AGENDA

Monday February 6, 2017

TOWN OF EASTHAM AGENDA BOARD OF SELECTMEN Monday, February 6, 2017 5:00 p.m.

Location: Earle Mountain Room

I. PUBLIC/SELECTMEM INFORMATION

II. APPOINTMENTS

5:00 p.m. Cape & Vineyard Electric Cooperative, *Liz Argo, Program Administrator.* Ms. Argo is seeking approval of the Board for the Round 1 Adder for FY18. The Board had previously voted to approve the adder for FY17 but the CVEC did not move forward. They are requesting approval for FY18 adder of \$.005 per kwh. This will amount to \$4,048 as opposed to the \$7,000 requested and approved for last year. The money will be deducted from revenue/credits from the round 1 project. (discussion & vote may be taken)

III. LICENSING

(All Licenses Require Votes and Signature)
2017 Annual Renewal of Common Victualer Licenses for the Chocolate Cafe

IV. ADMINISTRATIVE MATTERS

- A. Action/Discussion with Town Administrator
 - 1. Fire SAFER Grant (signature required)
 - 2. Review Warrant Articles- (Petitioned Articles)(discussion & vote may be taken)
 - 3. Close FY 18 Town Meeting Warrant (vote needed)
 - 4. Presentation of the FY18 Operating and Capital Budgets for adoption and to be forwarded to the Finance Committee for review. (vote needed)

V. APPOINTMENTS, continued

6:00 p.m. FY 18 Nauset Regional School Budget, *Tom Conrad, School Superintendant* (joint meeting with the Finance Committee- discussion only)

(Note: Other than public hearings, all times are approximate and items may be taken out of order.)

VI. ADMINISRATIVE MATTERS, continued

- A. Action/Discussion
 - 1. **ABCC Seasonal Population Estimate Report-** This is a report of the estimate of the Town's seasonal population to the Alcoholic Beverage Control Commission- we are estimating at 30,000. (no vote needed, form requires signature)
 - 2. Approval for National Multiple Sclerosis Cape Cod Getaway Walk (annual event) from September 8-10, 2017. (discussion & vote may be taken)

- 3. Request from DPW Superintendant Neil Andres for the Board to write to the MA DOT in support of the installation of the Hawk traffic control device at Governor Prence Road. The installation of the device was funded by a federal transit in the parks grant which will expire if no action is taken by Mass DOT (discussion & signature needed on letter)
- 4. **Extend Lower Cape Community TV Contract.** Request from Larry Greeley, President of Lower Cape Community Access TV to extend their contract with the Town of Eastham for an additional three years. The current contract ended June 15, 2016. New contract would be from June 16, 2017 to June 15, 2019. This would be the last extension, as the Town will be negotiating another agreement with Comcast prior to 2020.
- 5. **Formal Request for Town ISO Rating**. Request from Chief Farrenkopf for the Board of Selectmen to send letter formally requesting the Insurance Services Office (ISO) conduct a survey to lower the Town's ISO rating. The process has been ongoing as the Fire Chief has been working on this for over a year, however, the Town was not able to make a formal request to ISO until phase I Water Construction was substantially complete and water was available in hydrants throughout the town. (signature needed)

VII. TOWN ADMINISTRATOR REPORT

VIII. OTHER BUSINESS

Upcoming Meetings

February 8, 2017	3:00p.m.	Timothy Smith Room	Work Session
February 21, 2017(Tuesday)	5:00 p.m.	Earle Mountain Room	Regular Meeting
February 22, 2017	3:00 p.m.	Timothy Smith Room	Work Session

The listing of matters includes those reasonable anticipated by the Chair which may be discussed at the meeting. Not all items listed may in fact be discussed and other items not listed may also be brought up for discussion to the extent permitted by law.

This meeting will be video recorded and broadcast over Local Access Channel 18 and through the Town website at www.eastham-ma.gov.



Cape & Vineyard Electric Cooperative, Inc. Town of Eastham

12.20.16



Liz Argo, Manager, Projects and Administration



Cape & Vineyard Electric Cooperative, Inc. Municipal Net Metered Power

Cape & Vineyard Electric Cooperative Past - Present - Future

- Three PV Initiatives totaling 28.5MW are now producing power
 - > The largest block of Cooperative PV power in New England
 - At end of FY16 Total distribution of net metering benefits = \$5,599,000 at no capital cost to participants!
 - No liability and no O&M responsibility!
- Potential Future PV Initiatives based on 3 previous initiatives' successes.
 Solar Carport and Roof Top Initiatives
- Battery Back-up CVEC currently awarded a \$1.5 million grant for a battery back-up system at DY High School Regional County Emergency Shelter
- Potential Future Battery Initiatives
- Net Metering Credit purchases for offtakers (Dartmouth Solar, Future Generation Wind, Syncarpha's Marie's Way)



CVEC Financial & Operations Management Services

in addition to leading further PV and Battery development in Region

- Maintain Schedule Z database for all projects host & offtaker (needed for accurate distribution of net metering credits)
- Calculate monthly net metering credit activities: Expense, Revenue, Net
- Provide professional third party annual audit reports
- Provide monthly and annual reports; showing costs and net benefits
- Verify achievement of production expectations (GAO) and assure shortfall compensation
- Interface with Utility and PV system owner to assure proper compensation, proper maintenance and repairs.
- Provide annual reports to Mass DOER
- Provide legal services associated with management of systems
- Provide assistance with tax assessment, insurance, emergency response, etc.



The "Ask"

- In 2010 the CVEC Board voted not to impose the typical Administrative Operational Adder of \$0.01 on the 8 Round 1 projects under construction in Barnstable, Harwich, Chatham, Brewster, Eastham, Edgartown & Tisbury.
- In 2011 the Board voted to impose the typical Administrative Operational Adder on the Round 2 projects nearing completion; \$0.01 for members and \$0.015 for non-members was added to the PPA costs. Round 2 included PV projects in Orleans, West Tisbury, Barnstable and at DYRSD sized comparably to Round 1.
- Still meeting final debt associated with the Round 1 installation, in late 2014 CVEC recognized it couldn't maintain financial and operations services for all participants at the current level.
- To continue services for all members, in 2015 the CVEC Board voted to propose an Adder of \$0.01 on the Round 1 projects, similar to the Adder on its Round 2 projects. Eastham BOS approved the \$0.01 Adder last year.
- In 2016, following a year of reduced CVEC activities and spending, the CVEC Board voted to reduce the Round 1 Adder request to \$0.005. The \$0.005 Adder will provide an annual revenue to CVEC of just over \$100,000.

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The \$0.005 Adder to Eastham in dollars and cents

	Net Benefit
FY16 Net Benefit from R1 to Eastham as Host with Offtakers	\$75,937
Apply estimated affect of adder of \$0.01 per kWh to R1 (Last year's Adder request)	\$7,369
Apply adder of \$0.005 per kWh to R1	\$4,048
Adjusted FY16 Net Benefit from R1 to Eastham as Host with Offtakers with \$0.005 Round 1 Adder	\$71,889
Percentage Year One Income Reduced by	5%

*** The NMC used in the calculations is the actual NMC over the course of FY16. In the future the NMC will adjust up or down over the life of the project, with a net rise expected as the cost of electricity is expected to rise. Thus the net effect of the Adder will lessen over time.



The Need in dollars and cents

CVEC FY17 Budgeted Income and Expenses

	Annual Income	Annual Expenses	Net Income (Loss)
Projected TOTALS	\$188,200	\$238,750	(\$50,548)

An adder of \$0.005 on Round 1 projects starting in FY18 will provide an additional approximate annual revenue of \$100,000, with which CVEC can continue to operate at current levels and establish a necessary operational reserve.



SUMMARY

- ➤ In FY16, Eastham's annual savings from CVEC's projects totaled over \$75,937
- ➤ CVEC seeks a \$.005 per kilowatt hour Operational Adder (\$.0025 to system offtakers) on the Round 1 systems for approximate annual revenue to CVEC of \$106,000
- ➤ With a Round 1 Adder, the savings that CVEC sends Eastham will be reduced by approximately \$4,048 over the course of a year
- The annual revenue from the Adder on all 8 CVEC Round 1 projects will close the gap in CVEC's operational revenue and expenses, allowing CVEC to continue to manage its current projects as well as continue to bring forward more regionally beneficial projects

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Assurances

 CVEC will revisit the adder on Round 1 at the end of year one to determine whether it is recommended that the adder be discontinued, continued, or reduced





Memorandum

TO:

Board of Selectmen

FROM:

Planning Department

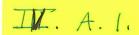
DATE:

January 31, 2017

RE:

Late 2017 annual license renewals

Please note that Chocolate Cafe has turned in its 2017 common victualler renewal application. Thank you.



Gillespie-Lee, Laurie

From:

Kent , Farrenkopf <kfarrenkopf@eastham-ma.gov>

Sent:

Thursday, January 12, 2017 10:20 AM

To:

Sheila Vanderhoef

Cc:

Jacqueline Beebe; Ryan VanBuskirk; Gillespie-Lee, Laurie

Subject:

Fire Department SAFER Grant Draft and Board of Selectmen Letter Draft

Attachments:

Safer Grant 2017.pdf; 2017 SAFER BOS Letter 1.docx

Hello,

Please see the attached draft for the SAFER Grant for 4 Firefighters/EMT/Paramedics. I have attached a draft letter for the Selectmen to review and sign, please make any needed changes to the draft letter. I need to submit this letter with the grant as soon as possible. Please advise me when I can pick up the signed letter. If you have any questions, please call me.

Thanks,

Kent

Chief Kent Farrenkopf
Eastham Fire Department
2520 State Highway
Eastham, Massachusetts 02642
774 212 2486 [C]
508 255 2324 [W]
Kfarrenkopf@eastham-ma.gov



TOWN OF EASTHAM

2500 State Highway, Eastham, MA 02642 - 2544 All departments 508 240-5900 Fax 508 240-1291 www.eastham-ma.gov

February 6, 2017

Catherine Patterson, Branch Chief Assistance to Firefighters Grants Branch DHS/FEMA 800 K Street NW Mailstop 3620 Washington DC 20472-3620

Re: FY2016 Staffing for Adequate Fire and Emergency Response (SAFER) Grant Support

To Whom It May Concern:

As the governing body of the Town of Eastham, MA, the Eastham Board of Selectmen write in strong support of the Eastham Fire Department's request for funding through the Federal Emergency Management Agency's Staffing for Adequate Fire and Emergency Response (SAFER) Grant Program.

As detailed in the application of the Eastham Fire Department, the need for additional shift staffing is significant for our community. Unfortunately, at the current financial state of the town, there are no other alternatives for funding these positions.

If awarded this grant, we wish to express our commitment to funding these positions through the applicable cost share as well as following the conclusion of the Period of Performance. Additionally, we guarantee to maintain staffing levels and incur no layoffs to the Fire Department.

We feel that this award is essential to the safety of our fire department and members of the community.

If you have any questions, please do not hesitate to contact us. Thank you for your consideration.

Sincerely,

John F. Knight Chair of the Board of Selectmen

cc: Board of Selectmen Fire Chief

DRAFT

FY2016

Staffing for Adequate Fire and Emergency Response (SAFER) Grant Program
Federal Emergency Management Agency

Town of Eastham, MA Fire Department

Revised: January 9, 2017

(4) New Shift Firefighter/Paramedics

TOTAL PROJECT COST: \$986,650

Applicant Share: \$430,416 (incl. \$52,200 ineligible costs)

Total Federal Request: \$608,434

		•	N.	•		
Base Salary*	FF/P (3 YR Avg) \$57,011					
Holiday Pay (11 @12hrs) Paramedic (\$3200)	\$3,446			٠.		
Education (10% Stipend)	\$0			Year 2	Year 3	
Total Comments	420.47		Year 1 (75/25)	(75/25)	(35/65)	TOTAL
Total Compensation	\$60,456	Salary:	\$241,826	\$241,826	\$241,826	\$725,478
Insurance (~36% of Base)	\$21,764	Benefits:	\$87,057	\$87,057	\$87,057 ,	\$261,172
Hiring Physical	\$400	Fed Share	\$246,662	\$246,662	\$115,109	\$608,434
PAT .	\$150	Cost Share	\$82,221	\$82,221	\$213,774	\$378,216
Clothing	\$1,500	TOTAL BUDGET	\$328,883	\$328,883	\$328,883	\$986,650
PPE	\$4,000					
Radios/Pagers	\$5,900			,		
Cost Per FF	\$95,271	INELIGIBLE EXPENSES	\$47,800	\$2,200	\$2,200	\$52,200
Cost for 4	\$381,083					

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Total Federal Share \$608,434	
Eastham's Costs: \$430,416	(Includes Cost Share of \$378,216 and
	Ineligible Expenses of \$52,200)
TOTAL BUDGET: \$986,650	

	TOTAL	Per Year	Per Day
Per Capita (YR)	\$174.63	\$58.21	\$0.16
Per Capita (Seasonal)	\$32.89	\$10.96	\$0.03

Applicant's Acknowledgements

- *I certify the DUNS number in this application is our only DUNS number and we have confirmed it is active in SAM.gov as the correct number.
- As required per 2 CFR § 25, I certify that prior to submission of this application I have checked the DUNS number listed in this application against the SAM.gov website and it is valid and active at time of submission.
- *I certify that the applicant organization has consulted the appropriate Notice of Funding Opportunity and that all requested activities are programmatically allowable, technically feasible and can be completed within the award's Period of Performance (POP).
- *I certify that the applicant organization is aware that this application period is open from 01/09 to 02/10/2017 and will close at 5 PM ET; further that the applicant organization is aware that once an application is submitted, even if the application period is still open, a submitted application cannot be changed or released back to the applicant for modification.
- *I certify that the applicant organization is aware that it is solely the applicant organization's responsibility to ensure that all activities funded by this award(s) comply with Federal Environmental planning and Historic Preservation (EHP) regulations, laws, and Executive Orders as applicable. The EHP Screening Form designed to initiate and facilitate the EHP Review is available at: http://www.fema.gov/media-library-data/1431970163011-80ce3cd907072a91295b1627c56d8fd2/gpd_ehp_screening_form_51815.pdf.
- *I certify that the applicant organization is aware that the applicant organization is ultimately responsible for the accuracy of all application information submitted. Regardless of the applicant's intent, the submission of information that is false or misleading may result in actions by FEMA that include, but are not limited to: the submitted application not being considered for award, an existing award being locked pending investigation, or referral to the Office of the Inspector General.
- * I certify that the applicant organization is aware that the grants awarded under this funding opportunity are provided a recruitment period, which begins when the application is approved for award. The recruitment period for grants awarded under the Hiring of Firefighters Activity is 180-days and the period of performance automatically starts after the recruitment period, regardless of whether the grantee has successfully hired the requested firefighters. The recruitment period for Recruitment & Retention of Volunteer Firefighters Activity is 90-days and the period of performance automatically starts after the recruitment period.
- * I certify that the applicant organization will, to the extent practicable, seek, recruit, and hire members of racial and ethnic minority groups and women to increase their ranks within their organization.
- *I certify that, if awarded under the Hiring of Firefighters Activity, the applicant organization, will assure a policy will be put into place, or is currently in place, ensuring that positions filled under this grant are not discriminated against, or prohibited from, engaging in volunteer firefighting activities in another jurisdiction during off-duty hours. (If applying under the Recruitment and Retention of Volunteer Firefighters Activity, this does not apply, however, in order to move forward in the application process, you must complete this question).

Signed by Lisa M Albino on 2017-01-09 18:27:46.0

Overview

* Are you a member, or are you currently involved in the management of the fire department	
or organization applying for this grant with this application?	
Yes, I am a member/officer of this applicant	

If you answered **No**, you must please complete the preparer information below. If you answered **Yes**, please skip the Preparer Information section.

Note: Fields marked with an asterisk (*) are required.

· ·	Preparer Information	
Preparer's Name		
Address 1		
Address 2		
City		
State		
Ζip	- Need help for ZIP+4?	
Primary Phone	Ext. Select	
Email		

In the space below please list the person your fire department or organization has selected to be the **Primary Point** of **Contact** for this grant. This should be an officer, member, or employee of the fire department or organization applying for the grant that will see the grant through completion, has the authority to make decisions on and to act upon this grant application.

The Primary Contact, as listed below, is the person for which all exchanges of information will be made relative to the application; all information provided must be specific to the contact listed. The Primary Contact must be an employee of the fire department or organization applying for the grant and shall not be a grant writer or a non-employee of the fire department or organization.

In addition to the Primary Contact information, you will be asked to provide two (2) Alternate Points of Contact on the next page. The Alternate Contacts must be familiar with the application and must be able to answer any questions relative to this application in the event that Primary Point of Contact is unavailable. When you are finished, click the Save and Continue button below.

Reminder: Please list only phone numbers and an email address where we can get in *direct contact* with the respective point of contact(s). If this contact changes at any time during the period of performance please update this information.

Note: Fields marked with an asterisk (*) are required.

Primary Point of Contact
Captain
Select
Lisa
M
Albino
508-240-5934 Ext. Type work
508-237-0191 Ext. Type cell '
Ext. Type Select

	508-240-5932
* Email	lalbino@easthamfire.org

Contact Information

NO. SECTION AND ADDRESS OF THE PARTY OF THE	Alternate Contact 1 Information
* Title	Firefighter
Prefix	WA
* First Name	Ryan
Middle Initial	F
* Last Name	Van Buskirk
* Primary Phone	508-240-5933 Ext. Type work
* Secondary Phone	774-722-2463 Ext. Type cell
Optional Phone	Ext. Type Select
Fax	508-240-5932
* Email	rvanbuskirk@easthamfire.org

CONTRACTOR OF THE PROPERTY OF	
	Alternate Contact 2 Information
* Title	Chief
Prefix	N/A ·
* First Name	Kent
Middle Initial	
* Last Name	Farrenkopf
* Primary Phone	508-255-2324 Ext. Type work
* Secondary Phone	774-212-2486 Ext. Type cell
Optional Phone	Ext. Type Select
Fax	508-240-5932
* Email	kfarrenkopf@eastham-ma.gov

Applicant Information

	nt Information
Organization Name	Eastham Fire Department
What kind of organization do you represent?	All Paid/Career
If you answered "Combination" above, what is the	%
percentage of career members in your organization?	
* Type of Jurisdiction Served	Town
If "Other", please enter the type of jurisdiction served	
In what county/parish is your organization physically	
located? If you have more than one station, in what	Bamstable
county/parish is your main station located?	
SAM.gov (System For Award Management)	
*What is the legal name of your Entity as it appears in	
SAM.gov?	
Note: This information must match your SAM.gov profile	Town of Eastham
if your organization is using the DUNS number of your	
Jurisdiction.	
*What is the legal business address of your Entity as it	
Note: This information must match your <u>SAM.gov</u> profile	if your organization is using the DUNS number of your
Jurisdiction.	
Mailing Address 1	2500 State Highway
Mailing Address 2	
* City	Eastham
* State	Massachusetts
4 7	02642 - 2589
* Zip	Need help for ZIP+4?
* <u>Employer Identification Number</u> (e.g. 12-3456789) Note: This information must match your <u>SAM.gov</u> profile.	04-6001140
* Is your organization using the DUNS number of your Jurisdiction?	Yes
* I certify that my organization is authorized to use the	4
DUNS number of my Jurisdiction provided in this	¥
application. (Required if you select Yes above)	
*What is your 9 digit <u>DUNS number</u> ?	047045810
	(call 1-866-705-5711 to get a DUNS number)
If you were issued a 4 digit number (DUNS plus 4) by	
your Jurisdiction in addition to your 9 digit number please	
enter it here.	
Note: This is only required if you are using your Jurisdiction's DUNS number and have a separate bank	
account from your Jurisdiction. Leave the field blank if	
you are using your Jurisdiction's bank account or have	
your own <u>DUNS number</u> and bank account separate from	
your Jurisdiction.	
s your <u>DUNS Number</u> registered in <u>SAM.gov</u> (System	
for Award Management previously CCR.gov)?	Yes
I certify that my organization/entity is registered and	·
active at <u>SAM.gov</u> and registration will be renewed	₩
annually in compliance with Federal regulations. I	
acknowledge that the information submitted in this	
application is accurate, current and consistent with my	
organization's/entity's SAM.gov record.	
w/locarines fema and EamaEiraGrant/firegrant/fish/safar2016/ann/iration/ann/	1

Headquarters or Main Station Physical Address	
* Physical Address 1	2520 State Highway
Physical Address 2	
* City	Eastham
* State	Massachusetts
7	02642 - 2544
* Zip	Need help for ZIP+4?
Mailing Address	
* Mailing Address 1	2500 State Highway
Mailing Address 2	
• City	Eastham
* State	Massachusetts
3 7m	02642 - 2589
* Zip	Need help for ZIP+4?
Bank Account Information	
* The bank account being used is: (Please select one from right)	Note: If this is selected, a 4 digit DUNS plus 4 is required if you answered "YES" to using the DUNS number of your Jurisdiction. Maintained by my Jurisdiction
Note: The following banking information must match your	SAM.gov profile.
• Type of bank account	Checking
Bank routing number - <u>9 digit</u> number on the bottom left hand comer of your check	011304478
Your account number	4035909
Additional Information	
* For this fiscal year (Federal) is your jurisdiction	
receiving Federal funding from any other grant program that may duplicate the purpose and/or scope of this	No ·
grant request?	
* If awarded, will your organization expend more than \$750,000 in Federal funds during your organization's fiscal year? If yes, your organization may be required to	
undergo an A-133 audit. <i>Under the Recruitment and</i> Retention of Volunteer Firefighters Activity, reasonable	No
costs incurred for an A-133 audit is an eligible expenditure and should be included in the applicant's proposed budget. Please enter audit costs only once in the "Request Details" section of the application.	
* ls the applicant <u>delinquent on any federal debt</u> ?	No
If you answered "Yes" to any of the additional questions above, please provide an explanation in the space provided below (4000 characters):	

Applicant Characteristics (Part I)

No determinant of the property of the control of th	•
Is this application being submitted on behalf of a Federal Fire Department or organization contracted by the Federal government which is solely responsible for the suppression of fires on Federal property?	No
*Please indicate the type of community your organization serves.	Rural
* Please describe your organization and/or the community that you serve (2000 characters)	The Eastham Fire Department is a 17-member, 100% full-time career fire department established in 1946 to better serve the year-round and seasonal population of the Town of Eastham, Massachusetts. In 2016, Eastham responded to 1,722 incidents, including 21 building fires and 1,216 calls for emergency medical services. Geography presents a significant challenge for emergency responses. Eastham, located on the outer portion of the peninsula of Cape Cod (about 35 miles south of Boston), is bordered on the east and west by large bodies of tidal water including the Atlantic Ocean, and towns north and south, which limits mutual and automatic-aid. Eastham syear round community of 5,650 increases seasonally to nearly 30,000 between Memorial Day and Columbus Day, leads to increased demands on department resources. Our department is not only concerned with the impact a major incident within our jurisdiction would have, but also preserving the natural beauty and historical significance. The pristine beauty of the seashore landscape is only one of the many reasons for the popularity of Eastham as a tourist destination. Preserving property involves the numerous historical landmarks within our town. Originally inhabited by the Nauset tribe of the Wampanoag Indians, Eastham was one of the first landing sites of the Pilgrims in the 17th century. On December 8, 1620, the first encounter between the Mayflower Company expedition and Native Americans occurred at one of Eastham spopular beaches along Cape Cod Bay. In comparison to other communities, Eastham is often regarded as a small town. & However, the value of the community is far greater than the size of our population or land area. An inadequate number of personnel and an aging apparatus fleet, make answering the call to protect and preserve our community a growing challenge.
* What is the square mileage of your first-due response area? Primary/First Due Response Area is a geographical area proximate to a fire or rescue facility and normally served by the personnel and apparatus from that facility in the event of a fire or other emergency and does not include daily or seasonal population surges.	27

9/2017 Applicant	Characteristics (Part I)
· What percentage of your primary response area is protected by hydrants?	33 %
* Does your organization protect critical infrastructure?	Yes
If Yes, please describe the critical infrastructure protected (3000 characters) .	
30,000 each summer ¿ an increase of over 530%. A major north/south. This highway, maintained by the Commonwer vacationers to reach the outer towns of Cape Cod. Accordant average of 25-30,000 vehicles travel this stretch of road portion of incident responses for our department, particular Eastham is home to a 180-student elementary school and citizen community center, a day facility for adults with degroup home, and four places of worship. Additionally, vac including a popular 109-room resort and conference center affordable housing developments, which will be comprised garden apartments. While we realize the need for more all present more challenges. One objective added to our mis department history. This vehicle has been tentatively additionally also oversees two main harbors to the Atlantic popularity for recreational boating, also supports a substate these areas, as well as the open water of the Atlantic Octof multiple agencies, including the United States Coast of National Park which accounts for approximately one-third the Seashore is to our community, emergencies within the difficult to access with traditional firefighting and emergen With the peninsula of Cape Cod, the town of Eastham se outer portion of: Wellfleet, Truro, and Provincetown. Any respective in the season of the peninsula of Cape Cod, the town of Eastham secuter portion of: Wellfleet, Truro, and Provincetown. Any respective in the content of the peninsula of Cape Cod, the town of Eastham secuter portion of: Wellfleet, Truro, and Provincetown. Any respective in the content of the content of the province town. Any respective province to the content of the cont	calth of Massachusetts, is the main thoroughfare for ding to a study conducted by the Cape Cod Commission, id daily in summer months. Route 6 accounts for a large early with Motor Vehicle Crashes (MVCs), id a 1,100-student regional high school, as well as a senior velopmental disabilities, a Department of Mental Health eationers to Eastham are supported by fifteen hotels, in Plans are being finalized for the construction of two id of 50+ units each in 2- and 3-story townhouses and fordable housing in Eastham, these developments will sion is the introduction of an aerial truck, the first in each to the Capital plan in FY20, contingent on funding. Our is of Coean and Cape Cod Bay which, aside from the ential commercial fishing industry. Incidents occurring near ean and Cape Cod Bay, commonly require the assistance for an area. However, as valuable an asset is area pose a great difficulty, as much of the park is cry medical apparatus. The area pose a great difficulty, as much of the park is cry medical apparatus. The area pose a great difficulty to the other towns along the esource delivered to those communities travels through gencies for mutual aid and incidents within our town (even a to the estimated 40-70,000 residents to our north.
* How much of your primary response area is for agriculture, wildland, open space, or undeveloped properties?	4%
* What percentage of your primary response area is for commercial and industrial purposes?	37 %
What percentage of your primary response area is used for residential purposes?	59 %
* How many occupied structures (commercial, industrial, residential, or institutional) in your primary response area are more than three (3) stories tall? Do not include structures which are not regularly occupied such as silos, towers, steeples, etc.	3
* What is the permanent resident population of your Primary/First-Due Response Area or jurisdiction served?	5650
*Do you have a seasonal increase in population?	Yes
If Yes what is your seasonal increase in population? * How many stations are operated by your organization?	30000
* Please indicate if your department has a formal automatic/mutual aid agreement with another community or fire department and the type of agreement that exists.	Both automatic and mutual aid

* What services does vo	our organization provide?	
Advanced Life Suppo Basic Life Support		Rescue Operational Level Rescue Technical Level Structural Fire Suppression Wildland Fire Suppression
Active Firefighting S	taff, use these definitions to answer the questions about "fi	refighter" positions.
Active Firefighter Position	An individual having the legal authority and responsibility to being employed by a fire department of a municipality, country engaged in the prevention, control, and extinguishing of fire emergency situations in which life, property, or the environ must be trained in fire suppression, but may also be trained hazardous materials awareness, rescue techniques, and a by the fire department.	unty, or fire district; being es; and/or responding to ment is at risk. This individual ed in emergency medical care,
Full-time Pald Firefighter Position	Full-time positions are those that are funded for at least 2, hours per week, 52 weeks per year.) The program office wisharing of a full-time position with sufficient justification. A position that is occupied by more than one person.	II also consider funding the
Part-time Paid Firefighter Position	Part-time paid firefighters receive pay for being on duty at they respond to any alarms. They may or may not receive	
Volunteer Firefighter Position	Volunteer firefighters receive no financial compensation for life/health insurance, workers compensation insurance, an	

SAFER intends to improve local fire departments' staffing and deployment capabilities so they may more effectively respond to emergencies. With the enhanced staffing, a SAFER grantee's response time will be reduced sufficiently and an appropriate number of trained personnel will be assembled at the incident scene. The following questions are designed to help us understand the staffing changes that have occurred in your department over the past several years and how the grant will assist in improving your staffing levels.

Use the following definitions when completing the table below.

Total # of Operational Career Personnel — this number represents the total number of authorized and funded active, full-time uniformed/operational career personnel employed by your department on the dates indicated. (Note: only operational personnel — including operational officers - should be included)

Operational Officers — of the operational career personnel indicated in the "Total # of Operational Career Personnel" question, how many of those serve in operational officer-level (both command and company) positions?

NFPA Compliance — of the "Total # of Operational Career Personnel" indicated, how many are assigned to field or response apparatus positions that directly support the department's compliance with NFPA 1710 (Section 5.2.4.1 — Single-Family Dwelling Initial Full Alarm Assignment Capability) or NFPA 1720 (Section 4.3 — Staffing and Deployment)? (Note: Officers should only be included in this number if they directly support the department's compliance with NFPA 1710 or NFPA 1720 compliance)

Note: The number of *career personnel* in any of these fields should include positions which are job-shared. Job-shared positions will be counted as one (1) regardless of how many personnel fill those positions.

For more information regarding these standards please see the Notice of Funding Opportunity or go to <u>www.nfpa.org</u>

Total # of Operational

Operational

NFPA

Personnel 17 17	Officers 5	Support 17
17 17	5	17
17		1
ing a grant grant and the grant was the first the second and a second and the sec	5	17
17	5	17
21	5	21
	17 21 number of shifts	17 5 21 5 number of shifts, number of pos

* Please provide details on the department's existing staffing model (i.e., number of shifts, number of positions per shift, contracted work hours, etc.) (3000 characters)

The Eastham Fire Department is a 17-member, 100% full-time career fire department, providing various aspects of fire suppression/protection and emergency medical services to the residents and visitors of Eastham, Massachusetts. The department is comprised of 17 cross-trained firefighter/emergency medical technicians, including two trained dive rescue technicians, and two technical rescue technicians. The department organizationally consists of a Fire Chief, a Deputy Chief (lost to attrition) and four shifts of line personnel & each comprised of a shift Captain, and three firefighters. However, budgetary restrictions lead to a minimum staffing of just three firefighters & leading to inadequacies per NFPA standards.

With the exception of the Fire Chief and Deputy Chief positions, department staff work a rotating 24-hour schedule (1 on, 2 off, 1 on, 4 off), 42-hour work week. Historically, the department has seen the need to increase staffing with an increased demand on department resources. In 1988, and subsequently in 2006, additional shift positions were added to the department organization in line with the growth in the community. Again, we are faced with addressing this need for our department.

While fire incidents are important to our career, roughly 70% of our incidents are related to emergency medical services. A popular retirement community, Eastham has a high median age (56.7), compared with MA average of 39.4. Over half of our year round population (54%) is over the age of 55. Contributing to the increase in EMS incidents is the growing opioid epidemic ¿ as our department saw an increase in overdoses in recent years. Our department provides the only advanced life support transport for Eastham, and as the closest hospital is 25 miles away, a typical medical transport ties up 3-4 personnel for an average of 2-3 hours at a time. Backfilling station coverage is handled by the off-duty personnel to meet department minimum staffing requirements. In 2016, these standby requests accounted for over \$132,000 of the overtime budget. With a limited workforce and increased call volume (especially during the peak season), our members have endured significant increases in physical and mental demands. When off-duty members are unable to supplement station coverage, on-duty personnel are put at undue risk, leaving our station covered with only one person, or worse, not staffed at all.

These new positions would prevent manpower voids that have become frequent to our operations. We realize that a shift of three personnel (including a three-person engine company) is not adequate to meet the increased demands of our department. Yet, we struggle to fill shifts to three with our current staffing.

By filling these positions, the Eastham Fire Department will be in a better position to provide for the population whom we have swom to protect.

Does your department utilize part-time paid firefighters?	No
---	----

If Yes, please provide details on how the part-time firefighters are used within your department to include the number of part-time firefighters, the number of full-time, NFPA compliant positions these part-time firefighters occupy, if applicable, and how they are scheduled to meet your staffing needs (3000 characters).

* Does your department utilize reserve/relief paid	No
firefighters?	

If yes, please provide details on how the reserve/relief firefighters are used within your department to include the number of reserve/relief firefighters, the number of full-time, NFPA compliant positions these part-time firefighters occupy, if applicable, and how they are scheduled to meet your staffing needs (3000 characters).

Do you currently report to the National Fire Incident	
Reporting System (NFIRS)?	Yes
Note: You will be required to report to NFIRS for the	
entire period of the grant.	

Applicant Characteristics (Part II)

	2016	2015	2014
* What is the total number of fire-related civilian fatalities in your jurisdiction over the last three calendar years?	0	0	0
• What is the total number of fire-related civilian injuries in your jurisdiction over the last three calendar years?	3	0	0
What is the total number of line of duty member fatalities in your jurisdiction over the last three calendar years?	0	0	0
 What is the total number of line of duty <u>member injuries</u> in your jurisdiction over the last three calendar years? 	8	7	1
* What is your department's operating budget (i.e., personnel, maintenance of apparatus, equipment, facilities, utility costs, purchasing expendable items, etc.) for the current (at time of application) fiscal year?	Fiscal Year: 17 Budget:	1918272	
What was your department's operating budget (i.e., personnel, maintenance of apparatus, equipment, facilities, utility costs, purchasing expendable items, etc.) for the 2001, 2002, and 2003 fiscal years?	Fiscal Year 2003 Bu	ıdget: 1083026	\$
If you are unable to provide the information, please enter 0 into each budget field and explain, in the Financial Need section of the narrative, why you are unable to provide this information.	Fiscal Year 2002 Budget: 1052656 Fiscal Year 2001 Budget: 1010586		
* What percentage of your operating budget is dedicated to personnel costs (salary, benefits, overtime costs, etc.)?	92 %		,
* Does your department have any rainy day funds, rainy day reserves, or emergency funds?	No		
If yes, what is the total amount currently set aside? If yes, what are the funds ear-marked for (1000 characters)			
? *What percentage of your annual operating budget is deri 100%	ved from; Enter numl	bers only, percentag	ges must sum up to
Taxes?	98 %		
Bond Issues?	1 %		
EMS Billing?	1 %		
Grants?	0 %		
Donations?	0 %		
Fund drives?	0 %		
Fee for Service?	0 %		
Other?	0 %		
If you entered a value into the "Other" field (other than 0), please explain (1000 characters):			

* How many frontline vehicles does your organization have in each of the types or classes of vehicle listed below that respond to first alarm assignments in support of NFPA 1710/1720? You must include vehicles that are leased or on long-term loan as well as any vehicles that have been ordered or otherwise currently under contract for purchase or lease by your organization but not yet in your possession. If you have multiple vehicles of the same type which have a different number of riding positions, please use the "average" number and provide additional information in the text box provided. Enter numbers only and enter 0 if you do not have any of the vehicles below.

Type or Class of Vehicle	Number of Frontline Vehicles	Number of Available Riding Positions per Frontline Vehicle	Number of Filled Riding Positions per Frontline Vehicle per first alarm assignment
Engines or Pumpers (pumping capacity of 750 gpm or greater and water capacity of 300 gallons or more): Pumper, Pumper/Tanker, Rescue/Pumper, Foam Pumper, CAFS Pumper, Type I or Type II Engine Urban Interface	2	5	3
Ambulances for transport and/or emergency response	2	2	0
Tankers or Tenders (pumping capacity of less than 750 gallons per minute (gpm) and water capacity of 1,000 gallons or more):	1	2	1 .
Aerial Apparatus: Aerial Ladder Truck, Telescoping, Articulating, Ladder Towers, Platform, Tiller Ladder Truck, Quint	0	0	0
Brush/Quick attack (pumping capacity of less than 750 gpm and water carrying capacity of at least 300 gallons): Brush Truck, Patrol Unit (Pickup w / Skid Unit), Quick Attack Unit, Mini-Pumper, Type III Engine, Type V Engine, Type V Engine, Type VI Engine, Type VII Engine	1	4	o
Rescue Vehicles: Rescue Squad, Rescue (Light, Medium, Heavy), Technical Rescue Vehicle, Hazardous Materials Unit	0	0	0
Additional Vehicles: EMS Chase Vehicle, Air/Light Unit, Rehab Units, Bomb Unit, Technical Support (Command, Operational Support/Supply), Hose Tender, Salvage Truck, ARFF (Aircraft Rescue Firefighting), Command/Mobile Communications Vehicle	2	1	1

Please use this comments section if you wish to provide any additional information with regards to the Type or Class of Vehicle section above (2000 characters).

Our First Alarm Assignment includes: Two Type I CAFS pumpers (3 Personnel Each), 1 Tanker/Tender (with 1), 1 Chief Officer; As well as an Automatic-Ald Engine Company (2 Personnel), and Ladder Company (4 Personnel). For 92% of the building fires from 2015-2016, our department averaged 14 firefighters on scene within 8 minutes. Most (66%) building fires for that time period have an initial engine company staffing of only three (3) personnel. By adding these positions, our First Engine would be staffed with at least four, and we would be able to achieve 15 Firefighters on scene within 8 minutes 100% of the time.

Department Call Volume

2016 2015 2014

* Summary of responses per year by category (Enter whole number only. If you have no calls for any of the categories, Enter 0)

Fire - NFIRS Series 100	40	30	23
Overpressure Rupture, Explosion, Overheat (No Fire) - NFIRS Series 200	2	1	1
Rescue & Emergency Medical Service Incident - NFIRS Series 300	· 1216	1291	1229
Hazardous Condition (No Fire) - NFIRS Series 400	72	60	51
Service Call - NFIRS Series 500	. 109	93	101
Good Intent Call - NFIRS Series 600	, 73	72	50
False Alarm & False Call - NFIRS Series 700	200	171	137
Severe Weather & Natural Disaster - NFIRS Series 800	3	2	1
Special Incident Type - NFIRS Series 900	8	0	3
Total	1723	1720	1596

FIRES

* How many responses per year by category? (Enter whole number only. If you have no calls for any of the categories, Enter 0)

Of the NFIRS Series 100 calls, how many are "Structure Fire" (NFIRS Codes 111-120)	21	_ 23	15
Of the NFIRS Series 100 calls, how many are "Vehicle Fire" (NFIRS Codes 130-138)	1	2	0
Of the NFIRS Series 100 calls, how many are "Vegetation Fire" (NFIRS Codes 140-143)	13	4	6
Total	35	29	· 21
What is the total acreage of all vegetation fires?	7	1	4

RESCUE AND EMERGENCY MEDICAL SERVICE INCIDENTS

* How many responses per year by category? (Enter whole number only. If you have no calls for any of the categories, Enter 0)

Of the NFIRS Series 300 calls, how many are "Motor Vehicle Accidents" (NFIRS Codes 322-324)	63	65	<i>~</i> 50
Of the NFIRS Series 300 calls, how many are "Extrications from Vehicles" (NFIRS Code 352)	. 0	0 .	0
Of the NFIRS Series 300 calls, how many are "Rescues" (NFIRS Codes 300, 351, 353-381)	9	6	6
How many EMS-BLS Response Calls	116	284	512
How many EMS-ALS Response Calls	992	932	701
How many EMS-BLS Scheduled Transports	0	0	0
How many EMS-ALS Scheduled Transports	0	0	0
How many Community Paramedic Response Calls	0	0	0
Total	1180	1287	1269

MUTUAL AND AUTOMATIC AID

* How many responses per year by category? (Enter whole number only. If you have no calls for any of the categories, Enter 0)

How many times did your organization receive Mutual Aid?	96	41	52
How many times did your organization receive Automatic Aid?	6	9	1
How many times did your organization provide Mutual Aid?	135	65	80
How many times did your organization provide Automatic Aid?	7	5	5
Of the Mutual and Automatic Aid responses, how many were structure fires?	16	15	6

Request Details

The activity for your organization is listed in the table below.

Activity	Number of Entries	Total Cost	Action
Hiring of Firefighters	1	986640	View Details

Request Details

In cases of demonstrated economic hardship, and upon the request of the grant recipient, the FEMA Administrator may waive or reduce a SAFER Hiring grant recipient's cost share requirement, the minimum budget requirement, and/or the restriction on supplanting. Is it your department's intent to apply for an economic hardship waiver, if awarded?

If yes, which type of waiver will you be applying for?	
--	--

Activity				Action	
Hiring of Firefi	ghters				View Details
Budget Item	Number of positions	Cost Per Firefighter		Overall Total	Action
		Compensation Per Firefighter			
1.	4	Annual Salary	60456	986640	View Details
	•	Annual Benefits	21764		
	Í	Total	82220		
Overall Total for all budget line items: 986640			A Control of the Cont		

View Hiring of Firefighters Activity

Hiring of Firefighters

* 1. Select which line-item below best describes your organization and the NFPA standard you are attempting to

	NFPA Requirements					
Check One	NFPA Standard (see the Notice of Funding Opportunity for more detail regarding these standards)	Department Characteristics	Demographic	Assembly Staffing	Response Time	Frequency of Time
X	1710	Career	With Aerial	15	8 min	90%
	1710	Career	Without Aerial	14	8 min	90%
	1720 - Urban	Urban Combo/Vol	> 1,000 pop/square mile	15	9 min	90%
	1720 - Suburban	Suburban Combo/Vol	500 - 1,000 pop/square mile	10	10 min	80%
	1720 - Rural	Rural Combo/Vol	< 500 pop/square mile	6	14 min	80%
	1720 - Remote	Remote Combo/Vol	Travel > 8 mi	4	n/a	90%

* 2. Given your current staffing levels, how often does your department meet the NFPA assembly requirements as indicated in the table above for the department's primary/first due response area?	
NOTE: If your department utilizes overtime to fill positions to ensure you are meeting applicable NFPA staffing and deployment standards, you will want to remove the number of positions filled by overtime from your calculations.	
* 2a. If awarded the number of positions requested in this application, how often do you anticipate that your department will meet the NFPA assembly requirements as indicated in the table above?	
* 3. Given your current staffing levels and without using overtime to fill vacant positions, what is the average actual staffing level on your first arriving engine company or vehicle capable of initiating suppression activities on the number of structure fires indicated in the "Department Call Volume" section of your application? (Up to one decimal i.e., 2.5)	3.3
NOTE: If your department utilizes overtime to fill positions to ensure you are meeting applicable NFPA staffing and deployment standards, you will want to remove the number of positions filled by overtime from your calculations.	•
* 3a. If awarded the number of positions requested in this application, what will be the average actual staffing level on your first arriving engine company or vehicle capable of initiating suppression activities on the number of structure fires indicated in the "Department Call Volume" section of your application? (Up to one decimal i.e. 2.5)	4

* 4. Please describe the departments hiring practices and timelines including how long after award will you be able to start a recruit class and how many recruits can be trained in one class. If you are requesting more positions than can be trained in one recruit class, please discuss when you will be able to hold the second class. If your department will need governing body approval before the award can be accepted, please be sure to include details on the timeline needed for acceptance (2000 characters).

It is reasonable to anticipate these positions could be filled well within 90 days or less upon receipt of grant funding. Hiring practices traditionally are based upon a regional pool of candidates rated according to test scores. This, along with administration interviews, allows the Fire Chief to determine the best candidates for the positions, Following successful completion of a Physical Agility Test and Medical/Physical exam, they are eligible to start department training for new employees. Under the current Collective Bargaining Agreement, there is no required supplemental recruit training, aside from application, candidates will be required to possess minimum EMT certification as well as state or national Firefighter I/II. Town officials have already stated their. intention to accept grant assistance if any should be awarded. A signed letter from the Chair of the Board of Selectmen stating their intention to continue to fund these positions following the period of performance of the SAFER grant is included in this application.

* 5. Is your request for hiring firefighters based on a risk analysis and/or a staffing needs analysis?

Yes

5a. If Yes, describe how the analysis was conducted (1000 characters)

In 2005, the Fire Chief provided his Long Range Plan (LRP) to the Town Administration. At the time, the department consisted of 14 members ¿ a Fire Chief, Deputy Chief, and four shifts of three. Based on projections of call volume and community growth, the Chief provided a plan that outlined the needed expansion over the next decade. Within ten years (by 2015), there would be a need of twelve additional firefighter positions, increasing the shift strength from six. The projected growth of the community was underestimated. Yet, shift strength is currently four members (minimum 3), and other positions were lost to attrition. In 2005, the need for department growth was evident, but funding has prohibited the needed increases. We struggle to provide services with current manpower levels.

Past ISO reviews highlight a lack of a fourperson engine company and poor NFPA 1710 compliance. By adding these positions, we can better meet ISO recommendations and NFPA standards.

* 6. If awarded a grant, will you provide the new recruits with entrylevel physicals in accordance with NFPA 1582, Standard on Comprehensive Occupational Medical Program for Fire Departments 2003 Edition, Chapter 6?

Yes, NFPA 1582 compliant

* 7. Do you currently provide annual medical/physical exams in accordance with NFPA 1582, Standard on Comprehensive Occupational Medical Program for Fire Departments 2003 Edition, Chapter 6?	Yes, NFPA 1582 compliant
* 8. Will the personnel hired meet the minimum local or State EMS training and certification requirements, as designated by your agency?	Yes
* 9. Does your department currently have a policy in place to recruit and hire veterans?	Yes
9a. If yes, please provide a brief description of the policy in place (1000 characters).	While neither the Town nor Department have set written policies for hiring veterans, if a candidate is a veteran, that factor has significant weight in the hiring decision. Traditionally, the Town of Eastham (including the fire department) has hired a number of veterans to open positions.
* 10. Is it your department's intent to sustain the positions filled under this grant after the completion of the period of performance?	Yes
10a. If yes, please provide a brief description on how the positions will be sustained.	A letter from the Eastham Board of Selectmen stating their intentions and dedication to accept any funding awarded and to continue funding these positions following the completion of the three-year performance period is attached to this application.

View Budget Item

As you are aware, grants awarded under the <i>Hiring of Firefighters Activity</i> requires grantees to maintain their staffing levels and incur no lay-offs during the period of performance of the grant. Therefore, it is imperative that your department have the support of your governing body.	
In order to ensure that there is a clear understanding of the long-term obligations of a SAFER grant and that, if awarded, all parties involved are committed to fulfilling those requirements upon acceptance of the award; we are requesting a letter from your governing body stating their commitment of the above requirement.	
The letter should be prepared on your governing body's letterhead and addressed to:	
Catherine Patterson, Branch Chief Assistance to Firefighters Grants Branch	
If you have received the letter, you may attach it here. (Note: only doc and .pdf files will be accepted)	
If you do not have the letter at this time, you may submit a signed copy of the letter as soon as you are able via fax to 1-866-274-0942 or via e-mail to firegrants@fema.dhs.gov.	
* How many full-time firefighter positions, including job-shares, are you requesting?	
"Full-time" is considered 2,080 hours or more worked per year and entitles the employee to receive benefits earned by the other full-time employees in the organization. "Job-share" is the term used to describe the hiring of more than one person to fill one full-time position. Part-time positions are less than 2,080 hours per year. Often part-time employees do not earn benefits or do not earn them at the same rate or level as full-time employees	4
If you are requesting to fund a full-time position(s) that will be "shared" by more than one individual (i.e., job-shared), please indicate how many individuals will fill that position, how they will be used and scheduled to fill the position(s), and provide an explanation as to why the position will be shared. (800 characters)	·
* Currently, what are the usual annual costs of a first-year firefighter in your department? "Usual annual costs" include base salary and the typical benefits package offered to a first-year firefighter.	Annual \$ 60456 Salary: Annual \$ 21764 Benefits: \$
	These positions (Firefighter EMT/Paramedic) include benefits for first-year firefighters as outlined in the Collective Bargaining Agreement between Eastham Permanent Firefighters Local 2975 and the Town of Eastham. According to Town officials, the Benefits package equals approximately 36%

* What costs are included in the typical benefits package your department provides to first-year firefighters (2000 characters)?

of Annual Salary amount. Included in Benefits: -Educational Incentive: 10% base salary added to regular rate, for eligible Associates degrees.

-EMT or Paramedic Incentive of \$2000 or \$3200, respectively, factored into base salary. -(11) Holidays, to be compensated as an additional day of pay (12 hours) at regular hourly rate)

-Professional Liability Insurance (Up to \$1,000,000)

-Health & Dental Insurance (Town to pay 65% of costs)

-Massschusetts General Law 111F -"Workmens Compensation" Line Of Duty Injury Coverage

-County Retirement Plan

-457b Deferred Compensation Plan

Close Window

Budget

Hiring of Firefighters:

There is a three-year period of performance for grants awarded under the Hiring of Firefighters Activity. The amount of Federal funding provided to a recipient for hiring a firefighter in any fiscal year may not exceed -

- Year One: 75 percent of the usual annual costs of a first-year firefighter as provided in the Request Details section;
- · Year Two: 75 percent of the usual annual cost of a first-year firefighter as provided in the Request Details section;
- · Year Three: 35 percent of the usual annual cost of a first-year firefighter as provided in the Request Details section.

Review and confirm the budget information below. If you need to change any of the budget amounts on the matrix, you will need to update the salary and benefit information on the previous Request Details screen.

When you are finished, press the Save and Continue button below.

	First 12-Month Period	Second 12-Month Period	Third 12-Month Period	Total	
<u>Personnel</u>	241,824	241,824	241,824	725,472	
<u>Benefits</u>	87,056	87,056	87,056	261,168	
Total:	328,880	328,880	328,880	986,640	
Total Applicant Share	82,220	82,220	213,772	378,212	
Total Federal Share	246,660	246,660	115,108	608,428	

Narrative Statement for Hiring of FireFighters

Application 90% complete

The narrative statements must provide all the information necessary for you to justify your needs and for FEMA to make an award decision. A panel of peer reviewers will perform the second phase of the applications' evaluations by using the narrative statements below, along with the answers to the general and the activity-specific application questions, to determine the worthiness of the request for an award.

Please ensure that your narrative clearly addresses each of the following evaluation criteria elements to the best of your ability, with detailed but concise information. Each element will be evaluated independently by the peer review panelists. The relative weight of the evaluation criteria in the determination of the grant award is listed below.

You may either type your narrative elements in the spaces provided below, or create the text in your word processing system and then copy it into the appropriate spaces provided below. Please note the narrative block does not allow for formatting. Do not type your narrative using only capital letters. Additionally, do not include tables, special fonts (i.e., quotation marks, bullets, etc.), or graphs.

Note: Fields marked with an asterisk (*) are required. Each element must have a minimum of 200 characters and each element will have a character limit; the limit varies based on the questions being asked. The character count will be listed below each text box.

* Element #1 - Project Description (30%):

* 1a. Why does the department need the positions requested in this application? If your request is based on a needs assessment or Insurance Services Office rating, please provide details of those outcomes. (3000 cheracters)

See Page I

2990 characters left

* 1b. How will the positions requested in this application be used within the department (i.e., 4th on engine, open a new station, eliminate browned out stations, reduce overtime)? What are the specific benefits the positions will provide to the department and community? (2000 characters)

See Page III

1988 characters left

* 1c. Please describe how the awarding of this grant would enhance the department's ability to protect the critical infrastructure discussed in the Applicant Characteristics section of the application. (1000 characters)

See Page V

990 characters left

Element #2 - Impact on Daily Operations (30%):

* 2a. How are the community and the current firefighters employed by the department at risk without the positions requested in this application? How will that risk be reduced if awarded? (2000 characters)

See Page VI

1989 characters left

* 2b. What impact will the positions requested in this application have on the departments NFPA compliance, if awarded? (2000 characters)

See Page VII

1988 characters left

*Element #3 - Financial Need (30%):

* 3a. Please provide additional details on the department's current operating budget. This must include an income verse expenses breakdown of the current annual budget indicated in Applicant Characteristics section of the application. If you were unable to provide the department's operating budget for the 2001, 2002, and 2003 fiscal years, please provide details on why you were not able to provide the information. (2000 characters)

See Page IX

1989 characters left

* 3b. Please describe the department's budget shortfalls and the inability to address the financial needs without federal assistance. What other actions have you taken to obtain funding elsewhere (i.e., state assistance programs, other grant programs, etc.)? (2000 characters)

See Page XI

1989 characters left

* 3c. How are the critical functions of your department affected without this funding? (2000 characters)

See Page XII

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Element #4 - Cost Benefit (10%):

* Please describe the benefits (i.e., anticipated savings, efficiencies) the department and community will realize if awarded the positions requested in this application. (3000 characters)

See Page XIV

2988 characters left

Element #5 - Additional Information: If you have any additional information you would like to include about the department and/or this application in general, please provide below. (2000 characters)

See Page XVI

1988 characters left

1

Supplemental Information

* 1. What is the rate of unemployment of the community, within the department's first due response geographical area, over the last three (3) years? Please indicate using a percentage and in the text box next to each of the rate percentage, indicate what year that figure pertains to.

Rate: 3.90% Year: 2016
Rate: 8.40% Year: 2015
Rate: 8.30% Year: 2014

- * 2. Has the department filed for bankruptcy (Chapter 9, Title 11), or has been placed under third party financial oversight or receivership within the previous three (3) years? No
- 2a. If Yes, please discuss (2000 characters).
- * 3. What is the median household income of the community, within the department's first due response geographical area, over the last three (3) years? Please indicate the dollar amount and in the text box next to each amount, indicate what year that figure pertains to.

\$61940 Year: 2016 \$62452 Year: 2015 \$56622 Year: 2014

* 4. What is the poverty rate of the community, within the department's first due response geographical area, over the last three (3) years? Please indicate using a percentage and in the text box next to each of the rate percentages, indicate what year that figure pertains to.

Rate: 6.80% Year: 2016 Rate: 5.10% Year: 2015 Rate: 5.10% Year: 2014

* 5. What is your municipalities operating budget for the last three (3) years? Please indicate the dollar amount and in the text box next to each amount, indicate what year that figure pertains to.

\$22656879 Year: 2015 \$22191505 Year: 2014 \$20618241 Year: 2013

- * 6. Has your jurisdiction/municipality reduced Full-Time Employees (FTEs) (in all agencies) over the last three year? No
- 6a. If Yes, by how many and in what areas (2000 characters)?
- * 7. Is your jurisdiction/municipality filling positions (in all agencies) as they become vacant? Yes 7a. If No, by how many and in what areas (2000 characters)?

- * 8. In the last year has your department utilized brown outs? No
- * 9. Has the department reduced non-operation positions (i.e. training, fire prevention, administrative staff, etc.) over the last three years? Yes

9a. If Yes, please provide details (2000 characters).

In 2014, the position of Deputy Chief was lost to attrition. As this position serves as Training Officer, EMS Coordinator, and Fire Prevention Officer, these activities have seen deficiencies in the time this position has remained vacant. There have been a number of discussions between administration and bargaining units within the town to reorganize positions to see that these functions are met. Yet, even this is not fiscally possible at our town, so current economic state. For example, after losing the Deputy Chief position to attrition, an EMS Coordinator position (as well as Fire Prevention Officer and Training Officer) was rejected for financial reasons. After a number of members were placed on LOD or extended medical leave, adding provisional or seasonal positions have been denied due to budget limitations or collective bargaining laws. There are currently no paid-on-call positions within our department organization, as these positions were eliminated in 2007 with budget cuts.

Presently, the department maintains a Fire Chief, four shift captains, 12 shift firefighters and one administrative assistant.

- * 10. What is the current foreclosure rate of the community, within the department's first due response geographical area? 0.50%
- * 11. Has the department provided cost of living increases over the last three (3) fiscal years? Yes

11a. If Yes, by what percent?

Rate: 3.00% Rate: 2.50% Rate: 2.50%

Year: 2016 Year: 2015 Year: 2014

Question 5: Municipality Operating Budget for 2016 unavailable; provided for 2015, 2014 and 2013.

^{*} If you are unable to provide any of the data requested above, please explain why you are unable to do so. (i.e,.data not available, data only available at state level, cannot find data, etc.) (2000 characters)

Assurances and Certifications

FEMA Form SF 424B

You must read and sign these assurances. These documents contain the Federal requirements attached to all Federal grants including the right of the Federal government to review the grant activity. You should read over the documents to become aware of the requirements. The Assurances and Certifications must be read, signed, and submitted as a part of the application.

Note: Fields marked with an asterisk (*) are required.

O.M.B Control Number 4040-0007

Assurances Non-Construction Programs

Note: Certain of these assurances may not be applicable to your project or program. If you have any questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant I certify that the applicant:

- 1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of the project described in this application.
- Will give the awarding agency, the Comptroller General of the United States, and if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
- 3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
- 4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
- 5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. Section 4728-4763) relating to prescribed standards for merit systems for programs funded under one of the nineteen statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
- Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. Sections 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. Section 794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. Sections 6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Acts of 1968 (42 U.S.C. Section 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (j) the requirements of any other nondiscrimination statute(s)

- which may apply to the application.
- 7. Will comply, or has already complied, with the requirements of Title II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interest in real property acquired for project purposes regardless of Federal participation in purchases.
- 8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
- 9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.
- 10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
- 11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
- 12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. Section 1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
- 13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469a-1 et seq.).
- 14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
- 15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. 2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
- 16. Will comply with the Lead-Based Paint Polsoning Prevention Act (42 U.S.C. Section 4801 et seq.) which prohibits the use of lead based paint in construction or rehabilitation of residence structures.
- 17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
- 18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations and policies governing this program.

This form has not yet been signed.

Form 20-16C

You must read and sign these assurances.

Certifications Regarding Lobbying, Debarment, Suspension and Other Responsibility Matters and Drug-Free Workplace Requirements.

Note: Fields marked with an asterisk (*) are required.

O.M.B Control Number 1660-0025

Applicants should refer to the regulations cited below to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 44 CFR Part 18, "New Restrictions on Lobbying" and 44 CFR Part 17, "Government-wide Debarment and Suspension (Non-procurement) and Government-wide Requirements for Drug-Free Workplace (Grants)." The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Homeland Security (DHS) determines to award the covered transaction, grant, or cooperative agreement.

1. Lobbying

- A. As required by the section 1352, Title 31 of the US Code, and implemented at 44 CFR Part 18 for persons (entering) into a grant or cooperative agreement over \$100,000, as defined at 44 CFR Part 18, the applicant certifies that:
 - (a) No Federal appropriated funds have been paid or will be paid by or on behalf of the undersigned to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with the making of any Federal grant, the entering into of any cooperative agreement and extension, continuation, renewal amendment or modification of any Federal grant or cooperative agreement.
 - (b) If any other funds than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure of Lobbying Activities", in accordance with its instructions.
 - (c) The undersigned shall require that the language of this certification be included in the award documents for all the sub awards at all tiers (including sub grants, contracts under grants and cooperative agreements and sub contract(s)) and that all sub recipients shall certify and disclose accordingly.

2. Debarment, Suspension and Other Responsibility Matters (Direct Recipient)

- A. As required by Executive Order 12549, Debarment and Suspension, and implemented at 44 CFR Part 67, for prospective participants in primary covered transactions, as defined at 44 CFR Part 17, Section 17.510-A, the applicant certifies that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, sentenced to a denial of Federal benefits by a State or Federal court, or voluntarily excluded from covered transactions by any Federal department or agency.
 - (b) Have not within a three-year period preceding this application been convicted of or had a civilian judgment rendered against them for commission of fraud or a criminal offense in connection with

- obtaining, attempting to obtain or perform a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
- (d) Have not within a three-year period preceding this application had one or more public transactions (Federal, State, or local) terminated for cause or default; and
- B. Where the applicant is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application. (4000 characters)
- 3. Drug-Free Workplace (Grantees other than individuals)

As required by the Drug-Free Workplace Act of 1988, and implemented at 44 CFR Part 17, Subpart F, for grantees, as defined at 44 CFR part 17, Sections 17.615 and 17.620:

- (A) The applicant certifies that it will continue to provide a drug-free workplace by:
 - (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
 - (b) Establishing an on-going drug free awareness program to inform employees about:
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation and employee assistance programs; and
 - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
 - (c) Making it a requirement that each employee to be engaged in the performance of the grant to be given a copy of the statement required by paragraph (a);
 - (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will:
 - (1) Abide by the terms of the statement; and
 - (2) Notify the employee in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction.
 - (e) Notifying the agency, in writing within 10 calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to the applicable awarding office.
 - (f) Taking one of the following actions, against such an employee, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted:
 - (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement or other appropriate agency.

- (g) Making a good faith effort to continue to maintain a drug free workplace through implementation of paragraphs (a), (b), (c), (d), (e), and (f).
- (B) The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance				
Street	City	State	Zip	Action

If your place of performance is different from the physical address provided by you in the Applicant Information, press *Add Place of Performance* button above to ensure that the correct place of performance has been specified. You can add multiple addresses by repeating this process multiple times.

Section 17.630 of the regulations provide that a grantee that is a State may elect to make one certification in each Federal fiscal year. A copy of which should be included with each application for FEMA funding. States and State agencies may elect to use a Statewide certification.

This form has not yet been signed.

- · Please enter a type of federal action
- · Please enter a status of federal action
- · Please select a type of report
- · Please select reporting entity type
- Please enter a federal department
- · Please enter federal program name

FEMA Standard Form LLL

Only complete if applying for a grant for more than \$100,000 and have lobbying activities. See Form 20-16C for lobbying activities definition.

You must read and sign these assurances by providing your password and checking the box at the bottom of this page.

Note: Fields marked with an asterisk (*) are required.

O.M.B Control Number 0348-0046

Standard Form LLL: Disclosure of Lobbying Activities			
1. *Type of Federal Action			
2. *Status of Federal Action			
3. * Report Type			
This subsection is re	quired for Material Change only		
Year			
Quarter			

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Date of last report:	
4. * Name and Address of Reporting Entity:	
*Reporting Entity Type	
Tier (if known)	
*Name	
*Street	
*City	
*State	
*Zip	- Need help for ZIP+4?
5. If Reporting Entity in No.4 is a Subawardee, ente	r name and address of Prime:
Name	
Street	
City	
State	
Zip	- Need help for ZIP+4?
Congressional District if known	
6. *Federal Department/Agency	
7 * Federal Program Name/Description	
CFDA Number if known	
8. <u>Federal Action Number if known;</u>	
9. Award Amount if known:	
10a, <u>Name and address of Lobbying Registrant: (</u> if i	ndividual, Last Name, First Name, MI)
Name	
Street	
City	
State	
Zip	
10b. Individuals Performing Services: (include addre	ss if different from No.10a) (Last Name, First Name, MI)
Name	
Street	
City	
State	
Zip	-
nformation requested through this form is authorized	by Title 31 U.S.C. Section 1352. This disclosure of lobbying

Information requested through this form is authorized by Title 31 U.S.C. Section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

This	form has not yet beer	ı signed.		

Project Description 1a:

Why does the department need the positions requested in this application? When were the positions requested vacated (or will they be vacated) and under what circumstance? If your request is based on a needs assessment or Insurance Services Office rating, please provide details of those outcomes.

(2742 / 3000 Characters)

The Eastham Fire Department is requesting SAFER grant funding of \$608,434 for hiring of four (4) new Firefighter EMT/Paramedics. Demands on our limited staffing inhibit efforts to meet the needs of our community.

The town of Eastham has seen significant growth in recent years, and we are on the brink of further development. In 2005, shift strength was increased from three to four in response to an increase of call volume and in an effort to reduce overtime. Twelve years later, we are facing the same problem. The addition of new housing developments, commercial projects, and the influx of a younger population anticipate an increased demand on department resources. Safe estimates foresee increases in call volume of 15-18% over the next few years. In a community whose population swells to over 30,000, this increase is significant.

The department currently allocates approximately 92% of its annual budget to personnel costs. With the nature of our community and only 16 shift firefighters, the overtime budget is regularly exceeded. This is partly due to increased number of incidents, but also a rise in line-of-duty (LOD) injuries. Despite decreasing minimum staffing in the off-season, the department still spent over \$115,000 in direct overtime costs to backfill for LOD injuries over the past 24 months (not all vacancies necessitated coverage). This, added to the regular overtime paid for incident coverage and time-off vacancies, led to an overtime budget that exceeded the original allocated funds by nearly \$50,000 for that period.

On a typical first alarm assignment, the on duty response and automatic aid from neighboring communities typically provides 14 firefighters. In 2016, we were able to meet the assembly of staffing of NFPA1710 less than 8% of the time. Through analysis, we were able to determine that the addition of these new positions would allow us to meet assembly staffing requirements of 15 personnel 100% of the time, and staff the first engine with 4 personnel for the entire year.

In 2009, an ISO analysis rated our department with a Public Protection Classification (PPC) of 9, meeting just the minimum requirements for fire protection. Since then, with the addition of municipal water supply, improvements to fire prevention activities, and training records, our new score is anticipated to be as low as 5 (we are planning a review in early 2017). One noted deficiency, however, is the low average of Engine Company manning: 3.2 personnel. By increasing our manning with these additional positions, we can lower our PPC to 4, which would lead to significant benefits to our departments as well as cost savings to the public. Adding these positions is critical to more effectively and safely serve Eastham.

Project Description 1b:

How will the positions requested in this application be used within the department (i.e., 4th on engine, open a new station, eliminate browned out stations, reduce overtime)? What are the specific benefits the positions will provide to the department and community?

(1882 / 2000 Characters)

In 2005, the Eastham Fire Department altered the department organization and added a fourth member to each shift. Yet, maintaining four per shift was only achieved 32% of 2016. This meant the initial engine company was understaffed for the majority of building fires over the past year. Even with adjusting automatic aid agreements, the assembly requirements for NFPA1710 were met less than 8% of the time. While a recall of off-duty personnel is part of the SOP for building fires, these recalls typically average four personnel, and their arrival on scene is not within the recommended time per NFPA 1710.

Other department activities have also seen an impact without these positions. In 2014, the Deputy Chief position, who typically coordinated all fire prevention and EMS supervision, was lost to attrition. Attempts to fill this position, including an application for SAFER funding in 2015, have not met with success. As these programs still are vital to the mission of our department, more work load was added to the Shift Captains. The four Shift Captains, with the Fire Chief, handle fire prevention and EMS supervision duties. With manpower limitations, the shift captains are also needed to staff routine emergency calls. With simply a typical medical transport, a shift staffing of three personnel (which occurred 68% of 2016), can deplete available manpower to deliver fire prevention activities, such as residential fire inspections. Additionally, with the limited overtime budget, public education programs to the 180-student elementary school and 1,100-student high school, are almost nonexistent as this responsibility falls solely with on-duty personnel to handle between emergency responses.

By adding these positions to our staffing, not only will manpower be maintained at a safe level for emergencies, but vital services can be delivered to our community.

Project Description 1c:

Please describe how the awarding of this grant would enhance the department's ability to protect the critical infrastructure discussed in the Applicant Characteristics section of the application.

(871/1000 Characters)

The critical infrastructure outlined previously poses a significant target hazards in our community, especially with our comparatively small fire/EMS department. While year-round population is only 5,650, this increases to over 30,000 in summer months (an increase of over 530%). This is the largest increase in summer population when compared with neighboring communities. Eastham is a small fire department tasked with protecting a town larger than we can handle. Affordable housing developments and new commercial projects in our community, project an increase of incidents by 15-18%. Additionally, the town acts as a lifeline to the other communities on the outer portion of the peninsula of Cape Cod, for utilities or infrastructure. These positions will allow our department to better protect these areas while providing the appropriate staffing for safe operations.

Impact on Daily Operations 2a:

How are the community and the current firefighters employed by the department at risk without the positions requested in this application? How will that risk be reduced if awarded?

(1586 / 2000 Characters)

The past two years saw a significant increase in Line of Duty (LOD) injuries with department members. According to a number of studies by professional organizations such as the IAFF and NIST, increasing staffing decreases the likelihood of a LOD injury. Even routine calls are being handled with less-than optimum staffing, which poses an undue risk to our members. Structure fires rarely have an initial engine company of more than three firefighters, and NFPA 1710 assembly requirements of 15 firefighters on the fire ground are typically not achieved until after 10 minutes. With a three-person engine company, the "two-in, two-out" rules are not met, thus limiting our strategies with fire suppression. The addition of these personnel would not only ensure adequate company staffing and fire ground assembly requirements, but also free up line officers and chief officers to handle other duties such as Incident Safety Officer and Incident Command.

The visitors and citizens of Eastham have an expectation of the fire department to keep them safe, prevent fires, and respond to emergencies promptly. With the limited current staffing, a higher demand is imposed on the workload of our members, leading to risk of physical injuries, as well as mental fatigue. The cost savings of not employing these additional personnel does not come close to justifying the risk to the department or the community. Without the addition of these positions to the department organizational structure, both the department members as well as our community will be at a substantial disadvantage and risk.

Impact on Daily Operations 2b:

What impact will the positions requested in this application have on the departments NFPA compliance, if awarded?

(1951 / 2000 Characters)

On a first alarm assignment, the on duty response and automatic aid from neighboring communities typically provides 14 firefighters. Due to the geography of our community, off-duty recalled members often cannot deliver apparatus to a scene until after 13-15 minutes from alarm time. Residency requirement and automatic aid agreement modifications, have failed to improve these figures.

In 2016, we were able to meet the assembly staffing of NFPA1710 less than 8% of the time. Also, the initial engine company was staffed with four personnel for less than 33% of building fires in the past year. NFPA 1500, 1710, and OSHA guidelines all recommend personnel in hazardous areas shall operate in crews of two or more. Yet, there are several instances where hoselines are deployed with only one member, or companies are unable to establish Incident Command due to obligations with other tasks. This hampered our ability to conduct primary searches and interior attack in accordance "two-in, two-out" standards. Addressing on-duty staffing is the only other way we see to improve our NFPA 1710 compliance.

Analysis suggests these new positions would allow our department to meet or exceed assembly staffing requirements within 8 minutes 100% of the time. Other portions of the applicable NPFA standards that would see improvement include:

NFPA 1710

4.1.2.1 (4) Delivery of full alarm assignment within 480 seconds (8 minutes)

- 4.1.2.1 (7) Delivery of ALS within 480 seconds (8 minutes)
- 5.2.3.1.1 Companies shall be staffed with a minimum of four on-duty members
- 5.2.4.1.1 (1) Establish Incident Command...with a minimum one member dedicated to this task
- 5.2.4.1.1 (3) Establishment of effective flow...with each handline operated by a minimum two members

Additionally, the added personnel to the shift would free up the required personnel for other activities in our community, such as Fire Prevention Inspections and Public Education Programs, as outlined in NFPA 1730.

Financial Need 3a:

Please provide additional details on the departments operating budget. This should include an income verse expenses breakdown of the annual budget indicated in Applicant Characteristics section of the application.

(1997 / 2000 Characters)

In FY17 the Eastham Fire Department had an operating budget of \$1,918,273. Approximately \$1,759,497 (92%), is allocated for personnel costs (Fire Chief, 16 firefighters, and one full-time administrative assistant). The remaining \$158,776 (8%) is for operating costs and expenses, such as building maintenance vehicle repairs, utilities/office materials, and EMS supplies. Capital Expenses included lease payments for a CAFS pumper (purchased 2013), and two ALS ambulances (purchased 2014), totaling \$272,065. Income is mainly funded by ambulance receipts, permit fees (approx. \$550,000 in FY16) and tax revenue. State aid has seen significant decline in recent years, further hindering town funding.

The town-wide budget is approximately \$23.9 million, with \$13.9 million (or 58%) for funding area schools. Retirement and insurance costs for current and retired employees total over \$3.8 million. The remainder of the budget funded 21 other town departments and various capital projects, including a \$4.3 million for a new public library, affordable housing developments, and an \$85 million town-wide water system. As Proposition 2 1/2 laws limit the ability of increasing budgets, requests are postponed, if not outright denied. Unfortunately, the Fire Department sees many of the funding cuts. There is simply no more money from the town to address the improvements to our department we so desperately need.

While it is a beautiful area to live, it is extremely difficult for many to make their home in Eastham. It is simply too expensive for young families to move here and increasingly difficult for those with fixed incomes to live here.

Other Eastham Financial Facts:

54.4% of Population over 55 years old (MA avg = 27.2%)
Median Age 56.7 (Substantially higher than MA avg 39.4 and US avg 36.8)
Cost of Living Index 142 (Significantly higher than 100 National Avg)
Median Adjusted Gross Income - \$43,548 (MA avg = \$64,752)
Poverty Rate; 6.8%
Average Home Value = \$449,600 (MA Avg = \$327,200)

Financial Need 3b:

Please describe the department's budget shortfalls and the inability to address the financial needs without federal assistance. What other actions have you taken to obtain funding elsewhere (i.e., state assistance programs, other grant programs, etc.)?

(1428/2000 Characters)

The state of the Eastham Fire Department budget is not unlike that of other departments. From 2012 to 2015, the budget for overtime shift and incident coverage has been exceeded by an average of \$30,000 each year. In 2016, this figure jumped to \$50,000 over the allocated budget, partly due to six separate line-of-duty injuries. Requests for additional personnel have been rejected due to lack of available funding. While our town officials agree additional staffing is needed, they are unable to fund this with traditional means and have approved a SAFER grant application. Aside from the SAFER program, no other grants or funding opportunities are available to address our staffing issues. SAFER is our last option. Our town has cooperated with studies to determine the feasibility of regionalization with other communities, but these analyses show limited cost/benefit. With each occurrence of extended leave (such as sick or LOD), we have considered provisional or part-time positions to assist with shift coverage; however, there is no such arrangement under the current Collective Bargaining Agreement.

In 2015, Eastham's SAFER application to fill the Deputy Chief position (lost to attrition) was denied. This position remains unfilled. Our department has made cuts wherever possible, and still we struggle to achieve our goals. The SAFER program is no our only avenue to support the hiring of these essential positions.

Financial Need 3c:

How are the critical functions of your department affected without this funding?

(1955 / 2000 Characters)

As mentioned previously, fire suppression activities have seen critical gaps. With manpower on the first-due engine averages just three fire fighters, without these positions, the "two-in/two-out" rule is not met, leading to alterations in fire ground tactics. With a three-person engine (75% of our building fires in 2016), the officer is obligated to engage in suppression activities and is unable to establish command and provide an adequate size-up. By having less staff to perform essential duties, members are looked upon to carry out multiple tasks placing our firefighters, as well as the public, placing our firefighters at undue risk of injury or death.

Since 2014 when the position of Deputy Chief was lost to attrition, fire prevention inspections are handled by the Fire Chief and Shift Captains. While the Fire Chief handles all commercial inspections, the on duty Shift Captain is called upon to handle any residential inspections. When staffing is limited to three personnel, the Shift Captain may be unable to assist as their first priority is staffing routine emergencies. The amount of residential and commercial inspections is simply too much for one person, especially when added to the Fire Chief's duties. Even by prioritizing the necessary inspections, many occupancies in our community have gone uninspected beyond recommended timeframes.

Additionally, public education activities by our department have been almost nonexistent in recent years. While we see it as a critical service to the community, budgetary restrictions limit

programs to be delivered by on duty personnel. Inevitably, these are interrupted or indefinitely postponed due to incident responses.

Currently, one routine medical call can deplete an entire shift staffing of three. We struggle on a daily basis to carry out essential functions of our department. These added positions are essential in order to provide better, safer service delivery to our community.

Cost/Benefit:

Please describe the benefits (i.e., anticipated savings, efficiencies) the department and community will realize if awarded the positions requested in this application?

(2991 / 3000 Characters)

Each year, the population of Eastham swells from 5,650 to approximately 30,000 between Memorial Day and Columbus Day. With this increase, minimum shift strength of four has become necessary to keep up with the increased calls. But even this staffing was less than optimum for the call volume. For the remainder of the year, shift staffing is three (occurred approximately 63% of 2016). It was difficult at times to even maintain a minimum of three. Sick time, extended injury leave, in addition to regular time off, led to nearly \$150,000 in overtime just to fill shift strength to three in the off-season. This number, added to the increased shift strength in the summer, resulted in over \$246,000 in shift overtime alone.

In addition to the financial costs, meeting these demands is physically and mentally taxing on our members. With reduced staffing, members are required to work more to fill vacancies. Last year, overtime shifts were filled by personnel working 34 consecutive hours or more nearly 100 times. Mandatory overtime shifts (i.e.: holdovers) occurred 48 times, leading to increased physical and mental stress on our members and their families. The combination of overworking and understaffing of our department has already shown a significant toll.

By adding these positions we are anticipating a cost savings, however, due to the unforeseen nature of our organization it is difficult to quantify those exact savings. From 2012-2015, overtime budgets have been regularly exceeded by approximately \$30,000 annually. In 2016, an increase in LOD injuries and extended medical leave saw this number jump to \$50,000 over the

original allocated budget. This despite efforts by our department administration to decrease the minimum manning where appropriate, restrict time-off requests in peak months, and limit other off-duty training in an effort to stretch the overtime budget.

Over the next two years, Eastham is anticipating further growth. With the planned new commercial and residential construction, conservative estimates forecast an increase in call volume of 15-18% annually. At this rate, we will be unable to maintain current staffing practices and face making further unsafe cuts.

These positions would provide the most benefit by increasing member safety. Studies by NIST, IAFC, and the U.S. Fire Administration, show that additional staffing can decrease likelihood of injuries. The potential for savings in sick and LOD costs provide evidence that adding these positions would decrease the demands of our small department.

The total project cost breaks down to a cost of approximately \$32.89 per peak population of Eastham, or \$0.03 per day over the three-year performance period of the award. By filling these positions through the SAFER grant funding, we can better serve the residents and visitors of Eastham, as well as our own personnel.

Additional Information:

Additional Information: If you have any additional information you would like to include about the department and/or this application in general, please provide below.

(1919 / 2000 Characters)

Eastham is often regarded as a small town, and thus a small fire department seemed sufficient for much of the past 70 years. As the town grew considerably, so did the demands on the department. However, our fire department has not seen the same rate of growth. In 2005, the Fire Chief outlined a reasonable plan to meet the rising demands of our department. He saw that within ten years (by 2015) the department would grow from 18 to 27 positions. Yet, instead of growing, we have decreased in size, losing the second-in-command position to attrition, leaving us with only 17 members to protect a community that grows to 30,000 each summer.

Compared to neighboring towns, Eastham has the largest increase in seasonal population, but the comparatively lowest staffing for its protection. Even if the population and call volume remain unchanged, our department will still see critical service gaps and inefficiencies. It is reasonable to conclude that in the coming years with the new construction and projects (including new affordable housing developments, and efforts to bring new young families to Eastham), our community will be facing further growth.

These increase demands can lead to inadequate patient care, inability to deliver services, and a danger to the public, at best. At worst, expecting our small department to do more can put our members in unnecessary dangerous positions. We currently do not have sufficient manning for building fires or EMS incidents. Our staff has seen significant burnout and stress over recent years due to the lack of sufficient manning.

The addition of these four shift positions is critical to the operation of our fire department, the safety of its members, as well as our community. But without the help of the SAFER Grant, this is simply not possible. We wish to extend our thanks to the Peer Reviewers for volunteering their time and your consideration of our application.

DRAFT

PETITION FOR TOWN MEETING WARARNT ARTICLE

To see if the Town will vote to request the Eastham Selectmen to authorize all Town officials to refrain from using Town funds and other resources to enforce federal immigration laws, in keeping with current practices, unless presented with a criminal warrant or other evidence of probable cause as required by the Fourth Amendment of the United Sates Constitution; and

To see if the Town will vote to request the Eastham Selectmen to advocate for the civil liberties and human rights of all Eastham residents and visitors regardless of race, ethnicity, religion, ability, sexual and gender identity, national origin, or citizenship and immigration status.

SUMMARY

This Article seeks to reaffirm the Town's commitment to the values of freedom, justice and equality for all Eastham residents and visitors and enable all residents and visitors to lead lives of peace and dignity free from fear, harassment and violence.

TOWN OF EASTHAM PUBLIC NOTICE

The Warrant for the Eastham Annual Town Meeting, to be held on Monday, May 1, 2017 opens Tuesday, January 3, 2017 and will close Monday, February 06, 2017 at 4:00pm.

<u>Public Notice</u>: Published in Saturday, December 31, 2016 Cape Cod Times and in Friday, January 6, 2017 edition of the Cape Codder on the Eastham page

<u>On Website:</u> News and Announcements <u>Posted:</u> Town Hall inside/outside boards





TOWN OF EASTHAM

2500 State Highway, Eastham, MA 02642-2544 All departments 508-240-5900 • Fax 508-240-1291 www.castham-ma.gov

Memorandum

TO:

Board of Selectmen

FROM:

Planning Department

DATE:

January 24, 2017

RE:

ABCC Seasonal Population Estimate

I have used the same estimate figure from last year. Feel free to change it if desired and sign the enclosed form where indicated. Thank you.

enc. ABCC 2017 seasonal population estimate form



CITY/TOWN:	Eastham
DATE:	February 6, 2017
239 Causewa Boston, MA 0	
Acting under th	ne authority contained in M.G.L. Ch. 138, §17, as amended the undersigned authority at a meeting held on:
	Date of Meeting
estimated that	the temporary increased resident population of: Eastham City/Town
As of July 10, 2	2017 will be 30,000 residents
	Estimate Resident Population
of the member	vas made and voted upon by the undersigned at a meeting called for the purpose, after due notice to each rs of the time, place, and purpose of said meeting, and after investigation and ascertainment by us of all fter cooperative discussion and deliberation. The estimate is true to the best of our knowledge and belief
	THE ABOVE STATEMENTS ARE MADE UNDER THE PENALTIES OF PERJURY
Very Truly Yo Local Licensi	ours, ng Authorities

THIS CERTIFICATION MUST BE SIGNED BY A MAJORITY OF THE MEMBERS OF THE LOCAL LICENSING AUTHORITIES.



EASTHAM POLICE DEPARTMENT

2550 State Highway • Eastham, MA 02642 508-255-0551 • Fax: 508-255-5412



KENNETH J. RODERICK Deputy Chief

EDWARD V. KULHAWIK Chief of Police

To:

Sheila Vanderhoef

Town Administrator

From: Edward V. Kulhawik

Chief of Police

Date: December 5, 2016

Subject:

MS National Multiple Sclerosis Society – Cape Cod Getaway Walk

Sept 8th and 10th, 2017

I have received and reviewed the proposed/requested route through the town of Eastham for the above-mentioned charity walk. I do not see any conflicts or problems concerning public safety at this time.

Please feel free to contact me with any questions or concerns.



National Multiple Sclerosis Society Greater New England Chapter



November 29, 2016

Ms. Sheila Vanderhoef Town Administrator 2500 State Highway Eastham, MA. 02642

Dear Ms. Vanderhoef,

Thank you for your support of the National Multiple Sclerosis Society and our 2016 MS Challenge Walk this past September. The event was a great success and we were able to raise \$1M that will go towards the continuing fight to end MS. Having our walkers in Eastham during that weekend is a large part of the success of the event.

We are holding our 16^{th} annual Challenge Walk from September $8^{th} - 10^{th}$, 2017. The weekend route will be the same as this past year's, and we would appreciate receiving he appropriate permits/permission from the Board of Selectman.

We will hire Eastham police officers to work safety details where needed. We operate a support team consisting of medical personnel, SAG vehicles, and amateur (HAM) radio operators. Our lead HAM radio operator monitors all emergency radio frequencies, so that we can close or redirect our route should that become necessary.

If you need any further information or have any questions, comments, or suggestions, please feel free to contact me.

Thank you for your continued support of the Greater New England Chapter MS Challenge Walk.

Best Regards,

Drew Davis

Director of Logistics

National Multiple Sclerosis Society

Greater New England Chapter

781-693-5158

Drew.davis@nmss.org

12.31	12.31	0.97	Pass	Salt Pond Visitor Center (lunch)	Sidowalls to Occasion			100	Pipeline works
12.51 0.77 R Right note Leous Road Proceed to				Cross Pt 6 onto Solt Bond Bond				to the second se	and the state of t
12.84 0.44				Right onto Locust Road					
13.28 3.00 Enter Enter Rest Stop 7 CCRT at Samoset ICE CREAM 13.74 2.54 X Cross Group Prenos Road Access Road Trail 14.20 2.08 X Cross Gov Prenos Road Access Road Trail 16.22 0.78 Enter Enter Rest Stop 8 Orleans District Court 16.28 0.72 Exit Exit R cnto CORT Confinue on CORT Trail 16.33 0.67 Cross Crossover R6 Confinue on CORT Trail 16.42 0.58 X Cross Jours Road Access Road Trail 16.47 0.53 X Cross Locust Road Access Road Trail 16.96 0.04 X Cross Main Street Orleans Center Access Road Trail 17.00 2.37 Enter Enter Rest Stop 9 Depot Square Orleans Center 17.01 2.36 Stright Confinue on CCRT Continue on trail Trail 17.50 1.87 XR Cross R onto West Road Cross West Road to shoulder A 17.70 1.67 L Left not Salty Ridge Road Proceed to CCRT W 17.80 1.57 R R Access Road Trail Trail 19.18 0.19 X Cross Seaview Road Access Road Trail 19.19 1.57 R R R Access Road Trail Trail 19.19 1.57 R R R Access Road Proceed to CCRT W 19.19 1.57 R R R Access Road Trail R 19.19 1.57 R R R Access Road R 19.19 1.57 R R R Access Road R 19.11 1.57 R R R Access Road R 19.12 R R Access Road R 19.13 R R Access Road R 19.14 R R R Access Road R 19.15 R R R Access Road R 19.17 R R R Access Road R 19.18 R R R R R R R R R 19.19 R R R R R R R R R									
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17.00 2.37 Enter Enter Rest Stop 9 Depot Square Orleans Center Trail Tra									
17.01				Enter Rest Stop 9		ITAII			
17.50 1.87					Continue on trail	Troil	6		Orleans
17.60 1.77 Cross Crossover Rt 6 Continue on shoulder on left A									
17.70				Crossover Rt 6					
17.80						\//			
18.58 0.79 X Cross Seaview Road Access Road Trail				R and enter CCRT					
19.18 0.19 X Cross Mitchell Lane Access Road Trail 19.37 0.83 Enter Enter Rest Stop 10 Nickerson State Park Picnic Area 19.38 0.82 L Exit L onto CCRT Continue on CCRT Trail 19.67 0.53 Pass Pass entrance to Cobies Continue on CCRT Trail 20.00 0.20 R Right onto Millstone Road Proceed to shoulder on left A 20.10 0.10 L Left onto Rt 6A Proceed to shoulder on right W 20.20 Enter Enter R Cape Cod Sea Camp End of Day 2 1 1 12 - 4pm Brewster				Cross Seaview Road					
19.37 0.83 Enter Enter Rest Stop 10 Nickerson State Park Picnic Area 19.38 0.82 L Exit Lonto CCRT Continue on CCRT Trail 19.67 0.53 Pass Pass entrance to Cobies Continue on CCRT Trail 20.00 0.20 R Right noto Millstone Road Proceed to shoulder on left A 20.10 0.10 L Left onto Rt 6A Proceed to shoulder on right W 20.20 Enter Enter R Cape Cod Sea Camp End of Day 2 1 12-4pm Brewster									
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2017	MS Ch	nallen	ge Walk Day 2					
atur	day S	eptem	nber 9, 2017					
						* Direct State of the Control of the		
/lileage	Next Stop	Direction	Street / Route	Instructions	W or A	Police Detail Total	Police Detail Location	Town
0.00		Exit	Exit Left onto Rt 6A	Proceed to shoulder on right	W	1	7:30am-11:30am	Brewster
0.38	0.37	R	Right into Cobies Lot	Proceed to shoulder on right	Trail	 	7.30am-11.30am	Diewstei
0.44	0.31	L	Left onto CCRT	Proceed on rail trail	Trail	-		
0.75	3.12	Enter	Enter Rest Stop 1	Nickerson State Park 2nd lot	ITAII			Brewster
0.76	3.11	Exit	Exit to continue on CCRT	Continue	Trail			Diewstei
0.95	2.92	X	Cross Mitchell Lane	Access Road	Trail			
1.56	2.31	X	Seaview Road	Access Road Access Road	Trail			
2.20	1.67	Exit	Exit CCRT at Salty Ridge Road	7100033110au	W			
2.29	1.58		Continue L on Salty Ridge Road		W			
2.38	1.49	SR	Sharp R onto West Road	Cross West Road to shoulder	A	1	7:30am-11:30am	Orleans
2.48	1.39		Crossover Rt 6	Sidewalk on bridge	A	- '	7.50am-11.50am	Offeatis
2.57	1.30	1	Enter L onto CCRT	Continue on trail	Trail			
3.11	0.76	X	Cross Main Street Orleans Center	Access Road	Trail	1 1	7:30am-11:30am	Orleans
3.56	0.31	X	Cross Locust Road	Access Road	Trail	 	7:00am-11:00am	Officario
3.64	0.23	X	Cross Jones Road	Access Road	Trail			
3.80	0.07	Cross	Crossover Rt 6	Continue on trail	Trail			
3.87	2.71	Enter	Enter Rest Stop 2	Orleans District Court	Han			Orleans
3.88	2.70	Exit	Exit L continue on CCRT	Gridano Biotriot Godit	Trail			Officialis
5.05	1.53	X	Cross Gov Prence Road	Access Road	Trail			
5.50	1.08	Exit	Exit L onto Bridge Road	Proceed to shoulder on left	A	·		
6.11	0.47	SR	Sharp R cross Herring Brook Rd	Proceed to shoulder on left	A			
6.58	0.91	XR	Cross enter Rest Stop 3	Herring Pond Beach			The second secon	Eastham
6.59	0.90	Exit	Exit R onto Herring Brook Rd	Continue on shoulder on right	W			Labariani
6.66	0.83	R	Right onto Lawton Road	Continue on shoulder on left	A			
6.98	0.51	XR	Cross R onto Samoset Road	Proceed to shoulder on left	A	1	8:30am-3:30pm	
7.49	2.41	Enter	Enter Rest Stop 4	CCRT at Samoset		The state of the s	Ciccam Ciccam	Eastham
7.50	2.40		Enter L onto CCRT	Continue on trail	Trail			Laction
7.95	1.95	Exit	Exit R onto Locust Road	Proceed to shoulder on left	A			
8.26	1.64	L	Left onto Salt Pond Road	Proceed to shoulder on left	A			
8.38	1.52	Х	Cross Rt 6 at crosswalk	Proceed to sidewalk on right	W	1 -1	At VC traffic light: 9am-3pm	Eastham
8.45	1.45	Pass	Salt Pond Visitor Center	Sidewalk becomes CCRT	VV	The second secon	71. VO tramo light. Oam Opin	Lactram
9.71	0.19	X	Cross Access Road	Access Road	Trail			
9.75	0.15	L	Left onto access road	Proceed to end on access road			Section 1	
9.90	0.96	Enter	Enter Rest Stop 5	Doane Picnic Area				Eastham
9.91	0.95	Exit	Exit to L onto posted short trail	Walking trail	ed and			Laotrain
10.08	0.78	L	Left onto CCRT	Proceed to Coast Guard Beach	Trail			
10.30	0.56	Cross	Crossover Footbridge	Continue on trail	Trail		and the second s	
10.48	0.38	Enter	Enter Coast Guard Beach	Loop at Headquarters	Trail		Commence of the Commence of	
10.49	0.37	Enter	Enter onto CCRT	Proceed back to Doane Picnic Area	Trail			
10.86	0.12	Pass	Footpath to Rest Stop 6	Doane Picnic Area	Trail			Eastham
10.98	2.30	Pass	Access road from Rest Stop 6	Doane Picnic Area	Trail			Lastrialii
11.08	2.20	X	Cross Access Road	Access Road	Trail			



National
Multiple Sclerosis
Society
Greater
New England
Chapter

Chief Edward Kulhawik Eastham Police Department 2550 State Highway Eastham, MA. 02642 November 29, 2016

Dear Chief Kulhawik,

Thank you for your support of the National Multiple Sclerosis Society and our 2016 MS Challenge Walk last September. I am pleased to say that the event was a huge success and all the participants had a wonderful time. We raised \$1M that will go towards continuing the fight to end MS. Being allowed to use the roads of Eastham during that weekend is extremely important to the success of the event.

We are holding the 15th annual MS Challenge Walk from September 8th - 10th, 2017. The weekend will be the same as this past year's, and I have included the Walk route and locations of last year's police details. I am also in contact with the Board of Selectman's office for any permitting needs that might be necessary.

If you have any questions or comments regarding this request, please don't hesitate to contact me.

Best Regards,

Drew Davis

Director of Logistics

National Multiple Sclerosis Society

Greater New England Chapter

(P) 781-693-5158

Drew.davis@nmss.org



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 12/29/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the

certificate holder in lieu	of such endorsement(s).			
PRODUCER MARSH USA, INC. 445 SOUTH STREET		CONTACT NAME: PHONE (A/C, No. Ext): E-MAIL	FAX (A/C, No):	
MORRISTOWN, NJ 07960-6454 Attn: Morristown.CertRequest@r		ADDRESS: INSURER(S) AFFORDING COVERAGE		NAIC #
	WALTH	INSURER A: Federal Insurance Company		20201
INSURED NATIONAL MULTIPLE SCLEROSIS SOCIETY GREATER NEW ENGLAND CHAPTER		INSURER B: ACE Property and Casualty Insurance Company		20699
		INSURER C:		
101A FIRST AVENUE, STE 6		INSURER D:		
WALTHAM, MA 02451		INSURER E:		
		INSURER F:		
COVERAGES	CERTIFICATE NUMBER:	NYC-007969988-14 REVISION NU		
INDICATED NOTWITHST	ANDING ANY REQUIREMENT TERM OR CONDIT	HAVE BEEN ISSUED TO THE INSURED NAMED ABO ION OF ANY CONTRACT OR OTHER DOCUMENT WIT ORDED BY THE POLICIES DESCRIBED HEREIN IS SU	H RESPECT TO	WHICH THIS

EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

E)	XCLUSIONS AND CONDITIONS OF SUCH			BEEN REDUCED BT	POLICY EVE			
INSR LTR	TYPE OF INSURANCE	ADDL SU	DRI POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	s	
A	X COMMERCIAL GENERAL LIABILITY		3583-33-49	12/31/2016	12/31/2017	EACH OCCURRENCE	\$	1,000,000
	CLAIMS-MADE X OCCUR			1		DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	1,000,000
	OLUMINO III III III III III III III III III					MED EXP (Any one person)	\$	10,000
						PERSONAL & ADV INJURY	\$	1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:					GENERAL AGGREGATE	\$	2,000,000
	POLICY PRO- X LOC					PRODUCTS - COMP/OP AGG	\$	1,000,000
	OTHER:						\$	
Α	AUTOMOBILE LIABILITY		7353-02-37	12/31/2016	12/31/2017	COMBINED SINGLE LIMIT (Ea accident)	\$	1,000,000
	X ANY AUTO					BODILY INJURY (Per person)	\$	
	ALL OWNED SCHEDULED					BODILY INJURY (Per accident)	\$	
	X HIRED AUTOS X NON-OWNED AUTOS					PROPERTY DAMAGE (Per accident)	\$	
	AUTOS					Comp/Coll Deductible	\$	1,000
B	X UMBRELLA LIAB X OCCUR		M00552835 006	12/31/2016	12/31/2017	EACH OCCURRENCE	\$	5,000,000
	EXCESS LIAB CLAIMS-MADE					AGGREGATE	\$	5,000,000
1	DED X RETENTION \$ 10,000	1 1					\$	
A	WORKERS COMPENSATION		71763467	12/31/2016	12/31/2017	X PER OTH- STATUTE ER		
1	AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE M					E.L. EACH ACCIDENT	\$	1,000,000
	OFFICER/MEMBER EXCLUDED?	N/A				E.L. DISEASE - EA EMPLOYEE	\$	1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below					E.L. DISEASE - POLICY LIMIT	\$	1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) THE CERTIFICATE HOLDER IS INCLUDED AS ADDITIONAL INSURED AS REQUIRED BY WRITTEN CONTRACT, BUT LIMITED TO THE OPERATIONS OF THE INSURED UNDER SAID CONTRACT, PER THE APPLICABLE ENDORSEMENT WITH RESPECT TO THE GENERAL LIABILITY AND AUTOMOBILE LIABILITY POLICIES.

CERTIFICATE HOLDER	CANCELLATION
COOKS BROOKS BEACH ATTN: MARK POWERS,DIRECTOR 2500 STATE HIGHWAY EASTHAM, MA 02642	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE of Marsh USA Inc.
4	Manashi Mukherjee Manashi Mukherjee
	The second of the second of



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 12/29/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in liqu of such endorsement(s).

the terms and conditions of the policy		idorsement. A stateme	ent on this	s certificate does not com-	er rights to the	
certificate holder in lieu of such endor	rsement(s).	CONTACT				
PRODUCER	CONTACT					
MARSH USA, INC.		PHONE		FAX (A/C, No):		
445 SOUTH STREET MORRISTOWN. NJ 07960-6454		(A/C, No, Ext): E-MAIL		[[A/C, NO].		
Attn: Morristown.CertRequest@marsh.com Fax: 212	2.048.0070	ADDRESS:				
Attit. Monistown. Certificequest@marsh.com r ax. 212	,540-0010	INSUREF	R(S) AFFORE	DING COVERAGE	NAIC#	
WALTH		INSURER A : Federal Insurance	ce Company		20281	
INSURED		INSURER B : ACE Property an	nd Casualty In	surance Company	20699	
NATIONAL MULTIPLE SCLEROSIS SOCIETY GREATER NEW ENGLAND CHAPTER		INSURER C:				
101A FIRST AVENUE, STE 6		INSURER D:				
WALTHAM, MA 02451		INSURER E:				
		INSURER F:				
	RTIFICATE NUMBER:	NYC-007969801-13		REVISION NUMBER:2		
THIS IS TO CERTIFY THAT THE POLICIES	S OF INSURANCE LISTED BELOW HAV	E BEEN ISSUED TO THE	E INSURED	NAMED ABOVE FOR THE I	POLICY PERIOD	
INDICATED. NOTWITHSTANDING ANY RI	EQUIREMENT, TERM OR CONDITION	OF ANY CONTRACT OR	OTHER D	OCUMENT WITH RESPECT T	TO WHICH THIS	
CERTIFICATE MAY BE ISSUED OR MAY	PERTAIN, THE INSURANCE AFFORDS	ED BY THE POLICIES DE	ESCRIBED	HEREIN IS SUBJECT TO A	LL THE TERMS,	
EXCLUSIONS AND CONDITIONS OF SUCH						
INSR TYPE OF INSURANCE	ADDL SUBR INSD WVD POLICY NUMBER	POLICY EFF POL (MM/DD/YYYY) (MM/	LICY EXP (DD/YYYY)	LIMITS		
A V	2592 22 40	10/21/2016 10/21	1/2017		1,000,000	

COMMERCIAL GENERAL LIABILITY 12/31/2016 1.000.000 |3583-33-49 112/31/2017 **EACH OCCURRENCE** DAMAGE TO RENTED PREMISES (Ea occurrence) CLAIMS-MADE X OCCUR 1,000,000 \$ 10,000 MED EXP (Any one person) \$ 1,000 000 PERSONAL & ADV INJURY \$ 2,000,000 \$ GEN'L AGGREGATE LIMIT APPLIES PER: GENERAL AGGREGATE 1,000,000 X Loc PRODUCTS - COMP/OP AGG \$ POLICY \$ OTHER: COMBINED SINGLE LIMIT (Ea accident) 12/31/2016 12/31/2017 AUTOMOBILE LIABILITY 7353-02-37 \$ 1,000,000 Α **BODILY INJURY (Per person)** \$ ANY AUTO ALL OWNED AUTOS SCHEDULED BODILY INJURY (Per accident) AUTOS NON-OWNED AUTOS PROPERTY DAMAGE \$ Χ Χ HIRED AUTOS (Per accident) Comp/Coll Deductible \$ 1,000 12/31/2016 12/31/2017 M00552835 006 5,000,000 В Χ **UMBRELLA LIAB** EACH OCCURRENCE \$ OCCUR 5.000,000 EXCESS LIAB AGGREGATE \$ CLAIMS-MADE DED X RETENTION \$10,000 71763467 12/31/2016 12/31/2017 WORKERS COMPENSATION X PER STATUTE AND EMPLOYERS' LIABILITY 1,000,000 ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? E.L. EACH ACCIDENT \$ N N/A 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ (Mandatory in NH) 1,000,000 If yes, describe under DESCRIPTION OF OPERATIONS below E.L. DISEASE - POLICY LIMIT

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
THE CERTIFICATE HOLDER IS INCLUDED AS ADDITIONAL INSURED AS REQUIRED BY WRITTEN CONTRACT, BUT LIMITED TO THE OPERATIONS OF THE INSURED UNDER SAID CONTRACT, PER THE
APPLICABLE ENDORSEMENT WITH RESPECT TO THE GENERAL LIABILITY AND AUTOMOBILE LIABILITY POLICIES.

CERTIFICATE HOLDER	CANCELLATION
TOWN OF EASTHAM ATTN: SHEILA VANDERHOEF 2500 STATE HIGHWAY EASTHAM, MA 02642	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE of Marsh USA Inc.
	Manashi Mukherjee Manashi Mukherjee
	C LOCAL AND LOCAL AND

EVENT NOTIFICATION FORM

Date: 11/29/16

Dear Sir / Madam,

Please be advised that the **National Multiple Sclerosis Society** has notified the Board of Selectman/City Council, Local Police/Fire Department and if applicable the State Police of its intention to conduct road work/parade/race/or **other events** in or through the City/Town of

The Board of Selectmen/City Council understands that it must give the Police and Fire Departments at least 48 hours notice before the commencement of the proposed work or event.

The Grantee must supply a Traffic Management Plan when the roadway is occupied and for all detours associated with said events to this Department and to all officials listed below. The Grantee(s) must notify the local and/or State Police to set up a detour of this area with appropriate signs and barricades. The local Fire Department must be notified of the detour to ensure that measures will be taken to minimize disruption to the Fire Department's emergency service during the event. The Grantee(s) must also notify local media (newspapers, radio) of this proposed event.

The following signatures are required prior to the issuance of the Permit. All officials listed below shall assume all responsibility and liability for all activity associated under their jurisdiction.

LOCAL POLICE DEPARTMENT Signed:	FIRE DEPARTMENT Signed:
Title: CAIRF OF POYLE	Title: Chief of Peacht
City/Town: ENSTITAND	City/Town: Easthan
BOARD OF SELECTMEN/CITY COUNCIL	STATE POLICE DEPARTMENT
Signed:	Signed:
Title:	Title:
City/Town:	City/Town:

CACO 230033(formerly 17505)

January 26, 2017

Stephanie Pollack Secretary & Chief Executive Officer Department of Transportation 10 Park Plaza, Suite 4160 Boston, MA 02116

Reference: Hawk Roadway Crossing at Route 6 south of Governor Prence Rd in Eastham

Dear Secretary Pollock:

I am writing in support of the Cape Cod National Seashore's proposal to install a HAWK signal on Route 6 south of Governor Prence Road in Eastham. This traffic control device is funded through a Transit-in-Parks grant which will soon expire if no action is taken by the Mass DOT.

The Hawk bicycle and pedestrian signal would allow visitors to safely cross a busy four lane highway to access popular attractions — Fort Hill, Hemmenway landing, Red maple swamp walk, and the Captain Penniman house. The crossing would be approximately three quarters of a mile from the Cape Cod Rail Trail. Currently, there is no safe bicycle and pedestrian access to these popular facilities during the busy summer season. The project is consistent with The National Park Service Healthy Parks, Healthy People fitness initiative as well as your Healthy Transportation Policy Directive. It would also help with limited vehicular parking.

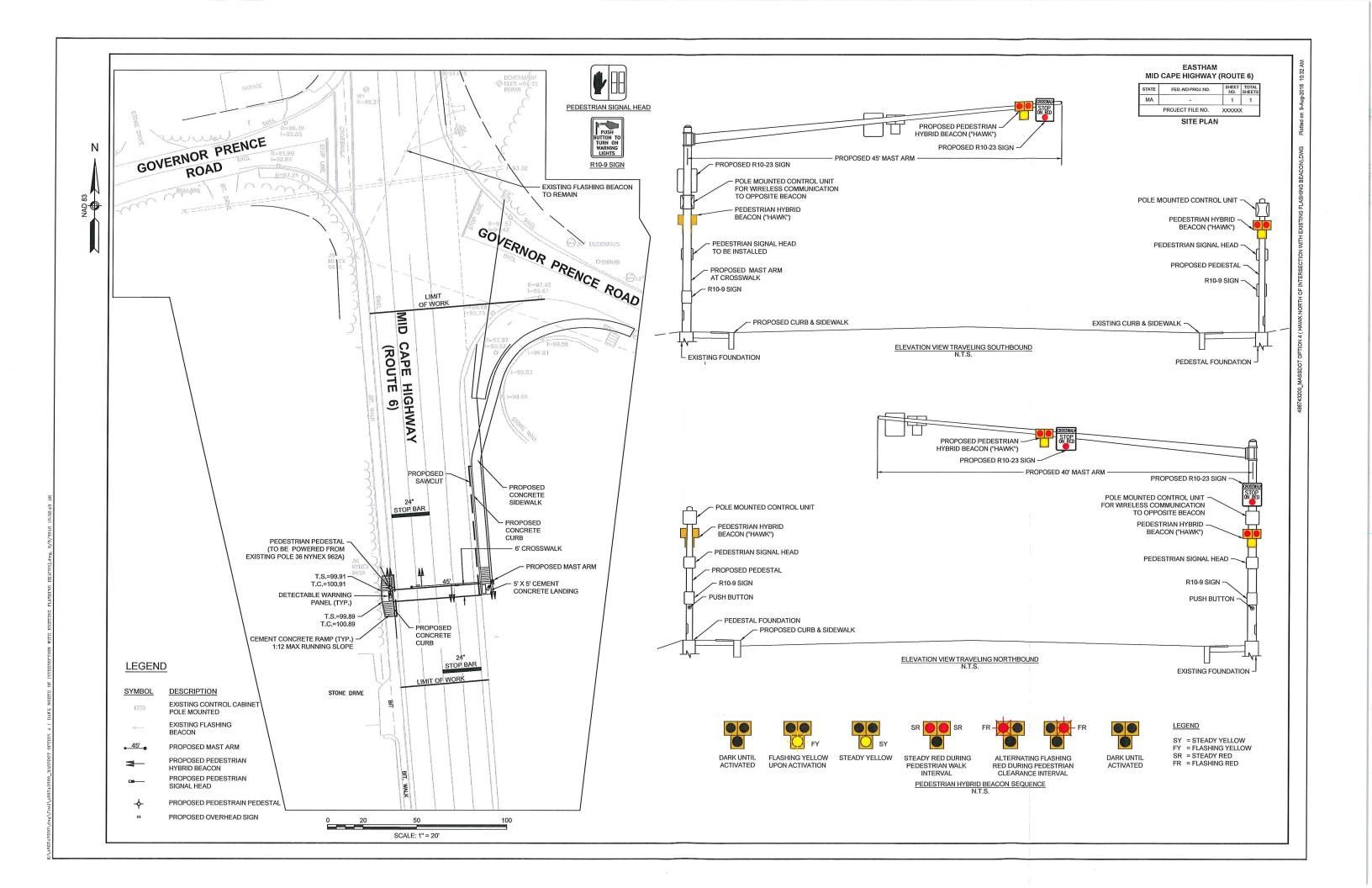
The hawk signal would primarily be used during our summer season when Eastham Population swells from 5,000 to 25,000. Bicycling a walking are popular means of transportation during the summer. In the winter, the signal would be dark and therefore not impact traffic flow on Route 6.

As the Route 6 @ Governor Prence Road intersection does not meet the MUTCD warrants for a traffic signal, the proposed mid-block Hawk signal appears the safest and practical means to allow bicycle and pedestrian access to the Fort Hill area

Sincerely,

Chairman
Board of Selectmen

Copy: Neil Boudreau (Mass DOT State Traffic Engineer James Kersten, Legislative Liaison George Price, Cape Cod National Seashore Superintendent Glenn Cannon, Cape Cod Commission







LCCAT • 100 Cable Rd., Eastham MA 02642

January 17, 2017

John Knight Chair of the Eastham Board of Selectmen 2500 State Highway, Town Hall Eastham, MA 02642

Dear Mr. Knight:

This letter is to information you that Lower Cape TV would like to extend the existing agreement between the Town of Eastham and Lower Cape TV for an additional three years, as previously agreed.

Enclosed is a simple signature form, as well as a copy of the previously executed document.

Thank you,

Larry Greeley President, LCCAT

Renewal Agreement by and between The Town of Eastham and Lower Cape Community Access Television Inc.

The Town and LCCAT agree to renew the Access Agreement dated August 2, 2010 for three years commencing August 2 2016 through August 2 2019, on the same terms and conditions contained therein.

TOWN OF ORLEANS

LOWER CAPE COMMUNITY ACCESS TV, INC

Board of Selectmen Eastham Town Hall 2500 State Highway Eastham MA 02653 Larry Greeley, President Lower Cape Community Access TV Inc.

North Eastham MA 02651

	the parties have executed this Agreement as a sealed lay of, 2016
TOWN OF ORLEANS	LOWER CAPE COMMUNITY ACCESS TV INC
By Board of Selectmen	By its President (as authorized)
John Knight, Chair	Larry-Greeley
William O'Shea	
Linda Burt	
Elizabeth Gawron	
Wallace Adams	



TOWN OF EASTHAM

2500 State Highway, Eastham, MA 02642-2544 *All departments* 508-240-5900 • *Fax* 508-240-1291 www.eastham-ma.gov

January 28, 2013

Mr. Thomas Cole, President Lower Cape Community Access Television, Inc P.O. Box 1661 North Eastham, MA 02651

RE: Renewal of the Access Agreement with LCCAT

Dear Mr. Cole,

This is to inform you that the Eastham Board of Selectmen received your correspondence dated December 20, 2012 notifying them of your intention to renew the Lower Cape Community Access Television, Inc (LCCAT) Agreement.

At their January 23, 2013 Selectmen's meeting, the Board voted to renew for three years the Agreement with the LCCAT. Said renewal shall be for a term starting June 14, 2013 through June 15, 2016. All other terms and conditions shall remain as shown in the attached agreement.

Sincerely on behalf of the Board of Selectmen,

Sheila Vanderhoef

Town Administrator

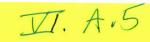
cc:

Garrett McCarey, Executive Director, LCCAT

Board of Selectmen



TOWN OF EASTHAM



2500 State Highway, Eastham, MA 02642 - 2544 *All departments* 508 240-5900 *Fax* 508 240-1291 www.eastham-ma.gov

February 6, 2017

Mr. Dominic Santanna ISO Manager 1000 Bishops Gate Blvd. Ste 300 P.O. Box 5404 Mt. Laurel, NJ 08054-5404

Re: ISO Rating

Dear Mr. Santanna,

As the governing body of the Town of Eastham, Massachusetts, the Eastham Board of Selectmen would like to request a new survey be conducted regarding the towns ISO rating. The town has recently installed a new municipal water system including fire hydrants. This new water system is the first for the Town of Eastham. The town is currently rated at 9 with ISO. Now with the availability of water for fire suppression, the Board is anticipating a lower ISO rating number.

Eastham Fire Chief, Kent J. Farrenkopf, has been in contact with Senior ISO Field Representative Mark J. Shelley. Mr. Shelley has provided information and the needed forms to start the new rating process. The Board of Selectmen and the Fire Chief look forward to working with the ISO representatives to achieve a lower ISO rating for the Town of Eastham. Please advise us of your earliest date available to start this process.

Please forward any questions or relevant information to Fire Chief Kent J. Farrenkopf at Email <u>kfarrenkopf@eastham-ma.gov</u> or call 774-212-2486. Thank you for your attention to this matter.

Sincerely,

John F. Knight Chair, Eastham Board of Selectmen

cc:

Board of Selectmen

Fire Chief

WF

Fire Suppression Rating Schedule



INSURANCE SERVICES OFFICE, INC.

FIRE SUPPRESSION RATING SCHEDULE

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INTRODUCTION

100 PURPOSE:

The purpose of this Schedule is to outline the criteria for evaluating the fire prevention and fire suppression capabilities of individual communities — or fire protection areas. The purpose of such an evaluation is to develop a Public Protection Classification (PPC) for property insurance rating.

101 SCOPE:

The Schedule measures the major elements of a fire protection area's fire prevention and fire suppression systems. The fire suppression component evaluates how those systems address reported structure fires. The Schedule gives procedures and formulas for developing the measurements into a Public Protection Classification number on a relative scale from 1 to 10, with 10 representing less than the minimum recognized protection.

The Schedule is a property insurance rating tool, and is not intended to analyze all aspects of a comprehensive public fire protection program.

102 PUBLIC PROTECTION CLASSIFICATION:

A Public Protection Classification developed by this Schedule is only one of several elements used to develop the property insurance loss cost and underwriting information for an individual property. Other features specifically relating to the individual property — such as construction, occupancy and hazards, exposures and private fire protection — are also important in the evaluation of property insurance loss costs and underwriting.

103 FIRE PROTECTION AREA:

The term "fire protection area," as used in this Schedule may include cities, towns, villages, districts, counties, or other civil jurisdictions responsible for providing fire prevention and fire suppression services.

For the purposes of the Schedule, a fire protection area must have legally defined boundaries for fire suppression services. For example, community limit boundaries, fire district boundaries, contractual agreements defining areas of responsibility, and the like may define the boundaries of a fire protection area. If a fire protection area has no legally defined boundaries, a governmental authority must affirm the boundaries in writing to ISO.

For purposes of making such an affirmation, the governmental authority should be the chief administrative official of the governing body responsible for the public safety and welfare of the residents within the fire protection area. The individual must be outside the direct chain of command of the fire protection authority. The governmental authority should preferably be an elected official, such as the mayor, the county executive, a judge, or some similar official.

104 FORMAT:

This Schedule consists of two major chapters:

I Public Fire Prevention and Suppression:

Chapter I (Sections 200 through 1312) gives procedures and formulas for developing Public Protection Classifications for properties with Needed Fire Flows of 3,500 gpm or less.

II Individual Property Fire Suppression:

Chapter II (Sections 2000 through 2311) gives procedures and formulas for developing Public Protection Classifications for specifically rated properties with Needed Fire Flow greater than 3,500 gpm.

105 CALCULATIONS:

To prorate credits or to make any calculation using a fraction of a whole number or point, round the final calculation or credit to two decimal places.

To receive full credit for any section within this Schedule, the authority having jurisdiction must produce complete records substantiating the item under review. When only partial documentation is available, prorate the credit up to a maximum of 75% of the available credit unless otherwise stated specifically in this Schedule.

When no records exist for an item under review, give no credit unless otherwise stated specifically in this Schedule.

106 REFERENCE STANDARDS:

This Schedule recognizes various voluntary consensus standards addressing fire prevention and fire suppression. The standards, approved by the American National Standards Institute (ANSI), include publications by the National Fire Protection Association (NFPA), the American Water Works Association (AWWA), and the Association of Public-Safety Communications Officials – International (APCO).

Whenever this Schedule refers to a consensus standard, the latest edition applies.

107 MINIMUM FACILITIES FOR APPLYING THIS SCHEDULE:

To receive a Public Protection Classification other than Class 10, a fire protection area must meet the following minimum requirements:

A. Organization:

The fire department must be organized under applicable state or local laws. The organization must include one person responsible for operation of the department, usually with the title of chief.

The fire department must serve an area with definite boundaries. (See Section 103.)

If a fire protection area does not have a fire department operated solely by or for the governing body of that fire protection area, the fire department providing such service must do so under a legal contract or resolution or must demonstrate documented performance for a minimum of one year. When a fire department's service area includes two or more fire protection areas, the department should execute a contract with each area served.

Governmental authorities may use NFPA 1201, *Standard for Providing Fire and Emergency Services to the Public*, as a guide to the organization and development of a fire department.

B. Firefighter Response to Alarms:

The fire department must demonstrate that a minimum number of firefighters — as defined in Section 201 — respond on the initial alarm to all reported structure fires. The chief officer may be one of the responding firefighters.

C. Training:

The fire department must provide training related to suppression of structure fires for active members for at least 3 hours every 3 months.

D. Emergency Communications:

Communications facilities and arrangements must provide for receipt of alarms and dispatch of firefighters and apparatus with no delay.

E. Apparatus:

The fire department must have at least one apparatus meeting the general criteria of NFPA 1901, *Standard for Automotive Fire Apparatus*. All apparatus must be registered and insured as emergency vehicles according to applicable state laws.

F. Housing:

Apparatus must be housed to provide protection from the weather and the deteriorating effects of all climatic conditions. In areas subject to freezing conditions, the structure must have provisions for providing heat.

Chapter I

PUBLIC FIRE PREVENTION AND SUPPRESSION

SCHEDULE APPLICATION

200 GENERAL:

Chapter I of this Schedule gives procedures and formulas for developing a Public Protection Classification that applies to properties with a Needed Fire Flow of 3,500 gpm or less as determined in Section 300.

201 APPLICATION:

The method of applying Chapter I of this Schedule depends upon the minimum facilities available for the fire department and the adequacy and duration of the water system as outlined below:

- A. Sections 300 through 1101 (Class 1 8) shall be applied if the fire protection area has all of the following:
 - 1. An apparatus that has a permanently mounted pump with a rated capacity of 750 gpm or more at 150 psi and a water tank in accordance with the general criteria of NFPA 1901, *Standard for Automotive Fire Apparatus*, "Pumper Fire Apparatus."
 - 2. A minimum of 4 firefighters responding on the initial alarm to all reported structure fires. The chief officer may be 1 of the 4 responding firefighters.
 - 3. One or both of the following:
 - a. A water system capable of delivering 250 gpm or more for a period of 2 hours plus consumption at the maximum daily rate at a fire location.
 - b. Fire department supply capable of delivering 250 gpm or more for a period of 2 hours at a fire location beginning within 5 minutes of arrival of the first-due engine.
- B. Sections 1200 through 1202 (Class 8B) apply if the fire protection area does not have the features outlined in A but does have all of the following:
 - 1. An apparatus that has a permanently mounted pump with a rated capacity of 750 gpm or more at 150 psi in accordance with the general criteria of NFPA 1901, Standard for Automotive Fire Apparatus, "Pumper Fire Apparatus."
 - 2. There shall be a minimum of 6 firefighters responding on the initial alarm to all reported structure fires. Two of the 6 may be automatic-aid firefighters (see Sections 507 and 511C). The chief officer may be 1 of the 6 responding firefighters.

- 3. The ability to deliver a minimum of 200 gpm for 20 minutes (4,000 gallons of water) on the initial alarm to all reported structure fires beginning within 5 minutes of arrival of the first-due engine.
- C. Sections 1300 through 1312 (Class 9) apply If the fire protection area does not have the facilities outlined in either A or B but does have all of the following:
 - An apparatus that has a permanently mounted pump with a rated capacity of 250 gpm or more at 150 psi and a permanently mounted water tank of at least 200 gallons in accordance with the general criteria of NFPA 1901, Standard for Automotive Fire Apparatus, "Initial Attack Fire Apparatus."
 - A minimum of 4 firefighters responding to all reported first-alarm structure fires. (See NFPA 1720, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations by Volunteer Fire Departments.) The chief officer may be 1 of the 4 responding firefighters.
 - 3. The ability to deliver a minimum of 500 gallons of water to all reported first-alarm structure fires.
- **D.** If the fire protection area does not have the facilities outlined in A, B, or C, apply Public Protection Class 10 to the fire protection area.
- **E.** If the fire protection area has a combination of A, B, C, and D, multiple Public Protection Classifications apply.

NEEDED FIRE FLOW

300 GENERAL:

This section provides procedures and formulas for developing Needed Fire Flows for selected locations throughout a fire protection area. The Schedule uses those Needed Fire Flows for other calculations. The calculation of a Needed Fire Flow (NFF) in gallons per minute (gpm) considers factors such as the type of building construction (C), occupancy (O), exposure (X), and communication (P) of each subject building or fire division.

For more information, including help with determining the factors, see *Guide for Determination of Needed Fire Flow*, available online at www.isomitigation.com/nff.

301 AUTOMATIC FIRE SPRINKLER SYSTEMS

In calculating the Needed Fire Flow for a commercial building protected by an automatic fire sprinkler system, consider the demand at the base of the automatic sprinkler riser plus additional allowances for inside and/or outside hose streams for a duration of 2 hours. This procedure applies to buildings rated and classified as sprinklered under ISO's Specific Commercial Property Evaluation Schedule (SCOPES).

The procedure also applies to a building not rated and not classified as sprinklered under ISO's SCOPES if a party responsible for the building has provided evidence that the automatic fire sprinkler system has been installed in accordance with the general criteria of NFPA 13, Standard for Installation of Sprinkler Systems, and is maintained in accordance with the general criteria of NFPA 25, Standard for the Inspections, Testing and Maintenance of Water-Based Fire Protection Systems.

310 CONSTRUCTION FACTOR (C):

The construction factor (C) is the portion of the Needed Fire Flow attributed to the construction and area of the subject building. To calculate the construction factor (C), use this formula:

$$C = 18F(\sqrt{A})$$

Where:

A = Effective Area

F = Coefficient related to the class of construction:

F = 1.5 for Construction Class 1 (Frame)*

= 1.0 for Construction Class 2 (Joisted Masonry)*

= 0.8 for Construction Class 3 (Non-Combustible)*

= 0.8 for Construction Class 4 (Masonry Non-Combustible)*

= 0.6 for Construction Class 5 (Modified Fire Resistive)*

= 0.6 for Construction Class 6 (Fire Resistive)*

Effective Area

Effective area is a modification of the total building area measured in square feet. The modification considers construction class, building height, fire protection features, division walls, and other factors that contribute to the spread of fire in a building. (See the Specific Commercial Property Evaluation Schedule (SCOPES) for detailed information on calculating effective area).

Mixed Construction

For buildings with two or more construction classes, see SCOPES, "Classification of Mixed Construction", for instructions on determining a single construction class for use in the construction factor (C) formula.

Minimum and Maximum Values

The minimum value of the construction factor (C) is 500 gpm.

The maximum value of the construction factor (C) is:

8,000 gpm for Construction Classes 1 and 2

6,000 gpm for Construction Classes 3, 4, 5 and 6

6,000 gpm for a 1-story building of any class of construction.

See the Specific Commercial Property Evaluation Schedule (SCOPES) for a detailed definition of the construction classes.

Rounding

Round the calculated value of the construction factor (C) to the nearest 250 gpm.

320 OCCUPANCY FACTOR (O):

The occupancy factor (O) reflects the influence of the occupancy on the Needed Fire Flow. Select the occupancy factor (O) from the following table.

OCCUPANCY COMBUSTIBILITY CLASS	OCCUPANCY FACTOR (O)	
C-1 (Noncombustible)	0.75	
C-2 (Limited Combustibility)	0.85	
C-3 (Combustible)	1.00	
C-4 (Free Burning)	1.15	
C-5 (Rapid Burning or Flash Burning)	1.25	

Multiple Occupancies

For buildings that contain multiple occupancies, see SCOPES, Item 440, "Combustibility Classification Applicable to Buildings," for instructions on determining a single-occupancy combustibility class for use in selecting the occupancy factor (O).

330 EXPOSURE (X) AND COMMUNICATION (P) FACTORS:

A building's exposure to and communication with adjacent buildings influence the subject building's Needed Fire Flow. Where applicable, select an exposure factor (X) from Table 330A. If applicable, also select a communication factor (P) selected from Table 330B. Select the factors for the same side of the building. Use the side of the building for which the sum of the factors has the largest value, represented as:

$$(X_i + P_i)_{max}$$

Limit the value of $(X_i + P_i)_{max}$ to a maximum of 0.60.

A. The exposure factor (X) of the subject building depends upon the construction and length-height value (length of wall in feet, times height in stories) of the exposed building and the distance between facing walls of the subject building and the exposed building. Select the exposure factor (X) from Table 330A(1-3).

^{*} See the Specific Commercial Property Evaluation Schedule (SCOPES) for more information on the length-height value.

Table 330A(1)

Construction of Facing Wall of Exposure	Frame (Except Masonry and Fire Resistive)								
Construction Wall of Subjection Distance in Feet to the Exposure	- 1	Frame	Masonry Unprotected Openings	Masonry Semiprotected Openings (or Blank)	Noncombustible Walls and Noncombustible Roof	Openings	Masonry or Fire Resistive Semiprotected Openings		
	Exposure						s 5 or 6		
0 - 10	80 - 100	0.126	0.0882	0.0000	0.1008	0.0252	0.0000		
	101 - 200	0.140	0.0980	0.0000	0.1120	0.0280	0.0000		
	201 - 300	0.140	0.0980	0.0000	0.1120	0.0280	0.0000		
	301 - 400	0.140	0.0980	0,0000	0.1120	0.0280	0.0000		
	Over 400	0.140	0.0980	0.0000	0.1120	0.0280	0.0000		
11 - 20	80 - 100	0.098	0.0686	0.0000	0.0784	0.0196	0.0000		
	101 - 200	0.126	0.0882	0,0000	0.1008	0.0252	0.0000		
	201 - 300	0.140	0.0980	0.0000	0.1120	0.0280	0.0000		
	301 - 400	0.140	0.0980	0.0000	0.1120	0.0280	0.0000		
	Over 400	0.140	0.0980	0,0000	0.1120	0.0280	0.0000		
21 - 30	80 - 100	0.056	0.0392	0.0000	0.0448	0.0112	0.0000		
	101 - 200	0.098	0.0686	0,0000	0.0784	0.0196	0.0000		
	201 - 300	0.126	0.0882	0.0000	0.1008	0.0252	0.0000		
	301 - 400	0.126	0.0882	0.0000	0.1008	0.0252	0.0000		
	Over 400	0.140	0.0882	0.0000	0.1120	0.0280	0.0000		
31 - 40	80 - 100	0.028	0.0196	0,0000	0.0224	0.0056	0.0000		
	101 - 200	0.070	0.0490	0.0000	0.0560	0.0140	0.0000		
	201 - 300	0.098	0,0686	0,0000	0,0784	0.0196	0.0000		
	301 - 400	0.112	0.0784	0.0000	0.0896	0.0224	0.0000		
	Over 400	0.126	0.0882	0.0000	0.1008	0.0252	0.0000		

Table 330A(2)

Construction of Facing Wall of Exposure	Masonry & Fire Resistive (Unprotected Openings)								
Construction Wall of Subjection Distance in Feet to the	- 1	Frame	Masonry Unprotected Openings	Masonry Semiprotected Openings (or Blank)	Noncombustible Walls and Noncombustible Roof	Masonry or Fire Resistive Unprotected Openings	Masonry or Fire Resistive Semiprotected Openings		
Exposure	Wall of					Class	s 5 or 6		
0 412	Exposure	0.0441	0.0252	0.0000	0.0252	0.0000	0.0000		
0 - 10	80 - 150 151 - 200	0.0441	0.0280	0.0000	0.0232	0.0000	0.0000		
	201 - 300	0.0490	0.0280	0.0000	0.0280	0.0000	0.0000		
	301 - 400	0.0490	0.0280	0.0000	0.0280	0.0000	0.0000		
	Over 400	0.0490	0.0280	0.0000	0.0280	0.0000	0.0000		
	0741 700	0.01.00	0.0200	0.2020					
11 - 20	80 - 150	0.0343	0.0196	0.0000	0.0196	0.0000	0.0000		
	151 - 200	0.0441	0.0252	0.0000	0.0252	0.0000	0.0000		
	201 - 300	0.0490	0.0280	0.0000	0.0280	0.0000	0.0000		
	301 - 400	0.0490	0.0280	0.0000	0.0280	0.0000	0.0000		
	Over 400	0.0490	0.0280	0.0000	0.0280	0.0000	0.0000		
21 - 30	80 - 150	0.0196	0.0112	0.0000	0.0112	0.0000	0.0000		
	151 - 200	0.0343	0.0196	0.0000	0.0196	0.0000	0.0000		
	201 - 300	0.0392	0.0224	. 0,0000	0.0224	0.0000	0.0000		
	301 - 400	0.0441	0.0252	0.0000	0.0252	0.0000	0.0000		
	Over 400	0.0490	0.0280	0.0000	0.0280	0.0000	0.0000		
31 - 40	80 - 150	0.0098	0.0056	0.0000	0,0056	0.0000	0.0000		
	151 - 200	0.0245	0.0140	0.0000	0.0140	0.0000	0.0000		
	201 - 300	0.0343	0.0196	0.0000	0.0196	0.0000	0.0000		
	301 - 400	0.0392	0.0224	0.0000	0.0224	0.0000	0.0000		
	Over 400	0.0441	0.0252	0.0000	0.0252	0.0000	0.0000		

Table 330A(3)

Construction of Facing Wall of Exposure			Masonry & F	ire Resistive (Se	miprotected Oper	nings)		
	eet to the Facing		Masonry Unprotected Openings	Masonry Semiprotected Openings (or Blank)	Noncombustible Walls and Noncombustible Roof	Masonry or Fire Resistive Unprotected Openings	Masonry or Fire Resistive Semiprotected Openings	
·	Exposure					Clas	s5or6	
0 - 10	80 - 150	0.0189	0.0126	0.0000	0.0126	0.0000	0.0000	
	151 - 200	0.0210	0.0140	0.0000	0.0140	0.0000	0.0000	
	201 - 300	0.0210	0.0140	0.0000	0.0140	0.0000	0.0000	
	301 - 400	0.0210	0.0140	0.0000	0,0140	0.0000	0.0000	
	Over 400	0.0210	0.0140	. 0.0000	0.0140	0.0000	0.0000	
11 - 20	80 - 150	0.0147	0.0098	0.0000	0.0098	0.0000	0.0000	
	151 - 200	0.0189	0.0126	0.0000	0.0126	0.0000	0.0000	
	201 - 300	0.0210	0.0140	0.0000	0.0140	0.0000	0.0000	
	301 - 400	0.0210	0.0140	0.0000	0.0140	0.0000	0.0000	
	Over 400	0.0210	0.0140	0.0000	0.0140	0.0000	0.0000	
21 - 30	80 - 150	0.0084	0.0056	0.0000	0.0056	0.0000	0.0000	
÷	151 - 200	0.0147	0.0098	0.0000	0.0098	0.0000	0.0000	
	201 - 300	0.0168	0.0112	0.0000	0.0112	0.0000	0.0000	
	301 - 400	0.0189	0.0126	0.0000	0.0126	0.0000	0.0000	
	Over 400	0.0210	0.0140	0.0000	0,0140	0.0000	0.0000	
31 - 40	80 - 150	0.0042	0.0028	0.0000	0.0028	0.0000	0.0000	
	151 - 200	0.0125	0.0070	0.0000	0.0070	0.0000	0.0000	
	201 - 300	0.0147	0.0098	0,0000	0,0098	0.0000	0.0000	
	301 - 400	0.0168	0.0112	0.0000	0.0112	0.0000	0.0000	
	Over 400	0.0189	0.0126	0.0000	0.0126	0.0000	0.0000	

EXPOSURE (X) AND COMMUNICATION (P) FACTORS: (Continued) 330

B. Factor for Communications (P):

The factor for Communication (P_i) depends upon the protection for communicating party wall* openings and the length and construction of communications between fire divisions* and shall be selected from Table 330B. When more than one communication type exists in any one side wall, apply only the largest factor for Communication (P).

Table 330B

Masonry Facing Wall (Exposure)								,	
FACTORS FOR COM	MUNICAT	IONS THI	ROUGH F	PASSAGE	WAYS						
Description of Protection of	Fire Resistive, Noncombustible, or Limited Combustible Passageways				Passageways with Combustible Construction						
Passageways	Open		Enclosed		Open			Enclosed			
Openings	Any	10 ft	11 ft	21 ft	10 ft	11 ft	21 ft	10 ft	11 ft	21 ft	
	Length	or	to	to	or	to	to	or	to	to	
		less	20 ft	50 ft	less	20 ft	50 ft	less	20 ft	50 ft	
1. Unprotected											
Length-Height 20-150	0	0.0252	0.0189	0.0126	0.0189	0.0126	0.0063	0.0315	0.0252	0.0189	
Length-Height >150	0	0.0280	0.0210	0.0140	0.0210	0.0140	0.0070	0.0350	0.0280	0.0210	
2. Single Fire Door a	t One End	d of Pass	ageway								
Length-Height 20-150	0	0.0126	0.0063	0.0000	0.0126	0.00945	0.0000	0.0189	0.0126	0.0063	
Length-Height >150	0	0.0140	0.0070	0.0000	0.0140	0.01050	0.0000	0.0210	0.0140	0.0070	
3. Single Fire Doors	at Each E	nd or Do	uble Fire	Doors a	t One Er	d of Pass	ageway				
Length-Height 20-150	. 0	0	0	0	0	0	. 0	0	0	0	
Length-Height >150	0	0	0	0	0	0	0	0	0	0	
FACTORS FOR COM	MUNICATI	IONS THI	ROUGH A	PARTY	WALL						
Single Fire Doors										:	
Length-Height 20-150	0.0189		_								
Length-Height >150	0.0210										
FACTORS FOR COM	MUNICATI	IONS ACI	ROSS PA	RTY WA	LLS						
All cases	0.0175										

Table 330B (cont.)

Other Than Masonary	Facing Wa	all (Expos	sure)								
FACTORS FOR COM	-			PASSAGE	WAYS						
Description of	Fire Resistive, Noncombustible, or Limited Combustible Passageways				Passageways with Combustible Construction						
Protection of	Open Enclosed		Open			Enclosed					
Passageways Openings	Any	10 ft	11 ft	21 ft	10 ft	11 ft	21 ft	10 ft	11 ft	21 ft	
opanings	Length	or	to	to	or	to	to	or	to	to	
		less	20 ft	50 ft	less	20 ft	50 ft	less	20 ft	50 ft	
1. Unprotected											
Length-Height 20-100	0	0.0504	0.0378	0.0252	0.0378	0.0252	0.0126	0.063	0.0504	0.0378	
Length-Height >100	0	0.0560	0.0420	0.0280	0.0420	0.0280	0.0140	0.0700	0.0560	0.0420	
2. Single Fire Door at	One Foo	of Pass	adeway								
Length-Height 20-100	0	0.0252	0.0126	0.0000	0.0252	0.0189	0.0000	0.0378	0.0252	0.0126	
Length-Height >100	0	0.0280	0.0140	0.0000	0.0280	0.0210	0.0000	0.0420	0.0280	0,0140	
2 C 1 F 2	3. Single Fire Doors at Each End or Double Fire Doors at One End of Passageway										
Length-Height 20-100	o o	0	ubie rire	0	O O	01 745	o o	0	ol	0	
Length-Height >100	0	0	0	0	0	0	0	0	0	0	

Note When a party wall has communicating openings protected by a single automatic or self-closing Class A fire door, it qualifies as a division wall* for reduction of area.

Note Where communications are protected by a recognized water curtain*, the value of P is zero (0).

^{*}The term is defined in greater detail in the Specific Commercial Property Evaluation Schedule (SCOPES).

340 CALCULATION OF NEEDED FIRE FLOW (NFF):

Use the following formula to determine the Needed Fire Flow (NFF):

$$NFF_i = (C_i)(O_i)[1.0 + (X + P)_i]$$

When a wood shingle roof covering on the subject building, or on exposed buildings, can contribute to spreading fires, add 500 gpm to the Needed Fire Flow.

The minimum Needed Fire Flow is 500 gpm, and the maximum is 12,000 gpm.

Round the calculated Needed Fire Flow to the nearest 250 gpm if less than 2,500 gpm and to the nearest 500 gpm if greater than 2,500 gpm.

For residential occupancies protected with an automatic fire sprinkler system installed in accordance with the general criteria of NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and including Four Stories in Height, the Needed Fire Flow is either the demand at the base of the automatic sprinkler riser or 1,000 gpm at 20 psi for a duration of 2 hours, whichever is greater.

For 1- and 2-family dwellings not exceeding 2 stories in height, the following Needed Fire Flows at a duration of 1 hour shall be used:

DISTANCE BETWEEN BUILDINGS	NEEDED FIRE FLOW	
 More than 30 feet	500 gpm	•
21-30 feet	750 gpm	
11-20 feet	1,000 gpm	
0 –10 feet	1,500 gpm	

- Exception 1: For a 1- or 2-family dwelling protected with an automatic fire sprinkler system installed in accordance with the general criteria of NFPA 13D, Installation of Sprinkler Systems for One- and Two-Family Dwellings and Manufactured Homes, the Needed Fire Flow is either demand at the base of the automatic sprinkler riser or 500 gpm at 20 psi for a duration of 1 hour, whichever is greater.
- Exception 2: For a 1- or 2-family dwelling with an Effective Area greater than 4,800 square feet, calculate the Needed Fire Flow using the Needed Fire Flow formula in this Section. Use the duration as specified in Section 604.

^{**} Residential occupancies specified in the scope of this standard include: apartment buildings; lodging and rooming houses; board and care facilities; and hotels, motels, and dormitories.

Emergency Communications

400 GENERAL:

This section gives procedures and formulas for evaluating:

- · communications facilities provided for the general public to report structure fires
- Enhanced 9-1-1 Telephone Service including wireless
- computer-aided dispatch (CAD) facilities
- · alarm receipt and processing at the communication center
- training and certification of telecommunicators
- facilities used to dispatch fire department companies to reported structure fires

410 EMERGENCY REPORTING (ER):

For information about emergency reporting for fire alarms, see NFPA 1221, Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems.

Assign points for emergency reporting (ER) according to the following:

Apply either A or B below

Emergency Reporting System (ERS₁)

A. Basic 9-1-1 or no 9-1-1 (BSC)

Public Safety Answering Point (PSAP) does not have customer-premises equipment (CPE) to enable the receipt of Enhanced 9-1-1 calls. Basic 9-1-1 systems do not have provisions for selective routing and may have automatic number identification (ANI) and/or automatic location identification (ALI)

ERS₁= Total, Maximum

Emergency Reporting System (ERS₂)

B. Enhanced 9-1-1 (ES)

Public Safety Answering Point (PSAP) has customer-premises equipment (CPE) to enable the receipt of Enhanced 9-1-1 calls with associated automatic number identification (ANI) and automatic location identification (ALI) from callers in the PSAP's jurisdiction, including selective routing



Maxi

mum Value

1. E9-1-1 Wireless (EW)

a. Wireless Phase I using Static ALI Functionality (WP1)

The PSAP is Phase 1 wireless-capable for at least one wireless service provider (WSP) in the jurisdiction or has made a valid formal request for Phase 1 wireless service with the WSPs doing business in its jurisdiction

b. Wireless Phase II using Dynamic ALI Functionality (WP2)

The PSAP is Phase 2 wireless-capable for at least one WSP in the jurisdiction or has made a valid formal request for Phase 2 wireless service with the WSPs doing business in its jurisdiction

- 2. E9-1-1 Voice over Internet Protocol (EI)
 - a. Static Voice over Internet Protocol using Static ALI Functionality (SVoIP)

The PSAP is capable of receiving and processing static VoIP calls with associated call back number and caller location information

 Nomadic Voice Over Internet Protocol using Dynamic ALI Functionality (NVoIP)

The PSAP is capable of receiving and processing VoIP calls utilizing dynamic ALI updates (callback number and caller location information)

3. Computer-Aided Dispatch (CAD)

a. Basic CAD (BC)

The PSAP provides its telecommunicators with software to assist in initiating calls for service, dispatching, and maintaining the status of responding resources in the field

b. CAD with Management Information System (MIS)

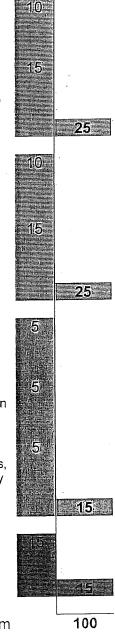
The PSAP has the ability to automatically accept, display and plot caller location data on an electronic map display (GIS) and access historical incident information

c. CAD with Interoperability (CAI)

The PSAP can transmit call information directly to responders, alternate PSAPs, and others. PSAP has the ability to provide data and interoperate electronically with other agencies and communications centers

4. Geographic Information System (GIS/AVL)

The PSAP uses a fully integrated CAD/GIS management system with automatic vehicle location (AVL) integrated with a CAD system providing dispatch assignments.



ERS₂= Total, Maximum

414 CREDIT FOR EMERGENCY REPORTING (CER):

Calculate the credit for emergency reporting (CER) as follows:

$$CER = \frac{ER}{100} \times 3$$

Where:

$$ER = ERS_1$$
 or ERS_2

ERS₁ = BSC

ERS₂ = (ES+EW+EI+CAD+GIS)

420 TELECOMMUNICATORS (TC):

Assign points for telecommunicators (TC) according to the following:

A. Telecommunicator Performance (TCP):

Handling of fire calls should be in accordance with the general criteria of NFPA 1221, Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems.

1. Alarm Receipt (AR):

2. Alarm Processing (AP):

Processing of alarms shall meet the requirements in accordance with the criteria of NFPA 1221......20 points

B. Emergency Dispatch Protocols for Fire Service (EDP):

C. Telecommunicator Training and Certification (TTC):

D. Telecommunicator Continuing Education/Quality Assurance (TQA):

Telecommunicators participate in continuing education and/or in-service training and quality-assurance programs as appropriate for their positions......20 points

422 CREDIT FOR TELECOMMUNICATORS (CTC):

Calculate the credit for telecommunicators (CTC) as follows:

$$CTC = \frac{TC}{100} \times 4$$

Where

$$TC = (AR + AP) + EDP + TCC + TQA$$

430 DISPATCH CIRCUITS (DC):

For information about the number and type of dispatch circuits needed to transmit alarms to fire department members, see NFPA 1221, *Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems.* If all responding firefighters are in the same building as the communication center and if the communications center personnel alert them, no dispatch circuit is needed. Do not give credit for facilities that are installed but not used or tested according to the general criteria of NFPA 1221.

431 REVIEW OF DISPATCH CIRCUITS (RDC):

Assign points for review of dispatch circuits (RDC) according to the following:

	Number of Needed Circuits	- N			u.v.
	Mulliber of Reeded Circuits	1		2	Mas
		-	Primary	Secondary	Yalue
4.	Dispatch Circuit(s) Provided: Apply only one of the following for each needed dispatch circuit. Maximum credit for this subsection is 40 points.		·		
1	Circuit to fire station where personnel are on duty:				
	a. The circuit consists of voice radio (trunked or nontrunked), microwave carrier channel, polling or self-interrogating digital radio, dedicated telephone circuit, wired circuit (including Internet Protocol (IP)) dedicated to public safety or governmental use.	40	20	,20	
	b. The circuit indicates only the box number or street intersection. With this type of circuit, there must be a telephone circuit or other means of transmitting detailed information to the fire station.	20	2 10 mm	10	
2	Radio Receivers Carried by Members: The circuit consists of a radio transmitter and receivers carried by members.				
	 Voice receivers under the direct control of the authority having jurisdiction (AHJ). 	40	.20	20	
	 Alphanumeric receivers with or without two-way paging capability under the direct control of the AHJ. 	40	20 -	20	
3	Circuit to Outside Coded Sounding Device: The circuit activates a coded siren, air horn, or other outside sounding device that notifies members. With this type of circuit, there must also be a telephone circuit or other means of transmitting detailed information to the fire station.	20	10 (17)	1 D:	
4	Circuit to Outside Noncoded Sounding Device: The circuit activates a noncoded siren, air horn, or other outside sounding device that notifies members. With this type of circuit, there must also be a telephone circuit or other means of transmitting detailed information to the fire station.	10	5	5	
5	No Circuit Provided:		0	0	
	Mazimum Yalue 431A				40

	Number of Needed Circuits				
		1		<u>, </u>	Max
			Primarg	Secondarg	Yalue.
В.	Monitoring for Integrity of Circuit:	30	30		30
	Maximum Value 431B	ļ			- 30
C.	Emergency Power Supply System:				
	When a dispatch circuit is dependent upon a power source at both transmitting and receiving facilities, credit the emergency power arrangement with the least points.				
	Credit for emergency power is dependent upon a testing program in accordance with the general criteria of NFPA 1221 and if applicable, remote annunciation based on NFPA 110, Standard for Emergency and Standard Prover Systems and NFPA 111, Standard on Stored Electrical Emergy Emergency and Standard Prover Systems.				
	Apply only one of the following for each needed dispatch circuit.				
1	Automatically started generator:	20	10	10	
	When used in combination with an uninterruptible power supply (UPS) add:	10	5	5	
2	Manually started generator:	20	10	10	
	When used in combination with an uninterruptible power supply (UPS) add:	10	5	5	-
3	Central battery system plus manually started generator:	30	15	15	
4	Central battery system only:	10	5	5	
	When strength and duration of the system meets the requirements in accordance with the general criteria of NFPA Standard 1221, add:	20	10	10	-
5	No emergency power provided: Maximum credit for this subsection is 30 points.	0	0	0	
	Mazimum Yalue 431C		1235145453455555555555555555555555	***********************	30
D.	When no circuit is needed:	100			
	Mazimum Total Credit		65	35	100

Note If some companies and members receive notification by one method and others by another method, prorate the points by the number members alerted by each method.

432 CREDIT FOR DISPATCH CIRCUITS (CDC):

Calculate the credit for dispatch circuits (CDC) as follows:

$$CDC = \frac{RDC}{100} \times 3$$

Where

$$RDC = (A + B + C + D)$$

440 CREDIT FOR EMERGENCY COMMUNICATIONS (CEC):

Calculate the credit for emergency communications (CEC) as follows:

$$CEC = (CER + CTC + CDC)$$

FIRE DEPARTMENT

500 GENERAL:

This section gives procedures and formulas for evaluating fire departments, including:

- engine, ladder, and/or service companies
- · equipment carried
- response to reported structure fires
- deployment analysis of companies
- available firefighters
- training

501 BASIC FIRE FLOW (BFF):

The Basic Fire Flow for a fire protection area is the fifth highest of Needed Fire Flows determined in Section 340. The maximum Basic Fire Flow is 3,500 gpm.

507 AUTOMATIC AID (AA;):

This section defines the credits available for automatic aid meeting the needs of the fire protection area under evaluation. Credit is available for engine companies and/or ladder/service companies from outside the fire protection area boundaries and within 5 road miles of the boundaries. The automatic-aid companies must respond under a legal contract or resolution or must demonstrate documented performance for a minimum of one year. The aiding fire departments must operate under a predetermined response plan for initial alarms.

AAi is a factor used in other calculations in this Schedule.

Assign points for AA, arrangements according to the following:

			Maximum Value
1.	Communication Facilities Review the dispatch facilities of the automatic-aid fire department according to Section 431. Multiply the number of points developed by application of Section 431 by 0.002:		
2.	Communication Facilities (continued) The communications center receives and dispatches all alarms, or there is no delay between communications centers in receipt and dispatch of alarms:		
3	Dispatch Plan The communications center uses computer-aided dispatch (CAD) to dispatch companies:		
4.	Interdepartment Training		
	a. Quarterly 3-hour training exercises with automatic-aid companies: or	0.35	
	b. Semiannual 3-hour training with automatic-aid companies:	0.20	
	or c. Annual 3-hour training with automatic-aid companies:	0.10	0.35
5.	Radio Communications Interoperability a. Common dispatch and tactical radio frequency capability: or	0.10	
	b. Common dispatch or tactical radio frequency capability:	0.05	0.10
6.	Standard Operating Procedures The fire departments have common standard operating procedures that outline the expectations and responsibilities for a first-alarm response:	0.110	0.10
	AA_i = Total, maximum		1.00

Note: If the developed factor is less than 0.40, no credit applies.

510 ENGINE COMPANIES (NE):

The number of needed engine companies is the largest number determined by applying Section 510A, 510B, or 510C.

A. Engine Company Locations:

A fire protection area needs an engine company for each engine location credited under Section 560, Deployment Analysis.

As an alternative to determining the number of needed engine companies through the road-mile analysis used in Section 560, the authority having jurisdiction may provide the results of a systematic performance evaluation. This type of evaluation analyzes computer-aided dispatch (CAD) history to demonstrate that, with its current deployment of companies, each fire department meets the time constraints for initial arriving engine in accordance with the general criteria of in NFPA 1710, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments.

B. Engine Companies by Basic Fire Flow (BFF):

Basic Fire Flow, gpm	Number of Needed Engine Companies	
500 - 1,000	1	
1,250 - 2,500	2	
3,000 - 3,500	3	

C. Number of Needed Engine Companies for Method of Operation:

The standard response on the initial alarm to fires in structures consists of a minimum of 2 engine companies. The responding fire departments must provide enough engine companies to ensure the response of at least 2 engine companies to all alarms for structure fires.

Exception: Minimum response for fire protection areas with a Basic Fire Flow of less

than 1250 gpm is 1 engine company.

511 NUMBER OF EXISTING ENGINE COMPANIES (EE):

A. Engine Companies

Credit pumpers staffed on the initial alarm to all reported structure fires as existing engine companies. At least 1 apparatus must have a permanently mounted pump rated at 750 gpm or more at 150 psi. (See Section 201A1.)

Credit all other apparatus with a permanently mounted pump rated at 250 gpm or more at 150 psi in this section.

B. Engine-Ladder or Engine-Service Companies

Credit an apparatus that carries both pumper and ladder-service equipment that is staffed on the initial alarm to all reported structure fires as an existing engine company, if needed according to Section 510.

C. Automatic-Aid Engine Companies:

Basic Fire Flow

Credit engine companies from outside the fire protection area and within 5 road miles of the fire protection area boundaries if needed to meet the requirements of Basic Fire Flow.

Deployment Analysis

Credit an automatic-aid engine company that serves 50% or more of an engine response district not within 1½ road miles of other engine companies. An engine response district is a built-upon area with a creditable water supply (as defined in Section 201A3) within a response distance of 1½ road miles.

Section 507 shows the credits available for automatic-aid engine companies.

512 EQUIPMENT ON EXISTING ENGINE COMPANIES (EC;):

For each company meeting the criteria of Section 511, evaluate the following:

A. Pump Capacity (PC_i):

Evaluate the actual pump capacity for each existing pumper at a rated pump pressure of 150 psi. Calculate the credit for pump capacity (PC_i) as follows:

$$PC_{j} = \frac{\text{Pump Capacity, Up to 1000 gpm}}{\text{1000 gpm}}$$

B. Hose Carried (HC_i):

Calculate the credit for hose carried (HC_i) as follows:

$$HC_{j} = \frac{SC_{j} + AC_{j}}{1200 \text{ feet}}$$

Where:

SC_i= length of supply line hose, comprising up to 1,000 feet in accordance with the general criteria of NFPA 1901, Standard for Automotive Fire Apparatus

AC = length of attack hose, comprising up to 200 feet of 2-inch, or 21/2- inch hose

C. Equipment (E_i):

Evaluate pumper equipment and hose carried for fighting structure fires by referring to NFPA 1901, Standard for Automotive Fire Apparatus, "Pumper Fire Apparatus." Determine the points credited for each existing in-service pumper by referring to the current equipment lists in Table 512A, Pumper Equipment and Hose; Table 512B,

Pumper Service Test Program; and Table 512C, Hose Service Test Program. Please see tables located in Appendix A of this document.

Calculate the credit for equipment (E_i) as follows:

E_i = Sum of applicable points from Table 512A, including points from Tables 512B, and 512C.

D. Value of Existing Engine Companies (EC_i):

Calculate the credit for the value of each existing engine company (EC_i) as follows:

$$EC_i = (PC_i)(HC_i)(E_i)$$

Note: When an automatic-aid company offsets the lack of a needed engine company, multiply the value of EC_i by the AA_i factor developed for each credited automatic-aid engine company. See Section 507 for development of the AA_i factor.

513 CREDIT FOR ENGINE COMPANIES (CEC):

Calculate the credit for engine companies (CEC) as follows:

$$CEC = \frac{(EC)}{600(NE)}[I + 0.5(I')] \times 6$$

Where:

$$EC = \sum_{i=1}^{n} EC_{i}$$

n = the number of existing engine companies (EE)

If NE < EE, then NE = EE

I = percent of built-upon area of the fire protection area with the initial response of at least 2 engine companies to reported fires in buildings

I' = percent of built-upon area of the fire protection area with the initial response of only 1 engine company to reported fires in buildings, except in fire protection areas where only 1 engine company is needed

Note: In fire protection areas where only 1 engine company is needed by Basic Fire Flow, I = 100%, and I' = 0.

520 NUMBER OF NEEDED RESERVE PUMPERS (NRP):

The number of needed reserve pumpers is 1 for each 8 needed engine companies or any fraction thereof.

521 EQUIPMENT ON EXISTING RESERVE PUMPERS (RPC_i):

Evaluate reserve pumpers for pump capacity (PC_i), hose carried (HC_i) and equipment (E_i) in the same manner as described in Section 512. The number of reserve pumpers evaluated in this section shall not exceed the number of needed reserve pumpers.

For each reserve pumper, calculate the credit for equipment on existing reserve pumpers (RCP_i) as follows:

$$RPC_i = (PC_i)(HC_i)(E_i)$$

Where:

 PC_i = pump capacity credit as developed in Section 512A ÷ 1,000 gpm

HC, = hose credit as developed in Section 512B

 E_i = equipment credit as developed in Section 512C

523 CREDIT FOR RESERVE PUMPERS (CRP):

Calculate the credit for reserve pumpers (CRP) as follows:

$$CRP = \frac{RCP}{600 (NRP)} \times 0.5$$

Where:

$$RCP = \sum_{i=1}^{n} RCP_{i}$$

n = the number of needed reserve engine companies (NRP)

530 PUMP CAPACITY (PC):

The total available pump capacity should be sufficient for the Basic Fire Flow in the fire protection area. Credit the pump capacity obtained by test at the rated pump pressure, not to exceed rated capacity. Limit the credit to a maximum of 75% of the rated capacity if partial test data is available and to a maximum of 50% of the rated capacity if no test data is available.

531 REVIEW OF PUMP CAPACITY:

A. Existing Pump Capacity (EP_i):

In this section, credit the pump capacity of in-service pumpers, pumper-ladder trucks, and pumper-service trucks credited in Section 513.

B. Reserve Pump Capacity (RP_i):

In this section, credit the pump capacity of reserve pumpers credited in Section 523.

C. Other Pump Capacity (OP_i):

In this section, credit 50% of the capacity of permanently mounted pumps on other responding apparatus not credited in Section 513 or Section 523. The pumps must be capable of delivering at least 250 gpm at 150 psi.

D. Automatic-Aid Pumper Capacity (AAP):

In this section, credit the capacity of pumpers credited as automatic aid in Section 513. Use the value of the AA_i developed in Section 507 multiplied by the creditable pump capacity for each credited automatic-aid pumper.

532 CREDIT FOR PUMP CAPACITY (CPC):

Calculate the credit for pump capacity (CPC) as follows:

$$CPC = \frac{(EP + RP + OP + AAP)Up \text{ to BFF}}{BFF} \times 3$$

Where:

$$EP = \sum_{i=1}^{n} EP_{i}$$

Note: In this formula, n = number of in-service apparatus from Section 513.

$$.RP = \sum_{i=1}^{n} RP_{i}$$

Note: In this formula, n = number of reserve apparatus from Section 523.

$$OP = \sum_{i=1}^{n} OP_{i} \times 0.5$$

n = number of other apparatus

$$AAP = \sum_{i=1}^{n} [(AAP_i)(AA_i)]$$

Note: In this formula, n = number of automatic-aid pumpers. The value AA_i is from Section 507.

540 LADDER/SERVICE COMPANIES (NL/NS):

The standard response on the initial alarm to fires in structures consists of a minimum of 1 ladder or service company. The responding fire departments must provide enough ladder and/or service companies to ensure the response of at least 1 ladder or service company to all alarms for structure fires.

A fire protection area needs a ladder/service company for each ladder/service location credited under Section 560, Deployment Analysis.

Also, a fire protection area needs a ladder/service company in an existing fire station when that station serves 50% or more of a standard response district not within 2½ road miles of other ladder/service companies. A standard response district is a built-upon area with a creditable water supply (as defined in Section 201A3) within a response distance of 2½ road miles.

The additional needed ladder/service locations must be fire stations identified as needed in Section 510A.

As an alternative to determining the number of needed ladder/service companies through the road-mile analysis used in Section 560, the authority having jurisdiction may provide the results of a systematic performance evaluation. Such an evaluation analyzes computer-aided dispatch (CAD) history to demonstrate that, with its current deployment of companies, each fire department meets the time constraints for initial full-alarm assignment in accordance with the general criteria of NFPA 1710, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments.

A. NUMBER OF NEEDED LADDER COMPANIES (NL):

Individual ladder/service response areas with at least 5 buildings of 3 stories or 32 feet or more in height (ground to eaves) or with at least 5 buildings that have a Needed Fire Flow greater than 3,500 gpm or with at least 5 buildings meeting any combination of those criteria must have a ladder company.

When no individual response area needs a ladder company, the fire protection area needs at least 1 ladder company if buildings in the fire protection area meet the criteria above.

B. NUMBER OF NEEDED SERVICE COMPANIES (NS):

Ladder/service response areas not needing a ladder company according to Section 540A must have a service company.

NUMBER OF EXISTING LADDER/SERVICE COMPANIES (EL/SC):

A. NUMBER OF EXISTING LADDER COMPANIES (EL):

For a company serving in the capacity of a ladder company, on the initial alarm to all reported structure fires, and equipped according to NFPA 1901, *Standard for Automotive Fire Apparatus*, give credit as an existing ladder company if a ladder company is needed according to Section 540A.

For an apparatus serving in the capacity of a ladder company, equipped according to NFPA 1901, and considered as an existing engine company in Section 511, give 50% credit as a ladder company (engine-ladder) in this section if a ladder company is needed according to Section 540A.

B. NUMBER OF EXISTING SERVICE COMPANIES (ES):

For a company serving in the capacity of a service company, on the initial alarm to all reported structure fires, and equipped according to NFPA 1901, *Standard for Automotive Fire Apparatus*, give credit as an existing service company if a service company is needed according to Section 540B.

For an apparatus serving in the capacity of a service company, equipped according to NFPA 1901, and considered as an existing engine company in Section 511, give 50% credit as a service company (engine-service) in this section if a service company is needed according to Section 540B.

C. AUTOMATIC AID LADDER/SERVICE (AAL):

Credit ladder/service companies from outside the fire protection area and within 2½ road miles of the fire protection area boundaries if they cover areas beyond the standard 2½-mile response distance of existing ladder/service company locations. The automatic-aid credit will reflect the percentage of the area covered. Determine the type of company credited according to Sections 540A and 540B.

542 EQUIPMENT ON EXISTING LADDER, ENGINE-LADDER, SERVICE, ENGINE-SERVICE COMPANIES

A. LADDER COMPANY EQUIPMENT (LCE;):

Evaluate ladder company equipment carried for fighting structure fires by referring to NFPA 1901, Standard for Automotive Fire Apparatus, "Aerial Fire Apparatus." Determine the points credited for each existing in-service ladder company by referring to the current equipment lists in Table 542A, Equipment for a Service Company; Table 542B, Additional Equipment for a Ladder Company; and Table 542C, Aerial Ladder/Elevating Platform Test Program. Please see tables located in Appendix B of this document.

B. ENGINE-LADDER COMPANY EQUIPMENT (ELCE,):

For an existing engine-ladder truck considered in Sections 511 and 542A, equipped according to NFPA 1901, *Standard for Automotive Fire Apparatus*, serving in the capacity of an engine-ladder company, and considered as an existing engine company in Section 511, give 50% credit in this section if a ladder company is needed according to Section 540A.

Evaluate ladder company equipment carried for fighting structure fires by referring to NFPA 1901, Standard for Automotive Fire Apparatus, "Aerial Fire Apparatus." Determine the points credited for each existing in-service ladder company by referring to the current equipment lists in Table 542A, Equipment for a Service Company; Table 542B, Additional Equipment for a Ladder Company; and Table 542C, Aerial Ladder/Elevating Platform Test Program. Please see tables located in Appendix B of this document.

C. SERVICE COMPANY EQUIPMENT (SCE,):

Determine the points credited for each existing in-service service company by referring to the current equipment list in Table 542A, Equipment for a Service Company. Please see tables located in Appendix B of this document.

D. ENGINE-SERVICE COMPANY EQUIPMENT (ESCE,):

For an existing engine-service truck considered in Sections 511 and 541B, equipped according to NFPA 1901, *Standard for Automotive Fire Apparatus*, serving in the capacity of an engine-service company, and considered as an existing engine company in Section 511, give 50% credit in this section if a service company is needed according to Section 540B.

Determine the points credited for each in-service engine-service company by referring to the current equipment list in Table 542A, Equipment for a Service Company. Please see tables located in Appendix B of this document.

548 AUTOMATIC AID:

In this section, credit the value of an automatic-aid ladder, service, engine-ladder, or engine-service company. Use the value of the company as determined by Sections 542A through 542D multiplied by AA, factor developed in Section 507.

CREDIT FOR LADDER SERVICE (CLS): Calculate the credit for ladder service (CLS) as follows:

$$CLS = \left(\frac{LCE + SCE + 0.5(ELCE) + 0.5(ESCE)}{772(NL) + 356(NS)}\right)(A) \times 4$$

A = percentage of built-upon area of the fire protection area with initial response (first alarm) of a ladder, service, engine-ladder or engine-service company to reported fires in buildings.

Where:

$$LEC = \sum_{i=1}^{n} LEC_{i}$$

$$ELCE = \sum_{i=1}^{n} ELCE_{i}$$

$$SCE = \sum_{i=1}^{n} SCE_{i}$$

$$ESCE = \sum_{i=1}^{n} ESCE_{i}$$

n = number of apparatus

550 NUMBER OF NEEDED RESERVE LADDER SERVICE TRUCKS (NRLS):

The number of needed reserve ladder (NRL) and needed reserve service (NRS) trucks is 1 for each 8 existing ladder and service companies (ELS) or any fraction thereof.

When a pumper-ladder truck has been credited in Sections 513 and 541A, consider it in this section as 1 existing ladder company.

When a pumper-service truck has been credited in Sections 513 and 541B, consider it in this section as 1 existing service company.

Calculate the number of needed reserve ladder service trucks (NRLS) as follows:

$$NRLS = \frac{EL + ES}{8}$$
 (raise to the next highest integer)

Calculate the number of needed reserve ladder trucks (NRL) as follows:

$$NRL = \frac{EL}{8}$$
 (raise to the next highest integer)

Calculate the number of needed reserve service trucks (NRS) as follows:

NRS = NRLS - NRL

551 EQUIPMENT ON RESERVE LADDER AND SERVICE TRUCKS (RLSC.):

Evaluate the equipment carried on reserve ladder and service trucks in the same manner as described in Section 542.

The number of reserve ladder and service trucks credited in this section shall not exceed the number of needed reserve ladder and service trucks. A reserve pumper-ladder or reserve pumper-service truck may be credited in this section as a reserve ladder or service truck or in Section 523 as a reserve pumper, but not both.

553 CREDIT FOR RESERVE LADDER AND SERVICE TRUCKS (CRLS):

Calculate the credit for reserve ladder and service trucks (CRLS) as follows:

$$CRLS = \frac{RLSC}{NRL(772) + NRS(356)} \times 0.5$$

Where:

$$RLSC = \sum_{i=1}^{n} RLSC_{i}$$

n = the number of creditable reserve ladder and service trucks from Section 550

560 DEPLOYMENT ANALYSIS (DA):

The built-upon area of the fire protection area should have a first-due engine company within $1\frac{1}{2}$ road miles and a ladder-service company within $2\frac{1}{2}$ road miles.

As an alternative to determining the number of needed engine and ladder/service companies through the road-mile analysis, a fire protection area may use the results of a systematic performance evaluation. This type of evaluation analyzes computer-aided dispatch (CAD) history to demonstrate that, with its current deployment of companies, the fire department meets the time constraints for initial arriving engine and initial full-alarm assignment in accordance with the general criteria of in NFPA 1710, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments.

561 CREDIT FOR DEPLOYMENT ANALYSIS (CDA):

Calculate the credit for deployment analysis (CDA) as follows:

$$CDA = \left[\left[\frac{EC}{600(EE)} \times 0.6(AE) \right] + \left[\frac{LCE + SCE + 0.5(ELCE) + 0.5(ESCE)}{772(EL) + 356(ES)} \times 0.4(AL) \right] \right] \times 10$$

Where:

- AE = the percent of built-upon area within 1½ road miles of a first-due engine, engine-ladder, or engine-service company
- AL = the percent of the built-upon area within 2½ road miles of a first-due ladder, service, engine-ladder, or engine-service company

570 EXISTING COMPANY PERSONNEL (ECP):

"Existing company personnel" means the average number of active firefighters and company officers available for existing companies. The number includes firefighters assigned to an initial rapid intervention crew (IRIC). Do not include the incident commander in existing company personnel.

Each person credited must, while on the fireground, have available a protective clothing ensemble in accordance with the general criteria of NFPA 1001, Standard for Fire Fighter Professional Qualifications.

Limit the credit for company personnel to the firefighters meeting the general criteria in Section 580. Evaluate company personnel as follows:

A. On-Duty Firefighters at Fire Stations (ODF):

To evaluate the total number of firefighters on duty with companies at the fire station, take an average over an entire year, considering vacations, holidays, sick leave, and other absences.

If a fire department has a funded hire-back program or equivalent program that will maintain minimum staffing levels, consider all staff as part of the annual average.

Include chiefs' aides in company strength if they participate in firefighting operations. Also include chief officers and fire department administrative personnel if they respond on the initial alarm to all reported structure fires and perform company duties.

In this section, include in company strength firefighters on apparatus not credited under Sections 513 and 549 if they regularly respond on the initial alarm to all reported structure fires to aid engine, ladder, and service companies.

Credit fire department personnel staffing ambulances or fire department apparatus responding on medical calls if those personnel participate in fighting structure fires. Prorate the credit to reflect the extent to which such personnel are available, respond on the initial alarm to all reported structure fires and perform company duties.

Each person credited in the section must, while on the fireground, have available a protective clothing ensemble in accordance with the general criteria of NFPA 1001, Standard for Fire Fighter Professional Qualifications.

B. Public Safety Officers (PSO):

Credit public safety officers employed to perform law enforcement or other municipal duties as well as firefighter duties on the basis of the average number of firefighters responding to structure fires on the initial alarm to all reported structure fires.

Each person credited must have a two-way portable radio on the fire frequency. Each person credited must receive notification of initial alarms for structure fires and must respond when the company to which he or she is assigned responds. While on duty, each person credited must remain within the company first-due assignment district, except that public safety officers may receive credit when the police patrol district and the first-due fire company response district overlap. Each person credited must have a vehicle equipped with emergency lights and a siren. Each person credited must, while on the fireground, have available a protective clothing ensemble in accordance with the general criteria of NFPA 1001, Standard for Fire Fighter Professional Qualifications.

Each position credited must have a written schedule including days of the month and times of day when the persons are available. The municipality must maintain records of the response of the persons to each initial report of a structure fire. Do not give credit for persons who experience unusual delays. To recognize that public safety officers may be unavailable because of assigned law enforcement and/or other responsibilities, credit each such officer as one-half of an on-duty firefighter.

C. On-Call and Off-Duty Firefighters (OCF):

Credit on-call, and off-duty firefighters based on the average number of firefighters who staff apparatus and respond on the initial alarm to all reported structure fires. In this section, include chief officers and fire department administrative personnel responding on the initial alarm to all reported structure fires and performing company duties. Credit off-duty firefighters responding on the initial alarm to all reported structure fires on the same basis as on-call firefighters. To account for the time needed for notification, travel, and assembly on the fireground, credit each on-call and off-duty firefighter as one-third of an on-duty firefighter.

Volunteer firefighters who are on duty at fire stations according to a predetermined assignment are credited as on-duty firefighters (ODF) for the time they are on duty; otherwise, volunteer firefighters are considered on-call.

D. Automatic-Aid Response:

In determining the credit for 570A, B, and C, consider the average number of firefighters responding with companies credited as automatic aid under Sections 513 and 549. To ODF, PSO, and OCF, add the average number of such firefighters responding multiplied by the AA_i factor developed in Section 507.

In determining the credit for 570A, B, and C, consider firefighters responding with companies located within 5 road miles of the fire protection area boundary and qualifying within Section 507 but not needed according to Section 513 and/or Section 549. Credit such firefighters only if they respond on the initial alarm to all reported structure fires to augment responding firefighters from the department under evaluation. To ODF, PSO, and OCF, add the average number of firefighters responding multiplied by the AA_i factor developed in Section 507.

E. Special Apparatus:

In determining the credit for 570A, B, C, and D, consider firefighters responding on the initial alarm to all reported structure fires on special fire department apparatus. Firefighters may be members of units such as rescue squads, personnel squads, or air units.

F. Service, Engine-Service, and Engine-Ladder Trucks:

If a service truck receives credit in Section 549, consider it as 1 existing service company in Section 571.

If an engine-service truck receives credit in Sections 513 and 549, consider it as 1 existing engine company and as 1 existing service company in Section 571.

If an engine-ladder truck receives credit in Sections 513 and 549, consider it as 1 existing engine company and as one existing ladder company in Section 571.

G. Additional Personnel (AP):

If the number of responding companies exceeds the number of needed companies for a response to structure fires as part of a standard initial response to all locations in the fire protection area, credit the personnel arriving with such companies in 570A, B, or C.

H. Personnel:

The maximum credit for any response by on-duty, firefighters, public safety officers, on-call and off-duty firefighters, and automatic-aid firefighters is 12, including company officers, for each existing engine and existing ladder company and 6 for each existing service company.

I. Alternative Water Supply Apparatus:

In Section 570, do not credit firefighters responding on apparatus with the primary responsibility of establishing and maintaining the water supply.

571 CREDIT FOR COMPANY PERSONNEL (CCP):

Calculate the credit for company personnel (CCP) as follows:

$$CCP = \frac{ODF + (PSO/2) + (OCF/3)}{EE + EL + 0.5(ES) - AP} \times 2.5$$

Note 1: If necessary, adjust the number of existing companies to conform with Section 570G.

Note 2: If satisfactory records are not available, divide the credit for OCF by 6 instead of by 3.

580 TRAINING (T):

Fire departments must keep training records in accordance with the general criteria of NFPA 1401, Recommended Practice for Fire Service Training Reports and Records.

Construction of a fire service training center must be in accordance with the general criteria of NFPA 1402, *Guide to Building Fire Service Training Centers*.

All personnel engaged in fire suppression activities must receive training in subjects related to fighting structure fires. Evaluate training as follows:

A. Training Facilities and Use (T₁):

1. Facilities (FA):

Maximum Points

Live fire training structure including smoke room	17
Drill tower at least 3 stories in height	10
Training area at least 2.0 acres in size	8

Maximum (FA) = 35

2. Use of Facilities (U):

For full credit under this item, each member of the department should attend 18 hours of training at the facilities credited in Section 580A1.

Multiply the points credit for facilities (FA) by the factor (U) for use of the facilities by all company members:

Maximum 18 hours per member; (U) = number of hours per member ÷ 18 Maximum for factor (U) = 1.00

Training at the facilities credited in this section must be in accordance with the general criteria of NFPA 1403, *Standard on Live Fire Training Evolutions* and NFPA 1410, *Standard on Training for Initial Emergency Scene Operations*.

$$T_1 = (FA)(U)$$

В.	Company Training Program (T ₂):
	Company training at fire stations including training using streets, buildings, and open
	areas, 16 hours per company member per month.
	Up to
	Firefighter training should be in accordance with the general criteria of NEPA 1001.

Firefighter training should be in accordance with the general criteria of NFPA 1001 Standard for Fire Fighter Professional Qualifications.

Calculate the points for company training (T2) as follows

$$T_2 = \frac{\Sigma \text{(Company Training Hours)}}{16 \text{ Hours} \times \text{(Number of Members)}} \times 25$$

Limit credit for company training hours to 16 hours per member per month.

- C. Officer Training and Certification Program (T₃):
 - 1. Officer Certification (OC):

Certification of each current officer with responsibilities in fire suppression in accordance with the general criteria of NFPA 1021, Standard for Fire Officer Professional Qualifications.

2. Officer Continuing Education (OE):

Continuing education for officer training on- or off-site, 12 hours per year for all officers.

Up to:......6 points

Officer training should be in accordance with the general criteria of NFPA 1021, Standard for Fire Officer Professional Qualifications; NFPA 1521, Standard for Fire Department Safety Officer; NFPA 1561, Standard on Emergency Services Incident Management System.

Calculate the points for officer training and certification (T₃) as follows:

$$T_3 = T_{3OC} + T_{3OE}$$

Where: $T_{3OC} = \frac{\text{(Number of Certified Officers)}}{\text{Number of Officers}} \times 6$ $T_{3OE} = \frac{\Sigma (Officer\ Continuing\ Education\ Hours)}{12\ Hours\times (Number\ of\ Officers)} \times 6$ Limit credit for officer continuing education to 12 hours per officer per year. D. New Driver/Operator Training Program (T₄): 60 hours (or certification) in accordance with the general criteria of NFPA 1002; Standard for Fire Apparatus Driver/Operator Professional Qualifications. The New Driver Operator Training Program should be in accordance with the general criteria of NFPA 1002, Standard for Fire Apparatus Driver/Operator Professional Qualifications, and NFPA 1451, Standard for a Fire Service Vehicle Operations Training Program. Calculate the points for The New Driver/Operator Training Program (T₄) as follows: $T_4 = \frac{\sum (\text{New Driver Operator Training Hours})}{60 \text{ Hours} \times (\text{Number of New Driver Operators})} \times 5$ Limit credit for new driver/operator training hours to 60 hours per new driver/operator. E. Existing Driver/Operator Training Program (T₅): 12 hours per year. Driver and operator training should be in accordance with the general criteria of NFPA 1002, Standard for Fire Apparatus Driver/Operator Professional Qualifications, and NFPA 1451, Standard for a Fire Service Vehicle Operations Training Program. Calculate the points for the Existing Driver/Operator Training Program (T₅) as follows: $T_5 = \frac{\sum (Existing Driver Operator Training Hours)}{12 Hours \times (Number of Existing Driver Operators)} \times 5$ Limit credit for existing driver/operator training hours to 12 hours per existing driver/operator per year. F. Hazardous Materials Training Program (T₆): 6 hours per member per year......1 point Hazardous materials training should be at a minimum awareness level in accordance

with the general criteria of NFPA 472, Standard for Competence of Responders to

Hazardous Materials/Weapons of Mass Destruction Incidents.

Calculate the points for the Hazardous Materials Training Program (T₆) as follows:

$$T_6 = \frac{\sum (\text{Hazardous Materials Training Hours})}{6 \text{ Hours} \times (\text{Number of Members})} \times 1$$

Limit credit for hazardous materials training hours to 6 hours per member per year.

G. Recruit Training Program (T₇):

Firefighter training should be in accordance with the general criteria of NFPA 1001, Standard for Fire Fighter Professional Qualifications. Give credit for class hours spent towards the completion of Firefighter I and Firefighter II training (in accordance with the general criteria of NFPA 1001). Firefighters who obtain the Firefighter I and Firefighter II designation (in accordance with the general criteria of NFPA 1001) before employment or within the first year of employment or tenure meet the intent of Section 580G.

Calculate the points for the Recruit Training Program (T₇) as follows:

$${\rm T_7} = \frac{\sum ({\rm Recruit\ Training\ Hours})}{240\ {\rm Hours}\times ({\rm Number\ of\ Recruits})}\times 5$$

Limit credit for recruit training hours to 240 hours per recruit.

H. Building Familiarization for Pre-Incident Planning Program (T₈):

Annual pre-incident planning.
Up to.......12 points

The fire department should make building familiarization and pre-incident planning tours of each commercial, industrial, institutional, and other similar building at least annually. Records of the inspections (whether in electronic or other formats) should include complete and up-to-date notes and sketches, which must be available to the responding incident commander.

Building familiarization and pre-incident planning should be in accordance with the general criteria of NFPA 1620, Standard for Pre-Incident Planning.

Frequency of Inspections Points

1 vear	1.00
2 years	0.83
3 years	0.67
4 years	0.58
5 years	0.42
More than 5 years	0.00

Calculate the points for building familiarization for pre-incident planning (T₈) as follows:

$$T_8 = Frequency \times \left(\frac{Number of Pre-Planned Buildings}{Number of Buildings} \right) \times 12$$

I. TRAINING RECORDS:

Reduce the sum of points credited in Sections 580A through H as specified in Section 105.

581 CREDIT FOR TRAINING (CT):

Calculate the credit for training (CT) as follows:

$$CT = \frac{\Sigma(T)}{100} \times 9$$

590 CREDIT FOR FIRE DEPARTMENT (CFD):

Calculate the credit for fire department (CFD) as follows:

$$CFD = CEC + CRP + CPC + CLS + CRLS + CDA + CCP + CT$$

Appendix A

TABLE 512A PUMPER EQUI	PMENT A	ND HOSE	
		Points	
Equipment and Hose	Needed	Credit/Unit	Total Points
Booster tank	300 gal. or larger	1/10 gal.	- 30
Hose:	1	12	12
15' soft-suction or 20' hard-suction hose 1½" , 1¾", or 2" hose carried	400'	3/50	24
Master stream appliance (1,000 gpm) Nozzles:	1	100	100
2½" playpipe with shutoff and 1", 1½", and 1½" tips	1	20	20
2½" combination spray with shutoff	1	30	30
1½" or 1¾" combination spray with shutoff	2	10	20
SCBA (30-minute minimum)	4	24 .	96
Extra cylinders (carried)	4	6	24
Salvage covers (minimum size of 12' x 14')	2	2	4
Electric handlights	2	2	4
Hose clamp	1	4	. 4
Hydrant hose gate (21/2")	1	4	4
Gated wye (2½" x 1½" x 1½")	1	4	4
Radio:	4	32	32
Mounted	1	16	16
Portable	'	10	10
Ladders: 12' to 16' roof	1	10	10
·- ·- ·- · · · · · · · · · · · · · · ·	1	16	16
24' extension or larger Annual tests:	'	10	,0
Pumper (see Table 512B)	1	100	100
Hose (see Table 5126) Hose (see Table 512C)	1	50	50
	otal '		600

TABLE 512B PUMPER SERVICE TEST PROGRAM

Average Interval between	
3 Most Recent Tests	Maximum Points Credit
1 year	100
2 years	75
3 years	50
4 years	25 .
5 years or more	0

The Pumper Service Test Program shall be in accordance with the general criteria of NFPA Standard 1911, Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus.

TABLE 512C HOSE SERVICE TEST PROGRAM

Average Interval between	
3 Most Recent Tests	Maximum Points Credit
1 year	50
2 years	37
3 years	25
4 years	12
5 years or more	0

The Hose Service Test Program shall be in accordance with the general criteria of NFPA 1962, Standard for the Inspection, Care, and Use of Fire Hose, Couplings, and Nozzles and the Service Testing of Fire Hose.

When the hose test frequency varies, proportion the credit based upon the percent of all hose tested for each frequency.

Note: If partial records of tests exist, reduce the credit for testing by 25% for Tables 512B and/or 512C; if no records of tests exist, reduce the credit by 100% for Tables 512B and/or 512C as applicable.

Appendix B

TABLE 542A EQUIPMENT FO	R A SERVICE	ECOMPANY	
ABLE 342A EQUI MENTI O	ICA OE COLO		
		Points	
Equipment	Needed	Credit/Unit	Total Points
SCBA (30-minute minimum)	4	24	96
Extra cylinders (carried)	4	6	24
Salvage covers (minimum size of 12' x 14')	6	2	12
Electric generator (3,000 watt)	1	25	25
Portable floodlight (500 watt)	3	4	12
Smoke ejector (5,000 cfm)	1	20	20
Portable thermal cutting unit	1	20	20
Saw – power (chain or heavy-duty rotary type)	1	20	20
Electric handlights	4	2	8 .
Pike pole (plaster hook):			
3' or 4'	2	2 2	4
6' or longer	4	2	8
Radio:			
Mounted	1	32	32
Portable	1	16	16
Ladder:			
24' extension or longer	1	25	25
16' roof or longer	1	25	25
10' attic or longer	1	4	4
14' combination or longer	1	. 5	5
	Total		356

TABLE 542B ADDITIONAL EQUIPMENT FOR A LADDER COMPANY			
Equipment	Needed	Points Credit/Unit	Total Points
Ladder: 16' or longer roof	1	25	25
35' or longer extension	1	25	25
Elevated stream device*	1	100	100
Large spray nozzle (1,000 gpm)	1	16	16
Aerial ladder/elevating platform*	1	200	200
Annual tests (aerial/platform, see Table 542C)	1	50	50
Authorities (married and and and and and and and and and an	Total		416

^{*}Of sufficient height to reach the roof of any building, or 100 feet, whichever is less. The credit shall be prorated if existing equipment has insufficient reach.

TABLE 542C AERIAL LADDER/ELEVATING PLATFORM TEST PROGRAM

Average Interval between	
3 Most Recent Tests	Maximum Points Credit
1 year	50
2 years	37
3 years	25
4 years	12
5 years or more	0

Aerial Ladder/Elevating Platform Test Program shall be in accordance with the general criteria of NFPA 1911, Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus.

Note: If partial records of testing exist, reduce the credit for testing in Section 542C by 25%; and if no records of testing exist, reduce the credit in Section 542C by 100%.

WATER SUPPLY

600 GENERAL:

This section gives procedures and formulas for evaluating the water supply system and/or fire department supply available for fire suppression in the fire protection area.

PART OF FIRE PROTECTION AREA WITHOUT A RECOGNIZED WATER SYSTEM:

If any portion of the fire protection area is not within 1,000 feet of a recognized water system, such area may receive a Class 8B (see Sections 1200–1202) or a Class 9 (see Sections 1300–1312). See Section 201A3 for the criteria for a recognized water system.

602 MAXIMUM DAILY CONSUMPTION RATE (MDC):

The maximum daily consumption rate is the rate of consumption on the maximum day. The maximum day is the 24-hour period during which the highest consumption total is recorded in the latest three-year period. High consumption that will not occur again because of changes in the system or that was caused by unusual operations will not be considered.

When a system has 2 or more service levels in series, the total maximum daily consumption rate that must pass through the service level being reviewed will be considered.

603 MINIMUM PRESSURE:

Evaluate the water system at a residual water pressure of 20 psi.

604 NEEDED FIRE FLOW (NFF) DURATION:

The fire-flow duration for commercial properties is 2 hours for Needed Fire Flows (NFF_i) up to 2,500 gpm and 3 hours for Needed Fire Flows of 3,000 and 3,500 gpm.

The fire-flow duration for 1- and 2-family dwellings with an Effective Area in excess of 4,800 square feet is 2 hours for Needed Fire Flows (NFF_i) up to 2,500 gpm and 3 hours for Needed Fire Flows of 3,000 and 3,500 gpm.

The fire-flow duration for 1- and 2-family dwellings with an Effective Area of 4,800 square feet or less is 1 hour.

The fire-flow duration for any 1- or 2-family dwelling protected with an automatic fire sprinkler system installed in accordance with the general criteria of NFPA 13D, Installation of Sprinkler Systems for One- and Two-Family Dwellings and Manufactured Homes, is 1 hour, in accordance with the general criteria of NFPA 1, Fire Code.

The fire-flow duration for a residential occupancy (in accordance with the general criteria of NFPA 101, *Life Safety Code*) up to and including 4 stories in height protected with an automatic fire sprinkler system installed in accordance with the general criteria of NFPA 13R, *Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and including Four Stories in Height*, is 2 hours, in accordance with the general criteria of NFPA 1, *Fire Code*.

605 SERVICE LEVEL:

A service level is a water distribution system or part of a system separated by closed valves, check valves, pressure-regulating equipment, or other means of separation. Evaluate each system or service level separately.

When a system or service level is supplied from 2 or more sources or supply works, the credit shall be based upon the combined water supply.

610 REVIEW OF SUPPLY SYSTEM:

Sections 611 through 616 give procedures and formulas for evaluating the ability of the water supply system to deliver the Needed Fire Flow (NFF_i) at representative locations throughout the fire protection area. For each representative location, separately evaluate the supply works, main capacity, and hydrant distribution.

611 SUPPLY WORKS:

Use the normal sustained flow as the normal capacity of the source. If conditions or operations regularly reduce the supply for a period exceeding 1 month per year, prorate the available supply accordingly. Do not take the absolute minimum supply available from water sources under extreme dry-weather conditions as the measure of the normal ability of the source of supply.

A. Minimum Storage (MS_i):

Credit no more than the average daily minimum water storage maintained.

For storage floating on the distribution system, credit only the portion of average daily minimum storage that the system can deliver at the required residual pressure and for the fire duration at the point of use. Minimum storage (MS) is the sum of all storages (MS_i) available at the test location for the fire duration, expressed in gpm.

For ground or below-ground storage where the average daily minimum storage must be repumped, limit credit for the storage to the capacity of the pumping facility for the fire duration.

When a fire protection area experiences large seasonal fluctuations of population and therefore wide variations in consumption, evaluate the average daily minimum storage at the time when consumption is average for the maximum population.

B. Delivery Rate (DR_i):

The total delivery rate for each service level is the effective capacity of all involved components. Components may include water treatment facilities, pumps, pipes, and other flow-restricting devices.

Consider each component of a water treatment facility (FL), including filters, storage, and pumps, for the limiting factor. Consider filters as capable of operating at a reasonable overload capacity based on records and/or the authority having jurisdiction. When treated water is pumped to a service level, the storage, filter, or pump capacity may limit the total delivery rate.

Credit pumps (PU_i) at their effective capacities when delivering at normal pressures. Suction or discharge lines or the average minimum daily storage may limit pumps that supply a service level from storage. Water treatment components may limit the effective capacity.

When 2 or more pumps lift in series, the effective pump capacity is the capacity of the lift with the lowest total capacity. When the same pumps can operate in 2 or more lifts, evaluate them in each lift to determine the lift with the lowest total capacity.

Discharge lines, pressure-regulating devices, or other flow-control devices may limit the effective capacity of gravity supply from a water treatment facility to a service level or from one service level to a different service level. The total capacity available in the service level supplying water may limit the effective capacity of pumped supply from one service level to a different service level.

The total delivery rate (DR) for a service level is the sum of all supplies as limited by water treatment, pumps, and other devices, including flow-restricting devices in gravity supply systems.

C. Emergency Supply (EM_i):

Evaluate the system's ability to use emergency supplies through connections from other systems or from separate sources, storage, or equipment not normally used. Credit emergency supplies that come in automatically.

Also credit other emergency supplies adjusted for the time that would elapse before delivery is possible from the emergency supplies.

The total emergency supply capacity (EM) is the sum of all emergency supplies available at the test location, expressed in gpm.

Calculate the emergency supply (EM) as follows:

$$EM = \sum_{i=1}^{n} EM_{i}$$

Where:

n = number of emergency supplies available at the test location

D. Suction Supply (SS_i):

Where bays, rivers, canals, streams, ponds, wells, cisterns, or other similar sources are available as suction supply for fire department pumpers, evaluate the suction supply with respect to its ability to satisfy the Needed Fire Flow (NFF_i) at test locations. Consider accessibility and availability during freezing weather, floods, droughts, or other adverse conditions. The total suction supply (SS) credited is the sum of suction supplies (SS_i) at the test location for the fire duration or the capacity of the fire department pumping equipment, whichever is less, expressed in gpm.

See NFPA 1142, Standard on Water Supplies for Suburban and Rural Firefighting, for criteria for establishment of a suction water supply.

Calculate the suction supply (SS) as follows:

$$SS = \sum_{i=1}^{n} SS_{i}$$

Where:

n = number of suction supplies available at the test location

See NFPA 1142, Standard on Water Supplies for Suburban and Rural Firefighting, for criteria for establishment of a suction water supply.

E. Fire Department Supply (FDS):

Credit supply delivered at a rate of 250 gpm or more by fire department apparatus either carrying and/or relaying water to the fire. The fire department must be able to achieve that application rate within 5 minutes of the initial arrival of the pumper apparatus at the fire site, and must continue for the fire-flow duration. If the fire department can increase the rate of flow within 15 minutes of arrival at the fire site and can continue the higher flow for the fire-flow duration, credit the higher rate.

Calculate the travel time of apparatus as follows:

$$T = 0.65 + 1.7D$$

Where:

T = minutes

D = miles

The formula assumes an average speed of 35 mph. Assume slower speeds in cases of adverse road conditions or apparatus laying hose lines.

The fire department supply (FDS) is the capacity of the supply for the fire duration, the capacity of the source pumping equipment, the capacity of the delivery equipment (mobile water supply apparatus and/or hose lines), or the capacity of the final delivery pumping equipment, whichever is least, at the test location, expressed in gpm.

See NFPA 1142, Standard on Water Supplies for Suburban and Rural Firefighting, for criteria for establishment of a fire department supply.

612 SUPPLY WORKS CAPACITY (SWC_i):

Calculate the supply works capacity in gpm, considering the fire-flow duration, for each representative test location.

For each supply at a test location, calculate the supply works capacity (SWC_i) as follows:

$$SWC_i = \sum_{a=1}^{n} SWC_{ak}$$

Where:

$$SWC_{ik} = [(MS + DR + EM) - MDC] + SS + FDS$$

k = represents the flow duration (Section 604)

n = the number of supplies available at a test location

a = the supply under consideration

613 MAIN CAPACITY (MC_i):

Evaluate the normal ability of the distribution system to deliver Needed Fire Flows (NFF_i) at the test locations considered in Section 612. The results of a standard flow test or the results of a properly balanced and tested hydraulic water system model at a representative test location will indicate the ability of mains to carry water to that location.

If the testing includes standard flow tests on 2 or more systems or service levels at the same location, give credit for the sum of the test results on each system or service level, up to the limit of supply, for the fire-flow duration at that location.

MC_i = tested or hydraulically modeled gpm at 20-psi residual pressure.

For information on standard flow testing of fire hydrants and sample forms for recording tests, see AWWA Manual 17, *Installation, Field Testing, and Maintenance of Fire Hydrants*, and NFPA 291, *Recommended Practice for Fire Flow Testing and Marking of Hydrants*.

614 HYDRANT DISTRIBUTION (HD_i):

Evaluate the distribution of hydrants and water suction points within 1,000 feet (as apparatus can lay hose) of the Needed Fire Flow test locations considered in Sections 612 and 613. Evaluate each hydrant. Also evaluate each water suction point (with or without a dry hydrant) that meets the criteria in Section 611D.

Credit up to 1,500 gpm for each hydrant or water suction point within 1,000 feet of the Needed Fire Flow location.

If 2 or more systems or service levels distribute water at the same location, give credit based on the hydrant protection provided by all systems and service levels available.

- A. Consider substandard hydrants if they have at least 1 fire department outlet, and can deliver at least 250 gpm.
- B. Consider cisterns or other suction points if they can supply at least 250 gpm for at least 2 hours.

C. Limit the credit for a hydrant based on the number and size of outlets as follows:

Maximum Credit

At least one pumper outlet	1,500 gpm*
Two or more hose outlets, no pumper outlet	750 gpm*
One hose outlet only	500 gpm

*AWWA Standard C502 Dry-Barrel Fire Hydrants and AWWA Standard C503, Wet-Barrel Fire Hydrants.

HD_i is the creditable capacity, expressed in gpm, for each hydrant within 1,000 feet of the Needed Fire Flow test location.

$$HD_i = \sum_{a=1}^{n} HD_a$$

Where:

n = the number of hydrants within 1,000 feet of the test location

a = the hydrant under consideration

615 CAPABILITY OF WATER SYSTEM AT NEEDED FIRE FLOW TEST LOCATION (TI.C.):

The creditable rate of flow at each Needed Fire Flow test location is the lowest of Needed Fire Flow (NFF_i), supply works capacity (SWC_i), main capacity (MC_i), or hydrant distribution (HD_i).

616 CREDIT FOR SUPPLY SYSTEM (CSS):

Where:

$$TLC = \sum_{i=1}^{n} TLC_{i}$$

$$NFF = \sum_{i=1}^{n} NFF_{i}$$

n = number of test locations

620 HYDRANTS - SIZE, TYPE AND INSTALLATION (PH):

Fire hydrants should be designed and installed in accordance with AWWA Standard C502, *Dry-Barrel Fire Hydrants*, or AWWA Standard C503, *Wet-Barrel Fire Hydrants*. Dry hydrants should be designed and installed in accordance with the general criteria of NFPA 1142, *Standard on Water Supplies for Suburban and Rural Fire Fighting*.

Assign points for hydrants, dry hydrants, cisterns, and/or suction points according to the following. Prorate the points according to the number of hydrants of each type compared with the total number.

	Hydrants	Points
Α.	With 6-inch or larger branch and a pumper outlet; with or without 2½ -inch outlets; or with 6-inch or larger dry hydrant installed in accordance with the general criteria of the applicable Standards	100
В.	With 6-inch or larger branch, no pumper outlet but 2 or more 2½ -inch outlets, or with small barrel less than 5 inches	75
C.	With only one 21/2 -inch outlet	25
D.	With less than 6-inch branch	25
E.	Flush type (flush or ground level)	25
F.	Cistern or suction point	25

621 CREDIT FOR HYDRANTS (CH):

Calculate the credit for hydrants (CH) as follows:

$$CH = \frac{PH}{100} \times 3$$

630 INSPECTION AND FIRE FLOW TESTING OF HYDRANTS:

A. Inspection (HI):

Inspection of hydrants should be in accordance with AWWA manual M17, *Installation, Field Testing, and Maintenance of Fire Hydrants*. The frequency of inspection is the average time interval between the 3 most recent inspections.

Assign points for frequency of inspection (FI) according to the following:

Frequency of Inspection (FI)	Points
1 year	30
2 years	20
3 years	10
4 years	5
5 years or more	No credit

Adjust the points for frequency of inspection (FI) to reflect the following, if applicable:

- 1. Hydrant inspections include a flushing program:
- +10 points

2. Inspections include a pressure test:

+10 points

3. Inspection of cisterns or suction points includes drafting with a pumper and back-flushing for dry hydrants:

+20 points

After application of subsections 1–3, reduce the total points for frequency of inspection (FI) by 25% if partial records of inspections exist. If no records of inspections exist, no credit applies.

Calculate the credit for inspection (HI) as follows:

$$HI = \frac{FI}{50} \times 4$$

B. Fire-Flow Testing (FT):

Fire-flow testing of hydrants should be in accordance with the general criteria of AWWA manual M17, Installation, Field Testing, and Maintenance of Fire Hydrants, and NFPA 291, Recommended Practice for Fire Flow Testing and Marking of Hydrants. For full credit in this section, fire-flow tests should be conducted on all parts of the distribution system every 5 years.

Assign points for frequency of fire-flow testing (FF) according to the following:

Frequency of Fire-Flow Testing (FF)	Points
5 years	40
6 years	30
7 years	20
8 years	10
9 years	5
10 years or more	No credit

If there is a hydrant marking program in accordance with the general criteria of NFPA 291 or AWWA manual M17, increase the points for frequency of fire-flow testing (FF) by 25%.

Reduce the total points for frequency of fire-flow testing (FF) by 25% if partial records of tests exist. If no records of tests exist, no credit applies.

Calculate the credit for fire-flow testing (FT) as follows:

$$FT = \frac{FF}{50} \times 3$$

In lieu of a comprehensive fire-flow testing program, credit the results of a current, properly installed and calibrated hydraulic water distribution system computer model that can produce static pressure and flow predictions at 20-psi residual pressure. For more information, see AWWA manual M32, *Computer Modeling of Water Distribution Systems*.

631 CREDIT FOR INSPECTION AND FIRE-FLOW TESTING OF HYDRANTS (CIT): Calculate the credit for inspection and fire-flow testing of hydrants (CIT) as follows:

CIT = HI + FT

640 CREDIT FOR WATER SUPPLY (CWS):

Calculate the credit for water supply (CWS) as follows:

CWS = CSS + CH + CIT

OPERATIONAL CONSIDERATIONS (OC)

700 GENERAL

This section gives procedures and formulas for evaluating fire department standard operating procedures (SOP) and incident management systems (IMS) for emergency operations involving structure fires.

710 CREDIT FOR STANDARD OPERATING PROCEDURES (SOP):

720 CREDIT FOR INCIDENT MANAGEMENT SYSTEM (IMS):

Evaluate an established incident management system (IMS) in accordance with the general criteria of the National Incident Management System (NIMS) and NFPA 1561, Standard on Emergency Services Incident Management System..................................50 points

730 CREDIT FOR OPERATIONAL CONSIDERATIONS (COC):

Calculate the credit for operational considerations.(COC) as follows:

$$COC = \frac{SOP + IMS}{100} \times 2$$

800 RESERVED FOR FUTURE USE

900 RESERVED FOR FUTURE USE

COMMUNITY RISK REDUCTION

1000 GENERAL:

This section gives procedures and formulas for evaluating:

- adoption and enforcement of fire prevention codes
- public fire safety education
- fire investigation programs

1010 Reserved for future use

1020 FIRE PREVENTION CODE ADOPTION AND ENFORCEMENT (PCE)

1021 FIRE PREVENTION CODE REGULATIONS (PCR)

Consider whether the jurisdiction adopts and enforces the latest edition of one of the following model codes:

- NFPA 1, Fire Code, promulgated by the National Fire Protection Association
- ICC International Fire Code, promulgated by the International Code Council

For full credit in this section, a jurisdiction must adopt and enforce the latest edition of one of the nationally recognized fire prevention codes.

If a jurisdiction adopts and enforces state or local amendments that modify or delete provisions for fire hazard mitigation within a nationally recognized fire prevention code, the points available in this section are subject to proration.

If a jurisdiction adopts and enforces a local code or regulations not developed by a nationally recognized code organization, the points available in this section are subject to proration.

- 2. If the published date of the adopted codes is within 6 years of the date of the grading, fire prevention code (s) addressing commercial and/or residential construction.........8.6 points

	3. If the published date of the adopted codes is within 10 years of the date of the grading, fire prevention code (s) addressing commercial and/or residential construction	
	4. If an earlier edition of the adopted codes is enforced, fire prevention code(s) addressing commercial and/or residential construction	
1022	FIRE PREVENTION STAFFING (PS): Evaluate staffing for fire prevention activities. Up to	
A.	Frequency of Fire Prevention Inspections: The jurisdiction must provide adequate personnel to perform fire prevention inspections on all nonresidential structures at least once a year.	
	For the purposes of this section, pre-incident planning inspections — with no component for fire prevention code enforcement — are not fire prevention inspections.	
В.	Fire Prevention Inspectors: The following types of personnel may conduct fire prevention inspections:	
	 Certified fire inspectors — full-time and equivalent part-time fire inspectors certified in accordance with the general criteria of NFPA 1031, Standard for Professional Qualifications for Fire Inspector and Plans Examiner, or equivalent ICC certification 	
	State or county fire prevention inspectors or fire marshals with authority for fire prevention code enforcement	
	3. Fire suppression personnel who perform in-service fire prevention inspections	
	Reduce the credit for fire prevention staffing (PS) by 25% if partial records exist. If no records exist, no credit applies.	
	Calculate the credit for fire prevention staffing (PS) as follows:	
	PS = Number of Non-Residential Structures Inspected Annually Number of Non-Residential Structures	
1023	FIRE PREVENTION CERTIFICATION AND TRAINING (PCT): Evaluate the certification and training of fire prevention code enforcement personnel. Up to	
A.	Fire Inspector Certification (PIC): Up to	
	All personnel assigned to perform fire prevention inspections shall be certified as fire inspector in accordance with the general criteria of NFPA 1031, Standard for Professional Qualifications for Fire Inspector and Plan Examiner, or equivalent ICC certification.	

Calculate the credit for fire prevention fire inspector certification (PIC) as follows: PIC = Total Number of Existing Certified Inspectors × 3 Total Number of Fire Inspectors B. Fire Inspector Continuing Education (PIE), Up to......3 points All fire prevention inspection personnel must receive at least 24 hours of additional fire prevention inspection continuing education every year. Calculate the credit for fire inspector continuing education (PIE) as follows: The Required Number of Hours of Continuing Education per Year per Inspector × 3 C. Credit for Fire Prevention Certification and Training (PCT) Calculate the credit for fire prevention certification and training (PCT) as follows: PCT = PIC + PIE1024 FIRE PREVENTION PROGRAMS (PCP): Evaluate the fire prevention programs. Fire prevention programs include: plan review · certificate of occupancy inspections quality control code compliance inspection of private fire protection equipment • fire prevention ordinances coordination of fire department training and pre-incident planning A. Plan Review (PPR): All construction plans for new nonresidential construction, additions, remodeling, and the like shall be reviewed for compliance with adopted fire prevention codes. B. Inspections for Certificates of Occupancy (PCO): Up to......4 points The jurisdiction must perform inspections for certificates of occupancy (or certificates of compliance) as specified by the code in effect.

1. The jurisdiction must perform a fire prevention inspection of all new residential 2. The jurisdiction must perform a fire prevention inspection of all new nonresidential C. Quality-Assurance Program for Enforcement and Inspection Programs (PQC): The jurisdiction must have a quality-assurance program that applies to all fire prevention code inspectors as appropriate for their position. D. Code Compliance Follow-Up (PCF): Up to......1 point The jurisdiction must perform follow-up inspections to verify correction of all violations. E. Inspections of Private Fire Protection Equipment (PPP): Up to......1 point The jurisdiction must perform routine inspections of all private fire protection The frequency of such inspections depends on the type of equipment. must comply with the adopted codes and/or be in equipment. The schedule of NFPA standards. accordance with the general criteria F. Fire Prevention Ordinances (PPO): The jurisdiction must adopt ordinances governing fire lanes, fireworks, hazardous material routes, barbecue grills, and the wildland-urban interface (WUI) or weeds and trash. G. Coordination with Fire Department Training and Pre-incident Planning (PTP): Personnel administering fire prevention activities must follow a defined procedure to share information and coordinate with training and pre-incident planning programs. H. Credit for Fire Prevention Programs (PCP): Calculate the credit for fire prevention programs (PCP) as follows: PCP = PPR + PCO + PQC + PCF + PPP + PPO + PTPCREDIT FOR FIRE PREVENTION CODE AND ENFORCEMENT (CPCE): Calculate the credit for fire prevention code and enforcement (CPCE) as follows: $CPCE = \frac{(PCR + PS + PCT + PCP)}{40} \times 2.2$

1030	PUBLIC FIRE SAFETY EDUCATION (FSE): Evaluate public fire safety education. Up to
1031	PUBLIC FIRE SAFETY EDUCATORS QUALIFICATIONS AND TRAINING (FSQT): Up to
	All public fire safety education personnel must be trained in methods of teaching as specified by the authority having jurisdiction.
A.	Fire Safety Education Course (FSEC): Up to
	All public fire safety education personnel must be trained in methods of teaching as specified by the authority having jurisdiction, in accordance with the general criteria of NFPA 1035, Standard for Professional Qualifications for Fire and Life Safety Educator, Public Information Officer, and Juvenile Firesetter Intervention Specialist.
B.	Fire Safety Education Continuing Education (FSCE): Up to
	All public fire safety education personnel must participate in continuing education in public fire safety education techniques and processes. They must receive at least 10 hours of additional work-related training each year.
	Calculate the credit for fire safety continuing education (FSCE) as follows:
	$FSCE = \frac{The \ Required \ Number \ of \ Hours \ of \ Continuing \ Education \ per \ Year \ per \ Educator}{10} \times 5$
C.	Credit for Public Fire Safety Educators' Qualifications and Training (FSQT): Calculate the credit for public fire safety educators' qualifications and training (FSQT) as follows:
	FSQT = FSEC + FSCE
1032	PUBLIC FIRE SAFETY EDUCATION PROGRAMS (FSP): Evaluate programs for public fire safety education. Up to
A.	Residential Fire Safety Program (FSPR): Evaluate the residential fire safety program. Up to
	Base the evaluation of the effectiveness of the residential fire safety program on the percentage of the entire community population reached annually.
	For more information, see NFPA 1452, Guide for Training Fire Service Personnel to Conduct Dwelling Fire Safety Surveys.

В.	Fire Safety Education in Schools (Private and Public, Early Childhood Education through Grade 12) (FSPS):
	Evaluate fire safety education in the schools.
	Up to
	1. Each school must conduct 1 fire exit drill, in accordance with the general criteria of NFPA 101, <i>Life Safety Code</i> , or the ICC International Fire Code each month that the
	campus is in session. Up to
	2. Each school must present developmentally appropriate classroom instruction on fire
	safety to all students in early childhood education. Up to
C	Juvenile Firesetter Intervention Program (FSPJ):
0.	Evaluate the juvenile firesetter intervention program
	Up to
	The program should refer all juveniles identified as involved in fire-play or firesetting behavior for educational intervention and/or other intervention services.
D.	Fire Safety Education Program for Occupancies Having Large Loss Potential or Hazardous Conditions (FSPL): Up to
	Evaluate the fire safety education in occupancies that have large loss potential or hazardous conditions as identified by the authority having jurisdiction.
	Prorate the credit based on the percentage of the occupancies reached each year.
1033	CREDIT FOR PUBLIC FIRE SAFETY EDUCATION PROGRAMS (CFSE): Calculate the credit for public fire safety education programs (CFSE) as follows:
	$CFSE = \frac{(FSP + FSQT)}{40} \times 2.2$
	Where:
	FSP = FSPR + FSPS + FSPJ + FSPL
1040	FIRE INVESTIGATION (IF): Evaluate the fire investigation programs. Up to

1041	FIRE INVESTIGATION ORGANIZATION AND STAFFING (IOS): Evaluate organization and staffing for fire investigations. Up to
Α.	Fire Investigation Organization (IO): Up to
	There must be — within or outside the civil jurisdiction(s) under evaluation — an office with responsibility to conduct investigations of the causes and origins of fires.
B.	Fire Investigation Staffing (IS): Up to
	The jurisdiction must have enough fire investigators to investigate all structure fires.
	Fire investigators may be paid or volunteer. Consider additional fire investigators with authority from the state fire marshal's office or the county or other civil jurisdiction.
	Calculate the credit for fire investigation staffing (IS) as follows:
	$ S = \frac{\text{Structure Fire Receiving Cause and Origin Investigation}}{\text{Total Structural Fires}} imes 4$
C.	Credit for Fire Investigation Organization and Staffing (IOS): Calculate the credit for fire investigation organization and staffing (IOS) as follows:
	IOS = IO + IS
1042	FIRE INVESTIGATOR CERTIFICATION AND TRAINING (IQT): Evaluate fire investigator certification and training. Up to
Α.	Fire Investigator Certification (IQTC): Up to
	All personnel assigned to perform investigation of the causes and origins of fires must be certified, in accordance with the general criteria of NFPA 1033, Standard for Professional Qualifications for Fire Investigator.
	Calculate the credit for fire investigator certification (IQTC) as follows:
	$IQTC = \frac{Total \ Number \ of \ Existing \ Certified \ Fire \ Investigators}{Total \ Number \ of \ Existing \ Fire \ Investigators} imes 3$
В.	Fire Investigator Continuing Education Training (IQTE): Up to
	All personnel assigned to perform investigation of the causes and origins of fires must receive at least 40 hours of additional fire investigation training each year.

Calculate the credit for fire investigator certification (IQTC) as follows:

$$IQTE = \frac{The Required Number of Hours of Continuing Education per Year Per Investigator}{40} \times 3$$

C. Credit for Fire Investigator Certification and Training (IQT):

Calculate the credit for fire investigator certification and training (IQT) as follows:

$$IQT = IQTC + IQTE$$

1043 USE OF THE NATIONAL FIRE INCIDENT REPORTING SYSTEM (IRS):

Give credit for satisfactory reporting using the National Fire Incident Reporting System (NFIRS) for the 3 years before the evaluation.

Up to.......6 points

1044 CREDIT FOR FIRE INVESTIGATION PROGRAMS (CIP):

Calculate the credit for fire investigation programs (CIP) as follows:

$$CIP = \frac{(IOS + IQT + IRS)}{20} \times 1.1$$

1050 CREDIT FOR COMMUNITY RISK REDUCTION (CCRR):

Calculate the credit for community risk reduction (CCRR) as follows:

$$CCRR = CPCE + CPSE + CIP$$

TOTAL CREDIT AND CLASSIFICATION

1100 GENERAL:

This section develops the Public Protection Classification number by summarizing the credits developed in sections 400 through 730. The calculation also includes an adjustment to reflect any difference between the evaluations developed for the fire department and the water supply.

1101 PUBLIC PROTECTION CLASSIFICATION (PPC):

Calculate the Public Protection Classification (PPC) as follows:

$$PPC = \frac{|100 - \{(CEC + CFD + CWS + COC + CCRR) - 0.5\{|(CWS) - 0.8(CFD + COC)|]\}|}{10}$$

Note 1: Raise any decimal to the next higher whole number. For example, raise 5.2 to 6.

Note 2: The numerator shall not be less than 0.01.

CLASS 8B PROTECTION

1200 GENERAL:

To be eligible for a Public Protection Classification of 8B, a fire protection area must meet the requirements listed in Section 107. In addition, the fire protection area must have at least one piece of apparatus with a permanently mounted pump with a rated capacity of 750 gpm or more at 150 psi. The fire protection area must also have fire suppression features meeting the criteria listed in Section 1201.

1201 CLASS 8B PROTECTION CRITERIA:

A. Emergency Communications

To be eligible for a Class 8B, a fire protection area must have an emergency communications system that receives a minimum credit of 4 points in Section 440, Credit for Emergency Communications (CEC).

B. Fire Department

To be eligible for a Class 8B, a fire protection area must have a fire department that meets the following requirements:

- 1. The engine(s) must be at least 40% adequate according to Section 512, Equipment on Existing Engine Companies (EC_i), which evaluates pumping capacity, hose quantity, and major equipment.
- 2. The fire department must respond with a minimum of 6 firefighters on the initial alarm to all reported structure fires. Each credited firefighter must, while on the fireground, have available a protective clothing ensemble in accordance with the general criteria of NFPA 1001, Standard for Fire Fighter Professional Qualifications.
- 3. For each active firefighter, the fire department must conduct a minimum of 24 hours per year of training in fighting structure fires.

C. Water Supply

To be eligible for a Class 8B, a fire protection area must have a fire department capable of delivering an uninterrupted fire flow of 200 gpm for 20 minutes beginning within 5 minutes of the first arriving engine.

- 1. The fire department must be able to deliver the minimum fire flow with only the primary responding fire department and automatic-aid fire department(s).
- 2. The fire department must be able to deliver the minimum fire flow to the buildable areas of the fire protection area within 5 road miles of the responding fire station.

1202 CLASS 8B CLASSIFICATION:

Assign Class 8B when a fire protection area meets the criteria of Sections 1200 and 1201.

CLASS 9 PROTECTION

1300 GENERAL:

To be eligible for a Public Protection Classification of 9, a fire protection area must meet the requirements listed in Section 107 and Section 201C. The fire protection area must also have fire protection features meeting the criteria listed in Section 1310 but must not be eligible for Class 8B (Sections 1200–1202).

1310 CLASS 9 PROTECTION CRITERIA:

To be eligible for a Class 9, a fire protection area must also have a fire department that meets the following requirements:

A. Personal Protective Clothing:

Each credited firefighter must, while on the fireground, have available a protective clothing ensemble in accordance with the general criteria of NFPA 1001, Standard for Fire Fighter Professional Qualifications.

B. Records Credit:

C. Equipment:

Evaluate the fire service equipment in accordance with the general criteria of NFPA 1901, *Standard for Automotive Fire Apparatus*. Assign points for equipment carried according to the following:

1.	400 feet of 1½", 1¾" or 2" hose
2.	Two handline nozzles, 95 gpm minimum
3.	Two portable fire extinguishers suitable for use on Class A, B, and C fires. The minimum size should be 80 B:C rating dry chemical extinguisher, and a 2½-gallon water extinguisher
4.	One 24' or longer extension ground ladder
5.	One 12' straight ladder with roof hooks
6.	Four self-contained breathing appratus (SCBA) in accordance with the general criteria of NFPA 1981, Standard on Open Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services
7.	One spare SCBA cylinder for each SCBA carried (up to 4)
8.	One pick-head axe and 1 flat-head axe

9. Two portable hand lights......4 points

Chapter II

INDIVIDUAL PROPERTY FIRE SUPPRESSION

GENERAL

2000 GENERAL:

This chapter of the schedule develops a Public Protection Classification that applies to specifically rated properties that have a Needed Fire Flow (NFF_i) greater than 3,500 gpm.

FIRE DEPARTMENT COMPANIES

2100 FIRE DEPARTMENT COMPANIES (FC):

For each building with Needed Fire Flow (NFF_i) greater than 3,500 gpm, determine the number of needed engine companies (NE) and the number of needed ladder companies (NL) according to the following:

Needed Fire Flow (NFF _i) gpm	Number of Engine Companies Needed (NE)	Number of Ladder Companies Needed (NL)
4,000 - 4,500	4	1
5,000 - 5,500	5	2
6,000 - 6,500	6	2
7,000 - 7,500	7	3
8,000 - 8,500	8	3
9,000 - 9,500	9	4
10,000 - 10,500	10	4
11,000 - 11,500	11	4
12,000	12	5

2101 MINIMUM EQUIPMENT:

Each pumper credited shall be at least 40% adequate according to Section 512 Equipment on Existing Engine Companies (EC_i) which takes into consideration pumping capacity, hose, and major equipment.

Each ladder truck credited shall be at least 40% adequate in equipment and ladders, according to Section 542A, Ladder Company Equipment (LCE_i).

Each engine-ladder truck credited shall be at least 40% adequate according to Sections 512, Equipment on Existing Engine Companies (EC_i), and 542B, Engine-Ladder Company Equipment (ELCE_i).

2102 EVALUATION OF FIRE DEPARTMENT COMPANIES (FDC):

Evaluate engine and ladder companies.

- A. For each creditable engine and ladder company in service in the fire protection area and responding on initial alarm or multiple alarms, assign 100 points. The maximum credit for an engine-ladder company is 150 points.
- B. Credit is available for automatic-aid engine and ladder companies within 5 road miles of the fire protection area boundaries. The automatic-aid companies must respond to first or multiple alarms within the fire protection area and must operate under a predetermined response plan. Calculate the points for an automatic-aid engine or ladder company by multiplying the automatic-aid plan factor (AA_i) determined in Item 507 by 100. Calculate the points for an automatic-aid engine-ladder company by multiplying the automatic-aid plan factor (AA_i) determined in Section 507 by 150.
- C. For each pumper and ladder truck in reserve in the fire protection area, if the truck is creditable under Section 2101 and if the truck has provision for staffing on multiple alarms, assign 50 points.

Note: A reserve pumper-ladder truck may be credited as a reserve pumper or as a reserve ladder truck, but not both.

D. Credit is available for outside-aid engine and ladder companies within 15 road miles of the fire protection area boundaries. The outside-aid companies must respond to the fire protection area when called. For each such company, assign 30 points. The maximum credit for an outside-aid engine-ladder company is 45 points.

$$FDC = A + B + C + D$$

Note: The number of pumpers credited shall not exceed the number specified in Table 2100 for the Needed Fire Flow at the property considered. The number of ladder trucks credited shall not exceed the number specified in Table 2100 for the Needed Fire Flow at the property considered.

2103 CREDIT FOR FIRE DEPARTMENT COMPANIES (CFC)

$$CFC = \frac{FDC}{NE + NL} \times 100$$

WATER SUPPLY SYSTEM

2200 WATER SUPPLY SYSTEM (W):

This section gives procedures and formulas for evaluating the flow from the water supply system at or near a subject building that has a Needed Fire Flow (NFF_i) greater than 3,500 gpm. The fire flow duration for such buildings is 4 hours.

- A. Supply works capacity (SWC_i) as developed in Section 612.
- B. Main capacity (MC_i) as developed in Section 613.
- C. Hydrant distribution (HD_i) as developed in Section 614.

The capability of the water supply system for each subject building in this section is the lowest of the NFF_h SWC_h MC_h or HD_i.

2201 CREDIT FOR WATER SUPPLY SYSTEM (CW):

$$CW = \frac{TLC_i}{NFF_i} \times 100$$

TLC_i = capability of water system at test location, from Section 2200.

CREDIT AND CLASSIFICATION

2300 GENERAL:

The protection class of an individual property is the lower of two credits, the credit for fire department companies or the credit for water supply system.

2310 CREDIT FOR INDIVIDUAL PROPERTY (CIP):

If CFC ≤ CW, then CIP = CFC

If CFC > CW, then CIP = CW

2311 PUBLIC PROTECTION CLASSIFICATION (PPC) FOR AN INDIVIDUAL PROPERTY: Calculate the Public Protection Classification (PPC) for an individual building as follows:

If the PPC calculated in this section for an individual building is better than that calculated in Section 1101 for the fire protection area, use the PPC calculated in Section 1101.

If the PPC calculated in this section for an individual building is worse than that calculated in Section 1101 for the fire protection area, use the PPC calculated in this section. However, do not use a PPC worse than Class 9.

If the PPC calculated in Section 1101 for the fire protection area is Class 8B, use Class 9 for the individual building.

*Raise any decimal to the next higher whole number.

INFORMATION

Gillespie-Lee, Laurie

From:

Belinda Eyestone

beyestone@eastham-ma.gov>

Sent:

Wednesday, January 18, 2017 11:14 AM

To:

Gillespie-Lee, Laurie

Cc:

Sheila Vanderhoef; Jacqueline Beebe

Subject:

FW: confirmatory deed

Attachments:

CONFIRMATORY DEED.doc; Attorney's request for Confirmatory Deed.pdf

Laurie,

As discussed, can you add this confirmatory deed to the Selectmen's packet for their next BOS meeting for signatures. This is a confirmatory deed from the Town's purchase of Lot 17A Higgins Road. I will deliver to you the original. Please do not hesitate to contact me with any questions. Thank you, Belinda

Belinda Eyestone, MAA

Principal Assessor
Town of Eastham
2500 State Highway
Eastham, MA 02642
508 240-5900
774 801-3212 Direct Line
beyestone@eastham-ma.gov



From: Amanda V. Love [mailto:assessing@eastham-ma.gov]

Sent: Wednesday, January 18, 2017 10:46 AM

To: Belinda Eyestone

Subject: confirmatory deed

Electronic copy attached...

Amanda V. Love

Assistant to the Principal Assessor 2500 State Highway Eastham, MA 02642 774.801.3215 Direct

DARLENE J. PITT

Attorney-at-Law



TOWN OF EASTHAM BOARD OF ASSESSORS 6H Munson Meeting Way • Chatham, MA 02633 (PH) 508.945.3663 • (FAX) 508.945.3755 EMAIL: darlene@pittlawfirm.com WEBSITE: www.pittlawfirm.com

December 6, 2016

Via First Class Mail

Town of Eastham
Assessors Office
ATTN: Belinda Eyestone
2500 State Hig way
Fastham, MA 02042

RE: Philip H. Douglas and Mary Anne Douglas

LOT 17A, off Higgins Road, Eastham, MA

Dear Ms. Eyestone:

I am the estate planning attorney for Philip H. Douglas and Mary Anne Douglas. On May 6, 2016, the Town of Eastham conveyed the above-referenced Lot 17A to Philip H. Douglas, Mary Anne Douglas, and their son, Kyle G. Douglas. There are the following two issues with that Deed: (1) the property was conveyed to them as tenanty by the entirety, which is how a married couple only may own property in MA; and (2) the recorded Deed states that "two certain lots of land" are conveyed. The issue with the ownership is that all 3 of them cannot own as tenants by the entirety – it should read "as joint tenants with rights of survivorship", which is how 3 people would have to own land with survivorship rights in Massachusetts. As to the conveyance of two parcels, it appears that only lot 17A was conveyed. I have looked at the plan recorded at Plan Book 663 Page 36 and believe that only Lot 17A is correct, as it is the only lot that abuts the Douglas' property at 155 Massasoit Trail. Therefore, the deed should only recite that "one certain lot of land shown as Lot 17A" is being conveyed. I have enclosed a copy of the recorded Deed, as well as the Plan, for your immediate reference.

At this time, I is adly request that the town execute and record a Confirmatory Deer to correct the two above-outlined errors, so that the Douglas family will have clear and unequivocal title to Lot 17A going forward. Please contact me at your convenience to confirm that the Town will rectify these two errors for the Douglas family. On behalf of the family and myself, I thank you in advance for your assistance in correcting these issues.

Sincerely,

Darlene J. Pitt, Esquire

Enclosures

29047,270; Aura the Tomaiss Mills Mary Aura anderson

OUITCLAIM DEED

Lot 17A, off Higgins Road, Eastham, Massachusetts

The Town of Eastham, a Massachusetts municipal corporation having a principal place of business at Eastham Town Hall, 2500 State Highway, Eastham, Massachusetts 02642 acting by and through its Board of Selectmen (the "Grantor"), in consideration of One Thousand Two Hundred Twenty and 00/100 Dollars (\$1,220.00), receipt of which is hereby acknowledged, pursuant to the authority of Article 9 voted upon at May 6, 2013 Annual Town Meeting, a certified copy of which is attached hereto, grants to Philip H. Douglas and Mary Anne Douglas, and Kyle G. Douglas as tenants by entitly of 155 Massasoit Trail, Eastham, Massachusetts 02642 (the "Grantee"), with QUITCLAIM COVENANTS, those two certain lots of land shown as Lot 17A, off Higgins Road, in Eastham, Massachusetts on a plan of land entitled "Plan of Land situated in Eastham, MA, prepared for Town of Eastham," dated October 6, 2014, prepared by Ryder & Wilcox, Inc., recorded with Barnstable County Registry of Deeds in Book 663, Page 36. Lot 17A contains 2,778 square feet, more or less, of vacant land (the "Lot" or "Premises").

The Grantor's conveyance of the Premises is subject to the restrictions that the Lot is not a buildable lot, is to be used for residential purposes in compliance with the Town of Eastham Zoning By-Laws and shall be combined and used with the Grantee's abutting property at 155 Massasoit Trail, shown on Town Assessor's Map 4 as Parcel 413, as one lot (the "Combined Property"), and that no part of such Lot or the Combined Property shall hereafter be used for non-residential purposes nor divided, subdivided or conveyed as a separate parcel or parcels, unless prior written permission is granted by the Town of Eastham Board of Selectmen and such permission is recorded with said Deeds. These restrictions shall run with the title to the Lot and the abutting property.

By accepting and recording this Quitclaim Deed, the Grantee expressly agrees to the Grantor's restrictions on the use of the Lot and the Combined Property. These restrictions shall be enforceable for a term of 200 years from the date hereof, and all of the agreements. restrictions, rights and covenants contained herein shall be deemed to be "other restrictions held by any governmental body," pursuant to G.L. c. 184, §26, such that the restrictions contained herein shall be enforceable for the term of 200 years and not be limited in duration by any contrary rule or operation of law. Nevertheless, if recording of a notice is ever needed to extend the time period for enforceability of these restrictions, the Grantee hereby appoints the Grantor as its agent and attorney in fact to execute and record such notice and further agrees that the Grantee shall execute and record such notice upon request.

The undersigned certifies that there has been full compliance with the provisions of G. L. c. 44 §63A.

No deed stamp taxes are due on this conveyance pursuant to G.L. c. 64D, §1.

For Grantor's title, see Deed from Nancy R. Codella recorded with said Deeds in Book 14714, Page 179.

Remainder of Page Intentionally Blank

COMMONWEALTH OF MASSACHUSETTS

Man O'Shea

Barnstable, ss

On this day of day of 2016, before me, the undersigned Notary Public, personally appeared which to be the Board of Selectmen of the Town of Eastham, proved to me through satisfactory evidence of identification, which was personal knowledge of the undersigned, to be the persons whose names are signed on the preceding or attached document, and acknowledged to me that they signed it voluntarily for its stated purpose as the free and deed of the Board of Selectmen of the Town of Eastham.

Notary Public

My Commission Expi

547478/EAHM/0193

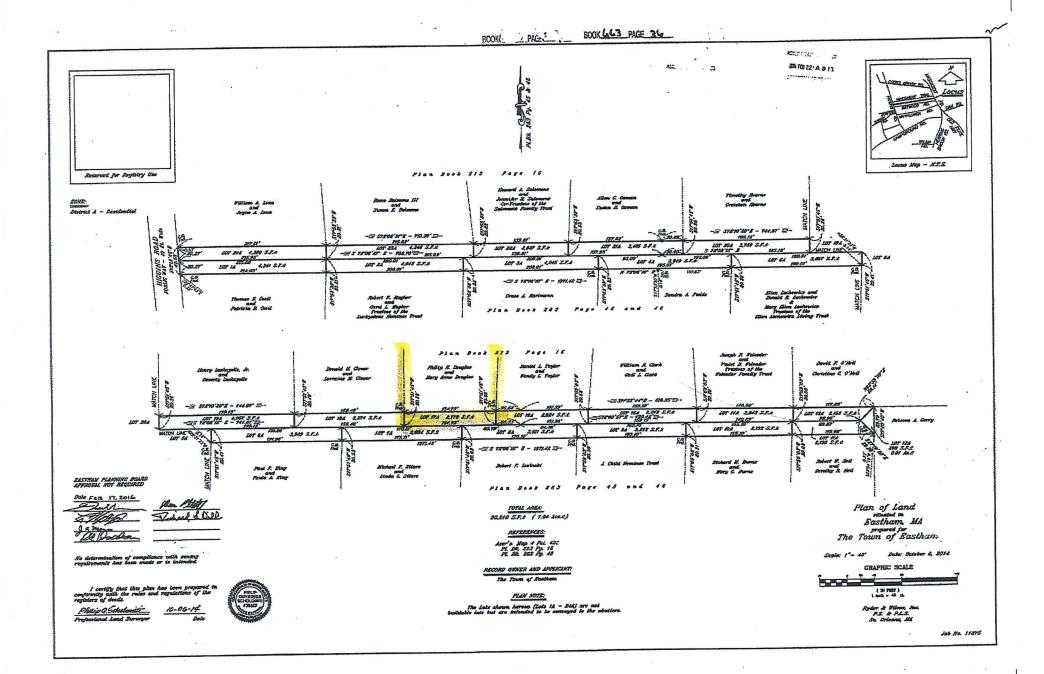
SUSANNE C. FISCHER

Notary Public

COMMONWEALTH OF MASSACHUSETTS

My Commission Expires

March 10, 2017



CONFIRMATORY DEED

Lot 17A, off Higgins Road, Eastham, Massachusetts

The **Town of Eastham**, a Massachusetts municipal corporation having a principal place of business at Eastham Town Hall, 2500 State Highway, Eastham, MA 02642 acting by and through its Board of Selectmen (the "Grantor"), in consideration of One Thousand Two Hundred Twenty and 00/100 Dollars (\$1,220.00), receipt of which is hereby acknowledged, pursuant to the authority of Article 9 voted upon at May 6, 2013 Annual Town Meeting, a certified copy of which is attached hereto, *grants to Philip H. Douglas, Mary Anne Douglas and Kyle G. Douglas as joint tenants with rights of survivorship*, all of 155 Massasoit Trail, Eastham, MA 02642 (the "Grantee", with Quitclaim Covenants, *the certain lot of land shown as Lot 17A*, off Higgins Road, in Eastham, MA on a plan of land entitled "Plan of Land situated in Eastham, MA, prepared by Ryder & Wilcox, Inc., recorded with the Barnstable County Registry of Deeds in Book 663, Page 36. Lot 17A contains 2,778 square feet, more or less, of vacant land (the "Lot" of Premises").

The Grantor's conveyance of the Premises is subject to the restrictions that the Lot is not a buildable lot, is to be used for residential purposes in compliance with the Town of Eastham Zoning By-Laws and shall be combined and used with the Grantee's abutting property at 155 Massasoit Trail, shown on Town Assessor's Map 4 as Parcel 413, as one lot (the "Combined Property") and that no part of such Lot or the Combined Property shall hereafter be used for non-residential purposes nor divided, subdivided or as a separate parcel or parcels, unless prior written permission is granted by the Town of Eastham Board of Selectmen and such permission is recorded with said Deeds. These restrictions shall run with the title to the Lot and the abutting property.

By accepting and recording this Confirmatory Deed, the Grantee expressly agrees to the Grantor's restrictions on the use of the lot and the Combined Property. These restrictions shall be enforceable for a term of 200 years from the date hereof, and all of the agreements, restrictions, rights and covenants contained herein shall be deemed to be "other restrictions held by any governmental body," pursuant to G.L. c. 184, §26, such that the restrictions contained herein shall be enforceable for the term of 200 years and not be limited in duration by any contrary rule or operation of law. Nevertheless, if recording of a notice is ever needed to extend the time period for enforceability of these restrictions, the Grantee hereby appoints the Grantor as its agent and attorney in fact to execute and record such notice and further agrees that the Grantee shall execute and record such notice upon request.

The undersigned certifies that there has been full compliance with the provisions of G.L. c. 44 $\S63A.$

No deed stamp taxes are due on this conveyance pursuant to G.L. c.64D, §1.

For Grantor's title, see Deed from Nancy R. Codella recorded with said Deeds in Book 14714, Page 179.

This Confirmatory Deed is given to correct and confirm Quitclaim Deed recorded as Book 29634, Page 1.

Remainder of Page Intentionally Blank

EXECUTED under seal this	day of	, 2017.
Town of Eastham By Its Board of Selectmen		
by the board of betweenigh		
John F. Knight	Elizabe	th Gawron
William O'Shea	Wallace	e F. Adams II
Linda S. Burt COMMONWE	EALTH OF MASSACH	USETTS
Barnstable, ss		
On this day of Public, personally appeared As Members of the Board of Selectronic satisfactory evidence of identification undersigned, to be the persons whose acknowledged to me that they signed deed of the Board of Selectmen of the same of	men of the Town of East on, which was personal lesse names are signed on the d it voluntarily for its sta	tham, proved to me through knowledge of the he above document, and
	Notary Public	
	My Commissio	on Expires:

Gillespie-Lee, Laurie

From:

Gillespie-Lee, Laurie

Sent:

Monday, January 23, 2017 9:17 AM

To:

'eddie@nfmdonations.com'

Subject:

Non Profit Benefiting Veterans

Mr. Chisham,

Your email to Sheila Vanderhoef dated January 3, 2017 was reviewed by the Eastham Board of Selectmen at their meeting on Tuesday, January 17, 2017.

Unfortunately, at this time, Eastham does not have a policy regarding the use of the Town's Website for links to non-profit agencies. Before the Board can fully consider your request, and any other requests received, Eastham must first develop a policy that will be in the best interest of the Town.

So unfortunately, we can not link our website to any non-profits at this time.

Thank you.

Laurie Gillespie-Lee Administrative Assistant Town of Eastham 2500 State Highway Eastham, MA 02642

Telephone: 508-240-5900, ext 3207

Fax: 508-240-1291

E Mail: admin2@eastham-ma.gov



TOWN OF EASTHAM

2500 State Highway, Eastham, MA 02642 - 2544 All departments 508 240-5900 Fax 508 240-1291 www.eastham-ma.gov

January 17, 2017

Mr. Leo G. Cakounes, Chairman County Commissioner's Office Superior Courthouse P.O. Box 427 3195 Main Street Barnstable, MA 02630

RE: Water Protection Collaborative

Dear Mr. Cakounes and Commissioners:

The Town of Eastham would like to request your support of the important work conducted by the Cape Cod Water Protection Collaborative and the role of Mr. Andrew Gottlieb as the Collaborative's Director. Andrew has provided leadership in obtaining SRF funding that will provide cost savings throughout Cape Cod.

The collaborative exists to offer a regional forum to build support for action and foster regional solutions. Jane Crowley is the Town of Eastham's representative on the committee. Each of the town's representatives share information on a wide range of topics and issues. Eastham is currently engaged in a development of a Town wide Municipal Water System at a cost of \$136 million dollars as the primary objective in providing public health from land use activities and wastewater impacts. Although other communities are currently focused on dealing with wastewater projects, Eastham's experience provides an opportunity to expand the regional focus on water quality to a broader level that include the importance of groundwater protection for municipal water supply, private wells, fresh water ponds and marine water quality. Our Eastham plan is unique in that water supply infrastructure is the first step in our water protection plan. We now work toward development of watershed approaches to wastewater management plans that will provide maximum benefit at the lowest cost possible but exploring all options. As a regional body, we benefit from the experience and lessons learned in other communities. We share in the successes and collectively learn from the failures. The Collaborative has provided funding to support the investigations of pilot projects that may prove to be successful cost saving alternative technologies.

All the towns on Cape Cod and our County are faced with enormous challenges of water protection and wastewater management. The Collaborative provides all the towns to equally share such issues, discuss possible solutions and discuss possible means of funding these solutions. We need to work together to address these enormous challenges.

We ask you to support the Collaborative as a significant means to address our water and wastewater issues.

Respectfully,

Eastham Board of Selectmen

John F, Knight, Chair

William O'Shea, Vice Chair

Wallace F. Adams II

Linda S. Burt. Clerk

Rizabeth Gawron



The Leader in Public Sector Law

January 24, 2017

101 Arch Street, Boston, MA 02110 Tel: 617.556.0007 | Fax: 617.654.1735

www.k-plaw.com



John W. Giorgio jgiorgio@k-plaw.com

Hon. John F. Knight and Members of the Board of Selectmen Eastham Town Hall 2500 State Highway Eastham, MA 02642

Re: Cape Light Compact - Joint Powers Agreement

Dear Members of the Board of Selectmen:

I have been working with the Cape Light Compact ("CLC") and other municipalities which are members of the CLC to explore a new model for governance of the CLC.

You may recall the CLC was formed pursuant to an Intergovernmental Agreement ("IGA") under G.L. c. 40, §4A that was entered into among the municipalities on Cape Cod and Martha's Vineyard as well as Barnstable County and Dukes County. In addition, acting through the CLC a municipal energy aggregation plan was developed and approved by the Massachusetts Department of Public Utilities. Neither the approved aggregation plan nor the IGA, however, has provided the necessary infrastructure and legal authority for the CLC to act as an independent entity in terms of the authority to maintain bank accounts, to hire employees, and to enter into contracts for goods and services. As a result, the CLC entered into an administrative services agreement with Barnstable County to perform these necessary functions for the benefit of CLC. Recently, however, the CLC and Barnstable County entered into a Termination and Transition Agreement which will terminate the administrative services provided by the County to the CLC effective June 30, 2017.

In August 2016, the General Court, as part of the Municipal Modernization Act (c. 216 of the Acts of 2016) enacted a new provision, G.L. c. 40, § 4A ½, which allows two or more municipalities to enter into an agreement to create a joint powers entity ("JPE"), which is a separate body politic and corporate from the municipalities, and which has enumerated powers that the JPE can perform on its own, including, among other things, the hiring of employees, entering into contracts, borrowing money, and maintaining bank accounts.

In my discussions with the CLC Administrator and counsel for CLC, we have concluded that the establishment of a JPE to replace the CLC created by the IGA will provide a much more effective and efficient independent entity capable of carrying out the important functions of the CLC municipal aggregation plan.



Hon. John F. Knight and Members of the Board of Selectmen January 24, 2017 Page 2

To that end, I am enclosing for your consideration the draft of a Joint Powers Agreement that was drafted by counsel for the CLC. I was provided the opportunity to review and comment on the draft agreement and my suggestions and revisions have been incorporated in the attached draft. The attached agreement, as explained on the first page, is color coded to identify the source of the text: including original IGA language, provisions authorized by the new JPE statute, and new text.

In reviewing the attached draft agreement, please note the following important features of the draft agreement.

- The JPE will be created as soon as at least two municipalities sign the agreement.
- Like an intermunicipal agreement under G. L., c, 40, § 4A, a town may enter into a JPE on approval of the Board of Selectmen. There is no requirement for a Town Meeting vote to authorize the JPE.
- The JPE authorized in the attached agreement will continue to perform the core functions of the CLC in terms of energy aggregation and energy efficiency programs. The new entity, however, will be able to take advantage of the express powers and authority authorized by the new statute without having to rely on one or more of the municipalities and counties which are members of the CLC under the IGA to perform those functions on behalf of the CLC.
- The agreement, however, does provide express authority for the JPE to enter into an administrative services agreement with one or more of the member municipal members to perform any of the services that the JPE is authorized to perform as a JPE.
- Perhaps most importantly, by creating the JPE, the new entity will have the authority to hire staff and to obtain a Federal Tax Identification Number.
- The attached agreement contemplates that the existing IGA will terminate as soon as 50% or more of the existing members sign the new joint powers agreement and all the assets and liabilities of the CLC under the IGA will transfer to the new entity.
- It is important to note that under the new statutory framework and by the express terms of the agreement, none of the member municipalities will be liable for any of the debts or liabilities of the CLC. This is no different than under the existing IGA except now there is express statutory authority to protect the municipalities from any liability unless the Town agrees in the Agreement to assume any obligations or liabilities. For example, should the Town and the JPE agree to enter an



Hon. John F. Knight and Members of the Board of Selectmen January 24, 2017 Page 3

administrative services agreement whereby the Town would agree to perform administrative, financial, or banking services on behalf of the JPE, the Town would be liable for any obligations expressly agreed to in that separate agreement.

- The new entity will be governed by a Board of Directors with each member municipality appointing a member in accordance with local appointment procedures. In making such an appointment, the Town would have the ability to provide limitations and instructions to its representative. The Town's representative would be appointed for a term specified by the Town.
- Once five or more member municipalities join, the Board of Directors could appoint an executive committee to act in circumstances where a quorum of the Board of Directors cannot be achieved.
- The JPE is subject to the Open Meeting Law, the Public Records Law, the Conflict of Interest Law, and state procurement laws.

In my opinion, the attached draft agreement represents a good opportunity for CLC to effectively and efficiently provide its core mission services to the member towns and their constituents, while continuing to provide important protections against labilities or risks by the member towns.

Please let me know if you have any questions.

Very truly yours,

JWG/bp

Enc.

cc: Town Administrator

573996/EAHM/0001

Gillespie-Lee, Laurie

avespordere

From:

Sheila Vanderhoef <svanderhoef@eastham-ma.gov>

Sent:

Tuesday, January 17, 2017 2:56 PM

To:

Gillespie-Lee, Laurie

Subject:

FW: Eversource Rate Review

Attachments:

EMA Fact sheet.pdf; Rate case release EMA FINAL 1-17.pdf

FOR bos 2/6 AGENDA

From: Christine.Collier@eversource.com [mailto:Christine.Collier@eversource.com] On Behalf Of

community.update@eversource.com
Sent: Tuesday, January 17, 2017 2:20 PM
To: community.update@eversource.com
Cc: ierome.mcdermott@eversource.com

Subject: Eversource Rate Review

Good Afternoon,

I am reaching out to inform you that Eversource filed an electric distribution rate review with the Massachusetts Department of Public Utilities (DPU) on January 17. This rate filing will enable us to continue to enhance service to your community as well as introduce new and innovative technologies for customers and communities. If approved, new rates would take effect in January, 2018.

Customer and Community Benefits

- Introduces "decoupled" rates in eastern Massachusetts to encourage more energy efficiency.
- Increases opportunities for communities to install more energy efficient LED streetlights.
- Enables us to create a more technologically advanced energy system.
- Provides for ongoing reliability enhancements and system automation.
- Allows Eversource to remain committed to effective response to increased storm activity.
- Gives customers and communities increased accessibility to emerging, clean energy technologies such as electric vehicle infrastructure and electric storage.
- Lets more customers interconnect with our grid using clean technologies.
- Supports continued economic growth in Massachusetts.

Over the years, we've been making extensive improvements to our electric system and service to our customers, and we want to continue to improve. In fact, we're rated a "top quartile" utility by IEEE and we want to maintain this standing. I'm also very proud of the leadership role Eversource has always taken in preparing for Massachusetts' energy future, and this rate case will enable us to continue to provide that leadership.

The Department of Public Utilities will conduct a review of our rate filing, with public hearings, and will most likely rule by next fall.

I will continue to update you, but in the meantime should you have any questions or would like more detail about the rate case, please contact me directly at 508-790-9002. Please see attached Fact Sheet and Press Release.

Thank you,

Jerry McDermott Community Relations Specialist

This electronic message contains information from Eversource Energy or its affiliates that may be confidential, proprietary or otherwise protected from disclosure. The information is intended to be used solely by the recipient(s) named. Any views or opinions expressed in this message are not necessarily those of Eversource Energy or its affiliates. Any disclosure, copying or distribution of this message or the taking of any action based on its contents, other than by the intended recipient for its intended purpose, is strictly prohibited. If you have received this e-mail in error, please notify the sender immediately and delete it from your system. Email transmission cannot be guaranteed to be error-free or secure or free from viruses, and Eversource Energy disclaims all liability for any resulting damage, errors, or omissions.

Electric Distribution Rate Review 2017Fact Sheet

Eversource customers in eastern Massachusetts benefit from a safe, internationally rated top-tier electric system that allows us to meet our customers' energy needs. At Eversource, we are proud of the highly reliable service we provide to residents, businesses, and communities of Massachusetts, and the leadership role we take in preparing for Massachusetts' energy future.

Delivering on these commitments requires significant and sustained investments in our system, which is why Eversource filed a rate review in January 2017 with the Massachusetts Department of Public Utilities (see rate review process on right). The filing enables Eversource to continue to provide superior service, support our customers' growing electricity needs into the future, boost electric innovations such as electric vehicles, and facilitate customers' interconnections to our grid using clean energy technologies. New rates would take effect in January 2018, if approved.

Why is Eversource requesting a distribution rate review?

Eversource is committed to investing in reliability improvements and the safety of our system. It's not only important for our customers, but also for the economic development of the region.

Massachusetts law requires utilities to conduct a rate review and update distribution rates every five years. This differs from energy supply rates – or Basic Service rates – that change each year in January and July. New rates will also help Eversource be prepared even more effectively for future storms. Our rate review details components of a \$60 million gap between expenses and what is currently collected in rates.

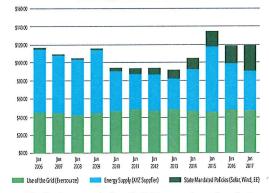
What are the customer benefits?

- A smarter, more technologically advanced energy system.
- Ongoing reliability enhancements and system automation.
- Increased accessibility to emerging, clean energy technologies such as electric vehicles and electric storage.
- "Decoupled" rates to encourage more energy efficiency.
- Further economic growth in Massachusetts.
- Easier to understand and more consistent rate classifications.

How would my bill change?

If approved, on January 1, 2018, Eversource expects an average residential bill in eastern Massachusetts to increase by about 7%, or approximately \$8.50 per month. Increases to individual customers will vary based on location, rate, and amount of electricity used.

Typical Bill of Residential Customer (\$) Residential Greater Boston R-1 Average Bill: 550 kWh



Distribution rates depicted in light green above show that these rates have been stable for the past ten years.

Where can I find more information about Eversource's 2018 Rate Review?

Customers can see more information in the "My Account" section of Eversource.com, or customers can call us at 800-592-2000.

Visit Eversource.com for helpful information on ways to save energy and money.

* Institute of Electrical and Electronics Engineers

EVERSURCE

Rate Review Process

What is a "rate review?"

In Massachusetts, a rate review is the regulatory proceeding conducted by the Department of Public Utilities (DPU) to review a utility's proposal to adjust rates.

STEP ONE

The utility files a Notice with the DPU indicating that it intends to file a rate review. The utility can file 30 days after this notice. Eversource filed its Notice on December 9, 2016.

STEP TWO

The utility determines the revenue deficiency, which is the amount of money the company is collecting in rates versus the amount of money that is required for its investments and Operation & Maintenance (O&M) costs.

STEP THREE

A utility conducts a "Cost of Service Study" (COSS) to determine costs to provide service to different types of customers, such as residential, commercial/industrial. Eversource's COSS allocates costs across ten unique customer rate groups.

STEP FOUR

A detailed rate review is filed with the DPU. This filing proposed rate adjustments by customer type, using the COSS. Eversource filed a detailed rate case with the DPU on January 17, 2017.

STEP FIVE

DPU issues a notice for Eversource's Rate Review and schedules public hearings to gather feedback on the rate review proposal.

STEP SIX

DPU conducts a comprehensive review of the rate review and issues a ruling within 10 months. The review process includes several days of hearings.

 If approved, any new Eversource electric rates would take effect in January 2018.



News Release

Eversource Requests Approval of a Grid-Wise Performance Plan for Next Generation Energy Company Regulatory rate review required to update company delivery rates

BOSTON (January 17, 2017) – In a move that will allow Eversource to expand its commitment to reliability and clean energy technologies, the company today filed a request with the Massachusetts Department of Public Utilities to update its base distribution rates as part of a longer term plan to deliver the benefits of a modernized grid to customers. The proposal makes possible the recovery of costs associated with delivering top-tier reliability and launches a *Grid-Wise Performance Plan* – a vision of designing and implementing a smarter, more technologically-advanced energy grid, better able to meet increasing customer expectations and align with clean energy policy goals.

"Customers are experiencing fewer and shorter outages as a result of our smart investments in sophisticated technology," said Craig Hallstrom, President of Massachusetts Electric Operations at Eversource. "We've also worked hard to improve reliability for customers with efforts like our enhanced tree trimming programs, all while holding the line on rising costs. Now, we're proposing to increase that commitment and utilize the latest engineering advances – including electric vehicle infrastructure and energy storage systems – for the benefit of customers."



The requested change in base distribution rates is required by law and locks in annual operating cost savings of \$30 million resulting from the 2012 merger between NSTAR and Northeast Utilities. Over the last 10 years, Eversource's distribution rates have remained stable due to efficient cost management while electric reliability has improved. This is particularly notable in comparison to increasing electric supply prices. The revised rates would incorporate the costs of capital investments made to achieve top-tier reliability performance.

Details of the Eversource *Grid-Wise Performance Plan* include increased deployment of advanced automated devices and technology to reduce the frequency and duration of power outages; an energy storage pilot program to demonstrate the viability of storage options and promote adoption of storage (more)



technologies; an enhanced electric-grid management system; tools for the integration of distributed energy resources; and an electric vehicle charging infrastructure program to meet the growing needs of green transportation in Massachusetts.

"Investments by Eversource are important to help address some of the critical gaps in EV charging infrastructure, such as multi-unit dwellings, workplace charging, DC fast charging along major highways, and solutions for disadvantaged communities," said Daniel Gatti, policy analyst for the Union of Concerned Scientists. "In addition, utilities can have a critical role in increasing consumer awareness of the benefits of electric vehicles and the many policies the state and federal government have in place to promote EVs. We look forward to working with Eversource and other stakeholders to refine their proposal and ensure that it meets the needs of all Massachusetts EV drivers with the hope of securing approval from the Department of Public Utilities for new infrastructure."

As Eversource works to continually modernize its electric system, a focus on cyber security has become increasingly important. Now more than ever, the company is investing in advanced technology solutions to protect the integrity of the grid along with the more traditional investments aimed at upgrading it.

"Our customers are expressing increasing interest in playing a more active role in their energy management with solar panels and other technologies," Hallstrom added. "Our plan includes the tools to help make the integration of solar safer and more streamlined."

Eversource is requesting new delivery rates to alleviate a revenue deficiency of roughly \$60 million for the company's Eastern Massachusetts service area. For residential customers in that area, the new distribution rates would add approximately 7 percent or \$8.45 to the monthly bill of a typical residential customer using 550 kilowatt hours of electricity.

Eversource's proposed distribution rate adjustments are based on actual operation and maintenance cost deficiencies for a test year ending June 30, 2016. The DPU will now thoroughly review the company's request, which will include soliciting and considering public comments, before making a final decision by the end of this year. If approved, the new rates would go into effect January 1, 2018.

Eversource (NYSE: ES) transmits and delivers electricity and natural gas to 1.7 million customers throughout Massachusetts, including approximately 1.4 million electric customers in 140 communities and 300,000 gas customers in 51 communities. Recognized as the top U.S. utility for its energy efficiency programs by the sustainability advocacy organization Ceres, Eversource harnesses the commitment of its approximately 8,000 employees across three states to build a single, united company around the mission of safely delivering reliable energy and superior customer service. For more information, please visit our website (www.eversource.com) and follow us on Twitter (@eversourceMa) and Facebook (facebook.com/EversourceMA.)

CONTACTS:

Mike Durand 508-441-5831 michael.durand@eversource.com

Rhiannon D'Angelo 617-424-2116 rhiannon.dangelo@eversource.com JAN 3 0 2017

12-30-17

Dear Eastham Board of Selectmen:

We can scale up projects such as the hatchery @ Hemenway. Using a Brain-storming model to un-Jam our Blue Economy "Log-Jam" is I think the way to Prosperity. All Cape+Islands towns and Counties and also the greater Regions could + should Pitch in. I design comprehensive complex systems for the public trust. Prosperity, Prosperity and Liberty We Love you. for Pam + Stove

STEVEN JF SCANNELL 508 - 360 - 1926

thescannellagenda @ 9 MA; L. COM



January 27, 2017

ADMINISTRATION

JAN 3 0 2017

RECEIVED

Via UPS

Board of Selectmen Town of Eastham 2500 State Highway Eastham, MA 02642

Dear Chairman and Members of the Board:

Pursuant to G.L. Ch. 166A, Section 10, Comcast is pleased to provide a copy of its Form 500 for 2016. The Form 500 contains information on customer video service related issues in your community and how Comcast responded, including the time taken to resolve these complaints. For the Form 500, the Massachusetts Department of Telecommunications and Cable defines a complaint as:

Any written or verbal contact with a cable operator in connection with subscription in which a person expresses dissatisfaction with an act, omission, product or service that is (1) within the operator's control, and (2) requires a corrective measure on the part of the operator.

Comcast also has forwarded a copy of the enclosed Form 500 to the Department of Telecommunications and Cable.

If I can be of further assistance on any matter related to the Form 500, please contact me at 508-732-1536.

Very truly yours,

Michael Galla

Sr. Manager of Government Affairs

Mintpolla

cc: Department of Telecommunications and Cable



Form 500 Complaint Data

Code Key: Avg. Resolution Time

Code Key: Manner of Resolution

<1> Less than 1 Day <2> 1-3 Days <3> 4-7 Days <4> 8-14 Days <5> 15-30 Days <6> >30 Days

A. Resolved to the satisfaction of both parties.

B. Resolved, customer dissatisfied. C. Not Resolved.

Town EASTHAM Year 2016			Total Complaints	Avg Resolution Time (see	Manner of Resolution (see code key above for the manner represented by the letters below) The number below each letter indicates the number of complaints resolved in that manner.		
Subscribers	4729			code above)	Α.	В.	C.
Advertising/Marketin	9		0	1	0	0	0
Appointment Service Call			0	1	0	0	0
Billing			2	3	2	0	0
Customer Service			0	1	0	0	0
Equipment			0	1	0	0	0
Installation			5	2	5	0	0
OTHER		DAMAGE	0	1	0	0	0
OTHER		PROGRAMMING	0	1	0	0	0
Reception			0	1	0	0	0
Service Interruption			0	1	0	0	0

Form 500 Service Interruption Data

#Name?

Code Key: Duration of Service Interruption

<1> Less than 1 Day <2> 1-3 Days <3> 4-7 Days <4> 8-14 Days <5> 15-30 Days <6> >30 Days

Town	Eastham	Year	2016	Subscribers	4729			
			Date of Service Interruption	Duration	of Service Interruption	(see Code Key above)		
Eastham		10/20/2016 1:20:00 AM	1					
	Eastham		12/23/2016 9:41:00 AM	1				
	Eastham		10/17/2016 10:59:00 AM	7/2016 10:59:00 AM				
Eastham		10/14/2016 5:01:00 PM	1					
	Eastham Eastham Eastham Eastham		9/26/2016 1:20:00 PM	1:20:00 PM 1				
			9/4/2016 3:31:00 PM		1			
			8/13/2016 11:06:00 AM		1			
			7/6/2016 10:58:00 AM		1			
Eastham Eastham Eastham Eastham		Eastham 6/25/2016 12:24:00 PM			1			
		5/22/2016 3:03:00 AM	5/22/2016 3:03:00 AM 1					
		Eastham 1/17/2016 3:24:00 PM			1			
		8/20/2016 12:34:00 AM	1					



THE COMMONWEALTH OF MASSACHUSETTS OFFICE OF THE ATTORNEY GENERAL

ONE ASHBURTON PLACE BOSTON, MASSACHUSETTS 02108

(617) 727-2200 (617) 727-4765 TTY www.mass.gov/ago

January 26, 2017

VIA EMAIL ONLY

Patrick Higgins patrick@patrickhiggins.co

> **Open Meeting Law Complaint** RE:

ADMINISTRATION

JAN 3 0 2017

RECEIVED

Dear Mr. Higgins:

We understand that on December 23, 2016, you filed a complaint with the Eastham Board of Selectmen ("Board"), alleging a violation of the Open Meeting Law, G.L. c. 30A, §§ 18-25. The Board is required to notify our office of the complaint and any remedial action taken to address the complaint. G.L. c. 30A, § 23(b); 940 CMR 29.05(5). Our office received notification and a response from the Board on December 28, 2016.

Under the Open Meeting Law, our office may only review your complaint after 30 days have passed from the time you first filed your complaint with the Board. G.L. c. 30A, § 23(b); 940 CMR 29.05(6). After 30 days, you may file a request with our office for further review of your complaint.

Thirty days have now passed since you first filed your complaint with the Board. However, our office currently has no record of a request for further review filed by you in this matter. Accordingly, we will presume that the action taken by the Board was sufficient and will close this file unless we receive a request for further review and a copy of the initial complaint by Monday, March 20, 2017.

Please feel free to contact us if you have any questions about the Open Meeting Law complaint process.

Sincerely,

Kaitlin Maher Paralegal

Division of Open Government

ce: Sheila Vanderhoef, Eastham Town Administrator (By mail) Eastham Board of Selectmen (By mail)

Info



508.945.3040 ph 888.945.8271 fax jeff@p5legal.com www.p5legal.com 3282 Main Street PO Box 910 (mail) Barnstable MA 02630

Mr. Thomas J. Wingard Building Commissioner and Zoning Enforcement Officer 2500 State Highway Eastham, MA 02642

January 27, 2017

Re: John Milliken - 2085 Bridge Road

Dear Mr. Wingard,

I have been retained by a Bridge Road property owner, resident and neighbor of Mr. Milliken, who wishes to remain anonymous at this time.

As you aware, the property at 2085 Bridge Road is and has been in violation of the Town of Eastham Zoning Bylaw, Section VIII.C, which section prohibits junkyards, for almost 15 years. In fact, on or about February 26, 2016 you wrote to Mr. Milliken informing him of his continuing violation and demanded that he clean up his property. As of today, January 27, 2017 Mr. Milliken has not complied with your order.

I do not need to restate the procedural history, suffice to say it is extensive and at every turn Mr. Milliken has been alternately defiant or dismissive with regard to the seriousness of this matter. While, I am not a municipal law specialist and understand that you had no involvement with the recent permitting of an expansion of Mr. Milliken's shellfish grant; I fail to understand why the town did not require that he clean up his property as a condition of considering the application.

So that I may properly counsel my client, I am respectfully requesting to know, in writing, if the town intends to enforce its bylaw prohibiting junkyards and require Mr. Milliken to clean up his property.

Sincerely,

Jeff Bellas, Esq

JB/jb

cc. Sheila Vanderhoef, Town Administrator Jacqueline Beebe, Assistant Town Administrator Jane Crowley, Health Agent