

Town of Colchester, Connecticut

127 Norwich Avenue, Colchester, Connecticut 06415

Tri-Board Minutes Tuesday, September 20, 2016 Colchester Town Hall @7pm

BOARD OF SELECTMEN MEMBERS PRESENT: First Selectman Art Shilosky, Selectman Rosemany Coyle, Selectman Denise Mizla, and Selectman John Jones

MEMBERS ABSENT: Selectman Stan Soby

BOARD OF FINANCE MEMBERS PRESENT: Chairman Rob Tarlov, Andrea Migliaccio, Thomas Kane, Andreas Bisbikos, and Roberta Lepore

MEMBERS ABSENT: James McNair

BOARD OF EDUCATION MEMBERS PRESENT: Chairman Ron Goldstein, Renie Besaw, Michael Voiland, Brad Bernier,

Mary Tomasi, and Don Kennedy
MEMBERS ABSENT: Mitchell Koziol

OTHERS PRESENT: WJJMS Building Committee Members, WJJMS Project Architect Team, WJJMS Project Management Team, WJJMS Project Construction Team, Superintendent Jeff Mathieu, Fire Dept. Chief W Cox and Deputy Chief D Lee, Fire Marshall Sean Shoemaker, 13 Fire Dept. and Fire Company Members, three citizens and Clerk T. Dean

1. Call to Order

First Selectman A Shilosky called the meeting to order at 7:00 p.m. Board of Finance Chair R Tarlov called the meeting to order at 7:00 p.m. Board of Education Chair called the meeting to order at 7:00 p.m.

- 2. Citizen's Comments none
- 3. Update by William J Johnston Middle School Building School Project Committee

 Tom Tyler, Building Committee Chair, gave an update on the project to date to include building design overview, specification overview, and budget overview. A member of the Architect Team discussed the buildings design and security features.

(B Bernier moved to adjourn the BOE at 7:30pm, seconded by R Besaw. Unanimously approved. MOTION CARRIED)

- 4. Update by JLN Associates on Fire Department Strategic Plan

 JLN Associate presented the Strategic Plan study (attached). Discussion included overview of the Fire Dept. equipment and operations, concept of risk, community risk assessment and reduction, capital improvement plan and list of recommendations.
- 5. Citizens Comments- none
- 6. Adjourn

J Jones moved to adjourn the BOS at 9:05 p.m., seconded by R Coyle. Unanimously approved. MOTION CARRIED. A Migliaccio moved to adjourn the BOF at 9:05 p.m., seconded by R Lepore. Unanimously approved. MOTION CARRIED.

Attachment: Fire Department Strategic Plan Study

Respectfully submitted,

Tricia Dean, Clerk



COLCHESTER STRATEGIC PLAN STUDY





JLN ASSOCIATES
FIRE PROTECTION SERVICES
43 HATCHETTS HILL ROAD
OLD LYME, CT 06371

Executive Summary

During the fall of 2015, the Town of Colchester requested the services of JLN Associates (JLN) to review Fire Department Strategic Plan draft documents. In addition, reassess present conditions and make Strategic Recommendations. To complete this task, JLN reviewed numerous internal and external documents, conducted interviews and a community recognizance. The documents, both Strategic and General in nature, were well done and contributed a great deal to the project. The facts from the documents were then compared to national standards and fire service best practices. Ultimately, a Strength, Weaknesses, Opportunities and Threats (SWOT) analysis was conducted with the membership of the Department.

This research and its functional process led to the following conclusions. The Town of Colchester and its guests are fortunate to have the dedicated career and volunteer staff of the Colchester Hayward Fire Department to serve them. Expanding calls for service, increased financial concerns and the various needs of the community continue to challenge the delivery of outstanding service. As we have seen across the country and in the response statics we reviewed from the fire reports software, large numbers of Volunteer members does not necessarily translate into the adequate amounts needed on scene to safely handle today's emergencies. It should be noted, the Colchester Fire Department utilizes a robust Mutual Aid plan to meet the needs of their town. Funding will be needed for both traditional and non-traditional responder support methods.

In addition, several Capital Improvement decisions by the electorate, in the past, have created stressful conditions within the rolling stock and supporting properties. Vehicle replacement and physical repair plans have been proposed.

Presently Community Risk Reduction, (Code Enforcement, Public Education and Fire / Life Safety), responsibilities are shared between the Fire Department and Fire Marshal's Office. The Marshal's Office, a part-time position, is presently assigned under the Building Official and is in Town Hall. It is our recommendation that the Fire Marshal supervision and support be moved to the Fire Chief.

An aging population and increased requests for Emergency Medical Services (EMS) requires an investigation of raising the level of EMS capabilities.

This report provides a comprehensive capabilities analysis based on an assessment of the existing fire protection and emergency medical services, balanced with the needs of the Town of Colchester. The assessment is inclusive of all available data obtained from individual fire departments records, personal interviews, data analysis, and personal observations. The recommendations that follow this research are offered respectfully and, for the needs of the community within the scope of the analysis and the mission of the fire service. At JLN we recognize that a little courageous self-assessment improves your chances enormously in support of the primary mission of the fire service. The JLN's goal, is to ensure that the information obtained and the recommendations put forth continue to provide clear direction to the Town of Colchester



Contents

Executive Summary	2
Strategic Planning Report	6
Process	6
The Town of Colchester	7
Form of Government	7
Fire Department Responder Designation	8
Department Direction	8
Vision Statement	8
Mission Statement	8
Organizational Values	8
Concept of Risk	9
Community Risk Assessment	
Pre-designated Target Hazards – Life – Hazardous Practices-Hazardous Substances	9
Known Community Risks - Examples	
Educational Facilities:	
Residential Occupancies	19
Sales and Repair Occupancies	19
Hazardous Materials Occupancies	
Introduction	
Purpose of the Fire Department	
Fire Suppression, Rescue and Hazardous Materials Operations – Targets	
Future Levels of Service Delivery:	
Financial Costs & Recovery	
Emergency Medical Services - Targets	22
Future Levels of Service Delivery:	
Financial Costs & Recovery	
Disaster Planning and Mitigation - Targets	22
Future Levels of Service Delivery:	23
Government Responsibilities	23
Strategic Planning	23
Strategic Research	
Strategic Planning Broken Down	
Community Risk Reduction	24
Public Education / Fire Prevention	24
Code Enforcement	24
Fire Investigation	24
Organizational Structure	25
Table of Organization - Administration	25
Organizational Statement	25
Table of Organization- Tactical	25
Procedures and Policies	26
Standard Series of Codes For Any Document	28
Financial Management	
Funding History, Projections	30
Capital Improvement Plan (CIP)	30
Grants, Donations and other Funding	31



Operating Apparatus	31
Apparatus Replacement Planning	34
Apparatus Replacement Program	34
Engines:	35
Tanker/Hose Tender:	36
Utility and Service Vehicles:	37
Ladder Company	38
Aerial Apparatus:	38
Rescue Company	38
Ambulances:	39
Conclusion:	40
Staffing	41
NFPA Standards - Deployment	43
Fire Station Distribution	47
DRIVER LOCATIONS & ESTIMATED RESPONSE TIMES TO STATION	47
Volunteer Support	49
Mutual Aid	50
Human Resources	53
Training	53
Training Programs	
Training Facilities	59
Fire and other Emergency Responses 2014	60
Emergency Scene Management	
Response Times	62
Communications	
911 Service	63
Equipment and Buildings	
Fire Stations	
Station 1	63
Station 2	67
Equipment Maintenance	70
Buildings	70
Station Locations and Response Times to High Risk Target Hazards	71
Station Locations and Response Times to High Life Target Hazards	
Water for Fire Protection	
Medical Clearance	76
Attachment #1	79
NFPA Standards	79
Attachment #2	
SOP Format Example	81
Attachment #3	
Apparatus Inventory	
Attachment #4	
NFPA 1901	
Attachment #5	
CHFD Proposed Plan	
Attachment #6	92



SWOT Analysis	92
Attachment 7	
NFPA 1201 Study Worksheet used for research.	
Funding History, Projections	107
Capital Improvement Plan (CIP)	
Grants, Donations and other Funding?	107
Present Day Requirements	108
Expansion of Services, Need for Enhancement	108
Attachment #8	124
List of Recommendations	125



Strategic Planning Report

This report, when applied as a whole, will provide a reasonable, realistic, and consistent template as a guide for planning and development. This report addresses the following areas:

- The required fire protection, rescue, emergency response and potential disaster needs for the Town of Colchester based on response trending data.
- The adequacy of the Colchester Fire Department's organization based on its bylaws and Standard Operating Guidelines.
- The Colchester Fire Department's use of current technology for monitoring inventory, maintenance of equipment, and maintaining response data.
- The Town of Colchester's Emergency Management Response Plan's ability to address appropriate guidance for the fire department during town emergencies including Homeland Security issues.
- The Colchester Fire Department's current configuration and the anticipated facility needs.
- The needs of the Colchester Fire Department based on the potential growth of the town and department within the next 5, 10, and 20 years.
- Water supply needs of the Colchester Fire Department to adequately protect the Town of Colchester.
- Condition, maintenance, and replacement schedule for fire apparatus and equipment.
- The Colchester Fire Department's Fire Prevention and Education Program.
- Review of Colchester Fire Department's Mutual Aid Agreements.
- The available options to the Colchester Fire Department to enhance emergency response within the community.

Process

The information in this report was developed based on the guidance provided on the fire risk analysis for community fire departments as delineated in the 18th and 19th editions of the Fire Protection Handbook published by the National Fire Protection Association. It contains a review of the Colchester Fire Department utilizing NFPA 1201-1994, Standard for Developing Fire Protection Services for the Public. The following standards were used as references to draw comparisons including:

NFPA 1141, Standard for Fire Protection in Planned Building Groups,

NFPA 1201, Standard for Developing Fire Protection Services for the Public,

NFPA 1500, Standard on Fire Department Occupational Safety and Health Program,

NFPA 1581, Standard on Fire Department Infection Control Program,

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.

NFPA 1720, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Volunteer Fire Departments.



Documentation provided by the Department of Environmental Protection, Introduction to State and Local EOP Planning Guidance was also referenced.

Travel times from Colchester Fire Department to various commercial properties and businesses are calculated using the Apparatus Travel Time Formula provided by the ISO Commercial Risk Services, Inc. EMS responder and apparatus driver response times to the Colchester Fire Department were calculated by the same means.

Information contained in this report on the potential fire hazards within the community has been based on discussions and research utilizing:

Discussions with Fire Chief Walter Cox.

Discussions with Deputy Fire Chief Donald Lee.

Discussions with 1st Assistant Fire Chief Paul Guidice.

Discussions with 2nd Assistant Fire Chief Ken McKenna.

Discussions with Company Past President Dave Martin.

Discussions with the Building Official and Emergency Director Reed Gustafson.

Community tours and property visits by the staff of JLN Associates, LLC.

Research by JLN of the commercial and industrial properties within the response district.

Meeting with the Command Staff.

Meeting with the Fire Company.

The Town of Colchester

The community of Colchester was founded in 1698 and is located in New London County, Connecticut. Colchester is also located within the Department of Emergency Management and Homeland Security's Region 4 and participates in its Regional Emergency Planning Committee. Colchester's location abutting both Hartford and Middlesex Counties has led to significant responder relationships in all three counties. In 2015 the population was recorded as 15,783 people. This population is spread out over forty-nine point eight (49.8) square miles. Forty nine point one (49.1) square miles are land and point seven (.7) square miles are water including the Salmon and Jeremy Rivers. This produces a population density of three hundred eighty three (376) people per square mile in 5,669 residences. The Town is bordered by East Hampton, East Haddam, Salem, Lebanon, Marlborough, Bozrah and Hebron. Colchester is approximately twenty-five (25) miles southeast of Hartford, seventeen point five (17.5) miles from Manchester and eighty three point one (83.1) miles from Boston, MA. Transportation routes through the Town, for commuters and merchandise, include, Rt. 2, Rt. 16, Rt. 149 (East and West) Rt. 11, Rt. 85 and RT. 354 (North and South).

Form of Government

The Town has Selectmen -Town Meeting form of government, with a Board of Selectmen consisting of five elected members serving concurrent two-year terms and a Board of Finance consisting of six elected



members serving overlapping six-year terms. Powers and privileges are conferred and granted to the Town by the Connecticut General Statutes, as amended. The Town has a Charter. Legislative power is vested with the Board of Selectmen and the Town Meeting. The annual budget, all special appropriations exceeding 1.0% of the combined Town budget, excluding the Board of Education, and all bond and note authorizations are submitted to a referendum vote.

The First Selectman is the Chief Executive Officer of the Town and is a full voting and participating member of the Board of Selectmen. The First Selectman is responsible for the direction and activities of all Town departments except the Board of Education and all appointed boards.

Fire Department Responder Designation

The Town of Colchester and the "Hayward Fire Company" have had a long standing relationship. The "Hayward Fire Company" was formed in 1854. It has since transitioned into the "Colchester Hayward Volunteer Fire Company", a standalone 501(c)(3) nonprofit corporation. On June 25, 1975, the "Town" and today's "Colchester Hayward Volunteer Fire Company" signed a formal agreement regarding Fire Protection and related services. In the agreement "Hayward", as the Company is identified, shall provide Fire and other services as are commonly provided by Municipal Fire Departments. In return, the Town would supply sufficient financial support to furnish those services. However, today they receive no funds from the Town of Colchester. All of their funding is raised by the members and through donations. The agreement stipulates "Hayward" would submit an annual budget request to be considered and addressed in the First Selectman's budget request. The Town supports, through municipal funding, a combination Volunteer / Career force known as the "Town of Colchester Fire Department" which provides fire, rescue and emergency medical services to the Community. The agreement provided the Town with the authority to promulgate regulations as they thought necessary. In addition, stipulations were included regarding the ownership and use of Fire Apparatus and Fire Department buildings.

Department Direction

The following items are from a guidance document shared with personnel.

Vision Statement

To protect and preserve lives and property of the people in the Town of Colchester.

Mission Statement

Our Mission is the Medical, Fire and Rescue intervention that supports our Vision. It is the fire service's heritage that is the driving force behind our mission.

Organizational Values

Service Excellence:

We do all we can to ensure we deliver the best possible service to our internal and external customers / community through smart, well trained, humble, dedicated, competent, hardworking, safe members.

Embrace Diversity:

Recognizing the value of diversity helps us to work together as a team to serve our community. We are dedicated to reflecting and respecting the community's diversity throughout our organization.

Integrity and Honesty:



We value the public's trust and are committed to honest and ethical behavior. We hold ourselves accountable to these values. We believe in personal commitment to the organization and the community. Self-discipline is the foundation for managing behavior.

Teamwork:

We seek out and value the input and opinions of members at all levels of the organization. Teamwork is the building block that drives the department's labor/management process. We work as a team to cooperate locally, regionally, and nationally to improve service to the public and maintain a safe effective work environment. We believe that members have a responsibility to mentor others.

Innovation:

We recognize the value of change in responding to and meeting the ever evolving needs of our customers and members. We are committed to seeking out effective methods and progressive thinking toward change. We recognize the value of ongoing education and training.

Honor and Respect:

We are a fire department family. We are committed and accountable to each other because our lives depend on it. We value the role each member plays in our organization. We respect those that came before us and will strive to make the organization better for those who follow.

Communication:

We believe communication is essential to the cohesiveness and performance of our organization. We are committed to providing effective and responsive means of communication throughout the organization and community

Concept of Risk

NFPA 1201: 7-4 states an Emergency Services Organization that provides fire suppression, emergency medical services, hazardous materials response, or special operations shall develop an implementation plan to comply with all federal, state or provincial, and local applicable laws, codes, regulations, or standards and NFPA 1500, Standard on Fire Department Occupational Safety and Health Program. This has been completed.

Community Risk Assessment

The department has conducted a community fire risk analysis to identify the size and scope of the potential fire problem in order to determine the necessary number and deployment of fire companies. This has been done to evaluate and redefine fire protection needs for their jurisdiction through the strategic (master) planning process.

Pre-designated Target Hazards – Life – Hazardous Practices-Hazardous Substances

ID STREET ADDRESS FACILITY NAME TYPE

1461 100 LINWOOD AVE 100 LINWOOD AVE. COMM

58 11 HAYWARD AVE 11 HAYWARD AVE COMM



4040	400 M/FOT DD	400 IN/FOT DD	0.011
1340	126 WEST RD	126 WEST RD.	GPH
1316	152 LEBANON AVE	152 LEBANON AVE	APTS
1462	152 LINWOOD AVE	152 LINWOOD AVE.	APTS
1345	155 WESTCHESTER RD		COMM
1339	347 SOUTH MAIN ST	347 SOUTH MAIN ST	OMD
1335	35 HAYWARD AVE	35 HAYWARD AVE	MIX
246	35 LEBANON AVE	35 LEBANON AVE	COMM
1343 1465	514 WESTCHESTER RD 7 PARK AVE	514 WESTCHESTER RD	MIX
1460	84 LINWOOD AVE	7 PARK AVE (SEE 163 BROADWAY) 84 LINWOOD AVE	COMM
1323	9 SCHOOL RD	9 SCHOOL RD	COMM APTS
76	94 LEBANON AVE	94 LEBANON AVE Vacant store with Apts.	MIX
141	75 NORWICH AVE	A SUNFLOWER FLORIST	COMM
1341	139 WESTCHESTER RD	ABANDONED MILL	IND
1486	179-B LINWOOD AVE	ADVANCED AUTO PARTS	COMM
70	47 LEBANON AVE	ALL TRESSED OUT	MIXED
26	121 BROADWAY	ALLSTATE BROADWAY	COMM
219	87 UPTON RD	ALPHA Q	IND
196	275 SOUTH MAIN ST	AMERIGAS	COMM
1483	448 NEW LONDON RD	ANNELLI PAVING	COMM
17	36 BROADWAY	APPLE REHAB	RHC
51	336 HALLS HILL RD	APPLE TREE DAY CARE	DCC
1347	11 PROSPECT ST	APTS 3	APTS
24	116 BROADWAY	APTS 3	APTS
56	124 HAMMOND CT	APTS 3	APTS
1292	127 LEBANON AVE	APTS 3	APTS
6	156 AMSTON RD	APTS 3	APTS
187	159 SOUTH MAIN ST	APTS 3	APTS 3
188	171 SOUTH MAIN ST	APTS 3	APTS 3
189	184 SOUTH MAIN ST	APTS 3	APTS 3
54	19 HAMMOND CT	APTS 3	APTS
156	232 NORWICH AVE	APTS 3	APTS
198	284 SOUTH MAIN ST	APTS 3	APTS
92	316 PARUM RD	APTS 3	APTS 3
109	336 LINWOOD CEMETERY RD	APTS 3	APTS
121	35 MCDONALD RD	APTS 3	APTS 3
18	43 BROADWAY	APTS 3	APTS
55	56 HAMMOND CT	APTS 3	APTS
88	76 PARK RD	APTS 3	APTS
20	80 BROADWAY	APTS 3	APTS
89	86 PARK RD	APTS 3	
90	88 PARK RD	APTS 3	APTS
		APTS 3	APTS
38	90 DAVIDSON RD		APTS
214 22	92 STANAVAGE RD 95 BROADWAY	APTS 3 APTS 3	APTS
	128 BROADWAY		APTS
28		APTS 4	APTS
224	156 WALL ST	APTS 4	APTS 4
94 105	240 LEBANON AVE	APTS 4	APTS 4
195	268 SOUTH MAIN ST	APTS 4	APTS



4.4	AAA DD FOOTE DD	ADTO 4	ADTO
41	344 DR FOOTE RD	APTS 4	APTS 4
1/6	7 SCHOOL RD	APTO 4	APTS 4
213	91 STANAVAGE RD	APTS 4 HANDISAD	APTS SFA
	15 TAVERN LN	APTS 4 HANDICAP	APTS
217	11 TAVERN LN	APTS 6	SFA
215	3 TAVERN LN	APTOC	SFA
216	7 TAVERN LN	APTCO	APTS
47	156 HALLS HILL RD	APTS 4 APTS 4 APTS 4 APTS 4 APTS 4 HANDICAP APTS 6 APTS 6 APTS 6 APTS 6 APTS 8 ASPEN PLAZA	COMM
233			COMM
167		AURORA-MCCARTHY FUNERAL HOME AUTO REPAIR SHOP	COMM
1488	29 MILL HILL RD	BACKUS HEALTH CENTER	
30	163 BROADWAY 123 BROADWAY	BACKUS HEALTH CENTER	COMM P
27	123 BROADWAY	BACKUS MEDICAL OFFICES	COMM
161	611 NORWICH AVE	BACON ACADEMY HIGH SCHOOL	EDU
190	196 SOUTH MAIN ST	BEAZLEY REALTORS	COMM
184	144 SOUTH MAIN ST	BELMONT FUNERAL HOME	COMM
3	40 AMSTON RD	BENS AUTO SUPPLY	COMM
103	95 LINWOOD AVE	BLOCK BUSTER VIDEO	COMM
19	71 BROADWAY	BROADWAY WINE AND SPIRITS	MIX
166	127 OLD HARTFORD RD	BROWING & LEE HARDWARE	COMM
131		BUSTERS	COMM
127		CADY OIL	COMM
	44 AMSTON RD	CAR WASH	COMM
	48 WESTCHESTER RD	CARE FREE SMALL BUILDINGS	COMM
	84 WATERHOLE RD	CARING COMMUNITY	GPH
1296	187 LEBANON AVE	CARPET DEPOT	COMM
52		CASTLE DAY CARE	DCC
1478	304 NEW LONDON RD		COMM
63		CENTURY 21 ASSOCIATES	MIX
45	35 HALLS HILL RD	CHILDRENS DENTAL ASSOC	COMM
1463	380 NORWICH AVE	CIS / WJJMS	EDU
147		CITIZENS BANK	COMM
72		CLOTHES PIN LAUNDROMAT	COMM
3	52 UPTON RD	CLUB FITNESS	COMM
1458	315 HALLS HILL RD	COLC. ELEMENTARY SCHOOL	EDU
1400	307 TIALLO TIILL ND	COLC. SCHOOL MAINTENANCE	IND
78	96 LEBANON AVE	COLCHESTER BAKERY	MIX
33	34 CHESTNUT HILL RD	COLCHESTER BIBLE BAPTIST CHURCH	PAS
118	60 MAIN ST	COLCHESTER FEDERATED CHURCH	PAS
165	52 OLD HARTFORD RD	COLCHESTER FIRE HEADQUARTERS	FIRE HOUSE
234	300 OLD HARTFORD RD	COLCHESTER HISTORICAL	COMM PAS
99	24 LINWOOD AVE	COLCHESTER HISTORICAL	COMM
185	147 SOUTH MAIN ST	COLCHESTER KINS	
155	224 NORWICH AVE	COLCHESTER KIDS COLCHESTER LAUNDRY	DCC MIX
151 80	159 NORWICH AVE 120 LEBANON AVE	COLCHESTER LAUNDRY COLCHESTER MILL FABRICS	COMM
71	59 LEBANON AVE	COLCHESTER MILL PABRICS COLCHESTER PIZZA	MIX
145	95 NORWICH AVE	COLCHESTER FIZZA COLCHESTER SR CENTER	PAS
149	127 NORWICH AVE	COLCHESTER TOWN HALL	PAS
173	(2. (40)(44)())//42L	OCC. IEO IEI I OTTIVIII III	MATTER.



170	364 OLD HARTFORD RD	COLCHESTER VET HOSPITAL	COMM
1318	99-B LINWOOD AVE	COLCHESTER WINE & SPIRITS	COMM
53	400 HALLS HILL RD	COLCHESTER WINNELLSON	COMM
41	228 OLD HARTFORD RD	COLCHESTER WOODWORKING	COMM
135	40 NORWICH AVE	COLCHESTER YOUTH CENTER	PAS
46	112 HALLS HILL RD	COLCHESTERS FARMERS CLUB	PAS
62	55 HAYWARD AVE	COLETTA & COLETTA	MIX
200	299 SOUTH MAIN ST	COLONY FARMS	COMM
238	188 NORWICH AVE	COMMERCE CENTER ONE	COMM
110	111 LOOMIS RD	COMMERCIAL BUILDING	MIX
1336	391-401 LINWOOD CEMETERY RD	CONDOS	SFA
1337	403-413 LINWOOD CEMETERY RD	CONDOS	SFA
1338	415-425 LINWOOD CEMETERY RD	CONDOS	SFA
74	84 LEBANON AVE	CONGREGATION AHAVATH ACHIM	IND
1437	1 COBBLE WAY	COUNTRY PLACE	Single Family
1411	1 COUNTRY PLACE RD	COUNTRY PLACE	SFA
1423	1 MEADOW DR	COUNTRY PLACE	SFA
1420	11 BIRCH CIR	COUNTRY PLACE	SFA
1444	11 COBBLE WAY	COUNTRY PLACE	SFA
1429	11 MEADOW DR	COUNTRY PLACE	SFA
1421	12 BIRCH CIR	COUNTRY PLACE	SFA
1422	13 BIRCH CIR	COUNTRY PLACE	SFA
1430	13 MEADOW DR	COUNTRY PLACE	SFA
1431	14 MEADOW DR	COUNTRY PLACE	SFA
1432	16 MEADOW DR	COUNTRY PLACE	SFA
1433	18 MEADOW DR	COUNTRY PLACE	SFA
1434	19 MEADOW DR	COUNTRY PLACE	SFA
1414	2 BIRCH CIR	COUNTRY PLACE	SFA
	2 COBBLE WAY	COUNTRY PLACE	SFA
1412	2 COUNTRY PLACE RD	COUNTRY PLACE	SFA
1424	2 MEADOW DR	COUNTRY PLACE	SFA
	20 MEADOW DR	COUNTRY PLACE	SFA
1436	21 MEADOW DR	COUNTRY PLACE	SFA
1415	3 BIRCH CIR	COUNTRY PLACE	SFA
1425	3 MEADOW DR	COUNTRY PLACE	SFA
1416	4 BIRCH CIR	COUNTRY PLACE	SFA
1439	4 COBBLE WAY	COUNTRY PLACE	SFA
1413	4 COUNTRY PLACE RD	COUNTRY PLACE	SFA
1440	5 COBBLE WAY	COUNTRY PLACE	SFA
1426	5 MEADOW DR	COUNTRY PLACE	SFA
1417	6 BIRCH CIR	COUNTRY PLACE	SFA
1441	6 COBBLE WAY	COUNTRY PLACE	SFA
1427	7 MEADOW DR	COUNTRY PLACE	SFA
1418	8 BIRCH CIR	COUNTRY PLACE	SFA
1442	8 COBBLE WAY	COUNTRY PLACE	SFA
1419	9 BIRCH CIR	COUNTRY PLACE	SFA
1443	9 COBBLE WAY	COUNTRY PLACE	SFA
1428	9 MEADOW DR	COUNTRY PLACE	SFA
1445	1 BIRCH CIR	COUNTRY PLACE OFFICE	PAS
98	8 LINWOOD AVE	CRAGIN MEMORIAL LIBRARY	PAS



		000001110	00::::
96	367 LEBANON AVE	CROSBY INC	COMM
1487	47 MILL HILL RD	CSP FLEET GARAGE	COMM
163	15 OLD HARTFORD RD	CSP TROOP K	COMM
4	76 AMSTON RD	CT. FLOORSCAPES	MIX
4	48 UPTON RD	CURLYS DAY CARE	DCC
83	203 LEBANON AVE	CUTS UNLIMMITED LLC	MIX
1485	359-B SOUTH MAIN ST	D.H. MARVIN & SONS (Rear)	COMM
119	80 MAIN ST	DAY HALL	DCC
97	373 LEBANON AVE	DESMONDS AUTO SALES	COMM
126	715 MIDDLETOWN RD	DOCTOR HURTS OFFICE	COMM
36	227 UPTON RD	DOG POUND	COMM
223	16 WALL ST	DOLLAR HEAVEN	COMM
150	139 NORWICH AVE	DR. DENNISON	COMM
95	300 LEBANON AVE	DUBLIN VILLAGE	SFA
210	440 SOUTH MAIN ST	DUNKIN DONUTS	COMM
207	392 SOUTH MAIN ST	DUTCH & ASSOCIATES	MIX
137	63 NORWICH AVE	EASTERN SAVINGS AND LOAN	COMM
114	20 MAIN ST	EDWARD JONES INVESTMENTS	MIX
1466	200-A SHAILOR HILL RD	EGG FARM Bldg A	COMM
1467	200-B SHAILOR HILL RD	EGG FAEM Bldg B	COMM
1468	200-C SHAILOR HILL RD	EGG FARM Bldg C	COMM
61	51 HAYWARD AVE	ENCHANTED FLORIST	MIX
140	72 NORWICH AVE	EPSTEIN AGENCY	COMM
164	35 OLD HARTFORD RD	EZ MART MOBILE	COMM
81	125 LEBANON AVE	FAIRYTALES	MIX
199	296 SOUTH MAIN ST	FAMILY PIZZA	COMM
174	631 OLD HARTFORD RD	FEDUS CONSTRUCTION CO	COMM
64	67 HAYWARD AVE	FIRST STEP DAY CARE	DCC
87	16 OLD TOWN RD	FISH AND GAME CLUB	PAS
202	327 SOUTH MAIN ST	FOOD BAG	COMM
1352	16 DOGWOOD LN	GA NA DEN TOO	SFA
1353	19 DOGWOOD LN	GA NA DEN TOO	SFA
1354	24 DOGWOOD LN	GA NA DEN TOO	SFA
1355	31 DOGWOOD LN	GA NA DEN TOO	SFA
1356	32 DOGWOOD LN	GA NA DEN TOO	SFA
1357	39 DOGWOOD LN	GA NA DEN TOO	SFA
1358	40 DOGWOOD LN	GA NA DEN TOO	SFA
9	38 BALABAN RD	GAIA GARDENS 100 BLOCK	APTS
10	44 BALABAN RD	GAIA GARDENS 200 BLOCK	APTS
11	52 BALABAN RD	GAIA GARDENS 300 BLOCK	APTS
12	60 BALABAN RD	GAIA GARDENS 400 BLOCK	APTS
13	64 BALABAN RD	GAIA GARDENS 500 BLOCK	APTS
8	20 BALABAN RD	GAIA GARDENS 600 BLOCK	APTS
7	12 BALABAN RD	GAIA GARDENS 700 BLOCK	APTS
171	396 OLD HARTFORD RD	GALLERY CINEMAS	PAS
206	385-A SOUTH MAIN ST	GAN ADEN Bldg A	APTS
51	385-B SOUTH MAIN ST	GAN ADEN Bldg B	APTS#
52	385-C SOUTH MAIN ST	GAN ADEN Bldg C	APTS#
53	385-D SOUTH MAIN ST	GAN ADEN COMMUNITY CENTER	APTS#
1350	20 MAPLE DR	GAN ADEN TOO	SFA
		•	49.7.3W



1251	26 MADLE DD	CAN ADEN TOO	CE A
1351 7	36 MAPLE DR 28 CHESTNUT HILL RD	GAN ADEN © CHESTAUT	SFA
105	120 LINWOOD AVE	GAN-ADEN @ CHESTNUT GANOS	COMM
153	176 NORWICH AVE	GERHART INSURANCE	COMM
169	339 OLD HARTFORD RD	GETTY MART	COMM
86	288 OLD HEBRON RD	GOLF COURSE CLUB HOUSE	PAS
211	464 SOUTH MAIN ST	GRANITE GROUP	COMM
1321	53 MILLER RD	GROUP HOME	GPH
123	255 MIDDLETOWN RD	GROUP HOME MIDDLETOWN RD	GPH
115	36 MAIN ST	GUNG HO	COMM
133	24 NORWICH AVE	HAIR MAGIC	COMM
57	59 HARRINGTON CT	HARRINGTON COURT GENISIS	RHC
23	104 BROADWAY	HARRYS PLACE	COMM
117	48 MAIN ST	HERBALIFE	COMM
93	216 LEBANON AVE	HIDE A WAY	MIXED
111	119 LOOMIS RD	HILL TOP MARINE	COMM
1304	526 WESTCHESTER RD	HISTORICAL BUILDING	SF
1331	12 BROADWAY	HISTORICAL HOME	HIS
1330	144 WATERHOLE RD	HOFFMAN HOUSE	GPH
168	212 OLD HARTFORD RD	HOPE HARDWARE	COMM
159	493 NORWICH AVE	HUB FORD	COMM
130	232 NEW LONDON RD	HUNG WON RESTAURANT	COMM
221	226 UPTON RD	INCORD LTD	COMM
197	276 SOUTH MAIN ST	INSURANCE	MIX
1298	199 LEBANON AVE	INTERNATIONAL PACKAGE STORE	COMM
50	215 HALLS HILL RD	JACK JACKTER INTERMEDIATE SCHOOL	EDU
182	128 SOUTH MAIN ST	JACKS CHEVROLET	COMM
227	297 WESTCHESTER RD	JEHOVAHS WITNESSES	PAS
69	27 LEBANON AVE	JEWELRY CONNECTION	MIX
112	14 MAIN ST	JOE'S MAIN ST. BARBER SHOP	MIX
232	240 OLD HARTFORD RD	JOHNS OIL AND LUBE	COMM
44	32 HALLS HILL RD	JONS FISH MARKET	COMM
68	11 JOSEPH LN	JOSEPH LANE GROUP HOME	RHC
42	13 FEDESHEN LN	KAKLEY DRY WALL	COMM
14	13 BOULDER RD	KNOB HILL CONDOS/APARTMENTS	SFA
162	95 O'CONNELL RD	KX CEC RADIO TOWER SITE	COMM
1332	159 CABIN RD	LARGE BARN	COMM
191	219 SOUTH MAIN ST 60-A LINWOOD AVE	LIBERTY BANK	COMM
44 45	60-B LINWOOD AVE	LINWOOD APTS Building 1 LINWOOD APTS. Building 2	APTS
45 46	60-C LINWOOD AVE	•	APTS
47	60-D LINWOOD AVE	LINWOOD APTS Building 3 LINWOOD APTS Building 4	APTS APTS
85	639 OLD HARTFORD RD	LOG HOMES	COMM
122	79 MIDDLETOWN RD	LORIES MOBILE	COMM
1476	355 NEW LONDON RD	M&J AUTO RECYCLING	COMM
106	132 LINWOOD AVE	MACKEYS INC	COMM
160	608-A NORWICH AVE	MAGNOLIA PLACE	APTS
1322	608-B NORWICH AVE	MAGNOLIA PLACE	APTS
136	56 NORWICH AVE	MANE STREET	MIX
128	744 MIDDLETOWN RD	MARIAS PIZZA	COMM
.25		THE STATE SHOP I I HANDRED S	COMM



178	95 SOUTH MAIN ST	MARKS UNITED AUTO	COMM
204	359-A SOUTH MAIN ST	MARVIN, D H & SONS (Front)	COMM
193	236 SOUTH MAIN ST	MASONIC TEMPLE	PAS
21	87 BROADWAY	MAYFLOWER FINANCIAL SERVICES	MIX
205	375 SOUTH MAIN ST	McDONALDS	COMM
230	9 WINDHAM AVE	MIX 9 WINDHAM AVE	MIX
1319	316 MIDDLETOWN RD	MOHRELINES FARM	COMM
91	111 PARUM RD	MORE THAN STOVES	COMM
201	308 SOUTH MAIN ST	MULTI FAMILY	APTS 3
101	71 LINWOOD AVE	MUNCHKINLAND	MIX
132	16 NORWICH AVE	NANCY RIELLA	COMM
108	24 LINWOOD CEMETERY RD	NAPA AUTO PARTS	COMM
177	152 SOUTH MAIN ST	NATHAN LIVERANT & SONS	COMM
1457	147 DAVIDSON RD	NB ROD AND GUN CLUB	PAS
172	489 OLD HARTFORD RD	NEADAU AUCTION GALLERY	COMM
15	15 BROADWAY	NOELS PLAZA	COMM
142	79-A NORWICH AVE	NORWICH AVE. Bldg A	СОММ
143	79-B NORWICH AVE	NORWICH AVE Bldg B	COMM
144	79-C NORWICH AVE	NORWICH AVE Bldg C	COMM
220	212 UPTON RD	NORWICH PEDIATRICS	COMM
39	16 DR FOOTE RD	NOVA ELECTRONICS	COMM
60	45 HAYWARD AVE	NUNUS BISTRO	COMM
1484	460 NEW LONDON RD	NURSERY	COMM
65	13 HOMONICK RD	NUTMEG	COMM
146	108 NORWICH AVE	OFFICE BUILD	COMM
5	100 AMSTON RD	OFFICE BUILDING	COMM
120	88 MAIN ST	OLD BACON ACADEMY	PAS
1348	51 WINDHAM AVE	Old Church	APTS
179	100 SOUTH MAIN ST	OLD FIRE HOUSE	PAS
1306	107 LEBANON AVE	OMD	OMD
1314	98 LEBANON AVE	OMD	APTS
66	52 IVY CT	OMD 3	OMD
67	24 JAMES ST	OMD 4	OMD
40	234 DR FOOTE RD	OMD 5	OMD 5
16	24 BROADWAY	OMD 5	OMD
157	252 NORWICH AVE	OMD 5	APTS
82	139 LEBANON AVE	OMD 6	APTS
59	23 HAYWARD AVE	OMD 6	OMD 8
73	83 LEBANON AVE	OMD 6	OMD SI
175	55 RENEE DR	OMD 8	OMD 8
125	713 MIDDLETOWN RD	PAPA ZS	MIX
29	151 BROADWAY	PARADISE PLAZA	COMM
113	16 MAIN ST	PEGS DINER	MIX
183	139 SOUTH MAIN ST	PEOPLES BANK	COMM
152	171 NORWICH AVE	PERFORMANCE PHYSICAL THERAPY	COMM
222	244 UPTON RD	Peter W. Ariros Architect	COMM
208	395 SOUTH MAIN ST	POLISH CLUB	PAS
226	283 WESTCHESTER RD	PONEMAH VILLAGE	APTS
180	103 SOUTH MAIN ST	POST OFFICE	COMM
102	79 LINWOOD AVE	QUALITY CLEANERS	COMM
			15 T 16



116	44 MAIN CT	OHALITY CONCINCMENTS	R #13/
1294	44 MAIN ST 167 LEBANON AVE	QUALITY CONSINGMENTS	MIX
	232 SOUTH MAIN ST	RAILROAD SQUARE REMAX REAL ESTATE	COMM
37	199 UPTON RD	RENT A SPACE	MIX COMM
1489	176 BULKELEY HILL RD	RESI:Ford, James	RESI
1454	13-18 VICKY LN	RIDGEVIEW CONDOS	SFA
	1-6 VICKY LN	RIDGEVIEW CONDOS	SFA
	19-24 VICKY LN	RIDGEVIEW CONDOS	SFA
	25-30 VICKY LN	RIDGEVIEW CONDOS	SFA
1453	7-12 VICKY LN	RIDGEVIEW CONDOS	SFA
	75 MILL ST	S&S WORLD WIDE	COMM
1481	327 NEW LONDON RD	SCOTTIES CUSTARD STAND	COMM
194	244 SOUTH MAIN ST	SELECT BEHAVIOR HEALTH	COMM
134	32 NORWICH AVE	SERVICE MASTER	COMM
	240 HALLS HILL RD	SFA 6	SFA
	25 CHRISTY LN EXT	SFA 6	SFA
	252 HALLS HILL RD	SFA 6	SFA
	30 CHRISTY LN EXT	SFA 6	SFA
	7 CHRISTY LN EXT	SFA 6	SFA
35	8 CHRISTY LN EXT	SFA 6	SFA
	75 LEBANON AVE	SHORE TV & APPLIANCE	COMM
32	31 CHESTNUT HILL RD	SKIS CONSTRUCTION	MIX
	87 LEBANON AVE	SKYVIEW REALTY	MIX
186	156 SOUTH MAIN ST	SOUTH MAIN GIFTS	COMM
25	119 BROADWAY	SPARROW COMMONS	COMM
		ST ANDREWS ROAMAN CATHOLIC	
148	124 NORWICH AVE	CHURCH	PAS
107	180 LINWOOD AVE	ST MARYS UKRANIAN CATHOLIC CHURCH	PAS
104	99-A LINWOOD AVE	STOP & SHOP	COMM
203	332 SOUTH MAIN ST	STOP & SHOP GAS STATION	COMM
43	31 HALLS HILL RD	SUBWAY	COMM
1446	346 LEBANON AVE	SUNSET VISTA CONDOS Bldg-A	SFA
	342 LEBANON AVE	SUNSET VISTA CONDOS Bldg-B	SFA
	338 LEBANON AVE	SUNSET VISTA CONDOS Bldg-C	SFA
	467 SOUTH MAIN ST	SUNSHINE CYCLE	COMM
173	627 OLD HARTFORD RD	T.I.C. MACHINE	IND
	64 NORWICH AVE	TD BANK	COMM
1349	62 RESERVOIR RD	THE CARING COMMUNITY	GPH
139	71 NORWICH AVE	THE NAIL SHOPPE	COMM
38	100 OLD HARTFORD RD	TOYOTA OF COLCHESTER	COMM
1308	111 LEBANON AVE	Tracey's Toons/Dagets Machine Shop	COMM
235	493-A WESTCHESTER RD	TRI-TOWN PLAZA Westchester A	COMM
229	493-B WESTCHESTER RD	TRI-TOWN PLAZA Westchester B	COMM
242	119-A SOUTH MAIN ST	TRI-TOWN PLAZA A	COMM
49	119-B SOUTH MAIN ST	TRI-TOWN PLAZA B	COMM
209	435 SOUTH MAIN ST	TROIANO MOTORS	COMM
77	95 LEBANON AVE	TWICE AS NICE CONSIGNMENTS	MIX
124	711 MIDDLETOWN RD	TWO BROTHERS	COMM
84	215 LEBANON AVE	VACANT 215 LEBANON AVE	MIX
1479	310 NEW LONDON RD	VACANT	COMM



1480	321 NEW LONDON RD	VACANT	COMM
1	28 AMSTON RD	VACANT	COMM
1302	109 LOOMIS RD	VACANT	DCC
1312	119 LEBANON AVE	VACANT	COMM
1310	232 LEBANON AVE	VACANT	COMM
1482	429 NEW LONDON RD	WALTS COUNTRY MOTORS	COMM
1477	348 SOUTH MAIN ST	WENDYS	COMM
228	449 WESTCHESTER RD	WESTCHESTER CONG. CHURCH	PAS
231	424 WESTCHESTER RD	WESTCHESTER FIRE STATION	FIRE HOUSE
1403	1 WESTCHESTER HILLS	WESTCHESTER HILLS CONDOS	SFA
1404	2 WESTCHESTER HILLS	WESTCHESTER HILLS CONDOS	SFA
1405	3 WESTCHESTER HILLS	WESTCHESTER HILLS CONDOS	SFA
1406	4 WESTCHESTER HILLS	WESTCHESTER HILLS CONDOS	SFA
1407	5 WESTCHESTER HILLS	WESTCHESTER HILLS CONDOS	SFA
1408	6 WESTCHESTER HILLS	WESTCHESTER HILLS CONDOS	SFA
1409	7 WESTCHESTER HILLS	WESTCHESTER HILLS CONDOS	SFA
1410	8 WESTCHESTER HILLS	WESTCHESTER HILLS CONDOS	SFA
1300	200 LEBANON AVE	WESTCHESTER WOODS	COMM
31	191 BROADWAY	WILD GEESE	COMM
158	360 NORWICH AVE	WM JOHNSTON MIDDLE SCHOOL	EDU

Occupancy Type Abbreviations Index:

SFA: Single Family Attached Comm: Commercial EDU: Education PAS: Public Assembly DDC: Day Care Facility IND: Industrial OMD: Occupied Multiple Dwelling+# Units

MIX: Mixed Occupancy, Residential over Commercial APTS: Apartments > 3 Family

RHC: Residential Health Care GPH: Residential Group Homes > 6 Residents HIS: Historical Building

Known Community Risks - Examples

Educational Facilities:

There are four (4) public schools located in the Town of Colchester.

Colchester Elementary with 587 students, 94 Teachers, Education Professionals, Para-professionals and Administrators is located at 315 Halls Hill Rd. The school was officially occupied in 2006 to teach preschool through grade two. In addition, the Head Start program and an Early Head Start program are at Colchester Elementary. The District's School Readiness Coordinator's office is also on site.





The Jack Jackter Intermediate School with 532 students and 58 Teachers, Education Professionals, Paraprofessionals and Administrators is located at 215 Halls Hill Rd. The school was re-occupied after being renovated in 2005 to teach Grade 3 through Grade 5. The Town's Emergency Operations Center is located in the Basement of the School.



The William J Johnston Middle School with 608 students and 70 Teachers, Education Professionals, Paraprofessionals and Administrators is located at 360 Norwich Avenue. The school was re-occupied after being renovated in 1987 to teach Grade 6 through Grade 8.



Bacon Academy, with 841 Students and 89 Teachers, Education Professionals, Para-professionals and Administrators is located at 611 Norwich Avenue. The school was built in 1992 and serves grades 9 to 12.



Residential Occupancies









Sales and Repair Occupancies









Hazardous Materials Occupancies





Introduction

Public fire protection services include, but are not limited to, fire suppression, fire prevention, fire investigations, public fire safety education, disaster management, rescue, emergency medical services, hazardous materials response, and response to other emergencies as needed. To accomplish these missions, the Colchester Hayward Fire Department operates out of two stations. The main station or Station 1 is located at 52 Old Hartford Rd and Station 2 is located at 424 Westchester Road. Multiple pieces of apparatus operate out of each station.



Purpose of the Fire Department

NFPA 1201 states: The fire department shall have programs, procedures, and organizations for preventing the outbreak of fires in the community and to minimize the danger to persons and damage to property caused by fires that do occur. The fire department also shall carry out other compatible emergency services as mandated. The CHFD has one hundred and seven (107) volunteer members. They are divided into three divisions with some cross over participation as follows: fifty-six (56) Fire Fighters, thirty—four (34) are medically cross trained, thirty-one (31) Emergency Medical Services personnel and twenty (20) Fire Police. There are also six (6) career employees. In 2013 the CHFD responded to 1,900 calls for service resulting in 21,018 Emergency Scene participation hours. An additional 6,478 hours where given for training and professional development.

The Colchester Hayward Fire Department operates under the basic premise that all operations should result in the following primary objectives. The preservation of Life and its Safety, the methods needed for effective Incident Stabilization and efforts for proactive Property Conservation.

NFPA 1201: 4.3.5* The Emergency Services Organization shall provide customer service—oriented programs and procedures to accomplish the following:

- (1) Save lives
- (2) Prevent or mitigate fires, injuries, and emergencies
- (3) Work through a system of emergency management
- (4) Extinguish fire
- (5) Minimize damage to property and the environment
- (6) Protect critical infrastructure
- (7) Perform emergency medical services
- (8) Protect the community from other hazardous situations
- (9) Perform response to and mitigation of events of terrorism
- (10) Perform rescue services
- (11) Perform other community-related services

Fire Suppression, Rescue and Hazardous Materials Operations – Targets

Present Level of Service: The ability to put ten (10) to fifteen (15) trained and equipped personnel on scene within an average of six (6) to twelve (12) minutes to initiate fire and rescue operations ninety (90) percent of the time.

Future Levels of Service Delivery:

The ability to put fifteen (15) to thirty (30) or more trained and equipped personnel on scene within an average of six (6) to twelve (12) minutes to initiate fire and rescue operations ninety (90) percent of the time.

Financial Costs & Recovery:

Funding increases, at some level, will be necessary to ensure adequate personnel will be on scene in a prompt manner. Presently, there is no cost recovery for Fire, Rescue or Haz-Mat operations. Recent changes in the State Fire Prevention Code, however, allow for billing for some specialty fire services. An option does exist to create a cost recovery system.



Emergency Medical Services - Targets

Present Level of Service: The ability to put one (1) to three (3) trained and equipped Medical Personnel at the bed side within an average of six (6) to nine (9) minutes to begin treatment ninety (90) percent of the time.

Future Levels of Service Delivery:

- 1) The ability to put two (2) to four (4) trained and equipped Medical Personnel at the bed side within an average of four (4) to six (6) minutes to begin treatment ninety (90) percent of the time..
- 2) The Fire Department has proposed, as part of their Strategic plan;
 - a. First to enhance the level of EMS service by rising to the Paramedic Level. This increase in service level is proposed to serve two purposes. First, to increase to level of care being provided in the present configuration. The increasing population of retiring residents and senior citizens will necessitate an increased workload. In addition, the expanding medical needs will include more advanced life support services. The present R-5 or Advanced Life Support units meet the transporting ambulance in route. This delays the administration of needed medications and advance life support procedures. The growing population of older adults and increased calls for service in the community necessities preparing for a change in service level. This effort would increase the level of care provided and, in addition, provide an increase in funding.
 - b. Second, to initiate a "Community Paramedicine" program. The Community Paramedicine concept provides pre-emptive care and pro-active disease management for community residents who frequently require medical treatment and transportation. This concept is a result of recent Health Care Legislation and has become a cost savings measure for both the patients and health care insurers. From recent interviews with leaders in the EMS community, it is our understanding, while being accepted across the country with great success, it is reportedly having trouble in Connecticut.

Financial Costs & Recovery

Presently, the department charges for the EMS Service and collected approximately \$531,000 in 2014. These funds are directed toward town finances. A business plan should be developed for the Paramedic Program to determine the feasibility of providing the advanced level of service and funding it appropriately.

Recommendation #1 Investigate becoming an Advanced Life Support (R5) Service

Disaster Planning and Mitigation - Targets

Present Level of Service: The Fire Department participates in pro-active Disaster Mitigation and Planning as part of the Community's Emergency Management Command level team. The Department supports Emergency Management Operations and initiatives. Included are Annual Table Top Drills and monthly meetings with communities Emergency Management Team (Fire Department, Schools, Park and Rec etc).



Future Levels of Service Delivery: Expanding the Disaster and Emergency Management Pre-planning. Expand the support efforts for Emergency Management.

Financial Costs & Recovery: Funding is primarily provided by the State Department of Emergency Management and Homeland Security within the Department of Emergency Services and Public Protection.

Government Responsibilities Partnerships

Fire Marshal: The Fire Department enjoys a good working relationship with the Fire Marshal. Specific changes in the chain of command and reporting structure are addressed in other sections of the report. Presently, the Fire Marshal works under the Building Official.

Law Enforcement: The Fire Department enjoys a cooperative relationship with its Police Department. They routinely operate together at all forms of emergencies and investigations as needed.

Public Health: The Fire Department has had a long standing relationship with the Health Department. They have participated in several Public Health Efforts.

Public Works: The Fire and Public Works Departments routinely operate together at emergency incidents.

Building Official / P&Z: The Building Official is primarily responsible for the Building Code, the Fire Department is part of a review team. Each component contributes their expertise. Larger projects are shared with the Fire Department. The Fire Department functions in an advisory capacity.

Strategic Planning

NFPA 1201 states: The fire department, in conjunction with the community administration, shall develop and implement a total concept strategic (master) plan for a community-wide balanced and cost-effective fire control strategy that takes existing conditions and anticipated overall community growth into consideration.

Strategic Research

The research and planning function should encompass examination of any or all aspects of the fire department's activities, both generally and specifically. It should be directed toward improving and maintaining the efficiency and effectiveness of the fire department and toward maintaining a responsive approach to the community's changing needs for service. To assist in this process, a series of Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis meetings were held. The results reflected a wide range of typical emergency services issues. It should be noted the results of the SWOT were gleaned from a small cross section of the Department. A small sampling of the comments contain the following; Strengths included the department personnel, volunteer commitment, equipment, public support and member training levels. Weaknesses included aging apparatus and equipment, facility issues, response pressure, career and volunteer interaction opportunities, Pride and Ownership shortfalls and communications as a whole both emergent and informational. Opportunities included improved communications and relationships within department and the career staff, enhanced training, and improved public / governmental relations. Threats included contracting EMS services, financial



climate, challenges to public support, loss of seasoned staff and 911 / Dispatch concerns. The complete SWOT analysis is displayed in Attachment #7

Strategic Planning Broken Down

Proposed / Expanding Risk: A review of proposed development and increasing risks was conducted. While there is some proposed development and related service considerations, the largest potential for service delivery involves the continued increase in an ageing population.

Risk Mitigation: Proactive efforts in Community Risk Reduction start with mitigating those risks we can see and those we anticipate impacting us in the future. Reviewing various mitigation efforts, it appears the Fire Department, working with its Emergency Management and Fire Marshal partners, have done a good job relative to mitigation. Working as a team, the Fire Department, Fire Marshal, Emergency Management and Building Office have worked as a team to reduce risk through code enforcement, public education, pre-emergency planning and pre-emergency drills.

Community Risk Reduction

Community Risk Reduction involves an overall programmatic plan for the coordination of all Risk Reduction Activities. These include Carbon Monoxide Programs, Driving Surveys, and Street Signs The evaluation of Risks to the Community is an essential

Public Education / Fire Prevention

Captain Dan Roland, a twenty (20) year veteran primarily delivers the Fire Prevention programs. These include Fire Prevention Week, Summer Recreation Programs, Senior Center Programs and 2 Classroom Visits. Captain Roland will be retiring this year and a replacement of similar commitment will need to be found

Code Enforcement

The Town of Colchester has an independent Fire Marshals' Office. In addition to the Fire Marshal, there are three Deputy Fire Marshals to assist with Code enforcement and related Fire Marshal duties. A closer relationship between the Fire Department and the Fire Marshal's Office, however, could make a good system even better. The Fire Marshal presently falls under the Building Official. Currently, there is not adequate space to effectively carry out his responsibilities. In addition, from a Community Risk Reduction viewpoint, the Fire Marshal and Fire Department often share a closer life safety code focus than the corresponding building code compliance focus with the Building Official. The Fire Marshal work hours (which were reduced) limits the successful completion of required inspections. Every opportunity possible should be used to enhance Community Risk Reduction efforts.

Fire Investigation

Fires are investigated by the Fire Marshals' Office. If needed, the State Fire Marshals' Office is utilized.

Recommendation #2 The Fire Marshal should report to the Fire Chief rather than the Building Official.



Recommendation# 3 Additional time should be added to the Fire Marshal's hours

Organizational Structure

Table of Organization - Administration

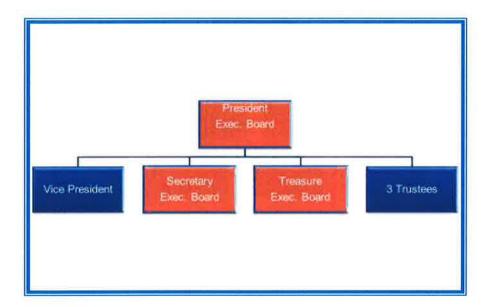


Figure #1 Administrative Table of Organization

Organizational Statement

OSHA 29 CFR 1910.156(b)(1)

Organizational statement. The employer shall prepare and maintain a statement or written policy which establishes the existence of a fire brigade; the basic organizational structure; the type, amount, and frequency of training to be provided to fire brigade members; the expected number of members in the fire brigade; and the functions that the fire brigade is to perform at the workplace. The organizational statement shall be available for inspection by the Assistant Secretary and by employees or their designated representatives.

Table of Organization-Tactical



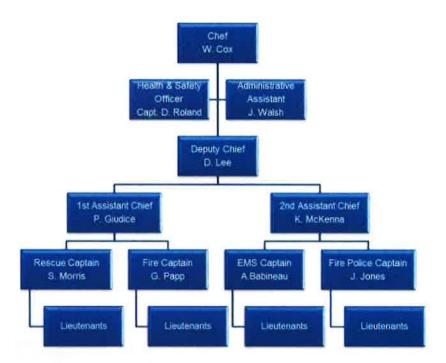


Figure #2 Tactical Table of Organization

Procedures and Policies

The Administrative Staff of the Colchester Fire Department is responsible for carrying out the traditional managerial functions of planning, organizing, staffing, leading and controlling for the entire Fire Department. These functions work together as they overlap and one effects the performance of others.

- Planning involves deciding what to do, when to do and how to do it. It identifies where the organization is now and where they want to be in the future.
- Organizing involves the process of acquiring physical resources, financial resources and human resources and then using them to achieve the organization's goals.
- Staffing involves selecting, appraising performance, and training members so that the right person(s) are assigned to the right job(s). Recruitment, retention and promotions are included within this function.
- Leading involves influencing, guiding, supervising, motivating and communicating with members so they understand and work toward achieving the organization's goals.
- Controlling involves ensuring that the organization's goals are being met. If goals and objectives
 are not being met, then corrective actions must be implemented. Standards of performance are
 established, actual performance measured, comparing performance to standards and taking
 corrective action, when necessary, are part of this function



The results of the application these managerial functions within an organization are usually implemented and published in the form of directives, guidelines, orders, policy and procedures.

Generally, those documents are defined or utilized differently by different organizations or agencies, but are commonly defined as:

DIRECTIVE: A document that serves to direct, guide and usually motivate members

toward an action or goal. Directives are usually issued by a high level official.

GUIDELINE: Outline of a policy or expected conduct.

ORDER: To tell someone to do something in an official way, a command.

POLICY: A definite course of action selected from alternatives. Policies are used to

guide and to determine present and future decisions.

PROCEDURE: An explanation of how a series of actions that are to be done a certain way.

A procedure establishes the organization's accepted way of doing

something.

The Colchester Administrative staff utilize a number of formats to implement managerial functions for the department. The documents utilized by the Colchester Fire Department include:

GOALS

Goals are general statements of desired results.

Goal statements are usually limited to four verbs; to reduce, to increase, to maintain and to provide.

Goals deal with the results and not the activities that produce those results.

- Directives (DIR)
- Fire Fighter Qualifications (FFQ)
- Fire Fighter Safety (FFS)
- Hazardous Materials (HAZ)
- Health & Safety Policy (HSP)
- Job Descriptions (JOB)
- Standard Operating Guidelines (SOG)
- Standard Operating Procedures (SOP)
- A spare classification for future use

OBJECTIVES

Objectives measure the results.

Objectives are:

Describable –

exactly what is to be achieved.

Dead Lined – specific time frame to accomplish objective.

Measurable – criteria is established for verifying that an objective has been achieved.

The Fire Department currently has a procedure to develop and implement policy, procedures, etc. Directives are issued by the Fire Chief. The Board of Selectmen issue directives for the Town. The Fire Department develops a



draft of a proposed document. That draft is reviewed by the Chief, Deputy Chief and the two Assistant Chiefs. The draft is discussed at an officers meeting, a consensus reached and approval voted. The four officers sign the document, it is coded and then loaded into the computer for access by all members via the internet.

Currently, the Administrative Staff is conducting an ongoing review to possibility consolidate all documents into a single manual as well as utilization of fewer formats and classifications.

Recommendation #4 Document Numbering

The Department has issued a number of documents which are currently classified by their in-house function for coding purposes. As the number of documents increase to meet the future service demands placed on the Fire Department, this review process to consolidate documents and standardize document format, should be continued by the department.

Recommendation #5 Standardization of Documents

Current documents contain a scope, goals, etc. All future issued documents, regardless of the format, should continue this practice and contain a defined, standardized guideline for goal and objectives.

Standard Series of Codes For Any Document

All future issued documents should be issued using a standardized series code for easy access by subject, for instance:

Colchester Fire Department administrative documents could be codified and identified under a general series number and subject classification as follows:

100 series - Administrative

200 series - Personnel Safety

300 series - Fire Prevention

400 series - Training

500 series - Operations

600 series - Reserved

700 series – EMS/Ambulance

800 series - Reserved

900 series - Dispatch/Communications

1000 series - Data Management



In this format example, the first Administrative document issued would be 100.1 the second 100.2 etc. The same would apply to all ten series.

Many fire service organizations use a Standard Operating Procedure (SOP) format for a majority of the documents issued to delineate the five basic managerial functions. SOP's should also contain a purpose and scope for each SOP.

Examples could include:

Purpose:

Maintain a high level of proficiency to eliminate errors.

To provide consistency and standardization.

To provide a predictability of response activities to reduce duplication of efforts and other operational problems.

Minimize distractions and maintain situational awareness.

- Provide the usual course of action for personnel to follow.
- Reduce unnecessary personal and team risk during labor-intensive evolutions when operating at an emergency situation.

Scope:

- Well-trained and proficient firefighters make fewer mistakes.
- Provide an Incident Commander with the ability to predict how each unit will function during an emergency.
- Distractions diminish operational readiness and contribute to a loss of situational awareness.
- Personnel cannot afford to be less than fully engaged and focused on their mission.
- Provide for a singular, structured Colchester Fire Department procedure to conduct operations, as well as to upgrade firefighting techniques and safety through training; standardize certifications and qualifications and provide a base for promotional examination criteria.
- Improve the efficiency, effectiveness and accountability of every team member assigned to participate.
- Enhance the knowledge, skills and ability required to conform to the Job Performance Requirement (JPR) format adopted by the department.
- Assist department members in meeting the job performance requirements of NFPA 1001 and to comply with OSHA's Fire Brigades Standard, 29 CFR 1910.156.
- Maintain the highest level of awareness and adaptability through utilization of International Fire Service Training Association (IFSTA) training manuals plus a comprehensive knowledge of laws, regulations, standards, policies and procedures applicable to the fire service and the Colchester Fire Department.



If the Colchester Fire Department does utilize a standardized format to consolidate their documents, a procedure to establish that format will need to be developed and implemented. An example for a SOP format could include a procedure to establish a numbering system should be developed and implemented. For instance, a 501 series could delineate Engine Company Operations, 502 Truck Company Operations, etc.

Currently, documents associated with the management of the Town and Fire Department are developed, codified, and issued. To someone not familiar with the process, it appears difficult for an employee to quickly access a particular document.

Recommendation #6 Written Documents and Organization

The Town and Fire Department should give consideration to developing and implementing a process to incorporate existing orders, notices and memorandum and other documents into a standard operating procedure format.

A standard format for managerial documents will make access more user friendly, clearly define and explain goals, objectives and procedures as well as encourage review and study by employees. Standardized documents will provide a clear course of action for personnel to follow.

Providing a standardized format of reference for all Fire Officers to utilize when delivering inhouse training sessions, conducting drills and responding to emergency and non-emergency incidents or, performing the numerous other functions of the Fire Department will enhance efficiency, provide a safe work environment, add professionalism and instill pride in membership.

Financial Management

The Board of Finance is the budget-making authority and is responsible for financial and taxation matters, presenting the annual fiscal budget for Town Meeting and referendum approval and establishing the tax rate. The 2015-2016 Tax rate is the Assessed Value x .03076.

Funding History, Projections

The Fire Department has requested funding for large strategic purchases over the past few years. Some of those requests, specifically to address critical issues, have been approved. Long term or strategic purchases proposed by the Fire Department and Community Leaders have not always passed. This is leading to some quick approaching funding issues. A major concern exists that the upcoming years will continue to challenge funding requests

Capital Improvement Plan (CIP)

We have provided below recommendations specific to apparatus and rolling stock to assist with future CIP requests. We believe the program is both pro-active and conservative in approach.



Grants, Donations and other Funding

The Town of Colchester and its Fire Department have been very successful in receiving various Assistance to Firefighters Grants. This effort should be continued in an effort to lessen the economic impact of funding the Department.

Operating Apparatus

A review of the apparatus within the fire stations identified;

- Typical wear and tear that one would expect given the age of the apparatus.
- The conditions typical of being exposed to the New England climate.
- Wear and tear based on the average calls for service.
- Equipment that has passed its expected service life and in need of a status change.

During the review of available research documents JLN found no comprehensive studies on apparatus life expectancy or clear-cut time frames for replacement. There were no definitive answers for how long a fire truck lasts. Regional differences are one factor cited for the absence of these studies. Variables such as weather, road conditions, run loads, and maintenance are listed as reasons for the inadequacy of any clear-cut information in this area. Age, in itself, should not be the sole criteria for deciding to replace a fire apparatus. The vehicle's routine workload, its physical condition, and the degree of preventative maintenance it received are usually more accurate indications of whether the apparatus is still reliable for first-line duty.

Generally, a 10 to 15 year life expectancy is normal for engines used daily in heavy to moderate response areas. For fire apparatus approaching or exceeding 15 to 20 years of age, corrosion, metal fatigue and crystallization in concealed areas can result in serious consequences. Perhaps the most reliable of these resources in reference to life service of fire apparatus is the National Fire Protection Association (NFPA) Handbook, 17th Edition which states, "in general, a 10 to 15 year life expectancy is considered normal for first line pumping engines. In some types of service, including areas of high fire frequency, a limit of only 10 years may be reasonable for first line service".

There is a general expectation of the life expectancy of fire apparatus to provide 15 years of front line service and 10 years of reserve or lighter duty service.

Fire apparatus is relied on daily, and multiple times throughout each day by fire and EMS personnel during response to incidents, training and public service meeting their mission in the towns they serve. All apparatus must be safe for all personnel that ride in them and must be reliable at all times to ensure efficiency and effectiveness in response. When apparatus is out of service for any reason, the overall protection to the town is compromised and appropriate response will be delayed waiting for mutual aid services to respond. As noted in the 2016 edition of NFPA 1901, Standard for Automotive Fire Apparatus, all apparatus has a finite life expectancy. This life expectancy depends on many factors including the following:

- 1. Mileage and engine hours
- 2. Preventative Maintenance
- 3. Driver Training
- 4. Use within its design parameters



CHVFD tracks the mileage and engine hours during all truck checks and uses this data to ensure proper maintenance intervals are followed. In addition to their regular daily/weekly truck checks, the department has a very strong and aggressive preventative maintenance program that includes full bumper to bumper operational and mechanical inspections performed by town mechanics as well as 6 month wheel inspection, rotation and maintenance. During the winter months the department fabricated a full undercarriage washing system to be used regularly following runs to wash the harsh salt material off the body and structural components.

CHVFD has a very strong driver training program requiring numerous hours behind the wheel with a trainer as well as hours operating all aspects of the apparatus they are looking to get qualified on to ensure they can operate safely, understand the apparatus limitations and do not damage or use apparatus outside its design parameters. All apparatus in town has been used within its design parameters and continues in that fashion demonstrating that the current apparatus lineup meets the needs of the town and for department operations with some minor changes suggested in this report to enhance a few areas.

When reviewing apparatus, NFPA 1901 recommends the following be considered regarding refurbishing or replacing fire apparatus:

- 1. True condition of existing apparatus
- 2. Advancement in design, safety and technology
- 3. Does current apparatus meet the program needs of the area its serving?
- 4. Following refurbishment will apparatus still provide safe and operational capabilities similar to new apparatus?
- 5. Anticipated cost per year to operate refurbished apparatus
- 6. Trade in value

NFPA 1901 recommends that apparatus more than 15 years old that is still in good working condition be reassigned to a reserve status or refurbished to meet NFPA 1912, Standard on Fire Apparatus Refurbishing. NFPA further recommends that apparatus 25 years or older be replaced. Depending on how busy each piece of apparatus is, these recommended timelines could also move in either direction. Some front line pieces that responded to all calls in a busy department may require refurbishment or replacement at 10 years while some apparatus may feasible run for 30 years. As a general rule, departments such as CHVFD typically plan on 20 year replacement plans for most apparatus. This 20 year average provides an optimal balance between the growing cost of fire apparatus, feasibility of refurbishment, safety and reliability with older apparatus and the eventual cost to operate far outweighing the cost of new.

Based on the above, the primary reasons behind the suggested apparatus replacement program for CHVFD are the age of apparatus, design/safety/technology changes, and reliability concerns based on recent experience and the impacts this has on the cost to operate and maintain apparatus per year.

The fire department review portion of ISO accounts for 50% of the total classification. The primary and reserve apparatus within the town account for 28% of that fire department review highlighting the



importance of having a sound apparatus management, maintenance and replacement program. In 2014, during the last ISO rating review, CHVFD received 12.7 out of a possible 14 available points for their current apparatus further demonstrating how critical it is that they maintain the integrity of their fleet and continue to make progressive improvements, where feasible.

The CHVFD has the following fire apparatus in its fleet:

Include in 10 - 20 Year Capital Plans

Include in current 5 Year Capital Plan

Immediate Action Needed

Make/Model	Year	Age (years)	ID	Location	Suggested Replacement Year	Comments
Simon Duplex/ Young	1988	28	Engine Tank 328	FHQ	2008	Open Cab – refurb and move to reserve
HME / Central States	2001	15	Engine Tank 128	FHQ	2019	Include in 5 year capital plan
Marion/Spartan/ Gladiator	2010	6	Engine Tank 228	Company 2	2030	Maintain
American Lafrance	1982	34	Engine Tank 428	FHQ	2012	Open Cab – Beyond Refurb
LTI Simon Duplex	1997	19	Ladder 128	FHQ	2017	Include in 5 year capital plan
Sparton/Marion	2014	2	Rescue 128	FHQ	2034	Maintain
IH/Middlesex	1987	29	Hose Tender 128	Company 2	2012	Retire and replace with 3K Tanker
4 Guys/ Kenworth	1992	24	Tanker 128	FHQ	2012	Refurb and Relocate to Co. 2
Freightliner Step Van	1999	17	Utility 128	FHQ	Department Discretion	Low activity – Maintain
F550/Gowans Knight	2003	13	Service 228	FHQ	2023	Maintain
F350	2005	11	Service 128	FHQ	2025	Maintain
IH Horton Ambulance	2006	19	Ambulance 628	FHQ	2017	Replace as Planned
IH Horton Ambulance	2010	6	Ambulance 528	FHQ	2020	CIP



F250	2008	8	Chiefs Vehicle		2028	Include in 5 year capital plan
Traffic Safety Fire Police	1997	19	Service 328	FHQ	Department Discretion	Low activity - Maintain

Figure 3 Apparatus

Apparatus Replacement Planning

To maximize fire fighter capabilities and minimize risk of injuries, it is important that fire apparatus be equipped with the latest safety features and operating capabilities. In the last 10 to 15 years, much progress has been made in upgrading functional capabilities and improving the safety features of fire apparatus. Apparatus manufactured prior to 1991 usually included only a few of the safety upgrades required by the 1991 and subsequent editions of the NFPA Fire Department Apparatus Standards or the equivalent Underwriters' Laboratories of Canada (ULC) standards. Because the changes, upgrades, and fine tuning to NFPA 1901, Standards for Automotive Fire Apparatus, since 1991, have been truly significant, especially in the area of safety, the CHFD should seriously consider the value (or risk) to fire fighters of keeping pre-1993 fire apparatus in first-line service.

The ages of the front line apparatus indicate a direct need to analyze, plan and fund an aggressive replacement schedule.

Apparatus Replacement Program **Present:**

E.T. 128 ATTACK ENGINE 2000 HME/CENTRAL STATES

DETROIT SERIES 60 12.7L (500HP) & ALLISON HD-4060 HALE QMAX 2,000 GPM PUMP 1,000 GALLON TANK HALE FOAM MASTER A/B 60 GALLON FOAM SYSTEM



2010 Spartan / MARIONCAT 450 ALLISON 4000 EVS

2,000 GPM HALE HALE CAFS SYSTEM FOAM LOGIC 5.0 AXB



1,000-GALLON. WATER 30-GALLON A FOAM 30-GALLON B FOA

E.T. 328 ATTACK ENGINE 1988 SIMON DUPLEX / YOUNG

DETROIT 8V92T / ALLISON HT740 1,750 GPM HALE PUMP 1,000 GALLON TANK 60 GALLON FOAM TANK 95 Gpm inline inductor



DETROIT SERIES 60 / ALLISON HT740 MG750 HALE PUMP 10" NEWTON QUICK DUMP 1,800 GALLON. TANK 3,000 DROP TANK

E.T. 428 (reserve) ATTACK ENGINE 1982 AMERICAN LAFRANCE, CENTURY

DETROIT 8V71 / ALLISON HT 740 1,250 GPM PUMP 1,000 GAL TANK







Engines:

Currently Colchester Fire Department has three (3) front line engines for response to emergencies in town and one engine in reserve. The oldest engine is the reserve piece (ET-428) which is 34 years old and, at the time this report was written, was in service on the front line while ET-128 has been out of service for 3+ months. The next oldest engine (ET-328) is 28 years old, followed by ET-128 which is 15 years old and ET-228 which is 6 years old.



The risks and hazards present in the community would suggest that the CHVFD should begin the process of developing specifications and going out to bid on a new attack engine for Fire Headquarters with a 2000 gpm pump, 1000 gallon water tank, foam capabilities and a minimum of 1500 feet of 5" LDH. Once in service, the following steps should occur with the current engines:

Based on its age and overall original design with an open cab which is no longer allowed per NFPA 1901, ET-428 should be retired. Refurbishment is also not a viable option for this engine due to its age, cost to operate and the fact that refurbishment will not bring this piece close enough to compliance with NFPA 1912 nor the current capabilities and safety of newer apparatus.

Following retirement of ET-428, the department should review any refurbishment needs for ET-328 and re-assign this piece to "reserve" status. While this engine is 28 years old, it remains a viable response piece as needed when front line apparatus goes out of service and can remain as such until ET-128 is up for replacement in the next 5 years and can then replace ET-328 in reserve. Once this occurs the engines will be back on a proper replacement cycle.

H.T. 128 HOSE TENDER / PUMPER 1987 I.H.C. MODEL 1854 4X4

DT 466 ENGINE / MT643 TRANS 1,250 DARLEY PUMP / 500 GALLON TANK 2,100 FT 5" HOSE ON REEL



Tanker/Hose Tender:

Water supply accounts for 40% of the overall fire department ISO rating. Only 10% of Colchester has hydrants available. The remainder 44.8 square miles of the town relies on rural water supply including the deployment of large diameter hose and the use of tankers in order to meet the required fire flows. Colchester Fire Department presently has a 1987 Hose Tender that carries 2100 feet of 5" LDH and one 1992 tanker with a volume of 1800 gallons to support this need. At 29 and 24 years old respectively, both pieces are beyond their usable life span in their present condition.

When the Hose Tender was placed in service, typical engines carried 500-800 feet of large diameter hose. Many of today's engines such as ET-128 and ET-228 carry 1500 feet of LDH. Because of this, the need for hose tender apparatus is lessening. With the age of this piece and LDH capacity of the current engines, it is recommended that the Hose Tender be retired and replaced with a new 2500-3000 gallon tanker with a minimum 1000 gpm pump, 3 way remote dump valves to ensure drivers remain in the apparatus during tanker shuttle and a 2500-3000 gallon portable tank to be placed at Fire Headquarters. Once the new tanker is in service, the current tanker should be refurbished following NFPA 1912 and placed out at Company 2. At 49.8 square miles, the town of Colchester covers a large area and thus response times can be greater to many areas of town. The current single 1800 gallon tanker, once on scene, can be depleted in less than 10 minutes. The response times for mutual aid tankers to most areas is beyond that 10 minute timeframe which drives the need for a second and larger tanker in town



which will provide greater service to the community and the department than having a hose tender remain in place.

UTILITY 128 Hazardous Materials / Loss Control
1999 FREIGHTLINER. MODEL 4700
DIESEL/ AUTO TRANS



SERVICE 128
2005 FORD F-350 4X4 R-1 / FORESTRY
250 GPM PUMP
150 GALLON TANK,



SER.228 R-1 / Mini-pumper 2003 FORD F-550 4X4 250 GALLON TANK 450 GPM PUMP



Utility and Service Vehicles:

The current utility and service vehicles within the Colchester Fire Department serve an important purpose to daily operations, emergency response, incident support, loss control, environmental protection, brush/forest fire response and traffic control. All vehicles at the time of this report are within a reasonable age for service and are mechanically and operationally sound for their purpose. Replacement plans for these should begin showing up on 5 year plans in 2018 with expected replacement years starting in 2023 at which point the Colchester Fire Department should re-evaluate the needs at that time. Some items to consider should include whether there is a continued need for a



mini pumper type apparatus as well as their brush fire and off road firefighting capabilities. Including the use of brush units to respond as a first responder vehicle.

Ladder Company

LADDER 128 75' AERIAL TRUCK / QUINT 1997 SIMON DUPLEX

ENGINE DETROIT SERIES 60 TRANS. ALLISON HD4060P SIMON LADDER AH-75 1,500 GPM WATEROUS PUMP 500 GALLON TANK



Aerial Apparatus:

Currently the Colchester Fire Department responds with a 1997 Simon Duplex/LTI Quint with a 75 rear mount ladder. This ladder truck has served the town very well since put in service. The design as a quint is a very important aspect to maintain the current ISO rating and most importantly to serve the needs of the department providing both engine and ladder company operations with one piece.

The department should begin plans for replacement of this aerial apparatus in the next couple years (5 year plan at most) and begin developing the needed specifications. The basis behind the recommendation to replace this piece is primarily its age as well as the technological and safety advances found in current aerial devices. In addition, the current ladder truck still holds value in the resale market for smaller fire departments with less activity or a department that does not presently have an aerial device. In Colchester, the ladder truck is an active front line piece. The added safety of providing a working bucket, increased water volume delivery, and design enhancements all justify replacement of Ladder 128.

The replacement should be a quint, with very similar specifications to their current piece regarding overall size and maneuverability to enable access to typical driveways found in town. The ladder should be a minimum of 75 feet and if possible could range to 95' however this will impact some agility of the truck. In addition to this the department should consider transitioning from a straight ladder design to a tower ladder design. The tower ladder (with bucket) provides a much higher degree of firefighter safety for those operating on or from the ladder. The tower also provides the ability to deliver up to two solid master streams (mounted to the bucket) which can be very beneficial for large volumes of fire, commercial structures, and low window placement where you would normally need multiple firefighters in order to deliver the same volume of water from multiple hose lines or ground deployed appliances.

Rescue Company

RESCUE 128 HEAVY RESCUE 2014 SPARTON METRO STAR / MARION

CUMMINGS ISL9 450 hp / ALLISON EVS 3000



The current rescue truck is a new 2014 Spartan Metro Star / Marion heavy rescue that will serve the town and the department very well. The department should begin plans for replacement in 2029 unless circumstances between now and then require earlier consideration.

Ambulances: 2010 Horton Ambulance



2006 Horton Ambulance



Currently the Colchester Fire Department operates with two ambulances for medical response including a 2006 and a 2010 Horton IHC ambulance. Medical response serves as approximately 60 - 65% of the department's overall annual responses averaging 1100 medical calls per year. The average useable life of an ambulance with this call volume is 10 - 12 years due to the mileage, mechanical integrity and reliability of these critical transport vehicles. As such, Ambulance 628 should be considered for replacement starting next year and Ambulance 528 in 2020 allowing their replacements to be staggered.

Chiefs Vehicle:

The current chief's vehicle, a 2008 F-350 with 79,000 miles, continues to serve its purpose well and is in good mechanical and operational condition. Depending on its mechanical and operational condition it should be considered for replacement in 2028.

The Colchester Fire Department recently created a career Deputy Chief Position. The Deputy Chief serves as the operational shift commander and the incident commander when the chief is not present. As such, the position responds to all emergencies in town and out of town when called for mutual aid.



Presently the career Deputy Chief is utilizing his personal vehicle for all emergency responses. As this is a career position and an expectation of the position is response to all emergencies, the department should begin looking for a department vehicle that can be issued to the person in this position. Consideration for used SUV type vehicles or state auction vehicles would keep cost down and procure a vehicle that would serve the purpose for incident response, communications and command/control of incidents.

Conclusion:

Having a well-developed and justified apparatus replacement plan will help ensure that all apparatus is reliable, efficient, employs up to date technology and does not cost more to maintain than its value/depreciation. This plan will also aid with the budget development process to ensure that there are few surprises in the process and clear expectations. A well-developed comprehensive apparatus plan will ensure the department acquires and maintains the required resources and equipment to provide fire protection and rescue services to the town of Colchester.

Replacement of apparatus as listed above will have an immediate impact the capital planning process for the Colchester Fire Department as well as the town of Colchester. These immediate impacts are justified by the content in this report and the needs of the department to provide and maintain their current level of emergency services to the town. It should be noted the impacts to the capital planning process will be lessened in the years to come as there will be clear expectations.

Recommendation #7 CIP for Apparatus

ID	Year	Age (years)	Location	Suggested Replacement Year	Estimated Replacement Cost
Engine Tank 328	1988	28	FHQ	2008	Refurbish \$150,000
Engine Tank 128	2001	15	FHQ	2019	\$450,000
Engine Tank 228	2010	6	Company 2	2030	Maintenance Costs
Engine Tank 428	1982	34	FHQ	2012	REMOVE FROM SERVICE
Ladder 128	1997	19	FHQ	2017	75' \$1,100,000 100' \$1,500,000
Rescue 128	2014	2	FHQ	2034	Maintenance Costs
Hose Tender 128	1987	29	Company 2	2012	Retire and replace with 3K Tanker



Tanker 128	1992	24	FHQ	2012	Refurbish \$ 150,000
Utility 128	1999	17	FHQ	Department Discretion	Low activity – Maintain
Service 228	2003	13	FHQ	2023	Maintenance Costs
Service 128	2005	11	FHQ	2025	Maintenance Costs
Ambulance 628	2006	19	FHQ	2017	\$180,000
Ambulance 528	2010	6	FHQ	2020	\$200,000
Chiefs Vehicle	2008	8		2018	Include in 5 year capital plan
Service 328	1997	19	FHQ	Department Discretion	Low activity - Maintain

Figure 4 Apparatus Cost Projections

Staffing

NFPA 1201 5-6.1

The fire company or response group assigned to respond to a fire call shall be comprised of the numbers necessary for safe and effective fire-fighting performance relative to the expected fire-fighting conditions. These shall be determined through task analysis procedures. The conditions to be considered shall include:

- (a) Life hazard to the populace protected.
- (b) Provisions of safe and effective fire-fighting performance conditions for the fire fighters.
- (c) The potential property loss.
- (d) The nature, configuration, hazards, and internal protection of the properties involved.
- (e) The types of fireground tactics employed as standard procedure, the type of apparatus used, and the results expected to be obtained at the fire scene.
- (f) Budgetary constraints.

There is a Chief, a Deputy Chief and a Captain / Safety Officer who work eight (8) hour days during the week, Monday through Friday, and four (4) Career Personnel working an alternating shift of two (2) sixteen (16) and one (1) eight (8) hour shift per week. This system provides two (2) personnel an additional sixteen (16) hours a day from Tuesday through Friday. Monday and Saturday there are two (2) additional personnel working eight (8) Hours. A Per Diem person works Saturday and Sunday from



1400 to 2400 hours. There is no funded coverage on Monday nights from 1600 to 2400, Saturdays from 0800 to 1400 and 2400 to 0800 and Sundays from 0000 to 1400 and 2400 to 0800. Volunteer personnel cover these hours. There are financial incentives to cover the ambulance for calls. Volunteer Personnel are activated for all calls. In Figure #3 Full Time Career Personnel are in Yellow, Per Diem are Blue and Volunteer Personnel are Pink.

Times	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
0000-	Volunteer	2 Career	2 Career	2 Career	2 Career	2 Career		
0800	Coverage	on Duty	on Duty	on Duty	on Duty	on Duty		
0800-	5 Career	5 Career	5 Career	5 Career	5 Career	Volunteer Coverage		
1600	on Duty	on Duty	on Duty	on Duty	on Duty			
1600- 2400		Vo	1 Per Diem On Duty	1 Per Deum On Duty				

Figure 5 Station Coverage, Career, Per Diem & Volunteer Personnel Coverage

Responding personnel have a myriad of tactical responsibilities to prepare for regarding commercial locations, high hazard occupancies and high life safety facilities. These sites, in addition to typical residences, can tax the Colchester Fire Department on arrival due to the number of resources required to conduct basic emergency operations and help evacuate and rescue individuals at the emergency scene. Fire dynamics are fuel, oxygen and time dependent.

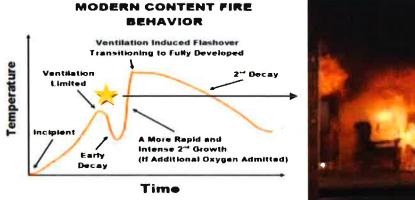






Figure 6: Modern Fire Timeline and Flashover

The example above shows a fire progression from start to finish. It should be noted the process displayed above reaches its critical point (Flashover) between three (3) and five (5) minutes. The Star ("Flashover") on the example is at the 3 minute: 08 second point. Fire research and the national experience has led to the importance of the tactical objectives and time requirements stated below.

As stated below, specific actions need to be taken to ensure a successful outcome. Several specific challenges were apparent to the JLN team. First, the percentage of fire-type emergencies in the community is low compared to the other services offered by the Department. Second, residential home fires continue to be the number one cause of civilian fatalities. Third, other than heart attacks, thermal assault and structural collapse continue to kill fire fighters annually. Fourth, the low number of Colchester Fire Department personnel available for responses can reduce operational capability.

The national experience for the minimum number of personnel for Fire Operations is twelve to eighteen (12-18) plus personnel within eight (8) minutes. These numbers are based on the individual/team jobs necessary to safely and successfully conduct fire suppression operations. These responsibilities include; Fire Attack (4), Water Supply/Shuttle (2-4+), Search and Rescue (4), Forcible Entry and Ventilation (2-4), Rapid Intervention Team and Command with an assistant (2). The numbers for personnel are for a two thousand square foot (2,000 Sq. ft.) home. It is our opinion, given the response and survey information we have reviewed, the present system is not capable of delivering the appropriate number of human resources to adequately control a fire within the first eight (8) minutes.

NFPA 1720 (2014) 4.3.4* Upon assembling the necessary resources at the emergency scene, the fire department shall have the capability to safely commence an initial attack within 2 minutes 90 percent of the time.

Structure Fires: Career and / or volunteer staff responds to initial emergencies. Automatic or Alarm Driven Mutual Aid can respond on structural fires from neighboring Departments as part of Mutual Aid Agreements. There is significant Mutual Aid from numerous towns. Predesignated response procedures determine who will be the Rapid Intervention Team (RIT) etc.

NFPA Standards - Deployment

There are two National Fire Protection Association Standards dealing with fire ground staffing. NFPA 1720 (2014) - Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments (Fig.7) and NFPA 1710 (2010) - Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments (Fig.8).

The figures below show the principal differences regarding on scene staffing and response times. As is with many communities across the country utilizing Combination Departments, there is no clear



delineation as to what standard to apply. JLN prefers to apply a task/risk based approach. For all emergencies there are a set of tasks that need to be performed for the emergency to have the best outcome possible. As described in the <u>Suppression Force Staffing</u> section of the report, tasks need to be performed and personnel are needed to do those tasks.

NFPA 1720 (2014) Table 4.3.2 Staffing and Response Time						
Area	Demographics Responders Response Time (Min.) % of Time					
Suburban	500-1000 people/mi2	10	10	80		

Figure: 7 NFPA 1720 Staffing and Response Times

NFPA 1710 (2010) Staffing and Response Time, 5.2.4.1 -5.2.4.2.2. (The initial full alarm assignment to a structure fire in a typical 2000 ft2 (186 m2), two-story single-family dwelling without basement and with no exposures)

Apparatus	Responders	Response Time (Min.)	% of Time
First Due Apparatus	4	4	90
Remaining Apparatus Water Supply	2	8	90
Remaining Apparatus Attack Line #2	2	8	90
Remaining Apparatus Attack Back up	2	8	90
Remaining Apparatus Search & Rescue	2	8	90
Remaining Apparatus Ventilation & Aerial	3	8	90
Remaining Apparatus Rapid Intervention	2	8	90
Incident Commander	1	8	90
Totals	18	8	90

Figure 8: NFPA 1710 Staffing and Response Times



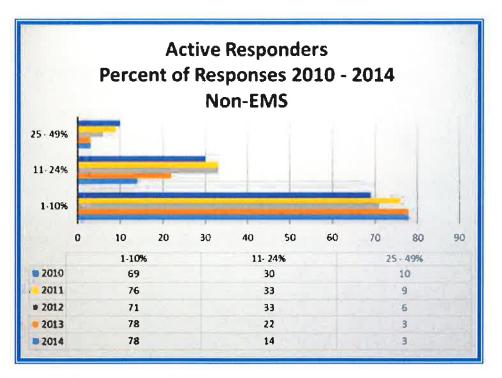


Figure 9 Percent of Responses - NON-EMS

A review of volunteer responses to non-Emergency Medical Service emergencies (Fig #9) revealed a majority of the members responded to ten percent (10%) or less of the incidents. A significant number of responders responded to between eleven (11) and twenty four (24) percent. However, this number had decreased in 2013 and 2014. In addition, several members had responded to more than twenty five percent (25%) of the non- EMS calls. However, this number had been decreasing since 2011. Given the Non-EMS calls equate to fifty two percent (52%) of the total call volume, these are fair response numbers.



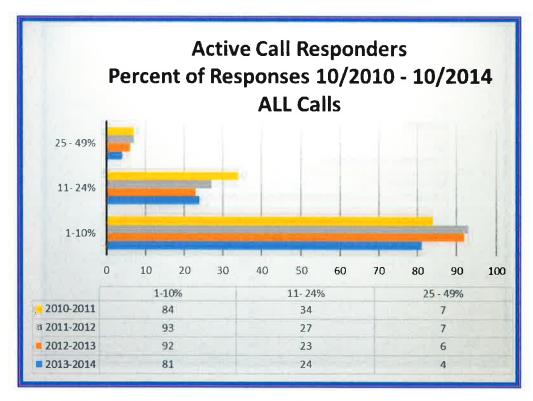


Figure 10 Percent of Response - ALL Emergencies

A review of volunteer responses to ALL emergencies (Fig# 10) again revealed a majority of the members responded to ten percent (10%) or less of the incidents. A significant number of responders responded to between eleven (11) and twenty four (24) percent. However, this number stabilized over the length of the records reviewed. In addition, several members had responded to more than twenty five percent (25%) of the non- EMS calls. Given the addition of thirteen hundred and ninety three (1,393) EMS responses to the total call volume between Figure #9 and Figure #10, these are good response numbers.

A review of the responding mutual aid personnel combined with the Colchester personnel does not equal the fifteen to eighteen (15-18) members needed to attack a residential structure fire ninety percent (90%) of the time. The present system could be stressed to meet the lesser ten (10) responder threshold. It should be remembered that less resources equals less tasks being completed and higher risks to the responders and occupants. While Structural Fires responses are a small percentage of the Department's workload, they are "High Risk and Low Frequency" in nature and where most civilians die and a large number of fire fighters are injured or killed annually.



Fire Station Distribution

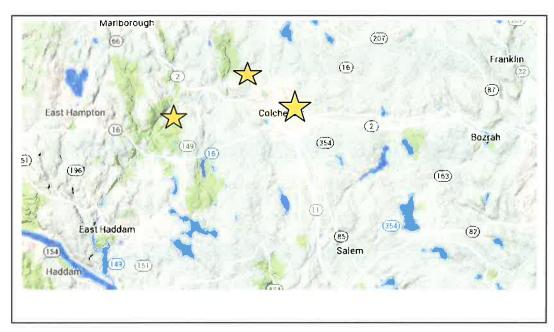


Figure 11 Station Locations

DRIVER LOCATIONS & ESTIMATED RESPONSE TIMES TO STATION Fire Drivers / EMS Drivers / Both

ID	Address	HQ Miles Time	CO#2 Miles Time	#3 Miles Time
139	River Rd.	5.2 Mi. 7 Min.	3.0 Mi. 5 Min.	6.8 Mi. 13 Min.
381	Edgewood Dr.	2.1 Mi 7 Min.	8.5 Mi. 11 Min.	.9 Mi, 3 Min.
343	Edgewood Dr.	2.1 Mi. 7 Min.	8.5 Mi. 11 Min.	.9 Mi. 3 Min.
383	Brindlewood Path	3.3 Mi. 7 Min.	8.2 Mi. 15 Min.	4.2 Mi. 10 Min.
327	Vicki Lane	.4 Mi 2 Min.	6.3 Mi. 10 Min.	2.2 Mi. 6 Min.
455	Bull Hill Rd	6.7 Mi. 11 Min.	4.6 Mi. 8 Min.	8.4 Mi. 12 Min.
560	CoCo Dr.	3.2 Mi. 6 Min.	2.9 Mi. 5 Min.	3.7 Mi. 7 Min.
427	Debra Lane	5.8 Mi. 10 Min.	1.3 Mi. 3 Min.	6.3 Mi. 10 Min.
518	Windham Ave.	3.1 Mi. 7 Min.	8 Mi. 13 Min.	4 Mi. 9 Min.
221	Middletown Rd.	1.8 Mi. 4 Min.	4 Mi. 6 Min.	2.3 Mi. 4 Min.
534	Bear Hill Rd.	?	?	?
488	Felicia Baber Ln.	5.7 Mi 10 Min.	1.1 Mi. 3 Min.	6.2 Mi. 10 Min.
172	Dr. Foote Rd.	1.4 Mi. 4 Min.	5 MI. 7 Min.	1.4 Mi. 4 Min.
561	Shailor Hill Rd.	5.8 Mi. 8 Min.	1.9 Mi. 4 Min.	7.5 Mi. 14 Min.
483	Buckley Hill Rd.	.2 Mi. 1 Min.	5.6 Mi. 8 Min.	2.1 Mi 6 Min.
150	Pleasant St.	1 Mi. 3 Min.	5.7 Mi. 8 Min.	1.3 Mi. 4 Min.
ME	Norwich Ave.	1.3 Mi. 4 Min.	6 MI 10 Min	1.9 Mi. 5 Min.
<mark>575</mark>	VanCedarfield Rd.	2.4 Mi. 5 Min.	4,4 Mi. 7 Min.	2.6 Mi. 5 Min.



399	Old Hartford Rd.	3.8 Mi. 6 Min.	3.8 Mi. 6 Min.	5.8 Mi. 8 Min.
337	Davidson Rd.	2.2 Mi. 5 Min.	3.7 Mi. 5 Min.	2.7 Mi. 5 Min.
	Davidson Rd.	2.2 Mi. 5 Min.	3.7 Mi. 5 Min.	2.7 Mi. 5 Min.
176	Sullivan Rd.	3.9 Mi. 8 Min.	11 MI. 14 Min.	3.8 Mi. 8 Min.
393	Ridgewood Rd. Ext.	4.2 Mi. 10 Min.	7.8 Mi. 13 Min.	2.7 Mi. 5 Min.
538	Scott Hill Rd.	7.8 Mi. 14 Min.	13.4 Mi. 19 Min.	6.8 Mi. 11 Min.
584	Sashel Ln.	5.2 Mi. 10 Min	11.4 Mi. 14 Min.	4.1 Mi. 7 Min.
	Cabin Rd.	2.1 Mi. 5 Min.	5.7 Mi. 9 Min.	1.8 Mi. 3 Min.
	Harland Rd.	9.4 Mi. 13 Min.	4.9 Mi. 7 Min.	9.9 Mi. 14 Min.
	Lebanon Ave	3 Mi. 5 Min.	7.9 Mi. 12 Min.	3.9 Mi. 8 Min.
333	Linwood Cemetary Rd.	.9 Mi. 2 Min.	5.5 Mi. 8 Min.	2.2 Mi. 4 Min <mark>.</mark>
<mark>198</mark>	Linwood Cemetery Rd.	.9 Mi. 2 Min.	5.5 Mi. 8 Min.	2.2 Mi. 4 Min.
182	Elsmere Rd.	4.2 Mi. 7 Min.	9.6 Mi. 15 Min.	5.7 Mi. 11 Min.
407	Pickerel Lake Rd.	5.7 Mi. 9 Min.	1.1 Mi. 3 Min.	6.2 Mi. 11 Min.
159	Crestview Dr.	1.5 Mi. 5 Min.	5.5 Mi. 9 Min.	1.4 Mi. 5 Min.
592	Van Cederfield Rd.	2.2 Mi. 4 Min.	4.6 Mi. 9 Min.	2.7 Mi. 5 Min.
	Wall St.	.4 Mi. 1 Min.	5.3 Mi. 8 Min.	2 Mi. 4 Min.
166	Amston Rd	.4 Mi. 1 Min.	5.8 Mi. 9 Min.	1.9 Mi. 5 Min.
	Dr. Foote Rd.	1.4 Mi. 4 Min.	5.1 Mi. 7 Min.	1.3 Mi. 4 Min.
444	West High St.	11.5 Mi. 13 Min.	7.2 Mi. 11 Min.	13.1 Mi. 15 Min.
178	Old Hebron Rd <mark>.</mark>	.5 Mi. 1 Min.	6 Mi. 10 Min.	2.2 Mi. 6 Min.
KIM	Old Hebron Rd.	.5 Mi. 1 Min.	6 Mi. 10 Min.	2.2 Mi. 6 Min.
306	Oak Ridge Dr.	3.4 Mi. 7 Min.	10.5 Mi. 13Min.	3.2 Mi. 6 Min.
S M	Westchester Rd.	6.4 Mi. 10 Min.	1.8 Mi. 3 Min.	6.9 Mi. 10 Min.
M O	McCall Rd.	7.4 Mi. 13 Min.	19.3 Mi. 23 Min.	7.4 Mi. 12 Min.
326	Renee Dr.	1.2 Mi. 4 Min.	6.2 Mi. 13 Min.	2.1 Mi. 6 Min.
	Gill St.	. 2 Mi. 1 Min.	5.7 Mi. 9 Min.	2.3 Mi. 5 Min.
	Windham Ave.	1 Mi. 3 Min.	5.9 Mi 10 Min.	1.9 Mi. 5 Min.
501	Lakeview Dr.	7.1 Mi. 12 Min.	2.5 Mi 5 Min.	7.6 Mi. 12 Min.
116	240 S. Main St.	.9 Mi. 3 Min.	5.6 Mi. 10 Min.	.9 Mi. 3 Min.
	Halls Hill Rd.	1.4 Mi. 3 Min.	5.7 Mi. 10 Min.	.9 Mi. 3 Min.
140	West Rd.	4.3 Mi. 10 Min.	10.1 Mi. 13 Min.	2.4 Mi. 4 Min.
114	Standish Rd	4.7 Mi. 9 Min.	3.9 Mi 7 Min.	5.2 Mi. 9 Min.
544	Labanon Ave.	1.4 Mi. 3 Min.	6.3 Mi. 13 Min.	2.4 Mi. 4 Min.
<mark>291</mark>	Prospect St.	1.6 Mi. 5 Min.	6.1 Mi 13 Min.	1.3 Mi. 4 Min.
D W	Old Country Rd	5.5 Mi. 10 Min.	.9 Mi. 3 Min.	6 Mi. 10 Min.

Fire Driver Only EMS Driver Only

Both Fire and EMS Driver

Responds to 10% or more of the Emergencies

Figure 12 Driver Locations and Response Times to stations



Fifteen (15) of the fifty-five (55) Drivers or twenty-seven percent (27%) responded to ten percent (10%) or one in ten emergencies. Several of the highest participating Drivers are Career Staff or Officers. The number drops dramatically to only nine (9) drivers or sixteen percent (16%) when we go to twenty percent (20%) of the calls. This limited number of active drivers has a direct impact on the ability to get needed equipment to the scenes.

In addition to looking at existing staffing procedures, responder data for calls, both with EMS and without and frequency when Drivers were able to respond, we looked at what days of the week were the busiest. Monday and Tuesday were the busiest. Saturday and Sunday, however, had minor reductions in activity. After reviewing these issues, a concern was developed relative to the possibility that in addition to the lengthening of response times, calls were also being missed. To address this concern, the Chief was directly asked about the ability to respond to emergencies on weekend days. During our interview it was relayed that weekends taxed the system and difficulties were becoming apparent during the non-staffed daytime hours.

Day of the Week

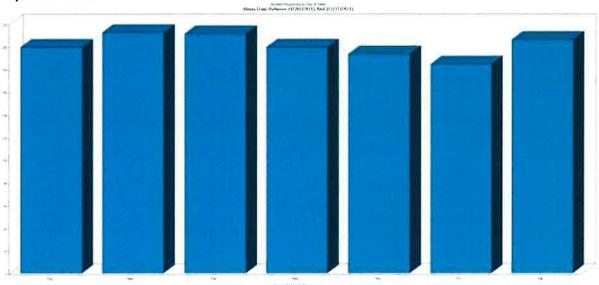


Figure 13 Day of the Week

Recommendation #8 The Part-Time personnel be returned to Saturday and Sundays daytime hours to ensure the ability to respond to EMS and Fire Calls.

Volunteer Support

The Fire Department has a very successful and effective recruitment and retention program. New members are brought into the Department on a regular basis. New personnel receive basic training and are issued protective equipment when appropriate. Individuals who have not served in emergency response agencies before are given the opportunity to pursue various types of service. This takes time, however, and can limit these peoples participation.



It is important to remember that both new and long-time members face competition issues for their time. Several on-going and potential retention mechanisms were reviewed relative to keeping members engaged in the department. As with most issues, funding is needed to be successful.

There is funding to support volunteer response efforts. Included is a fuel re-imbursement program and funding for part-time employment. While the Town Budget provides some funding for response support, several other strategies have been used to support the volunteer personnel. These have included awards nights, pig roasts and other "Family" type activities. These efforts, however, are financially funded by the members themselves and funds raised by the Fire Company. Essentially, the support from the Company was raised by the membership's efforts. This was a very big issue and was raised several times

Recommendation #9 Additional Funding Alternatives should be considered to support the active personnel

Mutual Aid

In an effort to provide adequate numbers of trained responders on scene for various types of emergencies, the Colchester Hayward Fire Department aggressively calls on its mutual aid neighbors. Mutual aid run card examples are located in Attachment #8

Listed below are the requirements and statistics of the mutual aid program.

NFPA 1201, 4.6.2* Mutual aid agreements shall address issues that include but are not limited to the following:

- (1) Indemnity.
- (2) Liability for injuries.
- (3) Reimbursement for cost of service.
- (4) Authorization to respond.
- (5) Level of staffing.
- (6) Types of equipment.
- (7) Resources to be made available.
- (8) Designation of the incident commander.
- 4.6.3 All personnel shall receive training to ensure compatible Operations.
- 4.6.4 Operational methods shall be as uniform as practical.



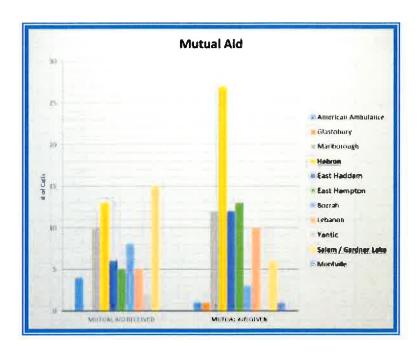


Figure 14 Mutual Aid Given and Received

Figure #15 provides a comparison of Colchester to its mutual aid partners in several areas. Of significance is Colchester's size, population and corresponding population density.



Topic	Colchester	East Haddam	East Hampton	Salem / Gardner Lake	Lebanon	Marlborough	Hebron	Bozrah
Population **	16500	9142	12940	4176	7322	6428	9627	2631
Square Miles **	48	54.25	2.55	28,92	54.1	23.35	36.94	19.96
Density/sq.mi. **	329.5	168.5	362,8	144.4	135.19	275.29	260.6	260.6
Total Expenditures **	\$56,825,708	\$29,854,398	\$41,825,453	\$14,458,144	\$23,380,957	\$22,665,709	\$35,791,811	\$8,101,182
Alarms	2028	.?	318	354	616	181	682	394
Paid Staff Full	7	2	0	2	0	0	2	0
Staff Part-time	10	0	0	0	0	0	0	0
Vol. Members	120	28	65	40	26	20	25	40
Fire Incidents *	YES	yes	YES	Yes	YES	Yes	Yes	Yes
EMS Incidents	Amb. + R1	Yes	spec.call	R-2	R-2	Yes	R-2	R-2
Rescue Service	Heavy	No	Yes	Yes	Yes	Light	Yes	Yes
Haz-Mat	OPS	OPS	OPS	OPS	OPS	OPS	OPS	OPS
SOPs Y/N	YES	yes	YES	Yes	YES	Yes	Yes	Yes
Engines	0	1	3	0	0	0	1	0
Engine Tankers	3	2	0	2	2	2	2	1
Tankers	2	1	3	2	1	2	1	1
Hose Tenders	1	0	0	0	1	1	0	0
Ladder	1	55	75'	77'	1	0	1	65'
Ambulance	2	2	3rd.	1	1	1	2	1
Rescue	1	Light	1&1	1	1	1	1	1
Brush Trucks	2	2	2.5 & 3	2	1	2	1	1
Boats	2	2	1	1	0	1	1	1
Residential	Heavy	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industrial	Light	light	light	light	light	light	light	Moderate
Commercial	Moderate	light	Moderate	light	light	light	light	light
Multi-Occup.	Light	Heavy	light	light	light	light	light	light
Public Assembly	Light	light	light	light	light	light	light	light
Inspections Y/N	YES	?	No	No	No	?	?	Yes
Inspections Y/N * CT - NFIRS ** www.cerc.com/Conto			No	No	No	?	?	

Figure 15 Review of Fire Service Partners



Mutual Aid Pagnanga Distance						
Mutual Aid Response Distance						
Department	Distance in Miles to Border					
Salem Fire Department	5.7					
Gardner Lake Fire Department	1.93					
Hebron Fire Department	4.9					
Hebron Co #2	1.9					
East Haddam Fire Department	5.3					
East Hampton Fire Department	4.1					
East Hampton #2	6.2					
East Hampton #3	7.1					
Marlborough Fire Department	4.2					
Marborough #2	8.1					
Lebanon Fire Department	6.2					
Haddam Neck Fire Department	10.7					
Bozrah Fire Department	6.1					
Portland Fire Department	12.9					
Portland #3	7.5					
Chesterfield Fire Department	8.2					
Oakdale Fire Department	6.4					

Figure 16 Mutual Aid Stations Distance to Border

Mutual Aid responses are predetermined by geographical location and risk presented. They are further defined by type and number of specific equipment that is necessary for the hazard.

Human Resources

It became evident during our discussions with the Department members that there was not a clear understanding of the Human Resource Services process. Presently, multiple offices are involved in Human Resource issues, Hiring, Complaints, Benefits, etc. This has caused some confusion in the past.

Recommendation # 10 Human Resources Clarification

The Town should consider assisting the Fire Department by clarifying the Human Resources process or creating a Human Resources/Personnel Department, if needed, to be the lead agency to maintain all documents and address employment issues for the entire town, especially job descriptions, hiring and promotional procedures and other legal, regulated employment practices that effect the Fire Department and the Town.

Training Programs



Minimum training requirements for all fire service organizations providing fire, rescue, EMS and Hazardous Materials emergency response, are mandated by the United States Code of Federal Regulations (CFR), nationally recognized codes and standards, state and local standards.

29CFR1910.156(c) Training and Education

1910.156(c)(1)

The employer shall provide training and education for all fire brigade members commensurate with those duties and functions that fire brigade members are expected to perform. Such training and education shall be provided to fire brigade members before they perform fire brigade emergency activities. Fire brigade leaders and training instructors shall be provided with training and education which is more comprehensive than that provided to the general membership of the fire brigade.

1910.156(c)(2)

The employer shall assure that training and education is conducted frequently enough to assure that each member of the fire brigade is able to perform the member's assigned duties and functions satisfactorily and in a safe manner so as not to endanger fire brigade members or other employees. All fire brigade members shall be provided with training at least annually. In addition, fire brigade members who are expected to perform interior structural firefighting shall be provided with an education session or training at least quarterly.

1910.156(c) (3)

The quality of the training and education program for fire brigade members shall be similar to those conducted by such fire training schools as the Maryland Fire and Rescue Institute; Iowa Fire Service Extension; West Virginia Fire Service Extension; Georgia Fire Academy, New York State Department, Fire Prevention and Control; Louisiana State University

Firemen Training Program, or Washington State's Fire Service Training Commission for Vocational Education. (For example, for the oil refinery industry, with its unique hazards, the training and education program for those fire brigade members shall be similar to those conducted by Texas A & M University, Lamar University, Reno Fire School, or the Delaware State Fire School.)



The Colchester Fire Department currently has a very robust training program meeting the codes and standards requirements of a fire service organization providing a wide range of emergency fire, rescue, emergency medical service, hazardous materials response, WMD and other CBRNE incidents as well as a range of community orientated non-emergency services and emergency and non-emergency support services to both the community and the department.

Based on a member's chosen level of service that they are willing to provide the department and the community, minimum annual training hours range from 17 up to as much as 120 hours.

- All members attend a minimum of 17 hours annually.
- Fire/Interior Firefighter attend an additional 28 hours.
- Fire/Fire Ground Support attend an additional 28 hours.
- EMS personnel attend an additional 28 hours.
- Fire Police attend an additional 19 hours.

Most members participate in more than one of the service levels available within the department and must meet the additional minimum hours for each category of service. These hours must be considered when considering how much time a "Volunteer" member contributes to their community.

The Colchester Fire Department has developed a Training Matrix that clearly shows the minimum training, the training hours and the training path required of a member as they progress from probationary member to full member and, if they desire, on to Fire Ground Operations, to Interior Firefighter, to Rescue Operations, to EMS Provider, to Apparatus Drive (both CDL and non-CDL) and Fire Police. Additionally, Departmental SOP-020 entitled "Yearly Training Requirements Standard Operating Procedure" clearly delineates the annual training requirements of all members wishing to maintain an active response status.

Overall Departmental training is determined by a Training Committee, established by Article XXI of the Colchester Hayward Volunteer Fire Company. Article XXI, Section 4 states "The Training Committee shall be responsible to provide a comprehensive training program for the Department throughout the year of the appointment".

The Training Committee consists of seven (7) members who are appointed annually. Of the seven members, one shall be an Elected Officer (Assistant Chief), one Appointed Officer (Captain), one EMT and one member from the Company 2 response area. This Training Committee meets and develops a training schedule for the first quarter of the year and then provides a complete annual schedule during subsequent meetings.

The 1st Assistant Chief assumes responsibility for all training and compliance issues i.e. OSHA, NFPA and other regulatory agencies.

The 1st Assistant Chief has responsibility for all training and compliance issues i.e. OSHA, NFPA and other regulatory agencies and is the chairperson for the Training Committee. This arrangement enhances management of the training program, provides a clear line of supervision and provides for



The 1st Assistant Chief is required to be a certified Fire Service Instructor. Additionally, the 1st Assistant Chief is the chairperson for the Training Committee.

The Fire Captain assumes responsibility for company level training. The Fire Captain works with the 1st Assistant Chief to ensure that the training requirements are met. The Fire Captain assists in the training of personnel under the guidance of the Training Committee. The Fire Captain is required to be a certified Fire Service Instructor.

New company members participate in a comprehensive "New Member Orientation Program". This program provides initial, minimum training related to a variety of subjects from Rules and Regulations to the annual Training Requirements each member must participate in to maintain membership.

The Colchester Fire Department's Fire Service Instructors have access to a wide assortment of facilities and resources designed to support their training programs. Instructors have access to an in-house classroom, lecture hall and conference room equipped with modern Audio / Visual equipment. IFSTA reference materials are available in a departmental library and a study room is available to members.

Fire Service Instructors have access to the Colchester Fire Departments training facility, constructed by company members in 2011, on company owned property. This training facility has a fire behavior/flashover module, constructed by members in 1997, which augments the other CFR and NFPA required training provided by the Department.

Departmental training, meeting the intent of 29CFR1910.156, 29CFR1910.120 and National Fire Protection Association Standards 1001, 1002, 1142 and 472 is provided at this training facility located on Mill Hill Road.

Local, in-house training at this facility routinely provides members with mandatory training on required subjects including:

Forcible entry
Fire attack
Hose line operations
Search and Rescue
Firefighter survival
Firefighter rescue

Training on Engine/Pumping Operations, Ladder Company Operations, Water Supply Operations and Hazardous Materials response is also routinely provided at the training facility.

The March 13, 2012 Capital Improvement Plan listed the advantages for members and cost benefits for the Town of having a local training facility as:

- Better company level training opportunities for members.
- Less member commitment of time and travel for mandatory training.
- The ability to conduct joint training with Mutual Aid partners.
- The ability to conduct day time training when required.
- Providing educational opportunities for the Town residents relating to fire prevention issues and citizen fire academy programs.



The Training Committee, 1st Assistant Chief and the Department maintain comprehensive training records for each member. Training Records are maintained in a secure file, separate and distinct from other types of records that are also required to be maintained for each member.

Training documentation for each program and program delivery is implemented with written program goals, objectives and a roster for that specific delivery being provided to the Instructor by the Training Committee. At the completion of the session(s), the Instructor submits all program documentation to the Training Committee. The Training Committee determines the goals and objectives have been met. Successful completion of a specific delivery is entered into each individual member's file and also entered on a training matrix, indicating the date of completion.

In addition to in-house training programs, the Department utilizes the Connecticut Fire Academy, the Eastern Connecticut Fire School and subject matter experts to supplement the department's training program.

Required training conducted within the Fire Department is funded by the Town of Colchester annual budget. The Fire Chief and Officers develop a list of required funding levels for annual training each budget cycle. Annual revision to this list is conducted so current, accurate costs are provided to the Town for budget considerations and identification of funding levels to support this training.

Annual training fund requests are based on required initial training for new members or members seeking an active status and mandatory certification training as well as mandatory annual recertification training which must also be funded. The Fire Chief identifies the number of members requiring this training, averaging approximately 280 individual sessions for 30 different training, certification or re-certification courses (<10 members per required course).

Over the years, State budget cuts to the Connecticut Fire Academy and to Regional training schools has increased the local funding requirements to support mandatory training. Therefore, budget preparations and requests have to be developed based on the known increases necessary to replace training opportunities eliminated by the State. Current training cost data indicate a 60% increase in those costs from 2000 to 2015.

Utilizing current per student cost data, the training/certification/re-certification requirements and the number of members requiring this training the Fire Department estimates a total required funding level of \$58,255.

The adopted Town budget for FY 2015-2016 indicates the Fire/Emergency Medical Services Mileage, Training & Meetings account being funded at \$35,400. (That original amount was reduced to \$27,500). Empirical training budget history for the Town indicates that during the 2000-2015 period when training costs increased 60%, local funding has decreased by 20%

The Fire Department has contributed to reducing training costs by utilizing in-house instructors and utilizing the Mill Hill training facility. Regardless, all mandatory in-house training requirements and some certification and re-certification courses cannot be totally supported locally without incurring some costs. Appropriate funding is necessary to provide mandatory training. Even the most active response member seldom is first due at an emergency. Current call volume, while increasing annually, simply does not provide the opportunity for all members to experience primary search, interior firefighting, ventilation and personal safety under emergency



conditions. Training is needed to maintain high levels of proficiency, and efficiency. Training does provides each member with the capability to do most "routine tasks" safely and automatically.

The Town and the Fire Department have shown they are committed to providing their first responders with a high level of training by support an excellent training program. In return, all first responders are very capable of responding to and abating all types of hazards and emergency situations with skill, confidence and professionalism. The Town and Fire Department must, however, continue to plan and enhance the current training program to service the current first responder roster and provide the future member's training needs. Training must keep pace with the future levels of service required by the Town.

Recommendation #11 Organizational Safety Policy

The Fire Department must develop and publish an Organizational Policy Statement that clearly delineates the type, amount, and frequency of training for the Department.

Recommendation #12 In House Training Program

The Department should encourage the development, design and delivery of in-house training programs, specific to Town hazards. A SOP for in-house lesson plan development should identify design and delivery criteria based on current pre-plans, inspection reports and familiarization visits.

Recommendation 13 Officer Educational Support

A specific line item, separate from the current "Mileage, Training & Meetings" account should be established to support the Code of Federal Regulations requirement to provide Fire Brigade leaders and training instructors (Chief Officers) with training and education which is more comprehensive than that provided to the general membership of the fire brigade.

Recommendation #14 Chief Officer Support

The Town and Department must continue to support Officer Development training.

Recommendation #15 Advanced Formal Education

Funding should be provided to support Executive Fire Officer, Associate, and Bachelor Degree programs. (Most FD programs reimburse for tuition and books upon successful completion with at least a C or better grade).

Recommendation #16 Subject Matter Expert Training

The Town and Department must continue to provide funding for contractor training as required to provide for subject specific topics, beyond in-house capabilities.



Provide an annual match funding (10%) for Fire Act Grant applications to support, develop and Recommendation #17 Fire Act Grants deliver training and enhance training facilities.

Training Facilities

Planning must include resources to support the care and maintenance of the current Training Recommendation #18 Training Facility Maintenance Facility located on Mill Hill.

Recommendation #19 Additional Training Props

Planning must include resources to support the addition of new or advanced training props for the current Training Facility located on Mill Hill.

Planning should include replacement of the current Fire Behavior/Flashover Module. This training Recommendation #20 Flashover Module Replacement prop was built in 1997 by Fire Department personnel and has now exceeded its service life.

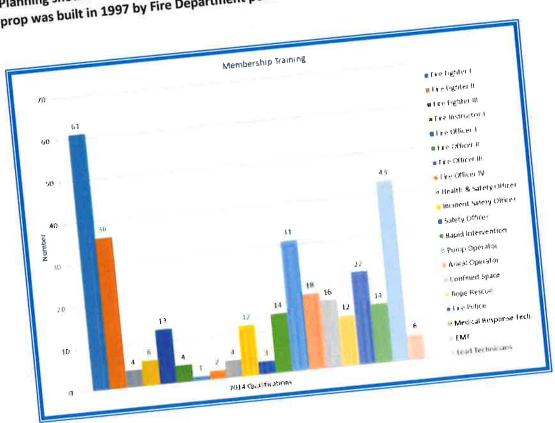




Figure 17 Department Qualifications

Fire and other Emergency Responses 2014

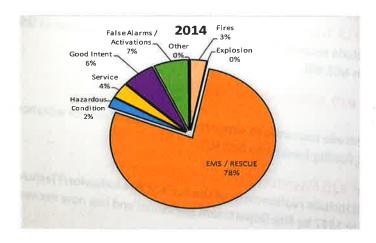


Figure 18 2014 Type of Calls

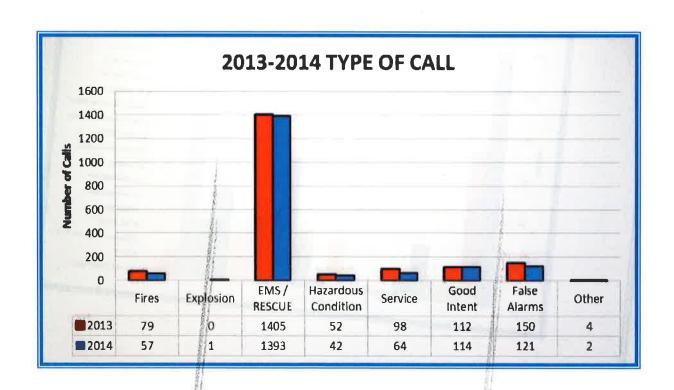


Figure 19 Type of Incident by Year



60

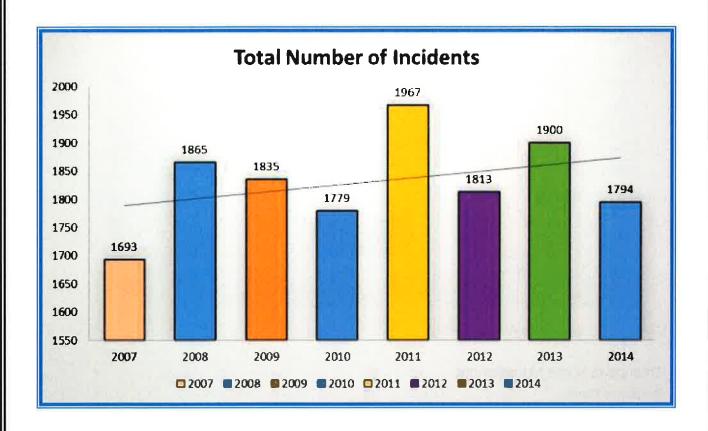


Figure 20 Total Number of Incidents

Consecutive Alarms: In addition to the alarms depicted above, often there are consecutive alarms at the same time or before the initial calls have been put under control. These instances compete for existing resources and commonly require mutual aid assistance. In 2014, there were three hundred and twenty nine (329) or eighteen point three percent (18.3%) of the calls competing for responders. So far in 2015, there have been two hundred and twenty seven (227) overlapping calls of the thirteen hundred and fifty six (1356) responses totaling sixteen point seven percent (16.7%).



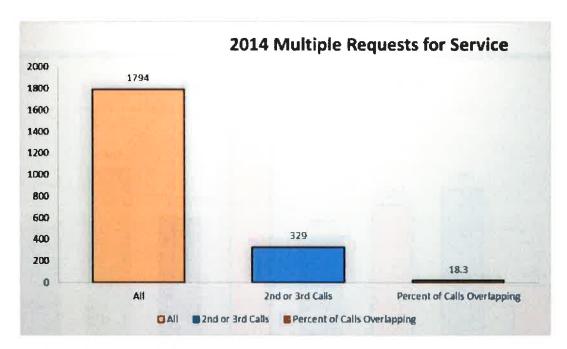


Figure 21 Multiple Requests for Service

Emergency Scene Management Response Times

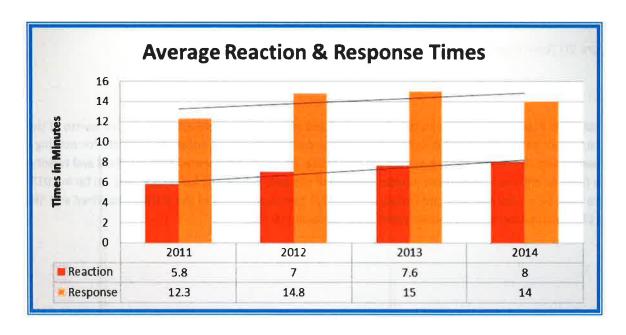


Figure 22 Average Reaction and Response Times



Communications

911 Service

Recent changes have taken place regarding the handling of calls for assistance and emergency communications. For many years, the region was served by the *Colchester Communications Center, Station KX. In March of 2016*, the 911 service and Emergency Communications was reassigned to the *Quinibaug Valley Communications Center*, Station QV

Equipment and Buildings

Fire Stations

Station 1





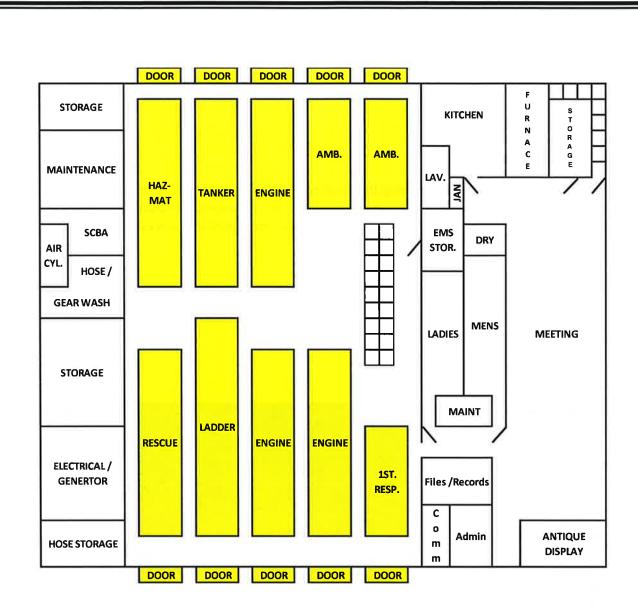


Figure 23 Station 1 Ground Floor



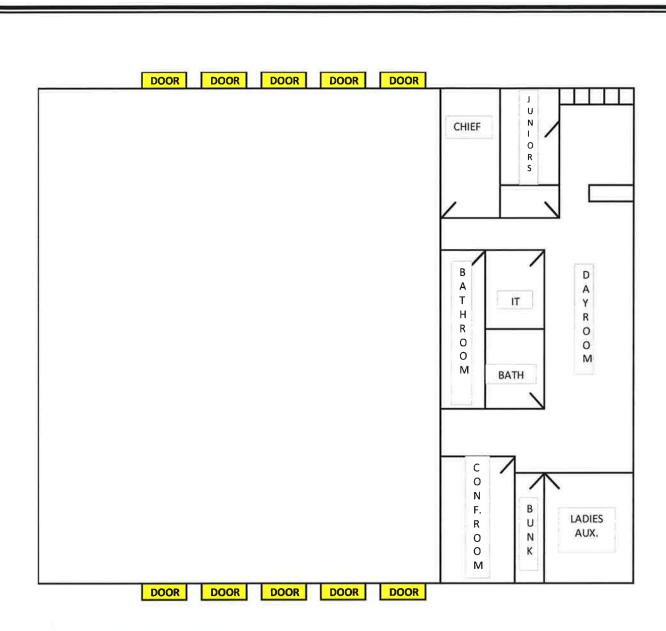


Figure 24 Station 1 Second Floor





Station 1 Apparatus Floor



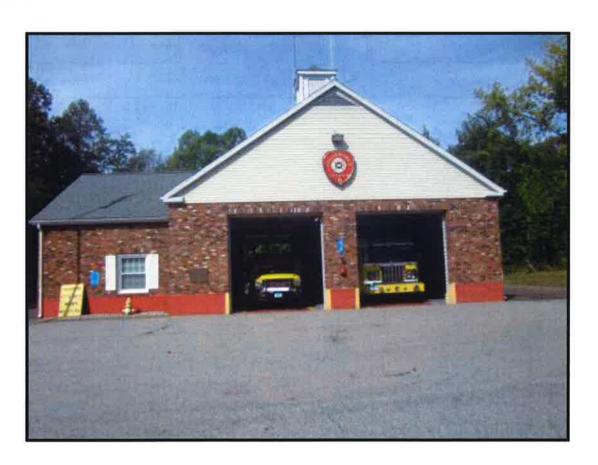
Station 1 Turnout Gear Room





Station 1 Chief's Office

Station 2





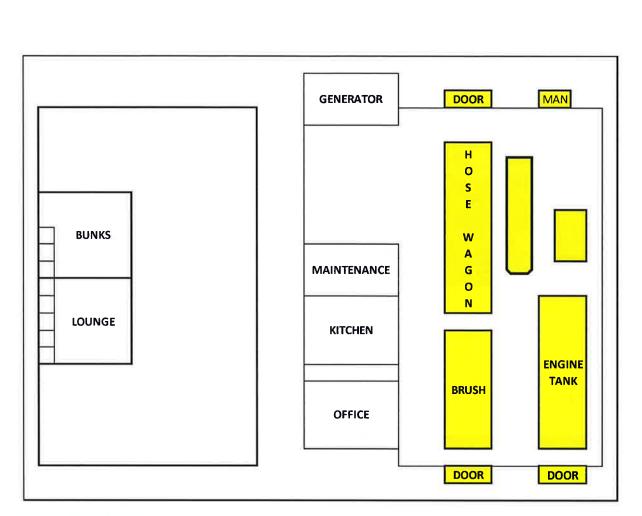


Figure 25 Station 2





Station 2 Tight Quarters



Station 2 Limited Space Rear Door





Station 2 Radio Room



Station 2 Space Limitations

Equipment Maintenance

Units are maintained by specific companies relative to the needs of the Department.

Buildings

Present: The present stations are in need of repair and are at capacity relative to space.

The most serious issue is the Black Mold at the Headquarters Station. This issue should be addressed as soon as possible. This can be a common issue in Fire Stations. Often the introduction of water into



hidden spaces causes the issue. Black Mold can have serious health consequences. It is our understanding that research has begun on a remediation plan to remove the mold.

The Headquarters Station, a metal building, has passed its design performance specifications. As a result, it needs a great deal of maintenance and repairs. These issues will continue to deteriorate until they are repaired.

Recommendation #22 Building Repairs should be undertaken for the Station 1 including remediation of the Black Mold.

The Westchester Station is in good shape but is packed to capacity. In addition, while the station provides a critical need protecting the outlying territory to the west, its response times to the center of the community are extended.

Ultimately, the stations are at capacity relative to the equipment needed to provide the necessary services.

A New Satellite Station has been proposed for the eastern portion of the Town. A parcel located at 132 New London Rd. has been set aside for possible future development as a Fire Station. The construction of the station could alleviate several issues regarding service delivery. Units assigned to this station would reduce response times for calls on the eastern part of town including Routes 2, 85 and 354. The response times for supporting Colchester apparatus would be shorter from the 132 New London Road site than the existing Station #2. Needed space is a critical issue which is hindering the Fire Department's ability to fulfill its various roles. The addition of office, storage and staff space would dramatically assist in this issue.

Recommendation #23 Construct a Satellite Station on the 132 New London Rd. Property.

We have determined response times for various Target Hazards, both from Life Safety and Hazardous Activities perspectives, from all three sites. Please see Tables below for Response Time comparisons

The First table deals with occupancies that present some form of risk from the activities or materials used at the location.

Station Locations and Response Times to High Risk Target Hazards



Company	Location	Hazards	Distance From CHFD HQ (Miles)	Travel Time (Min.)	Distance from CHFD Co#2 (Miles)	Travel Time (Min.)	Distance from 132 NL Road (Miles)	Travel Time (Min.)
AMERIGAS	275 SOUTH MAIN ST	Large Quantity Storage And Product Transfer	1	3	5.7	9	<u>.9</u>	3
AUTO REPAIR SHOP	29 MILL HILL RD	Automotiv e Fuels, Oils	1.2	2	5.5	6	3.9	6
BROWING & LEE HARDWARE	127 OLD HARTFORD RD	Multiple Hazards	.1	1	6	7	2	6
BUSTERS	532 NEW LONDON RD		4.4	8	8.8	11	<mark>2.6</mark>	3
CBC MOTORCYCLES	304 NEW LONDON RD	Automotiv e Fuels, Oils, Etc	2.9	6	7.2	9	.1	1
COLCHESTER FLEET GARAGE	300 OLD HARTFORD RD	Fuels, Oils Etc	2.9	6	5.7	7	2.3	8
COLCHESTER MILL FABRICS	120 LEBANON AVE	Fuel Load	.7	2	5.6	9	1.6	6
COLCHESTER WOODWORKING	228 OLD HARTFORD RD	Multiple Hazards	.3	1	5.8	6	<mark>2.6</mark>	6
DESMONDS AUTO SALES	373 LEBANON AVE	Multiple Hazards	1.8	4	6.7	10	2.7	7
EGG FARM Bldg A, B, C	200-A, B, C SHAILOR HILL RD	Multiple Hazards	6.1	10	2.5	6	7.9	11
FISH AND GAME CLUB	16 OLD TOWN RD	Ammunitio n	1.4	4	6.8	11	3.6	7
GANOS	120 LINWOOD AVE	Multiple Hazards	1.2	3	5	6	1.9	3



Company	Location	Hazards	Distance From CHFD HQ (Miles)	Travel Time (Min.)	Distance from CHFD Co#2 (Miles)	Travel Time (Min.)	Distance from 132 NL Road (Miles)	Travel Time (Min.)
			Ж					
HILL TOP MARINE	119 LOOMIS RD	Multiple Hazards	5.3	8	.7	2	6	8
HOPE HARDWARE	212 OLD HARTFORD RD	Multiple Hazards	.3	1	5.8	6	2.2	7
JACKS CHEVROLET	128 SOUTH MAIN ST	Multiple Hazards	.7	3	5.4	8	1.1	4
JOHNS OIL AND LUBE	240 OLD HARTFORD RD	Multiple Hazards	.4	1	5.8	6	2.9	6
M&J AUTO RECYCLING	355 NEW LONDON RD	Multiple Hazards	3.2	7	7.5	9	1.3	2
MACKEYS INC	132 LINWOOD AVE	Multiple Hazards	1.1	3	5	7	1.8	3
MARKS UNITED AUTO	95 SOUTH MAIN ST	Multiple Hazards	.7	2	5.4	9	1.2	4
MORE THAN STOVES	111 PARUM RD	Multiple Hazards	1.6	5	6.6	10	.5	1
NAPA AUTO PARTS	24 LINWOOD CEMETERY RD	Multiple Hazards	.9	3	4.8	6	1.6	3
NOELS PLAZA	15 BROADWAY	Multiple Hazards	.4	1	5.4	7	1.4	5
NOVA ELECTRONICS	16 DR FOOTE RD	Multiple Hazards	1.3	5	5.4	8	.9	4
NUTMEG	13 HOMONICK RD		4	9	8.4	11	2.1	3
SERVICE MASTER	32 NORWICH	Multiple	.7	3	5.4	8	1.3	4



Company	Location	Hazards	Distance From CHFD HQ (Miles)	Travel Time (Min.)	Distance from CHFD Co#2 (Miles)	Travel Time (Min.)	Distance from 132 NL Road (Miles)	Travel Time (Min.)
	AVE	Hazards						
T.I.C. MACHINE	627 OLD HARTFORD RD	Multiple Hazards	2.3	4	3.6	5	5.7	6
TOYOTA OF COLCHESTER	100 OLD HARTFORD RD	Multiple Hazards	.1	1	6	7	2	5
Traceys Toons/ Dagets Machine Shop	111 LEBANON AVE	Multiple Hazards	.7	2	5.6	8	2.4	4
Tri Towne Plaza A,B	119-A SOUTH MAIN ST	Multiple Hazards	.7	2	5.4	8	1.1	3

The Second table deals with occupancies that present some form of risk from a Life Safety perspective at the location

Station Locations and Response Times to High Life Target Hazards

Company	Location	Distance From CHFD HQ (Miles)	Travel Time (Min.)	Distance from CHFD Co#2 (Miles)	Travel Time (Min.)	Distance from 132 NL Road (Miles)	Travel Time (Min.)
APPLE REHAB	36 BROADWAY	.6	2	5.5	8	1.5	5
APPLE TREE DAY CARE	336 HALLS HILL RD	1.6	5	6.2	10	1.2	5
CARING COMMUNITY	84 WATERHOLE	7.3	12	2.8	5	8	12



Company	Location	Distance From CHFD HQ (Miles)	Travel Time (Min.)	Distance from CHFD Co#2 (Miles)	Travel Time (Min.)	Distance from 132 NL Road (Miles)	Travel Time (Min.)
	RD						
COLC. ELEMENTARY SCHOOL	315 HALLS HILL RD	1.6	5	6.6	10	1.2	5
COLCHESTER BIBLE BAPTIST CHURCH	34 CHESTNUT HILL RD	2.3	6	7	11	2.7	4
COLCHESTER FEDERATED CHURCH	60 MAIN ST	.6	2	5.3	7	1.3	4
COLCHESTER KIDS	224 NORWICH AVE	1.1	4	5.8	9	1.6	6
COLCHESTER SR CENTER	95 NORWICH AVE	.8	3	5.5	8	1.4	5
COLCHESTER YOUTH CENTER	40 NORWICH AVE	<u>*</u> 7	3	5.4	8	1.3	5
CRAGIN MEMORIAL LIBRARY	48 UPTON RD	.4	1	5.9	8	2.2	8
DAY HALL	80 MAIN ST	.6	2	5.4	7	1.2	3
FIRST STEP DAY CARE	67 HAYWARD AVE	.6	2	5.5	8	1.	5
GROUP HOME	53 MILLER RD	1.5	3	5.1	7	3.1	8
GROUP HOME MIDDLETOWN RD	255 MIDDLETOWN RD	1.8	4	4	5	2.4	3
JACK JACKTER INTERMEDIATE SCHOOL	215 HALLS HILL RD	1.6	5	6.3	10	1.2	4
JEHOVAHS WITNESSES	297 WESTCHESTE R RD	5	7	.9	1	6.8	7



Company	Location	Distance From CHFD HQ (Miles)	Travel Time (Min.)	Distance from CHFD Co#2 (Miles)	Travel Time (Min.)	Distance from 132 NL Road (Miles)	Travel Time (Min.)
JOSEPH LANE GROUP HOME	11 JOSEPH LN	4.6	9	9.3	15	4.8	8
OLD BACON ACADEMY	88 MAIN ST	.6	2	5.4	7	1.2	3
POLISH CLUB	395 SOUTH MAIN ST	1.2	5	6.3	8	<mark>.6</mark>	1
PONEMAH VILLAGE	283 WESTCHESTE R RD	4.9	6	1	1	6.7	7
ST ANDREWS ROAMAN CATHOLIC CHURCH	124 NORWICH AVE	1.3	4	6	10	1.2	5
ST MARYS UKRANIAN CATHOLIC CHURCH	180 LINWOOD AVE	1.1	3	4.9	6	1.8	3
THE CARING COMMUNITY	62 RESERVOIR RD	8	14	13	18	7.1	11
WM JOHNSTON MIDDLE SCHOOL	360 NORWICH AVE	1.3	4	6	9	1.8	5

Water for Fire Protection

The community is protected by a water system with fire hydrants in the Business district and static water sources throughout the community. Extensive training and planning have taken place to utilize the static sources and tankers to provide adequate fire fighting water.

Medical Clearance

All interior Fire Fighters and personnel who are over 45 must have an up-to-date physical on file. The members are given the choice of going to their personal physician or a designated medical office in town.



Recommendations

Recommendation #1 Investigate becoming an Advanced Life Support (R5)
Service

Recommendation #2 The Fire Marshal should report to the Fire Chief rather than the Building Official.

Recommendation# 3 Additional time should be added to the Fire Marshal's hours

Recommendation #4 Document Numbering

Recommendation #5 Standardization of Documents

Recommendation #6 Written Documents and Organization

Recommendation #7 CIP for Apparatus

Recommendation #8 The Part-Time personnel be returned to Saturday and Sundays to ensure the ability to respond to EMS and Fire Calls.

Recommendation #9 Additional Funding Alternatives should be considered to support the active personnel

Recommendation # 10 Human Resources Clarification

Recommendation #11 Organizational Safety Policy

Recommendation #12 In House Training Program

Recommendation 13 Officer Educational Support

Recommendation #14 Chief Officer Support



Recommendation #15 Advanced Formal Education

Recommendation #16 Subject Matter Expert Training

Recommendation #17 Fire Act Grants

Recommendation #18 Training Facility Maintenance

Recommendation #19 Additional Training Props

Recommendation #20 Flashover Module Replacement

Recommendation #21 Enhance Level of Pre-Hospital Care

Recommendation #22 Building Repairs should be undertaken for Station 1 including remediation of the Black Mold.

Recommendation #23 Construct a Satellite Station on the 132 New London Rd. Property.



Attachment #1

NFPA Standards

Complied with or used Yes / No	NFPA STANDARDS			
	HIGH FREQUENCY			
YES	NFPA 471 Recommended practices for responding to hazardous materials incidents.			
YES	NFPA 472 Standard for competence of responders to hazardous materials and weapons of mass destruction incidents.			
YES	NFPA 473 Standard for competencies for EMS personnel responding to has mater and weapons of mass destruction incidents.			
YES	NFPA 101 Life safety code.			
YES	NFPA 1000 Standard for fire service professional qualifications accreditation and certification systems.			
YES	NFPA 1001 Standard for firefighter professional qualifications.			
YES	NFPA 1002 Standard for apparatus operator professional qualifications.			
YES	NFPA 1006 Standard for technical rescuer professional qualifications.			
YES	NFPA 1021 Standard for fire officer professional qualifications.			
YES	NFPA 1026 Standard for incident management personnel qualifications.			
YES	NFPA 1035 Standard for professional qualifications for fire and lay safety educator.			
YES	NFPA 1041 Standard for fire instructor professional qualification.			
YES	NFPA 1250 Recommended practices in fire and emergency service organization risk management,			
YES	NFPA 1401 Recommended practice for fire service training reports and records.			
YES	NFPA 1403 Standard on live fire training evolutions.			
YES	NFPA 1404 Standard for fire service respiratory protection training.			
YES	NFPA 1410 Standard on training for initial emergency scene operations.			
YES	NFPA 1500 Standard on fire Department occupational safety and health program.			
YES	NFPA 1521 Standard for fire Department safety officer.			
YES	NFPA 1561 Standard on emergency service incident management system.			
YES	NFPA 1581 Standard on fire Department infection control program.			
YES	NFPA 1582 Standard on comprehensive occupational medical program for fire departments,			
YES	NFPA 1670 Standard on operations and training on technical search and rescue incidents.			
YES	NFPA 1851 Standard on the selection care and maintenance of protective ensembles for structural firefighting.			
YES	NFPA 1852 Standard on selection care and maintenance of open circuit self- contained breathing apparatus.			
YES	NFPA 1901 Standard for automatic fire apparatus.			
YES	NFPA 1914 Standard for testing fire Department aerial devices.			
YES	NFPA 1915 Standard for fire apparatus preventive maintenance program.			
YES	NFPA 1932 Standard on use maintenance and service testing of in-service fire Department ground ladders.			



YES	NFPA 1962 Standard for the care, use, inspection, service testing, and replacement of fire hose, couplings, nozzles, and fire ,hose appliances.
YES	NFPA 1971 Standard on protective ensembles for structural firefighting and proximity firefighting,
YES	NFPA 1981 Standard on open circuit self-contained breathing apparatus for emergency services,
YES	NFPA 1982 Standard on personal alert safety systems,
	MEDIUM FREQUENCY
YES	NFPA 1 Fire Code.
YES	NFPA 10 Portable fire extinguishers
YES	NFPA 13 Standard for fire sprinklers.
YES	NFPA 14 Standard for installation of standpipe hose systems.
YES	NFPA 450 Guide for emergency medical services and systems.
YES	NFPA 551 Guide for the evaluation of fire risk assessments.
YES	NFPA 1031 Standard for professional qualifications for fired inspector or plan examiner.
YES	NFPA 1033 Standard for professional qualifications for fire investigator.
NO	NFPA 1600: Standard on Disaster/Emergency Management and Business Continuity Programs,
YES	NFPA 1936 Standard on power rescue tools.
YES	NFPA 1951 Standard on protective ensembles for technical rescue incidents,
	LOW FREQUENCY
FM	NFPA 30 Flammable and combustible liquid code
FM	NFPA 30 A code for moral fuel dispensing.
FM	NFPA 31 Standard for the installation of oil burning equipment.
FM	NFPA 54 National fuel gas code.
FM	NFPA 55 Compressed gas in cryogenic fuel
FM	NFPA 58 Liquid petroleum gas code.
FM	NFPA 70 National electrical code
FM	NFPA 72 National fire alarm and signaling code



Attachment #2 SOP Format Example

COLCHESTER FIRE DEPARTMENT SAMPLE STANDARD OPERATING PROCEDURE

100.1 STANDARD OPERATING PROCEDURE / SAMPLE

100.1.1 PURPOSE

This procedure is established to:

Standardize the process for establishing new and/or modifying existing standard operating procedures.

Provide a standard format for all standard operating procedures.

Provide a process to incorporate existing orders, notices and memorandum into a standard operating procedure format.

Provide a standardized format of reference for all Fire Officers to utilize when delivering in-house training sessions, conducting drills and responding to emergency and non-emergency incidents or performing the numerous functions of the Fire Department.

Address the legal and regulatory requirements affecting the Colchester Fire Department.

Establish minimum standards of performance for individual Firefighters and Officers of the Colchester Fire Department.

Provide a mechanism to distribute and implement new and/or revised procedures.

100.1.2 SCOPE

The Colchester Fire Department currently utilizes a number of formats to issue orders, policy and procedure and other documents. Those various formats will either remain or be incorporated into new or revised Standard Operating Procedure format.



All existing orders, policy, procedure, memorandum etc. remain in full force and effect unless specifically superseded by a new or revised Standard Operating Procedure.

100.1.3 PROCESS

The process for establishing Standard Operating Procedures will:

Begin with an idea or concept submitted to a supervisor.

The idea or concept will be submitted to the Chief who will discuss the proposal with the Deputy Chief.

The Chief or Deputy Chief will assign a lead Officer to establish a draft procedure.

The Chief, Deputy Chief and assigned Officer will finalize the draft into a Standard Operating Procedure and establish an implementation date.

All members will be trained on the new Standard Operating Procedure.

After training, the procedure will be instituted and followed, beginning on the implementation date.

A hard copy will be issued for the Town of Colchester Fire Department Policy and Procedure Manual maintained by the Chief. All members will have internet access to SOP documents

All Colchester Fire Department Standard Operating procedures shall be authorized and implemented by the Fire Chief or Deputy Fire Chief.

All Colchester Fire Department Standard Operating Procedures shall have an implementation date. The implementation date will usually be some time after the actual issue date.

Colchester Fire Department Standard Operating Procedures shall be identified under the general series numbers and subjects as follows:

100 series - Administrative

200 series - Personnel Safety

300 series – Fire Prevention

400 series - Training

500 series – Operations

600 series - Reserved



700 series – EMS/Ambulance

800 series - Reserved

900 series - Dispatch/Communications

1000 series - Data Management



Attachment #3

Apparatus Inventory

E.T. 128 ATTACK ENGINE 2000 HME/CENTRAL STATES

DETROIT SERIES 60 12.7L (500HP) & ALLISON HD-4060 HALE QMAX 2,000 GPM PUMP 1,000 GALLON TANK

HALE FOAM MASTER A/B 60 GALLON FOAM SYSTEM

150' 1-3/4" with variable stream nozzle 1-3/4" with variable stream nozzle 150' 1-3/4" with smooth bore nozzle 15/16" 2-1/2" with variable stream nozzle 200' 200' 2" with variable stream nozzle 250' 2" with smooth bore nozzle 1-1/8" 300' 3" stinger 200'

300' Dead lay with a gated Y for yard lay 1,500" 5" LDH supply hose

9 SCBA

10 Kw Generator diesel

PPV Fan

Electric smoke ejector

Medical response equipment -AED

E.T.228 ATTACK ENGINE 2010 SPARTAN / MARION

CAT 450 ALLISON 4000 EVS 2,000 GPM HALE HALE CAFS SYSTEM FOAM LOGIC 5.0 AXB 1,000-GALLON. WATER 30-GALLON A FOAM 30-GALLON B FOAM

1-3/4" with variable stream nozzle 1-3/4" with variable stream nozzle 150' 150° 1-3/4" with smooth bore nozzle 15/16" 200' 200' 2-1/2" with variable stream nozzle 2" with variable stream nozzle 2" with smooth bore nozzle 1-1/8" 250' 300' 3" stinger 200' 300' Dead lay with a gated Y for yard lay 1,500" 5" LDH supply hose

5 SCBA

Vent saw Rescue Saw

10 Kw Generator PTO PPV Fan Electric smoke ejector Light Tower

Medical response equipment –AED







E.T. 328 ATTACK ENGINE 1988 SIMON DUPLEX / YOUNG

DETROIT 8V92T / ALLISON HT740 1,750 GPM HALE PUMP 1,000 GALLON TANK 60 GALLON FOAM TANK 95 Gpm inline inductor

150' 1-3/4" with variable stream nozzle
150' 1-3/4" with variable stream nozzle
200' 1-3/4" with smooth bore nozzle 15/16"
200' 2-1/2" with smooth bore nozzle 1-3/8"
250' 2" with variable stream nozzle
300' 2" with smooth bore nozzle 1-1/8"
200' 3" stinger
300' Dead lay with a gated Y for yard lay
800" 5" LDH supply hose

10 Kw Generator PTO PPV Fan 5 SCBA Medical response equipment

E.T. 428 (reserve) ATTACK ENGINE 1982 AMERICAN LAFRANCE, CENTURY

DETROIT 8V71 / ALLISON HT 740 1,250 GPM PUMP 1,000 GAL TANK

150' 1-3/4" with variable stream nozzle
200' 1-3/4" with smooth bore nozzle 15/16"
200' 2-1/2" with smooth bore nozzle 1-3/8"
250' 2" with variable stream nozzle
300' 2" with smooth bore nozzle 1-1/8"
200' 3" stinger
300' Dead lay with a gated Y for yard lay

1,500" 5" LDH supply hose

7.5 Kw Generator Gas Electric smoke ejector 3 SCBA









75' AERIAL TRUCK / QUINT 1996 SIMON DUPLEX

ENGINE DETROIT SERIES 60 TRANS, ALLISON HD4060P **SIMON LADDER AH-75**

1,500 GPM WATEROUS PUMP

500 GALLON TANK

600" 5" LDH supply hose 400"

3" supply hose
1-3/4" with variable stream nozzle
1-3/4" with smooth bore nozzle 15/16"
2-1/2" with variable stream nozzle 150' 200' 200'

5 SCBA

7.5 Kw generator Diesel

PPV Fan (2) Vent saws Electric smoke ejector (1) Rescue Saw

127' Ground Ladders

(1) 24' 2 fly

35' 2 fly 16" roof

(2) 14" roof (1) 10' Closet

12' Closet

TANKER 128 TANKER/TENDER 1992 KENWORTH T-800 / FOUR GUYS

DETROIT SERIES 60 / ALLISON HT740 MG750 HALE PUMP 10" NEWTON QUICK DUMP 1,800 GALLON. TANK 3,000 DROP TANK 45 Gallons Class "A" Foam Universal Knock Down 50 Gallons Class "B" Foam Universal Gold 1/3% 1-3/4" with variable stream nozzle 150'

(NOTE) upon receipt of new Tanker / Tender this unit to be refurbish-And Stationed at Company #2



H.T. 128 HOSE TENDER / PUMPER 1987 I.H.C. MODEL 1854 4X4

DT 466 ENGINE / MT643 TRANS 1,250 DARLEY PUMP / 500 GALLON TANK 2,100 FT 5" HOSE ON REEL

1-3/4" with variable stream nozzle 150' 1-3/4" with smooth bore nozzle 15/16" 200'

(NOTE) To be replaced with a new Tanker/Tender





RESCUE 128 HEAVY RESCUE 2014 SPARTON METRO STAR / MARION

CUMMINGS ISL9 450 hp / ALLISON EVS 3000

Command Post- VHF low 33/45 mhz VHF high UHF &700/800

Hydraulic rescue tools

Pneumatic rescue tools

Rescue struts

High Pressure Air bags

Cribbing

Rescue saws

Confined space rescue equipment

Low angle / high angle hardware and software

20 Kw generator PTO

Traffic control sign

8 SCBA

(1) Vent saws



Light Tower Medical equipment Electric confined space fan

(2) Rescue Saws

UTILITY 128 Hazardous Materials / Loss control 1999 FREIGHTLINER. MODEL 4700

DIESEL/ AUTO TRANS

10 Kw Generator

Booms & pads

Level "B" suits Tyvek Sarnext Tychem

8 Station decontamination, with pools and all support equipment

Leak kits

Over pack drums

Product transfer pumps

Brooms

Shovels

De-watering pumps and vacuums

Squeegees



SERVICE 128 2005 FORD F-350 4X4 R-1 / **FORESTRY**

250 GPM PUMP 150 GALLON TANK, Forestry tools Forestry hose bags

Chain saw

Medical response equipment -AED





SER.228 R-1 / Mini-pumper 2003 FORD F-550 4X4

250 GALLON TANK 450 GPM PUMP Forestry tools Forestry hose bags Chain saw Medical response equipment -AED 2 SCBA





Attachment #4
NFPA 1901
Chapter 3 Definitions:

3.3.109 Retired Fire Apparatus. A vehicle that was previously a fire apparatus but which, due to age or condition, is no longer capable of supporting the suppression of fires, the mitigation of hazardous situations, or operations at an emergency scene.

Chapter 5 Retirement of Fire Apparatus, 5.1* General. 5.1.1 The fire department shall consider safety as the primary concern in the retirement of apparatus. 5.1.2 Retired fire apparatus shall not be used for emergency operations.

Annex D Guidelines for First-Line and Reserve Fire Apparatus. This annex is not a part of the requirements of this NFPA document but is included for informational purposes only.

These recommendation, however, are often used to assist jurisdictions in making difficult decisions.

..... It is recommended that apparatus manufactured prior to 1991 that is less than 25 years old, that has been properly maintained, and that is still in serviceable condition should be placed in reserve status and upgraded to incorporate as many features as possible of the post-1991 fire apparatus (see Section D.3). Apparatus that was not manufactured to the applicable NFPA fire apparatus standards or that is over 25 years old should be replaced.

D.5 Refurbishing or Replacing Fire Apparatus. Fire department administrators and fire chiefs should exercise special care when evaluating the cost of refurbishing or updating an apparatus versus the cost of a new fire apparatus. Apparatus that are refurbished should comply with the requirements of NFPA 1912. A thorough cost-benefit analysis of the value of upgrading or refurbishing a fire apparatus should be conducted. In many instances, it will be found that refurbishing costs will greatly exceed the current value of similar apparatus. Experience has also shown that refurbishing a fire apparatus that is over 20 years old, other than to paint or repair the apparatus, is a very poor investment.

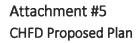
Some factors to consider and evaluate when considering whether to refurbish or replace a fire apparatus include the following: (1) What is the true condition of the existing apparatus? Has it been in a major accident, or has something else happened to it that would make spending significant money on it ill advised? (2) Does the current apparatus meet the program needs of the area it is serving? Is it designed for the way the fire department operates today and is expected to operate into the foreseeable future, or is the apparatus functionally obsolete? Can it carry everything that is needed to do the job without being overloaded? (3) If the apparatus is refurbished, will it provide the level of safety and operational capability of a new fire apparatus? Remember, in many cases, refurbishing does not mean increasing the GVWR, so it is not possible to add a larger water tank or additional foam agent tanks or to carry massive amounts of additional equipment. Enclosing personnel riding areas might add enough weight to the chassis that existing equipment loads need to be reduced to avoid overloading the chassis. An aerial ladder that does not have a 250 lb (114 kg) tip load rating at zero degrees elevation

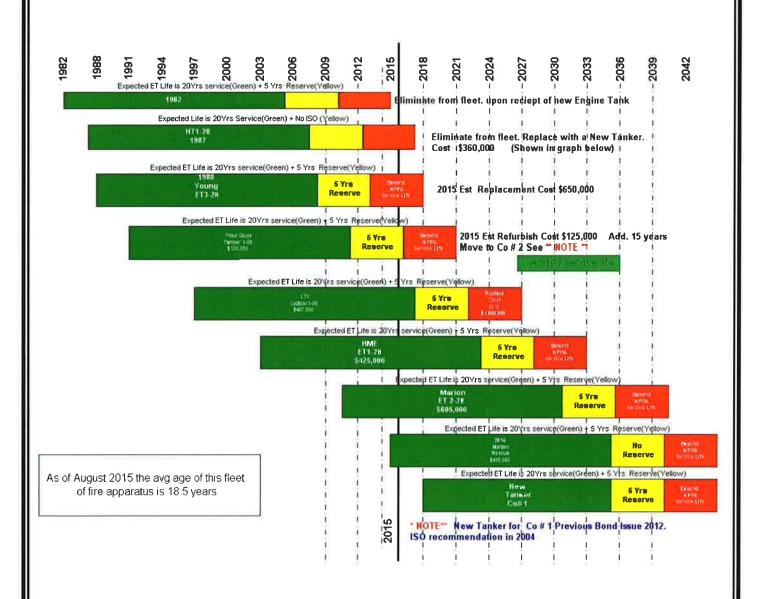


and maximum extension cannot be made stronger. (4) What is the anticipated cost per year to operate the apparatus if it were refurbished, and what would the cost per year be for a new apparatus? Do not forget insurance costs, downtime costs, maintenance costs, depreciation, reliability, and the safety of the users and the public. At what rate are those costs rising each year? Are parts still readily available for all the components on the apparatus? A refurbished 15-year-old apparatus still has 15-year-old parts in it. How long could the fire department operate without the apparatus if it suddenly needed major repairs? (5) Is there a current trade-in value that will be gone tomorrow? Most apparatus over 12 years old have little trade-in value. Are there creative financing plans or leasing options that can provide a new fire apparatus for little more than the cost of refurbishing or maintaining an older apparatus?

D.6 Conclusion. A fire apparatus is an emergency vehicle that must be relied on to transport fire fighters safely to and from an incident and to operate reliably and properly to support the mission of the fire department. A piece of fire apparatus that breaks down at any time during an emergency operation not only compromises the success of the operation but might jeopardize the safety of the fire fighters relying on that apparatus to support their role in the operation. An old, worn out, or poorly maintained fire apparatus has no role in providing emergency services to a community.









Attachment #6

SWOT Analysis

To assist in this process, a series of **S**trengths, **W**eaknesses, **O**pportunities and **T**hreats (SWOT) analysis meetings. The results reflected a wide range of typical emergency services issues. It should be noted the results of the SWOT were gleaned from a small cross section of the Department.

STRENGTHS

Membership

Diversity

Three Divisions: Fire, EMS, Fire Police

Training

Activity (fundraisers, etc)

Associate members

Ladies auxiliary

Cadets

Standards

Training

Qualifications for positions

Knowledge base

Longevity / experience

Training facility & opportunities

History / tradition

Reliability of service

Apparatus (?)

Equipment (?) & tools

Community (public) support

Public relations

Officers (company & department) & chiefs

Volunteerism / dedication

Career staff (maintenance & training)

WEAKNESSES

Funding \$\$\$

Apparatus aging & replacement plan

Equipment also aging: stretchers (not auto load)

Facilities / building need renovation (black mold & age)

Communications:

People-to-people

Radios / telecoms

Dead spots in coverage

Emergency response communications

Knowledge not always utilized for decisions

Lack research

More research needed on program

Notification processes (email/pagers/phones) not universal in department/company

(options also beneficial)



Proportion of fire to ems calls is 10/1

Participation percentage lacking

Need improved mentoring

Delineate or define/outline qualification paths

Need more training & interaction with career staff

"Daytime" environment:

Canceled enroute

Attitude is negative between career staff & volunteers

Participation / team issues

Union rule regarding career staff & volunteer training

Career staff not required to train in manner similar to volunteers; paid staff often in

"yellow" status

Lack of communications between chiefs and volunteers

Officers not knowledgeable about strengths of members

Lack pride of ownership (career & some volunteers)

Example: apparatus not topped off (>3/4 full) or clean

Run sheets not completed

Need consistency

Lack accountability for miles

Well-trained members leave for bigger departments

Paid staff daily routine?

Future succession plan lacking

FLSA impacts

Standardize structure to hire per diem members

Computers: need person to do day-to-day and maintenance/upgrades

Officer training/development plan/program needed

Who has potential?

Lack support for upward mobility/promotion; "heard" or "squashed"?

Chain of command bypassed

Some officers have gaps in training/background

Lack of a strategic plan for department (!)

Membership indifference/apathy

Lack of contract between company and town



OPPORTUNITIES

Clarify ems stipend status

Can leverage planning efforts

Refresh contract between company and town

Training enhancements:

Officers

Succession

Mentoring

New members

Establish consistency

Justification for more funding \$\$\$

Improve public relations and understanding of mission & performance

Showcase what company/department does for community/public

Increase points of contact

Improve relationship / team building between career staff and volunteers

Achieve apparatus plan

Increase amount & quality of communications with officers/chiefs

Develop succession planning

Improve outreach to members who need assistance with personal issues to improve retention

Increase/enhance mutual air relationships

Continue to enhance relationship between fire/ems/fire police

Improve standardization across department/company

Advocate for ems

THREATS

Contracted ems services – divisive to department / company "team" – loss of \$\$\$ – loss of paid staff

Changing political climate

Declining number who respond

Financial trends/changes

Loss of dispatch center (KX Comms) - plus or minus?

Retirements and/or aging and experience levels

Vulnerability of new dispatch infrastructure

Lack of completed process

Failure (or lack of commitment) to fully inform town governance of process/status/issues



Attachment 7 NFPA 1201 Study Worksheet used for research.

Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
General Notes From Interviews		Colchester Fire Department
		Basis for information is
Strategic Planning		applicability to Strategic Plan
		Process.
NFPA 1201 Standard for developing Fire		NFPA 1201, 2000 & 2004 Editions
Protection Services for the public		OSHA 1910.156, 1910.134
Chapter 1 General 1-1 * Scope		
Resolution or Legislation Creating Department		
A-1-1		
Public fire protection services include, but are not limited to, fire suppression, fire prevention, fire investigations, public fire safety education, disaster management, rescue, emergency medical services, hazardous materials response, and response to other emergencies as needed.	YES	CHFD provides these services at some level.
This standard is intended for the use and guidance of those charged with providing fire protection (safety) services to protect lives, property, and the environment from the effects of fire and, in many cases, other perils.	YES	Direction
Clear Direction of Service	YES	Forward from Chief's Document
Customer Focus	YES	Forward from Chief's Document
1-3* Introduction.		
This standard discusses public fire departments that serve a defined area and are generally under the auspices of a local government authority.		



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
Government Authority?	YES	Contract between CHVFD and Town recognizing CHVFC as Fire Authority
1-4 Relationship to Other Standards.		
The requirements of other NFPA standards that contain mandatory provisions related to the operation of a fire department and the delivery of fire protection shall be met. (In Appendix)		
1-5* Concept of Risk.	YES	7.4 Safety/Health/Risk Management. An ESO that provides fire suppression, emergency medical services, hazardous materials response, or special operations shall develop an implementation plan to comply with all federal, state or provincial, and local applicable laws, codes, regulations, or standards and NFPA 1500, Standard on Fire Department Occupational Safety and
347		Health Program.
The level of service provided and the degree of	YES	Risks Identified: 269 Hazards, includes Life Hazards
risk accepted by the jurisdiction shall be subject to local determination.		and Hazardous Substances.
The department shall maintain a periodically UPDATED COMMUNITY FIRE RISK analysis to identify the size and scope of the potential fire problem in order to determine the necessary number and deployment of fire companies	YES	Copied to Document
1-6* Fire Protection Alternatives.		
Where possible, fire departments shall periodically evaluate and redefine fire protection needs for their jurisdiction through the strategic (master) planning process.		Alternatives:
Chapter 2 Purpose of a Fire Department		
2-1 Purpose.	YES	4.3.5* The ESO shall provide customer service— oriented programs and procedures to accomplish the



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
		following:
		(1) Save lives
		(2) Prevent or mitigate fires, injuries, and emergencies
		(3) Work through a system of emergency management
		(4) Extinguish fire
		(5) Minimize damage to property and the environment
		(6) Protect critical infrastructure
		(7) Perform emergency medical services
		(8) Protect the community from other hazardous situations
		(9) Perform response to and mitigation of events of terrorism
		(10) Perform rescue services
		(11) Perform other community-related services
The fire department shall have programs, procedures, and organizations for preventing the outbreak of fires in the community and to minimize the danger to persons and damage to property caused by fires that do occur. The fire department also shall carry out other compatible emergency services as mandated.	YES	Colchester offers a wide variety of services which are needed by the community.
2-2 Fire Prevention and Risk Reduction.		
2-2.1*		
Every fire department shall have a program under which its personnel regularly examine every part of the community where a significant fire problem might develop. Personnel shall inspect real property in the community with an emphasis on those occupancies identified by a risk schedule as subject to a high level of hazard to life and property.	YES	Fire Prevention Programs: 43 Years, Captain Roland (Captain Roland retired 6/3/2016) Full program in Chapter 13. Minimal Here. 3 Deputy Fire Marshals Programs: Fire Prevention Week, Summer



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
		Recreation Program, Senior Center Programs, 2 Classroom Visits.
		Community Risk Reduction Programs: Carbon Monoxide Programs, Driving Surveys, Street Signs
2-3 Fire Suppression.		
2-3.1 Table of Organization's Structure		See Below
The fire department shall be organized to effectively combat fires that occur within the area it serves. A department's commitment to provide nonemergency services activities shall not interfere with its ability to effectively combat fires when they occur.	YES	Insert - Tale of Organization Administrative Table of Organization Tactical
2-3.2		
The priority of goals in the suppression of fire shall be as follows: (a) Save lives (b) Limit the spread of the fire	YES	Basic Department Component Rules & Regs: Chfdhq.webhop.net/preplan
(c) Extinguish the fire(d) Minimize property damage from fire-related hazards.		
2-4 Rescue and Emergency Medical Services.		
2-4.1*		
Preservation of human life shall be the primary responsibility of the fire department during fires and other emergencies.	YES	See 2.3.2



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
Present Level of Service	YES	Public Education, Training Facility,
Future Levels of Service Delivery	YES	Technical Rescue Expansion, Confined Space, Low Angle Rescue
Financial Costs & Recovery	YES	Ambulance Billing – No 3 rd Party, Potential increase in funding but also has a cost.
2-5 Hazardous Materials.		
2-5.1* Present Responder Levels?		Will address later in Chapter 19
Future Levels of Service Delivery	YES	Operations Level ONLY, CERRIT is HM Team
Financial Costs & Recovery	YES	DEEP, Replacement of consumables
The fire department shall be prepared to carry out at least first responder level functions in the event of hazardous materials incidents in its jurisdiction. Occupational Safety and Health Administration (OSHA) regulations require that all fire departments be trained to handle hazardous materials incidents at the first responder level.		Strictly Operational
2-6 Disaster Planning.	YES	LEPC Monthly, 2 Table Tops Annually + DESPP
2-6.1* Disaster Plan Interaction / Responsibilities		
Comprehensive response plans shall be prepared in writing describing the fire department role and providing for management and coordination of all public and private services called into action in natural and technological (man-made) disasters.	YES	Separate Annex for the Fire Department, FD may not be able or available to support 100% of the plan. EOC in Basement of Middle School.
Future Levels of Service Delivery		
Financial Costs & Recovery		
Chapter 3 Governmental Responsibilities		
3-1 Local Government.		
3-1.2*		
The fire department shall maintain a close working relationship with the agencies responsible for law enforcement and water supply, among others, in order to operate in an	YES	Law Enforcement: CSP – Resident State Trooper System (SGT) Good Relationship. 12 Colchester Police Officers.



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
effective and cooperative manner.		Public Health: CUT Funding, now with Chatham
		Health Department.
		Public Works: Good support with water.
		Building Official / P&Z: OK
		Emergency Management: OK
		Planning Department: Cooperation has improved since the past.
Chapter 4 Strategic (Master) Planning		
4-1* Purpose.		
The fire department, in conjunction with the community administration, shall develop and implement a total concept strategic (master) plan for a community-wide balanced and cost-effective fire control strategy that takes existing conditions and anticipated overall community growth into consideration.		Reason for Project
8		
Vision Statement	YES	In Report
Mission Statement	YES	Mission Statement supports Vision Statement In Report
Goals and Objectives		2015
Core Values Statement	YES	In Report
BIG UGLY GOALS		Transition to ALS Service, Add Co#3



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
4-2 Research and Planning		
4-2.2		
The research and planning function shall		
encompass examination of any or all aspects of		
the fire department's activities, both generally		
and specifically. It shall be directed toward		
improving and maintaining the efficiency and		
effectiveness of the fire department and toward		
maintaining a responsive approach to the		
community's changing needs for service.		
SWOT X 2 (Full in Appendix)		PRIMARY ISSUES HERE
COMMUNITY		
STRENGTH		
WEAKNESS		
OPPORTUNITY		
THREATS		
DEPARTMENT	YES	
STRENGTH		APPENDIX #
WEAKNESS		
OPPORTUNITY		
THREATS		
Present Fire Department Activities		
Future Fire Department Activities		Paramedics
Future - Community's Increasing Needs		
4-3 Strategic Planning Process.		
4-3.1*		
The strategic planning process shall be designed		Review Commission on Aging Report
to evaluate the kind and level of fire risk in a		
community and to establish future objectives for		



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
minimizing or reducing that risk.		
Proposed / Expanding Risk	YES	Population Growing > 55 YO, Residential Housing, increase in foreclosed properties. Commercial Development Possible, FD limited part of Development Process since Tim York Passed. Commercial — Not a lot of Risk Reduction, Route for Fire Response
Risk Mitigation		
Risk Reduction		
Risk- Pre-Performance Enhancements		
4-3.2*		
The strategic planning process shall attempt to project the future fire protection needs of a community for periods of 10 and 20 years.		Purpose for Project
Proposed Community Development		Not a great Deal of Participation –
Population Increases or Declines		Consistent increase in population
Chapter 5 Organizational Structure of the Fire Department		
5-1 Purpose.		Full
The fire department shall have an organizational structure that facilitates efficient and effective management of its resources to carry out its mandate as required in Chapters 2 and 3. Concerns	YES	The "Hayward Volunteer Fire Company" was formed in 1854. It has since transitioned into the Colchester Hayward Volunteer Fire Department. A standalone entity. They receive NO funds from the Town of Colchester. ALL of their funding is raised by the members and through donations In addition, the Town has created a Career Force known as the Town of Colchester Fire and EMS. There is a Contract between the Town and Hayward Fire Company signed in 1975. Company Participation, i.e. Fund Raising, Company Support with Activities. Need to tie into Emergency
		Response.
5-4 Fire Department Organizational Plans.		



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
5-4.1*		
The fire department shall have an organizational plan that illustrates the relationship of the individual operating divisions to the entire	YES	Table of Organization DONE
organization.		Great Relationship between the Administration and Command
		1910.156(b)(1)
Organizational Statement (OSHA) ?? Need to Separate Vol. Co. with Department for Issues		Organizational statement. The employer shall prepare and maintain a statement or written policy which establishes the existence of a fire brigade; the basic organizational structure; the type, amount, and frequency of training to be provided to fire brigade members; the expected number of members in the fire brigade; and the functions that the fire brigade is to perform at the workplace. The organizational statement shall be available for inspection by the Assistant Secretary and by employees or their designated representatives.
5-5 Operating Units.		
5-5.1*		UNIT IDENTIFICATIONS / FUTURE REQUIREMENTS
Present Needs, Limitations & Shortfalls: Engine Tank 228, Engine Tank 328	YES	Research moved to Report
Engine Tank 128		
Tanker 128		
Hose Tender 128		
Brush Truck 228		
Future:	YES	Research moved to Report



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
Engine Tank 228,		
Engine Tank 328		
Engine Tank 128		
Tanker 128		
Hose Tender 128		
Brush Truck 228		
5-5.2*		
Present Needs, Limitations & Shortfalls Ladder Companies.	YES	Research moved to Report
Future: Ladder Companies.		Research moved to Report
5-5.3*		
Present Needs, Limitations & Shortfalls Rescue	YES	Research moved to Report
Companies		
Future: Rescue Companies		Research moved to Report
5-5.4*		
Additions		
Present Needs:		
Boat	YES	Research moved to Report
Ambulance		
Ambulance		
Service 128		
Service 228		
Service 338		
Command 128		
Future Needs:		



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
Boat	1	Research moved to Report
Ambulance		
Ambulance		
Service 128		
Service 228		
Service 338		
Command 128		
5-6 Fire Suppression Force Staffing.	YES	5.6 vs Ch.9
5-6.1*		
The fire company or response group assigned to respond to a fire call shall be comprised of the numbers necessary for safe and effective fire-fighting performance relative to the expected fire-fighting conditions. These shall be determined through task analysis procedures. The conditions to be considered shall include:		The fire company or response group assigned to respond to a fire call shall be comprised of the numbers necessary for safe and effective fire-fighting performance relative to the expected fire-fighting conditions. These shall be determined through task analysis procedures. The conditions to be considered shall include:
(a) Life hazard to the populace protected		(a) Life hazard to the populace protected
(b) Provisions of safe and effective fire-fighting performance conditions for the fire fighters		(b) Provisions of safe and effective fire-fighting performance conditions for the fire fighters
(c) The potential property loss		(c) The potential property loss
(d) The nature, configuration, hazards, and internal protection of the properties involved		(d) The nature, configuration, hazards, and internal protection of the properties involved
(e) The types of fireground tactics employed as standard procedure, the type of apparatus used, and the results expected to be obtained at the fire scene		(e) The types of fireground tactics employed as standard procedure, the type of apparatus used, and the results expected to be obtained at the fire scene (f) Budgetary constraints.
(f) Budgetary constraints.		,



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
	YES	Fuel Compensation Program: 1 Point for at Station, 2 Points for at Scene.
Volunteer Support and Personnel Coverage		Two times a year (Jan & July). Response Funding divided by points earned.
		Paid EMS Shifts – 18 shifts \$50.00 / 6 Hours, From Home \$15.00/Call, < 6 Hours 15/15
5-8 Intercommunity Organization (Mutual Aid).		Mutual Aid – ? Future Changes
	YES	4.6.2* Mutual aid agreements shall address issues that include
		but are not limited to the following:
		(1) Indemnity
		(2) Liability for injuries
		(3) Reimbursement for cost of service
		(4) Authorization to respond
5-8.1		(5) Level of staffing
		(6) Types of equipment
		(7) Resources to be made available
		(8) Designation of the incident commander
		4.6.3 All personnel shall receive training to ensure compatible
		operations.
		4.6.4 Operational methods shall be as uniform as practical.
Where practical and as conditions require, the		
fire department shall have an effective mutual aid arrangement with neighboring jurisdictions.		
5.8.4		
Apparatus for responding to mutual aid incidents shall be equipped with radios that allow		
personnel to communicate with incident		
commanders and sector officers. Separate		
frequencies shall be provided that allow mutual		
aid companies to communicate without		
disruption of their local frequency. Chapter 6 Financial Management and Budgeting		



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
Funding History, Projections		
Capital Improvement Plan (CIP)	YES	Research moved to Report
Grants, Donations and other Funding?		
Chapter 7 Human Resources Management	?	Who handles
	YES	1910.156(c)(1)
		The employer shall provide training and education for all fire brigade members commensurate with those duties and functions that fire brigade members are expected to perform. Such training and education shall be provided to fire brigade members before they perform fire brigade emergency activities. Fire brigade leaders and training instructors shall be provided with training and education which is more comprehensive than that provided to the general membership of the fire brigade.
		1910.156(c)(2)
Chapter 8 Training		The employer shall assure that training and education is conducted frequently enough to assure that each member of the fire brigade is able to perform the member's assigned duties and functions satisfactorily and in a safe manner so as not to endanger fire brigade members or other employees. All fire brigade members shall be provided with training at least annually. In addition, fire brigade members who are expected to perform interior structural fire fighting shall be provided with an education session or training at least quarterly.



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
Present Day Requirements		
		Training Center
Expansion of Services, Need for		
Enhancement		
Chapter 9 Organization for Fire Suppression		Table of Organization
9-1 Purpose.		
Fire suppression operations shall be organized to	YES	
ensure adherence to an operational guideline		
that includes fire company procedures and		
staffing; officers; and duty requirements and	ĺ	
responses to fire and other emergencies that		
achieve effective, efficient, and safe execution of		
the fire department's mandate.		
9-3 Fire Company Procedures and Staffing.		EXISTING SOPS
9-3.1*		
Personnel designated to respond to fires and		Comparison of existing resources and potential
other emergencies shall be organized into		futures
company units or response teams and shall have		
appropriate apparatus and equipment assigned		
to such companies or teams.		
9-3.2* Present Day		
The fire department shall identify minimum		Research into Report
staffing requirements to ensure that a sufficient		
number of members to operate safely and		
effectively are available to respond with each		
company or response team.		
		Present Level of Service: The ability to put ten (10) to
		fifteen (15) trained and equipped personnel on
Present Staffing Needs		scene within an average of six (6) to twelve (12)
		minutes to initiate fire and rescue operations.
Future Staffing Needs		Future Levels of Service Delivery: The ability to put



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
		fifteen (15) to thirty (30) or more trained and equipped personnel on scene within an average of six (6) to twelve (12) minutes to initiate fire and rescue operations.
9-3.6		
Fire companies shall be responsible for identifying all target hazards or unusual properties in their districts and for developing pre-fire plans for use in the event a fire or other related emergency occurs at such a location.		
9-7 Response to Fires and Other Emergencies.	YES	Including Rescue and HAZ-MAT
9-7.1		RESPONSE SOPs
Standard response assignments and procedures, predetermined by the location and nature of the reported incident, shall regulate the dispatch of companies, response groups, and command officers to fires and other emergency incidents.		Extensive use of Mutual Aid and Pre-designated Run Cards
9-7.2		
The dispatcher shall be responsible for maintaining awareness of the location and status of all units and their availability to respond at all times and shall have some latitude in dispatching assignments within prescribed limits.		CAD in place
Future Expansion / Costs		
9-7.3*		
The number and type of units assigned to respond to a reported fire incident shall be determined by risk analysis and pre-fire planning based on specific location or neighborhood.		
Chapter 10 Emergency Scene Management		
10-1* Purpose.	YES	RESPONSE SOPs
An incident management system shall be provided to form the basic structure of all		



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
emergency operations of the fire department, regardless of the scale of the department or the emergency. An effective incident management system shall be designed to manage incidents of different types, including structure fires, wildland fires, hazardous materials incidents, emergency medical operations, and other types of emergencies that might be handled by the department.		
Chapter 11 Emergency Medical Systems	YES	*Community Medics*
11-1 Purpose.		
11-1.1		
Where the department provides or participates in emergency medical systems (EMS), the fire department shall provide appropriate resources, planning, and training that are consistent with the level of EMS service the community expects from the department.		
11-1.2*		
Where a fire department organization provides or participates in EMS, the provisions of this chapter shall apply.		
Based on Chapter 2 Service Changes	YES	Community Paramedicine
Training Changes		Train of hire Paramedics
11-2 Resources.		
11-2.1*		
The fire department shall analyze and report to the governing authority its resource needs and ability to provide the level of emergency medical service to which it is committed in addition to its	YES	Two Ambulances and 1 st responder vehicle adequate. Running Brush truck as R-1 will lower the life span of the brush truck,



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
fire-fighting and other responsibilities.		
Present Level of Resources Concerns		Concern with EMS coverage on weekends and on weekends.
Future Level of Resources		Minimum number of personnel assigned to EMS on weekends should be 2,
Funding / Support Changes		Increased payroll for Personnel
11-3 Planning.		
11-3.1*		
The fire department shall participate in community-wide planning to assure residents of the most effective available services at all times and at the levels to which it is committed. Planning Revisions	YES	Some reduction in participation in past year
11-4 Level of Service.		
11-4.1*		
Based on local needs, preferences, and resources, the community shall develop a policy statement that specifies the type of emergency medical service to be provided for the community and the role to be played by the fire department in delivery of that service.		Increase to Community Paramedicine
Chapter 13 Public Fire Safety Education		
13-1 Purpose.	YES	Community Engagement
The fire department shall carry out a public fire safety education program to achieve/develop a level of fire safety awareness and attitude that assists the fire department in the management and reduction of the fire risk in the community.		See 2.21
Chapter 14 Code Enforcement		
14-1 Purpose.		
14-1.1		
The fire department, subject to legal authority,		Stand Alone Fire Marshal. Good cooperation



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
shall establish policies and procedures for the		
enforcement of fire and life safety codes that		
enhance compliance with applicable fire safety		
legislation.		
Chapter 15 Fire Investigation		
15-1 Purpose.		
15-1.1		
The fire department, subject to legal authority,		Fires are investigated by local Fire Marshal. State
shall investigate all fires by gathering information		called as needed.
that assists in developing an effective fire		
prevention program, improving fire safety		
legislation, identifying public education		
programs, describing the community's fire		
problems, evaluating fire protection capability		
and assisting law enforcement.		
Community Risk Reduction		
Hazard Analysis		
Chapter 16 Communications	YES	911
16-1 Purpose.		
16-1.1		
The fire department shall have a reliable		Transition to new Center as a result of KX closing
communications system to facilitate prompt		
delivery of public fire services.		
16-1.2*		
A secure communications center shall be		YES
provided and staffed to receive requests for		
emergency assistance from the public, to	1	
dispatch that assistance, to coordinate		
communications with units providing emergency		
services, and to provide overall coordination and		
control of fire department operation		
communications.		



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
16-5 Radio Communications.		
16-5.1*	YES	
Radio transmitter/receivers shall be provided at headquarters and in emergency vehicles. Every chief officer and company officer shall be provided with a portable transmitter/receiver while assigned to emergency duty.		YES
16-5.2*		1470
The fire department shall have a selective alerting system by which it can summon designated on-call personnel, including volunteers and career staff, at any hour of the day or night.		YES
16-5.3*		
Sufficient radio frequencies shall be provided to accommodate the operational needs of the fire department or communications system, based on the amount of radio traffic that is anticipated and the need to communicate simultaneously with different individuals or groups.		YES
16-5.4		
Frequency allocations shall meet the requirements of the Federal Communications Commission in the United States or Transport Canada.		
Chapter 17 Equipment and Buildings	YES	REVIEW CIP
17-1 Purpose.		
17-1.1		
The fire department shall maintain an inventory of all equipment, buildings, and land owned, leased, utilized, or maintained by the fire department to assist in day-to-day operations and for future planning.		
17-1.2*		APPARATUS INVENTORIES



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
Rolling Stock		
Present		
Future		
The fire department shall maintain a current inventory of all apparatus, vehicles, and equipment owned, leased, utilized, or maintained by the department. This inventory shall include the current status of all assets of the department, project the remaining service life, and serve as a programming tool for future needs and procurement of requisite approvals for acquisitions.		Existing, used for CIP recommendations
17-2 Purchasing of Equipment.		
17-2.1*		
Specifications shall be prepared for the acquisition of all pieces of fire apparatus, vehicles, major equipment, and minor equipment as needed. Fire apparatus shall be acquired in accordance with the requirements of the appropriate NFPA 1900 series standards, which address such vehicles.		Added CIP Recommendations to report
17-3 Maintenance.		
17-4 Hose.		
17-4.1*		
A complete inventory of all fire hose, including purchase date, cost, and results of acceptance and annual service tests shall be maintained. To facilitate such record maintenance, each length of hose or each hose coupling shall be given a unique serial number for inventory purposes.		Hose tested annually
17-4.2		
The department shall adopt standards for the amount and size of hose carried on each piece of		



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
apparatus, depending on department operating		
practices, rated apparatus pump capacity, and its		
operational utilization in delivering fire flows.		
17-4.3		
Hose coupling and connection threads, including		
those on all master stream and other water		
delivery devices, shall be standardized		
throughout the department. Where threaded		
connection couplings are employed, coupling		
threads shall conform to the American National		
Fire Hose Connection Screw Thread as specified		
in NFPA 1963, Standard for Fire Hose		
Connections.		
Ladders		Tested Annually
17-5 Personal Equipment.		
17-5.1		
Members of the department shall be provided		YES
with personal protective clothing and equipment		
prior to engagement in any fire department		
response or hands-on training activity. This		
requirement shall be applicable to both fire-		
fighting and EMS functions that might be carried		
out. All equipment necessary to meet the		
requirements of NFPA 1500, Standard on Fire		
Department Occupational Safety and Health		
Program, as well as federal, state, provincial, or		
local law, shall be provided.		
17-5.1.1* When purchasing personal protective		YES
equipment for fire fighting and medical		
protection, such as breathing apparatus,		
protective clothing, gloves, footwear, and		
helmets, special consideration shall be given to		
meeting the NFPA standards for such personal		
protective clothing and equipment.		
17-6 Fire Department Buildings.		
Present Fire Department Concerns		Black Mold @ HQ, sSorage and Operations space.



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
Future Fire Department Needs		
17-6.1 Building Records and Planning.		
17-6.1.1* A file record shall be established for all buildings and structures owned, occupied, or utilized by the fire department, with future building needs identified.		Town Hall
17-6.2 Land Needs Planning.		
17-6.2.1* Land for fire department buildings shall be obtained in accordance with a planned program of development and acquisition. Measures shall be taken to prepare sites for future fire department use.		Recommendation to utilize land on New London Rd. for Satellite Station.
17-6.3 Maintenance of Land and Buildings.		
17-6.3.1* Routine maintenance procedures shall be established for all fire department facilities, including land, buildings, and grounds. These procedures shall address the building structure, including exterior and interior finish, as well as each major component of the building services, including plumbing, heating, and air conditioning.		HQ needs significant work, building has outlived its design specifications.
17-6.3.2* Fire stations shall be designed to meet their respective service demands in terms of space for practical utilization by apparatus and personnel. Construction specifications shall include details of facilities to be provided in new fire stations that provide for efficient, safe, and convenient functioning of the emergency fire service. Specifications shall comply with the requirements of NFPA 1500, Standard on Fire Department Occupational Safety and Health Program, and NFPA 101®, Life Safety Code®.		Space is an issue.
17-6.4 Training Facilities.	YES	Facilities need to be maintained and Burn building is at end of life span. Recommendation to report.
Present Fire Department Limitations / Concerns		
Future Fire Department Facilities		



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
17-6.4.1* Sufficient training facilities shall be provided for the department's in-service, special skills, and probationary programs. These shall include adequate classroom, lecture hall, conference room, library and study room, assembly area, and audiovisual facilities for the needs of the fire department.		
17-6.4.2 Adequate audiovisual and reference materials shall be available to support the department's training activities and subjects addressed in the NFPA professional qualifications standards for respective ranks of personnel in the department.		
17-6.4.3* The department shall have access to facilities for ground ladder training, live smoke and fire training, flammable liquids fires, pumping and drafting operations, and apparatus driver training.		
Chapter 18 Management of Water for Fire Protection	YES	
18-1 Purpose.		Public Water and Fire Holes.
18-1.1		
The fire department shall carry out and maintain a program for evaluating all sources of water supplies and delivery systems for fire fighting within the community and facilitate the delivery of adequate water supply consistent with the fire risk and the fire department capabilities.		
18-1.2*		
The fire department shall carry out a continuing program of evaluation for all water supplies for fire fighting, maintaining a liaison with the water authorities on fire protection water supply matters.		REMOVAL OF DAM NEAR OLD FACTORY WILL IMPACT AVAILABLE WATER.
18-1.3*		er STEAN



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
The fire department shall assess the adequacy or		
weakness of water supplies in relation to the fire		
risk throughout the community in conjunction		
with its pre-fire inspection or planning program.		
Expansion Needs		
18-1.4*		
The fire chief shall assign a full- or part-time		
water officer to assist the chief and keep the		
department informed of the available water		
supplies for fighting fires from all sources and to		
maintain regular contact with the managers of		
public and private water systems.		
18-4 Hydrant Service.		
18-4.1*		
All hydrants shall be inspected and tested at least		Center of Community and in new developed area on
once per year, preferably twice per year, and		New London Rd.
after use at fires if problems related to hydrant		
performance have been experienced. If not		
inspected and tested by the water utility, the		
hydrants shall be inspected and tested by the fire		
department. Where problems or deficiencies are		
identified, the fire department shall file a report		
with the water utility requesting specific		
relocations, repairs, or other adjustments to		
correct the problem.		
18-6 Alternate Water Supplies.		
18-6.1*		
The fire department shall study alternate sources		
of water supply to be used in the event of a		
major disruption in public water supply		
capabilities.		



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
Chapter 19 Hazardous Materials		
19-1 Purpose.		
19-1.1		
The fire department shall have a viable plan for	YES	In addition to Propane Facility and Bulk Oil Storage,
the protection of the community from the risks		Highways intersect the community.
associated with storage, use, and transportation		
of hazardous materials.		
Present		
19-1.1a Future Haz-Mat potential		
19-1.2*		
The fire department shall assume one of the lead		
agency roles in protecting the community from		
risks associated with storage, use, and		
transportation of hazardous materials. The fire		
department shall participate in the process of		
gathering and organizing information, identifying		
risks, and regulating the storage, use,		
transportation, and disposal of hazardous		
materials and hazardous wastes. The fire chief		
shall ensure compliance with NFPA 472, Standard		
for Professional Competence of Responders to		
Hazardous Materials Incidents, and NFPA 473,		
Standard for Competencies for EMS Personnel		
Responding to Hazardous Materials Incidents.		
19-2 Hazardous Materials Incident Response.		
<u> </u>		
19-2.2		



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
To safely and effectively manage hazardous materials incidents, fire service personnel shall be trained and equipped properly and shall have access to resources in addition to those normally used for fire suppression, including specialized protective clothing and breathing apparatus, disposal containers, neutralizing agents, monitoring equipment, reference materials, and communication with other agencies and sources of information that might be needed in the event of a leak or spill.		Operational
Chapter 20 Major Emergency Management		
20-1* Purpose.		
The fire department shall have a viable plan for the protection of the community from the anticipated risks associated with natural and technological emergencies that are more severe than the scale of most fires and hazardous material incidents and have the potential to exceed the resource capabilities of a particular jurisdiction.	YES	Working relationship with EM BUT Fire department can not fill all the jobs that have been requested.
20-2 Disaster Planning.		
20-2.1*		
A disaster plan shall be developed that is broad enough to encompass all situations that a community might face (all-hazard approach).		
20-2.2		
The disaster plan shall identify and evaluate risk (hazard analysis), formulate objectives, determine resource requirements and availability, assign responsibilities, develop special situation plans, provide the structure for directing and managing response operations, and develop plans for short- and long-term recovery.		
20-2.3*		



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
Local disaster plans shall be coordinated with any		
county and state or provincial emergency plans		
as well as with plans by federal agencies.		
Chapter 21 Management Reports and Records		
21-1* Purpose.		
A management information system shall be	YES	Personnel Records are kept at Town Hall.
maintained to support the management of the		
fire department by providing the fire chief and		
other administrative officers with data that		Company records, training records etc. are kept at
indicates the effectiveness of the department in		station.
preventing, suppressing, and investigating fires		
and all other major services and functions of the		
department. The records system shall provide		
data for reports on department activities,		
accomplishments, and long-range needs. The		
management information system shall be used to		
develop reports to the governing officials or		
members of a fire department.		
21-2 Records Retention. 21-2.1*		
The fire chief shall review legal requirements		
relating to reporting and retention of records and		
specify the records to be kept and the methods		
of gathering data. A records retention and		
disposal system shall be instituted.		
21-3 Incident Reporting. 21-3.1*		
Reports on emergency operations shall outline		Firehouse used for NFIRS
conditions encountered at an emergency and all		
actions taken by the department to control the		
condition, and they shall serve as a basis for		
determining incident responsibility.		
		1010 155/5/2)
		1910.156(b)(2)
Medical Clearance		Personnel. The employer shall assure that employees who are expected to do interior structural fire fighting are physically capable of performing duties which may be assigned to them during emergencies. The employer shall



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard
		not permit employees with known heart disease, epilepsy, or emphysema, to participate in fire brigade emergency activities unless a physician's certificate of the employees' fitness to participate in such activities is provided. For employees assigned to fire brigades before September 15, 1980, this paragraph is effective on September 15, 1990. For employees assigned to fire brigades on or after September 15, 1980, this paragraph is effective December 15, 1980.
		1910.134(e)(1)
		General. The employer shall provide a medical evaluation to determine the employee's ability to use a respirator, before the employee is fit tested or required to use the respirator in the workplace. The employer may discontinue an employee's medical evaluations when the employee is no longer required to use a respirator.
		1910.134(e)(2)(i)
		The employer shall identify a physician or other licensed health care professional (PLHCP) to perform medical evaluations using a medical questionnaire or an initial medical examination that obtains the same information as the medical questionnaire.
		1910.134(e)(2)(ii)
		The medical evaluation shall obtain the information requested by the questionnaire in Sections 1 and 2, Part A of Appendix C of this section.
Medical Surveillance		YES
Recommendations		



Code Requirement	Comply	Basis/Supporting Info for Meeting the Standard



Attachment #9 Mutual Aid Response Card

					Co	olchester F	ire Departi	ment					
RESPONSE	DISTRICT:	7				TYPE OF C	ALL: Struc	ture Fire					
LEVEL	CHFD	MFD	GLAST	E HAMP	E HAD	BOZ	GLFD	HEB	SALEM	PORT	HAD NECK	LEB FD	COLUMB
INITIAL	FULL												
1 ST	RECALL								1				FAST
2 ND	X			COVER	COVER		T-127	ET,T	ET-121			T-106	
3 RD	Х	ET,T		E,T,T	COVER		X	Х	Х		COVER	X	
4TH	X	X		X	E,T		X	X	X		E-116,T	ET,T	T-105
		7.7			Cc	olchester F							
	DISTRICT:						ALL: Struc						
LEVEL	CHFD	MFD	GLAST	EHAMP	E HAD	BOZ	GLFD	HEB	SALEM	MONTVIL	EGPFD	LEB FD	YANTIC
INITIAL	FULL												FACT
1 ST	RECALL	COLUED		COLUED			T 427	FT 240		14.40			FAST
2 ND	Х	COVER		COVER		ET,T	T-127	ET-210		M-43			Х
3 RD	Х	ET,T		COVER	COVER	Х	X	Х	T-121	Х		T-106	Х
4TH	X	Х		E,T,T,	E-115	X	X	X	X		ET-51	Х	X
					Co	olchester F	ire Depart	ment					
RESPONSE	E DISTRICT:	6				TYPE OF C	ALL: Struc	ture Fire					
LEVEL	CHFD	MFD	GLAST	E HAMP	E HAD	BOZ	GLFD	HEB	SALEM	MONTVIL	EGPFD	LEB FD	YANTIC
INITIAL	FULL												
1 ST	RECALL												FAST
2 ND	X			COVER	COVER	ET-126	T-127	ET,T	ET-121				Х
3 RD	Х	T-117		E,T	COVER	Х	Х	Х	Х	M-43		COVER	Х
4TH	X	X		X	E-115	X	X	X	X	X		ET,T	Х
					Co	olchester F							
_	E DISTRICT:					_	ALL: Struc	ture Fire	_				
LEVEL	CHFD	MFD	GLAST	E HAMP	E HAD	BOZ	GLFD	HEB	SALEM	PORT	HAD NECK	LEB FD	COLUMB
INITIAL	FULL				E-215								
1 ST	RECALL				E,T	FAST			FAST				
2 ND	Х	ET,T	COVER	E,ET,T	Х	Х		COVER	Х				
3 RD	X	Х	E,T	L-112	Х	Х	T-127	E,T	Х		COVER	COVER	
4TH	X	X	X	Х	X	X	X	Х	T-121	T-6	E-116	ET,T	ET,T
					C	olchester F	ire Depart	ment					
RESPONS	E DISTRICT	: 5				TYPE OF C	ALL: Struc	ture Fire					
LEVEL	CHFD	MFD	GLAST	E HAMP	E HAD	BOZ	GLFD	HEB	SALEM	PORT	HAD NECK	LEB FD	MONTVI
INITIAL	FULL												
1 ST	RECALL		FAST										
2 ND	Х	ET,T	Х	COVER	COVER	ET,T	T-127		ET-121				
3 RD	Х	Х	Х	E,T	ET, T	Х	Х	T-110	Х		COVER	COVER	
4TH	X	X	X	X	Х	X	X	X	X	T-6	E-116,T	ET,T	M-43



Attachment #9

List of Recommendations

Recommendation #1 Investigate becoming an Advanced Life Support (R5) Service	. 22
Recommendation #2 The Fire Marshal should report to the Fire Chief rather than the Building Official.	. 24
Recommendation# 3 Additional time should be added to the Fire Marshal's hours	. 25
Recommendation #4 Document Numbering	. 28
Recommendation #5 Standardization of Documents	
Recommendation #6 Written Documents and Organization	.30
Recommendation #7 CIP for Apparatus	
Recommendation #8 The Part-Time personnel be returned to Saturday and Sundays daytime hours to	
ensure the ability to respond to EMS and Fire Calls	.49
Recommendation #9 Additional Funding Alternatives should be considered to support the active	
personnel	.50
Recommendation # 10 Human Resources Clarification	
Recommendation #11 Organizational Safety Policy	
Recommendation #12 In House Training Program	. 58
Recommendation 13 Officer Educational Support	
Recommendation #14 Chief Officer Support	
Recommendation #15 Advanced Formal Education	
Recommendation #16 Subject Matter Expert Training	. 58
Recommendation #17 Fire Act Grants	
Recommendation #18 Training Facility Maintenance	. 59
Recommendation #19 Additional Training Props	. 59
Recommendation #20 Flashover Module Replacement	
Recommendation #22 Building Repairs should be undertaken for the Station 1 including remediation	
the Black Mold.	
Recommendation #23 Construct a Satellite Station on the 132 New London Rd. Property	71



		Colchester Hayward Fire Department,	Colchester CT- Strategic Plan Study
#	ВУ	Text	Response
1	Fee	Page 7, Paragraph 3 Spelling for 1st Assistant Chief Paul Giudice	Made Change
2	Lee	Page 7, Paragraph 3, Past president Dave Martin	Made Change
3	Lee	Page 17, Insert Index for Occupancy Abbreviations	Inserted Index
4	Fee	Page 44, Columb Allighnment	Fixed Allighnment
5	Fee	Page 46, in the table in columb 3 the CO for 3 is missing.	Added CO
6	Fee	Page 63, Revise Station 1 Drawing, Ground Floor Radio Room / Administration.	Modified Drawing
7	Lee	Page 79, Please review NFPA Table	Updated NFPA Table
8	Lee	Page 102, 2.2.1 Left Columb, 43 Years. Captain Roland retired June 30, 2016	Modified Original Worksheet
9	eel	The "Hayward Fire Company" was formed in 1854. It has since transitioned into the "Colchester Hayward Volunteer Fire Company", a stand alone 501(c)(3) nonprofit corporation. They receive no funds from the Town of Colchester.All of their funding is raised by the members and through donations. In addition, the Town supports, through municipal funding, a combination Volunteer / Career force known as the "Town of Colchester Fire Department" which provides fire, rescue and emergency medical services to the Community. There is an agreement for fire services between the "Town" and "Colchester Hayward Volunteer Fire Company" that was signed on June 25, 1975.	Modified Recognition Section on Page 8
10		was signed on June 25, 1975.	
11			
12			
13			
14			
15			



Attachment #8 1	24
ist of Recom125	

