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Future of Fire Service in Schodack, NY

Part 1: An Evaluation of Existing Conditions

October 2018

Prepared for:
Town of Schodack, Fire Districts

Prepared by:
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100 years CGR • 1915-2015

 Version 11-6-18

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Summary

Public safety and the performance of fire departments are essential to a community's quality of life. Any change to these services deserves a thorough, objective analysis of existing conditions and identification of options for improvement. It is essential to engage the public, elected officials and fire service professionals at each stage of the process to ensure a successful project with a beneficial outcome.

This report is designed to serve as a common set of facts about existing conditions and to identify a series of reasonable options for the future. There will be reasonable differences of opinion about the best course forward. However, through discussion in each of the departments and the community at large, it is anticipated that a plan for making appropriate changes will be developed.

Key Findings

The following observations are founded on quantitative information available in the reports or qualitative information from the interviews on the project.

- Fire service costs are relatively low in the town of Schodack at an average of $0.99 per thousand. This compares to $4.63 per thousand in the Town, $6.88 for the County and $23.63 for the Schodack Schools. The village rates are Castleton $5.04 for Castleton (which includes fire services) and $5.08 for Nassau, which excludes fire.
- While most departments report relatively stable finances and strong community support for fundraising, a number have long-term fiscal concerns, including increased costs for capital expenses, workers compensation, liabilities and cancer insurance.
- There is little debt among the six participating departments. Only Nassau and South Schodack carried debt over 10% of their budget and both are on track to retire it within two years.
- The fire companies have adequate apparatus and equipment to respond to the emergencies in the town. Several departments own similar or potentially redundant types of equipment
- In general, the fire companies report having sufficient personnel to handle emergencies in a timely manner on evenings, overnights and weekends. There is concern that sufficient personnel is not always available in a timely manner during the day.
- The number volunteer fire fighters has declined in the last decade, although hard data was not available to back up this point.

- There is a relative scarcity of younger members. Only `13% of survey respondents are under 30 while 32% are over 60.
- Rescue & EMS calls make up the vast majority of emergency calls for fire service in the town.
- Significant portions of the town lack fire hydrants, which makes fire departments reliant on hose lays or costly tankers.
- Several departments own similar or potentially redundant types of equipment.
- While most departments report relatively stable finances and strong community support for fundraising, a number have long-term fiscal concerns, including increased costs for capital expenses, workers compensation, liabilities and cancer insurance.
- Recruiting and retaining trained volunteers is a major challenge for most departments in Schodack, as is mustering enough volunteers to answer major calls during the typical workday.
- Overall call volume has remained consistent for the past few years. East Schodack FD received 24% of total alarms from 2013-2016, followed by South Schodack and Schodack Valley, at 20% and 19%, respectively.
- Rescue & EMS calls make up the vast majority of emergency calls for fire service in the town. However, none of the departments is responsible for EMS transport.
- Call volume tends to increase in late afternoons and evenings, and on weekends.
- Overall, local fire departments typically respond to fire calls within 14 minutes 90% of the time. The NFPA standard to have an effective firefighting force on scene is 10 minutes.
- An informal survey of current and retired department members found strong concern about manpower and retaining new members, as well as support or openness for a potential town-wide department merger.

Community Overview

The population of Schodack is estimated to be just over 13,000. The town comprises nearly 62 square miles. The median age is 44.8, which is 10% higher than Rensselaer County and 20% higher than New York State.

Agency Overview

The six departments involved in the study have worked together, particularly with their neighboring departments, for many years. The departments have drilled together and use mutual aid for significant events. In recent years, they have begun a program of automatic aid where a single engine from each neighboring department is requested at the time of dispatch for all structure fires.

Most of the firefighting equipment for the departments is interoperable, although not all of the SCBAs are interchangeable. There is familiarity on the specialty resources available from each department and it is requested as needed for emergencies.

Castleton Fire Department

The Village of Castleton Fire Department (CFD) serves the village of Castleton-on-Hudson and a portion of the town for the Schodack Fire Protection District. The department is managed by the village board. CFD is fully volunteer and has 27 active members. They report that 17 are interior-qualified and 2 are EMTs. The department responds to about 10 calls a month and they operate 3 engines and an EMS/Utility vehicle. The budget for the department is about $80,700.

East Schodack Fire District

The East Schodack Fire District (ESFD) serves an area in the eastern portion of the town in the East Schodack Fire District and in about 60% of the Nassau Lake Fire Protection District. The district is managed by five elected commissioners. The commission is supported by a secretary and treasurer, who both receive a stipend for their work. There is an associated fully volunteer fire company that provides the personnel for the emergency responses. ESFD has 27 active members on the rolls. Sixteen are interior-qualified and 7 are EMTS. ESFD operates 3 engines, including one with heavy rescue capability, an EMS/light rescue vehicle and a 4-wheel-drive, grass fire-capable truck. The department responds to an average of 20 calls per month. The 2017 expense budget was $182,266.

Nassau Joint Fire District

The Nassau Joint Fire District[1] # 1 (NFD) serves the village of Nassau and portions of the town of Schodack. The Schodack portion of the service area is 40% of the Nassau Lake Fire Protection District. The district is governed by a board of 5 commissioners who are assisted by a secretary and treasurer. NFD has about 28 active members in the department, which is a slight increase over the last 10 years. NFD operates three engines and an EMS/light rescue vehicle. The department responds to about 12 calls per month. The 2017 expense budget was $110,764.

Schodack Landing Fire District

The Schodack Landing Fire District (SLFD) operates in the hamlet of Schodack Landing in the southwestern corner of the town, along the Hudson River. The district is managed by an elected board of commissioners. SLFD has 19 members on the roll.

[1] A Joint Fire District (JFD) involves one or more villages and areas in towns outside the villages. JFDs have slightly different rules on representation and commission size when compared to traditional fire districts.

About a third are qualified interior firefighters. While most members are currently certified with CPR and First Aid, there are no currently certified EMTs. SLFD operates two engines, a utility vehicle for EMS and towing. The department has averaged only about 5 calls for service per month. Over the last six years, they have averaged $79,000 a year for expense.

South Schodack Fire District

The South Schodack Fire District (SSFD) serves an area in the southern central portion of the town. As with the other districts, it is governed by 5 elected commissioners who are assisted by a treasurer and secretary. The associated volunteer fire company has 28 active members on the roll. Fourteen of them are interior-qualified. Only 3 members are EMT-certified. The department operates two engines, a heavy rescue, a tanker and a brush truck/utility vehicle. SSFD responds to about 16 calls per month, on average, over the last 5 years. Over the last six years, the district has averaged about $207,000 in expenditures.

Call Volume

The summary table below shows the yearly distribution of calls between five fire departments. The report contains a more complete discussion of the types of calls and the response times for each agency.

Department	2013	2014	2015	2016	2017	Total	Share
Castleton	121	118	137	140	117	633	13%
East Schodack	221	254	246	249	227	1197	24%
Nassau	138	207	169	190	n/a*	704	17%
South Schodack	168	197	226	216	163	970	20%
Schodack Landing	74	65	52	60	40	291	6%
Schodack Valley	185	186	210	198	164	943	19%
All Departments	907	1,027	1,040	1,053	711	4,738	

*2017 Data excludes Nassau

Further discussion of options for the future will be presented in a separate section.

Acknowledgements

The following people assisted with the study as members of the project steering committee. Many thanks to them and the other members of the departments that participated in interviews.

- Stuart Mc Knight Castleton
- Matt Carnez Castleton
- Sharon Martin Castleton
- Peter Schweigert Study Organizer
- Mike Buckbee East Schodack Fire District
- Frank Curtis East Schodack Fire District
- Steve Schweigert East Schodack Fire District
- Mary Wrobel Nassau Fire District
- Matt Cooper Nassau Fire District
- Tim Blake Nassau Fire District
- Phill Donn Schodack Landing
- Paul Mac Phail Schodack Landing
- Roland Ferris South Schodack Fire
- Jim Dorward South Schodack Fire
- Dawne Kelly Town of Schodack
- Dave Harris Town of Schodack
- Steven Kelly Schodack Valley Fire
- Brian Cassidy Schodack Valley Fire
- Carl Ashley Schodack Valley Fire

Staff Team

The CGR team included Amelia Rickard, Mike Silva, and Kate Bell. Chief James Harrington (retired) provided assistance on the analysis and options development.

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Introduction

Public safety and the performance of fire departments[2] are essential to a community's quality of life. Any change to these services deserves a thorough, objective analysis of existing conditions and identification of options for improvement. It is essential to engage the public, elected officials and fire service professionals at each stage of the process to ensure a successful project with a beneficial outcome.

This report is designed to serve as a common set of facts about existing conditions and to identify a series of reasonable options for the future. There will be reasonable differences of opinion about the best course forward. However, through discussion in each of the departments and the community at large, it is anticipated that a plan for making appropriate changes will be developed.

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The following observations are founded on quantitative information available in the reports or qualitative information from the interviews on the project.

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- While most departments report relatively stable finances and strong community support for fundraising, a number have long-term fiscal concerns, including increased costs for capital expenses, workers compensation, liabilities and cancer insurance.
- There is little debt among the six participating departments. Only Nassau and South Schodack carried debt over 10% of their budget and both are on track to retire it within two years.

- The fire companies have adequate apparatus and equipment to respond to the emergencies in the town. Several departments own similar or potentially redundant types of equipment

[2] This report will use the term fire department in a generic sense to encompass fire districts, village fire departments and fire companies unless the more specific term is appropriate in that context. For example, when discussing operations at fireground, fire department will be used. While talking about taxation, this report will refer to fire district or village.

- In general, the fire companies report having sufficient personnel to handle emergencies in a timely manner on evenings, overnights and weekends. There is concern that sufficient personnel is not always available in a timely manner during the day.
- The number volunteer fire fighters has declined in the last decade, although hard data was not available to back up this point.
- There is a relative scarcity of younger members. Only `13% of survey respondents are under 30 while 32% are over 60.

- Significant portions of the town lack fire hydrants, which makes fire departments reliant on hose lays or tankers.
- Recruiting and retaining trained volunteers is a major challenge for most departments in Schodack, as is mustering enough volunteers to answer major calls during the typical workday.
- Overall call volume has remained consistent for the past few years. East Schodack FD received 24% of total alarms from 2013-2016, followed by South Schodack and Schodack Valley, at 20% and 19%, respectively.
- Rescue & EMS calls make up the vast majority of emergency calls for fire service in the town. However, none of the departments is responsible for EMS transport.
- Call volume tends to increase in late afternoons and evenings, and on weekends.
- Overall, local fire departments typically respond to fire calls within 14 minutes 90% of the time. The NFPA standard to have an effective firefighting force on scene is 10 minutes.
- An informal survey of current and retired department members found strong concern about manpower and retaining new members, as well as support or openness for a potential town-wide department merger.

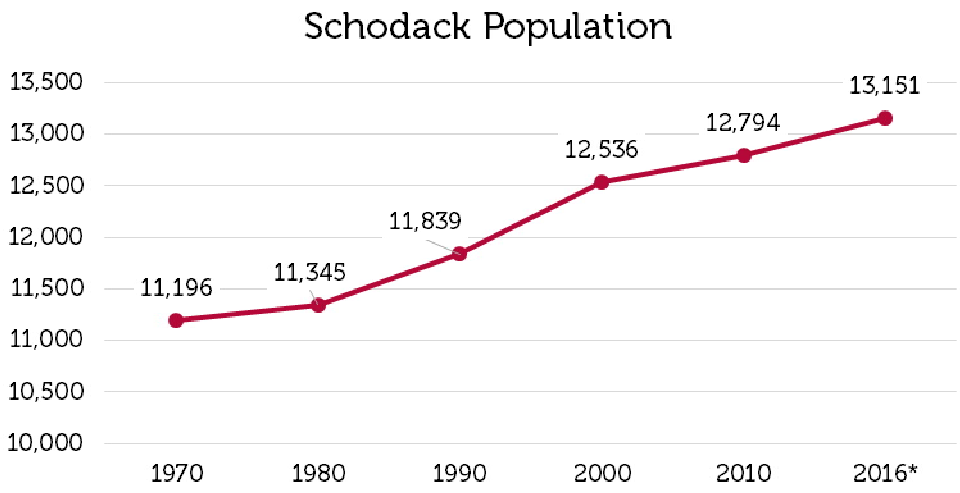
Existing Conditions

The town of Schodack has a complicated network of seven fire departments that serve it. The system developed over the twentieth century and has undergone no substantial structural change in several decades. The fire protection network developed during a time when many residents of Schodack worked in their community and were available to respond to calls on a more regular basis. Today, the fire departments in Schodack, like most volunteer departments in the country, report that they are facing declining membership rolls, increasing training requirements, a more hazardous and complex work environment and rising costs.

Community Overview

The population of Schodack is estimated to be just over 13,000. The town comprises nearly 62 square miles. The median age is 44.8, which is 10% higher than Rensselaer County and 20% higher than New York State. Fewer than one in 20 residents identifies as a racial or ethnic minority. Only 4.2% of residents are below the poverty line, one third the rate of Rensselaer County and one quarter the rate of New York State.

The population has been stable with gradual growth averaging 3% a decade over the last 40 years. It has accelerated a little between 2016 and 2010.



** estimated, Source: U.S. Census Bureau*

The town is located in the southwest corner of the county along the Hudson River. The NYS Thruway and the Berkshire Spur of the Thruway travel through the town, as well as passenger rail and freight rail.

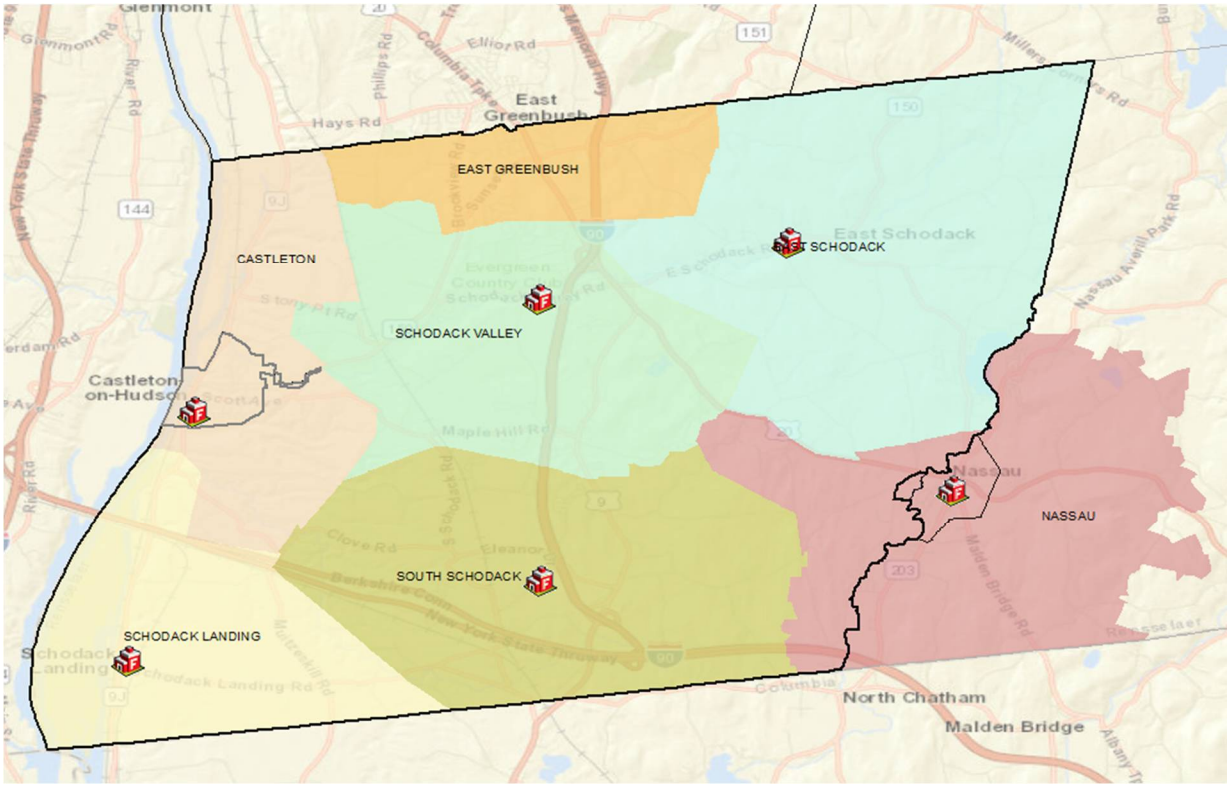
Department and District Profiles

Fire protection in Schodack (and all towns in New York State) is provided through a fire district, a fire protection district or a village fire department[3]. The town directly manages contracts for fire protection for the Nassau West Lake Fire Protection District and the Schodack Fire Protection District. In these situations, the town contracts with the Nassau Fire District and Schodack Valley respectively. In a Fire District, a board of fire commissioners (elected from within the district) serve as the governing authority

[3] See Glossary for further explanation of the difference between a fire district and fire protection district

for fire service in that area. For a village fire department, the Board of Trustees manages the fire department.

The Castleton Fire Department, East Schodack Fire District, Nassau Joint Fire District, Schodack Landing Fire District, Schodack Valley Fire District, South Schodack Fire District and the Town of Schodack are participants in this study, serving the areas below.



Common Findings

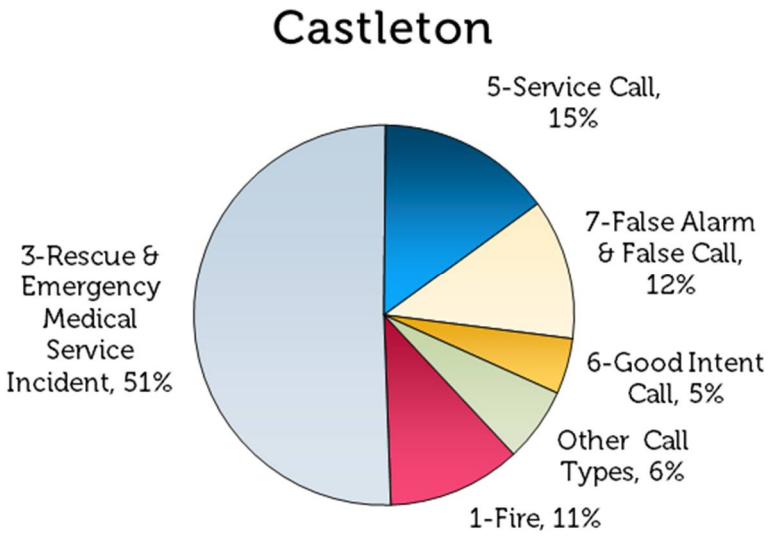
The six departments involved in the study have worked together, particularly with their neighboring departments, for many years. The departments have drilled together and use mutual aid for significant events. In recent years, they have begun a program of automatic aid where a single engine from each neighboring department is requested at the time of dispatch for all structure fires.

Most of the firefighting equipment for the departments is interoperable, although not all of the SCBAs are interchangeable. There is familiarity on the specialty resources available from each department and it is requested as needed for emergencies.

Castleton Fire Company (Village Department)

The Village of Castleton Fire Department (CFD) serves the village of Castleton-on-Hudson and a portion of the town for the Schodack Fire Protection District. The department is managed by the village board. CFD is fully volunteer and has 27 active members. They report that 17 are interior-qualified and 2 are EMTs.

CFD operates 3 engines and an EMS/Utility vehicle for their calls. They are in the process of purchasing a new mini-pumper (engine) that will replace the oldest engine and the EMS utility vehicle. The engine will be financed over 20 years. Over the last 5 years, they have averaged 10 calls per month. Most of the calls are for EMS events.



The department reports that they have had good support from the village government to keep their essential equipment up to date, such as SCBAs and turnout gear. The village is fully hydranted. However, the area in the town outside the village does not have hydrants and they must rely either on hose lays or tankers for sufficient water supplies. The recent trend has been that the department can get adequate staffing for calls in the evening and on overnights, but it would be a challenge to get 10 people to a scene within 10 minutes during the day.[4]

CFD has identified that they have had a decline in membership over recent years. Potential causes identified by department leaders include the preponderance of EMS calls in the area, the increased training requirements and challenges keeping new

[4] 10 trained fire fighters in 10 minutes is an approximation of the adequate force necessary to fight a fire based on a 2012 study by the National Institute for Occupational Safety and Health (NIOSH).

members engaged in the department. They have also identified the need to develop stronger leadership and administrative supports in the department.

CFD receives an average of $80,070 a year from the village for fire department operations. There was also about $12,000 a year for a Length of Service Awards Program (LOSAP) beginning in FY 2016. These expenses do not include the shares of expense for fuel, insurances, vehicle maintenance and capital costs that are bundled into other lines of the village's budget. The designated fire lines represent about 5% of the village's total expenses.

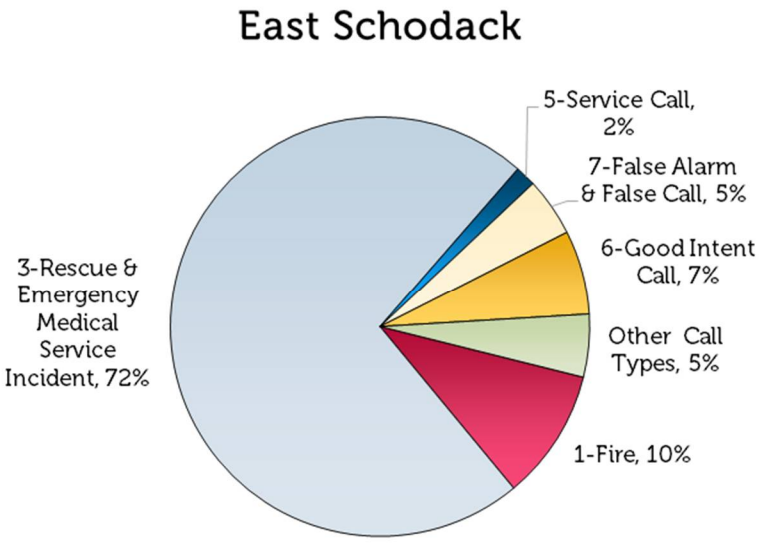
	2012	2013	2014	2015	2016	2017
Fire Specific Revenue						
Fire Protection Services, Other Govts	$37,000	$38,000	$38,000	$38,000	$38,000	$50,000
Fire Specific Expenses						
Local Pension Fund, Empl Bnfts (LOSAP)	-	-	-	-	$11,795	$12,573
Fire, Contr Expend	$62,530	$124,521	$82,537	$81,216	$52,735	$76,878
Fire, Equip & Cap Outlay	-	-	$1,690	$1,744	-	-
Share of Village Budget	4%	7%	3%	5%	4%	5%

The CFD fire company owns and maintains the building and grounds for CFD. The village pays for the utilities for the building. There is a fully enclosable picnic shelter next to the building that can be rented to residents and is used for fundraising activities.

East Schodack Fire District

The East Schodack Fire District (ESFD) serves an area in the eastern portion of the town in the East Schodack Fire District and in about 60% of the Nassau Lake Fire Protection District. The district is managed by five elected commissioners. The commission is supported by a secretary and treasurer, who both receive a stipend for their work. There is an associated fully volunteer fire company that provides the personnel for the emergency responses. ESFD has 27 active members on the rolls. Sixteen are interior-qualified and 7 are EMTS.

ESFD operates 3 engines, including one with heavy rescue capability, an EMS/light rescue vehicle and a 4-wheel-drive, grass fire-capable truck. They also have an ATV and a boat for special situations. They will be adding a new tanker with 2,500-gallon water capacity. There are no hydrants in the district. ESFD is in the early stages of planning to replace their oldest engine. Over the last 5 years, they have averaged 20 calls per month. The department responds on all EMS events in their district, as well as typical fire dispatches. This leads to more than 70% of their responses being for EMS events.



ESFD reports that the community has been supportive of their fiscal needs in recent years and they have been able to keep their equipment in good condition. They have also been the beneficiary of grants in recent years to help pay for SCBAs. The fire company has active fundraising, including monthly pizza nights, which helps purchase firefighting gear such as turnout attire and SCBAs. This activity allows the fire district to focus their efforts more heavily on the larger equipment items.

ESFD is concerned about the long-term fiscal health of the district. In particular, they are concerned about the increases for liability, workers compensation and cancer insurances that the district must buy. There have been substantial increases in the last several years in those areas.

ESFD Financial Summary

Revenues and Proceeds from Debt ($)						
	2012	2013	2014	2015	2016 *	2017 *

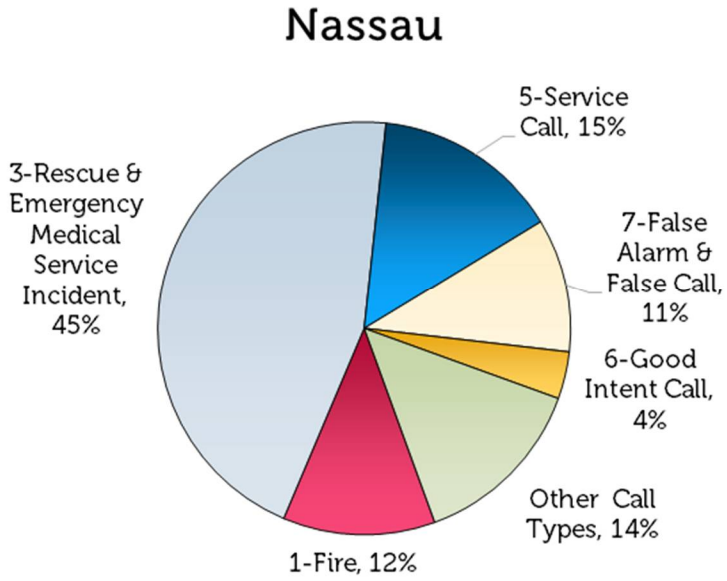
Revenues and Proceeds from Debt ($)						
A2262 Fire Protection Services Other Govts	78,000	79,000	81,100	83,000	84,000	84,500
A2705 Gifts And Donations	1,200	1,200	1,200	1,200	1,200	1,200
A2706 Grants From Local Governments	1,000	-	-	1,500		-
A1001 Real Property Taxes	88,500	89,500	91,900	95,368	95,368	99,000
R2401 Interest & Earnings	13	253	208	119	-	-
A2665 Sales Of Equipment	-	-	4,776	550	-	-
Total Revenues and Proceeds from Debt	**168,713**	**169,953**	**179,184**	**181,737**	**180,568**	**184,700**
Source: NYS Office of State Comptroller						
** Provided by ESFD*						

Expenditures ($)						
	2012	2013	2014	2015	2016 *	2017 *
A97106 Debt Principal, Serial Bonds	5,000	-	-	-	-	-
A97856 Install Pur Debt, Principal	26,266	21,242	22,871	103,194	-	-
A97107 Debt Interest, Serial Bonds	195	8,061	6,432	-	666	-
A97857 Install Pur Debt, Interest	3,037	-	-	5,381	13,864	-
A90308 Social Security, Employer Cont	161	164	168	172	172	172
A90408 Worker's Compensation, Empl Bnfts	22,559	25,943	28,537	29,964	29,964	29,964
A34104 Fire, Contr Expend	60,442	54,226	58,229	58,794	49,319	56,921
A34102 Fire, Equip & Cap Outlay	13,997	11,386	12,737	12,724	17,064	9,889
R34102 Fire, Equipment Outlay	-	-	-	83,055	66,971	83,000
A34101 Fire, Pers Serv	2,205	2,255	2,410	2,355	2,355	2,320
Total Expenditures	**133,862**	**123,277**	**131,384**	**295,639**	**180,375**	**182,266**
Source: NYS Office of State Comptroller						
** Provided by ESFD*						

Nassau Joint Fire District

The Nassau Joint Fire District[5] # 1 (NFD) serves the village of Nassau and portions of the town of Schodack. The Schodack portion of the service area is 40% of the Nassau Lake Fire Protection District. The district is governed by a board of 5 commissioners who are assisted by a secretary and treasurer. There is also a part-time administrator who helps with the operations of the district. The associated fire company provides service to the district. The fire company also owns and maintains the fire station.

NFD has about 28 active members in the department, which is a slight increase over the last 10 years. Twelve are qualified as interior fire fighters and 10 are certified as EMTs. NFD operates three engines and an EMS/light rescue vehicle. The department also has an ice rescue trailer that can also be used for rehabilitation and incident command. The department just finished paying off its most recent acquisition. The department responds to about 12 calls per month. Their 2017 data was not included in the data set from New York State. The department responds to more serious EMS calls from 6 pm to 6 am and to potential cardiac arrests at all times. Still, EMS calls account for about 45% of their call volume. The area in the village is fully hydranted, but water can be a problem in the areas outside the village.



NFD reports that they have been able to work collaboratively with the district and company to maintain a healthy financial situation. The company recently was able to

[5] A Joint Fire District (JFD) involves one or more villages and areas in towns outside the villages. JFDs have slightly different rules on representation and commission size when compared to traditional fire districts.

complete a substantial overhaul of the fire station, including renovation of the meeting room and other spaces used by the firefighters. The district, in the last few years, has been updating their training program and standard operating procedures. They believe that their revised program is leading to improved retention and efficiency in operations. As part of this activity, the department has begun a more formal leadership development plan. NFD does not have a LOSAP program for its members. They have developed preplan documents for the 10 largest structures in the community.

NJFD Financial Summary

Revenues and Proceeds of Debt	2012	2013	2014	2015	2016	2017
Total	$155,651	$156,229	$162,032	$201,214	$196,149	$196,175
A2262 Fire Protection Services Other Govts	$53,893	$54,893	$54,893	$56,402	$55,000	$55,000
A4960 Fed Aid, Emergency Disaster Assistance	$1,916	-	-	-	-	-
A2680 Insurance Recoveries	-	-	$6,871	$2,007	-	-
A2701 Refunds Of Prior Year's Expenditures	-	-	-	$8,618	$5,234	$6,299
A2770 Unclassified (specify)	-	$50	-	-	-	-
H5731 Bans Redeemed From Appropriations	-	-	-	$30,000	$30,000	$30,000
A1001 Real Property Taxes	$98,107	$100,069	$100,071	$102,550	$103,250	$104,251
A3089 St Aid - Other (specify)	-	$1,000	-	$1,500	-	-
A2401 Interest And Earnings	$233	$217	$197	$137	$165	$625
A2665 Sales Of Equipment	$1,502	-	-	-	$2,500	-

Expenditures	2012	2013	2014	2015	2016	2017
Total	$185,042	$104,870	$443,900	$149,313	$129,704	$110,764
A97306 Debt Principal, Bond Anticipation Notes	-	-	-	$30,000	$30,000	$30,000
H97306 Debt Principal, Bond Anticipation Notes	-	-	-	-	-	-

Expenditures	2012	2013	2014	2015	2016	2017
A97106 Debt Principal, Serial Bonds	$26,914	-	-	-	-	-
A97307 Debt Interest, Bond Anticipation Notes	-	-	-	$3,590	$2,908	$2,197
A97107 Debt Interest, Serial Bonds	$603	-	-	-	-	-
A90608 Hospital & Medical (dental) Ins, Empl Bnft	$6,100	$6,850	$7,564	$7,927	$8,461	$8,756
A90898 Other Employee Benefits (spec)	$2,975	$2,485	$860	$1,960	$2,053	$3,628
A90408 Worker's Compensation, Empl Bnfts	$19,498	$27,305	$24,439	$15,830	$15,312	$19,274
A34104 Fire, Contr Expend	$39,817	$37,766	$51,891	$47,656	$41,486	$36,581
A34102 Fire, Equip & Cap Outlay	$88,135	$29,464	$28,575	$41,250	$28,384	$9,228
H34102 Fire, Equip & Cap Outlay	-	-	$329,471	-	-	-
A34101 Fire, Pers Serv	$1,000	$1,000	$1,100	$1,100	$1,100	$1,100

NJFD's budget has remained relatively level, aside from the expenses associated with their new engine and the debt service for it. The tax and contract revenue has remained level because the district had been placing funds in a reserve account ahead of the purchase.

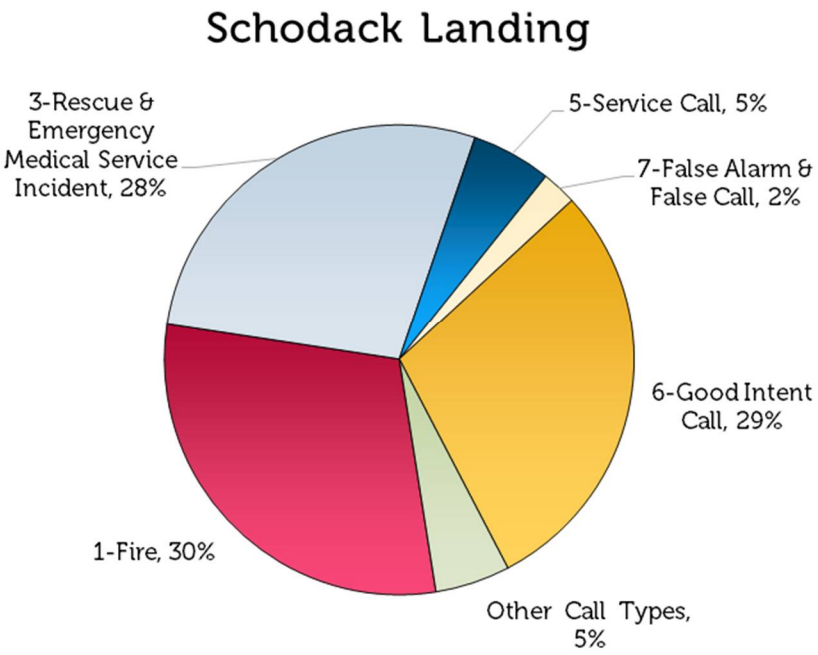
Schodack Landing Fire District

The Schodack Landing Fire District (SLFD) operates in the hamlet of Schodack Landing in the southwestern corner of the town, along the Hudson River. The district is managed by an elected board of commissioners. There is also a secretary and treasurer who receive stipends to assist in management of the department. There is an associated volunteer fire company that provides personnel for responding to emergencies in the district.

SLFD has 19 members on the roll. About a third are qualified interior firefighters. While most members are currently certified with CPR and First Aid, there are no currently certified EMTs. The department only responds to potential cardiac arrest calls for EMS.

SLFD operates two engines, a utility vehicle for EMS and towing, an inflatable boat, an ATV with amphibious capability and a small bus. The department is actively engaged

in securing a grant for the acquisition of a hovercraft. In 2017, they replaced their utility vehicle after it was involved in a theft and destroyed in a crash. The district does not have hydrants, but the fire department has a pond with 500,000 gallons of water and a dry hydrant that would allow them to have sufficient water supply, through hose lays, to nearly all structures in the district. Over the last 5 years, the department has averaged only about 5 calls for service per month.



SLFD reports that their financial situation has been relatively stable in recent years. They have been able to purchase needed equipment through savings and have not needed to bond. They operate out of a converted 19th century one-room schoolhouse. One of the largest challenges in the near-term future will be the maintenance of the building. The district does have a LOSAP program which pays out a lump sum benefit to qualified personnel at age 65 and also an annual payment if the person remains active.

The fire company actively fundraises to benefit their operations and to help with maintenance in the station. The fire company owns about 10 acres of land immediately surrounding the fire station, which includes a commercially certified outdoor kitchen. The kitchen is used for weekly barbeque events in the summer that serve as significant fundraiser. The picnic grounds also host a town-wide fire department picnic and fun day.

In several recent years, the district has had revenues that exceed expenses. The additional funds have been used to fund a reserve.

SLFD Financial Summary

Revenues and Proceeds from Debt ($)	2012	2013	2014	2015	2016	2017
A2262 Fire Protection Services Other Govts	-	-	-	-	-	2,315
A4960 Fed Aid, Emergency Disaster Assistance	882	-	-	-	-	-
A2680 Insurance Recoveries	4,643	-	-	1,709	-	43,288
A2705 Gifts And Donations	-	2,916	1,448	-	-	-
A2701 Refunds Of Prior Year's Expenditures	-	-	-	-	10,728	-
A1001 Real Property Taxes	100,716	91,916	98,916	85,616	91,527	99,100
A3960 St Aid Emergency Disaster Assistance	118	-	-	-	-	-
R2401 Interest & Earnings	-	-	13	16	20	22
A2401 Interest And Earnings	261	61	42	50	56	61
A2410 Rental Of Real Property	300	-	-	-	300	-
Total Revenues and Proceeds of Debt	**106,920**	**94,893**	**100,419**	**87,391**	**102,631**	**144,786**

Source: NYS Office of State Comptroller

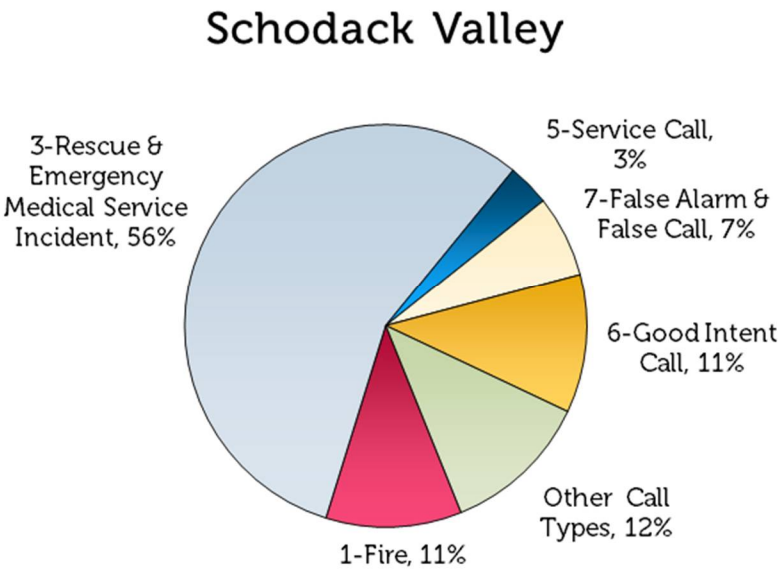
Expenses ($)	2012	2013	2014	2015	2016	2017
A97906 Debt Principal, State Loans	3,633	3,723	3,817	3,912	4,010	4,110
A97907 Debt Interest, State Loans	793	703	610	514	416	316
A90258 Local Pension Fund, Empl Bnfts	3,000	3,000	8,930	-	7,250	7,250
A34104 Fire, Contr Expend	59,518	56,270	49,929	49,984	42,960	75,995
A34102 Fire, Equip & Cap Outlay	-	-	-	15,340	-	50,155
A34101 Fire, Pers Serv	2,710	2,595	2,710	2,675	2,710	3,960
Total Expenditures	**69,654**	**66,291**	**65,996**	**72,425**	**57,346**	**141,786**

Source: NYS Office of State Comptroller

Schodack Valley Fire District

The Schodack Valley Fire District (SVFD) serves the central portion of the town. The district is governed by five elected commissioners. Like other districts, there are a secretary and treasurer who receive a small stipend for assisting the commissioners in conducting their business. There is a fully volunteer fire company associated with the fire district. SVFD has 30 members on its rolls. Half are interior-qualified firefighters. There are 8 EMTs and 2 CFRs in the department.

SVFD operates two dedicated engines, an engine/rescue, a mini pumper-brush truck, and EMS utility vehicle. Over the last 5 years, the company has responded to about 16 calls per month. They respond to suspected cardiac arrest calls at all times. On weekends and evenings, they respond to all but the lowest priority of EMS calls. The district has hydrants in about 25% of its area – fortunately, these are the most densely populated areas.



SVFD reports a conservative fiscal approach that had led to a capital reserve fund equal to at least three years' expenses. The fund had not been designated yet, but discussions have begun for a potential replacement of their building. The volunteer rolls for the department have been steady, but with little new blood, the average age continues to escalate. Rather than a LOSAP program, the district has purchased a group term life insurance policy for their members.

The fire company conducts regular fundraising activities, including a monthly pizza night and a boot drop fundraiser. The company owned the building for many years, but transferred the ownership to the district in 2009. The company is still responsible

for other expenses related to company activities and fundraising. They are not involved in supporting firefighting operations.

SVFD Financial Summary

Revenues and Proceeds of Debt ($)	2012	2013	2014	2015	2016	2017
A2705 Gifts And Donations	-	-	-	-	-	900
A1001 Real Property Taxes	174,720	178,205	181,163	183,930	182,587	187,946
A2401 Interest And Earnings	455	320	75	36	4	97
A2665 Sales Of Equipment	-	-	-	-	-	1,950
Total Revenues and Proceeds of Debt ($)	**175,175**	**178,525**	**181,238**	**183,966**	**182,591**	**190,893**

Source: NYS Office of State Comptroller

Expenditures ($)	2012	2013	2014	2015	2016	2017
A97306 Debt Principal, Bond Anticipation Notes	38,000	38,000	-	-	-	-
A97307 Debt Interest, Bond Anticipation Notes	2,740	1,349	-	-	-	-
A90408 Worker's Compensation, Empl Bnfts	9,665	11,115	12,226	12,838	13,480	13,480
A34104 Fire, Contr Expend	87,956	99,562	97,817	134,758	110,666	91,685
A34102 Fire, Equip & Cap Outlay	70,173	10,765	1,003	10,508	-	-
A34101 Fire, Pers Serv	1,640	2,210	2,690	-	-	-
Total Expenditures	**210,174**	**163,001**	**113,736**	**158,104**	**124,146**	**105,165**

Source: NYS Office of State Comptroller

South Schodack Fire District

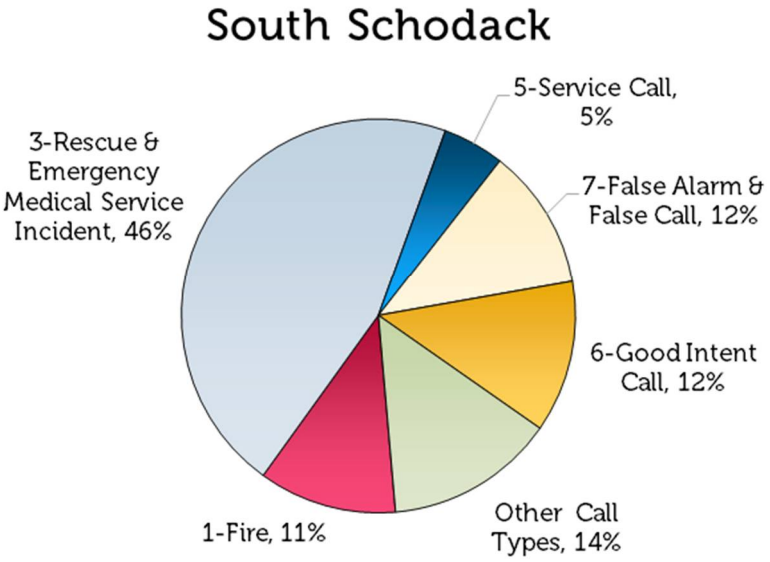
The South Schodack Fire District (SSFD) serves an area in the southern central portion of the town. As with the other districts, it is governed by 5 elected commissioners who are assisted by a treasurer and secretary. The associated volunteer fire company has

28 active members on the roll. Fourteen of them are interior-qualified. Only 3 members are EMT-certified.

The department operates two engines, a heavy rescue, a tanker and a brush truck/utility vehicle. There is discussion about replacing either the tanker or heavy rescue in the near future. The district has been placing funds in a reserve account for this purpose. The department is limited in the apparatus it can purchase because the bays only accommodate apparatus 32 feet long.

The company responds to more serious EMS calls from 6 pm to 6 am and on weekends. They only respond on potential cardiac arrest calls during other timeframes. The also respond to all calls at the large Hannaford distribution center. They report that about half of the district has hydrants, but the pressure to the hydrants is variable based on location and not always sufficient to support suppression operations.

SSFD responds to about 16 calls per month, on average, over the last 5 years. Nearly half the calls are for EMS events, although the department has recently changed their response protocols to reduce their EMS responses.



SSFD describes that they are in a strong administrative position, with good internal leadership and management processes. They had a line-of-duty death in 2002 that has led to substantial overhaul of operational procedures and documentation. The department has lost about 25% of its members in the last decade. They report that there are fewer members in the 20- to 40-year-old range compared to a generation

ago. Few members work in the community and are available to respond during the day.

SSFD Financial Summary

Revenues and Proceeds of Debt ($)						
	2012	2013	2014	2015	2016	2017
A4960 Fed Aid, Emergency Disaster Assistance	2,737	-	-	-	-	-
A2680 Insurance Recoveries	-	-	-	875	-	-
A2701 Refunds Of Prior Year's Expenditures	-	574	-	11,282	89	-
H5720 Statutory Installment Bonds	-	300,000	-	-	-	-
A1001 Real Property Taxes	102,250	104,150	173,420	173,170	173,170	173,170
A3089 St Aid - Other (specify)	-	1,000	-	1,000	-	-
A3004 St Aid, Reorganization & Efficiency Grants	-	1,035	-	-	-	-
R2401 Interest & Earnings	23	11	16	23	14	11
A2401 Interest And Earnings	48	17	15	232	135	199
A2665 Sales Of Equipment	-	3,044	-	-	300	-
Total Revenues and Proceeds of Debt	**105,058**	**409,831**	**173,451**	**186,582**	**173,708**	**173,380**

Source: NYS Office of State Comptroller

Expenditures ($)						
	2012	2013	2014	2015	2016	2017
A97106 Debt Principal, Serial Bonds	-	-	60,000	60,000	60,000	60,000
A97107 Debt Interest, Serial Bonds	-	-	7,770	6,216	4,662	3,108
A90258 Local Pension Fund, Empl Bnfts	11,322	10,973	9,861	15,940	17,120	10,251
A90408 Worker's Compensation, Empl Bnfts	19,190	19,102	18,936	18,930	18,903	19,404
A34104 Fire, Contr Expend	59,967	80,226	50,618	79,523	62,381	62,982
A34102 Fire, Equip & Cap Outlay	21,635	3,446	1,819	24,067	22,631	5,678
H34102 Fire, Equip & Cap Outlay	-	300,000	-	-	-	-
A34101 Fire, Pers Serv	2,690	2,595	2,565	2,610	2,600	2,508
Total Expenditures	**114,804**	**416,342**	**151,569**	**207,286**	**188,297**	**163,931**

Source: NYS Office of State Comptroller

Calls for Service Analysis

The NYS Office of Fire Prevention and Control (OFPC) provided the incident data used in this report, which was obtained through a Freedom of Information request. The data provided by OFPC originated from the National Fire Incident Reporting System (NFIRS). All U.S. fire departments are required to report incidents to NFIRS, through their state office, annually using a set of standard definitions and codes.

Our analysis includes incident type, location, response intervals and mutual aid in total and by agency for the five-year period of 2013-2017. OFPC had not yet received 2017 reporting from the Nassau Fire Department at the time of our request in June 2018, affecting the ability to analyze some trends in data.

Incident Volume

Incidents by Year

The six agencies in our study have reported 4,738 calls for service (i.e. alarms) from 2013-2017. The table below shows reported incidents increased by 13% from 2013 to 2014 and then remained steady at just over 1,000 until 2016. This data reflects each call for service reported by individual agency. Approximately 20% of calls involved

mutual aid by one or more departments. Mutual aid has increased in recent years and is discussed in detail later in our study.

	2013	2014	2015	2016	2017*	Total
All Departments	907	1,027	1,040	1,053	711	4,738
YoY Change	-	13%	1%	1%	n/a	

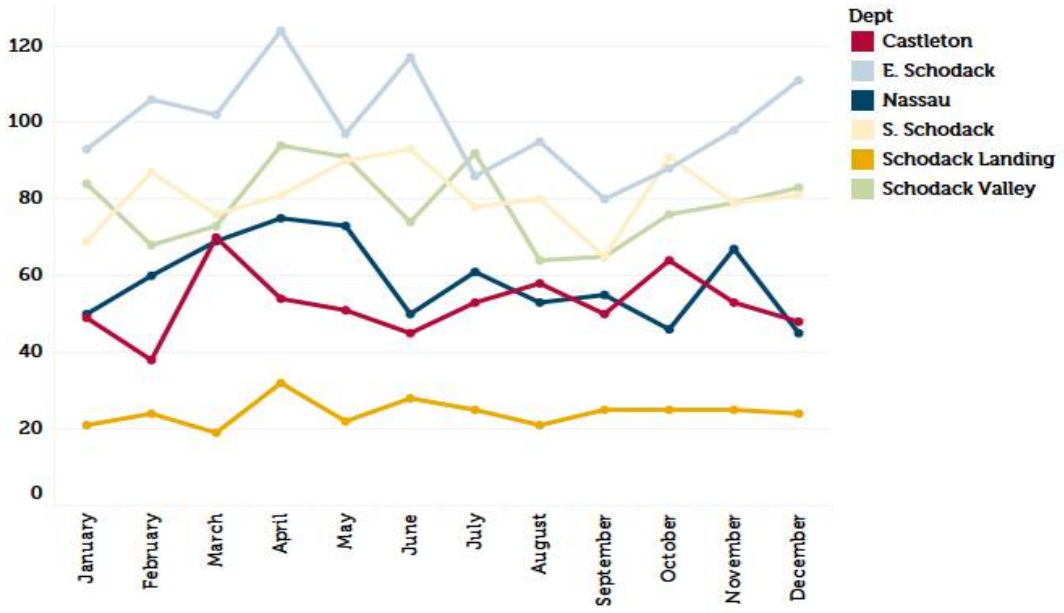
* *Excludes Nassau*

Through 2016, East Schodack FD received 24% of the total alarms from 2013-2016, followed by South Schodack and Schodack Valley, at 20% and 19%, respectively. South Schodack and Nassau each had a spike in volume from 2013 to 2014, which continued into 2015 for South Schodack. Factors driving the variability in call volume between the districts are the population, the road network and the types of EMS calls to which the districts respond.

Department	2013	2014	2015	2016	2017	Total	Share
Castleton	121	118	137	140	117	633	13%
East Schodack	221	254	246	249	227	1197	24%
Nassau	138	207	169	190	n/a	704	17%
South Schodack	168	197	226	216	163	970	20%
Schodack Landing	74	65	52	60	40	291	6%
Schodack Valley	185	186	210	198	164	943	19%
							100%

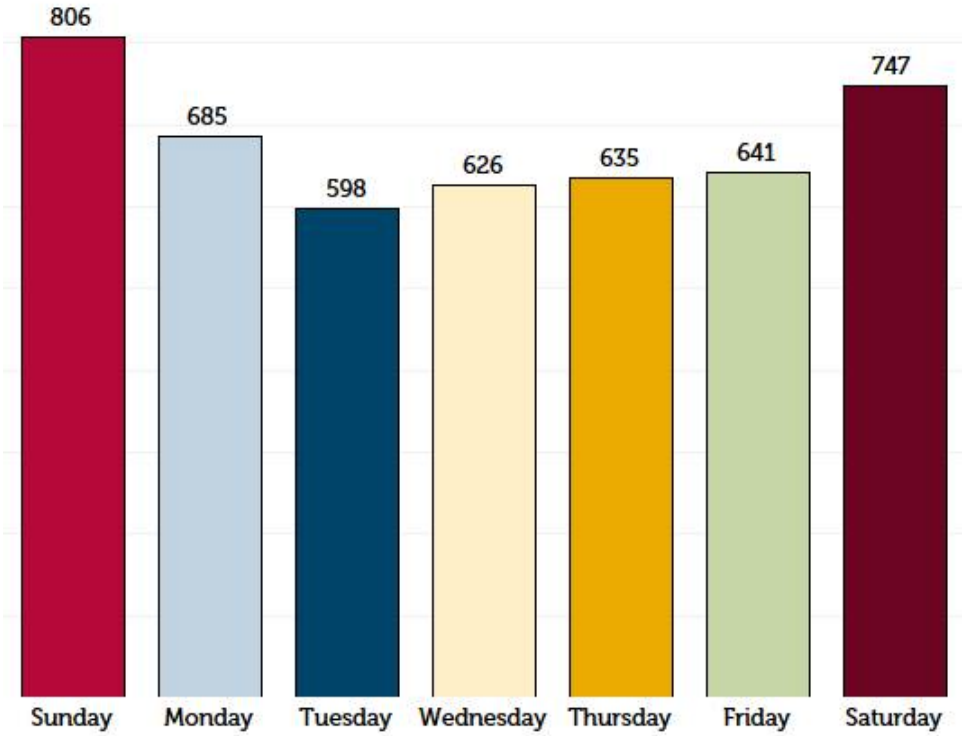
Incidents by Month

Looking at alarms by month, there is not much variation from month to month. East Schodack and Schodack Valley have a slightly higher call volume in spring months.

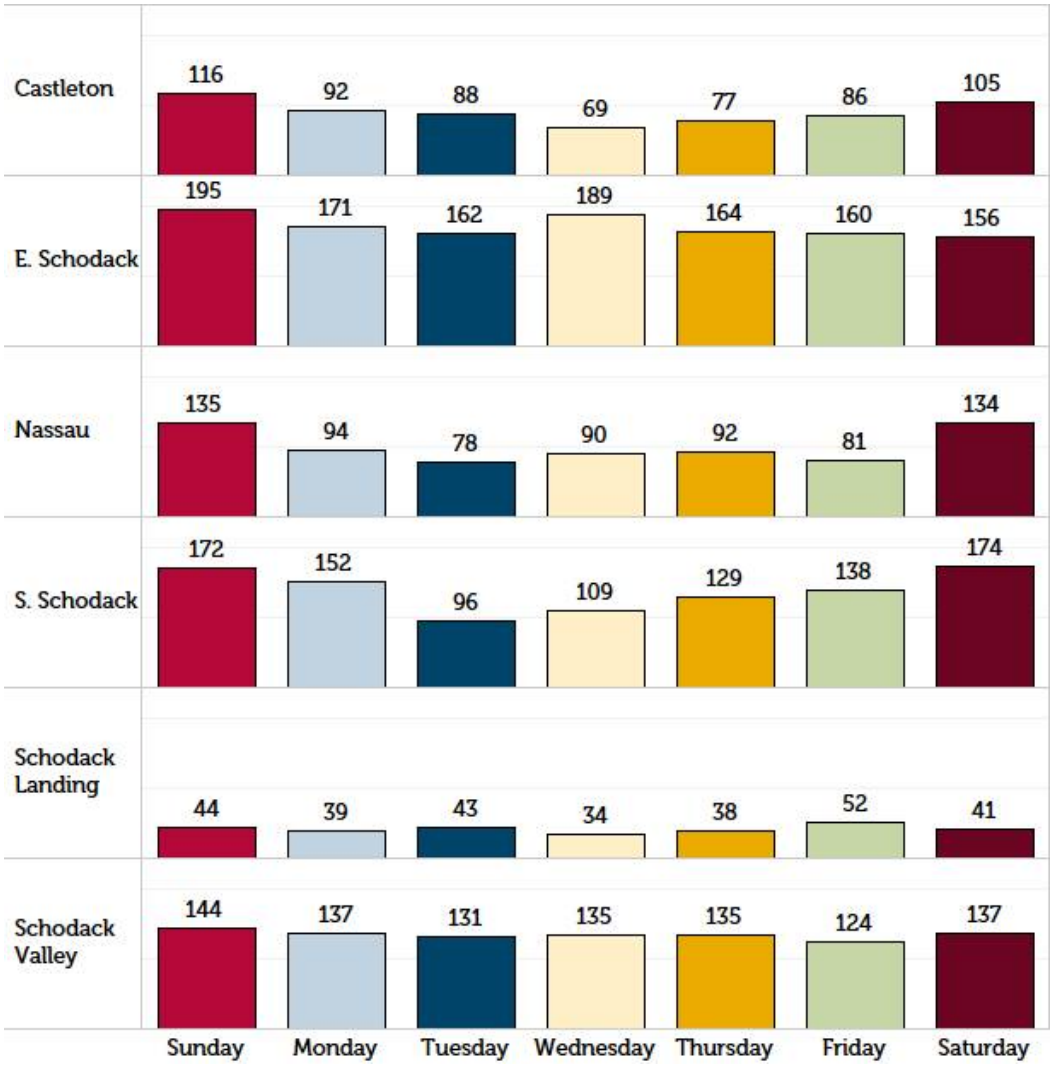


Incidents by Weekday

The weekdays show a noticeable variation in call volume. Sunday and Saturday have a higher proportion of calls.



When viewing weekday calls by department, East Schodack, Nassau and South Schodack are the drivers of an unusually high number of weekend incidents, while the other departments keep an equally distributed volume across all weekdays.



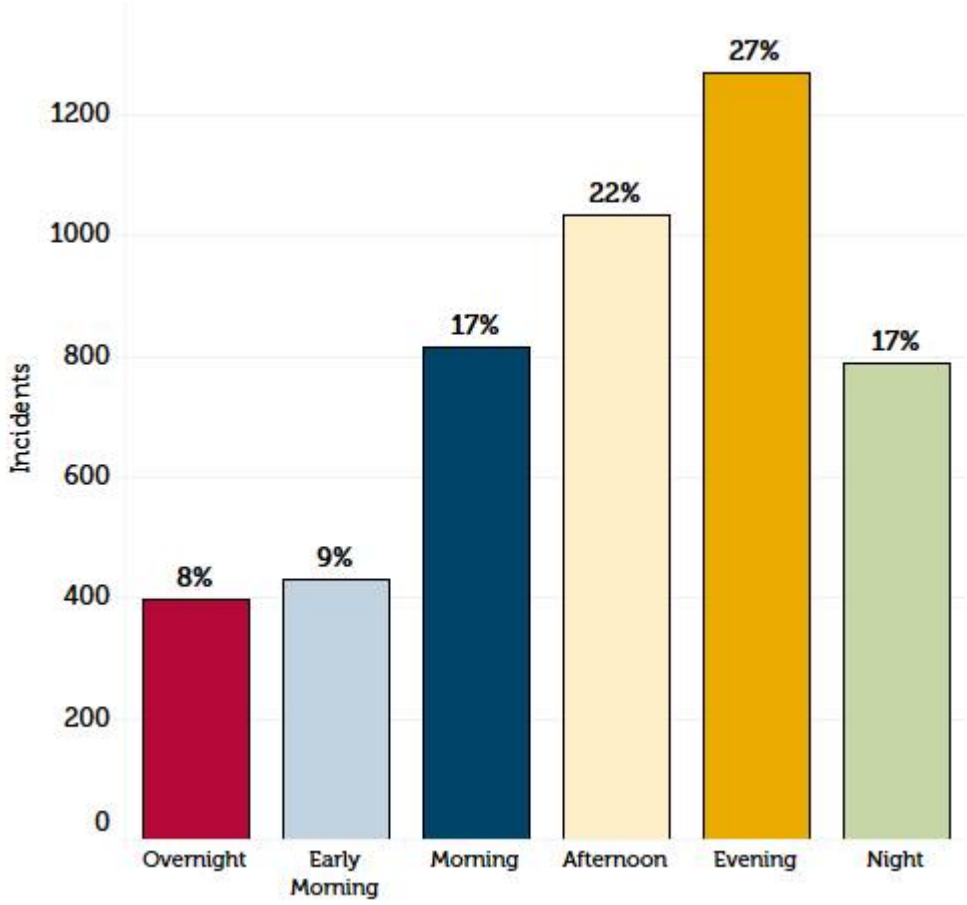
Time of Day

Our time-of-day analysis groups dispatches into six categories, based on hour of the day:

Overnight 00:00-03:59	Early Morning 04:00-07:59	Morning 08:00-11:59	Afternoon 12:00-15:59	Evening 16:00-19:59	Night 20:00-23:59

Half of the calls for service in Schodack occurred in the afternoon and evening. This is most likely due to increased activity (driving, cooking) throughout each community

and the higher population as residents return home from their work outside the community.



The distribution of calls for service within each agency also show peak volume occurring from the afternoon throughout the evening. By agency, Schodack Landing had the greatest percentage of calls between the hours of noon and 8:00 pm at 56%, and South Schodack had the smallest share at 46%. Detail by agency is shown in the table below.

Department	Overnight 00:00-03:59	Early Morning 04:00-07:59	Morning 08:00-11:59	Afternoon 12:00-15:59	Evening 16:00-19:59	Night 20:00-23:59
Castleton	58	47	81	132	199	116
E. Schodack	96	113	227	258	320	183

Department	Overnight 00:00-03:59	Early Morning 04:00-07:59	Morning 08:00-11:59	Afternoon 12:00-15:59	Evening 16:00-19:59	Night 20:00-23:59
Nassau	71	52	119	156	181	125
S. Schodack	84	111	159	201	242	173
Schodack Landing	22	22	44	76	87	40
Schodack Valley	68	87	184	212	239	153
Overall	399	432	814	1035	1268	790

Response Times

One measure of the quality of a fire service is how long it takes to respond to emergencies. Response times calculated in this report measure the time from the time of alarm to arrival on scene for each agency as recorded in their incident report.

Some caveats to keep in mind when viewing interval reporting are as follows:

- Alarm and on-scene times in the data had a level of detail to the minute, rather than to the second as might be available with dispatch data,
- Data was not available to measure the time from which a call was dispatched (alarm time) to when the department was en route, commonly known as turnout time or chute time.
- On-scene times may reflect a fire chief or other first-response unit and not necessarily fire apparatus. In other words, the information is presented below to provide context about response times from a department resource, but it cannot be used to make an accurate judgement about whether or not the departments are making a timely response with adequate resources.
- The NFIRS data did not provide a meaningful way to determine which department was first on scene for mutual aid calls.
- We excluded mutual aid-given calls and service calls, as they have a longer response, which is not indicative of the response to emergencies in the home district.
- Response times of zero and those greater than 40 minutes were also omitted because they are likely either data entry errors or the result of extenuating circumstances.

Response Intervals

CGR calculated the 25th, 50th (median), 75th and 90th percentile response time intervals by department and the nine NFIRS code classifications. CGR also grouped the 107 different incident descriptions entered by the departments into easily comparable groups.

Median time for dispatch to arrival on scene in the study area was 9m, which means that half of the calls for service have the fire department on scene in 9 minutes or less. Nassau had the lowest median response time at 6m and Schodack Landing and Schodack Valley were the longest at 10m. This includes all calls for service, regardless of whether they were fires or assisting other agencies, for example.

Though median response time is a useful data point, review of response times that include a larger portion of calls (e.g. 75th and 90th percentiles) is also useful to gauge department performance.

Overall, a fire department arrived on scene in 11m or less for 75% of the incidents, and 14m or less for 90% of incidents in the study area. At the 75th percentile, Nassau arrived on scene in the quickest time (9m). Schodack Landing took the longest to respond at 14m.

Perhaps the most significant indicator of fire operations is the time in which a unit will arrive on scene for 90% of their calls. The 90th percentile response time is widely used to evaluate department's efficiency and may indicate needs for changes to manpower resources, availability of apparatus, or training needed.

Nassau was able to arrive on scene within 12m for 90% of their calls for service. Schodack Landing had the longest response time, as 90% of their calls were responded to in 17m or less. Castleton had the largest difference in their response time from 75% to 90% of their calls, at 9m.

Department	Incidents	Percentile (25) of Alarm to Arrival	Median Alarm to Arrival	Percentile (75) of Alarm to Arrival	Percentile (90) of Alarm to Arrival
Castleton	467	0:04	0:07	0:11	0:16
East Schodack	1,039	0:06	0:09	0:11	0:13
Nassau	562	0:04	0:06	0:09	0:12
South Schodack	767	0:07	0:09	0:12	0:14

Department	Incidents	Percentile (25) of Alarm to Arrival	Median Alarm to Arrival	Percentile (75) of Alarm to Arrival	Percentile (90) of Alarm to Arrival
Schodack Landing	113	0:07	0:10	0:14	0:17
Schodack Valley	756	0:07	0:10	0:13	0:16
Overall	3,704	0:05	0:09	0:11	0:14

By Incident Type

Standards are created by departments to set expectations for response times. They may vary by type of service call and consider factors such as topography, population, available apparatus and manpower. For example, response times for fires are guided by National Fire Protection Association (NFPA) standards, but local response time standards vary based on community expectations and practical situations.

Currently, NFPA Standard 1720 for Volunteer Departments suggests that an appropriate response for a structure fire is 10 interior-qualified firefighters on scene in 10 minutes, 80% of the time. One of the underlying facts that influences these response time recommendations is that chances of a fire expanding beyond the room where it started go up dramatically at about 10 minutes. In order for a fire to be contained in the room where it started, a structure should either have sprinklers or an adequately staffed (12-14 people), trained and equipped fire response needs to be on scene in about 10 minutes.

Overall, Rescue & EMS calls for service account for 66% of calls for service in our analysis from 2013-2017. Half of the Rescue & EMS calls had a department on scene in 9m or less and 90% of calls had a response in 14m or less.

For fire incidents, a department was on scene in 14m or less for 90% of the calls, and Hazardous Conditions were attended to in 16m or less.

Excluding Special/Other incidents, Severe Weather & Natural Disaster incidents had the longest response times at the 90th percentile at 17m.

Overall response intervals by individual department are also included in the table below.

All Study Departments						
Incident Type	Count	Share	25th	50th (Median)	75th	90th
1-Fire	232	6%	0:05	0:08	0:11	0:14
2-Overpressure Rupture, Explosion, Overheat	5	0%	0:03	0:05	0:06	0:06
3-Rescue & Emergency Medical Service Incident	2,449	66%	0:06	0:09	0:11	0:14
4-Hazardous Condition	330	9%	0:06	0:09	0:12	0:16
5-Service Call	181	5%	0:04	0:08	0:11	0:14
6-Good Intent Call	114	3%	0:04	0:07	0:10	0:14
7-False Alarm & False Call	357	10%	0:05	0:07	0:11	0:14
8-Severe Weather & Natural Disaster	32	1%	0:05	0:10	0:12	0:17
9-Special/Other	4	0%	0:08	0:10	0:14	0:20
Overall, All Departments	3,704	100%	0:05	0:09	0:11	0:14

Castleton						
Incident Type	Count	Share	25th	50th (Median)	75th	90th
1-Fire	12	3%	0:04	0:05	0:08	0:12
2-Overpressure Rupture, Explosion, Overheat	1	0%	0:03	0:03	0:03	0:03
3-Rescue & Emergency Medical Service Incident	294	63%	0:05	0:08	0:11	0:17
4-Hazardous Condition	15	3%	0:04	0:09	0:12	0:16
5-Service Call	58	12%	0:04	0:07	0:10	0:13
6-Good Intent Call	9	2%	0:04	0:07	0:09	0:12
7-False Alarm & False Call	61	13%	0:04	0:07	0:11	0:14
8-Severe Weather & Natural Disaster	17	4%	0:03	0:07	0:11	0:15
9-Special/Other	0	n/a	n/a	n/a	n/a	n/a
Overall, Castleton	467	100%	0:03	0:07	0:11	0:16

East Schodack

Incident Type	Count	Share	25th	50th (Median)	75th	90th
1-Fire	56	5%	0:05	0:09	0:11	0:13
2-Overpressure Rupture, Explosion, Overheat	0	n/a	n/a	n/a	n/a	n/a
3-Rescue & Emergency Medical Service Incident	850	82%	0:07	0:09	0:11	0:13
4-Hazardous Condition	46	4%	0:06	0:08	0:11	0:13
5-Service Call	14	1%	0:04	0:06	0:07	0:09
6-Good Intent Call	20	2%	0:02	0:05	0:09	0:15
7-False Alarm & False Call	52	5%	0:05	0:08	0:10	0:12
8-Severe Weather & Natural Disaster	1	0%	0:20	0:20	0:20	0:20
9-Special/Other	0	n/a	n/a	n/a	n/a	n/a
Total	1,039	100%	0:07	0:09	0:11	0:13

Nassau

Incident Type	Count	Share	25th	50th (Median)	75th	90th
1-Fire	38	7%	0:04	0:06	0:07	0:09
2-Overpressure Rupture, Explosion, Overheat	3	1%	0:04	0:06	0:06	0:06
3-Rescue & Emergency Medical Service Incident	302	54%	0:03	0:05	0:08	0:12
4-Hazardous Condition	78	14%	0:05	0:08	0:11	0:13
5-Service Call	60	11%	0:04	0:06	0:10	0:13
6-Good Intent Call	11	2%	0:03	0:05	0:06	0:09
7-False Alarm & False Call	70	12%	0:03	0:06	0:08	0:10
8-Severe Weather & Natural Disaster	0	n/a	n/a	n/a	n/a	n/a
9-Special/Other	0	n/a	n/a	n/a	n/a	n/a
Overall, Nassau	562	100%	0:03	0:06	0:09	0:12

South Schodack

Incident Type	Count	Share	25th	50th (Median)	75th	90th
1-Fire	59	8%	0:05	0:09	0:11	0:13
2-Overpressure Rupture, Explosion, Overheat	1	0%	0:05	0:05	0:05	0:05
3-Rescue & Emergency Medical Service Incident	431	56%	0:07	0:09	0:12	0:14
4-Hazardous Condition	101	13%	0:07	0:10	0:12	0:16
5-Service Call	22	3%	0:09	0:10	0:11	0:13
6-Good Intent Call	37	5%	0:05	0:09	0:11	0:14
7-False Alarm & False Call	112	15%	0:05	0:09	0:12	0:14
8-Severe Weather & Natural Disaster	1	0%	0:04	0:04	0:04	0:04
9-Special/Other	3	0%	0:06	0:10	0:10	0:10
Overall, South Schodack	767	100%	0:06	0:09	0:12	0:14

Schodack Landing

Incident Type	Count	Share	25th	50th (Median)	75th	90th
1-Fire	20	18%	0:07	0:11	0:14	0:16
2-Overpressure Rupture, Explosion, Overheat	0	n/a	n/a	n/a	n/a	n/a
3-Rescue & Emergency Medical Service Incident	52	46%	0:07	0:10	0:13	0:17
4-Hazardous Condition	6	5%	0:08	0:10	0:14	0:16
5-Service Call	8	7%	0:04	0:10	0:12	0:14
6-Good Intent Call	17	15%	0:04	0:07	0:10	0:13
7-False Alarm & False Call	4	4%	0:08	0:11	0:14	0:16
8-Severe Weather & Natural Disaster	5	4%	0:12	0:13	0:16	0:17
9-Special/Other	1	1%	0:25	0:25	0:25	0:25
Overall, Schodack Landing	113	100%	0:09	0:10	0:14	0:17

Schodack Valley						
Incident Type	Count	Share	25th	50th (Median)	75th	90th
1-Fire	47	6%	0:06	0:11	0:14	0:16
2-Overpressure Rupture, Explosion, Overheat	0	n/a	n/a	n/a	n/a	n/a
3-Rescue & Emergency Medical Service Incident	520	69%	0:07	0:10	0:13	0:16
4-Hazardous Condition	84	11%	0:07	0:10	0:13	0:19
5-Service Call	19	3%	0:08	0:10	0:14	0:15
6-Good Intent Call	20	3%	0:07	0:08	0:10	0:13
7-False Alarm & False Call	58	8%	0:05	0:07	0:09	0:15
8-Severe Weather & Natural Disaster	8	1%	0:10	0:10	0:10	0:10
9-Special/Other	0	n/a	n/a	n/a	n/a	n/a
Overall, Schodack Valley	756	100%	0:07	0:10	0:13	0:16

Further analysis by call type is shown for the top 10 call types by volume, sorted by the shortest to longest response time in the 90th percentile. Rank by volume and rank by response time are also indicated.

The data shows Rescue and EMS-MVA incidents are among the most frequent and have the second-shortest response time for service at 13m. Though lesser in volume, Fire-In Structure incidents also have a response time of 13m.

Incident Type	Count	Rank by Volume	Alarm to Arrival, Median	Alarm to Arrival, 90th Percentile	Rank by 90th Percentile (1=shortest)
False Alarm-No Fire	112	7	00:07	00:12	1
Rescue & EMS-MVA	222	3	00:08	00:13	2
Fire-In Structure	87	10	00:09	00:13	2
Rescue & EMS	1,594	1	00:09	00:14	4
False Alarm-System Malfunction	129	5	00:08	00:14	4
False Alarm-Other	115	6	00:07	00:14	4
Good Intent Call-Other	96	8	00:08	00:14	4

Incident Type	Count	Rank by Volume	Alarm to Arrival, Median	Alarm to Arrival, 90th Percentile	Rank by 90th Percentile (1=shortest)
Hazardous Condition-MVA	91	9	00:10	00:15	8
Rescue & EMS-Assist, Standby	626	2	00:09	00:16	9
Hazardous Condition-Electrical	144	4	00:09	00:16	9

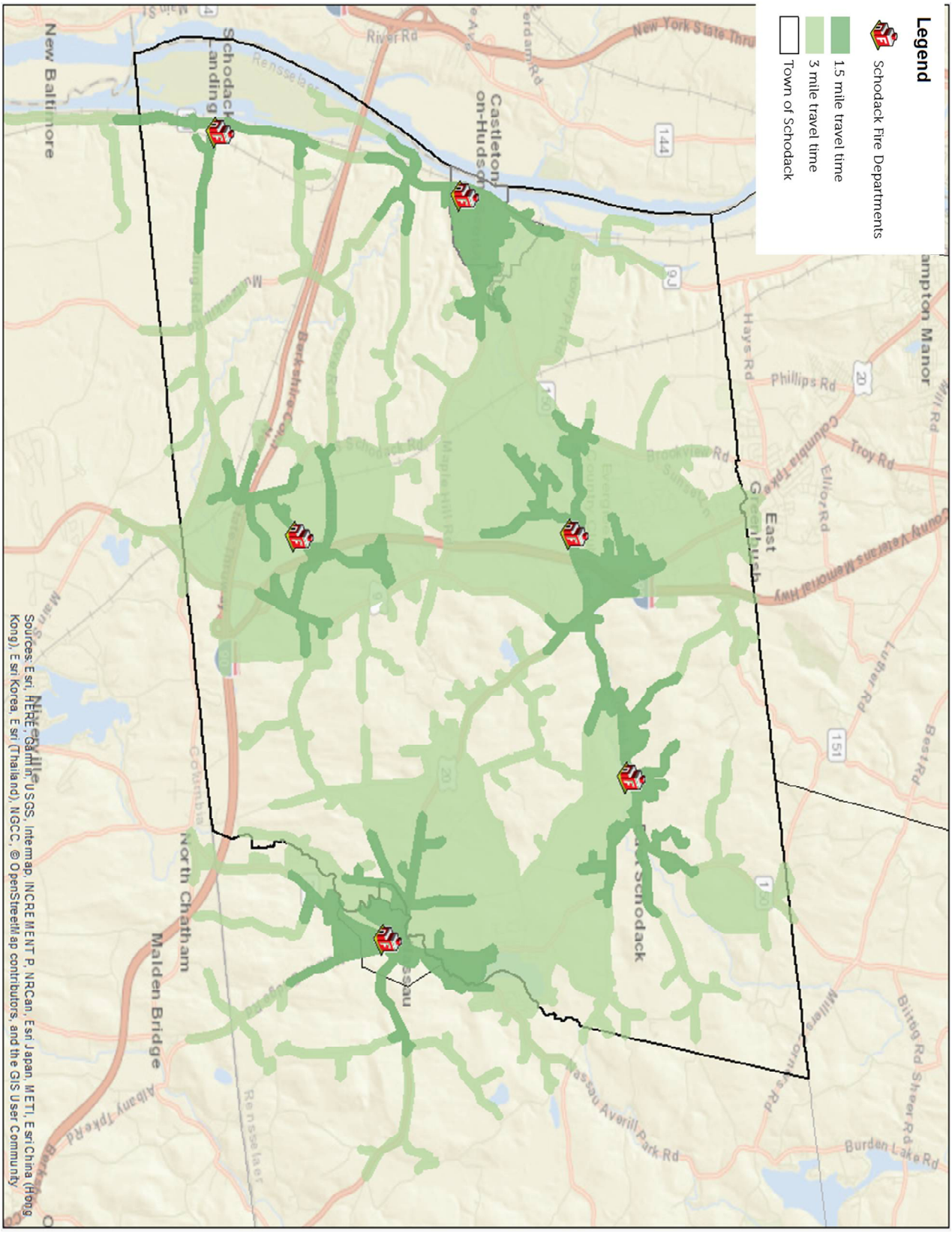
When fire calls are analyzed by department by time of day, it is apparent that some of the departments have longer response times during the day than they do in the evening or overnight hours.

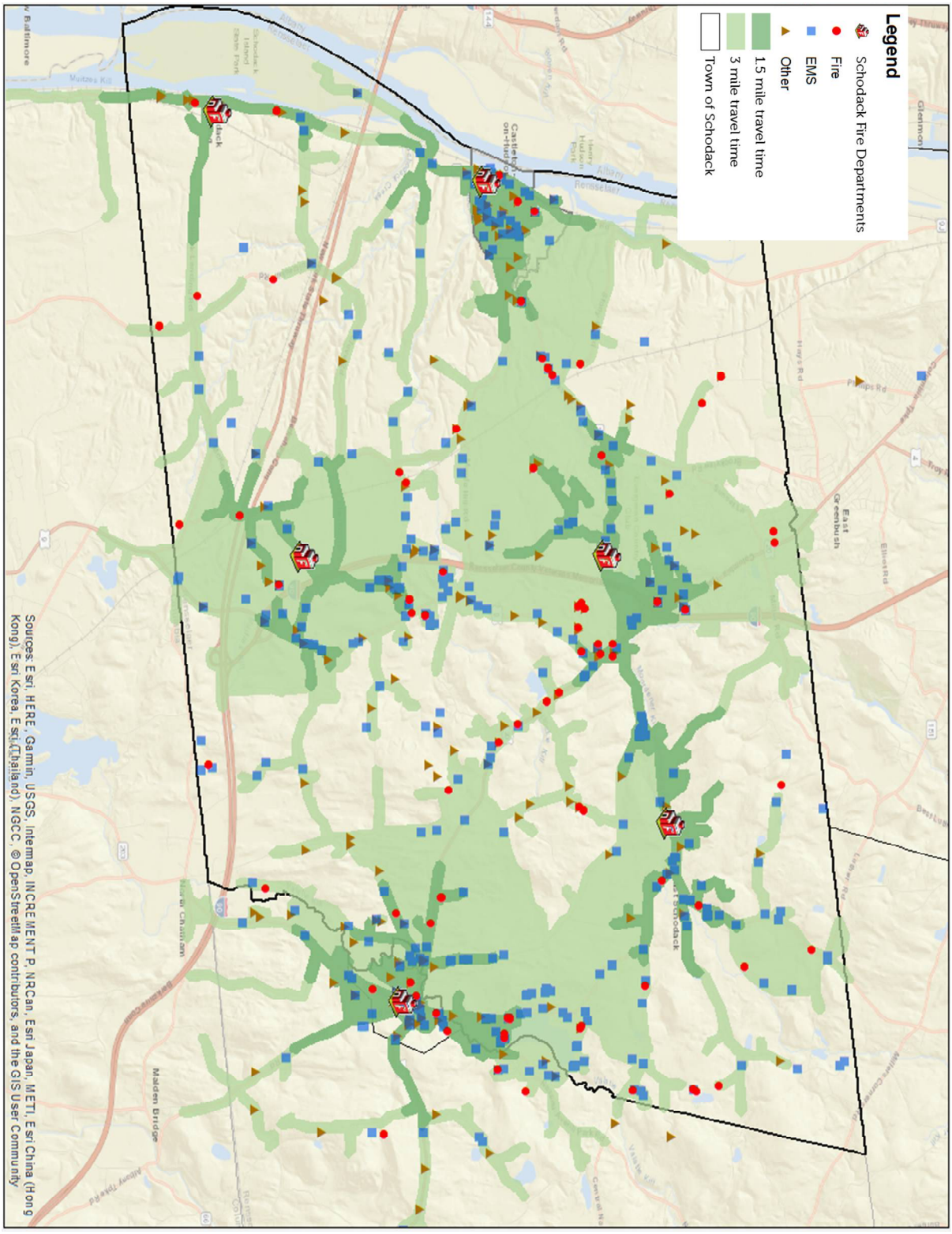
Department	Time of Day	Count	Alarm to Arrival, Median	Alarm to Arrival, 90th Percentile
Castleton	Morning & Afternoon (08:00-15:59)	5	00:12	00:12
	Evening & Night (16:00-23:59)	7	00:04	00:05
	Total	12	00:05	00:12
E. Schodack	Overnight & Early Morning (00:00-07:59)	3	00:05	00:05
	Morning & Afternoon (08:00-15:59)	26	00:09	00:16
	Evening & Night (16:00-23:59)	27	00:09	00:12
	Total	56	00:09	00:13
Nassau	Overnight & Early Morning (00:00-07:59)	1	00:02	00:02
	Morning & Afternoon (08:00-15:59)	15	00:07	00:10
	Evening & Night (16:00-23:59)	22	00:05	00:07
	Total	38	00:06	00:09
S. Schodack	Overnight & Early Morning (00:00-07:59)	5	00:12	00:13
	Morning & Afternoon (08:00-15:59)	23	00:09	00:13
	Evening & Night (16:00-23:59)	31	00:06	00:12
	Total	59	00:09	00:13
Schodack Landing	Overnight & Early Morning (00:00-07:59)	1	00:14	00:14
	Morning & Afternoon (08:00-15:59)	9	00:11	00:18

Department	Time of Day	Count	Alarm to Arrival, Median	Alarm to Arrival, 90th Percentile
	Evening & Night (16:00-23:59)	10	00:09	00:15
	Total	20	00:11	00:16
Schodack Valley	Overnight & Early Morning (00:00-07:59)	5	00:10	00:15
	Morning & Afternoon (08:00-15:59)	24	00:10	00:17
	Evening & Night (16:00-23:59)	18	00:11	00:16
	Total	47	00:11	00:16
Grand Total		232	00:08	00:14

Maps

The following maps show the response coverage for the whole study area based on the current station locations. Using the software, we modeled 1.5 mile and 3 mile drive distances from the stations. Almost all major streets in the service area are within a 3 mile drive of at least one station in the town. No areas are within a 1.5 mile drive of two stations, although there is some overlap of 3 mile drives. The map that shows the call distribution highlights that most calls also fall within the 3 mile drive times. There is also clustering near several of the fire stations because they are located in mores densely populated areas. (Maps focused on individual stations follow in the appendix).


Legend
Schodack Fire Departments
1.5 mile travel time
3 mile travel time
Town of Schodack
New Baltimore
Schodack Landing
Castleton-on-Hudson
River Rd
New York State Thru
144
9J
Hampton Manor
Hays Rd
Phillips Rd
20
Troy Rd
Columbia Turnpike
East Greenbush
County Veterans Memorial Hwy
Elliot Rd
Luther Rd
Best Rd
151
Berkshire Conn
Maple Hill Rd
Brookview Rd
Sunset Ln
Miller Corners Rd
Bittog Rd
Sheer Rd
Burden Lake Rd
Nassau Averill Park Rd
Albany Turnpike Rd
Rensselaer
Columbia
North Chatham
Malden Bridge
Schodack
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community


Legend
Schodack Fire Departments
Fire
EMS
Other
15 mile travel time
3 mile travel time
Town of Schodack
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

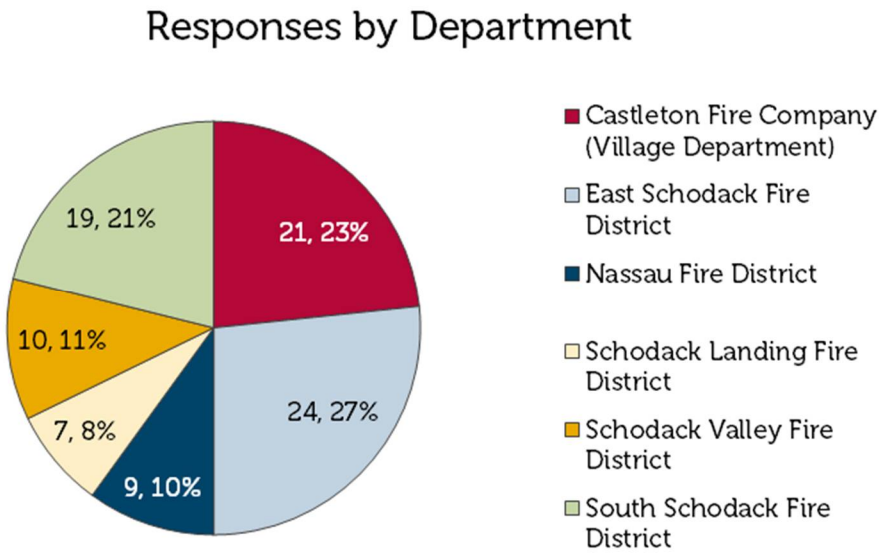
Summary of Member Survey

As part of this project, the project team conducted a survey on opinions of existing conditions in the fire services, using an internet-based tool. The survey was completed by 90 current and former fire department members within the study area[6]. Respondents were of varied age, length of service, gender and position held. This survey should not be interpreted as a scientific poll; however, the results of the survey can still serve to provide useful information about the general opinions of the current conditions and future options. Detailed tables of survey results are provided in the appendix.

Respondent Profile

Demographics

East Schodack had the greatest number of respondents at 24, and together with Castleton (21) contributed half of the responses. South Schodack followed closely with 19 responses, while Schodack Valley, Nassau and Schodack each had 10 or less participants.



Response rate measures the number of responses from each department against the number of available survey takers. Past members and members of any auxiliary were

[6] Not every respondent answered every question.

invited to respond to the survey as well which resulted in a greater than 100% response for one department (Castleton).

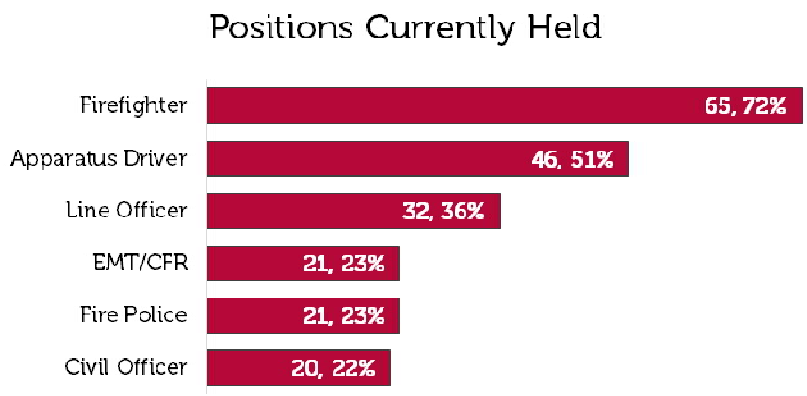
	Reported Members	Responses	Responses to Active Members Ratio
Castleton	17	21	124%
East Schodack	27	24	89%
Nassau	28	9	32%
Schodack Landing	19	7	37%
Schodack Valley	30	10	33%
South Schodack	28	19	68%
Total	149	90	60%

Half of the respondents had less than 20 years of service in their current department, and one third had less than 10. When considering all years of fire service, regardless of department, years of service becomes more distributed.

Almost two thirds of survey takers (59%) were over 50 years of age, while 32% were over 60. Members aged 30-39 were the next largest group represented, at 18%.

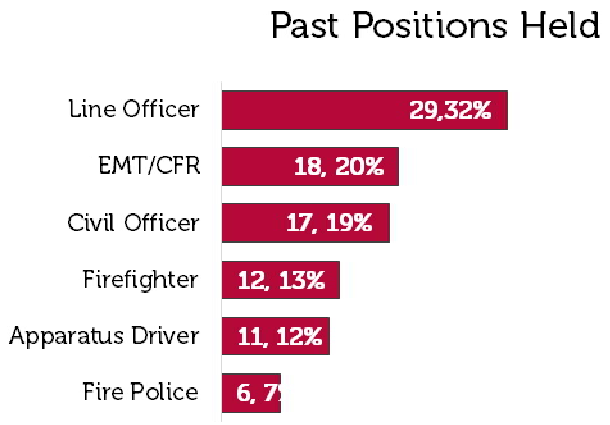
Service

Members were asked which position(s) they currently hold in their department. Almost all of the 90 survey-takers hold more than one more than one position in their department, for a total of 205 positions listed.



Seventy-two percent of the 90 members who responded hold a firefighter position, and just over half were Apparatus Drivers. More than one third (36%) acted as Line Officers. Between 22% and 23% of respondents were also EMT/CFRs Fire Police and Civil Officers.

The same was asked of past positions, resulting in 93 responses. The distribution was quite different from current positions. Line Officer was listed in 32% of the responses, followed by EMT/CFR and Civil Officer, at 20% and 19%, respectively.



Members were also asked if they were employed anywhere else in public safety. More than half of the 19 who answered "yes" held positions as firefighters, in EMS or as a police or security officer.

Averaged over the last six months, the majority of members reported averaging less than 10 hours a week of service in their department.

Results - SWOT

Members taking the survey were asked a series of questions on what they felt were strengths, weaknesses, opportunities and challenges of the fire service in the Town of Schodack, including their own department.

Strengths

The support of the communities they serve, availability and quality of equipment, mutual aid, training, and dedicated members were the most frequent terms used when asked to describe the strengths of their department or Schodack's fire service.

Q9 What do you see as strengths of the fire service in the Town of Schodack, including your own district?

Weaknesses

Lack of manpower and issues relating to recruiting new members were by far the most mentioned weakness in the fire service. The reason given most was the inability for many people to commit to the large amount of training necessary. Interestingly, equipment was listed quite frequently as a challenge, in contrast to being considered as strength (above). This may be due to the variation of apparatus type and quality by departments.

Q10 What do you see as weaknesses of the fire service in the Town of Schodack, including your own district?

Opportunities

Opportunities for improvement echoed the weaknesses, however there was no mention of recruitment or member retention efforts. Themes of consolidation into a

town-wide fire service was one of the top three opportunities listed. Reasons given were the ability to consolidate leadership, training, purchasing, and improve teamwork and membership retention.

Q11 What opportunities for improvement do you see for fire service in the Town of Schodack, including your own district?

Threats and Barriers

Threats and barriers to the town's fire service again referenced lack of manpower and mandated training requirements that affect recruitment. Many comments addressed changes seen in their community as their population of young people and tax base decrease. Issues describing dissatisfaction with leadership and individuals acting in their own interest were also mentioned.

Q12 Can you identify anything outside of your district as being a potential threat to the success of the organization?

Q13 What barriers do you see to improving fire service in the Town of Schodack?

Changes to the Departments

Replies to questions on what should not change if departments were consolidated (Q14) mirrored the answers given when asked about strengths of their own departments. The same was true for the weaknesses listed and what should change if there were a consolidation (Q15).

When asked specifically about the importance of keeping the identity of their department if a consolidation were to occur, 75% of responses "Strongly Agreed" or "Agreed" it was important.

Q14 If several or all of the fire departments in the Town of Schodack were to consolidate, what is the one thing that you would NOT want to see change in your fire department?

Q15 If several or all of the fire departments in the Town of Schodack were to consolidate, what is the one thing that you WOULD like to see changed in your fire department?

Retention and Recruitment Suggestions

Retention and recruitment is one of the largest problems the fire service across NYS is facing and is not a localized issue in Schodack. Many comments regarding recruitment and retention call for improved training, volunteer benefits and inclusion.

Q16 What can be done to retain current members of the department you belong to?

Q17 What can be done to improve the recruitment of new members to the fire departments in the Town of Schodack?

Potential Losses on Merger

The vast majority of responses to this question felt that they would lose little, if anything in a merger (Q19). The individuals that hold positions of authority could be the most threatened if the merger were to occur, yet in interviews there was often support for the concept if managed properly.

Q19 What would you personally lose if the six departments in the Town of Schodack were to merge?

Merger Support

Finally, respondents were asked "Would you support the merger of the six fire departments in the Town of Schodack?" Almost all respondents were evenly split

between "Yes" and "Not sure at this time." Ten percent of the responses answered "No." There were 18 who skipped this question.

Would you support the merger of the six fire departments in the Town of Schodack?		
Yes	33	46%
No	7	10%
Not sure at this time	32	44%
Total	72	100%
Skipped Question	18	

Tax Picture

Fire service costs are relatively low in the town of Schodack at an average of $0.99 per thousand. This compares to $4.63 per thousand in the Town, $6.88 for the County and $23.63 for the Schodack Schools. The village rates are Castleton $5.04 for Castleton (which includes fire services) and $5.08 for Nassau, which excludes fire.

Fire department tax rates in Schodack vary, ranging from a low of 57 cents per $1,000 assessed value in Schodack Center to a high of $1.80 per $1,000 in Schodack landing. The median rate was 78 cents, and most departments had rates below 80 cents. While most rates were relatively flat in the past 4 years, the Schodack Fire Protection District rate increased 34% during this period, largely reflecting a jump from 53 cents per $1,000 in 2016 to 70 cents in 2017.

	2015	2016	2017	2018	4-year change
EAST SCHODACK FIRE	$0.70	$0.69	$0.71	$0.72	3%
SCHODACK F.P. DIST	$0.53	$0.53	$0.70	$0.71	34%
NASSAU LAKE WEST	$0.95	$0.96	$0.95	$0.97	2%
SCHODACK CENTER	$0.58	$0.58	$0.59	$0.57	-3%
SCHODACK VALLEY	$0.66	$0.66	$0.67	$0.68	3%
SOUTH SCHODACK	$0.87	$0.87	$0.87	$0.87	0%
SCHODACK LANDING	$1.78	$1.86	$1.72	$1.80	1%
NASSAU FIRE DIST (SCHODACK)	$0.74	$0.76	$0.76	$0.77	3%

NASSAU FPD (NASSAU)	$1.43	$1.43	$1.41	$1.39	-3%
NASSAU FIRE DISTRICT (NASSAU)	$0.76	$0.76	$0.77	$0.78	2%

** Nassau rates are based on an equalized, full assessed value.*

The fire service-related 2018 property tax bill for a home assessed at $215,000 would range from $121.50 in Schodack Center to $387.32 in Schodack Landing. The bills for most fire departments, however, would be less than $200.

Projected annual tax for home of $215,000 (2018)	
EAST SCHODACK FIRE	$ 154.80
SCHODACK F.P. DIST	$ 152.98
NASSAU LAKE WEST	$ 208.64
SCHODACK CENTER	$ 121.50
SCHODACK VALLEY	$ 146.94
SOUTH SCHODACK	$ 187.10
SCHODACK LANDING	$ 387.32
NASSAU FIRE DIST (SCHODACK)	$ 164.59
NASSAU FPD (NASSAU)	$ 298.33
NASSAU FIRE DISTRICT (NASSAU)	$ 166.69

Further discussion of options for the future will be presented in a separate section.

Appendix A –Demographic Profile

Source for all tables is the US Census Bureau 2011-2016 ACS Estimates unless otherwise noted.

Age and Race/Ethnicity

Share of Population by Age (%)	Rensselaer County	Schodack Town
0 to 14 years	16.6	16.4
15 to 24 years	14.6	12.1
25 to 44 years	25.2	21.8
45 to 64 years	28.5	32.5
65 to 84 years	12.9	15.4
85 years and over	2.2	1.8
Median Age (years)	39.8	44.8

Share of Population by Race/Ethnicity (%)	
Asian	1.4
Black or African American	2.1
White	96.8
Two or More Races	1.0
Hispanic or Latino, Regardless of Race	0.5

Education and Employment

Educational Attainment, Population 25+ years (%)	
Less than 9th grade	1.3
9th to 12th grade, no diploma	6.3
High school graduate (includes equivalency)	27.5
Some college, no degree	18.8
Associate's degree	14.7
Bachelor's degree	17.6
Graduate or professional degree	13.8

Employment	
By Class (%, ages 16+)	
Private wage and salary workers	71.6
Government workers	23.7
Self-employed and Other	4.8
By Industry (%, top 5 by share)	
Educational services, and health care and social assistance	26.9
Public administration	12.8
Professional, scientific, and management, and administrative and waste management services	10.4
Retail trade	10.4
Construction	9.3

Income, Poverty and Housing

Household Income Distribution (%)	
Less than $25,000	9.8
$25,000 to $49,000	20.0
$50,000 to $74,999	17.3
$75,000 to $99,999	14.1
$100,000 to $199,999	32.6
$200,000 or more	6.2
Median household income	$81,050

Poverty for Selected Groups (%)	
Families	1.9
Individuals under 18	5.7
Individuals, 18-64 years	4.3
Individuals , 65 years and over	2.3

Housing	
Total Housing Units	5,247
Owner-occupied housing units (%)	81.5
Renter-occupied housing units (%)	18.5
Total Households	4,942
Households with individuals under 18 years (%)	29.7
Households with individuals 60+ (%)	44.4

Appendix B -Detailed Survey Results

Respondent Demographics

	Count	Share (%)
Which fire department do you belong to?		
Castleton	21	23%
East Schodack	24	27%
Nassau	9	10%
Schodack Landing	7	8%
Schodack Valley	10	11%
South Schodack	19	21%
Total	90	100%

	Count	Share (%)
Age		
Under 30	12	13%
30-39	16	18%
40-49	9	10%
50-59	24	27%
60-69	20	22%
70+	9	10%
Total	90	100%

	Count	Share
Gender		
Male	70	78%
Female	16	18%
I choose not to answer	4	4%
	90	100%

Service

	Count	Share (%)		Count	Share (%)
Years of Service: Current Department			Years of Service: All Departments		
<10	27	30%	<10	21	23%
10-19	17	19%	10-19	17	19%
20-29	15	17%	20-29	11	12%
30-39	12	13%	30-39	18	20%
40-49	15	17%	40-49	18	20%
50+	4	4%	50+	5	6%
Total	90	100%	Total	90	100%

	Count	Share
Monthly service hours averaged over the past 6 months		
0-4 hrs	26	32%
5-9 hrs	22	27%
10-14 hrs	12	15%
15-19 hrs	10	12%
20-29 hrs	6	7%
30-39 hrs	1	1%
40+ hrs	4	5%
Total	81	100%

CURRENT position(s) held in department							
	Civil Officer	Line Officer	Apparatus Driver	Firefighter	EMT/ CFR	Fire Police	Total
Castleton	3	4	6	14	3	6	36
East Schodack	8	10	15	18	9	3	63
Nassau	3	2	5	6	2	3	21
Schodack Landing	1	6	3	7	0	3	20
Schodack Valley	3	7	8	10	7	4	39
South Schodack	2	3	9	10	0	2	26
Total by Position	**20**	**32**	**46**	**65**	**21**	**21**	**205**
Share by Position	**10%**	**16%**	**22%**	**32%**	**10%**	**10%**	**100%**

PAST position(s) held in department	Civil Officer	Line Officer	Apparatus Driver	Firefighter	EMT/ CFR	Fire Police	Total
Castleton	3	4	6	14	3	6	36
East Schodack	8	10	15	18	9	3	63
Nassau	3	2	5	6	2	3	21
Schodack Landing	1	6	3	7	0	3	20
Schodack Valley	3	7	8	10	7	4	39
South Schodack	2	3	9	10	0	2	26
Total by Position	**20**	**32**	**46**	**65**	**21**	**21**	**205**
Share by Position	**10%**	**16%**	**22%**	**32%**	**10%**	**10%**	**100%**

Employment in other Public Safety positions	Count	Share
Fire	6	30%
EMS	6	30%
Police/Security	3	15%
Emergency Services	2	10%
HazMat	1	5%
911	1	5%
Did not disclose	1	5%
	19	100%

Completion Rates for SWOT and Open-Ended Questions

Question	Skipped	Answered	Completion Rate
What do you see as strengths of the fire service in the Town of Schodack, including your own district?	25	65	72%
What do you see as weaknesses of the fire service in the Town of Schodack, including your own district?	22	68	76%
What opportunities for improvement do you see for fire service in the Town of Schodack, including your own district?	31	59	66%
Can you identify anything outside of your district as being a potential threat to the success of the organization?	34	56	62%
What barriers do you see to improving fire service in the Town of Schodack?	37	53	59%
If several or all of the fire departments in the Town of Schodack were to consolidate, what is the one thing that you would NOT want to see change in your fire department?	31	59	66%
If several or all of the fire departments in the Town of Schodack were to consolidate, what is the one thing that you WOULD like to see changed in your fire department?	37	53	59%
What can be done to retain current members of the department you belong to?	37	53	59%
What can be done to improve the recruitment of new members to the fire departments in the Town of Schodack?	35	55	61%
What would you personally lose if the six departments in the Town of Schodack were to merge?	32	58	64%
Is there anything else you would like to share?	52	38	42%

Merger Support

If the departments were to merge, it is important is it to keep the identity of your department.	Count	Share
Strongly Agree	27	38%
Agree	24	34%
Disagree	3	4%
Strongly Disagree	7	10%
No Opinion	10	14%
	71	100%

Would you support the merger of the six fire departments in the Town of Schodack?	Count	Share
Yes	33	46%
No	7	10%
Not sure at this time	32	44%
	72	100%

Would you support the merger of the six fire departments in the Town of Schodack?	Yes	No	Not sure at this time
Castleton	8	2	5
East Schodack	10	2	9
Nassau	3	1	4
Schodack Landing	1	1	3
Schodack Valley	4	0	2
South Schodack	7	1	9
Total by Answer	33	7	32

Appendix C -Call for Service Detail

*Nassau did not report in 2017.

Reported Incidents						
	2013	2014	2015	2016	2017	Total
Castleton	121	118	137	140	117	633
E. Schodack	221	254	246	249	227	1197
Nassau*	138	207	169	190	*	704
S. Schodack	168	197	226	216	163	970
Schodack Landing	74	65	52	60	40	291
Schodack Valley	185	186	210	198	164	943
Total	907	1,027	1,040	1,053	711	4,738

Reported Incidents, excluding "Dispatched & canceled en route'						
	2013	2014	2015	2016	2017	Total
Castleton	117	113	130	138	114	612
E. Schodack	211	240	233	243	213	1,140
Nassau*	133	206	163	189	*	691
S. Schodack	153	184	203	197	151	888
Schodack Landing	60	47	42	50	29	228
Schodack Valley	168	167	197	177	150	859
Total	842	957	968	994	657	4,418

Cancelled Incidents, 2013-2017		
Castleton	21	7%
East Schodack	57	18%
Nassau	13	4%
South Schodack	82	26%
Schodack Landing	63	20%
Schodack Valley	84	26%
Total	320	100%

Incidents by Month by Year							
	2013	2014	2015	2016	2017	Total	Share
J	82	83	84	69	48	366	8%
F	52	87	64	124	56	383	8%
M	71	96	90	83	69	409	9%
A	77	98	97	110	78	460	10%
M	83	74	121	78	68	424	9%
J	91	76	83	96	61	407	9%
J	65	85	116	87	42	395	8%
A	82	77	75	88	49	371	8%
S	80	77	67	73	43	340	7%
O	65	79	108	71	67	390	8%
N	73	106	76	89	57	401	8%
D	86	89	59	85	73	392	8%
Total	907	1027	1040	1053	711	4738	100%

Incidents by Month, 2013-2017													
	J	F	M	A	M	J	J	A	S	O	N	D	Total
Castleton	49	38	70	54	51	45	53	58	50	64	53	48	633
East Schodack	93	106	102	124	97	117	86	95	80	88	98	111	1,197
Nassau	50	60	69	75	73	50	61	53	55	46	67	45	704
South Schodack	69	87	76	81	90	93	78	80	65	91	79	81	970
Schodack Landing	21	24	19	32	22	28	25	21	25	25	25	24	291
Schodack Valley	84	68	73	94	91	74	92	64	65	76	79	83	943
Total	366	383	409	460	424	407	395	371	340	390	401	392	4,738

Incidents by Weekday, 2013-2017								
	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
Castleton	116	92	88	69	77	86	105	633
East Schodack	195	171	162	189	164	160	156	1,197
Nassau	135	94	78	90	92	81	134	704
South Schodack	172	152	96	109	129	138	174	970
Schodack Landing	44	39	43	34	38	52	41	291
Schodack Valley	144	137	131	135	135	124	137	943
Total	806	685	598	626	635	641	747	4,738

Time of Day, 2013-2017							
	Overnight 00:00-03:59	Early Morning 04:00-07:59	Morning 08:00-11:59	Afternoon 12:00-15:59	Evening 16:00-19:59	Night 20:00-23:59	Total
Castleton	58	47	81	132	199	116	633
East Schodack	96	113	227	258	320	183	1197
Nassau	71	52	119	156	181	125	704
South Schodack	84	111	159	201	242	173	970
Schodack Landing	22	22	44	76	87	40	291
Schodack Valley	68	87	184	212	239	153	943
Total	399	432	814	1035	1268	790	4738

Incidents by NFIRS classification							
	2013	2014	2015	2016	2017	Total	Share
1-Fire	102	131	118	162	64	577	12%
2-Overpressure Rupture, Explosion, Overheat	1	4		3		8	0%
3-Rescue & Emergency Medical Service Incident	495	521	594	547	402	2,559	54%
4-Hazardous Condition	70	107	90	83	54	404	9%
5-Service Call	72	81	60	71	29	313	7%
6-Good Intent Call	94	94	95	78	84	445	9%
7-False Alarm & False Call	62	84	77	99	64	386	8%
8-Severe Weather & Natural Disaster	9	5	5	10	12	41	1%
9-Special/Other	2		1		2	5	0%
Total	907	1,027	1,040	1,053	711	4,738	100%

Incidents by Type, Detailed						
	2013	2014	2015	2016	2017	Total
In Structure	58	77	56	87	36	314
Other	22	17	17	19	9	84
Outdoor	14	29	35	38	11	127
Vehicle or Transport	8	8	10	18	8	52
Overpressure rupture, explosion, overheat	1	4		3		8
Rescue & EMS	287	343	376	369	252	1,627
Assist, Standby	156	109	148	126	117	656
MVA	50	66	67	51	32	266
Water & Ice Related	2	3	3	1	1	10
Electrical	22	44	44	44	25	179
MVA	24	27	14	22	11	98
Other	10	13	14	5	5	47
Structural	3		1		1	5
Toxic Chemical, Gas, Liquid	11	23	17	12	12	75
Assist Other Agency	4	5	5	10	4	28
Cover Assignment	26	25	18	20	9	98
Odor Investigation	5	10	4	7	6	32
Other	21	24	14	23	7	89
Public Assist	1	2		1		4
Water/Ice Problem	15	15	19	10	3	62
Cancelled En Route	65	70	72	59	54	320
No Incident Found	11	4		4	1	20
Other	18	20	23	15	29	105
Malicious				1		1
No Fire	24	21	23	35	13	116
Other	17	28	28	34	28	135
System Malfunction	21	35	26	29	23	134
Severe Weather	9	5	5	10	12	41
Special/Other	2		1		2	5
Total	**907**	**1,027**	**1,040**	**1,053**	**711**	**4,738**

Incidents by NFIRS classification by Department							
	C	ES	N	SS	SL	SV	Total
1-Fire	72	121	84	110	87	103	577
2-Overpressure Rupture, Explosion, Overheat	2		4	1	1		8
3-Rescue & Emergency Medical Service Incident	321	867	319	442	81	529	2,559
4-Hazardous Condition	17	57	93	125	8	104	404
5-Service Call	94	19	103	49	16	32	313
6-Good Intent Call	30	78	26	121	85	105	445
7-False Alarm & False Call	76	54	74	113	7	62	386
8-Severe Weather & Natural Disaster	21	1	1	5	5	8	41
9-Special/Other				4	1		5
Total	633	1,197	704	970	291	943	4,738

Incidents by NFIRS classification and Detail by Department

NFIRS	Detail	C	ES	N	SS	SL	SV	Total
1-Fire	In Structure	52	73	45	64	26	54	314
	Other	5		1	12	60	6	84
	Outdoor	10	40	30	23	1	23	127
	Vehicle or Transport	5	8	8	11		20	52
2-Overpressure Rupture, Explosion, Overheat	Overpressure rupture, explosion, overheat	2		4	1	1		8
3-Rescue & Emergency Medical Service Incident	Rescue & EMS	21	593	212	264	16	521	1,627
	Assist, Standby	295	181	39	108	33		656
	MVA	4	93	65	69	28	7	266
	Water & Ice Related	1		3	1	4	1	10
4-Hazardous Condition	Electrical	7	44	55	35	1	37	179
	MVA	7		5	64	2	20	98
	Other	1		9	3	4	30	47
	Structural			3			2	5
	Toxic Chemical, Gas, Liquid	2	13	21	23	1	15	75
5-Service Call	Assist Other Agency	11	3	7	4	1	2	28
	Cover Assignment	21	4	29	28	5	11	98
	Odor Investigation	15	1	8	2	1	5	32
	Other	25	5	31	10	8	10	89
	Public Assist		1	2	1			4
	Water/Ice Problem	22	5	26	4	1	4	62
6-Good Intent Call	Cancelled En Route	21	57	13	82	63	84	320
	No Incident Found	1	9	7	2		1	20
	Other	8	12	6	37	22	20	105
7-False Alarm & False Call	Malicious			1				1
	No Fire	6	38	42	8	1	21	116
	Other	59	8	16	23	5	24	135
	System Malfunction	11	8	15	82	1	17	134
8-Severe Weather & Natural Disaster	Severe Weather	21	1	1	5	5	8	41
9-Special/Other	Special/Other				4	1		5
Grand Total	Total	633	1,197	704	970	291	943	4,738

Mutual Aid, 2013-2017					
		Given	Received	None	Total
Castleton		136	23	528	687
East Schodack		122	37	1,038	1,197
Nassau		102	45	557	704
South Schodack		144	68	758	970
Schodack Landing		173	31	88	292
Schodack Valley		151	44	748	943
	Total	828	248	3,717	4,793

Cancelled Incidents by Mutual Aid Type					
		Given	Received	None	Total
Castleton		16		5	21
East Schodack		28	2	27	57
Nassau		7	3	3	13
South Schodack		41	2	39	82
Schodack Landing		59		4	63
Schodack Valley		59	1	24	84
	Total	210	8	102	320
		66%	3%	32%	100%

Mutual Aid Received (R) and Given (G) by NFIRS Classification and Department, 2013-2017													
	C		ES		N		SS		SL		SV		Total
NFIRS	R	G	R	G	R	G	R	G	R	G	R	G	Total
1-Fire	6	60	19	63	15	41	30	48	10	67	19	56	434
2-Overpressure Rupture, Explosion, Overheat		1				1	1			1			4
3-Rescue & Emergency Medical Service Incident	10	16	8	13	14	6	4	8	13	29	9	4	134
4-Hazardous Condition	1	1	3	11	9	10	20	16	1	2	10	16	100
5-Service Call	5	29		5	3	36	2	27	1	8	3	11	130
6-Good Intent Call			3	1		1	3	1	3	4		1	17
7-False Alarm & False Call		12	2	1	1		6		2	3	1	4	32
8-Severe Weather & Natural Disaster	1	1						2	1		1		6
9-Special/Other								1					1
Grand Total	23	120	35	94	42	95	66	103	31	114	43	92	858

Appendix D – Location Specific Maps

Due to the file size with these maps, they are included in a separate document.