The Center for Rural Pennsylvania
A Legislative Agency of the Pennsylvania General Assembly

Recruitment and Retention of Pennsylvania Firefighters, 2019

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Introduction

In November 2019, the Center for Rural Pennsylvania and the Pennsylvania Fire and Emergency Services Institute conducted a mail survey of Pennsylvania fire chiefs to identify firefighter recruitment and retention patterns. The Center compared the results of the survey to similar surveys conducted in 2012 and 2001.

The 2019 survey results indicate that:

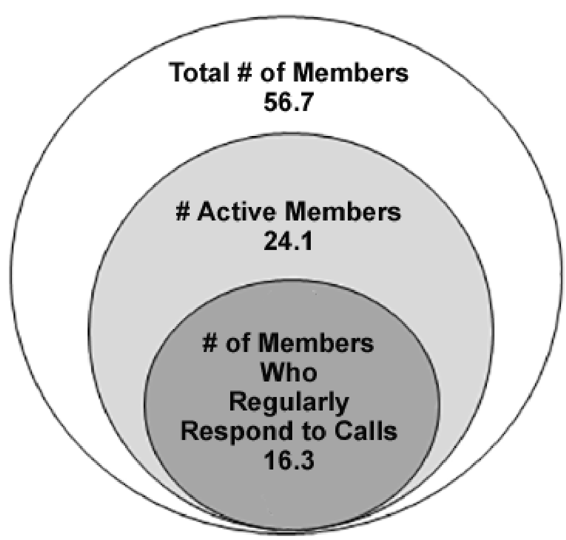
- 54 percent of respondent companies had a net increase in firefighters;
- Fire companies rely mostly on word-of-mouth and family/friends as recruitment methods – the same two methods that were rated the highest in 2012 and 2001;
- The top reasons why firefighters leave volunteer service are job and family commitments, and moving out of the area; and
- A majority of fire companies have retention programs (56 percent).

Findings

Number of Fire Company Members

In 2019, fire companies had, on average, 56.7 members, 24.1 active members, and 16.3 members who regularly respond to calls. Fire companies located in rural counties had, on average, fewer active members (22.5) than those in urban counties (25.7). However, there was no significant difference in the number of members who responded to calls. There were significant differences in membership when it came to company budgets. Companies with operating budgets under $100,000 had fewer active members (19.5) than companies with budgets of $500,000 or more (37.2).

Average Fire Company Membership, 2019



Survey Methods

The Center for Rural Pennsylvania and the Pennsylvania Fire and Emergency Services Institute (PFESI) conducted three statewide surveys of fire chiefs in 2001, 2012, and 2019. With a few exceptions, the questions in all surveys were identical.

The table below shows the response rates and margins of error for all three surveys.

Data Limitations

Focus on Volunteer and Paid/Volunteer Fire Companies

The 2019 survey was mailed exclusively to fire chiefs from volunteer fire companies and combination paid/volunteer companies. Earlier surveys were sent to all fire chiefs, including those from paid companies. The inclusion of paid companies in prior surveys are likely to have minimal effect on the comparisons made in this analysis, since PFESI data indicate that paid fire companies make up only 2 percent of Pennsylvania's 1,969 fire companies.

Different Definitions of Fire Company Member and Active Fire Company Member

In field testing the survey in 2001, some chiefs considered all members to be active, while others considered only those who regularly respond to calls as active. To avoid confusion, the Center included three separate questions on membership in all three surveys. The first asked for the total number of members; the second asked for the total number of "active members"; and the third asked for the total number of members who regularly respond to calls. Despite the separate questions, the results indicate that some respondents did not make the distinction between active members and members. Therefore, unless otherwise noted, this analysis focuses on active members.

Survey Responses Are Only Comparable at the Aggregate Level

The responses to all three surveys were anonymous, so individual responses from fire companies in 2001 and 2012 could not be compared with individual responses in 2019. Therefore, responses were compared in aggregate.

Chief's Opinion May Be Different from Rank-and-File Members

In many ways, the position of fire chief is one of management. His or her views may differ from rank-and-file members.

Recoding/Calculating Variables

Rural/Urban

Fire companies were classified as rural or urban based on the county in which they were located. The analysis used the Center for Rural Pennsylvania's definition of rural and urban counties. Fire companies were rural if they were located in counties where the population density was below the statewide average of 284 persons per square mile. Fire companies were urban if they were located in counties where the population density was at or above the statewide average.

Net Change in Firefighters

The analysis included a variable that was calculated by subtracting the number of new members that joined the company in the previous 2 years from the number of those who left the company or became inactive in the previous 2 years. This variable was then classified into three categories: (1) companies that lost members; (2) companies that had no change in members; and (3) companies that gained one new member or more.

Blank Responses

In all three surveys, questions that were left blank on age cohorts, the number of female members, new members, and members who left were interpreted to mean "none" and therefore coded as zero.

This analysis focuses on active firefighters. In the text below, the terms "firefighter" and "member" are synonymous.

Survey Response Rates

	2019	2012	2001
Number of Surveys Mailed	1,926	2,462	2,462
Number of Surveys With Bad Addresses	8	172	n.a.
Total Sample Size	1,918	2,290	2,462
Number of Useable Surveys Returned	643	601	883
Response Rate	33.5%	26.2%	35.9%
Margin of Error	3.16	3.43	2.64

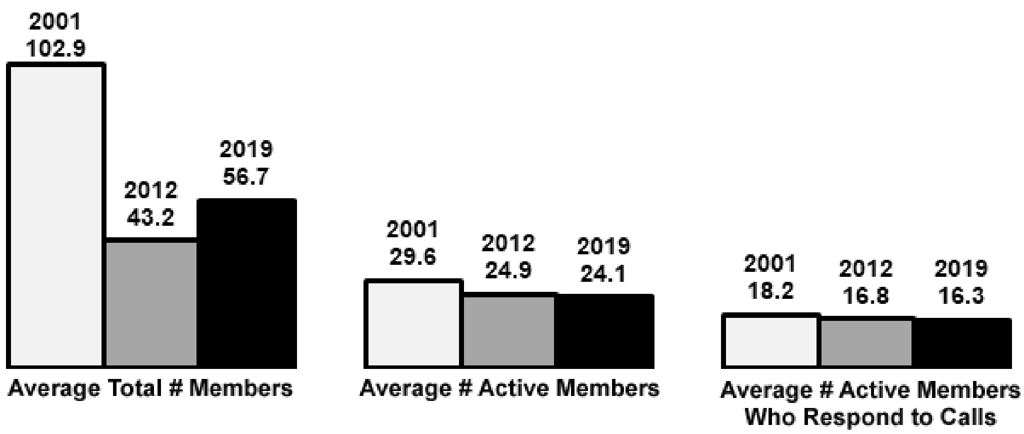
Change in Firefighter Membership

From 2001 to 2019, there was a 58 percent decline in total company membership. Most of this decline, however, was between 2001 and 2012. From 2012 to 2019, total company membership increased 31 percent.

Focusing on only active members, from 2001 to 2019, there was an 18 percent decrease. Again, most of this decrease occurred between 2001 and 2012. From 2012 to 2019, there was a 3 percent decrease in active members. The change from the latter period was not statistically significant.

From 2012 to 2019, rural fire companies had a 6 percent decline in active members and urban companies a 1 percent decline.

Average Number of Fire Company Members, 2001, 2012, and 2019



New Members

In 2019, 94 percent of fire chiefs said that new members joined their company. On average, these companies gained 6.2 new members. This was a slight decrease from 2001, when 6.9 new members, on average, joined the fire company. Urban fire companies had more new members, 6.8 on average, than rural companies, 5.5 on average. In addition, companies with smaller budgets (<$100,000) had fewer new members than companies with larger budgets ($500,000).

Average Number of New Fire Company Members Over the Previous 2 Years, 2001, 2012 and 2019

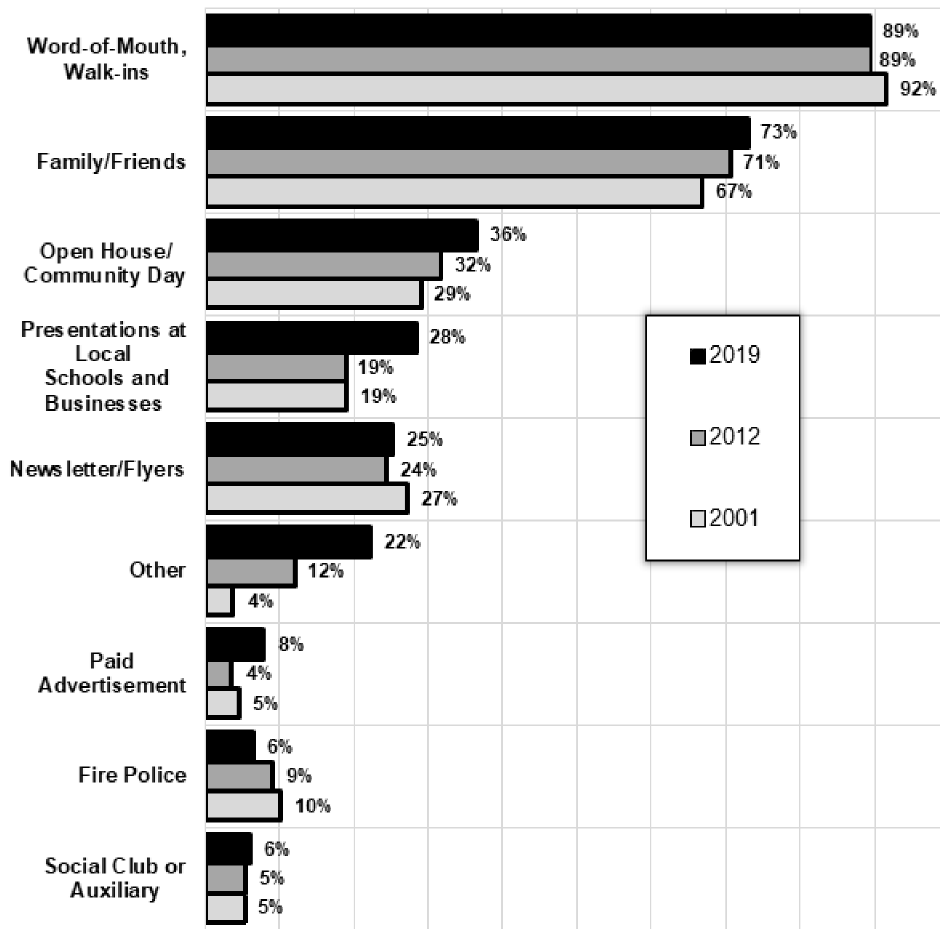
New Member Recruitment

The top three methods for recruiting new members were: word-of-mouth/walk-in (89 percent); family/friends (73 percent); and open house/ community day (36 percent). These top three methods changed little since 2001.

The survey data indicated that fire companies recruit more members when they use more recruitment methods. For example, companies that did not use any recruitment methods had, on average, 1.2 new members. Companies that used one or two recruitment methods had, on average, 5.2 new members. Companies that used three or four methods had 7.1 new members, on average. And, companies that used five or more methods had 8.1 new members, on average. This analysis suggests that companies using a variety of recruitment methods are generally more successful than companies that are using only one or two methods.

Recruitment Methods Used to Attract New Members, 2001, 2012, and 2019

(Totals do not add up to 100 percent due to multiple responses)



Barriers to Recruitment, 2019

Declining Population	•Barrier for 26% of fire companies. These companies recruited 5.0 new members, on average, in the past 2 years. This was significantly lower than the statewide average.
Aging Population	•Barrier for 43% of fire companies. These companies recruited 5.3 new members, on average, in the past 2 years. This was significantly lower than the statewide average.
No Formal Recruitment Program	•Barrier for 20% of fire companies. These companies recruited 6.1 new members, on average, in the past 2 years. This was nearly the same as the statewide average.
Public Awareness	•Barrier for 19% of fire companies. These companies recruited 6.5 new members, on average, in the past 2 years. This was nearly the same as the statewide average.
Time Committment	•Barrier for 90% of fire companies. These companies recruited 6.1 new members in the past 2 years. This was nearly the same as the statewide average.
Other Reasons	•Barrier for 27% of fire companies. These companies recruited 6.4 new members, on average, in the past 2 years. This was nearly the same as the statewide average.

Barriers to Recruitment

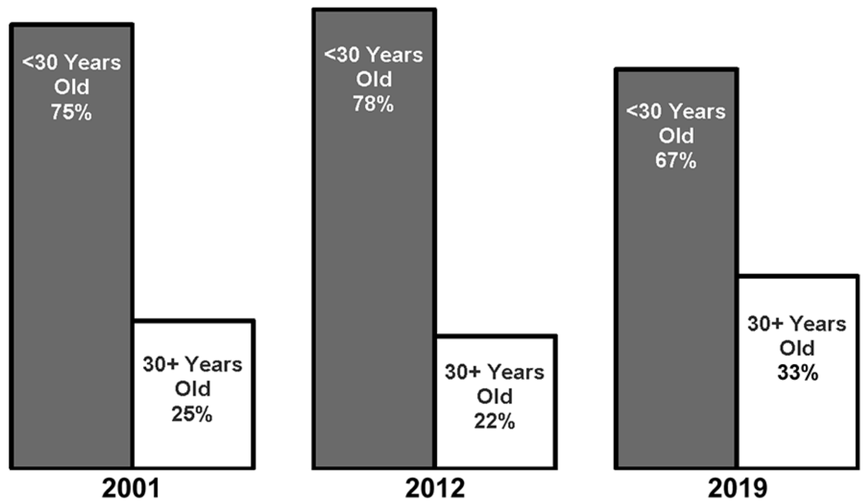
In the 2019 survey, fire chiefs were asked to identify the barriers to recruitment. The top two barriers were time commitments and an aging population. One in five chiefs said they had no formal program for recruitment. Rural fire chiefs were more likely to point to population loss and an aging population as recruitment barriers than urban chiefs. Statewide, chiefs that identified population loss and an aging population recruited significantly fewer new active members than those chiefs who did not identify these factors.

Thirty-eight percent of fire chiefs said their company had a strategic plan. In 2019, companies with a plan recruited 7.6 new members, on average, compared to 5.3 new members, on average, in companies without a strategic plan.

Age of New Members

In 2001, 75 percent of new active members were under 30 years old and 25 percent were 30 years old and older. Since then, there has been an upward shift in the age of new members. In 2019, 67 percent of new members were under 30 years old and 33 percent were 30 years old and older.

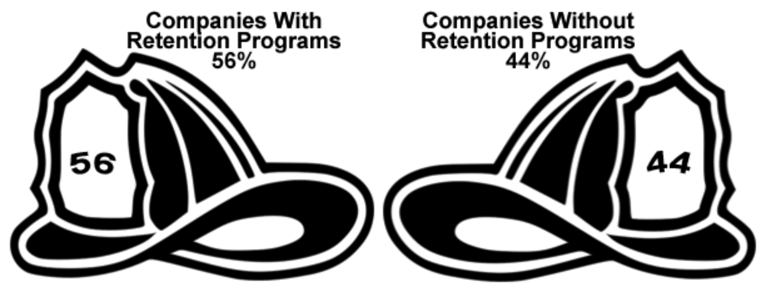
Age of New Active Members, 2001, 2012, and 2019



Member Retention Programs

In 2019, 56 percent of fire chiefs said their company had a retention program or incentives to retain members. These retention efforts included: fire company apparel (hats, t-shirts, etc.) (65 percent); length of service awards (49 percent); cash or gift cards (31 percent); and other incentives (35 percent). Companies with firefighter retention programs were more likely to be urban (65 percent), have more members (average 26 active members), and respond to more fire calls (average 828) than companies without retention programs.

Companies With and Without Retention Programs, 2019



Members Who Left the Fire Company Over the Previous 2 Years, 2001, 2012 and 2019

Members that Left the Fire Company

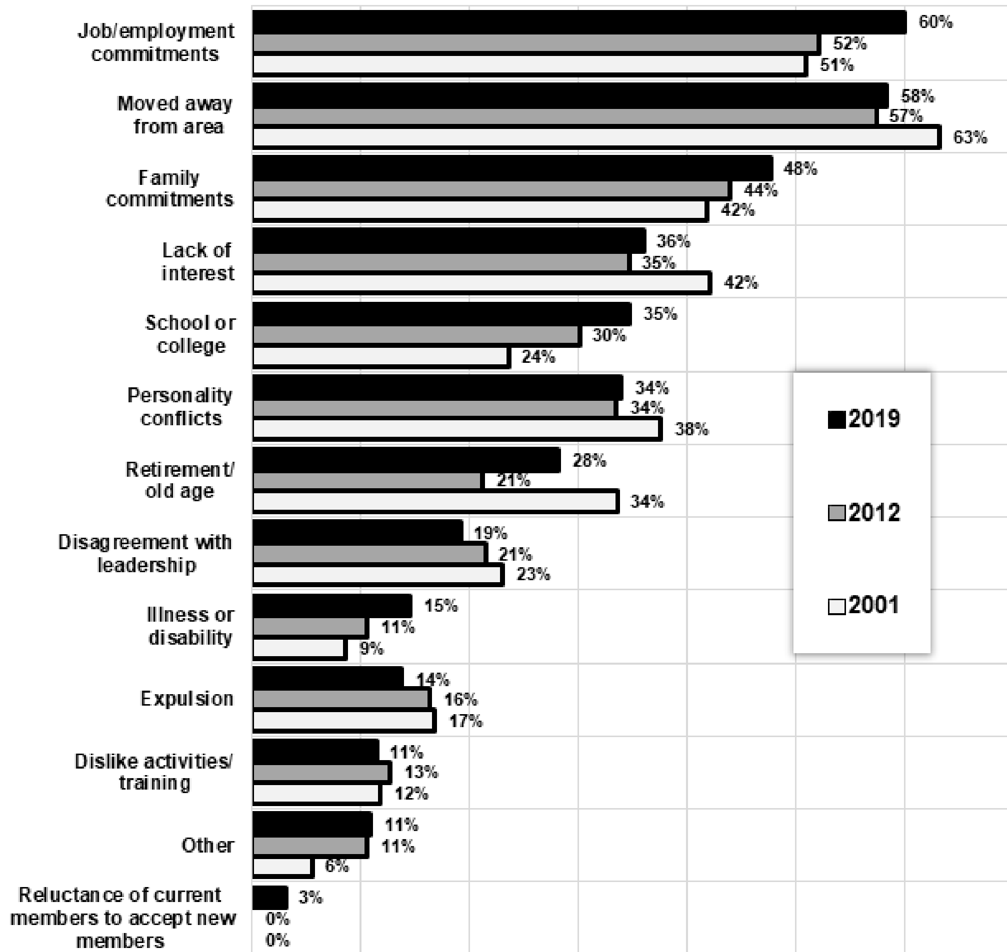
In 2019, 5.0 active firefighters, on average, left the fire company. This rate is identical to the 2001 rate, and only slightly above the 2012 rate of 4.8 members who left. In 2019, there were no statistical differences between rural and urban fire companies and the members who left (4.7 for rural and 5.3 for urban). Nor were there any differences among companies that had and did not have incentive programs to retain members (5.1 and 4.7, respectively). Larger companies (40 or more active members) had more members leave (average of 7.0) than companies with fewer than 20 members (average of 4.7).

Why Firefighters Leave the Fire Company

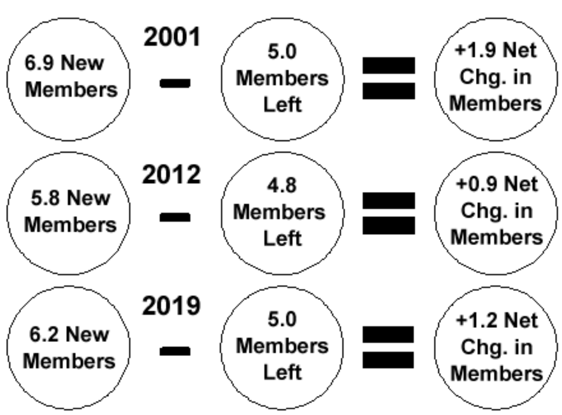
In 2019, the top three reasons why members left the fire company were: employment commitments (60 percent); moved away from the area (58 percent); and family commitments (48 percent). These three reasons were also the top three reasons in the 2001 and 2012 surveys. In 2019, fire chiefs were asked if members left because of a reluctance of current members to accept new members: only 3 percent of respondents identified this as a reason why members left.

Reasons Why Firefighters Left the Fire Company, 2001, 2012, and 2019

(Totals do not add up to 100 percent due to multiple responses)



Net Change in Active New Members, 2001, 2012, and 2019



Net Change in Firefighters

In 2019, fire chiefs said that 6.2 new active members, on average, joined their company and that 5.0 active members, on average, left their company. Subtracting the losses from the gains shows that, on average, fire companies in Pennsylvania had a net gain of 1.2 new active members. Fifty-four percent of fire companies had a net gain in members, 13 percent had no change, and 33 percent had a net loss in active members. There were no statistically significant differences between rural and urban companies and the net change in members.

Opinions About Recruitment

In 2019, chiefs were asked if they were more concerned with company finances than recruiting new members. According to the results, 19 percent of fire chiefs either agreed or strongly agreed that finances were more of a concern than new member recruitment. The majority of chiefs (52 percent), however, disagreed or strongly disagreed, suggesting that new member recruitment was more concerning than company finances. Approximately 30 percent of respondents took a neutral position.

Chiefs who said they were more concerned about finances than recruitment generally did better at recruitment and retention than those who were less concerned about finances and more concerned about recruitment.

The chiefs who were more concerned about finances had an average net gain of 1.5 new members. The chiefs who were more concerned about recruitment had a net gain of 1.0 new member, on average. And, chiefs who were neutral had a net gain of 1.4 new members, on average.

Conclusions

Downward Shift in Fire Company Size

In 2001, fire chiefs reported having 29.6 active members. By 2012, they reported 24.9 active members, on average, and, in 2019, 24.1 on average. While the difference between the last two surveys was slight, it does suggest that there is a downward trend in the size of fire companies. For example, in 2012, 45 percent of companies had 25 or more active members. By 2019, 39 percent had 25 or more active members. This downward shift suggests that companies are getting smaller.

Most Fire Companies Are Recruiting and Retaining Members

According to the 2019 results, more than two-thirds (67 percent) of fire companies had a net gain or no change in members. This could suggest that the majority of companies are able to recruit and retain members. This good news is a continuation of the results of the prior two surveys (2001 and 2012), which indicate that the hard work that recruitment and retention requires appears to be paying off somewhat for the majority of companies.

Multiple Methods of Recruitment Has Positive Results

In all three survey results, the top two methods of recruitment were word-of-mouth and family/friends. By themselves, however, these two methods recruited the lowest number of new fire company members. Companies that used multiple methods were able to recruit more members, on average, than companies that used fewer methods.

Increase in Age of New Members

In 2019, 32 percent of new members were 30 years old and older. In the earlier surveys, 23 to 25 percent of new members were 30 years old and older. While the 2019 increase in older members may reflect the demographic realities of Pennsylvania and its aging population, it can't be overstated that firefighting is hard work. While older members play important roles in the fire company, such as working as drivers, fire police, and in other support roles, younger members are essential as they may be better suited to performing the hard task of fighting fires.

Aging and Declining Population Are Real Barriers to Recruitment

When asked what the barriers to recruitment were, 43 percent of fire chiefs said an aging population, and another 26 percent said population decline. Combined, these two barriers had a depressing effect on the number of new members that joined the company. Other barriers, such as time commitment, public awareness, and lack of a formal recruitment program had less of an effect on the number of new members that joined the company.

No Change in the Number of Members Leaving the Fire Company

Across all three surveys, the average number of members who left the fire company remained fairly consistent at 5.0. There was no significant change among the three survey years. This could suggest that there has been no mass exodus of firefighters and that members leave at generally the same rate.

No Change in Reasons Why Members Leave

In all three surveys, fire chiefs reported that the top three reasons why members leave are: job/employment commitment, moved away from the area, and family commitments. These three reasons are generally beyond the control of the chief and the fire company.

Recruitment and Retention of Pennsylvania Firefighters, 2001, 2012 and 2019

	2001 (n=883)	2012 (n=601)	2019 (n=643)
Number of Fire Company Members			
Number of Active Members	102.9	43.2	56.7
Average Number of Members Who are Considered Active	29.6	24.9	24.1
Average Number of Active Members Who Regularly Respond to Runs/Calls	18.2	16.8	16.3
New Members Who Joined Company within Previous 2 Years			
No New Members	6%	5%	5%
1 to 4 New Members	32%	39%	40%
5 to 9 New Members	34%	37%	34%
10 to 14 New Members	18%	14%	14%
15+ New Members	10%	4%	7%
Average Number of New Members	6.9	5.8	6.2
Members that Left the Company within Previous 2 Years			
No Members Left	15%	10%	14%
1 to 4 Members Left	41%	46%	41%
5 to 9 Members Left	27%	30%	30%
10 to 14 Members Left	12%	11%	10%
15+ Members Left	5%	3%	5%
Average Number of Members Who Left the Company	5.0	4.8	5.0
Net Change in Members			
Companies that had a Net Loss in Members	27%	36%	34%
Companies that had No Net Change in Members	13%	12%	12%
Companies that had a Net Gain in Members	60%	52%	53%
Average Net Change in Members	1.9	0.9	1.2
Age of Active Members			
<18 Years Old	7%	8%	7%
18 to 29 Years Old	31%	29%	23%
30 to 39 Years Old	30%	28%	21%
40+ Years Old	32%	35%	49%
Active Female Members			
No Females	29%	21%	17%
1 to 2 Females	35%	41%	40%
3 to 4 Females	19%	23%	26%
5+ Females	17%	15%	16%
Average Number of Female Members	2.57	2.48	2.72
Firefighter Qualifications			
Average Number Interior Qualified Firefighters	n.a.	n.a.	13.7
Average Number Exterior Qualified/Drivers	n.a.	n.a.	8.2
Average Number of Fire Police	n.a.	n.a.	2.9

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