



FIRE
EMERGENCY

NEW ZEALAND

Learning and Development

Evidence Brief #209 - 2023



Evidence brief summary

Fire and Emergency commissions research to support its main functions:

- Reducing the likelihood of unwanted fires
- Reducing consequences from emergencies, and
- Helping build resilient communities.

Evidence Briefs summarise this research, on specific topics. They are the initial port of call for decision makers, policy makers, and operational staff looking to influence fire-related outcomes.

Fire and Emergency is one of the biggest training providers in New Zealand. This evidence brief summarises key findings from research it has commissioned over the past 20 years in relation to learning, development, and career progression.

Career firefighters' learning and development

- As well as fighting fires, the modern firefighter also attends medical emergencies and motor vehicle accidents, and takes part in search and rescue and civil defence operations, and responses to natural disasters. Training to become a Qualified Firefighter may need to be refreshed to ensure the relevant skills needed on the job are covered, and assessed.
- Some stations do not prioritise training and run regular drills, and this can be demotivating for new firefighters assigned to those stations.
- Professional development and performance management processes tend to be based on the self-motivation of the firefighter and officer.
- Few firefighters take up leadership and management roles. This is due to a combination of factors including: firefighters at the Senior Station Officer level being at a life stage where they want work-life balance; the design of some of the leadership roles; firefighters not having the support of family; the remuneration; and individuals not feeling they have the necessary skills and confidence to progress.
- Women and Māori experience significant barriers to progressing their careers at Fire and Emergency. Improving diversity in management and leadership requires commitment and accountability at the top and a change in organisational culture.

Volunteer firefighters' learning and development

- Tailored training strategies might be needed for specific segments of volunteers (for example, those with learning, literacy, and numeracy difficulties).
- Volunteer firefighter training usually happens on training nights. Training needs to be planned in advance, be held at locations that suit the volunteers, and take account of their work and family commitments.
- Financial support for training would be valued by many volunteers, particularly those in rural areas.
- The learning and progression pathway for urban volunteers is similar to that for career firefighters. Rural volunteer firefighters progress through a different system, which relies on unit standards.

Learning and development systems at Fire and Emergency

- Fire and Emergency provides an extensive range of training courses and learning opportunities. Courses are developed and implemented ad hoc, rather than according to an overarching strategy.
- Data integrity, dual systems, and manual entry are key issues for the learning management system database. This affects Fire and Emergency's ability to understand whether new initiatives and training are achieving the outcomes desired.

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Summary of Recommendations



Career firefighters' learning and development

1. Refresh the Qualified Firefighter programme to be more relevant to common response needs, particularly attendance at motor vehicle accidents and critical medical incidents, and the use of tools and equipment.
2. Measure and evaluate the success of diversity initiatives in relation to recruitment, learning and development, and career progression. This will provide a better understanding of what works and what doesn't.
3. Continue to improve processes for career progression and professional development, particularly in relation to the transition from Senior Station Officer to Executive Officer.
4. Require managers and leaders to be more committed to diversity and inclusion practices and to be more accountable for this.



Volunteer firefighters' learning and development

1. Tailor training to the learning styles and needs of volunteers. A range of different formats may be needed, and allowances may need to be made for some groups.
2. Plan and organise training nights to maximise participation. Providing advance notice and flexibility about timing and location would help.
3. Refresh the volunteer firefighter training programme to be more relevant to common response needs, particularly for motor vehicle accidents, critical medical incidents, and the use of tools and equipment.
4. Consider providing financial support for volunteer firefighters to improve their participation and engagement in training.
5. Develop and implement clear learning and progression pathways for volunteer firefighters.



Learning and development systems at Fire and Emergency

1. Rationalise and streamline the learning and development offerings.
2. Place learning at the heart of Fire and Emergency, and establish a strategic and coordinated approach to learning and development.
3. Develop a single source of trusted learning and development data at the enterprise level.



Future research

1. Review overseas operating models for roles equivalent to Senior Station Officer and Executive Officer, including the differentiation between them and the transition to the more senior role. Family support also appears to be a strong factor when individuals decide to apply for Executive Officer roles, and further research could examine that dynamic more closely.
2. Continue to gather data and monitor and evaluate training and its outcomes for Māori, Pacific peoples, minority ethnic groups, women, and those with learning disabilities, in order to understand what works and what doesn't in relation to their learning and development.

Overview of learning and Development at Fire and Emergency

There are four streams of training across Fire and Emergency.¹ The training pathways for career firefighters and for urban volunteer firefighters are similar, but training of rural volunteers is delivered and managed separately (Figure 1).

Figure 1. Training curriculum

TAPS (Training and progression system) Career firefighters and urban volunteer firefighters	Specialised courses
Firefighter development <ul style="list-style-type: none"> Recruit Qualified Firefighter Senior Firefighter Officer development <ul style="list-style-type: none"> Station Officer Senior Station Officer Executive Officer 	<ul style="list-style-type: none"> Appliances Hazardous materials Breathing apparatus Wildfire Leadership Development Programme Training of external parties and organisations
Rural volunteer training	Locally scheduled training
Unit standards managed by NZQA	Maintain operational skills as captured in the Operational Skills Management (OSM) database

Source: Adapted from Watson (2020)²

Table 1. Career progression of an urban career firefighter

Rank	Entry requirements	Time in role
Trainee Firefighter	Meet recruitment intake pre-requisites	n/a
Firefighter	Successfully complete the Career Firefighter Recruit Course	n/a
Qualified Firefighter	Successfully complete the career Qualified Firefighter Programme	After 2 years' continuous employment as a Firefighter and Trainee Firefighter
Senior Firefighter	Successfully complete the career Senior Firefighter Programme	After 2 years' continuous employment as a Qualified Firefighter
Station Officer	Successfully complete the career Station Officer Programme	After 2 years' continuous employment as a Senior Firefighter
Senior Station Officer	Successfully complete the career Senior Station Officer Programme	After 2 years' continuous employment as an operational Station Officer
Executive Officer	Successfully complete the Executive Officer Training and Progression System	After 2 years' continuous employment as a Senior Station Officer

Source: Fire and Emergency (2018)³

1) Training and Progression System (TAPS) for career firefighters and urban volunteers

TAPS is a set of structured programmes that allow firefighters to progress through Fire and Emergency's rank structure. It applies to both career firefighters and urban volunteers; it doesn't apply to rural volunteers.

Career firefighters

- Initial training through an intensive 12-week residential programme at the National Training Centre (NTC) in Rotorua
- Assigned to a brigade where on-station training and operational experience maintains their skills.
- Up to 2 years completing 20 distance learning modules, 2 on-station skill checks, an online examination, 2 practical courses at NTC, and a consolidation log
- Rank of Qualified Firefighter
- Similar patterns of training to progress to higher ranks, including Senior Firefighter, Station Officer, and Senior Station Officer (Table 1)
- To progress to Executive Officer, a 2-year postgraduate qualification from the University of Otago.

Urban volunteer firefighters

- On-station training, with a training log completed over 6 months
- 7-day residential volunteer recruit course at NTC
- Consolidation log
- Rank of Volunteer Firefighter
- Similar patterns of on-station training, distance learning, and course attendance to progress to higher ranks equivalent to those for career firefighters (see above and in Table 1).



2) Specialist courses

- **Specialist learning:** stand-alone courses, which include new equipment rollouts, driver and motor vehicle accident training, and initiatives to improve safety. Most of these courses are delivered in the regions, by regional trainers.
- **Wildfire training:** mainly delivered in small intensive courses, designed around unit standards
- **External training:** delivered to external parties
- **Recertifications:** training in areas that require regular recertification, such as Medical Co-response (First Aid), Emergency Response Driving, Line Rescue, and Breathing Apparatus cylinder filling.

3) Locally scheduled training

Locally scheduled, on-station training responds to needs specific to the particular station and maintains skills and capabilities identified in an individual's Operational Skills Management (OSM) record.

OSM ensures firefighters maintain a set of crucial operational skills. Through the traffic light system, unpractised skills become coded as "orange" or "red" based on their level of urgency. Career firefighters must refresh these skills so they return to "green".

Examples include:

- **On-shift training for career firefighters** is run on-station under the guidance of higher-ranking officers. The aim is for the firefighters to learn and practise key operational skills. Proficiency is recorded in the OSM database.
- **Volunteer firefighter training on training nights** is run by a high-ranking officer on regular training nights, supported by regional trainers. Completion is recorded in the OSM.

4) Rural volunteer firefighters

Training in rural volunteer stations is structured around unit standards that are managed by the New Zealand Qualifications Authority (NZQA).



Career firefighters' learning and development

Findings from past research

Training to become a Qualified Firefighter could be more relevant to the skills needed on-the-job

The nature of firefighting has changed over time: firefighters are now increasingly working as first responders to non-fire medical calls. Studies have suggested that training should put more emphasis on commonly used skills, such as responding to motor vehicle accidents and “purple calls” (medical co-response calls where life is threatened).^{4,5}

Training on using and understanding the relevant tools for those kinds of call-outs may be needed, particularly for recruits whose backgrounds don’t include practical use of tools and equipment. Examples include how to use a chainsaw, skill saw, or other cutting gear at rescues and car crashes, and how to manage an accident or incident scene.^{4,6}

Not all stations prioritise training, and this can demotivate new recruits

New career firefighters find it difficult to transition from the National Training Centre (NTC), where there is a sense of urgency and a lot to learn, to being in quieter stations where firefighters may not attend many call-outs, particularly if the officers leading the station are not motivated to train and conduct drills.^{5,7}

Recruit career firefighters thought NTC should set expectations for how busy a firefighter might be, how much downtime there is likely to be, and the chores that must be done.

Recruits also commented that all stations should run drills and ongoing training, so the recruits could practise the skills they had learnt and progress as firefighters.

“

The one thing that I really felt was missing from the QF TAPS programme was medical. So medical has actually become a really large part of our job but there's no continuation training on it, apart from your annual or maybe two-yearly reskilling with St John. It seems to be a massive training gap...”

– Career firefighter⁴

The research to date has highlighted three issues:

1. Whether training covers all the skills required and whether ongoing training is prioritised
2. The use of digital technologies
3. Access to training opportunities and to career progression, particularly for women.

The right infrastructure needs to be in place to facilitate technology-enabled learning

In 2019, focus groups and in-depth interviews were held with 132 firefighters in four career stations, four urban volunteer stations, and three rural volunteer stations around New Zealand.⁸ The research showed that firefighters understood the value of using digital learning to support their practical training, but it found that digital learning at fire stations was limited.

The problem was not helped by the lack of technological resources at stations. There were not enough laptops, tablets, projectors, and screens. Slow internet speeds were another barrier.⁸

The firefighters thought that Fire and Emergency's online learning management system, Learning Station, was a good source of information, but many firefighters had difficulties logging on and finding information and so the system was not used as much as it could be. Volunteers had the same difficulties.⁹

Confidence and capability in using digital technologies varied among firefighters.

Professional development processes could be formalised

New career firefighters have long-term aspirations and expect to progress through the ranks, with many seeing themselves as Station Officers or Senior Station Officers.⁵ Some new career firefighters are also interested in other pathways, such as training, being deployed overseas, and experience of other stations.⁵

However, longitudinal qualitative research on career recruits after one or two years at Fire and Emergency found that the level and quality of professional development and of performance feedback and debrief sessions tended to depend on how proactive the firefighter, or the senior officer, was.⁶

Officers who were interviewed said it was too early at two years to identify potential leaders. This research also found that the Station Officer programme had a gap in the development and assessment of skills needed to lead people.⁷

Few firefighters progress to leadership and management roles

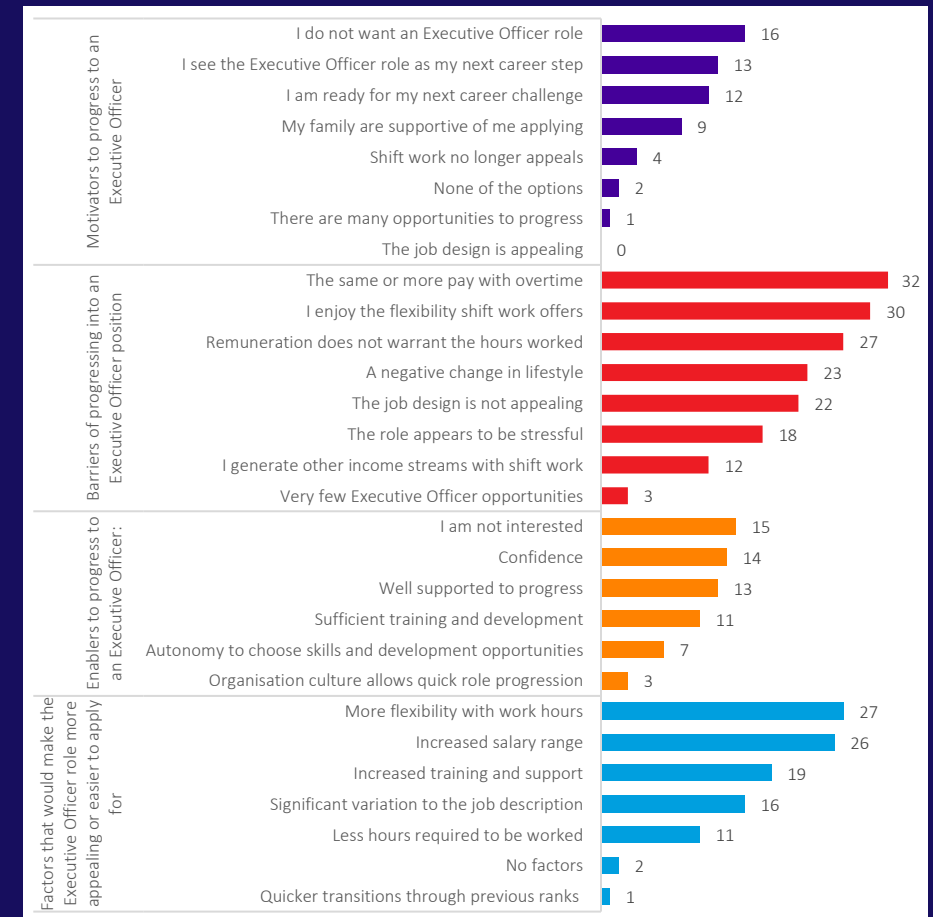
Career progression based on length of time in junior roles means it takes significant time to advance. This becomes more challenging the higher the rank, as there are fewer roles available and candidates need to wait until incumbents retire.^{3,10}

Fire and Emergency has had difficulty progressing employees from Senior Station Officer (SSO) to Executive Officer.³ The move requires the firefighter to do further study and training:

- They must do a 2-year postgraduate qualification at the University of Otago. This includes four modules covering topics on leadership management, performance management, strategy, finance, and project management.
- They must spend a day with an Executive Officer to increase their knowledge of the role.
- An online survey of 80 Senior Station Officers and Executive Officers found the following (Figure 2):³
- Senior Station Officers were often at the life stage where they are more concerned about work-life balance and flexibility than career progression. SSOs have permanent full-time roles, and they can accept overtime shifts and work outside of Fire and Emergency on their days off.
- Many SSOs felt unprepared to advance and were not confident about doing so.
- The design of the Executive Officer role was not appealing. An Executive Officer works at least five days a week and must work both weekends and in the evenings to serve their volunteers. They also have significantly more direct reports than an SSO, have many administrative tasks, and were seen as not having enough time to interact with staff.
- The remuneration for the job was not adequate for the responsibilities and the hours.^a

Those who had made the transition to Executive Officers did so for the excitement and challenge of the position, and said that support from their family was a key enabler. Secondment opportunities were also an important stepping stone to the role.

Figure 2. Motivators, barriers, enablers, and facilitators for the Executive Officer role



Source: Scott (2021)³

^aExecutive Officers are given a pay rise to recognise the qualification and the role.

Women experience significant barriers progressing their career at Fire and Emergency

Many studies, in New Zealand and internationally, have documented the difficulties that women firefighters have encountered in joining and progressing within fire emergency management organisations.^{10,11}

Common experiences of women firefighters include:^{10,11}

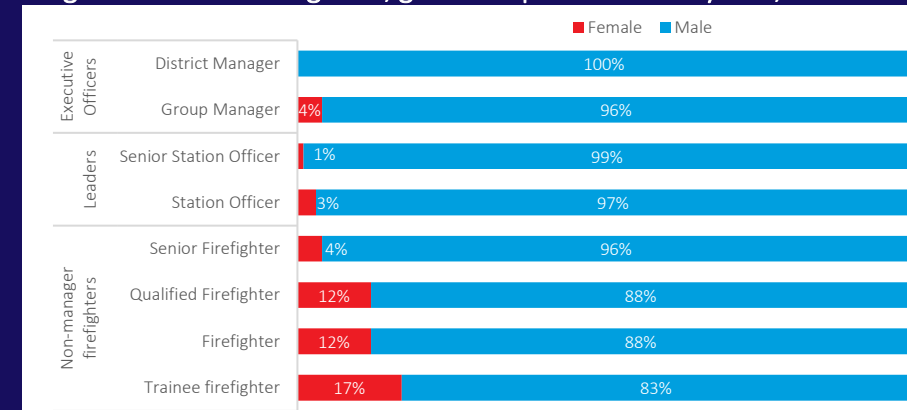
- being hired into lower positions than comparably qualified men
- being placed in specific, often gendered aspects of the occupation
- disparities in training and assignments, which affected opportunities for promotion
- less access to role models, mentors, networks, training, and development
- being held to higher standards and required to work harder
- being denied access to the classes and equipment needed to train for certification and promotion exams
- receiving little or poor careers advice
- favouritism for men through selective fast-tracking, and being assessed at a lower standard
- their career prospects depending on the subjectivities of their manager
- being penalised more than their male counterparts in their career development because of having children
- returning to a changed workplace after having children, with little support and a loss of status
- part-time and flexible work being considered problematic and signifying a lack of commitment. Motherhood and caregiving responsibilities meant that women could not participate fully in organisational operations, roles, and decision making.

The research often points to work cultures that are “blokey”, with characteristics of masculine stereotypes traits, such as being competitive and assertive.¹⁰

“

You can't be what you can't see”
– Multiple female firefighters¹¹

Figure 3. Career firefighters, gender representation by role, 2022



Source: Mossman (2023)¹¹

Representation of women among firefighters is low

As at 2022, representation of women among firefighters was low. Representation had increased over time, but slowly; women had shorter service length compared to men; and more women than men exited over 2021/22.¹¹ Women were under-represented in leadership roles – women hold only 2% of career firefighter leadership roles (Figure 3). Representation of women in leadership roles has increased over time, but only marginally – from 1.3% of women in 2015/16 to 2.3% by 2021/22.¹¹

In a recent interview-based study of 29 women firefighters (career and volunteer), training and development was an important theme, but the nature of the responses varied widely.¹¹ Negative experiences of training and the absence of formal career planning were two significant barriers. But the lack of career planning and professional development opportunities appears to apply equally to both male and female firefighters.

Women also spoke of enablers, such as opportunities to develop different skills and networks within Fire and Emergency, positive training experiences provided by female trainers, and participating in other inspirational female-themed professional development opportunities (for example, conferences).¹¹



**You can't be what
you can't see"**

– Multiple female firefighters¹¹

A more inclusive culture, and inclusive practices, are required across Fire and Emergency

The literature and all the studies commissioned by the organisation indicates the need for Fire and Emergency to:¹⁰⁻¹⁴

- require managers and leaders to commit to supporting greater diversity and more inclusive practices and to hold them accountable for this
- emphasise inclusive values and practices to ensure a culture of respect and support, and
- increase its support for diverse groups.

As part of this, training should be offered to leaders on cultural competency, inclusion and diversity, unconscious bias, and communication.^{11,14} Fire and Emergency should continue to develop and monitor its diversity initiatives, and should make its appointment processes more transparent.

A consistent message from women in the qualitative study was that they did not want special treatment or to be singled out in any way because they were women.¹¹ They wanted an environment of inclusion and respect, with equitable practices, where they were not disadvantaged because of their gender.



Volunteer Firefighters' learning and development

Findings from past research

Volunteers are motivated to train for self-development, and to make sure operations are safe

Interviews with 100 rural volunteers found that most agreed there should be set training requirements (the unit standards), and 70% thought that formal training made operations safer.¹⁵

In a recent interview-based study of four trainers and 13 students of the urban volunteers' Qualified Firefighters TAPS training programme, self-development and the ability to be ranked were key motivators.⁹ Gaining rank equated to extra responsibilities and respect within their brigade.

Self-development, improved skills, and increased confidence and self-esteem were also mentioned by about a third of rural volunteers as motivators for training.¹⁵ They were also key motivators for women volunteers.¹²

^bThis is a non-Fire and Emergency commissioned study. It is a thesis completed in 2018 for AUT's Master of Emergency Management.

“

It gives you respect from others”
– Rural volunteer

“

Training is empowering. Especially for the ones who don't have any qualifications”
– Principal rural fire officer¹⁵

Training may need to be tailored for some specific volunteer segments

The volunteer workforce is not homogenous, so training may need to be tailored for specific needs and segments.

Some might volunteer for more than one emergency service or for other volunteer activities, so the training burden will be high for that group.^{16,c}

Research has also found that some trainees have learning disabilities, and literacy and numeracy difficulties, but there was no data on the proportion of volunteers this includes.^{8,15,17} For firefighters with these challenges, having multiple learning formats may help.

Senior officers said that while some volunteers had literacy and numeracy challenges, this did not compromise essential communication, good operations, or safety.¹⁷ The risks were mitigated through supervision, mentoring, and team work, as well as through dividing responsibilities according to individuals' strengths.

Volunteers' training needs to be planned in advance, be held at places that suit them, and take account of their work and family commitments

Training in urban and rural volunteer stations happens on regular training nights. The sessions are from one and a half to two hours' long.

In urban volunteer stations, the sessions may be weekly. In rural stations, they may be fortnightly, monthly, or less often. Volunteers might also attend courses on the weekend or spend extra time catching up with training they have missed.⁸

Now that some components of the training are online and some of the senior officer sign-offs have been removed, volunteers have found they can complete their learning at a pace that suits them.⁹

But volunteers do find it difficult attending training nights regularly – particularly shift and seasonal workers, the self-employed, and farmers in August and September.^{8,15} Time constraints are consistently identified in the broader literature as a barrier to training for volunteers,¹⁶ and can lead to them being resistant to participating in training.¹⁵

One study of three rural volunteer brigades in Northland found that the main problem was lack of regular training.¹⁸ A different study of 100 rural volunteers found that the second most popular way of increasing participation in training was to have training in local areas, rather than centralising it (Figure 4).¹⁵

^cThis is a 2008 NZIER literature review commissioned by the Fire and Rescue Industry Training Organisation (FRISTO).

Training needs to be realistic and relevant to the role

Firefighters learn well if they know how, where, and when their knowledge will apply to their role. It is important to ground what firefighters learn in the real world.^{8,16}

The study of 100 rural volunteers found that the best way to increase training participation, as voiced by volunteers, was to ensure training was task-focussed (Figure 3). As with career firefighters, training needs to be relevant to common response needs, including motor vehicle accidents and purple calls.

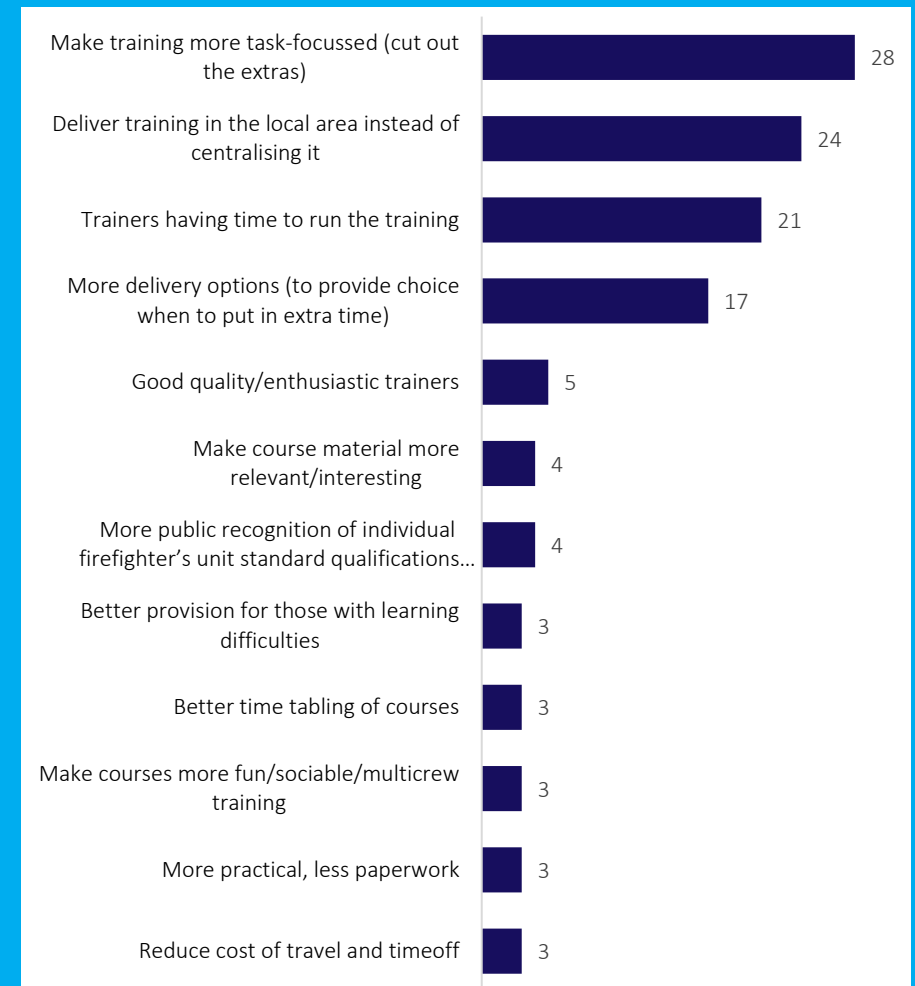
The rural volunteers in that study suggested many ways of improving brigade training, including its content, design, and delivery. They saw training with career staff, other brigades, or other agencies as potentially beneficial. Other suggestions were cross-over training between urban and rural brigades, and more visits from regional trainers.¹⁹

“Keep training relevant to the job, so it stays in context. This makes it fun.”

– Urban volunteer⁸



Figure 4. Volunteers’ perspectives on factors that would increase participation in training



Source: Corydon Consultants (2008)¹⁵

Financial support for training would help volunteers

Training comes at a financial cost to the volunteers, particularly in rural areas.

Because of the distances they have to travel, and because many may be unemployed, rural volunteers may not be able to afford to attend scheduled training.^{15,18}

In one study, urban volunteers identified travel, time, and other costs of attendance as one of the major issues.²⁰



Volunteers who have positive training experiences and who progress in their careers are more likely to stay on as volunteers and to be more engaged

A qualitative study done for the Fire and Rescue Services ITO found that there was a strong relationship between training and the recruitment and retention of volunteers.²¹ This is supported by the recent study on the volunteer journey, which concluded that good brigade training experiences contributed to volunteers staying more engaged.¹⁹

Progression is also a factor for recruitment and retention. When there are few opportunities to build skills or to progress, volunteers are less likely to want to stay on.¹⁹ Volunteers expressed dissatisfaction when progression was slow or if development opportunities were limited (or cancelled). Conversely, opportunities for development and progression were important factors in a positive volunteer experience and improved volunteers' sense of wellbeing.¹⁹

Volunteers in operational support^d or brigade support^e roles urged for more awareness of these roles in the community, and a better national strategy for training and progression pathways.¹⁹

The study of 100 rural volunteer firefighters found that poor communication and lack of leadership support for training was related to training resistance.¹⁵ The researchers concluded that the level of enthusiasm and energy that senior officers and crew leaders put into training was the most influential factor.¹⁵

^d Carry out tasks to help keep firefighters and the public safe, for example, controlling traffic, transporting equipment, managing lighting, and providing refreshments. Operational Support volunteers receive relevant training at their stations.

^e Complete administrative tasks and other duties to keep the brigade running smoothly. They may also work with communities to reduce the fire risks in people's homes.

Learning and development systems at Fire and Emergency

Findings from past research

Fire and Emergency provides an extensive range of training courses and learning opportunities

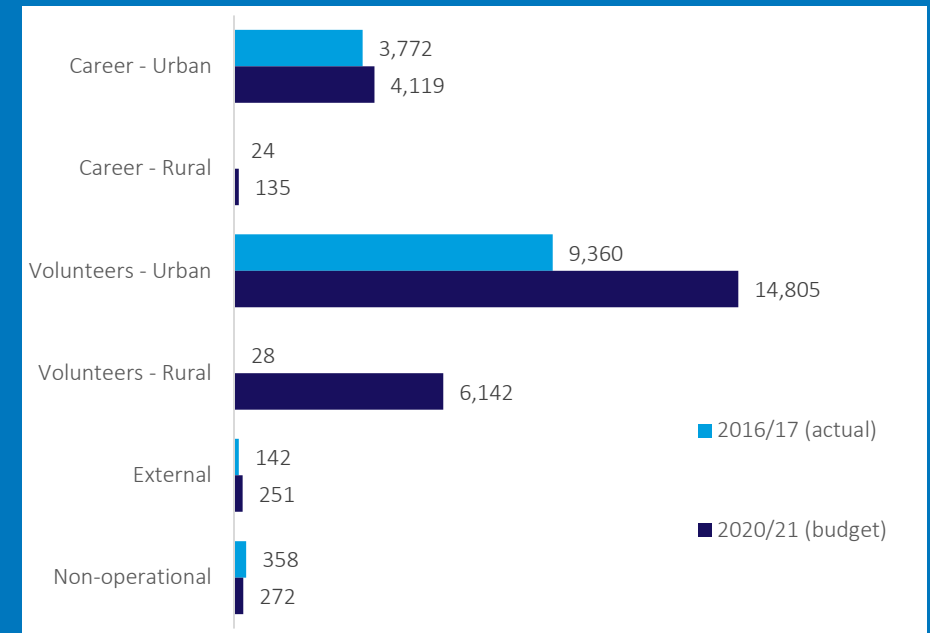
Fire and Emergency offers 240 different types of training courses, including 63 new courses that have been created since the organisation was established. There are also 259 e-learning modules available.

Fire and Emergency operates a regional delivery model for training, with regions delivering 95% of all training and the National Training Centre (NTC) in Rotorua delivering the remaining 5%. The training model was established in 2011, with a Training Manager and five Training Coordinators in each region.

A review of training participation (Figure 5) and costs found the following:²²

- Fire and Emergency’s course offering is similar in size to that provided by medium- to large-sized institutes of technology and polytechnics. Courses are developed and provided in response to requests from service delivery areas, not as part of an overarching training strategy. There may be opportunities for Fire and Emergency to rationalise its training courses.
- The largest increases in participation are in courses for volunteer firefighters; this is because of the amalgamation of the Rural Fire Authorities on 1 July 2017, and the increased focus in general on training volunteers.
- In 2019/20 just over 5% of training was delivered to external parties^[1] who are not charged for attending training courses.
- The current model of using career firefighters as trainers^[2] may be more expensive than using dedicated trainers.
- The collation and reporting of data on attendees was largely manual, raising potential health and safety, and liability, risks.

Figure 5. Training attendees from 2016/17 to 2020/21



Source: SageBush (2021a)²²

^[1] External parties include Department of Conservation, Department of Corrections, NZDF, NZ Police, St John NZ, Antarctica NZ, and forestry companies.

^[2] Training is also provided by volunteers. Fire and Emergency pays volunteer trainers any foregone salary or wages.

Fire and Emergency's approach to learning and development lacks a cohesive and strategic approach

Fire and Emergency commissioned a training and development review (TDR^h) in 2020 to give it an understanding of its current learning system and of what would be required for a future, fully integrated "learning organisation"^{i,2}

Unsurprisingly, given that Fire and Emergency only came into being in 2017, that 2020 review found the following:²

- There was no deliberate organisational approach to learning – it was "organic, devolved and fragmented".^{2(p20)} It tended to be based on the requirements of the individual or the business group.
- Training efforts and investment were mainly focussed on technical skills for the frontline workforce. About half of the training budget was directed at 12% of the workforce (career firefighters) for skills they use 6% of the time (on an incident).
- The existing training infrastructure, systems and processes, and function were not adequate for a new organisation that was much larger and more complex and that had different requirements.

A key recommendation from the review was to integrate learning into all parts of Fire and Emergency's people system. This is consistent with the research that showed that learning had a direct relationship with engagement, recruitment, and retention.^{16,19,21}

^h Known as the Watson review.

ⁱ A "learning organisation" creates the right conditions for learning, and continuously transforms itself in response.

There is a separate training system for rural volunteers

The rank and progression programmes that apply to career and volunteer urban firefighters do not apply to rural volunteers. Although significant work has been done incorporating legacy rural firefighter training into Fire and Emergency, there are still opportunities to further consolidate and integrate the training for rural volunteers.²

Learning management system

A 2015 review aimed to find out how technology could make firefighters' training processes more efficient.²³ At the time, the landscape of training-related software for New Zealand's firefighter workforce was complex, with many ad hoc applications and manual interfaces. Because of that, the information and data held within the systems was:

- difficult to access
- unreliable
- not up to date
- not developed, managed, and maintained within a formal structure or process
- duplicated, with trainees often being asked for the same data several times.

Fire and Emergency now uses Learning Station as its learning management system. However, some challenges continue, including manual collating of registration and course completion details, dual systems for collation and reporting, and problems with data integrity.^{1,22}

What does this mean for kaipatuahi Māori?

Findings from past research

Key findings

Māori firefighters are referred to as “kaipatuahi”. There are three elements to kaipatuahi – “kai” is a prefix to denote a worker, “patu” is to hit or fight, and “ahi” is fire.

Kaipatuahi continue to be a small but growing group. They are growing in particular among volunteers (from 5.1% in 2017, to 7.2% in 2022). The proportion of Māori among career firefighters has also slightly increased (11.2% in 2017, to 12% in 2022).

Much of the research on Māori volunteers is dated, being done in 2001 and 2002.^{18,20} Research done since then does not specifically use a Māori or te ao Māori lens.

To fill this gap, Fire and Emergency recently commissioned a qualitative, kaupapa Māori study on the voices and experiences of Māori career and volunteer firefighters.²⁴ For this research, 30 kaipatuahi and Fire and Emergency staff and leaders were interviewed.



These were the key findings:

- Kaipatuahi valued work flexibility as it enabled them to have more time with whānau and also to exercise at work.
- Many kaipatuahi experienced patriarchy, racism, cultural ignorance, and fear of diversity at their stations. These factors negatively impacted kaipatuahi by not wanting to pursue a career in firefighting, feeling that they will not be able to progress, and be less engaged and satisfied with Fire and Emergency.
- Changes to promotion, recruitment, and training will be needed in order to recruit and retain more kaipatuahi. These changes should be co-designed with Māori.
- The rank and progression system was seen favourably by kaipatuahi.²⁴ They thought TAPS was clear and easy to navigate, and they felt well-supported to move through the ranks. For some, progressing through TAPS gave them a sense of achievement and empowerment, in strong contrast to what they felt going through the compulsory education system.

Strong, positive leadership and representation continue to be important levers for change for kaipatuahi Māori

Kaipatuahi interviewed for the 2022 kaupapa Māori study thought that support within Fire and Emergency had improved. Strong leadership and having cohorts of fellow Māori were key enablers.²⁴

Kaipatuahi thought that Hiwa-i-te-rangi (formerly the Māori outcomes programme), Fire and Emergency's Māori directorate, and Pou Takawaenga (its Māori liaison team) were having a positive effect, but also that they were under-resourced to achieve "all things Māori".²⁴



Māori continue to be under-represented in senior and leadership roles

The kaipatuahi and other staff interviewed for the kaupapa Māori study recognised that Māori continue to be under-represented in leadership roles at Fire and Emergency. There were mixed responses about career progression at the organisation:²⁴

- Some thought the progression system still favoured non-Māori.
- Some career kaipatuahi felt they had been actively undermined and blocked from progressing in their careers.
- Volunteer kaipatuahi felt well-supported by their senior officers to develop job-related skills, achieve their goals, increase their confidence, and progress through the ranks.
- Humility is highly valued in te ao Māori, and it may be at odds with a Western-based career progression framework that values and rewards self-confidence and people proactively putting themselves ahead of others. The researchers specifically commented that the kaipatuahi they interviewed showed great humility.²⁴

Recommendation

There is an absence of high-quality ethnicity data to accurately tell the story of how effective Fire and Emergency is being in recruiting Māori and how successfully kaipatuahi are progressing through the ranks in their careers. Fire and Emergency should work with its data and insights team to collect and measure data on ethnicity (and descent) for all stages of recruitment and career progression.

Recommendations for improving learning and development

Implications from past research

Career firefighters' learning and development: Recommendations

- The research suggests that the Qualified Firefighter training and the requirements for completion could be improved, including medical response, and tool use and comprehension.⁴ NTC should also set appropriate expectations for the frequency of call-outs, drills, training, and downtime.
- Fire and Emergency should measure and evaluate the success of its diversity initiatives in relation to recruitment, learning and development, and career progression. This would enable it to know whether these initiatives are having the intended outcomes, and to better understand the enablers of and barriers to success.¹⁰
 - This includes generating high-quality data on women firefighters, and on Māori recruitment and career progression.
- Few career firefighters progress from Senior Station Officer to Executive Officer. The research suggests a number of measures for Fire and Emergency to explore:
 - Refreshing the job design for the Executive Officer role, including looking at position descriptions from overseas³
 - Addressing why families are not supportive of SSOs progressing to Executive Officer
 - Regularly seconding SSOs into the Executive Officer role
 - Establishing an Executive Officer induction programme, which could include shadowing another Executive Officer, formal peer-support, and mentoring.
- In developing and providing future digital learning, Fire and Emergency should consider the following:⁸
 - Confidence and capability in using digital technologies varies among firefighters, and the technological infrastructure at stations is often lacking.
 - E-learning tends to be offered on an individual basis, which diminishes some of the benefits that are gained through the current team-based learning approaches.
- Women continue to be under-represented in Fire and Emergency, including in leadership and management positions. The research all points to the need for managers and leaders to be more committed to diversity and inclusion practices and for them to be accountable for this.^{10,12–14} More specifically, managers and leaders should be trained in cultural competency, inclusion and diversity, unconscious bias, and communication.¹⁴
 - More support could be offered to women. One suggestion is to release women firefighters early in their career for leadership training and development, to help kickstart their leadership career.¹⁰

Recommendations for learning and development for career firefighters

1	Refresh the Qualified Firefighter programme to be more relevant to common response needs, particularly attendance at motor vehicle accidents and critical medical incidents, and the use of tools and equipment.
2	Measure and evaluate the success of diversity initiatives in relation to recruitment, learning and development, and career progression. This will provide a better understanding of what works and what doesn't.
3	Continue to improve processes for career progression and professional development, particularly in relation to the transition from Senior Station Officer to Executive Officer.
4	Require managers and leaders to be more committed to diversity and inclusion practices and to be more accountable for this.

Volunteer firefighters' learning and development: Recommendations

- The volunteer workforce is not a homogenous group, so training may need to be tailored for specific needs and segments. Training may need to be provided in a number of different formats, and allowances made for some groups.
- The planning and organising of training nights could be improved. Displaying the training schedule prominently in the brigade station will allow members to see what is coming up so they can plan and prepare. Also, more flexibility or more options around training dates, times, and locations, and about the level of commitment required, would help volunteers better manage and balance their work and volunteering commitments.¹⁹
 - Location and frequency of training is a key issue for rural volunteers.^{15,18}
 - Training could also be provided in non-core firefighter skills like teamwork, communication, basic computer use, resilience and coping strategies, and time management.^{17,19}
- As with career firefighters, the training content for volunteers could be updated to ensure it is up-to-date, hands-on, realistic, and relevant. Relevance relates to the brigade's location (for example, needing to be skilled in responding to vegetation fires and structural fires), to the call-out types they encounter most often, and to the equipment they have on hand.^{16,19,21}
- Some volunteers struggle to attend regular training because of the financial costs involved. Fire and Emergency could cover the costs of training and provide financial support (for example, for travel, childcare, and lost wages or salary).
- There is a strong relationship between training and progression on the one hand, and retention and engagement on the other. Clear learning and progression pathways for volunteer firefighters need to be developed.
 - One study recommended that rural stations be provided with more support and administrative assistance to establish individual training plans, organise qualified trainers and assessors, and facilitate volunteers' attendance at the training.¹⁵

Recommendations for learning and development for volunteer firefighters

1	Tailor training to the learning styles and needs of volunteers. A range of different formats may be needed, and allowances may need to be made for some groups.
2	Plan and organise training nights to maximise participation. Providing advance notice and flexibility about timing and location would help.
3	Refresh the volunteer firefighter training programme to be more relevant to common response needs, particularly for motor vehicle accidents, critical medical incidents, and the use of tools and equipment.
4	Consider providing financial support for volunteer firefighters to improve their participation and engagement in training.
5	Develop and implement clear learning and progression pathways for volunteer firefighters.

Learning and development systems at Fire and Emergency: Recommendations

- Establishing Fire and Emergency also included merging the legacy training requirements of 40 different organisations. As a result, Fire and Emergency’s learning offering is similar to that of a medium- to large-sized polytechnic. Courses are developed and provided in response to requests from the organisation. There appear to be many opportunities to rationalise Fire and Emergency’s course offerings to ensure they are aligned with the outcomes it wants to achieve.
 - In particular the learning offering for rural volunteers could be further integrated and consolidated.²
 - Fire and Emergency could consider a cost-recovery model for training for external parties.
 - It should consider whether dedicated trainers would produce the same outcomes as higher-cost career firefighter trainers.
- A review recommended that Fire and Emergency establish a strategic and coordinated approach to learning and development. Learning needs to be at the centre of all its operations.² This is consistent with the research showing a clear relationship between training, and recruitment and retention.²¹
- Learning Station is Fire and Emergency’s learning management system, but trainees and firefighters have difficulty logging on and using it.⁸ At the corporate level, registration and course completion details are still manually collated, and there are dual systems for collation and reporting. Most importantly, there are significant concerns about data integrity.^{1,22} Recommendations for the learning management system are:
 - Develop a single source of trusted data at the enterprise level
 - Capture information once – for example, all required information at source with the use of online forms, workflow, and electronic approval
 - Develop and use real-time dashboards to monitor training activity and outcomes.

Recommendations for learning and development at Fire and Emergency

1	Rationalise and streamline the learning and development offerings.
2	Place learning at the heart of Fire and Emergency, and establish a strategic and coordinated approach to learning and development.
3	Develop a single source of trusted learning and development data at the enterprise level.

Recommendations for future research

1. Review overseas operating models for roles equivalent to Senior Station Officer and Executive Officer, including the differentiation between them and the transition to the more senior role. Family support also appears to be a strong factor when individuals decide to apply for Executive Officer roles, and further research could examine that dynamic more closely.
2. Continue to gather data and monitor and evaluate training and its outcomes for Māori, Pacific peoples, minority ethnic groups, women, and those with learning disabilities, in order to understand what works and what doesn't in relation to their learning and development.



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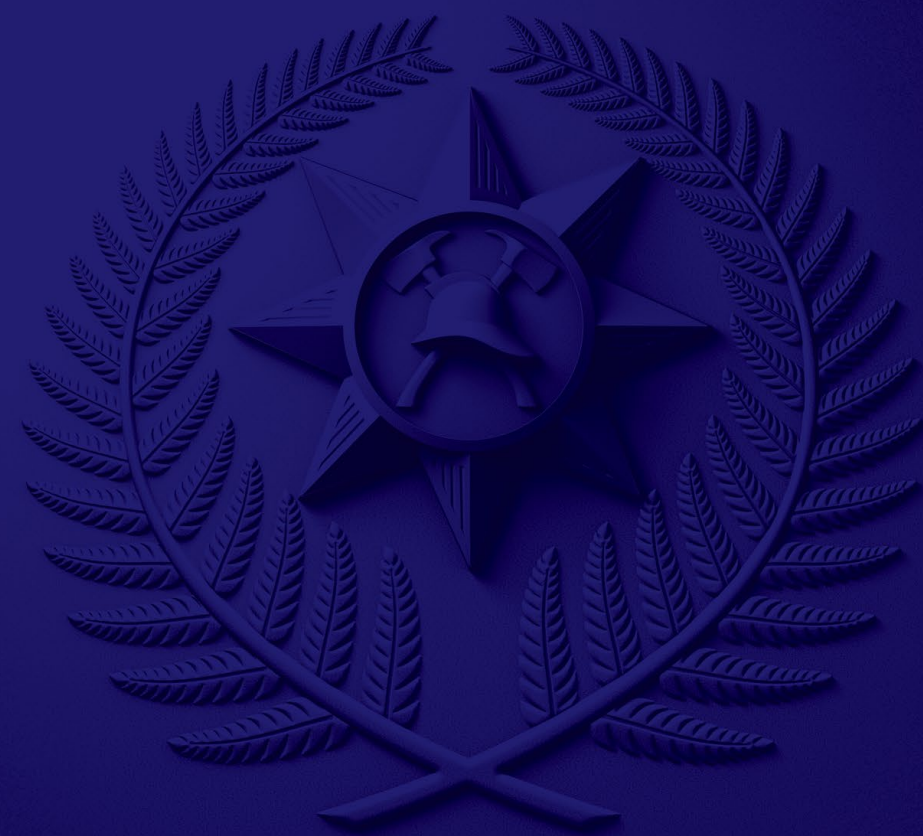
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