

# Funding Regime for Fire & Emergency New Zealand

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A Best-Practice Review – Summary Report

**A report prepared for Property Council New Zealand**

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## Summary

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Fire and Emergency New Zealand (FENZ) amalgamates fire and emergency services in New Zealand into one enterprise. The amalgamation brings all rural and urban fire services together and merges back-office operations and funding sources.

This report focuses on the funding regime for FENZ. Funding for FENZ's predecessor, the New Zealand Fire Service, was based on the value of households' and corporates' insurance cover for fire damage. The levy was collected through insurance payments by property and motor vehicle owners. The insurance levy was capped for residential contracts and not capped for property classed as non-residential. The levy on motor vehicles was a flat fee, which was also charged through insurance.

The funding regime for the newly created FENZ is being implemented in two phases. The first phase is a transition period (which began on 1 July 2017). The transition period involves no change in the insurance base but it does involve a levy increase of approximately 40 percent on property and motor vehicles. Following the transition period (ie, no later than 1 July 2019) the levy base will change from all fire insurance contracts to all insurance contracts covering property for loss or damage (ie, 'all perils' insurance). This change is aimed at providing a more stable source of funding for FENZ and better reflecting the role of the fire service: the fire service has expanded beyond fire prevention and response to non-fire activities such as responding to natural disasters. The base will also change from indemnity value to the sum insured under the insurance contracts.

The legislation establishing FENZ, the Fire and Emergency New Zealand Act 2017, sets out the principles for the funding regime for FENZ. These principles are that the levy be:

- stable;
- universal;
- equitable;
- predictable; and
- flexible.

In our assessment, the proposed funding regime for FENZ is not consistent with the funding principles set forth in the Act. Of the five legislated principles, FENZ's funding regime is wholly or partially consistent with only two of the principles. We find that FENZ's funding regime:

- **provides a somewhat stable source of funding.** However, FENZ's revenue will fluctuate with changes in property values and the regime will incentivise self or under-insurance and the restructuring of insurance policies as parties seek to minimise their levy;
- **is not universal.** The insurance-based levy means those who do not insure do not contribute to FENZ, despite receiving the benefits of FENZ's services. Also, large organisations have greater scope to alter their insurance exposure or completely self-insure. Furthermore, the government does not appear to be paying its fair share. As of 2013, public assets were estimated by the Office of the Auditor-General

to be insured to approximately half their carrying value<sup>1</sup>. It also appears that major public entities like tertiary education institutes and district health boards will have their FENZ levy capped<sup>2</sup> but private enterprises will face an uncapped levy;

- **is not equitable.** The funding regime makes little attempt to identify and charge beneficiaries based on the cost or risks they impose on FENZ. Further, there is no risk or experience rating built into the levy structure. Contrary to the Treasury's principles for cost-recovery by government entities<sup>3</sup>, the funding regime will result in significant cross-subsidisations between different user groups;
- **is not predictable.** The levy base will change with changes in the levied insurance contracts and with fluctuations in property values, which inevitably will lead to rates needing to change. There will also likely be periods of over/under collecting (especially in the short-term) as the regime converges to a more predictable state; and
- **is flexible.** The levies can be adjusted over time without new legislation.

This report considers the funding approaches used by other government agencies in New Zealand and the funding approaches used for fire services in other countries to see if there are lessons that can be applied to the funding regime for FENZ.

We find that significant improvements could be made to the funding regime for FENZ. These improvements include, in particular:

- clearly identifying the types of services FENZ provides, estimating the cost of each main service line and matching the costs incurred in providing that service with the charges to the beneficiaries of the service; and
- charging for FENZ's services to a greater extent on the basis of the expected risk and level of use, especially for non-residential users.

Both changes would result in a funding regime that is more compatible with the funding principles in FENZ's legislation. The fact that both approaches are used in New Zealand (eg by ACC) and by fire services in other countries (eg in Queensland, Washington state and Florida) demonstrate that they are practical and workable.

Best-practice features of the funding regimes used in other countries that could be implemented in New Zealand include:

- charging based on the size of the property, rather than just the value of the property, as the cost of responding to an incident is linked more closely to the size than the value of the property;
- charging based on the cost of the expected level of response, as higher risk properties like chemical plants or petrol stations are more likely to have an incident

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<sup>1</sup> Source: <http://www.oag.govt.nz/2013/insuring-public-assets/docs/insuring-public-assets.pdf>.

<sup>2</sup> Policy approval for Fire and Emergency New Zealand levy regulations, Cabinet Economic Growth and Infrastructure Committee Minute, 2017, [https://www.dia.govt.nz/diawebsite.nsf/Files/FENZ-Cabinet-Paper/\\$file/FENZ-Cabinet-Paper.pdf](https://www.dia.govt.nz/diawebsite.nsf/Files/FENZ-Cabinet-Paper/$file/FENZ-Cabinet-Paper.pdf)

<sup>3</sup> Guidelines for Setting User Charges in the Public Sector, New Zealand Treasury, 2017, <http://www.treasury.govt.nz/publications/guidance/planning/charges/settingcharges-apr17.pdf>

and likely to impose a higher cost on the fire service in the event of an incident;  
and

- incentivising risk mitigation, such as, offering rebates where sprinkler systems and fire alarms are installed.

Implementing a funding regime on the above lines would be more equitable, would encourage better use of FENZ's resources and would encourage people to take precautionary measures and thus help prevent fires and save lives.

In designing a funding regime for FENZ a balance needs to be struck between the accuracy of the price signals provided to users and the complexity of the funding regime. The finding of this report is that the regime proposed for FENZ, while having the advantage of being simple, does not provide price signals to users that reflect the costs they impose on them, and as a result is not universal, equitable or predictable. In particular, the FENZ regime has only two classes of property users, residential and non-residential (whereas the other countries reviewed in this report break-down the non-residential category into multiple different classes based on their risk type); the FENZ regime does not experience rate individual users; there is little contribution from the central government for the public good nature of the services; and there is no attempt to charge individual users for services that are clearly private in nature (eg, false alarm call-outs).

Moving from the over-simplified charging mechanism proposed for FENZ is practical and feasible. However, implementing risk rating and user-experience rating charges would be more complicated under an insurance-based collections system. It would require the insurance companies to collect additional information either at the point of contract with the client or after contracting with the responsible local authority. This information would include indicators of risk and required or likely response, such as property size, property location and property-use type.

User-experience rating is the insurance industry's core business and could be carried out by the industry, but, it would require an investment by the companies and brokers. One of the more complicated aspects of the insurance-based charging regime is the case of portfolio insurance contracts. For portfolio-based insurance contracts the portfolio would need to be disaggregated and charged by and per property. This again complicates the charging as the insurance companies cannot simply rate charge the insurance portfolio. Adding these measures to an insurance-based charging system would be more complicated but is feasible and implementable. The additions to complexity and therefore to the equity of the charging regime as a whole would take investment in the technical infrastructure that insurance companies have for data gathering and standard communication across insurance companies, brokers and clients. This will add expense and time to the implementation of the charging regime.

A feasible and practical alternative is for local authorities to take over the cost-recovery apparatus for FENZ. As detailed in the body of this report, local authorities are responsible for revenue collection for fire services in almost all the jurisdictions<sup>4</sup> examined in the course of this research, and appears to be the world norm.

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<sup>4</sup> With the exemption of New South Wales and Tasmania. Tasmania operates a hybrid system between insurance collections and a rates-based system.

Having the local authorities responsible for cost recovery for fire services simplifies many aspects of the funding and collections system. Local authorities have data on property use, property location and property size for each property under its jurisdiction. They already have a developed charging mechanism that reaches or can reach every property under their jurisdiction (as each authority charges rates). Lastly and importantly, it avoids any difficulties or added complexity with portfolios of assets as charging through local authorities would naturally treat each property as individual regardless of the type of ownership structure.

Consistent with cases identified from the United States, a hybrid system could be developed, with a portion of FENZ being funded through insured value and a portion being funded through rates and property size. Exemptions could be made for some property types such as churches and public land (such as parks) that have public good attributes. In most jurisdictions we examined, such exemptions come in the form of heavily discounted contributions rather than absolute exemptions. We have not identified any jurisdictions with lists of fully exempt property types.

Further information on the best-practice cost-recovery regimes examined in this report is summarised below.

## **New Zealand**

Within New Zealand, the Civil Aviation Authority (CAA) and the Accident Compensation Commission (ACC) provide good examples of funding regimes that could be used as models for FENZ.

The CAA provides a mix of public, club and private services. For cost-recovery purposes, the CAA classifies its activities into five different service lines, estimates the cost of providing each service within each service line and sets its charges so as to minimise cross-subsidisations between the different users and user-groups.

ACC provides a good example of cost-recovery where the payers' need for the service is uncertain. All earners and motor vehicle owner/operators are charged on the basis of the likelihood of their using the ACC's services and by the expected cost imposed on ACC in the event of use.

The first component (likelihood of use) is accounted for through the various industry-specific rates levied on employers (via the work account). Firms contribute to ACC based on the likelihood of injury in the firm's sector, the individual firm's history of workplace safety relative to other firms in the same sector and the expected level of burden placed on the system in the event of an injury. Likewise, motor-vehicle owners pay more if it is deemed that in the event of a crash they are likely to be harmed more and therefore inflict a higher burden on the system.

The second component (cost imposed in the event of use) is taken into account by earners' contributions being tied to their wages. This makes sense because the ACC cover an individual receives in the event of an injury is indexed to his/her earnings (up to a certain cap).

The ACC's funding regime is considered good-practice as its charges are based on the broad risk of use and the cost burden in the event of use, without being unnecessarily complex.

FENZ could, like the CAA, classify its services as public, club or private services, estimate the cost of providing each major service category and set its charges accordingly. FENZ could also move, like the ACC, to more risk-dependent funding by implementing risk ratings. Risk-rating different commercial property types is a practical, equitable and realistic change for FENZ to make (as demonstrated by the use of risk-rating by fire services in other countries as discussed below).

## **Australia**

Many Australian states have adopted funding regimes for fire and emergency services that have direct allowances for risk, likelihood of service and the benefit received in the event of use. South Australia, Western Australia, Queensland and Victoria all differentiate their fire-service charges (to varying degrees) by property type and location.

Queensland provides a good example of a beneficiary-pays system where levies are set on the basis of the response rate and level of response the contributor would receive in the event of an incident. Queensland breaks levy contributors into five broad groups based on the likely service that would be received in the area of the contributor. Areas with 24-hour, seven-day-a-week fire services that employ at least 16 full-time fire fighters contribute the most. Areas that are only covered by auxiliary staff contribute the least. This is sensible because if a fire station is well-staffed and well-equipped then the surrounding properties are the direct beneficiaries of that readiness and should take on a larger funding burden.

Queensland overlays its location-based charge with a property-use factor that reflects the risk of an incident and how costly a response would be if an incident occurred. There are 16 property-use groups aggregated from 160 property types. Thus, a small office, shop or commercial premise (no more than two levels or 51sqm in floor area) located in a well-staffed and well-equipped area contributes \$203 per year. At the other end of the spectrum, large oil or fuel depots (containing high risk materials and requiring a high-level response in the event of an incident) belong to the highest rated property-use group and contribute almost \$400,000 per year.

South Australia (SA) and Western Australia (WA) have funding regimes that are based on property value adjusted for location. Inhabitants of metropolitan areas typically contribute more than those in more remote areas, reflecting the better response likely to be received by metropolitan dwellers. SA and WA also adjust for property type. SA adds an additional rate, with industrial property having the highest rate and special-use properties such as churches having the lowest rate. WA doesn't adjust the overall levy rate but applies minimum and maximum contributions by property type. Victoria also charges based on property value and differentiates levy rates by six property uses and by fire service jurisdiction (with two separate fire-service jurisdictions).

## **Other countries**

Funding regimes for fire and emergency services in other countries provide good insights into practical, implementable and sustainable funding approaches. This report analyses in detail two funding regimes: those for Washington state and Florida.

Washington state allows its municipalities to charge for fire services through a Fire Benefit Charge that can be used to fund up to 60 percent of the fire service total budget. The remaining funding comes from a levy based on property value and from other sources such as donations.



The Fire Benefit Charge is based on:

- the property size (not property value);
- the building category – classified in most cases as commercial, residential, mobile home or apartment complex;
- the expected cost of a response – also classified into property types and in some cases adjusted for the structure’s square footage;
- the hazard level in the event of a required response – reflecting the increased cost involved with responses to high-risk properties such as industrial plants; and
- discounts offered for certain risk-mitigation measures such as sprinkler systems (regardless of the property type).

The aim of the Washington Fire Benefit Charge is to create a stable funding system for fire services. Previously funding was entirely based on property values. During the global financial crisis property values were decreasing and the levy rates were not flexible enough to change with the reassessment of property values. The fire service now has sustainable funding sources that are diversified and are more directly reflective of the cost of the service and the likely response required in the event of an incident.

While administratively more complex, the charging system used in Washington reflects better the work required in the event of an incident. The municipalities in Washington have shown the charging system to be a practical and feasible approach.

The second example presented in detail in this report is Florida, which charges a fire-assessment fee. The fee is based on:

- hazard classification – based on the property type/use and the required response in the event of an incident. Gainesville, FL, for example, has a hazard classification with 97 property types amalgamated into five risk bands;
- property size, measured by square footage; and
- historical demand – for example, Lake City, Florida estimates the expected operating expenditure for its fire service. It then charges the expected beneficiaries based on recent historical demand by property type (classified into 6 categories: single-family residential, multi-family residential, hotels, commercial property, industrial property/warehousing and vacant land).

As in Washington state, municipalities in Florida emphasise property size and not just property value, thus aligning the fees more closely to the cost of the response. Florida also presents another example of charges being differentiated by property use according to the risk and therefore likely burden imposed on the fire service (consistent with cost-recovery principles). Further, certain jurisdictions within Florida rely heavily on data-driven charging. Data is collected on response types and costs are allocated to the services, thus indicating which property types are the cost exacerbators and which beneficiaries should be charged accordingly.

Other similar funding approaches are used in California and South Carolina - albeit with simpler funding regimes than those above (the regimes charges are based on building category and property size).



This report also examines the Danish fire-service and highlights the efficiencies that can be gained through direct contracting. The report also briefly considers the fire-service funding approaches seen in England, United States, Canada, Singapore, France, Italy and Brazil.

The examples presented in this report show that a more equitable and universal funding mechanism is available for FENZ. FENZ could better differentiate between contributors based on observable risk and the costs they impose on FENZ. FENZ could also use different charging systems in tandem. For example, it could base its levies on property size - as a proxy for the expected response cost in the event of an incident - as well as basing the levy on response data to identify historical cost exacerbators.