

1946
NEW ZEALAND

FIRE BRIGADES OF THE DOMINION

(REPORT ON THE) BY THE INSPECTOR OF FIRE BRIGADES

Presented to both Houses of the General Assembly by Command of His Excellency

The INSPECTOR OF FIRE BRIGADES to the Hon. the MINISTER OF INTERNAL AFFAIRS.

Office of the Inspector of Fire Brigades,
Wellington, 26th September, 1946.

SIR, --

I have the honour to submit the thirty-fifth annual report on the working of the Fire Brigades Act, 1926, for the year ending 31st March, 1946.

ADMINISTRATION

1. No new fire districts were created during the year. This was largely due to the fact that it was common knowledge that new legislation was contemplated under which the territorial local authority could obtain contributions towards the cost of the local fire service from the Government and underwriters without the formation of an independent Fire Board. The number of Fire Boards in operation remains at sixty.

FIRE SERVICE REORGANIZATION

2. During the war attention has been mainly concentrated on the furtherance of the reorganization scheme outlined in this report last year. It was to be expected that there would be some opposition to a major change such as that proposed. The two principal objectives are the provision of an organization for war or Civil emergency and the improvement of the finances of the smaller fire brigades. Neither is a question on which there is much public comment. The requirements of and the necessity for an emergency organization are little understood outside the Fire Service, and the question of brigade finance concerns the local authorities controlling the small municipal and county urban areas, which are the least vocal of our local-government authorities.

3. Government directed that every possible effort was to be made to obtain some acceptable compromise between the conflicting viewpoints expressed to the parliamentary Committee on local government and the recommendations of that committee. A series of conferences was therefore held with representatives of the national organizations concerned with the Fire Service. On the administrative side these consist of the Fire Boards', Municipal, and Underwriters' Associations, while the United Fire Brigades' Association and the Federation of Fire Brigades' Unions represent the brigadesmen. Similar discussions were also held with officers of the Departments concerned, including Treasury, Public Works, State Forest, and the Armed Services. In addition, a personal visit was paid to 134 of the 159 towns in which fire brigades operate. Conferences were in each case held on the spot with representatives of the local authority and the fire brigade. The proposals were explained in detail and also the organization and equipment necessary in the town to enable the brigade to take its part in the emergency organization.

4. These discussions were most valuable and many of the suggestions made were adopted in the draft legislation. A memorandum was first prepared setting out the compromise proposals. This was discussed with the executives of the national organizations, which subsequently made joint representations to the Minister. A draft Bill was then prepared to give effect to the modified proposals recommended. This was circulated both to the national organizations and to all Fire Boards. As was to be expected, the local authorities in the smaller towns were unanimous in approving the principle of contributions to brigade costs by Government and underwriters. The draft Bill was approved by the Union Federation and the Municipal Association, subject to certain amendments which would probably have been agreed to. On the other hand, definite opposition was expressed by both the Underwriters' and the Fire Boards' Associations. It was finally decided to drop the proposals for the 1946-47 session so as to allow time for further consideration in the recess.

5. It would appear that the opposition from the underwriters centred in the proposed basis of contribution. That from the Fire Boards' Association seems to have arisen partly from a misunderstanding of the intentions of the draft Bill and partly from a fear that the transfer from Ministerial control to that of a central authority would involve some loss of status to the existing Fire Boards. A further complication arose from the circulation by one of the Fire Boards of alternative proposals for control of the Service on a provincial basis. Under the circumstances it is desirable that the proposals of the draft Bill should be reviewed in this report.

EMERGENCY ORGANIZATION

6. The two principal types of Civil fire emergency against which provision must be made are forest fires and the block fires likely to arise, as at Hawke's Bay in 1931, from severe earthquake. The essential requirements are a sufficient force of firemen, trained and equipped for overland operation from static water-supplies, and organized on a national rather than a purely local basis so that any units required can be mobilized without notice at any time. These are also the requirements of a wartime fire service. The organization, developed on the lines proposed, will therefore constitute the fire section of our peacetime defence system. Minor emergencies for which fire service pumps and equipment have been used in recent years, but which do not require the same standard of preparedness for immediate use, are the reinforcement of water-supplies in drought periods, the removal of flood-waters, and replacement of drainage pumps temporarily out of commission.

7. Major civil emergencies occur very infrequently and the type of operation necessary is seldom used in fire-fighting in urban areas. It would be unreasonable to expect the Fire Service to remain keyed up for emergency operation as it was during the war, unless the brigades are given some immediate objective and an incentive to maintain the specialized training required. The proposed rural fire-protection service provides this objective. A small annual retainer will be payable in respect of industrial

buildings (freezing-works, dairy factories, timber-mills, &c.) situated outside fire districts and the brigades will, as part of the service given, carry out regular practical training on the premises and under the conditions which would apply should a fire occur. The service, providing as it does some protection not at present existing, has a definite national value and justifies to some extent the increased contributions towards the general service costs to be paid by both Government and the underwriters.

Taupo Forest Fires

8. The development of both the forestry fire-protection system and the Fire Service emergency organization must of necessity be influenced by the experience gained during the forest-fire emergency in the Taupo-Rotorua area during the early months of 1946. A brief study of the conditions is therefore desirable. The area in exotic forests exceeds half a million acres and consists of a belt of plantations extending in an irregular pattern from the vicinity of Te Teko in the Bay of Plenty almost to Putaruru in the west and southwards across the Napier-Taupo Road. The land is light pumice country and most of the forest blocks are bounded by scrub and fern lands. The latter are only being brought into cultivation slowly and it appears likely that much of these areas will remain for many years, if not permanently, as waste land and therefore a potential menace to the forests. About half the planted area is State forest and the balance is owned by a number of forestry companies. The forest is in all stages of growth and is in, or ready for, production in about one-sixth of the area.

9. The plantations have until this year been singularly free from serious fires. Small fires have, of course, occurred from carelessness in burning off, from through-traffic road hazards, and from trespass. These have been dealt with by the plantation crews without difficulty, using mainly manual equipment (shovels, &c.). The friable nature of the pumice soil has contributed largely to this success. Because of it there had grown up a considerable body of opinion amongst foresters that the use of water for fire-extinction was not necessary in this class of country. Much of the area is very sparsely watered and the provision of reserve supplies of static water at strategic points is an expensive matter. It is therefore not to be wondered at that until very recent times the fire-protection organization has - apart from the provision and maintenance of fire-breaks and access roadways - been concentrated on a lookout system and other methods of early fire-detection and relied on quick operation by manual methods for fire-extinction.

10. Scrub fires in the waste-land areas adjoining the plantations are of frequent occurrence, mostly due to roadside carelessness and the lighting of fires for singeing pigs by hunters. It has been the practice of the State Forest Service and the forestry companies to keep a fire watch over these areas and to deal with any fires considered likely to endanger the forest. Other fires were allowed to burn unrestricted. They were held by some people to be beneficial in fern lands because a safe burn would remove the danger to the forest until fresh growth dried out, and in scrub land because such fires prevented accumulations of large scrub and self-sown pines which would carry a heavy fire. In the 1943-44 fire season several of these fires in the vicinity of Taupo reached serious proportions and not only threatened the forest areas, but also the townships of Wairakei and Taupo. A number of conferences was therefore held in an endeavour to arrange for the control of the waste-land fires in the incipient stages, even though they were not an immediate menace. Both financial and legal difficulties were met. The waste land is largely Maori-owned or Crown land. It is non-productive, non-taxable, and not controlled by any local authority. It is not included in any rural fire district and there is at present no legislation under which the lighting of fires can be prohibited, controlled, or policed.

11. The State Forest Service was about this time experimenting in the development of a water-carrying fire-engine, utilizing a type of chassis released by Army. This had been designed for an armoured car and was therefore suitable for weight-carrying and

for cross-country operation. It was finally decided that, pending Government decision on the major problem and the passing of the necessary legislation, an endeavour should be made to control the situation on a voluntary basis. Experiments showed that the forestry fire-engines could operate across country even in heavy scrub, and Government agreed to supply one of them to be stationed at Taupo. A local fire brigade was formed and a committee representing the forestry interests and the Taupo Road Board was set up to control and finance the seasonal fire-fighting operations in the waste-land area.

12. The climatic conditions during the last fire season were unusual. The late summer was both hot and dry and there were periods of exceptionally low relative humidity beginning in mid-January. The result was that grass and scrub in the waste-land area reached a tinder condition which not only caused fire to strike easily and travel rapidly, but also to persist right into the roots of bracken and grass. The sporadic fires, which are of no great importance in a normal season, did not die out as usual. Towards the end of January it could be said that there was a continuous fire or series of fires in the area between the Tauhara and Tahorakuri plantations and Lake Taupo. This wakened up daily with the heat of the sun and threatened from point to point as the wind increased and veered. Conditions reached the emergency stage in the early days of February and it was necessary to make a call on the Fire Service to counter the threat to the built-up areas at Wairakei, Taupo, and elsewhere.

13. The first call was sent to Rotorua, where one of the E.P.S. water units had been stationed in 1944 for the protection of the scenic and forest areas. This appliance operated in an endeavour to prevent the fire crossing the Waikato River near the Huka Falls, but it became evident that more assistance would be necessary. The fires were by this time on both sides of the Taupo-Rotorua Road, and a call was sent to Wellington on Saturday, 11th February, when heavy winds greatly increased the danger throughout the district. Although no prior arrangements had been made, the response was excellent. The first machine moved off from Wellington within thirty minutes of the call, arriving at Taupo at 2 a.m. the following morning. A second call was sent to Palmerston North, Wanganui, and Auckland, and later for relief purposes to the Waikato brigades. Most of the latter were urgently engaged owing to the wide area covered by the bad fire conditions, and response was only possible from Te Aroha and Rotorua. The "water units" sent on the first call were later reinforced by trailer pumps and cross-country-towing vehicles obtained from surplus Army and Air Force stocks.

14. The Fire Service crews continued in action until 5th March, when heavy rains had relieved the position, the permanent men on duty being relieved from time to time. In all, two water units with heavy pumps and four with medium pumps were used in addition to fifteen standard trailer pumps. The man hours worked were approximately 7,500. One brigadesman was rather badly burned, several of the appliances were more or less seriously damaged, and 5,500 ft. of hose was destroyed. It may fairly be said that the Fire Service was effective in its primary function in such emergencies—that of protecting built-up areas. There is little doubt that but for the operation of heavy equipment much of the property at Taupo and elsewhere would have been lost. The officers in charge of the Fire Service units have reported that their operations and effectiveness were very greatly hampered by the absence of an adequate system of control and communications, particularly in the early stages of the emergency. The brigade units took little or no part in what should have been their secondary job of supporting the forestry teams in their protection of the actual forest. (NOTE.—It is considered that it is only in exceptional cases that direct operation by the Fire Service on a forest fire will be possible. Its duty will usually be to transfer water overland by hose-lines from the static source to some convenient point from which the mobile forestry appliances can operate.)

15. The forestry fire-protection organization was totally inadequate to meet an emergency on the scale experienced. The fire-engine stationed at Taupo appears to have done some excellent work in the scrub areas in the immediate vicinity of the town during the early part of the summer and it was undoubtedly most effective for dealing with fires in the town. It was simply overwhelmed when the fires got out of hand in the later stages. The State Forest Service had only four similar machines available at the time in the district, and these had to be reserved for the protection of the Kaingaroa Forest. Heavy demands were made on the man-power and manual equipment resources of the State Forest and the forestry companies. Long hours were also worked by local residents, by men from the public-works camps on the Waikato River, and by men of the Armed Services sent from Waiouru and other Stations. All efforts were unavailing to prevent the spread of the waste-land fires under the conditions existing, and, in all, some 30,000 acres of exotic forest was destroyed. Exact information is not available at present since all accounts have not been rendered, but it appears that at the height of the emergency more than 2,500 men were employed and that the cost of operations will considerably exceed £50,000.

Fire Service and Forest Fires

16. The emergency has directed major attention to the question of forest-fire protection. It demonstrated that prevention is the only effective method of control. It is clear that, particularly in this type of country, every uncontrolled fire must be regarded as dangerous in the fire season, and during periods of low humidity every fire in the open. A number of conferences have since been held and a draft "Rural and Forest Fires Bill" has been prepared. This is mainly aimed at control of fires in the early stages so as to lessen the danger of emergency conditions arising. It is recognized, however, that a recurrence of forest fires on a large scale is still a possibility not only in the Taupo-Rotorua area, but also in other exotic forests, and that the legislation for both urban and rural fire control must be drawn so as to provide for the maximum co-operation between the Fire and Forest Services. It has been decided that the Forest Service will provide and operate all requisite manual and mobile equipment, while the Fire Service will be responsible for the maintenance and operation of heavy equipment such as large pumps and overland hose. It is agreed that the number and distribution of emergency appliances is at present inadequate. The recommendation has been made to Government that a further thirty small hose-laying appliances suitable for either road or cross-country work should be supplied to the Fire Service and issued to brigades at strategic locations in relation to forest fire-protection requirements throughout the Dominion. The response expected of the Fire Service is in three stages—

- (1) Where small forest or herbage fires are involved, the authorized officer may call on one or more adjacent brigades to supply pumping appliance and crew. The duty requirements will not normally exceed those of building fires in rural areas.
- (2) Where more serious fires occur or where the climatic conditions are likely to produce a minor or local emergency, call may be made on brigades over a wider area, the service requirements being a period not exceeding twenty-four hours. This is the maximum service to be expected of volunteer brigades and in some cases it may be necessary to reduce the numerical strength of the crews.
- (3) Where fires occur over a large area or threaten to get out of hand, or where specially hazardous climatic conditions exist, as during the Taupo fires, the Fire Service may be required to give prolonged active or standby service. The call will in this case be on the permanent staffs of the larger brigades.

CENTRAL AUTHORITY

17. With one exception all the major submissions to the parliamentary Committee recommended that the administration of the Act should be carried out by a central authority instead of by the Minister as at present. These representations were subsequently confirmed in detail by a deputation to the Minister representing the Fire Service organizations. The draft Bill provides for the constitution of a Fire Service Council with the membership and the powers recommended. This Council will elect its own Chairman (except for the first term—see paragraph 20 below), it will regulate its own procedure, and appoint both technical and administrative officers. Provision is made for payment of fees to members of the Council. The Council is required to submit annual estimates of expenditure to the Minister. Its duties are defined as follows:—

- (a) To administer the legislation.
- (b) To guide and supervise the Fire Service for the purpose of maintaining the maximum efficiency.
- (c) To co-ordinate the Fire Service units for purposes of rural fire protection, reinforcement at serious fires, or for war or other emergency.
- (d) To encourage, supervise, or carry out experimental or research work with respect to Fire Service methods, equipment, organization, or co-ordination with other services.
- (e) To publish reports, information, and advice on Fire Service matters.
- (f) To establish courses of training and generally direct the training of the Service, particularly of officers.
- (g) To provide for the inspection and training of brigades, and for such degree of standardization of plant, equipment, and training as may be deemed necessary for combined operations.
- (h) To classify fire districts and secondary fire districts for the purposes of this Act.
- (i) To provide reserves of plant and equipment for emergency and for their storage, maintenance, and distribution.
- (j) To approve or determine annual estimates of expenditure submitted by brigade-controlling authorities.

18. The Dunedin Metropolitan Fire Board recommended in its submissions to the parliamentary Committee and in a subsequent circular sent to all Fire Boards that the Fire Service should be controlled on a provincial basis. The combined deputation to the Minister referred to above suggested that this principle should be investigated. The proposal would involve a more complicated financial structure than that proposed under the central authority and there would be much the same objections from the individual Fire Boards. If the central authority, however, is to avoid the setting-up of a costly organization it will be convenient, if not necessary, for it to utilize the existing organizations in the larger fire districts for some of its functions, including for instance, those set out in clauses (d), (e), (f), and (i) of the preceding paragraph. It would also appear that the organization of the emergency service could most effectively be carried out on a provincial basis. The draft Bill therefore provides that the Council may delegate to any brigade-controlling authority such of its functions as it thinks fit and may pay such amount as may be agreed upon for any services so rendered.

19. It is proposed that the Civil fire service should, wherever this is practicable, take over responsibility for the protection of Government property and also in certain towns make special provision for forestry fire-protection. In some cases this will require expenditure by the brigade-controlling authority additional to its ordinary Civil requirements. Machinery provision is therefore made in the draft Bill for the Council to make appropriate special contributions to the authority concerned to meet this extra cost, following on the issue of a special requisition.

POWERS OF THE MINISTER

20. Under the draft Bill the administration of the Act and the efficiency of the Service is the responsibility of the Council. Government is mainly concerned to see that an emergency organization is established on a national basis. The draft Bill therefore provides that the Minister may attend any meeting of the Council, ask for any reports and papers considered necessary, and communicate to the Council the policy of Government in any matter affecting the national organization of the Service or its co-operation with other national or local services. The transition from Ministerial to Council control and the initial setting-up of the emergency organization will involve close liaison with Treasury and other Government Departments. For this reason the Minister is empowered to appoint the Chairman of the Council for the first term. In the same way, for similar reasons, and to avoid the setting-up of an unnecessarily costly central organization to which Government is required to contribute half the cost, he is empowered to direct that the clerical work of the Council be carried out by the Department of Internal Affairs as at present.

COUNCIL AND BRIGADE-CONTROLLING AUTHORITIES

21. The powers of the Council with respect to Fire Boards and other local authorities are strictly limited. The draft Bill requires every brigade-controlling authority firstly to maintain an efficient service as provided in section 43 of the Fire Brigades Act, and secondly to conform with the emergency organization requirements of the new legislation. The latter provision is qualified so as not to require the services outside the district of more than one-fourth of the brigade members or of plant and equipment essential for the fire protection of the town. The Council, for its part, if it considers that any brigade-controlling authority is not carrying out its duties, may require the authority to take such action as it deems necessary. The Fire Board or local authority may in turn appeal to a Magistrate against any such requisition on the grounds that such compliance is not in fact necessary for the efficiency of the Service or that the cost of compliance would be unreasonable having regard to any special conditions existing, the rateable capacity of the town, or the comparative expenditure on fire protection in other towns of comparable size and population.

EXISTING FIRE BOARDS

22. Existing Fire Boards and fire districts are not affected by the draft Bill, except that their estimates are approved by the Council instead of the Minister, their insurance contributions will be collected for them by the Council, and the existing Government member is replaced by a member nominated by the Brigade or, where more than three permanent men are employed, by the Union Federation on behalf of the brigade. The provisions of the Fire Brigades Act as to formation of united fire districts are retained.

NEW FIRE DISTRICTS

23. The recommendation of the parliamentary Committee is adopted and all towns classified by the underwriters are constituted fire districts. The towns affected are set out in the First Schedule to this report. A statutory committee of the local authority with the same membership as a Fire Board is constituted to control the local fire service. All other towns which have an effective service of a lower standard are declared secondary fire districts. The local authority is in this case required to set up a committee, including a representative of the brigade, to control the local service. The Second Schedule to this report sets out the towns so constituted. Provision is made for the Council to make grants not exceeding £25 to the local authority controlling a brigade below the standard required for a secondary fire district. Provision is also made for the Council to be a classifying authority and for the local authority of any secondary fire districts to apply for reclassification as a fire district or for the local authority of a town not in either Schedule to apply for classification as a secondary fire district or, should conditions

warrant, as a fire district. The provisions of the existing legislation with respect to metropolitan areas are extended to fire districts constituted under the draft Bill. No local-authority district situated within fifteen miles from the cities of Auckland, Wellington, Christchurch, or Dunedin may be constituted a fire district unless the Minister is satisfied that the fire protection of the district can be carried out with equal or greater efficiency and at no greater cost by independent operation as compared with the alternative of incorporation in a united fire district.

FINANCIAL PROVISIONS

24. The proposals for the financing of the Fire Service made to the parliamentary Committee on behalf of the Fire Boards', Underwriters', and Municipal Associations were identical. They recommended that the costs of the Service in fire districts should be contributed in equal shares by underwriters, Government, and local authority; that no more Fire Boards should be formed, except in towns with population exceeding 5,000, and that the underwriters and Government should in equal shares subsidize £1 for £1 the local-authority expenditure on the Service in non-fire-district towns, on a basis depending on population, with a maximum subsidy of £300 per annum. The Committee had before it the basis of contribution in Australia, where in two States the underwriters contribute one-third, in two five-ninths, and in the other two one-half and three-sevenths of the costs. The balance in each case is divided equally between Government and the local authorities. In its report the Committee recommended that in towns having a reticulated water-supply and a fire brigade of approved standard the necessary revenue should be provided on the same basis as in the existing fire districts. It agreed that having regard to the greatly increased amount of Government property, including State housing, the Government contributions should be increased, and recommended that the costs of the Service should be contributed in the proportions: underwriters, 50; local authorities, 30; and Government, 20.

25. When this recommendation was investigated by Treasury it was represented firstly that the property of most trading Departments contributed to the cost of the Fire Service both by way of rates and insurance premiums, secondly that State housing already contributed by way of rates and the appropriate insurance contribution could best be made on a unit basis, and finally that Government property such as schools, post-offices, police-stations, administrative offices, &c., which paid neither rates nor insurance, did not represent more than 5 per cent. of the total property at risk in urban areas. It was conceded that if the Service took over full responsibility for the fire protection of essential Government property such as Trentham Ordnance Stores and the Devonport Naval Base, an appropriate Government contribution should be paid. It was also agreed that the proposals for rural fire protection and emergency operation constituted an extension of the existing Service, towards the costs of which Government might reasonably be asked to contribute. An overall contribution of 15 per cent. of the Fire Service costs was suggested to cover all Government liabilities in respect of insurable property other than State housing. The proposals of the draft Bill follow this suggestion and provide for contributions in the overall proportions: underwriters (including State housing payment), 50; local authorities, 35; Government, 15. The contribution will be made in respect of State housing by including a nominal premium of £2 for each housing unit in the underwriters' return of premium income referred to in paragraph 27.

26. Provision is made in the draft Bill that the estimates of the Council shall be approved by the Minister and that the Council in turn shall approve the estimates of the Fire Boards and other local authorities controlling brigades. The financial provisions of the Fire Brigades Act, including the repayment to the local authority of the valuation of fire-fighting equipment, will not apply in fire districts constituted under the draft Bill, except in the case where a united fire district is formed. An alternative provision has been made to meet the fact that the legislation has been delayed since

1939 and that individual applications for the formation of a fire district have been declined by the Minister. It is proposed that the Fire Committee of a fire district or a secondary fire district may include in its annual estimate of expenditure an amount sufficient to enable the territorial local authority to recover, over a period of not less than five or more than ten years, the capital cost without interest of any land, buildings, plant, and equipment purchased out of revenue since the beginning of 1939. Interest and sinking fund on loans raised for fire-brigade purposes may in all cases be included in the annual estimates.

27 Under the existing method of collecting the insurance contributions, each of the 60 Fire Boards obtains from about 40 underwriters a return of premiums received from the fire district. After the annual estimates are approved by the Minister the Board makes quarterly demands on each underwriter, the amount of the levy being determined by the proportion which the premium income of the underwriter bears to the total. This system is cumbersome, and would be intolerably so if extended to 160 local authorities. The draft Bill provides that all contributions from both underwriters and Government shall be collected by the Council and by it distributed in quarterly cheques to each Fire Board or Fire Committee. Provision is made for the Council to obtain one return of premium income covering all fire districts throughout the country. After approval of its own and the local estimates, it will make the appropriate quarterly levies on the underwriters. It will also submit returns of approved estimates to Treasury, which will be authorized to pay the Government contribution in four quarterly instalments.

28. In order to simplify still further the financial arrangements and to avoid the necessity of making levies on 160 local authorities, the Bill provides that the expenses of the Council shall be borne in equal shares by the Government and underwriters. If the Council exercises its powers of delegation to a reasonable extent and advantage is taken of the existing departmental office system (see paragraphs 18 and 20), the overhead costs should not be considerable. The main items of expenditure would be :—

| | £ |
|--|--------|
| Fees, travelling-expenses, and meeting costs | 1,000 |
| Secretarial charges | 1,000 |
| Technical officer : Salary and expenses | 1,500 |
| Research and educational work | 1,000 |
| Departmental office charges | 1,000 |
| Subsidy to the United Fire Brigades' Association | 2,500 |
| Total | £8,000 |

29. The half-share of the expenses of the Council and the special subsidies for the protection of Government property referred to in paragraph 19 (estimated at not more than £8,000 per annum) will reduce the Government contributions in fire districts below the overall percentage shown in paragraph 25. The draft Bill provides that after making these payments the balance of the Government contribution—excluding its share of the subsidy to the secondary fire districts—shall be paid to the controlling authorities in the fire districts. It would be a sufficient allowance for all contingencies to assume that the two items referred to above will at no time exceed 5 per cent. of the total costs of the Service. The contributory position least favourable to the local authorities would therefore be : underwriters, 50 ; local authorities, 40 ; Government, 10 (excluding special subsidies—see paragraph 19). If the administration of the Council develops as anticipated, the Government contribution would be increased in most years to 11 per cent. or 12 per cent.

30. With regard to secondary fire districts, the parliamentary Committee made no recommendation as to the financing of brigades in towns below the fire-district standard. The proposal of the administrative organizations for a pound-for-pound subsidy has therefore been adopted, but with the limitation of the subsidy to £100 per annum. The Council will levy on underwriters and Government in the proportions applying over the whole Service (50 : 15). The actual provision is that the underwriters will pay 77 per cent. and Government 23 per cent. of the subsidy. In cases where the annual expenditure does not exceed £200 the funds would, under this arrangement, be provided in the proportions: local authorities, 50; underwriters, 38.5; Government, 11.5. If the total expenditure exceeds £200 the local authority would be responsible for the whole of the additional cost. The justification for this latter provision is that the standard of fire protection possible in the absence of an adequate water-supply reticulation is below that obtainable in a fire district. It therefore does not justify the same percentage contribution from the underwriters.

Effect on Insurance Companies

31. Some comment is desirable as to the effect on the underwriters of the above financial proposals. Under the existing legislation they pay 49.2 per cent. of the annual costs of the Fire Boards (see table), but nothing whatever in respect of the towns and urban districts shown in the Schedules. The proposals of the draft Bill are more favourable than the recommendations of the parliamentary Committee, since the State housing contribution, which in the coming year is estimated to reach $2\frac{1}{2}$ per cent. of the total cost of the Service, is deductible from the proposed underwriters' contribution of 50 per cent. It is conceded that, apart from the probable increase in operating-costs in existing fire districts, the proposals of the draft Bill will involve increased expenditure by the underwriters in the country towns. The underwriters, however, must benefit from the improved service made possible by these extra contributions, and also from the fire-protection service to be given in rural areas. It is also to be noted that if no amending legislation is passed the increasing costs of the Fire Service will inevitably force the formation of Fire Boards in most of the larger country towns. Several applications have, in fact, been held over pending the proposed legislation. The underwriters are faced by practically the same expenditure in either event and can obtain the best return from a properly co-ordinated scheme.

MACHINERY PROVISIONS FOR RURAL FIRE PROTECTION AND EMERGENCY

32. The draft Bill provides that the central authority shall be responsible for the establishment of a national system of rural fire protection and of reinforcement between brigades and for the provision of a chain of authority to control the assembly and operation of brigade units under emergency conditions. It authorizes the Council to issue requisitions on the owners and occupiers of commercial and industrial premises in rural areas and, if necessary, to determine which brigades will provide fire protection for these premises. The Bill also provides for the making of regulations prescribing the registration fees for premises in rural areas and the charges to be made for brigade attendances. It authorizes appropriate expenditure by the Council, and defines the responsibility in respect of rural fire protection of the territorial local authorities.

SUPERANNUATION FOR FIRE-BRIGADESMEN

33. Provision is made for the Council and every brigade-controlling authority to be deemed a local authority for the purpose of providing superannuation for its full-time employees in terms of the National Provident Fund Act, 1926. Machinery provisions are prescribed, and provision is made that in assessing contributions due regard shall be taken of the cost of providing for the inclusion of full-time Fire Service prior to the commencement of the Act as service in the assessment of pensions. Provision is also made that any contributor may at any time give notice of his intention to discontinue contributing to the Fund.

NEW ZEALAND FIRE LOSS

34. The latest year for which national figures are available is 1944. The insured loss was £478,000. With usual addition for uninsured loss this makes an estimated total loss for the year of £537,750. This may be regarded as very satisfactory, comparing as it does with an average of £642,590 for the previous five years. The fire loss in fire districts shown in the statistical table attached to this report evidences a considerable increase on last year. This is mainly due to an unusually high loss in large fires, a list of which is appended. Practically half the loss in both this and the preceding year has been due to serious fires in Government stores—at Palmerston North in 1944-45 and at Te Awamutu during the current year. This fact is stressed, because £243,700 out of the £251,270 loss at Palmerston North and the whole of the £415,000 loss at Te Awamutu was uninsured and will therefore not appear in the annual fire-loss figures published by the Government Statistician. Excluding the fires in Government stores referred to, the loss in fire districts for 1945-46 does not disclose any abnormal increase not accounted for by the increased replacement value of property.

| Locality. | Day and Date. | Time. | Occupation of Premises in which Fire occurred. | Cause of Fire. | Loss. |
|-----------------|--------------------|------------|--|--|---------|
| | | | | | £ |
| Auckland .. | Tuesday, 10/4/45 | 3.06 p.m. | Golf club | Unknown | 8,075 |
| " .. | Thursday, 12/7/45 | 3.04 p.m. | Box factory | " | 29,650 |
| " .. | Saturday, 8/12/45 | 2 a.m. | Block flats | " | 5,020 |
| Dunedin .. | Thursday, 27/9/45 | 3.45 a.m. | Linseed-oil factory | " | 67,402 |
| " .. | Thursday, 7/3/46 | 5.58 a.m. | Plastics-factory | " | 40,212 |
| Hamilton .. | Friday, 12/12/45 | 10.08 p.m. | Warehouses and offices | " | 16,000 |
| " .. | Wednesday, 2/1/46 | 11.26 a.m. | Private hotel | " | 5,828 |
| " .. | Monday, 11/2/46 | 6 p.m. | Shops and offices | " | 3,518 |
| Invercargill .. | Wednesday, 13/2/46 | 10.24 p.m. | Foundry and engineering shop | Sparks from adjacent factory | 8,800 |
| Pahiatua .. | Tuesday, 19/6/45 | 9.10 p.m. | Drapery and furniture store | Unknown | 20,550 |
| Te Awamutu .. | Sunday, 24/2/46 | 9.5 a.m. | R.N.Z.A.F. stores | " | 415,050 |
| Wanganui .. | Friday, 1/2/46 | 9.17 p.m. | Motor-body builders | " | 9,474 |
| Wellington .. | Sunday, 9/12/45 | 9.14 a.m. | Warehouse and shops | Arson | 5,557 |
| " .. | Monday, 17/12/45 | 2.18 a.m. | Tire-store and vulcanizers | Suspected arson | 7,059 |
| " .. | Friday, 21/12/45 | 3.06 a.m. | Joinery-factory and timber-yard | Lighted cigarette in contact with saw-dust | 9,715 |
| | | | | Total | 653,600 |

35. It is necessary to call attention to the very considerable increase in the number of property fires occurring. The average in fire districts for the five-year period 1940-45 was 989. In 1944-45 there were 1,391 of these property fires, and in the year under review the number has increased to 1,801, or nearly double the pre-war average. The fact that losses have not increased proportionately is probably due partly to an element of luck and partly to the increased efficiency of the Fire Service and the improvement resulting from the intensive training during the war years and the supply of additional equipment purchased for emergency purposes. If the increase in the number of fires continues, the initiating of some fire-prevention measures will be a matter for urgent consideration by the proposed central authority, should legislation on the lines proposed be prepared during the coming year.

I have, &c..

R. GIRLING-BUTCHER, Inspector of Fire Brigades.

FIRST SCHEDULE

LIST OF TOWNS PROPOSED TO BE CONSTITUTED FIRE DISTRICTS

| | | | |
|--------------|-----------------|-------------|-------------|
| Akaroa. | Havelock North. | Matamata. | Reefton. |
| Alexandra. | Huntly. | Mataura. | Richmond. |
| Ashburton. | Inglewood. | *Northcote. | Te Kuiti. |
| Blenheim. | Kaikohe. | Paeroa. | Te Puke. |
| Bluff. | Kaitaia. | Papakura. | Thames. |
| Cromwell. | Kawakawa. | *Papatotoe. | Waimate. |
| *Eastbourne. | Lyttelton. | Picton. | Waipawa. |
| Geraldine. | *Manurewa. | Queenstown. | *Devonport. |
| Gore. | Marion. | Rangiora. | |
| Greytown. | | | |

SECOND SCHEDULE

LIST OF TOWNS AND COUNTY URBAN AREAS PROPOSED TO BE CONSTITUTED SECONDARY
FIRE DISTRICTS

| | | | |
|--------------|------------------|-----------------|----------------|
| Arrowtown. | Kaponga. | Outram. | Stokes Valley. |
| Clyde. | Kumara. | Paekakariki. | Tahunanui. |
| *Day's Bay. | Leeston. | Palmerston. | *Takapuna. |
| Denniston. | Manaia. | Pleasant Point. | Tapanui. |
| Fairlie. | Manunui. | Plimmerton. | Taupo. |
| Featherston. | Martinborough. | *Point Howard. | *Tawa Flat. |
| Granity. | Motueka. | Putaruru. | Temuka. |
| Hanmer. | Mount Maunganui. | Raetahi. | Tuakau. |
| Helensville. | Naseby. | *Ravensbourne. | Wainuiomata. |
| *Henderson. | Ngaruawahia. | Ross. | Waiuku. |
| *Howick. | Ngongotaha. | Roxburgh. | Waverley. |
| Hunterville. | Opunake. | Runanga. | Naseby. |
| Kaikoura. | Otorohanga. | Shannon. | Eketahuna. |

* Subject to Ministerial approval—see paragraph 23.

MISCELLANEOUS STATISTICS FOR FIRE DISTRICTS

| | Population, 31st March, 1946. | Rateable Capital Value, 31st March, 1945. | Insurance Company's Premium Income, 1945-46. | Number of Fire Calls. | Fires involving Loss of Property. | Insurances on Property involved in Fires. | Insured Fire Loss: Buildings and Contents. | Uninsured Fire Loss: Buildings and Contents. | Total Fire Loss. | Authorized Expenditure for Year ended 31st March, 1946. |
|-----------------------|-------------------------------|---|--|-----------------------|-----------------------------------|---|--|--|------------------|---|
| | | £ | £ | | | £ | £ | £ | £ | £ |
| Auckland Metropolitan | 231,210 | 74,640,941 | 250,792 | 2,052 | 384 | 5,629,274 | 98,666 | 4,028 | 102,694 | 72,194 |
| Balclutha | 1,730 | 396,500 | 1,722 | 19 | 4 | 800 | 93 | .. | 93 | 430 |
| Birkenhead | 3,890 | 846,173 | 5,835 | 25 | 8 | 3,470 | 920 | 168 | 1,088 | 856 |
| Cambridge | 2,640 | 768,765 | 3,219 | 12 | 4 | 2,700 | 137 | .. | 137 | 864 |
| Carterton | 1,960 | 537,889 | 3,193 | 35 | 3 | 1,360 | 850 | .. | 850 | 812 |
| Christchurch | 116,700 | 33,567,282 | 115,693 | 813 | 236 | 1,631,994 | 20,363 | 2,800 | 23,163 | 28,500 |
| Dannevirke | 4,430 | 1,498,226 | 5,829 | 12 | 9 | 10,605 | 8,697 | 2,963 | 11,660 | 779 |
| Dargaville | 2,420 | 664,714 | 3,208 | 13 | 2 | 7,410 | 1,689 | .. | 1,689 | 611 |
| Dunedin Metropolitan | 80,920 | 26,624,643 | 85,761 | 657 | 163 | 1,271,278 | 119,067 | 5,510 | 124,577 | 25,900 |
| Elfhām | 1,910 | 416,335 | 1,860 | 4 | 3 | 19,700 | 773 | 50 | 823 | 500 |
| Fellding | 5,150 | 1,392,220 | 5,579 | 20 | 9 | 14,960 | 652 | 375 | 1,027 | 880 |
| Foxton | 1,670 | 307,297 | 2,673 | 19 | 1 | .. | .. | 460 | 460 | 380 |
| Gisborne | 15,350 | 4,396,047 | 21,409 | 65 | 24 | 11,715 | 2,590 | 1,049 | 3,639 | 3,707 |
| Greymouth | 8,620 | 1,823,162 | 8,626 | 11 | 6 | 100 | 15 | 200 | 215 | 1,323 |
| Hamilton | 22,900 | 6,732,516 | 21,039 | 248 | 44 | 243,225 | 33,846 | 880 | 34,726 | 8,340 |
| Hastings | 15,300 | 4,305,886 | 16,691 | 75 | 27 | 27,110 | 633 | 158 | 791 | 3,375 |
| Hawera | 4,990 | 1,572,316 | 7,287 | 48 | 15 | 59,682 | 1,094 | 355 | 1,449 | 2,258 |
| Hikurangi | 1,050 | 127,760 | 806 | 13 | 2 | 20,125 | .. | .. | .. | 369 |
| Hokitika | 2,810 | 523,173 | 3,879 | 8 | 5 | 5,047 | 3,366 | 700 | 4,066 | 625 |
| Invercargill | 24,400 | 7,187,695 | 26,888 | 237 | 55 | 340,515 | 9,696 | 587 | 10,283 | 12,132 |
| Kaipoi | 1,770 | 365,505 | 2,138 | 4 | 1 | .. | .. | .. | .. | 634 |
| Kaitangata | 1,370 | 146,215 | 1,055 | 3 | 1 | 150 | 10 | .. | 10 | 170 |
| Lawrence | 580 | 58,463 | 521 | .. | .. | .. | .. | .. | .. | 120 |
| Levin | 3,410 | 1,307,510 | 3,625 | 12 | 3 | 400 | 400 | 780 | 1,180 | 534 |
| Lower Hutt | 34,300 | 8,976,210 | 26,882 | 247 | 124 | 108,958 | 5,126 | 1,203 | 6,329 | 8,576 |
| Masterton | 9,900 | 2,828,950 | 11,320 | 122 | 29 | 101,965 | 3,993 | 604 | 4,597 | 3,524 |
| Milton | 1,600 | 284,510 | 2,109 | 6 | 1 | 30 | 5 | .. | 5 | 340 |
| Morrisville | 2,230 | 626,584 | 3,000 | 7 | 1 | .. | .. | .. | .. | 610 |
| Napier | 17,850 | 5,062,447 | 26,120 | 207 | 44 | 140,839 | 6,213 | 184 | 6,397 | 6,300 |
| Nelson | 13,550 | 3,478,613 | 17,012 | 93 | 39 | 49,990 | 2,717 | 2 | 2,719 | 3,774 |
| New Plymouth | 19,250 | 5,862,271 | 18,560 | 99 | 46 | 10,273 | 339 | 203 | 542 | 5,530 |
| Oamaru | 7,730 | 2,121,614 | 8,464 | 33 | 6 | 10,300 | 1,666 | 109 | 1,775 | 1,100 |
| Ohakune | 1,450 | 136,502 | 1,116 | 11 | 7 | 1,110 | 442 | .. | 442 | 484 |
| Opoiki | 1,610 | 396,806 | 2,268 | .. | .. | .. | .. | .. | .. | 667 |
| Otaki | 2,140 | 348,204 | 1,741 | 3 | 1 | .. | .. | 50 | 50 | 479 |
| Pahiatua | 1,790 | 465,849 | 3,480 | 11 | 1 | 20,550 | 20,550 | .. | 20,550 | 550 |
| Palmerston North | 26,300 | 8,122,231 | 29,325 | 118 | 49 | 227,105 | 5,605 | 827 | 6,432 | 11,100 |
| Patea | 1,520 | 215,976 | 3,481 | 7 | 1 | .. | 3,931 | .. | 3,931 | 1,052 |
| Petone | 11,100 | 3,409,310 | 16,787 | 39 | 26 | 19,870 | 2,177 | 110 | 2,287 | 4,805 |
| Port Chalmers | 2,210 | 347,110 | 1,913 | 6 | 3 | 2,450 | 220 | 1 | 221 | 300 |
| Pukekohe | 3,380 | 1,049,531 | 3,027 | 35 | .. | .. | .. | .. | .. | 940 |
| Rotorua | 8,420 | 1,866,527 | 8,516 | 101 | 25 | 126,780 | 1,688 | 1,023 | 2,711 | 2,419 |
| Stratford | 3,970 | 1,072,224 | 4,892 | 12 | 5 | 150 | 150 | .. | 150 | 1,000 |
| Taihape | 2,240 | 454,908 | 3,674 | 20 | 6 | 4,763 | 372 | 926 | 1,298 | 677 |
| Taumarunui | 2,750 | 667,314 | 3,183 | 34 | 8 | 7,889 | 129 | 10 | 139 | 950 |
| Tauranga | 5,400 | 1,727,927 | 5,787 | 21 | 7 | 3,200 | 17 | .. | 17 | 697 |
| Te Aroha | 2,480 | 846,537 | 4,074 | 21 | 2 | 12,450 | 1,027 | .. | 1,027 | 564 |
| Te Awamutu | 3,110 | 1,073,710 | 3,647 | 25 | 4 | 360 | 75 | 415,065 | 415,140 | 618 |
| Timaru | 18,900 | 5,444,808 | 17,660 | 91 | 29 | 14,745 | 1,457 | .. | 1,457 | 6,300 |
| Upper Hutt | 5,620 | 1,054,691 | 3,212 | 57 | 12 | 9,575 | 920 | 1,060 | 1,980 | 959 |
| Waihi | 3,840 | 369,761 | 3,084 | 90 | 4 | 50 | 50 | 90 | 140 | 520 |
| Waipukurau | 2,140 | 535,266 | 2,916 | 25 | 1 | .. | .. | .. | .. | 930 |
| Wairoa | 2,950 | 723,860 | 3,483 | 13 | 4 | 300 | 203 | 50 | 253 | 824 |
| Waitara | 2,380 | 552,704 | 3,924 | 1 | .. | .. | .. | .. | .. | 111 |
| Wanganui | 24,500 | 6,483,703 | 29,494 | 273 | 48 | 34,450 | 6,617 | 6,652 | 13,269 | 12,000 |
| Wellington | 130,620 | 49,480,433 | 194,393 | 1,419 | 240 | 1,684,042 | 41,970 | 1,584 | 43,554 | 53,800 |
| Westport | 4,810 | 849,818 | 4,758 | 7 | 2 | 300 | 90 | .. | 90 | 1,027 |
| Whakatane | 2,890 | 665,905 | 3,191 | 20 | 6 | 21,320 | 12,657 | .. | 12,657 | 762 |
| Whangarei | 9,650 | 3,016,473 | 10,266 | 46 | 14 | 15,060 | 1,138 | 41 | 1,179 | 1,700 |
| Woodville | 1,130 | 205,364 | 1,242 | 4 | 3 | 2,075 | 159 | 10 | 169 | 410 |
| Totals | 965,170 | 291,030,884 | 1,083,329 | 7,729 | 1,807 | 11,937,571 | 425,260 | 450,867 | 876,127 | 302,752 |

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