1942.
NEW ZEALAND.

PUBLIC WORKS STATEMENT

(BY THE HON. H. T. ARMSTRONG, MINISTER OF PUBLIC WORKS).

Mr. Speaker,—

In accordance with the provisions of section 8 of the Public Works Act, 1928, I submit my report on works carried out during the year ended 31st March, 1942, together with a statement of expenditure certified by the Controller and Auditor-General.

Owing to war conditions, public-works activities have been further curtailed, and for this reason, combined with the circumstances which now obtain, this report covers only a brief survey of the works undertaken.

In my last Statement I mentioned that my Department had been engaged to a large extent upon works directly associated with national defence. During the past year normal public works have been still further reduced, and the departmental organization has been devoted, on a much larger scale, to urgent and necessary defence construction.

Just before the end of the financial year the Government set up a Defence Construction Council and appointed a Commissioner of Defence Construction. The Commissioner was given wide powers in regard to the control of men and materials, and was given the responsibility of fixing priorities for the huge programme of defence construction. He set up an organization, which made use of existing Departments as far as possible. My Department, as the principal constructing Department, has been used by the Commissioner to the fullest extent, and by its use works of unprecedented magnitude have been carried out in record time.

I had hoped that upon the passing of the Soil Conservation and Rivers Control Act it would have been possible to establish the governing Council almost immediately for the purpose of making preliminary arrangements to inaugurate a practicable policy with the least delay. However, it was not found possible until recently to constitute the Council, but the necessary appointments have been made, and the Council will commence to function in the near future. It is expected that a considerable amount of investigatory work will be involved before the Council will be in a position to set up Catchment Boards to control any particular catchment areas.

Owing to the pressure of other more important work, the Department has not been able to undertake any surveys in connection with rehabilitation proposals, but as soon as staff can be made available a commencement will be made.

Fortunately there have been no disastrous floods of the first magnitude, but a number of floods occurred in various parts of the country, and considerable damage was done in some areas.

I desire to record the Government's appreciation of the services of Mr. J. T. Mair, who retired from the position of Government Architect, in which capacity be rendered notable professional service for nineteen years.

I wish also to acknowledge again the splendid work of the officers and workmen of the Department, who have given excellent service during a period of extraordinary activity and under difficult circumstances.

At the end of the year, 852 officers of the Department were serving with the forces, and it is my deep regret that 19 have made the supreme sacrifice and 30 have suffered casualties or are prisoners or war.

FINANCE.

The payments and receipts in connection with the Public Works Fund and other associated votes and accounts for the year 1941–42 are shown in the tabulation following.

The gross expenditure amounted to £18,236,324, of which £3,072,264 was expended by other Government Departments; the recoveries in reduction of expenditure amounted to £7,636,758, of which £1,424,456 was recovered by other Departments; the net expenditure totalled £10,599,566, of which £1,674,418 was expended by other Departments.

In addition, the Department collected £2,152,581 for the supply of electric energy and irrigation and as miscellaneous revenue from other sources.

Class of Work.	Expenditure, 1941–42.		
	Gross.	Recoveries.	Net.
EXPENDITURE, PUBLIC WORKS FUND.			
Railways—	£	£	£
New construction	617,724	88,038	529,686
Improvements and additions to open lines	193,291	29,225	164,066
Roads	294,045	51,100	242,945
Public buildings	1,254,164	26,882	1,227,282
Lighthouses and harbour-works	20,827	1,990	18,837
Tourist and health resorts	15,182	2,975	12,207
Telegraph extension	434,320	261,173	173,147
Departmental	547,332	444,033	103,299
Irrigation, water-supply, and drainage	538,176	51,690	486,486
Lands-improvement	163,979	63,730	100,249
Small farms development	436,979	260,064	176,915
Native-land settlement	862,260	754,188	108,072
Linen-flax development	679,728	107,606	572,122
Cost and discount, raising loans, &c.	99,056	..	99,056
Totals, General Purposes Account	6,157,063	2,142,694	4,014,369
Electric Supply Account (previously Aid to Water-power Works Account)—			
Construction	1,655,419	75,119	1,580,300
Working-expenses	649,662	8,159	641,503
Totals, Public Works Fund	8,462,144	2,225,972	6,236,172
EXPENDITURE, OTHER VOTES AND ACCOUNTS.			
Main Highways Account—			
Annual appropriation—			
Construction, reconstruction, and improvements	567,763	62,424	505,339
Maintenance, repairs, and renewals	1,186,382	118,354	1,068,028
Administration, plant, and miscellaneous expenditure	75,099	74,862	237
Interest, fees, and loan redemptions	351,909	..	351,909
Permanent appropriations (rate subsidies, interest on transfer from Public Works Fund, &c.)	312,722	..	312,722
Consolidated Fund—			
Maintenance, public buildings, roads, &c.	379,392	45,461	333,931
Plant, material, and miscellaneous services	5,286,215	5,109,685	176,530
Other accounts (expenditure by Public Works Department): Amounts not included above	1,614,698	..	1,614,698
Totals, other votes and accounts	9,774,180	5,410,786	4,363,394
Grand total of expenditure, Public Works Fund and other votes and accounts for the year ended 31st March, 1942	18,236,324	7,636,758	10,599,566

NOTE.—Adjustment as between Small Farms and Public Buildings, £29,275, year 1940–41 made in above.

Class of Work.	Recoveries, 1941–42.
RECEIPTS,* PUBLIC WORKS DEPARTMENT.	
Ordinary Revenue Account—	£
Irrigation (receipts for year)	27,333
Miscellaneous receipts for year	37,131
Electric Supply Account (sales of energy, miscellaneous receipts, &c.): Receipts for year	2,058,176
Main Highways Account (repayment of advances, &c., and interest): Receipts for year	29,941
Total receipts	2,152,581

* Excludes motor-spirits tax, registration fees, &c., collected by other Departments.

Summary.

—	Public Works Department.	Other Departments.	Total.
	£	£	£
Gross expenditure	15,164,060	3,072,264	18,236,324
Recoveries and receipts	8,364,883	1,424,456	9,789,339

Of the net expenditure of £10,599,566 previously mentioned, £5,750,175 may be regarded as having been expended from loan-moneys (£3,912,806 General Purposes Account, £1,580,300 Electric Supply Account, and £257,069 Main Highways Account), the balance—*i.e.*, £4,849,391—being expended from loan recoveries, war expenses, revenue, and taxation.

The ratio which the various classes bear to the whole is shown below. It should be noted that the figures are gross—that is, before deducting recoveries, which, if deducted, would detract from the true portrayal of activities:—

	£		Per Cent.
Roads, including construction and maintenance of main highways	2,787,920	=	13·67
Hydro-electric (construction and working-expenses) ..	2,305,081	=	11·31
Railway-construction, improvements and additions ..	811,015	=	3·98
Public buildings, including schools	1,254,164	=	6·15
Small farms development	436,979	=	2·14
Lands-improvement	163,979	=	0·80
Irrigation	538,176	=	2·64
Public buildings, roads, &c. (maintenance)	379,392	=	1·86
Telegraph extension	434,320	=	2·13
Native-land settlement	862,260	=	4·23
Plant, material, and services for other Departments ..	5,286,215	=	25·93
Linen-flax development	679,728	=	3·33
Miscellaneous	2,297,095	=	11·27
Revenue receipts	2,152,581	=	10·56
	£20,388,905	=	100·00

In regard to the ways and means of the General Purposes Account of the Public Works Fund the position is as under:—

			£
Balance available 1st April, 1941			1,521,270
Add funds received during the year—	£		
Finance Act, 1939, section 2 (Public Works)	4,548,168		
Finance Act 1940, section 3	1,390,127		
	5,938,295		
Less—		£	
Loans redeemed, 1941–42 ..	24,300		
		5,913,995	
Miscellaneous		164,014	
			6,078,009
			7,599,279
Deduct expenditure during 1941–42 under annual appropriations ..			3,915,313
Balance available 31st March, 1942			£3,683,966

The estimated net expenditure for the Public Works Department under the Public Works Account for the current financial year is £1,110,000, and arrangements are being made with the Minister of Finance to provide the necessary funds. This is the amount shown on the Public Works departmental estimates, which also show an estimated net expenditure of £2,000,000 from the Electric Supply Account and £1,692,200 from the Main Highways Account, a total for all these accounts of £4,802,200.

Summary of Votes under Control of Minister of Public Works and Proposed Ways and Means of Raising the Necessary Funds—Year ending 31st March, 1943.

Vote.	Loans.	Consolidated Fund.	Special Revenue.	Total.
	£	£	£	£
Departmental	150,000	..	..	150,000
Railway-construction	150,000	..	..	150,000
Public Buildings	350,000	..	..	350,000
Lighthouses and Harbour-works	20,000	..	..	20,000
Roads	170,000	..	..	170,000
Land-improvement	70,000	..	..	70,000
Irrigation	200,000	..	..	200,000
Electric Supply	1,100,000	..	900,000	2,000,000
Main Highways	300,000	..	1,392,200	1,692,200
Maintenance of Public Works and Services ..	..	500,000	..	500,000
Totals	2,510,000	500,000	2,292,200	5,302,200

For the current financial year 1942–43 a sum of £500,000 will be provided from the Consolidated Fund for expenditure on maintenance of public works and services. The expenditure on main highways (including permanent appropriations estimated at £307,800) is estimated to reach £2,000,000, of which a sum totalling £1,700,000 is expected to be raised by way of special revenue. It is anticipated that the revenue from the supply of electrical energy will reach a sum of £2,300,000, which will be utilized for the payment of arrears of sinking-fund instalments, interest, operating-expenses, and income-tax, &c.

HYDRO-ELECTRIC DEVELOPMENT.

The electric-supply systems in both Islands operated smoothly throughout the year and were remarkably free from interruption. The gross financial result was maintained at approximately the usual level.

The establishment of further war industries and the increased demand from other consumers have severely taxed the capacity of the generating-stations, making it necessary to insist on new installations being confined to the more essential purposes. By means of appeals an endeavour was made to eliminate all extravagant and wasteful uses of electricity. The response from consumers was such that a compulsory rationing of supply to individual consumers was avoided.

The development of further schemes has naturally been retarded by loss of man-power to the fighting services. Some progress has, however, been made, and sufficient labour has been available to install the plant coming to hand from overseas.

Owing to departmental circumstances arising from the war, it has not been found possible to include an audited statement of the Electric Supply Account with this report, but the matter is now in hand and the statement duly audited will be included in paper B.-1 [Pt. IV], in terms of section 57 of the Finance Act, 1932. A statement of the accounts and balance-sheet which are subject to audit are attached.

MAIN HIGHWAYS.

Outside of urgent and essential bridge renewals and the improvement of sections of highways to meet Army requirements, no new highway works have been started during the year, and the principal activities of the Main Highways Board have been to see that its assets are preserved by adequate attention being given to maintenance requirements.

Although the volume of car traffic on the roads has decreased considerably, traffic by the heavier type of vehicle has shown a marked increase in certain localities, and this has necessitated greater expenditure in those areas.

Materials, wages, and the cost of operating plant have all shown an increase during the year, but despite these factors the average cost of maintenance per mile has shown a substantial reduction.

Out of the funds provided for the current year, after allowance has been made to meet fixed charges and the cost of commitments already entered into, a very reduced amount will be available for the Main Highways Board to attend to maintenance requirements.

RAILWAY-CONSTRUCTION.

It was found necessary throughout the year to transfer men to special works, and consequently progress on railway-construction was retarded.

The driving of the last spike on the Westport-Inangahua Railway was marked by an official ceremony in December, 1941, and it is expected that traffic will shortly be possible on the Gisborne–Waikokopu section of the Gisborne–Napier Railway.

Although the Dargaville Station buildings are not completed, a goods and passenger service is being operated by the Railways Department over the Dargaville branch line.

Most of the construction work on the South Island Main Trunk Railway has been suspended temporarily, but during the year a number of bridges were completed.

RAILWAYS: IMPROVEMENTS AND ADDITIONS TO OPEN LINES.

The expenditure out of the Public Works Fund for the year ended 31st March, 1942, was £147,641, as against £1,087,337 for the previous year. The principal activities were the duplication of line between Papakura and Horotiu, grade and curve easements on the Henderson–Swanson–Waitakere section, and the Turakina–Okoia deviation.

In view of the present condition of emergency, these and other works have been suspended with a view to releasing workers for essential industries.

ROAD-CONSTRUCTION.

Road-works carried out during the year were limited to sections which were already in hand at the outbreak of hostilities, and bridge or minor access requirements of primary urgency. Where practicable, construction was suspended in order to facilitate the prosecution of more important works.

IRRIGATION AND WATER-SUPPLY.

The practice of irrigation in Central Otago was well maintained and a total of 52,620 acres were irrigated, from which an annual revenue of £27,600 was derived, being £870 in excess of last season's revenue.

In Canterbury, 3,400 acres were irrigated, bringing in a revenue of £605, or slightly less than last season, but, as mentioned in my previous Statement, the war period is not conducive to the change of methods in farming.

The construction work on the Mayfield-Hinds Scheme and the Ashburton-Lyndhurst Scheme has practically ceased, due to shortage of labour and plant, which has been diverted to the war effort.

The Rangitata diversion race has, however, proceeded favourably, and it is hoped to continue this work to make water available to the Highbank Hydro-electric Scheme for next winter. The year's work was mainly concentrated on the completion of the large reinforced-concrete structures for controlling the water in this forty-two-mile race.

The Downlands Water-supply Scheme is now serving the Pleasant Point Township and 834 farms, comprising a total area of 153,244 acres. The scheme, however, provides for the serving of a further 10,453 acres in the Pareora district, but this has been indefinitely delayed owing to the shortage of galvanized pipes.

The enforced stoppage of the irrigation activities is, I hope, only temporary, but work can be resumed readily as soon as conditions improve.

PUBLIC BUILDINGS.

Departmental Buildings.—With the exception of hospital buildings, the erection of new departmental buildings of a civil nature has practically ceased. Those structures in an advanced state of construction were pushed ahead as circumstances permitted. The new departmental Buildings at Stout Street, Wellington, and at Jean Batten Place, Auckland, are now in occupation, but certain items, where practicable, have been deferred until after the war.

Agriculture.—At Te Kauwhata Horticultural Station considerable progress was made in the provision of more adequate buildings and winemaking equipment. The facilities so far established will assist in meeting the increasing demand for locally-manufactured wine and in raising the quality standards. No further major improvements are contemplated in the immediate future.

Courthouses.—After considerable delay arising from difficulties concerning the supply of interior finishing materials, the new Courthouse at Invercargill was completed and opened during the year. The old Courthouse, which was built many years ago, was neither suitable nor convenient for the conduct of increasing business, and the accommodation of the staff in the new structure is filling a much-needed want.

Other buildings completed and brought into use were the new Courthouse at Ruatoria and a reconstructed Courthouse at Omakau, to which centre the Court business was transferred from Ophir.

Health and Hospital Institutions.—Alterations and additions were made to provide additional accommodation at Queen Mary Hospital, Hanmer, to meet staff and other requirements in connection with the expansion of the institution to accommodate sick and wounded soldiers.

At Wellington and Invercargill alterations and renovations were carried out at the St. Helens Hospitals. Plans were completed and tenders obtained for the new St. Helens Hospital, Christchurch, but owing to the effects of the war upon the availability of materials and building activities generally it was not found practicable to commence this proposal.

Internal Marketing.—Two cool stores, at Hastings and Nelson respectively, were completed for fruit-storage purposes, including facilities for receiving and despatching supplies.

A reinforced-concrete building was also completed at Auckland where butter, honey, and fruit, both locally grown and imported, are handled. This building also includes accommodation for administrative offices.

Mental Hospitals.—Increased accommodation for occupational-therapy work was provided at Auckland; the nurses' home and a number of staff residences at Kingseat were completed, while other residences at Kingseat were commenced.

At Ngawhatu three new villas for male patients were completed and are in occupation, and at Templeton one new villa for male patients was also completed.

Work was commenced on the erection of a residence for the Assistant Medical Officer at Tokanui. At Hokitika the laundry was extended, and the nurses' home and another building were approaching completion at the close of the year under review.

Police-stations.—The police-station at Glenavy, and the offices and residence at Temuka, were completed; and new stations were erected at Waiheke Island, Mount Maunganui, Havelock, and Wanaka.

New offices were provided at Kaitaia and South Dunedin, a residence for a Sub-Inspector was purchased in Wellington, and sites for police purposes were acquired at Kerepehi, Ngongotaha, Petone, Karamea, Millerton, Dobson, and Riversdale.

Postal and Telegraph.—The following works were completed during the year: Chief-post-office buildings at Christchurch and Invercargill; post-office buildings at Katikati and Mount Maunganui; a post-office building and residence at Mosgiel; an automatic-telephone-exchange building at Mount Albert; line store and garage buildings at Dunedin, Stratford, and Wanganui; and garage buildings at Hamilton, Linwood, New Brighton, Rakaia, Roxburgh, and Waitara. Post-office accommodation was provided in the new Government building in Jean Batten Place, Auckland, and in the new State Fire Building, Wellington. Additions were made to the chief-post-office building at Auckland, post-office buildings at Helensville, Kaeo, Kawakawa, New Lynn, Papanui, Waitoa, and Waitotara, the workshops building at Invercargill, and the garage building at Hawera. Improved accommodation was provided at Nelson, Port Nelson, and Timaru.

Several buildings and sites no longer required for departmental purposes were disposed of during the year. Sites and additional land for departmental purposes were acquired at nine places. Three residences for departmental officers were acquired.

A small number of buildings were in course of erection at the end of the year, and also in progress were large additions to the departmental building at Herd Street, Wellington; additions to the Ponsonby automatic-telephone exchange; major alterations to the Auckland chief-post-office building and to the Auckland (Newmarket) store and workshops building; and alterations to the Awarua Radio staff quarters, the Dargaville post-office building, the Waihi post-office building, and the old chief-post-office building at Wangauni.

Prisons.—There has been of necessity a minimum amount of new building and construction work for prison purposes. The main works carried out included the installation of electric lighting at Rangipo Prison Camp, and the erection of a new cottage at Invercargill Borstal to relieve to a small degree the housing needs of warders. At Waikeria Borstal Institution, Te Awamutu, two new staff cottages were completed, and also a new glasshouse and tobacco-shed, which were both much needed to meet departmental requirements.

EDUCATION BUILDINGS.

The gross expenditure for the year on school buildings, additions, teachers' residences, and the purchase of sites totalled £486,536, this sum including £20,850 provided by the Consolidated Fund to meet the cost of minor works.

Practically the whole of this expenditure was incurred in respect of primary, secondary, technical and Native schools.

TELEGRAPH EXTENSION.

Expenditure on telegraph extension by the Post and Telegraph Department during the year in respect of telephone, telegraph, and radio facilities throughout the Dominion amounted to £173,149 as against £256,054 for the preceding year.

Additional toll outlets were provided between Wellington and Palmerston North and between Seddon and Nelson.

Improved facilities were also provided between various centres by the erection of new lines and/or the rearrangement of existing circuits.

It was necessary during the year to impose drastic restrictions on the provision of telephone facilities for civilian purposes. Nothwithstanding these restrictions the net gain in subscribers totalled 3,895, as against 6,814 for the previous year. The grand total of telephone stations (main and extension) in the Dominion on the 31st March, 1942, was 235,888, which is 7,542 in excess of the previous year's figure.

The automatic-telephone exchange switching-apparatus at Gisborne was completed and the exchange cut over to automatic working on the 5th July, 1941.

The first stage of the comprehensive programme initiated in 1939 covering the extension of the automatic switching-system in the Auckland metropolitan area was completed during the year, and the second stage, comprising the establishment of new exchanges at St. Helier's, Mount Albert, and Birkenhead, and the installation of additional switching-equipment at the Takapuna and Remuera exchanges, is being proceeded with as rapidly as possible. In addition, a commencement will be made shortly with the installation of equipment to enable an exchange to be established at Avondale.

Additional switching-equipment was also provided during the year at several other automatic and magneto exchanges throughout the Dominion.

DEVELOPMENT OF TOURIST RESORTS.

The principal works carried out were extensions to the Rotorua electrical and water and drainage systems. The expenditure for the year was £12,207, as against £21,575 for the preceding year.

LANDS-IMPROVEMENT.

The reduced scale of operations under this vote consisted principally of schemes which had already been commenced. Apart from sand-dune and tidal-flat reclamation, the major works were the Awatere Water-supply Scheme, the Ashley River Control Scheme, and the excavation of the Whirokino Cut on the Manawatu River. However, these projects are only partially completed.

Rehabilitation of Flax-milling Industry.—In furtherance of the policy for rehabilitation of the flax-milling industry, there has been continued development of the flax lands in and around Moutoa. Special attention has been paid to the propagation and thickening of existing plantations, while steady progress has been made in clearing and planting, both by mechanical ploughing and disking and by hand-cultivation.

The care taken in ring-barking willows, clearing and extending drains, and the removal of weeds have all contributed to the regeneration of and improvement in the flax-leaf.

LINEN-FLAX DEVELOPMENT.

In connection with the further development of the linen-flax industry, my Department provided professional and technical services in respect of the selection of sites, the acquisition of land, the design and construction of buildings, and the installations essential to this important enterprise.

Following on the commencement of the original ten linen-flax factories in the preceding year, the demand from Great Britain for linen-flax fibre necessitated an increase in the factory-construction programme by extending the existing factories and constructing six additional factories.

Apart from the factories, including retting-tanks, and water-supplies and effluent drainage, 602 subsidiary buildings were also erected, the construction work having been practically completed by the end of the year under review.

SMALL FARMS DEVELOPMENT.

Owing to the increasing difficulty in obtaining adequate supplies of essential materials, development operations on the blocks controlled by the Land Settlement Board of the Lands and Survey Department had to be severely curtailed, and this, coupled with the shortage of labour, led to a decision to concentrate on the maintenance of the existing grassed lands. With reduced quotas of manure, production from these must necessarily fall.

The expenditure for the year on the development and farming of the blocks, including the purchase of live-stock, was £408,298, and the credits-in-aid were £260,064.

The number of men employed at the 31st March was 399, as against 721 at the end of the previous year.

LIGHTHOUSES AND HARBOUR-WORKS.

For obvious reasons it is not possible to give details of the nature of the works carried out last year under this vote. However, despite difficulties in supply of material from the United Kingdom, definite progress has been made with several essential works. Some works in progress at the end of the preceding year have been completed, and others which were commenced during the period under review are still proceeding.

NATIVE-LAND SETTLEMENT.

The gross expenditure from the Public Works Fund for the year under review was £862,104 (compared with £1,010,871 for the previous year), the finance for which was provided from the following sources: New loan-moneys, £107,915; grant from the Consolidated Fund, vote "Native," for the promotion of employment of Maoris, £247,500; miscellaneous refunds, £4,437; and farm and other receipts from Native land in course of development and settlement, £502,252.

With the exception of £25,493 expended under the Native Housing Act, 1935, the above figures represent expenditure on the development, settlement, cultivation, and improvement of Native lands, and the progress achieved in regard to these activities is set out fully in the report of the Board of Native Affairs, which is contained in parliamentary paper G.–10.

Further information concerning public works carried out during the past year is included in the attached reports by the Engineer-in-Chief, the Government Architect, and the Chief Electrical Engineer.

In accordance with section 24 of the Main Highways Act, 1922, the annual report of the Main Highways Board for the year ended 31st March, 1942, is also attached, *vide* Appendix E.

ELECTRIC SUPPLY ACCOUNT.—STATEMENT OF ACCOUNTS AT THE 31st MARCH, 1942.

General Balance-sheet

at 31st March, 1942, compared with Position at 31st March, 1941.

Liabilities.	1941–42.		1940–41.
	£	£	£
Aid to Water-power Works and Electric Supply Accounts—			
Debentures, Stock and Treasury Bills issued—			
At $1\frac{1}{4}$ per cent. interest	..		*310,000*
At $1\frac{1}{2}$ per cent. interest	1,415,000		*430,000*
At $2\frac{1}{2}$ per cent. interest	1,300,000		*1,300,000*
At 3 per cent. interest	3,149,372		*3,224,372*
At $3\frac{1}{4}$ per cent. interest	1,628,994		*500,000*
At $3\frac{1}{2}$ per cent. interest	1,711,755		*1,711,755*
At $3\frac{3}{4}$ per cent. interest	170,000		*567,290*
At 4 per cent. interest	1,643,470		*1,643,470*
At $4\frac{1}{2}$ per cent. interest	2,623,914		*2,623,914*
At 5 per cent. interest	3,159,228		*3,159,228*
		16,801,733	*15,470,029*
Consolidated Fund—			
Interest accrued on loans to 31st March, 1942	..	155,258	*316,743*
Temporary transfers from other accounts ..	..	..	*125,000*
Interest reserve, being excess of interest charged to schemes over interest actually paid on capital liability	..	65,847	*86,556*
Carried forward	..	17,022,838	*15,998,328*

Assets.	1941–42.		1940–41.
	£	£	£
North Island scheme—			
Assets as per separate balance-sheet ..	13,410,936		*12,193,877*
Investments, Sinking Fund	11,748		*25,242*
		13,422,684	*12,219,119*
South Island scheme—			
Assets as per separate balance-sheet ..	7,989,162		*7,663,010*
Investments, Sinking Fund	2,888		*14,222*
		7,992,050	*7,677,232*
Cobb River scheme	..	464,437	*341,979*
Surveys and General	..	20,265	*18,963*
Carried forward	..	21,899,436	*20,257,293*

ELECTRIC SUPPLY ACCOUNT.—STATEMENT OF ACCOUNTS AT THE 31ST MARCH, 1942—*continued.*

GENERAL BALANCE-SHEET—*continued.*

AT 31st MARCH, 1942, AS COMPARED WITH POSITION AT 31ST MARCH, 1941—*continued.*

Liabilities.	1941–42.	1941–42.	1940–41.
	£	£	£
Brought forward	..	17,022,838	*15,998,328*
Sundry Creditors—			
North Island scheme	188,694		*201,053*
South Island scheme	74,833		*72,368*
		263,527	*273,421*
Depreciation Reserve—			
North Island scheme	1,223,424		*1,112,633*
South Island scheme	831,583		*813,288*
		2,055,007	*1,925,921*
Sinking Fund—			
Amount utilized for redemption of loans	1,838,178		*1,538,178*
Available for further redemptions ..	363,248		*314,629*
		2,201,426	*1,852,807*
Reserve Fund—			
North Island scheme	391,990		*303,958*
South Island scheme	86,766		*86,766*
		478,756	*390,724*
Sundry credit balances	..	1,900	*2,324*
Total	..	£22,023,454	*£20,443,525*
Contingent Liability.			
Arrears of appropriation to Sinking Fund ..	138,029	..	*214,654*

Assets.	1941–42.	1941–42.	1940–41.
	£	£	£
Brought forward	..	21,899,436	*20,257,293*
Balance in Electric Supply Account at the end of year—			
Cash in Public Account	63,566		*39,992*
Impressts outstanding	60,452		*146,240*
		124,018	*186,232*
Total	..	£22,023,454	*£20,443,525*

NOTE.—No charge for cost of exchange on interest payments made in London is included.

These accounts are subject to audit. The audited accounts will be included in paper B.–1 [Part IV].

J. W. SCOTT, A.R.A.N.Z., Chief Accountant, Public Works Department.

NORTH ISLAND HYDRO-ELECTRIC-POWER SUPPLY.

Profit and Loss Account for Year ended 31st March, 1942, compared with Year ended 31st March, 1941.

Gross Revenue Account.

—	1941–42.	1941–42.	1940–41.
	£	£	£
To Generating-expenses (hydro-electric)—			
Arapuni	23,682		28,335
Horahora	7,642		7,120
Mangahao	11,478		13,407
Tuai	12,727		14,997
		55,529	63,859
Generating-expenses (fuel)—			
Penrose	2,825		3,393
Huntly	2,849		1,159
		5,674	4,552
Purchase of power in bulk	..	374,827	353,549
Standby charges	..	69,155	65,689
Transmission system: Patrol and maintenance	..	505,185	487,649
Substations: Operation and maintenance	..	33,590	31,784
Communication system: Patrol and maintenance	..	45,646	42,390
Distribution: Maintenance	..	1,958	2,296
System operation, testing, &c.	..	925	2,160
Management and general expenses	..	15,633	13,821
Balance, to Net Revenue and Appropriation Account	..	71,227	60,784
	..	923,817	892,252
		£1,597,981	£1,533,136

—	1941–42.	1941–42.	1941–42.	1940–41.
	£	£	£	£
By Sales of electrical energy—				
Bulk for resale	..	1,517,564	..	1,457,700
Other than for resale—				
Traction	18,804			13,695
Industrial	44,482			43,228
Retail	3,204			5,054
		66,490		
			1,584,054	1,519,677
Rents—				
Land and buildings	..	11,540		11,162
Lines and plant	..	540		560
			12,080	11,722
Miscellaneous revenue	..	..	1,847	1,737
			£1,597,981	£1,533,136

Net Revenue and Appropriation Account.

—	1941–42.	1941–42.	1940–41.
	£	£	£
To Interest (gross) for year ended 31st March, 1942	383,555		377,059
Less interest capitalized	56,021		40,986
		327,534	336,073
Depreciation on completed works		70,109	..
Sinking Fund		178,020	148,937
Reserve Fund		89,371	122,710
Social Security charge, national-Security tax, income-tax		258,783	284,532
		£923,817	£892,252

—	1941–42.	1940–41.
	£	£
By Balance from Gross Revenue Account	923,817	892,252
	£923,817	£892,252

NORTH ISLAND HYDRO-ELECTRIC-POWER SUPPLY—*continued.*

Depreciation Reserve Account.

—	1941–42.	1940–41.	—	1941–42.	1940–41.
	£	£		£	£
To Replacements, Renewals, &c.	3,823	*11,685*	By Balance from previous year's statement	1,112,633	*1,081,075*
Balance	1,223,424	*1,112,633*	Interest at 4 per cent. per annum	44,505	*43,243*
			Amount set aside as per Net Revenue and Appropriation Account	70,109	..
	£1,227,247	*£1,124,318*		£1,227,247	*£1,124,318*

Sinking Fund Account.

	£	£		£	£
To Balance	1,486,962	*1,308,951*	By Balance at close of previous year	1,308,951	*1,159,820*
			Interest	*Dr.* 9	*194*
			Amount set aside as per Net Revenue and Appropriation Account	178,020	*148,937*
	£1,486,962	*£1,308,951*		£1,486,962	*£1,308,951*

Reserve Fund Account.

	£	£		£	£
To Balance	393,329	*303,958*	By Balance at close of previous year	303,958	*181,248*
			Amount set aside as per Net Revenue and Appropriation Account	89,371	*122,710*
	£393,329	*£303,958*		£393.329	*£303,958*

NORTH ISLAND HYDRO-ELECTRIC-POWER SUPPLY—*continued.*

BALANCE-SHEET AT 31ST MARCH, 1942, COMPARED WITH POSITION AT 31ST MARCH, 1941.

—	1941–42.		1940–41.
Liabilities.	£	£	£
Depreciation Reserve	..	1,223,424	*1,112,633*
Sinking Fund—			
Utilized for redemption of loans	1,297,152	..	*1,134,772*
Available for further redemptions	189,810	1,486,962	*174,179*
			1,308,951
Reserve Fund	..	393,329	*303,958*
Sundry creditors	..	187,355	*201,053*
Sundry credit balances	..	454	*544*
Head Office Account	..	10,131,160	*9,291,980*
		£13,422,684	*£12,219,119*

—	1941–42.		1940–41.
Assets.	£	£	£
Hydro-electric plants—			
Arapuni	2,714,681		*2,645,343*
Horahora	327,275		*327,381*
Mangahao	1,368,241		*1,365,098*
Waikaremoana	780,840		*713,524*
		5,191,037	*5,051,346*
Fuel-plants—			
Penrose	65,431		*65,432*
Huntly	11,264		*11,264*
		76,695	*76,696*
Transmission-lines system	..	2,362,498	*1,747,813*
Substations	..	1,529,734	*1,386,362*
Communication system	..	181,158	*171,635*
Distribution system	..	56,687	*56,664*
Offices, stores, land, buildings, &c.	..	74,826	*71,325*
Cost of raising loans	..	333,096	*307,479*
Interest during construction—			
On assets in operation	1,000,650		*973,708*
On assets not in operation	79,970		*51,120*
		1,080,620	*1,024,828*
Works under construction	..	1,809,206	*1,667,557*
		12,695,557	*11,561,705*
Plant, motor-vehicles, and tools	..	65,333	*66,416*
Stocks of materials	..	305,422	*245,917*
Sundry debtors	..	344,624	*319,839*
Sinking Fund investments	..	11,748	*25,242*
		£13,422,684	*£12,219,119*

SOUTH ISLAND HYDRO-ELECTRIC-POWER SUPPLY.

Profit and Loss Account for Year ended 31st March, 1942, compared with Year ended 31st March, 1941.

Gross Revenue Account.

—	1941–42.		1940–41.
	£	£	£
To Generating-expenses (hydro-electric)—			
Lake Coleridge	14,377		*14,539*
Lake Waitaki	10,597		*8,561*
Kaimata	1,756		*1,578*
Monowai	7,186		*6,370*
		33,916	
			31,048
Generating-expenses (fuel) Dobson	..	6,997	*8,422*
Purchase of power in bulk	..	170	*298*
Standby charges	..	225	*225*
		41,308	*39,993*
Transmission System: Patrol and maintenance	..	16,926	*24,565*
Substations: Operation and maintenance ..	..	24,856	*22,230*
Communication System: Patrol and maintenance	..	1,596	*1,373*
Distribution: Maintenance	..	20,531	*19,934*
System operation, testing, &c.	..	12,924	*11,782*
Management and general expenses	..	65,249	*53,412*
Balance, to Net Revenue and Appropriation Account	..	516,766	*505,524*
		£700,156	*£678,813*

—	1941–42.			1940–41.
	£	£	£	£
By sales of electrical energy—				
Bulk for resale ..	..	456,201		*443,535*
Other than for resale—				
Traction	27,208			*21,479*
Industrial	94,533			*99,050*
Retail	108,792			*101,965*
		230,533		
			686,734	*666,029*
Rents—				
Land and buildings ..	..	4,516		*4,533*
Lines and plant ..	..	766		*386*
			5,282	*4,919*
Miscellaneous revenue ..	..	..	8,140	*7,865*
			£700,156	*£678,813*

Net Revenue and Appropriation Account.

—	1941–42.		1940–41.
	£	£	£
To Interest (gross) for year ended 31st March, 1942..	251,315		*262,393*
Less interest capitalized	9,814		*8,323*
		241,501	
			254,070
Depreciation on completed works	..	24,574	*73,711*
Sinking Fund	..	170,513	*126,227*
Reserve Fund	..	..	..
Social Security charge, national security tax, income-tax	..	80,178	*51,516*
		£516,766	*£505,524*

—	1941–42.	1940–41.
	£	£
By Balance from Gross Revenue Account	516,766	*505,524*
	£516,766	*£505,524*

SOUTH ISLAND HYDRO-ELECTRIC-POWER SUPPLY—*continued.*

Depreciation Reserve Account.

—	1941–42.	1940–41.	—	1941–42.	1940–41.
	£	£		£	£
To Replacements, Renewals, &c. ..	38,111	*45,650*	By Balance from previous year's statement..	813,288	*755,026*
Balance ..	831,583	*813,288*	Interest at 4 per cent. per annum ..	32,532	*30,201*
			Amount set aside as per Net Revenue and Appropriation Account	24,574	*73,711*
	£870,394	*£858,938*		£870,394	*£858,938*

Sinking Fund Account.

	£	£		£	£
To Balance ..	714,464	*543,856*	By Balance at close of previous year ..	543,856	*417,605*
			Interest ..	95	*24*
			Amount set aside as per Net Revenue and Appropriation Account	170,513	*126,227*
	£714,464	*£543,856*		£714,464	*£543,856*

Reserve Fund Account.

	£	£		£	£
To Capital loss ..	..	*433*	By Balance at close of previous year ..	86,766	*£87,199*
Balance ..	£86,766	*£86,766*			
	£86,766	*£87,199*		£86,766	*£87,199*

SOUTH ISLAND HYDRO-ELECTRIC-POWER SUPPLY—*continued*.

Balance-sheet at 31st March, 1942, compared with Position at 31st March, 1941.

—	1941–42.		1940–41.
Liabilities.	£	£	£
Depreciation Reserve	..	831,583	813,288
Sinking Fund—			
Utilized for redemption of loans	541,026		403,406
Available for further redemptions	173,438		140,450
		714,464	543,856
Reserve Fund	..	86,766	86,766
Sundry creditors	..	74,833	72,368
Sundry credit balances	..	1,446	1,778
Head Office Account	..	6,282,958	6,159,177
		£7,992,050	£7,677,233
Contingent Liability.			
Arrears of appropriation to Sinking Fund	£138,029		£214,654

—	1941–42.		1940–41.
Assets.	£	£	£
Hydro-electric plants—			
Lake Coleridge	868,553		865,215
Lake Waitaki	1,975,788		1,909,802
Kaimata	147,730		146,440
Monowai	205,617		202,882
		3,197,688	3,124,339
Fuel-plants—			
Dobson	..	135,361	133,220
Transmission-lines system	..	1,010,578	1,027,863
Substations	..	780,328	721,510
Communication system	..	81,417	73,017
Distribution system	..	885,115	872,193
Offices, stores, land, buildings, &c.	..	21,684	21,671
Cost of raising loans	..	540,495	532,492
Interest during construction—			
On assets in operation	490,217		482,275
On assets not in operation	9,216		7,344
		499,433	489,619
Works under construction	..	421,379	293,129
		7,573,478	7,289,053
Plant, motor-vehicles, and tools	..	107,922	110,852
Stocks of materials	..	158,758	126,093
Sundry debtors	..	149,004	137,012
Sinking Fund investments	..	2,888	14,223
		£7,992,050	£7,677,233

APPENDICES

TO THE

PUBLIC WORKS STATEMENT, 1942.

APPENDIX A.

AUDITED STATEMENT OF EXPENDITURE ON PUBLIC WORKS OUT OF THE PUBLIC WORKS FUND FOR THE YEAR 1941–42.

Prepared in compliance with Section 8 of the Public Works Act, 1928.

Public Works Department, Wellington, 25th June, 1942.

SIR,—

In compliance with the 8th section of the Public Works Act, 1928, I enclose a statement of the expenditure during the preceding financial year on all works and services chargeable to the Public Works Fund.

I have, &c.,

H. T. ARMSTRONG,
Minister of Public Works.

The Controller and Auditor-General, Wellington.

STATEMENT OF NET EXPENDITURE ON ALL WORKS AND SERVICES CHARGEABLE TO THE PUBLIC WORKS FUND FOR THE YEAR 1941–42.

Summary.	Appropriation.	Gross Expenditure.	Credits in Aid.	Net Expenditure.
PUBLIC WORKS FUND.				
General Purposes Account—	£	£ s. d.	£ s. d.	£ s. d.
Public Works, Departmental	200,000	546,769 9 2	444,033 4 9	102,736 4 5
Railways: Railway Construction	848,250	811,015 6 9	117,263 12 5	693,751 14 4
Public Buildings	1,458,000	1,224,784 0 11	26,882 4 9	1,197,901 16 2
Lighthouses and Harbour Works	50,000	20,826 18 11	1,989 19 0	18,836 19 11
Development of Tourist Resorts	20,000	15,182 2 5	2,974 15 2	12,207 7 3
Roads, Bridges, and other Public Works	390,000	294,045 1 10	51,099 19 2	242,945 2 8
Telegraph Extension	275,000	434,319 12 8	261,172 10 5	173,147 2 3
Lands, Miscellaneous	200,000	163,979 4 11	63,730 9 7	100,248 15 4
Irrigation, Water-supply, and Drainage	552,000	538,176 6 2	51,690 2 5	486,486 3 9
*Small Farms Development	388,200	463,746 9 4	260,064 7 0	203,682 2 4
Native Land Settlement	250,000	862,103 18 4	754,188 4 6	107,915 13 10
Linen-flax development	716,000	679,728 8 10	107,606 10 6	572,121 18 4
Unauthorized: Services not provided for	..	824 11 5	..	824 11 5
Totals, General Purposes Account	5,347,450	6,055,501 11 8	2,142,695 19 8	3,912,805 12 0
Electric Supply Account—				
Development of Water-power	2,957,375	2,305,080 19 7	83,277 19 5	2,221,803 0 2
Totals, Public Works Fund	8,304,825	8,360,582 11 3	2,225,973 19 1	6,134,608 12 2

* Includes vote "Settlement of Unemployed Workers" previously shown as separate vote.

APPENDIX A—*continued.*

Name of Vote.	Appropriation.	Gross Expenditure.	Credits in Aid.	Net Expenditure.
PUBLIC WORKS FUND.				
General Purposes Account—	£	£ s. d.	£ s. d.	£ s. d.
Public Works, Departmental	200,000	546,769 9 2	444,033 4 9	102,736 4 5
Railways—				
Railway Construction	648,250	617,724 2 8	88,038 1 4	529,686 1 4
Railways Improvements and Additions to Open Lines	200,000	193,291 4 1	29,225 11 1	164,065 13 0
Public Buildings	958,000	..	..	..
Subdivision I—Public Buildings, General	..	393,188 1 0	2,786 11 9	390,401 9 3
Subdivision II—Courthouses	..	12,702 1 3	5,000 15 5	7,701 5 10
Subdivision III—Prison Buildings and Works	..	2,665 13 6	65 10 6	2,600 3 0
Subdivision IV—Police-stations ..	..	27,843 6 1	5,073 15 6	22,769 10 7
Subdivision V—Postal and Telegraph ..	..	207,769 4 9	1,288 15 5	206,480 9 4
Subdivision VI—Mental Hospitals ..	..	80,276 18 11	449 14 11	79,827 4 0
Subdivision VII—Health and Hospital Institutions	..	34,652 12 7	16 19 11	34,635 12 8
Education Buildings	500,000	465,686 2 10	12,200 1 4	453,486 1 6
Lighthouses and Harbour Works ..	50,000	20,826 18 11	1,989 19 0	18,836 19 11
Development of Tourist Resorts ..	20,000	15,182 2 5	2,974 15 2	12,207 7 3
Roads, Bridges, and other Public Works ..	390,000	294,045 1 10	51,099 19 2	242,945 2 8
Telegraph Extension	275,000	434,319 12 8	261,172 10 5	173,147 2 3
Lands, Miscellaneous	200,000	163,979 4 11	63,730 9 7	100,248 15 4
Irrigation, Water-supply, and Drainage ..	552,000	538,176 6 2	51,690 2 5	486,486 3 9
Small Farms Development	388,200	463,746 9 4	260,064 7 0	203,682 2 4
Native Land Settlement	250,000	862,103 18 4	754,188 4 6	107,915 13 10
Linen-flax Development	716,000	679,728 8 10	107,606 10 6	572,121 18 4
Unauthorized: Services not provided for..	..	824 11 5	..	824 11 5
Totals, General Purposes Account ..	5,347,450	6,055,501 11 8	2,142,695 19 8	3,912,805 12 0
Electric Supply Account—				
Development of Water-power	2,957,375	2,305,080 19 7	83,277 19 5	2,221,803 0 2
Totals, Public Works Fund ..	8,304,825	8,360,582 11 3	2,225,973 19 1	6,134,608 12 2

NOTE.—This statement includes only the expenditure on works, and does not include expenditure such as interest, sinking funds, and charges and expenses of loans.

J. W. SCOTT, A.R.A.N.Z.,
Chief Accountant.

W. L. NEWNHAM,
Engineer-in-Chief and Under-Secretary.

The expenditure charged to the Public Works Fund has been examined and found correct subject to the remark that, as the Appropriation Act, 1941, made no provision for subdivisions in vote, "Public Buildings," the allocation of expenditure to the several subdivisions of that vote has not been checked.—CYRIL G. COLLINS, Controller and Auditor-General.

APPENDIX B.

ANNUAL REPORT ON PUBLIC WORKS BY THE ENGINEER-IN-CHIEF.

The ENGINEER-IN-CHIEF to the Hon. the MINISTER OF PUBLIC WORKS.

SIR,—

I have the honour to submit the following report upon the various public works completed and in progress throughout the Dominion during the year ended 31st March, 1942.

RAILWAYS.

Dargaville Branch Railway.—Except for buildings at Dargaville, this work is complete, and a goods and passenger service is now being operated by the Railways Department.

Paeroa–Pokeno Railway.—Construction was suspended in 1940, and work during the year has been confined to maintenance.

Turakina–Okoia Railway Deviation.—The only works to complete this deviation are ballasting, platelaying, erection of station buildings, and completion of the superstructure of the bridges over the Turakina and Wangaehu Rivers.

Napier–Gisborne Railway.—The greater part of the construction was completed, and included the completion of the last two tunnels, and four bridges over the Waiau Stream. One of these bridges is 530 ft. in length, with a central arch of 180 ft. span, the longest reinforced-concrete arch span in a railway bridge in New Zealand. There is a gap of only 2,480 lineal yards in the platelaying, and it is anticipated that this will be linked up to take traffic this year.

South Island Main Trunk Railway.—Work on most of the construction is suspended, activity being confined to maintenance and to heavy protection works for the bridges over the Clarence and Hapuku Rivers.

Over a distance of 13 miles between the pegs approximately 3 m. north of Kaikoura and 7 m. north of Hundalee respectively, the uncompleted sections of formation total 5¾ miles, a considerable amount of which is well advanced.

Progress during the year has included the completion of bridges over the Waimangarara Stream, Middle Creek, and Oaro Streams, and the Okarahia Viaduct. Repairs have been carried out to the Amuri Tunnel, but work on other tunnels and on four other bridges has been suspended.

Westport–Inangahua Railway.—The official ceremony of driving the last spike took place on 2nd December, 1941. Only a small amount of formation, ballasting, buildings, and bridge work is required for completion.

IRRIGATION.

Central Otago.—The rainfall before the irrigation season was very light, but good rains were experienced from November, which enabled the irrigation to proceed without the rationing which was anticipated at the commencement of the season.

The usual maintenance was carried out, the major items being the relocation of 1,040 ft. of 33 in. pipe-line on the Arrow Scheme, and the renewal of 712 ft. of steel pipes with reinforced-concrete pipes on the Teviot Scheme.

Irrigation water was supplied to 509 irrigators, and the total area irrigated was 52,620 acres, out of a total commanded area of 64,000 acres.

Financial results of the year's working are as follows: Revenue, £27,600; working-expenses, £22,550; profit on working, £5,050; total rates collected, £26,430.

On the Omakau Scheme, where the water is sold on demand, the total sales were 9,980 acre feet, or an increase of 1,200 acre feet on the previous year's total. This increase is particularly encouraging.

Canterbury.—On the two operating schemes, Redcliff and Levels, there was a fall in revenue compared with the previous year. These schemes are operated on the demand basis, and the fall in revenue is due to the shortage in farm labour and the uncertain outlook due to war conditions, preventing farmers from embarking on the expenditure necessary to change their farming methods at present.

Irrigation water was supplied to 65 irrigators, who irrigated 3,400 acres of the 27,400 acres for which water was available. The financial results were as follows: Revenue, £605; expenditure, £2,222.

Downs Water-supply Scheme: This scheme is completed with the exception of 10,453 acres of pipe reticulation in the Pareora district, for which there are no pipes available.

The total number of 834 farms, comprising 135,244 acres, are now receiving water in addition to Pleasant Point Township. The scheme includes the construction of six reinforced-concrete reservoirs, 58 miles of mains and sub-mains, and 612½ miles of galvanized reticulation piping.

SCHEMES UNDER CONSTRUCTION.

Ashburton-Lyndhurst Scheme.—Races completed, 132 miles, reinforced-concrete structures, 1,823, or 94 per cent. of total required to regulate the supply of water.

Mayfield–Hinds Scheme.—Some progress was made during the early part of the year, including 79,300 cubic yards of race excavation and the construction of 48 concrete structures.

The progress on both of these schemes is at present almost suspended, due to the diversion of labour and plant to urgent military works.

Rangitata Diversion Race.—This 42-mile diversion canal is nearing completion, and the available labour and plant is being kept on with a view to completing the work, to enable the water to be supplied to Highbank Power Scheme next winter.

The principal progress is the completion of the large 12-ft.-diameter reinforced-concrete conduit at Surrey Hills, the intake work, the large reinforced-concrete syphons under the South Hinds, Taylor's, South Bowyer, and North Bowyer Streams, and the Ashburton River.

Canterbury Irrigation Investigation.—This work has been considerably curtailed, but the important continuous records have been maintained.

HYDRO-ELECTRIC DEVELOPMENT: CONSTRUCTION WORKS.

Arapuni Power Scheme.—Concrete foundations for units No. 5 and No. 6 were completed. Penstock lining for No. 6 is completed, and No. 5 is nearly complete.

Karapiro Power Scheme.—The diversion tunnel was completed with the exception of some work at either portal, concreting the invert, and removal of construction lifts. The gate shaft was excavated, and part has been concreted. Some 116,000 cubic yards have been excavated on the right bank for the dam, but work has now been suspended temporarily.

Taupo Headworks.—The gate structure and main cut were completed, together with most of the cut at Totara Rapids.

Waikaremoana Lower Development.—Whakamarino Dam and automatic spillway were completed, four gates installed, and the lake-bed cleared of scrub. The tunnel intake was completed, concrete gates were placed in position, and tunnel and siphons completed except for a small closing gap. Concreting of surge chamber was complete to R.L. 911 and headgate shaft excavated. Penstocks are concreted up in tunnels, supporting pedestals completed, and the steel pipe-line welded up except for 5 ft. gaps.

The powerhouse structure was completed except for a few small details. The deepening and widening of the old river-bed for the tailrace has been completed as far as possible at present.

Cobb River Power Scheme.—Investigation of the dam-site has been carried out and bores and shafts sunk. The tunnel was pierced during the year, and some excavation to full section and concreting of footings, walls, and arch carried out.

Excavation for the pipe-line was practically completed. Further work on access roads up to the dam has been carried out and miscellaneous buildings erected.

Lake Tekapo Power Scheme.—Buildings for workmen's accommodation and for the manufacturing of concrete blocks have been erected, and all construction plant installed. One of the two tunnel shields is nearing completion at Temuka. At the inlet a heading was driven for 40 ft. down-stream from the shaft to take the shield. This shaft has been concreted up, and other measures taken to safeguard the work until construction is resumed. Operations have now been temporarily suspended on this work.

Highbank Power Scheme.—This scheme will be supplied with water from the Rangitata Diversion Race, and work is continuing to bring the scheme into operation as soon as possible. The 11 ft. concrete pipes for the low-pressure portion of the penstock are cast, and most of the steel for the high-pressure portion is in hand.

The powerhouse and staff cottages are under construction. A reinforced-concrete substation building, water-tower, and staff cottages are being erected at Hororata, where power from Highbank will link up with the South Island system.

CONSTRUCTION AND IMPROVEMENT OF ROADS.

A further reduction was made in the scope of operations relating to the construction and improvement of roads and bridges. Where practicable, formation work was suspended, and many roading proposals which in normal times would merit immediate attention have had to be deferred until conditions generally become favourable.

The following is a summary of the completed work for the past year: Formation, 105 miles; metalling, 160 miles; bridging, 6,017 lineal feet; culverting, 12,340 lineal feet.

LANDS-IMPROVEMENT.

Water-supply.—Concrete reservoirs have been constructed for the small farm settlements at Te Maire and Rehutai.

Swamp Drainage.—Work has continued on the raising of the Ruawai and Naumai stop-banks.

Kaipara Harbour Reclamation at Glorit, Kukutanga Block, and Oyster Point.—Maintenance has been continued, together with other work on water-supply, fencing, clearing, drainage, and roading.

Sand-dune Reclamation.—The Woodhill area is in good condition. Maintenance and replanting have been carried out where necessary, together with some work on fire-breaks, fencing, and nursery work. Three hundred and seventy-six thousand new trees have been planted out.

The areas at South Kaipara Heads and Pakiri-Mangawai have been maintained, with a certain amount of replanting.

On the North Waikato Heads area progress has been maintained on all stages of the work, and a new tree nursery established. Two hundred and seventy thousand trees have been planted out.

Waitoa Stream.—One hundred and twenty chains of diversion cuts were completed and 4½ miles of stream-snagging carried out.

Kurere-Komata Drain.—Work consisted of 52 chains of drain-deepening and the installation of two flood-gates.

Matatoki Drainage Scheme is almost completed.

Mangaorongo Stream.—Clearing of willows and logging were carried out for 4 miles 47 chains.

Judea Swamp Drainage.—This work is now completed.

Mangapu Drainage Board.—Work has continued on the Mangapu, Orahiri, and Mangarama Streams.

Manawatu River (Whirikino Cut).—This cut is about half complete, the excavation being on an average down to high-water mark.

Hokio Sand-dune Reclamation.—Maintenance and replanting were carried out during the year.

Ashley River Control.—Major floods during the year caused extensive damage, and partial repairs have been carried out to give a reasonable degree of safety.

Karamea Flood Control.—The stop-bank on Blackburn's property was completed and other works carried out.

LIGHTHOUSES AND HARBOUR-WORKS.

Lighthouses.

Routine maintenance and overhaul of equipment have been carried out to the various lighthouses.

Cape Reinga.—The light-tower installation, buildings, and 75 ft. towers have been completed.

Moko Hinau.—An underground concrete reservoir has been constructed.

Portland Island.—An access road has been formed between the landing and the lighthouse, and the channel leading through the reefs widened.

Clay Point, Tory Channel.—Concrete plinth and cylinders have been completed and the light is now in operation.

Godley Head.—This light was moved to a position further down the cliff and an old gas light installed.

Puysegur Point.—Work is in hand on the erection of a new tower.

HARBOUR-WORKS.

Houhora Wharf.—The new concrete wharf has been completed.

Westhaven Wharf.—Reinforced-concrete breastwork, 100 ft. long, has been completed. Damage was sustained during the placing of the approach filling, and repairs are under consideration.

Havelock Wharf.—Repairs have been completed.

LINEN-FLAX DEVELOPMENT.

The programme of the previous year has been expanded, and, in addition to the completion of the ten factories commenced the previous year, six new factories are now in hand—namely, at Seddon, Geraldine, Fairlie, Clydevale, Gore, and Woodlands. The programme also involved the building of retting-tanks at Oxford, Methven, Washdyke, Tapanui, and Winton.

At every factory the services have been made complete, and included accommodation (in some cases up to one hundred workmen), water-supply, sewerage, drainage, and fire-fighting, and a considerable amount of these services have been completed during the year.

TEMPORARY ACCOMMODATION FOR CHEESE-WORKERS.

The arrangement under which temporary accommodation was provided for cheese-factory workers has now been terminated in view of the situation having been met to a reasonable degree.

DEFENCE WORKS.

In addition to the miscellaneous construction works carried out on behalf of other Departments, the Public Works Department was engaged in a very active construction programme related to the requirements of the armed services. All sections of the Department have devoted their energies towards the urgent prosecution of necessary works, and just prior to the close of the year under review the hours of duty for staff and workmen were extended in order to expedite the completion of defence construction works.

PUBLIC BUILDINGS AND ELECTRIC SUPPLY.

Reports on public-buildings works and on the operations of the State electric-supply undertakings are contained in the separate reports, included herewith, of the Government Architect and Chief Electrical Engineer, respectively.

STAFF.

I would like to place on record my deep appreciation of the splendid work carried out by all members of the staff during a very difficult period. They have responded to every call made upon them, regardless of personal considerations, and by their efforts huge programmes of an urgent nature have been carried through in record time. Long hours of overtime have been worked without complaint, and in many cases without adequate compensation, and it is my strong recommendation that something further be done in the direction of adequate payment for the long hours worked.

I have, &c.,
W. L. Newnham, M.Inst.C.E.,
Engineer-in-Chief.

APPENDIX C.

ANNUAL REPORT ON BUILDINGS BY THE GOVERNMENT ARCHITECT.

The Government Architect to the Hon. the Minister of Public Works.

Sir,—

I have the honour to submit the following report on the activities of the Architectural Branch for the year ended 31st March, 1942.

The whole of my organization has been occupied with work for the armed services, with the exception of a certain amount of hospital work and works for the Emergency Precautions Service.

By close liaison with the Ministry of Supply I have watched the position with respect to materials and have endeavoured to make fullest use of such as are available.

I wish to place on record the whole-hearted co-operation of my staff in carrying out a heavy programme and adopting new methods to meet new situations as they arise.

Department of Agriculture.—At Te Kauwhata, Blocks A and C of the winery and distillery were completed.

A wheat research laboratory and glasshouse have been built at Canterbury Agricultural College.

Education Department.—The following secondary-school buildings were completed during the year: New Plymouth Boys' High School laboratory block; Nelson College, a two-story reinforced-concrete building; and a technical block at Waimate High School.

Mental Hospitals Department.—Three new villas were completed at Ngawhatu, Nelson; a villa No. 5 at Jenkins Farm, Christchurch; and a nurses' home and laundry block built at Hokitika.

Health Department.—Extra accommodation has been erected in a modern building at Hanmer. Extensive renovations were carried out at St. Helens Hospital, Christchurch; and at St. Helens Hospital, Invercargill, labour and laundry blocks were erected.

Justice Department.—A new Courthouse has been built at Invercargill.

Post and Telegraph Department.—New telephone-exchanges were erected at St. Heliers and Mount Albert, and post-offices built at Katikati, Mount Maunganui, and Invercargill. Line stores and garages were constructed at Stratford and Hawera. Extensive alterations were made to the Chief Post-office, Auckland.

Internal Marketing.—A large cool store was built at Hastings and a cool store provided at Nelson.

Industries and Commerce.—Linen-flax factories were completed at Woodlands and Gore.

Departmental Buildings.—At Auckland the new building known as "Jean Batten Place" was finished, and the new Stout Street building at Wellington was temporarily completed for urgent occupation.

I have, &c.,

R. A. Patterson, A.N.Z.I.A.,
Government Architect.

APPENDIX D.

ANNUAL REPORT OF THE CHIEF ELECTRICAL ENGINEER.

The Chief Electrical Engineer to the Hon. the Minister of Public Works.

Sir,—

I beg to report on the position of the development of electric power in the Dominion for the past year, as follows :—

North Island Electric-power System.

1. *Capital Outlay.*—At the close of the year 1941–42 the total capital outlay was £10,808,381 representing assets in operation, and £1,887,176 representing assets not in operation, giving a total capital outlay of £12,695,557.

2. *Financial Results.*—The total revenue for the year amounted to £1,597,981. Working-expenses were £674,164, resulting in a gross profit of £923,817, equal to a return of 9·04 per cent. on the average capital in operation (£10,214,397).

3. *System Operation.*—Arapuni and Horahora Power-stations were normally run continuously in parallel with Waikaremoana and Mangahao, and assistance was obtained from King's Wharf, Evans Bay, and the smaller stations as required.

Control of Lake Taupo became effective on 4th September, 1941, when the new gates at the outlet were put into operation, enabling the flow of the Waikato River to be regulated to suit the power-system requirements.

Approximately 74,550 tons of coal were used at King's Wharf Steam Station, and approximately 26,470 tons of coal and 9,840 tons of oil were used at Evans Bay Steam Station.

Transmission-line losses were considerably reduced by the putting into service of new 110 kV. transmission-lines, the most important of these being the Ongarue–Bunnythorpe line.

The maximum half-hourly load on the system was 252,400 kW. at 17·30 hours on Monday, 23rd June. The maximum load in the northern area was 137,500 kW. and in the southern area 116,800 kW.

The units generated and purchased totalled 1,306,838,519. Units sold totalled 1,182,020,169, and units otherwise accounted for 14,017,257. The balance, 110,801,093, represents transmission and distribution losses amounting to 8·5 per cent. of the total output.

The late delivery of new generating plant on account of the war has made it necessary to restrict load to a certain extent and has also necessitated very close control of the existing stations by load despatching.

4. *Construction.*—Arapuni : No. 6 tunnel and about half the length of No. 5 tunnel have been lined.

Karapiro : Work was continued for some time on excavation for the dam, power-house, and spillway, and on excavations and concreting for the diversion tunnel. Construction work has now been largely suspended.

Waikaremoana Main : New exciters and new voltage regulators were installed on Nos. 1 and 2 generators. A start was made on the erection of new outdoor 110 kV. switchgear.

Waikaremoana Lower : Construction work on this new station has proceeded throughout the year, but late delivery of essential equipment has delayed progress. The erection of one machine is well advanced and it is hoped to have this unit in operation early in the spring.

Substations : New transformers and switchgear were installed at a number of substations. Transfers of transformers between various substations were carried out. New substations at Te Kiri, Greytown, and Mataroa were put into service.

Transmission-lines : Arapuni–Penrose No. 2 double-circuit tower-line, Penrose–Henderson double-circuit tower-line, and Ongarue–Bunnythorpe and Woodville–Napier 110 kV. lines were completed and put into service. The Penrose–Henderson line is being used at 50 kV. temporarily.

Stratford - Te Kiri 50 kV. and Mataroa–Waiouru 11 kV. lines were completed and put into service. The Henderson–Takapuna 50 kV. line was deviated and rebuilt over a large part of its length to enable a harbour crossing near Hobsonville Aerodrome to be eliminated.

Erection work on the Tuai–Piripaua double-circuit 110 kV. line was practically completed Erection work proceeded on the Arapuni–Ongarue 110 kV. line, and survey work was carried out on the Bombay–Waiuku, Edgecumbe – Te Puke, and Khandallah – Central Park lines.

5. *Operation and Maintenance.*—Operation and maintenance have been carried out as usual so far as abnormal conditions have permitted. Shortage of staff and petrol restrictions have made conditions very difficult at times. In spite of this the usual high standard and reliability of supply have been maintained.

South Island Electric-power System.

1. *Capital Outlay.*—At the end of the year 1941–42 the total capital outlay was £7,142,883 representing assets in operation, and £430,595 representing assets not in operation, giving a total capital outlay of £7,573,478.

2. *Financial Results.*—The total revenue for the year amounted to £700,156. Working-expenses were £183,390, resulting in a gross profit of £516,766, which equals a return of 7·2 per cent. on the average capital in operation.

3. *System Operation.*—Lake Coleridge, Arnold, and Waitaki Power-stations were normally run in parallel with Monowai and Waipori. The Dobson Diesel Station was run as required to assist the hydro stations.

An agreement was made with the Dunedin City Council whereby the Waipori Station could be operated more effectively as part of the South Island system.

The maximum half-hourly load on the system (excluding Waipori) was 90,400 kW.

The units generated (excluding Waipori) were 424,569,370. Of these units 334,193,972 were sold by Christchurch District, 30,784,866 by Invercargill District, and 4,870,080 were otherwise accounted for. The balance, 54,720,452, represents transmission and distribution losses amounting to 12·8 per cent. of the units generated.

4. *Christchurch District.*—Construction: Waitaki Power-station. No. 4 unit at Waitaki was completed and placed in service on 25th May, 1941.

Substations: New transformers were installed at Addington. A new outdoor switchgear structure was completed at Ashburton.

Transmission-lines: A new 110 kV. line from Ashburton to Timaru was completed. A double-circuit 11 kV. line at Otira was completed. Approximately 20 miles of the Timaru–Tekapo 110 kV. line was completed.

Operation and Maintenance: Operation and maintenance have been carried out as usual. Abnormal conditions have created difficulties, but the usual high standard and reliability of supply have been maintained.

5. *Invercargill District.*—Supply, Consumers, Unit Sales, &c.: The number of consumers and the connected load continued to increase in all areas. The number of rural consumers is now 12,426 with a connected load of 57,954 kW.

The units sold for various purposes, and the average charges per unit were as follows:—

		d.
Domestic	7,451,619	2·225
Commercial	3,354,376	2·28
Industrial	7,750,831	0·99
Local body (bulk supply)	12,176,546	0·54

Unit consumption in respect of three of Southlands important industries—*i.e.*, coal-mines, freezing-works, and limeworks—was 1,120,312, 3,477,897, and 1.053,807 respectively.

The revenue from sales of electric energy for all purposes in Southland amounted to £161,529.

Operation and Maintenance: Operation and maintenance have been carried out as usual as far as shortage of staff, petrol restrictions, and other abnormal conditions would permit.

New transformers were installed at Invercargill Substation, and new 11 kV. switchgear was installed at Invercargill and Gore Substations. Extensive overhaul of the Monowai–Winton 66 kV. lines was carried out.

On the distribution system thirty-two new transformer installations with a total capacity of 260 kVA. were completed. Extensive transformer overhaul was carried out in the field. In Riverton Borough a change over from 3·3 to 11 kV. was made. At Winton Pole-factory 1,434 concrete poles were cast during the year.

The usual reliability of supply has been maintained.

6. *Nelson District.*—General: No part of the Cobb River scheme is yet in operation except the Stoke Diesel Station and part of the 66 kV. Stoke–Cobb transmission-line (at 11,000 volts).

Construction: Cobb Power-station: The construction of the headworks was continued, but due to drain of manpower the anticipated progress was not made. The work completed included the access road to the dam. The tunnel was pierced, and enlarging and concreting are in progress.

Substations and Transmission-lines: Work proceeded on construction of substations and transmission-lines. The survey of the Stoke–Blenheim 66 kV. line was completed for seventeen miles.

Registration of Electrical Wiremen.

In addition to the two regular examinations during the year, six special examinations were held, five for members of the armed forces who were proceeding overseas, and the other for a naval petty officer whose ship was leaving before the regular examinations.

Capping and casing was used in the two practical examinations.

There were 382 candidates for the wiremen's written examination and 252 for the practical examination. Of these, the percentages passes were 32 per cent. and 56 per cent. respectively.

For the servicemen's examinations there were 83 and 66 candidates for the written and practical parts respectively, and of these the percentage passes were 59 per cent, and 68 per cent.

DESIGN.

1. *Electrical Section.*—Detail work was carried out in connection with new power-stations at Waikaremoana Lower, Highbank, and Karapiro, and in connection with extensions at existing power-stations.

Design work for new buildings, building extensions, new substations, substation extensions, transmission-lines, &c., was carried out as usual.

Work for other Departments and in connection with electric supply to aerodromes and military camps was dealt with.

Additional fire-fighting and A.R.P. facilities for main stations were designed.

2. *Hydraulic Section.*—Investigation has been continued on the future resources of the Waikato River. Besides surveys and boring, assistance has been given by the Geological Survey Department in geophysical tests.

Observations have been resumed in connection with the Waikaremoana Upper development.

Design and supervision of works and the recording of water resources have been carried on continuously.

I have, &c.,

F. T. M. KISSEL, B.Sc., M.I.E.E., A.M.I.C.E.,
Chief Electrical Engineer.

APPENDIX E.

EIGHTEENTH ANNUAL REPORT OF THE MAIN HIGHWAYS BOARD.

The Hon. the Minister of Public Works, Wellington.

SIR,—

In accordance with requirements of section 24 of the Main Highways Act, 1922, the Main Highways Board has the honour to submit its eighteenth annual report for presentation to Parliament.

The report covers the period 1st April, 1941, to 31st March, 1942.

General.—The only improvement works commenced during the year were those of an essential nature or of military value, and those works in hand which were not considered to be of an urgent nature were stopped immediately they had been brought to a stage where they could be safely left without creating a danger to traffic.

With the restricted amount of petrol available to private-car owners the volume of traffic using the roads with this type of vehicle has been greatly reduced, but it is the heavier type of vehicle with its increased loading, and what is very often excessive speed, that causes the greatest damage to our road surfaces. There are many of the latter type of vehicle still operating, and on account of their activities the thickness of road crusts will require to be increased in several areas if we are to avoid heavy reconstruction costs at an early date.

Main highways have been generally maintained to a reasonable standard, and at the same time a considerable reduction has been made in the total maintenance charges for the year. The position has now been reached, however, where maintenance expenditure should be increased if we are to avoid a rapid deterioration of highway surfaces. It has always been the policy of the Board to preserve as far as possible the assets which loan and capital funds have created, and even after allowing for existing conditions it would be false economy to now neglect the adequate maintenance of roads that have cost the community many millions of pounds to build up to their present standard.

In common with other activities, scarcity of materials, increased costs, and reduction in available man-power are tending to make the Board's operations difficult and expensive to carry out in a satisfactory manner.

The Board's anticipated revenue for the coming year is not sufficient to cover the cost of the fixed charges and adequately maintained roads, and unless additional loan-money is forthcoming very heavy expenditure will be required in the future, in order to bring the road surfaces back to their previous high standard.

Personal.—The Board sustained a severe loss in the death of Mr. C. J. Talbot on the 26th March, 1942. Mr. Talbot, who was one of the Members representing the New Zealand Counties' Association, had been a member of the Board since the 27th July, 1926, and his knowledge of county administration, coupled with his high sense of justice, made him a most valued member of the Board.

It is also with deep regret that the Board has to record the death, on the 7th October, 1941, of Mr. G. C. Godfrey, a foundation member of the Board.

Legislation.—New legislation affecting the Board during the past financial year has been :—

National Development Loans Act, 1941: The outstanding balance of all loans raised for the construction of main highways have been transferred to the National Development Loans Account, and shall bear interest at such rate as the Minister of Finance prescribes. This procedure will increase the loan charges against the Main Highways Account by quite a considerable sum for the coming year.

Motor-vehicles Registration Emergency Regulations 1942 provide for a reduction in the annual fee payable in respect of annual licenses for a private motor-car from £2 to £1 15s. This provision will greatly reduce the Board's revenue.

A general description of the year's work as a whole is as follows :—

Reconstruction and improvement works have been kept to a minimum, and have comprised practically only the completion of works already in hand and those required for military purposes. The sealing programme has been drastically reduced, and has consisted principally of the renewal of worn surfaces which could not be allowed to deteriorate further.

The length of dustless surfacing has been increased by 61 miles, making a total of 3,537 miles, or 28·5 per cent. of the highway system. The previous year's increase was 243 miles, A certain number of bridges, which had passed beyond the end of their useful life to a dangerous condition, were put in hand for reconstruction so far as supplies of materials and man-power would permit. These are located chiefly in the Whangarei and Napier districts. Approximately 3,000 ft. of bridges were completed during the year, the largest being the 540 ft. Mataura River bridge, near Wyndham, in Southland County.

The completion of two overbridges—one near Auckland and one in the Dunedin district—has eliminated two further level-crossings, another at Auckland has been dealt with by a subway, and two more near Hunterville and Napier have been brought into use by completion of their approaches. The total number of crossings made safe under this programme is now 120.

The principal reconstruction work undertaken was that of the 17-mile section between Waiouru and Taihape. The formation is nearing completion, and the greater part of the length has been metalled and sealed. A 6-mile length, including two bridges, is in hand on the Pokeno–Paeroa highway, and 4 miles near Helensville, while 8½ miles has been reconstructed between Waiuku and Kohekohe.

Shorter lengths have been carried out elsewhere, particularly in the Napier district and on the Wangamoa Hill, Nelson.

Sealing in the Auckland district comprised principally 3¼ miles of first-coat and 5 miles of second-coat adjacent to Otorohanga, 2 miles near Turua in Hauraki Plains County, 3¼ miles at Leamington, and 12 miles south of Putaruru.

In the Tauranga district, 3½ miles was sealed on State highways and 3¼ miles on those in the Gisborne area. On the Taupo–Napier highway a recently-constructed section of 3 miles received a sealing-coat, and shorter lengths on other highways completed a total of 7 miles in the Napier district.

Very little new surfacing was undertaken in the Taumarunui and Taranaki districts, but Wanganui recorded 24½ miles, including 9 miles on the Waiouru–Taihape section mentioned above.

The Wellington district accounted for 3¾ miles, principally in the second-coat sealing of the main Hutt road. Several sections in the Manawatu area were widened and treated with plant-mix.

On the Wangamoa Hill, Nelson, 6¼ miles was sealed, and the Canterbury districts returned 14 miles, including a 6-mile length in Ashburton County.

A plant-mix smoothing-coat was laid on the 16-mile Hinds-Orari section, and on 14¾ miles between Pareora and Deep Creek, both on the Christchurch–Dunedin highway.

Practically no sealing was done in Otago but in Southland 7¼ miles was surfaced on the Lorne–Riverton State highway, together with several short township sections.

At the Homer Tunnel, Milford Sound, ring-drilling preparatory to enlargement was carried out over the full length, and 922 ft. enlarged to full size. The concrete avalanche-protection at the Cleddau portal has been completed for a length of 246 ft., and all work is now suspended.

The construction of footpaths was continued to a limited extent, the principal items being three ¾-mile lengths in the Auckland district and ½-mile near Wellington.

Flood damage has been very heavy in some districts, principally Taumarunui, Wellington, Nelson, and the West Coast. In Taumarunui and Wellington East restoration work has been practically continuous throughout the year, as far as supplies of plant and man-power would permit. The removal of slips has been greatly facilitated, in both time and cost factors, by the use of modern machinery.

The maintenance of signposts has been carried out on main highways by automobile associations, under subsidy from the Board, as usual.

The sixteenth examination for Foremen and Overseers of Road Construction was held on the 29th October, 1941, when only fifteen candidates presented themselves. Of the five candidates who sat for papers Nos. 1 and 2, two were successful in passing both. Five candidates passed paper No. 1 only, while four passed No. 2 only. To date, one hundred and forty-seven certificates have been issued.

The Board would like to express its sincere appreciation of the co-operation extended to it by local authorities and automobile associations during the year, and looks forward to a continuance of the same good relationship during the difficult period ahead.

As usual, the Public Works Department has rendered valuable services to the Board in matters relating to main highways administration, and the Board extends its thanks to the officers concerned.

The audited statement of accounts is also submitted herewith.

Signed on behalf of the Main Highways Board:

W. L. Newnham, Chairman.

MAIN HIGHWAYS ACCOUNT.

STATEMENT SHOWING PARTICULARS OF NET EXPENDITURE ON CONSTRUCTION, RENEWALS, MAINTENANCE, &c., FOR THE YEAR ENDED 31ST MARCH, 1942, AND TOTAL TO DATE.

—	Construction and Improvement of Main Highways.		Renewals of Main Highways.		Maintenance, Repairs, &c., of Main Highways.		Totals.	
	Total for Year 1941–42.	Total since Inception of Main Highways Act, 1922, to 31/3/42.	Total for Year 1941–42.	Total since 1/4/36 to 31/3/42.	Total for Year 1941–42.	Total since Inception of Main Highways Act, 1922, to 31/3/42.	Total for Year 1941–42.	Total since Inception of Main Highways Act, 1922, to 31/3/42.
Highway District—	£	£	£	£	£	£	£	£
No. 1	15,944	*1,395,767*	18,715	*130,962*	60,055	*1,025,835*	94,714	*2,552,564*
No. 2	69,267	*2,743,226*	16,336	*155,296*	116,416	*1,884,261*	202,019	*4,782,783*
No. 3	14,296	*916,891*	8,094	*65,532*	89,871	*1,061,915*	112,261	*2,044,338*
No. 4	11,202	*636,852*	2,333	*80,684*	56,953	*798,035*	70,488	*1,515,571*
No. 5	26,351	*813,326*	2,093	*66,428*	67,099	*1,176,806*	95,543	*2,056,560*
No. 6	16,429	*792,082*	1,463	*22,416*	65,081	*798,619*	82,973	*1,613,117*
No. 7	7,024	*908,832*	1,957	*29,741*	45,421	*737,221*	54,402	*1,675,794*
No. 8	102,141	*965,269*	6,757	*32,144*	64,562	*778,518*	173,460	*1,775,931*
No. 9	21,074	*1,446,700*	3,871	*38,041*	66,052	*862,282*	90,997	*2,347,023*
No. 10	2,893	*423,343*	7,870	*59,507*	31,907	*690,267*	42,670	*1,173,117*
Totals for North Island ..	286,621	*11,042,288*	69,489	*680,751*	663,417	*9,813,759*	1,019,527	*21,536,798*
No. 11	27,230	*1,009,381*	1,301	*14,876*	49,551	*807,336*	78,082	*1,831,593*
No. 12	33,677	*1,033,033*	5,783	*89,531*	68,188	*1,276,346*	107,648	*2,398,910*
No. 13	11,589	*330,691*	4,754	*4,946*	28,178	*363,713*	44,521	*699,350*
No. 14	23,831	*849,648*	134	*5,865*	27,016	*554,049*	50,981	*1,409,562*
No. 15	19,663	*524,443*	*Cr.* 20	*9,369*	30,204	*628,326*	49,847	*1,162,138*
No. 16	75,910	*861,314*	..	*12,362*	31,563	*504,144*	107,473	*1,380,820*
No. 17	13,131	*831,882*	23	*11,863*	27,822	*458,467*	40,976	*1,302,212*
No. 18	21,254	*996,951*	9,547	*37,715*	38,510	*588,991*	69,311	*1,623,657*
Totals for South Island ..	226,285	*6,440,343*	21,522	*186,527*	301,032	*5,181,372*	548,839	*11,808,242*
Totals for Dominion	512,906	*17,482,631*	91,011	*867,278*	964,449	*14,995,131*	1,568,366	*33,345,040*

MAIN HIGHWAYS ACCOUNT—*continued.*

Income and Expenditure Account for the Year ended 31st March, 1942, and Total to Date.

Expenditure.		Total for Year 1941–42.	Total since Inception of Main Highways Act, 1922, to 31/3/42.
		£	£
Net expenditure on construction, renewals, maintenance, &c. (see separate statement)		1,568,366	*33,345,040*
Administration—	£		
Administration expenses (including salaries, travelling-expenses, office rents, printing, stationery, postages, and miscellaneous expenses)	122,240	..	*1,284,423*
Fees and travelling-expenses of members of the Main Highways Board other than Government members	699	..	*20,874*
Miscellaneous expenses—			
Advertising, maps, rent of halls, traffic tallies, transport of samples, depreciation of furniture, &c.	148	..	*6,346*
Compassionate grants to widows and relatives of deceased employees	..	..	*4,000*
Compensation under section 3, Public Works Amendment Act, 1925	..	..	*1,015*
Exchange on remittances	182	..	*9,887*
Grant to Transport Department towards Traffic inspection	..	..	*42,906*
Petrological laboratory and other experimental work, Expenses of	*Cr.* 364	..	*13,887*
Total administration		122,905	*1,383,338*
Loan charges—			
Charges and expenses of raising loans, management charges of Consolidated Stock on account of Construction Fund, &c.	14,773	..	*87,603*
Interest on amount appropriated out of Public Works Fund and paid into Main Highways Account Construction Fund	61,300	..	*735,600*
Interest on loans, recoupment to Consolidated Fund (section 4, Finance Act, 1919)	330,954	..	*2,239,902*
Transfer to reserve for redemption of main highway securities	..	..	*1,252,130**
Payment to local authorities in commutation of toll-gate charges (Finance Act, 1925, section 20)	1,501	..	*33,225*
Payment to Wellington City Council in commutation of fees chargeable in respect of motor-vehicles using Hutt Road (Finance Act, 1927 (No. 2), section 33)	24,719	..	*329,130*
Total loan charges		433,247	*4,677,590*
Subsidies, &c., in respect of other than main highways—			
Municipal Corporations (Municipal Corporations Act, 1933, section 71)	32,509	..	*341,610*
County Councils and other local authorities (Finance Act, 1930, section 37)	179,380	..	*2,016,717*
Subsidies to County Councils for rebate to ratepayers (Finance Act (No. 4), 1931, section 45)	..	..	*253,893*
Subsidy on rates levied on farming land (Finance Act (No. 3), 1934, section 28)	*Cr.* 10	..	*364,242*
Maintenance and construction of roads giving access to outlying areas (Finance Act (No. 3), 1931)	..	..	*45,918*
Total subsidies		211,879	*3,022,380*
Balance, being excess of income over expenditure, carried to general balance-sheet	..	*Cr.* 52,796	*415,942*
		£2,283,601	*£42,844,290*

Income.	Total for Year 1941–42.	Total since Inception of Main Highways Act, 1922 to 31/3/42.
Loans raised under Main Highways Act, 1922—	£	£
Stock, Debentures, and Treasury Bills issued—		
At $1\frac{1}{2}$ per cent. interest	..	*2,495,000*
At 3 per cent. interest	..	*5,601,725*
At $3\frac{1}{4}$ per cent. interest	262,789	*453,684*
At $3\frac{1}{2}$ per cent. interest	..	*677,890*
At 4 per cent. interest	..	*1,442,437*
At $4\frac{1}{2}$ per cent. interest	..	*542,005*
Securities redeemed, Loans Redemption Account	..	*1,312,790*
Consolidated Fund—Public Debt Repayment Account	..	*55,720*
	262,789	*12,581,251*
Receipts under section 15, Finance Act, 1923, from Public Works Fund, General Purposes Account (at 5 per cent. interest)	..	*1,226,000*
Revenue transferred from the Consolidated Fund	2,162,139	*28,507,743*
Interest from investments	36	*218,444*
Interest from local authorities on plant purchased on their behalf	2,736	*37,111*
Interest on advances to local authorities	2,046	*42,055*
Miscellaneous receipts	3,855	*19,604*
Transfer from Consolidated Fund (section 14, Main Highways Act, 1922)	..	*210,000*
Rent of and tolls from ferries	..	*2,082*
Temporary transfers from other accounts	*Dr.* 150,000	..
	£2,283,601	*£42,844,290*

* Excludes £60,408 10s. 7d. interest credited.

NOTE.—No charge for the cost of exchange on interest payments made in London is included in the accounts.

MAIN HIGHWAYS ACCOUNT—*continued.*

General Balance-sheet as at 31st March, 1942.

Liabilities.	—	Total.
	£	£
Excess of income over expenditure—		
Balance at 31/3/41	468,738	
Less excess of expenditure over income for 1941–42	52,796	
		415,942
Sundry creditors	..	159,310
Interest accrued on loans	..	78,267
Reserves for redemption of securities	..	823
		£654,342

Assets.	—	Total.
	£	£
Cash in Public Account—		
At call	..	95,743
Sundry debtors	..	31,107
Advances to local authorities (Main Highways Amendment Act, 1926, section 2)	..	63,177
Motor-registration fees in hands of Postal Department	..	9,343
Interest due and accrued	..	1,202
Buildings and land	..	87,609
Stocks of materials, tools, &c.	..	155,176
Furniture, fittings, &c.—		
Expenditure to 31/3/42	938	
Less depreciation to 31/3/42	701	
		237
Plant and equipment—		
For Main Highways Board—		
Expenditure to 31/3/42	643,453	
Less depreciation charged to works	470,056	
		173,397
Purchased for local authorities—		
Expenditure to 31/3/42	351,363	
Less repayments of principal	314,835	
		36,528
Amount transferred to Loans Redemption Account	2,851,973	
Less amount utilized for redemption of securities	2,851,150	
		823
		£654,342

Notes.—(*a*) No liability is included for interest on loans redeemed out of Public Debt Repayment Account. (*b*) The two funds, previously known as "Construction" and "Revenue," were amalgamated as from 1st April, 1936, and are now termed the "Main Highways Account," in accordance with section 3, Finance Act (No. 2), 1935.

J. W. Scott, A.R.A.N.Z., Chief Accountant, Public Works Department.
W. L. Newnham, Chairman, Main Highways Board.

I hereby certify that the Income and Expenditure Account and Balance-sheet have been duly examined and compared with the relative books and documents submitted for audit and correctly state the position as disclosed thereby, subject to the departmental notes enfaced thereon.—Cyril G. Collins, Controller and Auditor-General.

By Authority: E. V. Paul, Government Printer, Wellington.—1942.