Year .	Staff	Employees	Total
1935	10	78	88
1936 1937	9 20 20	th will 82 misls on	91
1938	4.00 08 6.00	later to 79 mate inte	87
1940	to 10, 11 year	76 83	88 94
1941	11	79 85 86	94 90 95
1943	11	86	97
1945	4.05 12 50 5	94	105
1946	Steed 14 to 15 kg	102	116
1948	7 16 Torks	116	132
1949	13	129	142
1951	25 2.14 p.se.	113	127
1953	Sun13 en 24 a	108	125 121

The segregation of personnel as at 30th June, 1953, is as follows:-

Tramways Superintendent - 1
Traffic Inspectors - 5
Motormen/Conductors - 79
Traffic Clerks - 3
Rolling Stock Maintenance - 15
Track Maintenance - 15
Overhead Maintenance - 3

Trans used in Normal Traffic.

The morning service commences with 12 trancars augmented to 15 during the morning peak between 8.00 a.m. and 9.00 a.m. There are then 12 cars in service until the afternoon peak between 4.00 p.m. and 6.00 p.m. when 17 cars are on the road. The off peak night service from 8.00 p.m. uses 11 trams, increased to 14 for theatre traffic.

The trans used in each service vary as follows:-

North - Belmont	A.M. 4	Peak	8 Hoon	4 P.M.	Peak (Night 4
East - West	A.H. 4		4	4 "	THE S	5 " 3
Newtown - East Park	A.M. 2	4600	4 "	2 "	S# 4	" 2
Chilwell	A.M. 2	95	2 "	2 "	0	3 " 2

Daily Route Mileage

tes bon alress

mas increment.

Trans. in The	he normal	daily	mileage	run :	in each		m.To.F.	SAT.
	Belm	ont - 1	North		288.64	miles	622.62	576.58
	CONTRACTOR OF THE PARTY OF THE	- Wes			239.00		502.24	498.64
	THE RESERVE OF THE PARTY OF THE		- Hewtown	2	134.8		257.88	236.48
bas pressal	Chil	Mell	Decree of the last		116.0		233.08	218.84
Average Spe	ed of Ser	vices		Total	778.60	" "	1615.84	1530.54
	70 000	1000	THE RESERVE OF THE PERSON NAMED IN	1			The Part of the Party of the Pa	-

The average speed of the service now operated on the various routes including stops and layover time at terminal is:

North route	9.37	m.p.h.
Belmont route	7.91	The state of
East route	8.12	主在100 位。主
West route	6.92	SER SE
Chilwell route	6.54	W
Eastern Park route	6.45	99
Newtown route	8.25	**

0.00025

Service Supplied - Brief Summary of Present Services

Belmont - North routes

16/17 minute intervals with mill specials extra to 8.00/9.00 a.m. peak - lunch hour 12 to 2 p.m. 20 minute intervals. P.M. Peak 4.00 to 6.00 p.m., 11 minute intervals then 16/17 minute intervals to finish. Sundays 18 minute intervals from 1.30 to 10.30 p.m. loant to the afterence and pask particl

East - West routes

15 minute intervals with 12 minute service frequency for P.H. peak 4.00 to 6.00 p.m. 20 minute intervals from 8.00 p.m. Sundays 15 minute intervals 1.30 to 10.30 p.m. 8.00 p.m.

Eastern Park - Newtown routes

24 minute intervals reduced to 30 minute during lunch hour 12.00 noon to 2.00 p.m. Peak extras give 20 and 10 minute intervals between 4.00 and 6.00 p.m. 24 minute intervals to finish. Sundays 24 minute intervals 1.30 to 10.30 p.m.

Chilwell route

20 minute intervals throughout except p.m. peak 4.00 to 6.00 p.m. Sundays 20 minute intervals 1.30 to 10.30 p.m. Sixtro in a

Passenger Density

The average passenger density per hour on each route on ordinary weekdays (Mondays to Fridays) is computed as follows:-

North Route	Hax.	per	hour	299	Hin.	per	hour	28	Average	139
Belmont "		11	(Wiles	326	- 60	- 10	**	32	to in the s	149
West "	图1000年120		Mar 1	313	LEMON	. 19		33	or allowper	145
Chilwell *	SEL WILL	**	# B4	248	200	155	reile:	20	esimbenese	106
Newtown *	Mal's o	4	MAN A	157	- 14	-	22	11	reason of	47
Eastern Park Route	W	- 15	. 1	745	10	- 60		201	the track	804

Average Daily Passengers per Route

North Route Belmont *		1, 303		1,203	Total	2,505	les la
East "	- 11	1, 361	- 11	1,319	61 61	2,680	se includi
Chilwell "		1,012	28 29	893 496	19	1,905	
Newtown " Eastern Park Houte	100	463	19	392	includ	855	

Present Outlook

It has to be admitted that the leg in maintenance work on both rolling stock and tracks necessitated during the war years has not been fully overtaken. It is also admitted that the present rate of maintenance work, is not keeping pace with requirements. It is estimated that the annual expenditure requirements. It is estimated that the annual expenditure would need to be increased by \$18,812 per annum to maintain existing assets properly. This is 50% more than current expenditure on maintenance. Operation labour charges are now higher than the revenue collected and to effect an improvement in the overall financial position it would be necessary to increase income and reduce operation labour costs. Action on the latter income and reduce operation labour costs. item has already been implemented by an extension of one man operation in off-peak periods. This was initiated in Geelong on 24th November, 1952 when the proportion of one man operations was increased.

This was not accomplished without considerable discussion as the Tramways Employees' Union is opposed to one man operations. So far, the reductions of traffic personnel have been by wastage only, and it has been possible, so far, to adhere to our policy that extensions of one-man operations would not involve worsened working conditions. The outlook today is that further extension of one man operation is unavoidable and that the use of conductors must of sheer necessity be restricted at least to the afternoon and peak period from noon to 8.00 p.m. There must also be considered the complete elimination of conductors on Sundays by reason of the prohibitive costs of double ordinary rates of pay to two man crews. To put these economies into practice it will be necessary to convert all existing rolling stock to combination type to facilitate one man or two man operation as required. Although the employees have stated their opposition to the operation of the larger 8 wheel units as one man trams in no uncertain terms, this does not in any way affect the present outlook of the system. This is considered to be the present outlook and would do no more than hold the present position.

Prospective Cost to be Faced if Existing System is Continued:

As previously stated, the present installation is at the end of its nominal economic life and without effecting improvements other than to the condition of the tracks and pavement the following minimum expenditure is estimated. The Country Roads Board has previously approached the Commission regarding the relaying of the tramway tracks for a distance of approximately one mile along High Street, Belmont. This work would be necessitated as the Board desires to change the existing levels in re-designing this thoroughfare. For this item alone the cost today would be £40,000 approximately. This is beyond the capacity of the tramway undertaking for a work desired by another authority. The condition of the tramway tracks is to a large extent a reflection of the condition of the timber sleepers or concrete raft carrying the rails. In the present maintenance work, sleeper renewals are frequently required and by reason of the area required to be excavated and reinstated are a costly work. It would obviously be more economic to open up the tracks and make complete renewals of sleepers which have practically all reached the end of their life than the present patching practice. The cost of re-sleepering an existing single track on existing ballast bed and repaving with bitumen penetration macadam is £37,000 per mile. Including the High Street, Belmont project, it is considered that the cost of reconditioning the tracks including sleeper renewals on a substantial scale but not rails or special work would be £610,500.

Essential work on Rolling Stock including the conversion of all tram cars to combination type is estimated to cost £45,000 so that a prospective expenditure of £655,500 is faced with the continuance of the tramways with existing rolling stock and track layout.

Possible improvements to the present system:

The success of any transport system is measured by its ability to meet all demands in a smooth efficient manner and in this respect tramways operating on routes comprising substantially single tracks and loops are under a severe handicap from the start.

The speed of the service is reduced by the slow down necessary to tortuously negotiate the loops, the intervals between transars is regulated by the loops installed and not the number of passengers to be transported and, it is impossible

for trancars to observe close timing to avoid delays at loop crossings. In the present era of fast moving road transport, the trancar can only compete when given the maximum flexibility of movement, therefore for the maximum efficiency of the existing tramway system, the complete duplication of all routes would be essential. It is considered that this is also an essential to place transcars on the streets in their correct relationship to all other road traffic. There are in Geelong today 7.06 miles of single tram track, some of which is placed in the centre of the thoroughfare and some on one side of the centre line. The cost of duplicating an existing single track which is laid in its correct position and does not require work thereon is estimated today to cost £65,000 per nile but to move an existing single track from the centre, to resissper same and instal a duplicate track alongside would cost approximately £127,000 per It is estimated therefore that to improve the existing tramways to enable it to function at maximum efficiency and in correct relationship to other road traffic would involve an expenditure of approximately £1,147,380 on tracks and overhead alone. Since modern track layout would make desirable modern rolling stock, it is ascertained that the new trancars constructed by the Melbourne and Metropolitan Tramways are costing roughly £9,000 each so that the present fleet of 31 Vintage tramcars would cost £279,000 to replace to metropolitan standard. The details do not take into consideration the physical aspects of certain thoroughfares such as Pakington Street along which at present single tram tracks predominate or other thoroughfares along which it may be considered desirable to re-route a tramway track to provide an improved and more direct service.

Extensions to the Present Tramway System:

It is admitted by the Commission that the tramways do not now directly serve a substantial area of Greater Geelong which in some cases could be served by simple extensions but in other cases such as Geelong West a complete revision of routes would be necessitated. As previously stated, the Commission has at no stage in its experience as a tramway authority at Geelong found that any extension or revision of the tramway layout would be a sound economic proposition. For the purpose of this report therefore it is considered sufficient to state that the present day costs of construction of double track tramways is £120,000 per mile. This figure is based upon construction in a bitumen penetration pavement and would be subject to revision where concrete paving exists. It is not desired to go into the matter of possible extensions in detail, but the estimated costs given are considered sufficient to enable a figure to be obtained for any extension that might be put forward.

CONCLUSIONS

the Commission took over the responsibility for these existing tramway systems in the three provincial cities of Geelong, Ballarat and Bendigo early in the 1930's. It did this most unwillingly and as a somewhat ill-considered measure solely to prevent the collapse of the tramway systems in those cities. The responsibility was thrust on the Commission because, as owner of the electricity supply undertakings, it was regarded as the natural successor in the matter of the tramway operations of the companies from which it purchased the electricity supply assets. Before the Commission agreed to accept this responsibility it explored six other possible avenues of tramway operation, viz. by

(a) The Victorian Railways Department.
(b) The Melbourne and Metropolitan Tramways Board.
(c) A government authority to be constituted by the State Government.

(d)

The municipal councils concerned.

Tramway authorities to be created within the cities themselves. (e) oughout country arose

Private bus operators.

So far as this last possibility is concerned, it must be remembered that in those days the state of development of motor transport and the state of development of road making were such that this proposition was not nearly as attractive then as it might be today.

When it agreed to take over the three tranway systems mentioned above, the Commission stated in clear and unequivocable language

> (i) That since any loss on the tramway systems had to be met by electricity supply consumers it was not prepared to extend the tramway systems at the public expense.

in live harde to a burder

- (ii) However, to prevent the systems being entirely static in the face of any local desire that might exist for an extension of the systems, the Commission's agreement with the municipal councils concerned provided that extensions would be made on the requisition of one or more councils on the condition that the Councils undertook to reimburse the Commission any loss on the operations of such extensions, statutory provision having been made for the Councils to do this. To date no such requisition has been received.
- (iii) The Commission stipulated and all the Councils concerned agreed and entered into formal agreements that they would do everything in their power to prevent competition with the Commission's tramway systems. This was in support of section 11(b) of Act 3845, which authorised the Commission to operate tranway systems. This section was subsequently included in the Transport Regulations Acts.
- The Commission stated that the systems it was (iv) acquiring would (after making allowance for reconditioning work in Ballarat and Bendigo) probably be completely debilitated in about 15 years, i.e. about 1950.
- The Commission is now losing revenue on the three provincial systems at the rate of approximately i million pounds per annum. The position is such that the fares collected do not even meet the cost of the wages paid to the employees let alone make any provision for interest, depreciation, supervision, electricity or materials for maintenance purposes. There seems to be no way in which this position could be rectified by the Commission insofar as the existing tramway systems are concerned. Extensions could only increase the annual losses and increases in fares would certainly result in a reduction in the number of passengers and might even result in an overall loss of revenue.
- The Commission in addition to the expert knowledge of commissioners, has acquired through its officers a very large amount of detailed information and experience in the management and operation of its three tramway systems albeit that they are relatively small. The Commission has faithfully discharged its responsibility to operate the tramway systems for 15 years. The Commission therefore is a tramway authority insofar as the above allied to its legal powers constitutes it as such. On the other On the other

hand, the Commission is an unwilling transport authority. Its main preoccupation is that related to the generation, transmission and distribution of electricity and the extension of its electricity supply system throughout country areas. The operation of the transmy systems now in its hands is a burden on its electricity supply consumers. It sees no means of escaping from this net by its own efforts and it does not feel competent to offer to the Transport Regulations Board any suggestions as to how the position can be improved.

The Commission's most important reaction, however, to the present position in Geelong is that under present conditions it is not rendering to the residents of Geelong the transport service to which they are entitled.

| 13,522 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 17,535 | 1

GEELONG TRAHWAYS

STATEMENT "A"

INCOME, EXPENDITURE AND LOGS 1935 TO 1953.

Year Ended 30th June	Income £	Expendi ture £	loss £
1935	33,327	46,784	13,467
1936	34,312	49,365	15,053
1937	33,522	52,171	18,649
1938	32,898	54,937	22,039
1939	35,452	58,759	23,307
1940	35,294	60,072	24,778
1942	40,736	57,760	17,024
1942	49,659	56,927	7,268
1943	56,796	59,749	2,953
1944	60,825	64,983	4,158
1945	62,830	65,901	3,071
1946	62,394	65,559	3,165
1947	61,227	72,355	11,128
1948	61,533	87, 457	25,924
1949	63,272	102,197	38,925
1950	73,570	123,679	50,109
1951	75,793	145,451	69,658
1952	76,292	160 ,140	83,848
1953	77,535	172,804	95,269

GARLONG TRANSPAYS

Statement (2)

SECRETARION OF EXPENDITURE 1935 TO 1953

oar ending 30th June	Power	Operations	Maintenasoc	Administration	Capital Charges	Total
					Dopo Into	2
1935	3,699	17,018	7,588	3,759	5,961 8,759	46,784
1936	3,825	17,958	8,862	3,960	6,074 8,686	49,365
1937	3,810	17,678	9,619	5,658	6,138 9,268	52,171
1936	3,164	19,210	11,048	6,242	6,136 9,138	54,938
1939	3,537	20,595	12,044	6,628	6,136 0,019	58,759
1940	3,212	21,228	13,456	7,060	6,137 8,979	60,072
1941	2,806	24,337	10,362	5,898	4,763 9,594	57,760
1942	2,687	26,863	9,516	6,058	4,009 7,794	56,927
1943	2,393	29,047	11,720	7,122	3,311 6,156	59,749
1944	3,053	32,549	14,205	7,793	2,646 4,737	64,983
1945	3,092	34,555	14,600	7,106	2,341 4,207	65,901
1946	3,965	35,911	15,114	7,474	- 3,995	65,559
1947	3,186	39,178	17,481	8,631	- 3,879	72,355
1948	4,689	50,678	17,848	10,354	- 3,888	87,457
1949	5,789	59,628	20,611	12,167	- 4,002	102,197
1950	6,498	65,680	27,956	19,491	- 4,954	123,679
1951	6,839	84,668	34,440	15,380	- 4,124	145,451
1952	8,408	92,986	37,448	17,062	- 4,236	160,140
1953	10,007	96,032	45,138	17,100	- 4,527	172,804

GERME TRANS

Statement (c)

OFFRATION STATISTICS 1935 to 1955

or Ending	Phon were	Car Miles	Passengers per car nile	Average fare per passenger	Income per car mile	Expend- iture per our mile	tous you car mile	Loss per passenge
	A.			d _e	O ₂	do	d.	e,
35	3,622,086	594,657	6.1	2,209	23.447	18.882	5.435	0.895
36	3,728,308	600,674	6.2	2.207	13.705	39.727	6.012	0.972
57	3,623,934	599,297	6.0	2,216	25-434	20.893	7.468	2.236
38	3,330,762	602,572	5.5	2,362	25.202	21.801	8.778	2.588
1939	3,690,436	613,239	6.0	2,290	13.875	22,996	9.121	1.516
1940	3,737,125	613,596	6.2	2,256	15.804	23.496	9.692	1.591
1912	4,347,703	620,652	7.0	2.240	35-752	22.335	6.583	0.910
1942	5,546,659	629,878	8.8	2.243	16.921	21.691	2.769	0.324
1945	6,510,501	651,222	20.0	2.088	20.931	22.019	1.088	0.209
1914	6,859,521	665,202	10.3	2.127	23.945	23.445	2.500	0.116
1945	6,875,634	650,253	20.4	2,183	22.911	24-031	1.120	0.107
1946	6,715,222	655,230	20.3	2.209	22.853	24.013	1.159	0.223
1947	6,550,186	640,341	10.2	2.229	22,948	27.119	4.372	0.408
1948	6,609,331	656,178	10.1	2.223	22,506	32.988	9.482	0.943
2949	6,828,780	667,333	20,2	2,235	22.755	36.754	13.999	1.370
1950	6,037,820	629,101	9.6	2.925	28.067	47.283	19.116	1.992
1951	5,893,696	589,263	20.0	3.078	30.875	59,251	28.376	2,837
1952	5,315,092		9.3	3.435	32.040	67.254	35.214	3.786
1953	5,375,484		9.5	3.451	32,905	73.337	40.43%	4.253