TRAMWAY AND LIGHT RAILWAY COMPANIES

Note.—For information regarding the scope of the Census, instructions given to firms for making returns, and definitions of the terms used in this report, reference should be made to the Introductory Notes on pages v to xviii.

Introductory

The particulars given in this report relate to work of construction, repair, etc., done by employees of tramway and light railway companies. Details respecting similar work done in connection with tramway undertakings owned by Local Authorities are given in the report dealing with the general productive work of Local Authorities (see page 447). Work carried out by private firms on behalf of tramway and light railway companies is dealt with in the reports on the various trades concerned in the work.

The following table shows the main results of the Censuses of 1930 and 1924 in respect of tramway and light railway companies in Great Britain that employed an average of more than ten persons :—

Particulars	Unit	1930	1924
Value of work done (Gross output)	£'000	1,360	1,612
Cost of materials used	„	640	726
Net output	„	720	886
Average number of persons employed	No.	5,178	6,104
Net output per person employed	£	139	145
Power available :—			
Prime movers	H.P.	27	71
Electric motors driven by purchased electricity	„	5,134	3,166
Number of returns	No.	34	64
Number of establishments	„	68	*

* Not available.

Deficiencies in 1930 aggregates.—The aggregate number of persons employed in 1930 by undertakings that stated that they employed not more than ten persons on the average in constructional or maintenance work was 80, the corresponding figure for 1924 being 39. The total value of the work done by the small concerns in 1924 was £10,000.

Size of undertakings.—In the following table the main particulars recorded at the Census of 1930 are grouped according to the average numbers of persons shown in the returns :—

Size of undertaking (average numbers employed)	Number of returns	Gross output	Net output	Average number of persons employed	Net output per person employed
	No.	£'000	£'000	No.	£
11–24	11	48	30	204	145
25–49	5	39	26	187	141
50–99	5	63	38	293	131
100–199	8	265	158	1,112	142
200–1,499 ...	5	945	468	3,382	139
TOTAL ...	34	1,360	720	5,178	139

Regional distribution.—In the following table the results recorded at the Censuses of 1930 and 1924 are grouped according to the principal areas* of Great Britain in which tramway and light railway companies are situated :—

Area		Number of returns	Gross output	Net output	Average number of persons employed	Net output per person employed
		No.	£'000	£'000	No.	£
1	1930	4	434	195	1,511	129
	1924	*3*	*385*	*231*	*1,397*	*165*
2 and 3 ...	1930	7	213	122	953	128
	1924	*8*	*184*	*107*	*722*	*148*
4	1930	3	41	24	197	125
	1924	*6*	*99*	*51*	*357*	*143*
5 and 6 ...	1930	11	536	294	1,896	155
	1924	*30*	*722*	*378*	*2,730*	*138*
7	1930	4	82	52	300	174
	1924	*4*	*83*	*47*	*299*	*157*
8	1930	—	—	—	—	—
	1924	*4*	*22*	*11*	*105*	*105*
9 and 10	1930	5	54	33	321	102
	1924	*9*	*117*	*61*	*494*	*123*
TOTAL	1930	34	1,360	720	5,178	139
	1924	*64*	*1,612*	*886*	*6,104*	*145*

Northern Ireland.—The following table summarises the particulars recorded at the Census of Production taken by the Government of Northern Ireland for 1930, together with those furnished at

* For particulars see page xviii.

the 1924 Census. The 1930 figures relate to companies that employed an average of more than *five* persons in constructional or maintenance work, while those for 1924 relate to all companies.

Particulars	Unit	1930	1924
Value of work done (Gross output)	£'000	9	17
Cost of materials used	,,	3	7
Net output	,,	6	10
Average number of persons employed	No.	58	83
Net output per person employed	£	103	114
Power available :—			
Prime movers	H.P.	36	43

Production

The following table shows the value of the principal classes of constructional and repair work done in 1930 and 1924 by employees of tramway and light railway companies. The values stated represent sums calculated to cover wages and salaries, the cost of materials used, and the overhead charges properly attributable to the work, excluding interest, sinking fund and other loan charges.

Kind of work done	1930		1924
	Value (at cost)	Entries	Value (at cost)
	£'000	No.	£'000
Work of construction and repair on :—			
Rolling stock :—			
Tramcars and trackless trolley vehicles ...	374	33	516
Motor omnibuses and coaches	490	22	294
Other rolling stock	21	13	13
Permanent way and works connected therewith	335	32	594
Electrical equipment of lines	76	32	94
Depots, workshops, offices and other buildings:—			
New construction	18	10	33
Repairs	18	32	27
Machinery and workshop plant	18	16	19
Other work done	10	7	22
TOTAL VALUE OF WORK DONE	1,360	...	1,612

Volume of production.—It is estimated that the total value of the output of tramway and light railway companies in 1924, amounting to £1,612,000, would be equivalent to approximately £1,580,000 if valued in terms of 1930 prices, the value recorded for 1930 (£1,360,000) representing a decrease of about 14 per cent.

Employment

The following table shows the average numbers of persons employed in 1930 and 1924 :—

Persons employed	Males		Females		Total	
	Under 18	All ages	Under 18	All ages	Under 18	All ages
1930						
Operatives (average for the year)	262	4,600	2	20	264	4,620
Administrative, technical and clerical staff (as at 18th October)	18	492	7	66	25	558
TOTAL	280	5,092	9	86	289	5,178
1924						
Operatives (average for the year)	262	5,581	7	27	269	5,608
Administrative, technical and clerical staff (as at 18th October)	33	413	6	83	39	496
TOTAL	295	5,994	13	110	308	6,104

Power

The following table shows the capacity of prime movers, electric generators and electric motors ordinarily in use and in reserve or idle installed in the workshops of tramway and light railway companies in 1930 and 1924, exclusive of plant required for traction purposes :—

Power equipment	1930			1924		
	Ordinarily in use	In reserve or idle	Total	Ordinarily in use	In reserve or idle	Total
PRIME MOVERS	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
Reciprocating steam engines	—	—	—	50	—	50
Internal combustion engines :—						
Gas	—	6	6	12	—	12
Petrol, kerosene, or other light oils ...	16	5	21	9	—	9
TOTAL	16	11	27	71	—	71
ELECTRIC GENERATORS	Kw.	Kw.	Kw.	Kw.	Kw.	Kw.
Driven by Gas engines ...	—	—	—	4	—	4
ELECTRIC MOTORS	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
Driven by Purchased electricity	3,821	1,313	5,134	2,934	232	3,166

Consumption of electricity

The total quantity of electricity purchased and used in 1930 in the workshops to which this report relates was returned as 3,506,000 kilowatt-hours. While all motors were described as driven by "purchased" electricity the current used was generated to a considerable extent in stations owned by the companies making the returns.

In addition, companies using electricity for traction purposes in 1930 reported that the quantity so used by them in that year amounted to 104,422,000 kilowatt-hours.

TABLES

I. Summary of results

Particulars	Unit	England and Wales	Scotland	Great Britain
Value of work done (Gross output) ...	£'000	1,306	54	1,360
Cost of materials used	,,	619	21	640
Net output	,,	687	33	720
Average number of persons employed	No.	4,857	321	5,178
Net output per person employed ...	£	142	102	139
Power available :—				
Prime movers	H.P.	27	—	27
Electric motors driven by purchased electricity	,,	3,889	1,245	5,134

II. Production

Kind of work done	England and Wales	Scotland	Great Britain
Work of construction and repair on :—	£'000	£'000	£'000
Rolling stock :—			
Tramcars and trackless trolley vehicles ...	361	13	374
Motor omnibuses and coaches	*	*	490
Other rolling stock	*	*	21
Permanent way and works connected therewith	320	15	335
Electrical equipment of lines	72	4	76
Depots, workshops, offices and other buildings :—			
New construction	*	*	18
Repairs	17	1	18
Machinery and workshop plant	18	†	18
Other work done	10	†	10
TOTAL VALUE OF WORK DONE (GROSS OUTPUT)	1,306	54	1,360

* Owing to the possible disclosure of information relating to individual companies, separate particulars for England and Wales and for Scotland cannot be given.
† Less than £500.

III. Employment

A.—NUMBERS EMPLOYED IN WEEK ENDED 18TH OCTOBER, 1930

Persons employed	Males		Females		Males and females	
	Under 18	All ages	Under 18	All ages	Under 18	All ages
England and Wales :—						
Operatives	235	4,281	2	17	237	4,298
Administrative, etc.* ...	18	450	3	49	21	499
TOTAL	253	4,731	5	66	258	4,797
Scotland :—						
Operatives	24	268	—	3	24	271
Administrative, etc.* ...	—	42	4	17	4	59
TOTAL	24	310	4	20	28	330
Great Britain :—						
Operatives	259	4,549	2	20	261	4,569
Administrative, etc.* ...	18	492	7	66	25	558
TOTAL	277	5,041	9	86	286	5,127

* Administrative, technical and clerical staff.

B.—OPERATIVES EMPLOYED IN ONE WEEK IN EACH MONTH OF 1930

Week ended	Males and females			Week ended	Males and females		
	England and Wales	Scotland	Great Britain		England and Wales	Scotland	Great Britain
Jan. 18 ...	4,273	270	4,543	July 19 ...	4,453	271	4,724
Feb. 15 ...	4,335	261	4,596	Aug. 16...	4,494	266	4,760
Mar. 15 ...	4,364	257	4,621	Sept. 13...	4,455	239	4,694
April 12 ...	4,387	255	4,642	Oct. 18 ...	4,298	271	4,569
May 17 ...	4,469	268	4,737	Nov. 15...	4,195	257	4,452
June 21 ...	4,473	280	4,753	Dec. 13 ...	4,098	246	4,344
AVERAGE FOR THE TWELVE MONTHS					4,358	262	4,620

IV. Power

PARTICULARS OF PRIME MOVERS AND ELECTRIC MOTORS

Power equipment	Great Britain*	
	Ordinarily in use	In reserve or idle
	H.P.	H.P.
Prime movers :—		
Internal combustion engines :—		
Gas	—	6
Petrol, kerosene, or other light oils	16	5
TOTAL—PRIME MOVERS ...	16	11
Electric motors :—		
Driven by purchased electricity	3,821	1,313

* The only mechanical power recorded for Scotland, and included above, consisted of electric motors driven by purchased electricity of a total capacity of 1,245 horse-power (165 horse-power ordinarily in use and 1,080 horse-power in reserve or idle).

V. Consumption of electricity

Electricity used for all purposes*	England and Wales	Scotland	Great Britain
	B.T.U. (Kw.-hrs.) '000	B.T.U. (Kw.-hrs.) '000	B.T.U. (Kw.-hrs.) '000
Purchased electricity	3,441	65	3,506

* Exclusive of 104,422,000 units (97,953,000 units in England and Wales and 6,469,000 units in Scotland) used for traction purposes.