
 TRAMWAY AND LIGHT RAILWAY COMPANIES.

Contents.

	Page
INTRODUCTORY	379
Summary of results	379
Qualifications affecting comparisons	380
Valuation of output	380
PRODUCTION	381
Output	381
Cost of materials	381
Net output	381
EMPLOYMENT	381
MECHANICAL POWER	382
TABLES	383

Introductory.*

The tables on pages 383 to 386 are based on returns received from Tramway and Light Railway Companies in Great Britain and Northern Ireland and relate to all work of construction and repair carried out to their own properties by their employees during the year 1924. The number of such returns was 74.

Work carried out by private firms to the order of tramway and light railway companies is included in the reports dealing with the various trades concerned and is not covered by these tables.

Particulars relating to similar work done in connexion with Tramway Undertakings operated by Local Authorities are included in the report dealing with the general productive operations of Local Authorities (see pages 393 to 402).

Summary of results.—The following table shows the main results of the Censuses of 1924 and 1907, comparisons between the figures for the two years being subject to the qualifications mentioned in the next paragraph. In view of the exclusion of building and

* See also the Notes on pages vii to xv.

contracting work from the Census of 1912, the particulars obtained from Tramway and Light Railway Companies for that year are not comparable with those given below.

Particulars.	Unit.	1924.	1907.
Value of work done and goods made (Gross output)	£'000	1,639	637
Cost of materials used	"	737	330
Net output	"	902	307
Average number of persons employed	No.	6,226	4,497
Net output per person employed	£	145	68
Mechanical power available:—			
Prime movers	H.P.	117	}
Electric motors driven by purchased electricity	"	3,166	

* Not recorded.

Qualifications affecting comparisons.—In considering the above table and other tables in this report which shew figures for different censal years, it should be borne in mind that:—

(1) A large amount of work of similar kinds was done by Local Authorities and the proportion of the total work of these kinds done by Tramway and Light Railway Companies was smaller in 1924 than in 1907.

(2) The comparability of figures relating to value or cost is affected by the changes which have taken place in the general purchasing power of money.

(3) The Census of 1907 covered Great Britain and the whole of Ireland, but that of 1924 applied only to Great Britain and Northern Ireland. At the Census of 1907 the gross output returned for the whole of Ireland in respect of work done by Tramway and Light Railway Companies was valued at £100,000 and the number of persons employed was 721. Separate figures for Tramways and Light Railways are not available for the Census of Production carried out by the Government of the Irish Free State in respect of the year 1926. As will be seen from Table IIIB on page 385, the average number employed in Northern Ireland in 1924 was 76.

(4) In the Census of 1907 the particulars furnished in regard to mechanical power were inclusive of power used for traction purposes and are consequently omitted.

Valuation of output.—All figures in this report relating to output represent the cost of carrying out the work, or manufacturing the goods, specified. The value shewn consists of a sum calculated to cover the cost of the materials used and the wages and salaries of the persons employed in connexion with the various services, together with the establishment charges properly attributable thereto.

Production.

Detailed information relating to the work done by Tramway and Light Railway Companies in 1924 is given in Table II on page 383.

Output.—The following statement shews the value of the principal classes of work done and goods made by employees of Tramway and Light Railway Companies in the years 1924 and 1907.

Kind of work done and goods made.	1924.	1907.
	Value. £'000	Value. £'000
Work of construction and repair on:—		
Rolling stock:—		
Tramcars and trackless trolley vehicles	521	271
Motor omnibuses and other motor vehicles	294	5
Other rolling stock	17	17
Permanent way and works connected therewith	610	229
Electrical equipment of lines	94	75
Depots, workshops, offices and other buildings:—		
New construction	34	}
Repairs	28	
Machinery and workshop plant	19	7
Other work done and goods made	22	12
TOTAL VALUE	1,639	637

The outstanding change shown in the comparison of the two Censuses is the important amount spent on motor omnibuses in 1924.

Cost of materials.—The cost of materials used by the companies that made their returns on the Tramway and Light Railway Undertakings schedule was returned as £737,000 in 1924; the corresponding figure for 1907 was £330,000.

Net output.—The net output in 1924 of the companies that made their returns on the Tramway and Light Railway Undertakings schedule (whose gross output was valued at £1,639,000) was £902,000, that sum representing the total amount by which the value of the aggregate output exceeded the cost of the materials used.

The net output per head of persons employed in the censal year 1924 was £145 as compared with £68 in 1907.

Employment.

The detailed information relating to employment in 1924 is summarised in Table III on pages 384 and 385. The following table sets out certain particulars for that year together with those relating to the 1907 Census. For the purpose of this comparison, the average numbers of operatives of each sex returned for 1924 have been divided between the two age-groups in the proportions shown by the data relating to the week ended 18th October.

Average number.	Males.		Females.		Males and females.	
	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
1924.						
Operatives	265	5,692	6	27	271	5,719
Administrative, etc.	33	424	6	83	39	507
TOTAL	298	6,116	12	110	310	6,226
1907.						
Wage earners	185	4,220	1	3	186	4,223
Salaried	28	261	—	13	28	274
TOTAL	213	4,481	1	16	214	4,497

The numbers of operatives recorded month by month in 1924 ranged from 338 above the average, in June, to 444 below the average, in December (see Table IIIB, page 385).

Mechanical Power.*

The detailed information relating to mechanical power in 1924 is summarised in Table IV on page 386. The following table sets out the particulars for that year relating to the capacity and kinds of *prime movers* and the capacity of *electric generators* installed.

Power equipment.	1924.
	Total †
	H.P.
PRIME MOVERS :—	
Reciprocating steam engines	58
Gas engines	42
Petrol and light oil engines	17
TOTAL	117
	Kw.
ELECTRIC GENERATORS :—	
Driven by—	
Gas engines	4
TOTAL	4

† The prime movers and electric generators shown were all reported as being ordinarily in use during the year.

The capacity of *electric motors* recorded in 1924 was 3,166 horse-power (2,934 h.p. ordinarily in use and 232 h.p. in reserve or idle); all were reported as driven by purchased electricity.

Corresponding information was not required for 1907. The total number of Board of Trade units of electricity purchased for traction, power and lighting purposes in that year was returned as 49,026,000 (mainly for traction).

* See Qualification (4) on page 380.

TABLES.

I.—Summary of results.

Particulars.	Unit.	England and Wales.	Scotland.	Great Britain.	Northern Ireland.
Value of work done and goods made (Gross output)	£'000	1,505	117	1,622	17
Cost of materials used	„	674	56	730	7
Net output	„	831	61	892	10
Average number of persons employed ..	No.	5,649	494	6,143	83
Net output per person employed ..	£	147	123	145	114
Mechanical power available :—					
Prime movers	H.P.	74	—	74	43
Electric motors driven by purchased electricity	„	3,000	166	3,166	—

II.—Production.

Kind of work done and goods made.	England and Wales.	Scotland.	Great Britain.	Northern Ireland.
	Value.	Value.	Value.	Value.
Work of construction and repair on :—	£'000	£'000	£'000	£'000
Rolling stock—				
Tramcars and trackless trolley vehicles	483†	38	521†	†
Motor omnibuses and other motor vehicles	*	*	294†	†
Other rolling stock	17†	—	17†	†
Permanent way and works connected therewith	540	60	600	10
Electrical equipment of lines ..	88	6	94	—
Depots, workshops, offices and other buildings—				
New construction	34†	—	34†	†
Repairs	26†	2	28†	†
Machinery and workshop plant ..	*	*	19	—
Other work done and goods made	22	—	22	—
TOTAL VALUE OF WORK DONE AND GOODS MADE (GROSS OUTPUT) ..	1,505	117	1,622	17

* In order to avoid the possible disclosure of information relating to individual companies, figures are given only for Great Britain as a whole.

† In order to avoid the possible disclosure of information relating to individual companies in Northern Ireland, the figures for that division of the United Kingdom have been combined with those for England and Wales and for Great Britain.

III.—Employment.

A.—NUMBERS EMPLOYED IN WEEK ENDED 18TH OCTOBER, 1924.

Kind of staff.	Males.		Females.		Males and females.	
	Under 18.	All ages.	Under 18.	All ages.	Under 18.	All ages.
<i>England and Wales :—</i>						
Operatives	233	5,005	7	25	240	5,030
Administrative, etc.* ..	32	385	4	67	36	452
TOTAL	265	5,390	11	92	276	5,482
<i>Scotland :—</i>						
Operatives	23	442	—	4	23	446
Administrative, etc.* ..	1	32	2	16	3	48
TOTAL	24	474	2	20	26	494
<i>Great Britain :—</i>						
Operatives	256	5,447	7	29	263	5,476
Administrative, etc. ..	33	417	6	83	39	500
TOTAL	289	5,864	13	112	302	5,976
<i>Northern Ireland :—</i>						
Operatives	2	79	—	—	2	79
Administrative, etc. ..	—	7	—	—	—	7
TOTAL	2	86	—	—	2	86
<i>United Kingdom :—</i>						
TOTAL	291	5,950	13	112	304	6,062

* Administrative, technical and clerical staff.

B.—OPERATIVES EMPLOYED IN ONE WEEK IN EACH MONTH OF 1924.

England and Wales. (Annual average : Males, 5,174 ; Females, 23 ; Total, 5,197.)

Week ended.	Males.	Females.	Total.	Week ended.	Males.	Females.	Total.
Jan. 12th ..	5,239	23	5,262	July 19th ..	5,415	21	5,436
Feb. 16th ..	5,074	23	5,097	Aug. 16th ..	5,355	21	5,376
Mar. 15th ..	5,133	23	5,156	Sept. 13th ..	5,185	21	5,206
April 12th ..	5,174	23	5,197	Oct. 18th ..	5,005	25	5,030
May 17th ..	5,468	23	5,491	Nov. 15th ..	4,792	24	4,816
June 21st ..	5,488	22	5,510	Dec. 13th ..	4,758	22	4,780

Scotland. (Annual average : Males, 442 ; Females, 4 ; Total, 446.)

Jan. 12th ..	408	4	412	July 19th ..	475	4	479
Feb. 16th ..	414	4	418	Aug. 16th ..	445	4	449
Mar. 15th ..	435	4	439	Sept. 13th ..	435	4	439
April 12th ..	470	4	474	Oct. 18th ..	442	4	446
May 17th ..	480	4	484	Nov. 15th ..	418	4	422
June 21st ..	462	4	466	Dec. 13th ..	419	4	423

Great Britain. (Annual average : Males, 5,616 ; Females, 27 ; Total, 5,643.)

Jan. 12th ..	5,647	27	5,674	July 19th ..	5,890	25	5,915
Feb. 16th ..	5,488	27	5,515	Aug. 16th ..	5,800	25	5,825
Mar. 15th ..	5,568	27	5,595	Sept. 13th ..	5,620	25	5,645
April 12th ..	5,644	27	5,671	Oct. 18th ..	5,447	29	5,476
May 17th ..	5,948	27	5,975	Nov. 15th ..	5,210	28	5,238
June 21st ..	5,950	26	5,976	Dec. 13th ..	5,177	26	5,203

Northern Ireland. (Annual average : Males, 76 ; Females, — ; Total, 76.)

Jan. 12th ..	72	—	72	July 19th ..	78	—	78
Feb. 16th ..	74	—	74	Aug. 16th ..	79	—	79
Mar. 15th ..	73	—	73	Sept. 13th ..	80	—	80
April 12th ..	72	—	72	Oct. 18th ..	79	—	79
May 17th ..	76	—	76	Nov. 15th ..	80	—	80
June 21st ..	81	—	81	Dec. 13th ..	72	—	72

IV.—Mechanical Power.

PARTICULARS OF PRIME MOVERS, ELECTRIC GENERATORS AND ELECTRIC MOTORS.

Power equipment.	Great Britain.*		Northern Ireland.	
	Ordinarily in use.	In reserve or idle.	Ordinarily in use.	In reserve or idle.
	H.P.	H.P.	H.P.	H.P.
PRIME MOVERS :—				
Reciprocating steam engines ..	50	—	8	—
Gas engines	12	—	30	—
Petrol and light oil engines ..	12	—	5	—
TOTAL OF PRIME MOVERS INSTALLED	74	—	43	—
ELECTRIC GENERATORS :—	Kw.	Kw.	Kw.	Kw.
Driven by gas engines	4	—	—	—
TOTAL OF ELECTRIC GENERATORS INSTALLED	4	—	—	—
ELECTRIC MOTORS :—	H.P.	H.P.	H.P.	H.P.
Driven by purchased electricity	2,934	232	—	—

* The only mechanical power recorded for Scotland, and included above, consisted of electric motors driven by purchased electricity of a total capacity of 166 h.p. (146 h.p. ordinarily in use and 20 h.p. in reserve or idle).