Royal Commission on Transport

FIRST REPORT

The Control of Troffic on Roads.

_1929.



ROYAL COMMISSION ON TRANSPORT.

FIRST REPORT.

The Control of Traffic on Roads.

Presented by the Secretary of State for the Home Department to Parliament by Command of His Majesty, July, 1929.

LONDON:

PRINTED AND PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE.

To be purchased directly from H.M. STATIONERY OFFICE at the following addresses:
Adastral House, Kingsway, London, W.C.2; 120, George Street, Edinburgh;
York Street, Manchester; 1, St. Andrew's Crescent, Cardiff;
15, Donegall Square West, Belfast;
or through any Bookseller.

1929.

Price 1s. 0d. net

Note.

The estimated cost of the Commission up to the date of publication of this Report amounts to £3,136, of which £58 represents the estimated cost of the printing and publication of the Report, and £1,253 the estimated cost of the printing and publication of the Minutes of Evidence. Of the latter sum, £1,099 has already been recovered from sales.

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APPENDIX.

TABLE A.

Street Accidents in Great Britain in Years 1909 to 1928.

	Number of Vehicles, etc., to which accident is attributed.											
		Fatal	Accid	lents.			Non-	Fatal Acc	oidents.			
Year.	Mechanically Properties pelled Vehicles (excluding Trams).	Trains and Trackless Trolleys.	Pedal Cycles.	Horse-drawn Vehicles.	Total.	Mechanically Properties pelled Vehicles (excluding Trams).	Trams and Trackless Trolleys,	Pedal Cycles.	Horse drawn Vehioles.	Total.	Total of all Acci- dents.	
1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1920 1921 1922 1923 1924 1925 1926 1927 1928	373 539 727 727 1,154 1,329 1,810 1,651 1,406 1,280 2,010 2,291 2,222 2,435 3,019 3,401 4,155 4,480 5,223	112 105 117 128 168 147 256 344 318 260 184 185 98 111 98 113 124 110	700 160 169 149 143 117 158 166 170 209 241 229 311 413 426	585 597 605 620 584 614 534 428 437 400 343 295 265 237 258 217 189 218	1,070 1,241 1,449 1,664 2,220 2,849 2,678 2,295 2,094 2,480 2,470 4,2678 2,768 2,979 3,631 3,971 4,803 5,195 5,978	8,301 10,940 14,401 17,751 21,660 25,290 28,511 23,439 18,575 14,053 25,609 31,219 36,609 42,058 53,084 64,318 79,377 86,890 95,170 106,753	4,540 4,848 5,368 5,226 6,539 6,909 8,211 8,996 7,840 7,152 6,518 6,288 5,031 5,175 5,124 5,615 6,067 5,587 5,587 5,700 5,907	paying nd 12,714 10,095 7,963 7,459 6,490 7,773 9,331 12,176 13,623 15,716 18,363 20,325 22,018 23,145 24,439	13,250 13,162 12,910 12,764 13,091 12,713 11,640 9,582 7,885 6,896 7,362 6,896 6,127 6,635 6,198 6,288 5,733 4,989 4,733 4,505	26,091 28,950 32,679 35,741 41,290 57,626 58,457 49,980 41,759 34,591 47,262 53,734 59,943 67,491 80,122 94,584 111,502 119,484 128,748 141,604	27,161 30,191 34,128 37,405 43,252 59,846 61,306 52,658 44,054 36,685 49,750 56,438 62,621 70,259 83,101 98,215 115,473 124,287 133,943 147,582	

Note.—Each accident causing death or personal injury is counted as one accident only, irrespective of the number of persons killed or injured thereby. An accident in which more than one vehicle is involved is also counted as one accident only. Cases in which only the driver or rider is killed or injured are included.

TABLE B.

	Nun	nber of	Perso	ons Ki	lled.	Number of Persons Injured.					
Year.	Mechanically Properly of 19 ed (excluding Trains).	Trams and Trackless Trolleys.	Pedal Cycles.	Horse-drawn Vehicles.	Total.	Mechanically Pro- pelled Vehioles (excluding Trams).	Trams and Trackless Trolleys.	Pedal Cycles.	Horse-drawn Vebicles.	Total,	
1926 1927 1928	4,234 4,606 5,378	112 113 111	312 417 429	228 193 220	4,886 5,329 6,138	99,417 112,324 126,975	5,994 6,111 6,456	23,191 24,990 26,483	5,286 5,150 4,924	133,888 148,575 164,838	

TABLE C.

Year.			Approximate number of Motor Vehicles.	Total number of Acciden				
1921		•••	873,700	62,621				
1922	•••	•••	979,000	70,259				
1923	•••		1,141,400	83,101				
1924	•••		1,335,600	98,215				
1925			1,547,000	115,473				
1926		•••	1,729,000	124,287				
1927			1,898,500	133,943				
1928	•••		2,036,000	147,582				

TABLE D.

FATAL MOTOR ACCIDENTS.

June and July, 1928.

Summarised from Returns furnished by H.M. Coroners to the National Safety First Association.

				1928.	1927.	1926.
Number (of Coroners who sent returns	•••	•••	241	223	193
**	,, ,, nil returns	•••	•••	81	68	68
**	Inquests reported	•••		723	617	529
**	Deaths recorded	***		732	625	545
39	Contributory causes recorded	•••	•••	933	774	669

TABLE D .- cont.

I. Analysis of Causes.

(A) Causes presumably under Control of Motor 39·1% $36\cdot6\%$ Driver or Motor Cyclist.

Order of	Cause.	No. of	Per cent. of total causes					
frequency.	Cause.	times recorded.	1928.	1927.	1926.			
1	Excessive speed having regard to all circumstances.	141	15-1	12.9	10.9			
4	Inattentive, confused, or lacking in judgment.	56	6.0	6 · 2	7.0			
5	Failed to exercise care at road junction.	54	5∙8	4.8	2.9			
7	Improperly overtaking, cutting in or out.	37	4.0	2.5	2.7			
. 9	Failed to keep to near side of road.	29	3.1	3.6	2 · 1			
20	Inexperience	13	1.4	1.8	1.6			
25	Cutting corner	9	1.0	0.8	2.1			
25	Failed to sound horn	9	1.0	1.8	0.6			
35	Lost control due to pillion riding	6	0.6	1.2	4.2			
39	Failed to signal	4	0.4	0.1	0.5			
45	Under influence of drink	3	0.3	0.8	0.7			
50	'Physically unfit	2	0.2	0.4	0.3			
50	Leaving vehicle insecure	2	0.2	0.1	0.2			
57	Reversing negligently	0	0.0	0.0	0.5			
57	Forcing way through tramway queue.	0	0.0	0.0	0.5			
	Total	365	39 · 1	36.0	36.6			

(B) Causes due to vehicle—driver not necess- 7.0% 3.9% 4.8% arily responsible.

Order of		No. of	Per cent. of total causes.				
frequency.	Сацье.	times recorded.	1928.	1927.	1926.		
14	Defects in equipment—other than brakes or steering—e.g. burst tyre, etc.	20	2·1	1.3	1.6		
- 21	Insufficient lights on vehicle	12	1.3	0.8	1.2		
23	Defective brakes	10	1.1	0.3	0.7		
31	Dazzling lights	7	0.8	0.8	0.7		
31	Fault of Passenger	7	0.8	0.6	not re-		
37	Defective steering	5	0.5	0.5	0.3		
39	Overloaded vehicle	4	0.4	0.0	not re- corded.		
· 57	Left-hand steering	0	0.0	0.1	0.3		
	Total	65	7.0	3.9	4.8		

TABLE D.—cont.

(C) Causes due to pedestrians, cyclists, and 43.2% 48.1% 48.6% others than the driver.

Order of	G	No. of	Per cen	t. of tota	l causes
frequency.	Cause.	times recorded.	1928.	1927.	1926.
i	Children—				
3	Running into road (e.g., chas- ing toy, etc.)	61	6.5	4.5	
6	Crossing road carelessly or confusedly.	- 45	4.8	4.9	9.4
11	Crossing from behind vehicle	22	2.4	1.5	2.5
22	Playing games in street	11	1.2	1.5	1.8
25	Crossing in front of vehicle	9	1.0	0.8	0.3
39	Stealing rides on vehicles	4	0.4	0.9	0.7
	Total children	152	16.3	14.1	14.7
	Adults—	#0			
	Crossing road carelessly or confusedly.	73	7.8	6.7	8.4
	Stepping off footway without looking.	35	3.8	3.8	5.7
14	Crossing from behind vehicles	20	2.2	2.3	2.5
17	Physically infirm	15	1.6	1.7	1.2
17	Boarding or alighting from moving vehicles.	15	1.6	1.5	1.6
25	Crossing in front of vehicles	9	1.0	1.8	1.3
39	Boarding or alighting from stationary vehicles without looking out for other traffic.	4	0.4	0.8	1.0
39	Intoxicated	4	0.4	0.5	0.6
45	Failing to use footpath	3	0.3	0.8	1.1
	Total adults	178	19-1	19.9	23 · 4
	Total pedestrians Pedal Cyclists—	330	35.4	34.0	38 · 1
13	Swerving in front of vehicle	21	2.3	3.1	not re
17	Careless riding other than as specified.	15	1.6	3.0	8.7
25	Lost control	9	1.0	2.2)	not re
25	Cornering carelessly	9	1.0	1.8	corde
37	Failed to signal	5	0.5	0.5	not re
45	Overtaking on wrong side	3	0.3	0.1	corde
50	Holding on to vehicles	2	0.2	0.8	0.7
55	No rear illumination at night	1	0.1	1.3	0.5
55	Riding too many abreast	1	0.1	0.1	not re
					corde
	Total cyclists Animals—	66	7.1	12.9	9.9
39	Animals (other than dogs) not under control.	4	0.4	0.8	1
45	Dogs not under proper control.	3	0.3	0.4	0.6
	Total animals	7	0.7	1.2	0.6
	Total other road users	403	43.2	48 · 1	48.6

TABLE D.—cont.

		192	8.	1927.	1926,
(D) Causes	due to the road	. 6·2º	% 7	·6%	6.6%
Order of	G	No. of	Per ce	nt. of tot	al causes
frequency.	Cause.	times recorded.	1928.	1927.	1926.
10	Restricted view at corners	25	2.7	3.2	2.5
23	Tramlines—cycle wheels caught, skidding, etc.	10	1.1	2.2	1.2
31	Lack of warning sign	7	0-8	0.1	not re-
31	Defective road surface	7	0.8	1.4	0.3
35	Inadequate lighting of street or obstruction.	6	. 0⋅6	0.3	0.6
50	Level crossing	2	0.2	0.1	1.3
57	Lack of proper footway	0	0.0	0.3	0.7
57	Permanently slippery road surface.	0	0.0	0.0	0.0
	Total	57	6.2	7.6	6.6
(E) Weather	er Conditions	1928 4·2%	_	927. •1%	1926. 5·2%
(E) Weather		4·2% No. of	6 4		3.2%
	er Conditions Cause.	4.2%	6 4	-1%	3.2%
Order of		4·2% No. of times	Per cen	· 1%	3·2%
Order of frequency.	Cause. Temporarily greasy road Rain	No. of times recorded.	Per cen 1928. 2.3 1.7	1927.	3·2% l causes. 1926. 2·4 0·3
Order of frequency.	Cause. Temporarily greasy road	No. of times recorded.	Per cen 1928.	1% at. of tota 1927.	3·2% l causes. 1926. 2·4 0·3 0·5
Order of frequency.	Cause. Temporarily greasy road Rain	No. of times recorded.	Per cen 1928. 2.3 1.7	1927.	3·2% l causes. 1926. 2·4 0·3
Order of frequency.	Cause. Temporarily greasy road Rain Mist or fog	No. of times recorded. 22 16 2 40	Per cen 1928. 2.3 1.7 0.2 4.2	1927. 2.2 1.8 0.1 4.1	3·2% l causes. 1926. 2·4 0·3 0·5 3·2
Order of frequency.	Cause. Temporarily greasy road Rain Mist or fog	No. of times recorded. 22 16 2 40	Per cen 1928. 2.3 1.7 0.2 4.2	1927. 1927. 2.2 1.8 0.1 4.1	3·2% l causes. 1926. 2·4 0·3 0·5 3·2
Order of frequency.	Cause. Temporarily greasy road Rain Mist or fog	No. of times recorded. 22 16 2 40	Per cen 1928. 2.3 1.7 0.2 4.2	1927. 2.2 1.8 0.1 4.1	3·2% l causes. 1926. 2·4 0·3 0·5 3·2
Order of frequency. 11 16 50 (F) Fire	Cause. Temporarily greasy road Rain Mist or fog Total	No. of times recorded. 22 16 2 40 1928 0.3%	Per cen 1928. 2.3 1.7 0.2 4.2	1927. 1927. 2.2 1.8 0.1 4.1	3·2% l causes. 1926. 2·4 0·3 0·5 3·2 1926. 0·2%
Order of frequency. 11 16 50	Cause. Temporarily greasy road Rain Mist or fog Total Cause.	No. of times recorded. 22 16 2 40	Per cen 1928. 2.3 1.7 0.2 4.2	1927. 1927. 2.2 1.8 0.1 4.1	3·2% l causes. 1926. 2·4 0·3 0·5 3·2 1926. 0·2%
Order of frequency. 11 16 50 (F) Fire	Cause. Temporarily greasy road Rain Mist or fog Total Cause.	1928 0·3%	Per cen 1928. 2.3 1.7 0.2 4.2 Per cen	1927. 1927. 2.2 1.8 0.1 4.1 227. 3%	3·2% l causes. 1926. 2·4 0·3 0·5 3·2 1926. 0·2% causes.

TABLE D.—cont.

II.—VEHICLES INVOLVED. (Motor accidents only.)

				No.	P	er cent.	No.	Per	cent.	No.	Per cent.
Private Passenger V	ehicles-	-									
Private Motor Car							287	29	· 1		-
Motor Cycles (Sol	0)	•••	•••	181		18.4					
Motor Cycles (Pill		•••	•••	83		8.4					
Motor Cycles (Cor	nbinati	ons)	•••	47		4.7					
Total, Motor Cyc	eles	•••					311	31	• 5		
Total, Motor Car	s and (Cycles	•••			•				598	60.6
Public Passenger Ve	hicles-	_							•		
Motor Omnibuses		•••	•••		•••	•••	85	8	3 6		
Tramcars and Tra	ackless	Trolley	y8		•••	***	16		l 6		
Motor Coaches	•••		•••		•••	•••	17		l - 8		•
Motor Cabs	••••	•••	•••		•••	•••	10]	l·0		
Total, Public Pa	ssenger	Vehic	les		•••	•••			_	128	13.0
Goods-Carrying Veh	icles—										
Motor Lorries	•••				•••	•••	104	10	9.6		
Heavy Motor Tra	ctors	•••			•••	•••	18		I • 8		
Motor Vans	• • •	•••	• • •		•••	***	34	:	3.5		
_ ~ . ~							_				
Total, Goods-Ca	rrying	Vehicle	29		•••	***				156	15.9
Other Vehicles-											
Pedal Cycles		•••					83	:	8-4		
Horse Drawn Ve	hicles	•••	•••			•••	16		1.6		
Miscellaneous	•••	•••	•••		•••	•••	5		0.5		
TOTAL, Other Ve	hicles		•••				_			104	l 10∙5
,		•••	•••		•••	***					
GRAND T	OTAL	•••	••	•	•••	***	•		•••	986	100.0
		III.—	-Da	YLI	HT	OR DA	RK.				
									1928	3.	1927.
7 1 1/1/								I	er ce	nt.	Per cent.
In daylight	,	•••		•••		•• ••		•••	85 6	5	87.7
During hours of da	rkness	•••	•	•••	•	••	•	•••	14•8	5	12.3
TX	7 Do-		ъ.			_	_				
		CLOUS	P	LACE	:S (R OPER	ι Coτ	INTR	Y.		
In populous places		•••		• • •			•		66 - 3	3	$68 \cdot 5$
In open country	•••	•••		•••	•	•• ••	•	•••	33.	7	$31 \cdot 5$
	7	7.—Мт	тсн	OR	Læ	TLE TE		,			
Much traffic on ro				V		THE LE	CADER	J•	00.4		_
Little traffic on ro		•••		•••	•	**	•	***	20.9		22 - 4
		•••		•••			• •	•••	79 ·	1	77 - 6
	VIS	TRAIGE	rm Ì	RA.	ъ.	BEND, (. T.				
On straight road		LUALUE		LVVA	υ,	DEND, (DR JU	INCT			
At a road junction		•••		•••		•••	••	•••	66.	-	67 - 9
On a bend	ı	•••		•••			••	•••	19.		20 • 1
J	•••	***		•••		•••	••	•••	13-	y	$12 \cdot 0$
	VII.	Sex o	r l	Гото	R	Driver	s Tuu	ישונטי	RD.		
		_	-			•		7.00 7.1	™. No)_	Per cent.
Male	***	•••		•••		•••	•••	•••	802	-	97.8
Female	•••	•••		•••		•••	•••	•••	16		2.2

TABLE D .- cont.

VIII.—SUMMARY.

							Pe	rcenta	ge.	P	ercenta	ge.
1.		ers of than	the		Child	iren ists	1928. 19·1 16·3 7·1 0·7	1927. 19·9 14·1 12·9 1·2	1926. 23·4 14·7 9·9 0·6	1928.	1927.	1926,
	3.5 /	. .				•				$43 \cdot 2$	48.1	48.6
	Motor			•••		•••	•••	•••	•••	39 · 1	36.0	36.6
J.	Detect	s in the	e mot	or vehic	le	•••	***	•••	•••	7.0	$s \cdot g$	4.8
	Road			•••	~	•••	•••		•••	$6 \cdot 2$	7.6	6.6
	Weath	er Con	dition	s	•••		•••		•••	$4 \cdot 2$	4.1	3.2
6,	Fire	***	•••	***	•••	•••	•••	***	•••	0.3	0.3	0.2
									•		100	

IX.—Principal Faults (1928 as compared with 1927 and 1926).

•	The Paris (1020 to compared)	*1UH 102	a and re	720) .
		F	e.	
		1928.	1927.	1926.
1.	Motor driver—travelling at excessive speed having	15·1	$12 \cdot 9$	10.9
	regard to all circumstances.			
. 2.	Adult—crossing road carelessly	7.7	6.7	8.4
3.	Motor driver—Inattentive, confused, or lacking in	6.0	6.2	7.0
	judgment, other than as specified.			
4.	Children—crossing road carelessly	4.8	1.9	_
	Children—running into road (e.g., chasing toy)	6.5	4.5	$g \cdot k$
	Motor driver—lack of caution at road junctions	5.8	4.3	2.9
	Adults—stepping off footway without looking	3.8	3.8	5.7
	Motor driver—failing to keep to near side	3.1	x · 6	2 1
	Road—restricted view at corners	2 · 7	3.2	2.5
10.	Pedal Cyclist—swerving in front of vehicle	2 3	3.1	. •
	Pedal Cyclist—miscellaneous careless riding	1.6	3.0	$8 \cdot 7$
	Motor Driver—improperly overtaking, cutting in, etc.	4.0	2.5	2.7
			~ 0	
	Total	63 • 4	58.7	60.3

TABLE E.

Year.	Children killed in London.	Adults killed in London.	Mechanical Vehicles licensed in Great Britain.	Street Accidents in Great Britain					
1921	_			_					
922	26	14.5	12	12					
923	13.5	18 5	31	33					
924	25	59	53	57					
925	18.5	61	77	84					
926	26	$99 \cdot 5$	* 98	98.5					
927	19.5	116	118	114					
928	40	153	134	135					

TABLE F. RETURN OF THE ESTIMATED RATE OF SPEED OF VEHICLES (INCLUDING BICYCLES) CONCERNED IN FATAL ACCIDENTS IN STREETS IN THE METROPOLITAN POLICE DISTRICT DURING THE YEARS 1920-1926.

Z714—877			Rates of Speed.													
500 531 P. Year.		1 to 5 miles 5 to 10 miles per hour. per hour.		10 to 15 miles per hour.		15 to 20 miles per hour.		Over 20 miles per hour.		Unknown.		Stationary.		Total.		
		Number of Fatalities.	Percentage of Total.	Number of Fatalities.	Percentage of Total.	Number of Fatalities,	Percentage of Total.	Number of Fatalities,	Percentage of Total.	Number of Fatalities,	Percentage of Total.	Number of Fatalities.	Percentage of Total.	Number of Fatalities.	Percentage of Total.	
1920 1921 1922 1923 1924 1925 1926	•••	248 204 219 185 227 206 208	38·87 35·73 32·44 27·69 26·9 24·53 20·74	250 231 285 282 339 364 366	39·19 40·45 42·22 42·22 40·17 43·33 36·49	79 79 94 119 150 132 221	12·38 13·83 13·93 17·81 17·77 15·72 22·03	21 27 28 39 39 50 98	3·29 4·73 4·15 5·84 4·62 5·96 9·77	9 3 11 13 17 25 45	1·41 0·53 1·63 1·95 2·01 2·98 4·49	28 22 31 26 65 57 55	4·39 3·85 4·59 3·89 7·7 6·76 5·48	3 5 7 4 7 6	0.47 0.88 1.04 0.60 0.83 0.72 1.00	638 571 675 668 844 840 1003