

Public Works (1895) Department.

RAILWAY BRANCH.

G.O., No. 214-15R

DATED 28th March

[Despatch Abstract.]

Madras Railway. — Copies of the analysis of working of the — for the half-year ended the 31-12-74, ordered to be forwarded to the Director General of Railways & to the Secretary of State.

Forwarding Proceedings of Govt embodying the analysis of working the Madras Railway for the 2nd half of 1894.

[illegible]

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

GOVERNMENT MADRAS.

PUBLIC WORKS DEPARTMENT.

F

Read the following paper :—

Read the following paper :—
From the Agent and Manager, Madras Dated 26th March 1895, No. 4693/295.

From the Agent and Manager, Madras Road 20th March 1895.

ABSTRACT.—Submitting thirty copies of plan of working for the half-year ended the 31st December 1894.

ORDER—dated 26th March 1895, No. 21?ublic Works.

ORDER—dated 28th March 1895, No. 21 Public Works.
Ordered to be forwarded to the Director of Railways and to the Secretary of State.

[Here enter No. 215 R1 28th March 1895.]

(True Lt.)

(True Et.)
(Signed) D. G. SHELLEY, Captain, R.E.,
Under Secy. to Govt., P.W.D.,
Railway Branch.

ENDORSEMENT—dated 28th March 1895, N15 B., Public Works.

Forwad

(By Or.)

Under Secy. to Govt., P.W.D.,
Railway Branch.

Exd. C. A. Munisawmy.
Spare Copies

G.O

RAILWAY.

Govt. of {1895} Madras.
PUBLIC WORKS.

Dated March, 28th.

Recd.

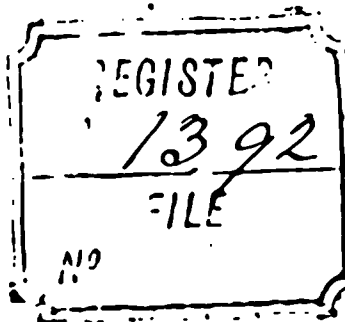
Encl.

G.O., 28th March 1895, Nos. 214,
215 R.

MARCH.

Madras Railway

Forwarding Proceedings of Government
embodying the analysis of working of the
— for the half-year ended the 31st Decem-
ber 1894.



(C. 3.)

500-20-1-53.

Madras Railway Company,
AGENT & MANAGER'S OFFICE,
Madras.

From

THE AGENT AND MANAGER,
M. R. Co.

To

The Consulting Engineer
for Railways,
Madras.

Dated 26th } March 1895.
Received 27/3/95 }
H. S.

No. 4693

295

The undersigned has the honor to forward
herewith 30 copies of the Analysis
of Working of the Madras -
Railway for the half year ended
the 31st December 1894.

Wm. S. M. D.
Agent and Manager.

Madras Railway Company.

ANALYSIS OF WORKING

FOR THE

Half-Year ending 31st December, 1894.

WEST AND COMPANY, PRINTERS, MADRAS.

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MADRAS RAILWAY COMPANY.

Analysis of Working for the Half-year ended 31st December, 1894.

Progressive Number.	HEADINGS.		REMARKS.
No. I.			
DESCRIPTION OF RAILWAY WORKED.			
1	Gauge of Railway	Miles	Ft. In. 5 6
2	Mean mileage worked	No.	* 849-225
3	Number of Stations		* 148
4	Total length of the following gradients:—	Miles	Nil.
	(a) $\frac{1}{8}$ and less	"	* 22-64
	(b) $\frac{1}{4}$ to $\frac{1}{8}$	"	* 50-13
	(c) $\frac{1}{2}$ to $\frac{1}{4}$	"	* 197-46
	(d) $\frac{3}{4}$ to $\frac{1}{2}$	"	* 124-10
	(e) $\frac{1}{2}$ to $\frac{3}{4}$	"	
5	Steepest gradient worked—	Miles	0-80
	(a) Length		1 in 60
	(b) Inclination		
No. II.			
FINANCIAL RESULTS.			
6	Percentage of net earnings (including Steam-boat traffic) on Capital outlay	Per cent.	2-04
7	Percentage of net earnings on paid up capital	"	2-04
No. III.			
OUTLAY, EARNINGS AND EXPENSES.			
<i>(Exclusive of Steam-boat Service.)</i>			
8	Capital outlay per mile open	Rs.	1,40,298
9	Total earnings per mile open per week	"	235-89
10	Total working expenses per mile per week	"	123-35
11	Total earnings per train-mile	"	4-171
12	Total working expenses per train-mile	"	2-181
13	Net earnings per train-mile	"	1-990
14	Cost per 1,000 gross ton-miles moved (freight and dead weight)	"	7-63
15	Percentage of total working expenses upon total earnings	Per cent.	52-29
16	Percentage of total working expenses upon total earnings, excluding from both sides of the account the charges for carriage of revenue stores... ..	"	51-75
<i>(Inclusive of Steam-boat Service.)</i>			
17	Percentage of total working expenses on total earnings (for details, see Table No. VII)	"	52-29
No. IV.			
DIVISION OF EXPENDITURE BETWEEN COACHING AND GOODS TRAFFIC.			
18	Total Working Expenses for both coaching and goods traffic, excluding Steam-boat expenses, and after deducting telegraph and sundry receipts and leaving only the balance of payments to other lines for mileage, &c.	Rs.	26,19,581
	Proportions, dividing expenditure in ratio of gross ton-mileage (freight and dead load).		
19	Coaching	"	9,87,064
20	Goods	"	16,32,517

* Include Kolar Gold Fields Railway.

ANALYSIS OF WORKING

For the Half-year ended 31st December, 1894.

Progressive Number.	HEADINGS.	REMARKS.
No. V.		
COACHING TRAFFIC.		
GROSS RECEIPTS AND TRAIN-MILEAGE—		
21	Receipts from coaching traffic <i>Rs.</i>	20,00,202
22	Coaching train-miles run <i>No.</i>	650,212
23	Average coaching receipts per train-mile <i>Rs.</i>	3-23
UNITS AND UNIT MILEAGE—		
Number of units carried one mile—		
24	1st Class <i>Unit miles</i>	1,647,511
25	2nd " "	3,858,174
26	3rd or Intermediate class "	
27	4th or Lowest " "	
28	Total passenger unit mileage "	188,520,714
29	Other coaching traffic <i>Ton-miles</i>	194,056,399
		1,928,226
Average sum received for carrying a unit one mile—		
30	1st Class <i>Pies.</i>	10-42
31	2nd " "	5-19
32	3rd or Intermediate class "	
33	4th or Lowest " "	1-64
34	Average for all classes "	1-73
35	Other coaching traffic per ton-mile "	31-32
Average number of units in a train—		
36	1st Class <i>No.</i>	2-53
37	2nd " "	5-98
38	3rd or Intermediate class "	
39	4th or Lowest " "	
40	Total passenger units "	289-94
41	Other coaching traffic <i>Tons</i>	293-45
		2-81
VEHICLES AND VEHICLE MILEAGE—		
Number of coaching vehicles hauled one mile—		
42	1st Class <i>Vehicle miles</i>	910,982
43	2nd " "	953,401
44	3rd or Intermediate class "	
45	4th or Lowest " "	
46	Other vehicles " "	6,357,937
47	Brake Vans "	738,781
48	Total "	8,961,101
Average number of vehicles in a coaching train—		
49	1st Class <i>No.</i>	1-40
50	2nd " "	1-47
51	3rd or Intermediate class "	
52	4th or Lowest " "	
53	Other vehicles " "	9-78
54	Brake Vans... .. "	1-13
55	Total "	
		13-78
Average earnings per coaching vehicle per mile—		
56	1st Class <i>Pies.</i>	18-85
57	2nd " "	21-17
58	3rd or Intermediate class "	
59	4th or Lowest " "	
60	Other vehicles " "	48-51
		77-52
Carrying capacity hauled one mile (excluding brakes)—		
61	1st Class <i>Seats</i>	9,439,010
62	2nd " "	18,832,660
63	3rd or Intermediate class "	
64	4th or Lowest " "	
65	Other vehicles " <i>Tons.</i>	324,318,366
		2,802,428
Percentage of freight upon capacity hauled—		
66	1st Class <i>Per cent.</i>	17-45
67	2nd " "	20-65
68	3rd or Intermediate class "	
69	4th or Lowest " "	
70	Other vehicles " "	58-13
		65-24

ANALYSIS OF WORKING

For the Half-year ended 31st December, 1894.

Progressive Number.	HEADINGS.	REMARKS.
WEIGHT OF TRAIN AND TON-MILEAGE—		
Gross ton-mileage of all coaching trains—		
71	Freight <i>Ton-miles.</i>	13,615,274
72	Dead weight "	115,909,377
73	Total "	129,524,651
Average weight of a coaching train—		
74	Freight <i>Tons.</i>	20-94
75	Dead weight "	178-26
76	Total "	199-20
COST OF WORKING AND PROFITS—		
77	Average cost of hauling a coaching train one mile ... <i>Rs.</i>	1-52
78	Average cost of hauling a coaching vehicle with its load one mile ... <i>Pies.</i>	21-15
Average cost of hauling a coaching unit one mile—		
79	Per passenger unit <i>Pies.</i>	89
80	Other traffic per ton "	9-12
81	Average profit on working a coaching train one mile... <i>Rs.</i>	1-71
Average profit on working a coaching vehicle one mile—		
82	1st Class <i>Pies.</i>	MINUS 2-30
83	2nd " "	02
84	3rd or Intermediate class "	
85	4th or Lowest " "	27-36
86	Other vehicles " "	56-37
Average profit on working a coaching unit one mile—		
87	Per passenger unit <i>Pies.</i>	89
88	Other traffic per ton "	22-20
No. VI.		
GOODS TRAFFIC.		
GROSS RECEIPTS AND TRAIN-MILEAGE—		
89	Receipts from goods traffic <i>Rs.</i>	20,75,904
90	Goods train-miles run <i>No.</i>	583,876
91	Average goods receipts per train-mile <i>Rs.</i>	5-10
UNITS AND UNIT MILEAGE—		
92	Tons of goods carried one mile <i>Ton-miles.</i>	67,058,462
93	Average sum received for carrying a ton one mile ... <i>Pies.</i>	8-52
94	Average number of tons in a train <i>Tons.</i>	114-85

ANALYSIS OF WORKING
For the Half-year ended 31st December, 1894.

Progressive Number.	HEADINGS.	REMARKS.
VEHICLES AND VEHICLE MILEAGE—		
Number of goods vehicles hauled one mile—		
95	Loaded Vehicle miles	10,873,000
96	Empty	2,451,585
97	Brake Vans	2,437,897
98	Total	15,812,482
Average number of vehicles on a goods train—		
99	Freight vehicles No.	22.82
100	Brake Vans	4.26
101	Total	27.08
102	Average earnings per goods vehicle per mile (excluding brakes) Pies.	42.88
103	Carrying capacity hauled one mile (excluding brakes) Tons.	146,611,676
104	Percentage of freight upon capacity hauled. Per cent.	45.74
105	Average load of a goods vehicle (including both loaded and empty) Tons.	5.03
106	Average load of a loaded goods vehicle	6.17
WEIGHT OF TRAIN AND TON-MILEAGE—		
Gross ton-mileage of all goods trains—		
107	Freight Tons.	67,058,462
108	Dead weight	147,163,907
109	Total	214,222,369
Average weight of a goods train—		
110	Freight Tons.	114.85
111	Dead weight	252.05
112	Total	366.90
COST OF WORKING AND PROFIT—		
113	Average cost of hauling a goods train one mile Rs.	2.40
114	Average cost of hauling a goods vehicle with its load one mile Pies.	23.52
115	Average cost of hauling a goods unit (viz., one ton) one mile	4.67
115A	Do. do. do. do. including interest on capital expended on open line, &c.	10.05
116	Average profit on working a goods train one mile Rs.	2.30
117	Average profit on working a goods vehicle with its load one mile Pies.	19.36
118	Average profit on working a goods unit (viz., one ton) one mile	3.85

ANALYSIS OF WORKING
For the Half-year ended 31st December, 1894.

Progressive Number.	HEADINGS.	REMARKS.
No. VII.		
DETAILED PERCENTAGES OF EARNINGS AND EXPENDITURE.		
Percentage to Total Earnings—		
119	Coaching Traffic Per cent.	40.78
120	Goods Traffic	57.82
121	Sundries, including telegraph	1.40
122	Steam-boat Earnings	...
Total Earnings		100.00
Percentage of Working Expenses upon Total Earnings—		
123	Maintenance Per cent.	11.45
124	Locomotive Expenses	18.81
125	Carriage and Wagon Expenses	6.63
126	Traffic Expenses	8.22
127	General Charges	5.43
128	Miscellaneous Charges	1.75
129	Steam-boat Expenses	...
Total Working Expenses		52.29
130		

ANALYSIS OF WORKING

For the Half-year ended 31st December, 1894.

No. VIII.—WORKING EXPENSES.

TABLE A.

Maintenance of Way, Works and Stations.

REFERENCE TO REVENUE ACCOUNT.		Progressive num- ber in analysis.	DETAILS.	Per mile of line maintained.	Per mile of track, including sidings.	Per total train-mile.	Per 1,000 gross ton- miles.	
Table and main head.	Sub- head.			† (819.22)	† (1,029.84)	† (1,251,910)	* (346,943,507)	
IF DONE DEPARTMENTALLY.	IX (A)	...	General Superintendence—	Rs.	Rs.	As.	Rs.	
	1 {	1 & 2	Engineers' salaries and allowances ...	69.70	57.49	.76	.17	
		3 to 5	Subordinate Superintendents' salaries and allowances, including overtime ...	46.16	38.06	.50	.11	
		6	Office expenses ...	40.00	32.98	.43	.10	
		131	Total ..	155.86	128.52	1.69	.38	
	2 {	1	Maintenance and Renewal of Permanent-way—					
		2	Wages ...	171.23	141.24	1.86	.42	
			Materials ..	91.04	75.08	.99	.22	
		132	Total...	262.32	216.32	2.85	.64	
	3 {	1	Repairs of Bridges, &c.—					
		2	Wages and Materials—					
			Bridges and tunnels ...	10.86	8.95	.12	.02	
		133	Miscellaneous ..	47.74	39.37	.52	.12	
			Total...	58.60	48.32	.64	.14	
	3(A)	...	134	Conservancy of Rivers ...	...	...	...	...
	4 {	1	Repairs of Stations and Buildings—Wages and Materials—					
		2	Repairs of all, except staff quarters ...	86.73	71.52	.94	.21	
			Repairs of staff quarters ...	17.93	14.73	.19	.05	
		135	Total..	104.66	86.25	1.13	.26	
	5 {	1	Maintenance by Contract—					
		2	Amount paid to contractors ...	...	...	...	...	
			Materials supplied by the Railway ...	...	...	...	...	
			Total...	...	...	...	...	
	6	..	136	New Minor Works ...	14.82	12.22	.16	.04
	7 {	1	Unclassified Expenditure—					
		2	Plantations ...	1.57	1.29	.02	...	
		3	Tools and Plant ...	2.42	1.99	.03	.01	
		4	Loss by exchange ...	74.74	61.64	.81	.18	
		5	Loss on stores, &c. ...	...	...	...	...	
			Freight on stores ...	27.89	23.00	.30	.07	
			Total...	106.62	87.92	1.16	.26	
			Total, Heads 5, 6 and 7	121.44	100.14	1.32	.30	
			Less Credits ...	...	...	...	...	
			136 Net Total, other charges ...	121.44	100.14	1.32	.30	
			137 Total Maintenance...	702.88	579.60	7.63	1.72	

• Madras Railway ... 343,747,051
Kolar Gold Fields Railway ... 3,198,497

† Include Kolar Gold Fields Railway.

ANALYSIS OF WORKING

For the Half-year ended 31st December, 1894.

No. VIII.—WORKING EXPENSES.

TABLE B.

Locomotive Expenses.

REFERENCE TO REVENUE ACCOUNT.		Progressive num- ber in analysis.	DETAILS.	Per Total	Per	Per 1,000
Table and main-head.	Sub- head.			train-mile.	engine mile.	gross ton- miles.
				†	†	†
				(1,251,910)	(1,476,121)	(346,943,507)
				As.	As.	Rs.
IX (B)	1	1 & 2 3 to 5 6	General Superintendence—			
			Salaries of superintendents and assistants, includ- ing allowances	·20	·16	·05
			Do. of subordinate do. including do.	·36	·31	·08
			Office expenses	·23	·20	·05
			Total... ..	·79	·67	·18
	2	1 & 2 3 4	Running Expenses—			
			Wages of drivers and firemen, including overtime... ..	1·97	1·67	·44
			Fuelling, cleaning and looking after engines	·31	·27	·07
			Contingent expenses	...	...	...
			Total... ..	2·28	1·94	·51
	3	1 to 4	Fuel—(In terms of Kuchiboreo Coal).	lbs.	lbs.	lbs.
			Average quantity consumed	45·77	38·82	165·16
			Average price per ton Rs. 14·78	As.	As.	Rs.
			Do. cost	4·83	4·10	1·09
			Total... ..	...	...	...
4	...	Water—(including wages and stores.)	·16	·13	·03	
		Oil, Tallow and other Stores	·23	·19	·05	
		Maintenance and Renewals of Engines—				
		Wages, including overtime	1·81	1·53	·41	
		Materials	1·41	1·20	·32	
6	1 & 2 3	Total... ..	3·22	2·73	·73	
		Maintenance and Renewals of Machinery—				
		Wages, including overtime	·06	·05	·02	
		Materials	·01	·01	...	
		Total... ..	·07	·06	·02	
7	...	New Minor Works—				
		Payments to other Lines—				
		Unclassified Expenditure—				
		Loss by exchange	·57	·49	·13	
		Loss on stores, &c.	·39	·33	·09	
9	1 2 3	Freight on stores	...	...	...	
		Total... ..	·96	·82	·22	
		Total, Heads 7, 8 and 9	·96	·82	·22	
		Less Credits	...	...	...	
		144 Net Total, other charges	·96	·82	·22	
145	...	Total Locomotive Expenses	12·54	10·64	2·83	

† Include Kolar Gold Fields Railway.

ANALYSIS OF WORKING
For the Half-year ended 31st December, 1894.
No. VIII—WORKING EXPENSES.

TABLE C.
Carriage and Wagon Expenses.

REFERENCE TO REVENUE ACCOUNT.		Progressive num- ber in analysis.	DETAILS.	Per total train-mile. † (1,251,910)	Per 1,000 vehicle miles run by horse vehicles. * (24,276,410)
Table and main-head.	Sub- head.				
IX (C) 1	1 & 2 3 to 5 6	146	<i>General Superintendence—</i>	As.	Rs.
			Salaries of superintendents, including allowances ...	·08	·27
			Do. of subordinate do. including do. ...	·16	·51
	147	145	Office expenses ...	·10	·32
			Total ...	·34	1·10
	2	147	<i>Repairs and Renewals of Vehicles—</i>		
			Coaching vehicles ... { Wages, including overtime ...	·42	3·58
			Materials ...	·34	2·95
	148	145	Total ...	·76	(a) 6·53
			Goods vehicles ... { Wages, including overtime ...	·81	4·18
			Materials ...	1·43	7·34
2a	1 & 2 3	148a	<i>Repairs and Renewals of Machinery—</i>		
			Wages including overtime ...	·04	·12
			Materials ...	·01	·04
	3	149	Total ...	·05	·16
			<i>Cleaning and oiling—</i>		
			Labour, including wages of oilers, &c. ...	·24	·78
	4	149	Stores ...	·14	·45
			Total ...	·38	1·23
	5	150	<i>New Minor Works ...</i>		
			<i>Unclassified Expenditure—</i>		
			Loss by exchange ...	·63	2·02
3	1 2 3	151	Loss on stores, &c. ...		
			Freight on stores ...	·02	·07
			Total ...	·65	2·09
	150	151	<i>Total, Heads 4 and 5 ...</i>	·65	2·09
			<i>Less Credits ...</i>		
			<i>Net Total, other charges ...</i>	·65	2·09
	151	151	<i>Total Carriage and Wagon Expenses ...</i>	4·42	14·23

(a.) Per 1,000 Coaching Vehicle Miles.
(b.) Per 1,000 Goods Vehicle Miles.
* Madras Railway ... 24,061,689
Kolar Gold Fields Railway ... 214,721

† Includes Kolar Gold Fields Railway.

ANALYSIS OF WORKING
For the Half-year ended 31st December, 1894.
No. VIII—WORKING EXPENSES.

TABLE D.
Traffic Expenses.

REFERENCE TO REVENUE ACCOUNT.		Progressive num- ber in analysis.	DETAILS.	Per total train- mile. † (1,251,910)	Per cent. of traffic earnings. Abstracts II and I. † (51,34,211)
Table and main-head.	Sub- head.				
IX (D) 1	(a) 1 & 3 2 & 4	152	<i>General Superintendence—</i>	As.	Per cent.
			Traffic Manager, Assistants, &c., including travelling allowances ...	·59	·90
			Office establishment and contingencies ...	·29	·45
	(b)	153	Total ...	·88	1·35
			Station Staff ...	2·43	3·71
	(c)	154	Train Staff ...	·64	·97
			Fuel, Lighting, Water and General Stores ...	·62	·94
	2	155	Clothing ...	·07	·11
			Printing, Stationery and Tickets ...	·48	·73
	3	156	Charges for Delivery and Collection of Goods, &c. ...	·01	·02
2	1 to 3	157	Miscellaneous Expenses ...	·03	·04
			<i>Payments to other Lines—</i>		
			Expenses at joint stations ...	·01	·02
	4	160	<i>Unclassified Expenditure—</i>		
			Loss by exchange ...	·29	·44
			Loss on stores, &c. ...		
			Freight on stores ...	·02	·03
	5	161	Total, Head 8 ...	·31	·47
			<i>Less Credits ...</i>		
	6	162	<i>Net Total, other charges ...</i>	·31	·47
			<i>Total Traffic Expenses ...</i>	5·48	8·36

† Includes Kolar Gold Fields Railway.

ANALYSIS OF WORKING
For the Half-year ended 31st December, 1894.
No. VIII.—WORKING EXPENSES.

TABLE E.
General Charges.

REFERENCE TO REVENUE ACCOUNT.		Progressive num- ber in analysis.	DETAILS.	Per total train- mile. † (1,251,910)	Per cent. on total earnings. † (52,06,505)
Table and main-head.	Sub- head.				
IX (E) 1	1 to 4	163	Home Expenditure	As. 45	Per cent. 68
			<i>Indian Management—</i>		
	1	164	Agent's Office, including travelling allowances and contingencies	34	51
	2		Auditor's Office ditto ditto	90	136
	3		Account's Office ditto ditto		
	4		Cash Office ditto ditto		
2		165	Total 2 to 4 ...	90	136
	5	166	Store Department, ditto ditto	15	22
	6	167	Medical Department, ditto ditto	19	28
	7		Rents		
3	8 to 10		Miscellaneous expenses, including printing, stationery, medicine and contributions to Hospitals	10	16
		169	Total 7 to 10 ...	10	16
3	1 to 3	169	Police	23	34
4	...	170	Advertising	04	06
			<i>Electric Telegraph—</i>		
	1 to 4		Salaries, &c.	62	93
	5		Maintenance (wages and stores)	23	35
5	6		Government Telegraph Department for rent, maintenance and inspection	01	01
		171	Total ...	86	129
6	...		Clearing accounts with other Lines		
			<i>Unclassified Expenditure—</i>		
	1		Loss on stores, &c.		
	2		Expenses connected with Fire engines	03	04
	3		Loss by exchange	35	53
7	4		Freight on stores	01	01
			Total ...	39	58
			Total, Heads 6 and 7	39	58
			Less Credits	03	04
		172	Net Total, other charges	36	54
		173	Total General Charges	362	544

† Include Kolar Gold Fields Railway.

ANALYSIS OF WORKING
For the Half-year ended 31st December, 1894.
No. VIII.—WORKING EXPENSES.

TABLE F.
Steam Boat Service.

NIL.

TABLE G.
Special and Miscellaneous Expenditure.

REFERENCE TO REVENUE ACCOUNT.		Progressive num- ber in analysis.	DETAILS.	Per cent. on total earnings. † (52,06,505)
Table and main-head.	Sub- head.			
IX (G) 1	...	174	Loss Charges	Per cent. 06
			<i>Compensation—</i>	
	1		For goods lost or damaged	05
	2		" personal injury	
	3		" other claims	
			Total ...	05
		175		
3	...	176	Rates and Taxes	29
			<i>Payments to other Lines—</i>	
	1		Hire of locomotives	11
	2		" of vehicles	08
	3		Mileage of foreign stock	11
	4		Rent of stations, &c., jointly occupied	47
			Total ...	77
		177		
6	...		<i>Contributions to—</i>	
			Railway Provident Institution	41
			Miscellaneous	17
5 & 7	...		Total, Heads 5 to 7	58
			Less Credits	
		173	Net Total, other charges	58
		179	Total Special and Miscellaneous Expenses	175

† Include Kolar Gold Fields Railway.

MADRAS RAILWAY,
CHIEF AUDITOR'S OFFICE,
15th March, 1895.

T. WAKE,
Acting Chief Auditor.

LOUIS S. MOSS,
Agent and Manager.

APPENDICES.

APPENDICES TO ANALYSIS OF WORKING

For the Half-year ended 31st December, 1894.

APPENDIX I.

Working of Locomotives.

REFERENCE TO REVENUE ACCOUNT.			Passenger.	Goods.	Tank.	Total.
Table and main-head.	Sub- head.					
		Locomotives { 1.—Wheels coupled ... 2.—Weight on driving axle ... 3.—Weight of engine in steam ... 4.—Weight of tender loaded ...	Single driving wheels. Tons. 13-25 32-30 25-15	4 and 6 wheels coupled. Tons. 12-16 32-39 26-09	Single driving wheels 4 wheels coupled. Tons. 14-00 38-45 ...	
XII	5	1.—Number of locomotives erected and made over to Locomotive Department ...	...	147	16	163
	11	2.—Average number of locomotives constantly under repairs and renewals ...	...	37	3	40
		3.—Number of locomotives laid by as spare ...	...	...	...	...
		4.—Ditto lent or hired out to other lines ...	...	...	...	...
		5.—Average number of locomotives 1—(3+4)...	...	147	16	163
		6.—Total mileage of locomotives (5) ...	...	1,351,335	124,786	1,476,121
		7.—Average miles run by a locomotive of each class 6+5 ...	...	9,193	7,799	9,056
		Per diem...	...	49-96	42-39	49-22
		8.—Weight of Coal, &c., used per engine-mile ...	lbs.	lbs.	lbs.	lbs.
		9.—Weight of wood used per engine-mile ...	...	39-67	29-62	38-82
		To be separated, if possible, among the classes of locomotives.				
			Passenger trains.	Goods trains.	Mixed trains.	
		10.—Average gross weight of trains hauled. Tons.	132-45	324-40	271-34	221-50
		11.—Average speed between stations... Miles per hour.	22-93	14-76	19-57	...
		12.—Average through speed... Miles per hour.	19-65	12-01	12-94	...
		13.—Average consumption of fuel per engine mile, lbs.	...	...	...	38-82

NOTE—The fuel consumed by the different classes of locomotives is expressed in terms of Kurhurbaree Coal the co-efficient for conversion being Kurhurbaree Coal=1.00; Patent Fuel=0.80; Singareni Coal=1.20; Borakur Coal=1.15; Wood=2.00.

APPENDICES TO
For the Half-year
APPEN
Working of

DESCRIPTION OF VEHICLES.	Total number on the list at end of the half-year.	AVERAGE WEIGHT IN TONS.		AVERAGE CARRYING CAPACITY.		Average number laid by as spare.	Average number lent or hired out.	Average number working.
		Of each description of vehicles.	Of each group.	Of each description of vehicles.	Of each group.			
Coaching Stock.								
Saloon State ... 6 wheeled.	2	10-72	...	4-00	...	...	...	2
Do Ordinary (1st Class Night Carriages)	26	9-55	...	8-00	...	...	...	26
Reserved Carriages ... 6 wheeled.	2	11-30	10-00	3-00	3-00	...	...	2
Do do ... 4 do.	7	9-63		3-00		...	7	
Composites 1st and 2nd Class Carriages								
Ordinary Sleeping ...	37	10-03	10-04	14-00	15-43	...	...	37
Do do do Day ...	5	10-10		26-00		...	5	
Second Class Carriages Ordinary ...	70	10-25	...	22-50	...	1	...	69
Third do do without Brakes								
Ordinary ...	342	8-50	8-52	51-72	31-01	1	...	341
Do do do Ambulance ...	28	8-50		55-00		...	28	
Do do and Postal Vans Ordinary	7	10-23		30-00		...	7	
				3-50		...		
Do do Carriages with Brakes								
Ordinary ...	6	7-15		42-50				6
		8-80						
Postal Vans ...	9	10-55	...	3-25	...	...	...	9
Carriage Trucks ...	21	5-15	...	6-00	...	...	...	21
Horse Boxes ...	46	8-35	...	3-00	...	1	...	45
Luggage Vans (Baggage Vans) ...	24	6-35	...	6-00	...	...	...	24
Total...	652	8-70	8-70	Nil.	Nil.	3	...	629
Goods Stock.								
Covered Goods Wagons Ordinary, Iron...	400	7-55	7-22	10-50	10-51	...	...	400
Do do do Wooden...	765	7-05		10-75		...	765	
High Sided Wagon Ordinary, Iron								
16 Tons. 6 wheeled.	50	8-00	6-52	13-50	12-02	...	...	50
Do do Wooden 10 Tons. 4 do	802	6-15		11-75		...	802	
Do do 8 Tons. 4 do	85	5-32		10-00		...	85	
(In term of 10 ton vehicles)...	213	4-95	...	12-00	6-42	31	...	182
Low Sided Wagon Ordinary Wooden...				6-00				
Coal or Coke Wagons ...	60	5-80	...	7-00	...	20	...	110
Fuel Trucks ...	70							
Cattle Wagons ...	50	6-40	...	6-33	...	...	...	50
Platform do ... 8 wheeled.	1	10-27	7-22	20-00	14-07	...	...	1
Do do ... 4 do.	2	5-70		12-00		...	2	
Powder Vans ...	4	8-50	...	7-50	...	...	...	4
Tool or Accident Vans ...	10	7-57	...	6-50	...	...	...	10
Timber Trucks Wooden Double Bolster	50	5-20	...	12-00	10-67	...	...	50
Do do do Single do ...	100			10-00		...	100	
Rail do do ... 6 wheeled.	50	7-45	...	18-00	...	...	...	50
Travelling Oil Tanks ... 6 do	6	9-43	...	12-00	...	...	...	6
Do Water Tanks ...	4	5-40	...	11-50	7-19	...	...	4
				5-75				
Do Cranes ... 6 wheeled.	3	23-58	17-80	10-00	6-71	...	...	3
		33-10		15-00				
Do do ... 4 do.	4	11-08		3-00				
Brake Vans ... 6 do.	20	11-43	8-00	8-00	5-08	...	...	20
Do ... 4 do.	152	8-57		4-70				
Total...	2,901	6-67	6-67	10-24	10-24	51	...	2,850
Grand Total...	3,533	Nil.	Nil.	Nil.	Nil.	54	...	3,479

Column f.—We have no Vehicles laid by as spare, but in this column Average Mileage per diem run on Do.

ANALYSIS OF WORKING
ended 31st December, 1894.
DIX II.
Vehicles.

MILEAGE OF						Ton-mileage of vehicle dead weight hauled on Home Line.
Foreign vehicles on Home Line.		Home vehicles on Home Line.		Home vehicles on foreign lines.	Carrying capa- city hauled on Home Line.	
Loaded.	Empty.	Loaded.	Empty.			
...	...	733	19	...	3,008	8,061
...	...	397,848	23,001	...	3,366,792	4,019,108
93,919	2,965	25,740	6,158	...	386,346	1,287,820
6,021	75	715,580	19,162	...	11,431,130	7,438,014
77,784	818	443,143	56,237	...	13,117,095	5,975,566
4,298	3,446	6,134,492	202,199	...	323,629,629	54,054,586
74,763	351	207,103	...	...	917,222	2,977,442
1,336	1,336	44,786	38,411	...	515,214	442,225
17,265	17,265	161,364	85,822	...	854,148	2,377,379
75	75	57,872	27,952	...	515,844	545,935
275,461	26,331	8,196,666	458,961	318,854	Nil.	79,126,136
...	...	7,142,731	577,846	...	81,143,264	55,742,566
468,573	425,741	2,786,189	1,056,598	...	56,242,369	30,823,296
...	...	33,278	51,240	...	542,606	418,364
...	...	6,532	7,286	...	96,726	80,144
...	...	49,422	50,113	...	630,057	637,024
...	...	3,014	2,768	...	84,822	41,746
...	...	78,275	23,010	...	759,638	860,923
...	...	219	75	...	1,911	2,226
...	...	169,190	147,572	...	3,379,851	1,647,162
...	...	86,746	53,022	...	2,515,824	1,041,272
...	...	52,618	52,318	...	1,259,232	989,546
...	...	6,509	3,561	...	72,547	54,486
...	...	3,206	415	...	24,297	64,454
...	...	...	2,487,697	...	...	22,142,283
463,573	425,741	10,417,929	4,513,741	155,539	Nil.	114,545,492
744,034	452,072	18,614,593	4,972,702	474,392	Nil.	193,671,628

has been entered the number of vehicles broken up and awaiting renewal.
Home line by Coaching Vehicles 48,681 63.
Goods do. 86,010 78.

APPENDIX V.—Maintenance of Way-Sleepers.

DETAILS.	Wood.										Iron Rails.	
	TRANSVERSE.											
	Tie.					Jungle.					Total.	
	16' x 12' x 6'	14' x 12' x 6'	12' x 12' x 6'	10' x 12' x 6'	10' x 10' x 5'	10' x 12' x 6'	10' x 12' x 6'	10' x 10' x 5'	10' x 10' x 5'	10' x 10' x 5'	10' x 10' x 5'	Sleepers.
1 Number of sleepers in way, including sidings, at the commencement of the half-year	2,404	156	5,124	1,583	7,490	3,592	18,293	36,942	110	3,201,710	23,7438	
2 Average age of sleepers in way at the end of the half-year. Years.	16.6322	21.2601	20.2150	13.3777	13.4704	4.2646	7.8020	10.4335	8.6020			
3 Number removed	26	...	121	7	24	242	692	*1,112	...	*2,277		
4 Number laid	19	...	141	14	413	237	896	*1,760	...	*30,279		
5 Percentage of removals on total of each class	1.0815	...	2.2308	.4422	.3204	6.7372	3.7829	2.8555	...			.0711
6 Number of sleepers in way, including sidings, at the end of the half-year	2,397	156	5,444	1,590	7,579	3,637	18,437	39,590	110	3,240,712		

* The difference between removal and laid is owing to increased sidings and main line.
† Includes 350 tank sleepers 10' x 10' x 5" and 39,684 Iron Rails for Kolar Gold Fields Railway.

No. 214. R. dated 28.3.75
PUBLIC WORKS DEPARTMENT,
RAILWAY BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following

Letter from the Agent and Manager, Madras Railway, submitting 30 copies of the Analysis of working for the half year ended the 31st December 1894.

H. E. No. 4693, 426-3-9
295

Ordered to be forwarded to the Director General of Railways and to the Secretary to State.

To
The Hon. Secy. for Railways
Govt. Ry. and
Madr.
11/4/95

Order E. No. 215, R. 428.3.

Forwarded.
H. E.
26/2/95

H. E. No. 7/214 R. 478-3-7

To,
The Right Honble the Secy. of State for India

Right Honble Sir,
Whereas the Government have forwarded herewith a copy of the

manuscript
sent to
Director General
of R. & S.
24.2.95

Printed

nos: No: 214. R. d. 25 March 1895
bodying the analysis of working
adms Railway for the second
ly of 1894.

Abel
28/3/95

DR

11/2/5

P. 214. R. dated 28.3.95
215

WORKS.
18

urgent

G.O. 28/2 15.5. 2/8 R
219

Beyrout-Matras Rly.
Shaw

The correspondence re:
proposed
the alignment of the —,
ordered to be forwarded to
the Govt. of India —

— do —

Forwarding correspondence
re: the proposed alignment
of the —.

1986

7

1000 ft
1000 ft
1000 ft

2

A

N. 218 R. dated 28.3.95
219

2

Pub meeting
to argument
made to

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following

Letter from the Commr of Chingleput H.S. no 57/448 of 13.7.95

do do Nellore 208- of 23rd do

do do Kistur 131 of 8th Jan 95

There is no occasion to send this round. It ought to go up alone.

W. 26 Mar

sent on 2048 27/2/95

Ordered that the above correspon-
dence be forwarded to the
Govt: of India in contin-
uation of Propo. no. 25
of 18th January

H.S. no 249 R

For

To the Commr of Chingleput
Nellore
Kistur
Revenue Dept

DESP. NO
28 MAR.

From,

The J. A. Atkinson
Esquire
Collector
Kistur

Recd: 13.3.95

To the Joint Secretary to
Government
Railway Branch

Dated 8.3.95

Desp 9.3.95

Recd 13.3.95
1041

Have all replies
been received
1041

Enclosures sent by
parcel post

D. No. 131 of 9th
Jan 95
Subject

Submitting report on the proposed
religement of the Saverwade-
Madras Railway

to study public convenience down to the
smallest detail.

I have the honor to be,

Sir

Your most obedient servant

E.S. Lloyd
for Collector

PK.

from Chelubrole to Guntur & would have
passed through a tract liable to very heavy
floods, as the road in question has most dis-
astrously experienced.

4 I presume however that the Guntur branch
will not be constructed till the main line is
completed & it would be well to wait awhile
the development of events. If for instance
the Southern Mahabatta Railway are not
allowed to make the line from Bezawada to
Choulipatam, & if further, as has been suggested,
the terminus of their system be moved back
from Bezawada to Tadepalli, I have heard it
hinted that they will wish to withdraw their
terminus still further, to Guntur's. In that
case the broad gauge could better have access
to Guntur's along the present Southern Mahabatta
alignment. Even if these hypotheses turn
out to be groundless, it is still a question
for consideration whether the Tondur-
Guntur branch is the best alignment. This
branch will cross the Kommamur Canal at
Chebrole, the only important village touched.
From Chebrole to Guntur's there is a first
class metalled road & at Chebrole are large
warehouses and wharves on the Kommamur
canal which accommodate the road & canal.

traffic between Guntur & the Delta & between
Guntur & Madras. The question arises whether
the Railway by touching this place will join
traffic to itself or will increase canal traffic.

There is an alternative route from Tenali
through Jagarlamudi to Guntur, and another
shorter, & probably easier to make than any
of the three already mentioned, from Kolakalur
or Duggirala to Guntur. I think that the
question should be very carefully considered
before the alignment of the junction line is fixed.

5 The map sent to me is on too small a scale
to show the location of stations. This is
a matter of extreme importance & if possible
I should like to have a chance of seeing the
ground-plan of the various stations. In
the case of the Villupuram-Guntur line
where it passes through the Cuddapah District
I know from experience that stations were
often most inconveniently situated. There
may be all the difference between one side
or one end of a town & another. Place a station
in or adjoining a fairish hamlet & the case
people will ostracise it and therefore where
there is a possibility of competition with
roads, canals and other means of communication
it behoves the Railway administration

to study public convenience down to the
smallest detail.

I have the honor to be,
Sir

Your most obedient servant

E.S. Lloyd
for Collector

PK.

From the Collector of
Nellore.

To

The Joint Secretary to
Government, Public Works
Department, Madras

Dated 23 February 1895

No. 205
Comp.

Subject.

Stating that the collector has no
remarks on the proposed
alignment of the Madras
Coastal Railway line.

1502

Recd. 28.2.95

112-

1) pointing that the proposed line
2) and Pannier is preferable to —
3) to the other and Culicab.

No.

57

17/2

Chingleput District Office,
Station, Saidapet,
13 February 1895.
22/1/2

FROM

By S. Jones Esquire,
By Secretary of Chingleput.

TO

THE SECRETARY TO GOVERNMENT,
Public Works DEPARTMENT,
Madras.

SIR,

In reply to para 4 of Government Order, dated 18th ultimo, No 25 R, calling for remarks on the proposed alignment of the Ennore-Puducherry section of the East coast railway, I have the honour to report that, of the two routes, that thro' Panner is in every respect preferable to that thro' Thattur and Culicat.

2. It is not clear if any opinion regarding the salt branch from Vallur to Thattur is required but I am informed that the whole of the delta tract between the Aris or Vannaravaram river to the north and the Thottelliar on the south is liable to submergence during the rains. If a more definite opinion is wanted regarding branch, I shall have further and more details.

RAILWAY.

Govt. of {1895} Madras
PUBLIC WORKS.

Dated March, 1895.

Recd.

Encl.

G.O., 28th March 1895, Nos. 218,
219 R.

MARCH.

Bezwada-Madras Railway

Forwarding correspondence regarding the proposed alignment of the —.

RAILWAY.

Govt. of {1895} Madras.
PUBLIC WORKS.

Dated March, 1895.

Recd.

Encl.

G.O., 28th March 1895, Nos. 218,
219 R.

MARCH.

Bezwada-Madras Railway

Forwarding correspondence regarding the
proposed alignment of the —.

28TH MARCH 1895, No. 218 R., PUBLIC WORKS.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Railway.

Read the following papers:—

From the Acting Collector of Chingleput, to the Joint Secretary to Government,
Public Works Department, Railway Branch, dated Saidapet, 13th February
1895, Ref. on No. 57 G & B.

In reply to paragraph 4 of G.O., dated 18th ultimo, No. 25 R., calling for remarks
on the proposed alignment of the Ennore-Gudur section of the East Coast Railway,
I have the honour to report that of the two routes, that through Ponneri is in every
respect preferable to that through Kattur and Pulicat.

2. It is not clear if any opinion regarding the salt branch from Vallur to Kattur
is required, but I am informed that the whole of the delta tract between the Arni or
Narnavaram river on the north and the Kortelliar on the south is liable to submergence
during the rains. If a more definite opinion is wanted regarding this branch, I shall
have further and more detailed inquiry made.

3. The plans received with the Government order under reference have, as
directed, been forwarded to the Collector of Nellore.

From the Collector of Nellore, to the Joint Secretary to Government, Public Works
Department, Railway Branch, dated 23rd February 1895, No. 205-Comp.

With reference to G.O., No. 25 R., dated 18th January 1895, I have the honour
to state that I have no remarks on the alignment as now revised.

2. The map only reached me from the Collector of Chingleput a couple of days
ago, and hence the delay.

From the Collector of Kistna, to the Joint Secretary to Government, Public Works
Department, Railway Branch, dated Tummurucode, 8th March 1895, Dis.
No. 131-Tour.

Referring to G.O., No. 25 R., dated 13th January 1895, I have the honour to
advise despatch of the map of the proposed alignment of the Bezwada-Madras Railway
which reached me in camp on 8th instant to your address by parcel post.

2. The proposed alignment according to the survey of 1894 has been well chosen
and accords with what I believe are the views of my predecessor, Mr. Arundel, who
had devoted much consideration to the subject. The following are the only remarks
I have to offer.

3. To make the junction of the Guntur branch at Tsundur is preferable to
placing it at Nidubrole as proposed in the Madras Railway Survey of 1890-91. The
latter would have been longer, would have been parallel to and in competition with a
metalled road the whole way from Nidubrole to Guntur, and would have passed
through a tract liable to very heavy floods as the road in question has most disas-
trously experienced.

4. I presume, however, that the Guntur branch will not be constructed till the main line is completed and it would be well to wait awhile the development of events. If, for instance, the Southern Mahratta Railway are not allowed to make the line from Bezvada to Musuliputam, and if further, as has been suggested, the terminus of their system be moved back from Bezvada to Tadepalli, I have heard it hinted that they will wish to withdraw their terminus still further to Guntur. In that case the broad gauge could better have access to Guntur along the present Southern Mahratta alignment. Even if these hypotheses turn out to be groundless, it is still a question for consideration whether the Tunduru-Guntur branch is the best alignment. This branch will cross the Kommamur canal at Chebrole, the only important village touched. From Chebrole to Guntur there is a first-class metalled road and at Chebrole are large warehouses and wharves on the Kommamur canal which accommodate the road and canal traffic between Guntur and the Delta and between Guntur and Madras. The question arises whether the railway by touching this place will win traffic to itself or will increase canal traffic. There is an alternative route from Tenali through Jagarlamudi to Guntur and another shorter, and probably easier to make than any of the three already mentioned, from Kolakalur or Duggirala to Guntur. I think that the question should be very carefully considered before the alignment of the junction line is fixed.

5. The map sent to me is on too small a scale to show the exact location of stations. This is a matter of extreme importance and, if possible, I should like to have a chance of seeing the ground plan of the various stations. In the case of the Villupuram-Guntakal line where it passes through the Cuddapah district I know from experience that stations were often most inconveniently situated. There may be all the difference between one side or one end of a town and another. Place a station in or adjoining a Pariah hamlet and the caste people will ostracise it and therefore where there is a possibility of competition with roads, canals and other means of communication it behoves the Railway administration to study public convenience down to the smallest detail.

ORDER—dated 28th March 1895, No. 218 R., Public Works.

Ordered that the above correspondence be forwarded to the Government of India in continuation of Proceedings No. 25 R., dated 18th January 1895.

[Here enter No. 219 R., dated 28th March 1895.]

(True Extract.)

(Signed) A. D. G. SHELLEY, Captain, R.E.,
Under Secy. to Govt., P.W.D.,
Railway Branch.

To the Collector of Chingleput.
" Collector of Nellore.
" Collector of Kistna.
" Revenue Department.

ENDORSEMENT—dated 28th March 1895, No. 219 R., Public Works.

Forwarded.

(By Order.)

(Signed) A. D. G. SHELLEY, Captain, R.E.,
Under Secy. to Govt., P.W.D.,
Railway Branch.