

Preparation of Detailed Project Report for Nanded Roads under JNNURM
Axle Load Survey Data Analysis

Location: Road No.42, Degloor Road

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
1) Light Commercial Traffic															
1	1	0.50	1.89					1.00	3.78					4.78	0.108
2	1	0.40	0.94					0.80	1.88					2.68	0.007
3	1	0.70	0.83					1.40	1.66					3.06	0.006
4	1	0.26	0.36					0.52	0.72					1.24	0.000
5	1	0.66	1.95					1.32	3.90					5.22	0.124
6	1	0.28	0.22					0.56	0.44					1.00	0.000
7	1	0.22	0.15					0.44	0.30					0.74	0.000
8	1	0.58	0.98					1.16	1.96					3.12	0.009
9	1	0.53	0.23					1.06	0.46					1.52	0.001
10	1	0.72	1.71					1.44	3.42					4.86	0.074
11	1	0.84	1.23					1.68	2.46					4.14	0.023
12	1	0.51	0.53					1.02	1.06					2.08	0.001
13	1	0.93	1.75					1.86	3.50					5.36	0.085
14	1	0.97	1.01					1.94	2.02					3.96	0.016
15	1	0.55	0.64					1.10	1.28					2.38	0.002
16	1	0.90	1.05					1.80	2.10					3.90	0.016
17	1	0.98	1.25					1.96	2.50					4.46	0.028
18	1	0.38	1.56					0.76	3.12					3.88	0.050
19	1	0.44	1.20					0.88	2.40					3.28	0.018
20	1	0.71	0.88					1.42	1.76					3.18	0.007
21	1	1.18	0.68					2.36	1.36					3.72	0.018
22	1	0.71	0.48					1.42	0.96					2.38	0.003
23	1	0.53	0.57					1.06	1.14					2.20	0.002
24	1	0.54	1.25					1.08	2.50					3.58	0.021
25	1	0.96	2.15					1.92	4.30					6.22	0.187
26	1	0.65	0.71					1.30	1.42					2.72	0.004
27	1	1.40	0.99					2.80	1.98					4.78	0.040
28	1	0.40	0.45					0.80	0.90					1.70	0.001
29	1	0.60	0.89					1.20	1.78					2.98	0.006
30	1	0.62	0.46					1.24	0.92					2.16	0.002
31	1	0.94	1.70					1.88	3.40					5.28	0.077
32	1	0.90	2.02					1.80	4.04					5.84	0.146
33	1	0.50	0.40					1.00	0.80					1.80	0.001
34	1	0.76	0.45					1.52	0.90					2.42	0.003
35	1	1.18	2.14					2.36	4.28					6.64	0.193
36	1	0.75	2.75					1.50	5.50					7.00	0.485
37	1	0.84	0.67					1.68	1.34					3.02	0.006
38	1	1.02	1.70					2.04	3.40					5.44	0.080
39	1	0.40	0.51					0.80	1.02					1.82	0.001
40	1	0.72	0.66					1.44	1.32					2.76	0.004
41	1	0.56	1.25					1.12	2.50					3.62	0.021
42	1	2.15	5.00					4.30	10.00					14.30	5.450
43	1	0.52	2.02					1.04	4.04					5.08	0.141
44	1	0.55	1.86					1.10	3.72					4.82	0.102
45	1	0.37	0.42					0.74	0.84					1.58	0.000
46	1	0.47	0.31					0.94	0.62					1.56	0.000
47	1	1.08	2.10					2.16	4.20					6.36	0.175
48	1	0.51	1.08					1.02	2.16					3.18	0.012
49	1	0.49	0.55					0.98	1.10					2.08	0.001
50	1	0.93	0.63					1.86	1.26					3.12	0.008
51	1	1.17	0.68					2.34	1.36					3.70	0.018
52	1	0.50	0.50					1.00	1.00					2.00	0.001
53	1	0.47	0.30					0.94	0.60					1.54	0.000
54	1	0.80	2.01					1.60	4.02					5.62	0.141
55	1	0.38	0.48					0.76	0.96					1.72	0.001
56	1	0.55	0.49					1.10	0.98					2.08	0.001
														VDF	0.142
2) Truck Traffic															
1	2	2.85	4.63					5.70	9.26					14.96	2.223
2	2	1.45	2.20					2.90	4.40					7.30	0.122
3	2	0.92	4.55					1.84	9.10					10.94	1.560
4	2	0.60	0.70					1.20	1.40					2.60	0.002
5	2	0.86	1.22					1.72	2.44					4.16	0.013
6	2	1.03	0.75					2.06	1.50					3.56	0.011
7	2	0.95	3.36					1.90	6.72					8.62	0.469
8	2	1.64	3.39					3.28	6.78					10.06	0.540
9	2	1.70	0.77					3.40	1.54					4.94	0.072
10	2	1.24	1.75					2.48	3.50					5.98	0.054
11	2	1.65	2.30					3.30	4.60					7.90	0.164

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
12	2	1.74	5.36					3.48	10.72					14.20	3.071
13	2	1.27	0.60					2.54	1.20					3.74	0.022
14	2	0.40	0.42					0.80	0.84					1.64	0.000
15	2	0.77	0.69					1.54	1.38					2.92	0.004
16	2	1.11	0.76					2.22	1.52					3.74	0.014
17	2	0.80	0.89					1.60	1.78					3.38	0.006
18	2	0.97	3.02					1.94	6.04					7.98	0.309
19	2	0.77	0.93					1.54	1.86					3.40	0.006
20	2	1.25	2.73					2.50	5.46					7.96	0.222
21	2	1.42	2.72					2.84	5.44					8.28	0.233
22	2	0.71	2.17					1.42	4.34					5.76	0.083
23	2	1.67	2.66					3.34	5.32					8.66	0.247
24	2	2.07	3.54					4.14	7.08					11.22	0.724
25	2	0.44	0.56					0.88	1.12					2.00	0.001
26	2	0.70	2.37					1.40	4.74					6.14	0.116
27	2	1.03	0.53					2.06	1.06					3.12	0.010
28	2	0.70	0.97					1.40	1.94					3.34	0.005
29	2	0.50	0.97					1.00	1.94					2.94	0.004
30	2	1.54	3.35					3.08	6.70					9.78	0.504
31	2	0.64	1.60					1.28	3.20					4.48	0.025
32	2	0.82	0.73					1.64	1.46					3.10	0.005
33	2	0.52	0.75					1.04	1.50					2.54	0.002
34	2	1.37	1.78					2.74	3.56					6.30	0.066
35	2	0.87	0.57					1.74	1.14					2.88	0.005
36	2	1.10	0.74					2.20	1.48					3.68	0.013
37	2	0.70	1.02					1.40	2.04					3.44	0.006
38	2	0.59	0.51					1.18	1.02					2.20	0.001
39	2	1.72	3.76					3.44	7.52					10.96	0.799
40	2	1.35	3.44					2.70	6.88					9.58	0.536
41	2	1.34	1.40					2.68	2.80					5.48	0.041
42	2	0.60	1.30					1.20	2.60					3.80	0.011
43	2	1.66	4.05					3.32	8.10					11.42	1.040
44	2	0.32	0.52					0.64	1.04					1.68	0.000
45	2	0.20	0.45					0.40	0.90					1.30	0.000
46	2	0.45	0.67					0.90	1.34					2.24	0.001
47	2	1.25	1.22					2.50	2.44					4.94	0.029
48	2	1.23	1.18					2.46	2.36					4.82	0.026
49	2	1.30	1.26					2.60	2.52					5.12	0.033
50	2	0.34	0.64					0.68	1.28					1.96	0.001
51	2	0.51	1.07					1.02	2.14					3.16	0.005
52	2	0.45	0.51					0.90	1.02					1.92	0.001
53	2	0.88	2.88					1.76	5.76					7.52	0.255
54	2	1.42	0.84					2.84	1.68					4.52	0.036
55	2	0.94	0.93					1.88	1.86					3.74	0.009
56	2	1.04	4.67					2.08	9.34					11.42	1.735
57	2	1.21	0.91					2.42	1.82					4.24	0.021
58	2	1.16	1.22					2.32	2.44					4.76	0.023
59	2	2.19	3.50					4.38	7.00					11.38	0.738
60	2	0.87	1.20					1.74	2.40					4.14	0.012
61	2	1.16	1.48					2.32	2.96					5.28	0.033
62	2	1.85	3.03					3.70	6.06					9.76	0.404
63	2	1.44	3.50					2.88	7.00					9.88	0.580
64	2	0.87	0.74					1.74	1.48					3.22	0.006
65	2	2.12	3.06					4.24	6.12					10.36	0.488
66	2	1.20	1.44					2.40	2.88					5.28	0.033
67	2	1.94	3.70					3.88	7.40					11.28	0.799
68	2	0.20	0.31					0.40	0.62					1.02	0.000
69	2	1.57	3.25					3.14	6.50					9.64	0.456
70	2	2.14	3.40					4.28	6.80					11.08	0.661
71	2	0.65	0.72					1.30	1.44					2.74	0.002
72	2	0.54	0.70					1.08	1.40					2.48	0.002
73	2	1.60	2.88					3.20	5.76					8.96	0.305
74	2	1.36	2.70					2.72	5.40					8.12	0.222
75	2	1.23	1.22					2.46	2.44					4.90	0.027
76	2	1.32	3.88					2.64	7.76					10.40	0.847
77	2	1.09	1.40					2.18	2.80					4.98	0.026
78	2	1.29	1.38					2.58	2.76					5.34	0.037
79	2	1.02	2.63					2.04	5.26					7.30	0.183
80	2	1.35	4.43					2.70	8.86					11.56	1.425
81	2	1.52	1.07					3.04	2.14					5.18	0.050
82	2	1.80	1.26					3.60	2.52					6.12	0.098
83	2	1.15	3.31					2.30	6.62					8.92	0.450
84	2	1.61	3.65					3.22	7.30					10.52	0.700

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
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85	2	2.00	3.87					4.00	7.74					11.74	0.948
86	2	1.80	0.86					3.60	1.72					5.32	0.091
87	2	0.78	3.03					1.56	6.06					7.62	0.309
88	2	0.60	0.95					1.20	1.90					3.10	0.004
89	2	2.01	3.38					4.02	6.76					10.78	0.611
90	2	1.60	1.29					3.20	2.58					5.78	0.065
91	2	1.20	2.69					2.40	5.38					7.78	0.207
92	2	1.62	3.79					3.24	7.58					10.82	0.806
93	2	1.92	3.56					3.84	7.12					10.96	0.697
94	2	1.70	3.66					3.40	7.32					10.72	0.721
95	2	1.23	1.25					2.46	2.50					4.96	0.028
96	2	1.71	4.25					3.42	8.50					11.92	1.255
97	2	2.55	3.88					5.10	7.76					12.86	1.178
98	2	1.25	2.47					2.50	4.94					7.44	0.156
99	2	1.53	1.20					3.06	2.40					5.46	0.054
100	2	1.20	2.96					2.40	5.92					8.32	0.296
101	2	1.37	3.55					2.74	7.10					9.84	0.606
102	2	1.60	3.86					3.20	7.72					10.92	0.860
103	2	2.57	4.28					5.14	8.56					13.70	1.585
104	2	1.80	2.18					3.60	4.36					7.96	0.170
105	2	1.67	3.85					3.34	7.70					11.04	0.862
106	2	1.04	0.96					2.08	1.92					4.00	0.013
107	2	1.37	1.16					2.74	2.32					5.06	0.036
108	2	1.58	3.31					3.16	6.62					9.78	0.488
109	2	1.17	1.09					2.34	2.18					4.52	0.021
110	2	1.01	0.77					2.02	1.54					3.56	0.010
111	2	1.51	2.19					3.02	4.38					7.40	0.127
112	2	2.24	4.58					4.48	9.16					13.64	1.808
113	2	0.54	0.80					1.08	1.60					2.68	0.002
114	2	0.85	0.62					1.70	1.24					2.94	0.005
115	2	1.16	1.00					2.32	2.00					4.32	0.019
116	2	2.31	3.06					4.62	6.12					10.74	0.558
117	2	0.85	0.84					1.70	1.68					3.38	0.006
118	2	0.70	0.76					1.40	1.52					2.92	0.003
119	2	1.20	2.31					2.40	4.62					7.02	0.121
120	2	1.16	2.40					2.32	4.80					7.12	0.136
121	2	1.47	1.37					2.94	2.74					5.68	0.052
122	2	2.39	4.13					4.78	8.26					13.04	1.330
123	2	1.42	1.14					2.84	2.28					5.12	0.040
124	2	0.39	0.56					0.78	1.12					1.90	0.001
125	2	1.30	3.35					2.60	6.70					9.30	0.481
126	2	1.22	0.98					2.44	1.96					4.40	0.022
127	2	1.71	1.54					3.42	3.08					6.50	0.092
128	2	0.78	1.08					1.56	2.16					3.72	0.008
129	2	1.75	3.66					3.50	7.32					10.82	0.730
130	2	0.76	2.15					1.52	4.30					5.82	0.080
131	2	0.72	0.88					1.44	1.76					3.20	0.004
132	2	0.64	0.97					1.28	1.94					3.22	0.005
133	2	1.74	2.63					3.48	5.26					8.74	0.251
134	2	1.28	1.26					2.56	2.52					5.08	0.032
135	2	1.26	1.14					2.52	2.28					4.80	0.027
136	2	0.41	0.35					0.82	0.70					1.52	0.000
137	2	0.97	1.97					1.94	3.94					5.88	0.062
138	2	1.04	0.83					2.08	1.66					3.74	0.012
139	2	1.08	0.97					2.16	1.94					4.10	0.015
140	2	1.42	3.64					2.84	7.28					10.12	0.671
141	2	1.84	1.66					3.68	3.32					7.00	0.124
142	2	1.85	3.70					3.70	7.40					11.10	0.778
143	2	1.51	5.54					3.02	11.08					14.10	3.460
144	2	2.13	3.65					4.26	7.30					11.56	0.817
145	2	1.48	1.32					2.96	2.64					5.60	0.051
146	2	1.23	1.44					2.46	2.88					5.34	0.035
147	2	1.35	3.55					2.70	7.10					9.80	0.604
148	2	1.20	1.25					2.40	2.50					4.90	0.026
149	2	1.55	3.53					3.10	7.06					10.16	0.612
150	2	0.67	3.59					1.34	7.18					8.52	0.604
151	2	1.84	4.55					3.68	9.10					12.78	1.651
152	2	2.08	2.12					4.16	4.24					8.40	0.231
153	2	1.62	4.24					3.24	8.48					11.72	1.230
154	2	1.59	4.24					3.18	8.48					11.66	1.226
155	2	1.10	1.20					2.20	2.40					4.60	0.020
156	2	0.90	0.77					1.80	1.54					3.34	0.007
157	2	1.32	1.35					2.64	2.70					5.34	0.038

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		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
158	2	1.62	4.24					3.24	8.48					11.72	1.230
159	2	0.71	0.67					1.42	1.34					2.76	0.003
160	2	2.37	3.95					4.74	7.90					12.64	1.149
161	2	2.30	4.32					4.60	8.64					13.24	1.499
162	2	1.07	3.21					2.14	6.42					8.56	0.396
163	2	1.00	0.88					2.00	1.76					3.76	0.011
164	2	1.20	1.35					2.40	2.70					5.10	0.030
165	2	0.78	3.00					1.56	6.00					7.56	0.297
166	2	2.04	4.41					4.08	8.82					12.90	1.518
167	2	1.63	2.67					3.26	5.34					8.60	0.244
168	2	1.27	1.40					2.54	2.80					5.34	0.036
169	2	1.03	1.16					2.06	2.32					4.38	0.016
170	2	1.99	3.42					3.98	6.84					10.82	0.628
171	2	1.23	1.07					2.46	2.14					4.60	0.024
172	2	1.20	3.98					2.40	7.96					10.36	0.927
173	2	2.01	4.17					4.02	8.34					12.36	1.234
174	2	1.73	4.66					3.46	9.32					12.78	1.786
175	2	0.91	0.61					1.82	1.22					3.04	0.006
176	2	2.13	4.96					4.26	9.92					14.18	2.368
177	2	2.36	3.01					4.72	6.02					10.74	0.559
178	2	1.54	4.20					3.08	8.40					11.48	1.176
179	2	1.52	1.03					3.04	2.06					5.10	0.049
180	2	2.20	3.73					4.40	7.46					11.86	0.900
181	2	2.08	3.91					4.16	7.82					11.98	1.005
182	2	0.53	1.07					1.06	2.14					3.20	0.005
183	2	1.18	1.31					2.36	2.62					4.98	0.027
184	2	1.80	2.77					3.60	5.54					9.14	0.302
185	2	1.81	3.17					3.62	6.34					9.96	0.457
186	2	1.42	0.86					2.84	1.72					4.56	0.036
187	2	1.47	1.28					2.94	2.56					5.50	0.049
188	2	1.58	2.85					3.16	5.70					8.86	0.292
189	2	1.54	1.14					3.08	2.28					5.36	0.054
190	2	2.64	4.14					5.28	8.28					13.56	1.475
191	2	1.48	1.13					2.96	2.26					5.22	0.046
192	2	1.78	1.46					3.56	2.92					6.48	0.101
193	2	1.20	4.31					2.40	8.62					11.02	1.269
194	2	1.93	4.40					3.86	8.80					12.66	1.476
195	2	0.80	1.25					1.60	2.50					4.10	0.012
196	2	2.03	5.01					4.06	10.02					14.08	2.428
197	2	2.35	3.64					4.70	7.28					11.98	0.894
198	2	2.13	2.93					4.26	5.86					10.12	0.441
199	2	1.12	1.66					2.24	3.32					5.56	0.041
200	2	2.49	3.91					4.98	7.82					12.80	1.172
201	2	1.91	2.51					3.82	5.02					8.84	0.256
202	2	2.49	2.81					4.98	5.62					10.60	0.550
203	2	1.04	3.42					2.08	6.84					8.92	0.506
204	2	2.09	3.66					4.18	7.32					11.50	0.812
205	2	1.63	1.53					3.26	3.06					6.32	0.079
206	2	1.85	5.90					3.70	11.80					15.50	4.493
207	2	1.48	2.51					2.96	5.02					7.98	0.184
208	2	2.90	4.08					5.80	8.16					13.96	1.601
209	2	1.85	3.85					3.70	7.70					11.40	0.896
210	2	2.54	3.88					5.08	7.76					12.84	1.173
211	2	2.19	3.54					4.38	7.08					11.46	0.763
212	2	1.74	4.60					3.48	9.20					12.68	1.701
213	2	1.01	0.78					2.02	1.56					3.58	0.010
214	2	1.08	1.35					2.16	2.70					4.86	0.024
215	2	2.40	2.89					4.80	5.78					10.58	0.533
216	2	1.46	1.24					2.92	2.48					5.40	0.047
217	2	1.33	1.43					2.66	2.86					5.52	0.042
218	2	2.41	5.01					4.82	10.02					14.84	2.569
219	2	1.70	2.72					3.40	5.44					8.84	0.269
220	2	2.65	4.60					5.30	9.20					14.50	2.040
221	2	1.00	0.70					2.00	1.40					3.40	0.009
222	2	1.64	1.24					3.28	2.48					5.76	0.070
223	2	0.93	1.09					1.86	2.18					4.04	0.011
224	2	1.82	4.50					3.64	9.00					12.64	1.580
225	2	1.26	1.16					2.52	2.32					4.84	0.028
226	2	2.77	4.21					5.54	8.42					13.96	1.636
227	2	1.90	4.13					3.80	8.26					12.06	1.165
228	2	1.20	0.81					2.40	1.62					4.02	0.019
229	2	2.36	4.66					4.72	9.32					14.04	1.972
230	2	1.57	2.60					3.14	5.20					8.34	0.217

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
231	2	2.31	4.27					4.62	8.54					13.16	1.446
232	2	1.26	3.82					2.52	7.64					10.16	0.793
233	2	2.38	4.69					4.76	9.38					14.14	2.025
234	2	1.75	4.58					3.50	9.16					12.66	1.675
235	2	1.32	1.02					2.64	2.04					4.68	0.030
236	2	2.50	4.59					5.00	9.18					14.18	1.939
237	2	2.87	4.22					5.74	8.44					14.18	1.722
238	2	1.50	1.23					3.00	2.46					5.46	0.051
239	2	1.47	1.60					2.94	3.20					6.14	0.063
240	2	1.77	3.72					3.54	7.44					10.98	0.777
241	2	0.80	1.03					1.60	2.06					3.66	0.008
242	2	1.24	1.18					2.48	2.36					4.84	0.027
243	2	1.45	2.10					2.90	4.20					7.10	0.108
244	2	2.20	4.53					4.40	9.06					13.46	1.725
245	2	2.04	4.89					4.08	9.78					13.86	2.220
246	2	2.36	5.25					4.72	10.50					15.22	3.017
247	2	1.45	3.98					2.90	7.96					10.86	0.947
248	2	2.55	4.57					5.10	9.14					14.24	1.938
249	2	2.60	2.66					5.20	5.32					10.52	0.567
250	2	1.46	1.96					2.92	3.92					6.84	0.092
251	2	0.87	1.28					1.74	2.56					4.30	0.015
252	2	1.02	0.77					2.04	1.54					3.58	0.010
253	2	1.40	4.49					2.80	8.98					11.78	1.506
254	2	1.80	4.48					3.60	8.96					12.56	1.549
255	2	2.01	4.57					4.02	9.14					13.16	1.719
256	2	1.60	1.06					3.20	2.12					5.32	0.060
257	2	1.44	1.48					2.88	2.96					5.84	0.054
258	2	1.26	1.29					2.52	2.58					5.10	0.031
259	2	2.10	4.50					4.20	9.00					13.20	1.651
260	2	1.01	0.75					2.02	1.50					3.52	0.010
261	2	1.54	0.78					3.08	1.56					4.64	0.049
262	2	2.86	5.00					5.72	10.00					15.72	2.831
263	2	2.73	2.83					5.46	5.66					11.12	0.701
264	2	2.65	3.10					5.30	6.20					11.50	0.751
265	2	2.24	3.30					4.48	6.60					11.08	0.642
266	2	2.09	5.07					4.18	10.14					14.32	2.557
267	2	1.85	4.19					3.70	8.38					12.08	1.217
268	2	0.83	1.27					1.66	2.54					4.20	0.013
269	2	1.32	1.18					2.64	2.36					5.00	0.033
270	2	2.13	3.14					4.26	6.28					10.54	0.526
271	2	2.13	3.78					4.26	7.56					11.82	0.914
272	2	2.20	3.78					4.40	7.56					11.96	0.938
273	2	1.37	5.09					2.74	10.18					12.92	2.464
274	2	2.55	4.88					5.10	9.76					14.86	2.413
275	2	2.68	4.78					5.36	9.56					14.92	2.328
276	2	1.23	2.10					2.46	4.20					6.66	0.090
277	2	2.33	4.84					4.66	9.68					14.34	2.239
278	2	2.17	3.76					4.34	7.52					11.86	0.912
279	2	1.76	4.62					3.52	9.24					12.76	1.733
280	2	2.30	5.33					4.60	10.66					15.26	3.163
281	2	2.23	5.19					4.46	10.38					14.84	2.840
282	2	2.64	4.52					5.28	9.04					14.32	1.923
283	2	2.02	2.90					4.04	5.80					9.84	0.397
284	2	1.58	1.02					3.16	2.04					5.20	0.056
285	2	1.32	1.46					2.64	2.92					5.56	0.042
286	2	2.32	1.35					4.64	2.70					7.34	0.256
287	2	1.27	1.48					2.54	2.96					5.50	0.039
288	2	1.58	2.76					3.16	5.52					8.68	0.263
289	2	1.97	2.02					3.94	4.04					7.98	0.187
290	2	1.05	1.28					2.10	2.56					4.66	0.020
291	2	1.68	2.72					3.36	5.44					8.80	0.266
292	2	2.43	4.29					4.86	8.58					13.44	1.522
293	2	1.76	4.26					3.52	8.52					12.04	1.275
294	2	1.23	1.59					2.46	3.18					5.64	0.042
295	2	1.24	1.07					2.48	2.14					4.62	0.025
296	2	1.28	2.56					2.56	5.12					7.68	0.178
297	2	2.68	2.93					5.36	5.86					11.22	0.702
298	2	1.54	1.50					3.08	3.00					6.08	0.066
299	2	2.12	4.67					4.24	9.34					13.58	1.895
300	2	2.50	3.12					5.00	6.24					11.24	0.673
301	2	2.97	2.57					5.94	5.14					11.08	0.814
302	2	1.75	2.22					3.50	4.44					7.94	0.167
303	2	2.42	2.12					4.84	4.24					9.08	0.362

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
304	2	2.07	5.22					4.14	10.44					14.58	2.847
305	2	1.06	1.08					2.12	2.16					4.28	0.016
306	2	0.38	0.43					0.76	0.86					1.62	0.000
307	2	2.65	4.08					5.30	8.16					13.46	1.421
308	2	2.60	3.33					5.20	6.66					11.86	0.831
309	2	1.17	1.82					2.34	3.64					5.98	0.056
310	2	0.81	2.09					1.62	4.18					5.80	0.073
311	2	1.14	2.37					2.28	4.74					7.02	0.129
312	2	2.08	4.72					4.16	9.44					13.60	1.958
313	2	3.02	4.84					6.04	9.68					15.72	2.691
314	2	0.63	0.52					1.26	1.04					2.30	0.002
315	2	2.12	4.19					4.24	8.38					12.62	1.288
316	2	2.05	4.42					4.10	8.84					12.94	1.533
317	2	2.07	2.93					4.14	5.86					10.00	0.422
318	2	2.82	4.00					5.64	8.00					13.64	1.462
319	2	2.92	4.23					5.84	8.46					14.30	1.774
320	2	2.40	4.98					4.80	9.96					14.76	2.510
321	2	1.40	1.60					2.80	3.20					6.00	0.056
322	2	1.08	1.32					2.16	2.64					4.80	0.022
323	2	2.61	4.98					5.22	9.96					15.18	2.622
324	2	2.63	5.40					5.26	10.80					16.06	3.487
325	2	2.54	4.58					5.08	9.16					14.24	1.947
326	2	1.83	2.86					3.66	5.72					9.38	0.337
327	2	0.63	1.95					1.26	3.90					5.16	0.054
328	2	2.27	4.98					4.54	9.96					14.50	2.454
329	2	1.99	4.14					3.98	8.28					12.26	1.198
330	2	1.22	1.35					2.44	2.70					5.14	0.031
331	2	1.31	1.93					2.62	3.86					6.48	0.075
332	2	1.22	2.58					2.44	5.16					7.60	0.179
333	2	3.30	3.80					6.60	7.60					14.20	1.756
334	2	2.09	3.30					4.18	6.60					10.78	0.591
335	2	2.35	5.44					4.70	10.88					15.58	3.433
336	2	2.55	5.26					5.10	10.52					15.62	3.133
337	2	0.55	0.58					1.10	1.16					2.26	0.001
338	2	1.80	1.90					3.60	3.80					7.40	0.136
339	2	1.81	1.85					3.62	3.70					7.32	0.133
340	2	2.72	5.17					5.44	10.34					15.78	3.052
341	2	0.75	1.44					1.50	2.88					4.38	0.018
342	2	1.80	3.53					3.60	7.06					10.66	0.652
343	2	1.72	3.35					3.44	6.70					10.14	0.531
344	2	2.10	2.40					4.20	4.80					9.00	0.284
345	2	2.12	4.23					4.24	8.46					12.70	1.331
346	2	2.08	4.70					4.16	9.40					13.56	1.927
347	2	2.38	5.62					4.76	11.24					16.00	3.888
348	2	3.12	4.72					6.24	9.44					15.68	2.599
349	2	2.10	5.07					4.20	10.14					14.34	2.560
350	2	1.87	1.90					3.74	3.80					7.54	0.150
351	2	0.77	0.79					1.54	1.58					3.12	0.004
352	2	3.01	5.02					6.02	10.04					16.06	2.995
353	2	2.22	4.18					4.44	8.36					12.80	1.312
354	2	1.50	4.52					3.00	9.04					12.04	1.556
355	2	2.40	4.75					4.80	9.50					14.30	2.126
356	2	2.45	4.85					4.90	9.70					14.60	2.310
357	2	2.22	5.52					4.44	11.04					15.48	3.572
358	2	1.93	2.22					3.86	4.44					8.30	0.205
359	2	2.52	3.12					5.04	6.24					11.28	0.684
360	2	2.22	5.65					4.44	11.30					15.74	3.900
361	2	2.42	5.16					4.84	10.32					15.16	2.860
362	2	2.54	4.52					5.08	9.04					14.12	1.865
363	2	0.80	0.85					1.60	1.70					3.30	0.005
364	2	1.91	4.06					3.82	8.12					11.94	1.098
365	2	2.12	2.50					4.24	5.00					9.24	0.312
366	2	3.52	5.01					7.04	10.02					17.06	3.579
367	2	3.65	4.20					7.30	8.40					15.70	2.625
368	2	2.52	2.92					5.04	5.84					10.88	0.604
369	2	1.65	1.88					3.30	3.76					7.06	0.108
370	2	2.44	5.04					4.88	10.08					14.96	2.639
371	2	2.25	6.24					4.50	12.48					16.98	5.714
372	2	2.55	4.68					5.10	9.36					14.46	2.096
373	2	2.23	3.58					4.46	7.16					11.62	0.804
374	2	1.98	3.18					3.96	6.36					10.32	0.500
375	2	2.52	5.01					5.04	10.02					15.06	2.625
376	2	1.31	1.55					2.62	3.10					5.72	0.046

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
377	2	1.45	1.71					2.90	3.42					6.32	0.068
378	2	1.12	4.16					2.24	8.32					10.56	1.099
379	2	1.82	4.43					3.64	8.86					12.50	1.489
380	2	1.32	5.52					2.64	11.04					13.68	3.393
381	2	2.30	4.12					4.60	8.24					12.84	1.281
382	2	1.33	2.26					2.66	4.52					7.18	0.121
383	2	1.62	5.48					3.24	10.96					14.20	3.329
384	2	1.63	2.71					3.26	5.42					8.68	0.255
385	2	1.95	4.88					3.90	9.76					13.66	2.179
386	2	1.60	3.83					3.20	7.66					10.86	0.836
387	2	2.66	6.35					5.32	12.70					18.02	6.319
388	2	0.68	5.57					1.36	11.14					12.50	3.492
389	2	2.33	4.12					4.66	8.24					12.90	1.293
390	2	0.54	1.07					1.08	2.14					3.22	0.005
391	2	2.25	4.95					4.50	9.90					14.40	2.393
392	2	1.26	1.22					2.52	2.44					4.96	0.029
393	2	1.92	3.25					3.84	6.50					10.34	0.519
394	2	1.08	1.12					2.16	2.24					4.40	0.017
395	2	1.81	2.50					3.62	5.00					8.62	0.232
396	2	1.29	0.77					2.58	1.54					4.12	0.025
397	2	1.84	2.91					3.68	5.82					9.50	0.357
398	2	1.80	3.00					3.60	6.00					9.60	0.382
399	2	0.51	1.65					1.02	3.30					4.32	0.027
400	2	1.87	2.74					3.74	5.48					9.22	0.308
401	2	1.67	2.10					3.34	4.20					7.54	0.136
402	2	1.75	1.77					3.50	3.54					7.04	0.115
403	2	1.73	4.15					3.46	8.30					11.76	1.151
404	2	1.58	3.25					3.16	6.50					9.66	0.457
405	2	0.97	2.77					1.94	5.54					7.48	0.221
406	2	1.04	0.90					2.08	1.80					3.88	0.012
407	2	0.85	1.27					1.70	2.54					4.24	0.014
408	2	0.63	0.81					1.26	1.62					2.88	0.003
409	2	1.61	1.13					3.22	2.26					5.48	0.063
410	2	0.63	0.45					1.26	0.90					2.16	0.001
411	2	1.67	3.74					3.34	7.48					10.82	0.775
412	2	1.50	2.30					3.00	4.60					7.60	0.144
413	2	0.87	2.87					1.74	5.74					7.48	0.251
414	2	1.68	4.48					3.36	8.96					12.32	1.528
415	2	0.80	1.10					1.60	2.20					3.80	0.009
416	2	2.07	4.29					4.14	8.58					12.72	1.383
417	2	1.12	0.80					2.24	1.60					3.84	0.015
418	2	2.52	3.45					5.04	6.90					11.94	0.854
419	2	2.68	4.57					5.36	9.14					14.50	2.017
420	2	2.29	3.22					4.58	6.44					11.02	0.622
421	2	1.46	3.45					2.92	6.90					9.82	0.552
422	2	1.40	3.16					2.80	6.32					9.12	0.394
423	2	1.91	1.48					3.82	2.96					6.78	0.130
424	2	1.05	2.60					2.10	5.20					7.30	0.176
425	2	0.69	2.10					1.38	4.20					5.58	0.072
426	2	1.85	3.91					3.70	7.82					11.52	0.946
427	2	0.60	0.89					1.20	1.78					2.98	0.003
428	2	0.76	0.54					1.52	1.08					2.60	0.003
429	2	0.66	0.47					1.32	0.94					2.26	0.002
430	2	1.96	3.02					3.92	6.04					9.96	0.426
431	2	0.84	0.78					1.68	1.56					3.24	0.006
432	2	1.25	1.10					2.50	2.20					4.70	0.026
433	2	1.31	1.81					2.62	3.62					6.24	0.064
434	2	0.63	0.53					1.26	1.06					2.32	0.002
435	2	1.60	3.16					3.20	6.32					9.52	0.417
436	2	1.13	4.51					2.26	9.02					11.28	1.514
437	2	2.42	3.21					4.84	6.42					11.26	0.674
438	2	1.09	1.00					2.18	2.00					4.18	0.016
439	2	0.85	0.95					1.70	1.90					3.60	0.007
440	2	1.10	1.08					2.20	2.16					4.36	0.017
441	2	0.79	0.60					1.58	1.20					2.78	0.004
442	2	0.99	1.62					1.98	3.24					5.22	0.033
443	2	0.80	0.62					1.60	1.24					2.84	0.004
444	2	0.72	0.90					1.44	1.80					3.24	0.005
445	2	0.94	1.05					1.88	2.10					3.98	0.011
446	2	0.98	1.06					1.96	2.12					4.08	0.012
447	2	1.24	0.93					2.48	1.86					4.34	0.023
448	2	0.94	1.19					1.88	2.38					4.26	0.014
449	2	0.91	0.64					1.82	1.28					3.10	0.006

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
450	2	1.65	2.83					3.30	5.66					8.96	0.295
451	2	0.81	0.63					1.62	1.26					2.88	0.004
452	2	1.30	1.69					2.60	3.38					5.98	0.054
453	2	1.55	0.84					3.10	1.68					4.78	0.050
454	2	0.87	2.31					1.74	4.62					6.36	0.108
455	2	1.90	3.60					3.80	7.20					11.00	0.719
456	2	1.21	0.78					2.42	1.56					3.98	0.019
457	2	1.31	0.69					2.62	1.38					4.00	0.026
458	2	0.75	0.60					1.50	1.20					2.70	0.003
459	2	0.57	0.70					1.14	1.40					2.54	0.002
460	2	1.16	4.04					2.32	8.08					10.40	0.981
461	2	1.38	3.33					2.76	6.66					9.42	0.477
462	2	0.85	0.60					1.70	1.20					2.90	0.005
463	2	0.58	0.96					1.16	1.92					3.08	0.004
464	2	1.50	3.63					3.00	7.26					10.26	0.672
465	2	0.76	0.88					1.52	1.76					3.28	0.005
466	2	1.12	1.18					2.24	2.36					4.60	0.020
467	2	1.02	1.25					2.04	2.50					4.54	0.018
468	2	1.14	2.13					2.28	4.26					6.54	0.089
469	2	1.27	1.00					2.54	2.00					4.54	0.026
470	2	1.04	1.45					2.08	2.90					4.98	0.026
471	2	1.26	1.70					2.52	3.40					5.92	0.052
472	2	1.71	3.57					3.42	7.14					10.56	0.661
473	2	0.97	1.17					1.94	2.34					4.28	0.014
474	2	1.62	2.62					3.24	5.24					8.48	0.229
475	2	1.98	3.61					3.96	7.22					11.18	0.746
476	2	1.27	1.09					2.54	2.18					4.72	0.027
477	2	1.48	2.79					2.96	5.58					8.54	0.260
478	2	2.10	3.60					4.20	7.20					11.40	0.773
479	2	1.22	2.70					2.44	5.40					7.84	0.211
480	2	1.35	2.25					2.70	4.50					7.20	0.121
481	2	1.04	2.04					2.08	4.08					6.16	0.073
482	2	1.16	1.14					2.32	2.28					4.60	0.021
483	2	1.25	3.58					2.50	7.16					9.66	0.616
484	2	0.28	0.55					0.56	1.10					1.66	0.000
485	2	1.26	1.35					2.52	2.70					5.22	0.033
486	2	1.38	1.42					2.76	2.84					5.60	0.045
487	2	0.60	0.84					1.20	1.68					2.88	0.003
488	2	1.65	3.99					3.30	7.98					11.28	0.982
489	2	1.16	1.26					2.32	2.52					4.84	0.024
490	2	1.49	4.88					2.98	9.76					12.74	2.098
491	2	1.13	3.66					2.26	7.32					9.58	0.664
														VDF	0.683
3) Multi AxleTraffic															
1	3	2.82	2.95	3.44				5.64	5.90	6.88				18.42	1.046
2	3	2.00	2.38	2.13				4.00	4.76	4.26				13.02	0.262
3	3	1.07	0.70	0.73				2.14	1.40	1.46				5.00	0.012
4	3	1.90	3.58	3.33				3.80	7.16	6.66				17.62	0.812
5	3	1.63	1.09	0.89				3.26	2.18	1.78				7.22	0.064
6	3	2.89	1.53	1.43				5.78	3.06	2.86				11.70	0.612
7	3	2.06	3.08	3.42				4.12	6.16	6.84				17.12	0.701
8	3	1.01	2.54	2.78				2.02	5.08	5.56				12.66	0.255
9	3	2.10	2.84	3.18				4.20	5.68	6.36				16.24	0.568
10	3	0.73	0.67	0.58				1.46	1.34	1.16				3.96	0.003
11	3	3.27	3.27	3.18				6.54	6.54	6.36				19.44	1.497
12	3	1.07	1.25	2.05				2.14	2.50	4.10				8.74	0.048
13	3	1.57	3.29	3.18				3.14	6.58	6.36				16.08	0.591
14	3	1.25	1.00	0.36				2.50	2.00	0.72				5.22	0.022
15	3	2.06	3.21	2.95				4.12	6.42	5.90				16.44	0.595
16	3	1.18	0.81	0.79				2.36	1.62	1.58				5.56	0.018
17	3	3.86	4.03	4.34				7.72	8.06	8.68				24.46	3.382
18	3	2.54	3.11	3.17				5.08	6.22	6.34				17.64	0.830
19	3	1.11	0.87	0.74				2.22	1.74	1.48				5.44	0.015
20	3	1.60	3.17	3.52				3.20	6.34	7.04				16.58	0.672
21	3	1.35	0.76	0.82				2.70	1.52	1.64				5.86	0.030
22	3	0.19	0.70	0.56				0.38	1.40	1.12				2.90	0.001
23	3	1.15	0.60	0.64				2.30	1.20	1.28				4.78	0.015
24	3	1.52	1.04	0.78				3.04	2.08	1.56				6.68	0.048
25	3	1.72	2.46	3.14				3.44	4.92	6.28				14.64	0.376

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
26	3	1.30	0.87	0.80				2.60	1.74	1.60				5.94	0.026
27	3	1.78	3.19	2.64	2.34			3.56	6.38	5.28	4.68			19.90	1.456
28	3	1.27	1.78	1.75				2.54	3.56	3.50				9.60	0.070
29	3	2.04	3.13	2.97				4.08	6.26	5.94				16.28	0.572
30	3	1.78	0.84	0.77				3.56	1.68	1.54				6.78	0.087
31	3	1.23	0.89	0.65				2.46	1.78	1.30				5.54	0.021
32	3	2.44	2.83	3.45				4.88	5.66	6.90				17.44	0.778
33	3	1.71	3.63	3.35				3.42	7.26	6.70				17.38	0.803
34	3	1.24	0.93	1.06				2.48	1.86	2.12				6.46	0.025
35	3	1.69	3.41	3.44				3.38	6.82	6.88				17.08	0.746
36	3	1.07	0.71	0.65				2.14	1.42	1.30				4.86	0.012
37	3	1.22	0.84	0.47	0.38	0.71		2.44	1.68	0.94	0.76	1.42		7.24	0.029
38	3	3.28	1.75	1.50				6.56	3.50	3.00				13.06	1.010
39	3	2.80	2.70	2.36				5.60	5.40	4.72				15.72	0.720
40	3	2.19	4.35	4.05				4.38	8.70	8.10				21.18	1.726
41	3	1.35	0.55	0.61				2.70	1.10	1.22				5.02	0.029
42	3	2.39	1.84	2.09				4.78	3.68	4.18				12.64	0.349
43	3	2.56	3.44	3.96				5.12	6.88	7.92				19.92	1.285
44	3	2.35	3.51	3.97				4.70	7.02	7.94				19.66	1.221
45	3	2.10	3.45	4.11				4.20	6.90	8.22				19.32	1.169
46	3	2.69	3.86	3.78				5.38	7.72	7.56				20.66	1.490
47	3	0.78	0.96	0.83				1.56	1.92	1.66				5.14	0.006
48	3	1.10	0.90	0.75				2.20	1.80	1.50				5.50	0.015
49	3	1.01	0.87	0.63				2.02	1.74	1.26				5.02	0.010
50	3	1.22	0.61	0.53				2.44	1.22	1.06				4.72	0.019
51	3	3.03	3.02	3.01				6.06	6.04	6.02				18.12	1.118
52	3	1.70	0.95	0.65				3.40	1.90	1.30				6.60	0.072
53	3	2.15	3.08	3.31				4.30	6.16	6.62				17.08	0.693
54	3	2.61	3.61	3.71				5.22	7.22	7.42				19.86	1.275
55	3	1.92	3.06	2.83				3.84	6.12	5.66				15.62	0.485
56	3	1.78	1.14	1.04				3.56	2.28	2.08				7.92	0.092
57	3	2.73	3.58	3.85				5.46	7.16	7.70				20.32	1.406
58	3	2.53	3.10	3.31				5.06	6.20	6.62				17.88	0.865
59	3	2.05	3.29	3.71				4.10	6.58	7.42				18.10	0.888
60	3	2.07	1.08	1.18				4.14	2.16	2.36				8.66	0.163
61	3	1.51	1.05	0.90				3.02	2.10	1.80				6.92	0.048
62	3	2.46	3.69	3.54				4.92	7.38	7.08				19.38	1.150
63	3	1.33	1.13	1.00	0.93			2.66	2.26	2.00	1.86			8.78	0.053
64	3	2.65	4.15	3.99				5.30	8.30	7.98				21.58	1.767
65	3	1.21	0.89	0.78				2.42	1.78	1.56				5.76	0.020
66	3	1.77	1.13	0.80				3.54	2.26	1.60				7.40	0.087
67	3	1.68	0.89	1.06				3.36	1.78	2.12				7.26	0.072
68	3	2.37	4.42	4.45				4.74	8.84	8.90				22.48	2.171
69	3	2.15	4.26	4.09				4.30	8.52	8.18				21.00	1.676
70	3	2.85	3.81	4.23				5.70	7.62	8.46				21.78	1.842
71	3	1.88	0.90	0.80				3.76	1.80	1.60				7.16	0.108
72	3	2.93	3.47	3.67				5.86	6.94	7.34				20.14	1.421
73	3	2.76	3.89	3.89				5.52	7.78	7.78				21.08	1.617
74	3	1.14	0.67	0.72				2.28	1.34	1.44				5.06	0.015
75	3	3.15	3.91	3.97				6.30	7.82	7.94				22.06	2.017
76	3	2.93	2.25	2.25				5.86	4.50	4.50				14.86	0.748
77	3	2.00	4.05	4.00				4.00	8.10	8.00				20.10	1.427
78	3	1.15	0.82	0.70				2.30	1.64	1.40				5.34	0.016
79	3	2.13	4.40	3.76				4.26	8.80	7.52				20.58	1.538
80	3	3.17	4.15	3.76				6.34	8.30	7.52				22.16	2.056
81	3	2.57	4.57	3.76				5.14	9.14	7.52				21.80	1.850
82	3	2.12	4.18	3.80				4.24	8.36	7.60				20.20	1.418
83	3	2.48	3.85	3.15				4.96	7.70	6.30				18.96	1.058
84	3	2.44	4.69	4.04				4.88	9.38	8.08				22.34	2.086
85	3	1.54	1.14	1.03				3.08	2.28	2.06				7.42	0.054
86	3	2.65	3.65	3.54				5.30	7.30	7.08				19.68	1.238
87	3	2.48	3.59	3.71				4.96	7.18	7.42				19.56	1.193
88	3	1.65	1.05	1.13				3.30	2.10	2.26				7.66	0.069
89	3	2.47	3.81	4.15				4.94	7.62	8.30				20.86	1.549
90	3	2.89	3.32	3.23				5.78	6.64	6.46				18.88	1.155
91	3	2.89	4.48	3.73				5.78	8.96	7.46				22.20	1.986
92	3	3.49	3.54	4.14				6.98	7.08	8.28				22.34	2.322
93	3	2.65	3.80	3.77				5.30	7.60	7.54				20.44	1.426
94	3	2.27	4.20	4.04				4.54	8.40	8.08				21.02	1.643
95	3	2.87	3.53	3.96				5.74	7.06	7.92				20.72	1.541
96	3	2.02	4.41	5.15				4.04	8.82	10.30				23.16	2.711
97	3	2.93	3.12	3.18				5.86	6.24	6.36				18.46	1.106
98	3	1.68	1.18	1.02				3.36	2.36	2.04				7.76	0.074

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
99	3	1.73	1.05	1.16				3.46	2.10	2.32				7.88	0.083
100	3	2.52	3.81	3.55				5.04	7.62	7.10				19.76	1.243
101	3	1.70	3.91	3.19				3.40	7.82	6.38				17.60	0.852
102	3	1.88	5.17	4.79				3.76	10.34	9.58				23.68	3.134
103	3	2.89	4.06	3.76				5.78	8.12	7.52				21.42	1.739
104	3	1.59	1.16	1.09				3.18	2.32	2.18				7.68	0.062
105	3	1.43	1.14	0.86				2.86	2.28	1.72				6.86	0.040
106	3	3.10	2.19	2.02				6.20	4.38	4.04				14.62	0.875
107	3	2.42	2.03	1.96				4.84	4.06	3.92				12.82	0.367
108	3	2.68	4.04	4.33				5.36	8.08	8.66				22.10	1.945
109	3	2.62	2.69	2.90				5.24	5.38	5.80				16.42	0.698
110	3	2.48	2.47	2.30				4.96	4.94	4.60				14.50	0.478
111	3	2.96	3.36	4.35				5.92	6.72	8.70				21.34	1.735
112	3	1.76	3.22	3.34				3.52	6.44	6.68				16.64	0.651
113	3	3.08	4.13	3.41				6.16	8.26	6.82				21.24	1.754
114	3	2.84	4.08	4.21				5.68	8.16	8.42				22.26	2.002
115	3	2.93	3.20	3.40				5.86	6.40	6.80				19.06	1.205
116	3	2.34	4.20	4.58				4.68	8.40	9.16				22.24	2.082
117	3	3.03	4.47	4.16				6.06	8.94	8.32				23.32	2.418
118	3	3.38	4.19	3.30				6.76	8.38	6.60				21.74	2.069
119	3	2.40	3.90	4.01				4.80	7.80	8.02				20.62	1.485
120	3	2.65	4.41	4.55				5.30	8.82	9.10				23.22	2.399
121	3	1.62	1.52	0.40				3.24	3.04	0.80				7.08	0.062
122	3	1.50	1.55	1.02	1.01			3.00	3.10	2.04	2.02			10.16	0.093
123	3	2.14	4.65	4.68				4.28	9.30	9.36				22.94	2.509
124	3	1.65	1.31	1.52				3.30	2.62	3.04				8.96	0.082
125	3	1.40	4.09	3.81				2.80	8.18	7.62				18.60	1.231
126	3	2.92	2.12	2.81				5.84	4.24	5.62				15.70	0.795
127	3	2.71	2.42	2.50				5.42	4.84	5.00				15.26	0.635
128	3	3.04	2.72	3.21				6.08	5.44	6.42				17.94	1.101
129	3	2.72	4.45	4.65				5.44	8.90	9.30				23.64	2.572
130	3	3.31	4.12	4.18				6.62	8.24	8.36				23.22	2.473
131	3	3.45	4.71	4.07				6.90	9.42	8.14				24.46	3.023
132	3	2.70	4.83	4.23				5.40	9.66	8.46				23.52	2.522
133	3	3.20	3.70	4.02				6.40	7.40	8.04				21.84	1.977
134	3	2.43	3.20	4.22				4.86	6.40	8.44				19.70	1.227
135	3	3.20	3.38	3.21				6.40	6.76	6.42				19.58	1.465
136	3	2.70	4.12	4.40				5.40	8.24	8.80				22.44	2.070
137	3	2.61	4.54	4.80				5.22	9.08	9.60				23.90	2.733
138	3	3.22	2.50	4.12				6.44	5.00	8.24				19.68	1.498
139	3	2.50	3.33	3.42				5.00	6.66	6.84				18.50	0.968
140	3	2.18	2.55	3.58				4.36	5.10	7.16				16.62	0.625
141	3	2.53	4.41	4.48				5.06	8.82	8.96				22.84	2.268
142	3	2.80	2.90	3.12				5.60	5.80	6.24				17.64	0.922
143	3	2.93	4.29	4.21				5.86	8.58	8.42				22.86	2.228
144	3	1.52	1.20	3.10				3.04	2.40	6.20				11.64	0.150
145	3	3.35	3.50	3.80				6.70	7.00	7.60				21.30	1.936
146	3	2.15	3.25	4.18				4.30	6.50	8.36				19.16	1.118
147	3	2.63	4.45	4.18				5.26	8.90	8.36				22.52	2.111
148	3	3.12	3.76	4.85				6.24	7.52	9.70				23.46	2.490
149	3	3.18	4.00	4.15				6.36	8.00	8.30				22.66	2.220
150	3	3.15	4.20	4.31				6.30	8.40	8.62				23.32	2.444
151	3	2.52	3.26	2.93				5.04	6.52	5.86				17.42	0.792
152	3	2.62	3.79	3.70				5.24	7.58	7.40				20.22	1.366
153	3	2.55	3.80	4.50				5.10	7.60	9.00				21.70	1.817
154	3	2.95	3.35	4.05				5.90	6.70	8.10				20.70	1.561
155	3	2.95	4.60	4.18				5.90	9.20	8.36				23.46	2.468
156	3	2.85	3.40	3.52				5.70	6.80	7.04				19.54	1.262
157	3	2.90	4.12	4.51				5.80	8.24	9.02				23.06	2.303
158	3	2.70	4.22	4.30				5.40	8.44	8.60				22.44	2.070
159	3	2.35	4.42	4.48				4.70	8.84	8.96				22.50	2.188
160	3	3.71	3.92	5.14				7.42	7.84	10.28				25.54	3.671
161	3	3.11	3.90	4.11				6.22	7.80	8.22				22.24	2.056
162	3	3.65	4.45	4.65				7.30	8.90	9.30				25.50	3.607
163	3	1.68	3.98	4.06				3.36	7.96	8.12				19.44	1.353
164	3	3.01	4.05	4.15				6.02	8.10	8.30				22.42	2.084
165	3	2.82	4.72	4.93				5.64	9.44	9.86				24.94	3.202
166	3	0.34	0.83	0.64				0.68	1.66	1.28				3.62	0.002
167	3	5.52	4.30	4.35				11.04	8.60	8.70				28.34	9.552
168	3	2.75	4.61	4.81				5.50	9.22	9.62				24.34	2.906
169	3	2.07	2.15	3.90				4.14	4.30	7.80				16.24	0.567
170	3	2.76	3.91	3.95				5.52	7.82	7.90				21.24	1.664
171	3	2.93	3.68	4.85				5.86	7.36	9.70				22.92	2.251

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
172	3	3.15	4.15	4.25				6.30	8.30	8.50				23.10	2.362
173	3	1.96	2.66	2.58				3.92	5.32	5.16				14.40	0.356
174	3	2.32	3.12	3.49				4.64	6.24	6.98				17.86	0.832
175	3	2.26	3.89	4.11				4.52	7.78	8.22				20.52	1.481
176	3	2.18	4.21	4.54				4.36	8.42	9.08				21.86	1.994
177	3	3.09	3.05	2.32				6.18	6.10	4.64				16.92	1.025
178	3	0.86	0.60	0.67	0.60			1.72	1.20	1.34	1.20			5.46	0.008
179	3	2.36	4.07	4.20				4.72	8.14	8.40				21.26	1.701
180	3	2.19	2.96	2.63				4.38	5.92	5.26				15.56	0.494
181	3	2.16	2.38	2.56				4.32	4.76	5.12				14.20	0.367
182	3	2.28	2.03	1.97				4.56	4.06	3.94				12.56	0.307
183	3	2.44	2.99	3.90				4.88	5.98	7.80				18.66	0.992
184	3	1.09	2.32	2.39				2.18	4.64	4.78				11.60	0.163
185	3	1.25	1.08	1.03				2.50	2.16	2.06				6.72	0.027
186	3	1.57	2.32	2.32				3.14	4.64	4.64				12.42	0.194
187	3	1.95	4.85	3.65	3.80			3.90	9.70	7.30	7.60			28.50	7.166
188	3	2.30	3.63	4.22				4.60	7.26	8.44				20.30	1.405
189	3	2.62	3.67	3.76				5.24	7.34	7.52				20.10	1.335
190	3	1.52	3.28	3.33				3.04	6.56	6.66				16.26	0.633
191	3	1.73	3.02	3.61				3.46	6.04	7.22				16.72	0.670
192	3	2.35	3.74	3.00				4.70	7.48	6.00				18.18	0.892
193	3	1.05	0.80	0.66				2.10	1.60	1.32				5.02	0.012
194	3	2.23	4.22	3.99				4.46	8.44	7.98				20.88	1.607
195	3	1.25	1.17	0.93				2.50	2.34	1.86				6.70	0.027
196	3	3.05	3.55	3.67				6.10	7.10	7.34				20.54	1.566
197	3	0.98	0.78	0.70				1.96	1.56	1.40				4.92	0.009
198	3	2.93	3.62	3.74				5.86	7.24	7.48				20.58	1.525
199	3	2.50	3.10	3.22				5.00	6.20	6.44				17.64	0.820
200	3	1.99	2.16	1.96				3.98	4.32	3.92				12.22	0.221
201	3	1.70	3.20	3.73				3.40	6.40	7.46				17.26	0.780
202	3	1.22	0.89	0.83				2.44	1.78	1.66				5.88	0.021
203	3	0.86	0.81	0.74	0.60			1.72	1.62	1.48	1.20			6.02	0.011
204	3	1.04	0.73	0.62				2.08	1.46	1.24				4.78	0.011
205	3	1.88	3.46	3.62				3.76	6.92	7.24				17.92	0.879
206	3	2.01	2.41	2.69				4.02	4.82	5.38				14.22	0.346
207	3	1.72	1.79	2.09				3.44	3.58	4.18				11.20	0.144
208	3	2.40	3.13	2.75				4.80	6.26	5.50				16.56	0.648
209	3	2.57	3.84	3.58				5.14	7.68	7.16				19.98	1.301
210	3	0.92	0.73	0.49				1.84	1.46	0.98				4.28	0.007
211	3	2.62	3.20	3.50				5.24	6.40	7.00				18.64	1.017
212	3	2.15	3.65	3.85				4.30	7.30	7.70				19.30	1.154
213	3	1.55	1.38	1.10				3.10	2.76	2.20				8.06	0.060
214	3	2.20	3.20	3.85				4.40	6.40	7.70				18.50	0.958
215	3	2.45	3.66	3.85				4.90	7.32	7.70				19.92	1.283
														VDF	1.125
4) BUS															
1	4	1.49	2.17					2.98	4.34					7.32	0.122
2	4	1.05	1.76					2.10	3.52					5.62	0.045
3	4	0.60	0.75					1.20	1.50					2.70	0.002
4	4	0.90	1.96					1.80	3.92					5.72	0.059
5	4	0.68	3.10					1.36	6.20					7.56	0.337
6	4	0.74	1.12					1.48	2.24					3.72	0.008
7	4	0.50	1.54					1.00	3.08					4.08	0.021
8	4	0.41	1.48					0.82	2.96					3.78	0.018
9	4	1.17	2.17					2.34	4.34					6.68	0.096
10	4	0.35	0.39					0.70	0.78					1.48	0.000
11	4	0.95	167.00					1.90	3.34					5.24	0.035
12	4	0.52	1.33					1.04	2.66					3.70	0.012
13	4	0.87	1.03					1.74	2.06					3.80	0.009
14	4	1.04	0.84					2.08	1.68					3.76	0.012
15	4	0.77	0.68					1.54	1.36					2.90	0.004
16	4	0.84	1.46					1.68	2.92					4.60	0.021
17	4	0.95	1.26					1.90	2.52					4.42	0.016
18	4	1.58	1.81					3.16	3.62					6.78	0.091
19	4	1.19	1.62					2.38	3.24					5.62	0.042
20	4	1.75	2.10					3.50	4.20					7.70	0.150
21	4	1.72	2.31					3.44	4.62					8.06	0.177
22	4	1.54	1.68					3.08	3.36					6.44	0.076
23	4	0.89	1.74					1.78	3.48					5.26	0.039
24	4	1.18	1.09					2.36	2.18					4.54	0.021
25	4	1.64	2.20					3.28	4.40					7.68	0.146
26	4	1.65	1.52					3.30	3.04					6.34	0.082
27	4	1.75	1.37					3.50	2.74					6.24	0.092

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
28	4	2.18	1.53					4.36	3.06					7.42	0.210
29	4	0.85	1.09					1.70	2.18					3.88	0.010
30	4	0.83	1.00					1.66	2.00					3.66	0.008
31	4	1.11	1.52					2.22	3.04					5.26	0.032
32	4	1.06	1.21					2.12	2.42					4.54	0.018
33	4	0.76	1.21					1.52	2.42					3.94	0.011
34	4	1.10	3.83					2.20	7.66					9.86	0.793
35	4	1.93	3.47					3.86	6.94					10.80	0.643
36	4	1.05	1.48					2.10	2.96					5.06	0.028
37	4	0.67	1.51					1.34	3.02					4.36	0.021
38	4	0.75	0.82					1.50	1.64					3.14	0.004
39	4	0.68	1.09					1.36	2.18					3.54	0.007
40	4	0.62	1.24					1.24	2.48					3.72	0.010
41	4	0.90	1.45					1.80	2.90					4.70	0.022
42	4	0.83	1.15					1.66	2.30					3.96	0.010
43	4	0.74	1.19					1.48	2.38					3.86	0.010
														VDF	0.083

Vehicle Damage Factor

LCV	0.142
HCV	0.683
Multi Axle	1.125
Bus	0.083

Axle Load Spectrum

Single Axle	Nos.	%	Tandam Axle	Nos.	%
19-21	0	0.00	34-38	0	0.00
17-19	0	0.00	30-34	0	0.00
15-17	0	0.00	26-30	0	0.00
13-15	0	0.00	22-26	0	0.00
11-13	4	2.13	18-22	2	8.00
9-11	19	10.11	14-18	8	32.00
< 9	165	87.77	< 14	15	60.00
	188			25	

Axle Load Spectrum

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Axle Load Spectrum

Axle Load Spectrum

Axle Load Spectrum

Axle Load Spectrum

Axle Load Spectrum

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Axle Load Spectrum

Axle Load Spectrum

Axle Load Spectrum

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Axle Load Spectrum

Preparation of Detailed Project Report for Nanded Roads under JNNURM
Axle Load Survey Data Analysis

Location: Road No.28, Bhagat Singh Road

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
1) Light Commercial Traffic															
1	1	1.06	3.54					2.12	7.08					9.20	1.335
2	1	0.82	2.56					1.64	5.12					6.76	0.366
3	1	0.7	0.55					1.40	1.10					2.50	0.003
4	1	0.89	2.59					1.78	5.18					6.96	0.385
5	1	0.94	1.06					1.88	2.12					4.00	0.017
6	1	0.63	0.56					1.26	1.12					2.38	0.002
7	1	0.85	1.96					1.70	3.92					5.62	0.129
8	1	0.71	0.64					1.42	1.28					2.70	0.004
9	1	0.68	0.53					1.36	1.06					2.42	0.002
10	1	1.11	1.09					2.22	2.18					4.40	0.025
11	1	0.66	0.7					1.32	1.40					2.72	0.004
12	1	0.72	1.08					1.44	2.16					3.60	0.014
13	1	0.72	0.72					1.44	1.44					2.88	0.005
14	1	0.72	0.55					1.44	1.10					2.54	0.003
15	1	0.68	0.59					1.36	1.18					2.54	0.003
16	1	1.36	2.71					2.72	5.42					8.14	0.484
17	1	1.04	1.27					2.08	2.54					4.62	0.032
18	1	0.89	1.03					1.78	2.06					3.84	0.015
19	1	0.55	0.59					1.10	1.18					2.28	0.002
20	1	1.12	1.14					2.24	2.28					4.52	0.028
21	1	0.65	1.21					1.30	2.42					3.72	0.020
22	1	0.64	0.58					1.28	1.16					2.44	0.002
23	1	1.08	2.09					2.16	4.18					6.34	0.172
24	1	2.21	2.61					4.42	5.22					9.64	0.592
25	1	0.71	0.62					1.42	1.24					2.66	0.003
26	1	0.7	0.75					1.40	1.50					2.90	0.005
27	1	0.96	1.8					1.92	3.60					5.52	0.096
28	1	0.6	0.49					1.20	0.98					2.18	0.002
29	1	1.19	2.5					2.38	5.00					7.38	0.346
30	1	0.74	0.94					1.48	1.88					3.36	0.009
31	1	0.56	0.61					1.12	1.22					2.34	0.002
32	1	1.1	1.11					2.20	2.22					4.42	0.025
33	1	0.84	0.75					1.68	1.50					3.18	0.007
34	1	0.71	0.6					1.42	1.20					2.62	0.003
35	1	0.75	0.74					1.50	1.48					2.98	0.005
36	1	0.72	0.48					1.44	0.96					2.40	0.003
37	1	0.66	0.72					1.32	1.44					2.76	0.004
38	1	1.04	0.99					2.08	1.98					4.06	0.018
39	1	0.69	0.59					1.38	1.18					2.56	0.003
40	1	1.38	1.02					2.76	2.04					4.80	0.040
41	1	1.28	2.04					2.56	4.08					6.64	0.169
42	1	0.85	0.69					1.70	1.38					3.08	0.006
43	1	0.79	1.92					1.58	3.84					5.42	0.118
44	1	0.86	1.01					1.72	2.02					3.74	0.013
45	1	0.69	0.58					1.38	1.16					2.54	0.003
46	1	0.8	0.69					1.60	1.38					2.98	0.005
47	1	1.24	2.89					2.48	5.78					8.26	0.608
48	1	0.61	0.48					1.22	0.96					2.18	0.002
49	1	0.89	0.7					1.78	1.40					3.18	0.007
50	1	0.84	1.03					1.68	2.06					3.74	0.014
51	1	0.77	0.9					1.54	1.80					3.34	0.008
52	1	0.97	0.83					1.94	1.66					3.60	0.011
53	1	0.73	0.71					1.46	1.42					2.88	0.005
54	1	1.62	2.41					3.24	4.82					8.06	0.343
55	1	0.5	1.36					1.00	2.72					3.72	0.029
56	1	0.64	0.59					1.28	1.18					2.46	0.002
57	1	0.73	0.68					1.46	1.36					2.82	0.004
58	1	0.8	1.01					1.60	2.02					3.62	0.012
59	1	0.7	0.64					1.40	1.28					2.68	0.003
60	1	0.68	0.56					1.36	1.12					2.48	0.003
61	1	0.77	0.65					1.54	1.30					2.84	0.004
62	1	0.93	2.02					1.86	4.04					5.90	0.147
63	1	0.77	0.93					1.54	1.86					3.40	0.009
64	1	0.75	1.15					1.50	2.30					3.80	0.017
65	1	0.88	1.95					1.76	3.90					5.66	0.127
66	1	1.35	1.36					2.70	2.72					5.42	0.057
67	1	0.95	2.05					1.90	4.10					6.00	0.156
68	1	0.76	2.02					1.52	4.04					5.56	0.143
69	1	0.61	0.63					1.22	1.26					2.48	0.002

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
70	1	1.12	2.52					2.24	5.04					7.28	0.353
71	1	0.54	0.63					1.08	1.26					2.34	0.002
72	1	0.82	1.12					1.64	2.24					3.88	0.017
73	1	1.45	3.46					2.90	6.92					9.82	1.246
74	1	0.75	1.45					1.50	2.90					4.40	0.040
75	1	0.82	1.02					1.64	2.04					3.68	0.013
76	1	0.83	1.86					1.66	3.72					5.38	0.105
77	1	1.13	2.67					2.26	5.34					7.60	0.442
78	1	0.61	0.6					1.22	1.20					2.42	0.002
79	1	0.6	0.57					1.20	1.14					2.34	0.002
80	1	1.3	2.15					2.60	4.30					6.90	0.204
														VDF	0.108
2) Truck Traffic															
1	2	1.19	1.98					2.38	3.96					6.34	0.073
2	2	1.63	1.28					3.26	2.56					5.82	0.069
3	2	1.95	2.49					3.90	4.98					8.88	0.261
4	2	1.81	1.68					3.62	3.36					6.98	0.119
5	2	2.59	5.18					5.18	10.36					15.54	2.990
6	2	2.26	5.1					4.52	10.20					14.72	2.673
7	2	1.12	0.83					2.24	1.66					3.90	0.015
8	2	2.45	5.46					4.90	10.92					15.82	3.527
9	2	1.65	1.55					3.30	3.10					6.40	0.083
10	2	0.65	0.78					1.30	1.56					2.86	0.003
11	2	2.93	4.86					5.86	9.72					15.58	2.645
12	2	1.92	2.26					3.84	4.52					8.36	0.209
13	2	1.78	1.67					3.56	3.34					6.90	0.113
14	2	2.82	5.32					5.64	10.64					16.28	3.438
15	2	2.36	4.25					4.72	8.50					13.22	1.445
16	2	1.61	1.82					3.22	3.64					6.86	0.096
17	2	1.82	3.17					3.64	6.34					9.98	0.459
18	2	2.35	2.28					4.70	4.56					9.26	0.355
19	2	2.94	4.09					5.88	8.18					14.06	1.645
20	2	1.18	1.22					2.36	2.44					4.80	0.024
21	2	2.18	2.18					4.36	4.36					8.72	0.272
22	2	1.08	1.28					2.16	2.56					4.72	0.021
23	2	2.94	3.66					5.88	7.32					13.20	1.281
24	2	1.54	1.87					3.08	3.74					6.82	0.092
25	2	1.83	1.95					3.66	3.90					7.56	0.147
26	2	2.15	2.39					4.30	4.78					9.08	0.299
27	2	2.41	4.73					4.82	9.46					14.28	2.100
28	2	2.45	2.84					4.90	5.68					10.58	0.540
29	2	0.73	0.72					1.46	1.44					2.90	0.003
30	2	2.54	4.29					5.08	8.58					13.66	1.579
31	2	1.74	1.79					3.48	3.58					7.06	0.115
32	2	2.58	4.97					5.16	9.94					15.10	2.586
33	2	1.2	1.06					2.40	2.12					4.52	0.022
34	2	0.8	0.67					1.60	1.34					2.94	0.004
35	2	2.28	2.09					4.56	4.18					8.74	0.297
36	2	1.66	1.57					3.32	3.14					6.46	0.086
37	2	2.34	5.05					4.68	10.10					14.78	2.611
38	2	2.07	4.67					4.14	9.34					13.48	1.880
39	2	1.58	1.39					3.16	2.78					5.94	0.066
40	2	1.83	1.52					3.66	3.04					6.70	0.114
41	2	3.4	3.64					6.80	7.28					14.08	1.763
42	2	2.48	5.56					4.96	11.12					16.08	3.785
43	2	1.62	1.54					3.24	3.08					6.32	0.078
44	2	2.14	2.44					4.28	4.88					9.16	0.305
45	2	2.73	5.37					5.46	10.74					16.20	3.484
46	2	2.94	4.6					5.88	9.20					15.08	2.254
47	2	1.56	2.28					3.12	4.56					7.68	0.148
48	2	1.5	1.69					3.00	3.38					6.38	0.072
49	2	2.75	4.75					5.50	9.50					15.00	2.328
50	2	2.64	5.42					5.28	10.84					16.12	3.539
51	2	2.57	2.2					5.14	4.40					9.54	0.453
52	2	0.66	0.72					1.32	1.44					2.76	0.003
53	2	3.72	4.85					7.44	9.70					17.14	3.621
54	2	1.68	1.65					3.36	3.30					6.66	0.094
55	2	1.76	3.34					3.52	6.68					10.20	0.532
56	2	1.97	1.33					3.94	2.66					6.60	0.138
57	2	1.7	1.76					3.40	3.52					6.92	0.105
58	2	1.03	1.44					2.06	2.88					4.94	0.025
59	2	1.77	1.86					3.54	3.72					7.26	0.126
60	2	1.66	1.87					3.32	3.74					7.06	0.108

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
61	2	2.45	5.05					4.90	10.10					15.00	2.662
62	2	2.36	3.04					4.72	6.08					10.80	0.571
63	2	1.3	1.65					2.60	3.30					5.90	0.051
64	2	2.51	3.23					5.02	6.46					11.48	0.729
65	2	1.56	1.48					3.12	2.96					6.08	0.067
66	2	2.86	4.56					5.72	9.12					14.84	2.132
67	2	1.68	1.7					3.36	3.40					6.76	0.097
68	2	1.25	1.73					2.50	3.46					5.96	0.053
69	2	1.33	1.06					2.66	2.12					4.78	0.031
70	2	1.48	1.81					2.96	3.62					6.58	0.079
71	2	2.72	2.96					5.44	5.92					11.36	0.740
72	2	1.33	2.1					2.66	4.20					6.86	0.097
73	2	1.77	1.03					3.54	2.06					5.60	0.087
74	2	2.54	5.32					5.08	10.64					15.72	3.256
75	2	2.94	4.9					5.88	9.80					15.68	2.721
76	2	2.12	3.04					4.24	6.08					10.32	0.480
77	2	2.15	3.26					4.30	6.52					10.82	0.590
78	2	1.41	1.32					2.82	2.64					5.46	0.044
79	2	0.84	0.71					1.68	1.42					3.10	0.005
80	2	2.32	4.24					4.64	8.48					13.12	1.416
81	2	1.85	1.63					3.70	3.26					6.96	0.124
82	2	2.63	4.52					5.26	9.04					14.30	1.917
83	2	2.45	5.46					4.90	10.92					15.82	3.527
84	2	1.75	3.35					3.50	6.70					10.20	0.536
85	2	2.06	5.73					4.12	11.46					15.58	4.061
86	2	2.18	2.85					4.36	5.70					10.06	0.430
87	2	1.26	1.19					2.52	2.38					4.90	0.029
88	2	0.76	1.1					1.52	2.20					3.72	0.008
89	2	2.34	5.65					4.68	11.30					15.98	3.948
90	2	1.14	1.56					2.28	3.12					5.40	0.036
91	2	1.11	2.47					2.22	4.94					7.16	0.148
92	2	1.8	4.5					3.60	9.00					12.60	1.576
93	2	2.48	5.56					4.96	11.12					16.08	3.785
94	2	2.13	3.78					4.26	7.56					11.82	0.914
95	2	1.15	1.3					2.30	2.60					4.90	0.025
														VDF	0.993
3) Multi AxleTraffic															
1	3	3.01	4.22	4.67				6.02	8.44	9.34				23.80	2.614
2	3	3.07	3.74	3.84				6.14	7.48	7.68				21.30	1.765
3	3	2.51	4.33	3.72				5.02	8.66	7.44				21.12	1.627
4	3	1.12	2.4	2.04				2.24	4.80	4.08				11.12	0.133
5	3	3.12	2.5	1.95				6.24	5.00	3.90				15.14	0.920
6	3	1.91	1.16	1.04				3.82	2.32	2.08				8.22	0.119
7	3	3.14	4.47	4.15				6.28	8.94	8.30				23.52	2.519
8	3	1.63	1.18	0.89				3.26	2.36	1.78				7.40	0.065
9	3	3.02	5.25	4.16				6.04	10.50	8.32				24.86	3.114
10	3	3.75	2.74	3.12				7.50	5.48	6.24				19.22	2.030
11	3	3.12	2.73	2.82				6.24	5.46	5.64				17.34	1.091
12	3	3.02	4.28	4.67				6.04	8.56	9.34				23.94	2.676
13	3	2.36	1.03	1.16				4.72	2.06	2.32				9.10	0.269
14	3	2.06	4.39	4.63				4.12	8.78	9.26				22.16	2.189
15	3	2.52	1.78	5.28				5.04	3.56	10.56				19.16	1.105
16	3	1.6	1.73	0.89				3.20	3.46	1.78				8.44	0.070
17	3	3.17	2.1	3.1				6.34	4.20	6.20				16.74	1.077
18	3	1.89	1.3	1.06				3.78	2.60	2.12				8.50	0.117
19	3	2.66	4.52	5.09				5.32	9.04	10.18				24.54	3.047
20	3	3.3	4.84	4.15				6.60	9.68	8.30				24.58	3.010
21	3	1.89	1.64	1.38				3.78	3.28	2.76				9.82	0.133
22	3	3.01	3.24	2.88				6.02	6.48	5.76				18.26	1.124
23	3	2.03	1.23	1				4.06	2.46	2.00				8.52	0.151
24	3	3.41	4.33	4.05				6.82	8.66	8.10				23.58	2.658
25	3	1.6	1.5	0.9				3.20	3.00	1.80				8.00	0.065
26	3	2.57	4.32	3.3				5.14	8.64	6.60				20.38	1.405
														VDF	1.350
4) BUS															
1	4	1.52	2.52					3.04	5.04					8.08	0.191
2	4	1.7	1.35					3.40	2.70					6.10	0.082
3	4	1.01	1.33					2.02	2.66					4.68	0.020
4	4	1.67	1.37					3.34	2.74					6.08	0.078
5	4	1.62	1.84					3.24	3.68					6.92	0.100
6	4	1.71	1.36					3.42	2.72					6.14	0.085
7	4	1.73	1.34					3.46	2.68					6.14	0.087

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
8	4	1.69	2.46					3.38	4.92					8.30	0.202
9	4	1.63	1.97					3.26	3.94					7.20	0.114
10	4	1.52	2.15					3.04	4.30					7.34	0.123
11	4	1.69	2.61					3.38	5.22					8.60	0.237
12	4	1.72	2.44					3.44	4.88					8.32	0.202
13	4	1.7	2.13					3.40	4.26					7.66	0.145
14	4	2.54	3.95					5.08	7.90					12.98	1.234
15	4	1.01	1.36					2.02	2.72					4.74	0.021
16	4	2.05	3.65					4.10	7.30					11.40	0.793
														VDF	0.232

Vehicle Damage Factor

LCV 0.108

HCV 0.993

Multi Axle 1.350

Bus 0.232

Axle Load Spectrum - Road No.28

Single Axle	Nos.	%	Tandam Axle	Nos.	%
19-21	0	0.00	34-38	0	0.00
17-19	0	0.00	30-34	0	0.00
15-17	0	0.00	26-30	0	0.00
13-15	0	0.00	22-26	0	0.00
11-13	4	2.13	18-22	0	0.00
9-11	19	10.11	14-18	0	0.00
< 9	165	87.77	< 14	26	100.00
	188			26	

Axle Load Spectrum - Road No.28

Axle Load Spectrum - Road No.28

19
69 95

15 26

Axle Load Spectrum - Road No.28

16

Preparation of Detailed Project Report for Nanded Roads under JNNURM
Axle Load Survey Data Analysis

Location: Road No. 32, Near Shiv Temple

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
1) Light Commercial Traffic															
1	1	0.65	0.68					1.30	1.36					2.66	0.003
2	1	0.25	0.31					0.50	0.62					1.12	0.000
3	1	0.25	0.43					0.50	0.86					1.36	0.000
4	1	0.26	0.20					0.52	0.40					0.92	0.000
5	1	0.31	1.10					0.62	2.20					2.82	0.012
6	1	1.23	1.77					2.46	3.54					6.00	0.102
7	1	0.48	0.54					0.96	1.08					2.04	0.001
8	1	1.65	4.24					3.30	8.48					11.78	2.788
9	1	0.60	1.74					1.20	3.48					4.68	0.078
10	1	0.28	2.62					0.56	5.24					5.80	0.397
11	1	0.60	0.74					1.20	1.48					2.68	0.004
12	1	0.80	1.10					1.60	2.20					3.80	0.016
13	1	0.81	1.71					1.62	3.42					5.04	0.076
14	1	1.20	1.20					2.40	2.40					4.80	0.035
15	1	1.12	1.15					2.24	2.30					4.54	0.028
16	1	0.93	1.05					1.86	2.10					3.96	0.017
17	1	0.67	1.07					1.34	2.14					3.48	0.013
18	1	0.75	0.95					1.50	1.90					3.40	0.010
19	1	0.91	0.92					1.82	1.84					3.66	0.012
20	1	0.58	0.97					1.16	1.94					3.10	0.008
21	1	0.59	2.01					1.18	4.02					5.20	0.139
22	1	0.73	1.14					1.46	2.28					3.74	0.017
23	1	0.49	0.37					0.98	0.74					1.72	0.001
24	1	0.61	1.25					1.22	2.50					3.72	0.022
25	1	1.35	1.15					2.70	2.30					5.00	0.043
26	1	0.69	1.68					1.38	3.36					4.74	0.069
27	1	1.21	1.78					2.42	3.56					5.98	0.103
28	1	0.78	2.05					1.56	4.10					5.66	0.152
29	1	0.44	0.58					0.88	1.16					2.04	0.001
30	1	0.71	1.07					1.42	2.14					3.56	0.013
31	1	0.91	1.24					1.82	2.48					4.30	0.026
32	1	0.44	0.53					0.88	1.06					1.94	0.001
33	1	0.81	0.37					1.62	0.74					2.36	0.004
34	1	0.70	0.60					1.40	1.20					2.60	0.003
35	1	1.60	3.90					3.20	7.80					11.00	2.006
36	1	0.50	0.73					1.00	1.46					2.46	0.003
37	1	0.46	0.91					0.92	1.82					2.74	0.006
38	1	0.94	1.12					1.88	2.24					4.12	0.020
39	1	0.78	1.27					1.56	2.54					4.10	0.025
40	1	1.08	1.43					2.16	2.86					5.02	0.047
41	1	0.44	0.40					0.88	0.80					1.68	0.001
42	1	0.20	0.72					0.40	1.44					1.84	0.002
43	1	0.74	0.45					1.48	0.90					2.38	0.003
44	1	0.60	0.68					1.20	1.36					2.56	0.003
45	1	0.77	1.50					1.54	3.00					4.54	0.046
46	1	0.60	0.45					1.20	0.90					2.10	0.001
47	1	0.54	0.36					1.08	0.72					1.80	0.001
48	1	0.61	0.42					1.22	0.84					2.06	0.001
49	1	1.01	1.61					2.02	3.22					5.24	0.065
50	1	0.49	1.01					0.98	2.02					3.00	0.009
51	1	0.57	1.01					1.14	2.02					3.16	0.010
52	1	0.47	0.86					0.94	1.72					2.66	0.005
53	1	0.86	0.65					1.72	1.30					3.02	0.006
54	1	0.56	0.60					1.12	1.20					2.32	0.002
55	1	0.72	0.54					1.44	1.08					2.52	0.003
56	1	1.14	0.62					2.28	1.24					3.52	0.015
57	1	0.72	0.72					1.44	1.44					2.88	0.005
58	1	1.49	2.07					2.98	4.14					7.12	0.196
59	1	0.59	1.72					1.18	3.44					4.62	0.075
60	1	0.63	1.01					1.26	2.02					3.28	0.010
61	1	0.65	0.90					1.30	1.80					3.10	0.007
62	1	0.40	0.40					0.80	0.80					1.60	0.000
63	1	0.88	1.57					1.76	3.14					4.90	0.056
64	1	0.62	1.76					1.24	3.52					4.76	0.082
65	1	0.88	1.95					1.76	3.90					5.66	0.127
66	1	0.71	1.95					1.42	3.90					5.32	0.124
67	1	0.75	1.15					1.50	2.30					3.80	0.017
68	1	0.60	0.77					1.20	1.54					2.74	0.004
69	1	0.82	1.45					1.64	2.90					4.54	0.041

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
70	1	0.60	1.12					1.20	2.24					3.44	0.014
71	1	0.63	1.33					1.26	2.66					3.92	0.028
72	1	0.50	1.48					1.00	2.95					3.95	0.040
73	1	0.96	1.24					1.92	2.48					4.40	0.027
74	1	1.63	2.19					3.26	4.38					7.64	0.253
75	1	0.73	0.78					1.46	1.56					3.02	0.006
76	1	0.91	2.42					1.82	4.84					6.66	0.295
77	1	0.84	2.22					1.68	4.44					6.12	0.209
78	1	0.95	1.02					1.90	2.04					3.94	0.016
79	1	0.77	0.66					1.54	1.32					2.86	0.005
80	1	0.83	0.95					1.66	1.90					3.56	0.011
81	1	1.30	2.50					2.60	5.00					7.60	0.353
82	1	0.60	0.51					1.20	1.02					2.22	0.002
83	1	0.78	1.61					1.56	3.22					4.78	0.060
84	1	0.72	0.59					1.44	1.18					2.62	0.003
85	1	0.70	0.60					1.40	1.20					2.60	0.003
86	1	0.74	0.69					1.48	1.38					2.86	0.004
87	1	0.68	1.43					1.36	2.86					4.22	0.037
88	1	0.79	1.81					1.58	3.62					5.20	0.094
89	1	0.45	1.80					0.90	3.60					4.50	0.089
90	1	0.60	0.62					1.20	1.24					2.44	0.002
91	1	0.66	0.77					1.32	1.54					2.86	0.005
92	1	0.70	1.73					1.40	3.46					4.86	0.078
93	1	0.60	1.90					1.20	3.80					5.00	0.111
94	1	0.97	1.44					1.94	2.88					4.82	0.044
95	1	0.61	0.49					1.22	0.98					2.20	0.002
96	1MB	2.40	4.12					4.80	8.24					13.04	2.709
97	1MB	1.51	1.62					3.02	3.24					6.26	0.102
98	1MB	0.70	1.00					1.40	2.00					3.40	0.010
	97													VDF	0.033
2) Truck Traffic															
1	2	1.15	4.68					2.30	9.36					11.66	1.754
2	2	1.12	5.95					2.24	11.90					14.14	4.559
3	2	1.02	5.15					2.04	10.30					12.34	2.560
4	2	1.08	7.64					2.16	15.28					17.44	12.367
5	2	1.25	1.05					2.50	2.10					4.60	0.025
6	2	0.80	0.73					1.60	1.46					3.06	0.004
7	2	0.32	1.29					0.64	2.58					3.22	0.010
8	2	0.60						1.20	0.00					1.20	0.001
9	2	1.38	2.15					2.76	4.30					7.06	0.108
10	2	1.29	3.60					2.58	7.20					9.78	0.632
11	2	1.14	1.13					2.28	2.26					4.54	0.020
12	2	0.17	5.47					0.34	10.94					11.28	3.247
13	2	1.03	1.50					2.06	3.00					5.06	0.028
14	2	1.35	1.45					2.70	2.90					5.60	0.044
15	2	0.90	4.10					1.80	8.20					10.00	1.030
16	2	1.30	6.12					2.60	12.24					14.84	5.111
17	2	1.62	1.02					3.24	2.04					5.28	0.062
18	2	0.70	1.01					1.40	2.02					3.42	0.006
19	2	0.93	1.40					1.86	2.80					4.66	0.020
20	2	0.95	2.80					1.90	5.60					7.50	0.230
21	2	2.02	3.60					4.04	7.20					11.24	0.750
22	2	1.31	4.63					2.62	9.26					11.88	1.691
23	2	1.25	1.37					2.50	2.74					5.24	0.033
24	2	1.01	1.35					2.02	2.70					4.72	0.021
25	2	1.35	4.00					2.70	8.00					10.70	0.956
26	2	0.60	4.20					1.20	8.40					9.60	1.130
27	2	1.90	4.20					3.80	8.40					12.20	1.238
28	2	1.32	3.20					2.64	6.40					9.04	0.406
29	2	1.23	2.97					2.46	5.94					8.40	0.301
30	2	0.97	1.20					1.94	2.40					4.34	0.015
31	2	1.97	3.96					3.94	7.92					11.86	1.019
32	2	1.09	3.61					2.18	7.22					9.40	0.628
33	2	1.12	1.02					2.24	2.04					4.28	0.017
34	2	1.28	1.20					2.56	2.40					4.96	0.030
35	2	1.40	6.31					2.80	12.62					15.42	5.782
36	2	1.44	6.20					2.88	12.40					15.28	5.395
37	2	1.40	6.30					2.80	12.60					15.40	5.745
38	2	1.10	1.11					2.20	2.22					4.42	0.018
39	2	1.70	2.20					3.40	4.40					7.80	0.155
40	2	1.98	3.18					3.96	6.36					10.32	0.500
41	2	1.35	1.67					2.70	3.34					6.04	0.056
42	2	0.80	0.95					1.60	1.90					3.50	0.006

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
43	2	1.66	1.70					3.32	3.40					6.72	0.094
44	2	1.75	3.90					3.50	7.80					11.30	0.918
45	2	1.95	4.32					3.90	8.64					12.54	1.385
46	2	0.57	2.90					1.14	5.80					6.94	0.257
47	2	1.68	4.35					3.36	8.70					12.06	1.366
48	2	1.35	5.05					2.70	10.10					12.80	2.387
49	2	0.86	3.90					1.72	7.80					9.52	0.844
50	2	0.78	2.42					1.56	4.84					6.40	0.128
51	2	2.38	2.96					4.76	5.92					10.68	0.549
52	2	1.08	1.33					2.16	2.66					4.82	0.023
53	2	1.81	4.68					3.62	9.36					12.98	1.830
54	2	0.90	3.68					1.80	7.36					9.16	0.671
55	2	1.20	3.40					2.40	6.80					9.20	0.502
56	2	1.80	3.58					3.60	7.16					10.76	0.684
57	2	1.06	0.92					2.12	1.84					3.96	0.013
58	2	0.47	1.28					0.94	2.56					3.50	0.010
59	2	1.38	1.30					2.76	2.60					5.36	0.041
60	2	1.54	1.56					3.08	3.12					6.20	0.069
61	2	0.83	0.97					1.66	1.94					3.60	0.007
62	2	1.72	1.05					3.44	2.10					5.54	0.078
63	2	1.25	1.30					2.50	2.60					5.10	0.031
64	2	1.06	3.00					2.12	6.00					8.12	0.304
65	2	1.27	1.04					2.54	2.08					4.62	0.026
66	2	1.07	1.19					2.14	2.38					4.52	0.018
67	2	1.82	4.77					3.64	9.54					13.18	1.970
68	2	1.66	1.35					3.32	2.70					6.02	0.076
69	2	1.04	1.28					2.08	2.56					4.64	0.020
70	2	1.07	1.40					2.14	2.80					4.94	0.025
71	2	0.86	1.86					1.72	3.72					5.44	0.048
72	2	1.39	2.05					2.78	4.10					6.88	0.096
73	2	1.53	4.68					3.06	9.36					12.42	1.786
74	2	0.37	0.62					0.74	1.24					1.98	0.001
75	2	2.47	3.83					4.94	7.66					12.60	1.094
76	2	1.24	4.19					2.48	8.38					10.86	1.138
77	2	1.95	5.73					3.90	11.46					15.36	4.031
78	2	1.27	1.80					2.54	3.60					6.14	0.060
79	2	2.07	2.24					4.14	4.48					8.62	0.246
80	2	0.97	1.32					1.94	2.64					4.58	0.018
81	2	1.31	2.91					2.62	5.82					8.44	0.285
82	2	1.06	1.58					2.12	3.16					5.28	0.033
83	2	1.15	1.67					2.30	3.34					5.64	0.043
84	2	1.49	2.86					2.98	5.72					8.70	0.284
85	2	1.20	4.71					2.40	9.42					11.82	1.802
86	2	1.52	7.18					3.04	14.36					17.40	9.683
87	2	1.78	3.19					3.56	6.38					9.94	0.460
88	2	1.50	1.33					3.00	2.66					5.66	0.054
89	2	2.01	1.32					4.02	2.64					6.66	0.149
90	2	1.29	5.45					2.58	10.90					13.48	3.223
91	2	1.27	1.31					2.54	2.62					5.16	0.033
92	2	1.26	4.27					2.52	8.54					11.06	1.227
93	2	1.46	4.41					2.92	8.82					11.74	1.410
94	2	2.52	5.07					5.04	10.14					15.18	2.736
95	2	1.18	1.30					2.36	2.60					4.96	0.027
96	2	2.27	6.85					4.54	13.70					18.24	8.208
97	2	1.15	1.24					2.30	2.48					4.78	0.023
98	2	1.30	1.35					2.60	2.70					5.30	0.036
99	2	2.24	6.00					4.48	12.00					16.48	4.912
100	2	1.29	4.56					2.58	9.12					11.70	1.591
101	2	1.75	3.76					3.50	7.52					11.02	0.804
102	2	2.00	3.96					4.00	7.92					11.92	1.027
103	2	2.00	1.53					4.00	3.06					7.06	0.155
104	2	1.91	2.65					3.82	5.30					9.12	0.291
105	2	2.50	2.30					5.00	4.60					9.60	0.431
106	2	1.29	1.21					2.58	2.42					5.00	0.031
107	2	1.71	1.90					3.42	3.80					7.22	0.119
108	2	1.25	3.46					2.50	6.92					9.42	0.540
109	2	1.20	4.50					2.40	9.00					11.40	1.505
110	2	2.11	4.93					4.22	9.86					14.08	2.309
111	2	1.51	4.60					3.02	9.20					12.22	1.668
112	2	1.50	6.77					3.00	13.54					16.54	7.661
113	2	1.33	4.61					2.66	9.22					11.88	1.664
114	2	1.43	1.58					2.86	3.16					6.02	0.058
115	2	2.30	4.57					4.60	9.14					13.74	1.818

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
116	2	1.30	3.17					2.60	6.34					8.94	0.390
117	2	1.37	1.50					2.74	3.00					5.74	0.048
118	2	1.29	4.25					2.58	8.50					11.08	1.207
119	2	1.76	2.01					3.52	4.02					7.54	0.140
120	2	1.06	1.06					2.12	2.12					4.24	0.015
121	2	1.27	4.60					2.54	9.20					11.74	1.646
122	2	1.75	4.34					3.50	8.68					12.18	1.366
123	2	1.45	4.00					2.90	8.00					10.90	0.966
124	2	1.40	4.84					2.80	9.68					12.48	2.022
125	2	1.25	4.90					2.50	9.80					12.30	2.111
126	2	1.55	5.00					3.10	10.00					13.10	2.315
127	2	1.47	1.41					2.94	2.82					5.76	0.054
128	2	1.42	1.45					2.84	2.90					5.74	0.050
129	2	1.23	1.68					2.46	3.36					5.82	0.048
130	2	1.24	1.25					2.48	2.50					4.98	0.029
131	2	0.93	1.27					1.86	2.54					4.40	0.016
132	2	1.17	4.23					2.34	8.46					10.80	1.177
133	2	1.78	5.16					3.56	10.32					13.88	2.656
134	2	0.95	3.17					1.90	6.34					8.24	0.373
135	2	1.05	2.52					2.10	5.04					7.14	0.156
136	2	2.65	4.91					5.30	9.82					15.12	2.524
137	2	1.06	4.58					2.12	9.16					11.28	1.606
138	2	1.74	6.95					3.48	13.90					17.38	8.538
139	2	1.12	1.26					2.24	2.52					4.76	0.022
140	2	0.82	1.62					1.64	3.24					4.88	0.029
141	2	1.07	1.38					2.14	2.76					4.90	0.024
142	2	0.95	1.29					1.90	2.58					4.48	0.017
143	2	1.38	1.27					2.76	2.54					5.30	0.040
144	2	1.78	4.98					3.56	9.96					13.52	2.315
145	2	1.04	4.76					2.08	9.52					11.60	1.872
146	2	1.24	1.27					2.48	2.54					5.02	0.029
147	2	1.87	4.44					3.74	8.88					12.62	1.512
148	2	1.07	1.40					2.14	2.80					4.94	0.025
149	2	1.29						2.58	0.00					2.58	0.023
150	2	1.10	1.25					2.20	2.50					4.70	0.021
151	2	1.26	0.84					2.52	1.68					4.20	0.023
152	2	1.45	1.50					2.90	3.00					5.90	0.056
153	2	1.24	1.28					2.48	2.56					5.04	0.030
154	2	2.66	4.98					5.32	9.96					15.28	2.653
155	2	1.60	7.15					3.20	14.30					17.50	9.533
156	2	1.92	2.50					3.84	5.00					8.84	0.256
157	2	2.20	3.22					4.40	6.44					10.84	0.587
158	2	2.12	5.20					4.24	10.40					14.64	2.822
159	2	1.63	1.44					3.26	2.88					6.14	0.075
160	2	1.16	2.58					2.32	5.16					7.48	0.176
161	2	1.22	1.10					2.44	2.20					4.64	0.024
162	2	2.34	2.80					4.68	5.60					10.28	0.476
163	2	1.29	1.46					2.58	2.92					5.50	0.040
164	2	2.20	4.92					4.40	9.84					14.24	2.322
165	2	1.90	5.07					3.80	10.14					13.94	2.506
166	2	1.26	1.35					2.52	2.70					5.22	0.033
167	2	1.42	1.26					2.84	2.52					5.36	0.043
168	2	1.60	1.80					3.20	3.60					6.80	0.093
169	2	1.80	1.52					3.60	3.04					6.64	0.108
170	2	1.72	2.99					3.44	5.98					9.42	0.364
171	2	1.21	3.85					2.42	7.70					10.12	0.815
172	2	1.16	1.12					2.32	2.24					4.56	0.021
173	2	1.42	4.42					2.84	8.84					11.68	1.418
174	2	2.20	7.70					4.40	15.40					19.80	12.946
175	2	1.22	1.30					2.44	2.60					5.04	0.029
176	2	2.10	5.80					4.20	11.60					15.80	4.268
177	2	1.30	1.30					2.60	2.60					5.20	0.034
178	2	1.61	1.51					3.22	3.02					6.24	0.076
179	2	0.73	1.69					1.46	3.38					4.84	0.032
180	2	1.36	1.44					2.72	2.88					5.60	0.044
181	2	1.69	5.60					3.38	11.20					14.58	3.635
182	2	1.23	2.01					2.46	4.02					6.48	0.078
183	2	2.43	7.80					4.86	15.60					20.46	13.718
184	2	1.73	5.00					3.46	10.00					13.46	2.342
185	2							0.00	0.00					0.00	0.000
186	2	1.30	1.42					2.60	2.84					5.44	0.039
187	2	1.38	1.45					2.76	2.90					5.66	0.047
188	2	1.75	5.00					3.50	10.00					13.50	2.346

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
189	2	1.60	5.00					3.20	10.00					13.20	2.322
190	2	1.31	1.47					2.62	2.94					5.56	0.042
191	2							0.00	0.00					0.00	0.000
192	2	0.76	1.41					1.52	2.82					4.34	0.017
193	2	1.48	2.91					2.96	5.82					8.78	0.301
194	2	1.06	1.38					2.12	2.76					4.88	0.024
195	2	2.50	5.60					5.00	11.20					16.20	3.896
196	2	1.34	1.48					2.68	2.96					5.64	0.045
197	2	2.37	7.45					4.74	14.90					19.64	11.438
198	2	1.02	1.04					2.04	2.08					4.12	0.013
199	2	1.34	7.50					2.68	15.00					17.68	11.502
200	2	1.50	7.39					3.00	14.78					17.78	10.859
201	2	1.47	1.09					2.94	2.18					5.12	0.044
202	2	2.06	7.95					4.12	15.90					20.02	14.638
203	2	1.48	1.55					2.96	3.10					6.06	0.061
204	2	1.22	1.60					2.44	3.20					5.64	0.042
205	2	2.27	4.94					4.54	9.88					14.42	2.384
206	2	2.13	3.38					4.26	6.76					11.02	0.647
207	2	1.82	1.31					3.64	2.62					6.26	0.103
208	2	2.25	3.88					4.50	7.76					12.26	1.038
209	2	1.60	1.14					3.20	2.28					5.48	0.061
210	2	3.36	4.41					6.72	8.82					15.54	2.446
211	2	2.04	2.80					4.08	5.60					9.68	0.369
212	2	2.50	3.00					5.00	6.00					11.00	0.623
														VDF	1.412
3) Multi AxleTraffic															
1	3	0.24	0.50	1.30	1.23	1.07	1.04	0.48	1.00	2.60	2.46	2.14	2.08	8.68	0.215
2	3	2.42	3.42	3.60				4.84	6.84	7.20				18.88	1.037
3	3	0.08	0.26	0.88	0.70			0.16	0.52	1.76	1.40			3.84	0.004
4	3	0.17	0.33	1.38	0.85			0.34	0.66	2.76	1.70			5.46	0.013
5	3	2.75	2.62	2.62				5.50	5.24	5.24				15.98	0.714
6	3	2.03	2.80	2.45				4.06	5.60	4.90				14.56	0.377
7	3	0.18	0.35	0.30	0.28			0.36	0.70	0.60	0.56			2.22	0.000
8	3	1.25	0.80	0.75				2.50	1.60	1.50				5.60	0.022
9	3	1.33	0.84	0.80				2.66	1.68	1.60				5.94	0.029
10	3	0.53	2.08	1.70				1.06	4.16	3.40				8.62	0.063
11	3	2.22	4.04	4.44				4.44	8.08	8.88				21.40	1.796
12	3	2.38	3.13	2.44				4.76	6.26	4.88				15.90	0.567
13	3	3.04	5.07	4.75				6.08	10.14	9.50				25.72	3.582
14	3	0.33	0.66	0.36	0.24			0.66	1.32	0.72	0.48			3.18	0.001
15	3	2.73	3.46	0.60				5.46	6.92	1.20				13.58	0.552
16	3	1.90	1.35	1.27				3.80	2.70	2.54				9.04	0.124
17	3	0.27	0.54					0.54	1.08	0.00				1.62	0.000
18	3	0.20	0.46					0.40	0.92	0.00				1.32	0.000
19	3	0.42	0.78	0.53	0.52			0.84	1.56	1.06	1.04			4.50	0.004
20	3	2.71	3.72	3.36				5.42	7.44	6.72				19.58	1.228
21	3		3.96	3.26				0.00	7.92	6.52				14.44	0.836
22	3	0.22	0.51	1.05	1.40			0.44	1.02	2.10	2.80			6.36	0.024
23	3	2.84	3.89	4.12				5.68	7.78	8.24				21.70	1.815
24	3	2.72	4.24	3.80				5.44	8.48	7.60				21.52	1.748
25	3	2.68	3.70	3.70				5.36	7.40	7.40				20.16	1.358
26	3	1.48	1.15	1.35				2.96	2.30	2.70				7.96	0.052
27	3	2.79	4.60	5.07				5.58	9.20	10.14				24.92	3.202
28	3	2.38	4.07	4.38				4.76	8.14	8.76				21.66	1.840
29	3	2.66	3.80	3.30				5.32	7.60	6.60				19.52	1.204
30	3	2.19	3.47	4.03				4.38	6.94	8.06				19.38	1.168
31	3	1.96	4.14	4.46				3.92	8.28	8.92				21.12	1.808
32	3	1.86	4.25	4.90				3.72	8.50	9.80				22.02	2.258
														0.864	
4) BUS															
1	4	0.69	1.50					1.38	3.00					4.38	0.020
2	4	1.33	1.75					2.66	3.50					6.16	0.060
3	4	1.41	1.24					2.82	2.48					5.30	0.042
4	4	1.26	1.45					2.52	2.90					5.42	0.037
5	4	2.20	2.84					4.40	5.68					10.08	0.433
6	4	1.15	1.56					2.30	3.12					5.42	0.036
7	4	1.30	1.75					2.60	3.50					6.10	0.058
8	4	1.83	2.63					3.66	5.26					8.92	0.268
9	4	1.90	3.50					3.80	7.00					10.80	0.654
10	4	1.43	1.64					2.86	3.28					6.14	0.061
11	4	1.13	1.80					2.26	3.60					5.86	0.052
12	4	1.44	3.97					2.88	7.94					10.82	0.937
13	4	0.86	1.27					1.72	2.54					4.26	0.014

Sl. No.	Vehicle Type	Wheel Load (Tonnes)						Axle Load (Tonnes)						Total Weight (GVW)	ESA
		1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle	1st Axle	2nd Axle	3rd Axle	4th Axle	5th Axle	6th Axle		
14	4	1.02	2.34					2.04	4.68					6.72	0.118
15	4	1.53	1.75					3.06	3.50					6.56	0.080
16	4	0.81	1.34					1.62	2.68					4.30	0.015
17	4	1.27	2.23					2.54	4.46					7.00	0.112
18	4	1.26	1.72					2.52	3.44					5.96	0.053
19	4	1.20	1.95					2.40	3.90					6.30	0.070
20	4	1.11	1.56					2.22	3.12					5.34	0.034
21	4	1.45	1.75					2.90	3.50					6.40	0.071
22	4	1.24	2.14					2.48	4.28					6.76	0.096
23	4	1.56	2.22					3.12	4.44					7.56	0.138
24	4	1.62	1.93					3.24	3.86					7.10	0.108
25	4	1.71	1.88					3.42	3.76					7.18	0.117
26	4	1.31	1.50					2.62	3.00					5.62	0.043
27	4	1.48	1.72					2.96	3.44					6.40	0.072
28	4	1.54	2.76					3.08	5.52					8.60	0.258
29	4	1.41	0.66					2.82	1.32					4.14	0.034
30	4	2.19	3.35					4.38	6.70					11.08	0.651
31	4	1.14	2.04					2.28	4.08					6.36	0.077
32	4	1.30	1.31					2.60	2.62					5.22	0.035
33	4	1.16	2.00					2.32	4.00					6.32	0.073
34	4	2.32	3.10					4.64	6.20					10.84	0.579
35	4	2.45	2.90					4.90	5.80					10.70	0.560
													VDF	0.173	

Vehicle Damage Factor

LCV	0.033
HCV	1.412
Multi Axle	0.864
Bus	0.173

Axle Load Spectrum - Road No.7

Single Axle	Nos.	%	Tandam Axle	Nos.	%
>9	284	84.27	< 14	33	84.62
9-11	38	11.28	14-18	6	15.38
11-13	10	2.97	18-22	0	0.00
13-15	5	1.48	22-26	0	0.00
15-17	0	0	26-30	0	0.00
	337	100.00	30-34	39	100.00

Axle Load Spectrum - Road No.7

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