

DESIGN FACTORS FOR A DESIGN SPEED OF 30 km/h (RURAL) USING E = 8% MAX.

DESIGN VELOCITY -30	DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)												INTERCHANGE RAMP			
	WIDTH-5.4 m		WIDTH-6.0 m		WIDTH-6.6 m		WIDTH-7.2 m		WIDTH-14.4 m		WIDTH		4.8 m	5.4 m		
	Lt	Lr	Lt	Lr	Lt	Lr	Lt	Lr	Lt	Lr	Lt	Lr	Lt	Lr	Lt	Lr
500	NC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
322	2.0	20	0.7	8	8	0.0	9	9	0.0	10	10	0.0	15	15	0.0	12
305	2.1	20	0.7	8	9	0.0	9	10	0.0	10	11	0.0	15	16	0.0	12
289	2.2	19	20	0.7	8	9	0.0	9	10	0.0	11	0.0	15	16	0.0	12
275	2.3	18	20	0.7	8	10	0.0	9	11	0.0	10	12	0.0	15	17	0.0
262	2.4	17	20	0.7	8	10	0.0	9	11	0.0	10	12	0.0	15	18	0.0
250	2.5	16	20	0.7	8	10	0.0	9	11	0.0	10	12	0.0	15	18	0.0
239	2.6	16	20	0.7	8	11	0.0	9	12	0.0	10	13	0.0	15	19	0.0
228	2.7	15	20	0.7	8	11	0.0	9	12	0.0	10	13	0.0	15	20	0.0
219	2.8	15	20	0.8	8	12	0.0	9	13	0.0	10	14	0.0	15	21	0.0
210	2.9	14	20	0.8	8	12	0.0	9	13	0.0	10	14	0.0	15	21	0.0
201	3.0	14	20	0.8	8	12	0.0	9	14	0.0	10	15	0.0	15	22	0.0
193	3.1	13	20	0.8	8	13	0.0	9	14	0.0	10	15	0.0	15	23	0.0
186	3.2	13	20	0.8	8	13	0.0	9	15	0.0	10	16	0.0	15	24	0.0
179	3.3	13	20	0.8	8	14	0.0	9	15	0.0	10	16	0.0	15	24	0.0
172	3.4	12	20	0.8	8	14	0.0	9	15	0.0	10	17	0.0	15	25	0.0
166	3.5	12	20	0.9	9	16	0.6	9	16	0.0	10	17	0.0	15	26	0.0
160	3.6	12	20	0.9	12	20	0.6	9	16	0.0	10	18	0.0	15	26	0.0
155	3.7	11	20	0.9	11	20	0.6	9	17	0.0	10	18	0.0	15	27	0.0
149	3.8	11	20	0.9	11	20	0.6	9	17	0.0	10	19	0.0	15	28	0.0
144	3.9	11	20	0.9	11	20	0.6	9	18	0.0	10	19	0.0	15	29	0.0
139	4.0	10	20	0.9	10	20	0.6	9	18	0.0	10	20	0.0	15	29	0.0
135	4.1	10	20	0.9	10	20	0.6	9	19	0.0	10	20	0.0	15	30	0.0
130	4.2	10	20	1.0	10	20	0.7	9	19	0.0	10	21	0.0	15	31	0.0
126	4.3	10	20	1.0	10	20	0.7	9	19	0.0	10	21	0.0	15	31	0.0
121	4.4	10	20	1.0	9	20	0.7	9	20	0.0	10	22	0.0	15	32	0.0
117	4.5	9	20	1.0	9	21	0.7	9	20	0.0	10	22	0.0	15	33	0.0
114	4.6	9	20	1.0	9	21	0.7	9	21	0.0	10	23	0.0	15	34	0.0
110	4.7	9	21	1.1	10	22	0.8	9	21	0.0	10	23	0.0	15	34	0.0
106	4.8	9	21	1.1	10	22	0.8	9	22	0.0	10	24	0.0	15	35	0.0
102	4.9	9	22	1.1	10	23	0.8	9	22	0.0	10	24	0.0	15	36	0.0
99	5.0	9	22	1.1	10	23	0.8	9	22	0.0	10	24	0.0	15	36	0.0
95	5.1	9	23	1.1	10	24	0.8	9	23	0.0	10	25	0.0	15	37	0.0
92	5.2	9	23	1.2	10	24	0.9	10	25	0.6	10	25	0.0	16	41	0.6
88	5.3	9	24	1.2	10	25	0.9	10	26	0.6	10	26	0.0	16	42	0.6
85	5.4	9	24	1.2	10	25	0.9	10	26	0.6	10	26	0.0	16	43	0.6
82	5.5	9	25	1.2	10	26	0.9	10	27	0.6	10	27	0.0	16	43	0.6
79	5.6	9	26	1.3	10	27	1.0	10	28	0.7	10	27	0.0	16	45	0.8
76	5.7	9	26	1.3	10	27	1.0	10	28	0.7	10	28	0.0	16	46	0.8
74	5.8	9	26	1.3	10	28	1.0	10	29	0.7	10	28	0.0	16	47	0.8
71	5.9	9	27	1.3	10	28	1.0	10	29	0.7	10	29	0.0	16	48	0.8
69	6.0	10	28	1.4	10	29	1.1	10	30	0.8	10	29	0.0	17	50	1.0
66	6.1	10	28	1.4	10	29	1.1	10	31	0.8	10	30	0.0	17	51	1.0
64	6.2	10	29	1.4	10	30	1.1	10	31	0.8	10	30	0.0	17	51	1.0
62	6.3	10	29	1.5	10	31	1.2	10	32	0.9	11	33	0.6	17	53	1.2
60	6.4	10	30	1.5	10	31	1.2	10	32	0.9	11	34	0.6	17	54	1.2
58	6.5	10	30	1.5	10	32	1.2	10	33	0.9	11	34	0.6	17	55	1.2
56	6.6	10	31	1.6	10	33	1.3	11	34	1.0	11	35	0.7	18	57	1.4
54	6.7	10	32	1.6	10	33	1.3	11	34	1.0	11	35	0.7	18	58	1.4
52	6.8	10	32	1.6	10	34	1.3	11	35	1.0	11	36	0.7	18	59	1.4
50	6.9	10	33	1.7	10	35	1.4	11	36	1.1	11	37	0.8	18	61	1.6
49	7.0	10	34	1.7	10	35	1.4	11	36	1.1	11	38	0.8	18	62	1.6
47	7.1	10	35	1.8	10	36	1.5	11	37	1.2	11	39	0.9	18	64	1.8
45	7.2	10	35	1.8	10	36	1.5	11	38	1.2	11	39	0.9	18	65	1.8
44	7.3	10	36	1.9	11	37	1.6	11	39	1.3	11	40	1.0	19	68	2.0
42	7.4	10	37	1.9	11	38	1.6	11	39	1.3	11	41	1.0	19	69	2.0
41	7.5	10	37	2.0	11	39	1.7	11	40	1.4	12	42	1.1	19	71	2.2
39	7.6	10	38	2.0	11	40	1.7	11	41	1.4	12	43	1.1	19	72	2.2
37	7.7	10	39	2.1	11	41	1.8	11	42	1.5	12	44	1.2	20	74	2.4
35	7.8	11	40	2.2	11	42	1.9	11	43	1.6	12	45	1.3	20	77	2.6
33	7.9	11	41	2.3	11	43	2.0	12	44	1.7	12	46	1.4	20	79	2.8
29	8.0	11	43	2.5	11	44	2.2	12	46	1.9	12	47	1.6	21	84	3.2

NOTE: Lt, Lr & w VALUES IN METERS. LISTED RADIUS IS THE MINIMUM ALLOWABLE RADIUS FOR THE CORRESPONDING E, Lt, Lr, AND w VALUES.

TRANSITION CURVES - RURAL
30 km/h DESIGN SPEED
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION
REFERENCE