

DESIGN FACTORS FOR A DESIGN SPEED OF 25 MPH (RURAL) USING E = 8% MAX.

DESIGN VELOCITY -25	DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)												INTERCHANGE RAMP							
	WIDTH- 18 FT				WIDTH-20 FT				WIDTH-22 FT				WIDTH-24 FT				WIDTH-48 FT			
	1 @ 9'		1 @ 10'		1 @ 11'		1 @ 12'		1 @ 12'		2 @ 12'		16 FT		18 FT					
	CR	LS	w	CR	LS	w	CR	LS	w	CR	LS	w	CR	LS	w	CR	LS			
2500	NC	0	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	0.0	0	0			
1756	2.0	26	0.0	29	0.0	32	32	0.0	35	35	0.0	35	35	0.0	40	40	43			
1664	2.1	77	80	2.0	29	30	0.0	32	33	0.0	35	36	0.0	52	54	0.0	42			
1579	2.2	73	80	2.0	29	32	0.0	32	35	0.0	35	38	0.0	52	57	0.0	40			
1502	2.3	70	80	2.0	29	33	0.0	33	37	0.0	35	40	0.0	52	60	0.0	40			
1431	2.4	67	80	2.1	29	35	0.0	32	38	0.0	35	42	0.0	52	62	0.0	40			
1366	2.5	64	80	2.1	29	36	0.0	32	40	0.0	35	43	0.0	52	65	0.0	40			
1306	2.6	62	80	2.1	29	38	0.0	32	41	0.0	35	45	0.0	52	67	0.0	40			
1250	2.7	60	80	2.1	29	39	0.0	32	43	0.0	35	47	0.0	52	70	0.0	40			
1198	2.8	58	80	2.2	29	40	0.0	32	44	0.0	35	48	0.0	52	72	0.0	40			
1149	2.9	56	80	2.2	29	42	0.0	32	46	0.0	35	50	0.0	52	75	0.0	40			
1104	3.0	54	80	2.2	29	43	0.0	32	48	0.0	35	52	0.0	52	78	0.0	40			
1061	3.1	52	80	2.3	29	45	0.0	32	49	0.0	35	54	0.0	52	80	0.0	40			
1021	3.2	50	80	2.3	29	46	0.0	32	51	0.0	35	55	0.0	52	83	0.0	40			
983	3.3	49	80	2.3	29	48	0.0	32	52	0.0	35	57	0.0	52	85	0.0	40			
948	3.4	48	80	2.4	29	49	0.0	32	54	0.0	35	59	0.0	52	88	0.0	40			
914	3.5	46	80	2.4	29	50	0.0	32	55	0.0	35	60	0.0	52	90	0.0	40			
882	3.6	45	80	2.4	29	52	0.0	32	57	0.0	35	62	0.0	52	93	0.0	40			
852	3.7	44	80	2.5	29	53	0.0	32	59	0.0	35	64	0.0	52	96	0.0	40			
823	3.8	43	80	2.5	29	55	0.0	32	60	0.0	35	66	0.0	52	98	0.0	40			
795	3.9	42	80	2.6	29	56	0.0	32	62	0.0	35	67	0.0	52	101	0.0	40			
769	4.0	40	80	2.6	29	58	0.0	32	63	0.0	35	69	0.0	52	103	0.0	40			
744	4.1	40	80	2.6	29	59	0.0	32	65	0.0	35	71	0.0	52	106	0.0	40			
720	4.2	39	80	2.7	29	60	0.0	32	66	0.0	35	72	0.0	52	108	0.0	40			
696	4.3	38	80	2.7	29	62	0.0	32	68	0.0	35	74	0.0	52	111	0.0	40			
674	4.4	37	80	2.7	29	63	0.0	32	70	0.0	35	76	0.0	52	114	0.0	40			
652	4.5	36	80	2.8	29	65	0.0	32	71	0.0	35	78	0.0	52	116	0.0	40			
632	4.6	35	80	2.8	29	66	0.0	32	73	0.0	35	79	0.0	52	119	0.0	40			
612	4.7	35	80	2.9	29	68	0.0	32	74	0.0	35	81	0.0	52	121	0.0	40			
592	4.8	34	80	2.9	29	69	0.0	32	76	0.0	35	83	0.0	52	124	0.0	40			
573	4.9	33	80	2.9	29	70	0.0	32	77	0.0	35	84	0.0	52	126	0.0	40			
555	5.0	32	80	3.0	32	80	2.0	32	79	0.0	35	86	0.0	52	129	0.0	40			
537	5.1	32	80	3.0	32	81	2.0	32	81	0.0	35	88	0.0	52	132	0.0	40			
519	5.2	31	80	3.1	32	83	2.1	32	82	0.0	35	90	0.0	52	134	0.0	40			
502	5.3	31	80	3.1	32	84	2.1	32	84	0.0	35	91	0.0	52	137	0.0	40			
485	5.4	31	82	3.2	32	86	2.2	32	85	0.0	35	93	0.0	52	139	0.0	40			
468	5.5	31	84	3.2	32	88	2.2	32	87	0.0	35	95	0.0	52	142	0.0	40			
452	5.6	31	86	3.3	33	90	2.3	32	88	0.0	35	96	0.0	52	144	0.0	40			
437	5.7	31	88	3.4	33	92	2.4	32	90	0.0	35	98	0.0	52	147	0.0	40			
423	5.8	31	89	3.4	33	93	2.4	32	92	0.0	35	100	0.0	52	150	0.0	40			
409	5.9	31	91	3.5	33	95	2.5	32	93	0.0	35	102	0.0	52	152	0.0	40			
396	6.0	31	93	3.5	33	97	2.5	32	95	0.0	35	103	0.0	52	155	0.0	40			
383	6.1	32	95	3.6	33	99	2.6	32	96	0.0	35	105	0.0	52	157	0.0	40			
371	6.2	32	97	3.7	33	101	2.7	32	98	0.0	35	107	0.0	52	160	0.0	40			
359	6.3	32	98	3.7	33	103	2.7	32	99	0.0	35	108	0.0	52	162	0.0	40			
347	6.4	32	100	3.8	33	105	2.8	32	101	0.0	35	110	0.0	52	165	0.0	40			
336	6.5	32	102	3.9	33	103	2.9	32	103	0.0	35	112	0.0	52	168	0.0	40			
326	6.6	32	104	3.9	33	108	2.9	32	104	0.0	35	114	0.0	52	170	0.0	40			
315	6.7	32	106	4.0	34	111	3.0	35	115	2.0	35	115	0.0	56	187	2.0	40			
305	6.8	32	108	4.1	34	113	3.1	35	118	2.1	35	117	0.0	57	191	2.2	40			
295	6.9	32	110	4.2	34	115	3.2	35	120	2.2	35	119	0.0	57	196	2.4	40			
286	7.0	32	111	4.2	34	116	3.2	35	121	2.2	35	120	0.0	57	198	2.4	40			
276	7.1	33	114	4.3	34	119	3.3	35	124	2.3	35	122	0.0	58	203	2.6	40			
267	7.2	33	116	4.4	34	121	3.4	35	126	2.4	35	124	0.0	58	207	2.8	40			
258	7.3	33	118	4.5	34	123	3.5	36	128	2.5	35	126	0.0	59	212	3.0	40			
248	7.4	33	120	4.6	34	125	3.6	36	131	2.6	35	127	0.0	59	216	3.2	40			
239	7.5	33	122	4.7	34	127	3.7	36	133	2.7	35	129	0.0	59	221	3.4	40			
229	7.6	33	124	4.8	35	130	3.8	36	135	2.8	35	131	0.0	60	225	3.6	40			
219	7.7	33	127	5.0	35	132	4.0	36	138	3.0	38	143	2.0	60	231	4.0	40			
209	7.8	34	129	5.1	35	135	4.1	36	140	3.1	38	146	2.1	61	236	4.2	40			
196	7.9	34	132	5.3	35	138	4.3	37	143	3.3	38	149	2.3	62	243	4.6	40			
172	8.0	34	136	5.8	36	142	4.8	37	148	3.8	39	154	2.8	64	254	5.6	40			

NOTE: CR, LS & w VALUES IN FEET. LISTED RADIUS IS THE MINIMUM ALLOWABLE RADIUS FOR THE CORRESPONDING E, CR, LS, AND w VALUES.

TRANSITION CURVES - RURAL
25 MPH DESIGN SPEED
VIRGINIA DEPARTMENT OF TRANSPORTATION