

802.44

DESIGN FACTORS FOR A DESIGN SPEED OF 70 MPH (RURAL) USING E = 8% MAX.

DESIGN VELOCITY -70	DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)												INTERCHANGE RAMPS									
	WIDTH-18 FT				WIDTH-22 FT				WIDTH-24 FT				WIDTH-28 FT				16 FT		18 FT			
	1 @ 9'		1 @ 10'		1 @ 11'		1 @ 12'		1 @ 12'		2 @ 12'		3 @ 12'		CR	LS	CR	LS	CR	LS		
	RADIUS(FT)	E(%)	CR	LS	w	CR	LS	w	CR	LS	w	CR	LS	w	CR	LS	w	CR	LS	w	CR	LS
17000	NC	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0	0	0	0
10731	2.0	45	45	0.0	50	55	55	0.0	60	60	60	60	60	60	60	60	60	60	60	60	60	60
10194	2.1	45	48	0.0	50	53	58	0.0	60	63	60	63	60	60	63	60	60	60	60	60	60	60
9706	2.2	45	50	0.0	50	55	61	0.0	60	66	60	66	60	60	66	60	60	60	60	60	60	60
9260	2.3	45	52	0.0	50	58	64	0.0	60	69	60	69	60	60	69	60	60	60	60	60	60	60
8851	2.4	45	54	0.0	50	60	66	0.0	60	72	60	72	60	60	72	60	60	60	60	60	60	60
8474	2.5	45	57	0.0	50	63	69	0.0	60	75	60	75	60	60	75	60	60	60	60	60	60	60
8127	2.6	45	59	0.0	50	65	72	0.0	60	78	60	78	60	60	78	60	60	60	60	60	60	60
7805	2.7	45	61	0.0	50	68	75	0.0	60	81	60	81	60	60	81	60	60	60	60	60	60	60
7506	2.8	45	63	0.0	50	70	77	0.0	60	84	60	84	60	60	84	60	60	60	60	60	60	60
7227	2.9	45	66	0.0	50	73	80	0.0	60	87	60	87	60	60	87	60	60	60	60	60	60	60
6967	3.0	45	68	0.0	50	75	83	0.0	60	90	60	90	60	60	90	60	60	60	60	60	60	60
6724	3.1	45	70	0.0	50	78	86	0.0	60	93	60	93	60	60	93	60	60	60	60	60	60	60
6495	3.2	45	72	0.0	50	80	88	0.0	60	96	60	96	60	60	96	60	60	60	60	60	60	60
6281	3.3	45	75	0.0	50	83	91	0.0	60	99	60	99	60	60	99	60	60	60	60	60	60	60
6079	3.4	45	77	0.0	50	85	94	0.0	60	102	60	102	60	60	102	60	60	60	60	60	60	60
5888	3.5	45	79	0.0	50	88	97	0.0	60	105	60	105	60	60	105	60	60	60	60	60	60	60
5708	3.6	45	81	0.0	50	90	99	0.0	60	108	60	108	60	60	108	60	60	60	60	60	60	60
5537	3.7	45	84	0.0	50	93	102	0.0	60	111	60	111	60	60	111	60	60	60	60	60	60	60
5376	3.8	45	86	0.0	50	95	105	0.0	60	114	60	114	60	60	114	60	60	60	60	60	60	60
5222	3.9	45	88	0.0	50	98	108	0.0	60	117	60	117	60	60	117	60	60	60	60	60	60	60
5076	4.0	45	90	0.0	50	100	110	0.0	60	120	60	120	60	60	120	60	60	60	60	60	60	60
4937	4.1	45	93	0.0	50	103	113	0.0	60	123	60	123	60	60	123	60	60	60	60	60	60	60
4805	4.2	45	95	0.0	50	105	116	0.0	60	126	60	126	60	60	126	60	60	60	60	60	60	60
4679	4.3	45	97	0.0	50	108	119	0.0	60	129	60	129	60	60	129	60	60	60	60	60	60	60
4558	4.4	45	99	0.0	50	110	121	0.0	60	132	60	132	60	60	132	60	60	60	60	60	60	60
4443	4.5	45	102	0.0	50	113	124	0.0	60	135	60	135	60	60	135	60	60	60	60	60	60	60
4332	4.6	45	104	0.0	50	115	127	0.0	60	138	60	138	60	60	138	60	60	60	60	60	60	60
4226	4.7	45	106	0.0	50	118	130	0.0	60	141	60	141	60	60	141	60	60	60	60	60	60	60
4125	4.8	45	108	0.0	50	120	132	0.0	60	144	60	144	60	60	144	60	60	60	60	60	60	60
4027	4.9	45	111	0.0	50	123	135	0.0	60	147	60	147	60	60	147	60	60	60	60	60	60	60
3933	5.0	45	113	0.0	50	125	138	0.0	60	150	60	150	60	60	150	60	60	60	60	60	60	60
3843	5.1	45	115	0.0	50	128	141	0.0	60	153	60	153	60	60	153	60	60	60	60	60	60	60
3756	5.2	45	117	0.0	50	130	143	0.0	60	156	60	156	60	60	156	60	60	60	60	60	60	60
3673	5.3	45	120	0.0	50	133	146	0.0	60	159	60	159	60	60	159	60	60	60	60	60	60	60
3592	5.4	45	122	0.0	50	135	149	0.0	60	162	60	162	60	60	162	60	60	60	60	60	60	60
3514	5.5	45	124	0.0	50	138	152	0.0	60	165	60	165	60	60	165	60	60	60	60	60	60	60
3439	5.6	45	126	0.0	50	140	154	0.0	60	168	60	168	60	60	168	60	60	60	60	60	60	60
3366	5.7	45	129	0.0	50	143	157	0.0	60	171	60	171	60	60	171	60	60	60	60	60	60	60
3296	5.8	45	131	0.0	50	145	160	0.0	60	174	60	174	60	60	174	60	60	60	60	60	60	60
3228	5.9	45	133	0.0	50	148	163	0.0	60	177	60	177	60	60	177	60	60	60	60	60	60	60
3163	6.0	45	135	0.0	50	150	165	0.0	60	180	60	180	60	60	180	60	60	60	60	60	60	60
3099	6.1	45	138	0.0	50	153	168	0.0	60	183	60	183	60	60	183	60	60	60	60	60	60	60
3037	6.2	45	140	0.0	50	155	171	0.0	60	186	60	186	60	60	186	60	60	60	60	60	60	60
2977	6.3	45	142	0.0	50	158	174	0.0	60	189	60	189	60	60	189	60	60	60	60	60	60	60
2919	6.4	45	144	0.0	50	160	176	0.0	60	192	60	192	60	60	192	60	60	60	60	60	60	60
2866	6.5	45	147	0.0	50	163	179	0.0	60	195	60	195	60	60	195	60	60	60	60	60	60	60
2865	6.5	68	220	2.5	50	163	179	0.0	60	195	60	195	60	60	195	60	60	60	60	60	60	60
2862	6.5	68	220	2.5	50	163	179	0.0	60	195	60	195	60	60	195	60	60	60	60	60	60	60
2807	6.6	67	220	2.5	50	165	182	0.0	60	198	60	198	60	60	198	60	60	60	60	60	60	60
2753	6.7	66	220	2.6	50	168	185	0.0	60	201	60	201	60	60	201	60	60	60	60	60	60	60
2699	6.8	65	220	2.6	50	170	187	0.0	60	204	60	204	60	60	204	60	60	60	60	60	60	60
2645	6.9	64	220	2.6	50	173	190	0.0	60	207	60	207	60	60	207	60	60	60	60	60	60	60
2590	7.0	63	220	2.6	50	175	193	0.0	60	210	60	210	60	60	210	60	60	60	60	60	60	60
2535	7.1	62	220	2.6	50	178	196	0.0	60	213	60	213	60	60	213	60	60	60	60	60	60	60
2480	7.2	62	220	2.7	50	180	198	0.0	60	216	60	216	60	60	216	60	60	60	60	60	60	60
2423	7.3	61	220	2.7	50	183	201	0.0	60	219	60	219	60	60	219	60	60	60	60	60	60	60
2365	7.4	60	220	2.7	50	185	204	0.0	60	222	60	222	60	60	222	60	60	60	60	60	60	60
2305	7.5	59	220	2.7	50	188	207	0.0	60	225	60	225	60	60	225	60	60	60	60	60	60	60
2242	7.6	58	220	2.7	50	190	209	0.0	60	228	60	228	60	60	228	60	60	60	60	60	60	60
2175	7.7	58	220	2.8	50	193	212	0.0	60	231	60	231	60	60	231	60	60	60	60	60	60	60
2100	7.8	57	220	2.8	50	195	215	0.0	60	234	60	234	60	60	234	60	60	60	60	60	60	60
2010	7.9	56	220	2.9	50	198	218	0.0	60	237	60	237	60	60	237	60	60	60	60	60	60	60
1821	8.0	55	220	3.0	55	220	220	0.0	60	240	60	240	60	60	240	60	60	60	60	60	60	60

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
70 MPH DESIGN SPEED
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE