

**DESIGN FACTORS FOR A DESIGN SPEED OF 60 MPH
(URBAN) USING E= 4 % MAX.**

RADIUS (FEET)	E (%)	PAVEMENT WIDTH											
		24 FT		36 FT		48 FT		60 FT		66 FT		72 FT	
		DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)											
		1 @ 12'		1.5 @ 12'		2 @ 12'		3 @ 10'		3 @ 11'		3 @ 12'	
		CR	LS	CR	LS	CR	LS	CR	LS	CR	LS	CR	LS
10000	NC	0	0	0	0	0	0	0	0	0	0	0	0
7131	2.0	54	54	67	67	80	80	89	89	98	98	107	107
6663	2.1	54	56	67	70	80	84	89	94	98	103	107	112
6232	2.2	54	59	67	74	80	88	89	98	98	108	107	118
5829	2.3	54	62	67	77	80	92	89	103	98	113	107	123
5451	2.4	54	64	67	80	80	96	89	107	98	118	107	128
5092	2.5	54	67	67	84	80	100	89	112	98	123	107	134
4746	2.6	54	70	67	87	80	104	89	116	98	128	107	139
4408	2.7	54	72	67	90	80	108	89	120	98	132	107	144
4098	2.8	54	75	67	94	80	112	89	125	98	137	107	150
3818	2.9	54	78	67	97	80	116	89	129	98	142	107	155
3563	3.0	54	80	67	100	80	120	89	134	98	147	107	160
3330	3.1	54	83	67	104	80	124	89	138	98	152	107	166
3114	3.2	54	86	67	107	80	128	89	143	98	157	107	171
2913	3.3	54	88	67	110	80	132	89	147	98	162	107	176
2724	3.4	54	91	67	114	80	136	89	152	98	167	107	182
2544	3.5	54	94	67	117	80	140	89	156	98	172	107	187
2372	3.6	54	96	67	120	80	144	89	160	98	176	107	192
2202	3.7	54	99	67	124	80	148	89	165	98	181	107	198
2030	3.8	54	102	67	127	80	152	89	169	98	186	107	203
1842	3.9	54	104	67	130	80	156	89	174	98	191	107	208
1505	4.0	54	107	67	134	80	160	89	178	98	196	107	214

NOTE:

CR AND LS VALUES IN FEET.

FOR PAVEMENT WIDTHS GREATER THAN 72 FEET USE LS VALUES DEVELOPED BY THE DESIGN SOFTWARE.

LISTED RADIUS IS THE MINIMUM ALLOWABLE RADIUS FOR THE CORRESPONDING E, CR, AND LS VALUES.

**TRANSITION CURVES - URBAN
60 MPH DESIGN SPEED**

VIRGINIA DEPARTMENT OF TRANSPORTATION