

DESIGN FACTORS FOR A DESIGN SPEED OF 55 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' | |
| Lt | Lr | Lt | Lr | Lt | Lr | Lt | Lr | Lt | Lr | Lt | Lr | Lt | Lr |
| 10000 | NC | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5995 | 2.0 | 52 | 52 | 64 | 64 | 77 | 77 | 86 | 86 | 94 | 94 | 103 | 103 |
| 5592 | 2.1 | 52 | 54 | 64 | 68 | 77 | 81 | 86 | 90 | 94 | 99 | 103 | 108 |
| 5218 | 2.2 | 52 | 57 | 64 | 71 | 77 | 85 | 86 | 94 | 94 | 103 | 103 | 113 |
| 4869 | 2.3 | 52 | 59 | 64 | 74 | 77 | 89 | 86 | 98 | 94 | 108 | 103 | 118 |
| 4538 | 2.4 | 52 | 62 | 64 | 77 | 77 | 92 | 86 | 103 | 94 | 113 | 103 | 123 |
| 4220 | 2.5 | 52 | 64 | 64 | 80 | 77 | 96 | 86 | 107 | 94 | 118 | 103 | 128 |
| 3909 | 2.6 | 52 | 67 | 64 | 83 | 77 | 100 | 86 | 111 | 94 | 122 | 103 | 133 |
| 3610 | 2.7 | 52 | 69 | 64 | 87 | 77 | 104 | 86 | 115 | 94 | 127 | 103 | 138 |
| 3343 | 2.8 | 52 | 72 | 64 | 90 | 77 | 108 | 86 | 120 | 94 | 132 | 103 | 143 |
| 3104 | 2.9 | 52 | 75 | 64 | 93 | 77 | 112 | 86 | 124 | 94 | 136 | 103 | 149 |
| 2888 | 3.0 | 52 | 77 | 64 | 96 | 77 | 115 | 86 | 128 | 94 | 141 | 103 | 154 |
| 2691 | 3.1 | 52 | 80 | 64 | 99 | 77 | 119 | 86 | 132 | 94 | 146 | 103 | 159 |
| 2510 | 3.2 | 52 | 82 | 64 | 103 | 77 | 123 | 86 | 137 | 94 | 150 | 103 | 164 |
| 2343 | 3.3 | 52 | 85 | 64 | 106 | 77 | 127 | 86 | 141 | 94 | 155 | 103 | 169 |
| 2186 | 3.4 | 52 | 87 | 64 | 109 | 77 | 131 | 86 | 145 | 94 | 160 | 103 | 174 |
| 2037 | 3.5 | 52 | 90 | 64 | 112 | 77 | 135 | 86 | 149 | 94 | 164 | 103 | 179 |
| 1895 | 3.6 | 52 | 92 | 64 | 115 | 77 | 138 | 86 | 154 | 94 | 169 | 103 | 184 |
| 1756 | 3.7 | 52 | 95 | 64 | 119 | 77 | 142 | 86 | 158 | 94 | 174 | 103 | 189 |
| 1615 | 3.8 | 52 | 98 | 64 | 122 | 77 | 146 | 86 | 162 | 94 | 178 | 103 | 195 |
| 1462 | 3.9 | 52 | 100 | 64 | 125 | 77 | 150 | 86 | 166 | 94 | 183 | 103 | 200 |
| 1190 | 4.0 | 52 | 103 | 64 | 128 | 77 | 154 | 86 | 171 | 94 | 188 | 103 | 205 |

NOTE:

Lt AND Lr VALUES IN FEET.

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

LISTED RADIUS IS THE MINIMUM ALLOWABLE RADIUS FOR THE CORRESPONDING E, Lt, AND Lr VALUES.

TRANSITION CURVES - URBAN
55 MPH DESIGN SPEED

VIRGINIA DEPARTMENT OF TRANSPORTATION