

**REGION OF WATERLOO DEFAULT RODEL PARAMETERS
VERSION 1.0 MAY 1, 2009**

The following Rodel inputs should be used when assessing the operation of a proposed roundabout:

Geometric Parameters	Single Lane Entry	Dual-Lane Entry	Triple-Lane Entry
Entry Width (E)*	4.5m	8.0m	11.0m
Effective Flare Length (L')*	30m	30m	30m
Half Width (V)*	3.5m	See notes.	See notes.
Entry Radius (RAD)	20m	20m	20m
Entry Angle (phi)	25	25	25
Inscribed Diameter (DIA)	40m	55m	70m
Grade Separation (GRAD SEP)	0	0	0

*High influence on capacity

Notes:

1. When analyzing an existing roundabout, use the Entry Widths provided on the Region Geometric Parameter Drawing regardless of the actual as-built entry widths. (Obtain from Traffic Systems).
2. The Half Width (V) will depend on the number of approach lanes. Assume a maximum of 3.5m per lane.
3. If no truck count is available, assume PCU = 1.05.
4. Use a Confidence Level CL = 50 to compare with analysis of other forms of traffic control; use CL = 85 for sensitivity check.
5. Always label legs and enter turning data in a counter-clockwise direction starting with the north leg.