



Source: Bunt & Associates Photo Database

Benefits

 Can create gaps in major road volumes.

• Pedestrian benefits through pedestrian activation and more direct routing.

•Smaller intersection footprint.

Disadvantages

- Expensive initial capital plus maintenance.
- Increased delays to major volume road,

i.e. 6 *Mile Road vehicles will have a red/* stop phase.

• Spreads delays to all approaches

(compared to minor leg stop control).

Applicability

Road Classification:

• Collector streets and arterials.

Types to Consider:

•Half (or Pedestrian) Signal – Permits minor leg to go without waiting for a green phase. Typically used when minor movement demand is pedestrian dominated.

• Full Signal – Semi- actuated (vehicles at minor leg activate signal).

Locations to Avoid

•If near another signal then coordination of signals may be required.

•Where major road spill-back may be problematic (vehicles queuing back towards Highway 1).

	Roundabout	Signalized Intersection
Capacity	=	=
Right of Way Requirements	-	+
Construction Costs	-	+
Maintenance Costs	+	-
Pedestrian Safety	=	=
Vehicle Safety	+	-
Cyclist Safety	-	+
Driver Familiarity	-	+
Environmental	+	-

Comparative Analysis: Roundabout vs. Signalized Intersection

Comparative Ratings: + (Advantage); - (Disadvantage); = (equal or no significant difference)

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