BENEFITS OF A ROUNDABOUT

Safety

Roundabouts are safer than other at-grade intersection forms because roundabouts have fewer conflict points, slower speeds, and easier decision making. When comparing a multi-lane roundabout to a signal, studies show that roundabouts have a reduction in all crashes by 32% and a reduction of injury causing crashes by 68%. These reductions are due to the elimination of most head-on, left turning across oncoming traffic, and right angle crashes.

Pedestrian safety is also improved at roundabouts over traffic signals. Pedestrians using roundabouts are able to cross a much smaller roadway, consider traffic traveling only one direction at a time, and are exposed to traffic that is traveling at much slower speeds.

Capacity

Roundabouts typically carry about 30% more vehicles than similarly sized signalized intersections during peak flow conditions. During off-peak conditions, roundabouts cause almost no delay, but traffic signals can cause delay to side streets and left-turning traffic from the major street. Increased capacity at roundabouts is due to the continuously flowing nature of yielding only until a gap is available, versus waiting turns at a red light.

Economy

Roundabouts save money. The City saves because operations and maintenance expenses of roundabouts are less than that of traffic signals. The driver saves time through reduced delay and lower fuel consumption. The community at-large saves because collisions are less frequent and much less severe, reducing insurance cost, medical cost, and the human cost of injury and death. Roundabouts also reduce the need for added lanes along roadways since signal-controlled roadways are widened from intersection to intersection to accommodate the queues of stopped vehicles generated by traffic signals.

Environment

Fuel consumption and air pollution are reduced significantly due to lower travel delay, especially in the off peak travel periods.

Beauty

Roundabouts central and splitter islands provide area for landscaping, sculpture, or other aesthetic features. They also avoid the clutter of traffic signal controller boxes, poles and wires, and pavement cuts for detector loops.

City of Springfield Development and Public Works Department 225 Fifth Street Springfield, Oregon 97477



City of Springfield

MULTI-LANE ROUNDABOUT

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Pedestrian Wait for Refuge island. a gap in Wait for gap in traffic before traffic before crossing. entering roundabout. Traffic circulates COUNTER-Watch for CLOCKWISE and yield to in roundabout. pedestrians in the crosswalk. Look to your left. Yield to vehicles in the roundabout. Crosswalk Crosswalk

MOTORIST

Going Left or U-turn:

- When approaching the roundabout, you must be in the LEFT LANE unless otherwise marked on the road.
- 2 Yield to pedestrians in the crosswalk.
- 3 Yield to traffic in the roundabout.
- 4 Enter the roundabout when there is a safe gap in the traffic.
- **5** Use your left turn signal when going around.
- 6 Stay in the left lane.
- **7** Use your right turn signal and exit the roundabout.
- 8 Yield to pedestrians in crosswalk.

Going Straight:

- When approaching the roundabout you can be in EITHER LANE unless otherwise marked on the road.
- 2 Yield to pedestrians in the crosswalk.
- **3** Yield to traffic in the roundabout.
- **4** Enter the roundabout when there is a safe gap in the traffic.
- **5** Stay in your lane.
- 6 Use your right turn signal and exit the roundabout.
- **7** Yield to pedestrians in crosswalk.

Going Right:

- When approaching the roundabout, you must be in the RIGHT LANE unless otherwise marked on the road.
- 2 Yield to pedestrians in the crosswalk.
- 3 Yield to traffic in the roundabout.
- **4** Enter the roundabout when there is a safe gap in the traffic.
- 5 Stay in the right lane.
- 6 Use your right turn signal and exit the roundabout.
- **7** Yield to pedestrians in crosswalk.

PEDESTRIANS

- 1 Always use the sidewalk.
- 2 Approach the crosswalk.
- 3 Look to your left for approaching vehicles.
- 4 When safe, cross the street to the median island; it is there to provide a refuge between lanes.
- 5 Look to your right for approaching vehicles.
- **6** When safe, cross the remaining lanes of traffic.

BICYCLES

- 1 Approach the roundabout in the bicycle lane.
- 2 Where the bicycle lane ends, either use the bicycle ramp up to the sidewalk, or merge with traffic.
- **3** Bicycles using the street should follow the same rules as motorists. Be assertive and occupy the middle of the lane.
- **4** Bicycles using the sidewalk should follow the same rules as pedestrians.

EMERGENCY VEHICLES

Do not enter the roundabout when emergency vehicles are approaching on another leg; allow vehicles in the roundabout to clear in front of the emergency vehicle. If in the roundabout, exit the roundabout and pull to the side. Never stop in the roundabout.

For additional information, contact:

City of Springfield
Transportation Division
Public Works Department
225 Fifth Street, Springfield, Oregon 97477

Phone: 541-726-4584 · Fax: 541-726-3781 E-mail: publicworks@ci.springfield.or.us Website: www.ci.springfield.or.us