# **Benefits**

#### **Improved Safety**

Roundabouts offer improved safety over other forms of at-grade intersections because there are fewer **conflict points, slower speeds**, and **easier decision-making**. Data from Pennsylvania intersections converted to roundabouts found a significant reduction in injury and fatal crashes. These results are consistent with similar national studies. The reductions are due to the elimination of most head-on, left turning, and right-angle crashes. Roundabouts also improve pedestrian safety by allowing pedestrians to cross one-way traffic moving at slower speeds.





8 conflict points

32 conflict points

### **Reduced Delay**

Roundabouts typically operate with **lower vehicle delays** than other types of intersections (e.g., traffic signal, stop control) with similar lane configurations. At roundabouts, entering traffic does not have to come to complete stops unless conflicts are present, allowing drivers to adjust speeds and take advantage of gaps between vehicles in the circulatory roadway. Even when there are traffic queues on one or more approaches, they are rolling queues that tend to move continuously.

## **Contact Information**

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# Trucks at Roundabouts

Driving Tips for Large Truck and Heavy Vehicle Navigation





# Large Trucks at Roundabouts

#### **Navigating a Roundabout**

While there are single-lane and multilane roundabouts, overall navigation is similar.

Slow down. Yield to pedestrians first, then to all lanes of circulating traffic.

When there is a clear gap, enter the circle, keeping in mind the trailer may off-track onto the striped buffer between entry lanes or the outside truck apron, if provided.

Continually check all mirrors when circulating and exiting the roundabout. The trailer may off-track onto the **truck apron** as the truck circulates the central island.

Yield to pedestrians at the exit.

#### **Multilane Roundabouts**

As with all vehicles, trucks need to enter multilane roundabouts in the correct lane for their destinations. Look for signs and pavement markings for navigation assistance.

For **left turns**, this is usually the left-most lane, but some multilane roundabouts allow lefts from more than one lane.

For **through movements**, this may be the right lane, left lane, or both lanes.

For **right turns**, trucks may need more space than just their lane, similar to other types of intersections. A right turn bypass lane may be provided.

Large trucks may **cautiously** encroach on adjacent lanes when no other vehicles are nearby. Hatched buffer areas may be provided between approach lanes to allow extra space for truck movements.







The yellow outline represents the cab path, while the orange outline represents the trailer path.

#### **Truck Aprons**

Trucks with trailers typically need more space than the lane width provided to navigate a roundabout.

- Truck aprons are designed for trailers to track over them.
- They are provided around the central island but may also be on the outside of the roundabout.
- On newer roundabouts, they are typically low enough to accommodate lowboy trailers.
- At smaller roundabouts, the truck cab may need to traverse the truck apron when turning right.

#### **Special Signage**

Some roundabouts may prohibit certain right turn movements and require trucks to fully circulate the roundabout to make the desired right-turn movement.



#### **Oversized Trucks**

Roundabouts may be designed to accommodate oversize trucks where necessary, especially for the through movement. They are rarely an issue for multilane roundabouts. In some cases, the roundabout may need to be closed while an oversize truck moves through the intersection.

