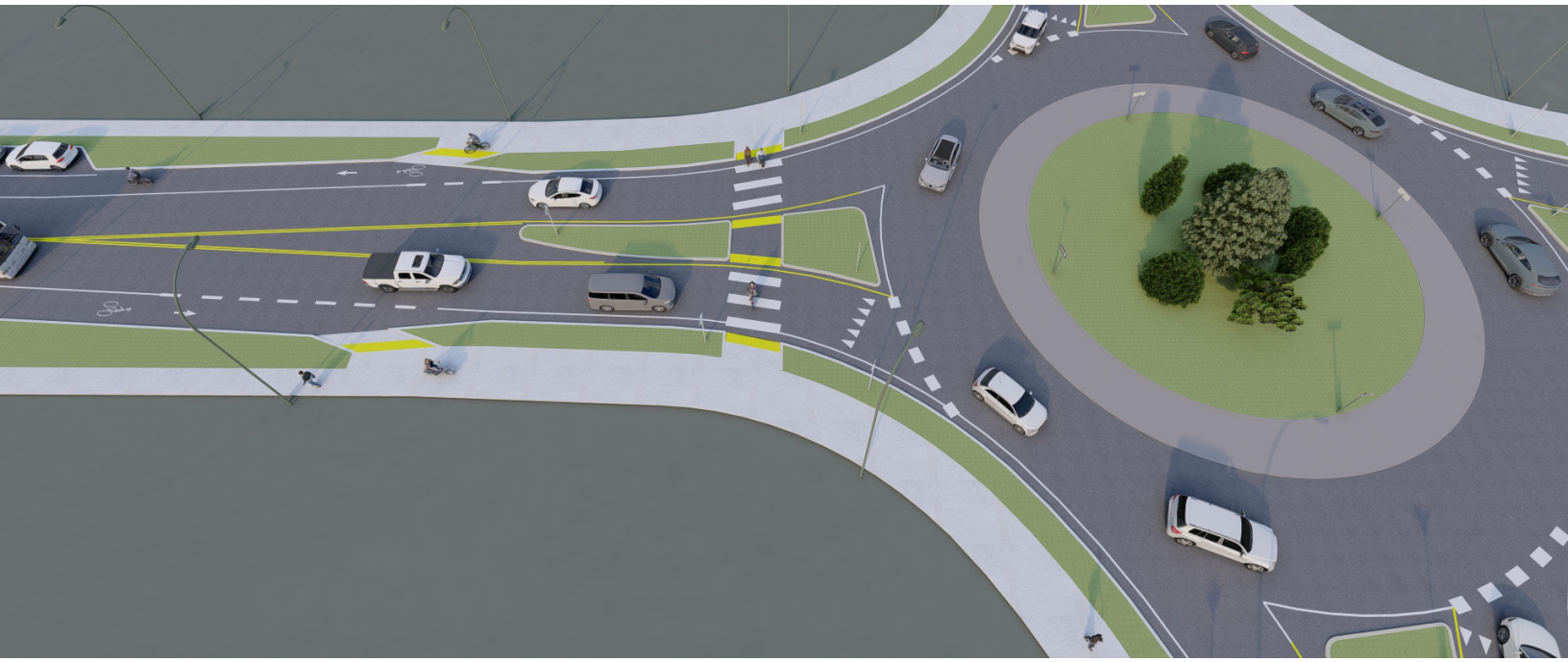
Bikes at Roundabouts



DESCRIPTION

- When designed appropriately, roundabouts can be an important part of a comfortable and connected bicycle network.
- Depending on the location, roundabouts can be designed to direct bicyclists to travel through the intersection with vehicle traffic in the center of the travel lane, on the sidewalk, or on a separated facility or shared use path. Bicycle lanes without vertical separation are not to be provided on the circular roadway of a roundabout.
- When planning bicycle facilities at roundabouts, it is important to provide appropriate space, minimize conflict points and stop-start maneuvers, and maximize visibility of all users.

CONTEXT

- At most urban, single-lane roundabouts, on-street bicycle lanes should be terminated in advance of the intersection, directing bicyclists either to merge into traffic or onto a separated bicycle lane or shared use path.
- At multilane roundabouts, directing bicyclists to merge into traffic is not preferred. Bicycle ramps should be provided to allow bicyclists to exit the roadway onto a separated bicycle lane or shared use path parallel to the sidewalk.

BENEFITS

- ✓ **Improved safety**
- ✓ **Shorter wait times**
- ✓ **Safer speeds**

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POLICY AND DESIGN GUIDANCE

- It is possible to install different bicycle treatments at different intersection legs depending on the bicycle facilities present on each approach.
- When terminating a bicycle lane approaching a roundabout, an appropriate taper should be provided to narrow the lane widths and encourage bicyclists to merge.
- At roundabouts where bicycle ramps are provided, a widened sidewalk or shared use path should be considered, depending on expected bicycle volumes.
- Bicycle ramps must be designed to ensure usability by bicyclists and to avoid the potential for confusion of pedestrians, especially those with visual impairments.
- Roundabouts vary widely in cost depending on the roadway context, size, and right-of-way acquisitions. For example, a temporary mini-roundabout costs approximately $50,000 and a standalone multilane roundabout can cost up to $4M.

For more information on **Bikes at Roundabouts** and other bicycle and pedestrian treatments, visit **virginiadot.org/programs/bikeped/bicycle_and_pedestrian_treatments.asp**

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RESOURCES

Legal definitions and regulations:

Code of Virginia

Bikes at roundabouts design guidance:

NCHRP

AASHTO

MassDOT

General roundabout design guidance:

FHWA

PEDSAFE

Geometric design guidance for Virginia:

VDOT Roundabout Design Guidance

VDOT Road Design Manual

Pavement markings, placement, and spacing:

MUTCD

VDOT 2016 Road and Bridge Standards

Virginia Supplement to the MUTCD

Guidelines are provided for informational purposes only. For detailed design guidance, please refer directly to design manuals and standards.