



California Drive Roundabout, City Project No. 83920 FREQUENTLY ASKED QUESTIONS

1. What is a “roundabout”?

A roundabout is a circular intersection where traffic circulates counterclockwise around a center island. There are no traffic signals or stop signs in a modern roundabout. Traffic entering the roundabout must yield to traffic already circulating within it.

2. Why consider a roundabout and not a traffic signal?

Various studies by the Federal Highway Administration have found that roundabouts are able to handle higher traffic capacity (by 30% to 50%) when compared to traditional intersections without increasing delay and traffic congestion. All traffic entering the roundabout is allowed to flow in at a reduced speed, but not make any single direction fully stop for more than a moment and create traffic backups.

For this project, a study was conducted in 2007 which confirmed the roundabout as the preferred alternative to improving the safety and traffic flow of the intersection of California Drive and Lorton/Bellevue Avenues.

3. Why is a roundabout safer than a typical intersection?

Studies have shown that roundabouts are safer than traditional stop sign or signal-controlled intersections. According to a study by the Insurance Institute for Highway Safety (IIHS), roundabouts reduced injury crashes by 75% at intersections where stop signs or signals were previously used for traffic control. Studies by the IIHS and Federal Highway Administration have also shown that roundabouts typically achieve the following:

- A 37% reduction in overall collisions
- A 75% reduction in injury collisions
- A 90% reduction in fatality collisions
- A 40% reduction in pedestrian collisions

4. Why are the roads leading to the roundabout so curved?

The roads approaching the roundabout are curved to slow down traffic to an appropriate speed as they navigate the roundabout. This reduction of vehicle speeds through roadway curves also make it safer for pedestrians and bicyclists. But these same curves are not such a hindrance as to create undue traffic congestion.

5. This project shows 2 lanes through the roundabout. Is a roundabout always 2 lanes?

No, not all roundabouts have 2 lanes. The project design team proposed a 2-lane roundabout based on the results of an intense traffic analysis. The results showed that a 2-lane roundabout is needed to accommodate the existing - and future - traffic volumes.

6. Will there be any “downsides” to a roundabout in terms of traffic congestion or driver confusion?

Roundabouts were originally conceived in order to reduce traffic congestion at intersections (or where three or more roads come together), reduce right-angle crashes, and slow down traffic.

While roundabouts are relatively new to drivers, the design is very intuitive because all that a driver needs to know is to circulate in the roundabout until they need to turn off to the right. If they miss their street, they just circulate in the roundabout again until it comes up again.

7. Will there be impacts from a roundabout to through-traffic on California Drive?

Through-traffic on California Drive will actually experience less delay from a roundabout than a traffic signal. Traffic entering from Bellevue Avenue and Lorton Avenue will also experience less delay since they will just need to yield to any traffic already in the roundabout, and then enter the roundabout and circulate through.

8. Can you make the northbound California Drive movement not go through the roundabout?

The current design includes one bypass lane for northbound California Drive. This will allow vehicles in that lane to bypass the roundabout circulation.

9. Will there be lighting in the pedestrian crosswalks as part of the project?

Street lighting and pedestrian safety lighting is planned to be included in this project.

10. Will there be any education for drivers on how to use the roundabout.

The project website has information and links to videos on how to safely drive through a roundabout. Also, there will be ample warning and directional signs posted during project construction to inform drivers on how to circulate through the roundabout.

11. Will the design consider bicycle users and bike paths?

The design will take into account bicyclists, and has incorporated a bike path in the northbound direction. Where there isn't room for a dedicated bike path (as in parts of the southbound direction), the design has included shared bike lanes and appropriate safety roadway markings informing drivers of the shared nature of the lane.

12. Will there be consideration for some sort of art in the center, and for a gateway feature to be incorporated? And, can the center of the roundabout be used as an accessible park?

Art and gateway features will be considered as the project moves into final design. Use of the center of the roundabout by pedestrians as a park, however, is not feasible or safe since traffic will be circulating around the center.

13. It appears the roundabout will take away green space. Can it be preserved?

The project currently includes adding and/or widening the pedestrian areas along parts of the eastern, western, and southern edges of the project with new landscaping and pedestrian sidewalks.