Riverford Road Roundabouts Project - Frequently Asked Questions (FAQ)

Why roundabouts?

Roundabouts have many advantages over traffic signals when constructed in the right location, including:

- They provide traffic calming, resulting in reduced speeds.
- They require less maintenance, have lower yearly operational costs, and have longer service life.
- They reduce greenhouse gas emissions by reducing vehicle idling time at intersections.
- Roundabouts' median islands provide refuse for pedestrians, allowing to cross one direction of traffic at a time.
- They provide additional opportunities for landscaping and hardscaping in the community.

Here is a link to the U.S. Department of Transportation, Federal Highway Administration, Roundabouts page, which has a lot of great information and educational videos:
https://highways.dot.gov/safety/intersection-safety/intersection-types/roundabouts

Are roundabouts safe?

Yes, roundabouts have been shown to reduce the severity of accidents compared to stop-controlled and signalized intersections. This means less fatal, serious, and injury-related crashes. They reduce speeds through the intersection and they reduce roadway/intersection conflict points.

Not only are they safer for drivers, but roundabouts have also shown to be significantly safer for pedestrians as well. Roundabouts have designated crosswalks with pedestrian islands, making it safer for pedestrians to cross one direction of traffic at a time. All crosswalks are located in areas where the speed of vehicles is already being reduced due to the design geometry required for vehicles to safely enter and negotiate the roundabout. Furthermore, since crosswalks are located outside of the roundabouts, drivers are able to focus on pedestrian crossings separate from roundabout maneuvering (entering, circulating, and exiting).

As an additional safety element, incorporating *raised* crosswalks will elevate the pedestrians slightly above street level, making them more visible to drivers and encouraging vehicles to slow down when approaching the pedestrian crosswalk. Raised crosswalks are ramped speed tables, not speed bumps. For more information, here is a link to a U.S. Department of Transportation, Federal Highway Administration page, which provides an exhibit and more information.
https://safety.fhwa.dot.gov/ped_bike/step/docs/techSheet_RaisedCW2018.pdf

We invite you to visit the Roundabout Statistics link located on the Riverford Roundabouts Project website.

Most people in this community have never used a roundabout before; can the County assist in training and education?

Yes, we understand there can be an initial adjustment period as drivers learn to navigate a roundabout. The County will continue to look for training and education opportunities as we get closer to construction and the opening of the roundabouts to traffic (currently anticipated 2029). Possible opportunities include creating a bird's-eye view video, as well as a driver's-eye video of vehicles traveling through the roundabouts.

In the meantime, there are many videos on-line that can help educate the public, including:

- Rules of the Roundabout
  https://www.youtube.com/watch?v=peUf2NRdWxs

- How to Maneuver a Modern Roundabout
  https://youtu.be/OizPs_uiRZU

The County can also provide locations of existing roundabouts in the region if drivers are interested in experiencing or practicing driving through a roundabout.

With so much traffic coming off the SR-67, how will other directions be able to get into the roundabout?

Roundabouts work by maintaining continuous flow of traffic while controlling vehicle speeds before entering and through the roundabout. This is accomplished using roadway geometry (curves) and physical barriers (narrowing of lanes, splitter islands, raised crosswalks, etc.) and the designed radius of the roundabout. Although vehicles may be traveling at high speeds on SR-67, they will be forced to slow down as they approach and enter the roundabout.

Based on the traffic data collected, and the required reduction of speed to safely enter the roundabout, vehicle gaps are anticipated. It can be expected that some legs will experience short queuing before entering the roundabout, however, the LOS/Sidra analysis shows that all legs of the roundabout will operate at an acceptable Level of Service (LOS) (see Fact Sheet for more details).

Additionally, the County used VISSIM software to model the proposed roundabouts while utilizing the collected and projected traffic data. The model shows the continuous movements of vehicles and how long delays, queues, and gaps are anticipated to be. The model and summary will be posted on the project's website.

Can you provide examples of any roundabouts in California that take traffic directly off a highway?

Roundabouts are becoming more popular throughout California and here are a few examples to look at. The roundabouts in Truckee are most similar to our project.

I-80 / SR-89 Interchange in Truckee, CA
https://maps.app.goo.gl/53XzsAfnawZARiqn6

SR-29 / 1st Street Interchange in Napa, CA
https://maps.app.goo.gl/enf5cnE7GcZkEG6D8

Valle Road and La Novia Ave Intersection, adjacent to I-5 in San Juan Capistrano, CA
https://maps.app.goo.gl/mmCpAuqUKiYr9Zwf7

SR-1 / SR-68 Interchange in Monterey County, CA
https://maps.app.goo.gl/pLJHGKhYXPoedvVx7

What happens when large trucks or emergency vehicles enter the roundabouts?

Both roundabouts are designed for the largest truck and trailers allowed on the road, as defined by the State and Federal guidelines. The roundabouts were also designed to accommodate special permit vehicles that have historically used this area. This includes:

- Federal: Surface Transportation Assistance Act (STAA) trucks with semitrailers of both 53 feet and 48 feet as well as Double Semitrailers of 28.5 feet each trailer and an overall unlimited length.
- State: California Legal Single and Double semitrailers (smaller than the STAA trucks).
- Permitted: Oversized and Overweight (OSOW) vehicles up to 135 feet long.

Large trucks and trailers are able to travel through the roundabout utilizing mountable truck aprons when navigating turns or circling the roundabout.

Emergency vehicles will also be able to navigate the roundabouts, and vehicles are required to yield to emergency vehicles in the roundabout similar to a standard roadway.

What will be the speed in the Roundabout?

As part of the design process, each roundabout is analyzed for the fastest path that vehicles could take to navigate each part of the roundabout. It was determined that the southern roundabout allows for an average speed of 22 mph entering the roundabout and an average speed of 18 mph inside the roundabout. The northern roundabout allows for an average speed of 20 mph entering the roundabout and an average speed of 18 mph inside the roundabout.

What kind of lighting will be included?

Pole-mounted streetlights will be located at the perimeters of each roundabout, illuminating the entire roundabout. The exact locations of the streetlights will be determined as design progresses.

Additionally, the center of the roundabout will be raised to reduce headlight glare from the vehicles on opposite sides the of the roundabout.

Why are you putting a crosswalk across the SR-67 off-ramps?

One of the purposes of this project is to improve multimodal connectivity within the community. This includes construction of shared-use pathways and sidewalks throughout the corridor, providing multiple options for safe passage and connectivity on either side of SR-67.

All crosswalks, including those across the off-ramps, will be located in areas where the speed of vehicles is already being reduced due to the design geometry required for vehicles to safely enter and negotiate the roundabout. As a function of roundabout design, pedestrians cross a shorter distance of only one direction of traffic at a time since the entering and exiting flows are separated. Furthermore, since crosswalks are located outside of the roundabouts, drivers are able to focus on pedestrian crossings separate from roundabout maneuvering (entering, circulating, and exiting).

To enhance safety further, all crosswalks, including those across the off-ramps, will be raised, making pedestrians more visible to drivers and encouraging vehicles to slow down further when approaching the crosswalks. Additionally, Rapid Flashing Beacons (RFBs) will be installed at the off-ramp

crosswalks. Pedestrian push buttons will be installed on each side of these crosswalks to activate the RFBs.

Drivers existing the SR-67 will have clear line of sight and warning alerts for pedestrians needing to cross.

Can stoplights be added to control the flow of vehicles entering the roundabout?
Based on the traffic data, it has been determined that stoplights are not necessary at this location.

Can you use this Project funding at a different location/intersection instead?
This interchange currently experiences considerable operational deficiencies during peak hours, which can result in excessive delays and significant queueing. This is mainly due to how closely spaced the intersections are on both sides of the interchange. Additionally, the overall existing geometry of the interchange/roadways, the complex traffic signal timing and operations, and the limited available vehicle storage lengths – all compound traffic and site conditions at the SR-67 off-ramps. Traffic often queues and backs up onto the highway.

The project is moving forward now due to required traffic mitigation from active private development on the north side of Riverford Road.

When will I get another chance to engage with the project development?
The Project website is consistently being updated as design progresses. The public will have an opportunity to comment on the project and environmental document during the environmental public review period between October 25 and November 26, 2024. Environmental documents can be found on Environmental Services Unit webpage starting October 25, 2024. The County values the community's input and will continue to engage with the Lakeside Community Planning Group and keep the public informed as design progresses.