

From: [REDACTED]
Sent: Thursday, July 31, 2014 9:46 AM
To: MTC Info
Cc: Michael Varney; Mary Ann Nihart; [REDACTED] Karen Ervin
Subject: Caltrans cannot account for water in a drought: they should not be rewarded with new contracts

Date: July 31, 2014

To: MTC Public Information Office
101 Eighth Street
Oakland, Ca 94607

Subject: Comments - Draft 2015 TIP and Draft Air Quality Conformity Analysis -

Dear MTC, I submit the following comments for the Draft 2015 TIP and Draft Air Quality Conformity Analysis.

I am specifically concerned with the proposed Calera Parkway Widening in County of San Mateo, City of Pacifica. The TIP ID for the Calera Parkway SR1 widening is SM-050001, RTP ID 98204. The Project description listed on the 2015 TIP Projects by County, page 11 of 59, states:

"In Pacifica: Route 1 between Fassler and West Port Dr. : Add an additional lane in each direction."

First, the proposed Calera Parkway-Caltrans Preferred Alternative, expands the existing roadway from 64 feet, shoulder to shoulder, to a width of 148 feet. Obviously, the proposed Calera Parkway is much bigger than, and adds much more than, one lane in each direction. In fact, it more than doubles the width of the existing roadway on this section of Highway 1 in Pacifica.

I am concerned because we are experiencing a major drought in California, and according to the Washington Post, Caltrans cannot account for their water consumption. After watching Caltrans in their current project, where they have caused accidents at the Pedro Point Bridge in South Pacifica with their poor signage and road design, we should not reward incompetence especially in the middle of a drought to an agency that cannot track its water usage.

According to the July 26 Washington Post:

"The AP asked the 11 agencies or departments that use the most water how their consumption over the first half of this year compared to the same period in 2013.

"Only four could provide comprehensive data for water use in buildings they manage, in some cases taking several weeks to produce the information. Others pulled a smattering of utility bills from a few sites only after being contacted — data they acknowledged was not sufficient to gauge the effectiveness of conservation efforts.

"One of the largest water users, the California Department of Transportation, provided 2014 data for water accounts in four cities and one county, and couldn't provide any 2013 numbers. The agency has more than 7,500 accounts....The lack of accounting by Caltrans and other agencies is another example of how the state is struggling to keep track of water use. A recent AP story detailed how state regulators do not know how many trillions of gallons have been diverted by corporations, agricultural concerns and others that have "senior water rights" entitling them to free water.

With California in the grip of its worst drought in a generation, Brown declared an emergency on Jan. 17 and asked residents and agencies to trim usage."

With this info, Caltrans cannot go forward. They need to be able to account for all their water usage. In a time of drought, no new freeways should be constructed, especially one that will do nothing to improve traffic flow. We need roundabouts!

Here is government information on roundabouts
(from <http://dot.wi.gov/safety/motorist/roaddesign/roundabouts/faq.htm#flow>):

How do roundabouts affect traffic flow?

Studies conducted by the Institute and others have reported significant improvements in traffic flow following conversion of traditional intersections to roundabouts.

A recent Institute study documented missed opportunities to improve traffic flow and safety at 10 urban intersections suitable for roundabouts where either traffic signals were installed or major modifications were made to signalized intersections. It was estimated that the use of roundabouts instead of traffic signals at these 10 intersections would have reduced vehicle delays by 62-74 percent. This is equivalent to approximately 325,000 fewer hours of vehicle delay on an annual basis.

Are there other benefits?

Because roundabouts improve the efficiency of traffic flow, they also reduce vehicle emissions and fuel consumption. In one study, replacing a signalized intersection with a roundabout reduced carbon monoxide emissions by 29 percent and nitrous oxide

emissions by 21 percent. In another study, replacing traffic signals and stop signs with roundabouts reduced carbon monoxide emissions by 32 percent, nitrous oxide emissions by 34 percent, carbon dioxide emissions by 37 percent, and hydrocarbon emissions by 42 percent. Constructing roundabouts in place of traffic signals can reduce fuel consumption by about 30 percent. At 10 intersections studied in Virginia, this amounted to more than 200,000 gallons of fuel per year. And roundabouts can enhance aesthetics by providing landscaping opportunities.

- Várhelyi, A. 2002. The effects of small roundabouts on emissions and fuel consumption: a case study. *Transportation Research Part D: Transport and Environment* 7(1):65-71.
- Mandavilli, S.; Russell, E.R.; and Rys, M. 2004. Modern roundabouts in United States: an efficient intersection alternative for reducing vehicular emissions. Poster presentation at the 83rd Annual Meeting of the Transportation Research Board, Washington DC.

Can roundabouts accommodate larger vehicles?

Yes. To accommodate vehicles with large turning radii such as trucks, buses, and tractor-trailers, roundabouts provide an area between the circulatory roadway and the central island, known as a truck apron, over which the rear wheels of these vehicles can safely track. The truck apron generally is composed of a different colored material than the paved surface, usually a reddish colored concrete, to discourage routine use by smaller vehicles.

How do roundabouts affect older drivers?

Age-related declines in vision, hearing, and cognitive functions, as well as physical impairments, may affect some older adults' driving ability. Intersections can be especially challenging for older drivers. Relative to other age groups, senior drivers are over-involved in crashes occurring at intersections.

In 2006, forty percent of drivers 70 and older in fatal crashes were involved in multiple-vehicle intersection crashes, compared with 22 percent among drivers younger than 70.

Older drivers' intersection crashes often are due to their failure to yield the right-of-way. Particular problems for older drivers at traditional intersections include left turns and entering busy thoroughfares from cross streets. Roundabouts eliminate these situations entirely.

A recent study in six communities where roundabouts replaced traditional intersections found that about two-thirds of drivers 65 and older supported the roundabouts. Although safety effects of roundabouts specifically for older drivers are unknown, the 2001 Institute study of 23 intersections converted from traffic signals or stop signs to roundabouts reported the average age of crash-involved drivers did not increase following the installation of roundabouts, suggesting roundabouts may not pose a problem for older drivers.

Are roundabouts safe for pedestrians?

Roundabouts generally are safer for pedestrians than traditional intersections. In a roundabout, pedestrians walk on sidewalks around the perimeter of the circulatory roadway. If it is necessary for pedestrians to cross the roadway, they cross only one direction of traffic at a time. In addition, crossing distances are relatively short, and traffic speeds are lower than at traditional intersections. Studies in Europe indicate that, on average, converting conventional intersections to roundabouts can reduce pedestrian crashes by about 75 percent. Single-lane roundabouts, in particular, have been reported to involve substantially lower pedestrian crash rates than comparable intersections with traffic signals.

Do drivers favor roundabouts?

Drivers may be skeptical, or even opposed to roundabouts when they are proposed. However, opinions quickly change when drivers become familiar with roundabouts. A 2002 Institute study in three communities where single-lane roundabouts replaced stop sign-controlled intersections found 31 percent of drivers supported the roundabouts before construction compared with 63 percent shortly after. Another study surveyed drivers in three additional communities where single-lane roundabouts replaced stop signs or traffic signals. Overall, 36 percent of drivers supported the roundabouts before construction compared with 50 percent shortly after. Follow-up surveys conducted in these six communities after roundabouts had been in place for more than one year found the level of public support increased to about 70 percent on average.

The additional travel lanes in multi-lane roundabouts increase the complexity of the driving task. Information is not yet available on drivers' attitudes toward multi-lane roundabouts in the United States.

What are the impediments to building roundabouts?

Despite the safety and other benefits of roundabouts, as well as the high levels of public acceptance once they are built, some states and cities have been slow to build roundabouts, and some are even opposed to building them. The principal impediment is the negative perception held by some drivers and elected officials.

Transportation agencies also have long been accustomed to installing traffic signals, and it can take time for deeply rooted design practices to change.

How common are roundabouts in the United States?

The first modern roundabouts in the United States were constructed in Nevada in 1990. Since that time, although the precise number of roundabouts is unknown, approximately 1,000 have been built. By comparison, there are about 20,000 roundabouts in France, 15,000 in Australia, and 10,000 in the United Kingdom. States that have active programs to construct roundabouts include Alaska, California, Colorado, Connecticut, Florida, Hawaii, Indiana, Kansas, Maryland, Michigan, Minnesota, Mississippi, Nevada, New Hampshire, New York, North Carolina, Oregon, South Carolina, Utah, Vermont, Virginia, Washington, and Wisconsin.

Do roundabouts require more space than traditional intersections?

Roundabouts do not necessarily require more space than traditional intersections. Geometric design details vary from site to site and must take into account traffic volumes, land use, topography, and other factors. Because they can process traffic more efficiently than traffic signals and stop signs, roundabouts typically require fewer traffic lanes to accommodate the same amount of traffic.

In some cases, roundabouts can require more space than stop signs or traffic signals at the actual intersection to accommodate the central island and circulating lanes, but approaches to roundabouts typically require fewer traffic lanes and less right-of-way than those at traditional intersections. The following example from Asheville, North Carolina, illustrates that roundabout dimensions can be compatible with those of traditional intersections.



Before



After

Intersection with traffic signals converted to a roundabout in Asheville, North Carolina

Where are appropriate locations for roundabouts?

Roundabouts are appropriate at many intersections:

- High crash rate locations.
- Intersections with large traffic delays.
- Complex geometry (more than four approach roads, for example).
- Frequent left-turn movements.

Roundabouts can be constructed along congested arterials, in lieu of road widening, and can be appropriate in lieu of traffic signals at freeway exits and entrance ramps on the cross road.

Until Caltrans can account for its water, and until we can use innovative ways to improve traffic flow, this 8-lane, 2-block highway can not move forward. It would be totally irresponsible of any government agency to approve it.

Thanks,

Jennifer Ball and Mike Varney