APPENDIX B
PUBLIC COMMENTS & CALTRANS RESPONSES

Comment 1

PHOEBE GRAUBARD
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October 6, 2008

TO: MENDOCINO COUNCIL OF GOVERNMENTS (MCOG)

FROM: PHOEBE GRAUBARD

RE: SIMPSON LANE PROJECT -- FORT BRAGG -- PUBLIC COMMENT

PUBLIC SAFETY ISSUE *1.a*

Highway One is a highway. It is not a rural road. This is a major highway. There is constant traffic night and day on Highway One between Fort Bragg and Mendocino, as people go to work and to events on the Coast. This area has become more populated with new residents and tourists.

There have been many accidents and deaths at the intersection of Highway 1 and Simpson Lane. I believe we need a traffic signal with left turn indicators to protect the safety of the public similar to the ones at Highway 1 and Little Lake Road in Mendocino and Highway 1 and 20 at the crossroads to the City of Fort Bragg.

I live in the Simpson Lane area and work in the City of Fort Bragg. I do not go out to most events at night in either Mendocino or Fort Bragg because of the difficulty of making the left turn to go South to Mendocino from Simpson Lane or the left turn to go up Simpson Lane from Fort Bragg. Sometimes I will go all the way to the Harvest Market parking lot in order to access the signal light at Hwy. 1 and 20 so that I can go South to Mendocino.

SENIOR CITIZENS *1.b*

There are many senior citizens living in the Simpson Lane area. Trying to merge into a roundabout will be more difficult than waiting at a stop light with a left turn indicator. It is hard to judge distances for the merge. There may be issues of impaired driving abilities from alcohol, medications, or drugs by drivers attempting to navigate the roundabout. This will cause more accidents. Was A Senior Citizen Traffic Study done, as mandated by State Law?

BERKELEY ROUNDABOUTS *1.c*

I am familiar with roundabouts because I lived in Berkeley before I moved my permanent residence to the Coast fifteen years ago. When I lived in Berkeley, I had difficulty merging into the Marin Circle roundabout. There were near misses, and I once got into an accident there. I chose alternate routes rather than use the Marin Circle roundabout. Alternate routes are not an option here where Highway 1 is the only road that goes North and South on the Mendocino Coast.

EMERGENCY VEHICLES 1.d

The roundabout will impede emergency access for citizens leaving Simpson Lane if there is a fire, earthquake, or personal emergency. The roundabout will impede the time it takes for an EMT or fire truck to reach a person or home in the Simpson Lane area.

COST 1.e

CALTRANS will pay for the cost of a traffic light. A roundabout is more expensive. The county will have to **pay its share of cost estimated at $1,060,000** by MCOG. This is a waste of public funds and unconscionable considering the budget crisis facing Mendocino County. The county is in deficit spending mode and has asked all departments to make a 10% cut. A traffic signal, which Caltrans concluded was the best alternative for that site is also the most cost effective choice for the County.

LACK OF STAKEHOLDER ENGAGEMENT & TRANSPARENCY IN THE GOVERNMENT PROCESS 1.f

I am extremely concerned by the lack of transparency in the Mendocino County Government process which concluded, without public hearings or scoping sessions, that a roundabout was a better choice for Coast residents than the signal light Caltrans had studied and agreed to pay for.

Attached to my public comment is a copy of the roundabout obtained by a Public Records Request from Caltrans.

Respectfully submitted

Phoebe Graubard
17320 Franklin Road
Fort Bragg, CA 95437

c: Mendocino County Board of Supervisors
Caltrans - sandra_rosas@dot.ca.gov.

Response 1.a
Public Safety
The multi-lane roundabout alternative for the SR 1 and Simpson Lane intersection has been selected due to the safety and operational benefits of the modern roundabout. The "safety first" motto is precisely why the roundabout was selected.

Modern roundabouts operate on a "yield at entry" rule, which gives traffic within the roundabout the right of way. Vehicles entering the roundabout must wait for an opening or gap in traffic to make an entry. If no traffic is present, entering vehicles will slow down and proceed into the roundabout. On a well-designed roundabout, the speeds of the entering vehicles and circulating vehicles are very close, making the merge easy and comfortable. For a multi-lane roundabout, pavement markings and signs will provide lane assignments. Lane use for a two-lane entry at a roundabout is exactly the same as at any intersection with a two-lane approach: vehicles turning left use the left lane, vehicles going straight use either lane, and vehicles turning right use the right lane. Lane markings and signs will show this directional method, which ensures correct position on entry.

Furthermore, Caltrans has employed the Federal Highway Administration (FHWA) method of estimating the annual cost to society for injury + fatality collisions (which includes no monetary assignment to pain, suffering, grief, or loss of companionship). For Simpson Lane, under the existing conditions, the cost to society for injury + fatality collisions is estimated at $107,920 per year. The roundabout will reduce the frequency of injury + fatality collisions by 90%. The signal system will reduce the frequency of injury + fatality collisions by 20%. Translating the increased safety into dollars and cents, the future cost to society for injury + fatality collisions will be $10,792 per year for the roundabout and $86,336 per year for the signalization.

References:
1.Persaud, B.N.; Retting, R.A.; Garder, P.E. and Lord, D. 2001. “Observational Before-After Study of the Safety Effect of U.S. Roundabout Conversions Using the Empirical Bayes Method.” Transportation Research Board ID 01-0562
2. Caltrans Highway Safety Improvement Program, 2005

Also, please refer to the “Selected Alternative” and “Climate Change under CEQA” sections in this document, where safety of the roundabout (versus the signal) is discussed. In addition, the Hopland roundabout in Mendocino County is a Caltrans project, which has resulted in successful, safe operations.

The paragraph and figure below are excerpted from a study entitled: “*Reducing Older Driver Injuries at Intersections Using More Accommodating Roundabout Design Practices*” by Dr. Dominique Lord, Department of Civil Engineering, Texas A&M University; Ms. Ida van Schalkwyk, University of Arizona; Dr. Loren Staplin, TransAnalytics; and Dr. Susan Chrysler, Texas Transportation Institute.

“This section briefly discusses the safety characteristics of roundabouts and specific design considerations aimed at improving the safety at roundabouts. Many studies have shown that regular intersections converted to roundabouts offer a substantial reduction in the number of crashes (Elvik 2003, Persaud et al. 2001). The safety benefits are attributed to types of

collisions eliminated, the reduction in speed differential between vehicles, and the lower speed at which vehicles collide when a crash occurs (Robinson et al. 2000). A conflict point is defined as a location where vehicle paths can potentially cross and result in a crash. Conventional wisdom indicates that a reduction in the number of conflict points leads to an improvement in the safety of the intersection. Figure 2.5 illustrates that roundabouts have fewer conflict points than conventional four-legged intersections. This reduction in conflict points partially explains why roundabouts experience lower crash rates than regular intersections.

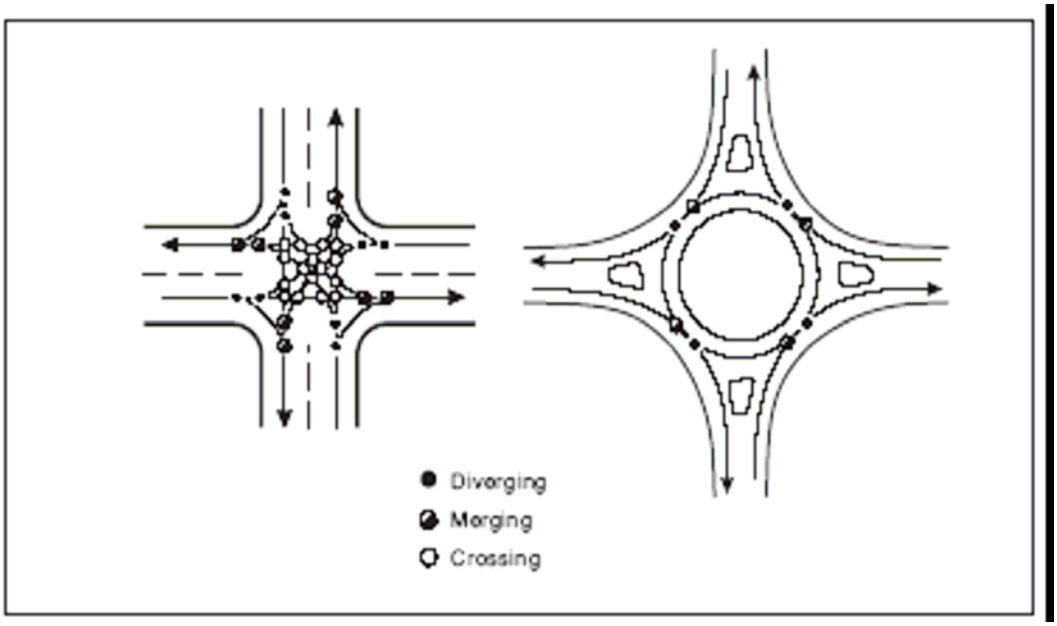

Figure 2.5 Number of Conflict Points for Single-Lane Roundabouts and Four-Way Stop Control Intersections (Robinson et al. 2000)

Response 1.b
Senior Citizens

"Reducing Older Driver Injuries at Intersections Using More Accommodating Roundabout Design Practices" also found that:
"Compared to conventional intersections, roundabouts have the demonstrated potential to significantly reduce the most injurious (angle) type of crashes and slow the operating speed of all vehicles, while maintaining a high capacity for moving traffic through an intersection. If all drivers, and especially older drivers, would increase their use of these highway facilities, and use them properly, a system-wide savings in traffic injuries and fatalities is a very high probability."

Consideration will be given to exit guide signs on the splitter islands vs. adjacent to the traveled way. Also, directional warning signs may be placed in the central island at roughly 90 degrees to the entering traffic as opposed to angling, to assist older drivers as suggested in the cited study.

Response 1. c
Berkeley Roundabout
Caltrans design staff is familiar with the Marin circle roundabout, which lacks several important design features:

- A large, raised central island (with landscaping, surrounded by curb that creates target value for approaching vehicles). The raised central island reduces distractions by limiting sight distance, and creates path deflection to aid in speed reduction;

- raised splitter islands between entering and exiting traffic for vehicle and pedestrian safety as well as speed reduction on the approach and entry;

- pedestrian crossings that are set back from the circulatory roadway to help ensure a one-decision-at-a-time environment for both vehicles and pedestrian,

- ample signing and striping on the entries and exits, as well as within the circle, to help drivers maneuver the facility properly and safely, and greater spacing between legs; and

- it is never permitted to park within a roundabout and the mailbox at the Berkeley roundabout violates this design principle.

Unlike the Marin Circle roundabout, the roundabout at Route 1 and Simpson Lane will be a good example of a well designed, modern roundabout.

Signage will be posted at each approach stating that there is a roundabout ahead with an advised speed of 15-20 miles per hour and "yield ahead" signs will notify the driver that he/she may need to come to a complete stop at the roundabout. The roundabout is a safer alternative due to reduced vehicle speeds, similar speeds between circulating and entering traffic, and the virtual elimination of broadside and head-on collisions. The traffic flow can be compared to the movement of traffic merging onto a highway onramp where there is no potential for t-bone collisions or head-on accidents.

Response 1.d
Emergency Vehicles
The roundabout will have no effect on emergency vehicle response time. In fact, vehicles are to obey the same rules they always follow when encountering an emergency vehicle. If an emergency vehicle is approaching, pull over and do not enter the roundabout. If a vehicle has no choice but to pull over in the roundabout, the circulatory roadway will be wide enough to allow an emergency vehicle to pass by. The roundabout will accommodate the largest, legal truck on the State Highway System. With less delay, it may actually be quicker for an emergency vehicle to get through and it will certainly be safer.

Response 1. e
Cost
Caltrans and Mendocino County will jointly fund the project.
The roundabout will cost $4,648,500. The signalization would cost $4,746,700.

The cost of maintaining a roundabout has been estimated at $10,900 per year as compared to the signalization that is estimated at $16,500 per year.

Response 1.f
Stakeholder Engagement
Refer to the "Coordination and Comments" section which summarizes project scoping, on-going coordination with government agencies, and public outreach.

The public review and participation process has complied with CEQA regulations.

Comment 2

7 Oct 08

Steven Blair Project Manager

Re: The proposed "Round a bout" at Highway 1 and Simpson Ln in the Ft Bragg area.

I am just stunned to learn that Cal Trans is actually taking seriously the suggestion by a few individuals in Ft Bragg! Re: "traffic Circle". 2a

As you know, very long trucks use Hwy 1 such a gasoline tankers with trailers, logging trucks and propane trucks with long trailers.

Many of these same trucks have trouble staying in their own lanes (the trailers that's) comming around curves on Hwy 128 much less expect them to drive safely around a circle on Hwy 1. They would have to do this with many other cars and trucks entering and leaving the "circle", while they themselves might have to change lanes within the "circle" in order to exit in another direction.

I would think that any "traffic Round a bout" in order to accommodate long trucks with trailers would need to be larger in diameter than that intersection would allow. You must assume that some drivers would want to exit Hwy 1 to Simpson Lane.

A small village in Europe is not like Hwy 1 and Simpson Ln, I.E. Traffic Circle! Who among the sponsors of a "circle" have ever driven in one?, I used to, everyday in Long Beach Cal, on my way to work every day, years ago.

It was not on a busy Highway and could not accommodate long trucks.

It was confusing and dangerous even if you were familiar with it.

It is truly a bizzarre suggestion for a heavily used highway.

Yes to a stop lite.

How about a stoplite with xtra lanes to enable traffic to safely enter and exit the highway.

Safety must come first! 2.b

Keep it simple! and what most everyone is used to and familiar with!

I'm a resident of the coast for over 30 years and I drive to Ft Bragg almost daily.

Alan Sussex
PO Box 340
Mendocino Ca
937-0193

Response 2

Response 2.a
Trucks
The multi-lane roundabout alternative is being is proposed for the SR 1/Simpson Lane intersection due to the safety and operational benefits that have been realized with the use of modern roundabouts in the United States. The "safety first" motto is precisely why the roundabout is the selected alternative.

Modern roundabouts are specifically designed to suit the needs of all vehicles expected to use the intersection. Large trucks are often the vehicles that are used as "design vehicles." The turning needs of these large trucks often determine the size or diameter of a roundabout. The Simpson Lane roundabout alternative has been designed to accommodate the Surface Transportation Assistance Act (STAA) truck, which is the largest legal vehicle allowed on the State Highway system without a permit. Technically, this type of vehicle is not allowed on SR 1 in this area. Furthermore, a buffer has been added to accommodate slight mismaneuvers. In response to your comment about large trucks on Route 128, unlike the roundabout, it is doubtful that the route was initially designed for large trucks. Large trucks cannot travel side by side through the roundabout. Large trucks travelling side by side would create the need for a huge high-speed facility and would greatly compromise passenger vehicle safety. Instead, a large truck entering the roundabout is to claim both lanes at the entry, through the roundabout, and/or at the exit. Once the truck, or any vehicle for that matter, is inside the roundabout, all entering traffic must yield. Circulating traffic has the right of way.

Response 2.b
Safety
Modern roundabouts are emerging as viable intersection alternatives throughout the US. In other words, many roundabouts are being built in place of signalized intersections. Moreover, many signalized intersections have been replaced with modern roundabouts to improve safety and increase capacity. The reduction in collisions (both number and severity) and the reduction in delay (operational improvements) are remarkable. Roundabouts handle large volumes of traffic, reduce emissions through reduced idling, create slow vehicle speeds, and remove collision conflict points, thereby reducing accident severity. In contrast, a signalized intersection at this location has the potential for high-speed collisions, both side impact and head-on. The potential for high-speed collisions results in a potential for fatalities.

Comment 3

10/22/08

Caltrans, Attn: Sandra Rosas
Office of Environmental Management
PO Box 911
Marysville, CA 95901-0911

Dear Ms. Rosas,

I am writing in regards to the Caltrans proposal to construct a multi-lane roundabout on Highway One and Simpson Lane in Fort Bragg. I have seen a digital image of the CalTrans roundabout design for this area. It looks fine from the aerial representation and I can understand why people would think it might be a great thing. I too appreciate practical and aesthetic improvements. I have actually used this type of traffic layout in other communities with unpleasant results. Many times I experienced or witnessed near-miss accidents due to people not understanding how to maneuver in the roundabout. In every instance, it only took one confused driver to cause a problem or a considerable logjam. In my experience the roundabout was something to be avoided because after repeated close-calls with other drivers, I decided it was too dangerous so I chose other routes whenever possible. *3.a*

It seems like putting a roundabout on a main artery such as Highway One is a kind of a risky undertaking considering the potential for such problems. I know others who have had negative experiences with roundabouts and avoid them as well. The roundabouts I am familiar with were not located on a main traffic artery and therefore could be avoided. How will we be able to avoid this one? Many people driving this route are tourists, unfamiliar with the layout of the roads, which is a recipe for confusion with a roundabout, risking long delays with backed-up traffic.

Some may have a different opinion than mine and I respect that. I am curious though, about whether supporters of this design have actually used a roundabout. I would be surprised that anyone who has done so (particularly on a busy route) would be supportive of such a proposal for a highway. We should be very cautious about approving such a permanent thing on a main artery with no alternate route. I have empathy for the people who live in that area and would have to deal with this situation every day. I have seen "improvements" made to highways that resulted in making existing problems much worse than before, and I hope we can avoid that here.

In light of the fact that this is a busy highway with no local alternate route and that it is frequently used by tourists unfamiliar with the road, I hope that CalTrans will reconsider this idea and opt for installing traffic signals with turning and merge lanes. It is very possible that putting a roundabout on Highway One and Simpson Lane would be something everyone using the highway would regret. There are too many potential problems with this design on a very busy main artery and the stakes are too high for such an experiment. *3.b*

Sincerely,

Carol Knolle

Carol Knolle
23595 Greentree Drive
Fort Bragg, CA 95437

Response 3

Response 3.a
Understanding the Roundabout

Modern roundabouts operate on a "yield at entry" rule, which gives traffic within the roundabout, the right of way. Vehicles wishing to enter must wait for an opening or gap in traffic. If no traffic is present, entering vehicles will slow down and proceed into the roundabout. On a well-designed roundabout, the speeds of the entering vehicles and circulating vehicles are very close, making the merge easy and comfortable. For a multi-lane roundabout, pavement markings and signs will provide lane assignments. Lane use for a two-lane entry at a roundabout is exactly the same as at any intersection with a two-lane approach: vehicles turning left use the left lane, vehicles going straight use either lane, and vehicles turning right use the right lane. Pavement markings and signs will show this directional method, which ensures correct position on entry.

Response 3.b
Familiarity with the Roundabout

Multi-lane roundabouts require adequate signing and striping to reduce the potential for driver confusion. Pavement markings and signs are placed to help drivers determine which lane they need to be in, based on their destination, before they enter the roundabout. Vehicles will be directed not to change lanes within the roundabout, and markings will indicate direction within the roundabout. The feature of roundabouts that has produced their excellent safety records is the fact that every, motorist, pedestrian, and bicyclist is required to look at the conflicting traffic and decide when it is safe to proceed. The slow speeds in the roundabout make this easy. The motorist uses the same skills that they are used when exiting a grocery store parking lot: look left and wait for a gap in traffic.

Modern roundabouts are emerging as viable intersection alternatives in many areas throughout the country. Chances are that most people know roundabouts, although drivers may not be familiar with the rules of driving a roundabout. However, drivers are familiar with reading signs and interpreting striping and pavement markings, as these are common to any transportation facility, whether it's a roundabout or a stretch of the interstate. With a roundabout, the unfamiliar driver will have a low-speed environment that will be adequately signed and striped. These messages will guide the unfamiliar driver through the roundabout. As in any traffic situation, drivers will need instructions to exercise common sense and caution.

Comment 4

REC'D OCT 29 2008

October 27, 2008

cc: City Council
City Manager
City Clerk

To Whom it May Concern:

I am a 28-year resident of Simpson Lane and I am writing to express my concerns and objections relating to the proposed roundabout at the Simpson Lane/Highway 1 intersection on the Mendocino coast. I realize that there are numerous issues here, but I will focus on just a few.

As a resident, one of my main concerns is being able to travel in and out of Simpson Lane. There are times when the traffic on Highway 1 is very heavy, i.e. when there are events in Fort Bragg, Mendocino, or the Botanical Gardens; on holiday weekends; during the morning and afternoon commutes. I have had a lot of experience with roundabouts and traffic circles and my experience is that when there is a heavy stream of traffic in one direction, it is very difficult for traffic from secondary streets to get into the circle or even break into the flow of traffic.

4.a

4.b

One of the main reasons this intersection is getting attention for traffic control is because of the high volume of traffic into and out of Simpson Lane. There is no other outlet. So if this roundabout does not improve the situation for residents of Simpson Lane, it is a poor idea

I would also like to respond to those who would call this an opportunity for a "gateway" to the community. I find this endeavor misguided. The stretch of Highway 1 north from Simpson Lane is hardly scenic. And after you cross Hare Creek Bridge you reach the huge, major, modern intersection at Highway 20. Putting a roundabout at Simpson Lane will not save us from such a construction, it already exists.

I strongly favor a traffic light at the intersection of Simpson Lane and Highway 1. Those of us who need to use it on a daily basis could be guaranteed of being able to exit and enter safely and in a timely fashion. And travelers on Highway 1 would be no more inconvenienced than they already are at numerous other points along this route. A traffic light is an understood necessary inconvenience when traffic volume reaches the level that it has here.

Sincerely,

Judy Tichinin

Judy Tichinin
P.O. Box 1361
Fort Bragg, CA 95437

cc: other relevant public officials and agencies

Response 4

Response 4.a
Volume

Roundabouts can handle larger volumes of traffic than traffic signals. The intricate relationship between entering, exiting, and circulating traffic on all legs of a roundabout creates this large capacity. Volumes on each leg need to be somewhat balanced in order to create the ideal situation; the greater the balance, the greater the capacity. Roundabout controlled intersections can efficiently service traffic with decreased delay and greater efficiency than traffic signals. This is particularly true where traffic volumes entering the roundabout are nearly balanced on all legs and where there is a high number of left turning vehicles. The high number of left turning vehicles at Simpson Lane coupled with the balanced traffic volumes in both directions on SR 1 provides a balanced volume relationship. Additional factors that can enhance capacity of roundabouts are the size of the roundabout, lane widths, and other geometric factors. Compared to a signalized intersection, there is much less wasted time at a roundabout. Intersections controlled by traffic signals can cause unnecessary delays because of the need to provide a minimum of green light time to each movement in every cycle, thus creating time intervals in which no vehicles are entering the intersection. In contrast, traffic can be present in the roundabout at all times. This continual use is a key factor in the capacity.

Response 4.b
Delay Times related to volume

Table 5 – Traffic Delays (Seconds) in 2028

	Southbound on SR 1 turning left (west) onto Simpson Ln	Southbound on SR1 through the intersection	Northbound on SR1 turning left (west) onto Old Coast Highway	Northbound on SR1 through the Intersection	Westbound on Simpson Ln turning right (north) onto SR	Westbound on Simpson Ln turning left (south) onto the SR 1
Roundabout	5	2	9	18	9	11
Signalization	29	8	15	20	16	41
No Build	120	13.9	8.5	3.3	360	600