On Tuesday at 6PM, I will be giving a presentation to the Atherton Transportation Committee recommending that a roundabout be installed at the intersection of Atherton Avenue and Alameda de Las Pulgas. If you are available to show up to voice your support for this occurring, that would be great. It will be in the town chambers at 94 Ashfield Rd. If not and you would like to register support, just reply to me with anything that I can print/forward to them and copy transportation@ci.atherton.ca.us.

Many of you have experienced the traffic delays that happen at least twice a day at that intersection. There is a potential solution *hiding in plain sight*. Roundabouts (not to be confused with "traffic circles" or "rotaries," which have given roundabouts a bad name)[1] have been used successfully in Europe for decades, but are in their infancy in the USA. Europe has over 100K of them, but the USA has about 3K, and according to the CA DOT, there are none in SF or San Mateo Counties, and only one in Santa Clara Co.[2] The town of Carmel, Indiana has found them to work so well that they have replaced many of their stop signs and all but one of their traffic lights with them. They have more than 80 in their small town.[3]

A single-lane roundabout at that location would be able to process about 50% more cars/hour[4] through it than the existing 4-way stop sign[5], so it would eliminate the congestion from that intersection. Furthermore, studies have shown that they are much safer,[6] cause less pollution[7] and noise, and save motorists time and money. Bikers prefer them due to the ability to maintain momentum. The Atherton police would also probably lose a major source of revenue from the issuance of traffic tickets for the cars that don't come to a complete stop. This problem inspired me to give a TED talk on intersections in 2010.[8] The analysis in that only looked at the 10-second delay from stopping at a stop sign, not the 5-minute traffic queue that forms twice a day at this particular location.

In most American towns, some people are afraid of roundabouts…until they try them. After they are built, they are much more appreciated.[9] The aversion may stem from recalling being stressed about them while driving overseas. This is nicely explained in Tom Vanderbilt's blog referenced below.[10]

A significant traffic complaint received by Atherton is about drivers taking short-cuts and speeding down residential streets during rush hour. This is an attempt to go around traffic jams. Roundabouts can eliminate those jams and thereby eliminate the diversion problem.

The cost of installing them is similar to that of putting in traffic lights, but there are lower operating costs[11], better safety, less pollution, noise[12], wasted time and wasted gas than traffic lights. There's a newer type called a Mini-roundabout[13] which can be even more cost-effective.

While this particular intersection is not one of the Earth's bigger problems, the aggregate costs of traffic jams are more than $100 billion annually in wasted fuel

and lost time.[14] This problem has to be solved one jam at a time, and I am hoping that this proven solution will be replicated elsewhere after succeeding in this location. If charity starts close to home, so should traffic improvements.

Thanks for your interest.

Gary Lauder
Gary@LauderPartners.com

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[1] "Traffic Circles vs. Roundabouts" http://www.alaskaroundabouts.com/mythfact1.html
"States embrace roundabouts for intersections" in USA Today 6/23/2010,
http://www.usatoday.com/news/nation/2010-06-23-roundabouts_N.htm

[2] Database of Roundabouts: http://roundabout.kittelson.com/Roundabouts/Search

[3] Carmel, IN: http://en.wikipedia.org/wiki/Carmel,_Indiana#Roundabouts
Map: http://carmel.in.gov/modules/showdocument.aspx?documentid=458
The Economist, 11/19/11, "Circular infrastructure: What goes around"
http://www.economist.com/node/21538779
BBC News: "Is the British roundabout conquering the US?"
http://www.bbc.co.uk/news/magazine-13863498

[4] Roundabout Capacity (p.53): https://people.sunyit.edu/~lhmi/ahb40/meetings/2005-07/Draft%20Ch%2017-C%20Procedure%202005-07-02.pdf

[5] See p.3 of "Traffic Operations At All-Way Stop-Controlled Intersections'
Volume 11: Draft Procedures For Capacity and Level of Service Analysis"
http://www.transnow.org/files/final-reports/TNW90-08vol2.pdf

[6] Insurance Institute for Highway Safety: Status Report: Vol. 36, No. 7, July 28, 2001: Roundabouts reduce traffic backups as well as crashes involving injuries • Motorists' acceptance of roundabouts increases with experience
http://www.iihs.org/externaldata/srdata/docs/sr3607.pdf
"Continued Reliance on Traffic Signals: The Cost of Missed Opportunities to Improve Traffic Flow and Safety at Urban Intersections" September 2005
http://www.iihs.org/research/paper_pdfs/mf_1848.pdf
"Crash and Injury Reduction Following Installation of Roundabouts in the United States" http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1446639/pdf/11291378.pdf

[7] "Impact of Modern Roundabouts on Vehicular Emissions," August 2003.
http://www.ctre.iastate.edu/PUBS/midcon2003/MandavilliRoundabouts.pdf

[8] My 2010 TED Talk (I'm not proposing my sign for here):
http://www.ted.com/talks/lang/en/gary_lauder_s_new_traffic_sign_take_turns.html

[9] http://www.apwa.net/Resources/Reporter/Articles/2002/7/Overcoming-public-misconception-regarding-the-modern-roundabout

[10] "Don't Be So Square: Why American drivers should learn to love the roundabout" By Tom Vanderbilt, July 20, 2009 http://www.slate.com/id/2223035

[11] Are Traffic Signals Really a Cure-All? http://www.azdot.gov/highways/traffic/Signal.asp

[12] http://www.azdot.gov/CCpartnerships/roundabouts/faq.asp

[13] Mini-roundabout info: http://safety.fhwa.dot.gov/intersection/roundabouts/fhwasa10007/

[14] "Report: Road congestion wastes 1.9 billion gallons of gas" USA Today 3/25/12 http://www.usatoday.com/money/industries/energy/story/2012-03-25/wasted-fuel-report/53776164/1