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Traffic Safety Committee
Town of Los Altos Hills
26379 Fremont Road
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Subject: A safe route through the Page Mill/280 interchange for non-motorized traffic

This is the third edition of this particular proposal, which I initially offered to the Town and County Road authorities in early 2010. The basic proposal, which covers cyclists, pedestrians, equestrians, wheelchairs, baby buggies and the like, has not changed but this version omits discussion of the off-track Stanford S1 Trail. The following account uses Caltrans' terminology for directions, which hold that I-280 goes north-south even though it actually goes east-west through our town.

New construction

My family and I arrived in Los Altos Hills in late 1965, shortly before the 280 Freeway was completed, and observed that the original Page Mill Road, which was a two-lane country road along Matadero Creek, was being superseded by the four lane Page Mill Expressway going from Foothill Expressway to the freeway along a parallel route over a nearby hill. Unfortunately, the resulting Page Mill interchange with I-280 was defective from the start as discussed below.

A segment of the old road that was bypassed was renamed "Old Page Mill Road." Non-motorized westbound traffic continued to go that way because it went around the hill instead of over it and provided a beautiful and quiet route to the vicinity of the interchange. However, there was no safe route to the other side of the freeway. That didn't matter so much in the early days when there was little traffic, but things got progressively worse.

Basic Hazards

From the beginning there was a dirt path through the interchange along the north side of the Page Mill Expressway that could be used by pedestrians and equestrians going in either direction. However, they had to cross a one lane northbound on-ramp and a two lane southbound on-ramp, which generally carried traffic moving at about 50 MPH. That made it extremely hazardous during rush hours. To make matters worse, the initial construction included a tall chain link fence between the path and the road that went part way around the corner of the two-lane southbound on-ramp, which meant that pedestrians were forced to cross those ramps on the far side of a blind curve. It would be hard to imagine a more hazardous design.

The interchange was also unacceptably hazardous for bicyclists. When going west on Page Mill they had to first cross the entrance to northbound on-ramp, then move left across the right lane before it split in two leading to the southbound on-ramp. That was a particularly dangerous move under heavy traffic conditions and even if the cyclist succeeded he or she then ended up riding in the left lane which was only 12 feet wide-too narrow for a wide vehicle to pass a cyclist safely. If the rider stuck to the right edge of that lane, fast traffic would be trying to get by on both sides. The rider could legally ride in the center of the left lane so as to block overtaking traffic, which was and is legal per California Vehicle Code, Section 21202 but, since vehicles frequently changed lanes in that zone, doing that took nerves of steel.

Eastbound cyclists faced similar problems, since just past the interchange the through lane merged with the left lane of the descending two lane northbound off-ramp, where cars often spun out and struck a nearby street light post. That interchange was on my commute route for many years and I've been through it over 5,000 times by car, bicycle and on foot and have often seen the results of such crashes.

Initial Mitigation

I joined the Town Pathways and Recreation Committee in 1993 and was promptly elected Chair. I then documented the several bicycling, pedestrian and equestrian hazards and proposed fixes in a report to the Committee. Specifically, I proposed two changes as follows.

- (1) The chain link fence was to be removed, which would allow pedestrians and equestrians to cross the southbound on ramp at a more visible location. That would not ensure that they could cross in a timely manner, since there was no way to halt the two lanes of traffic other than by bravely stepping out in a lane and waving one's arms, but at least they could see and be seen by oncoming traffic.
- (2) To accommodate westbound cyclists, I proposed that the left (through) lane be widened by excavating into the median so that it could safely be shared by vehicles and cyclists.

That proposal was reviewed and approved by the Committee then passed to the Council, which also endorsed it and passed it along to County Roads authorities. The Council also appointed me to the Bicycle Advisory Committee (BAC) of the Santa Clara Valley Transportation Authority (VTA) and that group promptly elected me as Chair.

Using that bully pulpit, I was able to get those changes made in 1997. However, as traffic densities continued to increase it was clearly not a permanent solution.

A disastrous redesign

To make matters worse, just two years later the interchange was reconfigured again, for no apparent reason, and was made much worse for cyclists than it had ever been. Whereas originally the left lane of the westbound expressway led directly to upper Page Mill Road and the right lane split in two under the bridges to connect with the two southbound on-ramps, the revised design had both lanes of the expressway connect to the southbound on-ramp and had a separate left lane going to upper Page Mill, which required motorists going through the interchange to make a lane change to the left in

order to continue. That meant that cyclists going the same way had to cross two lanes of fast traffic, which is essentially impossible to do safely in heavy traffic conditions. As a result, cyclists learned not to use that route during rush hours, which is an unfair situation.

Eastbound cyclists either had to dash across two lanes of traffic coming down the northbound off-ramp in order to reach the right curb or hug the left side of the left lane for a hundred yards or so to reach the left turn lane leading to Old Page Mill Road. One result of this reconfiguration was that on June 27, 2002, a student cyclist from Stanford was struck from behind while trying to make that left turn and suffered fractured vertebrae. A person who accompanied her to Stanford Hospital subsequently posted an observation from an anesthesiologist there that they receive many bicycle accident victims from that area.

Finding a solution

I and others continued to puzzle over how to let non-motorized traffic move safely in both directions between Old Page Mill Road and upper Page Mill Road. This clearly could be done with a bridge over the interchange or a tunnel under it, but both of those solutions would be very expensive. There is very little such traffic currently because of safety issues but if that was fixed this would be a useful route for many who now shy away.

In early 2010 it occurred to me that a surface route can be made to work without seriously interfering with motor traffic. As shown on the next page, I recommend that a two-way multipurpose trail be constructed just north of the expressway together with button-operated traffic lights to facilitate safe crossing of the two on-ramps.

I believe that the trail should be about 8 feet wide, be paved and have a centerline to accommodate two-way usage by pedestrians, equestrians and bicyclists. Given that Old Page Mill Road has very little vehicular traffic I believe that a separate path is not needed there. Admittedly a bicyclist was killed there a few years ago by a drunken motorist who came through at high speed but that kind of craziness can happen anywhere. I note that the stop lights on the two on-ramps can also be used as metering lights to control traffic flow onto the freeway. I believe that the two-lane southbound on-ramps should be metered now during the evening rush hour because the uncontrolled flow is already causing backups on the freeway.

No special accommodations are required to make this trail work at the intersection of Page Mill and Arastradero Roads and the end of the southbound off-ramp because that is a four way stop. However, there is another safety matter that I believe should be addressed. During the morning commute, this intersection holds up vehicles to the extent that they back up on the freeway, which is a serious hazard. Some people have proposed putting traffic lights at this intersection, which could be timed so as to minimize the freeway backup. However I believe there is an even better solution available: a roundabout. Roundabouts cost about the same amount to construct as traffic lights but have lower maintenance costs and generally provide a greater throughput for vehicles and

with lower accident rates. The proposed trail could get through the roundabout at the place where the off-ramp enters it inasmuch as each entry lane would have a “Yield” sign at the point where it turns into the roundabout.



A safe route between upper Page Mill Road and Old Page Mill Road

Conclusion

Overall, I believe that a roadside trail linking Old Page Mill Road to upper Page Mill Road will provide the most effective and least expensive solution to the ongoing safety problems encountered by cyclists, pedestrians and equestrians attempting to go through the interchange.