

MEMORANDUM

Date: October 8, 2013

To: Amy Pendergrast, Healthy Shasta
Paul Zykofsky, Local Government Commission

From: Charlie Alexander, PE, Fehr & Peers

Subject: Shasta College Walking and Bicycling Workshop

RS13-3159

Healthy Shasta recently hosted a walking and bicycling workshop for Shasta College. The workshop was part of the development of a walking and bicycling plan for Shasta College. The workshop included:

- Presentations on creating walking- and bicycling-friendly communities.
- Walking audits to identify positive practices, issues, and opportunities for walking and bicycling.
- A design table exercise where participants marked up aerials with suggestions on how to improve conditions for walking and bicycling at Shasta College.

The purpose of this technical memorandum is to document the findings of the walking and bicycling workshop.

ISSUES

The Old Oregon Trail/Collyer Drive/Shasta College Drive intersection was identified by several workshop participants as a barrier to walking and bicycling. Issues identified by workshop participants include:

- Pedestrians have difficulty crossing at the intersection.
- The intersection has high traffic volumes.



- The northbound right-turn is difficult for pedestrians and bicyclists to navigate; it is a free movement.
- Westbound left-turning vehicles bound for State Route 299 (SR 299) southbound often use the number one left-turn lane instead of the number two left-turn lane.
- The westbound through lane alignment overlaps with the intersection's southbound approach.
- There are no sidewalks near the intersection.

Other issues identified by workshop participants include:

- At the campus' South Entrance, bicyclists entering from Old Oregon Trail and making a left turn at Collyer Drive have to merge across traffic.
- There are no bike lanes on campus roadways.
- On the drop-off loop between Building 400/500 and the South Parking Lot, bicyclists ride the wrong-way to access central campus.
- At the Shasta College Drive/Collyer Drive intersection, there is no safe pedestrian crossing across Shasta College Drive.
- There is no direct connection for bicyclists between the South Entrance and Central Campus; campus policies currently prohibit bicycling in central campus.
- The campus needs high-quality short-term and long-term bike parking.
- Several workshop attendees desired additional walking paths through the campus' natural areas.
- At the South Parking Lot's west entrance/exit onto Shasta College Drive, drivers do not come to a complete stop.

OPPORTUNITIES

Workshop participants had several suggestions on how to improve conditions for walking and bicycling at Shasta College. Each of these suggestions warrants further study to determine their feasibility, consistency with relevant design standards, and cost. Suggestions from workshop participants include:



- At the campus' South Entrance:
 - Old Oregon Trail– workshop participants suggested a comfortable bikeway on Old Oregon Trail between Shasta College Drive and College View Drive. Several alternative bikeway types were suggested, including:
 - Class II bike lanes with a reconfiguration of the SR 299/Old Oregon Trail interchange to slow or control high speed movements.
 - A Class I bike path or cycletrack on the east side of Old Oregon Trail with a diagonal crossing at the Old Oregon Trail/College View Drive intersection.
 - A Class I bike path through the Shasta College property at the southeast corner of the Old Oregon Trail/Collyer Drive/Shasta College Drive intersection.
 - Old Oregon Trail/Collyer Drive/Shasta College Drive intersection – workshop participants suggested several improvements to this intersection to make it more pedestrian- and bicycle-friendly:
 - Replace multi-way stop with a traffic signal or roundabout.
 - Add marked crosswalks, possibly including bicycle stencils within the markings.
 - Provide pedestrian refuge islands.
 - Add a westbound left-turn lane for bicyclists so that they can avoid traffic turning onto SR 299 southbound.
 - Shasta College Drive/Collyer Drive intersection- replace side-street stop with a traffic signal or roundabout.
 - Construct sidewalks between the South Entrance and central campus.



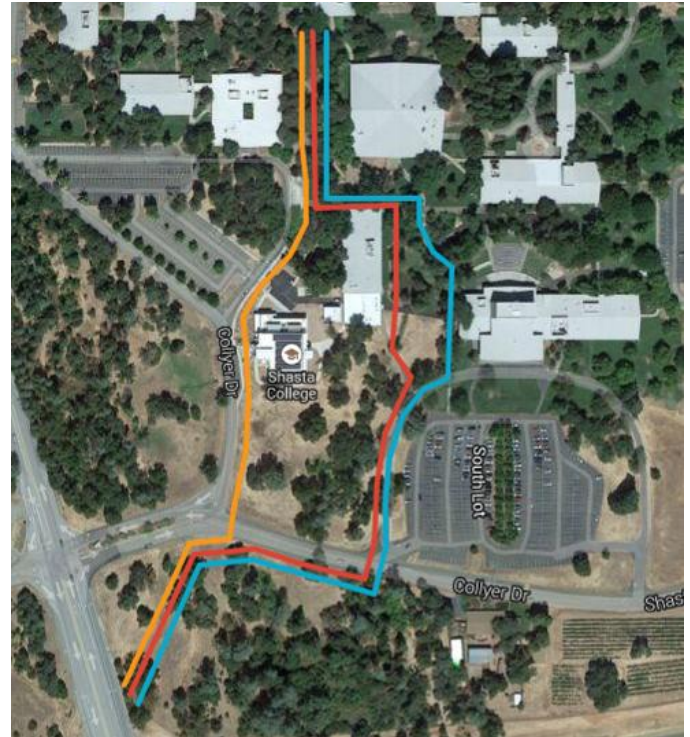
- Between the South Entrance and central campus, several workshop participants suggested a direct connection for bicyclists. Participants recommended three alternative alignments; each alternative begins at the South Entrance and ends near the Library. The three alternative alignments are:

1. West of Building 700 (orange).
2. East of Building 300 (red).
3. West of Building 400 (blue).

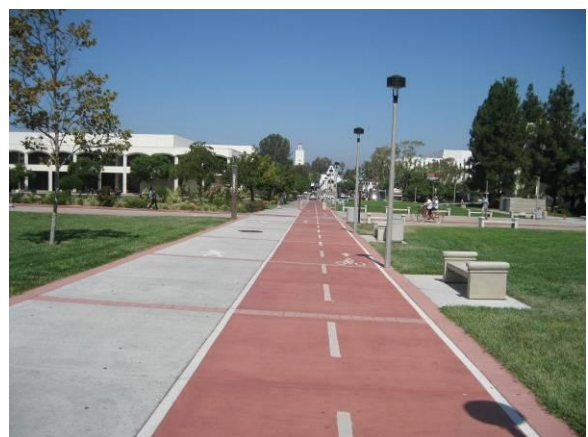
Each alternative would require a bike path crossing of Shasta College Drive. A raised crosswalk was suggested by workshop participants, however, the appropriate crossing treatment depends on multiple factors, including traffic volume, traffic speed, sight distance, and emergency response needs.

Several workshop participants suggested using the wide pathway between Building 100 and the Library. On this segment, a bikeway could be delineated separately from the pedestrian walkway. Similar strategies have been used at other colleges, including Aztec Walk at San Diego State University.

Alternatives 2 and 3 both use the drop-off loop between Building 400/500 and the South Parking Lot. These alternatives require reconfiguring the west entrance of the South Parking Lot so that it is separate from the drop-off loop and so that it intersects Shasta College Drive at 90 degrees.



Alternative bike connection alignments
Source: www.maps.google.com



Aztec Walk at SDSU
Source: www.bikesd.org



- Other suggestions include:
 - Bike lanes on campus roadways, including Shasta College Drive and Collyer Drive.
 - “Yield to Bikes” signs at multiple locations to reduce conflicts between vehicles and bicyclists.
 - Improved bike parking is necessary throughout campus. Both short-term bike parking and long-term bike parking is necessary.

Workshop participants suggested placing the short-term bike parking in visible, highly trafficked areas near a bicycle connection to central campus. Proposed locations included near the Library, Campus Quad, or Building 2400. UC Davis’ preferred bike rack is the “lightning bolt” rack, which is available from several manufacturers.

Workshop participants suggested a long-term bike parking corral near the gymnasium where bike commuters would have easy access to the showers.



Example of a lightning bolt rack
Source: www.creativepipe.com



Long-term bike parking at the UC Davis Medical Center

- Walkways and shade trees in campus parking lots may improve safety and would increase comfort for pedestrians, especially on hot days.
- Sidewalks on the east side of the North Parking Lot and the south side of Shasta College Drive between the North Parking Lot and the tennis courts.



- Walking/running trails through natural areas.
- Other bike connections:
 1. From the North Entrance to Building 1800.
 2. From the northwest corner of the East Parking Lot to the Gymnasium.
 3. From Building 500 to the East Parking Lot.

NEXT STEPS

Healthy Shasta should work with Shasta College to incorporate appropriate feedback from the workshop into a walking and bicycling plan; feedback from the workshop is not necessarily comprehensive of everything that should be included in the walking and bicycling plan.

Certain projects require specific next steps for implementation. In particular, improvements to the campus' South Entrance require detailed complete streets corridor planning. Shasta College could partner with Shasta County to apply for a Caltrans Transportation Planning Grant. The grant could be used to develop a corridor plan for Old Oregon Trail between Shasta College Drive and College View Drive. The corridor plan should evaluate alternative bikeway types on Old Oregon Trail, intersection control at the Old Oregon Trail/Collyer Drive/Shasta College Drive intersection, and improvements to the SR 299/Old Oregon Trail interchange.

The Caltrans Transportation Planning Grants can be used for conceptual design, which should be adequate to make a determination as to the appropriate infrastructure solution for the South Entrance. Further grants should be pursued to fund design and construction.



Additional bike connections recommendations

Source: www.maps.google.com