

Safety Preconditions for Tierra Bella 2022.

- In January I was appointed as the new Safety Captain, while David Sausjord, the previous Safety Captain became ACTC's Treasurer. A 2 year old Safety Plan was already in the works by that time so I did not have to start from scratch.
- Because 2+ years had passed since the base plan was conceived without being executed (Think COVID), many traffic situations could have changed since then. Extensive field reviews of traffic situations were warranted.
- David produced a very accurate job description. Crucially, **early recruiting** was emphasized in there.

Early Recruiting

- A first invitation went out to previous Safety Volunteers in January to invite them for a repeat performance. The new routes and Safety Stations were presented, to allow them first pick. Around 15 Volunteers were reenlisted during that first round.
- Next, about 20 new safety volunteers were recruited during ACTC rides. Since there were some cancellations and re-assignments to other TB2022 captains, I had about 32 volunteers at the start of March. At that time there were 36 slots to be filled at 17 Safety Stations.
- Later that month I asked 4 volunteers to do double shifts. All of them immediately said yes.

Changes to the original Safety Plan

Several changes were made to the original Safety Plan, after a test ride which was conducted with a group of experienced riders to check out the New Safety Stations. Thanks also to their input the following changes were implemented:

1. One Station was added, station #0, straddling the flyover over 101 at 6th street.
It's purposes were to
 - Streamline all riders into one single file while crossing the overpass over 101.
 - Control the traffic light with the button at the pedestrian overpass of the intersection with Camino Arroyo, to reduce the waiting time for the riders at the light.
 - Increase the Safety by having a CHP officer parking his patrol car just before the crossing with Camino Arroyo.
2. Station #2, at the intersection of Leavesley with Dryden, is a moveable switch for some of the riders. They are first directed up the hill on Leavesley while the other riders are to continue straight onto Dryden. The riders sent up the hill return later to that same intersection after having traversed Canada Loop. The **moveable** part for the riders returning from their uphill is implemented in the following way: Remove the first time arrows pointing uphill from the road

surface at 10 AM, when all Hilly riders presumably have gone up the hill, and replace with new arrows pointing straight ahead while also removing the sign board with all the arrows at that time, since a choice is no longer needed from that time on. This would prevent the second time Hilly riders from getting into an endless loop. The assumption was that they would not be back until 10 am.

3. The Safety of Station #3, covering the long downhill slope of Canada Road, was beefed up with extra signage and volunteers. 4 volunteers were to be present and 3 extra yellow signs were added.
4. Station #5 was added to protect all riders when turning left from New Ave into Buena Vista Ave. It contained 2 volunteers as well as a CHP officer with his patrol car.
5. Station #16, at the crossing of Burchell Ave with Hecker Pass Highway, was changed in the following ways:
 - Add 2 volunteers to a total of 4 volunteers, 2 on each side of the highway.
 - Direct the riders to go straight instead of turning left onto the Highway.
 - Instruct the riders to get off their bikes to walk down a gravelly slope and then to turn left onto a new bike path, continuing parallel to the highway by about 20 ft distance, rather than turning left onto the highway.

Safety Locations and Concerns

See the table for **Safety Stations Concerns** in table form. An Excel spreadsheet from which this list originated was reused multiple times for many different purposes. Some are listed below.

- Timing for the Shifts
- Allocation of CHP officers
- Routing the Safety Captain: Which route to follow to visit all Stations when they were occupied and active on TB event day.
- Allocation of the volunteers, their contact information, responses, etc.

Safety Logistics

There were almost 100 cubic feet of materials (signs, flags, safety vests, lanyards, instructions) to be distributed over 33 volunteers. This required a distribution from one central location. The distribution was taking place via a meeting in my backyard, where we also discussed what Safety was all about and got to know our team mates. Almost all signage was picked up that evening and most volunteers attended the meeting. After Tierra Bella all materials were returned to Gavilan college, to be returned to storage by Logistics.

Allocation of CHP officers

A total of 3 officers were assigned to control the traffic at 6 Safety Stations. They initially would control Stations #0, #1 and #5, where the wave of riders would hit them first. Then, once all riders had passed, they would move on to down-stream stations #4, #12 and #16.

Station #	Main Direction	Intersection	Safety Concern	Route Situation
0	East 6th Avenue	Camino Arroyo	Merge	Choice between bike path on sidewalk and bike path on road before 101 overpass. Urge riders to stay on road.
1	Dunlap to Godfrey	Ferguson	Cross Traffic	Dangerous Intersection, All Routes continue Straight
2	Leavesley	Dryden	Guidance	Hilly riders (Orange and Blue) turn right first time, continue straight second time.
3	Canada Rd	Downhill	Steep Down	Orange and Blue riders Steep Down Hill. SLOW THEM DOWN!
4	Canada Rd	Pacheco Pass	Cross Traffic	Orange and Blue(Long, Short): Turn Right. Pothole on the right and Heavy Traffic ahead.
5	New Ave	Buena Vista	Oncoming Traffic	All Routes Turn Left into oncoming traffic. New Ave is a busy 2 lane road with fast moving traffic.
6	Llagas	San Martin Rd	Guidance	Busy Cross Traffic. 4 way stop.
7	Llagas	San Martin Reststop	Guidance	Exiting riders turning left. Entering riders turning left into rest stop. Riders returning from Henry Coe passing in front.
8	Palm	Hale	Cross Traffic	Green, Orange and Blue: Straight across Hale. Turn Right onto Hale
9	Oak Glen	Uvas Rd	Cross Traffic	Green, Orange and Blue: Turn Left
10	San Martin	Santa Teresa	Cross Traffic	Pink, Yellow and Blue(Short): Turn Left
11	Day Rd	Watsonville Rd	Cross Traffic	Pink, Yellow and Blue(Short): Turn Left
12	Watsonville Rd	Ch-Adams Reststop	Guidance	Prevent riders from crossing Watsonville Rd into Burchell Ave when exiting the rest stop
13	Redwood Retreat Rd	Watsonville Rd	Cross Traffic	U-Turn, followed by crossing Watsonville Rd, ending with turning left into Watsonville Rd.
14	Burchell	Bluebell	Oncoming Traffic	Oncoming Traffic
15	Country Dr	Mantelli Downhill	Steep Down	Steep Down
16	Burchell	Hecker Pass Highway	Cross Traffic	Yellow riders (inexperienced): Guide to move safely Straight Across. Do not turn left into Hecker Pass Highway. Move down gravel slope on foot. Left on new Bike path in parallel with HPH.

Conclusions, Recommendations for improvements

The Safety operations generally went well throughout the event. Two women fell from their bikes, but only sustained some minor scrapes when they did not walk down a gravel slope against our instructions, but I received no reports of serious injuries anywhere. All Safety Volunteers were actively promoting Safety for the riders and most will return next year to do the same. They all were working hard and I admire their dedication.

What worked and what could be improved, partially based on Safety Volunteer Feedback (still in progress):

1. Safety Shifts should more accurately cover the period that riders will pass the Safety Stations.
2. Having CHP present at dangerous intersections was a great way to get drivers to slow down and pay attention.
3. The choice of paths for the riders to take at Station #0 needs to be reevaluated (go on the sidewalk yes/no)
4. 152 northwards and beyond (Ferguson) should be widened for a real bike lane and its surface quality should be improved.
5. It is too complicated to have multiple TB routes pass an intersection where some routes loop back on themselves after the first time, while having to switch direction the second time.
6. Reduce the number of routes from 6 to maximum 4.
7. The new yellow safety signs "X-TRAFFIC DOES NOT STOP" and "CAUTION STEEP HILL SLOW DOWN" are transparent for sunlight. When the sun hits them in the back they become hard to read. Solution for now: Cover the back side.
8. Yellow Signage support structure needs to be improved. Some signs were not positioned high enough to be visible.
9. Extend the U-turn at Redwood Retreat Rd all the way to the end of the road. Make it an out-and-back excursion. Less explaining to do. More miles (60+ for the 100K).
10. Send only the climb-committed riders up Bluebell. The other riders should follow the yellow route, continuing on Burchell Rd and crossing over Pacheco Pass Highway.
11. Add more Safety Volunteers and Signage to the crossing of Bluebell and Burchell (Station #14).