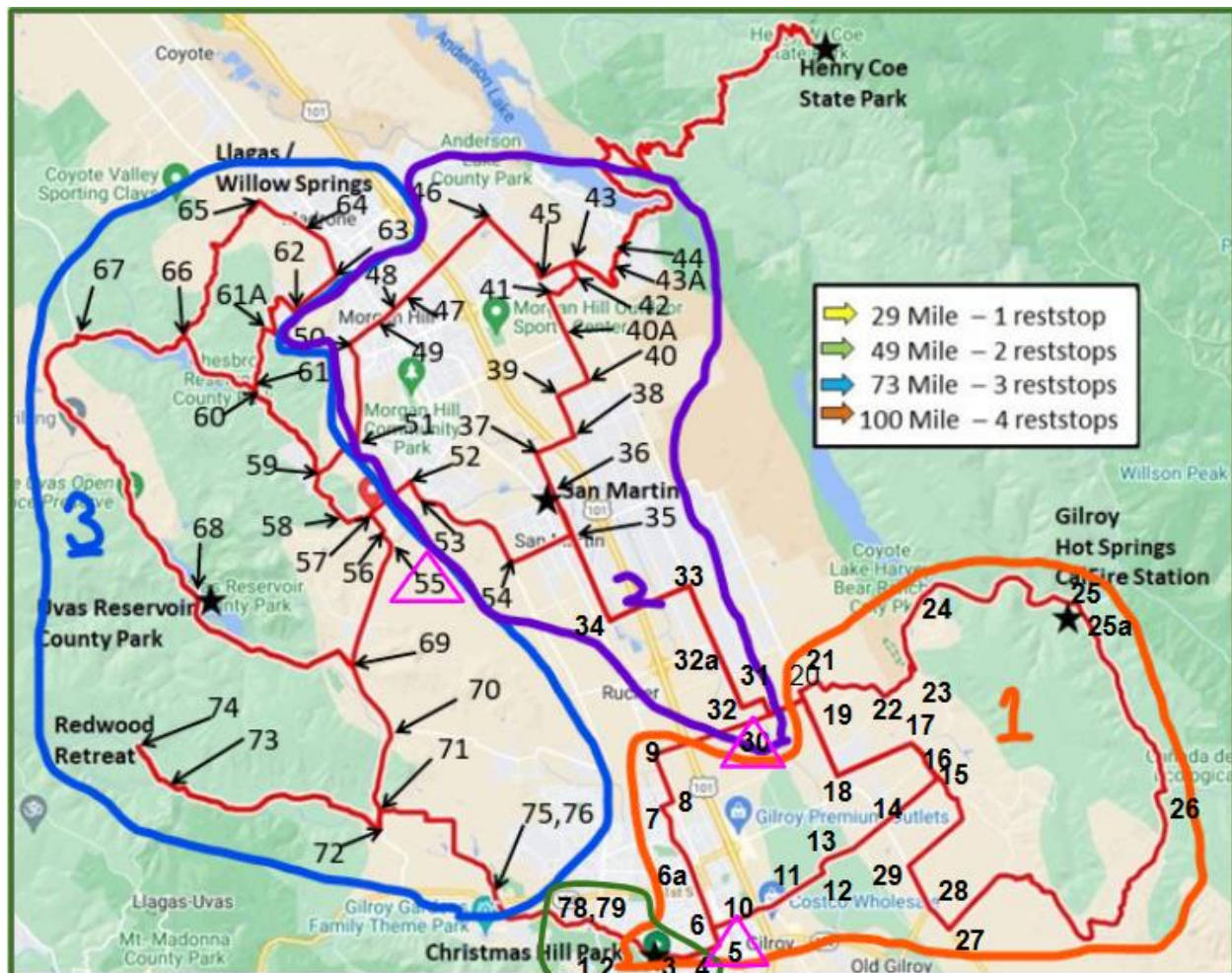


Tierra Bella 2025 Route Marking Report

Bryan Patterson, Captain

We used RouteArrows™ again to mark the four Tierra Bella routes. These are eco-friendly stickers (biodegradable paper and water-based inks) that are placed on the pavement at key intersections of the routes, primarily at turns.

We identified 86 intersections (junctions) across the four Tierra Bella routes that needed to be marked with guidance arrows. The captain assessed the number of arrows needed at each intersection and the totals summed by color. The roadways were then broken up geographically into three regions (see attached map below), with a goal of balancing the number of stops, arrows, and miles as evenly as possible across the three teams. To simplify the effort, the Captain acted as a fourth team to mark the start area and the bike path leading to the finish.



Each region consisted of roughly 28 identified intersections, between 22 and 33 miles, and between 208 and 246 route arrows of varying colors.

	100M	73M	49M	29M	Arrows	Jcns	Miles
Team 1	83	83	40	40	246	28	31
Team 2	85	41	41	41	208	28	22
Team 3	71	77	57	39	244	23	33
Team 4	19	19	19	19	76	7	

10 volunteers were recruited with the goal of having three teams of 3 route markers, and the Captain as emergency fill-in if needed or taking the finish area as Team 4. On each team, one person drove, one swept the road surface, and one placed the arrows.

The captain planned and held a Route Marking training session for the volunteers one week prior to Tierra Bella. The session consisted of a presentation with the goal of providing thorough and consistent marking of the identified intersections. All turns were marked with three sets of arrows leading to the turn and one confirming set following the turn. We also put “confirming” straight arrows where there are long stretches without a turn so riders get reassurance that they haven’t missed a turn. We place arrows in the roadway to the left of the white line or bike path, or two to three feet from the road edge where there is no line. The objective is to allow riders in a line to see the arrows while also allowing cars to run over them which later helps them disintegrate and disappear.

Each team was provided with the needed quantity of Route Arrows of each route color (in a convenient dispenser borrowed from RouteArrows/Randall), a broom to prepare the road surface for the arrows, a roller to press the arrows onto the road, safety vests, and a guide containing maps and pictures of each intersection which shows which routes cross that intersection. They were also given a driving route guide customized to their roads and intersections. Each team also had a can of spray paint to mark any road hazards encountered.

The three teams undertook the route marking duties late morning to afternoon on Friday May 2nd, the day before Tierra Bella. The weather cooperated and route marking proceeded without incident. It took each team 3.5 to 4.5 hours on the roads to complete their assigned intersections. Nearly 800 arrows were placed and all marking was complete by 4 pm. Accounting for travel to and from home to their routes, the effort takes volunteers most of a day to complete.

Selective arrow removal was planned, based in part on a resident’s request a few years ago. Arrows were removed from the bike path parallel to Hecker Pass leading to the finish, the end of Burchell Rd, and Redwood Retreat Rd. The following day, a resident on Estates Ave at Bannister requested arrows be removed so additional removal was undertaken. A map of the areas addressed for removal is attached at the end of this report. The effort took approximately 3 hours for one individual and 2 hours from another. When arrows couldn’t be lifted, the water and wire brush approach worked, after allowing the water to soak in for a minute before brushing. Removal takes considerably more time and effort than arrow placement.

Below is an outline of the tasks undertaken by the Route Marking Captain:

Route Marking Leader Task List	Timing
Count up total arrows needed by color (junctions)	TB -4 Mos
-- order arrows if needed	"
Divide Routes into Marking Teams (3?)	TB - 3 Mos
Determine # Volunteers and Recruit	TB - 3 Mos
Prepare direction signs if needed	TB -4 Wks
Update Route Sheets and RideWithGPS	TB -4 Wks
- arrange printing of Route Sheets (if needed)	TB - 2 Wks
Package and give arrows/signs to Other Captains	TB -2 Wks
Prepare marking packets each marking team	TB -2 Wks
> arrows needed, rollers, broom, vests	"
> Route Maps with numbered intersections	"
> Routing (driving) instructions	"
> Pictures of intersections per team	"
Schedule and hold team training (~ 1 week prior to marking)	TB -1 Wk
Mark Routes (day prior to TB, weather permitting)	TB -1 Day
<After ride>>	
Remove select Arrows (bike paths, etc)	TB +1, 2 Days
Collect rollers, brooms, etc from Teams	TB +1 weeks

The captain took on the additional task of creating the customized RwGPS Routes and Route Sheets for riders, based on the foundational work done by Donny. The updates mainly involved adding the Rest Stops, with hours, to the GPS routes and verifying the guidance cues. Similarly Route Sheets were updated with Rest Stops then formatted to include titles and QR codes to the RwGPS routes. These were shared and eventually links sent to registered riders and a small number of Route Sheets were printed for registration in case riders forgot theirs on ride day. Custom maps were created and printed (large size) for SAG/radio, Rest Stops, and Registration.

Costs: we had enough RouteArrows from last year that we didn't need to purchase any more. The expenditures were minimal:

- Printing of route guide for dividing among the 3 team (\$0 - Donny printed)
- Copies of Route Maps for teams (\$0 - printed at home)
- Team meeting snacks: (\$0) (captain)
- Printing of Maps and Cue Sheets for SAG, Registration, and Rest Stops (\$78)

NOTE: Randall Braun (RouteArrows) kindly agreed to loan me three Arrow Dispensers which make the route marking process considerably easier.

Remaining Route Arrow Inventory:

	Orange	Blue	Green	Yellow	Pink
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After 2025 Marking	335	268	519	1002	782
2026 Requirement (est.)	258	220	157	139	0

If we continue to have four routes of similar distances, we will need to purchase Orange and Blue Route Arrows or change the colors used. We have plenty of Pink arrows and recently inherited arrows from STTS which are a lime green (can't be used in combination with Yellow or Green due to potential for misidentification).

Feedback

- A resident requested arrows be removed on Estates Rd near Bannister.(DONE)
 - Removal of arrows takes considerable time and effort after the arrows have been run over by cars. Lifting them becomes a challenge, even with the tips folded under to create a "tab". Water and wire brush works, but is time consuming.
 - If we want to prioritize removal, could we use water soluble paint, or another solution, when rain isn't forecast to make removal easier?

Future Considerations:

- Consider placing "confirm straight" arrows at all traffic lights. This would add to the time and effort required and, less so, the number of arrows needed.
- Order new Orange and Blue arrows, or change to use Pink
- Consider creating a separate "Arrow Removal" team, consisting of 2-member team(s). The challenge will be to predict which areas will need arrow removal. Removing all arrows isn't practical, as it would likely take more than twice as long as the placement effort.
- Registration found the many riders at the Friday pick-up were taking the printed cue sheets since they had them out. They ended up making copies so they could hand them out to all riders. They felt it was nice to have something to give riders other than the wrist band.
 - We should decide, again, whether we want to print and hand out cue sheets to all registered riders or suggest riders who want them print their own. A survey question was added asking who used the cue sheets.

Route Arrow Removal Map (Unmarking intersections circled in green)

