

## —Sonoma County Bicycle Coalition—

# Family Bicycling Workshop Curriculum

## //GEAR

### >> ROUTE MAPS

print and bring several copies

### >> PAPERWORK BOX

liability waiver checklist, registration list, registration forms—for those who register on-site, evaluations, informational pamphlets

### >> KIT

pen box, floor pump, multi-tool/allen wrenches, extra tubes (16", 20", 24", 26"), patch kits, 10 safety vests, chalk, chalk stick, 4 small stop signs, 20 9" light and colored cones, tape measure, first aid kit, bike lights (for giving out)

### >> BIKE BLENDER KIT

(optional): big bike blender, bike trainer stand, table, blender kit, cooler, food supplies—ice/bananas/cups/frozen strawberries/apple juice)

### >> YUBA BIKES

(optional)

### >> LOANER BIKES

(optional)

### >> LOANER HELMETS

(optional)

## //Responsibilities of Lead Instructor (LCI)

- Scouting a route for the ride and bringing route maps; email Tina a copy of the map
- Picking up and/or purchasing class supplies (paperwork, kit, blender kit-optional)
- Assigning roles for the day (which instructors will be leading which sections—helmet check, bike fit, ABCD Quick Check and laps, driveway drill, lanes drills, intersection drill, bike ride, wrap-up, etc.)
- Handling all the after-workshop paperwork and reporting
- We strongly recommended to let all the LCIs know (including yourself) that you and they should each obtain the free League of American Bicyclists insurance through American Specialty Insurance (contact Kris Whitted [kwhitted@amerspec.com](mailto:kwhitted@amerspec.com))

## //Route Parameters

- Keep the ride between 1 and 1.5 miles (30-45 min) and if possible, have a destination in the middle (park, playground, etc.).
- Have about 3-4 safe stopping areas where group can pull over and debrief/ask questions, etc.
- Try to start with the easiest riding (right turns and going straight through intersections; walking bikes at crosswalks) and move into more difficult riding (left turns at intersections) as the ride progresses.
- Be aware of elevation gains/losses (try to keep it fairly flat).
- Depending on the meeting location, the riding may take place in an urban or suburban setting with high or low traffic flows. Ideally, low traffic flows are best for practice, but if there aren't nearby locations available, consider using a bike path if possible. If a high traffic street is the only option, modify the lesson to emphasize intersection negotiation while walking the bicycles and participate in on-street riding in places where you feel bicycles can be successfully accommodated.
- Map the route and have maps available for the other instructors (you will be doing a ride preview the morning of the workshop).

## Course Set-Up // (2 hrs; 8-10am)

- Before unpacking gear, do a ride preview (45 min). Go over keys for group riding (communication is key; instructors should be leap-frogging through intersections so that no intersection is unattended; instructors should consistently monitor participants to check for problems and to accommodate their pace).

- Assign roles for the day (helmet check, bike fit, ABCD Quick Check and laps, driveway drill, lanes drills, intersection drill, bike ride, wrap-up, etc.).

- Upon return from ride preview, chalk course (45 min).

- >> 4-6 lanes, each 3 ft wide and 80-100 ft long (see diagram A)

- >> Figure 8, with 3 ft lanes in both directions and directional arrows, intersection has stop signs, create a driveway area leading into course (see diagram B)

- >> If possible, find a space to park a car like it is in a driveway, ready to back out

- \* Before class and if you are able, as families are arriving, do a walk-through of each bike to make sure it is safe to ride (if not and loaners are available, help size a loaner bike).

- \*\* Don't encourage students to try a skill they are not ready for, but try to modify the activity by removing the obstacle so that they can still participate. For example, if a student cannot safely ride in the street, have them practice crossing the street on foot with their bicycle.

## Introduction // (30 minutes; 10-10:30am)

- Have everyone sign liability waiver.

- Introduce yourself and have other instructors introduce themselves. Have each family introduce themselves and briefly say why they are here.

- Ask what type of riding the families do and especially ask if the children ride to school.

- Introduce class—overview of what the day will be like (helmet and bike check, driveway drill, lanes drills, intersection drill, bike ride and wrap-up).

**Helmet Check** – Explain that a helmet is your first line of defense in a crash/fall. Wearing a helmet reduces serious head injuries by 85%. It is the law in California for everyone 18 and under to wear a helmet, and we recommend that everyone wear a helmet. After any impact that affects your helmet, replace it immediately. Have everyone take their helmets off and inspect the inside and outside of helmets for any cracks/damage. Go over how to fit a helmet and have everyone follow along, fitting their own helmet.

- >> Helmet is comfortably snug, doesn't move much when you shake your head.

- >> Ear straps should form a "V" right underneath the ear lobes.

- >> No more than 2 fingers between your eyebrow and brim of helmet (if you have a visor, you should be able to look up and see the edge of the visor).

- >> Clip your helmet and there should be no more than 2 fingers between your chin and chin strap.

**Bike Fit** – Have everyone follow along as you go through the steps.

- >> Stand over your bike with both feet flat on the ground, there should be an inch or so between the top tube and your body. When seated on the saddle, there should be a slight bend in the knee at the bottom of the pedal stroke (for more experienced riders, feet should not easily touch the ground when seated).

- >> Handlebars should be easy to reach when seated.

- >> If there is someone who is fairly new to riding, both of their feet should be flat on the ground when seated (this builds the rider's confidence that they are in control of the bike and this is paramount to beginning bicycle control; a safe bike is under control at all times). Raising a seat should be done incrementally and only after the rider has mastered balancing the bike.

**ABCD Quick Check** – Have everyone follow along as you go over the steps. Involve your students as much as possible, ask them what the different letters stand for.

>> Air– make sure there is enough air in the tube; tires should be nice and firm; explain how to find recommended psi on tire wall; check tires for any damage (bald spots, thinning treads, etc).

>> Brakes– squeeze the right lever (which controls the rear brakes) while trying to move the bike forward and the front wheel should come up; squeeze the left lever (which controls the front brakes) while trying to move the bike forward and the rear wheel should come up; or squeeze both levers while trying to move the bike forward and bike doesn't move (can also lift front or rear wheel off ground, spin the wheel and use the corresponding brake and the wheel should stop moving; there should be no less than 1" between the brake lever and handle bar; check pads for any wear.

>> Crank/Chain/Cassette– wiggle the crankarms and they shouldn't move; make sure chain has enough lube and there is no rust; spin pedals backward and make sure chain is running smoothly over chainrings and cassette; check your shoelaces/pant legs to make sure they won't get caught in chain.

>> Drop– gently drop your bike (inch or two off the ground) and listen for any unusual noises; remind everyone to Drink water before you are thirsty and Eat before you are hungry as this is your fuel (always drink and eat while you ride).

>> Quick– make sure quick releases (on wheels, seat, brakes) are nice and snug (give yourself a warm hug, that is how your quick release should be).

>> Race!– Tell the students that it really doesn't take long to do a thorough ABCD Quick Check before you ride. Challenge them to do one in 30 sec or less, time them!

>> Check–lead everyone on a few oval laps around the parking lot and tell everyone to be aware of anything that does not feel or sound right on their bikes; there should be one invisible bicycle (or one bicycle length) between each rider; practice hand signals. End your laps at the beginning of the driveway drill area.

## Drills (1 hour; 10:30-11:30am)

**Driveway Drill**–Use a real car and driver if possible; if not, find a good space to simulate a driveway, and have one of the instructors pretend to back out of a driveway.

>> Ask students if they are riding on sidewalks or in the road–explain why no matter where they ride, whether it's on the sidewalk or in the road, they need to be especially careful around driveways (drivers are backing up and not looking, drivers are turning into driveways, etc.). Mention that many driveway crashes involve children.

>> Explain how to identify "edges" of the street and that these are places where they need to slow down and stop.

>> Discuss what "yield" means–being prepared to stop and let ongoing traffic pass, only going when it is safe to do so.

>> Discuss making eye contact with drivers who are both backing out and turning into driveways.

>> Explain that about 20 ft before a driveway (about 2 cars distance), riders must slow down, and look for signs that a driver is backing out (car lights on, being able to see driver in car, sounds of engine). Also, look for drivers that might be turning into driveways from the roadway. Tell the children that they can stand on their pedals so that they can see better.

>> Demonstrate all of the above.

>> Have each child practice and adults if they'd like.

>> Tip for parents–children are shorter than adults, their view is significantly lower and they are less easy to see by drivers; this makes it especially important to teach them about yielding and eye contact and being extra-cautious around driveways where sight is limited.

**Lanes Drills**—These drills are mainly for the children to practice; one instructor will take parents to the stopping end of the lanes and explain what the children are doing; parents should participate in the fourth drill, the Door Zone. Explain to the students that the drills build on each other so remind them to keep practicing all that they have learned through the consecutive drills; if you find that there are students that are uncomfortable with any of the drills, tell them they can keep practicing the ones they are comfortable with until they are ready to move on. Have riders line up in the lanes, one rider per lane. If you have more riders than lanes, begin to line them up behind each other.

>> 1st Drill—Starting and Stopping

- o Explain power pedal position—have riders straddle the bicycle-not seated-and place one foot at “2 o’clock”; when everyone is set, riders stand on that pedal to gain forward momentum and step-up onto the seat.
- o Have them practice staying in their lanes and riding straight.
- o Tell them to have a couple of fingers over the brakes to be ready to stop and to use both brakes when stopping.
- o When the bike is stopped, they should dismount by standing on a pedal and place the opposite foot on the ground. Tell them to look left, right, left and behind and signal which direction before going and use power pedal again to start.

>> 2nd Drill—One Hand Riding and Signaling

- o Go over left, right and stopping signals.
- o Have the riders practice riding in their lanes, in a straight line, with one hand on the handlebars and one hand off on their hip (practice with both right and left hands). Tell them to always have at least one hand on the handlebars (if students are uncomfortable with putting one hand on their hip, then tell them to practice taking one hand off of their handlebars for increasing amounts of time).
- o As students ride, call out “left” or “right” or “stop” and the rider has to make appropriate hand signal.
- o Remind them to include all the elements from the previous drill (starting, riding straight, stopping, looking, and signaling).

>> 3rd Drill—Scanning

- o Have riders ride in a straight line while looking over their left shoulder for increasing lengths of time; instructor stands at starting end and holds up fingers (or arms) and students look back and call out how many they see.
- o Remind them to include all the elements from the previous drill (starting, riding straight, stopping, looking, and signaling).

>> 4th Drill—Door Zone

- o Gather parents and children together at the start of the lanes. Have an instructor stand half-way down on the outside of the furthest right lane (like where a car would be parked on the street).
- o Explain door zone (the area where a car door opens into) and that this causes quite a few crashes with bicyclists. Tell them that to imagine that the instructor is a parked car.
- o Instruct the riders to leave enough room on their right side between themselves and the parked car for two “imaginary bikes” (about 3 ft.) and to ride straight; tell them not to be “squirrels”, i.e. do not weave in and out of parked cars, just ride straight.
- o Explain that they should always be scanning ahead as they are riding, so that they see the parked car(s); if they find themselves over too far to the right as they are coming upon parked cars and need to move left so that they are out of the way of the door zone, they must scan behind to see if anyone is coming, signal to move left and then move left.
- o Demonstrate, and as you go by the instructor in the middle will put an arm out, kind of like a door opening.
- o Have everyone practice a few times as the middle instructor puts out an arm to show if riders are leaving enough space between themselves and the “car door”.
- o Riders can practice riding straight, 3 ft away from the parked car, and they can also practice riding to the right and then scanning and moving left before coming upon the parked car.

**Intersection Drills**—have everyone meet at the Figure 8 intersection.

Ask: what are intersections? (where streets cross, where a high percentage of crashes happen, places where there is more traffic, places where bicyclists have to be particularly careful). Talk about how communication among riders/drivers is key (eye contact, waves, etc.).

Discuss Right-of-way—who goes first? First one to arrive goes first, always make eye contact; if everyone arrives at same time, other drivers must yield to traffic on the right; discuss passing on the wave-through (tell them to be careful that all drivers see them, one driver might not have seen another driver wave them through). You can have everyone practice walking through the intersection and demonstrating right-of-way.

Driveway—show where the driveway comes into the course. Riders can either be bicyclists coming out of the driveway, or they can pretend to be “cars” backing out of the driveway.

Have everyone practice on their bikes on the course, going around several times.

## **Break (10-15 minutes; 11:30-11:45am)**

- Pack up gear or designate someone to stay with gear.

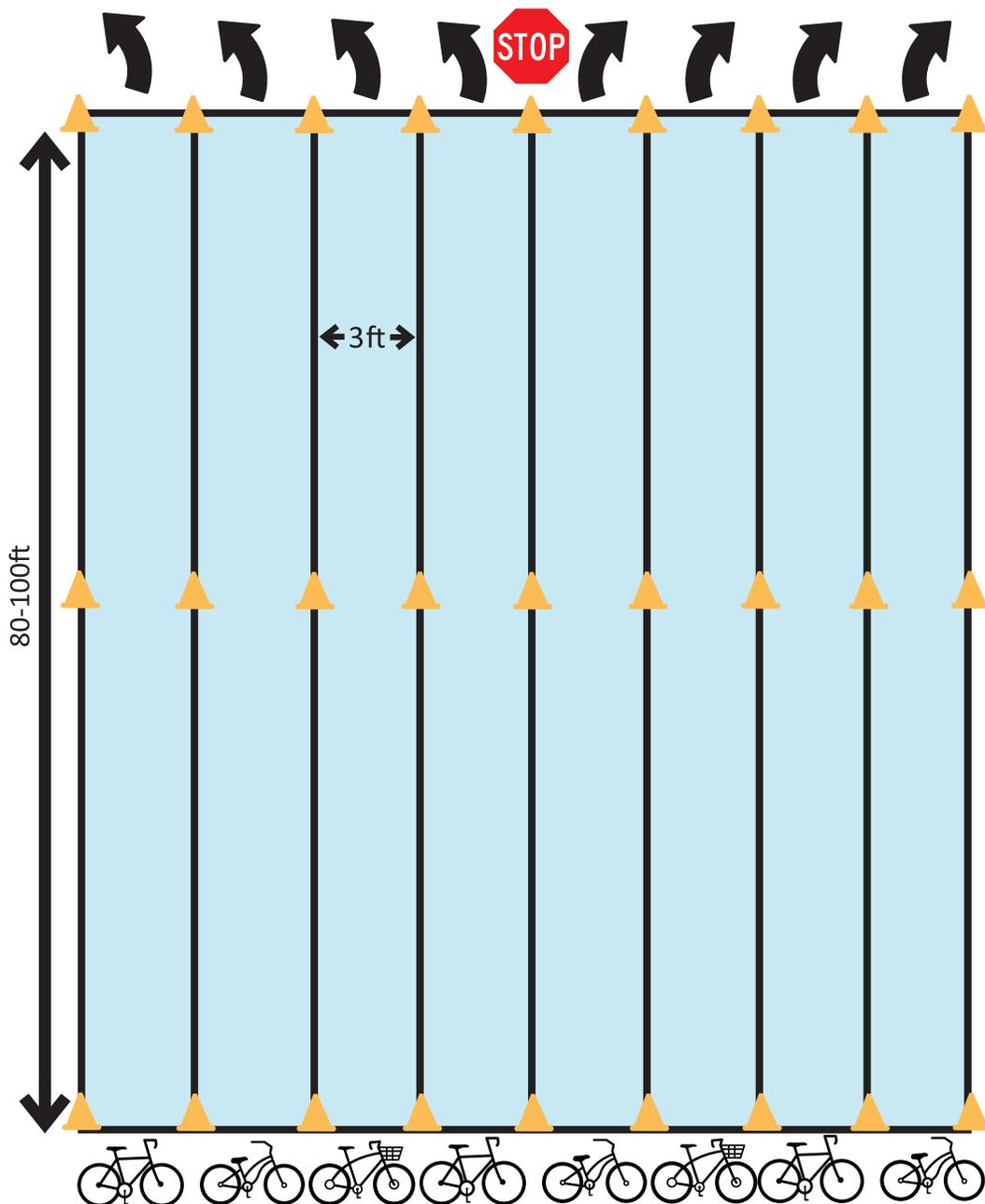
## **Neighborhood Ride (30 minutes; 11:45am-12:15pm)—Bring first aid kit.**

- Note: Participants who cannot safely start and stop their bike in a straight line are advised not to ride on the road yet.
- Explain that we will now be doing a mile or so ride to put into practice on the roadways what we have been practicing in our drills. We will be practicing lane and intersection positioning, right turns, going straight and left turns. Explain that instructors will be leap-frogging through intersections so that no intersection is unattended and that instructors will be monitoring participants to check for problems and to accommodate their pace.
- Explain that parents can either ride behind their child/ren (diagonally on the child’s left side, also called “flanking”)—this allows the parents to keep a close eye on their child/ren and encourage good and safe biking behavior, this also helps the child/ren see more and make their own decisions (but it can also give the child a false sense of security), or they can ride in front and have their child/ren follow (this allows the parents to control the pace and where they stop/turn, etc.).
- Talk about how family riding is like group riding: we should use consistent language for good family communication; terms like “stopping”, “car back”, “right-turn”, “left-turn”, “heads-up” are all useful on the road (we should avoid saying directions such as “left” or “right,” or non-specific instructions, such as “watch out”); we should announce all hazards and movements (stopping, slowing, turns, etc.) to the riders around us; as a family, we should create consistent rules (stop before entering the flow of traffic, where to ride/or walk on which roads); families can consider a call-and-response technique (children repeat the direction back to their parents so that the parents know the children heard them) and practice having children lead this communication when they are comfortable on their bike.
- Set ride rules before going out on the road: children must listen to their parents and instructors and ride where the lead instructor rides and follow all traffic laws; ask what the laws are: ride on the right—if you’re not riding on the road yet, then sidewalks and bike paths are always good places to begin this practice; obey all traffic signs and signals; yield to crossing traffic; yield when changing lanes (scan for traffic, signal lane changes and turns); be in the rightmost lane that serves your destination of travel. Tell everyone to ride predictably and be visible (ask if anyone would like to wear a bright/safety vest).
- Explain that a bicyclist is a bicycle/pedestrian transformer (one of the best things about being on a bike is you can easily become a pedestrian) and if anyone ever feels unsafe at any time, they can get off of their bike and walk.
- Let everyone know that the group sometimes may split up (such as at a traffic light), but not to worry, the riders in front will pull over at the first safe place. Give an overview of the route (can show maps) and point out the places where participants will re-group, debrief and be prepped on what is coming up next. Remind participants to communicate clearly with the other riders, pay attention, ride single-file and leave an invisible bike space between each rider. Choose a parent or instructor to sweep, the sweep is always a little further out to the left.
- Ask if there are any questions before setting out.

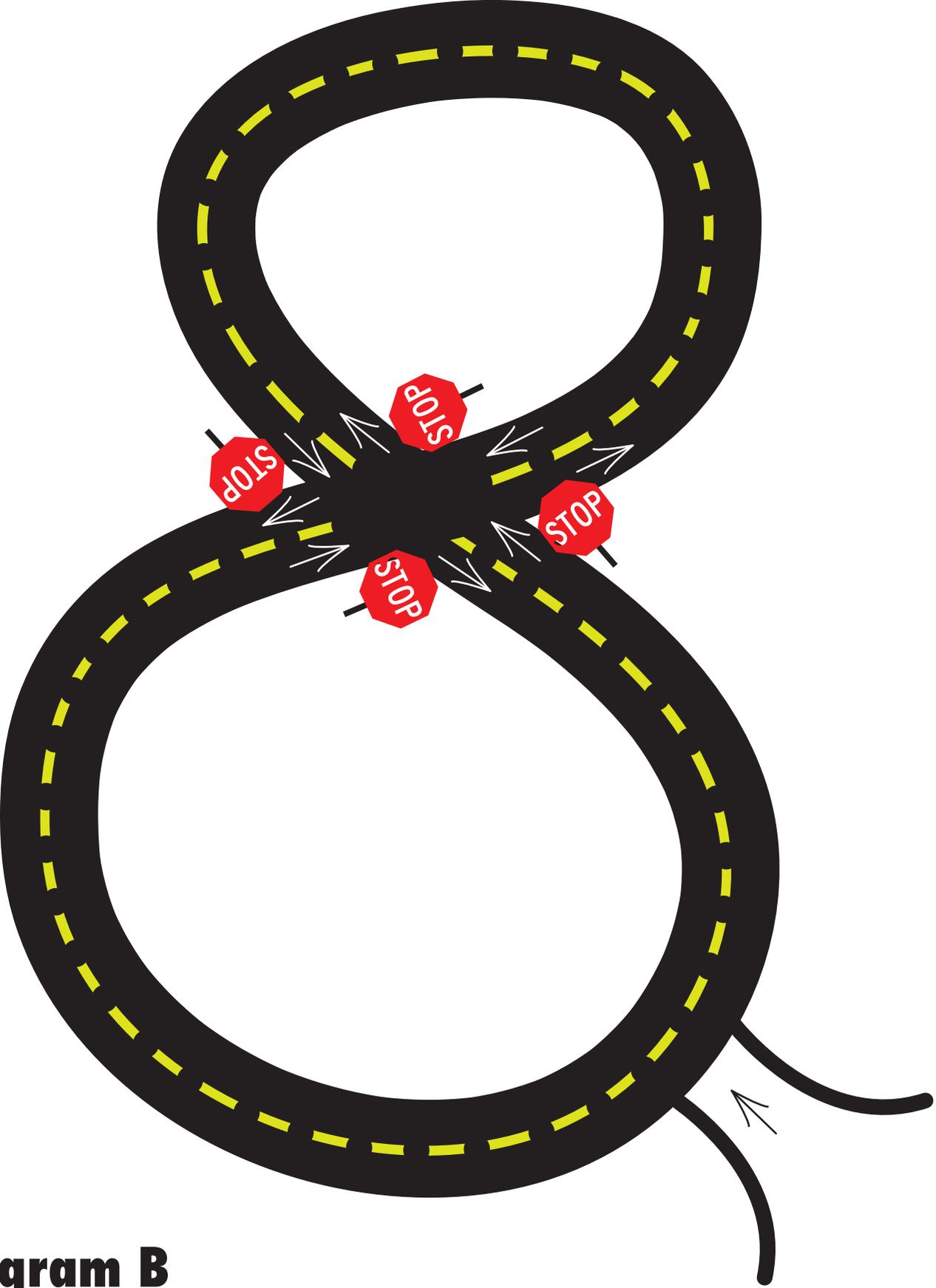
## Wrap-Up, Bike Blender and Light Give-Away (15 minutes; 12:15-12:30pm)

- Ask: what is the best thing you learned today? Go around in a circle and have everyone in the group name one thing.
- Give evaluations to fill out as you begin making bike blended smoothies.
- Make sure each participant gets a bike light and any info (pamphlets, etc.) that they would like.

## Clean-Up (30 minutes; 12:30-1pm)



# Diagram A



**Diagram B**