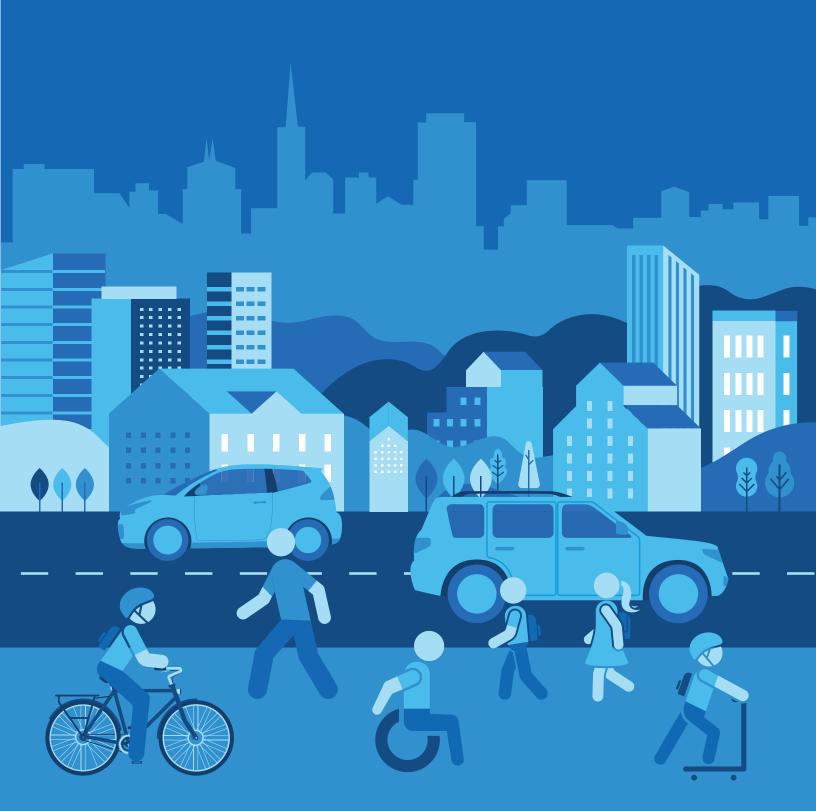
# PEDESTRIAN & BICYCLIST SAFETY HANDBOOK



Tips to keep yourself and the others safe while walking, biking or driving



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# INTRODUCTION

This Pedestrian and Bicycle Safety Handbook was developed by the City of Menlo Park Safe Routes to School (SRTS) Program to help parents, caregivers, students, and educators understand the California state laws that specify pedestrian and bicyclist rights and responsibilities. This handbook contains the rules of the road, safety tips, and examples from local streets in the Menlo Park area.

Parents and caregivers should use their best judgment in routing and riding with children.



#### **PARENTS AND CAREGIVERS**

Use this guide to discuss walking and biking safety with your child. Make sure they understand what they can do to stay safe in the streets, whether it is to travel to school, go to the park, or visit a friend.



#### **EDUCATORS AND SRTS CHAMPIONS**

Use this guide to provide pedestrian and bicycle safety education in the classroom. The Menlo Park SRTS Coordinator can assist you with developing presentation and lesson plans for your students.

#### **Contact Safe Routes to School Coordinator:**

SafeRoutestoSchool@menlopark.gov

# WALKING SAFETY

# **Crossing the Street Safely**

Whenever possible, use marked crosswalks at intersections to cross the street. These areas are designed to facilitate safe pedestrian crossings and are typically accompanied by traffic signals or signs to guide you.

Pay attention to traffic signals, including pedestrian crossing signals, traffic lights, and pedestrian countdown timers. Follow the signals accordingly, waiting for the appropriate "Walk" signal or green light before crossing the street.

Be alert, attentive, and free of distractions, such as using a cell phone or listening to loud music while crossing the street. Stay focused on your surroundings, listen for approaching vehicles, and watch for sudden changes in traffic patterns.

# **Crossing Guards**

School crossing guards contribute to making travels to school safer in protecting students against high-volume traffic during early mornings and afternoons. They remind drivers of the presence of people walking and rolling, help instill safe walking skills in students and their families, and indicate when people driving should yield.

Suggested routes to school maps show the crossing guard locations on your way to school.

Whether you are walking, rolling or driving, always follow the crossing guard's instructions. Remember that they are there to protect the students.





Stop at the edge of the street.



Look both wavs before stepping onto the street.



Look left, right, and all around for approaching vehicles.



Make eye contact: even if you have the right-of-way, it's essential to make eye contact with drivers and bicyclists to ensure they have seen you and will yield.



On streets with heavy traffic, it is best to cross at intersections with street lights and marked crosswalks.

If your child goes to Laurel School **Upper Campus** or Belle Haven **School**, you may have to cross Willow Road, which is a busy traffic corridor. Use caution and cross where there is a crossing guard, or where there are street lights, such as at Gilbert Avenue and Durham Street if you go to Laurel, or Newbridge Street and Ivy Drive if you go to Belle Haven.

# **Walking Without Sidewalks**

When there is no sidewalk, pedestrians should walk in the shoulder of the road.



A sidewalk is a paved and elevated path for pedestrians at the side of a road. Sidewalks provide a separation between the road and the pedestrians.



The shoulder, or walking path, is the edge of the road where cars are not driving. Sometimes there is a white line separating the shoulder from the roadway (where cars drive). Use the shoulder when there's no sidewalk.

Walking without a sidewalk requires an additional level of awareness beyond walking on a sidewalk.



#### **FACE ONCOMING TRAFFIC**

This allows you to see approaching vehicles and react accordingly. It also increases the chances of a driver noticing you since you're walking against the flow of traffic. Walk on the shoulder when possible and stay as far away from the travel lane as safely possible.



#### **WATCH FOR OBSTACLES**

Be extra careful on garbage days or if parking is allowed in the street as your route may have obstacles. Cars may be parked on the shoulder of the road where it may be safest to walk. When possible, walk around the car furthest from the road. If this is not possible, watch closely for traffic and walk on the roadway until the shoulder clears.



neighborhoods around Encinal **Elementary School and Oak Knoll Elementary School, many streets** do not have sidewalks. Walking in a group improves your visibility. Finding a friend to walk with or starting a walking school bus are great ways to improve your walk.



#### DRESS BRIGHT, **BE SEEN**

Wearing high-visibility clothing and bright colors can help drivers notice you, especially in low light conditions.

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# **BICYCLE SAFETY**

# Before You Go

Before you leave, prepare yourself and your bike for a smooth and enjoyable ride. Whether you're commuting to school, exploring scenic trails, or cycling through winter conditions, taking a few moments can make a significant difference in your overall experience.









ROLL UP PANTS, TUCK IN SHOELACES, **WEAR CLOSED-TOE SHOES** 





# What to Bring and Wear

#### **HELMETS**

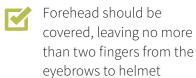
Helmets should be worn by bicyclists of all ages and abilities! In California, bicycle riders under the age of 18 are required by law to wear their helmets (Cal. Vehicle Code 21212).

Helmets come in all shapes and sizes. A helmet should fit comfortably on your head without buckling. When fastened, the buckle should not be able to slide over the chin. Many helmets come with an adjustable dial in the back for greater sizing control. Children's helmets often come with different-sized foam padding, which should be adjusted for maximum comfort and safety.



Remember to replace your helmet after a crash or 5 years after the purchase!







Straps should create a triangle or "V" shape around the ears



Buckle should be tight enough for only one finger to fit in between the strap and the chin



Dial on back of helmet should be tightened









#### LIGHTS/REFLECTORS

Reflective lighting keeps bicyclists visible and safe! High-quality lighting can make riding feel safe and secure.

At night, the following must be attached to the bicycle or bicyclist:

- \* A white headlight visible from the front (Cal. Vehicle Code 21201).
- \* A red reflector or a red light with a built-in reflector (can be solid or flashing) visible from the rear (Cal. Vehicle Code 21201).
- A white or yellow reflector on each pedal or on the bicyclist's shoes or ankles that is visible from the front and the rear (Cal. Vehicle Code 21201).
- A white or yellow reflector on the front half of the bicycle, and a red or white reflector on each side of the back half of the bicycle. These reflectors are not required if the bike has reflective front and back tires. (Cal. Vehicle Code 21201).



Avoid nighttime riding! Plan to travel during daytime hours as much as possible.

#### RIDING IN WINTER

- \* Check the weather forecast: Menlo Park's winter weather can be unpredictable. with variations between rain, fog, and occasional sunny days. Before leaving for the day, check the weather forecast to ensure you're prepared for the conditions you may encounter during your ride. Dress appropriately and plan your route accordingly.
- **Dress in layers:** Dress in layers so you can adjust your clothing. Start with a breathable base layer, add a long-sleeve jacket for insulation, and bring a lightweight, waterproof outer layer in case of rain. Reflective clothing is also helpful when visibility is poor.
- Be cautious of wet roads: Winter in Menlo Park often brings rain, which can make the roads slick. Slow down and be cautious when riding on wet surfaces, especially when turning or braking. Reduce your speed to allow for extra stopping distance. Avoid riding through large puddles or areas of standing water, as they may conceal potholes or debris.
- \* Fenders and mudguards: The wet weather can result in muddy roads and puddles. Installing mudguards or fenders on your bike can help keep you and your bike cleaner and drier. They prevent water and debris from splashing up onto your clothing, face, and drivetrain, making your ride more comfortable.
- **Plan for shorter daylight:** The days are shorter during the winter months, so plan your rides accordingly. Start earlier in the day to take advantage of the available daylight and avoid being caught in darkness. Plan to carry bicycle lights and reflective clothing to enhance your visibility to other travelers.

### **ABC Quick Check**



Performing an ABC Quick Check only takes a few minutes but can help identify any obvious issues that might affect your ride. It's important to note that the ABC Quick Check is not a substitute for regular bicycle maintenance and periodic professional servicing. Regularly servicing your bike will help ensure its overall safety, performance, and longevity.

- **QUICK** Is the quick-release lever securely closed?
- **CHECK** Take a quick slow ride around to make sure everything is working properly.

### **AIR**

- \* Check your tire pressure and ensure that it matches the recommended pressure indicated on the sidewall of the tire.
- ★ Look for any signs of damage or excessive wear on the tires, such as cuts or bulges. Make sure there are no objects embedded in the tire that could cause a puncture.

### **BRAKES**

- Squeeze each brake lever individually to make sure they engage smoothly and effectively.
- \* Check that the brake pads make proper contact with the rim or disc and are not excessively worn. If needed, adjust or replace the brake pads.

### **CHAINS**

- ★ Inspect the chain for any signs of rust, dirt buildup, or damage. Ensure it is properly lubricated.
- \* Check the chain tension by pulling it away from the teeth of the front chainring. There should be a slight amount of play, but it should not sag excessively.

# Carrying Large Items by Bike

Do not carry items on your bicycle one handed. You need two hands to safely steer and brake. Always consider the size, weight, and balance of the items you're carrying to ensure your safety and the safety of others on the road. Several types of bags can assist in carrying items on your bicycle:





#### **BICYCLE BASKETS**

Simple and versatile options for carrying items like musical instruments and sports equipment. They often attach to the front handle bars or rear rack. Some baskets are detachable, allowing you to use them as a shopping basket off the bike.



#### **PANNIERS**

Bags specifically designed to attach to the rear rack of a bicycle. They come in various sizes and styles. They are ideal for commuting, touring, and carrying bulky items.



- Remember to distribute weight evenly and securely fasten any bags.
- Practice riding with a loaded bike to get the hang of it.
- Visit a local bike shop to get a basket installed on your bicycle.



#### BACKPACKS

Look for features like water proofing or reflective material for additional functionality and safety.



#### CARGO/CHILDREN TRAILER

Ideal for carrying young passengers and larger loads. They provide extra stability and alleviate many weight distribution issues.



#### **Always Lock Your Bike!**

Make sure the frame of your bike and the front wheel are linked to the bike rack. If parts of your bike have a quick release lever, e.g. the seat or the rear wheel, use an additional lock (e.g., cable or U-lock) to link these parts with the bike rack.

U-locks are strongly recommended for protecting your bike.

### **Planning Your Route**

#### **CHOOSE THE SAFEST ROUTE**

Ask yourself why you are cycling and how far you will be traveling. Whether for commuting, leisure, or exercise, determining the desired distance and duration of the ride will help you plan accordingly.

Look for established bike routes, bike lanes, or shared-use paths in your area. Use online resources such as Google and Apple Maps, or locally published routes that prioritize pedestrian safety, such as the San Mateo Countywide bike map. Look for roads with lower traffic volumes, designated bike infrastructure, or scenic paths away from heavy traffic whenever possible. The Suggested Routes to School Maps identify low-stress routes that are appropriate for children and families.

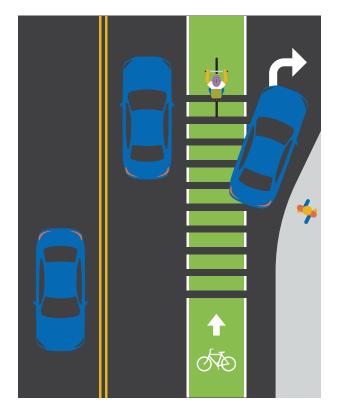
Using cycling-specific infrastructure can dramatically improve comfort on your ride!

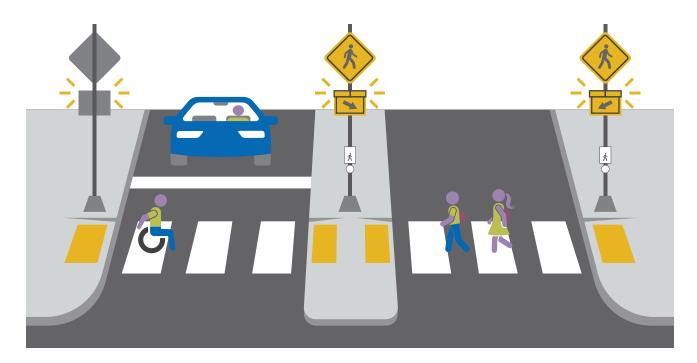
- **Bike lanes** are areas of the road specifically designated for bicyclists. They are often marked by painted lines and symbols, providing dedicated space for cycling.
  - Some bike lanes have painted lines that create a buffer space separating the bike lane from the traffic lane. They are called buffered bike lanes. In Menlo Park, Santa Cruz Avenue is a buffered bike lane that connects many neighborhoods to downtown Menlo Park.
  - You may ride on bike lanes on your way to school, for example Oakdell Drive, Valparaiso Avenue, or Encinal Avenue.





- **Separated bike lanes** have physical barriers, such as curbs, planters, or bollards, separating bicyclists from motor vehicle traffic. They provide an extra level of safety and are becoming more common in the Bay Area!
- **\*** Dashed conflict zones often appear in areas where cars may be turning right and have to cross the bike lane. The dashed lines alert bicyclists that vehicles can merge in the bike lane at these locations.
  - Dashed conflict zones can be found throughout the city, in particular on Laurel Street and Ravenswood Avenue.





Rectangular rapid flashing beacon (RRFB) and High-intensity activated crosswalk (HAWK) are other signals that enhance crossing safety for pedestrians and bicyclists.

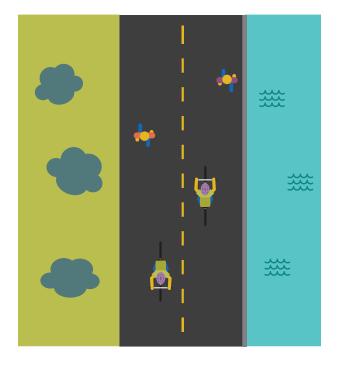




**RRFB** are warning signs located at intersections or at mid-block crosswalks. They are usually activated by the pedestrian and alert drivers to yield.

**HAWKs**, also called hybrid beacons, improve the pedestrian and bicyclist crossing at intersection of major streets with streets with lower traffic volume. HAWK are signals with two red lenses over a single yellow lens. The beacon begins flashing yellow, changes to steady yellow, then displays a solid red indication with both red lenses. During the solid red phase, drivers must stop and remain stopped, as with a standard traffic signal.

- Shared-use paths and trails are separate from roadways and are designed for both pedestrians and bicyclists. These paths can be found in parks, along riverside, or as a larger network of multi-use trails.
  - ► A segment of the San Francisco Bay Trail crosses Menlo Park and takes you from Bedwell Bayfront Park in Menlo Park to Alviso, in North San Jose.



**Neighborhood greenways** are streets with lower traffic volumes and slower speeds, prioritizing bicyclist safety and comfort. They often have traffic calming measures.



\* Shared lane markings or "sharrows" show the bicyclist where to ride to stay outside the door zone on streets without bike lanes. Ride down the center of this "sharrow" symbol.



**Bike route and wayfinding signage:** You can see these signs at many locations in Menlo Park. The wayfinding signage indicates that you are on a designated bike route and it makes motorists aware of the bicycle route. Signs also guide you to key destinations, for example the Caltrain station, a park, or other bike facilities and indicate the distance and travel time to the destination.

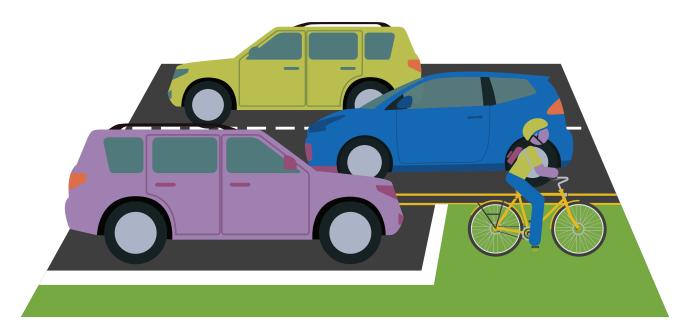




Menlo Park has a few **pedestrian and** bicycle bridges.

The Ringwood Avenue bridge crosses over Highway 101 and connects the Belle Haven and Flood Park Triangle neighborhoods. Many students take that bridge to travel to and from Menlo-Atherton High. San Mateo Drive bridge and Willow Place bridge cross the San Francisquito Creek and connect Menlo Park to **Stanford** University campus and Palo Alto.

### **Bike Box**





If you've ever taken a bike ride down Laurel Street, you might have seen intersections with green "boxes" painted between traffic lanes and crosswalks. These are called "bike boxes," a new way of enhancing bicyclist safety at installed in many locations across the city

- **What is a bike box?** A bike box is a designated area at the head of a traffic lane, which provides queuing space for bicyclists turning left or traveling straight.
- How do bicyclists use bike boxes? Simply proceed into the bike box, stop, and wait for your green light. Position yourself directly in front of cars to increase your visibility. If the bike lane.

# Ready to Go!

### California Law

#### A BICYCLE IS A VEHICLE!

Bicyclists are considered operators of vehicles and must obey all traffic laws, signals, and signs, just like motor vehicle drivers (Cal. Vehicle Code 21200). This includes stopping at red lights and stop signs, yielding to pedestrians, using proper hand signals for turns, and riding in the same direction as traffic.



Bicyclists must travel on the right side of the roadway in the direction of traffic (Cal. Vehicle Code 21650).

Where possible, bicyclists should ride in designated cycling infrastructure such as bike lanes, shared-use paths and trails, and neighborhood greenways (Cal. Vehicle Code 21208).

If this infrastructure is not available for your ride, mixing with car traffic is a legal option. Taking the lane should be done if the bike lane is too narrow or there isn't one available. This makes you more visible and discourages drivers from attempting to pass too closely.

Hillview Students: If you bike heading east on Menlo Avenue (toward El Camino Real) after school, you should stay on the south side of the road—even if you ride on the sidewalk. Riding on the south sidewalk means you will travel with the flow of traffic. Drivers turning from and on to Menlo Avenue do not look for bicyclists coming down the north sidewalk, and there have been some near misses when bicyclists have traveled on that sidewalk.





#### RIDING ON THE SIDEWALK

Riding on the sidewalk is another option if you do not feel safe in the street or if the road does not have a bike facility like the ones mentioned earlier. If you ride on the sidewalk:

- Slow down at intersections.
- Slow down at driveways.
- Use extra caution: drivers may not expect a fast-moving bicyclist on the sidewalk. Walk your bicycle when there are pedestrians on the sidewalk.

Remember: In Menlo Park, you have to walk your bicycle on the sidewalks of the downtown area (City Code 11.56.120).

#### **BE PREDICTABLE: USE HAND SIGNALS**

Hand signals are essential for communicating your intentions to motorists and other bicyclists while riding a bicycle! Here's how to perform common hand signals:



**Left turn** is shown by extending your left arm straight out to the side horizontally, parallel to the ground.



Right turns can be shown in two ways. Traditionally, bicyclists signal a right turn by extending your left arm out to the side and bend it upward at a 90-degree angle at the elbow.

Alternatively, take your right arm and extend it straight out horizontally, parallel to the ground. Only use this option if you don't need to use your right hand to brake.



To show you are stopping,

extend your left arm downward, with your palm facing backward. Your arm should be fully extended, pointing downward at a 90-degree angle.

#### **NO HEADPHONES**

Headphone and cellphone use on a bicycle is illegal in California (Cal. Vehicle Code 27400)!

#### PEDESTRIANS HAVE THE RIGHT-OF-WAY

Bicyclists must yield the right-of-way to pedestrians within crosswalks at intersections (Cal. Vehicle Code 21950).





# **Avoiding Common Collisions**

Riding in the streets means interacting with motor vehicles. While bicyclists must follow the same rules of the road as vehicles, and are legally vehicle operators in their own right, bicyclists must take their safety into their own hands and have strong situational awareness. Distracted drivers, inadequate infrastructure, and weather conditions can all be outside the control of the bicyclist. Bicyclists are safest when they are visible and predictable.



Slow down near driveways! **Especially on streets with business** driveways and more vehicle movement, like Menalto Avenue.

#### **RIGHT HOOK**

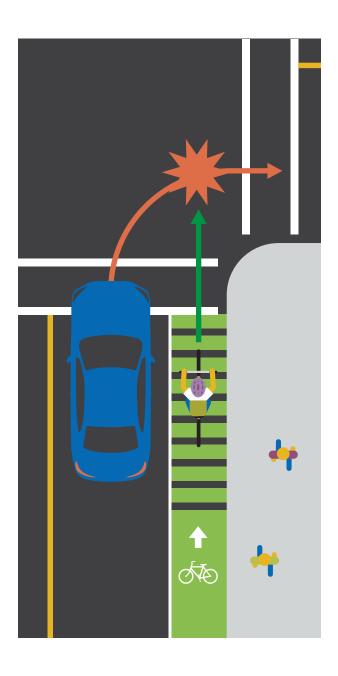
"Right hook" collisions occur when a bicyclist is riding to the right of motor vehicle traffic, and a driver attempts to make a right turn, crossing the bicyclist's path.

To prevent right hooks, be visible, position yourself, signal your intentions, use non-verbal communication with drivers, and take the lane if necessary.

To minimize right hook collisions, the California Vehicle Code requires drivers to merge into bike lanes prior to turning right at such intersections.

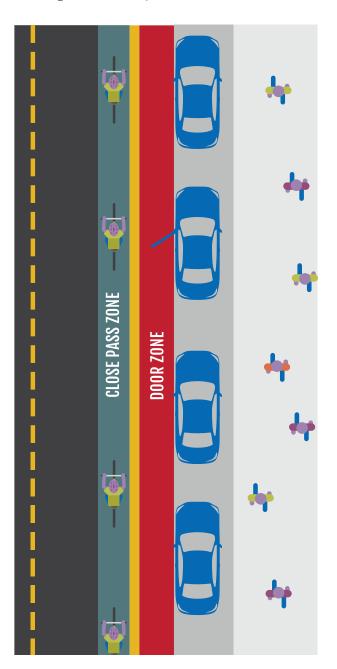
#### Remember:

- If a driver is approaching the intersection, bicyclists should be on alert for the car's right-turn signal and avoid traveling in the car's blind spot.
- If a driver is already merging or in the bike lane ahead of a bicyclist, the bicyclist should either pass the car on the left or wait for it to complete its turn before continuing on.



#### **DOOR ZONE**

If you ride on a road with parked cars, imagine a line five feet away from them. Everything between that imaginary line and the parked cars is the door zone (because the average car door is five feet wide). Stay to the left of the line, and you're in the clear! Ride to the right of the line, and you put yourself at risk—it's as simple as that. This may require taking the travel lane or riding out in traffic, but it's safer to ride in a predictable line than weaving in and out of parked cars.



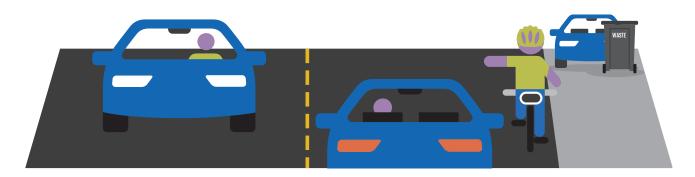


#### **REPORT A SAFETY CONCERN:**

Reporting immediate non-emergency

**Reporting an emergency:** To report a

For a school related concern not needing. an immediate response: Reach out to



#### **HOW TO AVOID OBSTACLES** IN THE BIKE LANE

Bike lanes are sometimes blocked by objects such as garbage cans or delivery vehicles. To avoid these obstacles, you will need to maneuver into the street. Remember these steps:

- 1. Shoulder check: look left behind your shoulder for incoming vehicles
- 2. Hand signal: show your intention to merge into the traffic lane
- 3. Yield to traffic: make sure the way is free of
- **4.** Merge into the traffic lane when there is no car

#### MAKING LEFT TURNS

There are different ways to make a left turn when bicycling:

- **1.** Using traffic lanes. This option requires the strongest bicycling skills as you need to change lanes to turn and ride with other vehicles. Follow these steps to turn using a traffic lane:
- \* Shoulder check: look left behind your shoulder for incoming vehicles.
- ★ Hand signal: show your intention to merge into the traffic lane if you are in the bike lane or to change lanes.
- Yield to traffic: make sure the way is free of cars.
- Change lanes.
- \* If you are riding in a bike lane or on a multilane road, look and signal every time you change lanes.
- 2. Using crosswalks (two-stage turn). This is the recommended way to cross the street for less experienced bicyclists or children:
- Approach the intersection, staying on the right.
- Stop and walk your bicycle in the crosswalk.
- ★ If there is a signal light, wait for the green light or WALK signal before crossing.
- \* Yield to pedestrians in the crosswalk.



Never make a left turn from the right side of the road, even if you are in a bike lane.

#### **HOW TO SAFELY CROSS RAILROAD** TRACKS ON A BICYCLE

If you live near downtown Menlo Park, your children have likely biked across Caltrain tracks on their way to school. These railroad crossings, like those at Ravenswood Avenue, Oak Grove Avenue, Encinal Avenue, and Glenwood Avenue can pose a significant risk for bicycle riders.

Here are some tips to help you and your family safely approach and cross railroad tracks:

- Approach slowly: Reduce your speed as you approach the tracks, giving yourself time to assess the crossing and identify the best path across.
- Be aware of warnings: Look and listen for trains. Keep an eye out for lowering gates, flashing lights, and ringing bells indicating an approaching train. If any of these warning signals are active, do not attempt to cross the tracks until the train has passed or the warnings are deactivated.
- **Check for oncoming trains:** Before crossing, always look to your left and right to make sure no trains are approaching. Even if no warning signals are active, a train could still be coming from either direction, and they will sound their horn as an additional safety measure.
- **Cross at right angles:** To avoid getting your wheels caught between rails, always aim to cross tracks directly at a 90-degree angle. Try to also cross using the smoothest path available, avoiding any bumps, cracks, and debris in the pavement.
- "Unweight" your bicycle: Just before crossing the tracks, gently lift your weight up from your bike saddle. This will allow your bicycle to more smoothly cross and reduce the chance of your wheels getting stuck in the tracks



- Beware of wet tracks: Railroad tracks can become slippery when wet, creating an especially hazardous situation. Exercise extra caution during rainy weather and consider walking your bike across the rails.
- Take your time: Never race the train to the crossing or travel along the tracks.

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# DRIVING **SAFETY TIPS**



# **Protecting Pedestrians** and Bicyclists

Keeping all road users safe is important for the Menlo Park community. With a large network of roads and a variety of road users—including people driving, biking, walking, and more—the City is committed to fostering an environment that promotes safe practices and habits.

This Menlo Park Safety Handbook is a guide for drivers in Menlo Park to use safe driving practices. Following these guidelines protects you as a driver and vulnerable road users, including people walking and biking. This handbook covers several aspects of road safety in Menlo Park, specific locations with higher proportions of collisions, and safe driving behaviors. The safety guidelines developed in this handbook were selected based on collision factors and patterns identified in the City of Menlo Park Vision Zero Action Plan and the San Mateo County Youth-Based High Injury Network

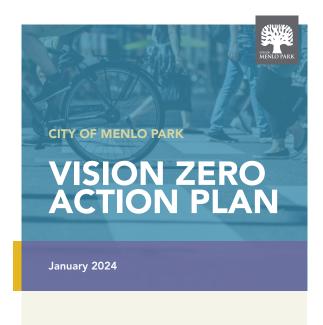
The handbook includes the following sections:

- The Roadway Network and Safety
- Speed Kills
- Follow These Rules to Protect Yourself and Others
- School Zones
- Street Markings and Treatments
- Railroad Crossings

# The Roadway **Network and Safety**

Over the years, plans and studies have collected data on collisions in Menlo Park to identify the most common causes, locations, and victims of collisions and to determine solutions to improve safety.

The Menlo Park Vision Zero Action Plan published in 2024 is a strategic blueprint for eliminating traffic fatalities and serious injuries in Menlo Park. It prioritizes safety over other transportation considerations and acknowledges that traffic deaths and serious injuries are preventable.





**According to the Menlo Park Vision Zero Action Plan:** 

- Collisions involving drivers traveling at unsafe speeds (as noted by the reporting officer) make up 40% of all injury collisions and nearly 30% of all fatal and serious injury
- The plan also notes that nearly 45% of all fatal and serious injury collisions occur on stateowned roadways that include El Camino Real, Bayfront Expressway, University Avenue, and Willow Road.
- Nearly 30% of all fatal and serious injury collisions, nearly 50% of all pedestrian injury collisions, and just over 20% of all bicycle injury collisions occur in Downtown Menlo Park.

The San Mateo County Safe Routes to School Youth-Based High Injury Network Report, developed in 2022, also identifies segments in the road network where many pedestrian and bicycle collisions have occurred. That report classified several roads in Menlo Park as safety priority corridors in the Youth-Based High Injury Network due to their high traffic speeds and increased incidence of collisions.

Extra caution is advised when driving on the following roadways, the Vision Zero Action Plan or Youth-**Based High Injury Network Report:** 

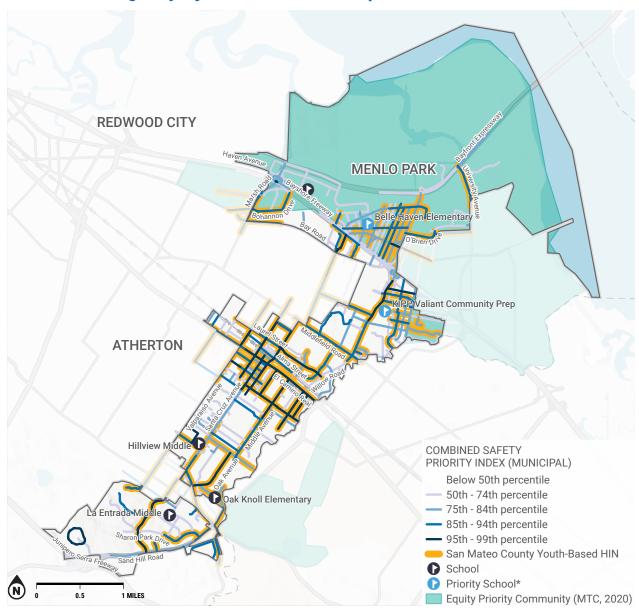
- **El Camino Real**
- **Glenwood Avenue**
- **Laurel Street**
- Ravenswood Avenue
- **Unversity Avenue**
- **Willow Road**







# Youth-Based High Injury Network (HIN) - Top Corridors



<sup>\*</sup>Priority schools are defined as those with 75% or greater eligibility for Free and Reduced Price Meal (FRPM) programs during the 202-2021 school year.

#### **TOP 5 SAFETY PRIORITY CORRIDORS**

Corridor	Number of Collisions						
	All Collisions	Fatal or Severe (KSI)	Pedestrian- Involved	Bicyclist- Involved	Youth- Involved		
Ravenswood Ave	22	1	3	6	6		
Avy Ave	12	1	0	7	2		
El Camino Real	59	2	3	8	14		
Laurel St	20	3	1	6	9		
Glenwood Ave	6	1	0	36	2		

Segments are sorted by their Combined Safety Priority Index scores. Columns may not add up because collisions may be counted in multiple columns.

# **Speed Kills**

Speed is a significant factor in the severity of collisions. Higher speeds reduce a driver's ability to steer safely around curves or objects in the roadway, extend the distance necessary to stop a vehicle, and increase the distance a vehicle travels while the driver reacts to a dangerous situation.

The risk of severe injury or death increases significantly with speed. According to the US Department of Transportation, someone walking or bicycling has a 90% chance of survival if hit by a vehicle traveling at 20 miles per hour but only a 50% chance of survival if hit by a vehicle traveling 40 miles per hour. In Menlo Park, unsafe speed is listed as one of the top five collision factors of the San Mateo County Youth-Based High Injury Network.





**HIT BY A VEHICLE** TRAVELING AT: **፟**፟ጟ፞ጚጚጚጚጚጚጚጚጚጚጚ 10% **RISK OF DEATH** 

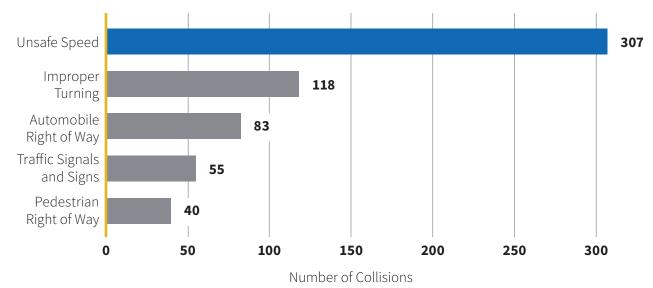
**HIT BY A VEHICLE** TRAVELING AT: **፟**፟፟ጟ፞፞፞፟ጟ፞ጚ፞ጚ፞ጚ፞ጚ፞ጚ፞ጚ፞ጚ፞ጚ 25% **RISK OF DEATH** 

**HIT BY A VEHICLE** TRAVELING AT: **፟**፟ጟ፞ጚጚጚጚጚጚጚጚጚጚጚጚ **50% RISK OF DEATH** 

**HIT BY A VEHICLE** TRAVELING AT: **፟**፟ጟ፞ጚጚጚጚጚጚጚጚጚጚጚ **75%** RISK OF DEATH

HIT BY A VEHICLE TRAVELING AT: 90% **RISK OF DEATH** 

#### TOP 5 COLLISION FACTORS, ALL COLLISIONS IN SAN MATEO COUNTY



Collision data is from the San Mateo County Youth-Based High Injury Network.

# **Tunnel Vision and Speed**

Tunnel vision refers to the narrowing of an individual's field of vision caused by driving at higher speeds. Someone experiencing tunnel vision focuses on a specific point or object while neglecting their peripheral surroundings. Tunnel vision can be exacerbated by several factors, such as stress, fatigue, or intense concentration.

In practical terms, tunnel vision reduces your situational awareness, potentially hindering your ability to perceive critical information—such as traffic signals, pedestrians, or other vehicles outside a central focal point. Paired with higher speeds, tunnel vision reduces a driver's ability to quickly react to pedestrians and bicyclists!

#### **15 MILES PER HOUR**



**30 MILES PER HOUR** 



# Tips to Protect Yourself and Others



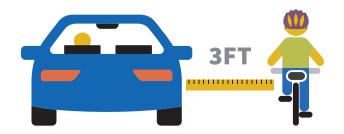
# **Avoid Drugs and Alcohol**

Safe driving requires focus, coordination, good judgment, and quick reactions to the environment. These skills are all impacted by drugs and alcohol, increasing the likelihood that a collision involving drugs or alcohol will be more severe. Although under 5% of all injury collisions involve drugs or alcohol, nearly 15% of all fatal and serious injury collisions involve these substances1.

Plan ahead if you plan to drink alcohol or use drugs. Designate a trusted driver ahead of time, or arrange for alternative transportation such as a taxi or public transit.



**Teen Drivers: Resources for** schools and parents are available from Impact Teen Drivers (impactteendrivers.org) to educate youth on safe driving.



# **Keep a Safe Distance from Bicycles**

People driving should always maintain a safe distance from people biking. In California, a minimum 3 feet of separation is required overtaking a bicyclist with a car. Ensure there is ample space and reduce speed to minimize the risk of collision. Give more space when local traffic conditions allow.



When making a right turn at an intersection with a designated only after ensuring it is safe to do so, and yield to any bicyclists in the lane. A set of dashes in the bike lane will indicate the point at which to merge into the bike lane.

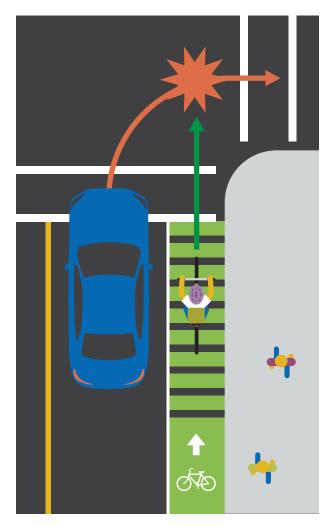
<sup>&</sup>lt;sup>1</sup> Menlo Park Vision Zero Action Plan, 2023, page 15. (MenloPark.Gov)

### **Drive Safely at Intersections**

Intersections are common sites for collisions. Always be aware of your surroundings when turning at intersections and be especially mindful of bicycles and pedestrians crossing the road. Reduce speed and take extra care at intersections.

Follow these rules when turning at intersections to prevent collisions and maintain the flow of traffic:

- Always signal at least 100 feet before turning.
- Turn from the correct lane.



Right Hook Collision. Check page 18 of the document for a description of the right hook collision.

- **Check your mirrors and blind spots** before turning.
- When making a left turn at an intersection, yield the right-of-way to oncoming traffic, including people walking in the crosswalk and biking in the roadway or bike lanes, until it is safe to proceed.
- When making a right turn at a red traffic **signal,** you are allowed to execute a right turn at a red traffic signal, as long as there is no sign or no turn on red arrow explicitly prohibiting such a turn. Come to a full stop and verify that it is safe to proceed before turning.
- When making a left turn from one oneway street to another on a red traffic signal, be sure to yield to any oncoming traffic and pedestrians. This is legal unless posted otherwise.
  - Drivers turning left are involved in just over 30% of all pedestrian injury collisions and nearly 25% of all bicycle injury collisions; another 20% of pedestrian injury and bicycle injury collisions involve a driver turning right.
- At an intersection with a stop sign, come to a complete stop, yield the right-of-way as required, and proceed only when it is safe.
- At an intersection with a yield sign, slow down and yield the right-of-way to vehicles or pedestrians with the right-of-way. If the way is clear and safe, you may proceed without coming to a complete stop.

### **Parking Near Intersections**

A new law in California aims to daylight, or shifting parking away from intersections, to improve visibility. By keeping the area next to the crosswalks clear of parked vehicles obstructing bikes, pedestrians, and cars can see each other better! Vehicles must be parked at least 20 feet from a marked or unmarked crosswalk.

### Slow Down at Crosswalks

Crosswalks are designed for pedestrian safety. When approaching a crosswalk, slow down and watch out for people walking who may be hidden behind parked cars. California law requires drivers to yield the right-of-way to pedestrians in marked or unmarked crosswalks. Drivers must come to a complete stop if a pedestrian is crossing or approaching the same half of the roadway.

### Use the Dutch Reach Method

Being hit by the door of a parked vehicle or being "doored" is a common type of bicycle collision that can cause severe injuries to the person biking. Drivers and their passengers can protect bicyclists when opening their door by practicing a simple safety tip called the Dutch Reach or anti-dooring method.

The door zone is the area into which a car door opens. To avoid hitting a bicyclist when opening a car door, use the Dutch Reach or anti-dooring method: open the door with your far hand, which forces you to look over your shoulder for approaching bicyclists.

Remember: Never fling your door open or leave it open! If you hit someone with your door, you will be found at fault and cited for dooring (CVC 22517).



### Yield the Right-of-Way

Failing to yield at a traffic signal or sign is a common cause of crashes.

Always yield to pedestrians. In California, all intersections are crosswalks intended for pedestrians to safely cross at.

Yield the right-of-way to other cars in the following situations:

- \* Uncontrolled intersection: Come to a complete stop. Yield to vehicle that was there before yours. Allow them to turn or pass before proceeding.
- **All-way stop intersection:** Come to a complete stop. If you arrive at the intersection at the same time as another driver, yield to the driver to your right.
- \* T-intersection: Yield to traffic on the through road.
- \* At a yield sign: Slow down and yield the right-of-way to vehicles that are approaching from another direction.

# **Take Care During Evening Commutes**

Evening commutes can be stressful and chaotic, often linking multiple trips together. You might be leaving work, picking up the kids from school, and stopping at the market all on the way home. Over one-quarter of injury collisions occur during evening peak travel between 3:00 p.m. and 6:00 p.m. Take extra care when driving during these hours. Exercise more caution in the winter months, when rain and fog are more common, and hours of daylight in the day are shorter.

# **School Zones**

School zones are areas near schools where speed limits are reduced to 15 miles per hour during school hours to protect children. Pay close attention to signage in these areas, and always slow down in school zones.

Watch for bicyclists: Pay particular attention to students bicycling in school zones. One-quarter of all bicycle injury collisions involve someone 15 years or younger bicycling. Furthermore, close to 40% of all bicycle injury collisions take place during the fall months—September, October, and November. This period witnesses an increase in new riders and heightened risks due to wet pavement. Therefore, exercising additional caution and consideration during the fall and winter months is key to reducing the risk of collisions.

Stop for school buses: When a school bus is picking up or dropping off children, drivers are legally obligated to come to a complete stop. Patience and attentiveness during these times are critical to ensure the safety of children crossing the road.



Take care during arrival and dismissal: Double parking poses a hazard by obstructing the view of other drivers. Similarly, rushing during arrival or dismissal times can create unsafe conditions. Instead, consistently park in designated areas and allow sufficient time to guarantee safety for all road users.

# **Street Markings** and Treatments

Street markings are visual elements painted or applied on road surfaces to convey essential information and guide traffic. These markings aid drivers in navigating roads safely and efficiently. Common street markings include lane dividers, crosswalks, arrows, and symbols indicating the rules and regulations for specific lanes. Street treatments are a variety of infrastructure changes that can alter driver behavior. This section discusses how to safely interact with a number of street markings and treatments found throughout Menlo Park.

### **Shark Teeth**

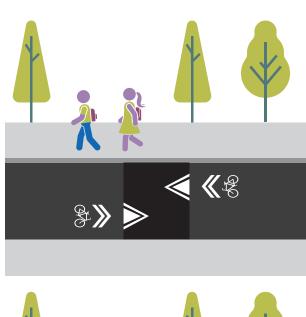
Shark teeth, or yield lines, consist of a series of triangular shapes painted on the road surface, pointing in the direction of oncoming traffic. These markings are used to indicate that drivers on the side with the marked triangles must yield the right-of-way to vehicles approaching from the other side.

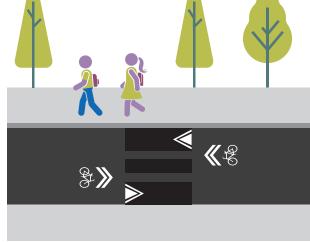


Shark teeth serve as a visual cue for drivers to exercise caution, yield, and allow the smooth flow of traffic. The clear and recognizable pattern aids in regulating traffic and enhancing safety at intersections and midblock crossings. When you see shark teeth, exercise caution, yield, and allow the smooth flow of traffic.

# **Speed Humps and Pillows**

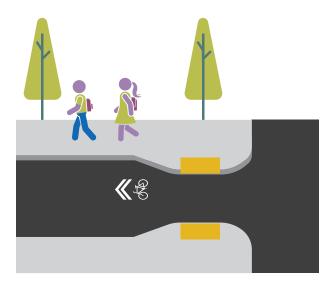
Speed humps and pillows or cushions are traffic calming devices installed on roadways to reduce vehicle speeds, promote safety, and control traffic flow. They are strategically placed where slowing down is essential, such as near schools, residential zones, or pedestrian crossings. Speed humps and pillows work by forcing drivers to slow down when approaching them, discouraging excessive speeds and enhancing overall road safety. A speed pillow closely resembles a speed hump in shape except for the cuttings placed into it. These cuttings are perfect for emergency vehicles but are too wide for most conventional automobiles. Bicyclists also can use the cuttings to continue without interruption by the speed pillow.





### **Curb Extensions**

Curb extensions serve to both visually and physically narrow roadways, resulting in safer pedestrian crossings. Curb extensions offer a versatile range of solutions, spanning from traffic calming measures to the implementation of bus bulbs and midblock crossings. Examples can be found in Belle Haven and Downtown Menlo Park.



### **Bike Lanes**

Bike lanes are designated areas on the road for bicyclists. They are typically marked by painted lines and bicycle symbols. Always check for bicyclists before crossing a bike lane.

#### **CONVENTIONAL BIKE LANES**

Exclusive bicycle travel lanes increase safety and promote proper riding. They reduce the possibility that motorists will stray into bicyclists' path by providing a visual reminder of bicyclists' right to the street. Pass with care and provide at least 3 feet between motor vehicle and bicyclist.

Dashed conflict zones often appear where cars may turn right and cross the bike lane. The dashed lines alert bicyclists that vehicles can merge in the bike lane at these locations. Drivers should be extra cautious and check for bicyclists in and around this zone.

**☀** Dashed conflict zones are found throughout the city, for example on Laurel Street and Ravenswood Avenue.



#### PROTECTED BIKE LANE

Protected bike lanes are separated from vehicle traffic by physical barriers such as posts, curbs, or parked cars. They provide a safer space for bicyclists to travel. While protected bike lanes create greater separation between cars and bicyclists, drivers should remain alert when a bicyclist is in a protected bike lane near them!

#### **SHARROW**

A sharrow, or shared lane marking, indicates a shared lane for vehicles and bicycles. When you see a sharrow, remember to share the road with people biking as bikers may use the full width of the lane.



#### **BIKE/PEDESTRIAN TRAIL CROSSING ROADWAY**

These are marked crossings where bike paths or pedestrian trails intersect with the roadway. Be especially alert at these crossings and yield to people walking and biking.

# Railroad Crossings

Railroad crossings are potential hazard areas. There are four railroad crossings with Caltrain in Menlo Park: Encinal Avenue, Glenwood Avenue, Oak Grove Avenue, and Ravenswood Avenue. Always slow down, look both ways, and listen for approaching trains before crossing. Remember, trains always have the right-of-way and cannot stop instantaneously due to their weight and speed.

Caltrain is working on upgrading their trains from diesel to electricity. The new electric trains will be quieter than diesel trains, but will still sound their horns as a warning when they approach crossings.

Always wait for the gate: You might not hear the train coming. Make sure to wait for the gate to fully rise before crossing. Never assume that there is only one train coming from a single direction.

**DO NOT stop on the track:** Make sure you have enough space to get across the railroad tracks before crossing.

If your car stalls on a track, quickly get everyone out: Run away from the tracks and your car to avoid being hit by flying debris. Call the number on the blue emergency notification system sign near the tracks. If no sign is visible, call 911.

> REPORT PROBLEM **OR EMERGENCY** 1-800-555-5555 X-ING 836 597 H XYZ RAILROAD

Stay away from damaged wires: If you see a downed or otherwise damaged overhead wire, stay at least 25 feet away as these wires carry 25,000 volts of electricity. For emergencies, call the Transit Police at 1.877.SAF-RAIL (1.877.723.7245).



# **Helpful links**

- California- Impact Teen Drivers,
- Bicycle Friendly Driver Training, The League of American Bicyclists
- Menlo Park Vision Zero Action Plan
- Child Safety and Seat Belt Laws in California, Safe Kids Coalition
- Getting from here to there safely. A Youth and Parent Safety Booklet for all roadway users. Sanford Children's Health and Santa Clara County Public Health.



