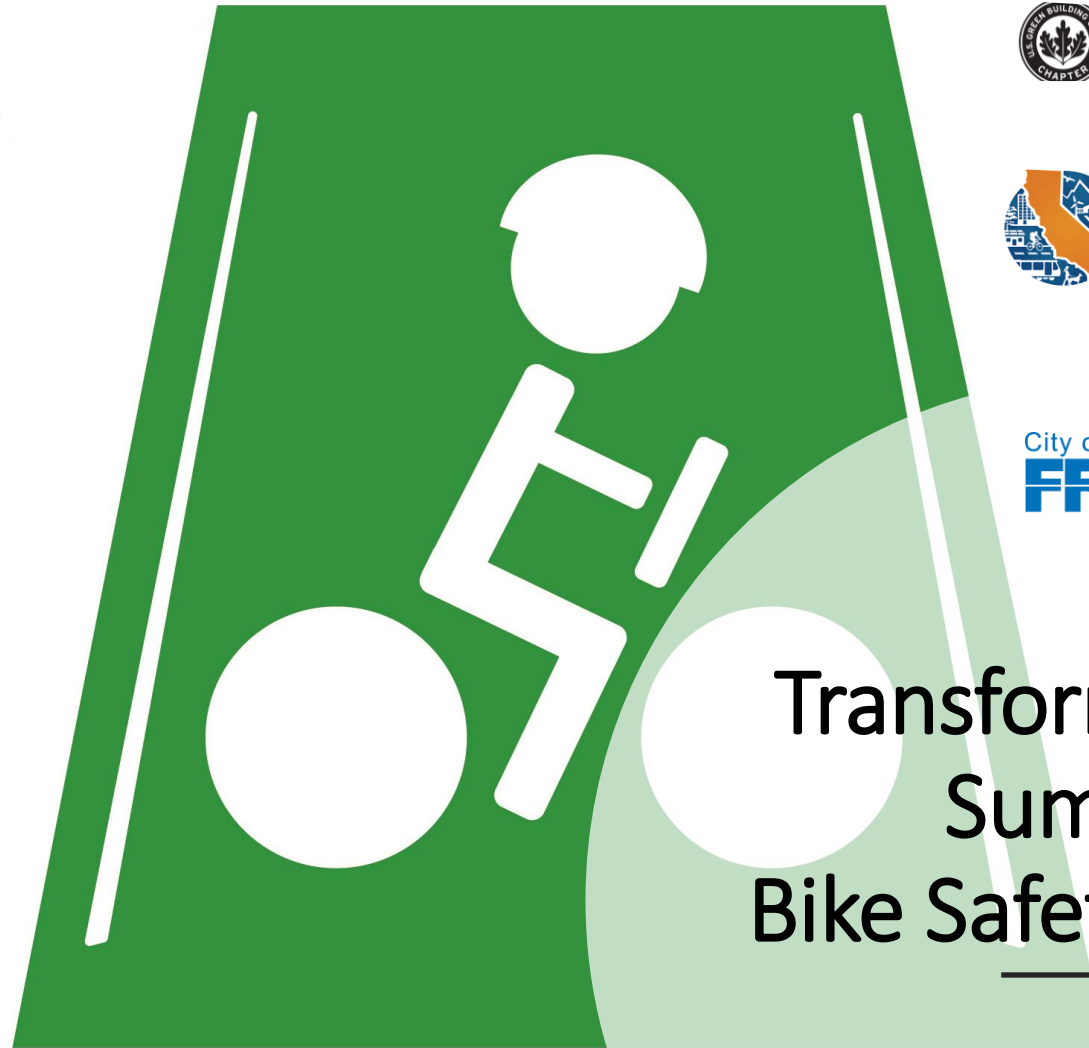


BIKE SAFE *FRESNO*



Transform Fresno Summit: Bike Safety Session

Bike Safe Fresno is supported by California Strategic Growth Council's Transformative Climate Communities program with funds from California Climate Investments—Cap-and-Trade Dollars at Work.



US Green Building Council Central California

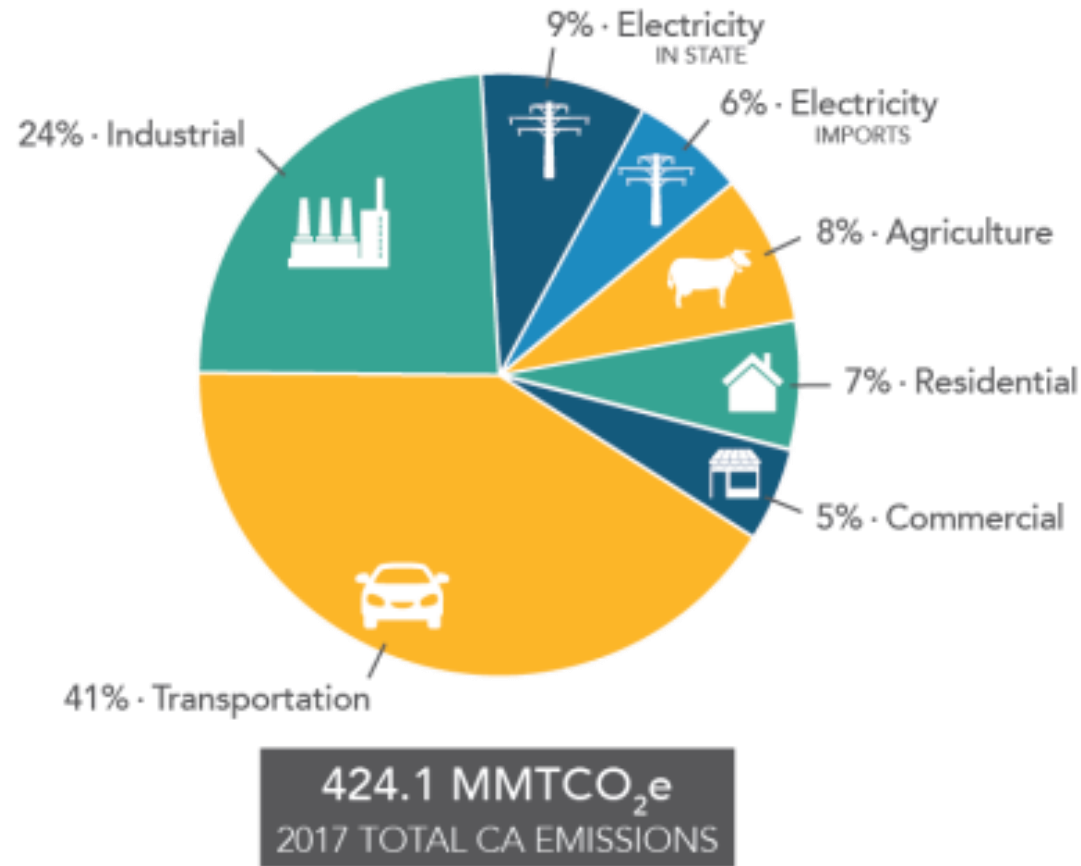
501c3 non-profit organization
Fresno, CA

Mission

Transform the way buildings and communities are designed, built and operated, enabling an environmentally and socially responsible, healthy and prosperous environment that improves the quality of life.



Active Transportation as part of Transformative Climate Communities





Bicycle riding
reduces congestion,
reduces locally
produced emissions,
is good for your
health,
and is fun too!

***BIKE
SAFE***
FRESNO



Bicycle Education with
Smart Cycling Curriculum

Opportunity to take
about safe riding
practices

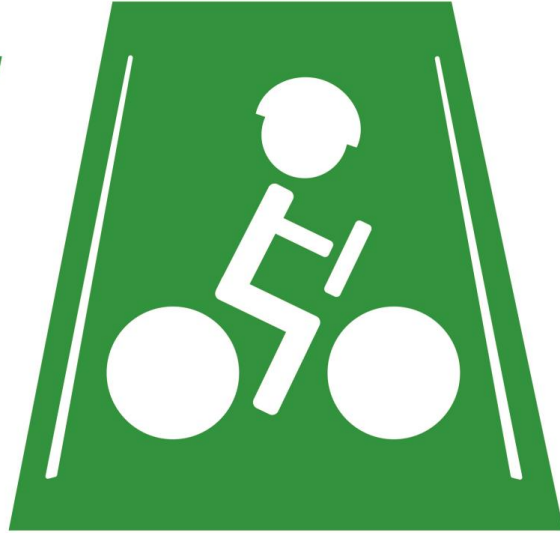
Feedback on bicycling in
Fresno and bicycle
infrastructure for SW
Fresno

Info on active transportation:
[usgbccc.org/ bikesafefresno](https://usgbccc.org/bikesafefresno)

Survey: What would help you to
bike more around Fresno?



**BIKE
SAFE**
FRESNO



About today's session

1. Bicycle Facilities: Today and in our Future
- *Cecilio F. Garcia, Public Works, City of Fresno*

2. Five Layers of Bicycle Safety
- *Laura Gromis, US Green Building Council Central California*

3. Bicycle and Pedestrian Advisory Committee
(BPAC)
- *Harman Dhaliwal, Public Works, City of Fresno*

4. Q&A

Bicycle Facilities: Today and in our Future

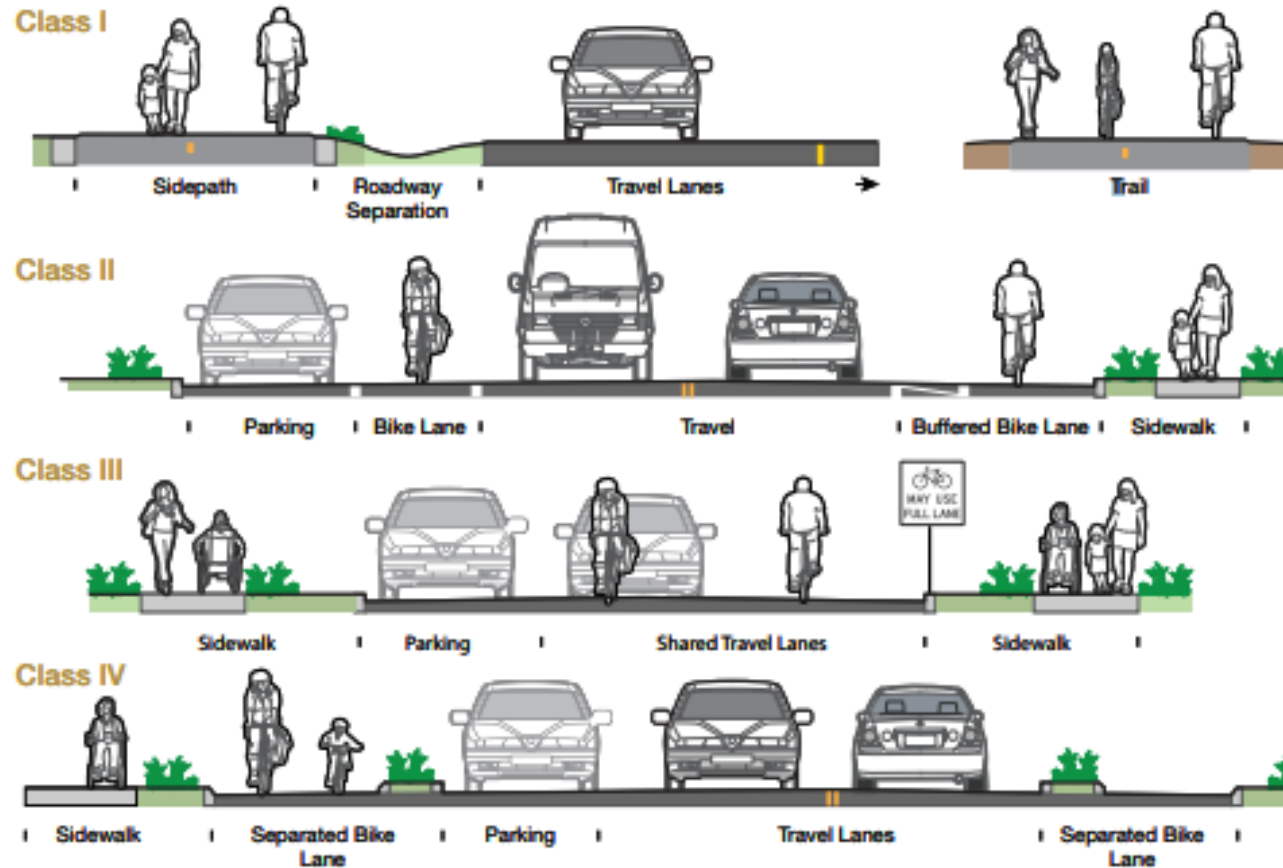
Cecilio F. Garcia, EIT

Supervising Engineering Technician

City of Fresno

Department of Public Works, Project Management

Bike facilities: What are they?



- Caltrans defines several classifications of bicycle facilities. These facilities provide varying levels of separation from other traffic and some are shared use.



Class I – Bike Path

- Per CA MUTCD Section 1A.13, 31d, “a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized.
- Bidirectional shared use path located immediately adjacent and parallel to a roadway.

Class II – Buffered Bike Lanes



- An exclusive lane for bicycle access within the roadway to separate bicyclists from the adjacent motor vehicle travel lane and/or parking lane.

Class III – Bike Routes

- A road that designates preferred usage for bicyclists using a combination of signing, striping, or volume management.



Class IV – Separated Bikeways

- A bikeway that is separated from vehicular traffic using horizontal and vertical elements.
- Separation can be made through:
 - Flexible posts
 - Inflexible physical barriers
 - Planters
 - Parked vehicles
 - Curbs



Bike Plan: What is it?

- Plan for Bicycle facilities, part of a larger vision
- Active Transportation Plan (ATP)
 - Walking,
 - Cycling, and
 - Wheelchair access
- <https://www.fresno.gov/publicworks/wp-content/uploads/sites/17/2016/09/170022FresnoATPFinal012017.pdf>



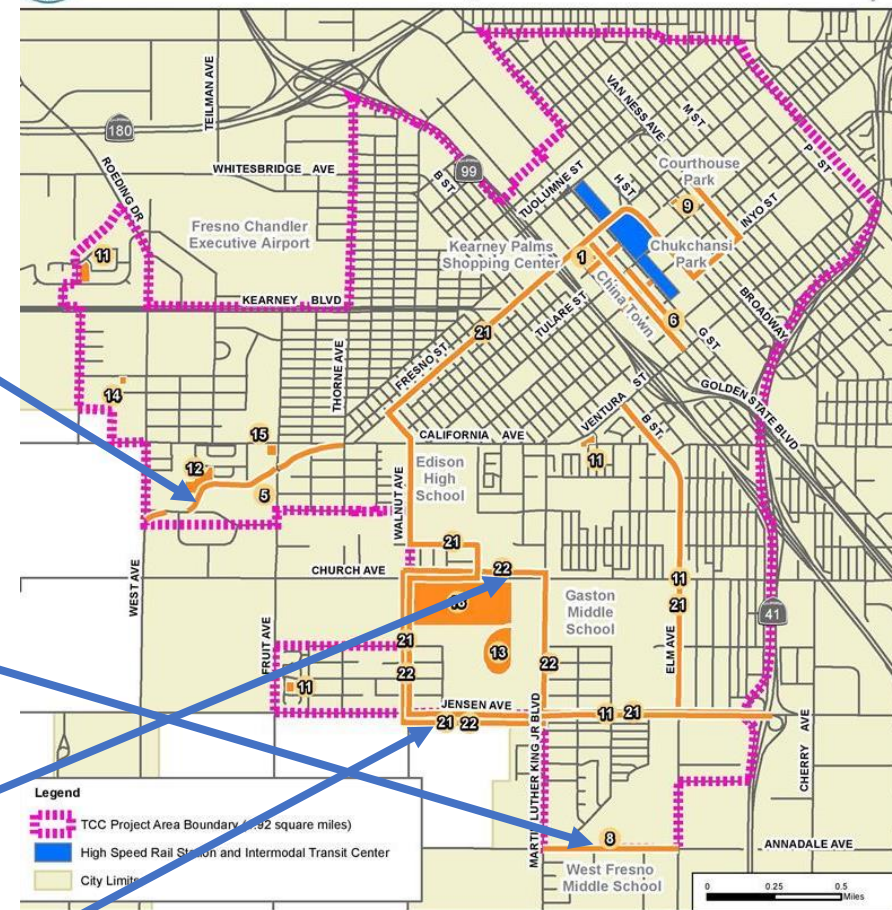
TCC Projects Supporting Active Transportation

- **#5 – Southwest Fresno Trail**
 - Between West and Thorne
 - Additional Trees
- **#7 Clean Share Mobility Network**
 - Car Shares, Van pools, bike sharing
- **#8 – Annadale Mode Shift**
 - Sidewalk Gap Closure on East Annadale Avenue between MLK and Elm
- **#21 – TCC Connector**
 - Increase frequency of busses on Route 38 from Downtown to Jensen and Cedar
- **#22 Southwest Offsite Improvements**
 - Trails, sidewalk, bike lanes around future Fresno City College Campus



Transform Fresno Plan Projects

January 2020



Disclaimer: This map is believed to be an accurate representation of the City of Fresno GIS data, however we make no warranties either expressed or implied for correctness of this data.

- Chinatown Housing Project
- Southwest Fresno Trail
- Chinatown Urban Greening- Pedestrian Pathways, Lighting and Tree Planting
- Annadale Mode Shift
- Mariposa Plaza
- Southwest Urban Forest Expansion-Tree Planting and Urban Farm
- Yosemite Village Permaculture Community Garden
- Park at MLK Magnet Core
- Inside Out Community Garden
- 16,17- Southwest Fresno Community Food Hub
- Fresno City College: West Fresno Satellite
- TCC Connector - Enhanced Bus Service
- Southwest Offsite Improvements

The projects below do not have a specific location and are not depicted on the map.

- 02 - EOC Partnership for Energy Savings and GHG Reductions in SW Fresno
- 03 - GRID Solar Collaborative Single-Family Partnership
- 04 - GRID Solar Collaborative Multi-Family Partnership
- 07 - Clean Shared Mobility Network
- 19 - Chinatown Property Based Improvement District
- 20 - EOC Partnership for Energy Savings and GHG Reductions in SW Fresno: EFMP Plus-Up Vehicle Replacement and Incentives
- WDP - Workforce Development: Low/Zero Emission Truck Driver Training

2. Bicycle Safety

Intent:

More people choosing bikes to get around for health, clean air and climate consideration

Need:

- More safe biking infrastructure
- Safer biking habits

Goal: Bicycle Crash Avoidance

Why Crashes Happen

Why Crashes Happen: Statistics

Approximately 50 percent of all bicycle crashes are falls. They are often caused by road surface hazards — impact with potholes, storm grates, skidding on wet manhole covers, loose gravel or dirt — or by the front wheel being diverted by railroad tracks, expansion joints or other cracks in the pavement. To avoid these, be alert to the hazards. Be careful turning, braking, or accelerating on a slippery surface. Steer around hazards if you can; the rock dodge technique allows you to do this quickly, as necessary.

Breaking Down Crash Statistics

Most motorist/cyclist collisions involving child cyclists are caused by the child. The causes of motorist/

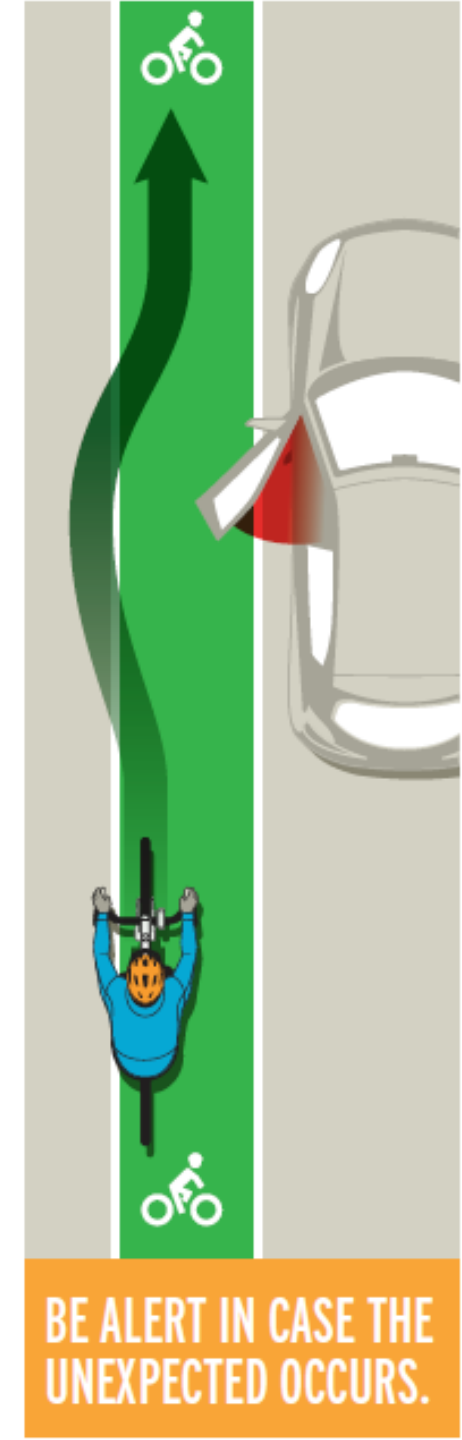
Who is at fault?	Action	%
Bicyclist	Wrong-way riding facing traffic	14%
Bicyclist	Left turn from the right side of the road	11%
Bicyclist	Failure to yield from driveway	9%
Bicyclist	Running a stop sign or signal	8%
Bicyclist	Swerving in front of car	5%
Total Bicyclist		47%
Motorist	Left turn in front of the bicyclist	13%
Motorist	Right turn in front of the bicyclist	11%
Motorist	Running a stop sign or signal	8%
Motorist	Opening car door into path of the bicyclist	7%
Motorist	Failure to yield from driveway	6%
Motorist	Didn't see the cyclist	3%
Total Motorist		48%
Undetermined		5%

Jerrold Kaplan, 1974, William E. Moritz 1996.

The highlighted lines are the only crashes that involve cyclists hit from behind.

Types of Hazards

- Surface: Debris, metal surfaces, esp if wet, “longitudinal” cracks & uneven pavement joints, rails
- Dooring
- Visibility: Time of day, weather, objects blocking your view



Risky Behaviors:

- Riding on sidewalks.
- Riding the wrong way, against traffic.
- Ignoring stop signs and traffic signals (both for people on bikes & in cars).
- Failing to yield when turning (primarily motorists turning left or right across the path of a bicyclist).

Five Layers of Safety

1: Bike control: Don't fall or collide with others

2: Obey the law: Don't cause traffic crashes

3: Positioning: Discourage others' mistakes

4: Avoidance: Avoid others' mistakes

When all else fails and you are faced with a

5: Passive safety: Survive a crash

When you are involved in a crash you need those passive safety devices that will help you survive. This means a helmet, gloves and glasses at a minimum.

Five Layers of Safety

1: Bike control: Don't fall or collide with others

About half of adult cyclist crashes are single rider falls.

Control your bike by smoothly

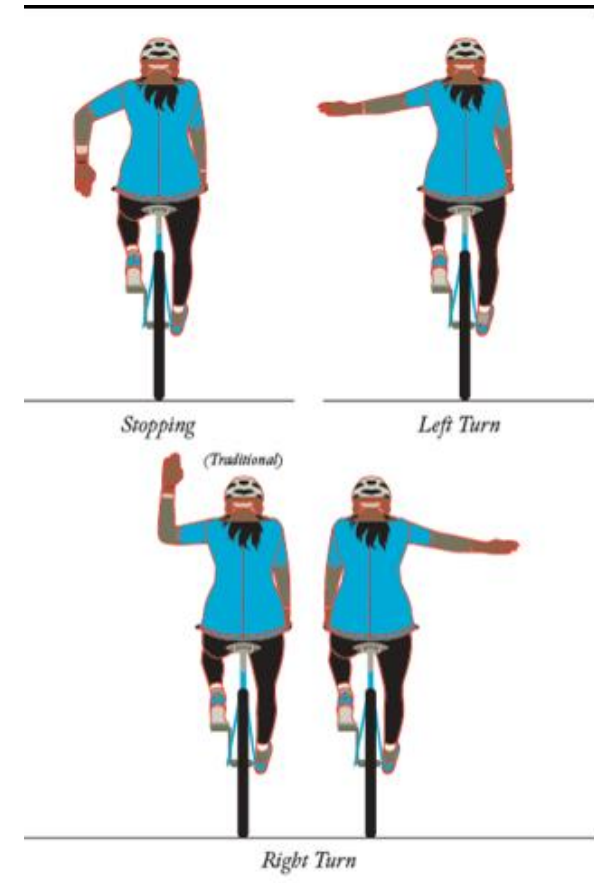
starting

stopping

signaling

maneuvering

You will avoid falling or running into other cyclists, dogs, cars and pedestrians.



Five Layers of Safety

2: Obey the law: Don't cause traffic crashes

For adult cyclists about half of the car/bike crashes are caused by cyclists who make unsafe decisions. Follow traffic laws, obey signs and signals and use correct lanes for turns and through movements so you don't cause a collision.

- ❖ You have the same rights and duties as motorists.
- ❖ Obey all traffic signals and stop signs.
- ❖ Ride with traffic and use the rightmost lane that serves your destination.

Five Layers of Safety

3: Positioning: Discourage others' mistakes

Motorist's unsafe decisions cause about half of the car/bike crashes for adult cyclists.

Know when to control the lane or when to share a lane.

Use your lane position to tell drivers what you are doing and discourage them from making right hooks, left crosses or other bad movements.

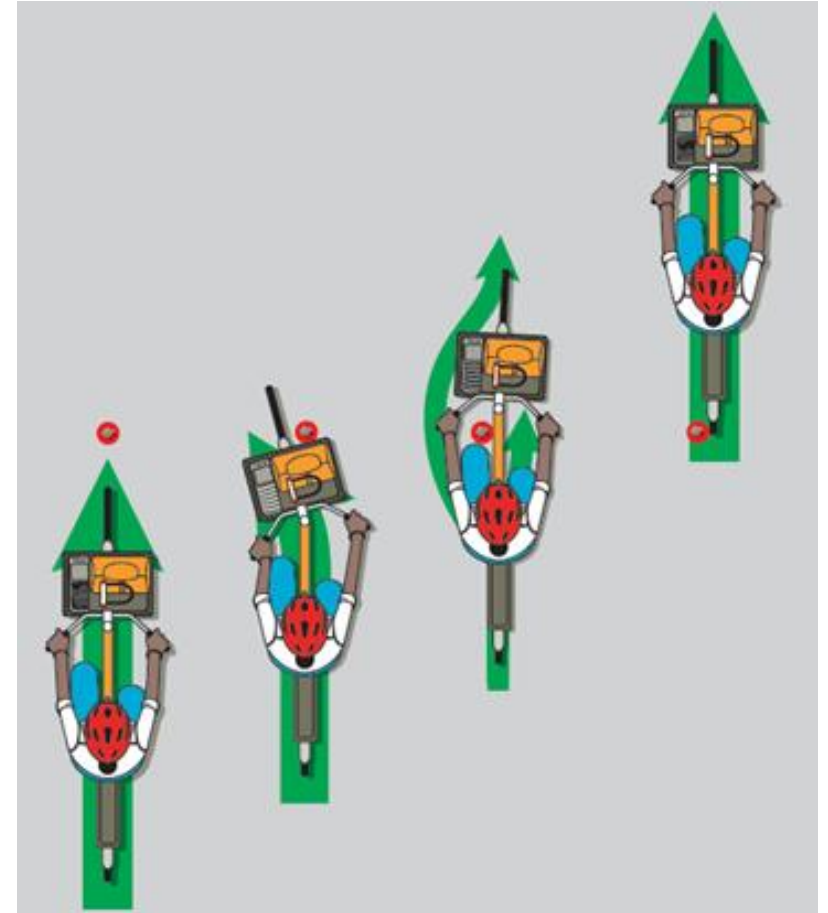
Over 90% of the crashes can be avoided with the first three layers.



Five Layers of Safety

4: Avoidance: Avoid others' mistakes

When all else fails and you are faced with a critical situation you need to understand how to maneuver your vehicle to avoid crashing or at least limit the consequence of a crash.



Five Layers of Safety

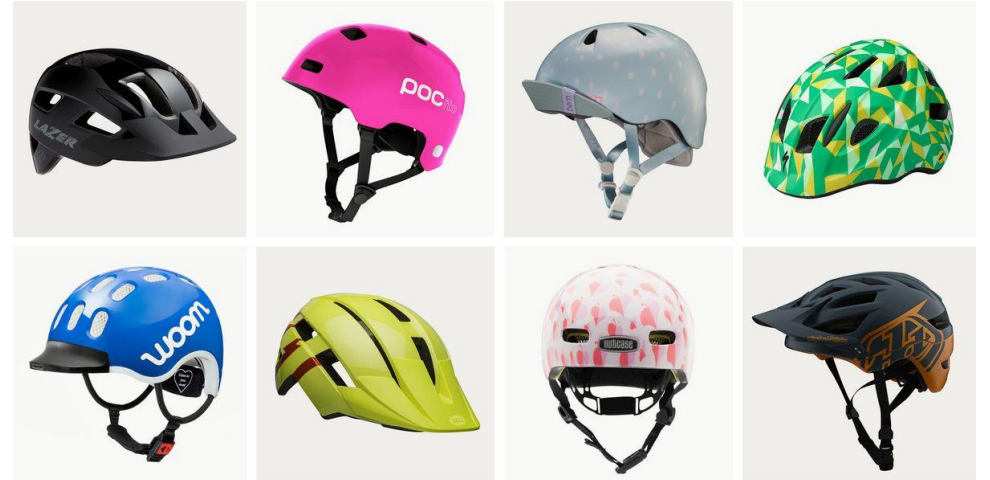
5: Passive safety: Survive a crash

When you are involved in a crash you need those passive safety devices that will help you survive including

helmet

gloves

glasses.





Smart Cycling Resources

**BIKE
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FRESNO



- Online Videos
- Quick Guide
- Tips

CHECK IT OUT
**BIKELEAGUE.ORG/
RIDESMART**



Bicycle and Pedestrian Advisory Committee (BPAC)

Harmanjit Dhaliwal, P.E.

Supervising Professional Engineer

City of Fresno

Department of Public Works, Traffic Operations and Planning



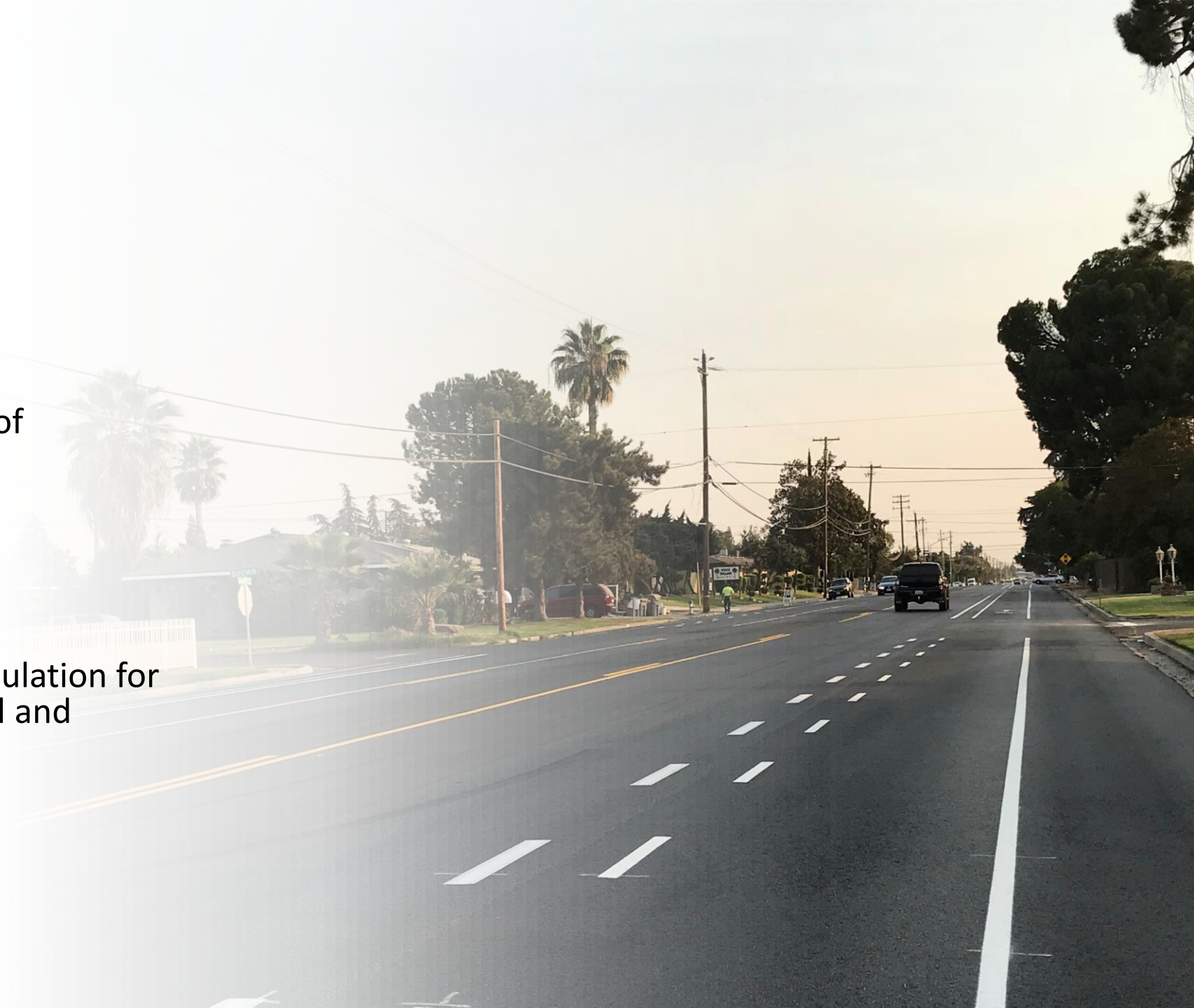
Overview of BPAC

- Formed to provide a means for the Public to help City Staff realize the following goal:
 - Develop and implement strong bicycle policy
 - Bikeways
 - Secure parking
 - Improved access to public transit
 - Intermodal bicycle-carpool coordination
 - Educational programs for cyclists and drivers



Objectives

- Advise and recommend policies of pedestrian and bikeway systems
- Planning
- Development, and
- Maintenance
- Results in safe and enjoyable circulation for both utilitarian commuting travel and recreation within the City.



Representatives

- Mayoral Representative 1: Phil Arballo, Chairman
- Mayoral Representative 2: Melanie Ruvalcaba, Vice Chair
- Council District 1: Vacant
- Council District 2: Matthew Woodward, Member
- Council District 3: Gene Richards , Member
- Council District 4: Vacant
- Council District 5: Lucio Avila , Member
- Council District 6: Steven Bradley , Member
- Council District 7: Susan Smith, Secretary



How to get involved

- Attend Public BPAC Meetings
 - Held over virtual platform until further notice pursuant to Emergency Order No. 2020-12
- Email publicworks@fresno.gov
 - Instructions for comments to be read into the meeting located in BPAC Agenda
- FresGO
 - Allows feedback to the City



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Questions?
Laura Gromis
lgromis@usgbccc.org