STOCKTON BOULEVARD CRASHES

CORRIDOR CRASH SUMMARY (2009-2017)

ALL INJURY CRASHES
- 47
- 5
- 13

FATAL AND SEVERE CRASHES
- 2
- 3
- 2

KEY CHARACTERISTICS

- Four travel lanes plus raised median/center turn lane.
- Class II bicycle lanes along entire corridor.

SPEED LIMIT 35

STOCKTON BOULEVARD CRASHES
CORRIDOR-WIDE CRASH TYPES

VEHICLE

Unsafe Speed
"Unsafe Speed" was the primary violation cited in 23% of all crashes.

Proceeding Straight
More than 60% of drivers were proceeding straight or stopped at the time of the crash.

Broadside
40% of all crashes were broadside, also called T-Bone.

Rear End
Rear End was the second most common crash type - 20% of all crashes.

Left Turns
More than 70% of drivers who were turning at the time of the crash were making a left turn.

Numbers that are turned on represent a location where crash type has occurred at least three times.

PEDESTRIAN

Crossing in Crosswalk
60% of pedestrians hit by drivers were crossing in a crosswalk at the time of the crash.

Senior Victims
60% of pedestrian victims were age 60 or older.

BICYCLE

Broadside
More than 60% of bicycle crashes were broadside, also called T-Bone.

Morning
More than 60% of bicycle crashes occurred before noon.

Right Turns
In nearly half of bike crashes, the driver was making a right turn.

Numbers that are turned on represent a location where crash type has occurred at least three times.
**NORTH STOCKTON BOULEVARD CORRIDOR-WIDE RECOMMENDATIONS**

**What You See Today**

**What's Proposed**

**Corridor-Wide Recommendations**

- **Separated/Buffered Bikeway**
- **Bus Boarding Islands**
- **Advanced Dilemma-Zone Detection**

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*TBD with Stockton Boulevard Master Plan*
NORTH STOCKTON BOULEVARD RECOMMENDATIONS

Location-Specific Recommendations

1. Pedestrian Scramble
2. Pedestrian Signal
3. High Visibility Crosswalk
4. High Traffic Signal
5. High Visibility Crosswalk
6. High Visibility Crosswalk
7. High Visibility Crosswalk
8. High Visibility Crosswalk
9. High Visibility Crosswalk
10. High Visibility Crosswalk
11. High Visibility Crosswalk

Existing Conditions

COUNTY PRIMARY CARE CENTER

WILLIAM LEE COLLEGE PREP

DISTANCE BETWEEN CROSSES WITH IMPROVEMENTS

DISTANCE BETWEEN CROSSES ON-ROAD CYCLE LANE
**NORTH STOCKTON BOULEVARD IMPROVEMENTS**

**Advanced Dilemma-Zone Detection**
- Bicycle Safety
- Signals/Signage

Advanced dilemma-zone detection enhances safety at signalized intersections by modifying traffic control signal timing on the fly to reduce the number of drivers that may have difficulty deciding whether to stop or proceed during a yellow phase. This may reduce rear-end crashes associated with unsafe stopping and angle crashes due to red light running.

**Extend Pedestrian Crossing Time**
- Crossings, Pedestrian Safety

Increases time for pedestrian walk phases, and can better accommodate vulnerable populations such as children and the elderly.

**Bus Boarding Islands**
- Bicycle Safety

Dedicated waiting and boarding areas for passengers that are separated from the sidewalk by a bike channel, eliminating conflicts between transit vehicles and bikes at stops.

**Extend Signal Clearance Time**
- Signals/Signage

Extending yellow and all red time allows drivers and bicyclists to safely cross through a signalized intersection before conflicting traffic movements are permitted to enter the intersection.

**High Visibility Crosswalk**
- Crossings, Pedestrian Safety, Visibility

A crosswalk designed to be more visible to approaching drivers, striped with ladder markings using high-visibility material such as thermoplastic tape instead of paint.

**Prohibit Left Turn**
- Bicycle Safety, Crossings, Pedestrian Safety, Signals/Signage

Bans left turns at locations where a turning vehicle may conflict with pedestrians in the crosswalk or where opposing traffic volume is high. Reduces pedestrian interaction with vehicles when crossing.

**Consolidate Driveways**
- Bicycle Safety, Pedestrian

Reducing the number of driveway entrances/exits through consolidation limits the exposure of bicyclists, pedestrians, and drivers to vehicles entering or exiting driveways, reducing conflicts.

**Intersection Tightening**
- Crossings, Pedestrian Safety, Speed, Visibility

Uses temporary materials like paint, plastic bollards, narrow the street at intersections, which can create a shorter crossing for pedestrians and slows vehicles approaching the intersection and turning.

**Leading Pedestrian Interval**
- Crossings, Pedestrian Safety, Visibility

Traffic signals timed to allow pedestrians a short head start in crossing an intersection to minimize conflicts with turning vehicles and improve pedestrian visibility.

**New Traffic Signal**
- Signals/Signage

New traffic signals help organize travel of all modes at an intersection, limiting interactions between vehicles, pedestrians, and bicyclists with conflicting movements. New signals can have a traffic calming effect on long, high-speed straightaways.

**Red Light Camera**
- Signals/Signage

Red light cameras can be used for automated enforcement to issue citations to drivers running red lights at signalized intersections, and may discourage this behavior.

**Pedestrian Scramble**
- Crossings, Pedestrian Safety, Signals/Signage

Restricts vehicular movements to provide an exclusive signal phase allowing pedestrians to cross in all directions, including diagonally.

**Dual Curb Ramps**
- Pedestrian Safety

Dual curb ramps improve ADA accessibility at all intersection approaches so that pedestrians with mobility challenges, or those pushing carts or strollers, can safely enter and exit all crosswalks.
Relocate Crosswalk

Crossings, Pedestrian Safety, Visibility

Relocating existing crosswalks can help improve pedestrian visibility, shorten crossing distances, and minimize conflicts with vehicles. In some cases, crosswalks currently located between two legs of an offset intersection may be moved to the far side of the intersection to minimize the number of conflicting vehicle turning movements.

Road Diet

Speed, Pedestrian Safety, Bike Safety, Crossings

Road diets generally reassign space in the roadway from vehicle travel lanes to create room for bicycle facilities, wider sidewalks, or center turn lanes. Road diets optimize street space to benefit all users by improving the safety and comfort of pedestrians and bicyclists, and reducing vehicle speeds and the potential for rear end collisions.

Separated/Buffered Bikeway

Bike Safety

Designated bicycle lanes, separated from vehicle traffic by a physical barrier, usually bollards, landscaping, or parked cars. These facilities can increase safety by decreasing opportunities for collisions with over-taking vehicles, and reducing the risk of dooring.

Shorten Signal Cycle Length

Signals/Signage

Reducing the cycle length at intersections may reduce the delay experienced by vehicles, bicyclists, and pedestrians. When delay is significant, road users are more inclined to ignore signal indications.