



City of
Oakland

Department of
Transportation

Safe Streets
Division

Bicycle &
Pedestrian Program

January 2025

West St Road Diet Evaluation



Full report at: www.oaklandca.gov/projects/west-street-road-diet-project

Project Elements

Corridor Wide Three to Two Lane Road Diet – converted the two-way center turn lane to a median to reduce conflicts and use of the turn lane for passing and create space for additional safety improvements.

(Before)



(After)



Speed Cushions - like speed bumps they reduce vehicle speeds but with gaps for emergency vehicles.



Concrete Pedestrian Safety Islands – allow pedestrians to cross one lane at a time, encourage drivers to stay in their lane, and reduce turning speeds.



Protected Intersections – separate vehicles from cyclists, improve visibility, slow down turning vehicles, and reduce crossing distances for cyclists and pedestrians.



Raised Intersections – like speed bumps, they slow vehicles and encourage drivers to stop at stop signs.





Protected Intersections



Pedestrian Safety Islands

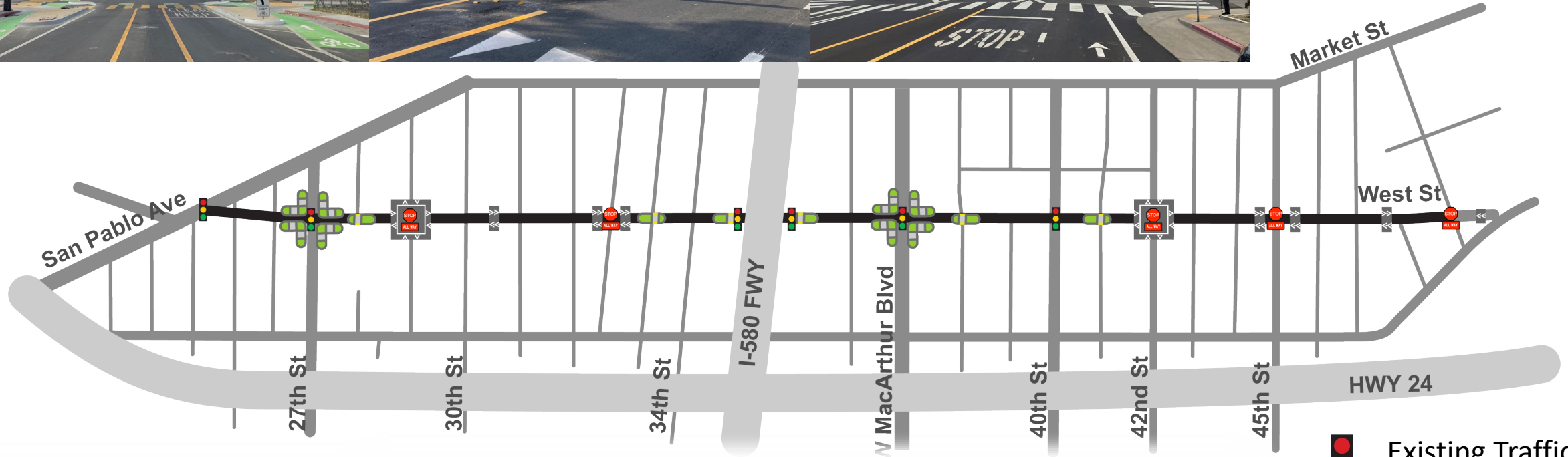


Raised Intersections

Project Elements



N →



Speed Cushion/Hump



Three to Two Lane Road Diet



Existing Traffic Signal



Existing All-Way Stop Sign



Before

After

Implemented in 2021-2022

Timeline

1997, 2007
4-to-3 lane road
diet implemented

2017
This project
Included in
Capital
Improvement
Program

2019
Project first
presented to
public for
feedback

2020
Feasibility Study
completed

2020
Mailer sent to
over 1,000
addresses along
corridor
requesting
feedback

2020
Project outreach
to community
partners, schools,
neighborhood
councils, etc.

2021
Design modified
to include speed
cushions, raised
intersections, and
planting in
pedestrian safety
islands based on
community
feedback

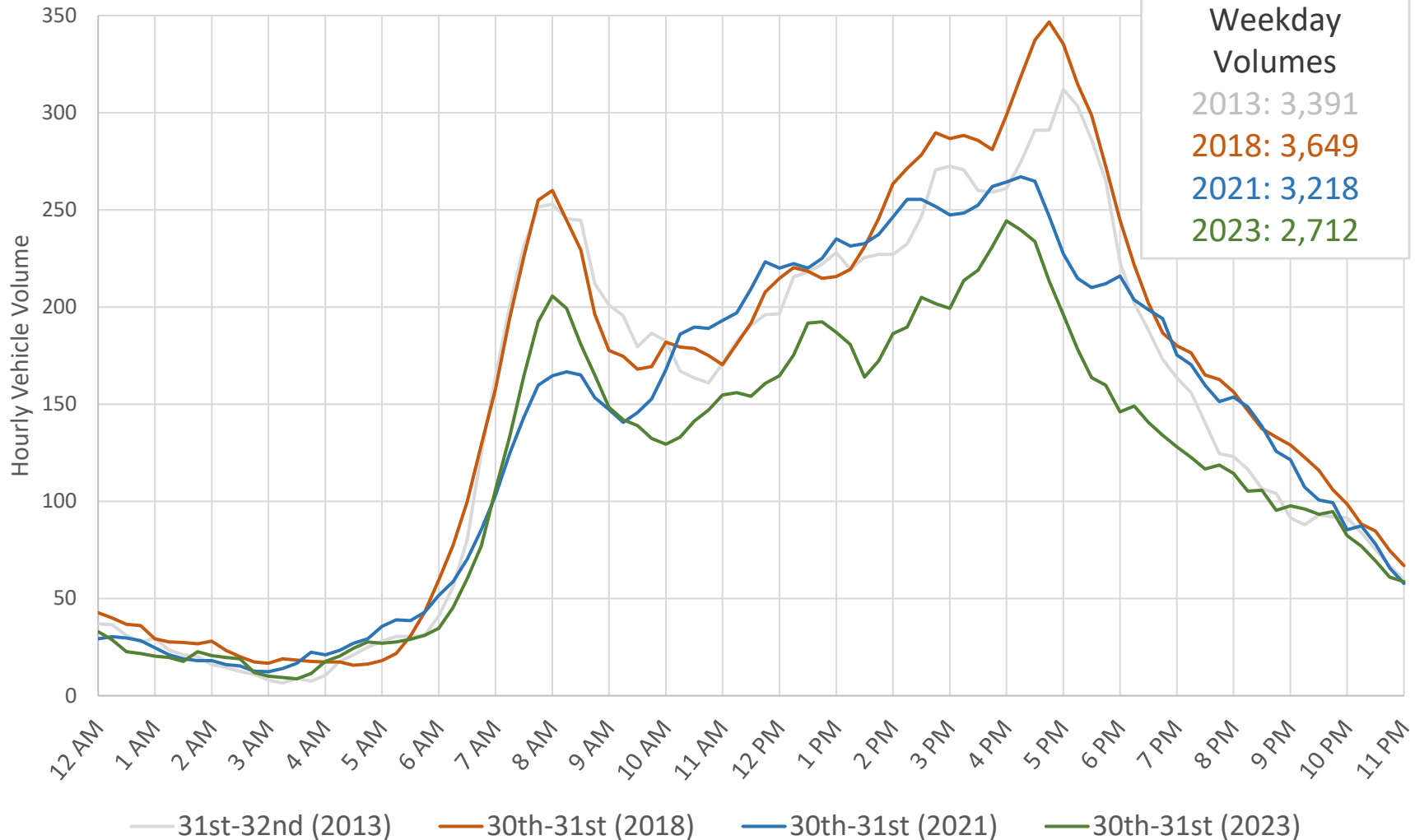
2021
Design finalized,
construction
begins on curb
ramps and
sidewalks

2022
Construction of
speed cushions,
raised
intersections,
repaving,
pedestrian safety
islands, striping

2025
Post-project
evaluation
completed

Vehicle Volumes

Weekday Volumes (San Pablo Ave - W MacArthur Blvd)

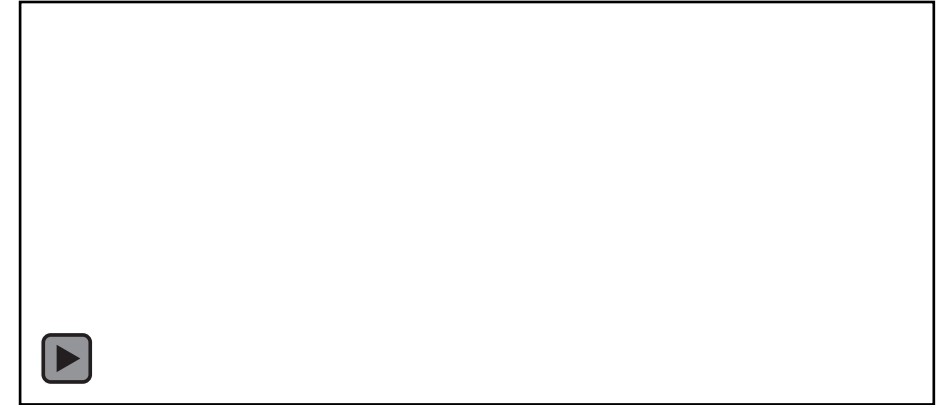


- Between 2018 (pre-project & pre-pandemic) and 2023, the average number of vehicles decreased by 26%.
- Because the project was built during the COVID-19 pandemic, it's difficult to separate project-related from pandemic-related impacts.

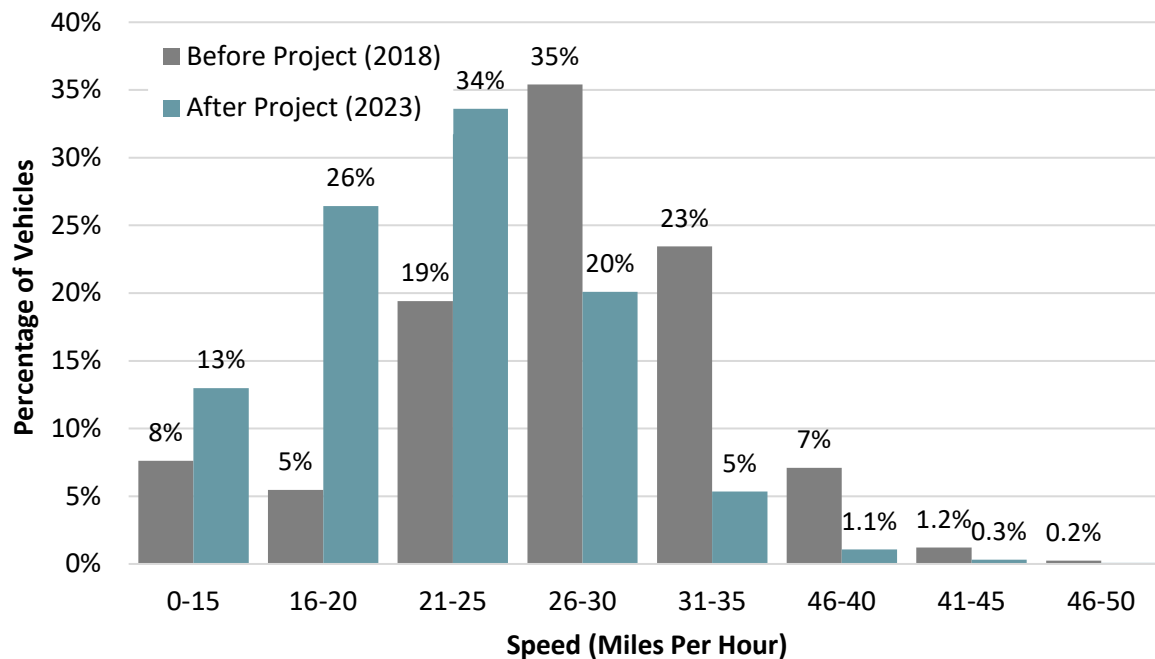
Motorist Speeding

- The percentage of people driving in every 5-mile increment over 25MPH fell after the project was implemented.

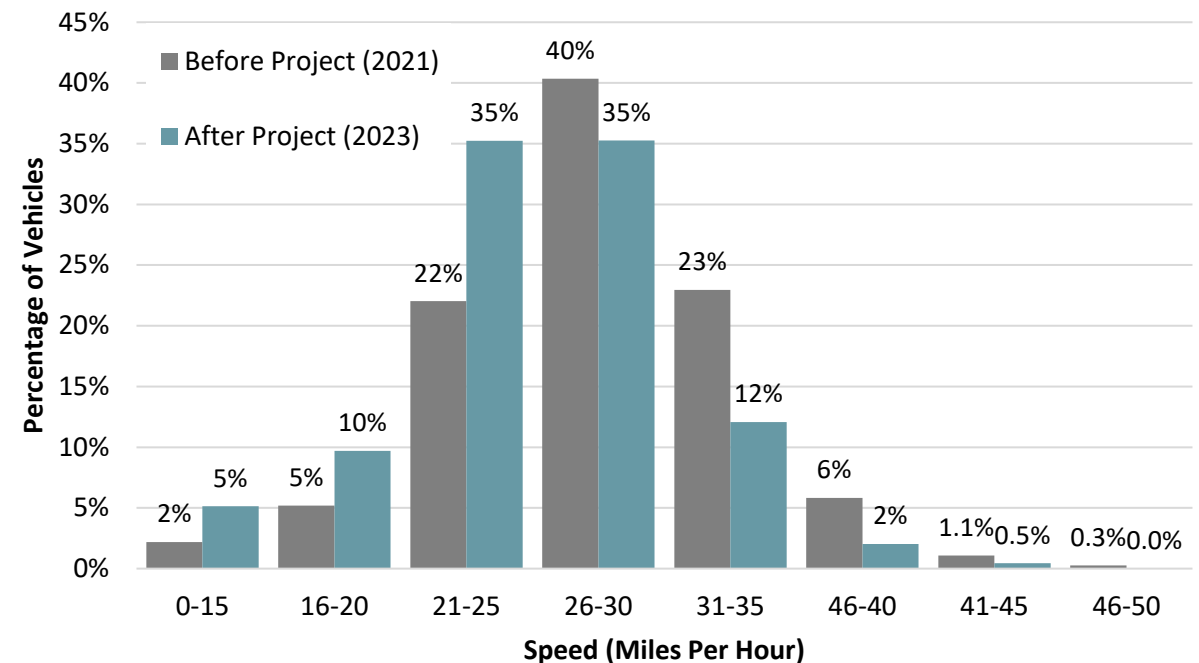
Pre-Project Video from Resident showing an all-way stop intersection (5/2020)



Vehicle Speeds on West St between 30th St & 31st St



Vehicle Speeds on West St between 43rd St and 44th St



Vehicle Speeds

- Prevailing **vehicle speeds decreased after the project was built** on both sides of the corridor from above to below the 30 MPH speed limit.
- The percentage of drivers going over the 30 MPH speed limit **dropped from 32% to 6% after the project was built** (2018 vs. 2023) on West between 30th St and 31st St.
- The number of drivers going over 40 MPH rose between 2018 and 2021 (following pandemic related trends of more speeding) before falling after the project's implementation.

| Location on West St | Year | Average Speed | 85% of Cars at or Below | % Over 30 MPH | % Over 40 MPH | # Over 40 MPH Per Day |
|---------------------------|---------------|---------------|-------------------------|---------------|---------------|-----------------------|
| Between 43rd St & 44th St | 2021 (Before) | 28 MPH | 33 MPH | 30% | 1.5% | 39 |
| | 2023 (After) | 25 MPH | 30 MPH | 15% | 0.6% | 15 |
| Between 30th St & 31st St | 2018 (Before) | 26 MPH | 33 MPH | 32% | 1.5% | 56 |
| | 2021 (Before) | 26 MPH | 33 MPH | 25% | 2.1% | 64 |
| | 2023 (After) | 21 MPH | 28 MPH | 6% | 0.4% | 11 |

Speed Cushion Compliance

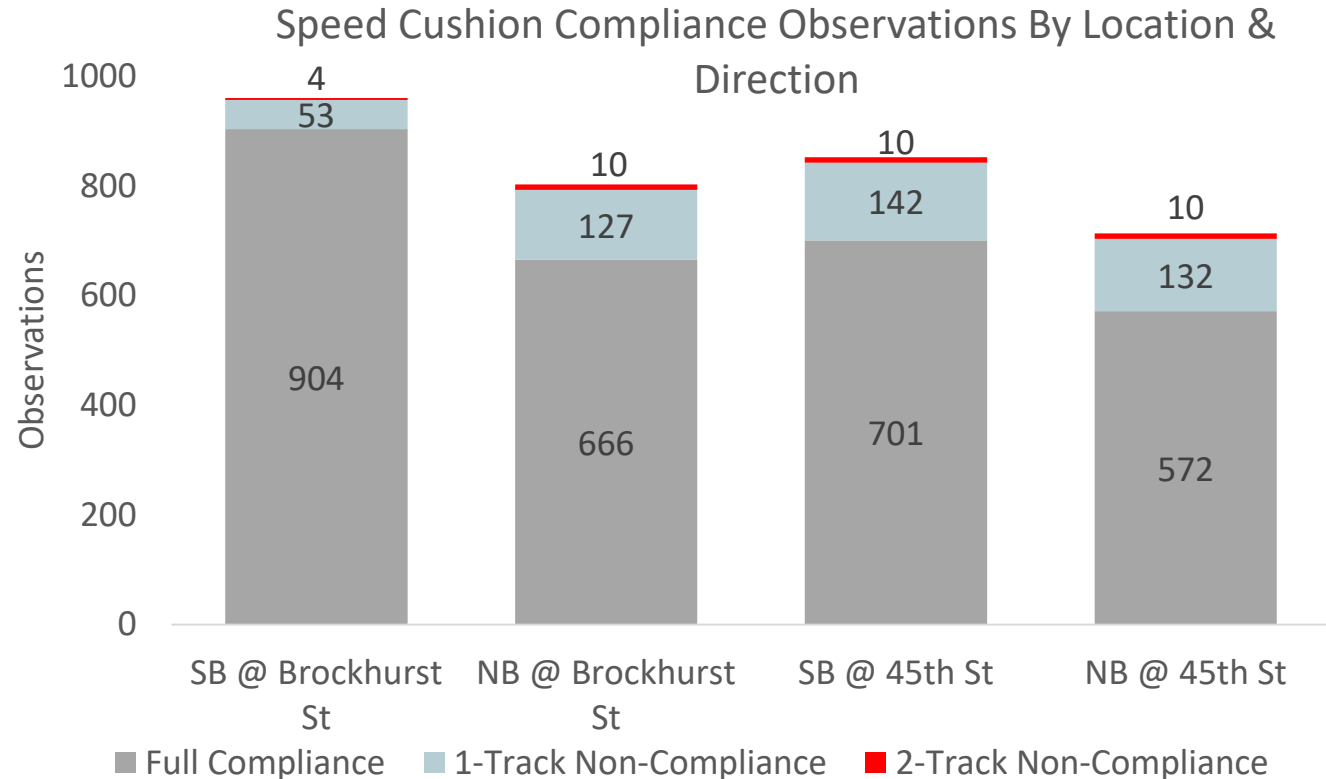


Speed cushions: undulations in the roadway, like speed humps with two lengthwise gaps for emergency vehicles.

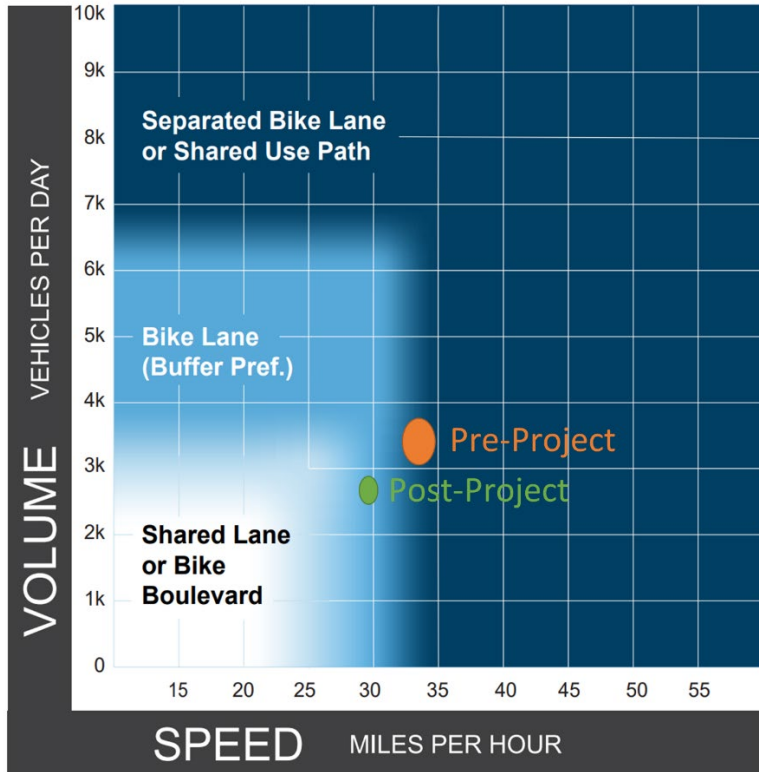
- The project installed 6 speed cushions.
- The gaps in the speed cushions allow emergency vehicles to pass with minimal slowing.
- The gaps were placed in the middle of the street between the two lanes to deter non-emergency vehicles from using them.

Compliance with speed cushions was high

- 14% of motorists deviating slightly to use one emergency vehicle pass-through
- 1% of motorists deviating from the travel lane enough to use both emergency vehicle pass-throughs.



Bicycling Safety & Comfort



The project made West St a more suitable bikeway connection by reducing vehicle volumes and speeds.



The additional space created by removing the center turn lane was used to upgrade the standard bike lanes to buffered bike lanes.

Concrete protected bike lanes at two key intersections with perpendicular bike lanes (27th St and W MacArthur Blvd) added physical barriers to give cyclists a protected space to wait.



Pedestrian Safety and Comfort

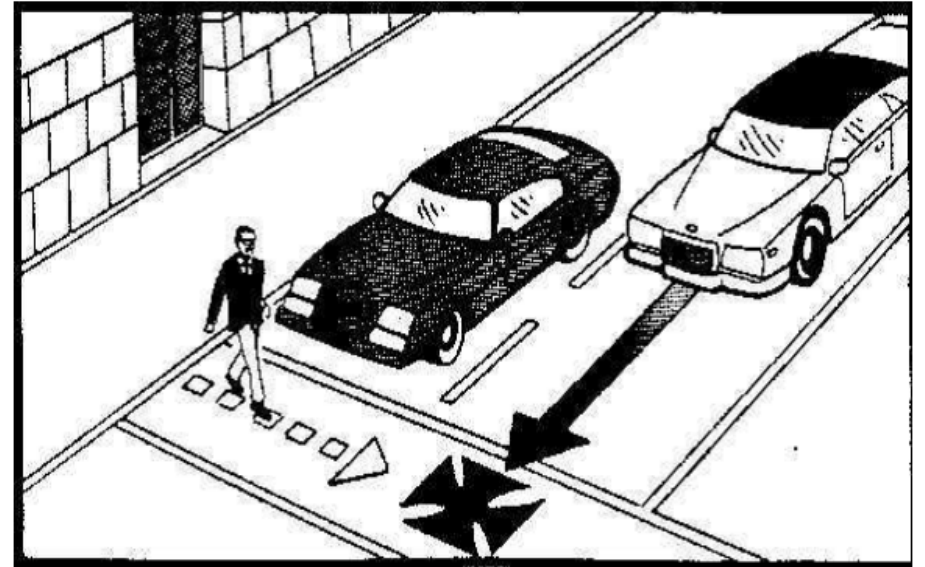
The project improved pedestrian safety by:

- Increasing buffer space between sidewalks, bike lanes, and vehicle lanes
- Shortening the distance pedestrians need to cross vehicle traffic
- Reducing the number of conflicting movements between users (by removing turn lanes)



- Adding concrete pedestrian safety islands at six intersections.

- Improving crossings and reducing the number of uncontrolled multi-threat crossings to zero.



Multi-threat crossings: Crossings where a car yielding in one lane may obstruct the sightline between the crossing pedestrian and a vehicle in the adjacent lane.