



SFMTA

Red light running collisions and the red light camera program

SFMTA Board of Directors

Policy and Governance Committee

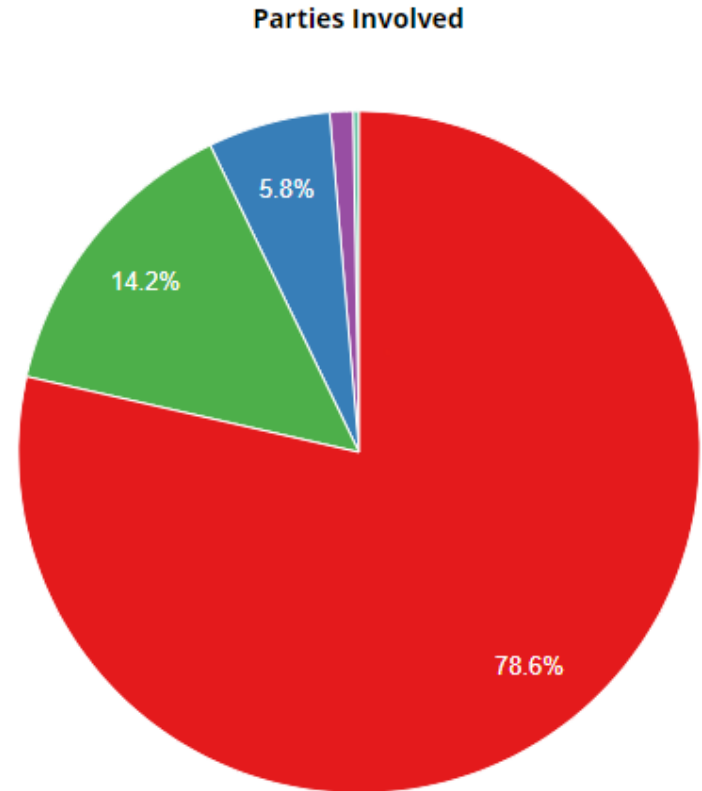
October 22, 2019

Crashes Due to Violation of Red Lights (CVC 2453A) 2014-2018

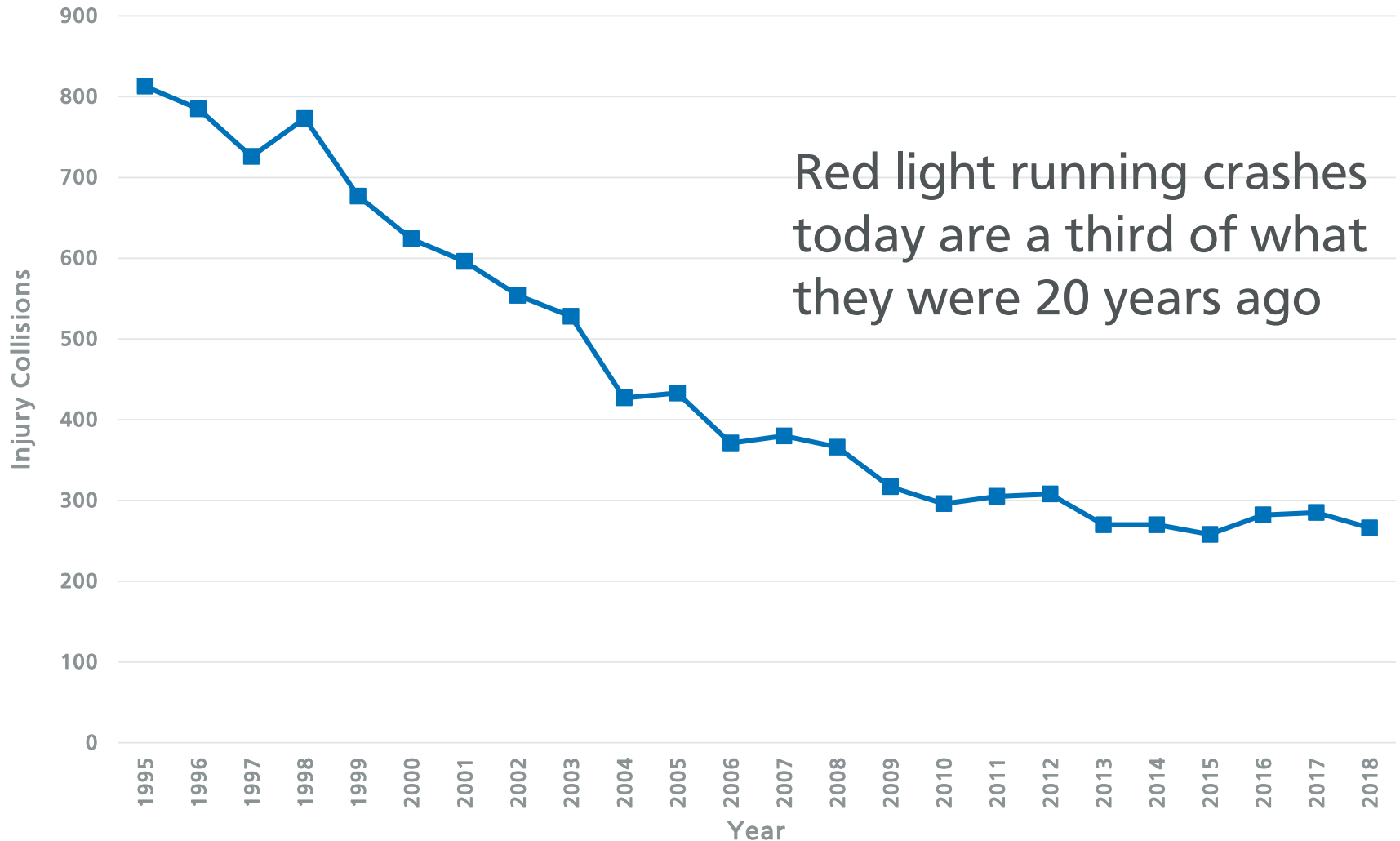
- Third most common violation type for injury crashes after unsafe speed and violation of pedestrian right-of-way (8.6 percent of crashes)

By mode:

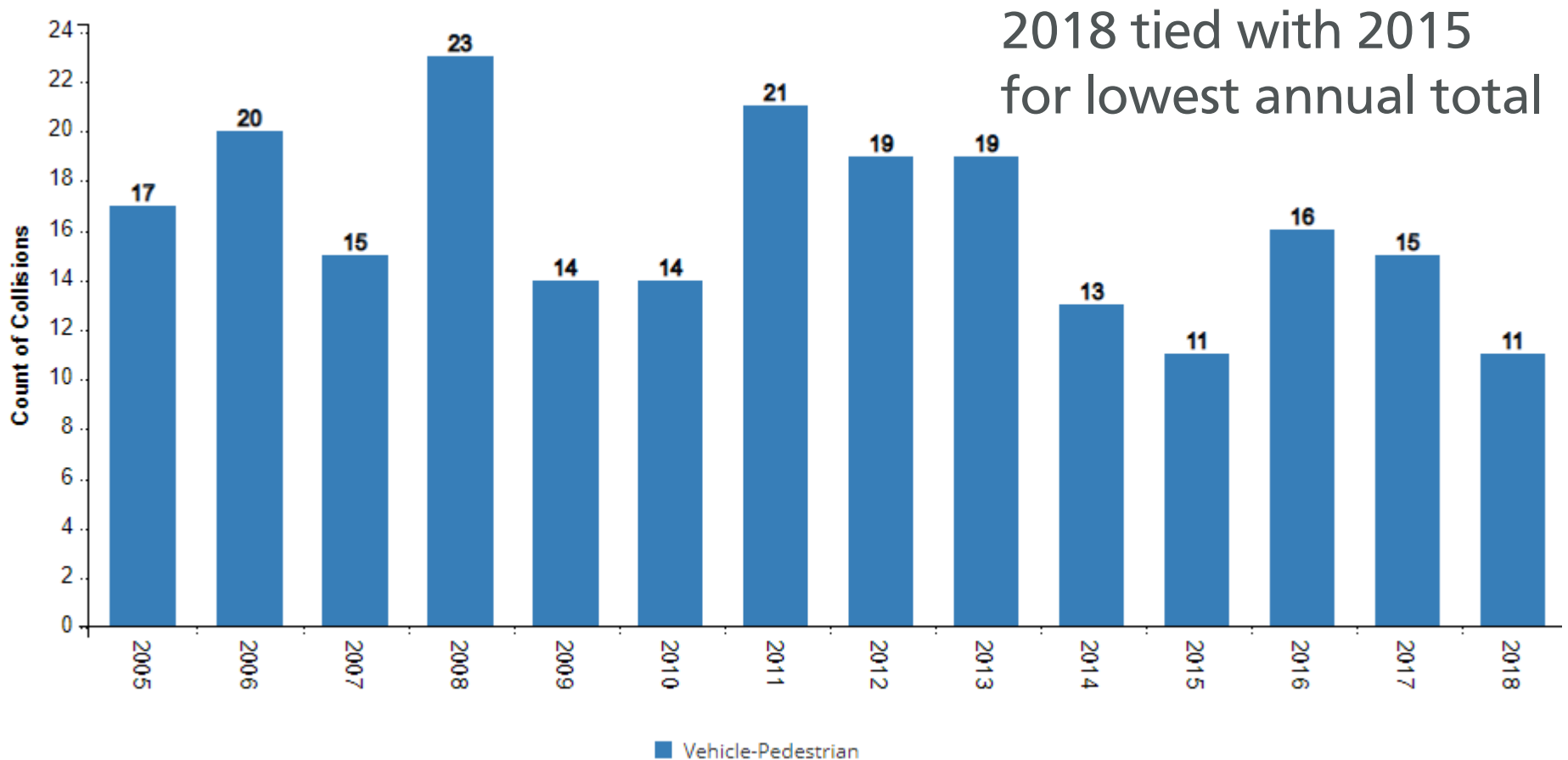
- 79 percent of crashes are vehicles only (1081)
- 14 percent involve vehicles and bicycles (196)
- 6 percent involve vehicles and pedestrians (80)



Crashes Due to Violation of Red Lights (CVC 2453A) 1995-2018



Pedestrian Involved Motor Vehicle Red Light Running Collisions 2005-2018

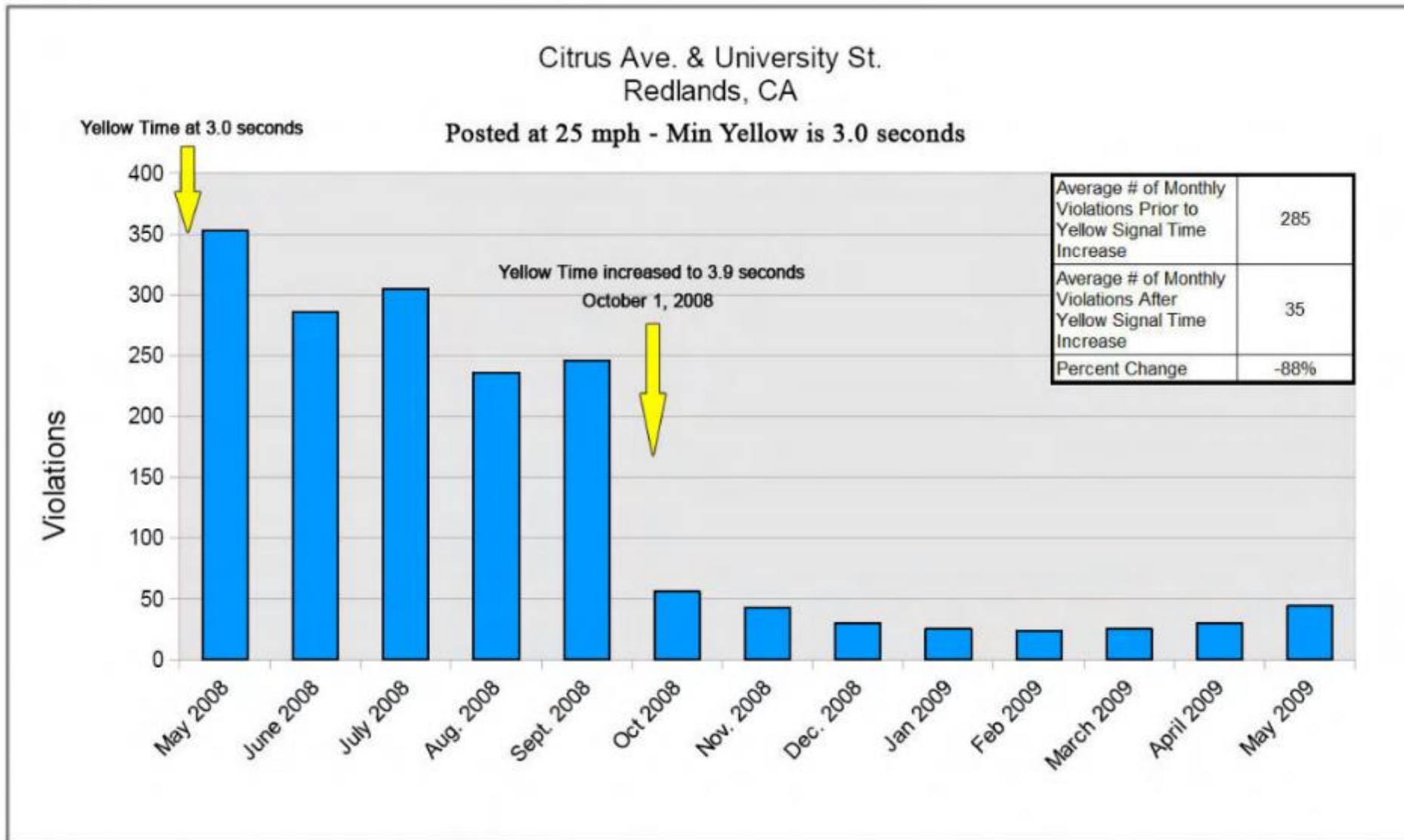


Tools to Reduce Red Light Running: Signal Timing

- All-red pauses to help vehicles clear intersection after yellow light
- Coordination of adjacent signals minimize stopping
- SFMTA use yellow lights longer than state minimums

Posted Speed	Speed Used for Yellow	Yellow Using State Equation	2014 San Francisco Yellow Light
25 MPH	35 MPH	3.6 seconds	4.0 seconds
30 MPH	40 MPH	3.9 seconds	4.0 seconds
35 MPH	45 MPH	4.3 seconds	4.5 seconds
40 MPH	50 MPH	4.7 seconds	5.0 seconds

Redlands, California - Yellow Change Example



Tools to Reduce Red Light Running: Signal Visibility Upgrades

- SFMTA has long-standing capital program to upgrade older traffic signals
- Signal visibility improvements:
 - Increasing signal head sizes
 - Installing signals over the streets (mast arms)
 - Improving location of signal indications





**Turk at Divisadero
before 2014**



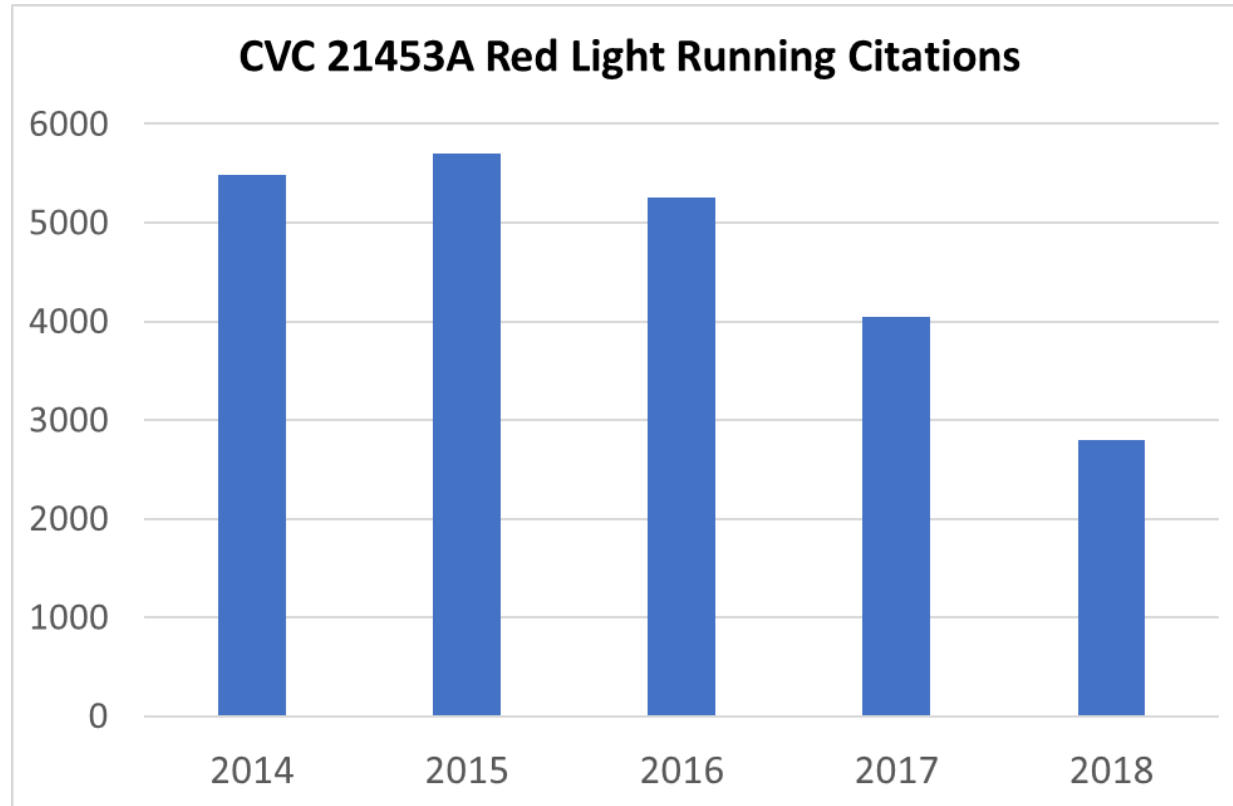
**Turk at Divisadero
after 2014**

Changes in Injury Collisions after South of Market 1990s Traffic Signal Upgrades

Street (1 st to 10 th Sts)	1996 to 1998 Before Upgrades	1999 to 2001 After Upgrades	Change
Bryant Street	118	57	- 51%
Folsom Street	199	65	- 67%
Harrison Street	221	125	- 43%
Howard Street	186	97	- 48%
TOTAL	724	344	- 52%

Tools to Reduce Red Light Running: San Francisco Police Department Enforcement

- Red light running is one of SFPD's "Focus on the Five" citation categories
- Red light citations totals 2014-2018:



Tools to Reduce Red Light Running: Red Light Camera Program

- Program started as a pilot in 1996
- Currently undergoing \$2.5 million upgrade to digital technology
- 19 intersection approaches, including 6 new approaches
- Locations selected based on incidence of red light violation crashes and meeting current engineering design standards
- SFMTA will identify additional funding to support the red-light camera expansion to new sites



Current Camera Enforcement Program

Intersections to be upgraded with new equipment:

1. 6th St at Bryant St (eastbound, southbound)
2. 19th Ave at Sloat Blvd (northbound, southbound)
3. Fell St at Masonic Ave (westbound)
4. Hayes St at Polk St (southbound, westbound)
5. Market St at Octavia Blvd (eastbound illegal right turns)
6. Oak St at Octavia Blvd (eastbound, northbound)
7. Park Presidio Blvd at Lake St (southbound)
8. So. Van Ness Ave at 14th St (northbound)

Intersections to be newly enforced (2019):

9. 4th St at Harrison St (southbound, westbound)
10. 6th St at Folsom St (southbound)
11. 8th St at Folsom St (southbound)
12. Divisadero St at Bush St (northbound)
13. Van Ness Ave at Broadway (southbound left turn lanes)
14. Oak St at Octavia Blvd (eastbound right-turn lanes)



Top Red Light Running Citywide Locations

Intersection	2015-2018 CVC 21453A Collisions	Actions pending and monitoring
Gough and Market	15	Engineering changes pending
Broadway and Van Ness	12	New camera and engineering changes pending
13 th and South Van Ness	11	Engineering changes pending
Hayes and Van Ness	11	Engineering changes pending
Larkin and Post	11	Engineering changes completed and pending
Fell and Masonic	10	Current camera site; possible expansion approach
Bush and Divisadero	10	New camera pending
Evans and Phelps	10	Engineering changes completed and pending



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Thank you

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