

Automated Photo Enforcement Annual Report 2015

March 28, 2016

Pursuant to California Vehicle Code section 21455.5, the San Francisco Municipal Transportation Agency is submitting an Automated Photo Enforcement Program Annual Report for 2015. This Annual Report contains the following information:

- 1. The number of alleged violations captured by the system: 33,049 alleged automated enforcement violations were captured in 2015, as shown in the chart below.
- 2. The number of citations issued by a law enforcement agency based on information collected from the automated traffic enforcement system: 11,851 automated enforcement citations were issued in 2015, as shown in the chart below.
- 3. For citations identified in item #2, the number of violations that involved traveling straight through the intersection, turning right, and turning left: Our vendor, Xerox, does not track whether a violation involved traveling straight through the intersection, turning right, or turning left. In San Francisco there are policies in place (such as minimum violation speed) to prevent the system from citing legal right turns on a red light.
- 4. The number and percentage of citations that are dismissed by the court: The Court was unable to provide data for November and December 2015 due to their switch to a new computer system at the end of 2015. The SFMTA will submit a revised annual report if and when the data becomes available. From January to October 2015, 549 citations were dismissed, as shown in the chart below, which represents 5.49% of citations issued from January to October (10,001).
- 5. The number of traffic collisions at each intersection that occurred prior to, and after the installation of, the automated traffic enforcement system: Beginning on page 3 are graphs showing the number of injury collisions before and after installation of red light cameras at each intersection.

Alleged Violations Captured	Number of Citations Issued	Number of Citations Dismissed by the Court
2,686	1,024	73
2,425	947	38
2,656	1,053	32
2,866	1,096	19
2,692	894	41
3,023	945	47
2,958	918	53
2,860	905	136
2,839	1,050	73
3,098	1,169	37
2,486	957	data not available
2,460	893	data not available
22.040	11,851	549 Jan-Oct (or 5.49% of citations issued Jan-Oct)
	2,686 2,425 2,656 2,866 2,692 3,023 2,958 2,860 2,839 3,098 2,486	Captured Issued 2,686 1,024 2,425 947 2,656 1,053 2,866 1,096 2,692 894 3,023 945 2,958 918 2,860 905 2,839 1,050 3,098 1,169 2,486 957 2,460 893

Engineering Changes at Red Light Camera Enforced Intersections

19th Avenue and Sloat Boulevard

Installation Dates: January 1997 (Northbound), February 1997 (Southbound)

Directions Enforced: Northbound and Southbound 19th Avenue

Date of Major Signal Upgrade: April 1999 Date of Yellow Light Changes: April 1998

Other signal modifications of note: April 2000, all-red added after Sloat Boulevard phase, pedestrian signals installed crossing 19th Avenue. August 2003, all-red added after 19th Avenue phase. November 2007, lagging eastbound left turn arrow installed.

Figure 2: 19th Avenue and Sloat Boulevard Injury Broadside Collisions (1995-2015)

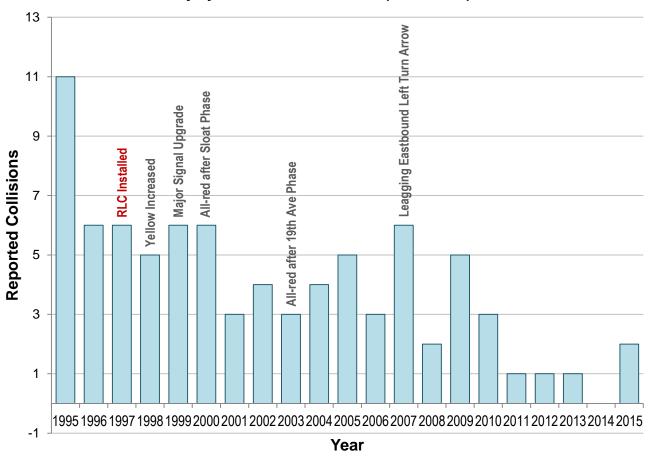


Figure 2: 19th Avenue and Sloat Boulevard Injury Broadside Collisions (1995-2013)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	11	6	6	5	6	6	3	4	3	4	5	3	6	2	5	3	1	1	1	0	2

1st and Folsom Streets

Installation Dates: March 2000

Directions Enforced: Southbound 1st Street Date of Major Signal Upgrade: October 1998 Date of Yellow Light Changes: October 1998

Other signal modifications of note: Pedestrian signals added August 2006

Figure 3: 1st and Folsom Streets Injury Broadside Collisions (1995-2015)

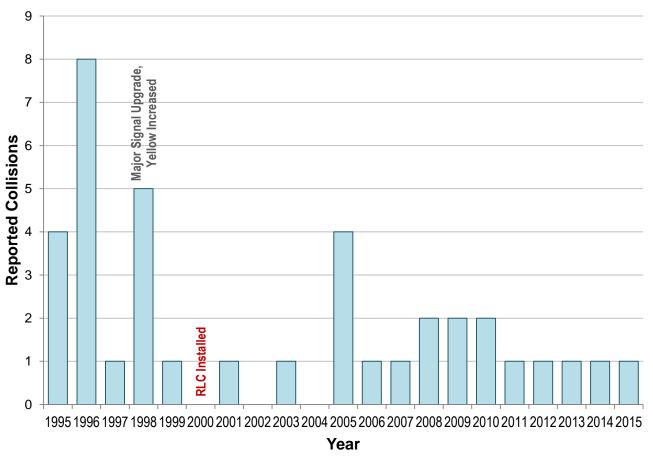


Figure 3: 1st and Folsom Streets

Injury Broadside Collisions (1995-2013)

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Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	4	8	1	5	1	0	1	0	1	0	4	1	1	2	2	2	1	1	1	1	1

3rd and Harrison Streets

Installation Dates: February 2001

Directions Enforced: All

Date of Major Signal Upgrade: July 1998 Date of Yellow Light Changes: March 2000

Other signal modifications of note: Pedestrian signals added March 2000

Figure 4: 3rd and Harrison Streets Injury Broadside Collisions (1995-2015)

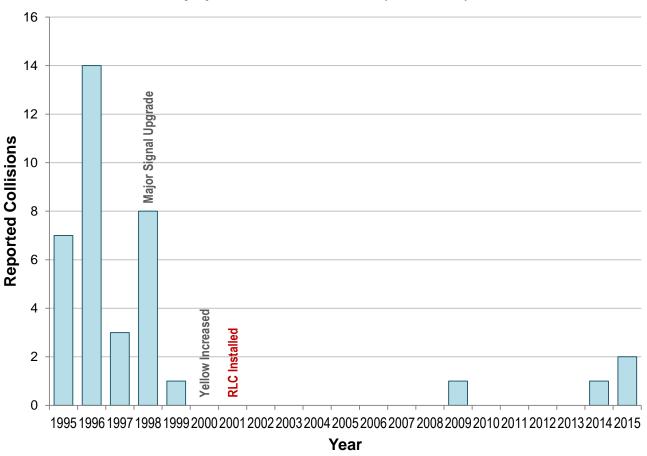


Figure 4: 6th and Bryant Streets Injury Broadside Collisions (1995-2013)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	7	14	3	8	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2

4th and Howard Streets

Installation Dates: June 2004

Directions Enforced: Westbound Howard Street

Date of Major Signal Upgrade: March 1999 and February 2003

Date of Yellow Light Changes:

Other signal modifications of note: All-red added February 2003

Figure 5: 4th and Howard Streets Injury Broadside Collisions (1995-2015)

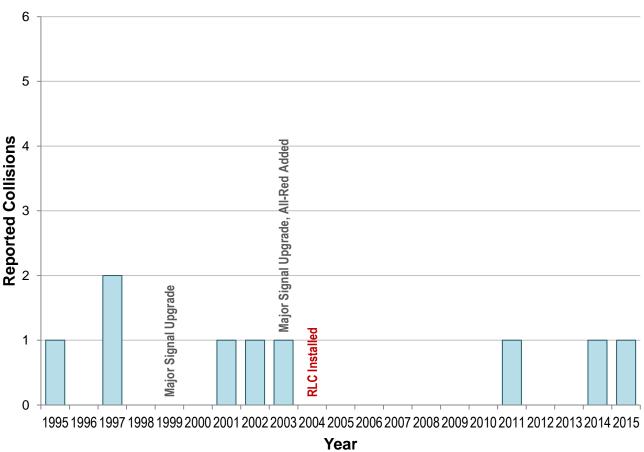


Figure 5: 4th and Howard Streets
Injury Broadside Collisions (1995-2013)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Tota	1	0	2	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0	0	1	1

5th and Harrison Streets

Installation Dates: February 2001

Directions Enforced: Southbound 5th Street, Westbound Harrison Street

Date of Major Signal Upgrade: July 1998 Date of Yellow Light Changes: July 2000

Other signal modifications of note: September 2004, all-red added after 5th St phases.

November 2005, all-red added after Harrison St and offramp phases.

Figure 6: 5th and Harrison Streets Injury Broadside Collisions (1995-2015)

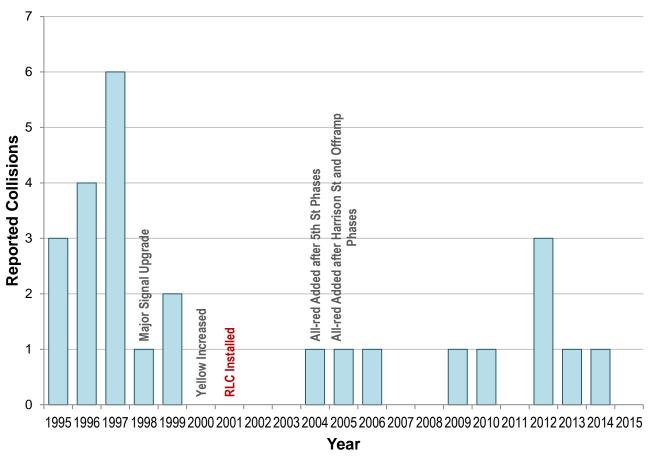


Figure 6: 5th and Harrison Streets Injury Broadside Collisions (1995-2013)

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Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	3	4	6	1	2	0	0	0	0	1	1	1	0	0	1	1	0	3	1	1	0

5th and Howard Streets

Installation Date: November 1996

Directions Enforced: Westbound Howard Street Date of Major Signal Upgrade: March 1999

Date of Yellow Light Changes: December 1997, February 2012

Other signal modifications of note:

Figure 7: 5th and Howard Streets Injury Broadside Collisions (1995-2015)

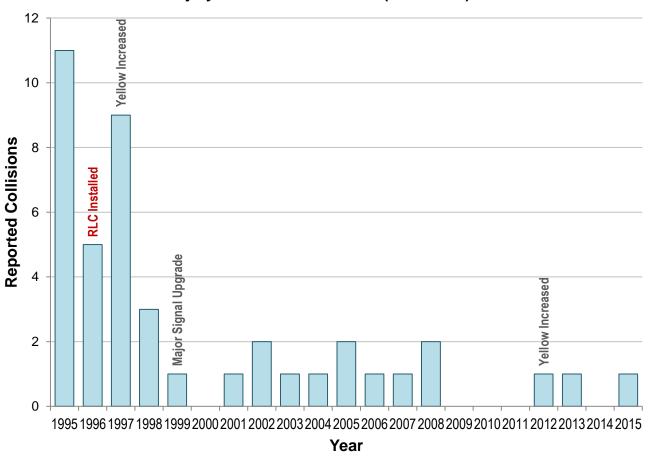


Figure 7: 5th and Howard Streets Injury Broadside Collisions (1995-2013)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	11	5	9	3	1	0	1	2	1	1	2	1	1	2	0	0	0	1	1	0	1

5th and Mission Streets

Installation Dates: October 2000 (Northbound), November 2000 (Southbound and Westbound)

Directions Enforced: Northbound and Southbound 5th Street, Westbound Mission Street

Date of Major Signal Upgrade: April 1999 and October 2003

Date of Yellow Light Changes: April 1999

Other signal modifications of note: All-red added September 1997 and increased October 2003.

Figure 8: 5th and Mission Streets Injury Broadside Collisions (1995-2015)

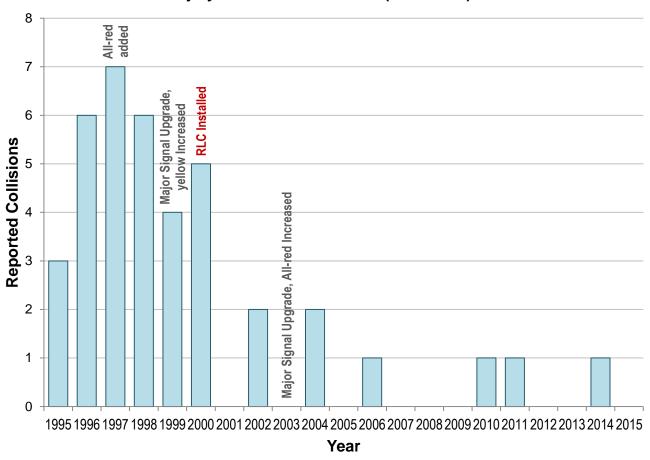


Figure 8: 5th and Mission Streets Injury Broadside Collisions (1995-2013)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	3	6	7	6	4	5	0	2	0	2	0	1	0	0	0	1	1	0	0	1	0

6th and Bryant Streets

Installation Dates: December 1999 (Northbound), February 2000 (Southbound) and

April 2000 (Eastbound)

Directions Enforced: All

Date of Major Signal Upgrade: September 1997

Date of Yellow Light Changes: July 2000, eastbound and southbound. May 2004

northbound.

Other signal modifications of note: Southbound left turn arrows added September

Figure 9: 6th and Bryant Streets **Injury Broadside Collisions (1995-2015)**

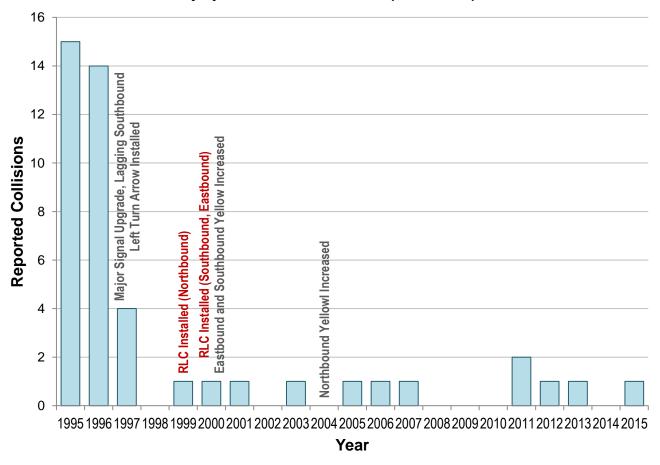


Figure 9: 6th and Bryant Streets Injury Broadside Collisions (1995-2013)

1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 1995 1996 1997 Year Total 15 14 4 0 1 1 0 0 1 1 0 0 0 2

0

7th and Mission Streets

Installation Dates: September 1997 (Northbound), November 1998 (Westbound)

Directions Enforced: Northbound 7th Street, Westbound Mission Street

Date of Major Signal Upgrade: August 2002 Date of Yellow Light Changes: August 1998

Other signal modifications of note:

Figure 10: 7th and Mission Streets Injury Broadside Collisions (1995-2015)

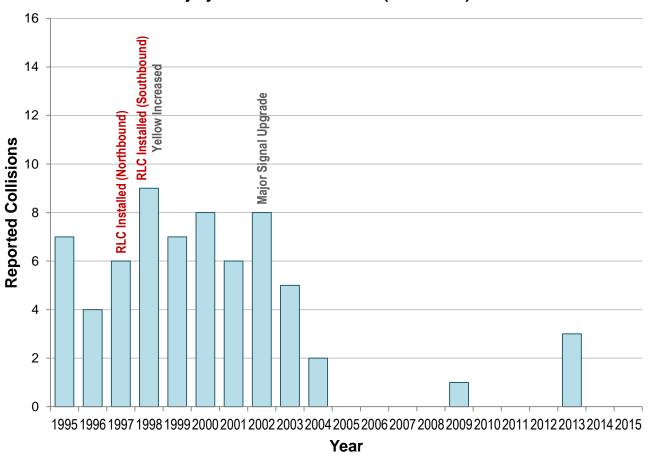


Figure 10: 7th and Mission Streets Injury Broadside Collisions (1995-2013)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	7	4	6	9	7	8	6	8	5	2	0	0	0	0	1	0	0	0	3	0	0

7th and Mission Streets shows how a red light camera installation can at times leave an intersection's collision trends unchanged. 7th and Mission was one of the first red light cameras to be installed by the City in 1997. The location was selected for its above average collision totals. In 1998, after the red light camera had begun operation, the location reported a higher number of collisions and was one of the highest injury collision locations for the city (Figure 2). Yellow lights were adjusted that year. The location continued to average collision totals close or higher than those present before the red light camera, reporting its second highest annual total in a decade in 2002. In 2003 a major signal upgrade along the downtown portion of Mission Street was completed. This upgrade relocated the location of signal poles, installed overhead (mast arm) signals, and installed pedestrian signal indications. Annual injury collisions since the upgrade dropped significantly, suggesting it was the signal engineering upgrade and not the enforcement mechanism that in this case reduced the intersection's injury collision totals.

8th and Harrison Streets

Installation Dates: January 2001

Directions Enforced: All

Date of Major Signal Upgrade: August 1998 Date of Yellow Light Changes: July 2000

Other signal modifications of note: September 2005, all-red added.

Figure 11: 8th and Harrison Streets Injury Broadside Collisions (1995-2015)

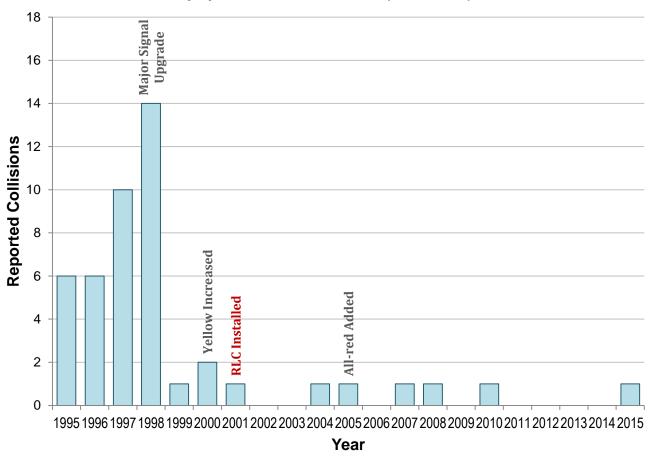


Figure 11: 8th and Harrison Streets Injury Broadside Collisions (1995-2013)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	6	6	10	14	1	2	1	0	0	1	1	0	1	1	0	1	0	0	0	0	1

9th and Howard Streets

Installation Dates: September 1997 (Northbound), March 2010 (Westbound) Directions Enforced: Northbound 9th Street, Westbound Howard Street

Date of Major Signal Upgrade: March 1999 Date of Yellow Light Changes: December 1997

Other signal modifications of note: Pedestrian signals installed October 2004

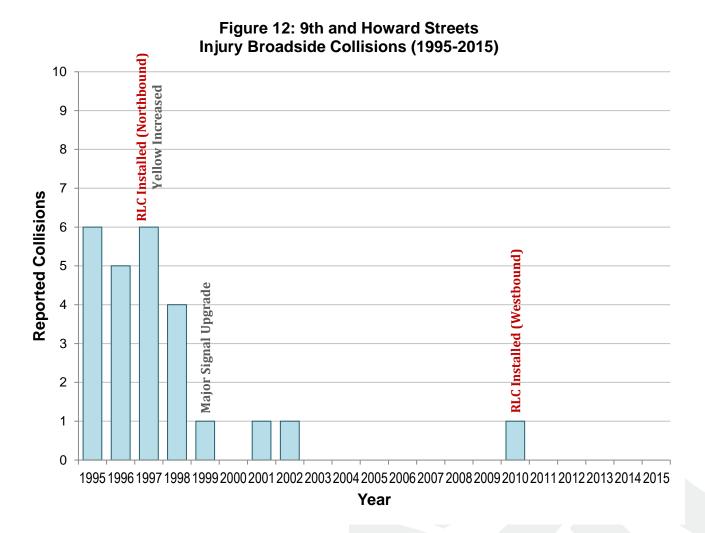


Figure 12: 9th and Howard Streets Injury Broadside Collisions (1995-2013)

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Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	6	5	6	4	1	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0

14th Street and South Van Ness Avenue

Installation Dates: June 2000 (Eastbound), February 2001 (Northbound)

Directions Enforced: Northbound South Van Ness Avenue, Eastbound 14th Street

Date of Major Signal Upgrade: Pending (2015)
Date of Yellow Light Changes: August 2000

Other signal modifications of note: July 2001, all South Van Ness Ave northbound heads and one 14th St eastbound head upgraded from 8" to 12". February 2010, all remaining 8" heads upgraded to 12" heads

Figure 13: 14th Street and South Van Ness Aveue Injury Broadside Collisions (1995-2015)

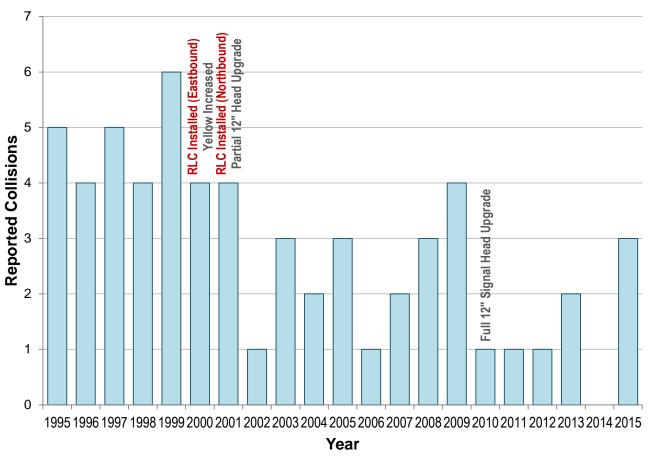


Figure 13: 14th Street and South Van Ness Avenue Injury Broadside Collisions (1995-2013)

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Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	5	4	5	4	6	4	4	1	3	2	3	1	2	3	4	1	1	1	2	0	3

15th and Mission Streets

Installation Dates: June 2000 (Southbound), August 2000 (Northbound)

Directions Enforced: Northbound and Southbound Mission Street

Date of Major Signal Upgrade: November 2007 Date of Yellow Light Changes: June 1999

Other signal modifications of note:

Figure 14: 15th and Mission Streets Injury Broadside Collisions (1995-2015)

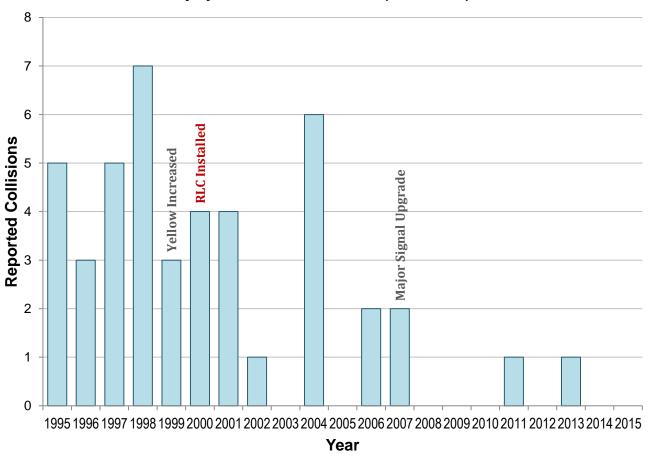


Figure 14: 15th and Mission Streets Injury Broadside Collisions (1995-2013)

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Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	5	3	5	7	3	4	4	1	0	6	0	2	2	0	0	0	1	0	1	0	0

Bush Street and Van Ness Avenue

Installation Dates: March 2001

Directions Enforced: Northbound Van Ness Avenue

Date of Major Signal Upgrade: June 2004 Date of Yellow Light Changes: January 2000

Other signal modifications of note: June 2004, all-red added. July 2004, pedestrian

signals crossing Van Ness installed.

Figure 15: Bush Street and Van Ness Avenue Injury Broadside Collisions (1995-2015)

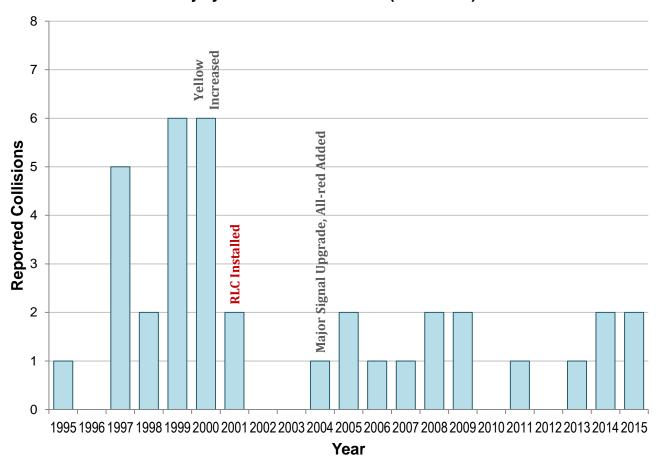


Figure 15: Bush Street and Van Ness Avenue Injury Broadside Collisions (1995-2013)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	1	0	5	2	6	6	2	0	0	1	2	1	1	2	2	0	1	0	1	2	2

Ellis and Larkin Streets

Installation Dates: February 2010

Directions Enforced: Northbound Larkin Street, Westbound Ellis Street

Date of Major Signal Upgrade:

Date of Yellow Light Changes: June 2003

Other signal modifications of note: January 2007, all-red added. June 2011, 12" heads

and pedestrian signals installed.

Figure 16: Ellis and Larkin Streets Injury Broadside Collisions (1995-2015)

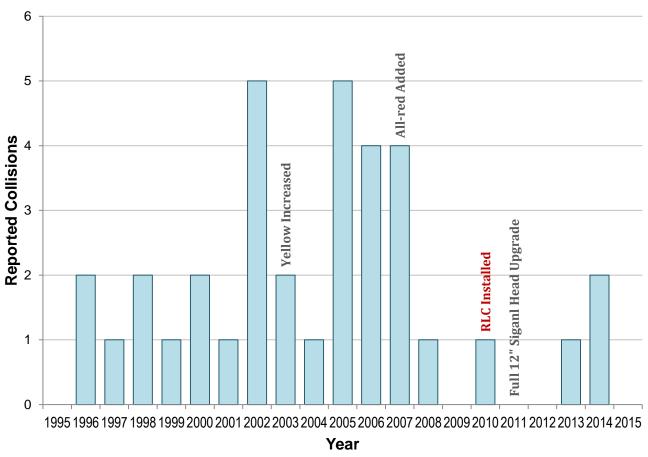


Figure 16: Ellis and Larkin Streets Injury Broadside Collisions (1995-2013)

 Year
 1995
 1996
 1997
 1998
 1999
 2000
 2001
 2002
 2003
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 2007
 2008
 2009
 2010
 2011
 2012
 2013
 2014
 2015

 Total
 0
 2
 1
 2
 1
 5
 2
 1
 5
 4
 4
 1
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 1
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 0
 1
 2
 0

Fell Street and Masonic Avenue

Installation Date: January 2012

Directions Enforced: Westbound Fell Street

Date of Major Signal Upgrade: June 2003 and September 2012

Date of Yellow Light Changes: September 2010

Other signal modifications of note: April 2002, all-red added.

Figure 17: Fell Street and Masonic Avenue Injury Broadside Collisions (1995-2015)

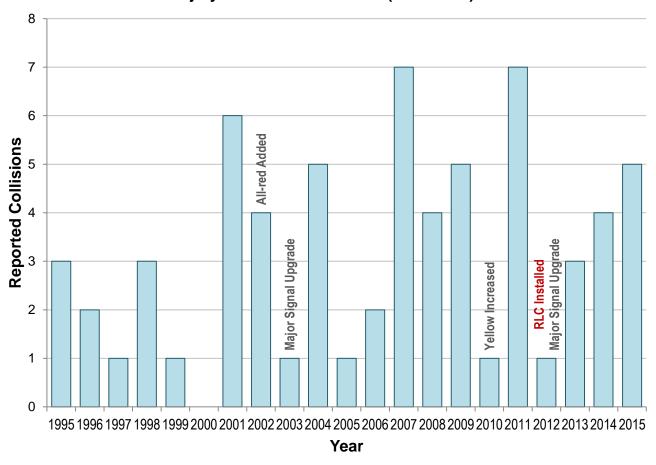


Figure 17: Fell Street and Masonic Avenue Injury Broadside Collisions (1995-2013)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	3	2	1	3	1	0	6	4	1	5	1	2	7	4	5	1	7	1	3	4	5

Fulton Street and Park Presidio Boulevard

Installation Dates: May 2004 (Northbound), June 2004 (Southbound) Directions Enforced: Northbound and Southbound Park Presidio Boulevard

Date of Major Signal Upgrade: April 2009

Date of Yellow Light Changes:

Other signal modifications of note: August 2003, all-red added.

Figure 18: Fulton Street and Park Presidio Boulevard Injury Broadside Collisions (1995-2015)

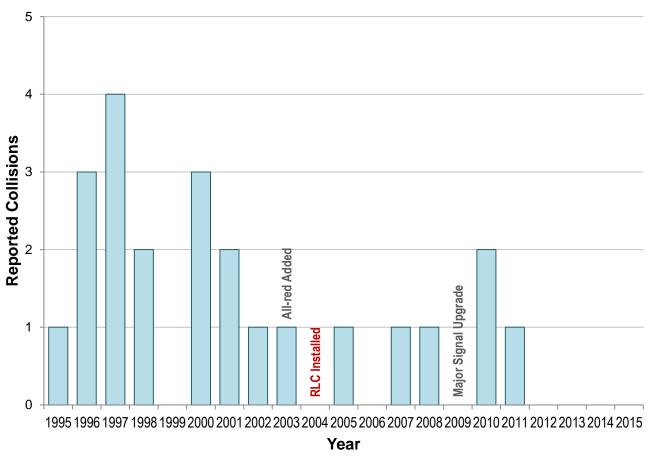


Figure 18: Fulton Street and Park Presidio Boulevard Injury Broadside Collisions (1995-2013)

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Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	1	3	4	2	0	3	2	1	1	0	1	0	1	1	0	2	1	0	0	0	0

Francisco and Richardson Streets

Installation Dates: May 2004 (Westbound), June 2004 (Eastbound) Directions Enforced: Eastbound and Westbound Richardson Avenue

Date of Major Signal Upgrade: August 2006

Date of Yellow Light Changes:

Other signal modifications of note: April 2003, all-red added after Francisco phase. August 2006, all-red added after Richardson phase, pedestrian signals

installed.

Figure 19: Francisco Street and Richardson Avenue Injury Broadside Collisions (1995-2013)

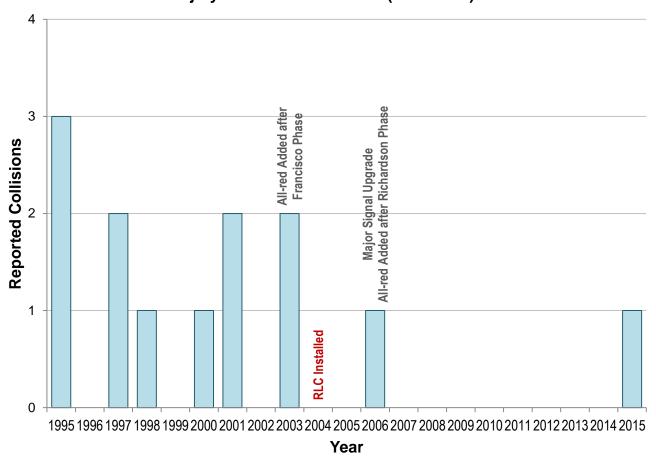


Figure 19: Francisco Street and Richardson Avenue Injury Broadside Collisions (1995-2013)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	3	0	2	1	0	1	2	0	2	0	0	1	0	0	0	0	0	0	0	0	1

Geary and Park Presidio Boulevards

Installation Dates: May 2004(Southbound), June 2004 (Northbound, Westbound,

Eastbound)
Directions Enforced: All

Date of Major Signal Upgrade: December 2009

Date of Yellow Light Changes:

Other signal modifications of note: August 2003, all-red added.

Figure 21: Geary and Park Presidio Boulevards Injury Broadside Collisions (1995-2015)

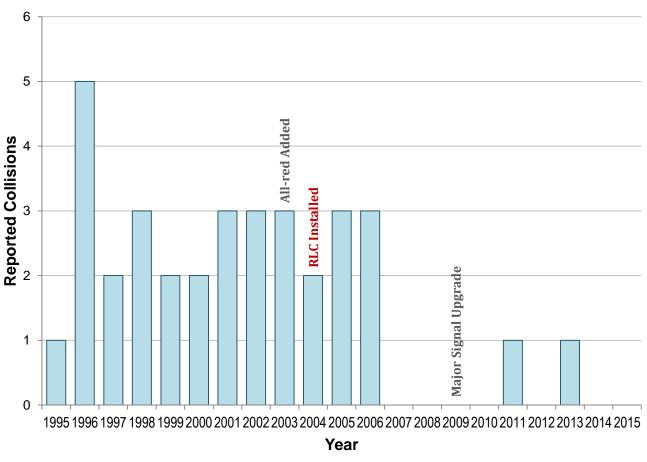


Figure 21: Geary and Park Presidio Boulevards Injury Broadside Collisions (1995-2013)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	1	5	2	3	2	2	3	3	3	2	3	3	0	0	0	0	1	0	1	0	0

Hayes and Polk Streets

Installation Dates: September 2000

Directions Enforced: All

Date of Major Signal Upgrade: March 2003 Date of Yellow Light Changes: September 1999

Other signal modifications of note: March 2003, all-red added. April 2005, pedestrian

signals added.

Figure 22: Hayes and Polk Streets Injury Broadside Collisions (1995-2015)

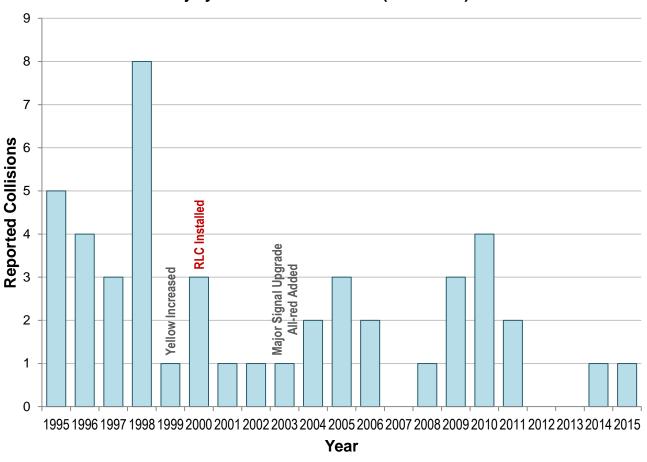


Figure 22: Hayes and Polk Streets Injury Broadside Collisions (1995-2013)

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Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	5	4	3	8	1	3	1	1	1	2	3	2	0	1	3	4	2	0	0	1	1

Lake Street and Park Presidio Boulevard

Installation Dates: May 2004 (Northbound), June 2004 (Southbound)
Directions Enforced: Northbound and Southbound Park Presidio Boulevard

Date of Major Signal Upgrade:

Date of Yellow Light Changes: August 2003

Other signal modifications of note: March 2002, Pedestrian signals installed. August 2003, all-red increased. July 2010, all signals upgraded to 12" heads.

Figure 23: Lake Street and Park Presidio Boulevard Injury Broadside Collisions (1995-2015)

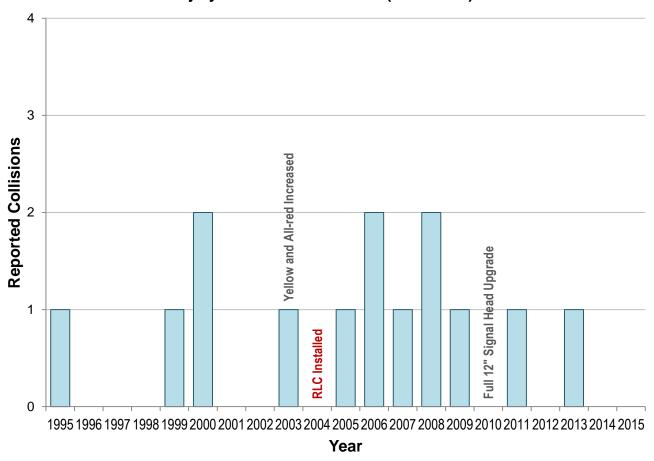


Figure 23: Lake Street and Park Presidio Boulevard Injury Broadside Collisions (1995-2013)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	1	0	0	0	1	2	0	0	1	0	1	2	1	2	1	0	1	0	1	0	0

Marina Boulevard and Lyon Street

Installation Dates: May 2004

Directions Enforced: Eastbound Marina Boulevard

Date of Major Signal Upgrade: Date of Yellow Light Changes:

Other signal modifications of note: June 2012, all-red added after Lyon and Mason phases, pedestrian signals added crossing Lyon and Mason. Doyle Drive construction and re-alignment in 2012.

Figure 24: Marina Boulevard and Lyon Street Injury Broadside Collisions (1995-2015)

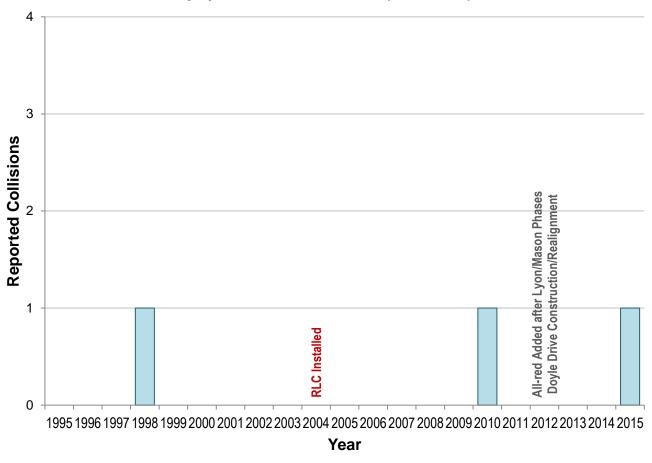


Figure 24: Marina Boulevard and Lyon Street Injury Broadside Collisions (1995-2013)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1

Oak Street and Octavia Boulevard

Installation Date: December 2009

Directions Enforced: Northbound Octavia Boulevard, Eastbound Oak Street

Date of Major Signal Upgrade: July 2005 (Octavia Boulevard opening)

Date of Yellow Light Changes: September 2010

Other signal modifications of note: December 2001, all-red added, pedestrian signals

installed.

Figure 25: Oak Street and Octavia Boulevard Injury Broadside Collisions (1995-2015)

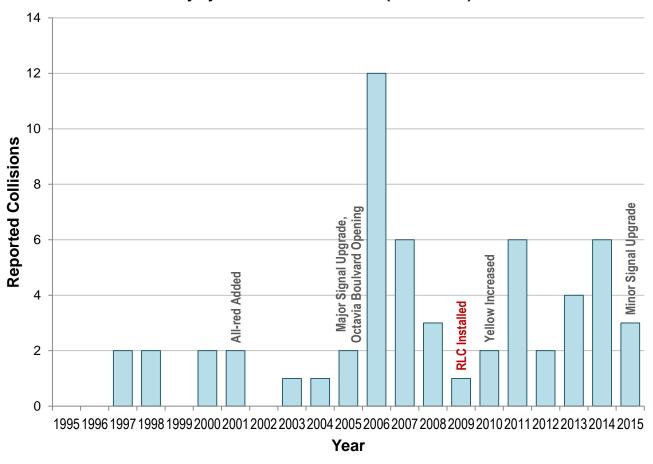


Figure 25: Oak Street and Octavia Boulevard Injury Broadside Collisions (1995-2013)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	0	0	2	2	0	2	2	0	1	1	2	12	6	3	1	2	6	2	4	6	3

Pine and Polk Streets

Installation Dates: June 2000

Directions Enforced: Westbound Pine Street Date of Major Signal Upgrade: April 2002

Date of Yellow Light Changes: September 1998, October 2010 Other signal modifications of note: April 2002, all-red added.

Figure 26: Pine and Polk Streets Injury Broadside Collisions (1995-2015)

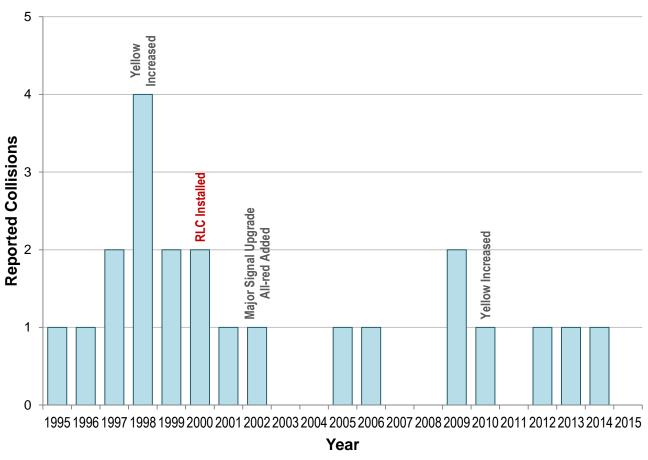


Figure 26: Pine and Polk Streets
Injury Broadside Collisions (1995-2013)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	1	1	2	4	2	2	1	1	0	0	1	1	0	0	2	1	0	1	1	1	0