# City Of Spokane's Intersection Safety Program

## How It Works & How It Benefits Your Community

# Information Covered

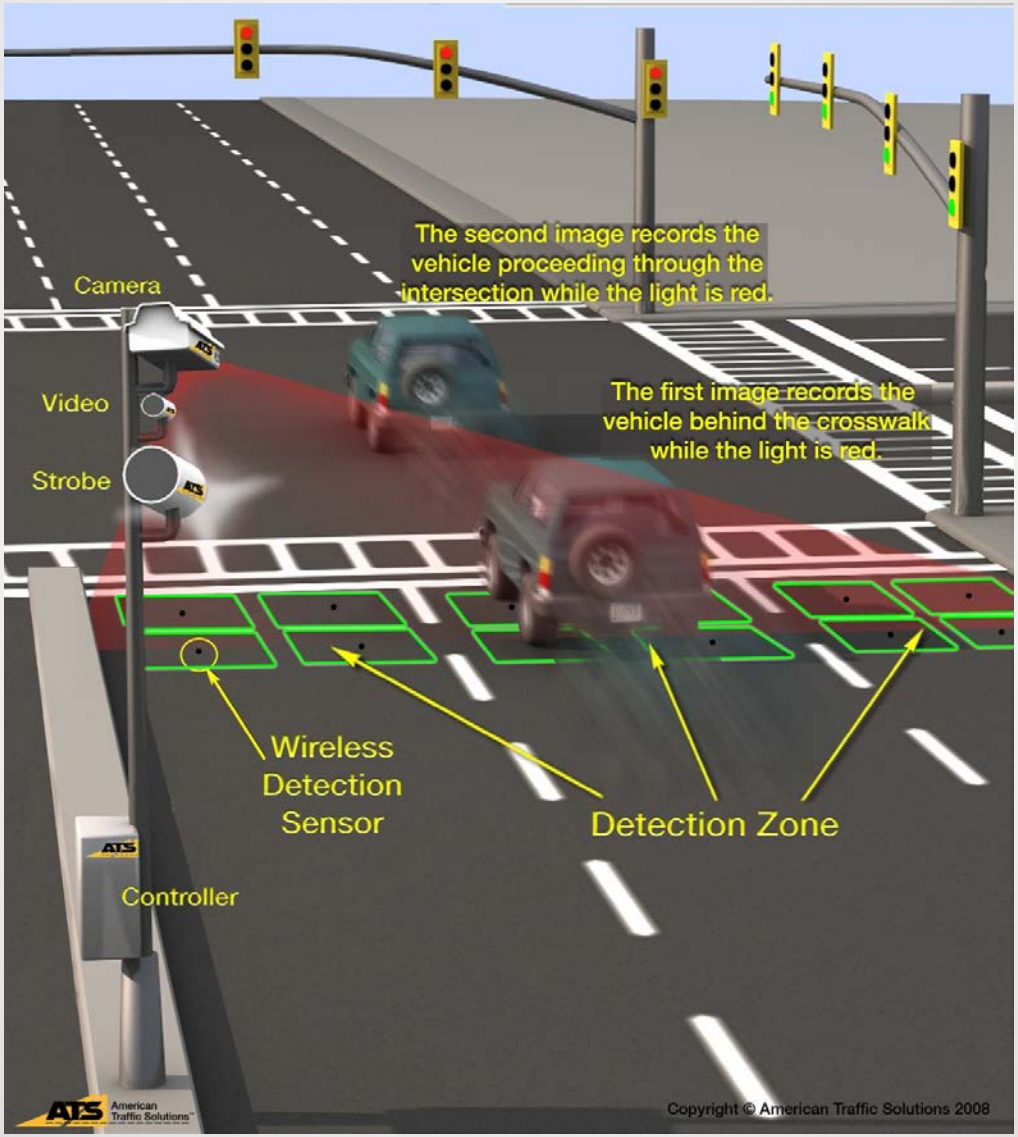
- Goals
- How the program works
- How it benefits the City of Spokane
- General program numbers
- Current data
  - Ticket issuance rates
  - Collision data
    - Aggregate crash data from all three phases

# Goals

- Red-light cameras have the potential to reduce collisions, injuries, and fatalities at intersections
- The City of Spokane has deployed red-light cameras at ten intersections to reduce the number of red-light violations
- The objective is to change drivers' behavior, making the community safe as more drivers obey traffic signals and stop on red

# How It Works

- Using a passive sensor, the system detects when the signal changes to red
- The red-light enforcement system triggers when a vehicle enters an intersection after the light changes red
- When a red-light violation occurs, the cameras capture two digital still images and approx. 12 seconds of video
- Each image displays:
  - Time and date of violation
  - Location of violation
  - Length of time the light was red
- The video confirms the violation for free turns and flashing red lights


The second image records the vehicle proceeding through the intersection while the light is red.
Camera
Video
Strobe
The first image records the vehicle behind the crosswalk while the light is red.
Wireless Detection Sensor
Detection Zone
Controller
American Traffic Solutions
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# How It Works

- First Violation Image: "A" Shot
  - Captured from the rear of the vehicle
  - Shows violation scene
  - Shows vehicle prior to violation point
  - One or more visible red light signals
  - Clear image of license plate


# How It Works

- Second Violation Image – "B" Shot
  - Captured from rear of vehicle
  - Shows scene of violation
  - Shows vehicle has crossed violation point and entered the intersection
  - One or more visible red lights

# How It Works

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- The way the law is currently written is designed to protect your privacy
  - Pictures are only taken from the rear of the vehicle
  - Tickets get issued to the registered owner of the vehicle in a very similar manner to parking violations
  - They do not get reported to insurance companies and do not affect your driving record
  - The also do not qualify for traffic school or deferment

# How Intersection Safety Benefits the City

- By reducing crashes
  - Reducing the amount of personal injury and property damage
- NO taxes are required to implement these systems
  - They are funded solely by red light runners
- All revenue above and beyond what pays for the program goes right back into traffic safety/calming projects for your neighborhoods

# Intersection Safety Program

## Numbers to Date (03-31-13)

- 49,562 tickets issues since the start of the program Nov. 1st, 2008
  - 6,196 tickets in 2009
  - 11,583 in 2010
  - 12,060 in 2011
  - 15,750 in 2012
  - 3,365 so far in 2013
- 10 intersections monitored by 15 cameras
- Net revenue $1,931,875
- On average, 74% of people are paying their infractions (data from 2009-2012)
  - 76.2 % 2009
  - 75.6% 2010
  - 72.6% 2011
  - 71.5% 2012

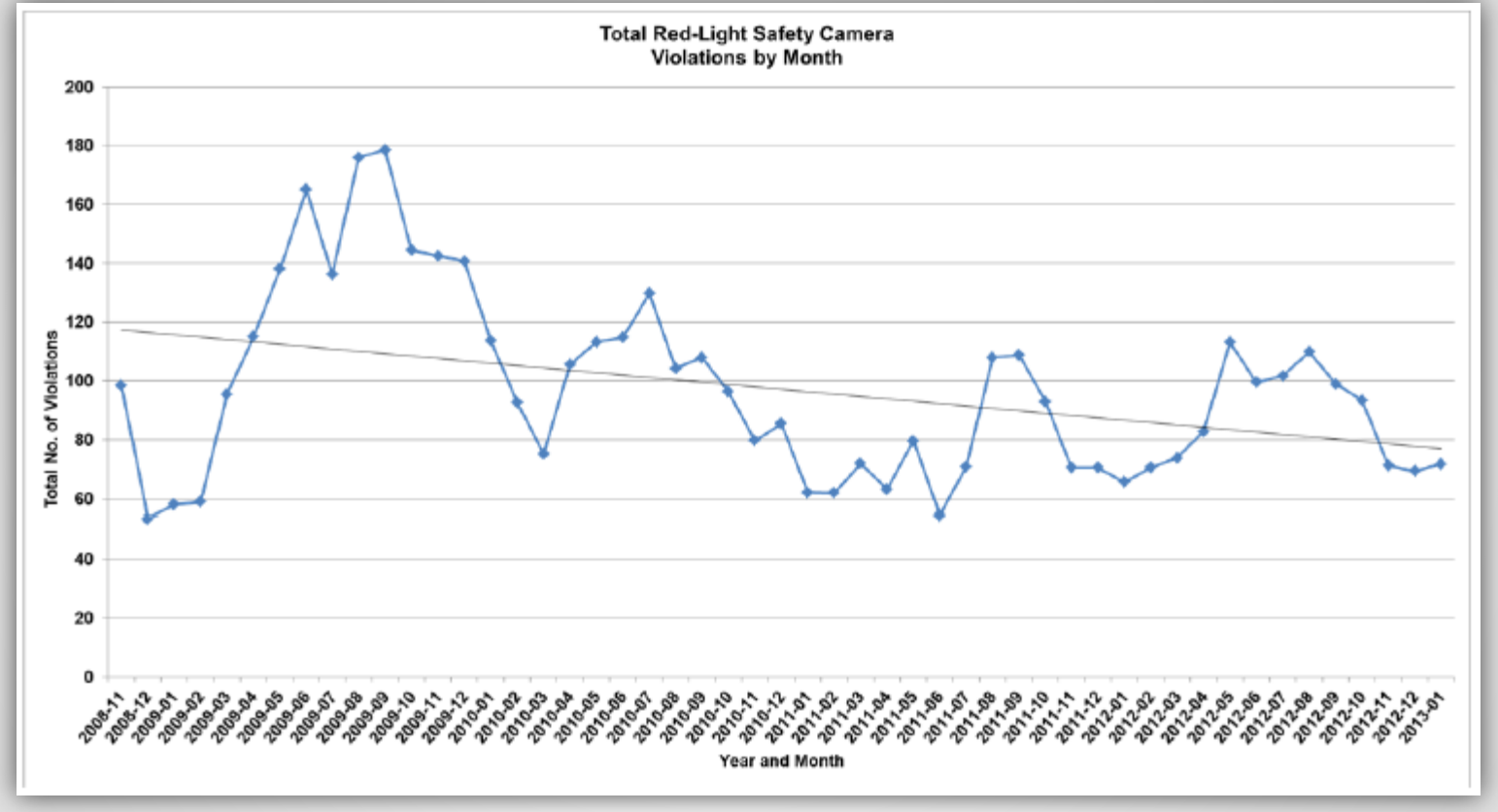
# Intersection Safety Program

## Numbers to Date (03-31-13)

- 11,315 notices challenged or mitigated
  - 1370 in 2009
    - 139 dismissed (10.1%)
  - 2460 in 2010
    - 314 dismissed (12.8%)
  - 2680 in 2011
    - 591 dismissed* (22.1%)
  - 3739 in 2012
    - 629 dismissed (16.8%)

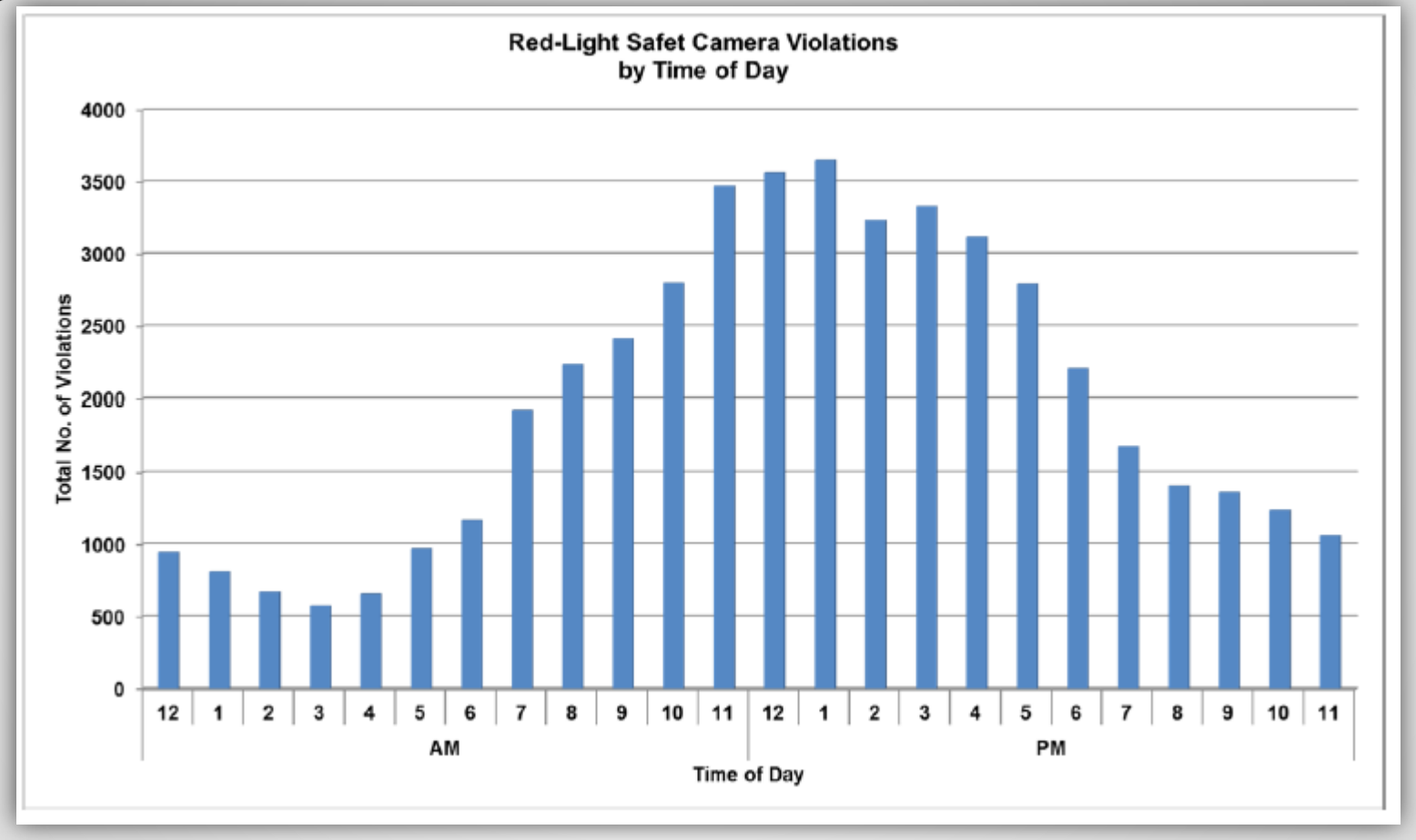
* Dismissals went up in 2012 due to the fact that we started printing them in house. While we worked to make the printing process acceptable, we had to dismiss some of the violations that were not printed in a timely fashion

# Ticket Issuance Data




Spokane began it's program in Nov., 2008 with four cameras. Since program inception, red-light running violations decreased by 32%. As violations reduce, the opportunity for dangerous red-light running related crashes also drops, contributing to safer travel throughout the city.

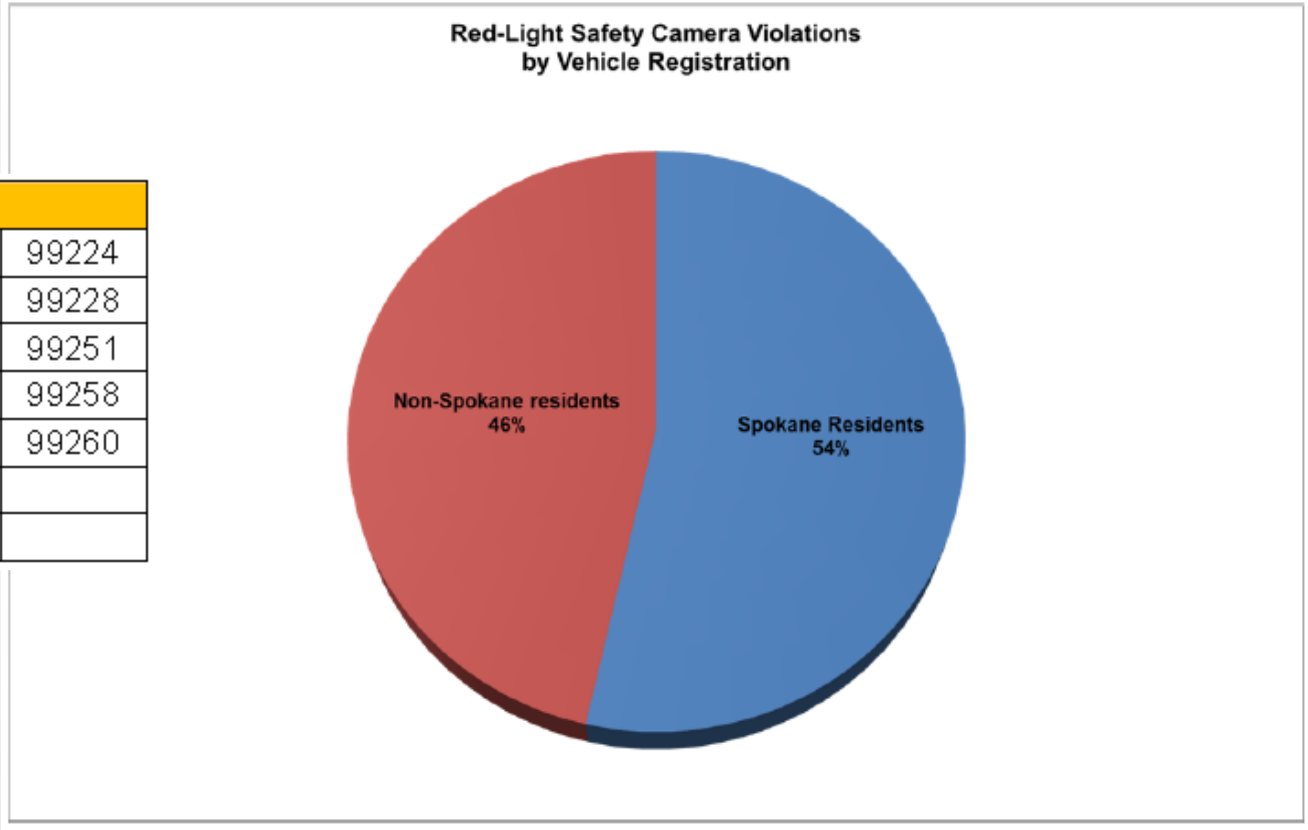
# Ticket Issuance Data




Forty-nine percent of total violations occur between 11am and 6pm, making this the most dangerous time of the day for red-light running.

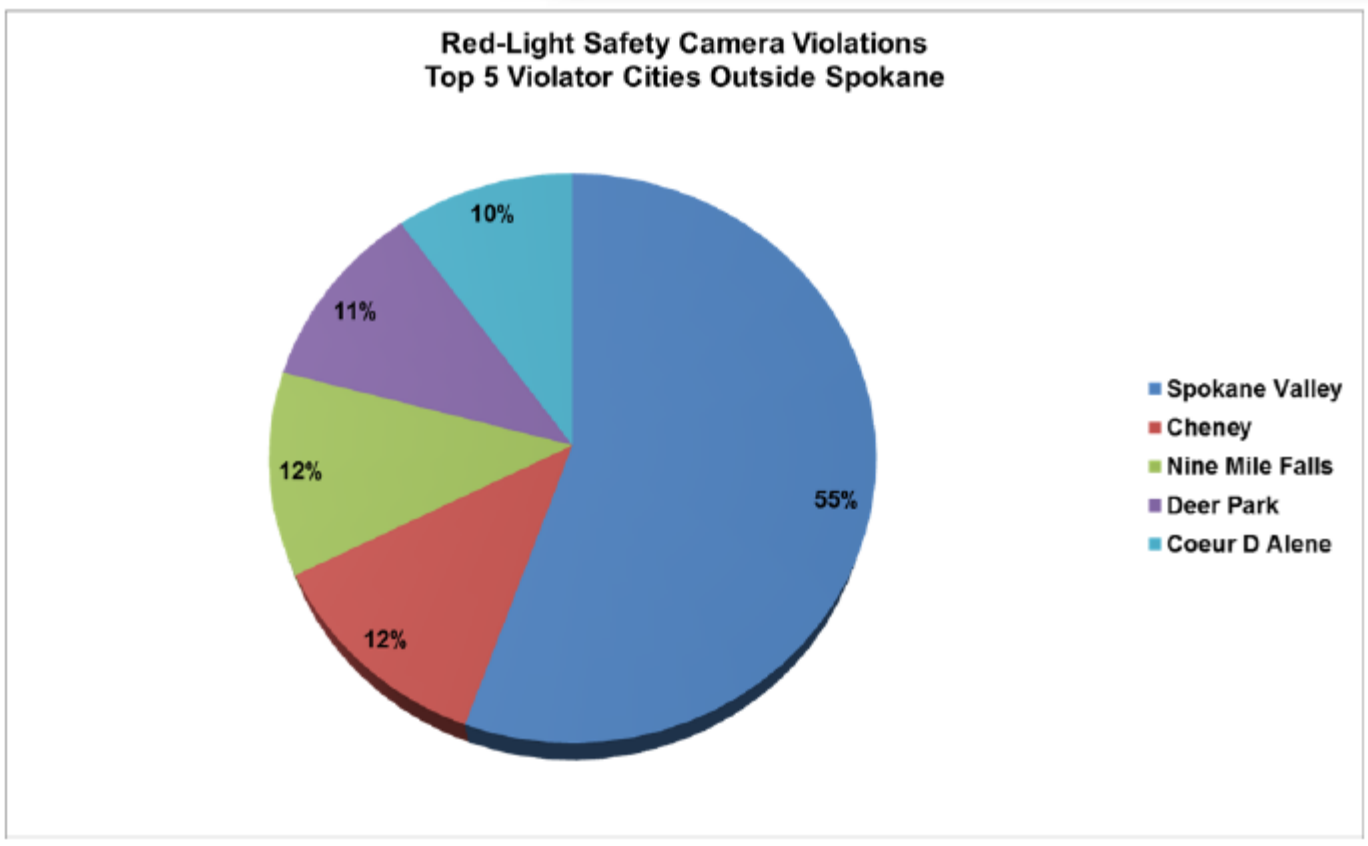
# Violations by Spokane Residents

| Zip Codes | | | |
|---|---|---|---|
| 99201 | 99208 | 99215 | 99224 |
| 99202 | 99209 | 99216 | 99228 |
| 99203 | 99210 | 99217 | 99251 |
| 99204 | 99211 | 99218 | 99258 |
| 99205 | 99212 | 99219 | 99260 |
| 99206 | 99213 | 99220 | |
| 99207 | 99214 | 99223 | |



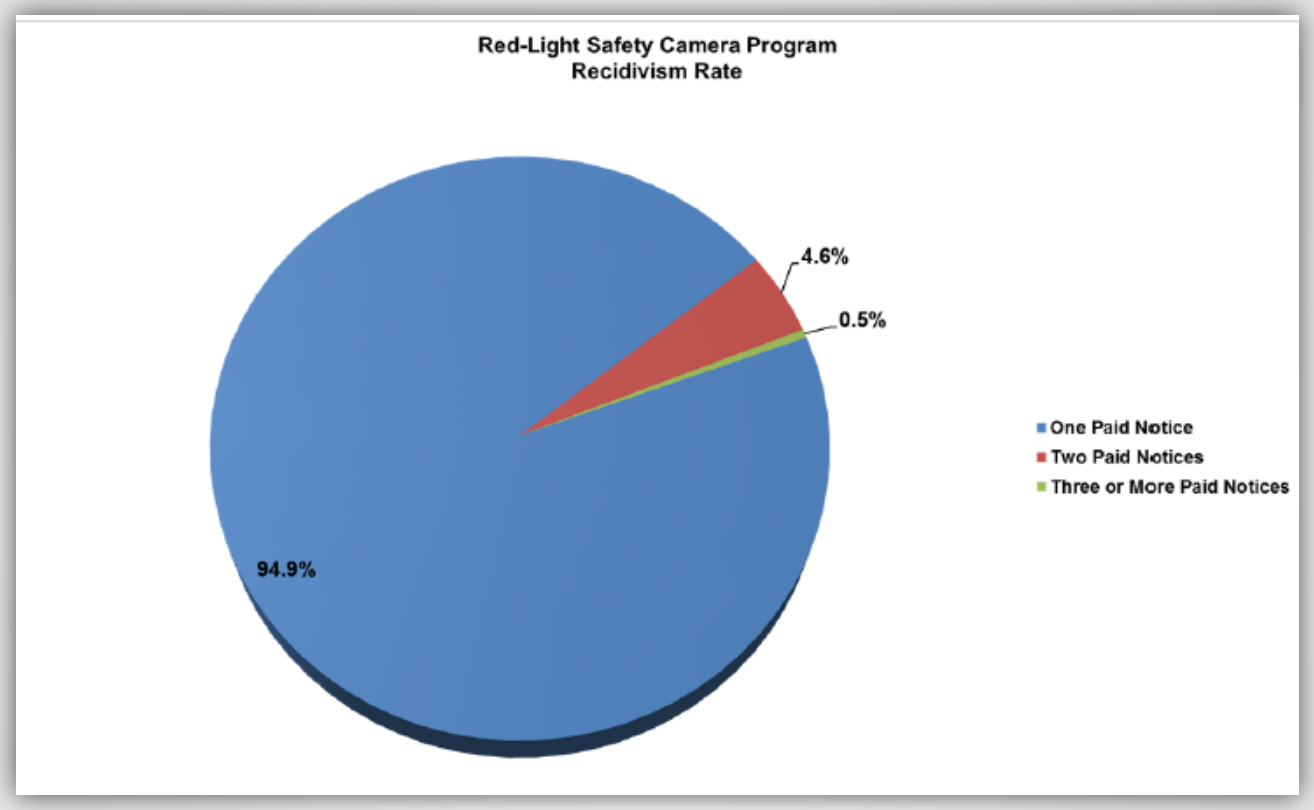

Spokane City residents are the recipients of 54% of all violations since the program's start.

# Violations by Non-Spokane Residents




The majority of non-Spokane residents getting red-light infractions are from Spokane Valley, Cheney, Nine Mile Falls, Deer Park, and CDA.

# Repeat Violators




Drivers are getting the message to stop on red in Spokane. Our community's recidivism rate is 5%, which means 95%of all violators who receive a ticket and pay it do not get another violation. The low rate of repeat behavior, dating form program inception through January of 2013, indicates a change in driver behavior for the better.

# Crash Data Phase 1

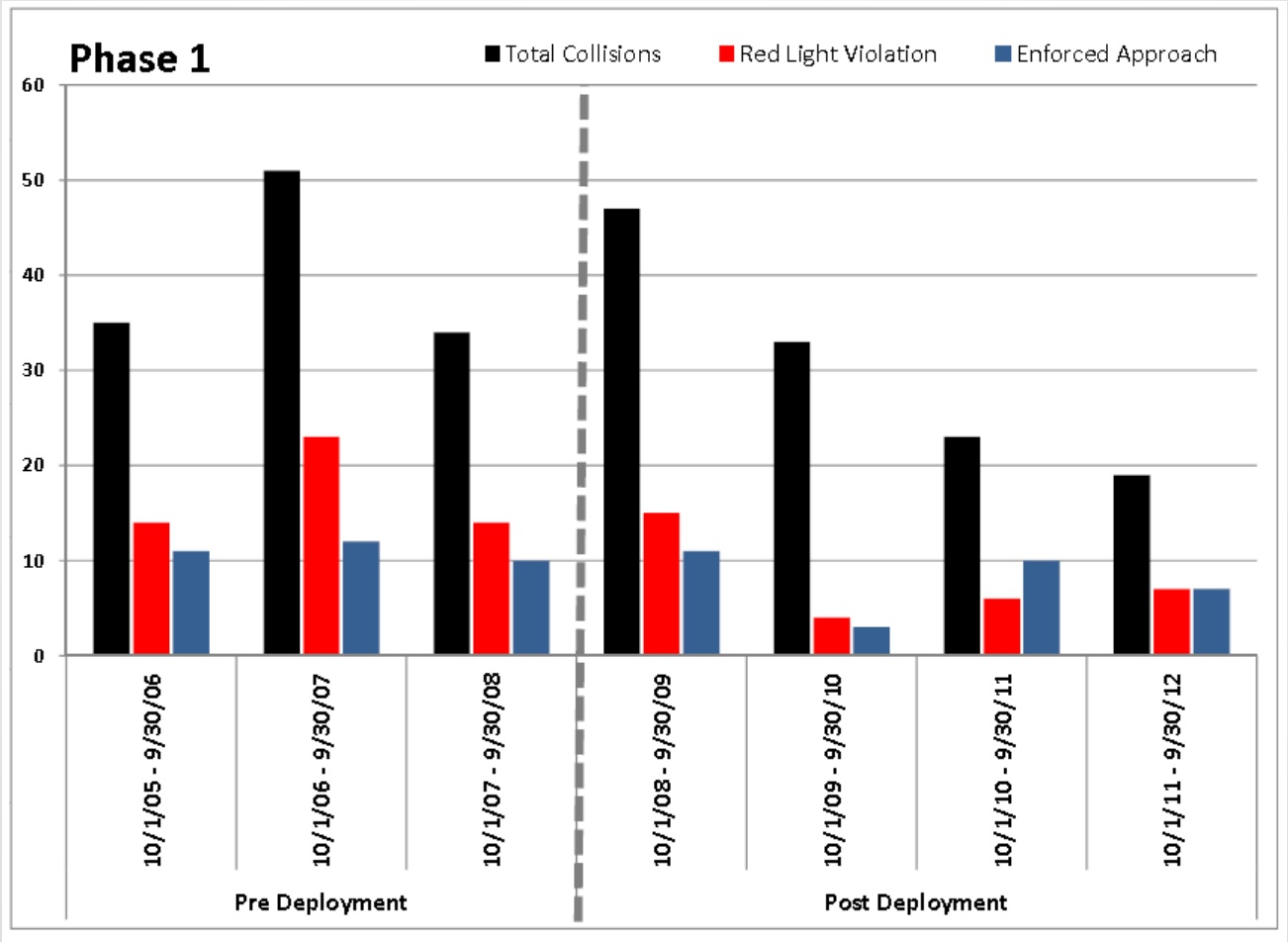
Mission/Hamilton, Browne/Sprague, Francis/Division

- Three years pre-deployment
  - Oct. 1, 2005-Sept. 30, 2008
    - 40 crashes/year on average
    - 17 red light related crashes/year on average
    - 13.67 t-bone crashes/year on average
    - 5.67 rear-end crashes/year on average

- Four years post-deployment
  - Oct. 1, 2008-Sepat. 30, 2012
    - 30.5 crashes/year on average
      - 23.75% decrease
    - 8 red-light related crashes/year on average
      - 52.9% decrease
    - 6.75 t-bone crashes/year on average
      - 50.62% decrease
    - 8 rear-end crashes/year on average
      - 41% increase

# Crash Data Phase 1

## Mission/Hamilton, Browne/Sprague, Francis/Division



# Crash Data Phase 2

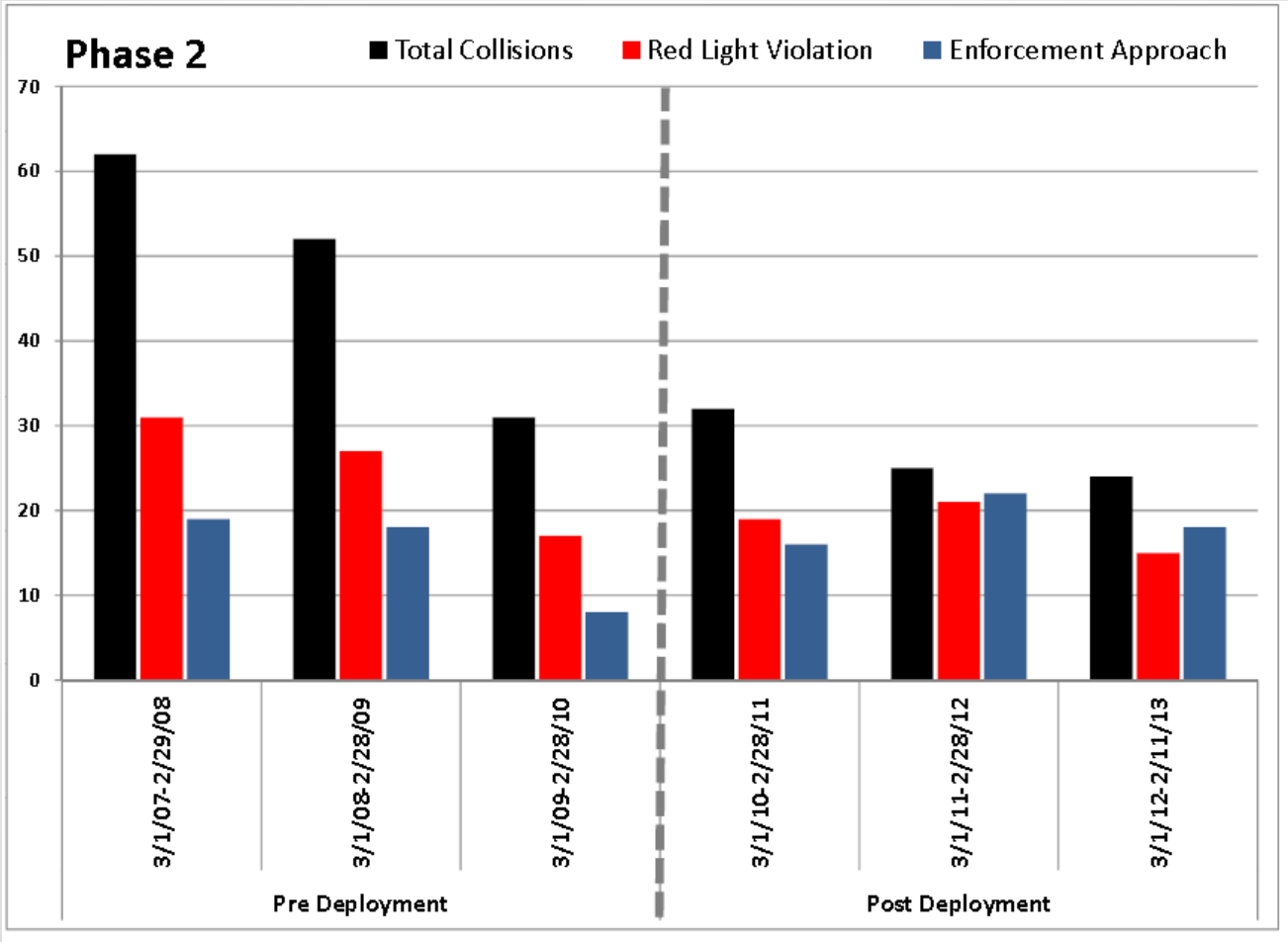
## Ash/Wellesley, 2nd/Thor, 3rd/Freya, Division/Sprague

- Three years pre-deployment
  - March 1, 2007-Feb. 28, 2010
    - 48 crashes/year on average
    - 25 red light related crashes/year on average
    - 27.6 t-bone crashes/year on average
    - 7 rear-end crashes/year on average

- Three years post-deployment
  - March 1, 2010-Feb. 28, 2013
    - 27 crashes/year on average
      - 43.75% decrease
    - 18.3 red-light related crashes/year on average
      - 26.8% decrease
    - 18 t-bone crashes/year on average
      - 34.78% decrease
    - 5.3 rear-end crashes/year on average
      - 24.28% decrease

# Crash Data Phase 2

## Ash/Wellesley, 2nd/Thor, 3rd/Freya, Division/Sprague



# Crash Data Phase 3

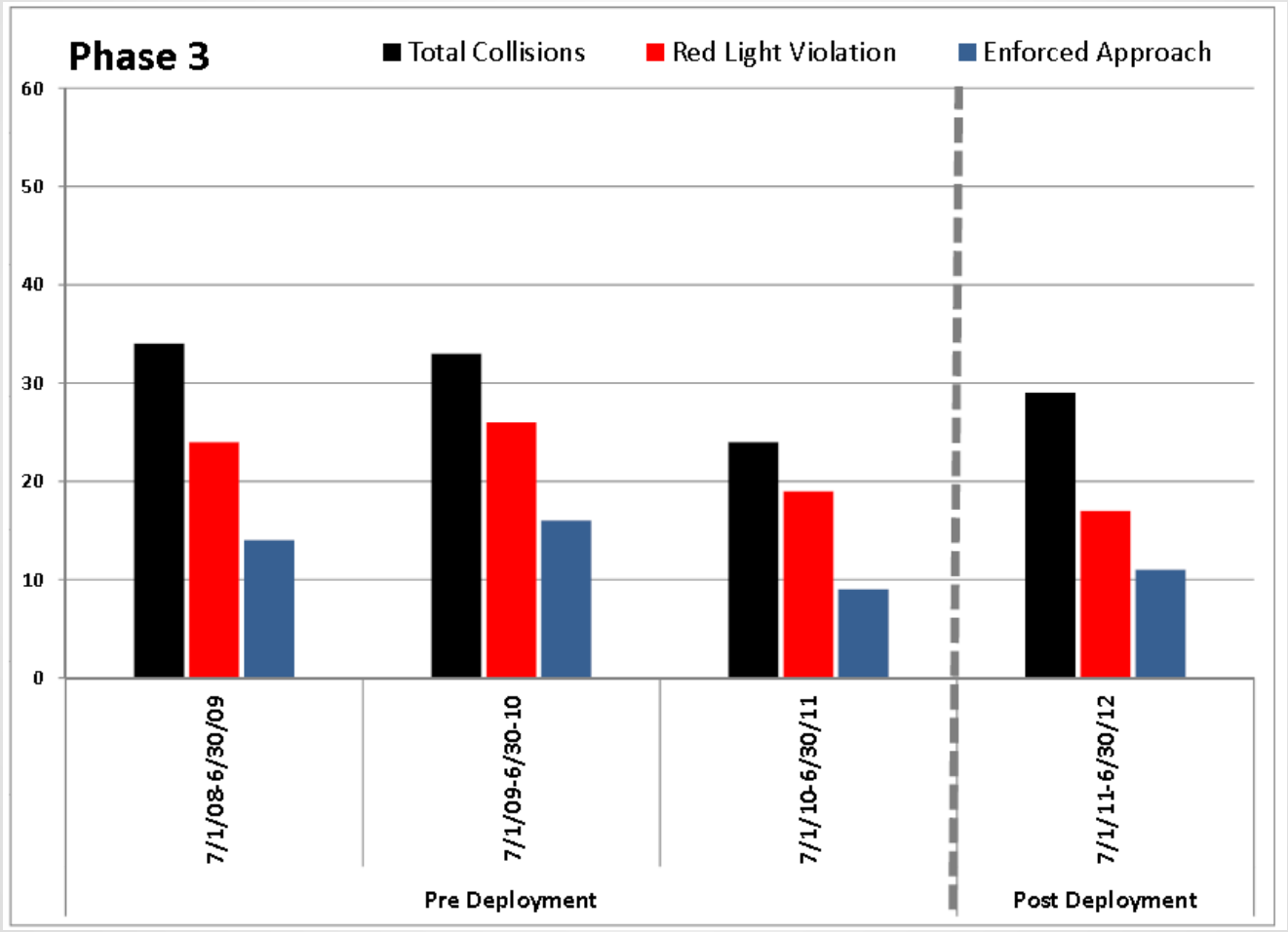
## 2nd/Walnut, 2nd/Maple, 3rd/Browne

- Three years pre-deployment
  - July 1, 2008-June 30, 2011
    - 30 crashes/year on average
    - 23 red light related crashes/year on average
    - 24.3 t-bone crashes/year on average
    - 2.3 rear-end crashes/year on average

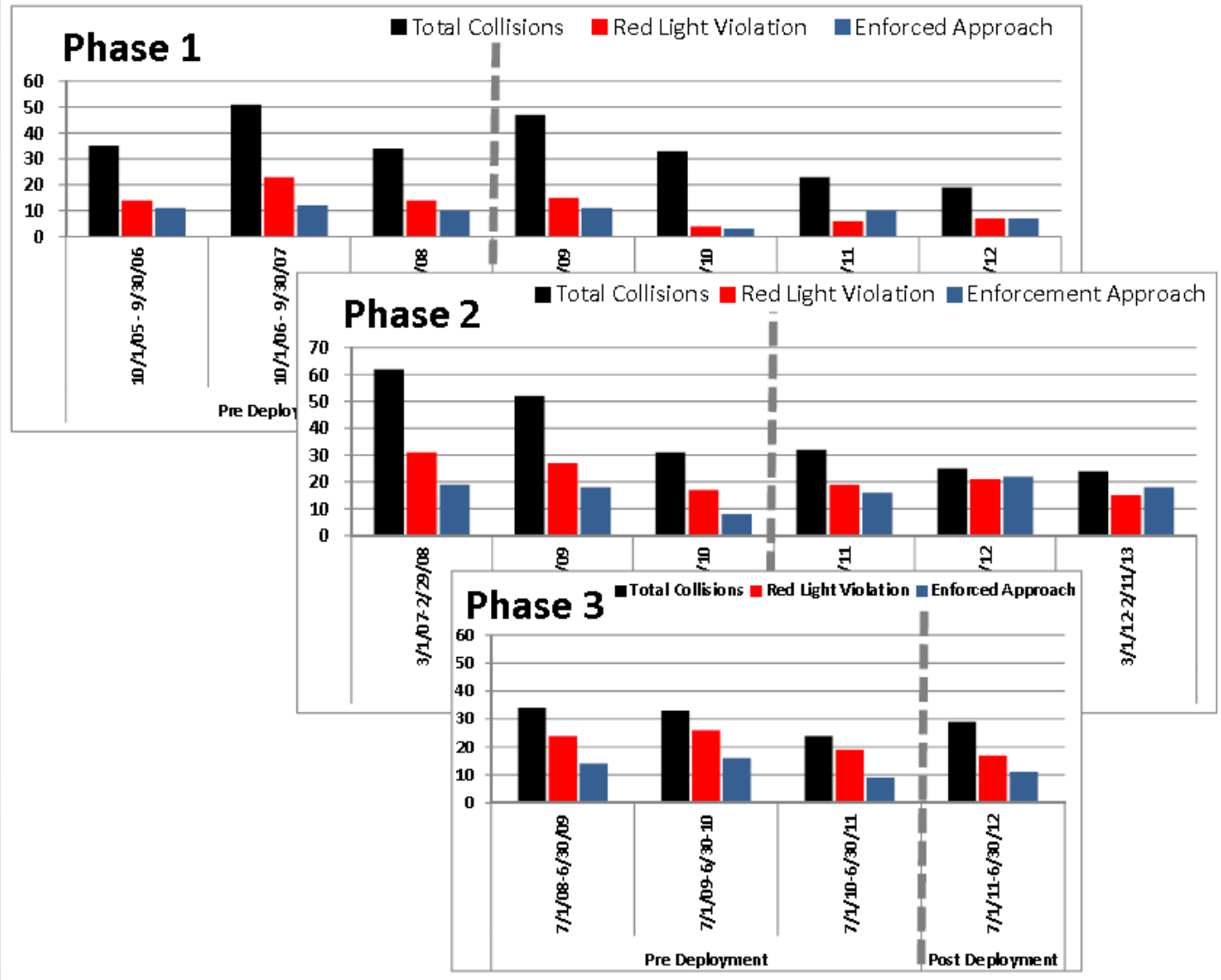
- Three years post-deployment
  - July 1, 2011-June 30, 2012
    - 29 crashes
      - 3.3% decrease
    - 17 red-light related crashes
      - 26% decrease
    - 20 t-bone crashes
      - 17.7% decrease
    - 2 rear-end crashes
      - 13% decrease

# Crash Data Phase 3

## 2nd/Walnut, 2nd/Maple, 3rd/Browne



# All Phases Overlapped



# The Future for Spokane's Intersection Safety Program

- This program is having an effect on driver's habits as demonstrated both by crash data and ticket issuance
- Sustain the currently implemented educational campaign
- Negotiation of extended contract
- Once contract extension is decided, update photo enforcement ordinance

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Public Information

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