SFMTA

SFMTA Automated Red Light and No Turn Enforcement Camera Technology

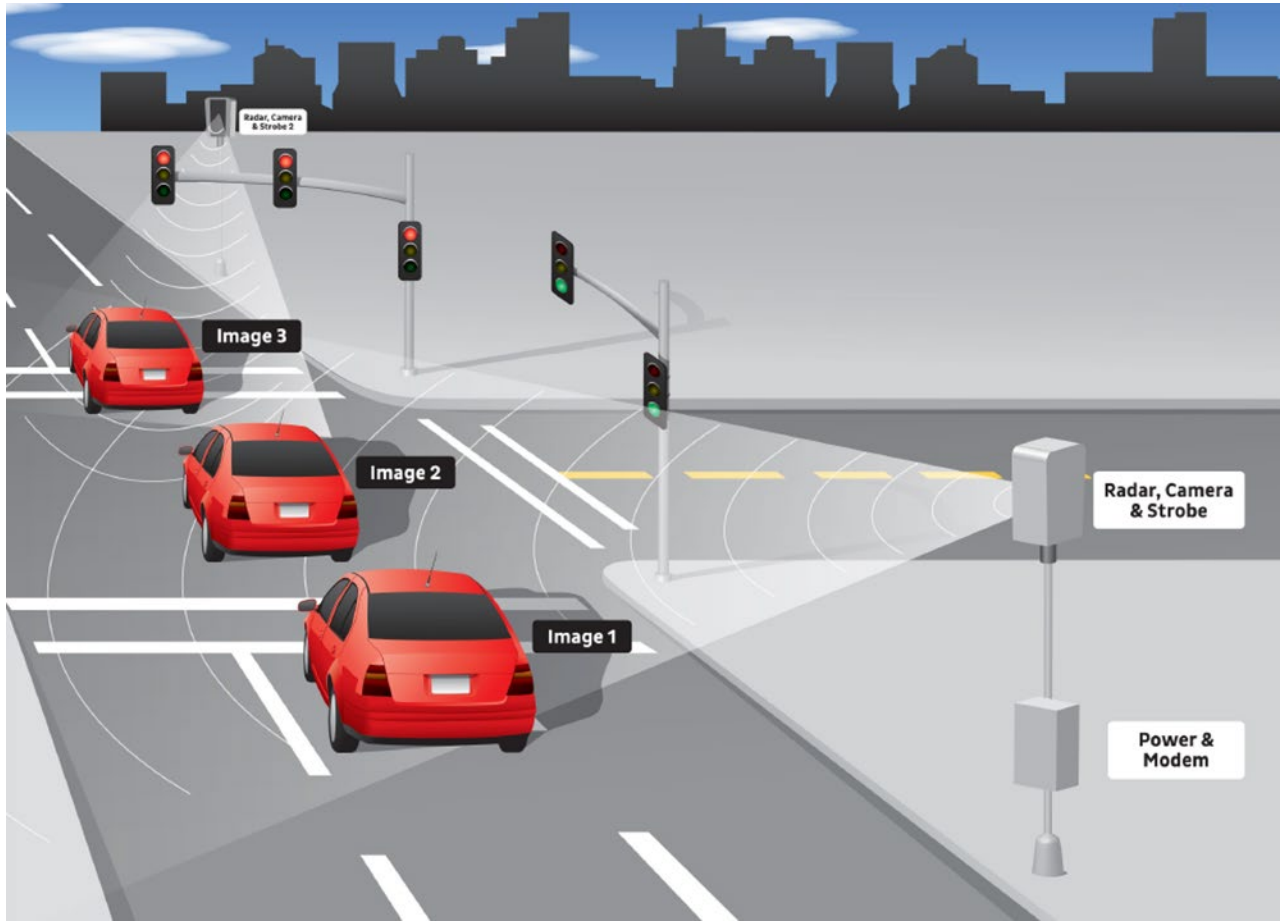
BOS Rules Committee Meeting: May 19, 2025

Technology Description

1) Automated Enforcement Program started in 1996 to reduce the number of collisions, property damage, physical injuries, and deaths caused by red-light running and illegal turns.
2) Authorized under California Vehicle Code section 21455.5 and part of Vision Zero.
3) Managed by MTA with support from SFPD, Superior Court, and the City Attorney's Office.
4) Automated cameras record traffic violations, photographing the license plates and drivers when vehicles run red lights or make illegal turns and mailing out citations.
5) Equipment is owned, operated, and maintained by Verra Mobility (Contractor) and leased to the Department.
6) Contractor also provides program administration, violation review prior to SFPD approval, processing, citation printing and mailing, tree trimming, and construction design services.

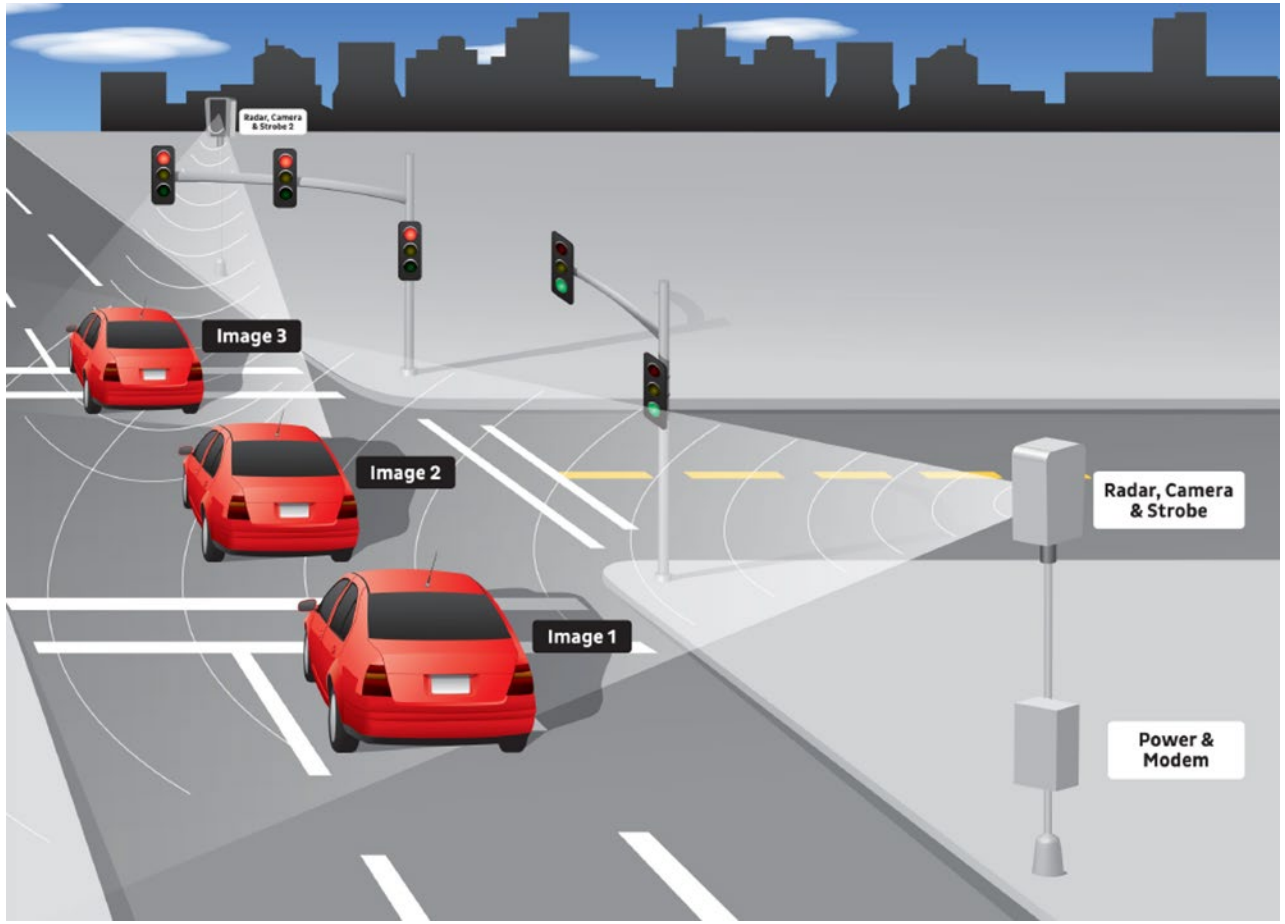
Technology Description

- How this Technology works: (Red Light Violation)
  - i. Camera control unit uses 3D traffic radar to track cars.
  - ii. Also monitors traffic light as it changes color.
  - iii. System enters enforcement mode when light changes from yellow to red.
  - iv. Does not photograph cars that enter intersection on a green or yellow light.
  - v. Once violation is detected, System captures photos of the license plate and driver and a short video clip.



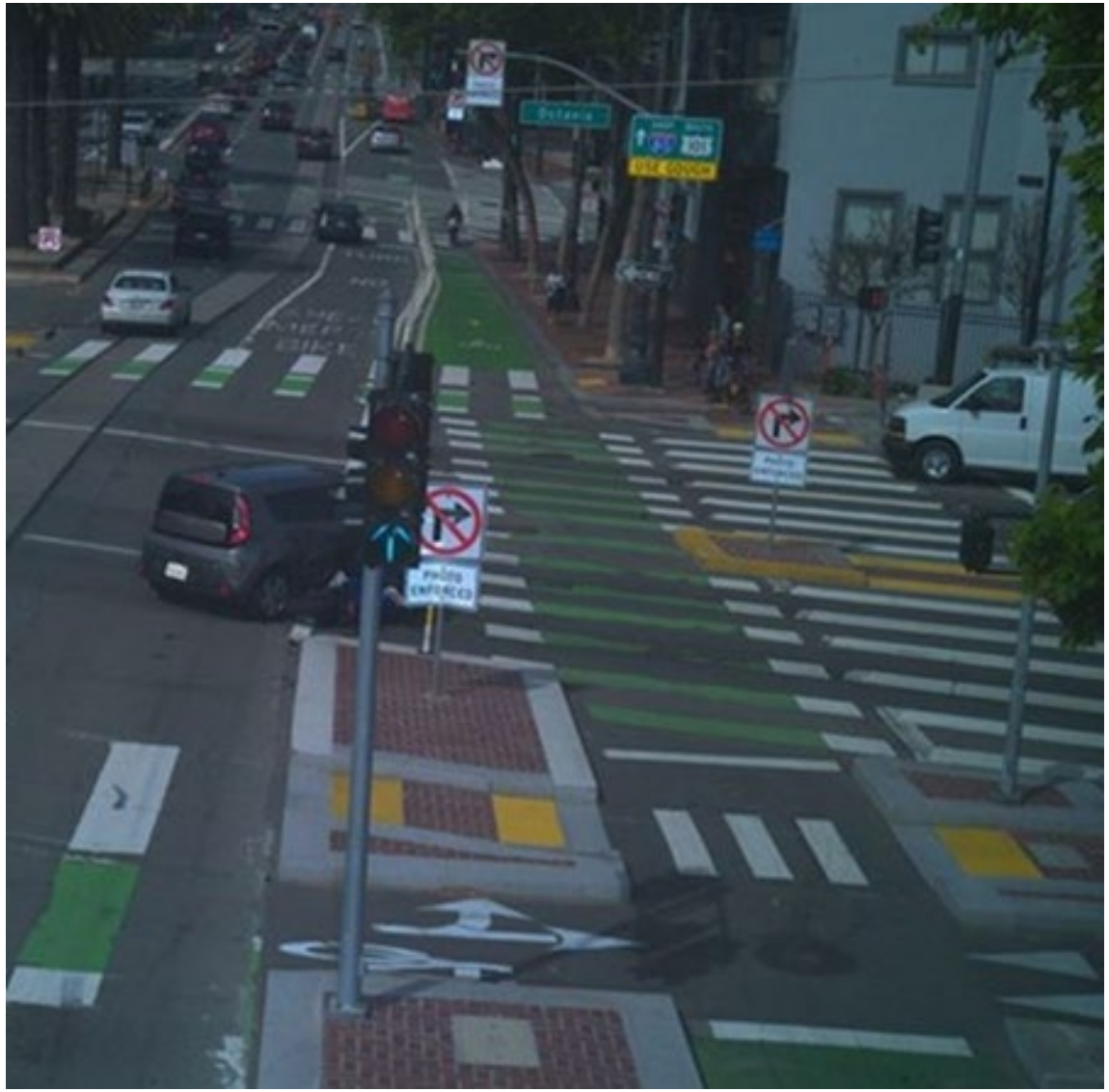
Technology Description (summary of system steps)

- Step 1: System activates when car enters intersection on a red light. Camera captures multiple images from rear and front of vehicle.
- Step 2: First image shows vehicle before entering intersection during red light.
- Step 3: Second image shows the vehicle proceeding through the intersection on a red light.
- Step 4: Third image, taken by camera two, identifies the driver of the vehicle.
- Step 5: Close-up image of the license plate is also captured.
- Step 6: Data, including the time, date, and duration of the yellow and red lights, is also recorded.
- Step 7: Cameras also record a 12-second digital video of the violation, including six seconds prior to and six seconds after running the red light.



Technology Description

- How this Technology works: (Illegal Turn Violation)
  i. Similar to Red Light violation.
  ii. Instead of radar, uses a video stream to capture vehicles making a turn.
  iii. Going straight through the intersection will not activate the system.
  iv. When the system detects a vehicle entering the intersection and making an illegal turn, the system captures three digital photographs and a short video clip (12 seconds long) of the event.



Authorized Use Cases

Department's use of the Automated Red Light and No Turn Enforcement Camera technology is limited to the following use cases:

1. To cite and prosecute red light violations.
2. To cite and prosecute illegal turn violations.
3. To perform engineering analysis from associated data such as vehicle counts, vehicle speeds and violation numbers.

Data Lifecycle Steps

- Collection
  - "Radar-system" continuously monitors for violations.
  - When one occurs, onsite camera captures a clear picture (.JPEG) of violating vehicle's rear license plate and driver's face and sends it to the vendor server.

- Processing & Use
  - Upon violation, data is captured and securely transfers to Contractor's Back Office
  - Contractor (Verra Mobility) reviews the violation. Once confirmed, collects DMV information and shares it with the Law Enforcement (SFPD)
  - SFPD reviews the violation, signs and issues the citation
  - Vendor mails the 'Notice of Violation/Citation' to the vehicle registered owner

Data Lifecycle Steps

- Sharing
  - **Department**: Data is available to only authorized department staff
    - Will not share technology data externally with entities outside the City and County of San Francisco unless a warrant/subpoena was issued
  - **Others**: SFPD, Superior Court
  - **External Data Sharing**: Verra Mobility (Contractor and Owner of the Technology) and their designated subcontractors.
- Retention
  - **Local Storage (On Device): 30 days**
  - **If no citation issued: 15 Business Days**
  - **If citation issued: 15 Business Days from the final disposition**
  - **If final disposition not received from the Superior Court: 5-Years from the Citation due date**
    - This agreement is currently in the process of being documented in a Contract amendment.

PSAB & COIT Meeting Dates

- COIT PSAB Meeting:
  - November 7, 2024
  - February 27, 2025

- COIT Recommendation Date:
  - Date COIT Recommended this policy for BOS Review: March 20, 2025

Questions

Team members available to Answer Questions:

Automated Enforcement Program:

– Monica Giese

Law Enforcement:

– SFPD (Not Present)

City Attorney's Office (CAO):

– Isidro Alarcon Jimenez (Not Present)

Information Technology:

– Sean Cunningham (Not Present)

Program Management Office (PMO)

– Sohail Warsi

– Nabil Arnaoot