







## **INFORMATIONAL MEMORANDUM**

**TO: Public Safety Committee**

**FROM: Bruce Linton, Chief of Police**

**BY: Bill Devlin, Sergeant Traffic Division**

**CC: Mayor Ekberg**

**DATE: 07/23/2018**

**SUBJECT: Automated Safety Camera Presentation**

### **ISSUE**

Increase public safety on the city roadways through enforcement and education using automated red-light cameras.

### **BACKGROUND**

The most prevalent complaint from our residents is speeding on our arterials and neighborhoods. Our traffic enforcement section cannot keep up with the increased call for enforcement. In addition to leveraging this technology for increased efficiency, studies have shown that red light cameras will make the city streets safer by reducing red light running violations. They are currently used in King, Pierce, Snohomish, Spokane, and Chelan counties. Here in King County there are programs in Bellevue, Des Moines, Federal Way, Issaquah, Kent, Lake Forrest Park, Mercer Island, Renton, and Seattle.

### **ANALYSIS**

Automated safety cameras will reduce red light running, which in turn reduces the potential serious injury right angle collisions. They will educate the public and spillover to the non-camera intersections. They will assist with increased traffic flow and increase the safety of police officers. The camera systems will assist with better tracking of intersection statistics like traffic flows - number of vehicles, peak hours of the days, number of collisions, and tickets issued. They will provide more efficient service with no additional FTE's. The Police, Prosecutor, City Attorney, and Court supports the program. Studies show that nationally a high percentage of the public is in favor of automated red-light cameras.

### **FINANCIAL IMPACT**

No upfront cost, the per camera, per month charge quoted as \$4,250.00, the program will fund itself.

### **RECOMMENDATION**

The Committee is being asked to forward this item to the Council for consideration at the August 13, 2018 Committee of the Whole meeting and subsequent August 20, 2018 Regular Meeting.

### **ATTACHMENTS**

- Automated safety cameras info power point
- Draft automated safety camera city ordinance



# *Tukwila, Washington*

Automated Traffic Safety Camera Program

## Key Points

- Cameras will make the city streets safer
- Cameras will reduce red light running
- Cameras will reduce potentially serious injury right angle collisions
- Cameras will educate the public and spillover to surrounding non camera intersections.
- Cameras will increase traffic flow
- Cameras will assist with internal investigations, law suits
- Cameras will assist with traffic collision investigations
- Cameras will increase safety of police officers
- Cameras will provide more efficient service, 24/7 with no additional FTE's
- Camera will allow for better tracking of vehicles, collisions, and tickets issued
- Police, Prosecutor, City Attorney, and Court supports this program.
- Studies show that nationally a high percentage of the public is in favor of RLC.

# General Automated Enforcement

## Information and Uses

- ▶ Automated enforcement refers to the use of Cameras to enforce traffic safety laws (Red Light running) 24/7.
- ▶ Their primary purpose is to improve traffic safety by modifying driver behavior.
- ▶ Many states have laws that explicitly authorize automated enforcement. Here in Washington it is RCW 46.63.170
- ▶ The most common type of automated program is for red light violations. The use of cameras to enforce speed limits is less common, but increasing, especially in school zones.
- ▶ Many jurisdictions treat automated enforcement citations just like parking tickets in that the registered owner is liable. Parking tickets do not result in points and/or not recorded on a driver's record.

## *Local Automated Enforcement Uses*

- In our State/area there are currently 17 programs, with 343 Safety Cameras
- They are used in King, Pierce, Snohomish, Spokane and Chelan Counties
- King County ATS camera programs include Bellevue (9), Des Moines (11), Federal Way (16), Issaquah (2), Kent (8), Lake Forrest Park (11), Mercer Island School District (5) Renton (18) Seattle (59), Seattle Public Schools (120)



# *The Need for an Automated Red Light Program*

- ▶ Their primary purpose is to improve traffic safety.
- ▶ To provide superior services that support a safe, inviting and healthy environment for our residents, businesses and guests.
- ▶ Responsive- We are timely and effective in the delivery of great customer service. We continually strive to find innovative ways to improve.
- ▶ Why is red light running a problem?
- ▶ Red light Runners cause hundreds of deaths, tens of thousands of injuries, and billions of dollars in property damage each year. In 2016, 800 people were killed, and an estimated 137,000 were injured in crashes that involved red light running.

## *How Often do Drivers Run Red Lights?*

- Studies conducted during a several month time frame in 5 busy intersections in Fair Fax County, VA prior the use of red light cameras found that a motorist ran a red light every 20 minutes at each intersection, and during peak times it was more frequent.
- An analysis of red light violation data from 19 intersections without red light cameras in four states found a violation rate of 3.2 per hour per intersection.

## *Do Red Light Cameras Reduce Violations and Collisions?*

- ▶ Yes, in addition to the decrease in red light running at camera-equipped sites, studies show this effect is carried over to nearby signalized intersections that are not equipped with red light cameras.
- ▶ An IIHS international red light camera study concluded that cameras lower red light violations by 40-50 percent.
- ▶ A 2016 Institute study comparing large cities with red light cameras to those without found the devices reduced the red light running crash rate by 21 percent and the rate of all types of fatal crashes at signalized intersections by 14 percent.
- ▶ Previous IIHS research in California found significant citywide crash reductions followed the introduction of red light cameras and injury crashes at intersections with traffic signals were reduced by 29 percent.

## *Red Light Violations and Injury Collisions*

- Front into side collisions (right angle), the crash type most closely associated with red light running, at these intersections declined by 32 percent overall, and front side crashes involving injury fell 68 percent.
- An institute review of international red light camera studies concluded that cameras reduce injury crashes by 25-30 percent.
- The Cochrane Collaboration, an international public health organization, reviewed 10 controlled before-after studies of red light cameras effectiveness. Based on the most rigorous studies, there was an estimated 13-29 percent reduction in all types of injury crashes and a 24 percent reduction in right angle injury crashes.

## *Do Red Light Camera's Increase the Risk of Rear-end Collisions?*

- Some studies have reported that while red light cameras reduce front-into-side collisions and overall injury crashes, they can increase rear-end crashes, however such crashes tend to be much less severe than front-into-side crashes, so the net affect is positive.
- The study sponsored by the Federal Highway Administration evaluated red light camera programs in seven cities and they found that overall, right-angle crashes decreased by 25 percent while rear-end collisions increased by 15 percent.
- Results showed a positive aggregate economic benefit of more than \$18.5 million in those seven cities. The authors concluded that the economic costs from the increase in rear-end crashes were more than offset by the economic benefits from the decrease in right-angle crashes targeted by red light cameras.
- Note, not all studies have reported increases in rear-end crashes. The review by Cochrane Collaboration did not find a statistically significant change in rear-end injury crashes.

# Proposed Red Light Safety Camera Intersections

- ▶ Tukwila International Blvd at S 144<sup>th</sup> Street
  - ▶ Boeing Access Road at MLK Jr Way S
  - ▶ S 133 rd Ave S and Interurban Ave S
  - ▶ 42<sup>nd</sup> Ave S at Interurban Ave S
  - ▶ Southcenter Parkway at Strander Blvd
  - ▶ W. Valley at 180<sup>th</sup> Ave S
  - ▶ W. Valley at Strander Blvd
  - ▶ Grady and Interurban Ave S
  - ▶ Tukwila Parkway at 61<sup>st</sup> Ave S
  - ▶ Tukwila Parkway at onramp to I-405 N
  - ▶ Southcenter Blvd at 66<sup>th</sup> Ave S
  - ▶ Southcenter Blvd at 61<sup>st</sup> Ave S
- (Stats From 1/14-12/31/16,  
39 with 16 being right angle crashes,  
with 8 persons injured; 16 sideswipe;  
6 rear end crashes; 1 fixed object).

# The Safety Camera Equipment

## 3D Red-Light Safety Camera Solution



### 24/7 Automated Red-Light Camera Enforcement

Continuous intersection coverage both day and night.



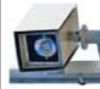
### 3-Dimensional Radar Detection

Next-generation, non-invasive 3D tracking radar measures the distance, angle and speed of up to 32 vehicles for optimal event capture.



### High-Definition Video

Digital video including a 72-second video clip of the violation event and 24/7 video of each intersection.



### High-Efficiency Strobe

Fast recharge rate with flash variance capability for clear plate shots during dark conditions.



### Automated Wireless Upload

Fast data and evidence transfer at speeds up to 4C.



### Single Camera, Single Pole

Industry-leading technology inconspicuously placed on a single pole. Installation available on existing infrastructure.



### ATS Live Video Capability

Innovative traffic surveillance with real-time visual intelligence and post-incident analysis via computer, phone, tablet etc.



### High-Resolution 29 MP Images

Clear plate and vehicle images that distinguish the make, model and color of vehicle.



### Blends into Cityscape

Minimal design with customized color options to fit the cityscape.



### Real-Time System Support

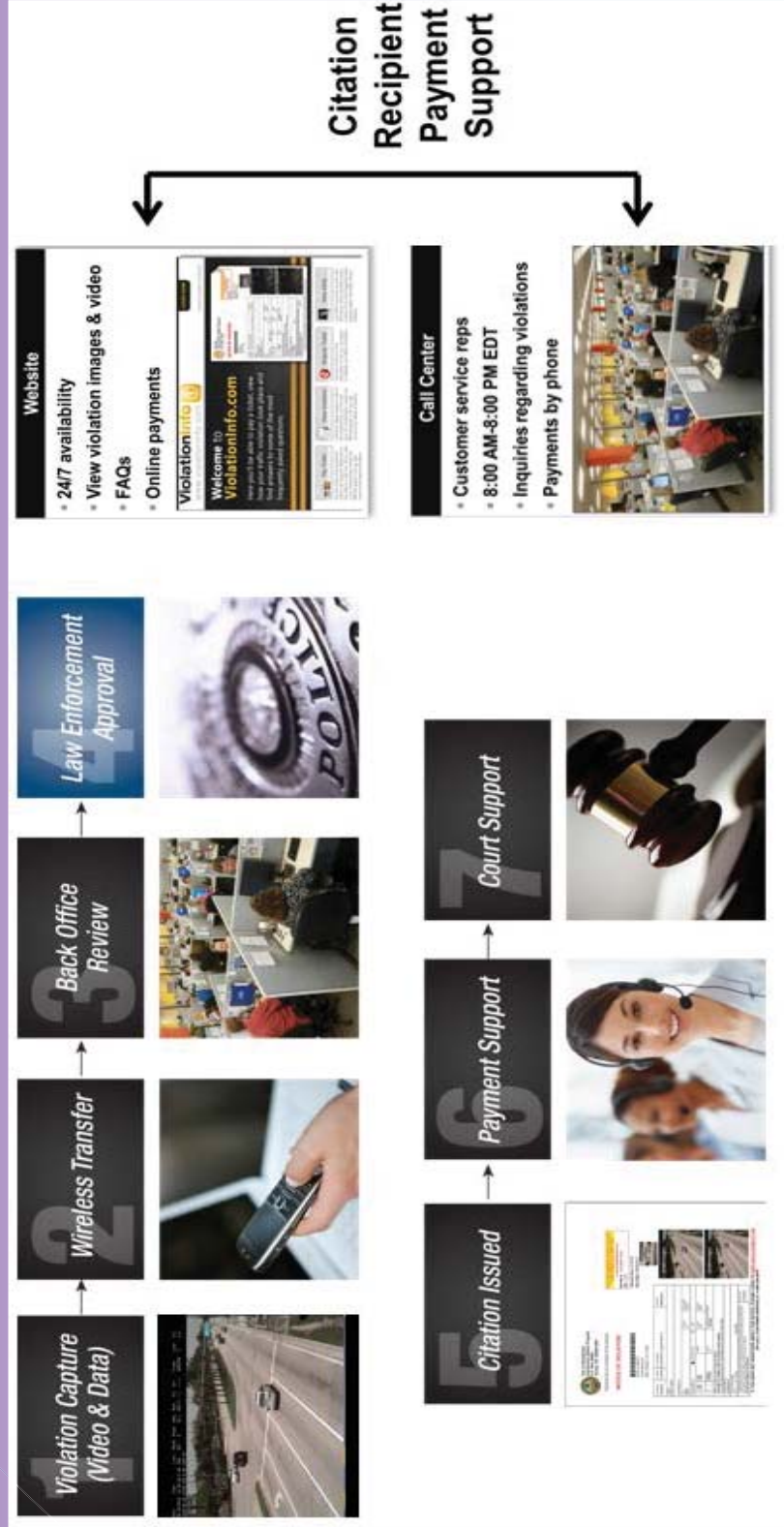
Real-time connectivity capabilities ensure that your cameras are online, operating correctly and capturing violations.



Latest TECH



# End to End Program Support





# ATS Per Month Pricing (No upfront Cost)

**\$4,250**  
Per camera, per month

## Latest Technology

- Non-invasive 3D radar
- 29 MP still camera
- HD video camera
- Self-serve video retrieval
- High-efficiency strobe
- Wireless event upload

## Program Support & Training

- Senior Account Manager
- Client support personnel
- IT, software & maintenance support
- In-person & online training
- In-house legislative team
- Local WA attorney: [Stoel Rives LLP](#)

## End-to-End Services

- Safety camera installation
- Maintenance & field services
- Event processing
- Citation printing & mailing
- Program reporting
- Evidence packages

## Award-Winning PR

- Advertising & promotions
- Video PSAs
- Social media outreach
- Collateral & FAQs
- Press Releases

## Key Points

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- Cameras will eliminate internal investigations, law suits
- Cameras will assist with traffic collision investigations
- Cameras will increase safety of police officers
- Cameras will provide more efficient service, 24/7 with no additional FTE's
- Camera will allow for better tracking of collisions, and tickets issued in these intersections.
- Police, Prosecutor, City Attorney, and Court supports this program.
- Studies show that nationally a high percentage of the public is in favor of RLC.

# DRAFT

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF TUKWILA, WASHINGTON, ADOPTING A NEW CHAPTER OF THE TUKWILA MUNICIPAL CODE AUTHORIZING THE USE OF AUTOMATED TRAFFIC SAFETY CAMERAS AND ADOPTING STANDARDS RELATED THERETO, TO BE CODIFIED AS TUKWILA MUNICIPAL CODE CHAPTER 9.22; PROVIDING FOR SEVERABILITY; AND ESTABLISHING AN EFFECTIVE DATE.**

**WHEREAS**, very serious traffic accidents involving right-angle collisions at high rates of speed are often the result of drivers running red lights; and

**WHEREAS**, studies show that these accidents result in more serious injury and deaths than other accidents at signalized intersections; and

**WHEREAS**, locating automated traffic safety cameras at signalized intersections has been shown to reduce the frequency of traffic violations at these intersections and has resulted in a corresponding reduction in injuries and associated economic costs; and

**WHEREAS**, the City has arterial intersections that would benefit from the strategic placement of automated traffic safety cameras; and

**WHEREAS**, the City of Tukwila desires to improve traffic safety and pedestrian safety throughout the City with emphasis on critical intersections; and

**WHEREAS**, the Washington State Legislature has adopted Chapter 46.63 RCW, which authorizes local jurisdictions to use automated traffic safety cameras at arterial intersections, subject to some limitations; and

**WHEREAS**, in accordance with RCW 46.63.170(1)(a), the City has prepared an analysis of the locations where automated traffic safety cameras are proposed to be located;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF TUKWILA, WASHINGTON, HEREBY ORDAINS AS FOLLOWS:

**Section 1. Chapter 9.22 of the Tukwila Municipal Code Established.** A chapter of the Tukwila Municipal Code entitled “Automated Traffic Safety Cameras,” to be codified as Tukwila Municipal Code (TMC) Chapter 9.22, is hereby established to read as follows:

**CHAPTER 9.22  
AUTOMATED TRAFFIC SAFETY CAMERAS**

Sections:

- 9.22.010 Automated traffic safety cameras – Detection of violations – Restrictions
- 9.22.020 Notice of infraction
- 9.22.030 Prima facie presumption
- 9.22.040 Infractions processed
- 9.22.050 Fine
- 9.22.060 Nonexclusive enforcement

**Section 2. Regulations Established.** TMC Section 9.22.010, “Automated traffic safety cameras – Detection of violations – Restrictions,” is hereby established to read as follows:

**9.22.010 Automated traffic safety cameras – Detection of violations – Restrictions**

A. City law enforcement officers and persons commissioned by the Tukwila Police Chief are authorized to use automated traffic safety cameras and related automated systems to detect and record the image of stoplight violations at the intersection of two arterials; provided, however, pictures of the vehicle and the vehicle license plate may be taken only while an infraction is occurring, and the picture shall not reveal the face of the driver or of any passengers in the vehicle.

B. Each location where an automated traffic safety camera is used shall be clearly marked by signs placed in locations that clearly indicate to a driver that the driver is entering a zone where traffic laws are enforced by an automated traffic safety camera.

C. “Automated traffic safety camera” means a device that uses a vehicle sensor installed to work in conjunction with an intersection traffic control system or a speed measuring device, and a camera synchronized to automatically record one or more sequenced photographs, microphotographs or electronic images of the rear of a motor vehicle whenever a vehicle fails to stop when facing a steady red traffic control signal as detected by a speed measuring device.

**Section 3. Regulations Established.** TMC Section 9.22.020, "Notice of infraction," is hereby established to read as follows:

**9.22.020 Notice of infraction**

A. Whenever any vehicle is photographed by an automated traffic safety camera, a notice of infraction shall be mailed to the registered owner of the vehicle within 14 days of the violation, or to the renter of a vehicle within 14 days of establishing the renter's name and address. A person receiving a notice of infraction based on evidence detected by an automated traffic safety camera may respond to the notice by mail.

B. If the registered owner of the vehicle is a rental car business, the law enforcement agency shall, before a notice of infraction is issued, provide a written notice to the rental car business that a notice of infraction may be issued to the rental car business if the rental car business does not, within 18 days of receiving the written notice, provide to the agency by return mail: (1) a statement under oath stating the name and known mailing address of the individual driving or renting the vehicle when the infraction occurred; or (2) a statement under oath that the business is unable to determine who was driving or renting the vehicle when the infraction occurred; or (3) in lieu of identifying the vehicle operator, the rental car business may pay the applicable penalty. Timely mailing of this statement to the agency shall relieve the rental car business of any liability under this chapter for the infraction.

C. The law enforcement officer issuing a notice of infraction shall include with it a certificate or facsimile thereof, based upon the inspection of photographs, microphotographs or electronic images produced by an automated traffic safety camera, citing the infraction and stating the facts supporting the notice of infraction. This certificate or facsimile shall be prima facie evidence of the facts contained in it and shall be admissible in a proceeding charging a violation under this chapter. The photographs, microphotographs or electronic images evidencing the violation must be available for inspection and admission into evidence in a proceeding to adjudicate the liability for the infraction.

D. The registered owner of a vehicle is responsible for an infraction detected through the use of an automated traffic safety camera unless the registered owner overcomes the presumption set forth in TMC Section 9.22.030, or, in the case of a rental car business, satisfies the conditions under TMC Section 9.22.020.B. If appropriate under the circumstances, a renter identified under TMC Section 9.22.020.B is responsible for an infraction.

E. All photographs, microphotographs or electronic images prepared under this chapter are for the exclusive use of law enforcement in the discharge of duties under this chapter and, as provided in RCW 46.63.170(1)(g), they are not open to the public and may not be used in a court in a pending action or proceeding unless the action or proceeding relates to a violation under this chapter. No photograph, microphotograph or electronic image may be used for any purpose other than enforcement of violations under this chapter nor retained longer than necessary to enforce this chapter.

**Section 4. Regulations Established.** TMC Section 9.22.030, "Prima facie presumption," is hereby established to read as follows:

**9.22.030 Prima facie presumption**

A. In a traffic infraction case involving an infraction detected through the use of an automated traffic safety camera under this chapter, proof that the particular vehicle described in the notice of traffic infraction was involved in a stoplight violation, together with proof that the person named in the notice of infraction was at the time of the violation the registered owner of the vehicle, shall constitute in evidence a prima facie presumption that the registered owner of the vehicle was the person in control of the vehicle at the point where, and for the time during which, the violation occurred.

B. This presumption may be overcome only if the registered owner, under oath, states in a written statement to the court or in testimony before the court that the vehicle involved was, at the time, stolen or in the care, custody or control of some person other than the registered owner.

**Section 5. Regulations Established.** TMC Section 9.22.040, "Infractions processed," is hereby established to read as follows:

**9.22.040 Infractions processed**

Infractions detected through the use of automated traffic safety cameras shall be processed in the same manner as parking infractions.

**Section 6. Regulations Established.** TMC Section 9.22.050, "Fine," is hereby established to read as follows:

**9.22.050 Fine**

The fine for an infraction detected under authority of this chapter shall be a base monetary penalty of \$136.00; and provided further, that whenever, in the future, the state of Washington increases the fine imposed under this chapter, by legislation or court rule, the City's fine shall be increased to a like amount upon the effective date of such legislation or court rule.

**Section 7. Regulations Established.** TMC Section 9.22.060, "Nonexclusive enforcement," is hereby established to read as follows:

**9.22.060 Nonexclusive enforcement**

Nothing in this chapter prohibits a law enforcement officer from issuing a notice of traffic infraction to a person in control of a vehicle at the time a violation occurs under RCW 46.63.030(1)(a), (b) or (c).

**Section 8. Corrections by City Clerk or Code Reviser.** Upon approval of the City Attorney, the City Clerk and the code reviser are authorized to make necessary corrections to this ordinance, including the correction of clerical errors; references to other local, state or federal laws, codes, rules, or regulations; or ordinance numbering and section/subsection numbering.

**Section 9. Severability.** If any section, subsection, paragraph, sentence, clause or phrase of this ordinance or its application to any person or situation should be held to be invalid or unconstitutional for any reason by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of the remaining portions of this ordinance or its application to any other person or situation.

**Section 10. Effective Date.** This ordinance or a summary thereof shall be published in the official newspaper of the City and shall take effect and be in full force five days after passage and publication as provided by law.

PASSED BY THE CITY COUNCIL OF THE CITY OF TUKWILA, WASHINGTON, at a Regular Meeting thereof this \_\_\_\_\_ day of \_\_\_\_\_, 2018.

ATTEST/AUTHENTICATED:

\_\_\_\_\_  
Christy O'Flaherty, MMC, City Clerk

\_\_\_\_\_  
Allan Ekberg, Mayor

APPROVED AS TO FORM BY:

Filed with the City Clerk: \_\_\_\_\_

Passed by the City Council: \_\_\_\_\_

Published: \_\_\_\_\_

Effective Date: \_\_\_\_\_

Ordinance Number: \_\_\_\_\_

\_\_\_\_\_  
Rachel B. Turpin, City Attorney







C. Ordinance: Red Light Cameras

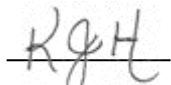
Staff is seeking Council approval of an ordinance that would add a chapter to the Municipal Code authorizing the use of automated traffic safety cameras. The Police Department is interested in working with American Traffic Solutions to install automated safety cameras at certain intersections to reduce red light running and the potential of serious injury collisions. The intersections would be selected based on collision data. Red light runners are responsible for deaths, serious injuries, and property damage, and studies show that red light cameras are effective at reducing the crash rate. A police officer will review all photographs taken by the automatic cameras and make a determination whether or not to issue a notice of infraction. Red light violations will have a penalty of \$136 and will be handled in the same manner as parking infractions. The cost of each camera is \$4,250 per month, and the program would be self-sustaining. Additional revenue distribution would be a Council policy decision to be evaluated after the program is implemented. Chair Hougardy invited the Municipal Court Administrator to speak to the FTE and caseload impacts to the Court. Staff reached out to Renton, Des Moines, and Fife, which are averaging about 20,000 tickets per year from their automated cameras. At this time Court is estimating that an additional 1.75 FTE and another half day calendar would be needed if the City moves forward with 6-12 cameras. Committee members expressed general support to introduce the cameras, but preferred a phased-in approach that incorporates data-based siting decisions. **UNANIMOUS APPROVAL. FORWARD TO AUGUST 13, 2018 COMMITTEE OF THE WHOLE.**

D. Fire Department Lock Box Program

Staff briefed the Committee on an initiative to upgrade the City’s KNOX Box locking system to a keyless system that will be available January 1, 2019. The Fire Department will be requesting additional budget in its 2019-2020 proposal to implement the upgrade, which is expected to reduce the City’s liability for misplaced or lost Knox Box keys. Staff and representatives from Knox demonstrated the new technology. **DISCUSSION ONLY.**

III. MISCELLANEOUS

**Adjourned 6:49 p.m.**

 Committee Chair Approval  
Summary by LH