

# AGENDA ITEM SUMMARY

City Council



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## STAFF

Jerrod Kinsman, Lieutenant, Police Services Special Operations Division  
Mike Avrech, Sergeant, Police Services Traffic Unit  
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## SUBJECT

**Items Relating to Traffic Safety Initiative – Automated Vehicle Identification System (AVIS) Corridors.**

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## EXECUTIVE SUMMARY

A. First Reading of Ordinance No. 097, 2024, Amending the Fort Collins Traffic Code to Implement a New Automated Vehicle Identification System (AVIS) to Replace the Previously-Approved AVIS to Support the Traffic Safety Initiative.

B. First Reading of Ordinance No. 098, 2024, Designating Speed Corridors Pursuant to Fort Collins Traffic Code Section 1106.

C. First Reading of Ordinance No. 099, 2024, Making Supplemental Appropriations to Support Additional Staffing and Expenses for Implementation of the Automated Vehicle Identification System Traffic Safety Initiative.

The purpose of this item is to recommend a proposal from Police Services and Planning, Development and Transportation (PDT), supported by the City Attorney's Office (CAO), and Municipal Court. This proposal stems from recent changes to Colorado law related to the expanded use of unmanned speed enforcement with Automated Vehicle Identification Systems (AVIS), on sections of roadways designated by the Council as speed corridors. The initiative's primary goal is to promote traffic safety through speed enforcement and supports Vision Zero, the Council's goal of eliminating Fort Collins roadway fatalities and reducing injury crashes.

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## STAFF RECOMMENDATION

Staff recommends adoption of all Ordinances on the First Reading.

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## BACKGROUND / DISCUSSION

This initiative is a joint effort by Police Services and PDT, and is supported by the City Attorney's Office, and Municipal Court. It results from recent changes to Colorado law related to the expanded use of photo speed enforcement tools on sections of roadways designated by the City Council. The initiative's primary

goal is to promote traffic safety through speed enforcement and supports Vision Zero, the City Council's goal of eliminating Fort Collins roadway fatalities and reducing injury crashes.

A fundamental portion of the initiative is to adopt changes to Municipal Traffic Code 615 and 1106. Designated "speed corridors" will be identified based on vehicle speed and crash data provided by City staff. Once the Council identifies speed corridors, Police Services can utilize photo speed enforcement in these areas. Without a speed corridor designation, state law limits the use of photo radar to school zones, neighborhoods, construction zones, and streets that are adjacent to parks.

Based on preliminary data collected for the proposed corridors and expansion to allow current red-light cameras to begin capturing speed data, the system will increase the number of citations issued. This increase will significantly increase the workload for the City Attorney's office and the Municipal Court. To offset this impact, Council will need to appropriate funds to increase personnel at the CAO and Municipal Court starting in 2024 and continuing through 2025 and for PDT starting in 2025.

### **Background**

Traffic speed is a concerning problem facing the City. Last year, the City experienced a record-high number of fatal and injury collisions, many of which were associated with people driving beyond posted speed limits.

In 2023, the State passed legislation to allow local governments to conduct unmanned speed enforcement with AVIS (Automated Vehicle Identification System). With this change in state law, the City of Fort Collins has the opportunity to impact traffic speed compliance through the expanded use of automated speed enforcement—to reduce the number of injury accidents and traffic-related fatalities on our roadways.

As part of the City's current traffic enforcement program, six intersections are outfitted with red-light cameras (two cameras per intersection) that detect red stop-light violations. Those twelve red-light-camera approaches have the capability to also detect, validate, and generate speeding violations where vehicle speed exceeds the posted limit of more than eleven miles per hour, if those intersections are designated within a speed corridor. Additionally, this initiative adds the contracted use of two transportable units that can be placed temporarily in problematic locations to address speed compliance between intersections.

The appropriation will fund essential FTE's in Municipal Court and the City Attorney's Office along with temporary positions to help manage the initial extreme influx of cases. in 2024. This appropriation will be fully funded through traffic safety revenue in the Redlight Camera Fund within the General Fund collected from existing AVIS. The projected future equipment, operating costs, and personnel will be supported by the additional AVIS and Speed Corridor Ordinance items that are being considered by Council to support the Traffic Safety Initiative.

<https://www.cpr.org/2023/06/06/police-signs-bill-allowing-more-speed-cameras-across-colorado/>

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD004607.pub4/abstract>



It is estimated that by 2020, road traffic crashes will have moved from ninth to third in the world ranking of burden of disease, as measured in disability adjusted life years. The prevention of road traffic injuries is of global public health importance. Measures aimed at reducing traffic speed are considered essential to preventing road injuries; the use of speed cameras is one such measure.

Thirty five studies met the inclusion criteria. Compared with controls, the relative reduction in average speed ranged from 1% to 15% and the reduction in proportion of vehicles speeding ranged from 14% to 65%. In the vicinity of camera sites, the pre/post reductions ranged from 8% to 49% for all crashes and 11% to 44% for fatal and serious injury crashes. Compared with controls, the relative improvement in pre/post injury crash proportions ranged from 8% to 50%.

### **Ordinance update**

To establish the use of unmanned speed enforcement or AVIS, an update to existing ordinance is required. Changes to City Ordinance 615 and 1106 will align with state law updates signed into law from Senate Bill 23-200 which updated CRS 42-4-110.5 permitting local and state governments to implement AVIS within their jurisdictions along designated speed corridors. Additionally, Council is being asked to adopt designated speed corridors through an ordinance based on data collected within the past five years but not to exceed five years. Staff has provided the past three years of data to support corridor designation. Data beyond three was not utilized as it was not geocoded for locations.

### **Corridor Designation**

Police Services and PDT are asking Council to designate by ordinance speed corridors to address dangerous driving on the community roadways. Data supports identifying corridors in accordance with state law CRS 42-4-110.5, utilizing crashes, citations, and complaints. Two tiers of corridors have been identified by city staff responsible for responding to and addressing roadway safety. The two tiers being recommended represent the most common locations for injury/fatal crashes, citations involving speeding, careless driving, reckless driving, and racing. In addition, complaint data was used to support the empirical data but not used to weigh the decision as complaints are relative to the opinion of the complainant and vary widely. The Traffic Safety Initiative group is asking Council to adopt both tier 1 and tier 2 corridors as they support the need for additional speed enforcement due to higher volumes of driving behaviors which contribute to injury and fatal crashes.

<b>Road</b>	<b>From</b>	<b>To</b>
Suniga Road	College Ave	Lemay Ave
Riverside Drive	College Ave	Pitkin St
Prospect Road	Taft Hill Road	I25
Drake Road	Overland Tr	Lemay Ave
Horsetooth Road	College Ave	Ziegler Rd
Harmony Road	Chokecherry Tr	I25
Trilby Road	Wainwright Dr	College Ave/287
Taft Hill Road	Mulberry St	Trilby St
Shields Street	Elizabeth St	Carpenter Rd
College Ave/HWY 287	Laurel St	Carpenter Rd
Lemay Avenue	Prospect Rd	Trilby Rd
Timberline Road	Prospect Rd	Drake Rd
Timberline Road	Harmony Rd	Trilby Rd
Ziegler Road	William Neal Pkwy	Kechter Rd
Conifer Street	College Ave	Lemay Ave
Mulberry Street	Taft Hill Rd	12 <sup>th</sup> St
Stuart Street	College Avenue	Lemay Avenue
Elizabeth Street	Overland Tr	Shields St
Drake Road	Lemay Ave	Miles House Ave
Overland Trail	Mulberry St	Drake Rd
Timberline Road	Drake Rd	Harmony Rd

<b>Intersection (+300 feet)</b>	<b>Directions</b>
Mulberry and Shields	West and East
Prospect and Shields	North and South
Harmony and Shields	North and South
Drake and College	North and South
Drake and Lemay	North and East
Harmony and Timberline	East and West

### **Automated Vehicle Identification System (AVIS) Upgrade**

Upgrading existing red-light camera locations to issue speed violations would cost \$2500 per month, per approach (12) totaling \$30,000 per month to activate all approaches.

Adding transportable solutions which could be moved periodically, likely every thirty days in areas where speed is most concerning would cost \$8,500 per month per unit (2). It is recommended two transportable systems are added to traffic safety operations totaling \$17,000 a month with total systems additions being \$564,000 annually. The systems specifications include:

- Dual radar - Lane-specific tracking radar (primary radar) measures the speed and position of vehicles in beam, while the speed radar (secondary radar) provides high precision speed measurement of vehicle in beam. This enables the system to precisely track each vehicle and accurately trigger speed events, even in high-traffic locations. This also enables hardware-based edge SSV (secondary speed verification), which Verra Mobility uniquely provides.
- High-Definition Video - Capture high-definition digital video including a configurable video clip (up to 12-seconds) of the event and video of each speed-enforced location. This footage has been used to successfully assist law enforcement in solving both traffic and non-traffic related crimes.
- High-Efficiency LED Strobe - The purpose-built LED strobe allows for the ideal level of illumination to capture evidence of speed violations, while reducing the amount of light pollution typically associated with regular strobes.

- Ultra-High-Resolution Images - The camera captures ultra-high-resolution color images of 12 megapixels. While other systems rely on multiple pieces of equipment to process and store images, the Verra Mobility system integrates the camera and the main processing unit together. This eliminates the risk for missed or misinterpreted event data as it transfers from one processor to another.

2024 total equipment costs are estimated to be \$235,000.

2025 and future projected ongoing equipment costs are estimated to be \$564,000.

**Additional Recommended Personnel:**

With the addition of automated speed enforcement utilizing AVIS an increase in the number of citations is anticipated. With an increase in citations staffing is required to support this Traffic Safety Initiative to quell dangerous driving behaviors. Municipal Court and the City Attorney’s Office will be directly impacted with the increase in citations, and it is recommended that funds generated from AVIS enforcement be utilized to provide necessary staffing. The AVIS funds from the updated corridor related Traffic Safety Initiative ordinances will support the additional personnel requested by Municipal Court and the City Attorney’s Office and PDT. Below is a table highlighting the current increase in traffic citations for current camera radar vans and red-light camera citations processed by the Municipal Court and the City Attorney’s Office from January 1<sup>st</sup> to March 31<sup>st</sup> for each year shown.

	2023 YTD	2024 YTD	% Change
Citations Issued	4522	7872	+42%
Citations Disposed	4223	7162	+42%
Dismissals	350	677	+48%
Trials Scheduled	44	88	+50%
Motions Filed	144	320	+55%
Cases Served by VM	270	292	+8%

**Proposed Personnel Costs:**

2024 Personnel costs to support speed corridor and automated enforcement for the city consist of the following proposed positions.

- (2) Full-time municipal court clerks \$67,696 (Municipal Court)
- (1) City Attorney and (1) Legal Assistant \$142,774 (City Attorney’s Office)
- Estimated 1-2 FTE’s for temporary staffing (either hourly or contractual) Municipal Court \$24,904
- Estimated 1-2 FTE’s for temporary staffing (either hourly or contractual) City Attorney’s Office \$179,112
  - Total personnel cost expansion funded by automated enforcement \$414,486

2025 and ongoing personnel costs

- (2) Full-time municipal court clerks \$154,285 (Municipal Court)
- (1) City Attorney and (1) Legal Assistant \$253,142 (City Attorney’s Office)
- Estimated 1-2 FTE’s for temporary staffing (either hourly or contractual) Municipal Court \$58,864
- Estimated 1-2 FTE’s for temporary staffing (either hourly or contractual) City Attorney’s Office \$258,902

- (1) Vision Zero Coordinator (PDT) \$130,713
- (1) Network Engineer (PDT) \$117,072
  - Total personnel cost expansion funded by automated enforcement \$972,978

Staff has also requested under a separate item on this agenda that Council appropriate funds to support Municipal Court and City Attorney’s Office staffing to absorb traffic enforcement and AVIS expansions implemented in late 2023-early 2024.

**Anticipated Traffic Safety Revenue and Appropriation of Funds**

Staff is requesting for Council to appropriate \$649,486 from the Redlight Camera Fund within the General Fund, generated by these new Ordinances, to fund necessary FTE positions, equipment, and program costs for Municipal Court, City Attorney’s Office and Police Services for 2024 to support adopting ordinances for automated enforcement of speeding violations in areas where the City designates as speed corridors.

The future revenue generated by AVIS will be dedicated to support traffic safety related programs, equipment, and personnel.

The current Redlight Camera Fund within the General Fund balance is \$1,082,000 and is currently used to support municipal court and PDT. Activating red-light locations into speed camera locations would generate and estimated additional \$2,166,000 and develop an estimated Redlight Camera Fund within the General Fund balance for 2024 of \$2,124,392 if activated by August of 2024, fund balance for 2025 of \$3,347,637 and for 2026 a balance of \$4,882,461.

	2021	2022	2023	2024	2025	2026
Current AVIS Rev	\$ 1,211,000.00	\$ 1,164,000.00	\$ 1,150,000.00	\$ 1,604,000.00	\$ 1,888,000.00	\$ 1,944,000.00
Current AVIS Exp	\$ 882,000.00	\$ 960,000.00	\$ 1,435,000.00	\$ 1,899,000.00	\$ 1,965,000.00	\$ 2,034,000.00
<b>Income/(Loss)</b>	<b>\$ 329,000.00</b>	<b>\$ 204,000.00</b>	<b>\$ (285,000.00)</b>	<b>\$ (295,000.00)</b>	<b>\$ (77,000.00)</b>	<b>\$ (90,000.00)</b>
<b>Additional Corridor Revenue</b>				<b>\$ 2,166,000.00</b>	<b>\$ 3,293,000.00</b>	<b>\$ 3,408,000.00</b>
Appropriation for Immediate Need				\$ 179,122.00	\$ 324,777.00	\$ 336,144.20
Additional FTE Need to Support Speed Corridor				\$ 414,486.00	\$ 972,978.00	\$ 1,007,032.23
Additional Corridor Expenses				\$ 235,000.00	\$ 564,000.00	\$ 571,000.00
				<b>\$ 649,486.00</b>	<b>\$ 1,536,978.00</b>	<b>\$ 1,578,032.23</b>
<b>Total Additional Expenses</b>				<b>\$ 828,608.00</b>	<b>\$ 1,861,755.00</b>	<b>\$ 1,914,176.43</b>
<b>Fund Balance</b>	<b>\$ 1,163,000.00</b>	<b>\$ 1,367,000.00</b>	<b>\$ 1,082,000.00</b>	<b>\$ 2,124,392.00</b>	<b>\$ 3,478,637.00</b>	<b>\$ 4,882,460.58</b>

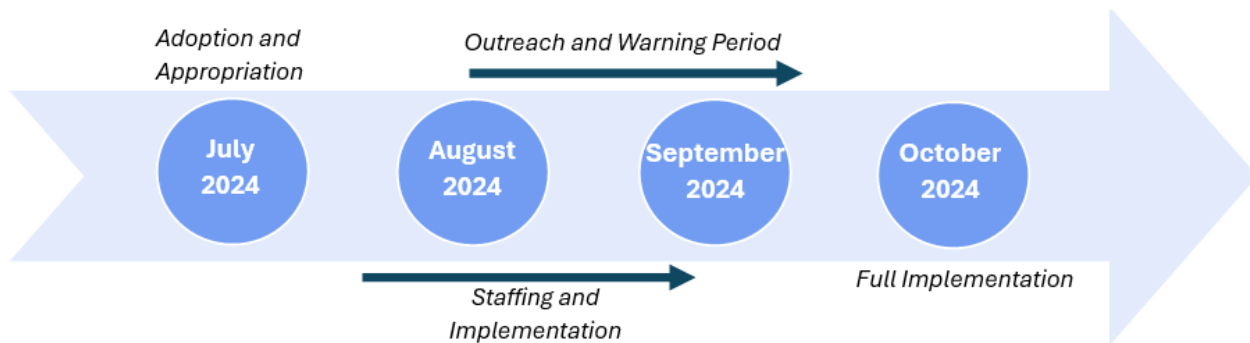
**Recommendation:**

Staff recommends the following regarding the Traffic Safety Initiative for AVIS.

- Adopt on first reading the Ordinance Repealing and Reenacting Municipal Traffic Code Sections 615 and 1106
- Adopt on first reading the Ordinance Designating Speed Corridor Locations
- Adopt on first reading the Ordinance Appropriating Funds in the Redlight Camera Fund within the General Fund to Support Additional Staffing and Expenses for Implementation of the AVIS in 2024

**Previous Council Direction**

At Council work session on May 28, 2024, Council provided direction to move forward with this initiative as soon as practical and adopt all ordinances, both corridor tiers and appropriation of funds to support the program costs and recommended staffing increases for Municipal Court and the City Attorney’s Office (starting in 2024 and continuing through 2025) and PDT (starting in 2025).



**CITY FINANCIAL IMPACTS**

The financial impact will be to increase the current contract with the AVIS vendor the City is under contract with currently to include speed enforcement at all red-light camera locations and add two transportable automated speed enforcement units. In addition, funding the requested staffing to support the City Attorney’s Office, Municipal Court and PDT. No additional funding is requested from Council as all aspects of this initiative are to be funded directly from the Redlight Camera Fund within the General Fund if the proposed ordinances and corridor designation are adopted.

In 2024 the financial impact is approximately \$649,486 needed to support the equipment, operating costs, and personnel of AVIS Speed Corridors. Municipal Court will receive \$92,600 for personnel, the City Attorney’s office will receive \$321,886 for personnel and Police Services will receive \$235,000 for equipment.

**BOARD / COMMISSION / COMMITTEE RECOMMENDATION**

There are no board, commission or committee recommendations. Council requested this be presented for first reading without directing initiative through additional review.

**PUBLIC OUTREACH**

A thorough public outreach will occur once ordinances are adopted, and appropriations are made for expansion of the AVIS program. This involves 30 days public notice of corridor locations once posted, then 30 days of warnings for detected violations. Adoption of this initiative will also require public feedback of

data focused on providing the number of citations issued in each area, ongoing feedback on the number of injury and fatal crashes after systems are fully operationalized and on a every other year basis to council to provide regular reports in-line with the BFO process. This data will be publicized on Police Services website and updated monthly.

## **ATTACHMENTS**

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1. Ordinance A for Consideration
2. Ordinance B for Consideration
3. Ordinance C for Consideration
4. Traffic Safety Initiative Summary
5. Presentation