AGENDA TITLE
Consideration of a motion to adopt Resolution 1342 designating certain streets within the City of Boulder as automated vehicle identification corridors; and setting forth related details

PRESENTER(S)
Nuria Rivera-Vandermyde, City Manager
Natalie Stiffler, Director of Transportation & Mobility
Devin Joslin, Principal Traffic Engineer
Veronica Son, Senior Civil Engineer
Jo Vann, Photo Enforcement Supervisor
Chris Reynolds, Prosecution Senior Manager

EXECUTIVE SUMMARY
The City of Boulder has had a photo enforcement program for 25 years. In that time, the program has grown to include over 180 neighborhood photo radar van deployment locations, five full-time and two part-time photo enforcement officers, two photo radar vans, and 11 red light running cameras. City Council and the Transportation Advisory Board advocated for passage of Senate Bill 23-200 (SB 23-200) as essential to achieving the city’s Vision Zero goals. Governor Polis signed SB 23-200 into law on June 5, 2023. With passage of SB 23-200, Colorado Revised Statutes (C.R.S.) 42-4-110.5(2)(g) was amended and now allows for the expanded use by municipalities of Automated Vehicle Identification Systems (AVIS) on any street or portion of a street that has been designated as an automated vehicle identification corridor. The law requires corridors to be designated by ordinance or resolution of a municipality’s governing body. Boulder Revised Code (B.R.C.) 7-4-74 authorizes the use of automated enforcement systems.
within the city. Therefore, City Council is asked to adopt Resolution 1342, included herein as Attachment A, to allow for the expansion of the City’s photo speed enforcement program to enhance public safety by designating certain streets as automated vehicle identification corridors.

**STAFF RECOMMENDATION**

<table>
<thead>
<tr>
<th>Suggested Motion Language:</th>
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<tr>
<td>Staff requests council consideration of this matter and action in the form of the following motion:</td>
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<tr>
<td>Motion to adopt Resolution 1342 designating certain streets within the City of Boulder as Automated Vehicle Identification Corridors; and setting forth related details.</td>
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**COMMUNITY SUSTAINABILITY ASSESSMENTS AND IMPACTS**

- **Economic** – Photo enforcement program expansion is expected to result in increased citations and fines for violators. Fine amounts are capped at $40 unless the violation occurred in a school or construction zone. School and construction zone fines are doubled to $80. There are no points assessed against a person’s privilege to drive based on these violations per state law, and therefore these violations typically do not affect insurance rates.

- **Environmental** – Photo enforcement program expansion is expected to result in decreased speeding.

- **Social** – Photo enforcement program expansion is anticipated to reduce the occurrence of fatal and serious injury crashes, increase awareness of speed enforcement on Boulder’s streets, and contribute to increased community safety.

**OTHER IMPACTS**

- **Fiscal** – The 2024 Police Department budget includes approved requests to support expansion of the photo enforcement program, such as additional staff, equipment, and other infrastructure upgrades.

- **Staff time** – The photo enforcement program is operated as part of staff’s normal work plan. One additional full-time employee at the police department to assist with program expansion is approved within the 2024 budget. The municipal court and city attorney’s office are working together to plan for the increased number of citations seen at the court.
RESPONSES TO QUESTIONS FROM COUNCIL AGENDA COMMITTEE

None

BOARD AND COMMISSION FEEDBACK

Staff presented details of the planned photo enforcement program expansion and resolution to designate certain streets within the City of Boulder as Automated Vehicle Identification Corridors to the Transportation Advisory Board (TAB) at its November 13, 2023 meeting. However, because the topic was presented under Matters from Staff as an update on the process to bring forth the related resolution to City Council, and not as a formal agenda item, TAB was not able to formally offer feedback or make a recommendation to City Council. TAB previously expressed support for photo enforcement program expansion at their March 13, 2023 meeting in which the board offered unanimous support for the city’s Vision Zero Action Plan, of which photo enforcement program expansion was a key action in the Plan.

PUBLIC FEEDBACK

None

BACKGROUND

The City of Boulder has had a photo enforcement program for 25 years. In that time, the program has grown to include over 180 neighborhood photo radar van deployment locations, five full-time and two part-time photo enforcement officers, two photo radar vans, and 11 red light running cameras. City Council and the Transportation Advisory Board advocated for passage of SB 23-200 as essential to achieving the city’s Vision Zero goals. Governor Polis signed SB 23-200 into law on June 5, 2023. With passage of SB 23-200, C.R.S. 42-4-110.5(2)(g) was amended and now allows for the expanded use by municipalities of AVIS on any street or portion of a street that has been designated as an automated vehicle identification corridor. The law requires corridors to be designated by ordinance or resolution of a municipality’s governing body. B.R.C. 7-4-74 authorizes the use of automated enforcement systems within the city. Therefore, City Council is asked to adopt Resolution 1342 to allow for the expansion of the City’s photo speed enforcement program to enhance public safety by designating certain streets as automated vehicle identification corridors.

The Vision Zero Boulder: Safe Streets Report, 4th Edition, 2022 identified that one out of every three fatal and serious injury crashes that occurred between 2018 through 2020 involved speeding. The Boulder Vision Zero Action Plan, May 2023 contains an action focused on strategically expanding deployment of automated vehicle identification systems, including both fixed and mobile speed enforcement, where allowed by state law. The intended outcomes of the photo enforcement program expansion are to:

- Reduce speed-related fatal and serious injury crashes.
- Increase awareness of speed enforcement on Boulder’s streets.
• Reduce speeding.
• Increase community safety.

ANALYSIS

SB 23-200 requires that automated vehicle identification corridors be designated based on review of data collected within the past five years related to incidents of crashes, speeding, reckless driving, or community complaints of speeding on a street. As such, Transportation and Mobility Department and Police Department staff reviewed crash data and calls to police dispatch related to complaints of speeding or reckless driving. This data was used as a basis for determining which corridors to designate within Resolution 1342.

Table 1 summarizes the speeding-related crashes that occurred from 1/1/2018 through 8/31/2023 across the city. Within this period, there were a total of four fatal and 39 serious injury crashes attributed to exceeding the safe speed or speeding at 10 mph or more over the posted speed limit.

Table 1. Summary of Speeding 10 mph+ or Exceeding Safe Speed Crashes

<table>
<thead>
<tr>
<th>Year</th>
<th>Fatal</th>
<th>Incapacitating Injury</th>
<th>Non-Incapacitating Injury</th>
<th>Possible Injury</th>
<th>Property Damage Only</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>2018</td>
<td>0</td>
<td>7</td>
<td>21</td>
<td>16</td>
<td>37</td>
<td>81</td>
</tr>
<tr>
<td>2019</td>
<td>0</td>
<td>12</td>
<td>21</td>
<td>15</td>
<td>42</td>
<td>90</td>
</tr>
<tr>
<td>2020</td>
<td>0</td>
<td>9</td>
<td>11</td>
<td>10</td>
<td>26</td>
<td>56</td>
</tr>
<tr>
<td>2021</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>7</td>
<td>34</td>
<td>49</td>
</tr>
<tr>
<td>2022</td>
<td>0</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td>34</td>
<td>51</td>
</tr>
<tr>
<td>2023</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>3</td>
<td>24</td>
<td>42</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>39</td>
<td>72</td>
<td>57</td>
<td>197</td>
<td>369</td>
</tr>
</tbody>
</table>

Attachment B illustrates the location of crashes that were a result of exceeding the safe speed or traveling at 10 mph or more above the posted speed limit for the most recent five-year period from January 1, 2018 through August 31, 2023. Attachment C illustrates those same speed-related crashes in a heatmap. As can be seen, many of the crashes occur on the city’s higher volume, higher speed arterial streets. The heatmap shows that there are speed-related crashes along the extents of the streets recommended to be designated within Resolution 1342.

Attachment D illustrates a heatmap of speeding related calls to police dispatch received during the period from January 1, 2018 through August 31, 2023. The map shows where community complaints of speeding have been noted. There are clusters of calls at intersections along many of the city’s arterial streets. The police dispatch calls correlate closely with crash data, further indicating these streets should be designated.

In addition to this quantitative data, qualitative data from the Police Department Traffic Unit was also considered regarding streets that are challenging to enforce due to physical site constraints.
Attachment E illustrates the streets proposed to be designated within Resolution 1342 as automated vehicle identification corridors. The corridors include both city owned and state owned streets. The corridors include many of the city’s expressway, principal arterial, and minor arterial streets, including the entirety of Broadway, 28th Street, and Iris Avenue, as well as large segments of Lookout Road, Spine Road, Valmont Road, Pearl Parkway, Canyon Boulevard, Arapahoe Avenue, Colorado Avenue, Baseline Road, Table Mesa Drive, Folsom Street, 30th Street, Foothills Parkway, 55th Street, and 63rd Street. Note that most streets not specifically designated within Resolution 1342 can still be enforced using automated enforcement because they are in residential neighborhoods on streets with speed limits of 35 mph or less, within school zones, adjacent to a park, or in an active construction zone. Sites meeting those criteria are allowed to be enforced without specific designation as an automated vehicle identification corridor. Once adopted by resolution, automated enforcement could occur anywhere within the extents of the designated corridors. However, additional coordination is required with the Colorado Department of Transportation (CDOT) prior to automated enforcement beginning on state owned streets.

NEXT STEPS

In 2024, staff will continue to implement elements of the expanded photo enforcement program. Many requests to allow for expansion of the photo enforcement program were approved within the 2024 Police Department budget. These include staff recruitment of one additional full-time employee on the photo enforcement team, equipment procurement of one additional photo radar van, infrastructure enhancements, such as six concrete pads to provide parking for the photo radar van along designated corridors and upgrades to red light running cameras to enable automated speed enforcement. In addition, staff will continue to collaborate with CDOT in 2024 on steps necessary prior to automated enforcement occurring on state owned streets in accordance with CDOT automated enforcement guidelines, which are in the process of being developed.

ATTACHMENT(S)

A – Proposed Resolution 1342
B – Map of Corridor Speed Limits and Speed-Related Crashes from 1/1/2018 through 8/31/2023
C – Heatmap of Speed-Related Crashes from 1/1/2018 through 8/31/2023
D – Heatmap of Police Dispatch Calls Related to Speeding or Reckless Driving from 1/1/2018 through 8/31/2023
E – Map of Boulder Automated Vehicle Identification Corridors Designated within Resolution 1342
RESOLUTION 1342
A RESOLUTION DESIGNATING CERTAIN STREETS WITHIN THE CITY OF BOULDER AS AUTOMATED VEHICLE IDENTIFICATION CORRIDORS; AND SETTING FORTH RELATED DETAILS

THE CITY COUNCIL OF THE CITY OF BOULDER, COLORADO, HEREBY

FINDS AND RECITES THAT:

A. C.R.S. 42-4-110.5(2)(g) was amended in 2023 and now allows for the expanded use by municipalities of Automated Vehicle Identification Systems (AVIS) on any street or portion of a street that has been designated as an automated vehicle identification corridor.

B. Current AVIS speed enforcement operations by the City of Boulder are restricted to residential neighborhood streets with speed limits of 35 mph or less, within school zones, or in active construction zones.

C. The City of Boulder’s Safe Streets Report has identified that one out of every three fatal and serious injury crashes between 2018 and 2020 involved speeding.

D. Speed-related crashes accounted for an average of 7 severe and 65 total crashes per year from 2018-2022. Further, crash data indicates 67% of all fatal and serious injury crashes within the City of Boulder occurred on arterial roadways.

E. The United States Department of Transportation National Roadway Safety Strategy released in January 2022 determined that achieving safe speeds requires a multi-faceted approach including road design, infrastructure, speed limit setting, education, and enforcement. The strategy specifically identified speed safety cameras as a safety countermeasure.

F. City Council strongly supported the passage of amendments to C.R.S. 42-4-110.5 as essential to achieving its Vision Zero travel safety goals. The 2023-2027 Vision Zero Action Plan, presented at the April 6, 2023 City Council meeting, contains an action focused on strategically expanding deployment of automated vehicle identification systems, including both fixed and mobile speed enforcement, where allowed by state law.

G. City staff have illustrated, through compiled data, incidents of crashes, speeding, reckless driving, or community complaints that necessitate the designation of certain streets within the city of Boulder as automated vehicle identification corridors.
NOW THEREFORE, BASED ON THE FINDINGS MADE IN THIS
RESOLUTION, ABOVE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY
OF BOULDER, COLORADO, THAT:

1. City Council hereby approves the expanded use of AVIS to enhance the public safety on Boulder’s roads.

2. City Council further approves the designation of certain streets within the city of Boulder, named below, as automated vehicle identification corridors. The specific extent of the designation on any state-owned streets will be determined in consultation with the Colorado Department of Transportation.

Automated Vehicle Identification Corridors

- Broadway – US 36/28th Street to CO 119/CO 7 (Canyon Boulevard)
- CO 93 (Broadway) - CO 119/CO 7 (Canyon Boulevard) to south city limits
- Folsom Street – Valmont Road to Colorado Avenue
- US 36/28th Street – Broadway to S Boulder Road/Table Mesa Drive
- 30th Street – CO 119 (Diagonal Highway) to Baseline Road
- CO 157 (Foothills Parkway) - CO 119 (Diagonal Highway) to S Boulder Road/Table Mesa Drive
- 55th Street – Valmont Road to CO 7 (Arapahoe Avenue)
- 63rd Street – CO 119 (Diagonal Highway) to south city limits
- Lookout Road – 63rd Street to 75th Street
- Spine Road – Lookout Road to S. Orchard Creek Circle/Wellington Road
- Violet Avenue – Broadway to US 36/28th Street
- Iris Avenue – Broadway to US 36/28th St
- CO 119 (Diagonal Highway) - US 36/28th Street to 47th Street
- Valmont Road – Folsom Street to 55th Street
- Valmont Road – 55th Street to east city limits
- Pearl Street/Pearl Parkway – US 36/28th Street to 55th Street
- CO 119 (Canyon Boulevard) - west city limits to CO 93 (Broadway)
- CO 7 (Canyon Boulevard) - CO 93 (Broadway) to US 36/28th Street
Arapahoe Avenue – Broadway to US 36/28th Street
CO 7 (Arapahoe Avenue) - US 36/28th Street to east city limits
Colorado Avenue – Folsom Street to CO 157 (Foothills Parkway)
US 36 (Baseline Road) - CO 93 (Broadway) to US 36 Westbound Ramp
Baseline Road – US 36 Westbound Ramp to east city limits
Table Mesa Drive/S Boulder Road – Lehigh Street to east city limits
ADOPTED this ___ day of _________________ 20__.

_________________________________
____________________,
Mayor

Attest:

_________________________________
City Clerk
10mph+ Posted Speed Limit or Exceeding Safe Speed Crashes

Crashes 1/1/18 to 8/31/23
Police reported only, dry roadway conditions, not under the influence or impaired

Attachment B – Map of Corridor Speed Limits and Speed-Related Crashes from 1/1/2018 through 8/31/2023

Item 3D - Photo Speed Enforcement Corridors
Crashes 1/1/18 to 8/31/23
Police reported only, dry roadway conditions, not under the influence or impaired

Speed Related Crashes Heat Map

- **Low**
- **Medium**
- **High**
Police Call Center
Speeding Related Calls

Calls 1/1/18 to 8/31/23
speeding related calls,
reckless/aggressive/dangerous driving related calls

Speed Related Heat Map

Low
Medium
High

Speeding or Reckless Driving from 1/1/2018 through 8/31/2023

Attachment D – Heatmap of Police Dispatch Calls Related to Speeding or Reckless Driving from 1/1/2018 through 8/31/2023
Attachment E

Boulder Automated Vehicle Identification Corridors