

# AGENDA

## INFORMATION UPDATE

November 9, 2021

5:00 PM,



---

### I. INFORMATION UPDATE

- I.A. WELS Update
- I.B. 2021 Snowmaking for Snow Polo
- I.C. Lift One Corridor Status Update
- I.D. Electric Vehicles for the Police Department
- I.E. Safety and Mobility in the Downtown Core Project



## INFORMATION ONLY MEMORANDUM

**TO:** Mayor and City Council

**FROM:** Rob Gregor, Utilities Management Analyst  
Rick Magill, WELS Plans Review Technician

**THROUGH:** Lee Ledesma, Utilities Finance Manager  
Tyler Christoff, Utilities Director

**MEMO DATE:** October 29, 2021

**MEETING DATE:** November 09, 2021

**RE:** Water Efficient Landscape Standards – Program update & 2022 Enhancements

---

**REQUEST OF COUNCIL:** No request for approval or specific direction. Staff is providing this memo to the Mayor and City Council so that they may be informed of the status of the Water Efficient Landscape Standards and on-going administrative updates.

**SUMMARY AND BACKGROUND:** Conservation and efficiency are key components of Aspen’s Integrated Water Supply System, and conservation and efficiency practices enable the City to manage water supplies more effectively. As such, the Water Efficient Landscape Ordinance and associated Standards remain the top action item in both the Aspen Municipal Water Efficiency Plan and in the Roaring Fork Watershed Regional Efficiency Plan.

After several years of successfully implementing the Water Efficient Landscape Standards (WELS) and collecting data, Utilities staff has identified additional enhancements to improve the efficacy of the Standards. Enhancements for 2022 include: requiring WaterSense-approved “smart irrigation controllers” on residential properties, requiring a minimum deposit value for projects that cannot be completed/inspected until the next irrigation season, and requiring professional preparation of as-built planting and irrigation plans. See Exhibit A.

To date, there have been 106 building permits (85 within the city and 21 within the county) that have triggered compliance with the WELS. These projects involved a total of 972,092 irrigated square feet (up from 762,764 irrigated sq. ft last year). The average water budget from the 106 submittals since 2018 is down to 6.0 gallons/sq.ft./irrigation season (down from 6.4 gallons/sq.ft./irrigation season last year), and now exceeds the desired reduction of gallons per square foot per season envisioned in the Standards by nearly 20 percent. These projects equate to an estimated annual savings of more than 8,750,000 gallons of water. Additionally, there are currently 20 WELS submittals under review and

approximately 15 applications in preapproval status. Additional data on WELS submissions can be found in Exhibit B.

**DISCUSSION:** After an 18-month pilot program that ended in December 2018, all building permit applications that trigger WELS compliance review now demonstrate alignment with the maximum annual irrigation water budget of 7.5 gallons/sq.ft./irrigation season. In addition to providing a landscape and irrigation plan that demonstrates alignment with this maximum irrigation water budget at the permit review stage, applicants are also required to obtain a 3<sup>rd</sup> party audit from a certified landscape irrigation auditor once the landscaping and irrigation systems are installed. This audit ensures that the landscape and irrigation installations comply with the WELS as approved during plans review.

In May 2020, City Council approved several minor enhancements to the WELS, which included adding two new exemptions to WELS review, a variance to the WELS for projects with outdoor pools/spas and a relatively small, irrigated area, and updated permit language for triggering WELS compliance review.

**2022 ENHANCEMENTS:** Building off the enhancements made in 2021, a list of enhancements to the WELS that will become effective January 1, 2022, is provided below. A full draft of the amended Standards can be found in Exhibit A.

- WELS Section 5.1.5 is amended to require “smart irrigation controllers” for both residential and commercial projects. Smart irrigation controllers were previously only required for commercial projects. Smart controllers are an irrigation industry standard and uniformity between customer classes ensures fairness and equity with the application of these requirements.
- References to routing WELS plans and documentation to the Parks Department are deleted (e.g. WELS Section 5.7.2 relating to irrigation Audits and WELS Section 6 relating to Landscape and Irrigation Inspections). All WELS roles, duties, and responsibilities are now solely under the purview of the Utilities Department.
- WELS Section 5.8.3 and Municipal Code Title 25.30 are amended to require a minimum deposit value of \$5,000 and a requirement for the applicant to list itemized costs for landscape/irrigation project completion to calculate WELS deposit requirements for applicants seeking a Temporary Certificate of Occupancy (TCO) in lieu of a Certificate of Occupancy (CO) when WELS inspections are not possible until a later date. Previous versions of the WELS did not specify a minimum deposit requirement or provide adequate direction for estimating future costs of project completion. A minimum deposit value is recommended to ensure completion of WELS final inspection on smaller projects, and the deposit calculation assists applicants’ construction and financial planning activities.
- Landscape and Irrigation Inspection Requirements (WELS Sections 6.1 and 6.2, respectively) are updated to require “professionally prepared” Landscape and Irrigation as-built plans. Professional standardization of this documentation is needed as many as-built and/or installation documents have been insufficient when attempting to show deviation from professionally prepared and approved plans.

**ENVIRONMENTAL BENEFITS OF THE WELS:** The City of Aspen's Landscaping Standards are an excellent example of how local efforts tie into larger statewide efforts to

reduce outdoor water use in Colorado and tie directly to both the municipal and regional water efficiency plans to which Aspen is party. Comprehensive landscape codes are key to reducing outdoor demand and "building it smart from the start," and the WELS promote the values and benefits of healthy landscapes while recognizing the need to invest in efficiency.

**CITY MANAGER COMMENTS:**

**ATTACHMENTS:**

Exhibit A – Enhanced Sections of Water Efficient Landscaping Standards for 2022

Exhibit B – WELS Overview Graphs 2017-2021

# Exhibit A – Enhanced Sections of Water Efficient Landscaping Standards (2022)

## SECTION 5: IRRIGATION SYSTEM CRITERIA

### 5.1: Irrigation System Requirements

5.1.5: Smart irrigation controllers labeled by U.S. Environmental Protection Agency's WaterSense Program or with published reports posted on the Smart Water Application Technologies website are ~~recommended~~ **required** for residential projects and required for all non-residential projects. Flow sensors integrated with the automatic irrigation controller are required on all projects to control irrigation if flows are abnormal.

### 5.7: Irrigation Audit

5.7.2: Prior to the audit, applicant shall inform the ~~Parks Department Permit Coordinator and City of~~ Aspen Landscape Plan Reviewer that the site is ready for irrigation inspection.

### 5.8: Irrigation Approval Letter

5.8.3.c: ~~If a permanent Certificate of Occupancy cannot be issued during the winter months because landscaping and irrigation systems cannot be inspected for compliance, as required by the Water Efficient Landscaping Standards, and a property owner or their representative requests a Temporary Certificate of Occupancy, the property owner will submit an estimate to complete the remaining irrigation and landscaping work and pay a deposit to the City of Aspen Utilities department as set out below, prior to issuance of a Temporary Certificate of Occupancy. For County parcel on City water, if the County issues a Certificate of Occupancy without an approved and inspected irrigation and landscape installation that includes a third-party audit, City of Aspen Utilities will collect a deposit based on schedule below using owner's estimated total for remaining irrigation and landscaping work on subject parcel.~~

~~Deposit Schedule for Landscaping and Irrigation:~~

<del>Project cost estimate</del>	<del>Deposit</del>
<del>\$0-50,000</del>	<del>50%</del>
<del>\$50,000-100,000</del>	<del>25%</del>
<del>Over \$100,000</del>	<del>15%</del>

**The Water Efficient Landscaping Standards Sections 5.7 and 5.8 require the Irrigation Approval Letter and Irrigation Audit before final approval by the City. As such, if a property owner, or their representative, requests a Temporary Certificate of Occupancy for City parcel on City Water or a Certificate of Occupancy for a County parcel on City Water prior to the complete installation of the landscape and irrigation and/or before a third-party audit and final City of Aspen Approval Letter can be provided, the property owner will submit an estimate to complete the remaining irrigation and landscaping**

work and pay a deposit as set out below prior to issuance of the (Temporary) Certificate of Occupancy.

For project cost estimates, applicant is required to submit remaining project cost details including: plant costs, labor costs, and irrigation system costs.

Deposit Schedule for Landscaping and Irrigation	
Project cost estimate	Deposit
\$0—50,000	50% -- Minimum \$5,000.00
\$50,000—100,000	25%
Over \$100,000	15%

Once compliance with all the requirements of the Water Efficient Landscaping Standards have been confirmed by the City, the deposit will be returned in full.

## SECTION 6: INSPECTION REQUIREMENTS

The City of Aspen reserves the right to conduct inspections as deemed necessary, separate from the third- party irrigation audit that is described in Section 0 above. All projects must meet the requirements and criteria explained in this document and as approved for building permit, regardless of whether the City conducts an inspection. The following information (6.1 & 6.2) is required to be provided in packet form to the City of Aspen Landscape Plan Reviewer ~~to the City~~ prior to requesting a final inspection. ~~by the City of Aspen Parks Department.~~

### 6.1: Landscape Inspection

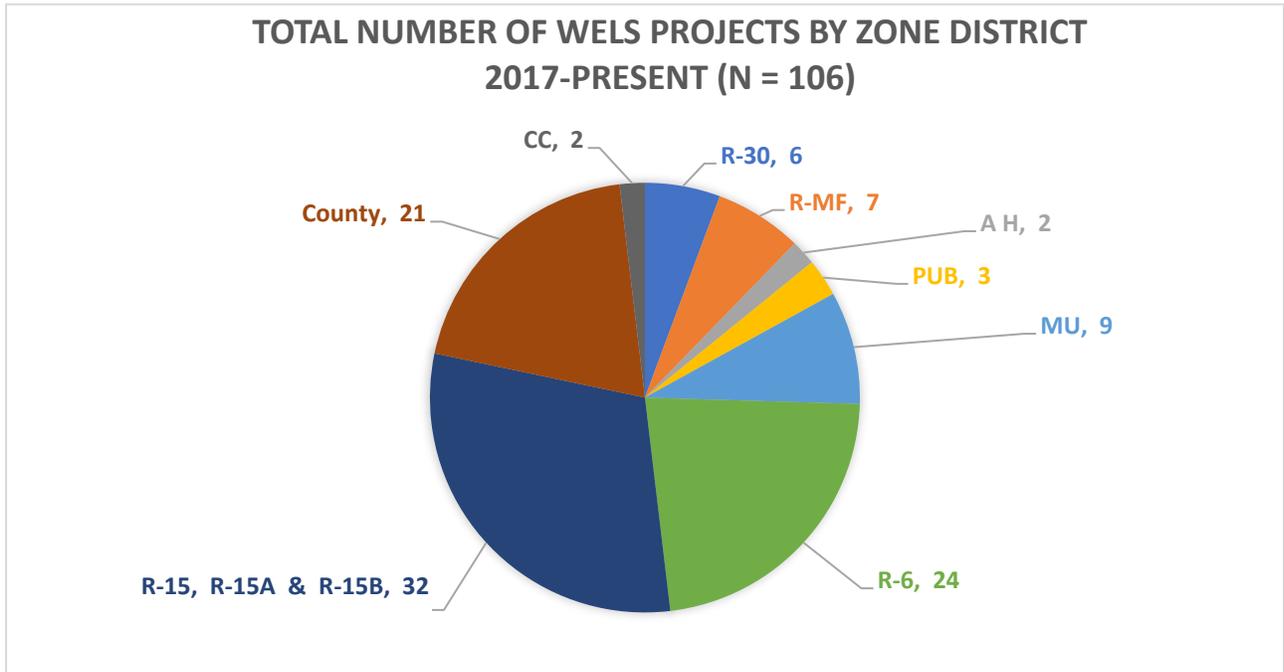
6.1.1 Professionally prepared plant list and drawings reflecting the landscape design and installed landscaping.

### 6.2: Irrigation Inspection

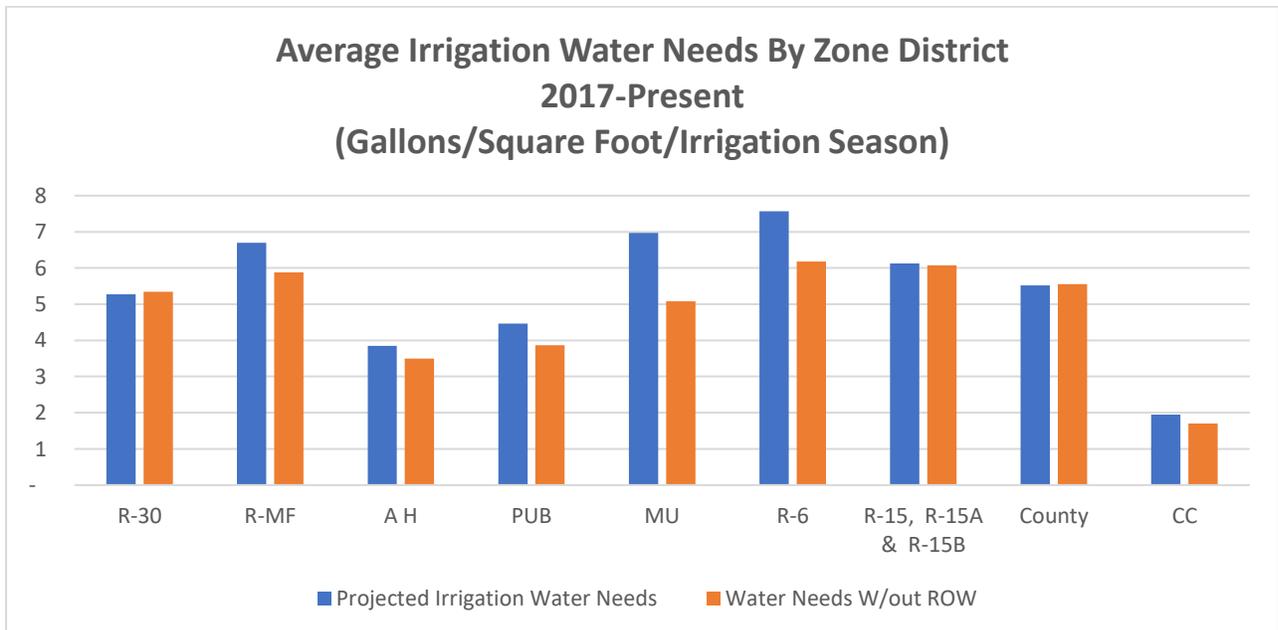
6.2.1 Professionally prepared drawings reflecting the as-built irrigation system.

# EXHIBIT B – WELS OVERVIEW GRAPHS

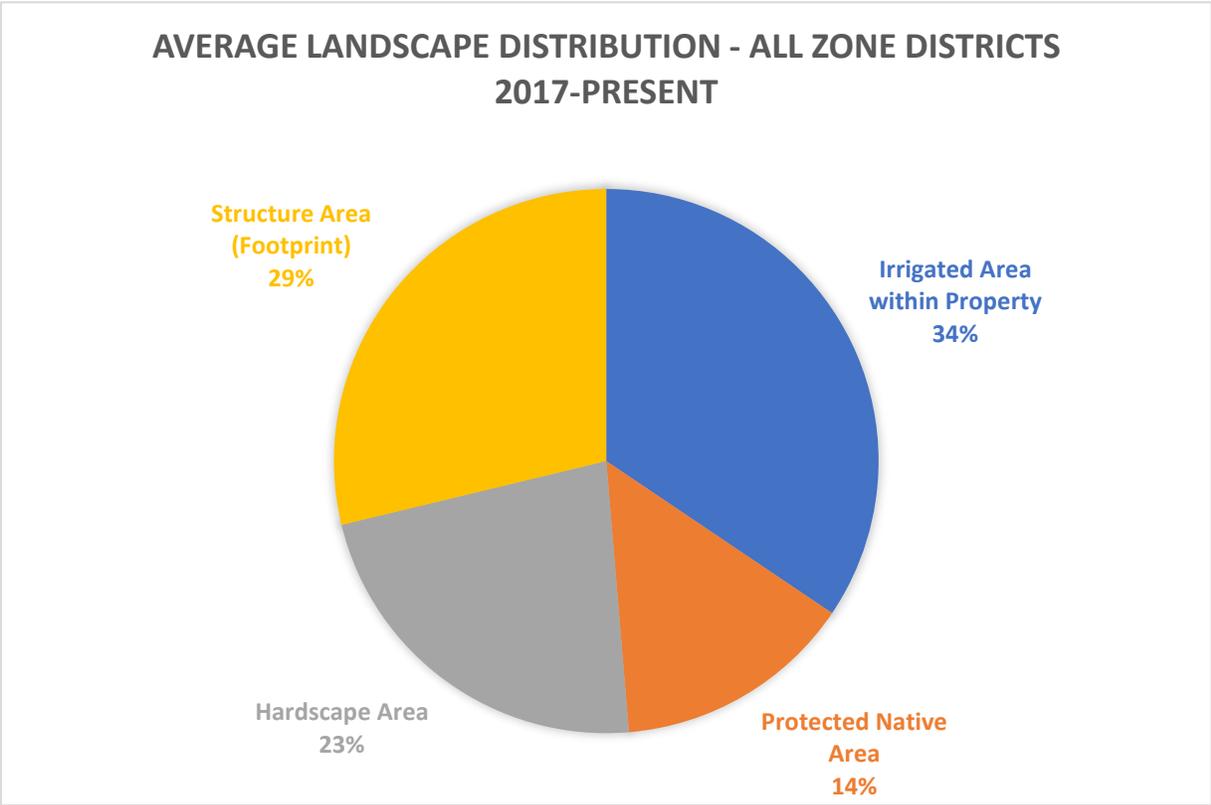
**GRAPH #1 – PROJECTS REQUIRING WELS COMPLIANCE BY ZONE DISTRICT**

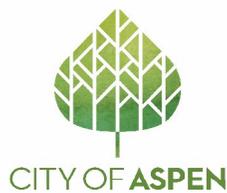


**GRAPH #2 – WATER REQUIREMENTS INCLUDING RIGHT-OF-WAY IRRIGATION**



**GRAPH #3 – TYPICAL PARCEL MAKEUP**





## MEMORANDUM OF INFORMATION

**TO:** Sara Ott, City Manager

**FROM:** Nancy Lesley, Director of Special Events  
Tyler Christoff, Director of Utilities  
Steve Barr, Parks, Operations Manager

**THROUGH:** Austin Weiss, Director of Parks and Recreation

**RE:** 2021 World Snow Polo Championships Snowmaking

---

**REQUEST OF COUNCIL:** Staff is notifying the City Manager regarding the possibility of making snow this December if all conditions allow, for the Snow Polo special event on Rio Grande Park December 18 & 19, 2021.

**SUMMARY AND BACKGROUND:** City staff is presently reviewing the permit application for Snow Polo to be held on Saturday and Sunday, December 18th and 19th in Rio Grande Park. The Aspen Valley Polo Club signs a Park Lease with the Parks Department that requires a certain amount of snow must cover the park to protect the grass during the event. In order to meet the terms of the lease, the Club has requested the option to make snow, if necessary, for the event.

For the past eight years, Mother Nature hasn't provided sufficient natural snow to meet the Parks Department's lease requirements. In those cases, the Club contracted with the Aspen Skiing Company and made snow specifically for the event.

In 2018 when the City was under Stage II water restrictions, Council at that time voted to move forward and approve the snowmaking if all conditions (same as outlined below) were met.

**DISCUSSION:** On July 14, 2020, a Stage I Water Shortage was declared by City Council. As water conditions worsened during the summer, Council enacted a Stage II Water Shortage on August 25, 2020. The focus of the adopted water reduction measures is on outdoor irrigation which is the primary water use in the summer and early fall. The specifics of the Stage II restrictions as described in Ordinance 10 series of 2020, are attached as Exhibit A.

Since City water customers are under Stage II water restrictions, staff has been discussing the implications of the restrictions as it may pertain to making snow for this event. If the following conditions are met, then staff believes that snowmaking can comply with the current water restrictions.

Conditions for use of Aspen's water supply for snowmaking at this event include:

- Sufficient water must be available in the system at the time of snowmaking. Water Department staff will evaluate the following criteria to make this determination immediately prior to the event:
  - Ability to meet Aspen's existing domestic use
  - Ability to meet existing in-stream flow requirements for Maroon Creek and Castle Creek.
  - Ability to meet all existing water contracts.
- Cost of the water and associated staff labor will be covered by the event.
- Water Department staff will manage the water system connection and work with the Parks Department and Aspen Skiing Company to ensure safe and effective operations.
- Snowmaking operations will use water efficiently and not allow water to puddle or runoff the Rio Grande Park into the streets
- Water use will have a backflow prevention device and be metered to allow an accurate accounting of water used.

This year the ideal time to make snow has been determined as December 3 – 11. The snowmaking team will make snow as often and for as long as the terms of the agreement will allow 7pm to 8am daily. Due to the location of the water source, during the snowmaking operations, Rio Grande Street will be closed (again, during snowmaking, which occurs overnight, only) from Mill Street to the Parking Garage entrance. The parking garage will be open and accessible from Spring Street.

**FINANCIAL IMPACTS:** The cost of the Water Department staff time and metered water will be billed to the event.

**ENVIRONMENTAL IMPACTS:** The process of snowmaking involves electricity and treated water. Snowmaking can also create noise issues when done in close proximity to residential or commercial operations. The use of the quieter types of snowmaking equipment for this event in recent years has been successful in mitigating this impact.

**ATTACHMENTS:** Exhibit A- August 25, 2020, Ordinance 10, series 2020 Stage Two Water Shortage

RECEPTION#: 663667, R: \$43.00, D: \$0.00  
DOC CODE: ORDINANCE  
Pg 1 of 7, 09/24/2020 at 08:59:30 AM  
Janice K. Vos Caudill, Pitkin County, CO

ORDINANCE NO. 10

Series of 2020

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ASPEN, COLORADO, TO AMEND CHAPTERS 25.20.020, WASTING OF WATER, AND 25.28, WATER SHORTAGES, OF THE MUNICIPAL CODE.

WHEREAS, the City Council has a currently adopted ~~water shortage~~ policy to address a shortage in its supply of water that this ordinance further refines and additionally provides a framework for sustainable water use during drought conditions; and

WHEREAS, this policy maintains essential public services to preserve public health and safety, environmental resources, and economic activity during all drought stages; and

WHEREAS, Aspen's water supply is highly dependent upon snowpack and snowmelt runoff with no current storage and a large dependence on streamflow availability at its river diversion points; and

WHEREAS, this ordinance provides guidance to prepare for, and respond to, drought conditions with transitions and action steps within the varying drought stages.

WHEREAS, the City Council finds that this ordinance furthers, and is necessary for, the promotion of the public health, safety, and welfare.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF ASPEN, COLORADO:

**Section 1.**

That Section 25.20.020 of the Municipal Code of the City of Aspen, Colorado which sets forth wasting of water prohibited, is hereby deleted in its entirety.

**Section 2.**

That Section 25.28 of the Municipal Code of the City of Aspen, Colorado which sets forth water shortages applicability, is hereby repealed and replaced as follows:

**Chapter 25.28. - WATER MANAGEMENT**

**Sec 25.28.010. Purpose.**

The City is committed to sustainability and providing a quality potable water supply to the community. The efficient use of the City's water resources as identified in the City's municipal water efficiency plan assures an adequate water supply for municipal water customers for all municipal purposes. The City supports and promotes the wise use of water under all conditions to help preserve essential public services and minimize the adverse effects of a water supply emergency on public health and safety, economic activity, environmental resources, economic activity, and individual lifestyles. When water shortages occur, restrictions on the use of water are imposed in order to protect the health and safety of citizens and property owners.

**Sec. 25.28.020. - Wasting of water prohibited.**

It shall be unlawful for any person using water from the City water system or any system connected thereto, to waste water. For purposes of this Section, *to waste water* shall mean any of the following:

- (a) The unnecessary running of water, which is not applied to any beneficial use, through or out of any water closet, lavatory, urinal, bathtub, hose, hydrant, faucet or other fixture, appliance or apparatus whatsoever, through the neglect or by reason of faulty or imperfect plumbing or fixture; or
- (b) Applying more water than is reasonably necessary to establish and maintain a healthy landscape, including but not limited to, the continuous application of water to lawns, sod, landscaping, or urenity resulting in oversaturation, ponding, pooling, or the flowing of water into drainage or storm drainage facilities; or
- (c) Watering with spray irrigation between the hours of 8.00 a.m. and 6.00 p.m. during the period from May 1 to October 1, except for the following uses:
  - (1) Watering for up to twenty-one (21) consecutive days to establish irrigated turf from seed or sod;
  - (2) Watering new plant material on the day of planting (e.g., flowers, trees, and shrubs);
  - (3) Watering that is essential to preserve irrigated or artificial turf subject to heavy public use;

- (4) Operating an irrigation system for installation, repair, audit, or reasonable maintenance, if the system is attended throughout the period of operation;
- (5) Watering where tree preservation is required under the local tree ordinance.
- (d) Watering landscaped areas during precipitation or high wind; or
- (e) Applying water intended for irrigation to an impervious surface, (e.g., a street, parking lot, alley, sidewalk or driveway); or
- (f) Failure to repair an irrigation system unit which is known to be leaking; or
- (g) Failure to use covers for outdoor pools or hot tubs; or
- (h) Using water instead of a broom or mop to clean outdoor impervious surfaces (e.g., sidewalks, driveways, and patios), except when cleaning with water is necessary for public health or safety reasons or when other cleaning methods are impractical and in which case the hose must be equipped with an automatic shut-off nozzle; or
- (i) Washing vehicles with a hose that lacks an automatic shut-off nozzle; or
- (j) Violation of restrictions imposed in connection with a declared water shortage per Chapter 25.28.030.

The prohibitions against wasting water are applicable regardless of whether a water shortage has been declared or a system emergency exists. Additional restrictions during times of a declared water shortage may apply pursuant to Chapter 25.28.030.

(Code 1971, § 23-151; Ord. No. 27-1985, § 1; Ord. No. 37-1991, § 5; Ord. No. 24-2019, § 1, 11-26-2019)

Sec. 25.28.022. - Exceptions.

The following activities do not constitute the wasting of water for purposes of Section 25.20.020:

- (a) Flow resulting from firefighting or routine inspection of fire hydrants or from fire training activities; or
- (b) Flow resulting from routine inspection, operation, or maintenance of a utility water system; or
- (c) Water applied as a dust control measure; or
- (d) Water used for construction or maintenance activities where the application of water is the appropriate methodology and where no other practical alternative exists; or
- (e) Street sweeping; or
- (f) Other watering activities reasonably necessary to protect public health or safety.

(Ord. No. 24-2019, § 1, 11-26-2019)

25.28.030. - Water shortage declaration.

- (a) A water shortage shall be declared upon a finding by the City Council that the City is having a shortage in its supply of water due to drought, system capacity, or any other cause. Such a finding shall be made by resolution.
- (b) The provisions of this Chapter shall apply to the use of the treated water supply, pressurized and non-pressurized raw water, and reuse water of the City to the extent any City-customer agreements provide for curtailment of water use or suspension of water delivery during water shortages or emergencies.
- (c) The City Council shall regulate the water service usage in accordance with subsection (a) of this section through adoption by resolution of a "drought mitigation and response plan", which shall be prepared and maintained by the Aspen Utilities Department.
- (d) The City Manager shall promulgate rules and regulations to implement the response plan as appropriate to address the water shortage declared by City Council. Such rules and regulations may include exemptions, as deemed appropriate by the City Manager.
- (e) When the resolution finding a water shortage is approved, the plan set forth in the rules and regulations shall be implemented. Such rules and regulations shall have full force and effect and shall be enforceable until such a time as the water shortage is found by City Council to have ended. It shall be an additional responsibility of the Utilities Director, under direction of the City Manager, to ensure that the measures described in the rules and regulations are carried out and to provide sufficient coordination between City departments.
- (f) In the event of an emergency, the City Manager shall have the authority to institute rules and regulations affecting the uses of all water served by the water delivery system until such a time that a water shortage declaration can be made by the City Council but no longer than 21 consecutive days.

(Code 1971, § 23-200; Ord. No. 27-1985, § 1; Ord. No. 18-2002 § 1 [part])

Sec. 25.28.040. - Enforcement and Appeal Process.

The owner or occupant of the licensed premises shall be responsible for compliance with this Chapter and those who violate these regulations or restrictions shall be subject to the following actions and penalties.

- (a) Upon first violation, the owner or occupant will be issued a written warning.
- (b) Upon further violations within a 12-month period from the date of the warning notice at the same premises, the owner or occupant will be advised in writing and the following penalty charges will be added to the water bill for the property.
  - (1) The following penalties shall be due, payable and collectible from any person, customer, or owner of the residential property pursuant to the provisions of this chapter by the due date of the water bill. Unless a water shortage declaration is in place, the charges are based on the "Normal Conditions" column and reflect violations to Section 25.28.020. During a water shortage declaration, the charges are based upon the stage, as appropriate:

Violation	Normal Conditions	Water Shortage Declaration			
		Stage 1	Stage 2	Stage 3	Emergency Response
2 <sup>nd</sup> Violation	\$125.00	\$175.00	\$200.00	\$300.00	\$400.00
3 <sup>rd</sup> Violation	\$250.00	\$300.00	\$325.00	\$400.00	\$500.00
All Additional Violations	\$500.00	\$525.00	\$550.00	\$650.00	\$750.00

(2) The following penalties shall be due, payable and collectible from any nonresidential customer pursuant to the provisions of this chapter by the due date of the water bill. Unless a water shortage declaration is in place, the charges are based on the "Normal Conditions" column. During a water shortage declaration, the charges are based upon the declared drought stage, as appropriate:

Violation	Normal Conditions	Water Shortage Declaration			
		Stage 1	Stage 2	Stage 3	Emergency Response
2 <sup>nd</sup> Violation	\$250.00	\$300.00	\$500.00	\$750.00	\$1,000.00
3 <sup>rd</sup> Violation	\$1,000.00	\$1,250.00	\$1,500.00	\$1,750.00	\$2,000.00
All Additional Violations	\$2,000.00	\$2,500.00	\$3,000.00	\$3,500.00	\$4,000.00

- (c) After the fourth violation within a 12-month period from the date of the warning notice at the same premises, if continued waste of water or willful violation of these regulations or restrictions occurs, the Water Department may disconnect the service where the violation has occurred.
- (d) Appeal Process. Any person subject to a charge for violation of a provision of this Chapter may appeal the charge by contacting the Aspen Water Department in writing within twenty (20) days of receipt of monthly utility bill containing the violation charge. Unless the customer's appeal is approved prior to the water bill due date, the customer shall pay any charges that appear on the water bill by the due date of the water bill. If the customer's appeal is approved after payment has been made, the disputed charge will be credited on the next water bill.

(Ord. No. ~~24-2019~~, § 1, 11-26-2019)

Sec. 25.28.050. - Monthly rules for water shortages.

Unless an alternative system of charges is adopted by City Council, temporary rates will be in effect during the time that the City Council declares a water shortage. Factors from the tables below will be specified in the rules and regulations for the water shortage declared by City Council and will be applied to monthly variable charges identified in Section 25.16.010 to develop temporary rate increases. Temporary rate increases shall go into effect after a minimum of a 48-hour notification of this rate change by the City of Aspen City Manager and as set forth in the rules and regulations provided via Public Notice.

(a) Four-Tier Rate Structure:

Billing Tier	Usage in Gallons Per ECU	Stage 1	Stage 2	Stage 3	Emergency Response
I	0 to 4,000	1.0	1.0	1.0	1.0
II	4,001 to 12,000	1.0	1.0	1.0	1.0
III	12,001 to 16,000	1.0 to 1.75	1.0 to 1.75	1.0 to 1.75	1.0 to 1.75
IV	Over 16,000	1.0 to 2.0	1.0 to 2.0	1.0 to 2.0	1.0 to 2.0

(b) Two-Tier Rate Structure (Bulk Water Customers):

Billing Tier	Usage in Gallons Per ECU	Stage 1	Stage 2	Stage 3	Emergency Response
I	0 to 2,940	1.0	1.0	1.0	1.0
II	Over 2,940	1.0 to 1.75	1.0 to 1.75	1.0 to 1.75	1.0 to 1.75

(c) Raw Water Rate Structure, Pressurized and Non-Pressurized:

Non-Pressurized Raw Water	Pressurized Raw Water	Stage 1	Stage 2	Stage 3	Emergency Response
Per 1,000 Sq. Ft	Per 1,000 Gallons	1.0 to 1.75	1.0 to 1.75	1.0 to 1.75	1.0 to 1.75

### Section 3.

Any and all existing ordinances or parts of ordinances of the City of Aspen covering the same matters as embraced in this Ordinance are hereby repealed and all ordinances or parts of ordinances inconsistent with the provisions of this ordinance are hereby repealed; provided, however, that such repeal shall not affect or prevent the prosecution or punishment of any person for any act done or committed in violation of any ordinance hereby repealed prior to the taking effect of this Ordinance.

**Section 4.**

If any section, subsection, sentence, clause, or phrase of this Ordinance is, for any reason, held to be invalid or unconstitutional, such decision shall not affect the validity or constitutionality of the remaining portions of this Ordinance. The City of Aspen hereby declares that it would have adopted this Ordinance, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases thereof be declared invalid or unconstitutional.

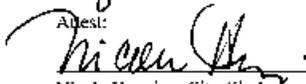
**Section 5.**

This Ordinance shall take effect thirty (30) days after passage, adoption and publication thereof as provided by law.

**Section 6.**

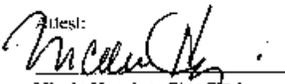
This ordinance shall not affect any existing litigation and shall not operate as an abatement of any action or proceeding now pending under or by virtue of the ordinance repealed or amended as herein provided, and the same shall be conducted and concluded under such prior ordinances.

**FIRST READING OF THIS ORDINANCE WAS INTRODUCED, READ, ORDERED AND PUBLISHED** as provided by law, by the City Council of the City of Aspen on the 11<sup>th</sup> day of August 2020.

Attest:  
  
Nicole Henning, City Clerk

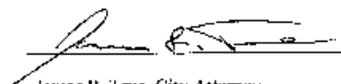
  
Tom, Mayor

FINALLY, adopted, passed, and approved this 25<sup>th</sup> day of August 2020.

Attest:  
  
Nicole Henning, City Clerk

  
Tom, Mayor

Approved as to form:

  
James R. Truc, City Attorney



INFORMATION ONLY  
MEMORANDUM

TO: Mayor Torre and City Council  
FROM: Jen Phelan, Development Manager<sup>i</sup>  
THROUGH: Scott Miller, Public Works Director  
MEMO DATE: November 5, 2021  
PUBLISH DATE: November 9, 2021  
RE: Status update of Lift One Corridor project (6)

---

This memo is providing City Council with a current progress update of the Lift 1 Corridor project. As mentioned in the initial memo in 2020, voter approval of the multi-stakeholder project<sup>1</sup> was granted in March 2019. The project stretches from Dean Street to the southerly termination of S. Aspen Street.

Five stakeholders are involved in the project: Lift One Lodge (LOL), Gorsuch Haus (GH), the Aspen Historical Society (AHS), Aspen Skiing Company (ASC), and the City of Aspen. Besides a land interest in the corridor project, the city also has a financial interest.<sup>2</sup>

All stakeholders are continuing to work towards perfecting their land use entitlements. Both of the final land use applications for Gorsuch Haus and Lift One Lodge were conditionally approved by the Historic Preservation Commission and/or the Planning Commission in December, with reviews that primarily focused on building materials and landscaping.

With final land use approvals granted, Development Orders have been issued which create a vested property right and starts the vesting period for the project. The Development Orders were published in the local newspaper on December 24, 2020 and a five year vesting period, granted in the ordinances that were referred to the electorate, has begun. To perfect their entitlements, both applicants are required to

---

<sup>1</sup> The project includes two hotels (Lift One Lodge and Gorsuch Haus), installation of a new telemix lift that loads closer to Dean Street and skier return, relocation of the historically designated Lift 1 bullwheel and associated towers, development of a ski museum and ticketing/skier services, as well as the redevelopment of city parks, Dean Street, and the termination (a new cul-de-sac) of S. Aspen Street.

<sup>2</sup> The city has allocated \$4.36 million dollars within an escrow account to help fund certain “public facing” elements of the project such as improvements to Dean Street and relocation of the Skiers Chalet Lodge (home of a future ski museum and ASC services) that will benefit the public. These funds are to be released to Lift One Lodge when overall improvements are constructed and “once the new ski lift is in a working condition.”

submit final plats, development agreements, easement agreements, maintenance agreements, etc. for recordation.

Gorsuch Haus submitted these draft plats and agreements at the end of February for administrative review and approval. The documents were recorded in July 2021. Lift One Lodge has also submitted their draft documents to the Community Development Department within the required submission timeline and the application was deemed complete on July 14th.

As the LOL approvals include development by other parties on city land as well as development on the LOL owned lots, the city and other stakeholders are involved in the review of draft plats and agreements. As a multistakeholder development in this part of the corridor, additional agreements and easement are necessary compared to the Gorsuch Haus lots.

Review between the stakeholders is ongoing. Due to the complexity of the documents, the stakeholders are targeting a first quarter recordation date. In the meantime, representatives of the stakeholder group continue to meet as a whole and individually to discuss issues associated with the Corridor Project.

On the development front, the Parks department anticipates removal of structures on the Dolinsek property by the end of the year and park improvements to begin in 2022 on areas outside of the skiway.

---

<sup>i</sup> As the owner representative for the project, the Development Manager position is expected to oversee successful execution of all phases in the development project: from initial concepts through final construction. This entails both leading and supporting the stakeholder group (both externally and internally) as well as monitoring coordination of the group to ensure that all technical studies, design, and entitlement requirements are met in a timely fashion to successfully move the project to completion. I'm happy to answer any additional questions Council may have with regard to this project. Feel free to contact me at [jennifer.phelan@cityofaspen.com](mailto:jennifer.phelan@cityofaspen.com) or 319-9949.

**INFORMATIONAL ONLY MEMORANDUM**

**TO:** Aspen City Council

**FROM:** Linda Consuegra – Assistant Chief of Police,  
Tessa Schreiner – Climate and Sustainability Programs Administrator  
Willy McFarlin – Assistant Streets Superintendent

**THROUGH:** Richard Pryor – Chief of Police  
Sara Ott – City Manager

**MEMO DATE:** November 1st, 2021

**RE: Electric Vehicles for the Police Department**

---

**REQUEST OF COUNCIL:**

This memo is informational only. No Council action requested.

**SUMMARY AND BACKGROUND:**

**History of Aspen Police Cars**

Back in the 1970s, the Aspen Police Department ditched its rear-wheel-drive American sedan police cars in favor of a quirky, virtually unknown little Swedish brand and began to drive Saab vehicles. The automaker provided a steep discount to increase awareness of the fledgling brand in the US. The Saabs were a hit, and the Aspen Police Department eventually worked out a lease program that saw new Saabs shipped to Colorado every three years. Saabs were driven by the Police Department for decades, until the vehicles were discontinued. In those three decades where Aspen Police drove Saabs, it made Aspen stand out having the Police Department drive unconventional police vehicles, just like staff still wear jeans as uniforms today. As a Police Department, staff takes pride in being different, progressive and being a nontraditional Police Department.

In 2004, when it became apparent that Saab would not continue its relationship with the City of Aspen, the Police Department had been investigating the possibility of hybrid vehicles. At that time, staff could not determine that any police agency in the U.S., was using a fully equipped hybrid SUV for police patrol. The idea of introducing hybrid vehicles to the Police Department fleet was presented to council, but ultimately the bidding process was deemed unsuitable by council and staff was directed to look at other options, which spawned the department to contract with Volvo vehicles. The Volvo contract called for Volvo to buy back the fleet of police vehicles at the end of 2008.

In 2007, with the knowledge of the Volvo contract coming to an end, the Police Department began moving to align its vehicle choices with Council and community goals of reducing greenhouse gas emissions. The Police Department switched to hybrid vehicles in 2008, which were used for marked and unmarked patrol vehicles. Unfortunately, the hybrid vehicles were not able to sustain the needs to run the marked vehicle police package, which caused a connector to continually burnout from the high electrical demands to run all the police equipment. In 2015 Aspen Police moved to purchase the Ford Interceptors, to replace the hybrid marked patrol vehicles, which are the vehicles that are still in our fleet at this time.

The Police Department kept five of the hybrid vehicles, which are still used by administration and are not equipped with the same heavy electrical demand as the patrol vehicles. This also meant they did not experience the same problems as our marked cars. The Police Department is currently in the process of replacing these five unmarked admin vehicles. These were originally scheduled for replacement seven years ago, but this was deferred in an effort to help the city budget. Those hybrid admin vehicles are still in active service today and are nearing 12 years old. By pushing the replacement as far as possible, the department now has the opportunity to incorporate plug-in electric vehicles into our police fleet. For the last five years, the Climate and Sustainability Office has approached the Police Department to consider incorporating electric vehicles into the Police fleet.

The Police Department and the Climate Office see this current recommendation as an opportunity to partner and run a pilot program. Other city departments could use this model as an example on how to transition their fleet vehicles to electric vehicles and/or more fuel-efficient vehicles in the future. The procurement of electric vehicles for the City of Aspen fleet is an important action item in various planning documents such as the Aspen Area Community Plan, the Climate Action Plan, the Aspen Community Electric Vehicle Readiness Plan, and the Electric Vehicle Public Charging Infrastructure Masterplan. Furthermore, the electrification of the City's fleet helps support City Council's Climate and Waste goal adopted in August 2021.

For police purposes, it is critical that any technological advancements be appropriately and fully vetted, so the emergency response vehicles of the police department are proven to be up to the 24-7 mission of the police officers, as well as meeting the environmental goals of the city.

#### **DISCUSSION:**

In the past, the Police Department has hesitated in purchasing electric vehicles due to challenges in the following areas:

- Reliability
- Range in milage
- Cost
- Support for police equipment (lights, radar, computers, sirens, etc.)

However, in the past few years, electric vehicles have made significant advancements and have improved in each of the areas above. EVs are more reliable, their mileage rate has increased, their cost has decreased, and more government organizations are incorporating

them into their fleet. Three basics of electric vehicles are undisputed: they save money and time in maintenance as well as reduce exhaust, air pollution and GHG emissions.

Staff is proposing a pilot program to purchase new electric vehicles for the police fleet. This pilot program will allow staff to conduct appropriate research and vet the electric vehicles to make sure the vehicles can sustain the demands of the police package/equipment for the best possible fleet performance. The Department's goal is to follow a detailed acquisition plan, which will yield a long-term value for the fleet, as well as to create and adopt an environmental sustainability plan with the fleet program.

The Climate Office provided the Police Department with a series of electric vehicle options, and the following criteria were used in determining the best vehicle to meet the Department's needs:

- Reliability
- Range mileage
- Already being used in their fleets in other police departments and can sustain the needs of a police package/equipment.
- Available upfitters that can set up a center console for equipment (i.e. radio, light switches, mikes, etc.)
- Cost (upfront and lifetime maintenance)
- Performance and safety
- Equipped with built-in camera technology
- Vehicle warranty
- Substantial reduction to our GHG emissions

With these criteria in mind, staff is recommending the purchase of five Tesla Model Y vehicles for the replacement of the current police administration vehicles. Purchasing and using all five electric vehicles would determine if switching to electric vehicles is the best options for ongoing fleet replacements that strive to meet the goals stated above.

With regard to meeting the electric vehicle criteria above, Teslas meet or exceed the Police Department's needs. Teslas are reliable, have sufficient range, are able to be outfitted for Police equipment, have a lower cost per mile compared to a gas-powered vehicle, and have been leading the market for the last 10 years. Teslas have zero tailpipe emissions and will help significantly reduce the Police Fleet's GHG emissions. For each of the five vehicles being replaced with Teslas, the City will reduce tailpipe emissions by an estimated 3,000 lbs., which is the equivalent of what 60 mature trees could absorb in CO2 in a year. Lastly and importantly, multiple other local governments are procuring Teslas for their law enforcement fleets and have demonstrated success with these vehicles.

Several examples of police departments who have incorporated Tesla vehicles into their police fleet to lower their overall vehicle costs and reduce the carbon footprint of their vehicle fleet include:

- Westport, CT
- Los Angeles (currently testing a fully outfitted Tesla patrol car with potential to transition all police fleet to EVs)
- Bargersville, IN
- Fremont, CA (Pilot Program)
- Broken Arrow, OK
- Seaside, CA
- Beverly Hills, CA
- Hastings-on-Hudson, NY
- Denver (Community Outreach vehicle), CO
- Nitro, WV
- Boulder County, CO

The following table provides more detail on a relevant local example. The Boulder County Sheriff’s Office is currently testing and conducting a case study for their 2021 Tesla Model Y Long Range AWD that they purchased this year. In an initial comparison of operating costs between the Tesla and the Ford Police Interceptor Hybrid (SUV), they have determined that the operating costs for the Tesla Model Y are lower than the Ford Police Interceptor Hybrid. Table 1, sourced from the Boulder County website, breaks down the compared operating costs of both vehicles.

Table 1: Boulder County Sheriff’s Office – Vehicle Operating Cost Comparison

<b>Operating Costs</b>	
Tesla Model Y	Ford Police Interceptor Hybrid
<ul style="list-style-type: none"> <li>• Efficiency                             <ul style="list-style-type: none"> <li>• 350 Wh/mi (worst case)</li> <li>• Electricity cost at HQ: \$0.45/kWh</li> <li>• "Fuel" cost of 21,000 miles driven annually (2017 OPS average): \$330                                     <ul style="list-style-type: none"> <li>• (0.350kWh/mi x 21,000mi x \$0.045)</li> </ul> </li> </ul> </li> <li>• Maintenance                             <ul style="list-style-type: none"> <li>• \$500 multi-point 2yr service</li> </ul> </li> <li>• Cost per mile driven: \$0.029</li> </ul>	<ul style="list-style-type: none"> <li>• Fuel economy                             <ul style="list-style-type: none"> <li>• 20mpg (does not account for idle time)</li> <li>• Gasoline cost: \$2.33/gal (10yr avg.)</li> <li>• Fuel cost of 21,000 miles driven annually (2017 OPS avg.): \$2,447</li> </ul> </li> <li>• Maintenance                             <ul style="list-style-type: none"> <li>• Brakes: \$160 once per year</li> <li>• Oil changes/PM (5/yr @ \$75/ea): \$375</li> </ul> </li> <li>• Cost per mile driven: \$0.146</li> </ul>

Source: <https://www.bouldercounty.org/safety/sheriff/tesla/>

Overall, Boulder County estimates that the Ford Police Interceptor costs them approximately \$2,652 more per year to operate than the Tesla, and they expect the initial cost difference between the Tesla and the Interceptor to be made up within 6-18 months due to the significantly lower operating and ownership costs of the Tesla.

One aspect about the Tesla that Boulder County specifically addresses in their communications is the perception that Tesla vehicles are “luxury vehicles” and that the public may believe the purchase is not the best financial choice for a local government. Upfront and transparent communication with the public about the actual costs of the purchased Teslas and environmental benefits can help demonstrate the fiscal and environmental responsibility of the purchases, and staff will work with the communications team on this messaging.

For the City of Aspen’s Police fleet, staff estimates that the cost per mile driven of the Tesla Model Y would be half of the current administrative vehicles (Toyota Highlanders). Similar to the test case that Boulder County is conducting, the Police Department and the Climate Office will track various metrics on the new Teslas to verify actual cost per mile and performance.

The transition of the Police Department’s fleet to electric also provides community benefits. First, electric vehicles have no tailpipe emissions and therefore help improve air quality. Second, this pilot program of fleet electrification for an emergency services department can help inform and provide helpful information to other local and regional agencies that are also looking to transition their fleets to electric. Finally, fleet electrification can help the City of Aspen do its part in reducing organizational greenhouse gas emissions, thereby also helping the community reduce its emissions.

**FINANCIAL IMPACTS:**

Funding exists in the Asset Management Plan Fund for the purchase of the five Teslas. The total amount to replace the five vehicles is \$262,200 and the total cost to equip the vehicles is \$48,870, bringing the total cost of procurement to \$311,070. The allocated budget to replace and equip fleet replacement for these five vehicles is \$294,250, which brings the department over budget by \$16,820. However, costs can be covered by existing funds from the Police Fleet and Police General Administrative Operation Supplies line. See table 2.

Table 2: Budget Summary of Electric Vehicle Procurement for the Police Fleet

Vehicle / Equipment	Budget Fund	Existing Funds or New Request	Cost per Unit	Total
Tesla Model Y (5)	Police Fleet	Existing	\$52,440	\$262,200
Tesla Equipment and Installation	Police Fleet	Existing	\$9,774	\$48,870
			Total:	\$311,070

Tesla vehicles are equipped with camera systems, which would provide a cost savings by not installing body worn cameras in cars, currently the annual cost to have body worn cameras in patrol cars is \$10,836.

The Police Department was able to extend the replacement period with the current administration vehicles from 5 to 12 years, when the replacement vehicle was every 5 years or up to 60,000 miles. The current replacement schedule is 7 years and 80,000 miles. The Department will recommend that surface life for the Tesla vehicles be extended from 7 years to, at a minimum, every 8 years, but more than likely this could be extended to 10 years. Tesla provides government entities a vehicle warranty of 8 years or up to 120,000 miles, whichever comes first.

Currently, the Police Department has four Level 2 chargers in the fleet parking garage. The chargers are located where the patrol vehicles park, so would need to either be relocated to where the administrative vehicles park, or new chargers would need to be procured and installed. Funding exists in the APD budget to install new chargers if needed, and staff will work with the Climate team and Asset to determine the best option for installation.

## **ENVIRONMENTAL IMPACTS:**

Choosing electric vehicles represents numerous environmental benefits. Most notably, these benefits occur while the vehicles are operating in the community. During this time, they produce zero tailpipe emissions. By contrast fossil fuel powered vehicles emit many types of pollutants including nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (VOCs), carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), particulates, sulphur dioxide (SO<sub>2</sub>) and lead. Since EV's have zero emissions, their use in our community will:

- Improve air quality, which in turn improves quality of life and health outcomes for our residents, workforce, and visitors.
- Reduce our organization and community's emissions of climate-warming GHGs, which is critical to protecting all aspects of our environment.

EV's also provide environmental benefits in terms of the energy that is being used to power them. Because of Aspen's 100% renewable electricity supply, using this electricity instead of imported fossil fuels represents a substantial environmental benefit. Not only does this change in fuel source dramatically reduce GHG emissions, it also contributes to taking fuel trucks off local roads, which further reduces GHG emissions and tailpipe pollution.

Additionally, EVs require much less maintenance than conventional vehicles. The fact that EVs do not require oil changes creates significant environmental benefits because oil does not need to be extracted, transported, refined, transported again, and then disposed of regularly, to maintain smooth vehicle operations.

Finally, it is important to note that EVs are environmentally beneficial even when considering the full 'life cycle' of vehicle manufacturing and usage. The US Department of

Energy confirms that as the electricity supply powering EV's is relatively clean, the life cycle environmental impacts of EV's is significantly lower than that of fossil fuel vehicles.

**NEXT STEPS:**

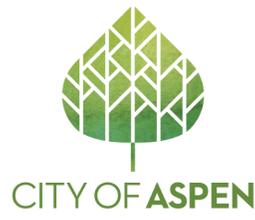
The next steps for the Police Department are to:

- Purchase agreement will be presented to City Council on December 7<sup>th</sup>, 2021.
- Sign and process a purchase order and plan for a delivery date for the purchase of the five Tesla vehicles
- Ensure adequate charging infrastructure is in place in the Police Department fleet parking garage
- Continue to work with the Streets Department to train staff on the maintenance process for the new Tesla vehicles
- Continue to work with the Climate Office to assess the pilot program and ensure the electric vehicles can sustain the demands of the police package/equipment for the best possible fleet performance
- Create and follow a detailed acquisition plan which will yield a long-term value for the fleet, and create and adopt an environmental sustainability plan within the fleet program to be used for all city departments

The Police Department has always embraced its uniqueness and through efforts such as electric vehicle procurement will continue to pursue being innovative and environmentally responsible.

**CITY MANAGER COMMENTS:**

The Council can anticipate larger strategy discussions about electrifying the city's vehicle fleet as part of the Council's greenhouse gas reduction goals. The first work session is on Nov 15 and the work will continue through 2022. - SGO



## INFORMATION MEMORANDUM

TO: City of Aspen Mayor and Council

FROM: PJ Murray, EIT – Project Manager  
Pete Rice, PE – Division Manager  
Trish Aragon, PE – City Engineer  
Lynn Rumbaugh – Transportation Manager  
John Krueger – Director of Transportation

MEMO DATE: November 8, 2021

RE: **Information Only: Safety and Mobility in the Downtown Core**

---

**Background:** The “Safety and Mobility in the Core” project is a vision for a safe, connected, and vibrant downtown core. The project is in a conceptual phase and is based largely in the understanding that the City of Aspen right-of-way, which contains streets, sidewalks, utility corridors, and more, is a public space with potential to serve the work force, tourists, and the community more fully.

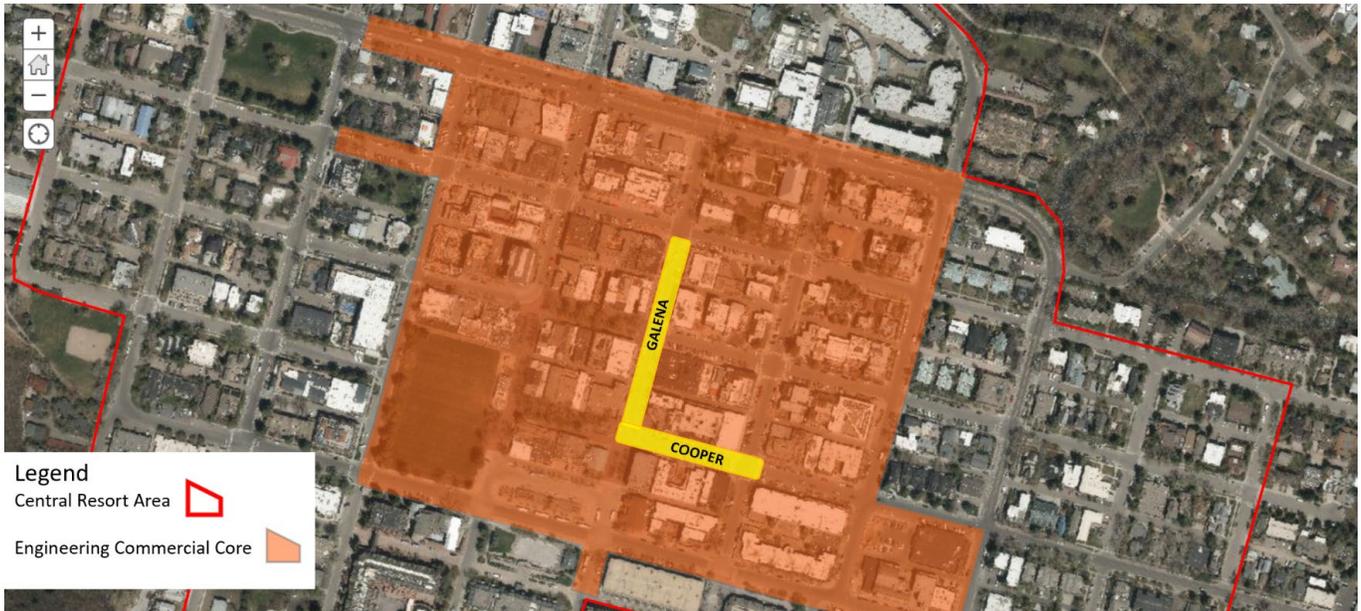
During the February 1, 2021 work session, Council directed staff to prepare concepts for the Hopkins, Galena and Hyman/Mill corridors that would holistically increase safety and improve mobility for vehicles, pedestrians, and bicyclists. To achieve the goal of safe corridors, the space in the right-of-way (ROW) cross section would need to be reallocated from vehicular areas (currently 70% of the existing ROW), dedicated to the movement and parking of vehicles, to pedestrian and bicycle areas (currently 30%), increased walkway width, dedicated bike lanes, activation areas, etc. Staff utilized the Pedestrian and Bicycle Masterplan and the Downtown Enhancement Pedestrian Project (DEPP) to develop the concepts presented to Council in the June 21, 2021 work session. The Safety and Mobility in the Core project is an opportunity to implement many projects identified by both the Pedestrian and Bicycle Masterplan and the DEPP.

The high-level concepts that staff presented on June 21, 2021, showed what Aspen’s downtown core *could* look like. Each concept showcased a variety of safety improvement strategies which can be treated like a menu and were shown in three downtown corridors (Hopkins Ave, Galena Ave, and Hyman/Mill Ave corridors). These strategies are listed below:

- Conversion of parking from head-in to parallel to reallocate space for other uses
  - Counter-flow protected bikeways on one-way streets
  - Activation areas
  - Increased pedestrian corridors
- Curb extensions to improve sightlines for all users and decrease the width of the crosswalk
- Transitioning to vehicle-free corridors for 100% priority on pedestrians and bicycles.

Council requested staff to develop a safety pilot program or living lab that would incrementally implement improvements listed above in a holistic manner. This living lab was presented during the August 23<sup>rd</sup> Council Work Session.

**Summary:** The first incremental step included review of areas best situated for corridor modifications in safety. Staff recommended introducing the incremental safety improvement strategies to the Galena corridor first, which includes Galena St from Hopkins to Cooper as well as Cooper Ave from Galena to Hunter. The living lab within this corridor will allow the community, staff, and Council the opportunity to observe the modifications prior to implementing permanent features. The approach will focus on measures that can be implemented in 2022 that minimize permanent infrastructure modifications needed within the initial steps.



*Figure 1. City of Aspen Downtown Core*

The staff recommended plan for Spring 2022 implementation was presented to Council on August 23<sup>rd</sup> and included the following improvements to the Galena Corridor (shown below as Concept 3):

- Modification of the corridor cross-section to convert all head-in parking to parallel parking on both sides of the street which improves sight lines and reduces conflicts between users.
- Widened pedestrian areas.
- A shared bike lane with vehicle traffic and/or a dedicated bike lane traveling the direction of vehicular flow in a similar fashion to the bikeways outside the core.
- A protected counter-flow bike lane for cyclists traveling against the flow of vehicular traffic.
- Turning motion modifications at the intersection of Galena and Hyman (adjacent to the Elks Building) to eliminate the left turn from Galena to Hyman. This simplifies the intersection and reduces the potential for conflict. Hyman would become a one-way street from Hunter to Galena with vehicular traffic traveling from east to west.
- Intersection improvements with curb extensions at the following intersections:
  - Galena & Hopkins – City Hall
  - Galena & Hyman – Elks Building
  - Galena & Cooper – Paradise Bakery
  - Cooper & Hunter – Old Boogies Space

As a conclusion to the August 23<sup>rd</sup> work session, Council requested further analysis to be provided on staff's recommended pilot project compared to different parking configurations that could be utilized within the corridor.

Staff prepared this informational memo in response to Council’s request. This informational memo outlines the schematic designs staff explored prior to recommending the preferred plan (Concept 3) to Council during the August work session. Impacts to parking and transportation of each schematic design are also outlined below.

**Discussion:** Below are the three schematic designs Staff explored as the first step to implementing a safety pilot program in the Galena corridor. All three concepts presented in the memo modify the parking configuration to reallocate space for safety measures for pedestrians and cyclists which better balances the roadway space allocation and priority of each user. There are numerous iterations of how the street cross section can be divided to balance the space allocated to each user group however the three concepts presented below minimize impacts to parking and existing infrastructure (curb and gutter) for a temporary pilot condition while implementing the safety measures that offer the greatest improvement. The following paragraphs discuss the benefits and drawbacks of each concept as well as the rationale to choosing the preferred/recommended option (Concept 3). Intersection improvements such as curb extensions and shortened crosswalks will be installed with each of the concepts as well as relocating and accommodating emergency vehicle parking, loading/unloading zones, and ADA parking spaces. The turning motion modifications at Galena and Hyman can also be implemented with all three concepts, this improvement will simplify the interactions at this intersection and improve the safety for all users.

Implementing improvements for pedestrians and cyclists will not only improve the safety and mobility aspects of the core for all users, but it is anticipated that a more balanced approach to corridors will reduce the carbon footprint of the City as biking and walking within the core become more safe, convenient, and equitable. Everyone who lives, visits, works, or enjoys Aspen is a pedestrian at one point in their time here, not everyone is a vehicle driver or a cyclist. Improving the experience and safety of our most vulnerable user should be a top priority.

### Concept 1: Dedicated bi-directional bikeway



Figure 2. Galena Corridor Concept 1

Benefits:

- Minimal impacts to parking space striping on the west (right) side of the street.
- Reduces conflict interactions between angle head-in parking and cyclists while maintaining head-in parking on the west (right) side of the street.

Drawbacks:

- Does not offer safety improvements for pedestrians in the corridor – pedestrian space allocation percent (30%) does not increase in the temporary condition or have the potential to increase if the improvements are made permanent. Road width does not allow for widened pedestrian areas; curb line cannot shift.
- Interactions between users at the intersections become complicated to keep cyclists in the protected bi-directional bikeway. Where the one-way ends and a two-way road begins will require unsafe movements by cyclists. A unique solution for the intersections will need to be developed for this concept, it will not be replicable in other corridors in town.
- Adding a bike sharrow lane for bikers in this configuration does not improve the safety for bicyclists as vehicles have limited vision towards oncoming bicyclists.

Concept 1 impacts 44 parking spaces of the 86 parking spaces in the corridor.

**Concept 2:**

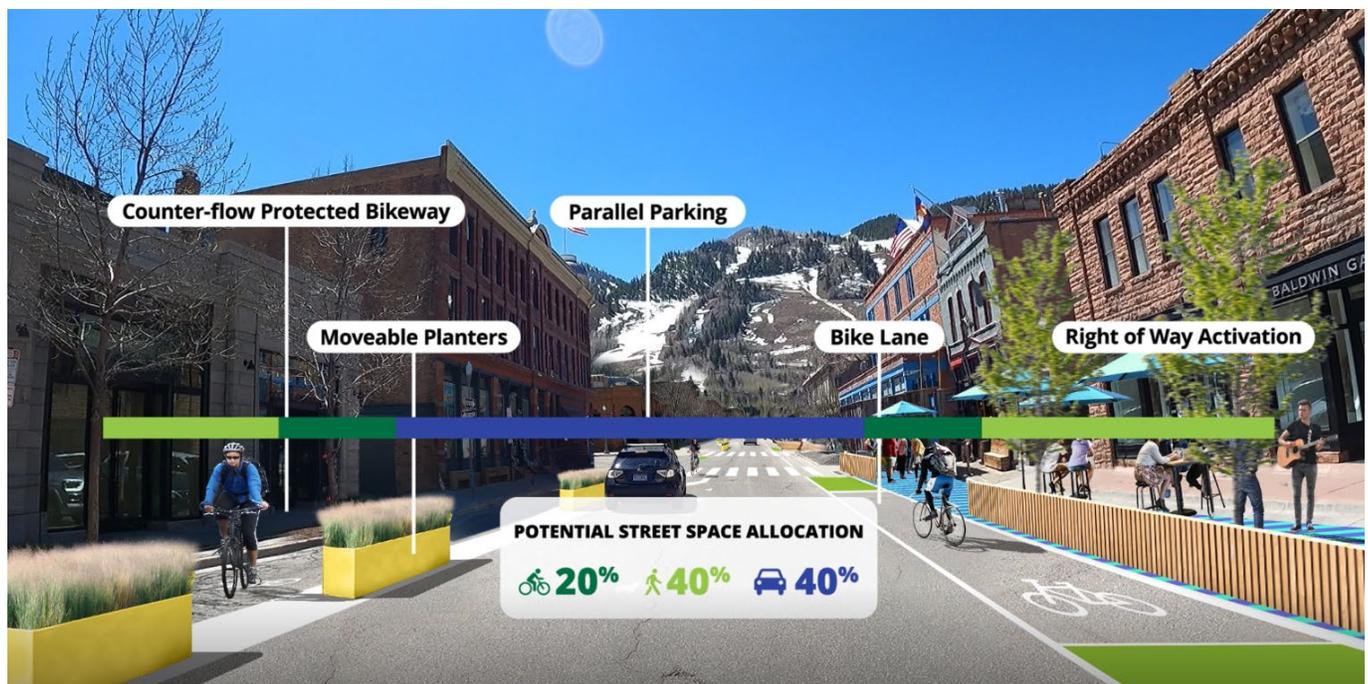


Figure 3. Galena Corridor Concept 2

Benefits:

- Maximizes space allocated to pedestrians (existing = 30%, proposed = 40%) in both the temporary test condition and permanent condition to be used as activation area, widened pedestrian walkways, etc.
- Maximum safety for cyclists – dedicated bike lanes both directions with simplified intersection interactions between users compared to Concept 1 and no conflict interactions between cyclists and angle head-in vehicles parking. Parallel parked cars have improved sight lines for parking maneuvers.

Drawbacks:

- Maximum impact to parking with parallel parking on the east (left) side of the street only. Space allocated to vehicles decreases as a result (existing 50%, proposed 40%).

Concept 2 impacts 68 parking spaces of the 86 total spaces in the corridor.

### Concept 3: Preferred Option



Figure 4. Galena Corridor Concept 3

Benefits:

- Increases bicycles safety - provides dedicated bicycle infrastructure for cyclists traveling the opposite direction of vehicular traffic. Increased dedicated space allocation for cyclists (existing = 0%, proposed = 10%)
- Visual identification between vehicles and bicyclists is improved.
- Allows for increased pedestrian areas not provided in Concept 1 in the temporary test condition or permanent installation as activation areas, widened pedestrian areas, etc.
- Increases number of parking spaces in the corridor compared to Concept 2 with parallel parking on both sides of the street. The redistributed space provides room for safety measures for pedestrians and cyclists and balanced space allocation in the ROW.

Drawbacks:

- Does not provide dedicated bike lanes for both directions of cycling travel.

Concept 3 impacts 44 parking spaces of the 86 total parking spaces in the corridor.

Preferred Option: Staff presented Concept 3 to Council during the August 2021 work session as staff's preferred concept to implement and test during the 2022 spring/summer season for the following reasons:

1. Concept 3 provides safety benefits to all users whereas Concept 1 and Concept 2 slightly prioritize bicycle safety improvements. The goal of this project is to provide safe, dedicated

space for all users to balance the priority. Staff believes Concept 3 achieves this goal without requiring complex intersections or slightly prioritizing bicycles over vehicles.

2. Staff met with a few ACRA members in August. During this meeting the ACRA members provided the feedback that there is support for ROW modifications for increased safety of the traveling public in the core. The business community feels strongly that the ROW work should strive to also prioritize a vibrant commercial core. Staff used this feedback to rank the concepts from the business community's need for parking spaces in the core with each concepts ability to improve safety for vehicles, pedestrians, and bicycles. Concept 1 and Concept 3 impact the same number of parking spaces (44 spaces) however Concept 3 offers greater improvements for cyclists and pedestrians. Concept 2 impacts more parking spaces (68 spaces) and was considered less ideal even though the pedestrian and bicycle safety experience is maximized, it was too impactful on vehicles for a first incremental step.

Staff recommends Council approve Concept 3 for the temporary testing condition for Spring/Summer 2022.

**Mitigation Techniques:** Staff will submit an informational memo or present at a future work session regarding the Parking Space Availability Programming Plan in partnership with the Parking Department. This will address Council's questions from the August 23<sup>rd</sup> work session, such as:

1. Impacts of reclassifying existing residential and carpool parking spaces as core parking spaces.
2. Explore an equitable valet program.
3. Construction vehicle parking options.

**Next Steps:** Council supported staff continuing with the following components outlined as part of the Galena corridor safety pilot program:

- Education outreach for biking community.
- Enhanced Downtowner and Galena St Shuttle service for Spring/Summer 2022. To secure service for the spring/summer 2022 seasons, staff will need to proceed soon.
- Conduct public outreach regarding the use of ROW space in the downtown core corridors in partnership with the City's Communications Department. Include targeted outreach for downtown core business groups.
- Develop final concept designs for the Galena corridor living lab using Concept 3, above. The final temporary aesthetics will be vetted through staff, Council, and the community. Implementation of the living lab will be installed Spring 2022 and will include the intersection and traffic flow modifications at Galena and Hyman Ave.
- Staff will prepare a parking availability program that will maintain available spaces throughout the commercial core. This program will include things such as: target percent of available space, construction vehicle parking limitations, variable time limitations based on demand/location in the core, and modifications to maximum parking time.
- Prepare an incremental safety program that outlines improvements in a step-by-step manner beyond the Galena corridor to identify next steps.
- Staff will continue implementing intersection improvement projects in the Core as outlined in the Capital Improvement Plan. These improvement projects will be consistent and replicable throughout the core.
- Permanentize the improvements installed for the construction of the Crystal Palace on Mill St and Hyman Ave adjacent to the Wheeler Opera House. This includes one-way traffic pattern, counter flow bike lane, and parallel parking.