City of Colorado Springs' Electric Vehicle Readiness Plan

April 11, 2022





Benefits

Cost savings

Lower emissions

Healthier air

Avoided regulations

Preserved reputation

Potential Avoided Annual Emissions (High Growth)

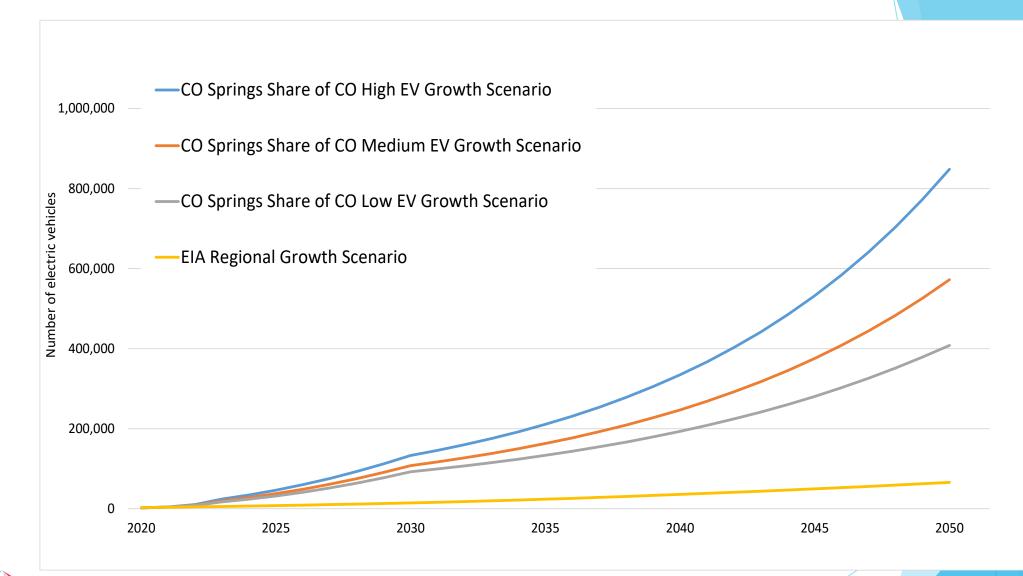
Particulate Matter: 10,000 kg

Volatile Organic Compounds: 100,000 kg

Nitrogen Oxides: 500,000 kg

Greenhouse Gases: 5 million metric tons

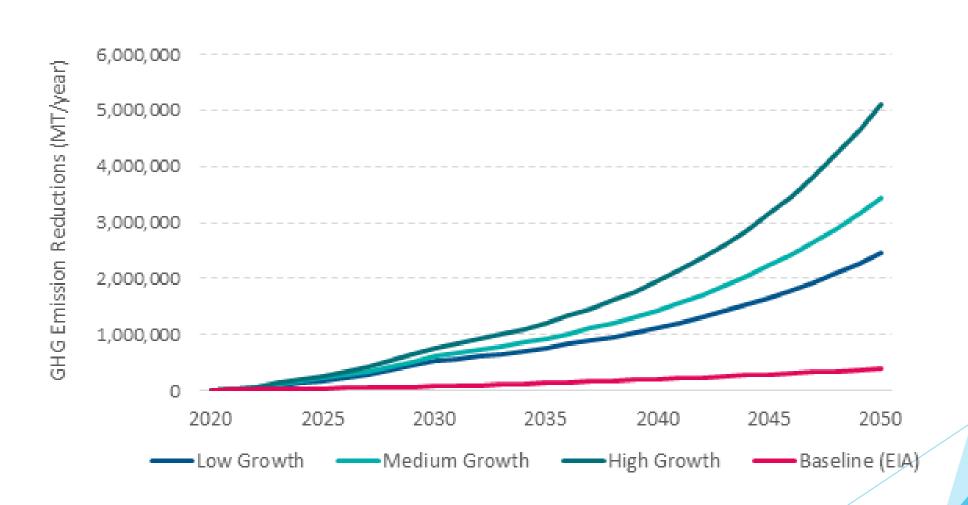
Scenario	2020	2025	2030	2050
CO Springs Low EV Growth Scenario	2,308	31,799	92,174	408,166
CO Springs Medium EV Growth Scenario	2,308	37,599	107,588	572,185
CO Springs High EV Growth Scenario	2,308	46,320	133,056	848,452







Annual GHG Emissions Reductions from EV Growth Scenarios (MT/year)



Policy Recommendations

Building Codes

Parking and Zoning Bylaws

Permitting

City Fleet Procurement

EV Charger Incentives

Load Management and Rate Structures





Fleet Recommendations

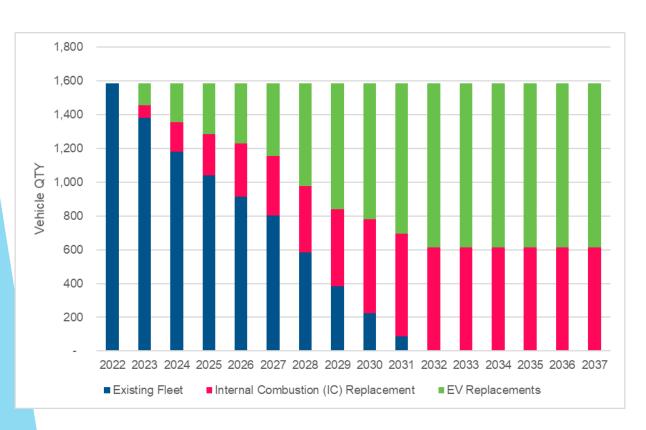
- Number of city-owned vehicles
- Vehicle replacement: phased versus non-phased approach
- Cost analysis

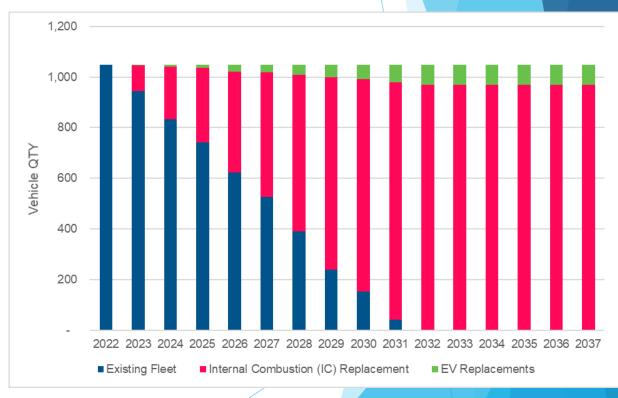




Recommended EV Replacement Timeline - Fuel Types (Phased)

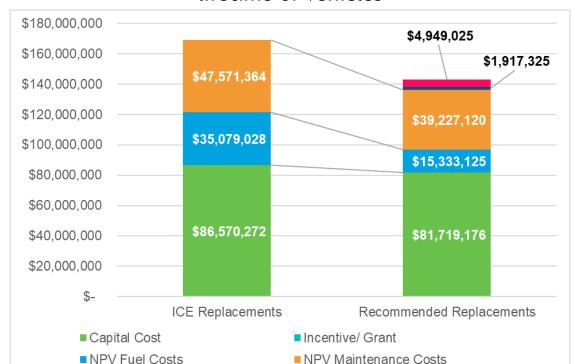
City Fleet Utilities Fleet





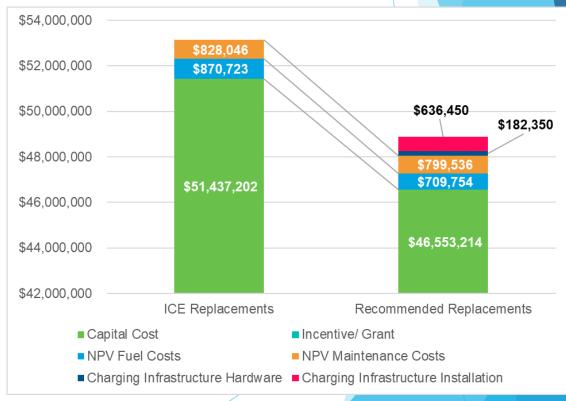
TCO Comparison - NPV Costs Over Vehicle Lifespans (Phased)

City Fleet \$26M savings over lifetime of vehicles



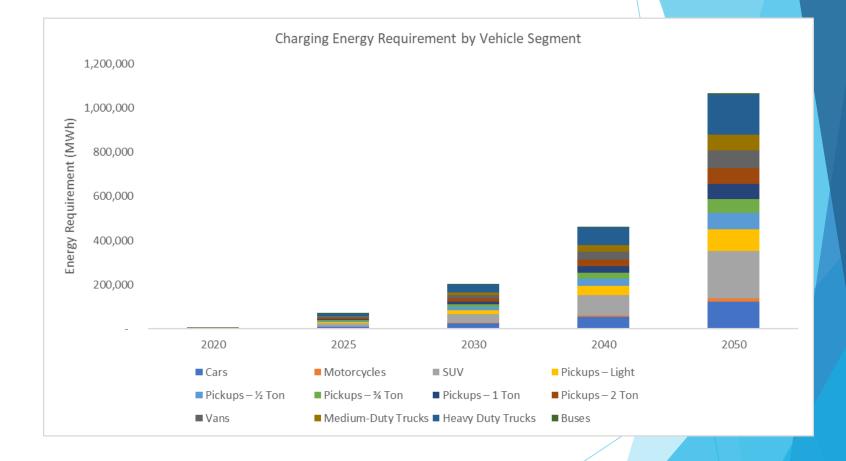
■ Charging Infrastructure Hardware ■ Charging Infrastructure Installation

Utilities Fleet \$4M savings over lifetime of vehicles



Utility Recommendations

Energy requirements







Outreach Recommendations

Survey Results: Barriers to EV Adoption

- Target audiences
- Key messages
- Channels of EV education and outreach
- Partnership efforts
- Considerations for disadvantaged communities

Statement	Percentage of respondents giving a 4 or 5	Percentage of respondents giving a 1 or 2
I'm worried the car will run out of charge before reaching my destination	67	11
The up-front cost of buying an electric vehicle is too high	64	11
I don't know if EVs have the main features I need	48	23
I don't have anywhere to charge an electric vehicle at home	46	27
I won't be able to drive an electric vehicle to (or in) the mountains	42	24
I'm not sure how to charge an electric vehicle	41	29

Base: Non-EV owners. Question: On a scale of 1 to 5, where 1 = strongly disagree and 5 = strongly agree, how much do you agree with each of the following statements regarding what's standing in your way of getting an EV the next time you get a car? © E Source (Colorado Energy Office EV Awareness Study)

Next Steps

- Outreach and education
- Pursue funding opportunities
- Implement strategies
- Collaboration with internal and external stakeholders
- Metrics for success and data management

Goal	<u>Measurement</u>	<u>Source</u>
Improve air quality	Project reduction in greenhouse gases and nitrogen oxides	Project emissions reductions based on EV adoption
Increase EV adoption	Track # of EVs	Atlas EV Hub.
Increase EV charger deployment	Track # of chargers	AFDC Station Locator.
Increase community knowledge of EVs	Track community engagement	Periodically repeat Springs Utilities customer surveys
Identify funding for EVs & charging infrastructure	Track amount of identified funding	City and Springs Utilities staff







Thank You! Questions?



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