



A Model for Civic Innovation

Presented by
the Colorado Smart Cities Alliance



WHAT IS THE ALLIANCE?



MISSION | A 501(c)3 non-profit founded to **create technology partnerships** that prove next-generation solutions to improve Colorado's quality of life

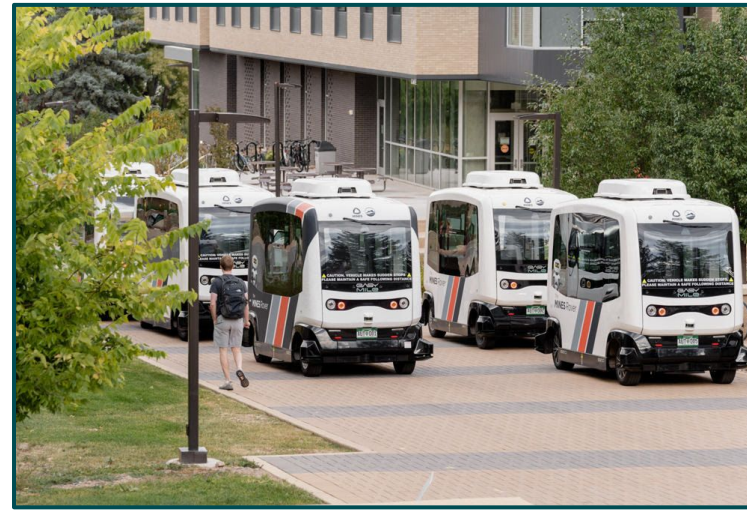
VALUES | Equity, Sustainability, Resilience, Humanism

Nation's first and largest statewide coalition dedicated to advancing smarter communities



COLORADO MUNICIPAL LEAGUE • 2023 ANNUAL CONFERENCE

50+ smart cities projects created
16 replications across network



*AvCo - Mines Rover
Autonomous, electric transit*



Air Quality Monitoring

**Private LTE fills coverage gaps for
communication emergencies**



Emergency Communications



Commute Optimization



*V2G EV Charging
City of Boulder
2021' IDC Smart Building Award*

CONNECTED COLORADO CHALLENGE



CONNECTED COLORADO (C²) CHALLENGE 2023 PROBLEM STATEMENTS



ACCESSIBILITY

Increase the accessibility and inclusivity of public spaces and platforms.



SAFE STREETS

Improve the safety, convenience or comfort of active mobility within a community.



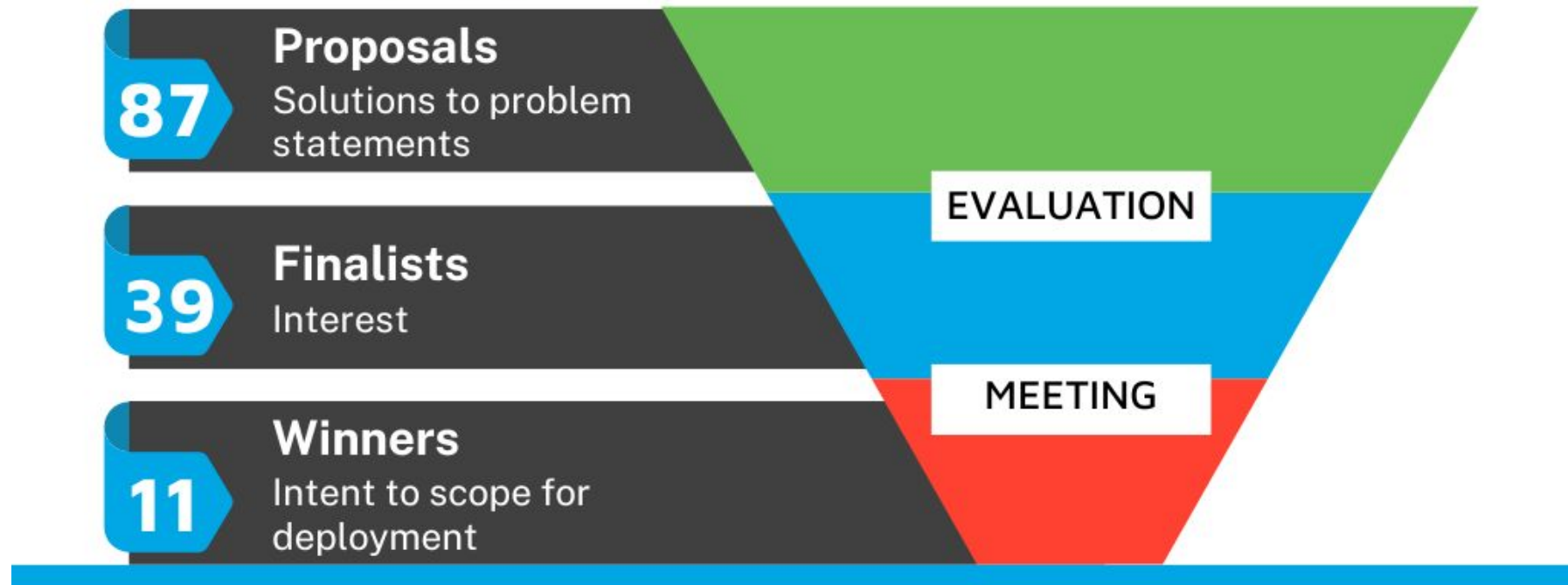
PUBLIC SAFETY

Increase the safety of public spaces through preventative and protective measures.





REVIEW PROCESS



WINNERS



Kaizen Labs



Liveable Cities

THE ROUTING COMPANY

SNOWBOTIX

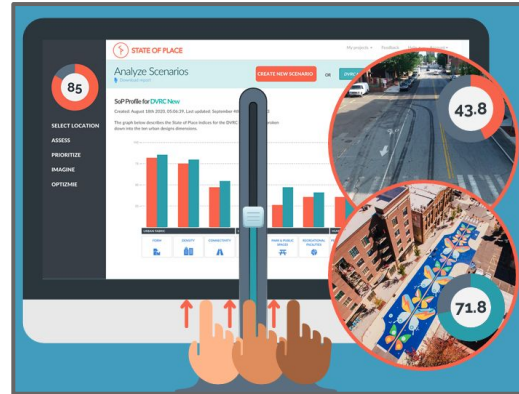


VAISALA

Velodyne Lidar

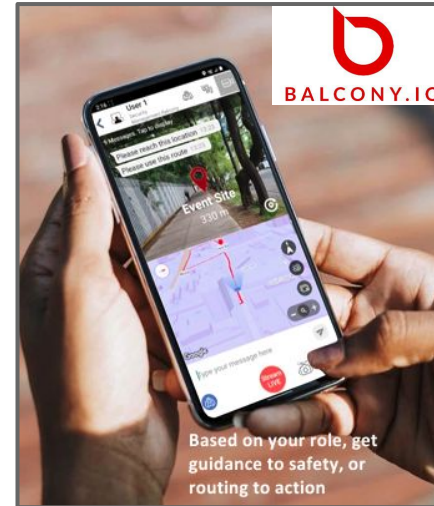
11 WINNERS
11 PROJECTS

City-Building Engagement



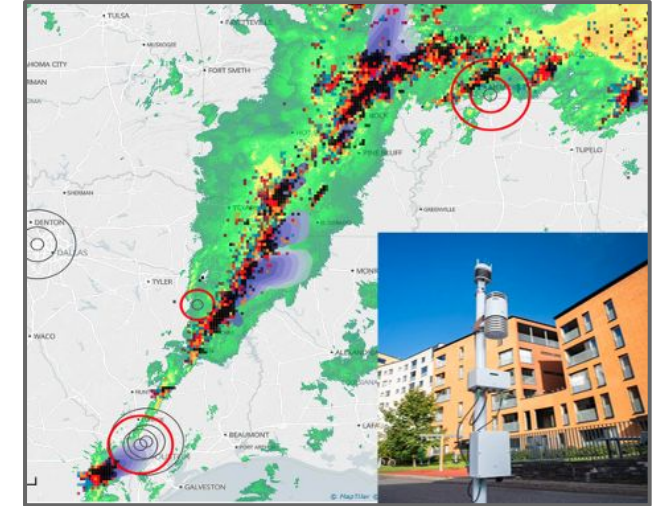
STATE OF PLACE

Emergency Communication



Based on your role, get guidance to safety, or routing to action

Weather Monitoring and Alerting System



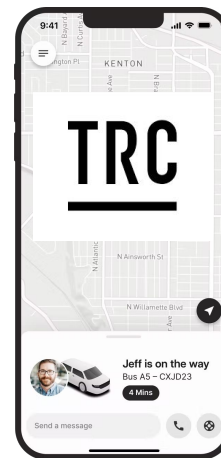
VAISALA

Road Safety Detection



Velodyne Lidar®

On-Demand Transit

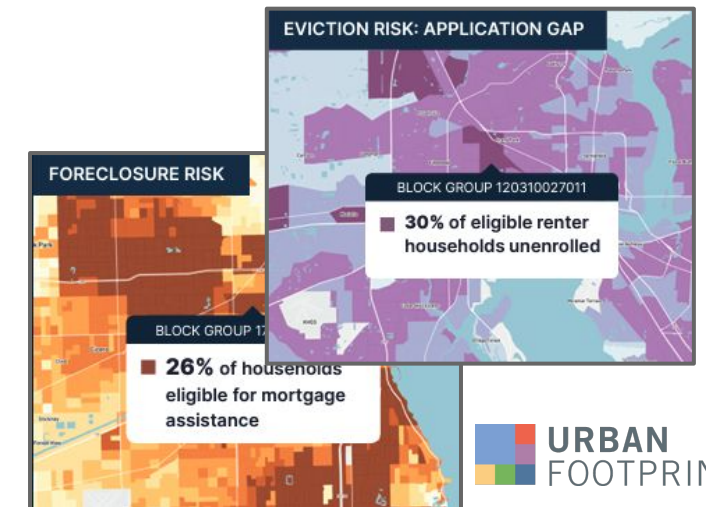


Robotic Snow Plow



SNOWBOTIX

Housing Risk Data



GOVERNMENT MEMBERSHIP

Champions

- ◆ Project consulting
- ◆ Grant support

Allies

- ◆ Peer network navigation
- ◆ Partner identification
- ◆ Workforce development
- ◆ Open Lab Access
- ◆ Discovery session



A MODEL FOR CIVIC INNOVATION



COLORADO SMART CITIES
ALLIANCE



Ryan Trujillo

Colorado Springs
(Deputy Chief of Staff)



Michael Lawson

Woodland Park
(City Manager)



Casey Cox

Aurora
(PMO Manager)



Chelsea Barrett

CSCA
*(Sr. Marketing &
Communications Manager)*

Office of Innovation

City of Colorado Springs SmartCOS

Colorado Municipal League



An aerial photograph of Colorado Springs, Colorado, showing a dense urban area with various buildings, including several tall skyscrapers. In the background, a range of rugged, rocky mountains is visible under a clear sky. The entire image has a semi-transparent dark blue overlay.

Why is Colorado Springs becoming a Smart City?

What is your “why” for smart cities?

- Improve City services and quality of life through innovation and technology
- Economic Vitality
- Efficient use of taxpayer dollars and City resources
- Community engagement

An aerial photograph of Colorado Springs, Colorado, showing a dense urban area with various buildings, including a prominent red brick building on the left and a tall, modern glass skyscraper in the center. The city is surrounded by a vast, arid landscape with scattered trees and shrubs. In the background, a range of rugged, rocky mountains stretches across the horizon under a clear sky. The entire image has a semi-transparent dark blue overlay.

How is Colorado Springs approaching Smart Cities?

How are we becoming a Smart City?



SMART
DATA



SMART
ENVIRONMENT



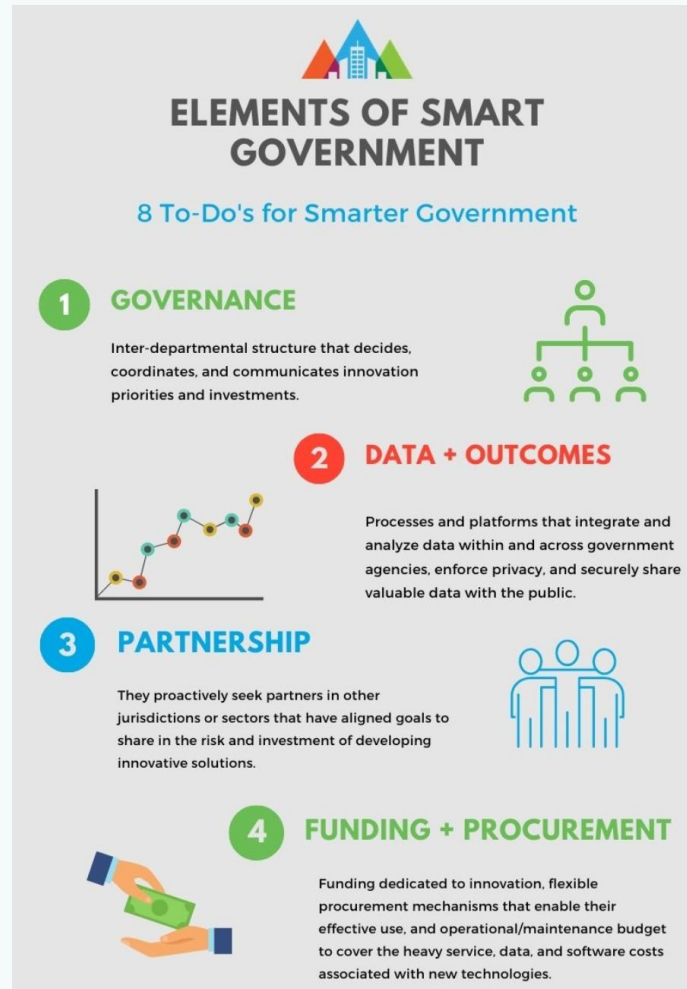
SMART
ENERGY



SMART
ECONOMY

- Alignment with City's Strategic Plan
- Inventory existing efforts that could fall under "smart city" umbrella
- Stakeholder alignment
- Develop a plan and/or strategies
- Dedicate resources
- Become a member of the Colorado Smart Cities Alliance

Colorado Smart Cities Alliance



An aerial photograph of Colorado Springs, Colorado, taken at dusk. The city's skyline is visible, with several tall buildings illuminated by city lights. The sky is a deep blue with some clouds. In the foreground, a wide street with multiple lanes runs through the city, flanked by parking lots and commercial buildings. The overall atmosphere is calm and professional.

Thank You

Questions?

www.coloradosprings.gov/innovation



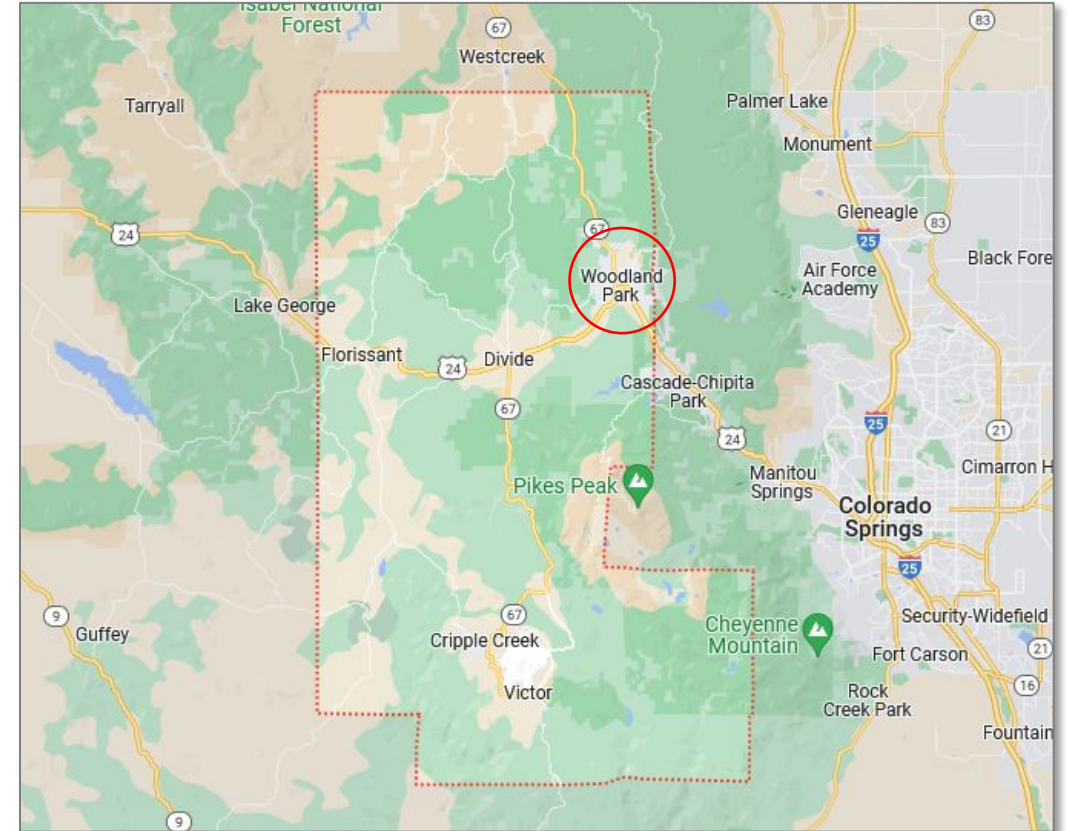


CML Annual Conference | “A Model for Civic Innovation”

Michael Lawson
City Manager
City of Woodland Park, Colorado

City of Woodland Park – by the numbers

- Population: 8,200 (2023 estimated)
- Land area: 6.5 square miles
- Largest city in Teller County (other municipalities are Cripple Creek and Victor)
- 10 departments
- 104.33 full-time staff equivalents, ~30 seasonal employees
- \$31.5 million budget (\$15.0 million General Fund budget)



What worked, what didn't

- **Challenges**

- Being ahead of your time.
- Agony and ecstasy of startups.
- Perceptions of 'smart city' tech.

- **Benefits**

- Quickly find innovative solutions to problems, new and old.
- Positive attention for the community and organization.
- Discovering solutions useful for partnering jurisdictions.



**Municipal Fiber
Middle Mile**



Why engage with the Alliance?

- **Subject matter expertise.** Technological innovation is not slowing down—how to keep up?
- **Financial assistance?** Quite possibly.
- **Network of fellow cities and counties.** Chances are someone else has similar needs to yours.
- **Laying the foundation.** Through other participating peer cities, vendors, and CSCA itself, get support for policies and governance first.

Takeaways from a small city – the value of the Smart Cities Alliance

- **Instant expertise, on-demand.**
Knowledgeable, friendly, cheap.
Consider them your extended staff on cutting-edge solutions.
- **Range of solutions for a range of issues.**
Can find big tech solutions to big problems or simple solutions to day-to-day inconveniences.
- **Take the scary out of new technology.**
CSCA can quickly break down barriers to understanding and access.



Aurora Quick Facts

- Aurora is a global city, with more than 398,000 residents and Colorado's most diverse population.
- The city is Colorado's third largest and is the 52nd largest in the United States.
- 160 square miles over 3 counties (Adams, Arapahoe, Douglas.)
- Approximately 3,000 full and part-time employees and 1,200-1,400 seasonal workers across 20 departments including Public Safety, Water, Public Works, in-house IT.
- \$1.15B adopted budget for 2023; \$320M in annual payroll.
- 10,000 capitalized fixed assets.
- 550 supported applications.
- 1,400 procurements a year.
- 50,000 vendors in our financial system.
- Smart City Projects:
 - 2021: 36 total (49% of total IT projects)
 - 2022: 39 total (45% of total IT projects)



Why are Innovation or Smart City Initiatives important in government?

- Because it shows that we're capable of transforming along with the needs of our constituents and staying out in front of what makes our jurisdiction a great place to live and work.
- "Running the business" is truly important but businesses and individuals who call your city home want more.
- In some areas, particularly Economic Development, Aurora uses Innovation to create a competitive advantage from other the other municipalities when attracting businesses and individuals.
- The cost of Innovation is cheaper than not innovating.
- Innovation keeps you ahead of rogue actors who exploit security and technical vulnerabilities of legacy, end of life, or unsupported technologies.
- Maintaining the status quo is not an acceptable option. For Aurora, we need to continually evolve and transform through technology and business process improvement to continue to provide better service levels. Maintaining the status quo is not an acceptable option.



What are important considerations in starting and operating an Innovation / Smart City Program?

- Don't associate Innovation with Technology. Innovation can come in many different forms including people, process and technology improvements.
- Center your innovation program as a citywide effort with representation from a diverse group of willing volunteers.
- Ensure you're maintaining or improving service levels by using a data driven approach. Prove to doubters that innovation works through data.
- Start small and appreciate that it will take time, years!, of stops and starts to establish a functioning program. Stick with it.
- Reduce the psychological barriers that prevent ideas from being generated.
- Executive sponsorship and Program prioritization are key. It's okay if Innovation isn't #1.
- Embed your innovative ideas approval process into your current program and project governance process. Don't create a shadow approval process for innovation ideas.
- Provide training and learning opportunities for program volunteers.
- Provide encouragement and reward for the implementation of ideas.
- Lean on the Colorado Smart City Alliance for support. Don't reinvent the wheel.



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THANK YOU

Contact chelsea@coloradosmart.city
to learn more about how you can
engage with the Alliance!