Denver Smart City Initiatives
Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD)
01 Leverage Connected Vehicle (CV) Technology
Connected infrastructure benefits for congestion & safety outcomes

02 Open by Default
Use open source code projects & contribute back to them

03 Build Public Sector Expertise
Leverage city staff expertise & build on it
Connected Pedestrian
Connected Pedestrian Sign Rendering
Connected TMC
Start Small
Collaborate with the Community
Be Ready to Test (a lot)
Look at internal use cases first
I-70 V2X Connected Vehicle Ecosystem
RSU Optimization

MileMarker: 2568
Annual Cost: $718180
AADT: 72000
Crash Road Condition: DRY
Crash Weather: NONE
Contour: CURVE ON-GRADE
Pole: No Coverage
Signal Level: No Coverage
Poles Covering: 0

Optimal Benefit to Cost

Initial Coverage on Existing Poles
Limited Benefit Below Critical Density
New Poles
Incremental Units Contribute Little

100% RSU Coverage
1. 90 Miles
   I-70 from Golden to Vail

2. 100 Roadside Units
   Dual DSRC and C-V2X

3. 93 Vehicles Equipped
   Scaling from here
RSUs Deployed
RSE & OBE