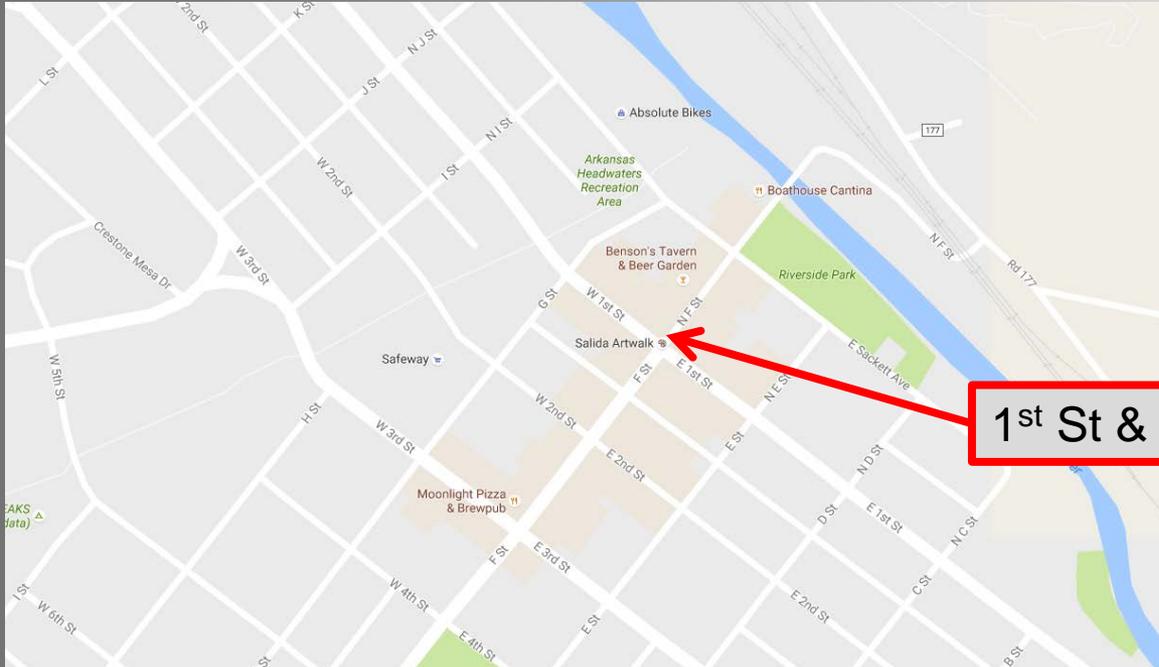


2017 Salida Signalized Intersection Improvements

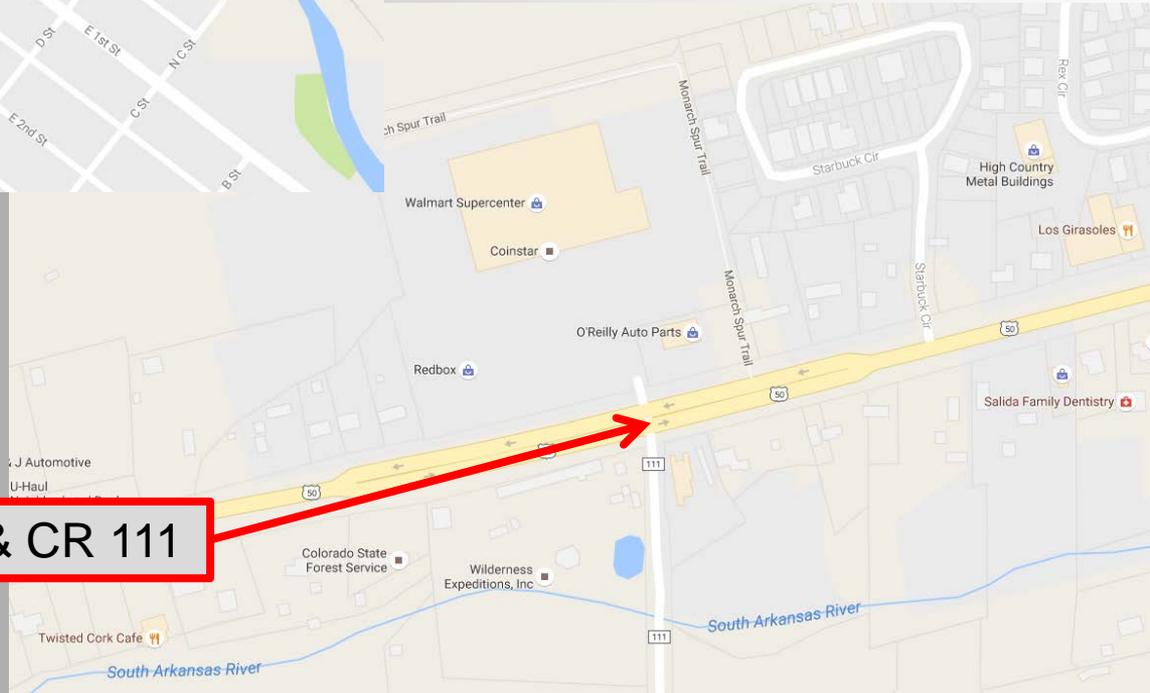
1st Street (CO 291)/ F Street
US 50 /CR 111



Salida Project Locations



1st St & F St



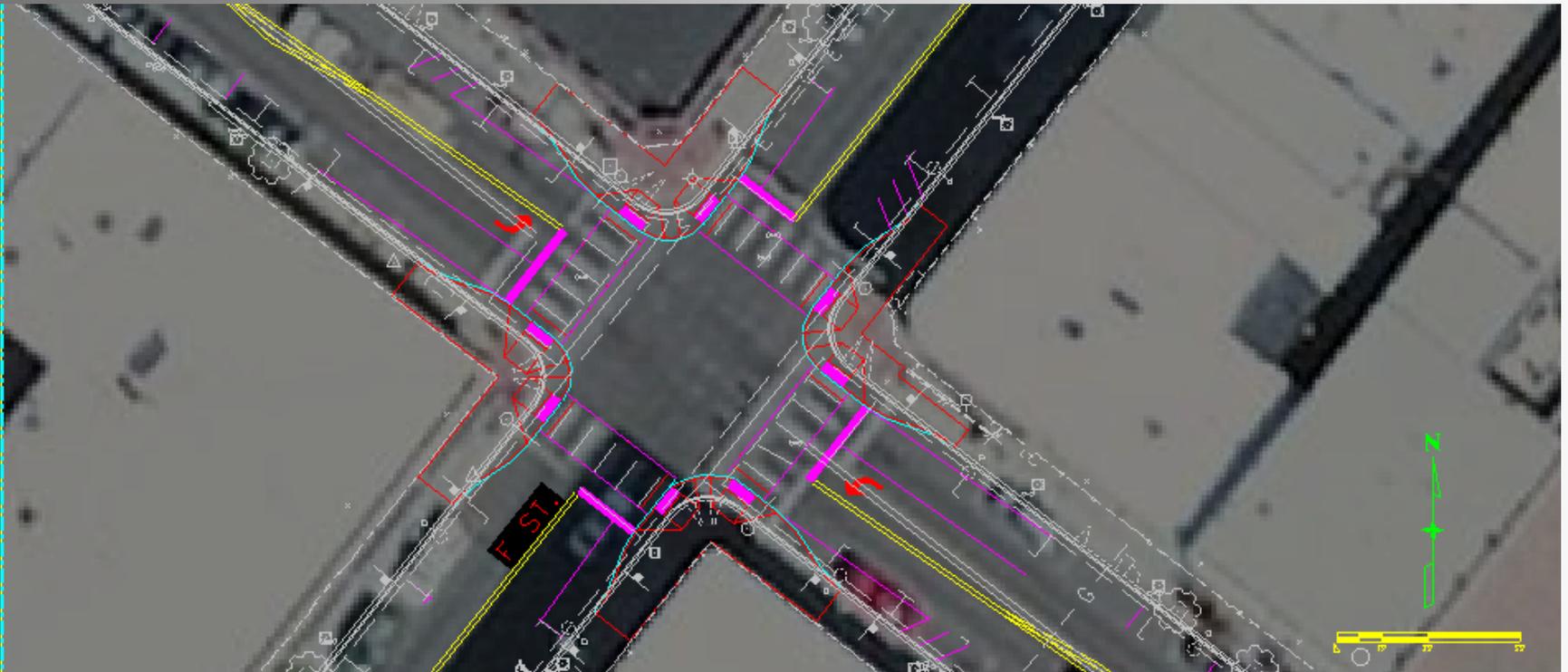
US 50 & CR 111

Project General

1. Signal Replacement– CDOT has received funds to upgrade its signal infrastructure (Span Wire, Old Signals. Above and Below Ground)
2. R5 Traffic & Safety- Other Reasonably Achievable Safety and Operational Improvements
3. CDOT Maintenance- HMA Overlay 1st St Approaches
4. City of Salida- Waterline Replacement (Salida Funded)

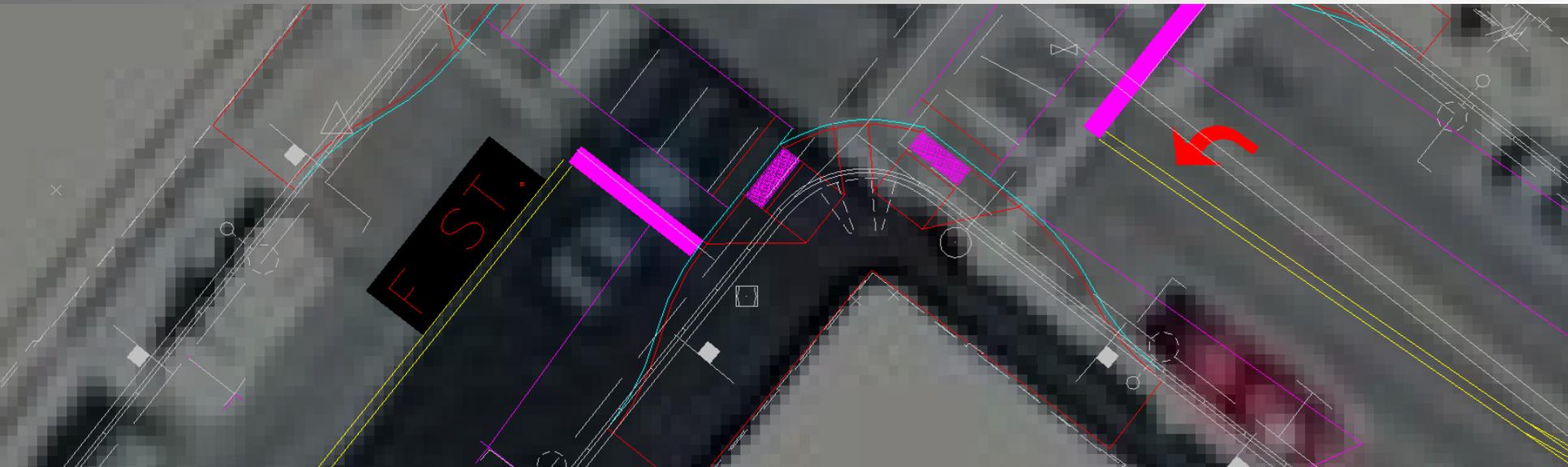
1st (CO 291) & F Street

1. In addition to signal infrastructure upgrades:
 - a) Full Intersection Reconstruction in Concrete with HMA Overlay on 1st
 - b) Curb Extensions
 - c) Exclusive Pedestrian Phase
 - d) Short Left Turn Lanes on 1st St (CO 291)



1st (CO 291) & F Street

1. Curb Extensions- An extension of the sidewalk into the roadway that reduces the crossing distance of a roadway for pedestrians and their exposure to vehicular traffic.
 - a) Improves visibility of pedestrians
 - b) Shorter crossing distance = less time in the road
 - c) 39% to 46% Crash/Crash Potential Reduction Motorized Vehicle vs. Pedestrian crashes
 - d) Low speed turns, more sidewalk at top of sidewalk ramp, ADA compliance



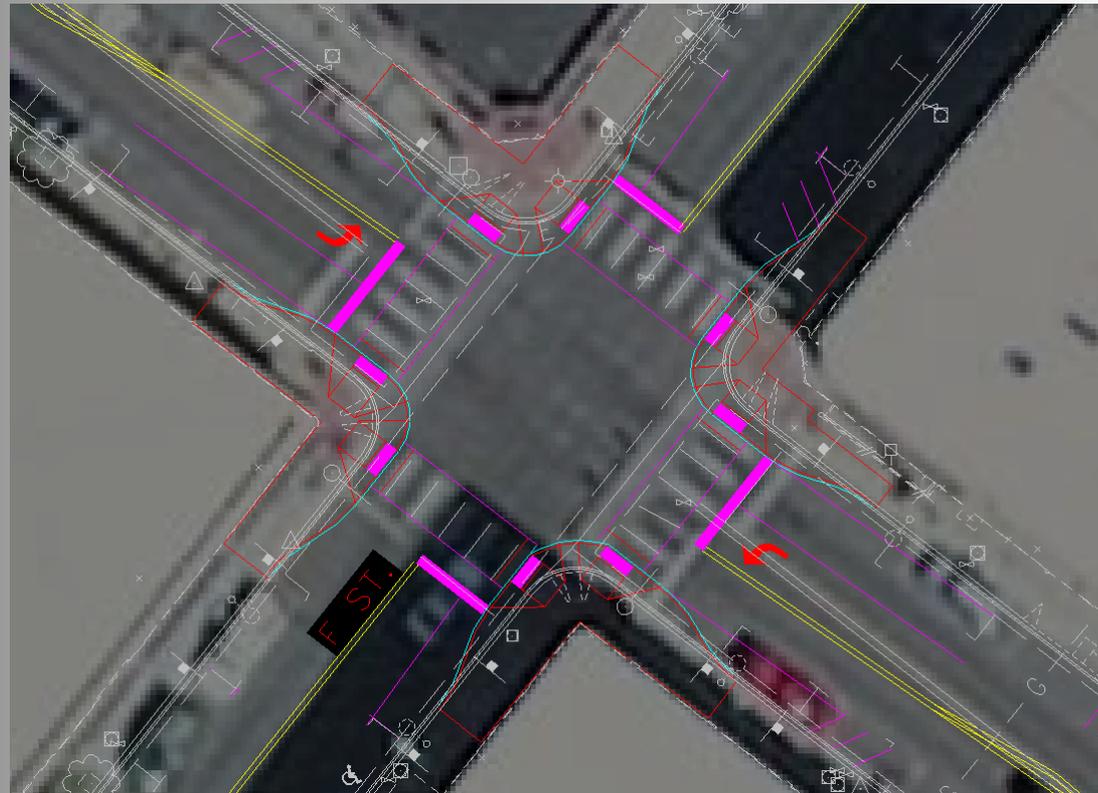
1st (CO 291) & F Street

1. Exclusive Pedestrian Phase- All directions of traffic have a red signal indication while pedestrians receive their Walk and Flashing Don't Walk in all directions.
 - a) During Pedestrian Phase= Red Ball, Left Red Arrow, No Right Turn Blank Out Signs. Removes conflicting traffic turning movements
 - b) ~51% Crash/Crash Potential Reduction of Motorized Vehicle vs. Pedestrian crashes



1st (CO 291) & F Street

1. 1st St (CO 291) Left Turn Lanes- Separate and independently control left turns from through movements.
 - a) Significantly reduce times where a vehicle waiting to turn left blocks through traffic = more efficient + better utilization of green indications.
 - b) 16% Crash/Crash Potential Reduction involving left turns. Safety benefit to all crash types.



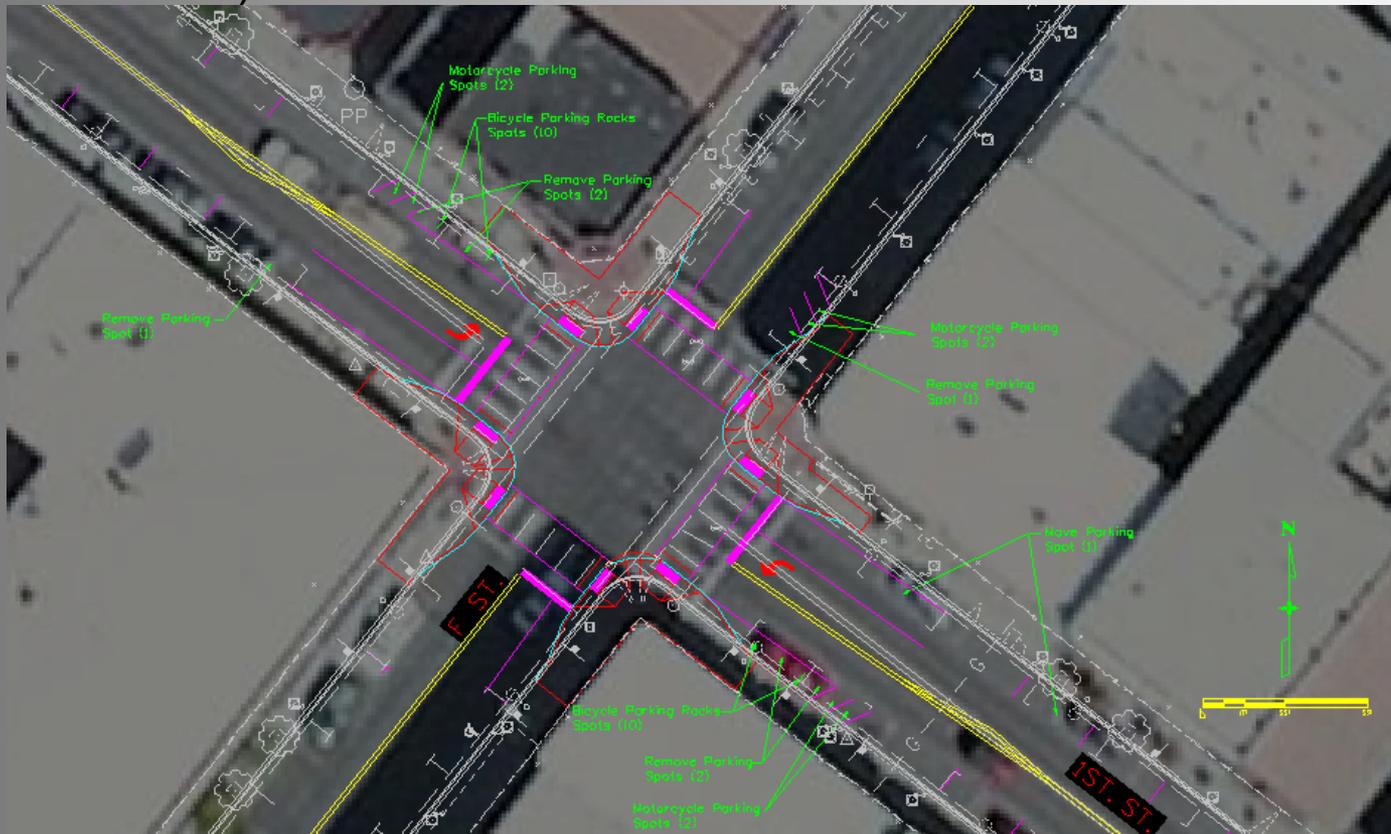
1st (CO 291) & F Street

1. Context Sensitive- Keep design in harmony with Downtown Salida
 - a) Design as a downtown, low speed intersection with many types of road users (Motorized, Peds, and Bikes)
 - b) Match other downtown Salida colored and patterned concrete crosswalks and sidewalk ramps.
 - c) Protect in place existing decorative/historic sidewalk items



1st (CO 291) & F Street

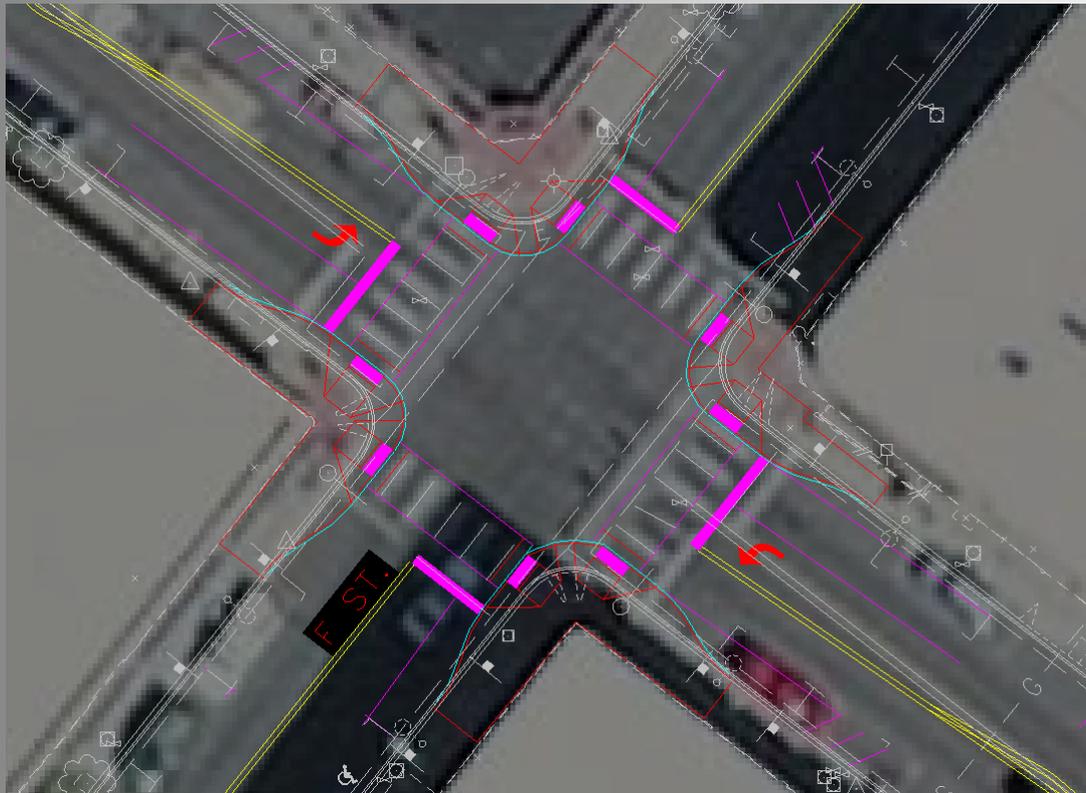
1. Parking- For the left turn lanes, re-allocate parking space
 - a) Left Turn Lanes as short as possible (2-3 cars vs. existing 0)
 - b) Re-allocate 6 car parking spaces to 5 Motorcycle (Can also re-locate bike racks to street, 20 bicycle parking spots, from sidewalk, protected by curb extensions)



1st (CO 291) & F Street

1. How?

- a) Existing- 4-lanes wide (2 Traffic + 2 Parking)
- b) Proposed- 3 Traffic + 1 utilized for curb extensions



1st (CO 291) & F Street Traffic Impacts

1. Compared to busy streets in Denver everyday =
 - a) No Big Deal

2. Compared to what Salida is accustomed to at this + surrounding intersections =
 - a) Significant Increased Delay + Congestion

3. Maintaining Traffic (Motorized/Non-Motorized) During Construction Options-
 - a) Option 1- One Way Operation + Partial Detour
 - OR**
 - c) Option 2a or 2b- Full Closure + Full Detour

1st (CO 291) & F Street

Minimize Construction Impacts

1. Minimize Construction Impacts

- a) Consolidate projects- Signalized Intersection Reconstruction + CDOT Maintenance Asphalt Paving + Salida Waterline. Cheaper than 3 separate projects (Waterline \$140k vs. \$200k)
- b) Durability- Concrete intersection + upgraded waterline = long life span with minimal ongoing maintenance.
- c) Schedule- Begin after Labor Day 2017, end before Thanksgiving
- d) Accelerated Concrete- 1 day to cure vs. 5 days
- e) Contractor Incentive Payment Opportunity for Completion ahead of schedule (Disincentive for finishing late). Old Towns...
- f) Encourage Heavy Truck Traffic to stay on US 50 and US 285

ROAD WORK	NO TRUCKS	BUSINESS
CO 291	EXPECT	ACCESS
9-17 to 11-17	DELAYS	OPEN

1st (CO 291) & F Street Traffic Impacts

1. Option 1- One Lane, One Way + Partial Detour 9-5-17 to 11-17-17

- a) **Pros-** Maintains some through traffic on 1st Street (CO 291)...Also a Con
- b) **Cons-** More Parking Impacts, Longer Construction Timeframe (Winter), More Pedestrian Impacts, Higher Risk of Crashes for Traveling Public & Workers



1st (CO 291) & F Street Traffic Impacts

1. Option 2a- Full Closure + Full Detour Duration 9-5-17 to 10-20-17

- a) **Pros-** Quicker Construction Timeframe (4 Weeks Sooner than Option 1, Winter), No Through Motorized Traffic = **SAFER**, Less Pedestrian Impacts, Less Parking Impacts
- b) **Cons-** No Through Traffic



1st (CO 291) & F Street Traffic Impacts

1. Option 2b- Full Closure + Full Detour (2 Weeks) 9-5-17 to 11-3-17

- a) Pros- 2a Light
- b) Cons- 2a Light



US 50 & CR 111

1. Scope:

- a) Convert span wire to poles and mast arms.
- b) Connect up existing sidewalk and trail, build intersection to accommodate future sidewalk/trail expansion.
- c) **7-31-17 through 9-22-17**



Salida Signal Replacements

1st Street (CO 291)/ F Street

US 50 /CR 111



Questions?