

# Boulder, CO

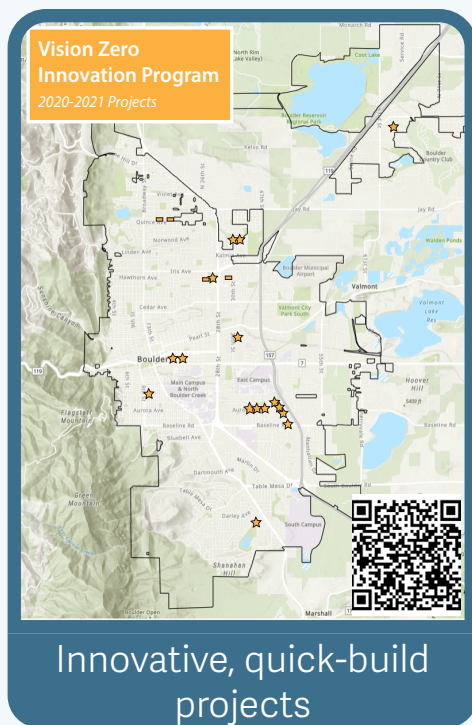
## A Systemic Approach to Crash Reduction

### Vision Zero

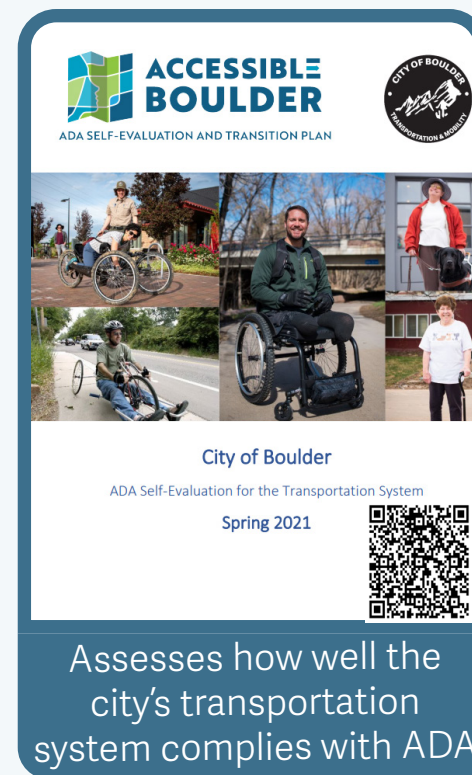
- Adopted in 2014 as part of the City's Transportation Master Plan
- Data-driven approach to increasing the safety of Boulder's streets
- Targeted improvements to street design, enforcement, and outreach efforts in places where they are needed most



Measures traffic crash data and identifies trends in crashes



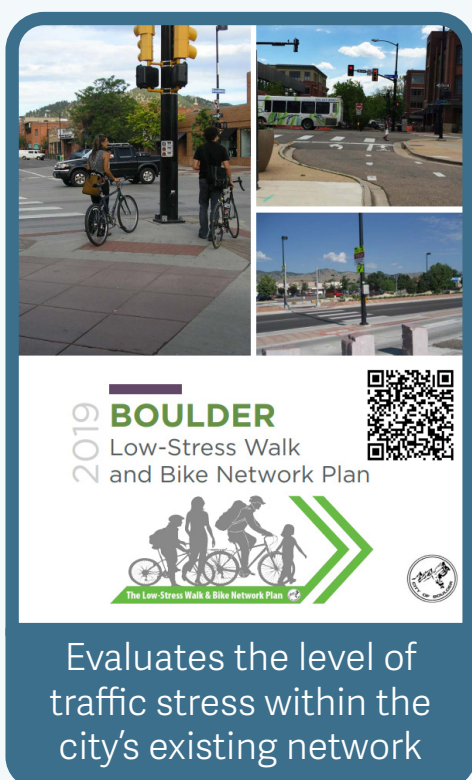
Innovative, quick-build projects



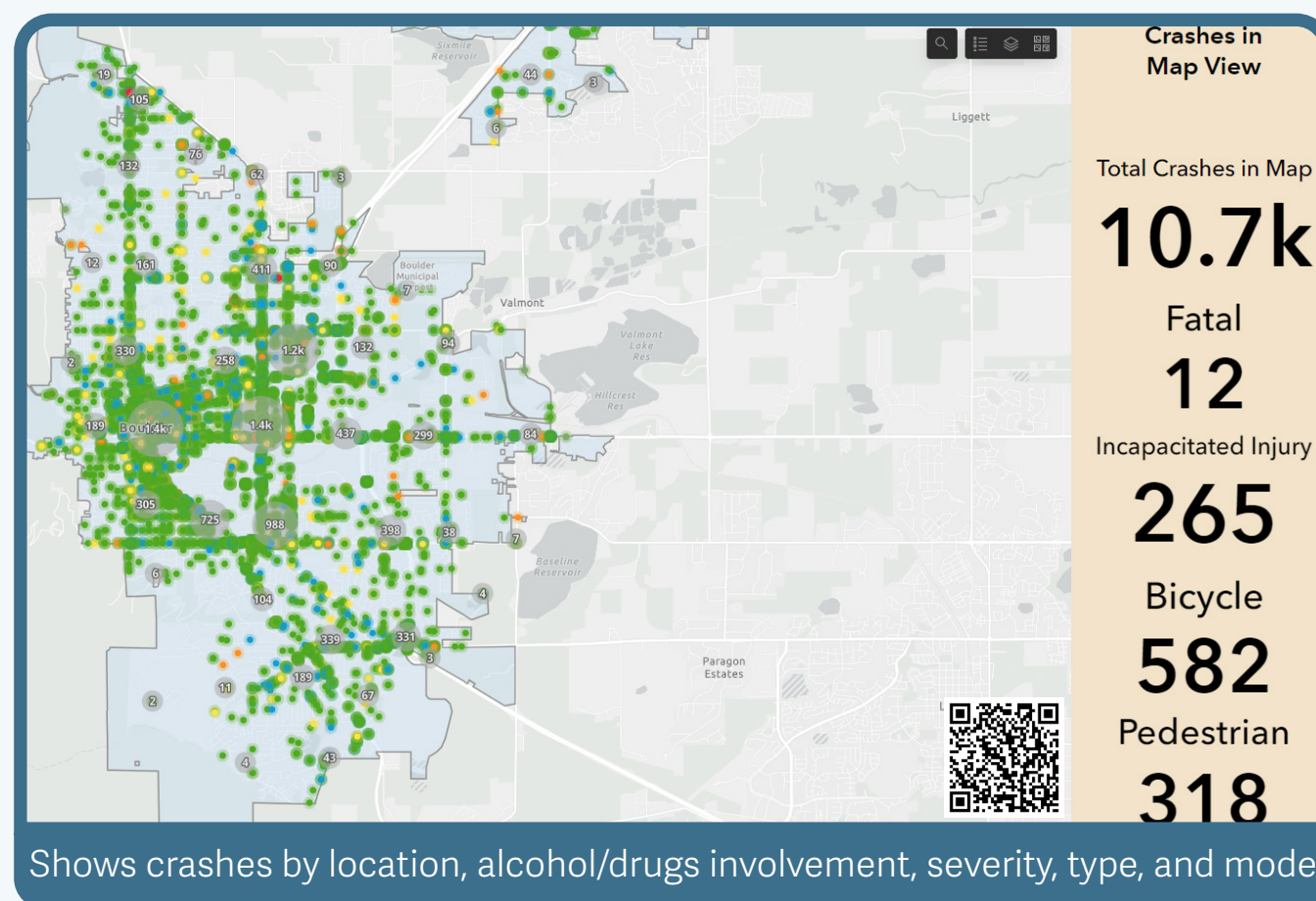
Assesses how well the city's transportation system complies with ADA



Identifies specific actions and strategies



Evaluates the level of traffic stress within the city's existing network



Analysis of the High Risk Network found **7** crash types account for **62%** of fatal and serious injury crashes:

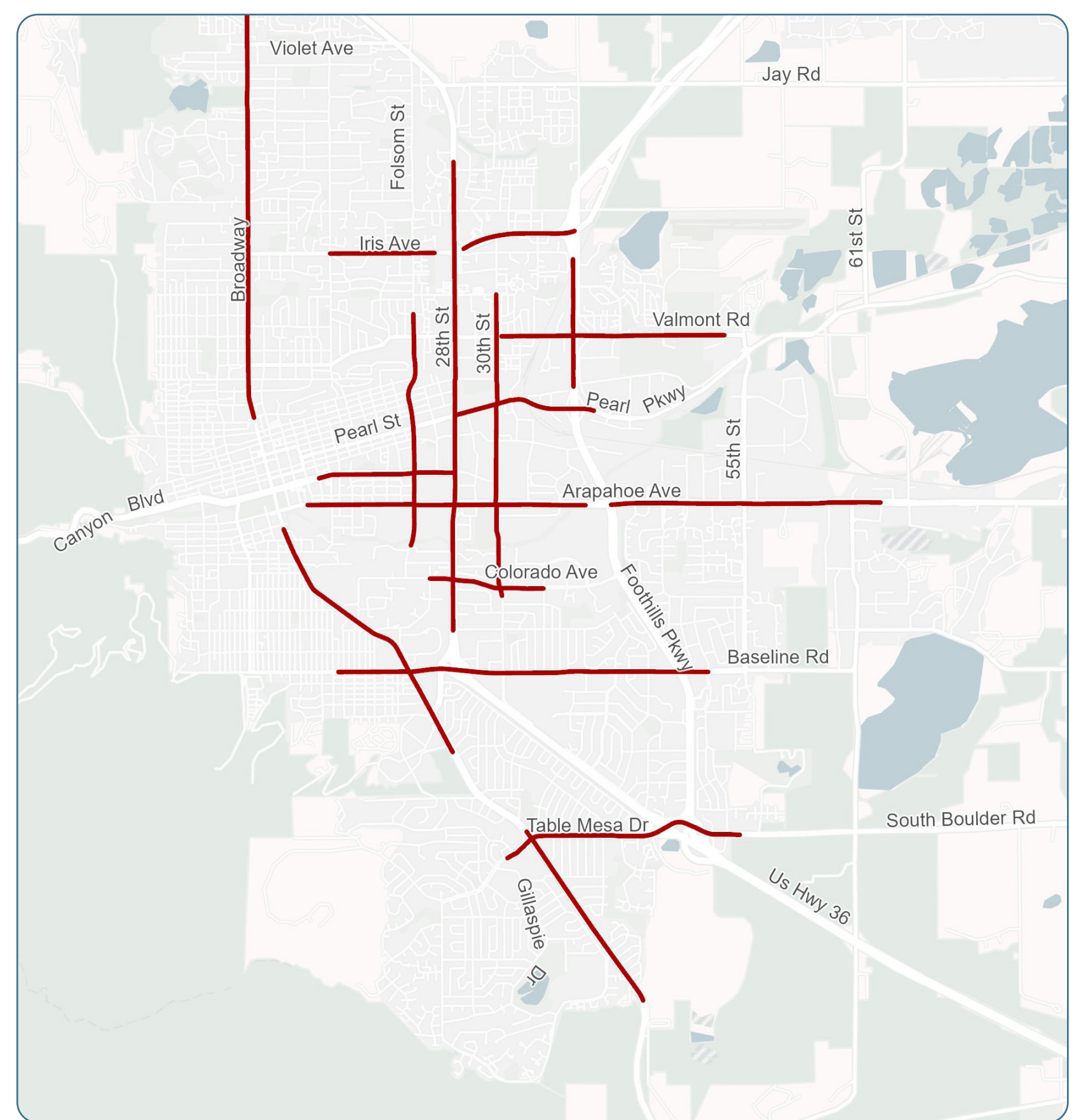
- Running red lights
- Right-turn crashes
- Left-turn crashes
- Multi-use path crossings
- Right-turn slip lanes
- Pedestrian crashes while crossing the street
- Right-turn on red crashes

### High Risk Network

The High Risk Network, measured by crashes per vehicle miles traveled, has roughly five times more risk than all Boulder arterial streets.

Managing risk and mitigating crashes on this small percentage of streets can have an outsized impact on reducing fatal and serious injury crashes.

Vision Zero Action Plan (VZAP) focuses on common crash types and typical solutions.



#### LEFT-TURN CRASHES

**CRASH TYPE DESCRIPTION**  
There are three common types of left-turn crashes:

- VEHICLE-VEHICLE LEFT-TURN CRASHES**  
A driver turns left and does not yield to an oncoming through vehicle
- VEHICLE-PEDESTRIAN/BICYCLIST**  
A driver turns left and does not yield to a pedestrian or bicyclist traveling in the crosswalk
- VEHICLE-BICYCLIST**  
A driver turns left and does not yield to an oncoming through bicyclist traveling in the bike lane

**Potential Solutions**  
All Types  
Continued implementation of the city's Left-Turn Phase Operation Practice, which guides changes to left-turn operation at signalized intersections. And updating the guidance with consideration of:  

- Lower pedestrian and bicyclist (in crosswalk) volume thresholds
- Oncoming bicyclist in bike lane volume threshold
- Providing protected left-turn signal phasing when a pedestrian or bicyclist pushes the pedestrian push button

**Systemic Approach to Crash Reduction**

| SYSTEMIC SOLUTION   | STRATEGY FOR MANAGING RISK   |
|---|--|
| Protect left-turns  | Protect left-turns based on conflicting volumes of left-turning vehicles and pedestrians or bicyclists in the crosswalk or oncoming bicyclists   |
| WHERE TO DEPLOY RISK MANAGEMENT STRATEGIES                    | ASSOCIATED VISION ZERO ACTION PLAN ACTIONS   |
| High Risk Network first, other signalized intersections later | <ul style="list-style-type: none"> <li>1.CJ - Update Boulder's Left-Turn Operation Traffic Operations Practice (2024)</li> <li>1.CJ - Proactively implement the new left-turn operation practice across the HRN (2025)</li> <li>1.CJ - Proactively implement the new left-turn operation practice at remaining traffic signals (2026)</li> </ul> |

**Related areas of concern from 2022 Safe Streets Report:**

- Bicycle, pedestrian, and motorcycle crashes
- People ages 15-29 and older adults ages 65 and older
- People speeding, people impaired, and people making left-turns



# Boulder, CO

## Getting to Zero on the Core Arterial Network

Findings from the Vision Zero Boulder: Safe Streets Report (SSR) show that 67% of traffic crashes resulting in severe injury or fatality occur on arterials. In response, the city is focusing its investments and resources to design and construct improvements on a "Core Arterial Network" (CAN).

This connected system of protected bicycle lanes, intersection enhancements, pedestrian facilities, and transit upgrades will help reduce the potential for severe crashes and make it more comfortable and convenient for people to get where they need to go.

While most CAN corridors will explore multi-modal enhancements, others will have an emphasis on bicycle or transit facilities. Here are some of the design elements that may be considered across the suite of CAN projects.



*67% of serious injury and fatal traffic crashes occur on arterial streets (only about 17% of streets)*



**Floating Bus Stops**



**Business-Access-Transit (BAT) Lanes**



**Protected Intersections**



**Protected Bicycle Lanes**

### Low Wall Concrete Barriers

The Baseline Road Transportation Safety Project (28th Street to Foothills Parkway) will create safer conditions for walking, bicycling, and driving on Baseline Road while enhancing connections to popular community destinations.

Low wall pre-cast concrete barriers will be placed in strategic, prioritized locations to harden existing separated bike lanes east of 30th street. This will be the first time these barriers are used in the City of Boulder.