



COLORADO

Department of Transportation

Cell Phone Connectivity Interim Study Committee

CDOT Overview

July 9th, 2024



What we do today

Land Leases for Cellular Towers

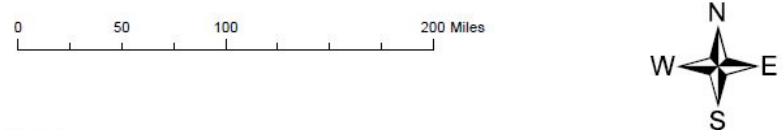
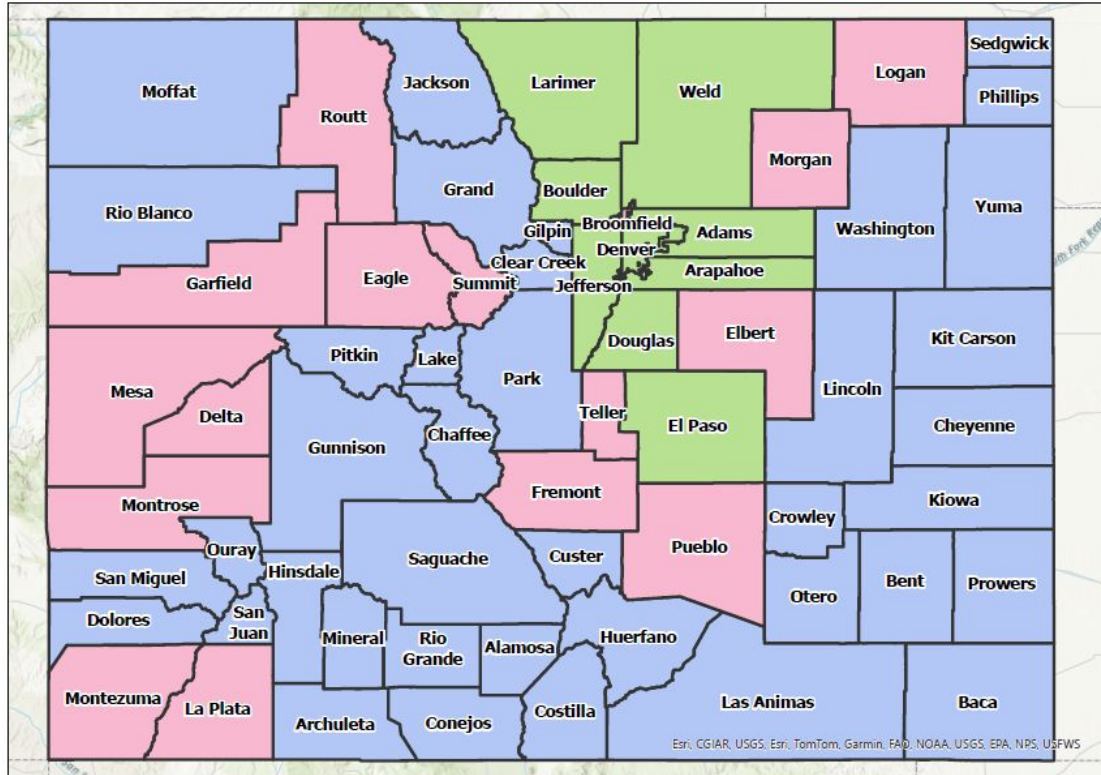
CDOT offers overall Master License Agreements (“MLA”) and individual Site License Agreements (each an “SLA”) to allow for the installation, operation, and maintenance of communications facilities by requestors on certain CDOT Properties.

- Primary Owner of Tower
 - 3 categories of land lease types:
 - Prime Urban (\$35k per year; Counties over 200k pop.)
 - Urban (\$25k per year; Counties 20,001-200k pop.)
 - Rural (\$15k per year; Counties under 20,001 pop.)
- Colocation User
 - Primary Owner pays 50% of their sublease revenue.
- Program At-a-Glance
 - 26 contracts
 - \$611k annual lease fees
 - 6 renewals in process.
 - Governed by:
 - 23 CFR 710.403 (e) (Management of Part 710 Right-of-Way and Real Estate)
 - CRS 43-1-210 (3) and (4) (Acquisition and disposition of property)

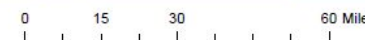
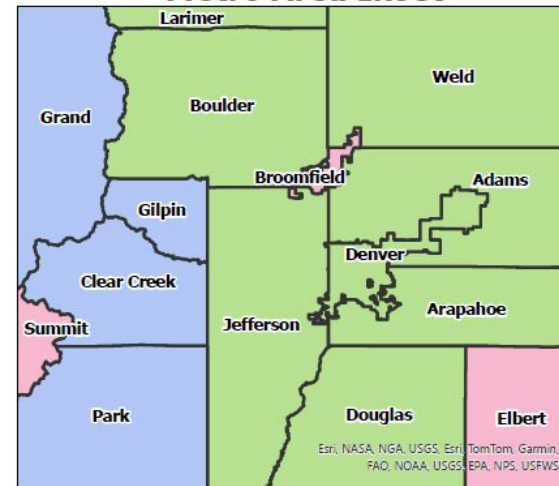


What we do today

CDOT Cell Tower Pricing (yearly)



Metro Area Inset



Map of CDOT Cell Tower Pricing per year.
Counties are put into one of three categories: Rural, Urban, or Prime Urban.

Effective: 2/1/2023. Cost escalates by 3% annually for all categories.

7/9/2024



What we do today

Permits for Small Cell Towers

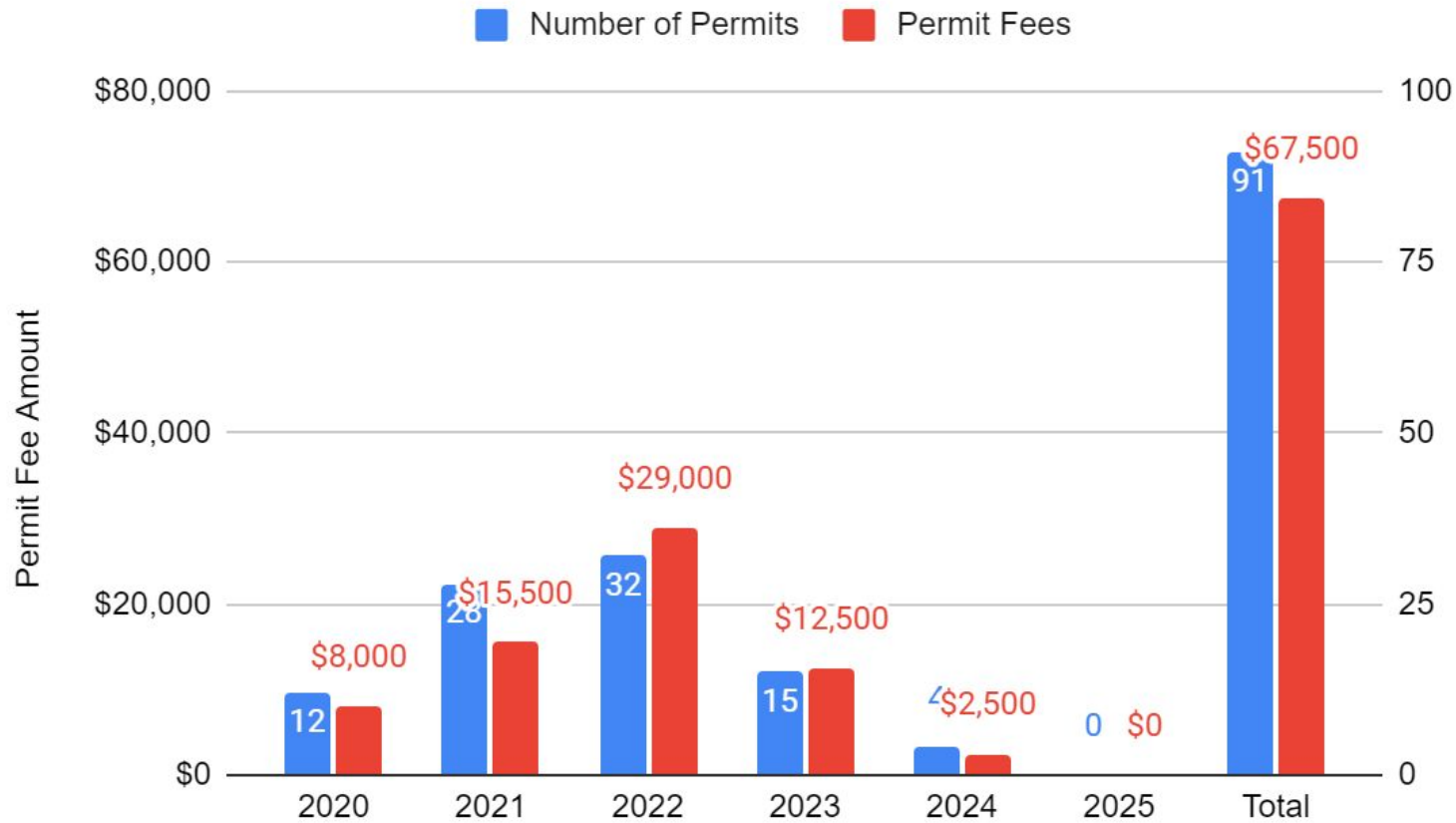
As required by FCC 20-75, CDOT implemented Utility/Special Use Permit for Small Cell Facilities and has been compliant with these requirements. The requirements informed the [terms and conditions](#) for Permit for Small Cell Facilities issued by the CDOT.

- New Pole
 - \$1,000 for non-recurring fees (i.e. not a collocation) intended to support one or more Small Cell Facilities
 - \$270 per Small Cell Facility per year, including any possible ROW access fee or fee for attachment to CDOT owned structures in the ROW
- Colocation User
 - \$500 non-recurring fees for up to five small wireless facilities, an additional \$100 for each Small Cell Facility beyond five.
 - \$270 per Small Cell Facility per year, including any possible ROW access fee or fee for attachment to CDOT owned structures in the ROW
- Program At-a-Glance
 - Fees were set by FCC and could be adjust by the DOT under specific conditions.
 - 91 Permits
 - \$67.5k total permit fees over 4+ years.
 - Governed by:
 - 2012 Spectrum Act 6409(a)
 - [FCC 18-133](#) (Management of Part 710 Right-of-Way and Real Estate)
 - [FCC 20-75](#) (Accelerating Wireless and Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment)



What we do today

Small Cell Permit Fees





Glenwood Canyon Mudslide July 2021

Situation: Burn scars from previous year and additional rains, created mudslides throughout the Canyon. No wireless coverage or feasible infrastructure. In addition, radio system was unstable, first responders and CDOT crews were unable to communicate while responding to the emergency and rescues.

Contacted Verizon and AT&T (FirstNet), Verizon deployed Cellular on Wheels (“CoW”) within hours and AT&T had their permanent small cell network live on the railroads for emergency communications within a few weeks.

CDOT Intelligent Transportation Systems (“ITS”) designed remote cameras that monitored the most vulnerable areas via this new cellular emergency service.





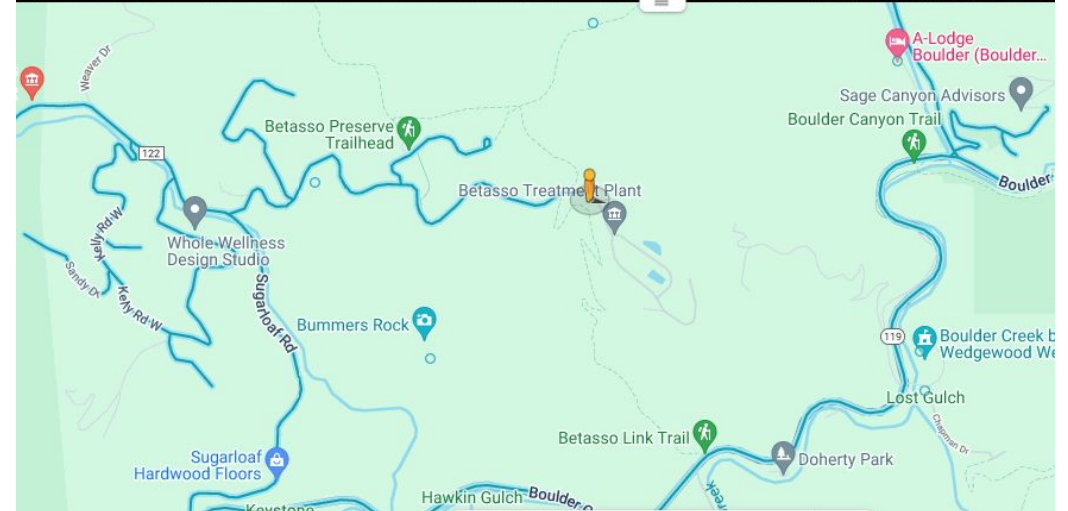
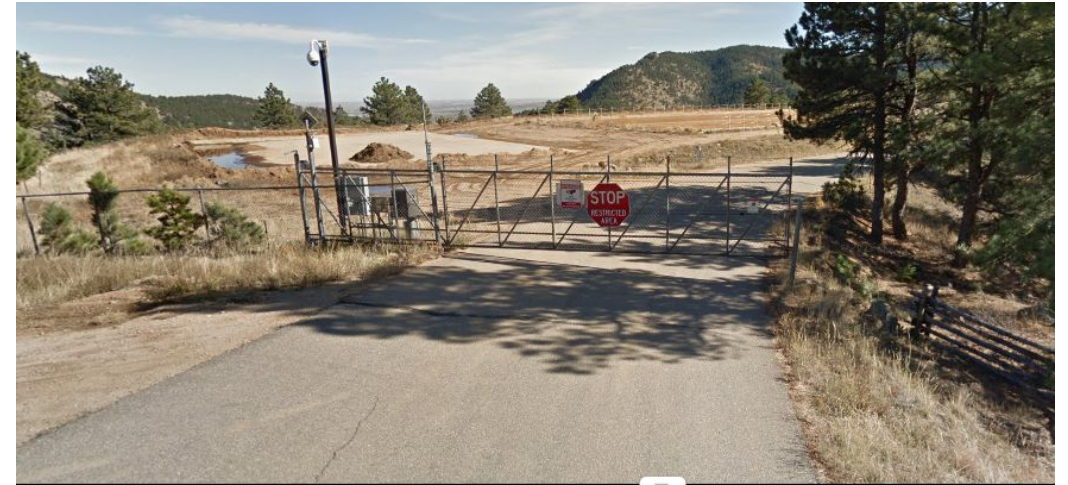
When we don't have

Highway 119 November 2019

Situation: Rock scaling required 4 hour road closures. Additionally, unexpected boulders come down during scaling that required heavy machinery to remove, taking several hours longer than expected. Constituents concerned about access to emergency services, children at school and communications.

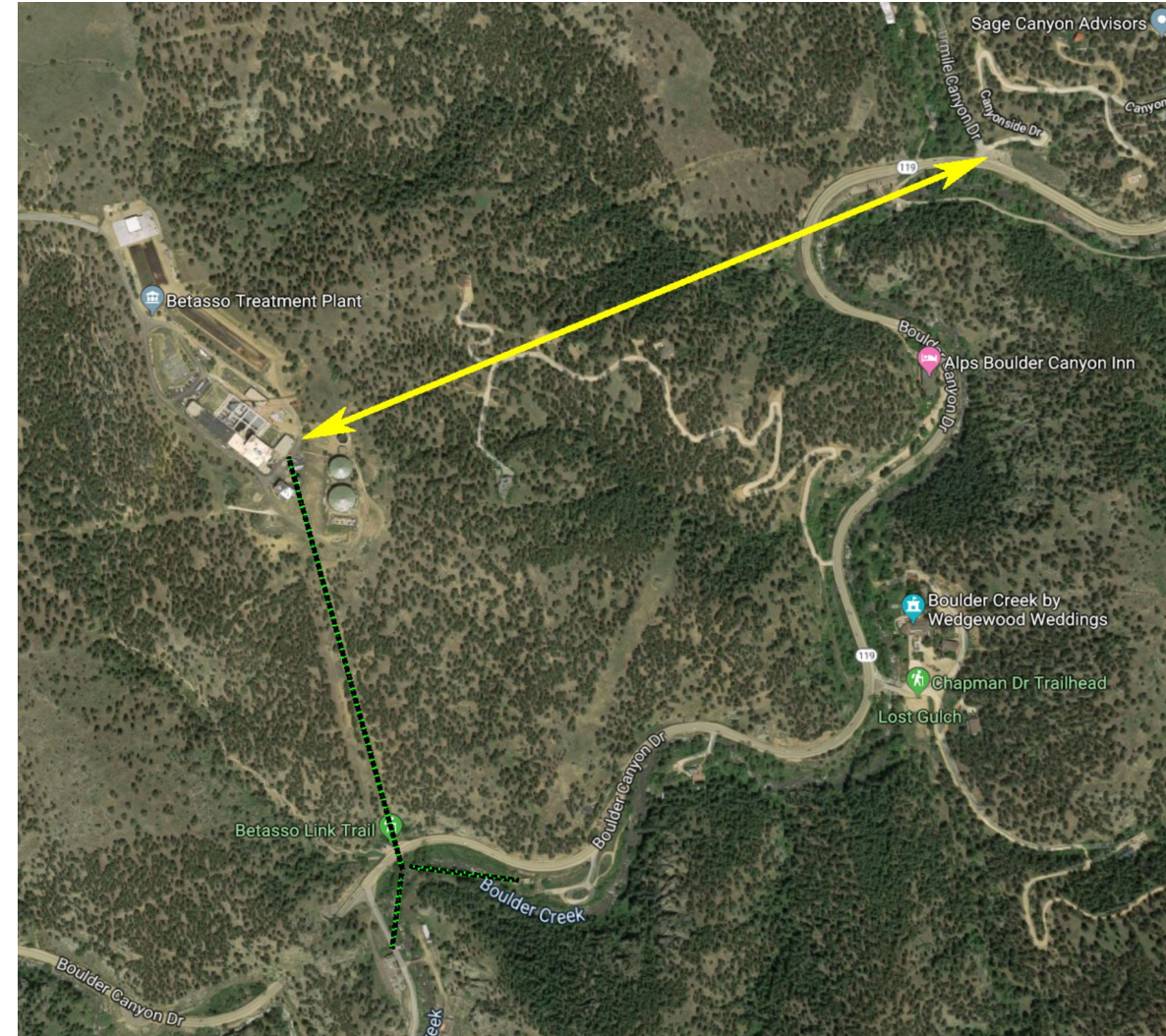
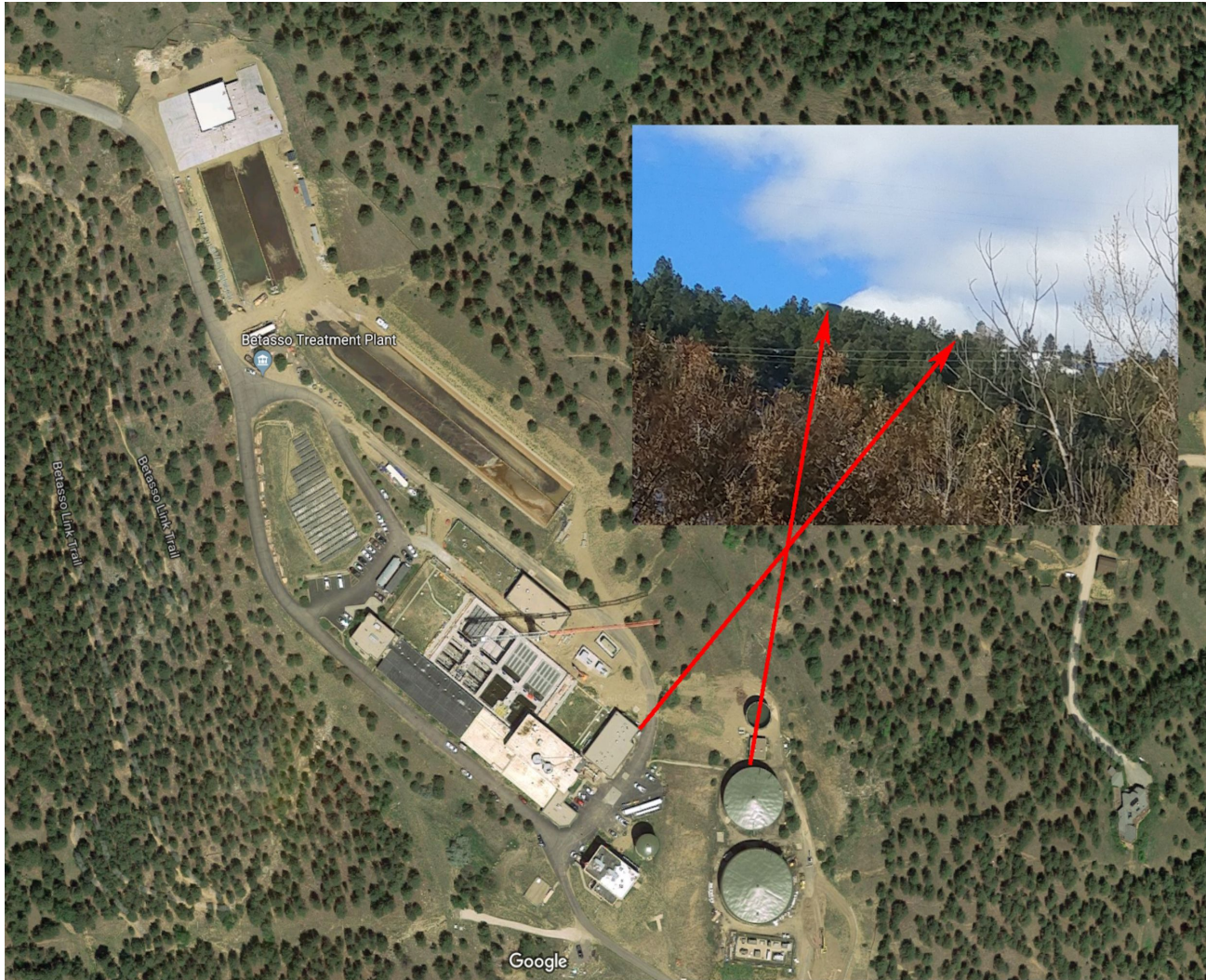
Contacted Verizon and AT&T (FirstNet), no line of sight and were unable to provide Cellular on Wheels (“CoW”) for emergency communications.

CDOT Intelligent Transportation Systems (“ITS”) designed Fixed Wireless Wi-Fi solution for free Wi-Fi to be broadcasted in the canyon, partnering with the City of Boulder.



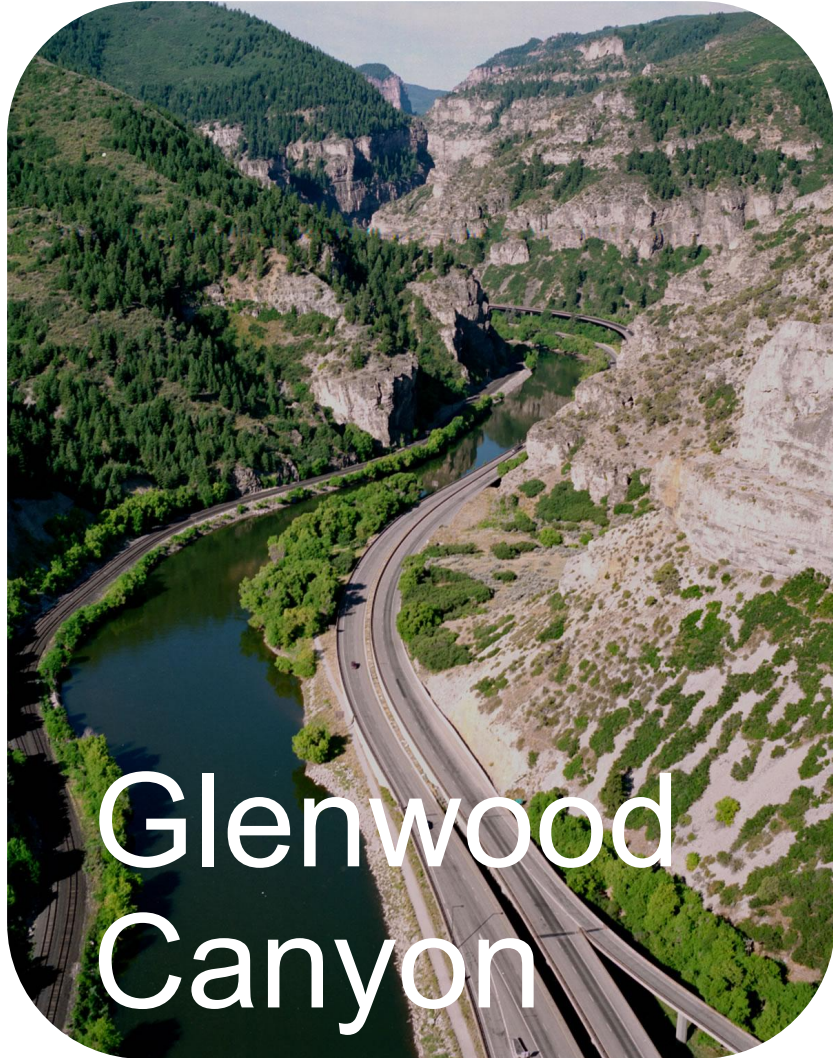


When we don't have





When we don't have





Thirty years of perfect reputation.

Active Traffic Management, Operations, Corridor Management and Incident Command, all while efficiently and effectively communicating with the traveling public, real-time.



~2.3k

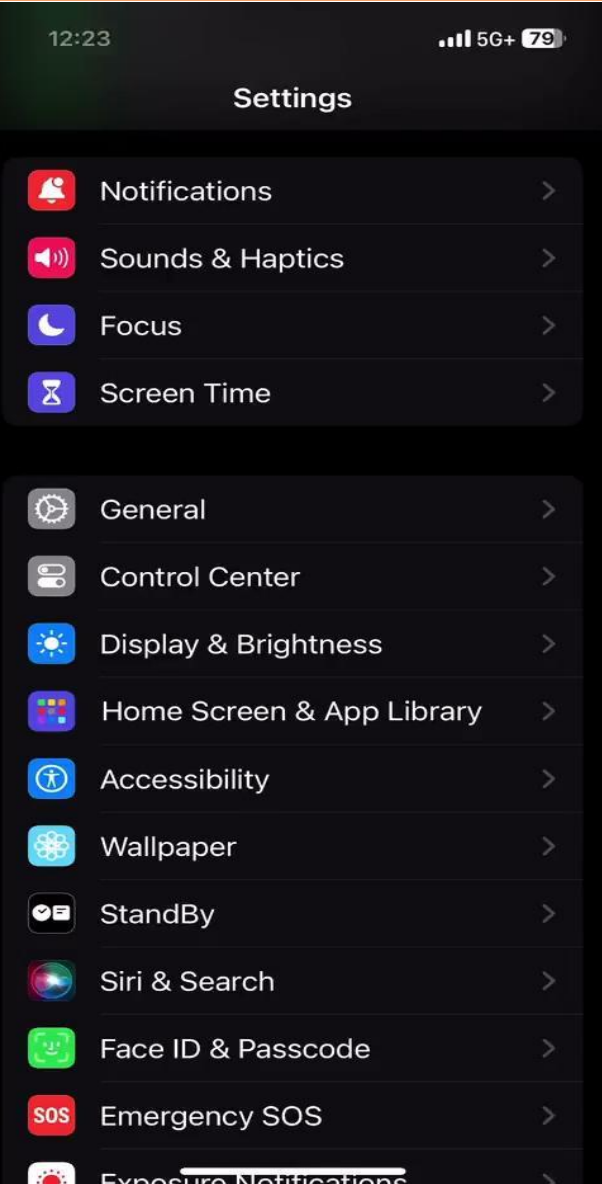
Users per Average Minute
(6k Users per Minute during storm)

~148M

Website views per year
(~4.1M average views per storm)

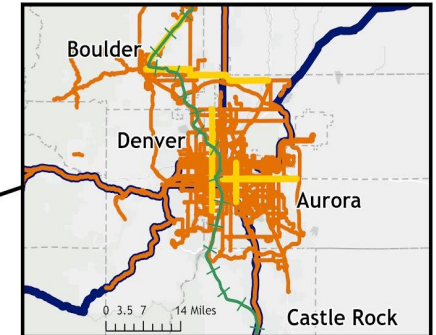
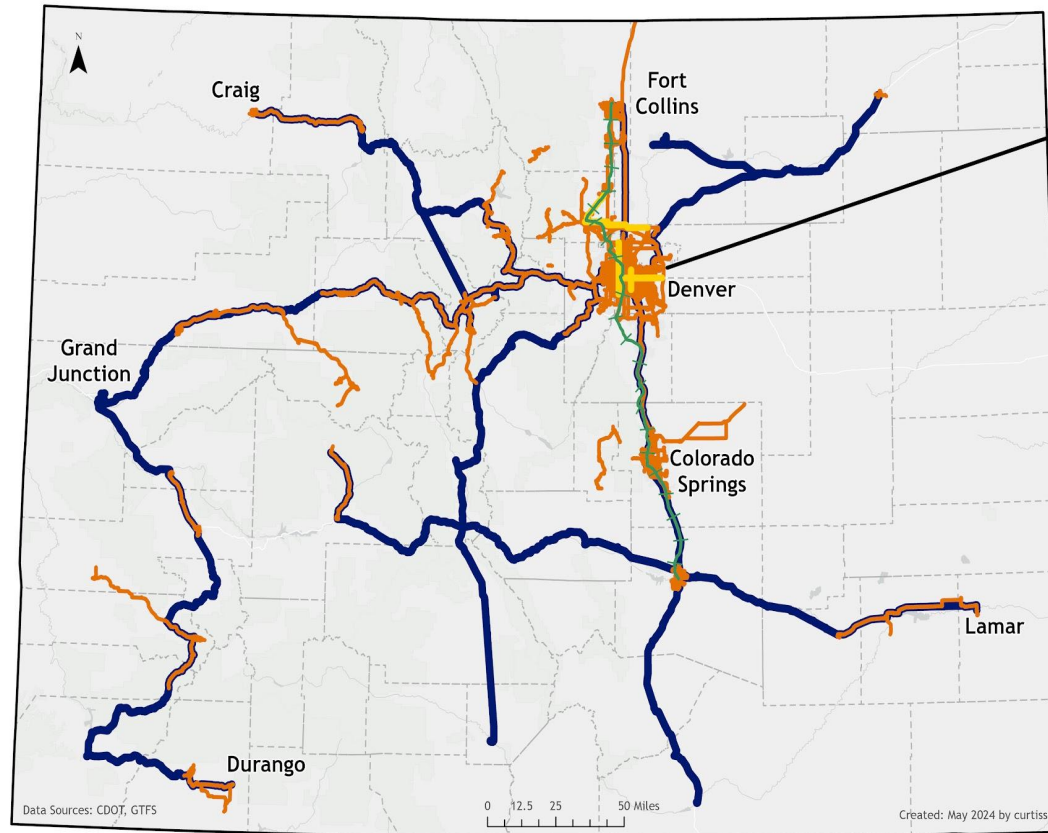
~4.8M

Active users of COtrip



- A connected and integrated Colorado mobility platform for transit.
- A system where people can find the information needed to travel seamlessly in Colorado using transit.

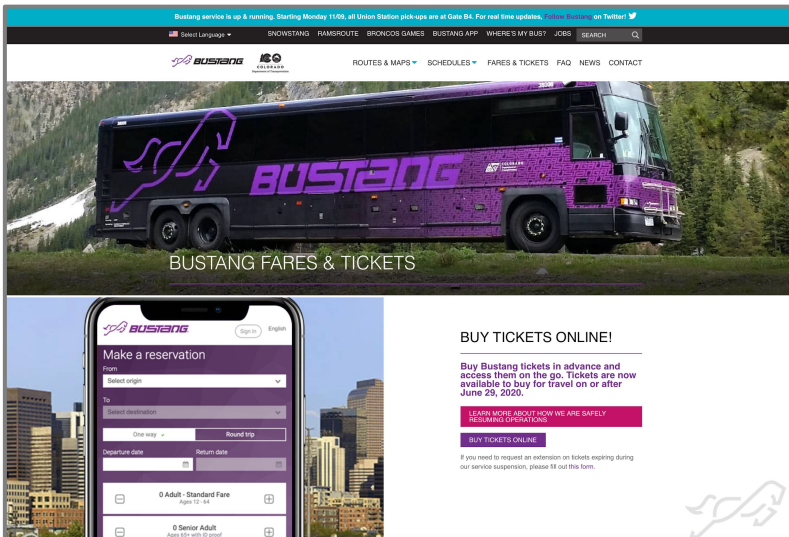
Transit Connections in Colorado



Location: Denver Metropolitan Area

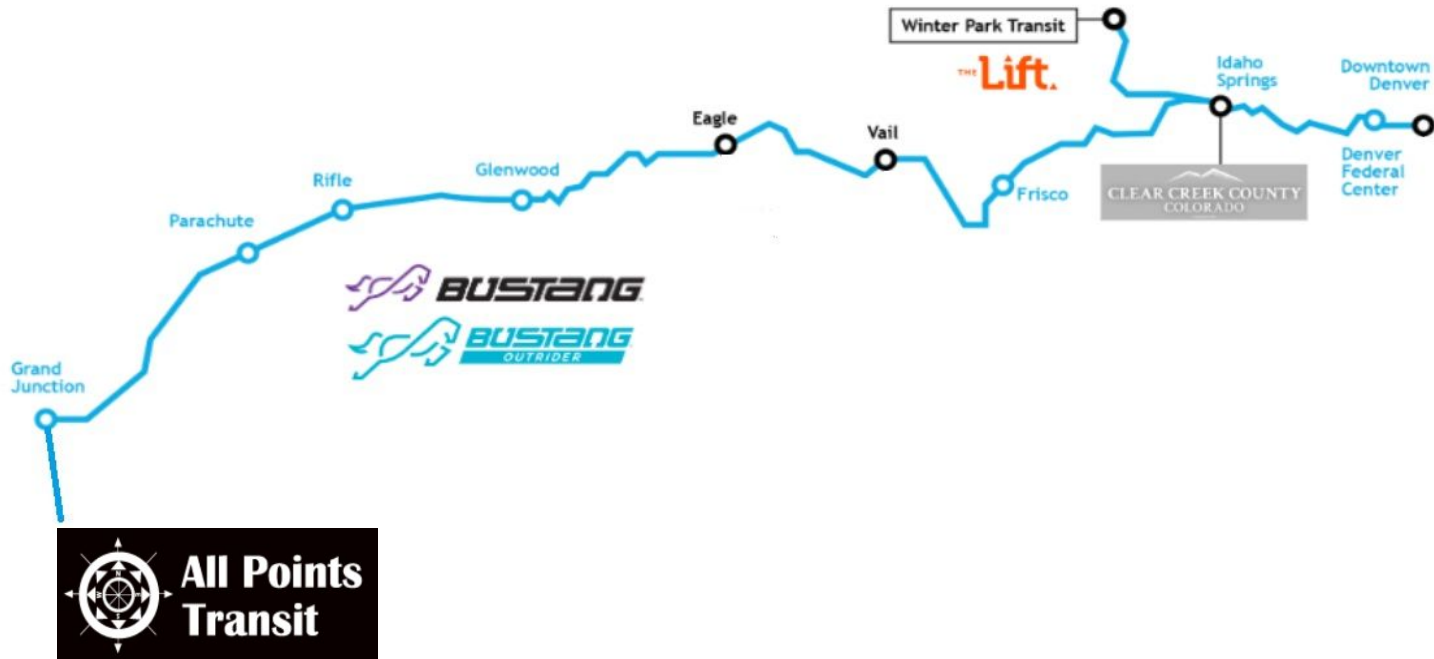
Legend

- Bustang and Outrider
- Local Transit Agencies
- Bus Rapid Transit
- + Front Range Passenger Rail





Phase II Prototype Partners



CONNECTED COLORADO

Select Language

Dashboard Trip Planner Saves Trips

Dashboard

Tickets Bought: 0
Total tickets bought

Past Tickets: 0
Total past tickets

Active Tickets: 0
Total active tickets

Saved Trips: 0
Total saved trips

Recent Saved Trips

Sno	Source	Destination	Date
You have not saved any trips yet.			

View All

Saved Trips Statistics (This Week)

CONNECTED COLORADO

Powered by Google Translate

Select Language

Dashboard Trip planner Schedules Alerts Saved trips Ticketing My Orders Settings Logout 0 | \$0.00 View Cart

Enter source: E 14th Ave & N Broadway, Denver, CO

Enter destination: Winter Park, CO 80482, USA

Plan My Trip

Depart now

Suggested Routes

2:48 PM - 5:36 PM 2 hours 49 mins
77.5 mi | 5.1 lbs CO₂ | \$13.75

7:41 AM - 11:04 AM 3 hours 24 mins
69.9 mi | 4.7 lbs CO₂



- Permit (40 different permits between Port of Entry and CDOT, examples below:)
 - Purchase fuel & trip permits for DOR (out of state plates/CMV).
 - Oversize/Overweight
- In-cab technology now includes collision avoidance systems, lane departure warnings, and fatigue detection.
- In-cab technology also provide critical messaging including advance warning on low-bridge, steep grades and traffic slowdowns based on geofencing.
- These features contribute to a safer driving environment, reducing the risk of accidents and promoting overall road safety.





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Contact

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