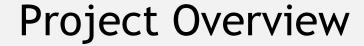# Connected Colorado Project Update
TRAC Presentation 01.15.2021

COLORADO
Department of Transportation

Connected Colorado aims to develop an easy-to-use app that allows the public to plan their entire trip and pay online, and also supports better coordination and data sharing between local transit providers.

PURPOSE

To build a statewide, centralized platform- a digital mobility hub that provides General Transit Feed Specification (GTFS) data, trip planning, dispatching and online ticketing in real time for Colorado Transit providers (especially rural providers), in-state passengers and out-of-state visitors.

EXISTING GAPS

CDOT has a robust online traveler information system (COTRIP), which provides live camera feeds of highways, traffic and accident alerts, road conditions, and route information, but nothing for integrated transit data. There is no platform that shows the public how to connect from one system to another.
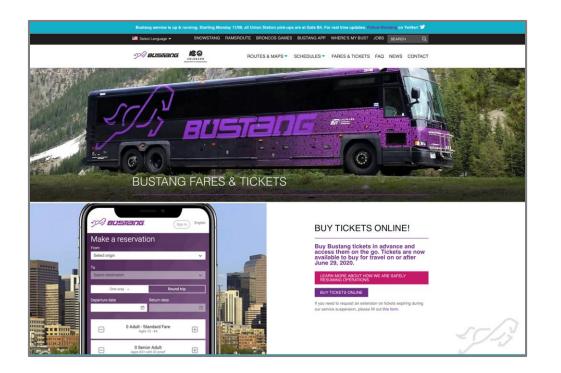
A connected and integrated Colorado mobility platform for transit.

A system where people can find the information needed to travel seamlessly in Colorado using transit.

PHASE 1
Statewide GTFS-General Transit Feed Specification project that publishes transit data to be consumed by a wide variety of applications (ex: Google Maps)

PHASE 2
Digital Mobility Hub featuring Trip Planning, Coordinated Dispatching, and Universal Ticketing in real time for Colorado transit providers, operators, and passengers

PHASE 3
Future Integration with Colorado urban and small urban transit systems, other transportation modes

The Phase II survey sought to help guide the CDOT project team determine scope and next steps of the Connected Colorado effort.
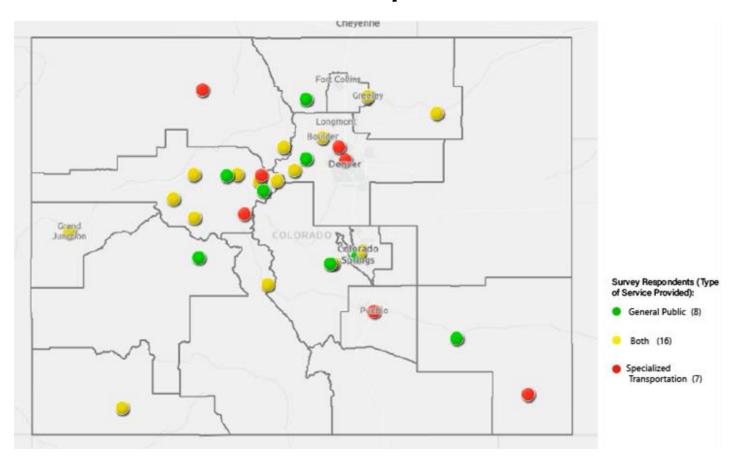
The report summarizes information about respondents, reactions to an initial digital mobility hub, trip planning, coordinated dispatch, and universal ticketing.

Service Provider Respondents

Type of Service Provided

Type of Service	Votes	Percentage
General Public	8	26%
Specialized Transportation Services	7	23%
Both	16	52%
Total Responses	31	100%*

*Percentages have been rounded.

Software Platform Utilization

Pie chart legend:
- **Yes** (blue) — 59%
- **No** (red) — 20.5%
- **No, but we would like to in the future.** (orange) — 20.5%

22 respondents utilize software platform improvements for trip planning.

Gaps in transit services across the state mostly focus on regional connectivity (and less on real-time information and trip planning).

CONNECTED COLORADO

Over half of the respondents would opt in to Connected Colorado at this point.

The remaining respondents need additional information.

Barriers to Opting In

Barrier Type	Votes	Percentage
Legal	0	0%
Financial	7	18%
Political	1	3%
Operational	15	40%
Technological	12	32%
Other	3	8%
Total Responses	**38**	**100%***

*Percentages have been rounded.

CONNECTED COLORADO

Digital Mobility Hub development will begin along the I-70 Corridor and the Bustang West Line.

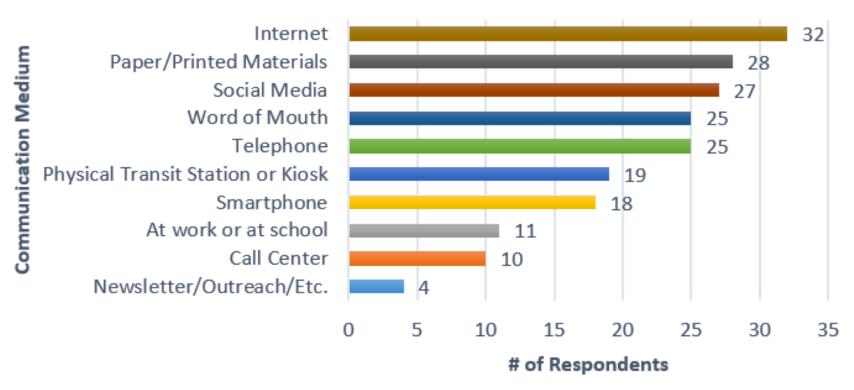One to three transit providers will serve as initial prototype agencies.

Interest in Serving as a Prototype

Level of Interest	Votes	Percentage
Interested	4	20%
Need More Information	12	60%
Not Interested	4	20%
Total Responses	20	100%

CONNECTED COLORADO

How Agencies Inform Riders of Transit Services

Space Reservations

- Only 10.5% (4 respondents) allow for seat reservations
- 31% (12 respondents) offer wheelchair space reservations
- No agencies currently offer bike rack reservations

Regional Trip Planning

- Many agencies do not provide trips or make arrangements for people to take trips outside of their boundaries
  - Intermountain communities, especially those close to ski resorts, have the facilities and capacity to make arrangements
  - Rural agencies and agencies with specialized provisions tend to not make any specific arrangements, but would if they had the capacity to do so.
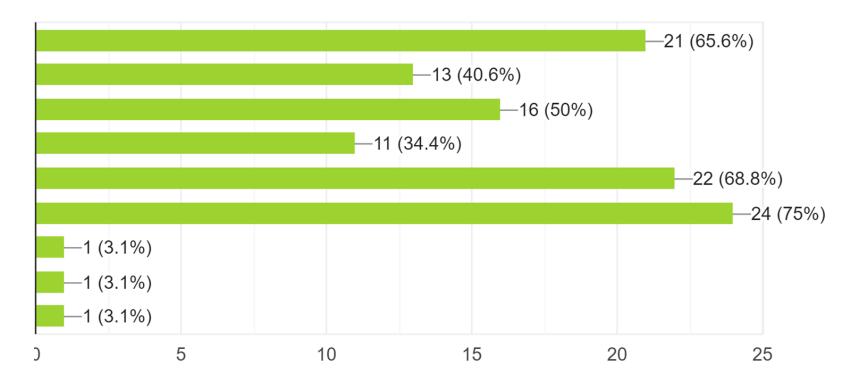- Current gaps focus on coordination and inter-agency planning

CDOT Operational Data Needs

Bustang real-time data — 21 (65.6%)
Outrider real-time data — 13 (40.6%)
Bustang ridership data — 16 (50%)
Outrider ridership data — 11 (34.4%)
Roadway construction zones, closures and detours — 22 (68.8%)
Roadway weather conditions and travel speeds — 24 (75%)
1 (3.1%)
Other — 1 (3.1%)
1 (3.1%)

Trip Planning Needs

- Highest response for "uncertain and/or not applicable" which could indicate a need for further explanation of either the function capabilities or the project as a whole.

- General consensus on the importance of Linked Trip Planning, Coordination + Integration, and General Trip Planning

Digital Mobility Hub - Trip Planning Needs

Category	Votes	Percentage
Linked Trip Planning	4	15%
Coordination + Integration	4	15%
General Trip Planning	4	15%
Real-time Information	3	12%
Uncertain/Not Applicable	7	27%
Other	4	15%
Total Responses	26	100%

*Percentages have been rounded.

Goal is for two-way communication between connected transit agencies for scheduled and real-time arrival and departure times.

- 32% of respondents are currently utilizing any form of automated dispatch for riders.
  - RouteMatch, Nextbus, Ride Free Lafayette, RideSystems, Trapeze-TransitMaster, InfoWeb, Google (Fixed), Trapeze-PASS (Para)
- 81% of respondents are currently utilizing any form of automated dispatch for drivers.
  - 4 use software: ParaPlan, Ride Free Lafayette, Trapeze-TransitMaster
  - 3 use traditional dispatch: VOIP/Radio and AVL/CAD location, texting, and calling
  - 2 will be transitioning to automated dispatch software

Fare Collection Techniques

Category	Votes	Percentage
Fare Free	13	27%
Fareboxes/Collected by driver/Cash	13	27%
Online Payment and/or cell-phone app (Token Transit, GenFare Masabi)	10	20%
Ticket Vending Machine (TVM)	6	12%
Suggested Donations	3	6%
Pass Cards	2	4%
Other	2	4%
Total Responses	49	100%

*Percentages have been rounded.

61% do not use reduced or discount fare pricing for particular rider groups (likely influenced by fare-free agencies).

- Of those that do offer discounts, seniors, children, and riders who are disabled are the most common groups. Multi-ticket packs or punch cards and employer pass programs are also utilized.

Most concerns around universal ticketing are around cost and financial coordination, training and administration, and compatibility with existing systems.

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