



Monthly Meeting
Dec 6th, 2022





#### R Line Resumes Operations!

- Full line reopened on Tuesday November 29th.
- Approach speed limited to 25mph.
- Trains must 'stop & proceed' at the crossing.
- Unsealed PUC report shows operator error (overspeeding) as cause.
- Questions raised regarding investigation / regulation of light rail.
- GDT (Richard) featured multiple times in the press, providing experi opinion on subject matter.

## **Events**

#### **Monthly Meetings - TBA**

Tuesdays at 6pm Cadence Union Station, Sky Lounge



# Campaigns & Projects



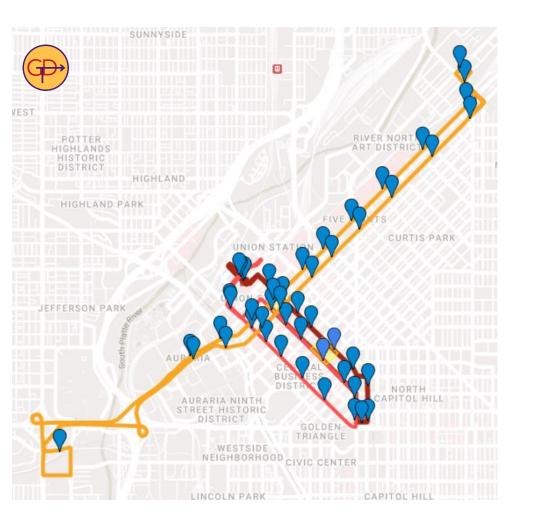


# Greater Denver Transit Downtown Denver Bus Trunks

Dec 6th, 2022

#### The Downtown Denver Bus Trunks

RTD bus journeys can be made faster with safer and easier transfer experiences in Downtown via a series of inexpensive and common-sense routing adjustments to form transit "Trunks".



- "Trunk" lines are made up of multiple transit routes that merge together to create ultra-high frequency service over a common stretch of track/street
  - □ 13 existing bus routes should have their Downtown "last mile" aligned between (a) DUS and (b) Civic Center
  - ☐ The former Free MetroRide bus fleet can then be optimally repurposed to fill Downtown's largest transit gap: Sun Valley Auraria LoDo RiNo
- □ The high frequency "Trunks" can be further enhanced by block-long bus stops that make transfers safer, easier, and prevent buses from bunching up



## What is a bus "trunk" line?

A "trunk" line is a transit right-of-way where multiple lines merge together to create a common stretch of high-frequency service.

- This does not always require introducing new services, and can instead redesign existing routes to create higher frequency
- □ A trunk also improves critical connections: more lines over the same stretch of stations shorten transfer walks
- → Potential bus "bunching" slowdown can be alleviated by block-long bus stops which safely spread out stopping-zones along the Trunk
- Intersecting trunks make it possible to substantially enhance the transfer experience in Downtown by developing "Transit Squares" of block-long stops on all four corners of intersecting blocks
  - Top Transit Square Candidates:
    - Blake/Market between 17th and 18th (x2 Bus Trunks Merge)
    - Stout/California between 17th and 18th (Bus Trunk and Light Rail Merge)



### **Benefits to Transit Riders**

The consolidated "Trunks" offer increased bus speeds, more frequent services, and transfers that are easier and safer.

■ A Downtown Trunk would benefit every Downtown route:

Downtown Denver Bus Trunk Summary		
Trunk Lines	Change w/ Trunk Adoption	Key Rider Benefit
0	17th / 18th Trunk	Nearly 3 minutes saved
6	Extend to DUS via 17th/18th Trunk	Union Station access - connections multiplied
8	15th / 17th Trunk	Union Station access - connections multiplied
9	17th / 18th Trunk	Nearly 4 minutes saved
10	17th / 18th Trunk	Nearly 4 minutes saved
15	17th / 18th Trunk	Over 2 minutes saved
19	15th / 17th Trunk	Downtown frequency increases
20	Eliminate West Leg	Downtown frequency increases
32	17th / 18th Trunk	Nearly 4 minutes saved
38	15th / 17th Trunk	Union Station access - connections multiplied
43	Extend to DUS via 17th/18th Trunk	Union Station access - connections multiplied
120X / 122X	Merge via 17th/18th Trunk	Higher frequency AND operational savings

☐ A crosstown E/W trunk could optimally connect RiNo with LoDo and Auraria for the first time: a huge hole in service

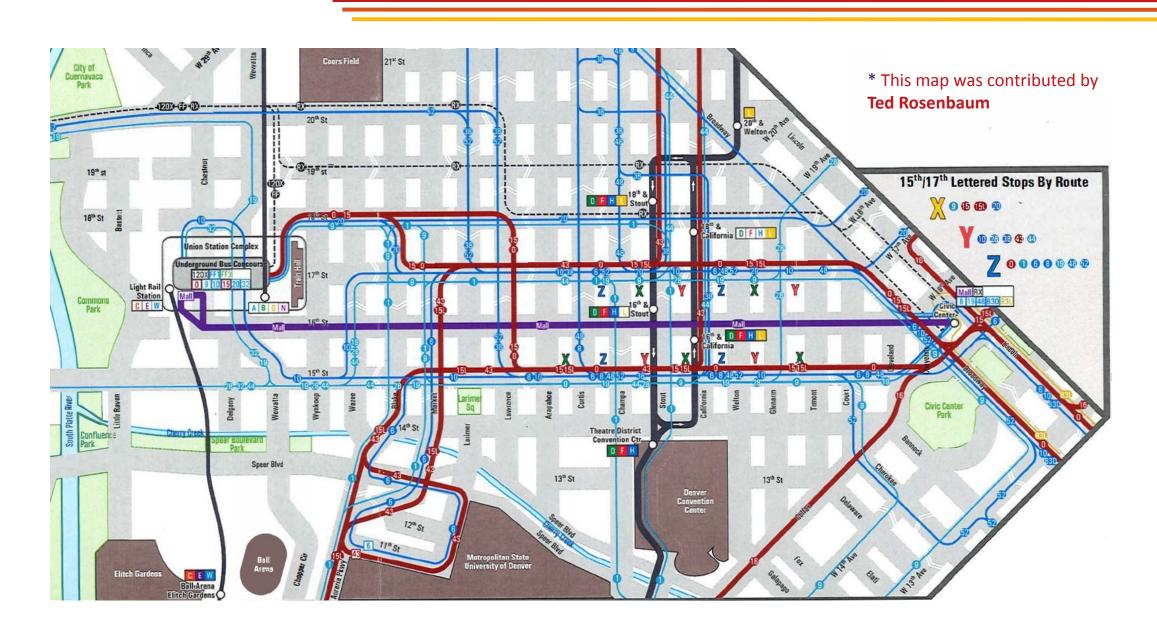


## **The Problem with Downtown Buses**

The RTD buses that operate through Downtown are slower, less efficient, and underused compared to what they could be.

- RTD operates 13 buses between Civic Center and Union Station, with several pre-COVID routes still suspended
  - No buses operate in the most efficient way possible down 17th/18th Streets
    - Several buses that traverse the full length of Downtown completely miss the largest regional hub Denver Union Station. Meanwhile, the 10 and the 32 make TWO stops at Union Station, unnecessarily adding several minutes to timetables
  - The streets that buses run along between Civic Center and Union Station are inconsistent bus-to-bus which undermines transit value, preventing:
    - Potential high service frequency of funneling over a common routing
    - Common knowledge about the fastest RTD service between Union Station/LoDo and the Civic Center
- In the Post-COVID world, <u>RTD has an opportunity to reimagine and revitalize downtown bus services.</u>

## **Pre-Pandemic Bus Routings**





## **Downtown Denver Bus History**

Bus routings through Downtown Denver have stagnated since the 1980s, despite major increases in density.

- ☐ The only major change in Downtown was when Denver Union Station reopened in 2014 and replaced Market Street Station
  - When DUS opened, RTD chose to provide a free special bus called the Free MetroRide aimed mainly at commuters transferring who have already paid a fare from a previous service
- There is also speculation that pre-2000's RTD administrations selectively adjusted routes in Downtown to to satisfy corporate demands for a stop in front of select office locations
- The result is a mess of inconsistent, circuitous, and slow routes that have not been updated to serve new centers of gravity in Downtown that have moved east toward Coors Field



## Issues with X, Y, and Z Boarding

Some busier RTD bus stops use a confusing X, Y, and Z loading zone system with single "stops" extending across multiple city blocks which dissuade current and future RTD riders.

- ☐ There are many issues present:
  - □ Safety riders have to scramble across busy streets to transfer
  - Inconvenience walks are longer than necessary to transfer
  - Poorly understood / communicated many riders will not deal with confusing structures, and will be reluctant to try these routes
- ☐ The Result: too many riders avoid critical Downtown starting/transfer points
  - Riders who already paid a fare jump on the Free MallRide to traverse downtown because it is simple despite being much slower
  - If more riders knew about existing bus arrangements, then the Free MetroRide infrastructure could better-serve riders elsewhere

#### **Phase 1: DUS-Civic Center Trunk**



## The DUS - Civic Center Trunk will consolidate 13 RTD bus routes in Downtown:

- The 17th/18th Trunk will include the 0, 6, 9, 10, 15, 20, 32, 43, and 120X/122X (merged)
  - Newly-merged 120X/122X can be considered for limited stop service in Downtown (only at Squares, DUS, and Civic Center)
- The 15th/17th Trunk will include the 8, 19, and 38 buses (existing route of the 19)
- While every Trunk route will serve Union Station, not every route will serve Civic Center
  - The 20 and 43 will not serve Civic Center to avoid backtracking (inbound routes are north) and truncated to terminate at DUS

## Phase 2: Sun Valley - RiNo Trunk

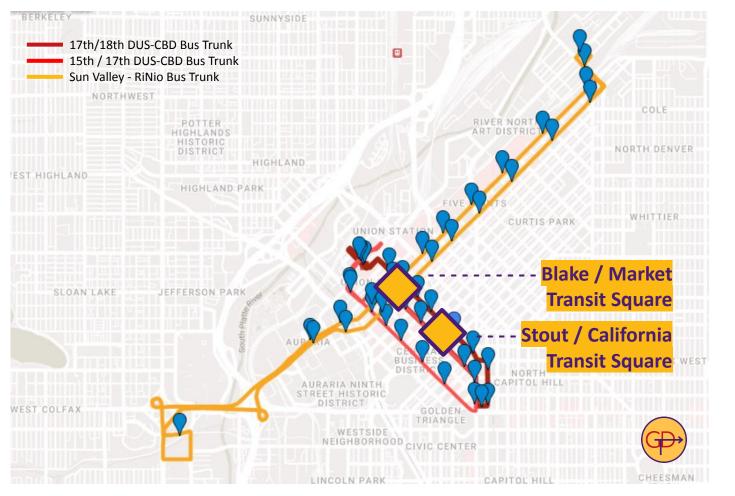


The best way to repurpose the MetroRide is a Sun Valley - RiNo Bus Trunk that fills in a glaring hole in Downtown transit service.

- There is currently no transit service connecting Union Station and Ballpark with RiNo
  - Eastern Downtown is also poorly connected to the West Side; Auraria services are inefficient
- The best way to create a high-frequency service between these neighborhoods is repurposing the MetroRide and aligning the 28 and 44 buses for a mile stretch in inner-Downtown
- Dispatches will be optimized around (a) Decatur Federal Station in the West and (b) 38th & Blake Station's Brighton Blvd entrance in RiNo to best connect with the A and W Lines.

## **Downtown Transit Squares**

The intersections of the new "Trunks" will become high-potential transfer points called "Transit Squares" which enhance safety and efficiency of transfers.



- □ A Transit Square is a cluster of four block-long transit stops (one on each street)
  - Follows best practices learned in Portland and other peer US cities
- ☐ This allows for intuitive and safe connections between any combination of direction changes
  - ☐ This addresses weaknesses in the X,Y, Z structure of today
- Other Trunk stops will be incrementally extended to block-long, "Super" stops.



## **Enhanced Safety of Bike Lanes**

The rebalancing of buses in Downtown opens up the opportunity to upgrade bike infrastructure for safety as well:

- Existing left-sided bike lanes on 15th and 19th Streets should be upgraded for safety now that they are relieved of some bus service:
  - Raise them to sidewalk-level and/or reinforced with physical barriers
  - Install dedicated turn signals for autos to decrease chances of cars turning left into bike lanes.
- 18th Street's nested bike lane should be studied for upgrades
  - Bikes should be better-insulated from the heavier bus flow and higher volume boarding/disembarking transit riders along new block-long bus stops
- ☐ 16th and 17th Streets to be upgraded per DOTI's existing plans
  - 17th Street is planned to have a new bike lane per the DenverMoves Plan
  - ☐ The 16th Street Mall will reopen, but remain as a pedestrian mall





# Questions?



## **GDT Bar Stickers**







## **Project Workshop**

#### **GDT Toolkit**

- Website
- Images
- Social Media Posts
- Letter Templates
- Event Support
- Meeting Strategies
- Report Writing
- Presentations



# **Project Workshop**

#### **Project Ideas**

- Bus Stops
- Maps
- Schedules
- Safety / Security
- Events / Stunts
- Community Outreach
- Increasing GDT Membership / Participation
- Your Idea!



