



**We Make Lives Better
Through Connections.**

Reimagine RTD

System Optimization Plan Overview

Agenda

- **Background and Goals**
- **Evaluation**
- **Public Input**
- **Recommendation**



Project Background and Goals

What is an SOP?

A System Optimization Plan (SOP) is a detailed evaluation of travel patterns, demographics, and transit routes that recommends modifications to routes to best meet the region's near-term mobility needs within the existing workforce and financial constraints.

Why did RTD Conduct an SOP?

- Address declining ridership trends
- Improve transit service performance / efficiency
- Provide services within RTD's budget
- Address changing travel demand including shifts resulting from the pandemic
- Remain a competitive transportation service provider
- Improve transit service quality

What were RTD's goals?

- Set a new baseline for RTD in preparation for future growth
- Align service levels with workforce availability
- Clarify service priorities including prioritizing service to social equity groups
- Engage and build consensus with stakeholders and partners
- Evaluate services at a regional and subregional level

What process did RTD follow?

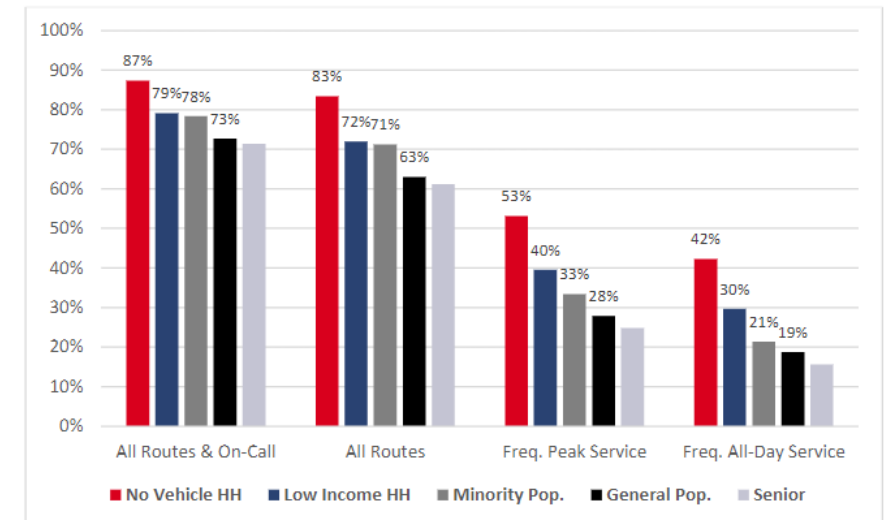
- Comprehensive review of each route and service provided by RTD
- Assembled and evaluated data on 50 million trips to understand how well the existing transit network served the region's mobility needs
- Conducted regional travel demand modeling to understand how differing investment strategies would influence ridership, cost, and efficiency
- Worked collaboratively with communities to understand their goals for transit in the region
- Drafted preliminary route level recommendations and solicited feedback from stakeholders
- Finalized route level recommendations



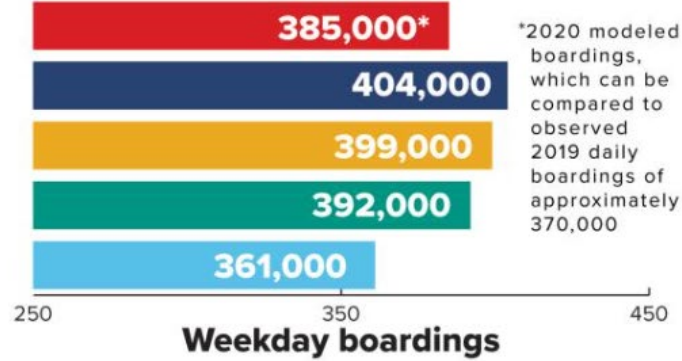
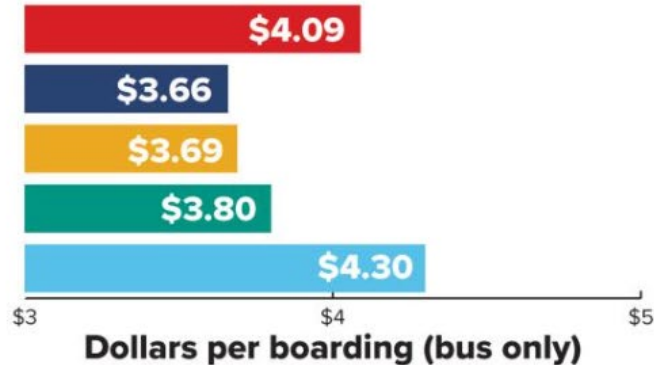
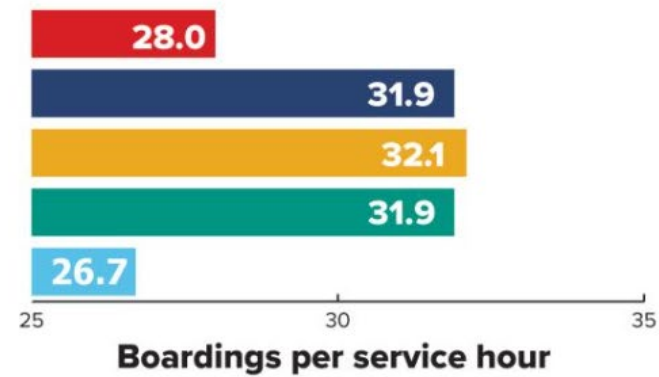
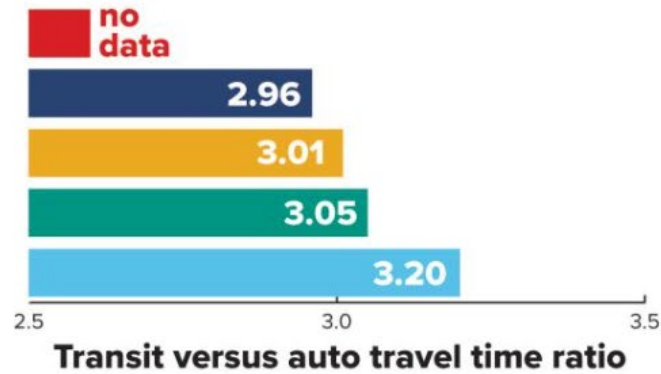
Evaluation

Comprehensive Assessment of Services

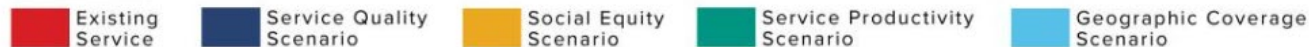
- Early step in Reimagine RTD to establish baseline understanding of agency and system performance
- Key elements include:
 - Route-level system analysis
 - Rider demographics
 - Ridership by mode/service type
 - District-wide origin/destination analysis
 - Equity zone analysis
 - Fleet & facilities overview
 - Assessment of RTD policies and standards
- Notable findings
 - Existing network is more accessible to equity populations than the general population
 - Costs per boarding have risen substantially since 2007, while boardings per service hour have either stagnated or declined
 - Approximately nine million trips per day in the District
 - Downtown Denver has a much higher transit mode share (22%) than any other part of the District (generally less than 5%)
 - Average transit travel time to drive travel time ratio in the District is over 4



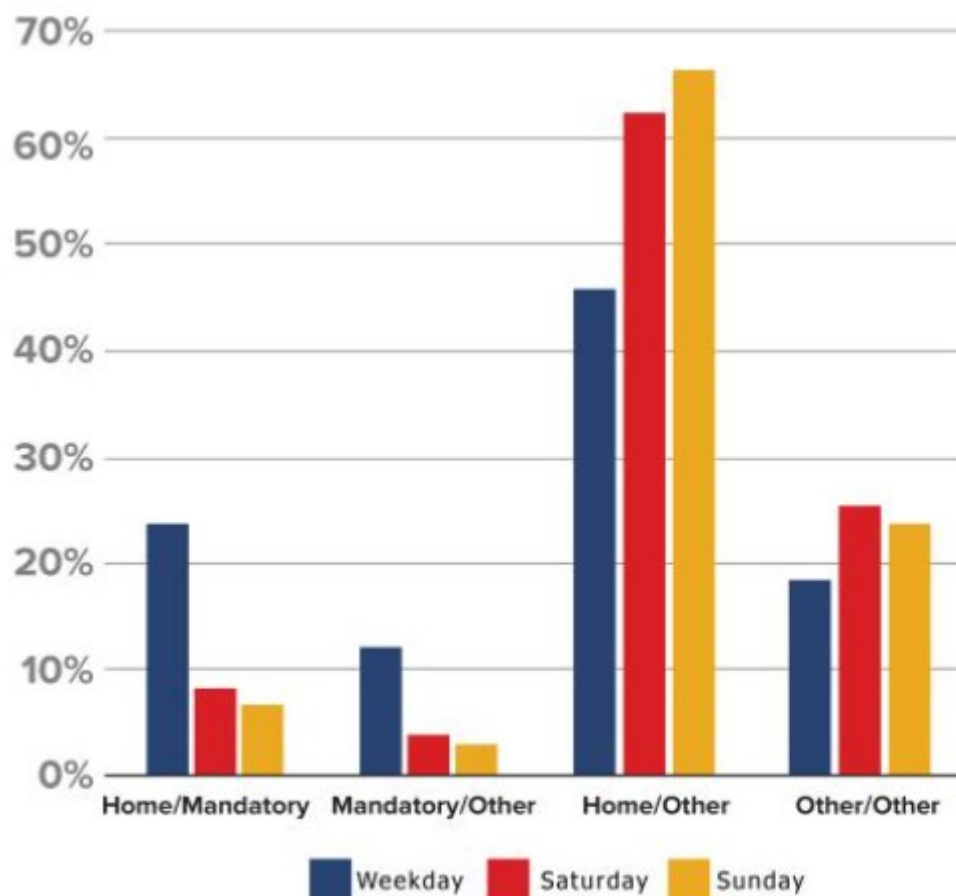
Regional Modeling of Various Investment Strategies



LEGEND



Detailed Evaluation of Existing Travel Patterns



Key Statistics

Location-based Services Data

Almost 16 million travel-days and 50 million trips by residents observed in the sample

Once normalized, ~10 million trips on an avg weekday, and 6.5 million trips on avg weekend

The Denver area residents work hard, but relax on the weekends (see graph)

Denver, Arapahoe, and Jefferson counties all have over 1.5 million trips a day

Visitors make between 3-6% of all travel in the region (highest on Saturdays)

SOP Optimizes RTD's Transit Network

- Service levels aligned with people power
 - Social equity populations' high-quality service access prioritized
 - Increased focus on high-quality, regional, backbone network
 - Overall transit network integrity maintained
- Improving cost efficiency
 - State of good repair prioritized



How the SOP Will Improve RTD's Service

- 57% increase in district-wide access to 15-minute or better service
- Increase service to communities who rely on transit for their transportation needs
 - 50% increase in access to 15-minute or better service for these populations
 - 20% increase in mid-day service
- SOP balances frequent services in high-density areas with connecting services to the suburbs



*Metrics as compared to September 2021 RTD service levels

Public Input

Stakeholder and Public Outreach – By the Numbers

181 Total Meetings – Over 4,000 attendees	31 Telephone Town Halls –Over 29,000 Attendees
13 Meetings Each - Technical Working Group & Advisory Committees	43 Targeted Listening Sessions
16 Presentations - RTD Board	1,069 Statistically-Valid Survey Participants
Seven Public Meetings	18 Meetings with Service Sectors
Five Formal Focus Groups	Over 1,600 Comments Received on SOP
250 Participants in Employee Forums	18,307 Website Visits

Public and Stakeholder Comment Summary

1,600 comments received and considered

- Majority of comments requested new service or increased frequencies
- Improve quality by focusing on a frequent regional backbone
- Address safety/security concerns
- Create a more robust partnership program

Recommendation

SOP Service Categories

Service Category	Category Description
Core	Routes serving the region's largest employment centers, highest density housing, and major trip generators with a demonstrated demand for a minimum of an 18 hour span of service, 15-minute peak period and midday frequency, and service seven days per week.  Examples: Flatiron Flyer, 15, E, 30/31
Connect	Regionally focused local bus routes with a minimum 14-hour span of service (6AM to 8PM)  Examples: 100, 24, 92
Commuter	Regional bus and rail routes with limited stop spacing focused on serving a unique travel market (e.g., downtown workforce, DEN workforce and travelers)  Examples: SkyRide, P, LX
Community	Community-focused local routes with custom-built span of service, frequency, and days of service to meet local needs  Examples: 16th Street Mall Ride, Longmont local routes, Boulder local routes, 402L, FlexRide services, demand response partnerships

SOP Recommendations



Simplification

Well-defined corridor routes



Consistency

Fewer irregular trip patterns

Consistent service spans

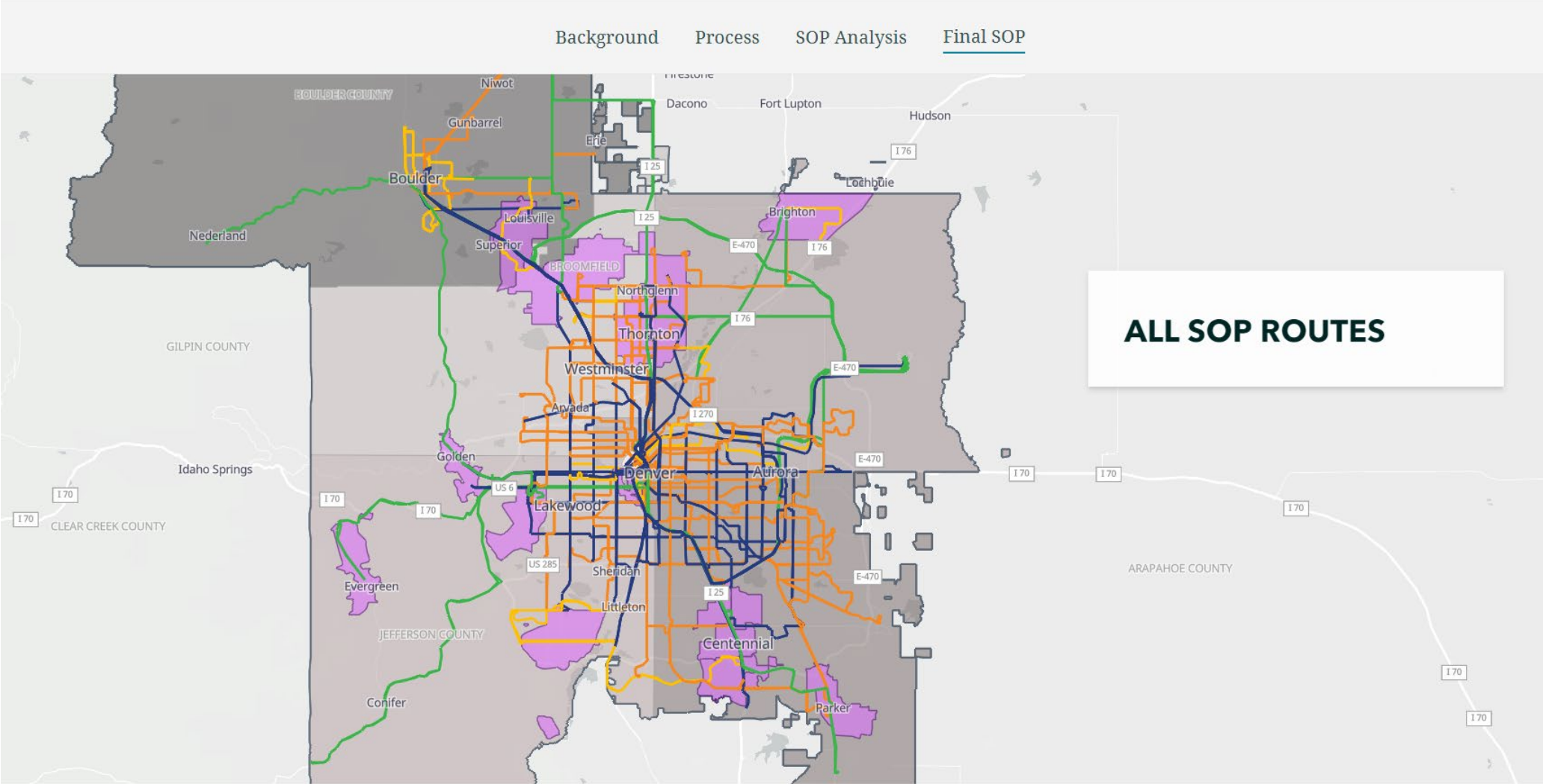


Reliability

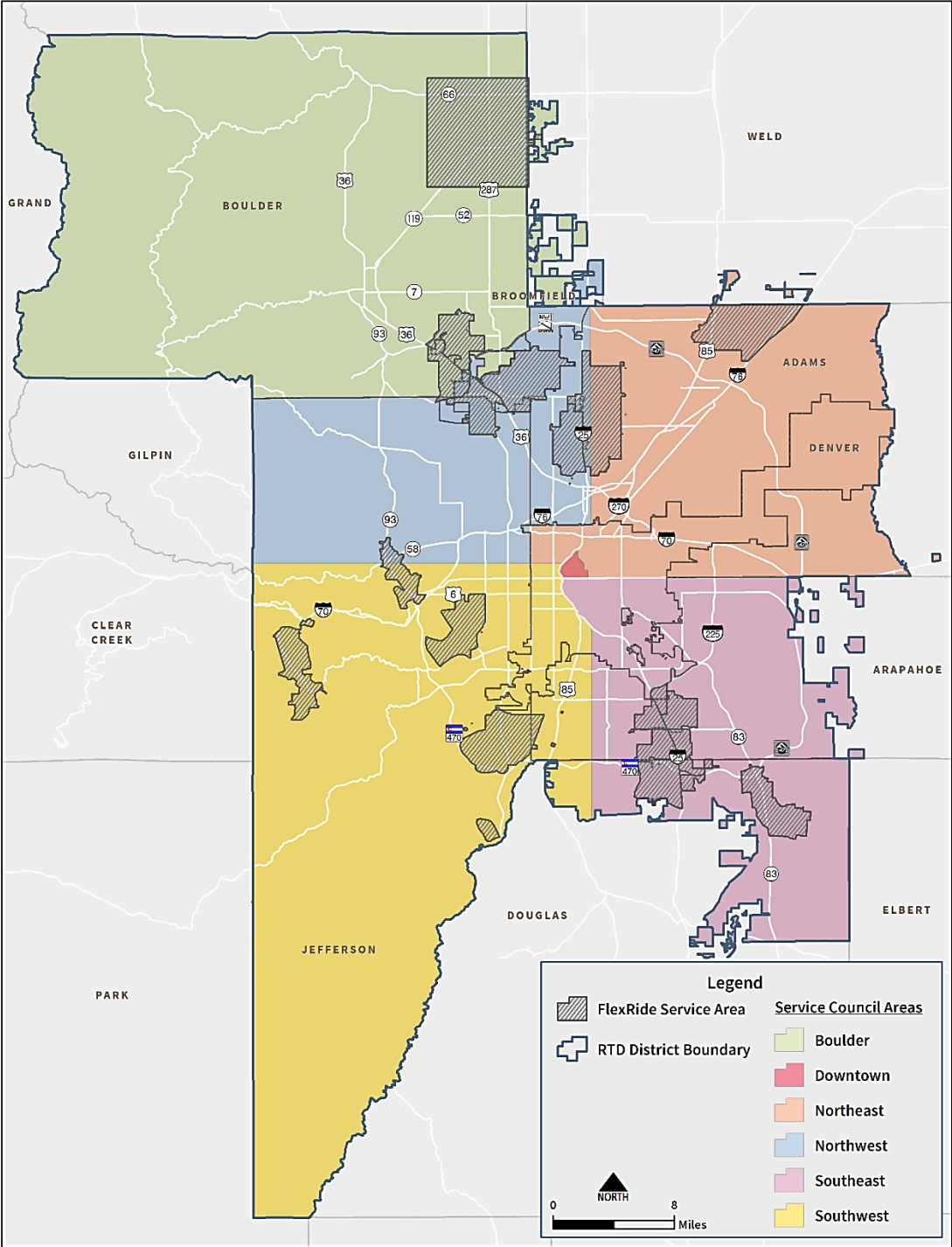
Elimination of long routes



Recommended SOP



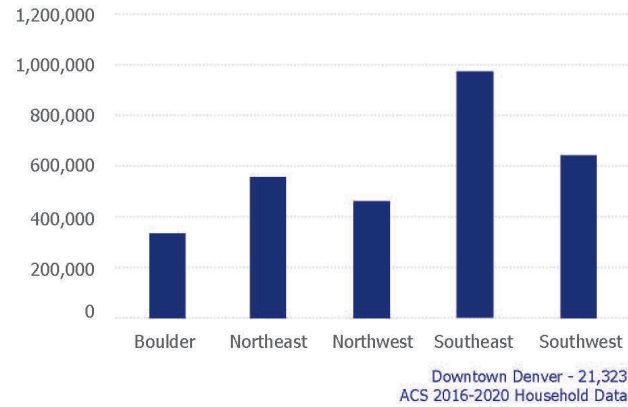
Subregional Service Councils



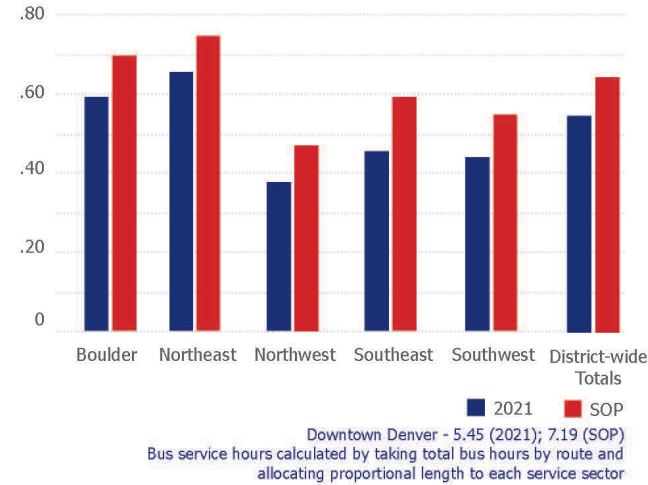


SOP NETWORK

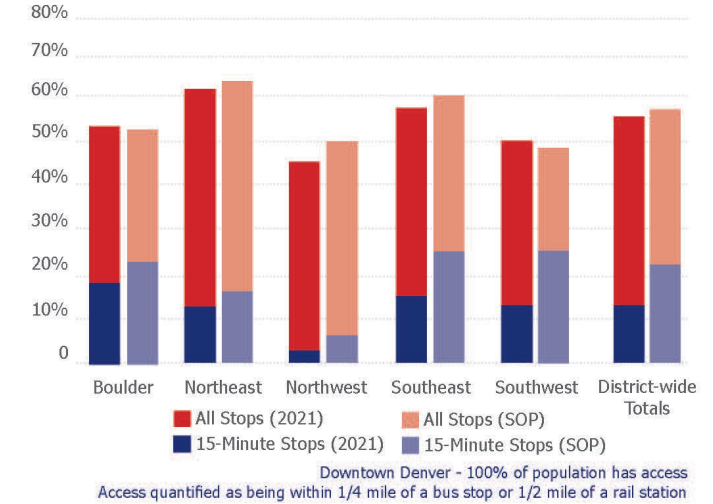
POPULATION



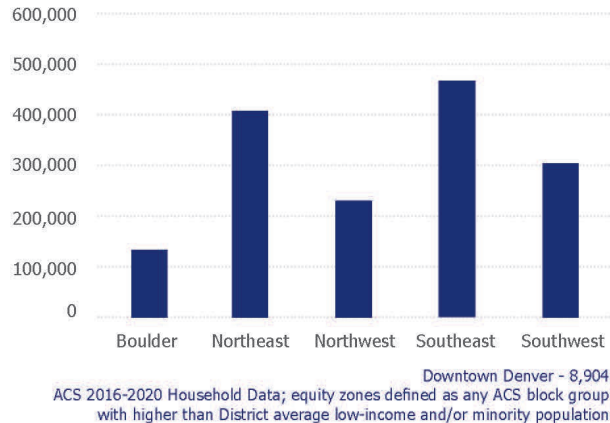
BUS SERVICE HOURS PER CAPITA



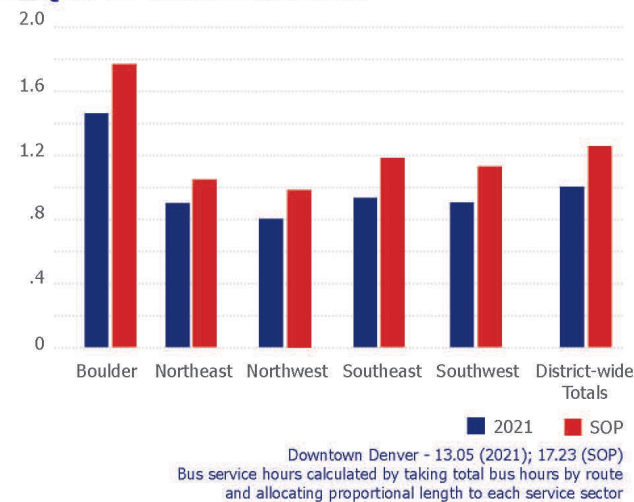
POPULATION ACCESS TO STOPS



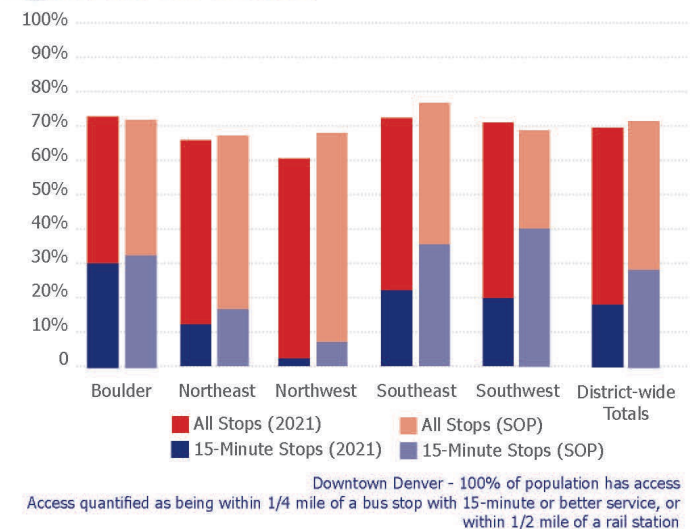
EQUITY ZONE POPULATION



BUS SERVICE HOURS PER EQUITY ZONE CAPITA



EQUITY ZONE POPULATION ACCESS TO STOPS



Operationalizing the SOP

- Implementation initiated October 2022
- Speed and timing of implementation resource-dependent (workforce and financial)
- Dialogue on service ongoing through sub-regional service councils
- Performance measures tracked quarterly to inform and continuously refine
- Significant changes to SOP recommendations addressed by the Board of Directors

Thank you.