

October 2024

CO 119 BRT Service Plan Reassessment: Service Recommendations

Technical Working Group Meeting #3





Project Background

Project Scope

Project Purpose:

- To re-examine proposed BRT service patterns and frequencies for the BOLT BRT project.

Desired Outcome:

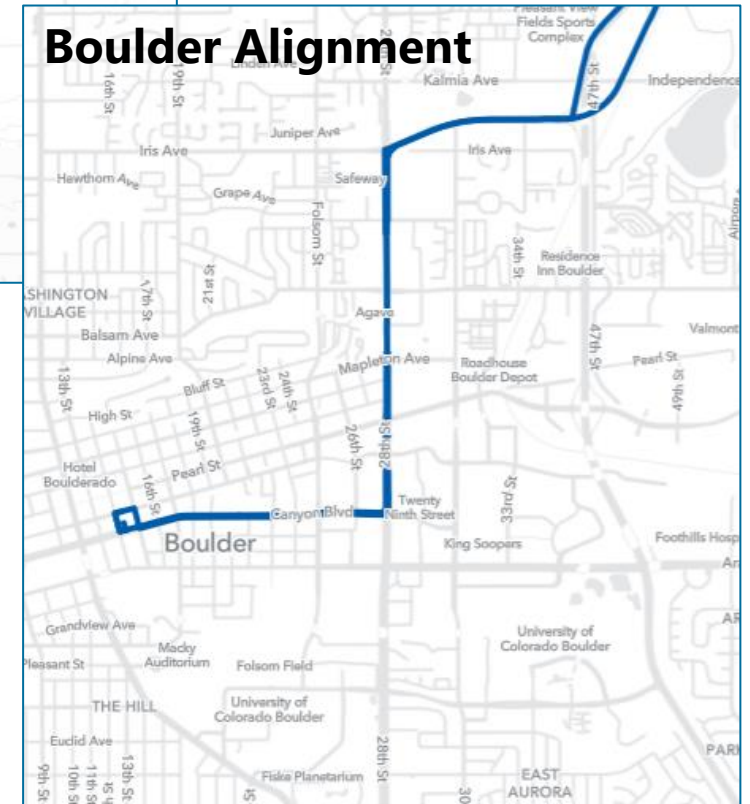
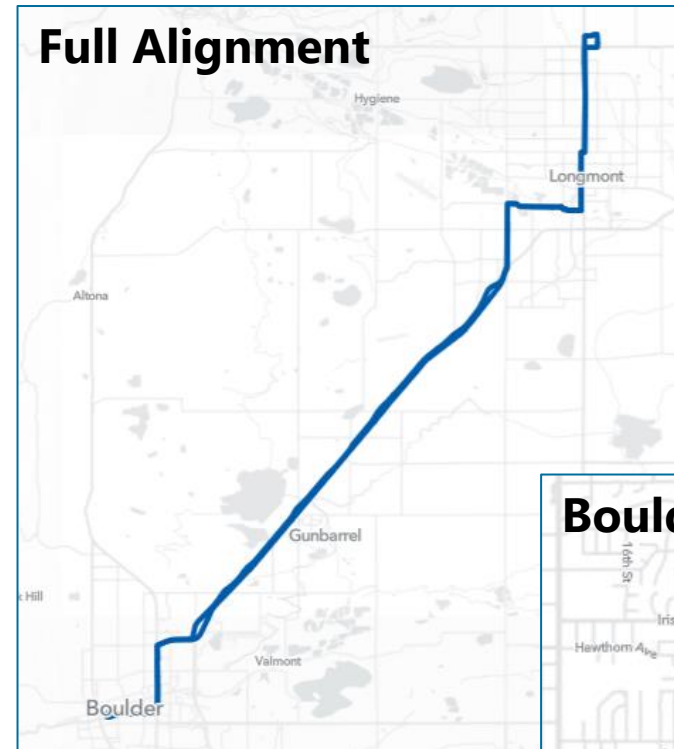
- To ensure the CO 119 BRT project best serves customers traveling in and out of Boulder and connects with Boulder's key ridership origins, destinations and markets.

Project Work Tasks

- Market Analysis
- Service Plan Alternatives
- Travel Times
- Service Evaluation

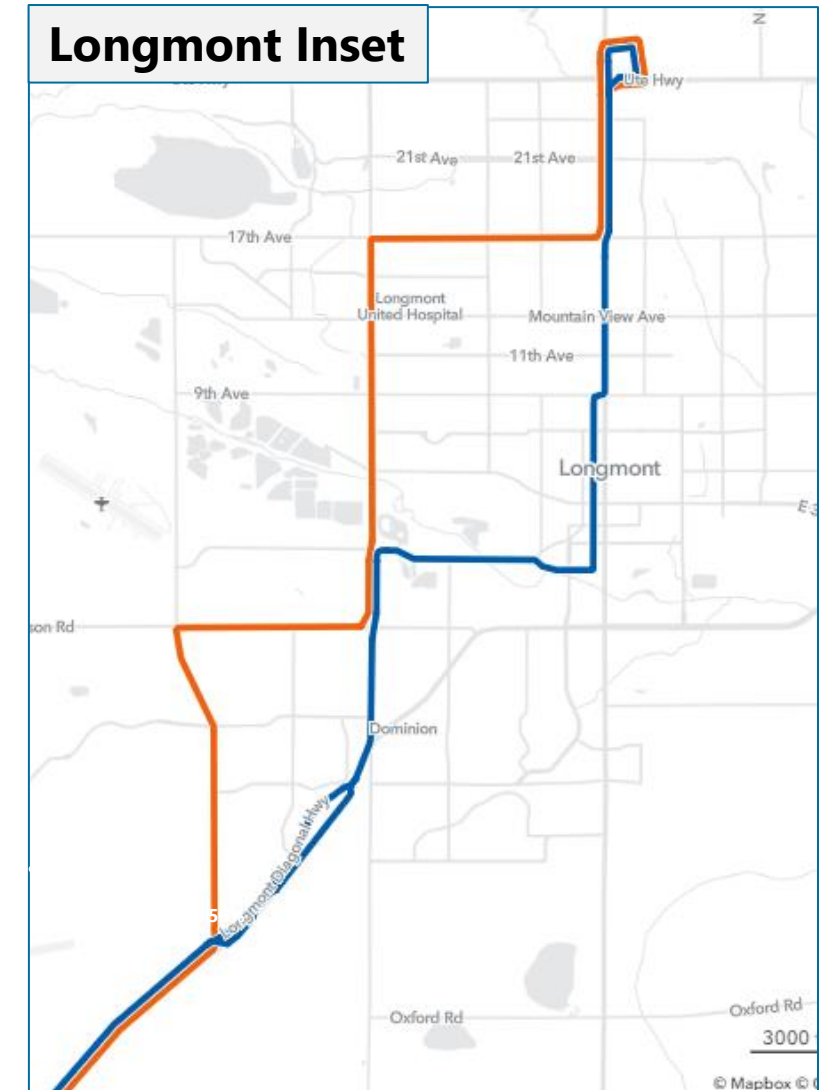
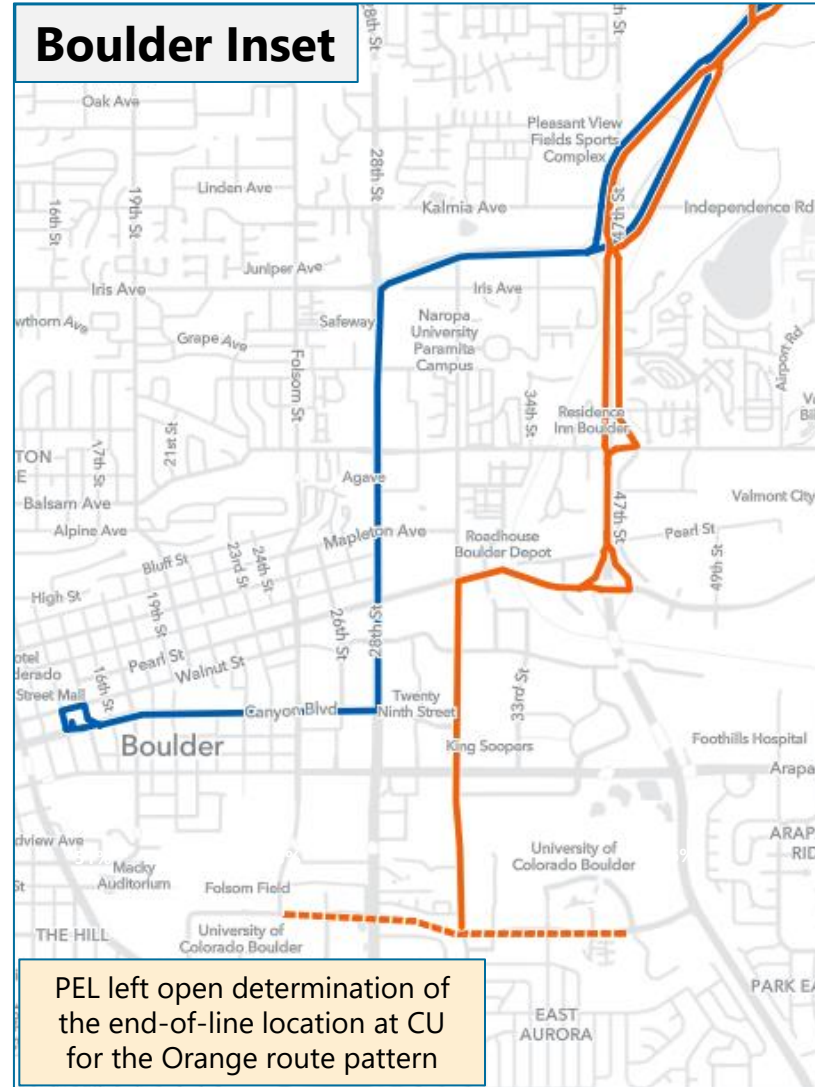
Existing BOLT Service

- 30-minute frequencies during weekday peak periods
- 60-minute frequencies during weekday middays, evenings and on weekends
- Prior to Covid, the BOLT operated more frequent service, with select trips serving Hover Street in Longmont. Select trips also served Boulder Station along Pearl Parkway. Route J also provided supplemental service in the peak periods with 4-5 peak direction trips in each peak period.



Proposed PEL CO 119 Service

- Blue pattern operating at 15-minute frequencies all-day to downtown Boulder
- Orange pattern operating at 30-minute frequencies to the CU campus via 30th Street
- The PEL left a final Orange routing decision for a later date (main campus vs. East campus)



Why Reassess CO 119 Service?

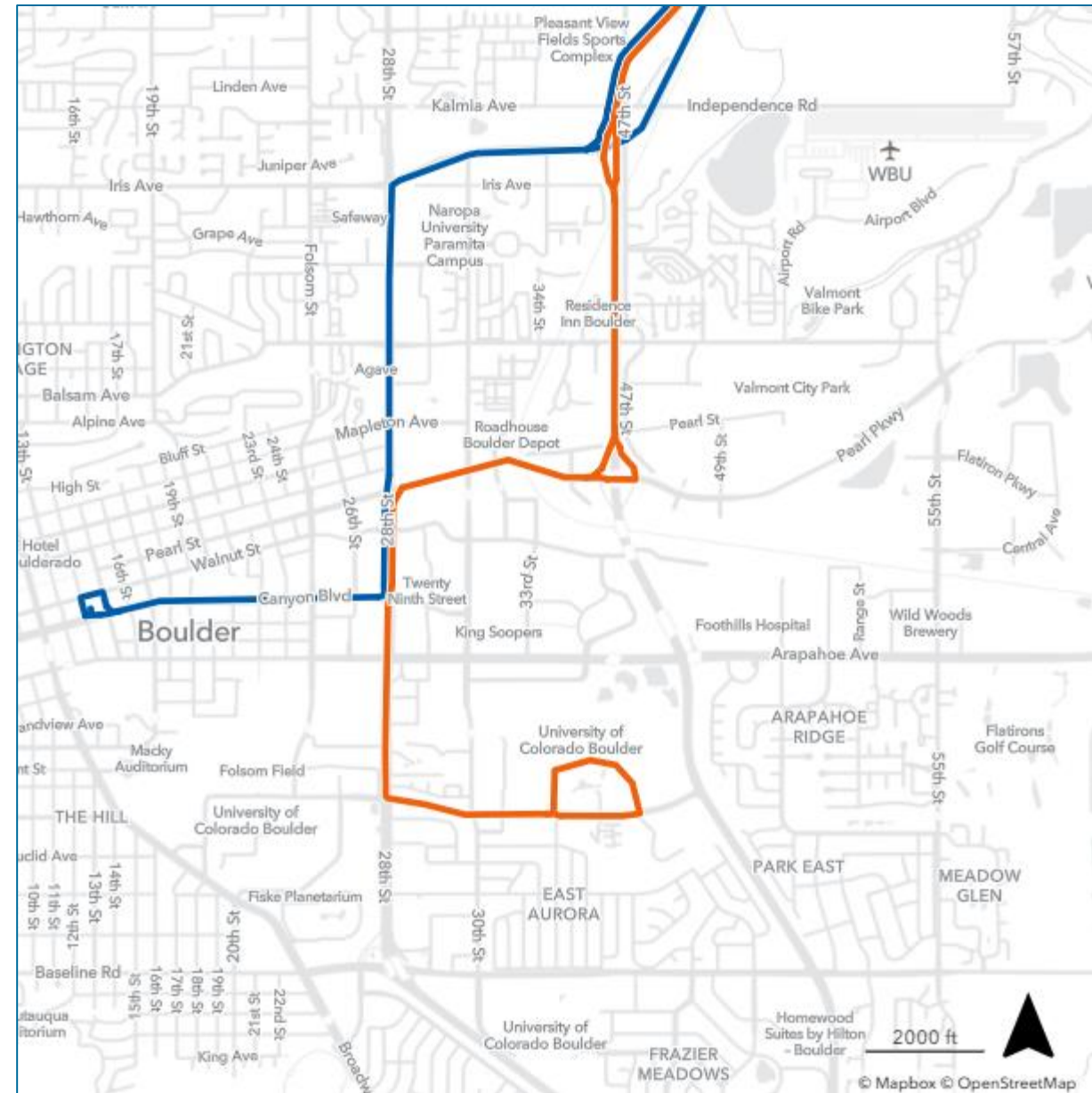
- Corridor travel patterns have changed significantly since pre-COVID conditions
- RTD service reductions have resulted in suspended and diminished planned regional service on 28th Street between Arapahoe Avenue and Baseline Avenue
- Stakeholder and customer feedback regarding the potential routing of the Orange pattern via 30th and Colorado to CU East campus
- City's capital infrastructure and operational improvements along 28th Street to support regional transit
- City's current efforts to redesigning 30th Street to balance local multimodal travel patterns with bicycle and pedestrian features along this corridor



Service Alternatives Considered

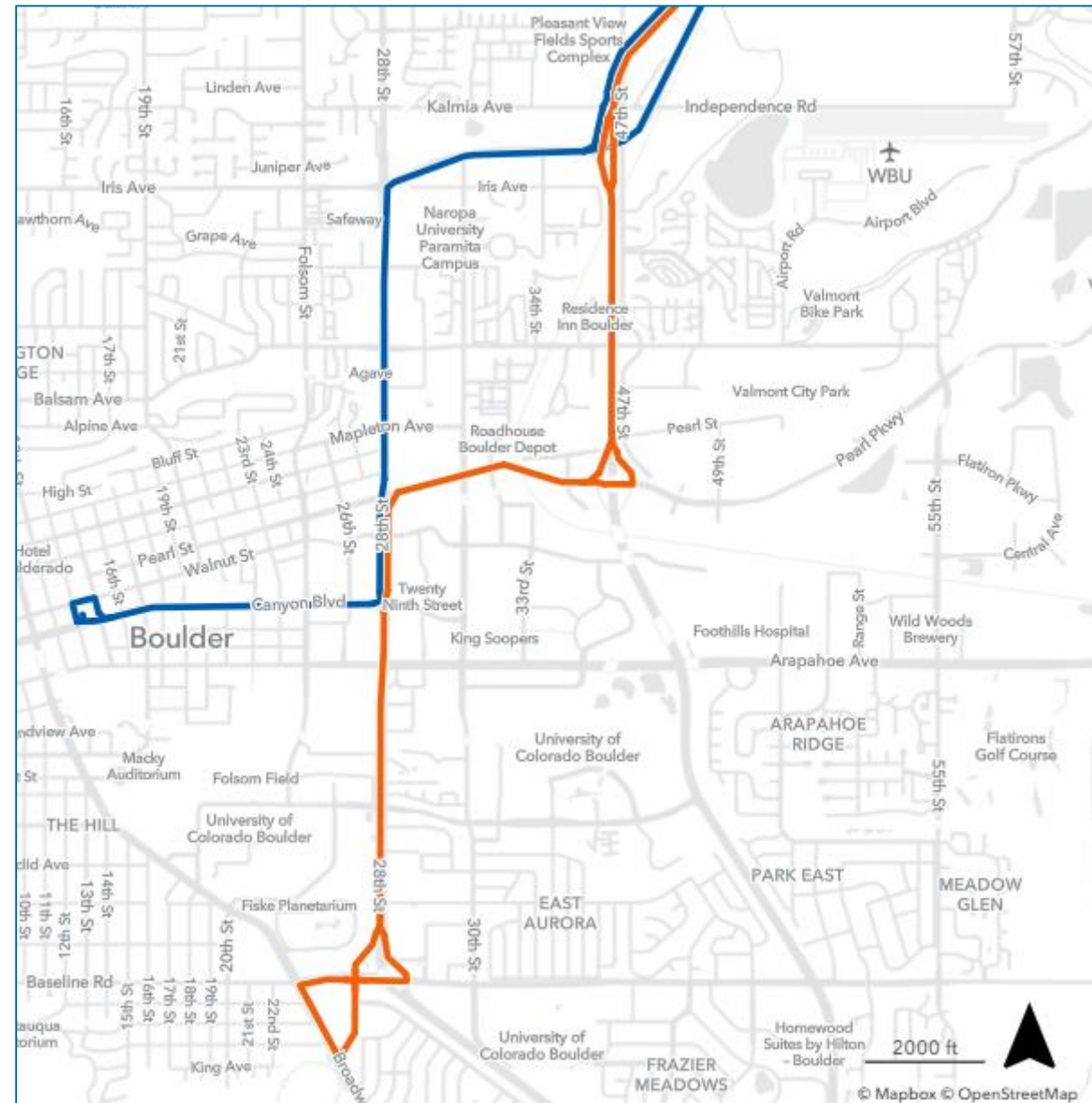
Option 1: CU East Terminal via 28th St.

- No changes to the Blue route pattern
- Orange route's terminal is at CU East campus, but via 28th Street instead of 30th Street
- CU Main campus served by stop at Colorado Avenue and 28th Street. Passengers can also transfer to the Stampede for travel further into the CU Main campus
- CU East campus served by the on-site stop/terminal



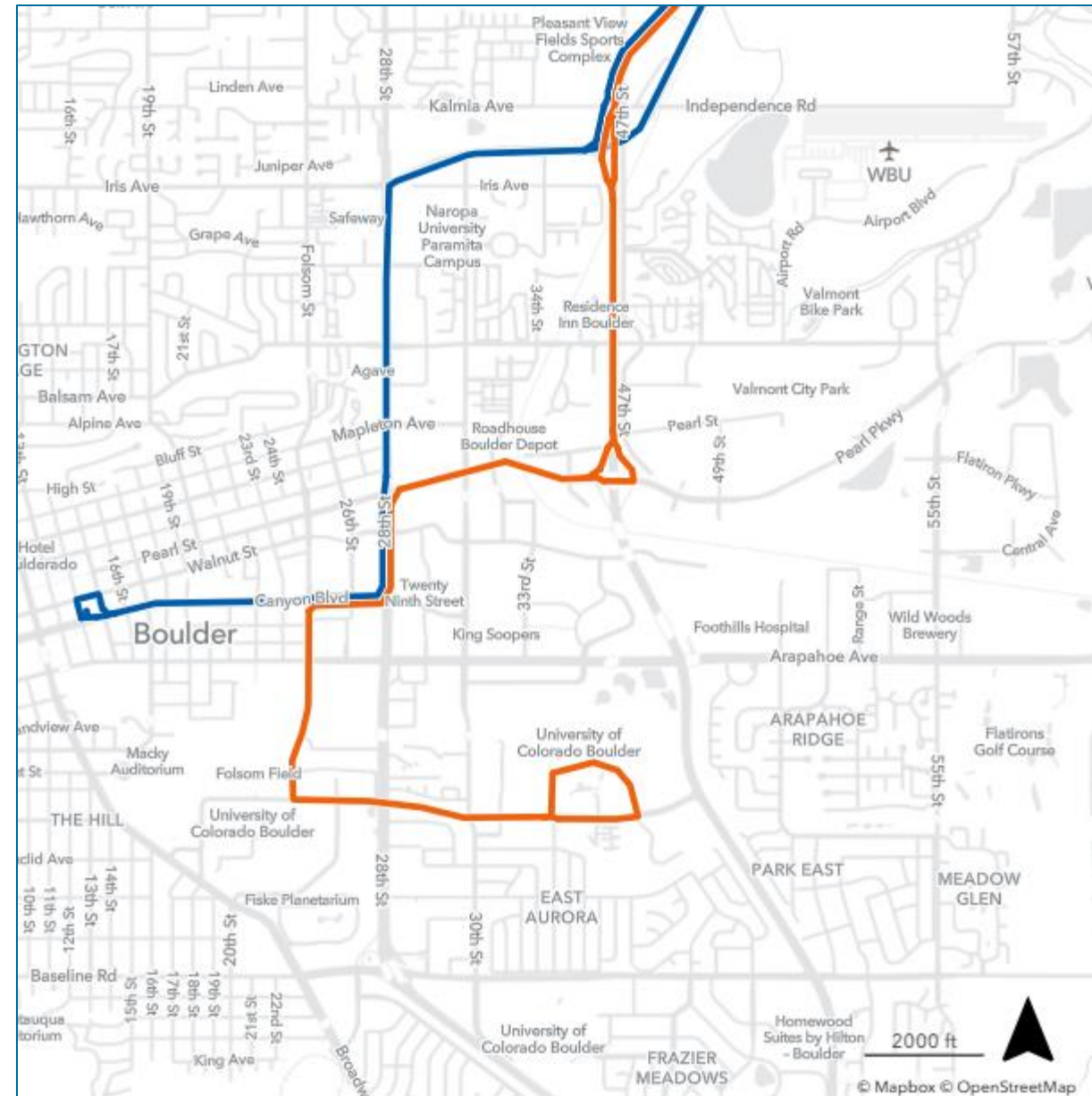
Option 2: Baseline Terminal via 28th St.

- No changes to the Blue route pattern
- Orange route pattern modified to operate to Baseline Road.
- Orange route terminal at either 27th Way and Broadway, or on Baseline, east of Broadway
- CU Main campus served with stops on 28th Street, just south of Colorado Avenue.
- CU East campus requires a transfer to the Stampede route at Colorado & 28th Street



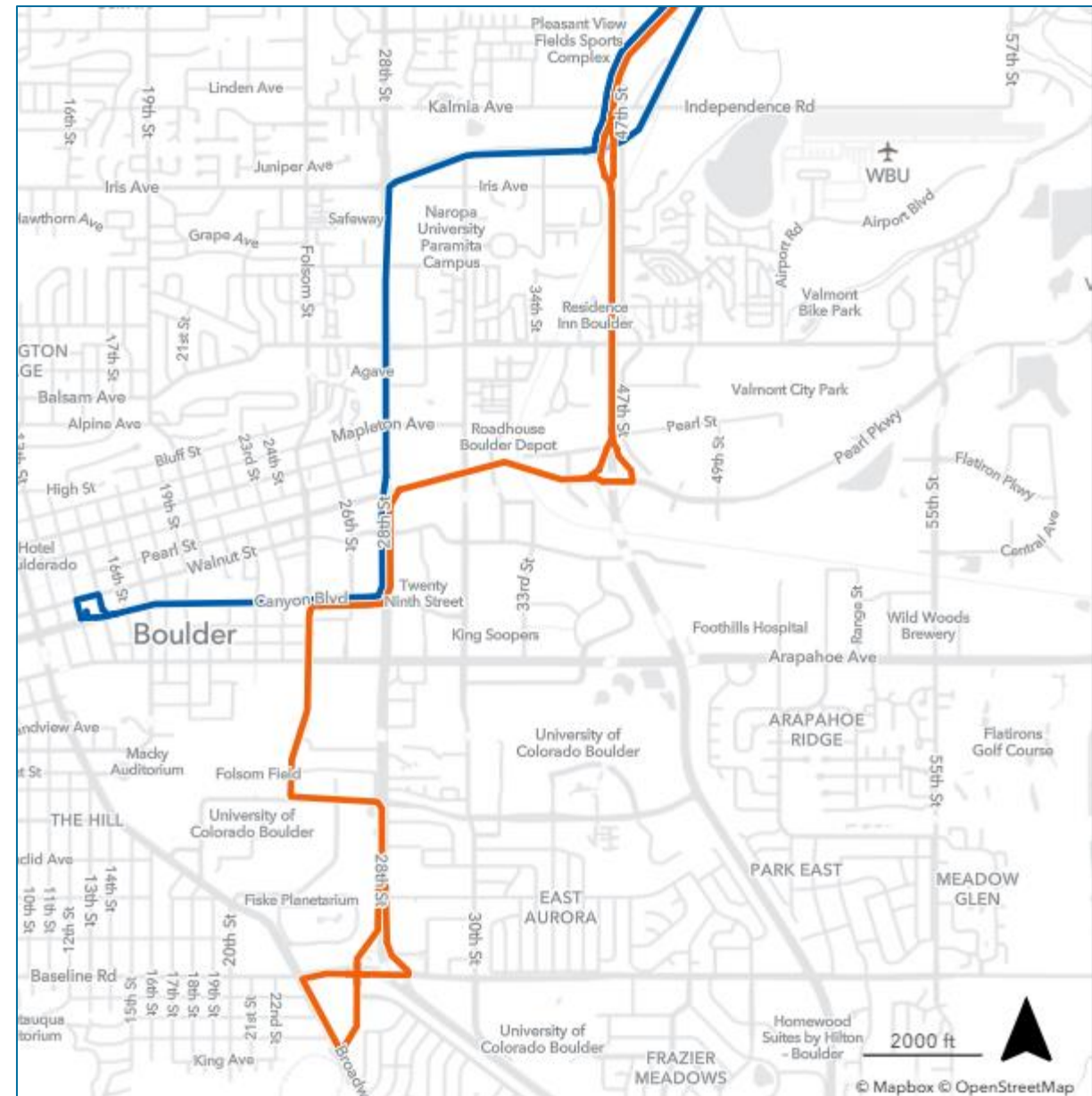
Option 3: CU East Terminal via CU Main

- No changes to the Blue route pattern
- Orange route pattern modified to operate to CU Main campus, following Canyon Blvd., Folsom St. and Colorado Ave. to CU East
- CU Main campus served with stops at Folsom Street and Colorado Avenue
- CU East campus served by the proposed terminal stop



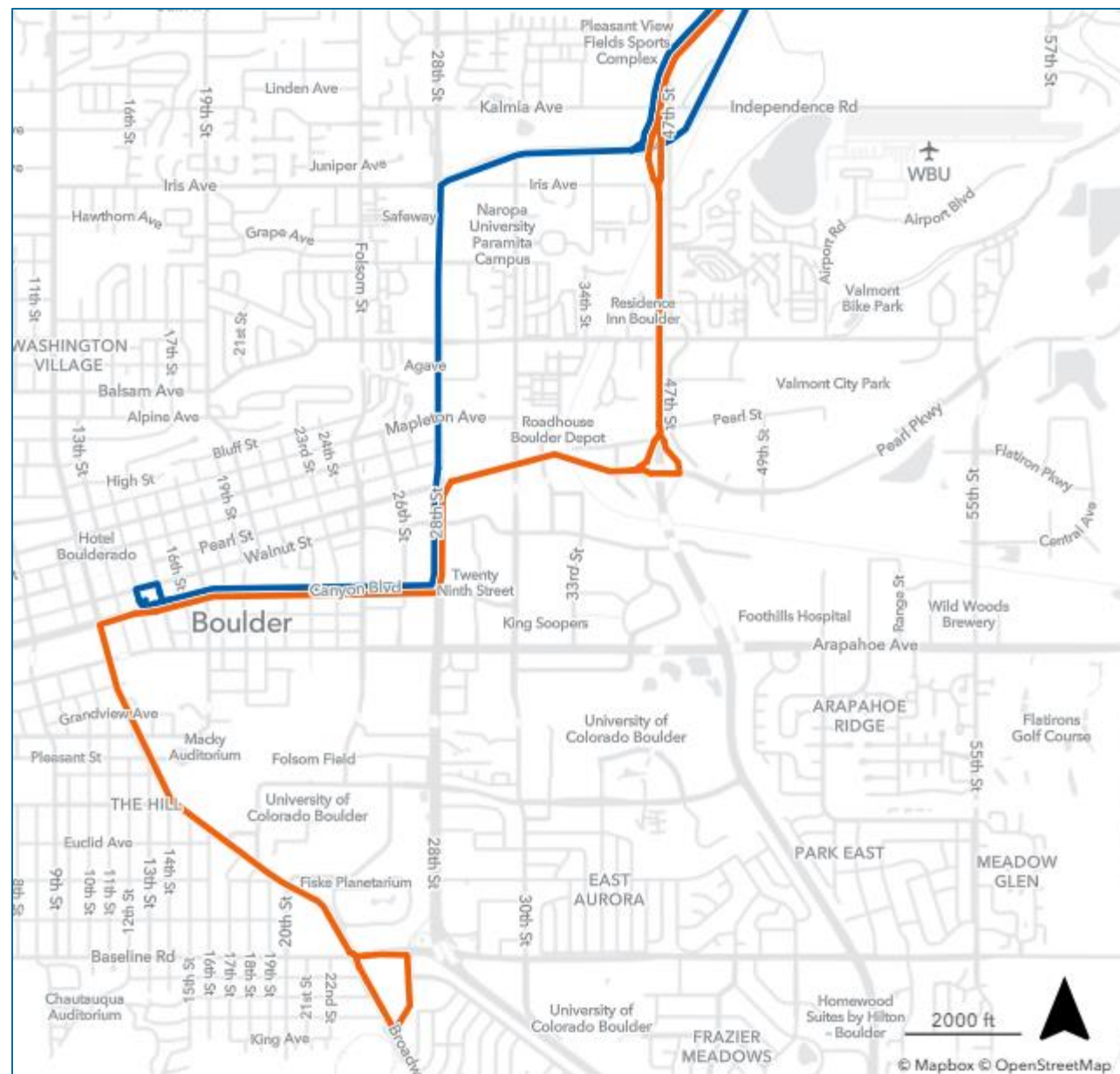
Option 4: Baseline Terminal via CU Main

- No changes to the Blue route pattern
- Orange route pattern modified to operate to CU Main campus, following Canyon Blvd., Folsom Street and Colorado Ave. to 28th Street
- Orange Route terminal at either 27th Way and Broadway, or on Baseline, east of Broadway
- CU Main campus served with stops at Folsom Street and Colorado Avenue
- CU East campus requires a transfer to the Stampede route at Colorado & 28th Street



Option 5: Baseline Terminal via Broadway

- No changes to the Blue route pattern
- Orange route pattern modified to operate to follow 28th Street, Canyon Blvd. and Broadway
- The proposed terminal would be at either 27th Way and Broadway, or on Baseline, east of Broadway
- CU Main campus served with the existing stop at Broadway and Euclid
- CU East campus requires a transfer to the Stampede route at this stop



Comparison of Service Option Characteristics

The PEL proposed 15-minute all-day weekday service on the Blue route pattern and 30-minute all-day weekday service on the Orange route pattern.

	PEL Align.	Option 1	Option 2	Option 3	Option 4	Option 5
Peak Veh.**	13 veh.	13 veh. +0 veh.	14 veh. +1 veh.	14 veh. +1 veh.	14 veh. +1 veh.	15 veh. +2 veh.
Rev. Hours**	51,900	51,900 +0	53,800 +1,900	55,300 +3,400	55,300 +3,400	58,800 +6,900
Population Access*	16,200	17,400	17,500	19,100	19,300	20,100
Jobs Access*	21,200	20,600	20,600	21,400	21,300	21,300

*Population based on 2022 ACS 5-year estimates, Employment based on 2021 LEHD, All Jobs. Block Group demographics proportioned by National Address Database points within ¼ mile of Alternative's bus stops.

** Peak vehicles and revenue hours based on a service plan that assumes 15-minute weekday peak/midday and 60-minute evening/weekend service on the Blue Line and 30-minute weekday peak/midday service on the Orange line. Opening year service levels may differ based on funding and operator availability

Opening Year (SOP) Service Plan Considerations

- RTD's current financial condition and operator shortage limits its ability to fully implement CO 119 BRT service plan at this time.
- All options with exception to Option 5 can operate within RTD's SOP budgeted 33,100 annual revenue bus-hours. Option 5 exceeds this limit by 1,700 hours.

Comparison of Existing and SOP CO 119 BRT Service

Characteristic	Service Pattern	Existing	SOP
Weekday Freq.	Blue	30 peak/ 60 midday	15 peak, peak dir. only/ 30 midday
	Orange	n/a	30 peak, peak dir. only
Weekend Freq.	Blue	60 all-day	30 daytime, 60 evening
	Orange	n/a	n/a
Peak Buses		5 buses	8 buses
Ann. Revenue Hours		22,800	33,100

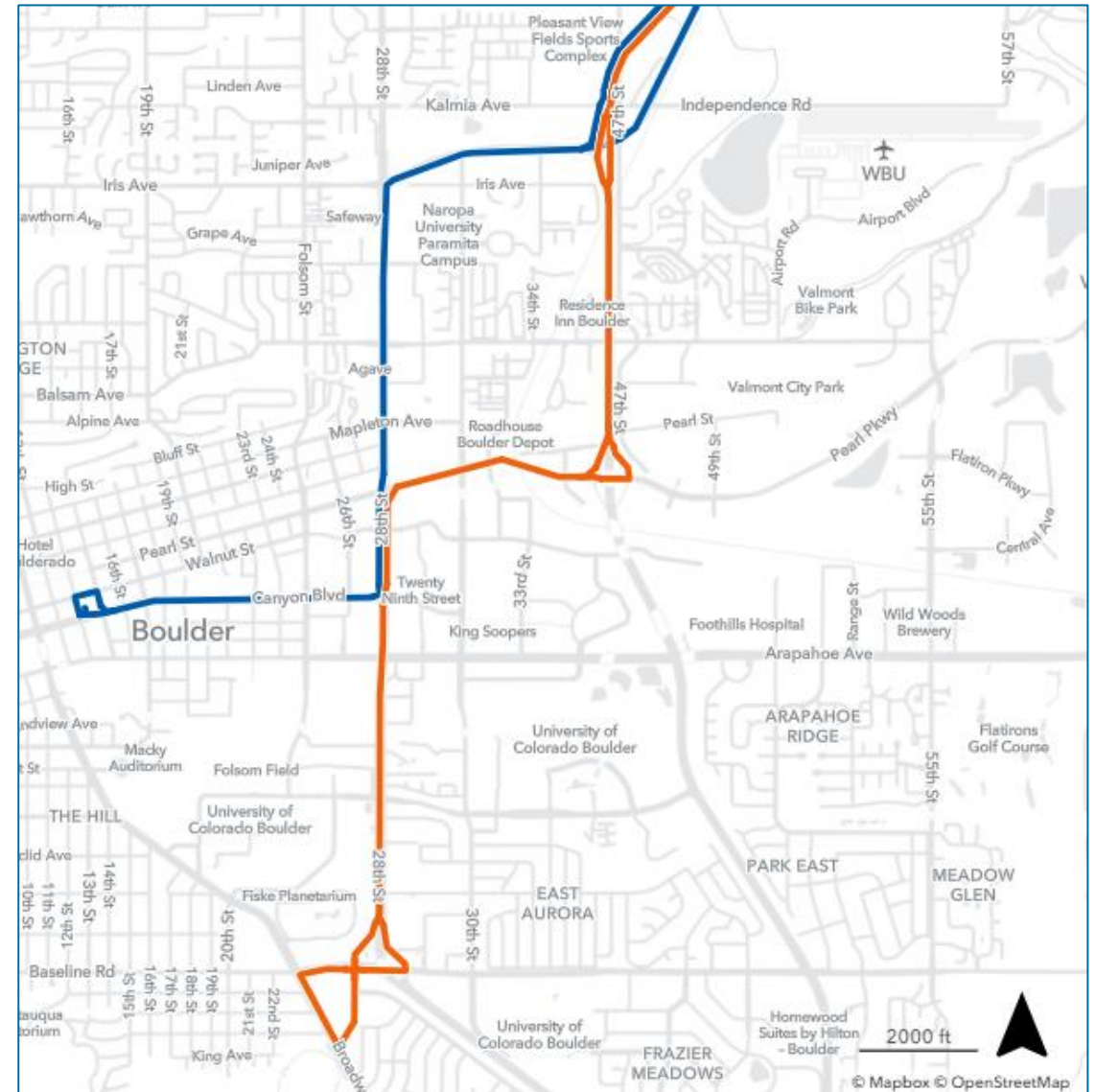


Service Plan Recommendations

Service Plan Recommendations

Option 2 has been identified as the preferred service plan for the following reasons:

- Utilizes the 28th Street corridor which is more direct and where there is existing and planned infrastructure improvements
- Access to CU Main campus is provided via 28th Street stops south of Colorado Avenue and on Baseline
- Extends the market reach of CO 119 service to the south edge of CU Main campus
- Adds CO 119 BRT connections to several routes that currently operate at Broadway and Baseline
- Includes a stop at RTD's 27th Way and Broadway Park-and-Ride to support northbound travel
- Existing stops and layover infrastructure at 27th Way/Baseline/Broadway can be expanded to accommodate CO 119 BRT services
- This option has the support of City of Boulder and CU staff



Transitioning from Opening Year (SOP) to PEL Service

- As a next step, a phased approach should be defined for transitioning from Opening Day (SOP) service levels to PEL service levels
- Phased service expansion could include further modifications to address future CU campus expansion plans. Timing of potential service expansion to CU East campus include:
 - The rate of return of return to faculty and staff on-site work on the East campus
 - The timing of full implementation of CU Campus Master Plan projections
 - Over 3 million square feet of academic, research, administration, housing, and student life/dining buildings
 - Student housing with 2,500 beds
 - The timing of implementing a transit center at Colorado and Folsom, as envisioned in the 2020 CU Transportation Master Plan

Summary of CO 119 Service Plan and Requirements

Characteristic	Service Pattern	Existing	Opening Year (SOP)	PEL
Weekday Freq.	Blue	30 peak/ 60 midday	15 peak, peak dir. only/30 30 midday	15 daytime/ 60 evening
	Orange	n/a	30 peak, peak dir. only	30 all-day
Weekend Freq.	Blue	60 all-day	30 daytime, 60 evening	30 daytime, 60 evening
	Orange	n/a	n/a	n/a
Peak Buses		5 buses	8 buses	14 buses
Ann. Revenue Hours		22,800	33,100	53,800

