



**CITY OF BOULDER
CITY COUNCIL AGENDA ITEM**

MEETING DATE: August 29, 2018

AGENDA TITLE: Consideration of motion to accept the East Arapahoe/SH 7 Transportation Plan (EATP).

PRESENTERS:

Jane S. Brautigam, City Manager
Maureen Rait, Executive Director of Public Works
Michael Gardner-Sweeney, Director of Public Works for Transportation
Kathleen Bracke, GO Boulder Manager
Jean Sanson, Senior Transportation Planner

EXECUTIVE SUMMARY

The purpose of this agenda item is for City Council to consider acceptance of the [East Arapahoe/SH 7 Transportation Plan](#) (EATP). The EATP sets the multimodal vision for Boulder's East Arapahoe/State Highway 7 (SH 7) corridor and is the first step in a multi-step multi-year journey. It is important to set the vision today to ensure transportation improvements, land use changes and investment strategies are in service of advancing the long-range corridor vision. The EATP provides the vision framework to begin improving corridor conditions today for neighborhood residents, employees and visitors, and into the future as the city works with local and regional partners to advance regional mobility improvements along the length of SH 7 between downtown Boulder and I-25, and, ultimately, to Brighton.

Aligned with Boulder's Transportation Master Plan (TMP) and the Boulder Valley Comprehensive Plan (BVCP), the 2040 vision plan for the East Arapahoe corridor creates a Complete Street that supports existing and future land uses and includes safety improvements for people using all modes, walking and biking enhancements, improved regional and local transit, and reliable vehicular travel.

The EATP includes an implementation plan to guide near-term and long-range corridor improvements. Examples of near-term improvements include safety-related intersection improvements, completion of missing links in the sidewalks and bicycle facilities along the corridor, as well as enhancing existing transit stops. Longer-term improvements include the creation of mobility hubs and Business Access and Transit (BAT) lanes to support local and

regional transit service and intersection improvement projects to address regional corridor congestion.

Importantly, the EATP positions the city to work with our SH 7 partners in pursuit of regional, state and federal funding for high quality, high frequency Bus Rapid Transit (BRT), a regional bikeway, pedestrian improvements and first- and final-mile supportive infrastructure along the length of the SH 7 corridor.

Council consideration of the EATP is time-sensitive to securing resources for near-term improvements. If accepted, the city will work with local and regional agency partners to submit the East Arapahoe/SH 7 corridor projects for consideration as part of the Denver Regional Council of Governments (DRCOG) Transportation Improvement Program (TIP) 4-year grant application cycle. Project applications are due to DRCOG by September 21 and require projects to be based upon adopted local and/or regional plans. See **Attachment A for details on the plan.**

The EATP has been developed through an extensive community engagement process as well as collaboration with regional agencies. Community engagement included a 20-member Community Working Group (CWG) as well as several open houses and 34 stakeholder group meetings. The project team received a large quantity of input and feedback from community members, including comments provided at public meetings, online and via email. Major themes of feedback received include concerns about traffic congestion, safety for people walking and biking, and the need to improve bus service. This community input and feedback has directly informed the vision plan. All comments received are documented in **Attachment B: Summary of Public Input.**

The vision plan has also been reviewed and guided by input from the Transportation Advisory Board (TAB) at key milestones throughout the planning process, and TAB member Johnny Drozdek served as a board liaison to the Community Working Group. Staff has also worked with regional agencies and partners to ensure alignment with regional plans along SH 7.

Attachment C: Community Working Group (CWG) Statement of Findings was issued in February 2018 at the conclusion of the CWG meetings. Note that while the intent of the CWG was not to reach consensus on a preferred vision, through the course of ten meetings and extensive discussion and deliberation over the data-driven analysis, the CWG determined that they agreed on a preferred vision.

At the [May 2018 TAB meeting](#), the board voted unanimously to recommend the EATP to City Council for consideration of acceptance. Support for the EATP from Boulder County, Regional Transportation District (RTD) and the Colorado Department of Transportation (CDOT) is documented in **Attachment D: Agency Letters of Support.**

If council accepts the EATP, the vision plan will become part of the larger regional SH 7 project development process to advance multimodal improvements, including BRT and a commuter bikeway, in the corridor between downtown Boulder and I-25/Brighton.

BACKGROUND

The 2014 TMP called for a Complete Street study of the East Arapahoe corridor, and the East Arapahoe/SH 7 Transportation Plan (EATP) has been underway since 2015 to identify near-term and long-range transportation improvements.

Community Engagement and Planning Process

Broad community outreach for the EATP has been consistent with the city's nine-step public engagement decision-making process and has included 10 meetings of the EATP Community Working Group (CWG), five public workshops and open houses, 34 corridor stakeholder meetings, numerous individual and small group meetings, as well as ongoing meetings with agency partners.

The EATP planning process has also included on-going coordination with the city's Planning & Sustainability (P&S) and Housing staff to ensure integrated land use and transportation planning. All of the analysis for East Arapahoe is based on a 2040 horizon and assumes future land uses consistent with the Boulder Valley Comprehensive Plan (BVCP). The recommended vision plan also provides the flexibility to adapt to future land use changes. For example, if future subarea planning suggests an intensification of land use in the corridor, more transit vehicles and enhanced first- and final-mile connections can be added to serve increased demand.

Over the multi-year planning process, four conceptual alternatives were identified for transportation improvements that would set the vision for the corridor. These alternatives, along with their evaluation and community feedback, have been presented to City Council at key milestones throughout the planning process. More information on the alternatives and the analysis is provided in the [Evaluation of Alternatives Summary Report](#). The preferred complete street design and basis for the plan vision was recommended to City Council in December 2017. See [City Council Information Packet](#) for details.

Transportation Advisory Board Recommendation

In winter and spring 2018, the plan vision was refined through broad community input and feedback. At the May 14, 2018, TAB meeting, TAB recommended City Council accept the East Arapahoe/SH 7 Transportation Plan. See the TAB [meeting minutes](#) for details.

ANALYSIS

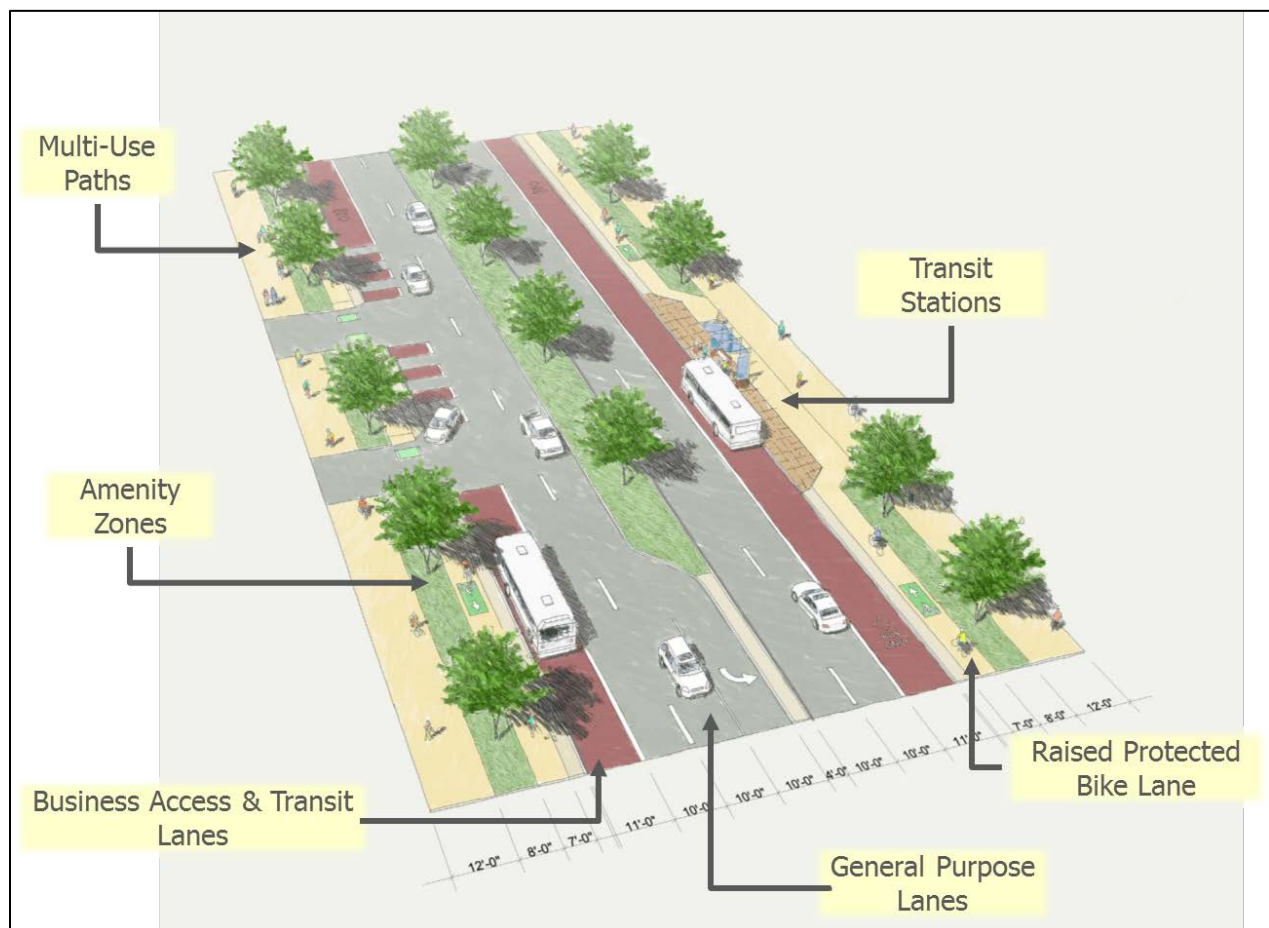
2040 Vision

The EATP considers how to safely move more people through enhanced travel options in the existing right-of-way. Right lanes (or curbside lanes) in the corridor today are underutilized because drivers try to avoid getting stuck behind buses and turning cars. The vision calls for a more efficient use of this space.

The 2040 vision for East Arapahoe creates a Complete Street, which is one in which all users are safely accommodated, supporting the city's Vision Zero safety initiatives to eliminate fatalities and serious injuries from traffic collisions. The vision, as shown in Figure 1, includes the following features:

- Two general-purpose traffic lanes are maintained in each direction.
- Curbside business access and transit (BAT) lanes accommodate local and regional transit, right-turning vehicles, HOVs and new technologies such as shared autonomous/connected vehicles.
- Raised protected bike lanes with a multi-use path create safe, comfortable places for people to walk and bike.
- Amenity zones enhance the streetscape and public realm.
- Regional BRT service connects Boulder to I-25 and Brighton via SH 7.

Figure 1: East Arapahoe 2040 Vision - Typical



The plan is expected to enhance safety for all users, maintain auto travel times while providing a transit travel time that is competitive with the automobile for other modes of travel, and increase access and comfort for all people walking and bicycling. The plan also:

- Provides the flexibility to serve existing neighborhoods as well as to adapt – both to future land use changes within the corridor and to rapid technological advances that have ushered in an era of evolution in mobility options.
- Increases mobility options to improve safety, health, air quality and reduce our impact on the climate.
- Reduces vehicle miles traveled in the corridor by 14 percent compared to making no improvements.
- Creates greater visibility for cyclists, more separation from general traffic, and separates bicyclists and pedestrians, thereby increasing safety, access and comfort for all people walking and bicycling.
- Enhances livability, creating an attraction for community-oriented businesses.

If no improvements are made to East Arapahoe, conditions for all travelers will deteriorate over time. Adding more lanes will not fix the problem. In the short-term, adding general purpose lanes in the east end of the corridor would reduce some congestion, but they would quickly be filled by new traffic. In the long-term, Arapahoe Avenue would become so congested that additional traffic would disperse to connecting roadways, making those intersections and corridors more congested.

Transportation and Land Use Integration

Future phases of planning for the East Arapahoe corridor will advance the corridor design concept to a greater level of detail with on-going property owner and community input. More detailed design will be the basis for a Right-of-Way Plan, which indicates right of way needs and infrastructure requirements along Arapahoe/SH 7, and is the basis by which developers are required to reserve or dedicate rights-of-way for planned transportation improvements. The Right-of-Way Plan will provide much-needed detail for forthcoming development proposals in the corridor.

As part of the EATP phasing plan, future phases of planning will more fully develop mobility hub concepts in the Arapahoe corridor and 55th Street and 29th Street areas. Similarly, first- and final-mile infrastructure, programs and strategies in the corridor will continue to be advanced in support of existing and future land uses.

NEXT STEPS

The Draft Plan outlines all elements of the long-term vision, including an approach to incrementally phase improvements. It includes near-, mid- and long-term implementation actions, with additional community engagement at each step.

The next phases of the plan, if accepted, include finalizing corridor design and refining cost estimates as the city continues to pursue funding with regional partners and make progress toward conducting shorter-term localized improvements in the corridor. Key short-term implementation items include the following:

- Design intersection configurations and traffic signal operations to enhance safety.

- Develop a Right-of-Way Plan to integrate right-of-way needs into the development review process.
- Develop an Access Management and Connections Plan to consolidate driveways and improve access points.
- Complete missing multi-use path links.
- Coordinate mobility hub planning with the 55th and Arapahoe Area Plan.
- Work with area employers to encourage the use of parking management and transportation options, e.g., transit, ridesharing, and other transportation demand management programs (parking cash-out, EcoPasses, etc.)

For more information, please see the [East Arapahoe \(SH 7\) Transportation Plan website](#).

STAFF RECOMMENDATION

Staff recommends City Council consider approval of the following motion:

Suggested Motion Language:

*Motion to accept the East Arapahoe/SH 7 Transportation Plan (**Attachment A**)*

Attachments

- A. **East Arapahoe (SH 7) Transportation Plan**
- B. **Summary of Public Input**
- C. **Community Working Group (CWG) Statement of Findings**
- D. **Agency Letters of Support**

EAST ARAPAHOE (SH 7) TRANSPORTATION PLAN

SETTING THE VISION FOR 2040

March 2018 - DRAFT



Acknowledgements

City Council

Suzanne Jones (Mayor)
Aaron Brockett
Bob Yates
Cindy Carlisle
Jill Adler Grano
Lisa Morzel
Mary Young
Mirabai Kuk Nagle
Sam Weaver
Matt Appelbaum (former)
Jan Burton (former)
Andrew Shoemaker (former)

TAB

Johnny Drozdek
Dom Nozzi
Tila Duhaime
Jennifer Nicoll
Bill Rigler
Andrea Bilich (former)
Daniel Stellar (former)
Anna Reid (former)
Zane Selvens (former)

Community Working Group

Kai Abelkis
Dave Baskett
Aaron Cook
David Cook
Johnny Drozdek
Guy Fromme
Aaron Johnson

Yvan Lehuierou
Sherry Olson
Aaron Pasterz
Elisabeth Patterson
Sue Prant
Anna Reid
Bill Roettker
Thomas Sanford
Jerry Shapins
Becca Weaver

City Staff

Management and Administration
Jane Brautigam - City Manager
Maureen Rait - Executive Director of Public Works

Transportation

Michael Gardner-Sweeney - Director of Public Works for Transportation
Kathleen Bracke - GO Boulder Manager
Jean Sanson - Senior Transportation Planner
Bill Cowern - Principal Traffic Engineer
Chris Hagelin - Senior Transportation Planner
Dave Kemp - Senior Transportation Planner
Amy Lewin - Senior Transportation Planner
Randall Rutsch - Senior Transportation Planner
Natalie Stiffler - Senior Transportation Planner
Ted Harberg - Analysis and Community Engagement
Oscar Saucedo-Andrade - Graphics and Community Engagement

Planning, Housing, + Sustainability

Jim Robertson - Director of Planning, Housing + Sustainability
Lesli Ellis - Comprehensive Planning Manager
Beth Chamberlin - Planner I

Communications

Ben Irwin - Deputy Director of Communications
Meghan Wilson - Communication Manager for Public Works/Planning, Housing + Sustainability
Deanna Kamhi - Public Works/Planning, Housing + Sustainability
Brady Delander - Newsletter and Neighborhood Services

Boulder County Transportation

George Gerstle - Transportation Director
Mark Ambrosi - Long Range Transportation Planner

Consultant Support

Nelson\Nygaard

Tom Brennan
Oren Eshel
Corinna Kimball-Brown

Fox Tuttle Hernandez Transportation Group

Bill Fox
Cassie Slade
Josh Mehlem

Fehr & Peers Transportation Consultants

Charlie Alexander
Carly Sief

studioINSITE:

Jim Leggitt

Catalyst Inc:

Barbara Lewis

OnSight Public Affairs:

Curtis Hubbard

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“A hallmark of any great city is that its streets are designed with consideration for all people and designed in support of community values. Mobility is not a means in and of itself, but rather a function that supports a vital, healthy, and sustainable community. Today, East Arapahoe is a street with design oriented largely for motor vehicles. The vision for East Arapahoe is one where all users are considered, accommodated, and celebrated. Simply put, complete streets are streets for everyone.”

- East Arapahoe Transportation Plan Vision Statement

THE EAST ARAPAHOE (SH 7) CORRIDOR

Introduction

The East Arapahoe Corridor is one of the city's busiest regional travel corridors. It is a 4.5-mile segment of Arapahoe Avenue (State Highway 7) that connects downtown Boulder to 75th Street and beyond to neighboring communities. Tens of thousands of people move through the corridor every day. Many call the area home, while even more are employed in the corridor or pass through on their way to jobs throughout Boulder.

The travel needs for people working, living, and accessing services within the East Arapahoe corridor are changing. East Arapahoe is no longer seen as a “pass through” corridor for in-commuters—it has, in fact, become one of Boulder's largest employment centers. From students traveling between university campuses to employees wanting to grab lunch, people are looking for safe and convenient ways to travel between destinations along East Arapahoe and other areas of the city, whether they are walking, biking, taking transit, ridesharing, or driving. This Plan sets out a long-range vision that will be phased over time, with safety, access, and mobility improvements that can be phased incrementally to improve conditions for people working and living in the corridor today and into the future.

This Plan also addresses increasing regional demand for travel to and through the East Arapahoe corridor, as substantial development is expected in communities east of Boulder. Regional change impacts the local and regional economy; how mobility needs associated with those changes are managed will shape Boulder's ability to meet its vision for a safe, equitable, efficient, and climate-friendly transportation system.



The Twenty-Ninth Street Retail Center (top) and Ball Aerospace and Engineering (bottom) are two of the major destinations in the East Arapahoe corridor.

To begin to address this challenge, regional partners between Boulder and Brighton have formed the SH 7 Coalition to coordinate and advocate for creating a regional multimodal corridor with high-quality/high-frequency bus rapid transit (BRT), a regional bikeway, pedestrian improvements and first and final mile supportive infrastructure and strategies. East Arapahoe is a key segment of this corridor and this Plan defines the city's commitment to advancing local multimodal improvements in support of improved regional access and mobility along the length of SH 7.

Importantly, the Plan provides a great deal of flexibility to adapt—both to future land use changes within the corridor and to rapid technological advances that have ushered in an era of evolution in mobility options.



Source: flickr user Kevin Baird.

The University of Colorado East Campus

Ridehailing companies such as Uber and Lyft are changing the dynamic of personal mobility; autonomous vehicles and buses bring potential for safety enhancements and may allow transit to operate more ubiquitously.

All these aspects add complexity to the challenge of managing limited street and public space.

Boulder's Community values are strong and clearly documented in the [Boulder Valley Comprehensive Plan](#) (BVCP), the [Boulder Transportation Master Plan](#) (TMP), the city's [Sustainability Framework](#) and [Climate Commitment](#). The vision for the East Arapahoe Corridor connects those values with solutions for the corridor's challenges.



Source: www.rbbarchitects.com

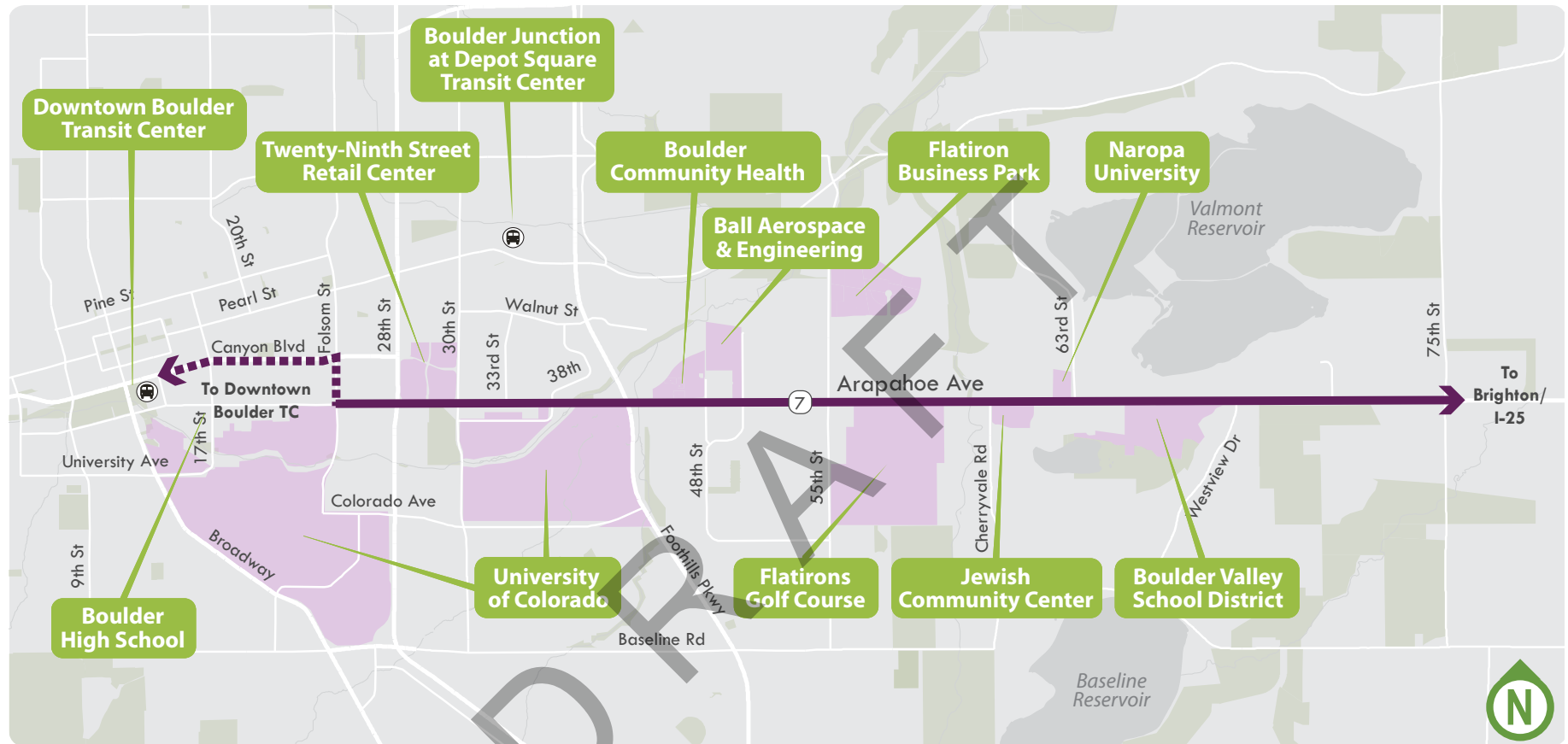
Boulder Jewish Community Center

Plan Organization

The plan includes the following sections:

- The **Existing and Future Conditions** section provides an overview of the corridor and introduces the five character districts that were developed to help frame solutions, and describes their existing conditions and planned land use per the BVCP.
- The **Process** section describes the milestones, community engagement, and overall planning process. It presents the plan goals and describes how alternatives were evaluated to achieve the community's vision.
- The **Vision** section describes the 2040 vision for the corridor and its key elements.
- The **Benefits** section highlights expected outcomes for the corridor and the city.
- The **Implementation** section describes near-, mid- and long-term steps, funding strategies, partnerships and coordination, and monitoring.

East Arapahoe Transportation Plan Study Area



The plan study area extends along Arapahoe Avenue between Folsom Street and 75th Street.

The East Arapahoe corridor is a segment of SH 7 that connects downtown Boulder on the west and I-25/Brighton on the east.

Complete Streets

The Boulder Transportation Master Plan (TMP) identifies Arapahoe Avenue for complete street improvements and calls for a transportation plan for the corridor. Complete streets accommodate all modes of transportation by planning, designing, and building facilities for pedestrians, bicyclists, transit riders, and vehicle drivers.



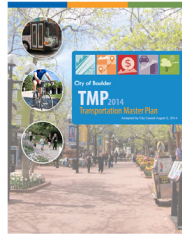
Policy Foundation

Local and regional plans identify the East Arapahoe corridor as a priority for multimodal transportation investments over the short- and long-term. The corridor is critical to connecting a growing region to the many jobs, services, and educational and recreational opportunities in Boulder. The East Arapahoe Transportation Plan builds upon previous planning efforts to craft a clear vision for the future of the corridor.

Local Plans and Policies

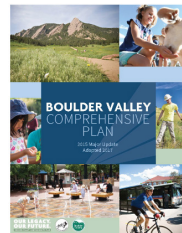
- **City of Boulder Transportation Master Plan (TMP) (2014)**

– Identifies the East Arapahoe corridor as a priority for future bus rapid transit (BRT).



- **Boulder Valley Comprehensive Plan Update (2017)**

– Identifies East Boulder and the East Arapahoe corridor for future employment growth and mixed-use development. A sub-area plan for the 55th & Arapahoe area is expected to be initiated in 2019.



- **University of Colorado (CU) East Campus Master Plan (2013)** – Documents a partnership between the University of Colorado (CU) and the City of Boulder to advance important sustainable transportation connections in the east campus area.

- **City of Boulder Climate Commitment (2016)** – Provides a vision for Boulder's future, sets goals and targets related to emissions reduction and sustainability and provides initial pathways to reaching these goals.

- **Boulder Access Management and Parking Strategy (AMPS) (2014-2017)** – Identifies opportunities in the East Arapahoe corridor including exploring the creation of access management and parking districts and improving travel options, e.g., through shared-use mobility and satellite/edge parking.

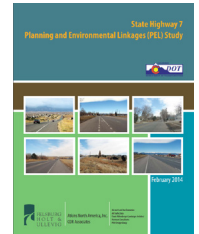


Regional Plans

- **Regional Transportation District (RTD) Northwest Area Mobility Study (NAMS) (2014)** – Includes Arapahoe/SH 7 between Boulder and Brighton as a long-term priority arterial bus rapid transit (BRT) route, with connections in Lafayette and at I-25.

- **Colorado Department of Transportation (CDOT) State Highway 7 Planning and Environmental Linkages (PEL) Study (2014 and 2017)**

– The 2014 study identifies improvements on SH 7 between 75th Street and US 85 in Brighton, including a regional bikeway, transit stations, transit queue jumps, and a future managed lane or expanded shoulder for BRT and high-occupancy vehicles. The 2017 study identifies improvements on SH 7 between US 287 and 75th Street, including a separated multi-use path; intersection enhancements and shoulders in the short-term; and either full width shoulders or a center contra-flow lane for transit, high-occupancy vehicles, and potentially autonomous vehicles in the long-term.



- **Boulder County State Highway 7 Bus Rapid Transit (BRT) Study (2016 - present)** – Confirms regional BRT feasibility and develops an operations plan for the SH 7 corridor, which includes the East Arapahoe study area.

“The Coalition seeks to advocate for a multimodal corridor that includes high-quality/high-frequency BRT and a regional bikeway accompanied by local bus, bike & pedestrian connections, first and last mile connections, and future innovative transportation modes.”

- *State Highway 7 Coalition Statement of Purpose*

The East Arapahoe corridor is a vital segment of this regional corridor connecting downtown Boulder to I-25 and Brighton.

CORRIDOR CONDITIONS

Today, Arapahoe Avenue is a six-lane arterial through most of the study area. It is served by frequent RTD JUMP bus service. People walking and bicycling enjoy a multi-use path for much of the corridor, but both the path and the sidewalk have significant gaps, crossings are at signalized intersections that may be far apart, and bicycle facilities are limited. Because there are only a few continuous east-west and north-south roads in East Boulder, there are limited alternative routes for many trips through and within the East Arapahoe corridor. This underscores the importance of designing and managing the corridor so that it works for all users. This includes ensuring efficient and reliable freight and goods movement for businesses in the corridor.

For more information see **Appendix A: Existing Conditions Report**



JUMP bus service and the multi-use path on Arapahoe Avenue.

Character Districts

The street features, design, interface with private properties and types of land use along East Arapahoe vary considerably throughout the study area. With input from stakeholders and public, the project team developed five character districts to help frame the discussion of existing travel conditions, identify needs and opportunities, and consider transportation solutions for each unique section of the corridor. The districts are distinguished by key land use conditions (existing and planned per the Boulder Valley Comprehensive Plan), the number of travel and turn lanes, types of intersections and crossings, and the type, extent and quality of pedestrian, bicycle, and transit facilities.

EAST ARAPAHOE CHARACTER DISTRICTS, EXISTING AND PLANNED CONDITIONS



A 29th Street District

Existing Conditions

Land Use:

- Higher density retail and mixed-use
- University of Colorado East Campus

Auto: 6 travel lanes + turn lanes

Bike/Ped: Multi-use path with small gaps

Transit: Queue jumps for buses at selected intersections

BVCP Planned Land Use

- Mixed-use and infill development
- Expansion of CU East Campus



B Boulder Creek Transition Zone

Existing Conditions

Land Use: Riparian wetland

Auto: 6 travel lanes + turn lanes

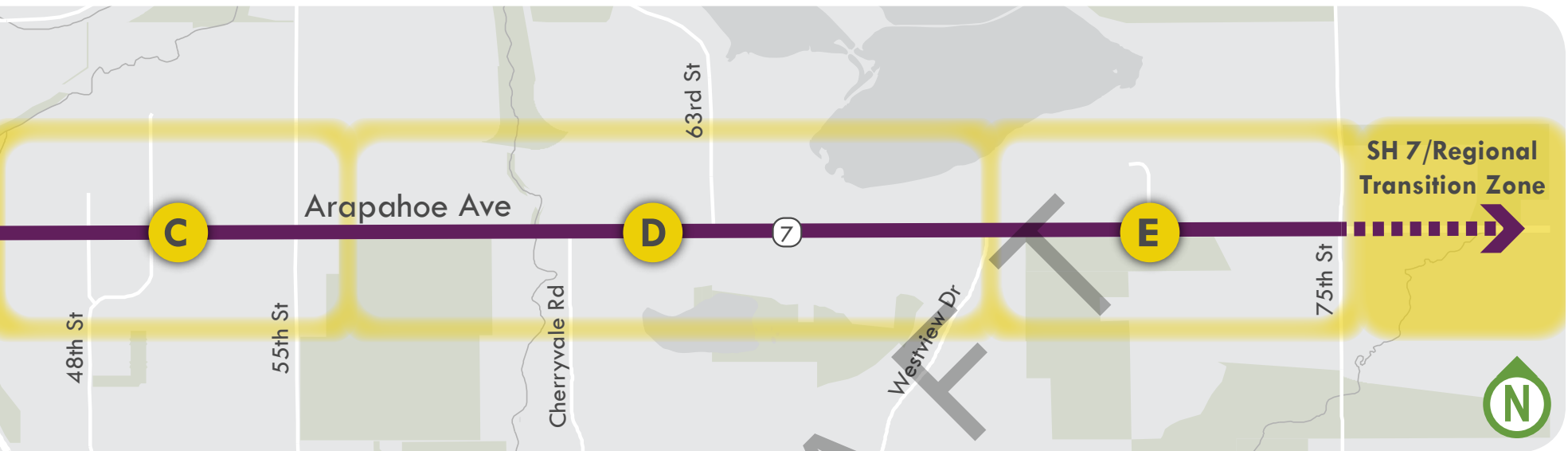
Bike/Ped: Multi-use path

Transit: Queue jumps at intersection

BVCP Planned Land Use

- Similar to existing





C Innovation & Health District

Existing Conditions

Land Use: Medium density institutional & light industrial

Auto: 6 travel lanes + turn lanes

Bike/Ped: Multi-use path incomplete on south side

Transit: No special transit treatments at intersections

BVCP Planned Land Use

- Boulder Community Health expansion
- 55th and Arapahoe neighborhood center, with local retail and other community businesses
- Housing infill and mixed-use development in light industrial areas, where appropriate



D Industry & Education District

Existing Conditions

Land Use: Low-density office, light industrial, retail

Auto: 5 travel lanes + turn lanes

Bike/Ped:

- Multi-use path incomplete on both sides
- On street bike lanes

Transit: Transit lanes east of 63rd

BVCP Planned Land Use

- Housing infill and mixed-use development in light industrial, where appropriate
- Very low to medium-density residential



E Gateway District

Existing Conditions

Land Use: Open space/farmland with clusters of other land uses

Auto: 2 travel lanes + center turn lane

Bike/Ped:

- Multi-use path on north side only
- On-street bike lanes or wide shoulders

Transit: Queue jump for buses at 75th Street

BVCP Planned Land Use

- Similar to existing



The Need for Investment

TRANSIT IMPROVEMENT POTENTIAL

- **Lack of Passenger Amenities:** Of 57 JUMP stops in the study area, only 44% have a bench, 26% have a shelter, and 23% have bike parking.¹
- **Transit Travel Time is Not Competitive:** Eastbound transit travel times are five minutes longer during the evening commute than in the morning, and are nearly twice as long as auto travel times.²

PREPARE FOR THE FUTURE

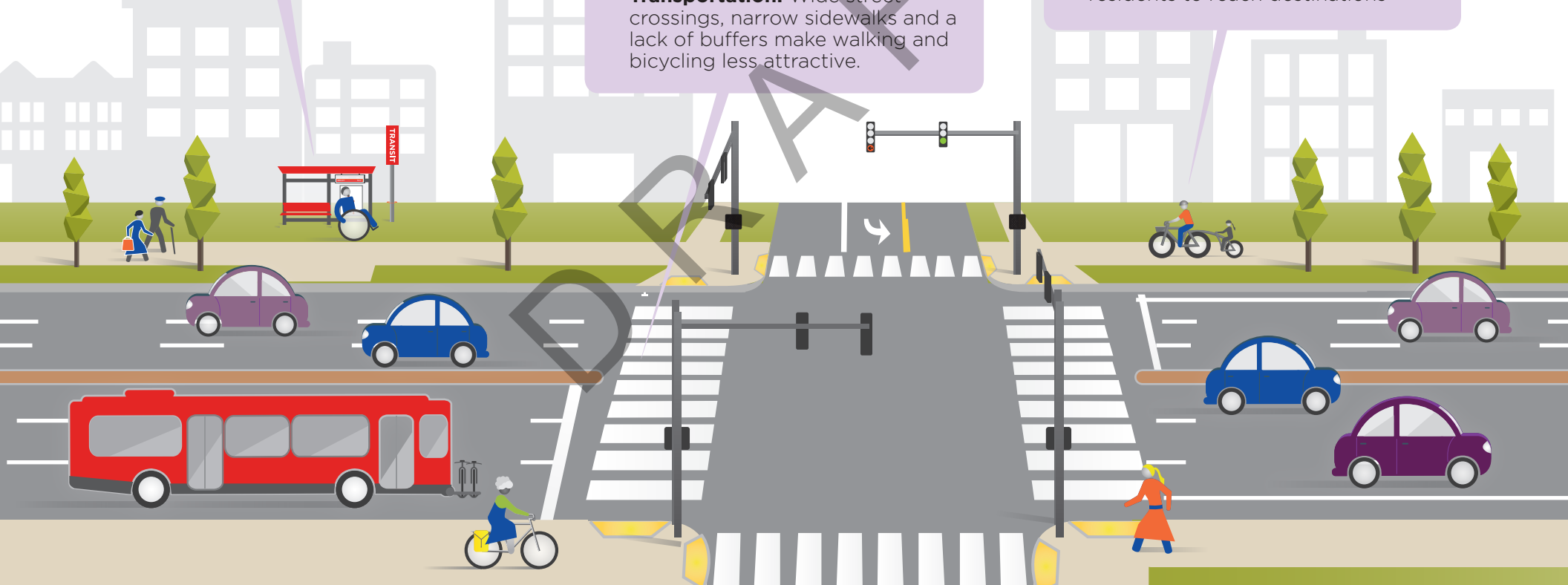
- **Evolving land use and technology:** The plan should allow flexibility to respond to change.

SAFETY AND COMFORT

- **Vision Zero:** Between 2012 and 2014, three intersections in the corridor had over 100 collisions, with most being rear-end crashes.³
- **Safety Challenges for Active Transportation:** Wide street crossings, narrow sidewalks and a lack of buffers make walking and bicycling less attractive.

GAPS IN THE PEDESTRIAN AND BICYCLE NETWORK

- **Incomplete Pedestrian and Bicycle Network:** Multiple locations in the corridor lack a sidewalk or multi-use path on one or both sides of the street.
- **Lack of North-South Crossings:** Signalized crossings are limited—more than 1/4 mile apart in most of the corridor.
- **Neighborhood Access:** Difficult for residents to reach destinations



LIMITED TRAVEL OPTIONS

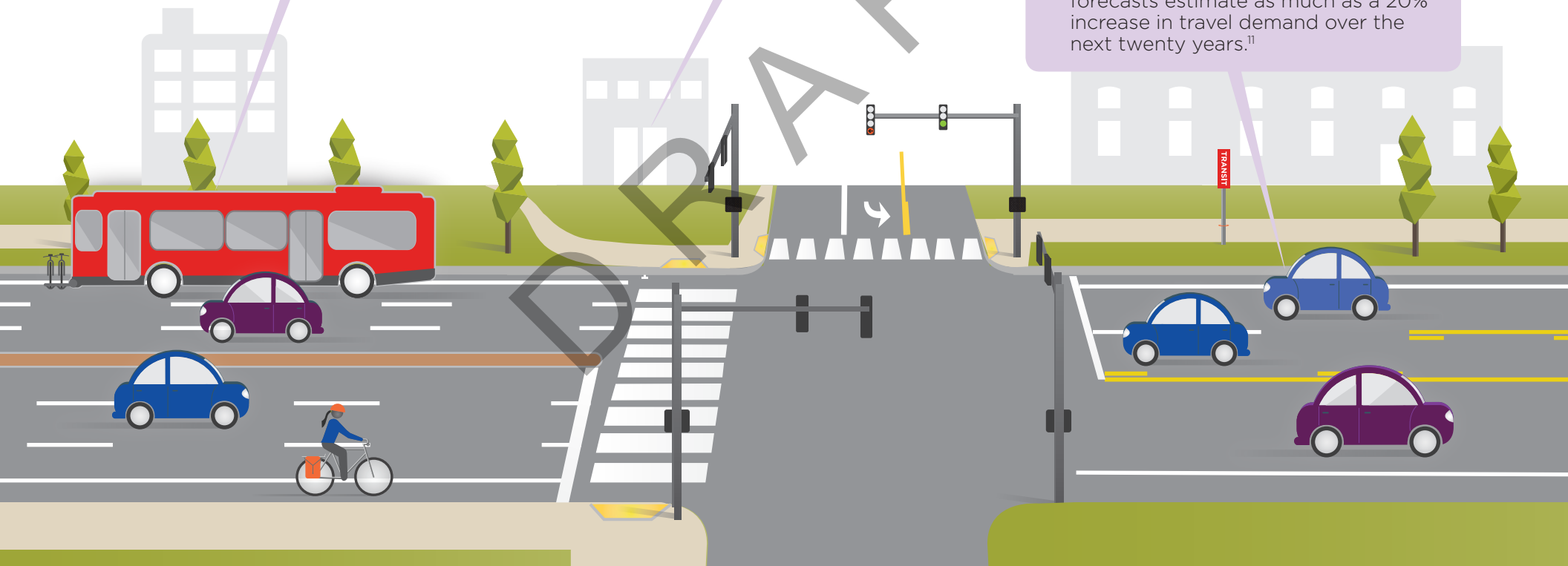
- **Travel Options:** Currently, only 25% of employees in the East Arapahoe corridor have access to an EcoPass; People with an EcoPass are four to seven times more likely to use transit than those without a pass.⁶
- **Bike Share Access:** There are only four BCycle stations along the corridor and one eGo car share location.

EMPLOYMENT

- **Job Center:** More than 35,500 jobs—roughly 40% of Boulder’s total employment—are located within a half-mile of the East Arapahoe corridor.⁴
- **Jobs and Commerce:** Of the 2,200 development review applications in the City of Boulder in 2015, nearly 25% were within one-half mile of Arapahoe Avenue.⁵ East Boulder has greater potential for commercial development than the rest of the city, while other parts of the city are near capacity.⁶

REGIONAL ACCESS

- **Increasing Vehicle Traffic:** Traffic volumes at the east end of the corridor have nearly doubled in the past 30 years.⁸
- **Large Number of Commuters:** Approximately 47% of Boulder workers commute from other places in the region.⁹ The rate of single-occupancy vehicle (SOV) work trips for in-commuters is well above the rate for residents—80% versus 47%.¹⁰
- **Growing Regional Demand:** Regional forecasts estimate as much as a 20% increase in travel demand over the next twenty years.¹¹



“As members of the CWG, we feel that this was a credible process that accounted for both a technically rigorous analysis and extensive public input.”

- *Community Working Group Statement of Findings*

PLANNING PROCESS

To seek input from a broad range of perspectives and representatives from across the city and region, the City of Boulder reached out to the community through numerous events and focus groups, met with the Transportation Advisory Board and the City Council, and formed a Community Working Group (CWG) to provide input to the project team throughout the duration of the planning process. The CWG helped the project team establish plan goals and objectives, define character districts, review design alternatives and evaluation criteria, and discuss implementation and phasing. The result is a plan that details a comprehensive vision for the corridor and each of its character districts.

The next phases of the project will include finalizing corridor design and pursuing funding and implementation strategies. This plan is the first step on the journey to accomplishing the vision.



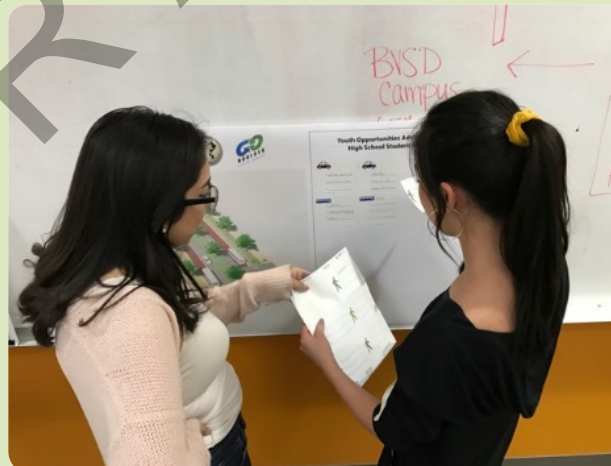
The Community Working Group discusses East Arapahoe character districts at their October 2016 meeting.

Boulder Public Process Principles

The public outreach and stakeholder engagement process for the East Arapahoe Transportation Plan was rooted in the core principles & values of public engagement identified by the Public Participation Working Group (PPWG):

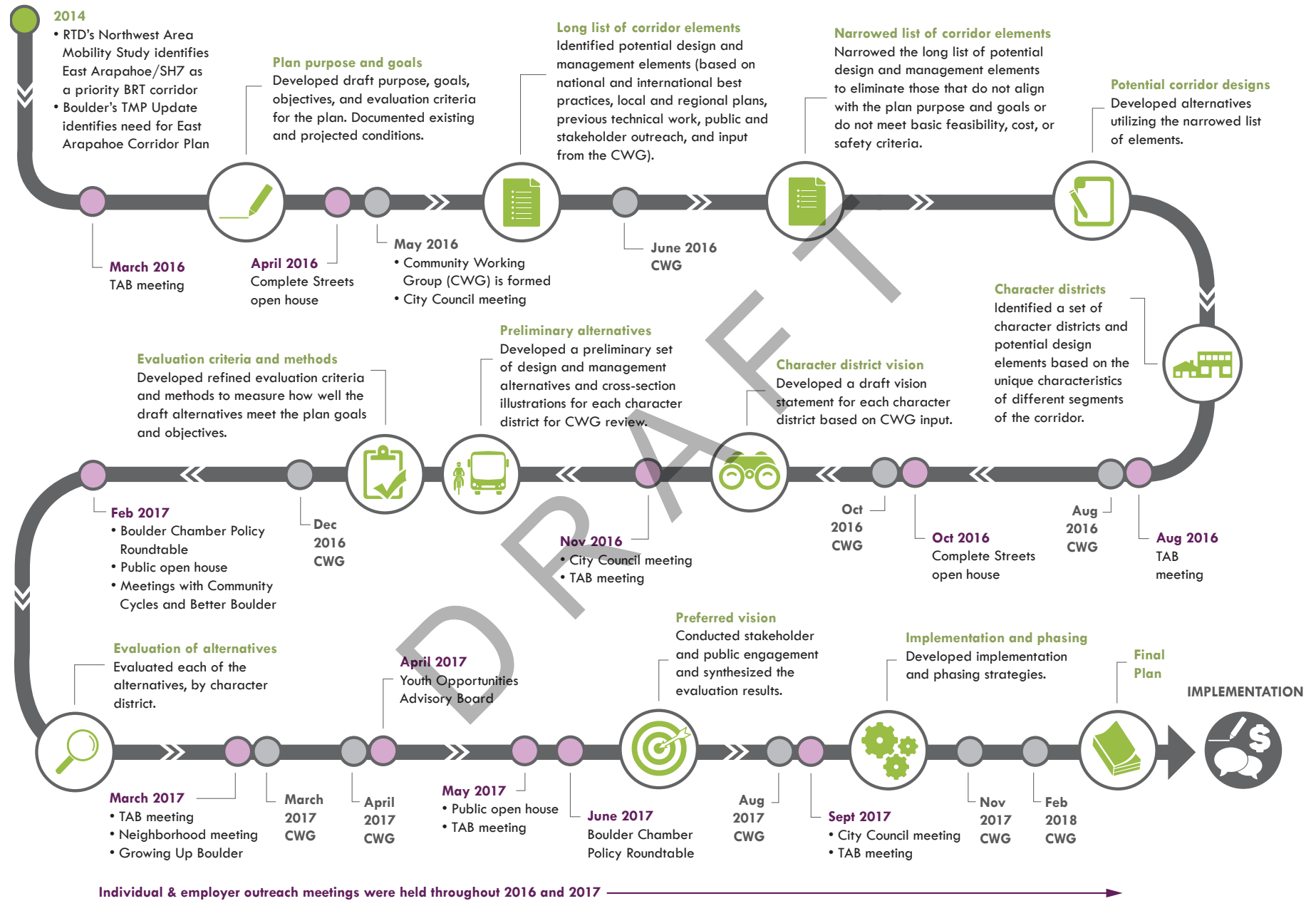
- The problem is clearly defined
- Public engagement is thoughtfully planned
- All voices are encouraged & included
- Public contribution & civil participation are fostered
- The process is trustworthy and transparent

The plan was developed using a comprehensive decision-making process consistent with the nine-step decision-making process recommended by the Public Participation Working Group.



The public engagement process included four open house events (top) and a meeting and walk audit of the corridor with the Youth Opportunities Advisory Board (left).

EAST ARAPAHOE TRANSPORTATION PLAN PROCESS AND MILESTONES



Goals

Plan goals and objectives were developed to guide development of the plan in support of Boulder's TMP goals and policies. They are based on analysis of existing and projected conditions for the East Arapahoe corridor, and City of Boulder plans and policies.

Goal 1. Complete Streets:

Provide Complete Streets in the East Arapahoe corridor that offer people a variety of safe and reliable travel choices.



- Provide safe travel for all modes using the East Arapahoe corridor, including supporting the "Vision Zero" effort to eliminate fatalities and serious injuries from traffic collisions.
- Improve the ease of access and comfort for people walking in the East Arapahoe corridor, and ensure the vision contributes to placemaking.
- Broaden the appeal of bicycling along the East Arapahoe corridor to people of all ages and bicycling abilities.
- Make transit a convenient and practical travel option in the East Arapahoe corridor.
- Move drivers efficiently through the East Arapahoe corridor.

Goal 2. Local and Regional Travel:

Increase the number of trips the East Arapahoe corridor can carry to accommodate local transportation needs and projected changes in surrounding communities.



- Improve local travel options within the East Arapahoe corridor for residents, employees, and visitors.
- Improve regional travel options between Boulder and communities to the east for work and other regional trips.

Goal 3. Transportation Demand Management (TDM):

Promote more efficient use of the transportation system and offer people travel options within the East Arapahoe corridor.



- Improve first and final mile connections to help people conveniently and safely walk and bike to and from transit.
- Promote the use of multiple transportation options in East Boulder by residents and workers.

Goal 4. Funding:

Deliver cost-effective transportation solutions for the East Arapahoe corridor that can be phased over time.



- Coordinate with public and private entities, including adjacent land owners, to implement cost-effective transportation improvements.

Goal 5. Sustainability:

Develop transportation improvements in the East Arapahoe corridor that support Boulder's Sustainability Framework (desired outcomes include a community that is Safe, Healthy & Socially Thriving; Livable, Accessible & Connected; Environmentally Sustainable; Economically Vital; and provides Good Governance).



- Reduce greenhouse gas (GhG) emissions and air pollution from vehicle travel within the East Arapahoe corridor.
- Improve travel options that promote public health for residents and workers along the East Arapahoe corridor.
- Provide access to affordable transit and other travel options to low- and moderate-income residents and workers along the East Arapahoe corridor.
- Preserve and improve economic vitality in the East Arapahoe corridor.
- Promote and improve water quality, and reduce the urban heat island effect through roadway and landscape design.

WHY INVEST IN MULTIMODAL CORRIDORS?

East Arapahoe is one of several corridors where the City of Boulder is planning for complete street improvements that will advance the community goals and desired outcomes outlined in the Sustainability Framework.



ACCESSIBLE AND CONNECTED AND COMMUNITY

- Offers and encourages a variety of safe, accessible, and sustainable mobility options
- Supports strong regional multimodal connections
- Supports a balanced transportation system that promotes 15-minute neighborhoods



ECONOMICALLY VITAL COMMUNITY

- Invests in infrastructure and amenities that attract, sustain and retain diverse businesses, entrepreneurs and jobs



ENVIRONMENTALLY SUSTAINABLE COMMUNITY

- Moves Boulder toward its carbon neutral goal



LIVABLE COMMUNITY

- Provides safe and well-maintained infrastructure
- Serves neighborhoods



HEALTHY AND SOCIALLY THRIVING COMMUNITY

- Improves access and comfort for people using active and healthy travel options
- Connects people to parks, schools and health care



SAFE COMMUNITY

- Increases safety for people using all modes of transportation



GOOD GOVERNANCE AND COMMUNITY ENGAGEMENT

- Constructing and maintaining safe and effective multimodal corridors requires smart use of limited public funds
- Ensures a community voice in the planning process for people traveling via all modes



Alternatives and Evaluation

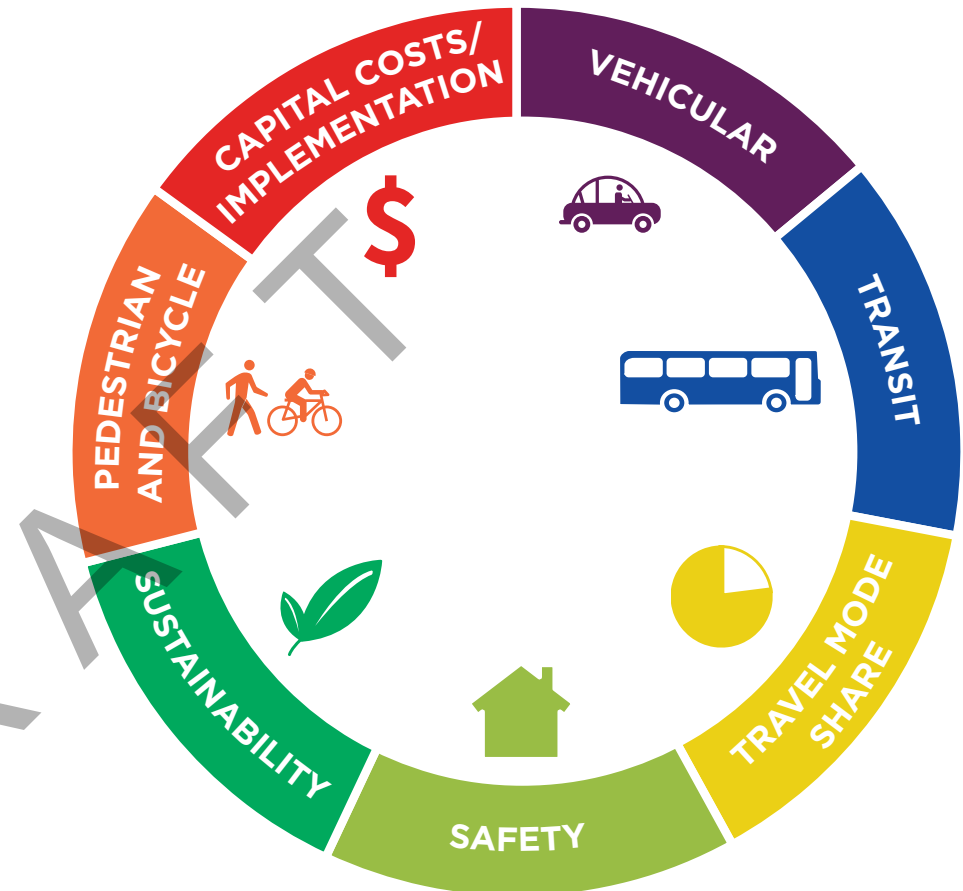
To develop a long-term vision for East Arapahoe, a number of complete street design and management alternatives were developed by the project team; these alternatives were shaped with input from the Community Working Group, corridor stakeholders, TAB, City Council, and the public through meetings and a series of outreach events.

The four conceptual alternatives developed illustrate a range of potential complete street design options for East Arapahoe:

- **Alternative 1/No Build Alternative:** no transportation improvements are made.
- **Alternative 2:** maintains current roadway design and makes a minimal investment in complete street features such as completing gaps in the multi-use path, adding more transit vehicles and enhancing stops.
- **Alternatives 3 and 4:** significant investment in complete street features such as repurposing existing travel lanes for exclusive bus rapid transit (BRT) lanes and adding protected bicycle lanes and pedestrian treatments. Alternative 3 calls for side-running BRT, while Alternative 4 calls for center-running BRT.

To determine which elements of each alternative best met City and plan goals, an evaluation framework was developed. The evaluation addressed seven major aspects of corridor design and operation. For each of the seven categories, a series of measures was applied to each character district to guide development of a corridor vision that is customized to the unique segments of the corridor and is aligned with Boulder's community values.

EVALUATION FRAMEWORK



Based on the technical evaluation, it was determined that Alternative 3 best meets the plan goals and city's TMP objectives. In comparison to Alternatives 1, 2 and 4, Alternative 3 is expected to enhance safety for all users, best maintain auto travel time while providing a transit travel time that is competitive with the automobile, and increase access and comfort for all people walking and bicycling. Alternative 3 is the recommended complete street design option and basis for the long-term vision described in the following pages.

WHAT IS THE LONG-TERM VISION?

Vision Statement

A hallmark of any great city is that its streets are designed with consideration for all people and designed in support of community values. Mobility is not a means in and of itself, but rather a function that supports a vital, healthy, and sustainable community. Today, East Arapahoe is a street with design oriented largely for motor vehicles. The vision for East Arapahoe is one where all users are considered, accommodated, and celebrated. Simply put, complete streets are streets for everyone.

The vision for the East Arapahoe corridor is one where:

- Boulder residents of all ages and physical abilities can safely navigate multi-use paths, public transit, protected bike lanes, and roadways as they make their way around the community.
- Commuters travel to and through East Arapahoe using high-quality bus rapid transit, shared transportation, a regional bikeway, and modes that limit impact on community health and the environment.
- East Arapahoe is designed to minimize conflict points for people using all modes, including driveways and intersections, and support the city's Vision Zero goal of eliminating serious injuries and fatalities resulting from traffic collisions.
- Future infill and redevelopment complete the vision streetscape design and transform the street to create a place where people want to be, rather than simply pass through.
- Business and services have an attractive, customer-friendly streetscape in retail areas and reliable access to move goods and freight to and through the corridor.
- People connect seamlessly to transit and shared transportation services using mobility hubs, which provide access to other parts of the community and region.
- The corridor serves as a welcoming community destination and gateway to Boulder, inviting residents, employees, and visitors.
- Boulder community values guide the corridor vision and implementation.

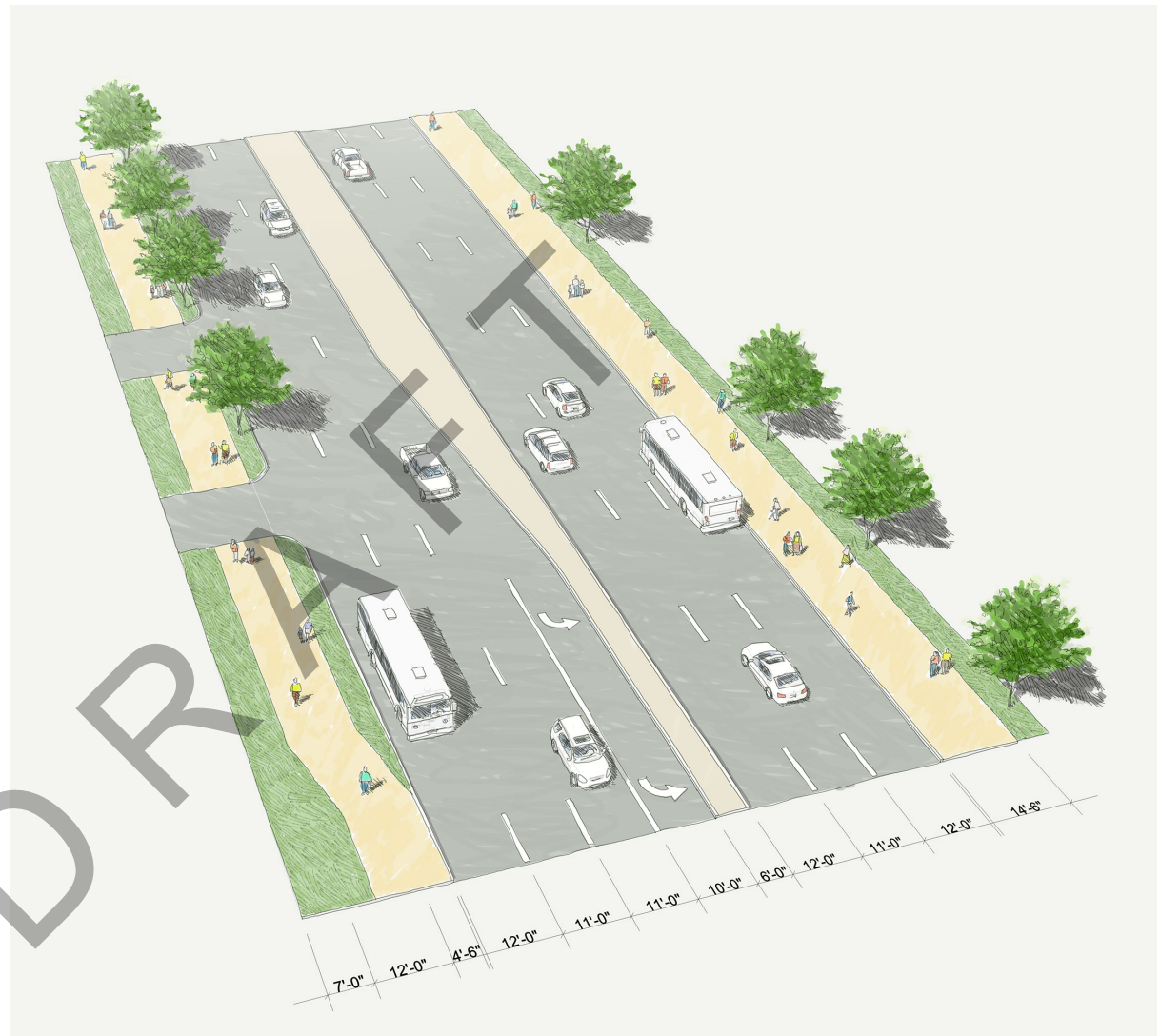
A Vision for 2040

The long-term vision for East Arapahoe describes the desired future condition of the corridor by the year 2040.

The vision is dynamic—recognizing that change will come in phases—and responsive to evolving community planning, mobility advancements, and how private development shapes the corridor.

The following sections identify the key vision elements, demonstrate how the vision knits the character districts together, and provide detail about each key element.

EXISTING CONDITIONS (TYPICAL)



2040 VISION



The long-term vision for East Arapahoe includes:

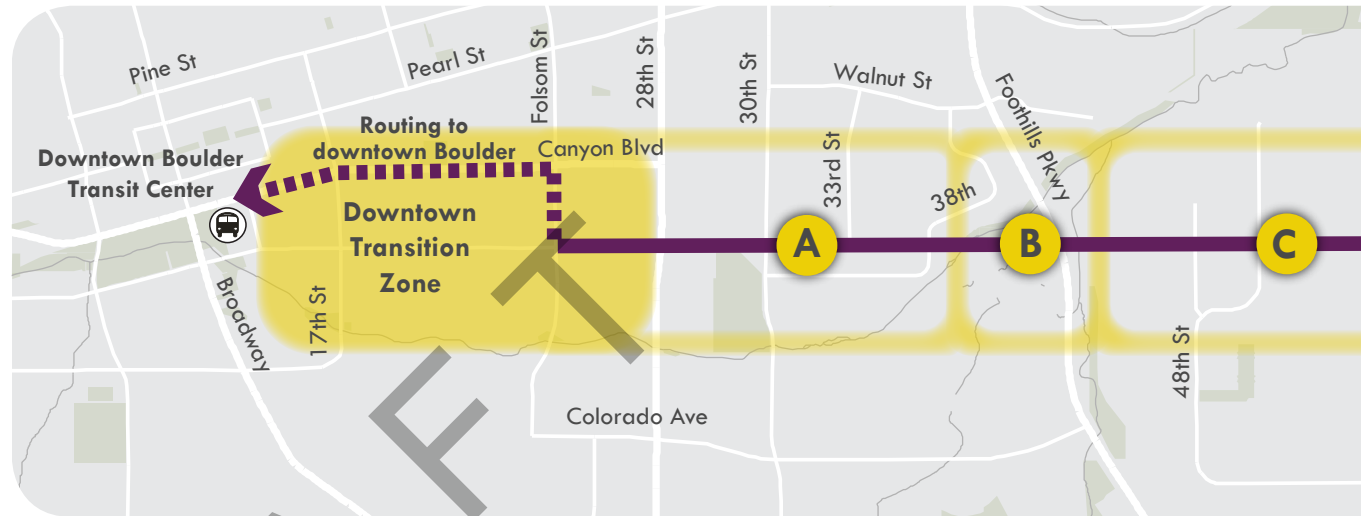
- **Two general-purpose traffic lanes** are maintained in each direction, except in a portion of Character District D and in District E, where the existing condition will be retained.
- **Regional BRT service** connects downtown Boulder to I-25 and Brighton via State Highway 7. BRT operates in **business access and transit (BAT)** lanes. BAT lanes also accommodate HOVs, local buses, right-turning vehicles, and new technologies such as shared autonomous/connected vehicles.
- **Raised protected bike lanes, with a multi-use path**, except in Character District E; the protected bike lane may be set back from or adjacent to the street.
- **Amenity zones** enhance the streetscape and public realm.

Vision by Character District

Downtown Transition Zone

Within Boulder, the BRT route connects the Downtown Boulder Transit Center to Arapahoe Avenue using Canyon Boulevard and Folsom Street.

The City of Boulder is conducting a separate corridor study along Canyon Boulevard as well as 30th Street and Colorado Boulevard.



A 29th Street District – Folsom Street to Boulder Creek



In District A, Arapahoe Avenue is a pedestrian-oriented urban boulevard serving a regional center and the expanding CU East Campus. Sidewalks can be expanded to provide flexible space for café seating and other uses. Transit stations are designed to provide convenient connections to regional BRT and local transit service along 28th and 30th Streets.

B Boulder Creek Transition Zone

District B is a transition zone between Districts A and C. A separate study will need to resolve the configuration of the Foothills Parkway intersection to accommodate the East Arapahoe plan.

C Innovation and Health District – East of Foothills to East of 55th



In District C, Arapahoe Avenue is pedestrian and bike accessible and permeable, supporting a diverse mix of uses and services. These include Boulder Community Health, Ball Aerospace, a variety of small businesses, and residential neighborhoods to the south. At 55th and Arapahoe, local transit and shared-use mobility options connect the corridor to Flatiron Business Park and a planned mix of uses. The 55th & Arapahoe Area Plan will develop a more detailed integrated land use and transportation vision for this area, including a planned mobility hub.



SH 7/Regional Transition Zone

East of 75th Street, high-quality/high-frequency regional BRT service extends east along SH 7 to I-25/Brighton.

Bicycle and pedestrian facilities along Arapahoe connect to a regional bikeway along SH 7.

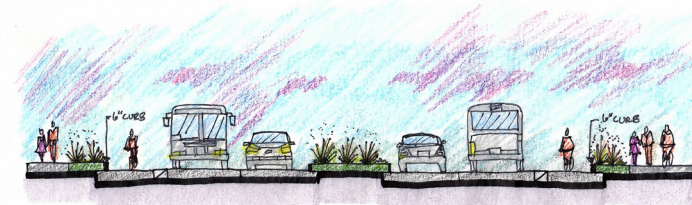
D Industry and Education District – East of 55th to Westview



District D transitions to open space and a less urban character. Arapahoe Avenue provides complete facilities for all users, and supports adaptive industrial uses including the arts, and enhanced cultural and educational institutions.

Where existing traffic lanes transition from three to two lanes per direction east of 55th Street, the next phase of concept design will need to evaluate where the future transition from two to one general purpose traffic lane per direction should occur.

E Gateway District – Westview Drive to 75th Street



District E maintains its rural character. It provides a gateway to Boulder and highlights the corridor's view features. Arapahoe Avenue retains much of its original configuration but extends the existing BAT lanes and enhances pedestrian and bicycle facilities.

The existing multi-use path on the north side connects to a planned regional bikeway along SH 7. On-street bicycle facilities may be buffer- or barrier- protected.

Walking and Bicycling

Long-Term Vision

People walking and biking in the East Arapahoe corridor have comfortable, uninterrupted facilities. There are distinct, context-appropriate facilities for people biking at low speeds or with young children—who may be more comfortable on a multi-use path—and for faster cyclists and bike commuters who may prefer using a dedicated bicycle facility. Enhanced facilities help the city realize it's Vision Zero goal of eliminating serious injuries and fatalities resulting from traffic collisions.

Between Folsom Street and Westview Drive (Character Districts A, B, C, and D), raised protected bike lanes on both sides of Arapahoe Avenue are separated from the roadway by a buffer or amenity zone, and a multi-use path provides space for both bicyclists and pedestrians.

Between Westview Drive and 75th Street (Character District E), street-level buffered bike lanes on both sides of Arapahoe are separated from motor vehicle traffic by a striped buffer or vertical separation. The multi-use path continues along the north side of Arapahoe, separated from the roadway by an amenity zone, while a new sidewalk and amenity zone runs along the south side of Arapahoe.

Elements

- **Protected bike lanes** are raised to curb level to provide greater protection from motor vehicle traffic, and are separated from the roadway by either a narrow paved buffer or a wider amenity zone.
- The **multi-use path** is separated from the bike lane by an amenity zone. The multi-use path clearly delineates space between people bicycling and people walking, e.g., using pavement markings.



Diagonal Highway. Source: City of Boulder.

- Additional **mid-block pedestrian crossings** with context-appropriate treatments (e.g., based on number of lanes and traffic volumes) may be considered based on Boulder's guidelines and Colorado Department of Transportation (CDOT) standards.

- Two **design options** are feasible, and will likely vary by character district. The configuration will be refined in a later design phase.

DESIGN OPTION 1



A narrow paved buffer separates the protected bike lane from the roadway, and a wide amenity zone with street trees is located between the protected bike lane and the multi-use path.

DESIGN OPTION 2



A wide amenity zone with street trees separates the protected bike lane from the roadway, and a narrower amenity zone is located between the protected bike lane and multi-use path.

Streetscape, Land Use, and Urban Design

Long-Term Vision

Streetscape, urban design, and land use in the East Arapahoe corridor are integrated seamlessly with the transportation elements of the vision. Amenity zones buffer the roadway for the length of the study area, providing space for streetscape and design elements such as landscaping, seating, and lighting that improve the experience of people walking and bicycling.

The corridor vision is consistent with planned land use as detailed in the BVCP, and provides flexibility to adapt to future land use changes, for example by adding transit service and enhancing first/final mile connections. Future phases of planning, particularly BRT station area and mobility hub design, are coordinated with regional, local, and area land use planning efforts. By coordinating transportation planning and investments with anticipated changes in land use, improvements can support community desires for high quality design and placemaking in the East Arapahoe corridor. A transportation system that is accessible and comfortable and provides convenient travel options will create value by helping to make East Arapahoe a great place – to work, live and visit.

Elements

- **Amenity zones** provide space for:
 - Landscaping
 - Bicycle parking
 - Wayfinding signage
 - Seating
 - Pedestrian scale lighting
 - Public art
 - Trash receptacles
 - Transit shelters and shade
- The next phase of planning advances corridor design with continued community and property owner input, and includes a **right-of-way plan** that helps guide development.
- **Local and regional land use plans**, such as the Boulder Valley Comprehensive Plan and the upcoming 55th & Arapahoe Area Plan, incorporate the East Arapahoe vision.



Amenity zones provide space for streetscape features such as bike parking, seating, landscaping, and pedestrian-scale lighting.

Motor Vehicles

Long-Term Vision

Two through traffic lanes per direction are maintained in Character Districts A through C and one traffic lane per direction is maintained in District E, with protected left-turn lanes at intersections. The number of existing lanes varies today in District D, and the concept design for the corridor will need to address where the number of through lanes transitions from two to one in District D.

The curbside business access and transit (BAT) lane allows any vehicle to enter and make right-turns or access businesses. Emergency vehicles, HOVs, and new technologies such as shared autonomous/connected vehicles can also use this lane.

Reduced travel speeds, greater separation between people driving and those on foot and bike, and minimized conflict points between all travelers will help the city realize its Vision Zero goal of eliminating serious injuries and fatalities resulting from traffic collisions.

Elements

- **BAT lanes** can be managed to allow general-purpose traffic at certain times of day, or to allow high-occupancy

vehicles. These lanes can be used for emergency vehicle access, e.g., to Boulder Community Health.

- **Performance standards** for managing transit and/or high-occupancy vehicle lanes will ensure that the curb lane is used in a way that maximizes the efficient and reliable movement of people through the corridor, while helping Boulder accommodate changing travel demand through the East Arapahoe corridor over the time horizon of the plan.
- **Narrowed travel lanes** (10 feet, and 11 feet for curb-side lanes) communicate to drivers that they need to be more careful and enhance safety by slowing traffic speeds consistent with posted limits.



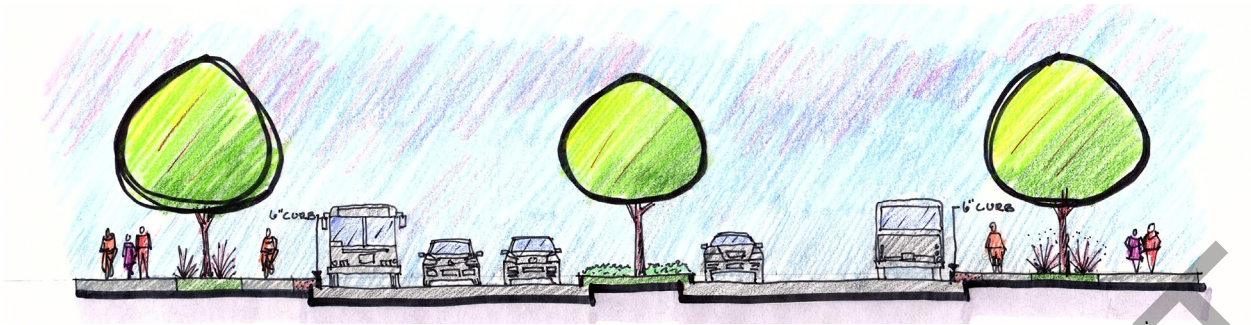
Business access and transit lane on 28th Street.



Posted speeds are 45 mph in much of the corridor.

- **Speed reduction** enhances safety and comfort for all roadway users. Changing the posted speed limit, which is currently 45 mph on much of Arapahoe Avenue, would require approval by the Colorado Department of Transportation and should be accompanied by implementation of all plan vision elements to reduce actual travel speed along the corridor.
- **Coordinated traffic signal timing** improves traffic flow and minimizes conflicts between different roadway users.

Transit



SIDE-RUNNING BRT - EXAMPLE CROSS-SECTION

Long-Term Vision

Regional BRT provides fast, reliable, frequent service on Arapahoe using curbside business access and transit (BAT) lanes. The BAT lanes operate much as they do today along north 28th Street, allowing transit vehicles and right-turning vehicles to use the curbside lanes. Stops are located at key stations, with spacing of at least a quarter-mile and preferably between a third and a half-mile (or more). High-quality stations (see amenities at right) provide a comfortable and convenient passenger experience. BRT stations and electric transit vehicles have a unique brand that distinguishes them from local JUMP buses, which continue to serve existing stops in the corridor.

Elements

- **BAT lanes** allow buses to run faster and more reliably, while allowing all vehicles to use the lanes to access businesses or make right-turns at intersections. These lanes could operate during particular times of day, and could be used by high-occupancy vehicles and future transportation technologies like shared-use autonomous vehicles as long as transit operations are not impacted (guided by performance standards).
- **Transit signal priority (TSP)** gives preferential treatment to buses at traffic signals, e.g., by extending a green signal slightly until a bus passes through.
- **Frequent transit service and longer service span** — up to every 5-10 minutes during the day, and every 15 minutes in the early mornings and evenings (combined BRT and local buses).

- **Branding** distinguishes BRT vehicles, stations, and marketing materials from other transit services
- **Electric transit vehicles** have wide doors and level, low-floor boarding to ease passenger loading and reduce delay
- **Transit stations** will include:
 - Shelters
 - Seating
 - Lighting
 - Schedules
 - Real-time arrival information
 - Off-board fare payment
 - Level boarding
 - Bicycle parking
 - Wayfinding signage
 - Art

The exact location, size, and level of amenities at each station may vary based on land use, ridership, space constraints, or other factors.



BRT Station in Kansas City

Conceptual Station and Mobility Hub Locations

Seven conceptual BRT station locations have been identified between Folsom and 75th Streets. Local bus service would continue to serve other stops in the corridor. Several mobility hub locations have also been identified. Station and mobility hub designs will be refined during the concept design process.



Mobility Hubs

Long-Term Vision

Mobility hubs facilitate transit connections around BRT stations with infrastructure, shared mobility services, and technology. Mobility hubs include pedestrian and bicycle improvements and other sustainable modes (e.g., car or bike sharing) designed to connect transit passengers to adjacent neighborhoods and destinations. Amenities support increased transit transfer activity and placemaking features make transit stations attractive and vibrant community elements for the surrounding neighborhood. Technology helps people navigate the options and promotes shared-use mobility.

Mobility hub locations along the East Arapahoe corridor include:

- 28th & Arapahoe
- CU East Campus
- Boulder Community Health
- 55th & Arapahoe

Elements

Mobility Hubs are context-sensitive solutions that are adaptable to a variety of locations. Each location requires a unique design. Mobility hub elements include:



A Context-appropriate parking, consistent with the city's Access Management and Parking Strategy "SUMP" principles—shared, unbundled, managed, and paid.

B Accessible, universal design allows people of all physical abilities easy access to transit stops/stations and connections.

C Shared mobility services—including bike share stations, car share vehicles, and loading space for other private or public mobility services—enable access outside of transit station walksheds.

D Loading zones for transportation network company (TNC) or ridehailing vehicles (e.g., Lyft and Uber), shuttles, and autonomous "microtransit" or other vehicles.

E Integrated mobility technology—including kiosks, reader boards with

real-time information on transit and other modes, and shared payment interfaces—assists travelers with trip planning and arranging shared rides, and provides opportunities for other evolving applications.

F Placemaking elements, such as public art and public seating, active street environments with a mix of land uses, and strong land use anchors invite social interaction and vibrant business opportunity.

G Secure, covered bicycle parking is part of the network of Bike and Ride stations located throughout Boulder County and provides access to the surrounding bicycle transportation network.

H High-quality pedestrian infrastructure within a one-mile walkshed.

Access Management, Parking, and Transportation Demand Management

Long-Term Vision

Boulder's Access Management and Parking Strategy (AMPS) (see callout at right) promotes a balanced approach to enhancing access. The vision for East Arapahoe includes the following elements to expand the travel options available within the East Arapahoe corridor, in support of the AMPS guiding principles and consistent with the city's Transportation Demand Management Action Plan.

Elements

- The **bicycle and pedestrian network** is fully connected within a half-mile of transit stations to allow easy, comfortable access to and from the corridor and surrounding neighborhoods and commercial centers.
- **Partnerships** with microtransit, shuttle and/or electric bike services provide connections to major institutions and office parks, such as Flatiron Business Park and the CU East Campus.
- A new **park and ride** at the future RTD Northwest Rail Station, and/or other locations, provides satellite/edge parking that allows regional commuters from cities to the east to park and use transit

or other mobility options for travel within Boulder.

- **EcoPasses** are available to corridor employees and residents through expansion of the existing Business and Neighborhood EcoPass programs, or a community-wide EcoPass.
- **Real-time ridesharing** is available to corridor employees and is incorporated into mobile devices and mobility hub information kiosks.
- **Individualized marketing** promotes travel options to corridor employers and residents in conjunction with the launch of new bicycle facilities and transit service enhancements.
- The **Transportation Options Toolkit** is utilized by existing developments and employers and integrated into the review process for new development along the East Arapahoe corridor.
- **Access districts** are in place, including Arapahoe/55th Street, facilitating coordination between employers. Access Districts are developed with coordination between the City and employers.
- **Managed parking** is in place within new Access (Parking/TDM) districts, in conjunction with enhanced transportation options.

Boulder Access Management & Parking Strategy (AMPS)

The city's Guiding Principles for AMPS are:

- Provide for All Transportation Modes
- Customize Tools by Area
- Support a Diversity of People
- Seek Solutions with Co-Benefits
- Plan for the Present and Future
- Cultivate Partnerships

The strategy provides the following tools for change:



District Management



On- and Off-Street Parking



Transportation Demand Management



Technology and Innovation



Code Requirements



Parking Pricing

Advanced Mobility

Long-Term Vision

The East Arapahoe corridor vision plan and city policy prepare for the changes in transportation that are likely to occur over the life of the plan by working with mobility service providers, integrating new technology, and crafting policies that anticipate the future challenges and opportunities presented by advanced mobility.

“Advanced” (or “Emerging”) mobility refers to a range of new technology and transportation options, including ridehailing companies like Uber and Lyft, integrated trip planning platforms, autonomous vehicles, and privately-operated shuttles and microtransit services, i.e., autonomous small transit vehicles that can operate on flexible routes and/or on-demand. Autonomous transit may be among the first candidates to utilize autonomous vehicle infrastructure and technology. These new and emerging technologies are important opportunities for advancing the community’s sustainability and climate goals.

Elements

Recommended actions include:

- Convert to a fleet of **electric transit vehicles**
- Examine **curbside practices** (i.e., pickup and dropoff) of ridehailing companies, and:
 - Designate safe pickup and dropoff locations at or near popular destinations such as Boulder Community Health, CU campus, and Flatiron Business Park (including and in addition to Mobility Hub locations).
 - Work with ridehailing companies to ensure safe pick-up and dropoff locations and identify designated pickup/dropoff zones for them to integrate into their platforms and guide drivers.
- Identify **potential for microtransit** connecting land uses to transit stations along the East Arapahoe corridor.
- **Promote technology** that seamlessly integrates mobility options.
- **Incorporate smart kiosks** with flexible upgrade options at mobility hubs to

bridge the equity gap in access to technology.

- **Adopt policies** that encourage shared rather than single-passenger use of autonomous vehicles.
- **Monitor and adopt electric and autonomous vehicle technologies** as they are sufficiently proven, such as allowing shared-use autonomous vehicles or microtransit to use the transit/HOV lane and incorporating these technologies into regular transit service along the corridor.



Source: EasyMile/ Laura A. Oda

Autonomous shared-use vehicles and microtransit services may play a role in providing first and final mile connections to transit service on the East Arapahoe corridor.

WHAT ARE THE BENEFITS?

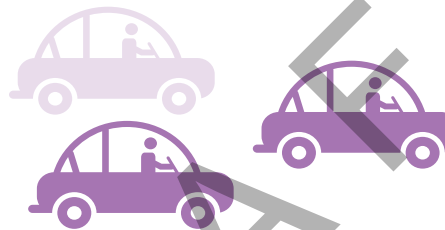
The East Arapahoe Transportation Plan provides a vision for multimodal transportation and streetscape improvements along the corridor. The corridor's overall look and feel and functionality will be vastly improved—streetscape enhancements will make it safer and more comfortable for people to bike and walk; transit service enhancements will make it more convenient and reliable for people to ride transit; urban design features will work hand in hand with mobility improvements make Arapahoe a more appealing place to travel and spend time.

For more information see Benefits notes on p. 39 and Appendix C: Evaluation of Alternatives Report.

BY 2040 . . .

All comparisons are between 2040 Vision implementation and the 2040 No-Build Alternative, which assumes minimal improvements are made in the corridor.

There will be **14% fewer vehicle miles traveled** in the corridor than if no improvements were made.



Person carrying capacity of the corridor increases, by doubling the number of buses during commute hours and providing more dedicated space for people walking and biking, while maintaining current capacity for people driving.



A trip along Arapahoe from US 287 to Boulder Community Health at 48th and Arapahoe during the morning rush hour takes:

19 minutes on BRT service - 6 minutes less than with no improvements

17 minutes driving - the same as with no improvements



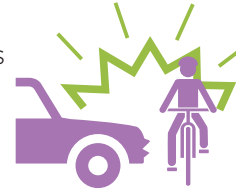
Bus rapid transit service will extend from downtown Boulder to I-25 and Brighton, and operate **at least every 15 minutes between 6 am and 10 pm**, and up to every 5 to 7 minutes during peak commute times.



The safety and comfort of people of all ages and abilities biking and walking in the corridor will be improved by a raised protected bike lane and multi-use path, helping the city move towards its **Vision Zero** goal of eliminating fatal and serious injury collisions.



Driveway consolidation and intersection and crossing improvements will help **reduce collisions for drivers**.



East Arapahoe will see:



Trips made on foot increase **to 2% of total trips**, contributing to the citywide target of 25% for residents.



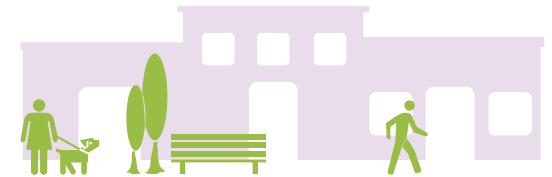
Bicycle trips increase **to 4% of total trips**, contributing to the citywide target of 30% for residents and 2% for non-residents.



Transit trips increase **to 11% of total trips, meeting the citywide target** of 10% for residents and 12% for non-residents.

Based on estimates on Arapahoe Avenue at 30th and 55th Streets.

Transportation and urban design improvements will **enhance livability and attract community-oriented businesses** to the corridor.



More people walking, bicycling, and taking electric buses will **prevent an increase in Greenhouse Gas (GHG) emissions**.



HOW WILL THE PLAN BE IMPLEMENTED?

Implementation Approach

Setting the vision for the East Arapahoe corridor is the first step in a multi-year journey. Implementing the vision and advancing regional mobility improvements along the length of SH 7 between downtown Boulder and I-25/Brighton will be a long-term project for the City of Boulder and key local and regional partners. It will require the city and its partners to seek out and take advantage of grants and other funding sources as opportunities become available to implement elements of the vision.

There is also flexibility to achieve the vision incrementally through short to medium-term actions. Some changes to the public realm may be coordinated with infill developments as property owners construct or reconstruct pedestrian facilities and amenity zones. Making changes to the location of the curbs in the longer term, where required, will require block-by-block and segment-by-segment reconstruction, similar to the city's multi-phased approach to improving 28th Street.

In conjunction with local improvements in the corridor, the city and regional partners will continue to refine plans for a regional multimodal corridor that has broad support and integrates Boulder's vision for East Arapahoe with planned improvements along the full extent of SH 7 between Boulder and Brighton.

Each implementation action described on the following pages is either categorized as ongoing or is assigned a general timeframe:

- Short-term actions would occur between 2018 and 2022
- Mid-term actions would occur between 2023 and 2027
- Long-term actions would occur between 2028 and 2040

The actions on this list should not be considered absolutely sequential; more than one action can be pursued simultaneously. Should viable opportunities or partners become available to pursue or accelerate specific transportation improvements or features sooner than is indicated for that specific implementation action, the city will pursue these prospects. The City of Boulder will be proactive and creative in monitoring and pursuing funding opportunities to implement the vision for the East Arapahoe corridor.

Planning and Design

Area	Element	Action	Time Frame
Corridor Design	Local Corridor Design	<ul style="list-style-type: none"> • Advance corridor design and refine cost estimates. With 10-15% corridor design concept: <ul style="list-style-type: none"> – Design intersection configurations and traffic signal practices to enhance safety – Develop Right-of-Way Plan. Integrate right-of-way needs into development review process – Develop Access Management and Connections Plan to consolidate driveways and improve access points – Conduct a study to resolve the configuration of the Foothills Parkway intersection to accommodate the plan vision 	Short-term
	Regional Corridor Design	<ul style="list-style-type: none"> • As part of SH 7 Coalition between Boulder and Brighton: <ul style="list-style-type: none"> – Participate in a regional Environmental Assessment to advance design and environmental clearance for a regional multimodal corridor (BRT, regional bikeway, pedestrian improvements, first/ final mile strategies, etc.) – Pursue local, regional, state, and federal funding for multimodal improvements 	Ongoing
Integrated Land Use Planning	Mobility Hubs/ Corridor-wide	<ul style="list-style-type: none"> • Refine station area design concepts in coordination with broader land use planning 	Ongoing
	Mobility Hubs/55th & Arapahoe Area Plan	<ul style="list-style-type: none"> • Prioritize and coordinate mobility hub planning with the 55th and Arapahoe Area Plan, expected to be initiated in 2019 	Short-term
	Streetscape	<ul style="list-style-type: none"> • Develop a streetscape plan for the corridor, including arts and aesthetics; a gateway element for the east end; signage to improve wayfinding and safety; and pedestrian-scale lighting 	Short-term
Policy Guidance	Transportation Master Plan	<ul style="list-style-type: none"> • Incorporate the East Arapahoe Transportation Plan into the 2018/19 TMP update and the TMP Capital Improvement Program 	Short-term
Plan Monitoring	Metrics/Monitoring	<ul style="list-style-type: none"> • Establish and implement multimodal metrics and monitoring program to regularly measure progress toward plan goals 	Ongoing

SHORT-TERM = 2018-2022

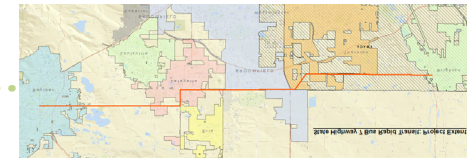
MID-TERM = 2020-2027

LONG-TERM = 2028-2040

INTERSECTION DESIGN



REGIONAL SH 7 BUS RAPID TRANSIT/MULTIMODAL STUDY



STREETSCAPE



TMP



Pedestrian and Bicycle

Area	Element	Action	Time Frame
Pedestrian	Crosswalks	• Develop pedestrian crossings where needed , consistent with City of Boulder guidelines	Ongoing
	Americans with Disabilities Act (ADA)	• Upgrade existing intersections to be ADA compliant	Ongoing
Pedestrian/ Bicycle	Multi-Use Path	• Reconstruct multi-use paths and amenity zones , as needed, to plan specifications	Ongoing
	Multi-Use Path	• Complete missing multi-use path links with a goal to create separate space between pedestrians and cyclists:	Short-term and ongoing
	Ped/Bike Underpass	• Coordinate with S. Boulder Creek Flood Mitigation Project to implement new underpass (approximately 200 feet east of 55th Street)	Mid- to Long-term
Bicycle	Interim buffered bike lanes	• Investigate options to enhance existing bike lanes using striped buffers where feasible, e.g., east of 55th Street	Short-term
	Protected bicycle lane	• Implement protected bicycle lanes per the plan vision	Mid- to Long-term

SHORT-TERM = 2018-2022

MID-TERM = 2020-2027

LONG-TERM = 2028-2040

PEDESTRIAN / BICYCLE CROSSINGS



MULTI-USE PATH DIAGONAL HIGHWAY



RAISED PROTECTED BIKE LANE PEDESTRIAN / BICYCLE UNDERPASS



GAPS IN MULTI-USE PATH



First and Final Mile and TDM

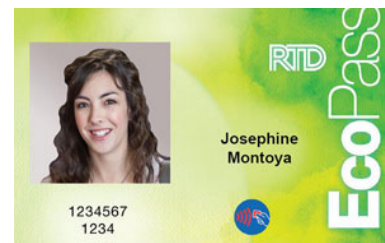
Area	Element	Action	Time Frame
First and Final Mile	First and Final Mile/Bicycle	• Explore and expand bike share partnerships to activity centers and employment concentrations in coordination with mobility hub planning	Ongoing
	First and Final Mile/Pedestrian & Bicycle	• Identify gaps in the connecting ped/bike network within 1-mile of station areas and improve multi-use path connections	Short-term
	First and Final Mile/Transit	• Explore transit partnerships to activity centers and employment concentrations along the corridor, e.g. microtransit/shuttles, mobility on demand, mobility as a service, fixed route transit	Ongoing
	First and Final Mile/Transit	• Coordinate East Arapahoe transit service with Boulder's Renewed Vision for Transit fixed route network, including regional BRT network connections	Ongoing
	First and Final Mile/Satellite Parking	• Explore park-and-ride locations in conjunction with other regional transit corridors	Short- to Mid-term
TDM	Employer TDM Programs	• Work with area employers to encourage use of parking management and transportation options , e.g. ridesharing, transit, vanpooling and other TDM programs like parking cash out, EcoPasses, alternative work schedules, etc.	Ongoing
	Neighborhood TDM Programs	• Promote transit service and other travel options along the corridor to area residents , including expansion of Neighborhood EcoPass program. Work with multi-family residential properties to manage and unbundle parking . Provide safe and convenient pedestrian and bicycle access to transit .	Ongoing
	District TDM Programs	• Work with area property owners to explore the potential for new access (parking/TDM) districts per AMPS action items	Ongoing

SHORT-TERM = 2018-2022

MID-TERM = 2020-2027

LONG-TERM = 2028-2040

ECOPASS



PARK-AND-RIDE



BCYCLE BIKE SHARE



AUTONOMOUS MICROTRANSIT



BOULDER HOP COMMUNITY TRANSIT NETWORK ROUTE



Transit and Vehicular

Area	Element	Action	Time Frame
Transit	BRT	• Implement regional BRT service in cooperation with SH 7 Coalition partners, including phased service options	Mid- to Long-term
	Local Transit	• Enhance existing transit service in the corridor through transit priority, frequency and quality improvements	Ongoing
	West End Routing & Stations	• Refine west end terminus, alignment, and stations , coordinated with other street and transit projects connecting 28th Street to Downtown Boulder	Short-term
	Stations & Stop Improvements	• Implement stop improvements and refine BRT station design concepts to maximize passenger and pedestrian access, comfort and safety	Ongoing
Transit/ Vehicular	BAT Lanes	• Implement transit priority measures for local and regional transit , including BAT lanes for priority direction and time of day in key segments, HOV 2 or 3+, emergency vehicles and evolving technologies	Mid- to Long-term
	Communication Technology	• Evaluate need for advanced communication technology to support advanced mobility (bus priority, autonomous vehicles, etc.)	Ongoing
Vehicular	Lane Striping	• Where feasible, restripe lanes consistent with plan vision , coordinated with potential future roadway repaving	Ongoing
	Signal Timing	• Incorporate findings of future city-wide signal timing and progression analysis , as appropriate	Ongoing
	Speed Limit Evaluation	• Evaluate posted speeds with CDOT , coordinated with corridor improvements, safety considerations, and community vision for the corridor	Short- to Mid-term
	Lane Configuration	• East of 55th Street, where existing traffic lanes transition from three to two lanes per direction, evaluate where the future transition from two traffic lanes to one traffic lane per direction should occur	Short-term

SHORT-TERM = 2018-2022

MID-TERM = 2020-2027

LONG-TERM = 2028-2040

EXISTING LOCAL TRANSIT:
JUMP



BRT STATION



BAT LANES: 28TH STREET



Funding, Partnerships, and Coordination

Creative funding strategies utilizing a variety of sources will be needed to implement the East Arapahoe vision. Potential sources include local, regional, state, and federal sources as well as public-private partnerships. These partnerships will be critical to implementing the vision for the East Arapahoe corridor. The city will actively engage with the community and regional partners including CDOT, Boulder County, RTD, and neighboring jurisdictions. Roles for key partners include:

- **CDOT**, which has jurisdiction over SH 7 will be a key funding partner in implementing the plan vision. For vision elements that can be accomplished within existing curb-to-curb dimensions, CDOT roadway maintenance projects may provide an opportunity to make incremental improvements that enhance safety and comfort for all users. CDOT will also be a key partner in advancing concept designs and securing funding for improvements within the East Arapahoe corridor and along SH 7 to the east.
- **RTD** will be a critical funding partner in enhancing transit service and capital facilities in the corridor, including improving the quality of service in the

corridor today, and in launching future regional BRT service.

- **SH 7 Coalition** is a forum to coordinate and advocate for a regional multimodal corridor that includes high quality/high frequency BRT and a regional bikeway accompanied by local bus, bike and pedestrian connections, first and final mile connections, and future innovative transportation modes. The Coalition is comprised of representatives from the cities of Boulder, Brighton, Lafayette, and Thornton; the Town of Erie; Adams County and Boulder County; and the City and County of Broomfield. As an active participant in the Coalition, the City of Boulder will work collaboratively with member jurisdictions and agencies to secure funding for these corridor improvements, which include the East Arapahoe vision, through the DRCOG Transportation Improvement Program (TIP), the RTD Strategic Business Plan (SBP), the CDOT Development Program, and, when appropriate, by pursuing state and federal grants.

- **Private sector and institutional partners, including the Chamber of Commerce, Commuting Solutions, and Boulder Transportation Connections**, will work with the city to develop programs and policies that encourage use of travel options and support other elements of the vision, such as expanding EcoPass distribution and participating in programs that enable ride sharing and supporting shuttle services.
- **Private application developers** can help the city develop technology applications to deliver real-time information and shared mobility solutions.
- **Ridehailing companies** (such as Lyft and Uber) and autonomous vehicle operators can collaborate with the city to create policies to effectively manage how their vehicles utilize curb space and integrate with potential managed lanes.
- **Carshare and bikeshare providers** (such as BCycle and eGo CarShare) will also be important in providing first and final mile connections at stations and mobility hubs.
- **Private developers** will help implement the plan's vision for the public realm as infill and redevelopment occurs.

Monitoring

The City of Boulder will continually monitor progress toward the plan vision and goals. Specifically, the city will monitor thresholds for implementing specific types of improvements and evaluate the benefits of implementing the vision, particularly as they contribute to meeting the city's TMP objectives and Climate Commitment goals. The city will:

- Continue to collect auto travel time data annually and monitor trends over time.
- Continue to collect and evaluate safety data to evaluate safety trends over time.
- Continue to monitor performance of the RTD JUMP route to assess the impact of congestion on transit performance, and the justification for improvements that ensure reliable transit travel time and mitigate increases in operating costs (or degradation in frequency) that would result from the travel time impacts.
- Evaluate performance measures for the curbside lane to identify when and where it is appropriate to implement BAT and/or HOV lanes.
- Engage in on-going community input and feedback to ensure continuous improvement of the project development process



End Notes

NEED FOR INVESTMENT

1. Inventory of passenger amenities from City of Boulder inventory, 2016.
2. Transit travel times based on the existing JUMP Schedule, 2016; Auto travel times from City of Boulder Traffic Count Data and Drive Time Data, 2014.
3. The intersections of Arapahoe Avenue with 28th Street, 30th Street, and Foothills Parkway each had more than 100 total collisions between 2012 and 2014. Source: Collision data based on City of Boulder analysis of Boulder Police Department crash data, 2012-2014.
4. Existing employment data from US Census Longitudinal Employer-Household Dynamics (LEHD), 2015.
5. Based on analysis of open development cases, 2016. Source: <https://bouldercolorado.gov/open-data/city-of-boulder-open-development-review-cases/>
6. Employment capacity from [Boulder Valley Comprehensive Plan, 2015-2040 Projections](#).
7. Based on EcoPass data as of May 2016 and employment from US Census LEHD, 2015, within 1/2 mile of the corridor between Folsom Street and 75th Street.

8. Historical traffic based on City of Boulder Traffic Count and Drive Time Data, 2014.
9. Non-residents hold 47% of the 100,148 jobs in Boulder. Source: [Boulder Community Profile, 2017](#). Based on 2016 estimate by City of Boulder Dept of Planning , Housing, and Sustainability.
10. Based on the 2014 Boulder Valley Employee Survey, Table 10, 47% of Boulder residents drive alone to work, compared to 80% of nonresidents.
11. Regional travel demand forecasts from DRCOG, 2040.

BENEFITS

1. In 2040, vehicle miles of travel in the corridor are projected to be 130,100 miles with no improvements and 20% traffic growth, and 111,300 miles with vision implementation and 0% traffic growth. For more information see [Evaluation of Alternatives Summary Report](#), Vehicle Operations: VMT, p. 27.
2. Carrying capacity is estimated based on modeled traffic volumes, transit capacity, and projected bicycle and walking trips. See [Evaluation of Alternatives Summary Report](#) Appendix D: Mode Share for more information.
3. Auto and transit travel times are based on traffic modeling performed for this plan, and east of 75th Street, on analysis

that was done for the SH 7 BRT Study. For more information see [Evaluation of Alternatives Summary Report](#), Transit Operations: Sample Travel Times, p. 34. .

4. Multiple studies have shown that reducing the number of access points on urban and suburban arterials reduces the number of collisions. For more information see the [Evaluation of Alternatives Summary Report](#), Safety, p. 51, and Appendix E: Safety.
5. Mode share estimates are calculated separately for each mode based on travel demand modeling, ridership forecasts, and increases in bike trips seen by other communities after facility improvements. See the [Evaluation of Alternatives Summary Report](#), Travel Mode Share, p. 46, and Appendix D: Mode Share for more information.
6. Mode share targets are from the 2014 [Transportation Master Plan](#).
7. In 2040, greenhouse gas emissions in the corridor are projected to be 47.7 metric tons with no improvements, and 40.8 metric tons with vision implementation. Estimates are based on vehicle miles traveled. For more information see the [Evaluation of Alternatives Summary Report](#), Community Sustainability: Greenhouse Gas Emissions, p. 54, and Appendix F: Sustainability.

DRAFT



Attachment B:

EAST ARAPAHOE TRANSPORTATION PLAN Public Input Summary

November 2015 – June 2018 – DRAFT

(6.19..2018)

EAST ARAPAHOE TRANSPORTATION PLAN | Public Input – November 2015 to May 2018
City of Boulder

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SUMMARY OF PUBLIC INPUT

1. DOCUMENT OVERVIEW

This document is a summary of public input received by the East Arapahoe Transportation Plan project team from November of 2015 to May of 2018. It highlights major themes, ideas, concerns and suggestions raised by members of the public through a series of public engagement activities conducted during this time. Below is a list of the groups and engagement events that are further summarized in this document.

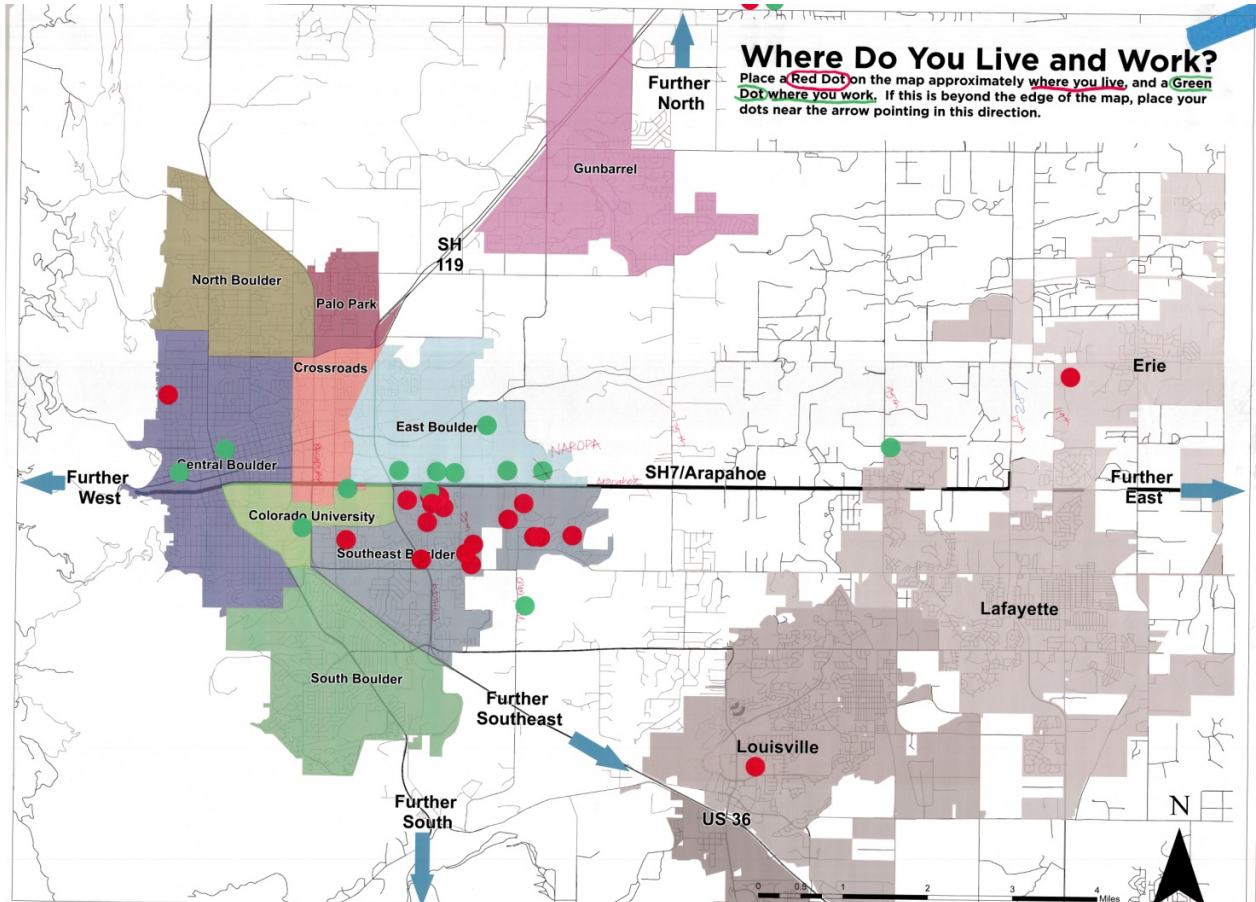
- **Public Events**
 - November 19, 2015 Public Workshop
 - April and October, 2016: Complete Streets Open Houses
 - February 2, 2017: Boulder Chamber policy roundtable with members of the Boulder business community
 - February 2, 2017: Public Open House
 - February 6, 2017: Community Cycles meeting
 - February 8, 2017: Better Boulder meeting
 - March 8, 2017: Neighborhood meeting (in conjunction with Boulder Valley Comprehensive Plan Update)
 - March 24, 2017: Growing Up Boulder workshop with teen mom's class
 - April 7, 2017: City of Boulder Youth Opportunities Advisory Board walk audit and workshop
 - May 10, 2017 Open House
 - February 15, 2018 Open House
- **Business Outreach**
 - June Boulder Chamber Policy Roundtable
 - Meetings with Individual Businesses
 - Boulder Community Health Focus Group
 - Ball Aerospace Employee Meeting
- **Daily Camera**
 - Articles
 - Editorials
 - Guest Opinions
- **Online Comments and Emails**

2. PUBLIC EVENTS

November 19, 2015 Public Workshop

The project team held a public workshop at Naropa's Nalanda Campus on November 19, 2015. Approximately 30 people were in attendance. As shown in Figure 9, most meeting attendees either live or work in the East Arapahoe corridor, with red dots indicating where participants work and green dots indicating where they live.

Figure 1: Geographic Representation of Workshop Attendees



Participants at the workshop were given a brief overview of the status of the East Arapahoe Transportation Plan and a chance to view the preliminary conceptual design alternatives. Participants then broke into tables and discussed the opportunities and challenges associated with each alternative. Finally, all meeting attendees were asked to weigh in on what evaluation criteria are the most important to them.

Feedback on Conceptual Design Alternatives

The results from the small group discussions on design alternatives are shown in Figure 10. Generally, the following themes emerged from the conversations:

- No Change: Current conditions were called out as being unpleasant and aesthetically unpleasing.
- Alternative A: Those who would like to see minimal disruption to the corridor see strength Alternative A. Participants generally agreed that multi-use paths need to be completed as shown in Alternative A.
- Alternatives B and C: Seen as strong in the way that they enhance both bus service and the pedestrian and bicycle environment. Weaknesses seen in these two alternatives are their potential to create congestion, and skepticism that the investment will be worth the bus ridership that will result.
- Alternative D had the most weaknesses called out. Though Alternative D offers separated space for every mode of travel, it generated a negative reaction. Many people disliked its sheer width, and the potential impacts to private property.

April and October, 2016 Complete Streets Open Houses

In April and October of 2016, the City of Boulder Transportation Department hosted open houses presenting information on the full range of Complete Streets projects that the city is working on. The East Arapahoe Transportation Plan is one of these complete streets projects, and provided updates and project information at both open houses.

February 2, 2017 Boulder chamber policy roundtable

The project team provided a briefing to members of the business community as a Boulder Chamber Policy Roundtable. Staff presented the planning process, plan context and purpose, design elements and examples of alternatives being developed, as well as draft evaluation criteria that will be used to evaluate alternatives.

The following are notes, questions and input as transcribed from the business outreach meeting:

- Character districts should speak to the residential areas (especially in C and D).
- This corridor serves a lot of in-commuters. Project should create housing that might attract them.
- Project should speak to the mobility hub concept at 55th and Arapahoe.
- We should expect resistance from in-commuters to Boulder and from the Daily Camera.
- Turning onto and crossing Arapahoe is problematic.
- What is the status of funding for the project? Response – project is currently unfunded.
- We should plan “capture” options/park-and-rides for in-commuters.
- Express service would be valuable for improving time competitiveness.
- Is there enough land for the alternatives? Do property owners need to prepare for acquisition or easements? Response – evaluation of alternatives will indicate right-of-way acquisition needs.
- We need to understand the travel times of each alternative as public opinion will be strongly affected by that.

- This plan should complete a full life cycle analysis of this versus other investments in driving.
- Will this plan include access control? Response – most likely a near or mid-term action item.
- How are we incorporating the proposed event center at the Flatiron Golf Course? Response – no formal plans for an event center have been brought forward.
- For each alternative, we need to understand congestion and automobile access.
- Question re. crash reporting – just rear-ends? Response – analysis looks at all crashes, but focus on serious collisions.
- Set vision for how corridor evolves over time; early, mid-term and long term investments.
- Area C has housing on south, but not mentioned. Should include.
- Group validated character district segments.

February 2, 2017 Open House Summary

Open House Overview

The project team hosted a Public Open House on the evening of February 2, 2017 at the Boulder Chamber of Commerce.

City staff shared several conceptual design options, incorporating features that offer a variety of safe and reliable travel choices for people walking, biking, using transit or driving. Approximately 35 people were in attendance. The city requested input on draft cross-sections that had been designed with input from a Community Working Group and from prior public comments. Comments were collected through in-person conversations, on the presentation boards, and in written comment forms.

Comments from Presentation Boards

General Comments

- Bus does not run late enough on Arapahoe. Should match Flatiron Flyer frequency.
- Jump weekend hours should be longer and more frequent.
- Automobile noise concerns should be a factor.
- BRT vehicles should accommodate bike on-board. Need more bikes on transit capacity.

District A: Draft Cross Sections

- I like the bike lane with protection from the travel lanes with the amenity zone – will be better for more vulnerable users.
- It is really great to see 10' lanes. Thank you for making that a priority here!

District D: Draft Cross Sections

- Use beautiful pavers (a la Europe) for sidewalks and bike lanes.
- Definitely raised – cars come much too fast for families to share the road here.
- Consider replacing traffic signals with roundabouts.

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- The merge out of bus lane at 63rd is confusing.

Figure 2: Draft Evaluation Criteria Feedback

Criteria	Which Criteria Are Most Important to You?
Pedestrian & Bike Comfort and Access	Place Your Dots Below
Perceived Ease of Access of Comfort for Walking Along or Across the Corridor	2
Perceived Ease or Comfort for Bicycling Along or Across the Corridor	5
Safety	
Safety Evaluation	0
Access management	0
Travel Mode Shares	
Estimated Pedestrian, Bicycle, Transit, Auto Mode Share	3
Transit Operations	
Transit Travel Time and Service Reliability	8
Transit Ridership	2
Transit Operating Costs	0
Vehicle Operations	
Auto Travel Time and Level of Service (LOS)	2
Auto Vehicle Miles Traveled (VMT)	1
Freight Impacts	0
Potential for Traffic Diversion	0
Capital Costs / Implementation	
Capital Costs and Right of Way	1
Cost-Effectiveness	0
Ability to Phase Improvements / Complexity	0
Community Sustainability	
Streetscape Quality	6
GhG Emissions from Transportation	1

Notes from In-Person Conversations

- Park-n-rides need to be an integral part of this transportation plan. Satellite lots are a good thing, but perhaps they need to be within the corridor as well as on the perimeter of the city.
- Desire by some to see two GP lanes extended from 63rd to 75th.
- Access can be difficult in places, specifically at McArthur Drive. Would it be possible to add signalized access here?
- It is not always clear from drawing and renderings that the full street cross-section is proposed to be wider.

Written Comments

- Make North-South connections between bike paths and Arapahoe in commercial areas. The one on West side of 28th is great! Folsom not so good, and there is no access to the Walnut bike extension.
- Difficult commute to go from 3 lanes to 2 to 1 between Foothills and 75th. I like bike/pedestrian/tree additions – especially needed on the south side.
- The city should look at ways to limit employment growth within the city limits rather than assuming more is always better.
- We need more bike spaces on the Jump/BRT. If two bikes are on already, I have to wait for another bus.
- Try to find a way to achieve goals without building so close to the road – makes being a biker/pedestrian more enjoyable!
- The bus-only merge lane at 63rd is confusing. People merge early (near golf course) and don't use lanes well. Can merge be pushed off until Westview?

Meetings with Community Cycles and Better Boulder

Project staff met with members of Community Cycles on February 6th, and Better Boulder on February 8th for a conversation about the plan, and to hear from these groups about their priorities for the East Arapahoe corridor.

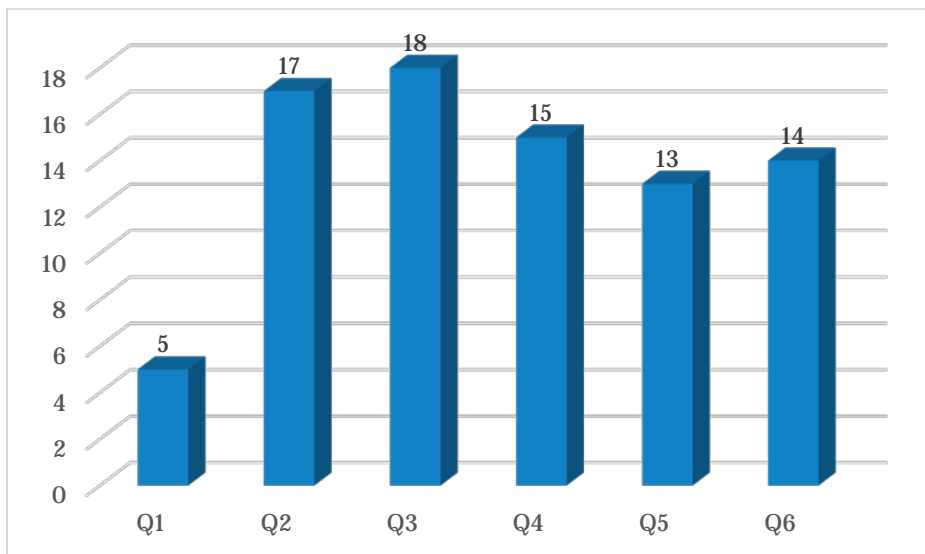
Neighborhood Meeting

City staff attended a neighborhood meeting on March 8, 2017 at the Unitarian Universalist Church of Boulder to provide a briefing, answer questions and hear desires and concerns that neighbors east of Foothills Parkway have for the East Arapahoe corridor.

Attendees were asked the following questions by the meeting host:

- Q1 I prefer no development at/near Arapahoe
- Q2 I prefer no new building heights over current limits in East Boulder
- Q3 I prefer retail that serves our neighborhood at East Edge site
I am concerned about building setbacks from the road becoming too
- Q4 small
- Q5 I am concerned about crossing Arapahoe by bike or foot
- Q6 I am concerned about vehicular accessibility to/from Arapahoe

Figure 3: Chart of Responses from Neighborhood Meeting



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The following comments were also submitted to city staff following the Neighborhood Meeting:

Comments
We need traffic cameras at 55th & Arapahoe
Retail & commercial to serve nearby neighbors and nearby jobs ONLY - Not to attract from other areas. Prefer little development at/near Arapahoe
1) Neighborhood is calm - this is huge infill. 2) What is planned for 55th between Baseline & Arapahoe? 3) Confusing because many websites cited during meeting. 4) Looks like permanent chaos - not happy
Mitigating flooding issues opposite the hospital on Arapahoe - 48th st, Eisenhower Pkwy, Meritt Dr., etc.
Biggest concern is increased building height (.35') & resulting increased density on North side of Arapahoe
-Hi-rise multi-use buildings. -Intercept parking @ 75 and shuttles to work
Neighborhood food market with produce. Height increase allows for density so we don't become another Aspen. Also, high rise senior housing
Don't want more strip malls in area. Leave the chains out. More affordable housing. No paying lieu for developers
I hope the community input is considered seriously by the City.
1) Main concern is access development around Arapahoe & 55th on foot, walking from adjacent neighborhood. 2) Safety accessing Arapahoe from neighborhood by car to commute to work
I would like retail area like NoBo in East Boulder so I can walk to shops.
I would like to see affordable housing included in every mixed use development. I don't like to see segregation of low-income residents to only a few areas
I am not concerned about height limitations on the North side of Arapahoe. Affordable housing is very important and should be spread around
1) egress from MacArthur. 2) reduce speed limits to 35MPH throughout. 3) plan trans & east edge jointly
E Arap could use some updating with buildings no higher than about 35 feet with appropriate setbacks.
Concern about increased noise from volume and speed on Arap. Already unsafe for bike and pedestrian access. Speed limit reduced to 35 mph from 55th to Foothills. Traffic circles Arapahoe east of 55th to 75th
Improvements to Arapahoe infrastructure, but not buildings. Bike lanes, overhead utilities, walkways. Would like to see locally owned businesses.
Concerned about parking. Vital for a huge parking arrangement. Parking in Arapaho Ridge will disturb kids on bikes, babies in strollers, dog walking, & joggers and fill our streets with strangers.

Growing Up Boulder

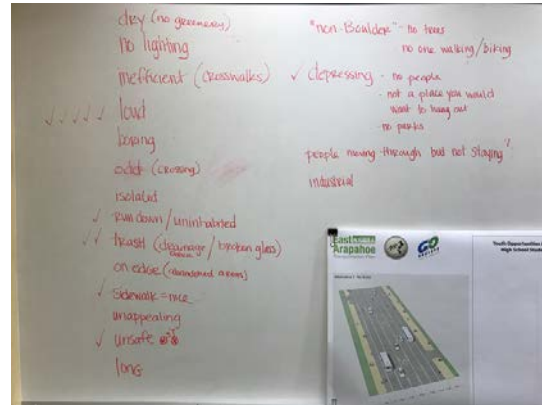
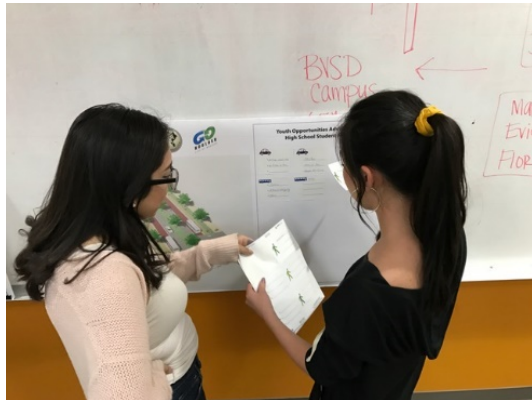
The project team met with a life skills class of teen mothers on March 24, 2017. One of the goals of the class is to provide young women with leadership skills. Growing Up Boulder reached out to the teen mothers program for this project because the girls provided a unique perspective for transportation planners and because their high school (ARHS) is located on Arapahoe Avenue, the location for the Transportation Plan. The girls provided input from the perspective of a) being a teenager, b) being a parent, c) observing the experiences of their children. Their input pertained both to the East Arapahoe Transportation Plan and also how they get around the city in general.

The girls showed staff on a map and through discussion where they live and the transit they use to get around town. They also helped modify a tool to collect information about transit options for teen moms. The tool will be distributed to the other mothers who were not present at the class (up to 14 more students).

Recurring Themes or Ideas: Both young women either took the specialized teen mother bus to school or drove. The specialized bus was convenient because it had the correct sized car seats and room for the mothers, and it took them directly to school (except for other student pick-ups). When not taking the school bus, the girls preferred to drive. Both girls mentioned that before children, they relied heavily upon public transportation for their transit needs. After having children, however, they found it more convenient to drive themselves and their children around town. One mother mentioned that taking the public bus is challenging with her toddler, as he has difficulty sitting still and there is no car seat in which to contain him on the bus. The other mother avoids the bus because it takes so much longer than driving, and now that she needs to get both herself and her baby ready every day, she needs the extra time. Both young women find walking and biking to destinations inconvenient, unless walking for recreation.

Youth Opportunities Advisory Board

The project team met with the Youth Opportunities Advisory Board on April 7, 2017 to take the students on a Walk Audit of the eastern portion of the East Arapahoe Corridor (between Cherryvale and the BVSD Arapahoe campus). The students answered questions on a walk audit questionnaire, and then offered their advice on the pros and cons of the various end-to-end alternatives being considered for the corridor. Below are their responses.



Feedback from the Youth Opportunity Advisory Board

Alternative 1 – No Build

As a Pedestrian

Pros:

- Wide Sidewalks

Cons:

- No barriers
- No crosswalks
- No shade trees

As a Person on Bicycle

Pros:

- Multi-use Path
- No traffic on path
- Path is in good condition

Cons:

- Right next to vehicles
- Nothing to break weather
- Fast traffic

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As a Person on Transit

Pros:

- Single bus lane
- Faster

Cons:

- Not pretty
- No lighting
- No shelter

As a Person in an Automobile

Pros:

- Don't have to wait for buses
- Don't have to worry
- Center turn lane

Cons:

- One lane

Speaking for Myself

Cons:

- No shade and nothing to look at
- No trees, ugly, no good marking for lane differences
- No shade, no green, doesn't really help anyone

Alternative 2 – Enhanced Bus

As a Pedestrian

Pros:

- Trees – natural barrier and shade
- Bike lane is raised and separate
- Accessible bus shelters

Cons:

- No crosswalks

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As a Person on Bicycle

Pros:

- Shade
- Raised path (safe)
- Prettier/good conditions

Cons:

- Blocked by walkers

As a Person on Transit

Pros:

- Shelter glass
- Pretty

Cons:

- Slower
- Cars when you get off

As a Person in an Automobile

Pros:

- 3 lanes
- Fast moving

Cons:

- Wait for buses
- Median so limited, left turns

Speaking for Myself

Pros:

- Trees, bus stop separate bike/sidewalk
- Needs a turnaround center lane instead of a tree median

Cons:

- No breaks in median for cars, behind buses

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Alternative 3 – Side-Running BRT

As a Pedestrian

Pros:

- Trees/shade/barrier
- Separated bike paths

Cons:

- No crosswalks

As a Person on Bicycle

Pros:

- Raised path (safe)
- Shade
- Prettier

Cons:

- Stopped by peds

As a Person on Transit

Pros:

- Faster
- Different color is pretty
- Safer

Cons:

- None

As a Person in an Automobile

Pros:

- Turning right easy
- No buses in lane

Cons:

- Only 1 lane
- Narrow lane
- Limited left turns

Speaking for Myself

Pros:

- Trees, good bus lane, curb not too bad
- Shade/greenery perfect for pedestrians and bikes

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- Separate lanes for busses bikes and pedestrians are ideal for all 3
- Bus lanes are different colors and are easy to identify
- Not stuck behind buses for cars
- I like this option because it feels like the most reliable to move traffic in and avoid any bus accidents. However, I would put a center turn lane and indent the bike path for peds to see to the bus.
- More consistent and safe and nice to use. Bike path does not pose very much trouble.
- Non-car friendly promotes alternative ecofriendly transportation.
- Shade/Greenery
- Has different colors so it is easy to tell facilities apart.
- Has right turn lane
- Gives everyone a little something. As someone that takes the bus, it would be fantastic.
- Better for cars, buses, walkers, and bikes
- Shade
- Better looking
- Although a shaded bus stop would be good

Cons:

- No ramped-up bus stop
- Median makes it hard for cars or bikes to turn
- Few car lanes

Alternative 4 – Center-Running BRT

As a Pedestrian

Pros:

- Trees/shade/barrier

Cons:

- No crosswalks
- No barriers/rails
- Inconvenient bus stop

As a Person on Bicycle

Pros:

- Shade
- Safe
- Pretty (green)

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Cons:

- None

As a Person on Transit

Pros:

- Faster
- Shelter/seating

Cons:

- Not safe
- Cross traffic
- Standing in the middle of cars

As a Person in an Automobile

Pros:

- Turn lane
- Not stopped by bus
- 2 lanes

Cons:

- Cross buses when turning left
- More peds crossing to middle buses
- Cross bikers and peds with weird visibility.

Speaking for Myself

Cons:

- Dangerous to be in the middle of cars with no railing or barriers
- Inconvenient to get to bus
- I don't like this because I would feel unsafe waiting for the bus and annoyed with left turning
- Least favorite due to inconvenience for pedestrians to get to bus stop

May 10, 2017 Open House

Open House Overview

The project team hosted a Public Open House from 5 -7 pm on May 10, 2017 at the Unitarian Universalist Church of Boulder.

City staff shared the Draft Alternatives for the East Arapahoe corridor, incorporating features that offer a variety of safe and reliable travel choices for people walking, biking, using transit or driving. Draft evaluation results were also shared with attendees, and the full draft evaluation results report is available for public review on the project website. Approximately 26 people were in attendance. Staff presented project information boards at an Open House from 5 – 5:30 pm, followed by a presentation by Jean Sanson and Tom Brennan with a Question and Answer session from 5:30 – 6:15 pm. The evening concluded with a return to the Open House from 6:15 -7 pm and an opportunity for meeting attendees to participate in dot-polling exercises, as well as one-on-one conversations with project staff.

This report summarizes presentation materials and community input received at the open house.

Open House Presentation Boards

The presentation boards on the following pages were displayed during the open house.

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Figure 4: May 10, 2017 Open House Presentation Boards

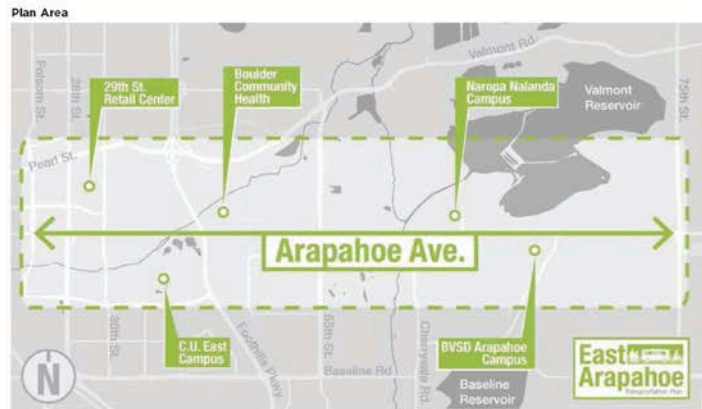


PLAN OVERVIEW

The East Arapahoe Transportation Plan will be a long-range plan that considers a number of potential transportation improvements within the East Arapahoe corridor, including safety for people using all modes, walking and biking enhancements, improved regional and local transit, vehicular travel, as well as urban design features that work hand in hand with mobility improvements to transform the corridor.

Transportation improvements will support the goals and objectives of the Boulder Valley Comprehensive Plan, the Transportation Master Plan (TMP) and the city's Sustainability Framework.

Read more about the plan, and review plan documents at
EastArapahoeTransportationPlan.net



Elements of the Plan



PLANNING PROCESS



About the East Arapahoe Community Working Group

In early 2016, the City assembled a Community Working Group composed of twenty members who represent a diverse set of perspectives to assist with the project. The role of the community working group is to review all components of the project and to provide comments, feedback and input to the city staff and consultants during each phase of the planning process.

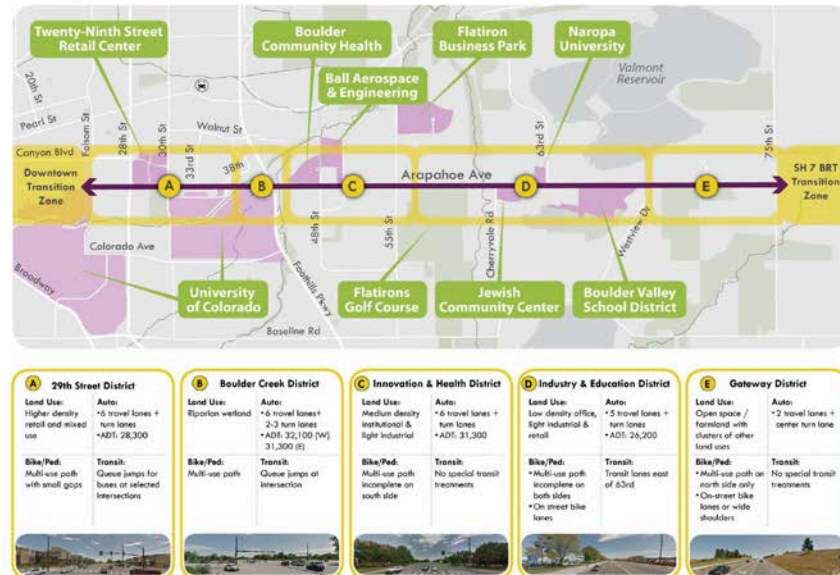
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CHARACTER DISTRICTS

Character districts are helping to frame the development of potential alternatives based on the unique transportation and land use qualities of each area along the corridor.



GOALS AND OBJECTIVES

Goal 1. Complete Streets: Provide Complete Streets in the East Arapahoe corridor that offer people a variety of safe and reliable travel choices.

Goal 2. Regional Travel: Increase the number of person trips the East Arapahoe corridor can carry to accommodate growing local and regional transportation needs.

Goal 3. Transportation Demand Management (TDM): Promote a more efficient use of the transportation system and offer people travel options within the East Arapahoe corridor.

Goal 4. Funding: Deliver cost-effective transportation solutions for the East Arapahoe corridor that can be phased over time.

Goal 5. Sustainability Initiatives: Develop transportation improvements in the East Arapahoe corridor that support and integrate with the Boulder Valley Comprehensive Plan and Boulder's Sustainability Framework (desired outcomes include a community that is Safe, Healthy & Socially Thriving, Livable, Accessible & Connected, Environmentally Sustainable, and Economically Vital Community and provides Good Governance).


































EAST ARAPAHOE TRANSPORTATION PLAN | Public Input – November 2015 to May 2018

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PLAN CONTRIBUTION TO TMP OBJECTIVES



Transportation Master Plan (TMP) Objectives	East Arapahoe Transportation Plan Evaluation Areas	Alt 1: No-Build (2040)	Alt 2: Enhanced Bus (2040)	Alt 3: Side-Running BRT (2040)	Alt 4: Center-Running BRT (2040)	EXPLANATION
Reduce VMT by 20% by 2035, and achieve a 16% reduction in GHG emissions	 Community Sustainability					<ul style="list-style-type: none"> No-Build: VMT along Arapahoe increases by 18%. BRT: VMT and GHG emissions increase by less than 5%.
Reduce SOV travel to 20% of all trips for residents and to 60% of work trips for non-residents	 Travel Mode Share					<ul style="list-style-type: none"> No-Build: Auto mode share along Arapahoe is 91% of all trips. BRT: Auto mode share reduced to 82% of all trips.
No more than 20% of roadways congested at Level-of-Service (LOS) F	 Vehicle Operations					<ul style="list-style-type: none"> Side- and Center-Running BRT: Arapahoe & Foothills may be at LOS F in PM peak (No-Build: LOS E). Center-Running BRT: Arapahoe & 55th may be at LOS F in PM Peak (No-Build: LOS D).
Expand fiscally-viable transportation options, increase transportation alternatives	 Transit Operations  Pedestrian and Bicycle Comfort and Access					<ul style="list-style-type: none"> No-Build: Assumes completed sidewalks/multi-use paths, with existing on-street bicycle facilities. Build: enhanced options and increased person-carrying capacity for people walking, biking, and using transit.
"Toward Vision Zero" fatal and serious injury crashes	 Safety					<ul style="list-style-type: none"> No-Build: Assumes completed sidewalks/multi-use paths, with existing on-street bicycle facilities. Build: Dedicated, protected bicycle facilities along Arapahoe and treatments at signalized intersections.
Increase the share of residents living in complete neighborhoods to 80%	 Community Sustainability					<ul style="list-style-type: none"> No-Build: Assumes completed sidewalks/multi-use paths, with existing on-street bicycle facilities. Build: Enhanced options increase access to businesses, services, and other destinations.

Contribution to Meeting TMP Objective





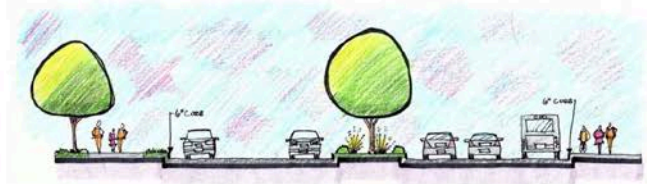
AUTO AND TRANSIT ALTERNATIVES



The following transit and auto options are being considered:

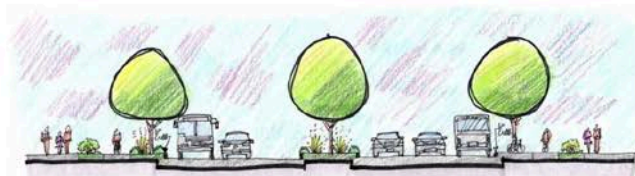
Alternative 1: No-Build

- Maintains existing travel lanes
- Completes Multi-Use Paths
- Existing bus service and facilities



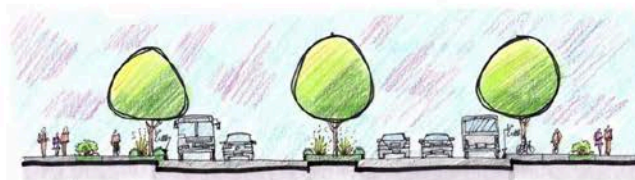
Alternative 2: Enhanced Bus

- Maintains existing travel lanes
- Transit service operates in mixed-traffic with enhancements such as:
 - Enhanced vehicles with all-door boarding
 - Enhanced shelters, benches, and other passenger amenities at stops
 - Off-board fare payment
 - Real-time arrival information



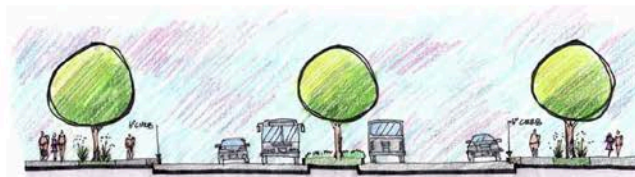
Alternative 3: Side-Running BRT

- Re-purposes the existing travel lane closest to the curb as a business-access and transit (BAT) lane that allows vehicle access for right-turns.



Alternative 4: Center-Running BRT

- Re-purposes the center travel lane in each direction as a dedicated transit-only lane.



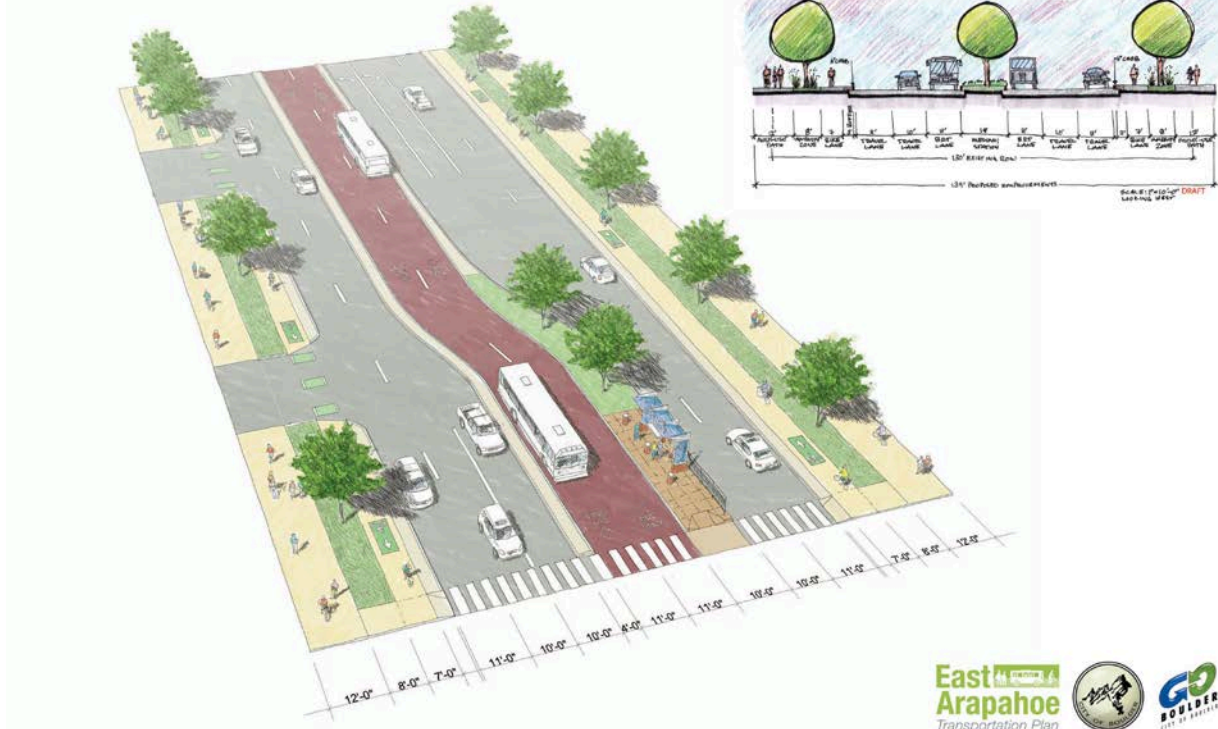
This aerial view illustrates a proposed multi-lane road design. The road features a central median, multiple travel lanes, and dedicated bus lanes. Pedestrian sidewalks are located on both sides of the road, lined with trees and streetlights. A cross-section inset in the top right corner provides a detailed view of the road's vertical profile, showing the relative heights of the road surface, sidewalks, and trees. The inset also includes a scale bar with dimensions in feet (7'-0", 12'-0", 4'-6", 12'-0", 11'-0", 11'-0", 10'-0", 6'-0", 12'-0", 11'-0", 12'-0", 14'-0").

This aerial perspective view illustrates a proposed transit corridor. The corridor features a central transit lane with a dedicated bus stop, flanked by general travel lanes. The design includes a multi-lane sidewalk with trees, landscaping, and a dedicated bicycle lane. A cross-section inset in the top right corner provides a detailed view of the corridor's width and components, including the transit lane, general travel lanes, and various landscaping elements. The inset shows a total width of 150' for the entire corridor, with specific dimensions for each component: 10' for the transit lane, 8' for the general travel lane, 7' for the sidewalk, 11' for the landscaping, 10' for the bicycle lane, 10' for the transit lane, 7' for the sidewalk, 8' for the general travel lane, and 10' for the landscaping. The inset also shows a cross-section of the corridor with a total width of 150' and a cross-section of the corridor with a total width of 150'.

Alternative 3: Side-Running BRT



Alternative 4: Center-Running BRT



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TRANSIT ASSUMPTIONS



SERVICE FREQUENCY AND STATION LOCATIONS

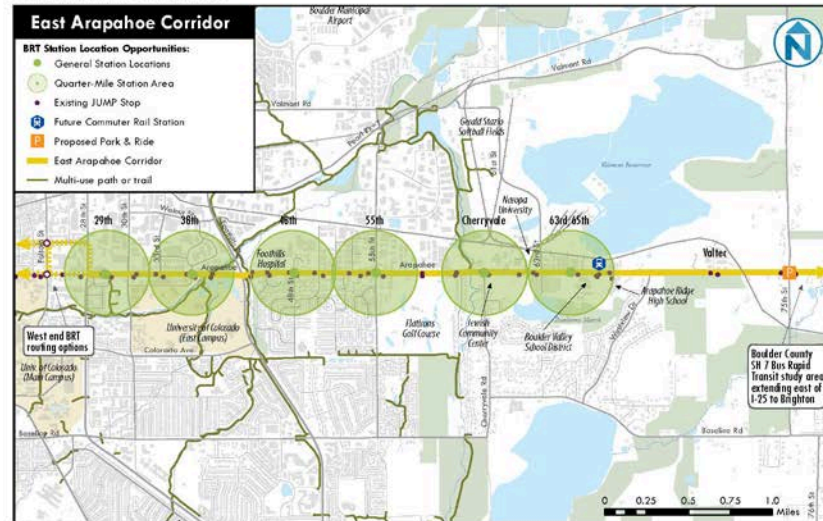
No-Build (Alt 1):

- Transit frequency and service hours are assumed to be similar to today, with minor enhancements.
- Transit stop locations are similar to today.

Enhanced Bus (Alt 2) and BRT (Alts 3 and 4):

- Transit runs every 10 minutes or more often all-day and every 15 minutes at night, with longer hours including on weekends.
- Enhanced Bus and BRT serve stations a half-mile or more apart. The Long JUMP continues to serve all stops, with locations similar to today.

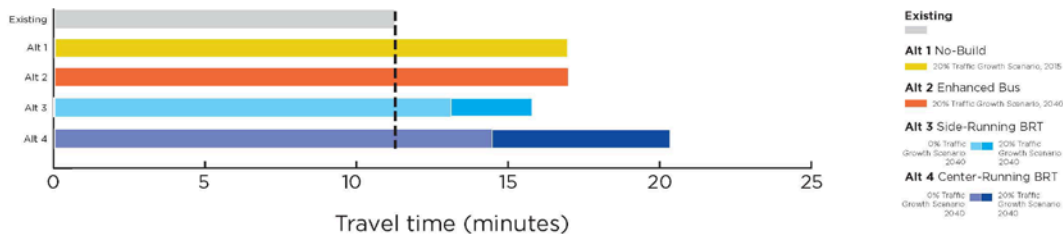
CONCEPTUAL STATION LOCATIONS



AUTO TRAVEL TIME



AUTO TRAVEL TIMES, EASTBOUND PM PEAK, FOLSOM TO 75TH STREETS, 2040



In the No-Build Alternative (Alt 1):

- Auto volumes are projected to increase by up to 20% by 2040 based on regional travel demand model projections. (Historically, traffic volumes in the corridor have remained steady.)
- Auto travel times are forecast to increase in the PM peak hour.
- With Enhanced Bus (Alt 2), auto travel times would be similar to the No-Build alternative.

With implementation of either BRT alternative:

- Daily traffic in the corridor would be reduced by 3,700 vehicles compared to No-Build.
- With a lane repurposed for side-running BRT (Alt 3), auto travel times would be lower than the No-Build alternative.
- With a lane repurposed for center-running BRT (Alt 4), auto travel times could be higher.
- All of the Build alternatives include roadway design features that would provide safety benefits to drivers.

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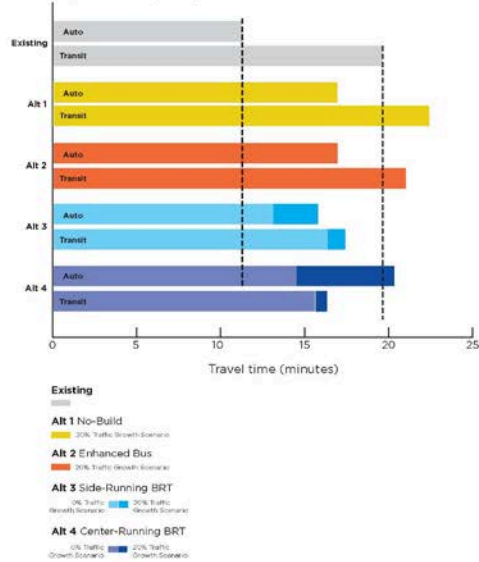
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AUTO AND TRANSIT TRAVEL TIMES

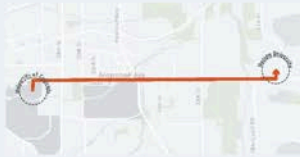


ONE-WAY TRANSIT TRAVEL TIMES COMPARED TO AUTO TRAVEL TIMES, FOLSOM TO 75TH STREETS, 2040, EASTBOUND PM PEAK



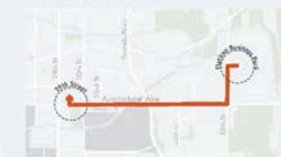
A trip along Arapahoe from the Colorado University campus at Folsom to the Naropa University Campus at 63rd St. during the evening rush hour takes...

- 9 minutes driving or 18 minutes on transit in 2015
- 12 minutes driving or 20 minutes on bus in 2040 in the **No-Build** scenario
- 12 minutes driving or 18 minutes on **Enhanced Bus** in 2040
- 10 - 17 minutes driving or 13 - 14 minutes on **Bus Rapid Transit** in 2040



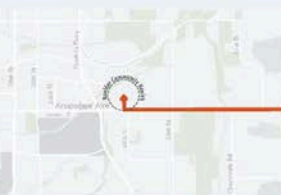
A trip along Arapahoe from the Flatiron Business Park on 55th St. to the Twenty-Ninth Street Retail Area around lunch time takes...

- 6 minutes driving or 18 minutes on transit in 2015
- 6 minutes driving or 20 minutes on bus in 2040 in the **No-Build** scenario
- 6 minutes driving or 17 minutes on **Enhanced Bus** in 2040
- 6 - 8 minutes driving or 16 minutes on **Bus Rapid Transit** in 2040



A trip along Arapahoe from US 287 to Boulder Community Health at 48th St. during the morning rush hour takes...

- 14 minutes driving or 18 minutes on transit in 2015
- 17 minutes driving or 19 minutes on bus in 2040 in the **No-Build** scenario
- 17 minutes driving or 15 minutes on **Enhanced Bus** in 2040
- 17 - 18 minutes driving or 14 minutes on **Bus Rapid Transit** in 2040

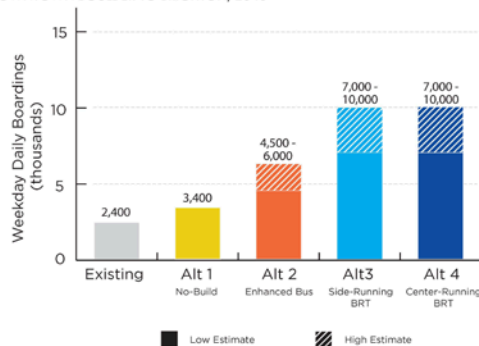


TRANSIT RIDERSHIP AND COST-EFFECTIVENESS



RIDERSHIP

PROJECTED WEEKDAY DAILY BOARDINGS, DOWNTOWN BOULDER TO BRIGHTON, 2040

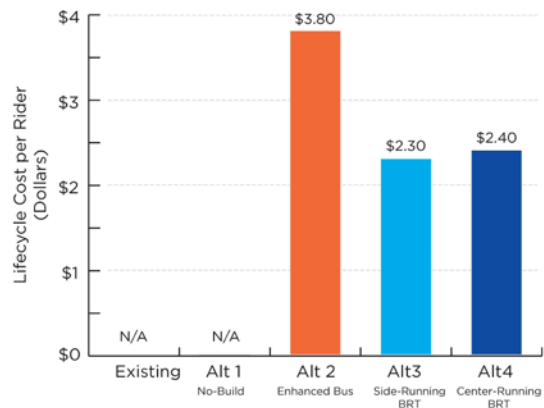


Sources: Sketch-level local ridership model, RTD ridership data for JUMP, January 2015, DRCOG regional travel demand model data, 2013/2035, US Census Longitudinal Household Dynamics (LEHD), 2014. Existing and No-Build service is between Downtown Boulder and Erie/Lafayette. Enhanced bus and BRT service is between Downtown Boulder and Brighton, east of I-25. Enhanced bus and BRT ridership includes local bus.

- 7,000 to 10,000 daily boardings are projected in 2040 for side and center-running BRT.
- Ridership would be lower for Enhanced Bus due to longer, less reliable travel times on service without a dedicated lane and that is less visible/prominent than BRT service.

COST-EFFECTIVENESS

TRANSIT LIFECYCLE COSTS (WITHIN BOULDER) PER TRANSIT RIDER, 2040 (ANNUAL OPERATING & ANNUALIZED CAPITAL COST, 2017 DOLLARS)



- Side-running and center-running BRT are the most cost-effective.
- Enhanced Bus is likely to be the most expensive to operate due to longer travel times that require more vehicles and bus operators.

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BIKE AND PEDESTRIAN OPTIONS



Four pedestrian/bicycle/transition zone options are being considered. These options can be “mixed and matched” with the preferred auto/transit alternative.



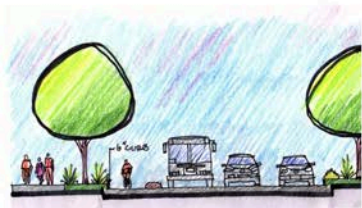
CURBSIDE RAISED PROTECTED BICYCLE LANE

Separated from the sidewalk/multi-use path by an amenity zone.



CURBSIDE AMENITY ZONE WITH RAISED PROTECTED BICYCLE LANE

Separated from both the travel lanes and the sidewalk/multi-use path by an amenity zone.



STREET-LEVEL PROTECTED BICYCLE LANE

Separated from travel lanes by a physical barrier.



STREET-LEVEL BUFFERED BICYCLE LANE

Separated from travel lanes by a striped buffer.



PEDESTRIAN COMFORT AND ACCESS



- The Build options equally increase pedestrian comfort in the corridor.
- The Build options provide a lower degree of pedestrian comfort in the far east end of the corridor due to high vehicular speeds.

PEDESTRIAN LEVEL OF SERVICE, EXISTING



PEDESTRIAN LEVEL OF SERVICE, BUILD ALTERNATIVES (2, 3, AND 4)



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BICYCLE COMFORT AND ACCESS



ON-STREET FACILITIES

ON-STREET BICYCLE LEVEL OF TRAFFIC STRESS, EXISTING



ON-STREET BICYCLE LEVEL OF TRAFFIC STRESS, BUILD ALTERNATIVES (2, 3, AND 4)



- On-street facilities are less comfortable for some users, but have the benefit of avoiding conflicts between bicyclists and pedestrians that may occur on multi-use paths.
- The Build alternatives provide on-street protected bike lanes, except on the far east end of the corridor where buffered bike lanes are proposed.

OFF-STREET FACILITIES

OFF-STREET BICYCLE LEVEL OF TRAFFIC STRESS, EXISTING



OFF-STREET BICYCLE LEVEL OF TRAFFIC STRESS, BUILD ALTERNATIVES (2, 3 AND 4)



- Off-street bicycle facilities (i.e., multi-use paths shared by people walking and biking) are more comfortable for some users.



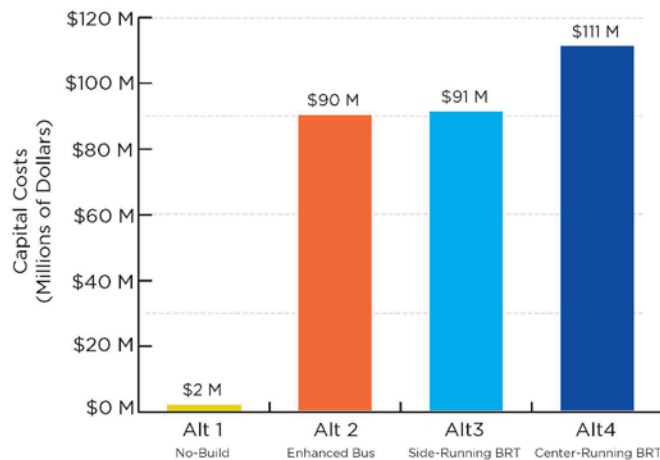
CAPITAL COSTS & IMPLEMENTATION



TOTAL CAPITAL COSTS

- All Build alternatives would require phased implementation.
- Side-running BRT would be easiest to implement in phases.
- Potential funding could include local, regional, state, federal, and private sources.

TOTAL CAPITAL COSTS, FOLSOM - 75TH STREETS, 2017 DOLLARS



* Alt 2, 3, and 4 assume a share of the total vehicle costs to operate Enhanced Bus or BRT service between Downtown Boulder and Brighton (east of I-25), based on the proportion of service hours required to operate between Downtown Boulder and 75th Street.

Capital costs include constructing the transit and bicycle/pedestrian/streetscape alternatives as well as other infrastructure needs identified for the corridor in the Transportation Master Plan and other studies.



TRAVEL MODE SHARE

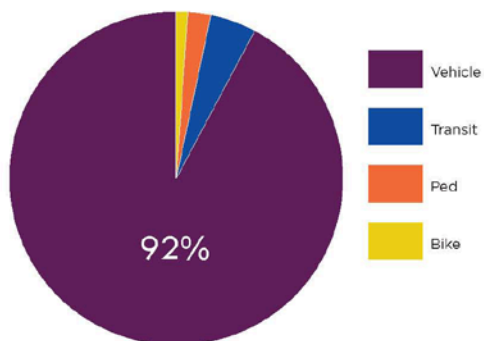


PEOPLE IN VEHICLES, ON TRANSIT, WALKING, AND ON BICYCLES

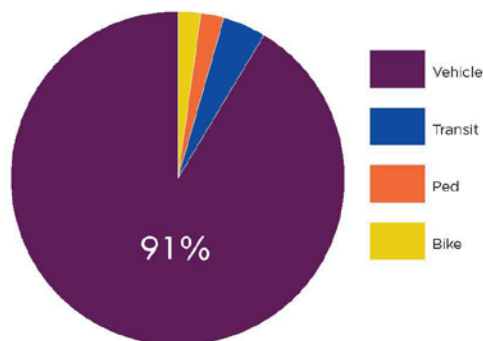
- Each of the Build alternatives would reduce auto mode share and increase transit, pedestrian, and bicycle mode share, moving the city closer to its TMP goal of reducing single occupant vehicle travel to 20% of all trips for residents and to 60% of work trips for non-residents.
- BRT (Alts. 3 & 4) would increase transit mode share the most.
- All of the pedestrian and bicycle Build options would approximately double trips by biking and walking.

MODE SHARE AT ARAPAHOE AVENUE AND 30TH STREET SCREENLINE

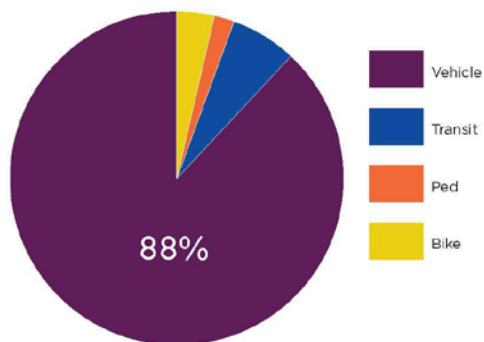
EXISTING MODE SHARE, 2015



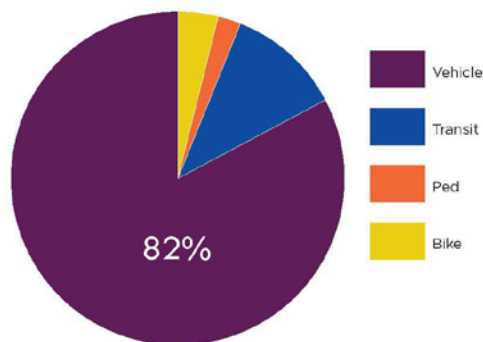
ALTERNATIVE 1 (NO-BUILD) MODE SHARE, 2040



ALTERNATIVE 2 (ENH. BUS) MODE SHARE, 2040



ALTERNATIVE 3 & 4 (BRT) MODE SHARE, 2040*



*Transit mode share is average of low and high-end BRT ridership range

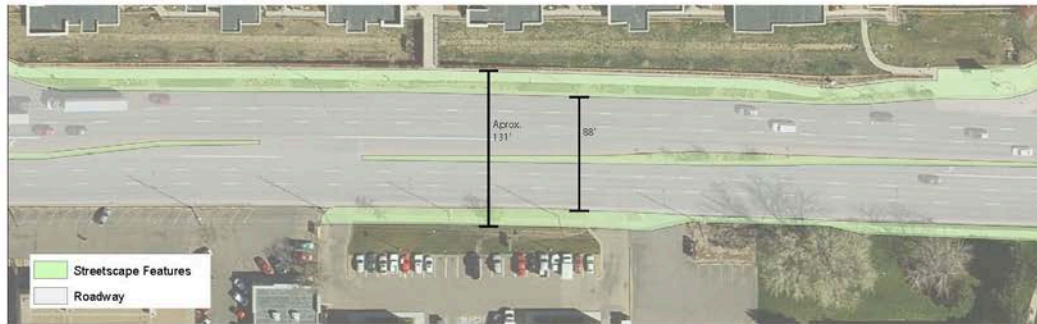


COMMUNITY SUSTAINABILITY

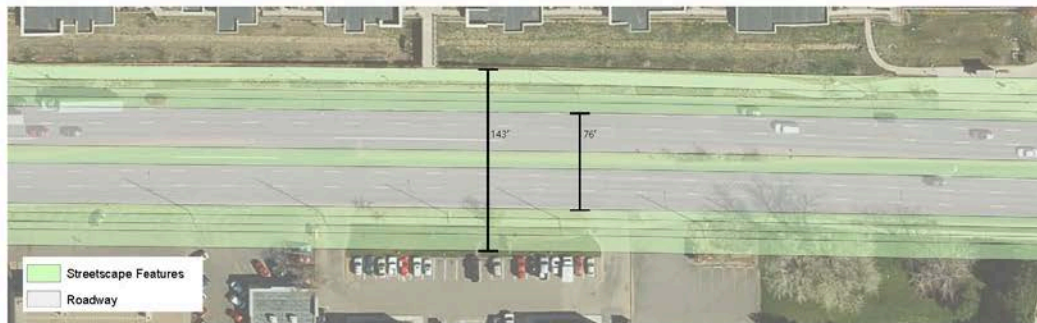
**East
Arapahoe**
Transportation Plan

STREETSCAPE

CHARACTER DISTRICT A EXISTING



CHARACTER DISTRICT A CONCEPTUAL: ALTERNATIVES 2 & 3

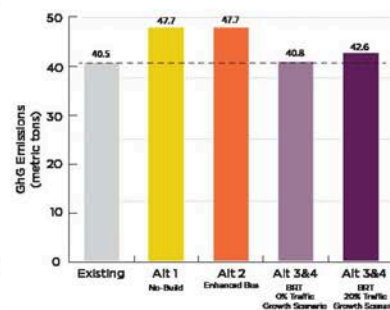


- All of the Build alternatives would designate a larger percentage of street right-of-way to streetscaping features than the No Build alternative.
- The bike/pedestrian option has the most significant effect on the streetscape space. These options can be “mixed and matched” with the various BRT alternatives.
- The curb-to-curb pedestrian crossing distance is shorter than existing conditions in all Build alternatives (except on the far eastern end of the corridor).

GREENHOUSE GAS EMISSIONS

DAILY AUTO GREENHOUSE GAS EMISSIONS, EAST ARAPAHOE CORRIDOR

- There are 2.5 million vehicle miles traveled (VMT) citywide as of 2015. This is 8% higher than 2012 (2.3 million) but 10% lower than the peak level in 2002 (2.8 million).¹
- Based on regional projections for 20% traffic growth by 2040, the No-Build and Enhanced Bus alternatives are likely to increase emissions in the corridor relative to existing conditions.
- The BRT alternatives would reduce emissions to near existing levels if they can help maintain the historic trend of 0% traffic growth.



Question and Answer Session

Question: Why does center-running BRT cost more than side-running BRT?

Response: The major differentiator is the cost associated with constructing independent, median BRT stations located within the center of the roadway.

Question: Can the north and south pedestrian infrastructure be different from each other?

Response: Yes. Once a recommended alternative (concept plan) is selected later this year, more detailed design will be required to determine the exact configuration of pedestrian infrastructure – which may vary between segments of the corridor and between the north and south side of the street.

Question: What is the latest thinking on safety of on-street vs off-street bike facilities?

Response: The jury is still out from a data standpoint. The design of intersections plays a large role in the perceived comfort and safety for bicyclists.

Question: Where does the increase in transit ridership for the BRT alternatives come from? Inside or outside of the city?

Response: The projected increase in transit ridership comes from both within and outside the city, particularly from neighboring communities to the east, some of which are expected to grow exponentially. The Colorado Department of Transportation and the Denver Regional Council of Governments develop the forecasting models used by the project team.

Question: How do you account for such a large increase in transit use with the BRT alternatives?

Response: BRT systems implemented in regions similar to Boulder have shown that this is the kind of result that a community should expect to see from these types of regional transit improvements that provide travel time benefits.

Question: Roundabouts work great elsewhere. Could these be considered for Arapahoe?

Response: Roundabouts tend to give you safety benefits on smaller (i.e. 2-lane) streets. Larger roundabouts are possible, but have an enormous footprint, and do not produce the kind of pedestrian safety improvements that are seen with smaller roundabouts, unless features like below-grade underpasses are included, at a large cost.

Question: Would BRT reduce the number of transit stops?

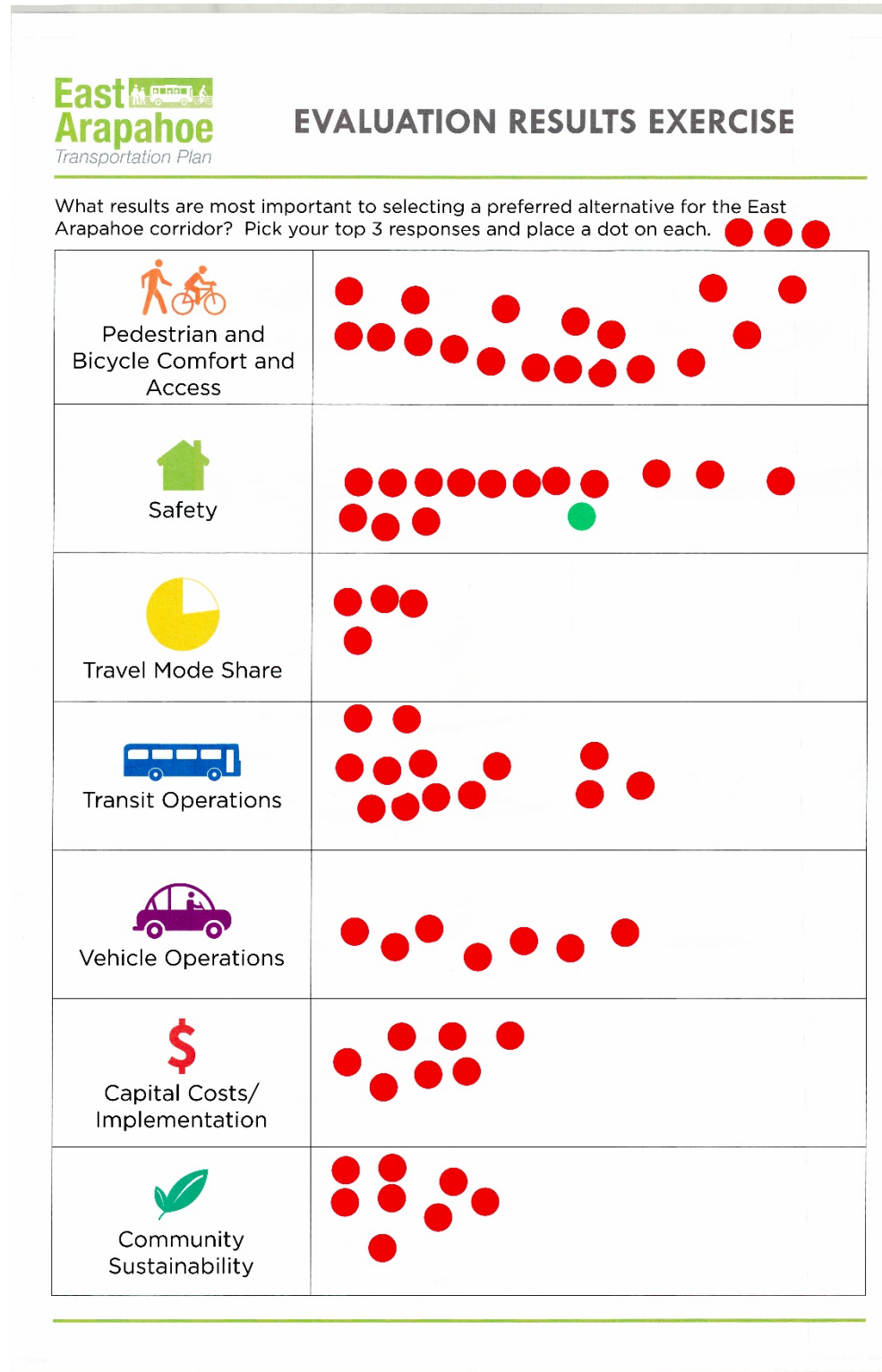
Response: BRT would have a longer station spacing than local bus (JUMP) stops to improve regional transit travel times, but both services would continue to run along Arapahoe to serve destinations in-between BRT stations.

Question: Do ridership projections rely on widening SH7 all the way to I-25?

Response: Ridership projections assume the same high level of BRT improvements all along its route between Boulder and Brighton, but the County has not determined what the ultimate roadway/transitway configuration will look like to US287.

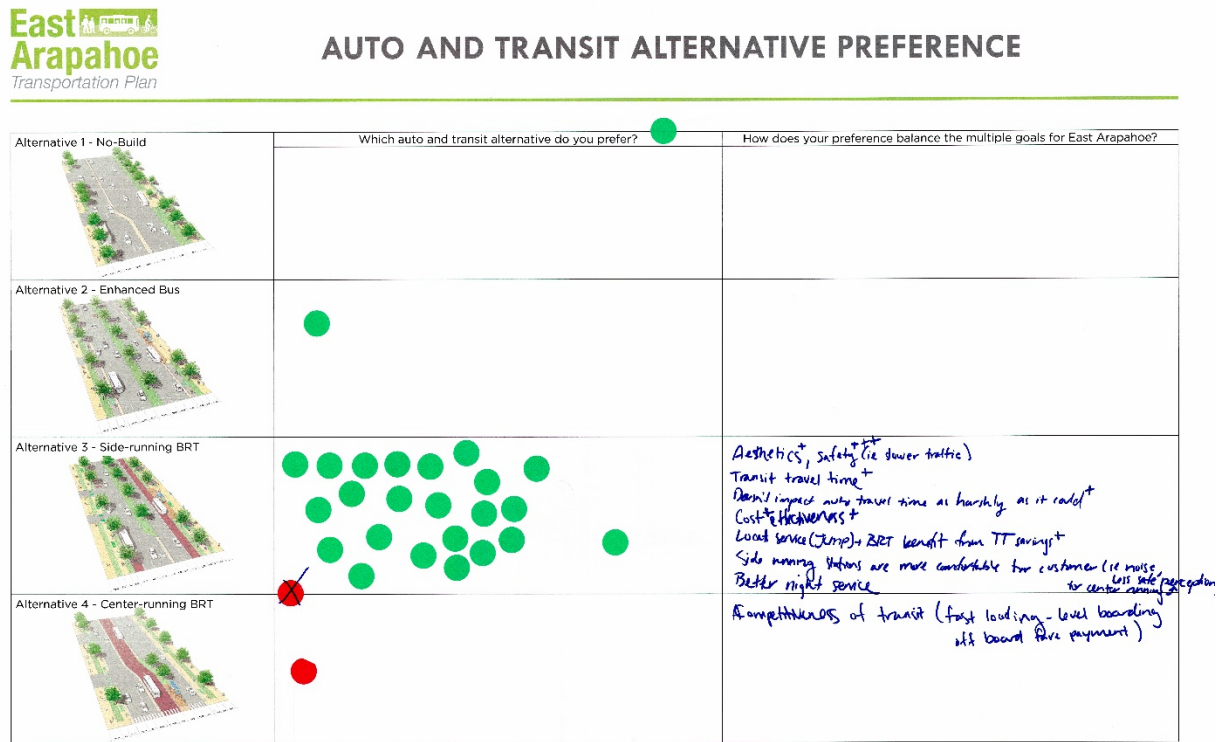
Dot-Polling Exercises

Figure 5: Evaluation Results Dot-Polling



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Figure 6: Auto and Transit Alternative Preference

**Comments:****Alternative 3**

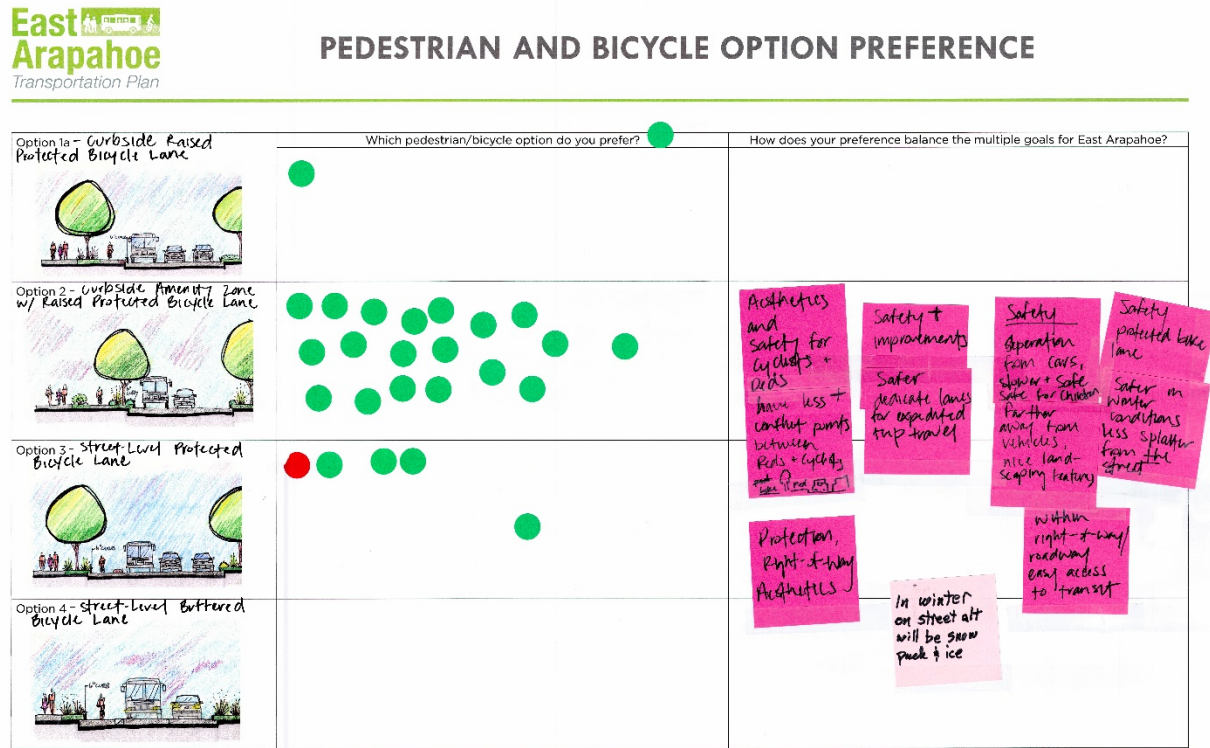
- Aesthetics
- Safety (slower traffic)
- Transit travel time
- Doesn't impact travel time as harshly as it could
- Cost effectiveness
- Local service and BRT benefit from travel time savings
- Side running stations are more comfortable for customer (i.e. noise, less safe perceptions for center-running)
- Better night service

Alternative 4

- Competitiveness of transit (fast loading, level boarding and off board fare payment)

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Figure 7: Pedestrian and Bicycle Option Preference



Comments:

Option 2 – Curbside amenity zone with raised protected bicycle lanes

- Aesthetics and safety for cyclists and pedestrians
- Have less conflict points between pedestrians and cyclists. What about switching pedestrians and cyclists?
- Safety improvements
- Safer dedicated lanes for expedited trip travel
- Safety! Separation from cars, slower and safe for children
- Farther away from vehicles. Nice landscaping features
- Safety – protected bike lane
- Safer in winter conditions – less splatter from the street.

Option 3 – Street-level protected bicycle lane

- Protection, right-of-way, aesthetics
- In winter on-street alternative will be snow packed and ice
- Within right-of-way, roadway easy access to transit.

General comments:

- 48th and Arapahoe protected left-turn lights, safe for all
- Ecopass for seniors would help safety and senior mobility
- Both along and across the corridor for people walking and biking
- Would like to see more intersection treatments for bikes
- Would like to see protected intersections

February 15, 2018 Open House

Open House Overview

The project team hosted a Public Open House from 5:30-7:30 on Thursday, February 15, 2018 at the Unitarian Universalist Church of Boulder. More than 50 members of the public joined city staff on February 15 for an open house, where staff shared the recommended alternative for East Arapahoe, incorporating features that offer a variety of safe and reliable travel choices for people walking, biking, using transit and driving.

Figure 8: February 15, 2018 Open House Presentation Boards

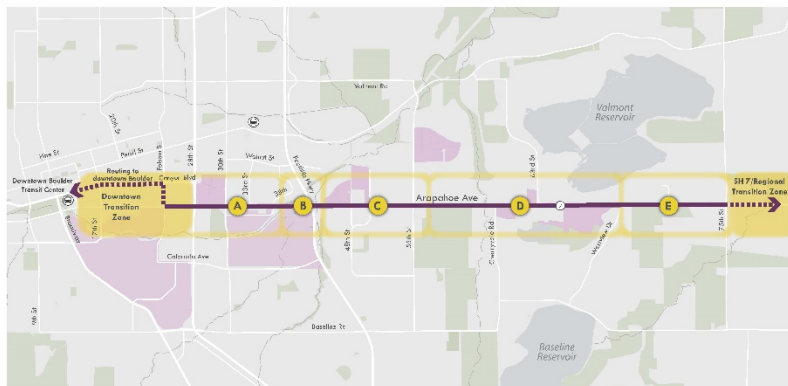
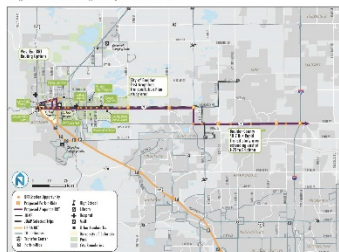


PLAN OVERVIEW

The East Arapahoe Transportation Plan is a long-range plan to provide safe, convenient, and efficient access and travel options for people traveling to and through the East Arapahoe corridor. The corridor is a 4.5-mile segment of Arapahoe Avenue between Folsom Street and 75th Street that provides a critical transportation connection between Boulder and the region and is, in itself, a major employment destination.

Regional partners between Boulder and Brighton have formed the SH 7 Coalition to coordinate and advocate for creating a regional multimodal corridor with high quality-high frequency bus rapid transit (BRT), a regional bikeway, pedestrian improvements and first and final mile supportive infrastructure and strategies. East Arapahoe is a key segment of this corridor.

Regional State Highway 7 Corridor



Elements of the Plan



Access Management & Parking Strategy (AMPS)



Streetscape & Urban Design



Pedestrian & Bike Travel



Automobile Travel



Mobility Hubs



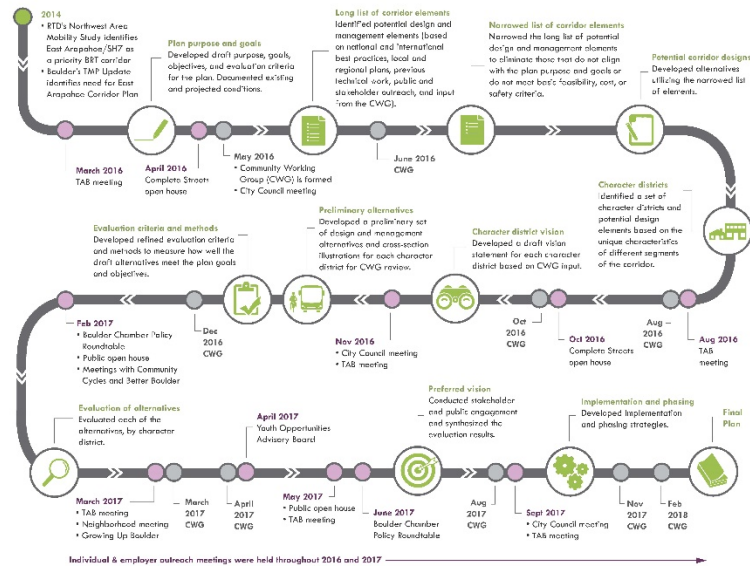
Transit & Regional Connectivity

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PLAN PROCESS

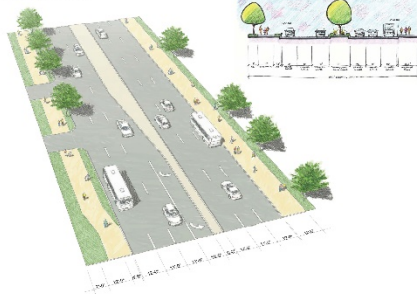


In early 2016, the City assembled a Community Working Group composed of twenty members who represent a diverse set of perspectives to assist with the project. The role of the community working group is to review all components of the project and to provide comments, feedback and input to the city staff and consultants during each phase of the planning process.

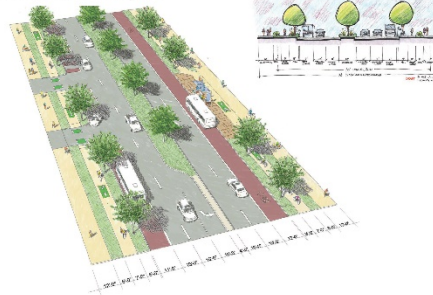


ALTERNATIVES EVALUATED

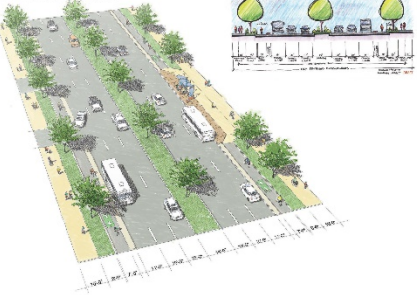
Alternative 1: No-Build



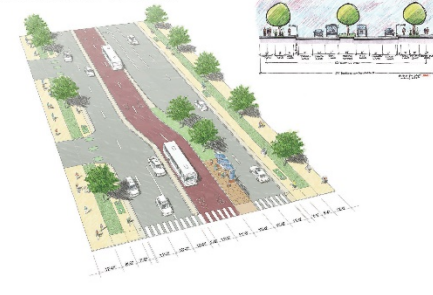
Alternative 3: Side-Running BRT



Alternative 2: Enhanced Bus



Alternative 4: Center-Running BRT



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CONSISTENCY OF ALTERNATIVES WITH TMP OBJECTIVES

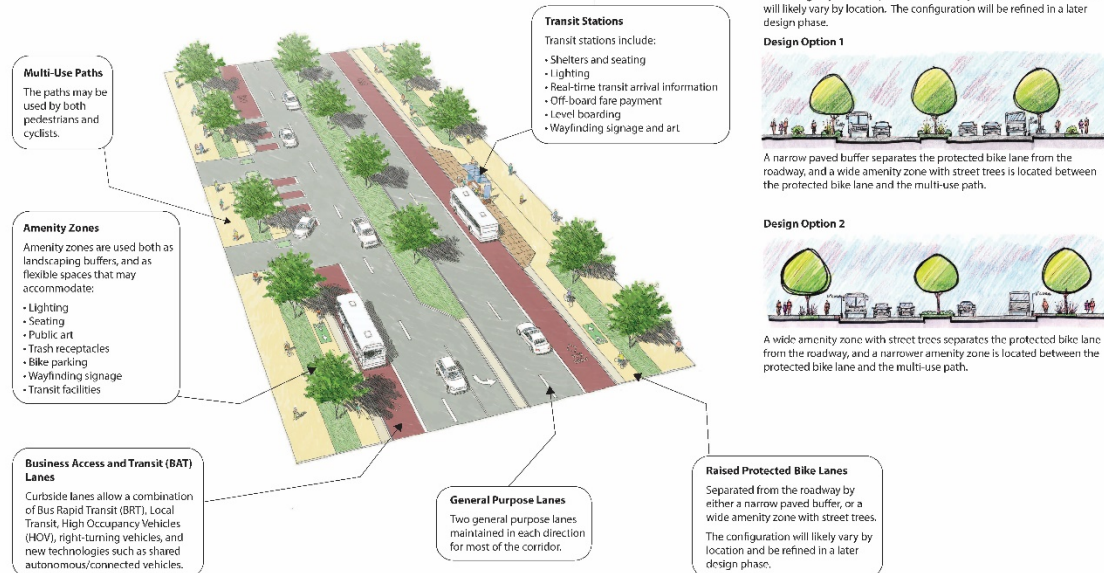
Transportation Master Plan (TMP) Objectives	East Arapahoe Transportation Plan Evaluation Areas	Alt 1: No-Build (2040)	Alt 2: Enhanced Bus (2040)	Alt 3: Side-Running BRT (2040)	Alt 4: Center-Running BRT (2040)	EXPLANATION
Reduce VMT by 20% by 2035, and achieve a 16% reduction in GHG emissions	Community Sustainability					<ul style="list-style-type: none"> No-Build: VMT along Arapahoe increases by 18%. BRT: VMT and GHG emissions increase by less than 5%.
Reduce SOV travel to 20% of all trips for residents and to 60% of work trips for non-residents	Travel Mode Share					<ul style="list-style-type: none"> No-Build: Auto mode share along Arapahoe is 91% of all trips. BRT: Auto mode share reduced to 82% of all trips.
No more than 20% of roadways congested at Level-of-Service (LOS) F	Vehicle Operations					<ul style="list-style-type: none"> Side- and Center-Running BRT: Arapahoe & Foothills may be at LOS F in PM peak (No-Build: LOS E). Center-Running BRT: Arapahoe & 35th may be at LOS F in PM Peak (No-Build: LOS D).
Expand fiscally-viable transportation options, increase transportation alternatives	Transit Operations Pedestrian and Bicycle Comfort and Access					<ul style="list-style-type: none"> No-Build: Assumes completed sidewalks/multi-use paths, with existing on-street bicycle facilities. Build: enhanced options and increased person-carrying capacity for people walking, biking, and using transit.
"Vision Zero" fatal and serious injury crashes	Safety					<ul style="list-style-type: none"> No-Build: Assumes completed sidewalks/multi-use paths, with existing on-street bicycle facilities. Build: Dedicated, protected bicycle facilities along Arapahoe and treatments at signalized intersections.
Increase the share of residents living in complete neighborhoods to 80%	Community Sustainability					<ul style="list-style-type: none"> No-Build: Assumes completed sidewalks/multi-use paths, with existing on-street bicycle facilities. Build: Enhanced options increase access to businesses, services, and other destinations.

Contribution to Meeting TMP Objective: Least → Greatest



RECOMMENDED ALTERNATIVE: A VISION FOR 2040

Alternative 3 (typical)



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CHARACTER DISTRICT VISION

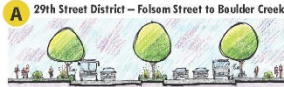
Downtown Transition Zone

- BRT route connects Downtown Boulder Transit Center to Arapahoe using Canyon and Folsom
- City of Boulder is conducting separate corridor studies along Canyon, 30th, and Colorado



SH 7/Regional Transition Zone

- East of 75th Street, high-quality/high-frequency regional BRT service extends east along SH 7 to I-25/Brighton.
- Bicycle and pedestrian facilities along Arapahoe connect to a regional bikeway along SH 7.



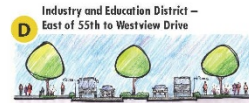
- **Pedestrian-oriented urban boulevard** serving a regional center and the expanding CU East Campus.
- **Sidewalks can be expanded** to provide flexible space for café seating and other uses.
- **Transit stations** are designed to provide convenient connections to regional BRT and local transit service along 28th and 30th Streets.

B Boulder Creek Transition Zone

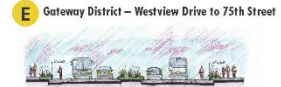
- **Transition zone between Districts A and C.** A separate study will need to resolve the configuration of the Foothills Parkway intersection to accommodate the East Arapahoe plan.



- **Pedestrian and bike accessible and permeable**, supporting a diverse mix of uses and services. These include Boulder Community Health, Ball Aerospace, a variety of small businesses, and residential neighborhoods to the south.
- At 55th and Arapahoe, **local transit and shared-use mobility options** connect the corridor to Flatiron Business Park and a planned mix of uses.
- The **55th & Arapahoe Area Plan** will develop a more detailed integrated land use and transportation vision for this area, including a planned mobility hub.



- **Transitions to open space and a less urban character.**
- **Complete facilities for all users**
- **Supports adaptive industrial uses** including the arts, and enhanced cultural and educational institutions.
- Where existing traffic lanes transition from three to two lanes per direction east of 55th Street, the next phase of concept design will need to evaluate where the future transition from two to one general purpose traffic lane per direction should occur.

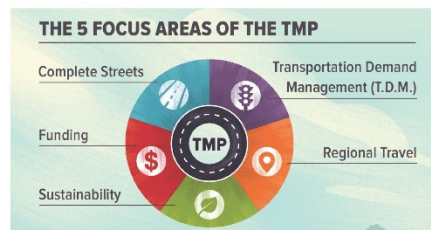


- **Maintains rural character.**
- **Gateway to Boulder**
- **Highlights the corridor's view features.**
- **Retains much of the current configuration but extends the existing BAT lanes and enhances pedestrian and bicycle facilities.**
- **The existing multi-use path on the north side connects to a planned regional bikeway along SH 7.**
- **On-street bicycle facilities may be buffer- or barrier- protected.**



PLAN GOALS

Transportation improvements will support the goals and objectives of the Boulder Valley Comprehensive Plan, the Transportation Master Plan (TMP), and the city's Sustainability Framework and Climate Commitment.



Goal 1. Complete Streets: Provide Complete Streets in the East Arapahoe corridor that offer people a variety of safe and reliable travel choices.

Goal 2. Local and Regional Travel: Increase the number of person trips the East Arapahoe corridor can carry to accommodate growing local transportation needs and projected growth in surrounding communities.

Goal 3. Transportation Demand Management (TDM): Promote a more efficient use of the transportation system and offer people travel options within the East Arapahoe corridor.

Goal 4. Funding: Deliver cost-effective transportation solutions for the East Arapahoe corridor that can be phased over time.

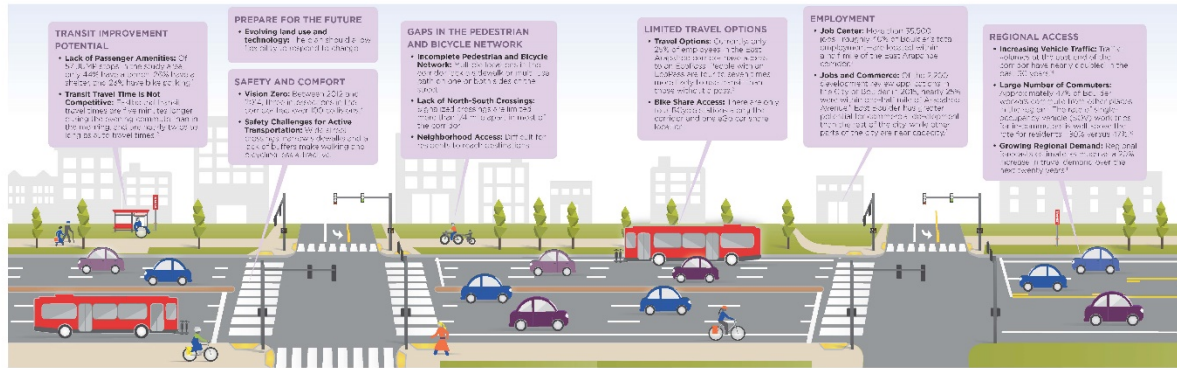
Goal 5. Sustainability: Develop transportation improvements in the East Arapahoe corridor that support Boulder's Sustainability Framework.

EAST ARAPAHOE TRANSPORTATION PLAN | Public Input – November 2015 to May 2018

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THE NEED FOR A PLAN



BENEFITS OF THE RECOMMENDED ALTERNATIVE

BY 2040 . . .

All comparisons are between 2040 Vision Implementation and the 2040 No Build Alternative, which assumes minimal improvements are made in the corridor.

There will be **14% fewer vehicle miles traveled** in the corridor than if no improvements were made.



Person carrying capacity of the corridor increases, by doubling the number of buses during commute hours and providing more dedicated space for people walking and biking, while maintaining current capacity for people driving.

A trip along Arapahoe from US 287 to Boulder Community Health at 48th and Arapahoe during the morning rush hour takes:
19 minutes on BRT service - 8 minutes less than with no improvements
17 minutes driving - the same as with no improvements



Bus rapid transit service will extend from downtown Boulder to 48th and Arapahoe, and operate at **least every 15 minutes between 6 am and 10 pm**, and up to every 5 to 7 minutes during peak commute times.



The safety and comfort of people of all ages and abilities biking and walking in the corridor will be improved by a raised protected bike lane and multi-use path, helping the city move towards its Vision Zero goal of eliminating fatal and serious injury collisions.



Driveway consolidation and improved on- and off-street parking improvements will help **reduce collisions** for drivers.



East Arapahoe will see:

Trips made on foot increase to **2% of total trips**, contributing to the citywide target of 25% for residents.

Bicycle trips increase to **4% of total trips**, contributing to the citywide target of 50% for residents and 25% for non-residents.

Transit trips increase to **11% of total trips**, meeting the citywide target of 0% for residents and 10% for non-residents.

Based on estimates on Arapahoe Avenue at 30th and 55th Streets.

Transportation and urban design improvements will **enhance livability** and attract community-oriented businesses to the corridor.



More people walking, bicycling, and taking electric buses will **prevent an increase in Greenhouse Gas (GHG) emissions**.



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DRAFT IMPLEMENTATION STRATEGIES

Planning and Design

INTERSECTION DESIGN



REGIONAL SH 7 BUS RAPID TRANSIT/MULTIMODAL STUDY



Area	Element	Action	Time Frame
Corridor Design	Local Corridor Design	<ul style="list-style-type: none"> Advance corridor design and refine cost estimates. With 10-15% corridor design concept. Design intersection configurations and traffic signal practices to enhance safety. Develop Right-of-Way Plan. Integrate right-of-way needs into development review process. Develop Access Management and Connection Plan to consolidate drive-ways and improve access points. Conduct a study to resolve the configuration of the Foothills Parkway intersection to accommodate the plan vision. 	Short-term
	Regional Corridor Design	<ul style="list-style-type: none"> As part of SH 7 Coalition between Boulder and Brighton: Participate in a regional Environmental Assessment to advance design and environmental clearance for a regional multimodal corridor (BRT, regional bikeway, pedestrian improvements, first/first mile strategies, etc.). Pursue local, regional, state, and federal funding for multimodal improvements. 	Ongoing
Integrated Land Use Planning	Mobility Hubs/Corridor-wide	<ul style="list-style-type: none"> Refine station area design concepts in coordination with broader land use planning. 	Ongoing
	Mobility Hubs/55th & Arapahoe Area Plan	<ul style="list-style-type: none"> Prioritize and coordinate mobility hub planning with the 55th and Arapahoe Area Plan, expected to be initiated in 2019. 	Short-term
	Streetscape	<ul style="list-style-type: none"> Develop a streetscape plan for the corridor, including arts and aesthetics; a gateway element for the east end; signage to improve wayfinding and safety; and pedestrian-scale lighting. 	Short-term
Policy Guidance	Transportation Master Plan	<ul style="list-style-type: none"> Incorporate the East Arapahoe Transportation Plan into the 2018/19 TMP update and the TMP Capital Improvement Program. 	Short-term
Plan Monitoring	Metrics/Monitoring	<ul style="list-style-type: none"> Establish and implement multimodal metrics and monitoring program to regularly measure progress toward plan goals. 	Ongoing

SHORT-TERM = 2018-2022
MID-TERM = 2020-2027
LONG-TERM = 2028-2040

STREETSCAPE

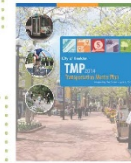


MOBILITY HUBS

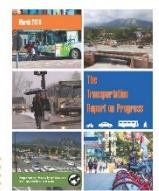


Source: David Goltz

TRANSPORTATION MASTER PLAN



TRANSPORTATION REPORT ON PROGRESS



DRAFT IMPLEMENTATION STRATEGIES

Pedestrian and Bicycle

PEDESTRIAN / BICYCLE CROSSINGS



Area	Element	Action	Time Frame
Pedestrian	Crosswalks	<ul style="list-style-type: none"> Develop pedestrian crossings where needed, consistent with City of Boulder guidelines. 	Ongoing
	Americans with Disabilities Act (ADA)	<ul style="list-style-type: none"> Upgrade existing intersections to be ADA compliant. 	Ongoing
Pedestrian/Bicycle	Multi-Use Path	<ul style="list-style-type: none"> Reconstruct multi-use paths and amenity zones, as needed, to plan specifications. 	Ongoing
	Multi-Use Path	<ul style="list-style-type: none"> Complete missing multi-use path links with a goal to create separate space between pedestrians and cyclists. 	Short-term and ongoing
Bicycle	Ped/Bike Underpass	<ul style="list-style-type: none"> Coordinate with S. Boulder Creek Flood Mitigation Project to implement new underpass (approx. 200 feet east of 55th St). 	Mid- to Long-term
	Interim buffered bike lanes	<ul style="list-style-type: none"> Investigate options to enhance existing bike lanes using striped buffers as an interim condition where feasible, e.g., east of 55th St. 	Short-term
	Protected bicycle lane	<ul style="list-style-type: none"> Implement protected bicycle lanes per the plan vision. 	Mid- to Long-term

SHORT-TERM = 2018-2022
MID-TERM = 2020-2027
LONG-TERM = 2028-2040

GAPS IN SIDEWALK / MULTI-USE PATH



MULTI-USE PATH WITH AMENITY ZONES DIAGONAL HIGHWAY



PEDESTRIAN / BICYCLE UNDERPASS



PROTECTED BIKE LANES



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DRAFT IMPLEMENTATION STRATEGIES

First and Final Mile and TDM

BCYCLE BIKE SHARE



AUTONOMOUS MICROTRANSIT

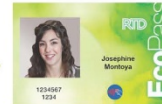


Source: Laura A. Odo

Area	Element	Action	Time Frame
First and Final Mile	First and Final Mile/Bicycle	• Explore and expand bike share partnerships to activity centers and employment concentrations in coordination with mobility hub planning	Ongoing
	First and Final Mile/Pedestrian & Bicycle	• Identify gaps in the connecting ped/bike network within 1-mile of station areas and improve multi-use path connections	Short-term
	First and Final Mile/Transit	• Explore transit partnerships to activity centers and employment concentrations along the corridor, e.g., microtransit/shuttles, mobility on demand, mobility as a service, fixed-route transit	Ongoing
	First and Final Mile/Transit	• Coordinate East Arapahoe transit service with Boulder's Renewed Vision for Transit fixed route network, including regional BRT network connections	Ongoing
	First and Final Mile/Satellite Parking	• Explore park-and-ride locations in conjunction with other regional transit corridors	Short- to Mid-term
TDM	Employer TDM Programs	• Work with area employers to encourage use of parking management and transportation options, e.g., ridesharing, transit, vanpooling, and other TDM programs like parking cash out, EcoPasses, alternative work schedules, etc.	Ongoing
	Neighborhood TDM Programs	• Promote transit service and other travel options along the corridor to area residents, including expansion of Neighborhood EcoPass program. Work with multi-family residential properties to manage and unbundle parking. Provide safe and convenient pedestrian and bicycle access to transit.	Ongoing
	District TDM Programs	• Work with area property owners to explore the potential for new access (parking/TDM) districts per AMPS action items.	Ongoing

SHORT-TERM = 2018-2022
MID-TERM = 2020-2027
LONG-TERM = 2028-2040

ECOPASS



BOULDER HOP COMMUNITY TRANSIT NETWORK ROUTE



PARK-AND-RIDE



SECURE BICYCLE PARKING



DRAFT IMPLEMENTATION STRATEGIES

Transit and Vehicular

EXISTING LOCAL TRANSIT: JUMP



BRT STATION



Area	Element	Action	Time Frame
Transit	BRT	• Implement regional BRT service in cooperation with SH 7 Coalition partners, including phased service options	Mid- to Long-term
	Local Transit	• Enhance existing transit service in the corridor through transit priority, frequency and quality improvements	Ongoing
	West End Routing & Stations	• Refine west end terminus, alignment, and stations, coordinated with other street and transit projects connecting 28th Street to Downtown Boulder	Short-term
	Stations & Stop Improvements	• Implement stop improvements and refine BRT station design concepts to maximize passenger and pedestrian access, comfort and safety	Ongoing
Transit/Vehicular	BAT Lanes	• Implement transit priority measures for local and regional transit, including BAT lanes for priority direction and time of day in key segments, HOV 2 or 3+, emergency vehicles and evolving technologies	Mid- to Long-term
	Communication Technology	• Evaluate need for advanced communication technology to support advanced mobility (bus priority, autonomous vehicles, etc.)	Ongoing
Vehicular	Lane Striping	• Where feasible, realign lanes consistent with plan vision, coordinated with potential future roadway regrading	Ongoing
	Signal Timing	• Incorporate findings of future city-wide signal timing and progression analysis, as appropriate	Ongoing
	Speed Limit Evaluation	• Evaluate posted speeds with CDOT, coordinated with corridor improvements, safety considerations, and community vision for the corridor	Short- to Mid-term
	Lane Configuration	• East of 55th Street, where existing traffic lanes transition from three to two lanes per direction, evaluate where the future transition from two traffic lanes to one traffic lane per direction should occur	Short-term

SHORT-TERM = 2018-2022
MID-TERM = 2020-2027
LONG-TERM = 2028-2040

SPEED LIMIT EVALUATION



BAT LANES: 28TH STREET



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Feedback from the community was also collected and is shared below.

- Love the idea! Would make my commute to and from work faster, and encourage me to visit businesses (shout out to Wild Woods Brewery and the Boulder Humane Society Thrift Shop!) in East Boulder more often, and would make the area feel less.... “trafficky,” Good luck!
- With Alternative 3 it looks like there are 2 options for buffer zones between bikes and cars, and pedestrian and bike. I favor the wider buffer between bike and cars and narrower between bike and ped. Distracted drivers veering seems more of an issue than distracted bikers but tickets can certainly be issued to bicyclists who act stupid. Thank you
- Making Arapahoe narrower makes no sense. You will only push more traffic down 55th. The only way this will work is to put a large!! Parking lot outside the area and offer free, frequent bus service in. With Boulder getting too expensive, you are going to have even more traffic. It is almost like the city is getting paid to force more traffic onto 36 so they increase their revenues and I bike and take bus to work. This place is making biking less safe.
- It is impossible to exit Park Lake subdivision (between 75th and 95th) onto Arapahoe at 7-9 and 3:30pm – If we want to go to Boulder we can turn right, but to turn left is impossible – we turn right, to to 75th, then left, go to Baseline, turn Left, and can finally get to 95th which is only 2 miles from Park Lake – we remember a meeting at Douglas Elementary several years ago when 4 lanes was an option – Bus lanes are useless!
- I don’t understand how you plan to reduce car traffic on Arapahoe.
- I do not support Alternative 3. In my opinion, it only worse if people leave their car for a bus. The width of the needed right of way will ruin businesses from Folsom to 55th.
- 2040 seems absurdly far out. Still trying to understand why we went through 2 years of construction on the 65th-75th street for no appreciable enhancements. How about just fixing Arapahoe and 55th intersection in my life time? BTW one of the most dangerous intersections for children is right in front of this church. Brooklawn and Pennsylvania is a death trap for kids walking to and from school!
- Why does Boulder want to force us to take RTD and ride our bikes for lack of decent road? People want to drive for a lot of reasons! This is a 4 season region – not Southern California – how many of you rode your bicycles to this meeting? Doesn’t Boulder care about the hard working professionals that make up the bulk of the businesses along this corridor? You are trying to cater to others and not those who are professionals and happen to be very smart and wise individuals in this community. Why are you spending all this money on a 20-40 year plan when right now our creeks and rivers need the funding to clear the debris from the 2013 flood? This is a right now current issue that needs funding!! We have culverts that are blocked from the 2013 flood that haven’t been cleared! Why aren’t we dealing with the here and now necessary issues?? Let’s repair our city from whats already happened first!!! Please!!
- 1) Why are coercing citizens to ride the bus and ride bikes? 2) Are the goals really saving 6 minutes on BRT and 17 minutes driving which is the same as with no improvements – does the price warrant 6 minutes of saved travel time? The city needs to repair our town before moving forward.
- Need (desperately and urgently) for Park-n-Ride on Foothills and Arapahoe with free or low fee parking (or near Foothills on East Arapahoe). Too crowded on Table Mesa (S. Boulder Road) and/or Pearl Street (too far).
- Westview Road safety issue accessing Arapahoe at peak traffic hours. Signalization or some other solution would help.
- Run the buses on Arapahoe more frequently! I like the idea of #3, a middle lane that changes depending on traffic.
- FIND A BETTER PLAN. The only way this will succeed is with a large parking lot (“PL”) at 95th, another PL at 75th, one at 63rd, and one at 55th, with exceptional bus service. We don’t have exceptional bus service. We have marginal bus service. Do not reduce lanes on Arapahoe have you ever been stuck on 28th st, trying to get to Arapaho east bound in a snowstorm? This is a terrible plan. This plan will snarl traffic and with the hospital now on Arapahoe, traffic has increased – it will only get worse. DO NOT DO THIS PLEASE. This is arrogance – you think you know best.

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- 1) Why was this scheduled on the same night that the RTD is having a “community input” at the Louisville Library (which has been scheduled for at least 6 weeks). 2) Why do you think the RTD is going to put more buses on when their ridership at this point is pathetically low. 3) Do you honestly feel that Arapahoe between 63rd and 75th has been improved by what was done to that section of the road. 4) Do you have any data regarding ridership on the mostly empty buses that I see daily.
- Ensure protected bike lanes from hospital exit/entrance as well as businesses. Currently one lane going both directions. Would love to see improved bus scheduling to encourage ridership.
- Are you really proposing reducing automobile lanes? Bad idea. More people, more business, and more automobiles. Use common sense.
- Your guy who told me I don’t believe in climate change made me furious. I put solar on my home 7 years ago because of climate change. He was arrogant.
- 2 dedicated bus (rapid transit or otherwise) lanes without increasing the number of car lanes is a total waste of resources. It is wishful thinking that people who work anywhere but Downtown Boulder will not drive to work.
- The plan goes out to 2040, but something needs to be done now to alleviate the traffic current congestion. Granted there is not a lot of traffic on Arapahoe during the day now, but the morning and evening commutes are bumper to bumper into and out of Boulder (remember, most of the area growth is in Erie and Lafayette). The buses don’t run very often and there is the problem of people getting to work after they exit the bus. 2 auto lanes in each direction is a must.
- Make bike lanes GREEN – use green concrete. Do this throughout the city. Protected and continuous bike lanes and sidewalks. At driveways, make cars cross the bike lane. 8mph for cars when crossing over the bike/ped crossing.
- Don’t think it’s practical to proceed with the lane changes and restrictions before we get assurance that BRT or even improved bus service and usage will happen. Not convinced that the city can do the human engineering to get people to leave their cars for buses to make this all work. Good idea in theory but seems like between now and 2040 driving East Arapahoe will be a disaster. Especially with the push to bring in dense development.
- We are concerned about being able to get out of Westview Drive onto Arapahoe during rush hours.
- Trees trees trees trees trees!
- I like this plan, think it’s going in the right direction. It needs to be combined with zoning and land-use changes to complete the traffic transformation.
- I strongly feel the multiuse path should have marking indicating a ped-only place to be (no bikes). I am concerned for vulnerable people especially with bikes co-existing on the path. Thank you.
- No BRT lane 28th to 63rd – would cause too much congestion. If trying to increase bus ridership need more frequency. 75th to 287 – really need 4 lane (2w, 2e) but could use left hand turn lane and wider right shoulders.
- Have you done survey of people on east side of city to see who/how many would get on a bus – I have to walk about a mile to Arapahoe or over ½ mile to Baseline – not really convenient.
- What is RTD’s projections of ridership on this corridor – east of 75th pretty rural.
- Need better intersections at Arapahoe and 287 – west side terrible congestion – longer left and right hand turn lanes. Know there is private property on that NW corner.
- What impact does school choice have on traffic patterns in this corridor.

3. SUMMARY OF ONLINE QUESTIONNAIRE RESULTS

In winter, 2016, the community was invited to participate in an online questionnaire. The survey asked a range of questions to assess the primary concerns of those who use Arapahoe Avenue, to gauge reaction to a variety of potential transportation improvement alternatives and to understand what is most important to travelers. There were 126 responses, most of which were complete. The following is a summary of responses to each question.

Question 1. As we plan for the future, what would make it easier for you to travel within the East Arapahoe corridor?

This was an open ended question, and the responses varied widely. What follows is a snapshot of the most common themes in these responses. As shown in Figure 1, the need for more general purpose lanes received the most responses, followed by improved bicycle infrastructure, a better pedestrian environment, bus frequency, safety, completing the multi-use paths, and adding more bus destinations.

Note that these responses were cross tabulated with Question 4 in the questionnaire that asks respondents where they live. This gives some indication of what improvements are most important to residents, and what are most important to daily in-commuters. The results of this cross-tabulation show that those respondents who would like more general purpose lanes are evenly distributed between people who live within Boulder and those who in-commute. However, respondents who live in the City of Boulder were most likely to ask for bicycle, pedestrian, and transit improvements.

Figure 9: Online Questionnaire Results

Question 1 results: “As we plan for the future, what would make it easier for you to travel within the East Arapahoe corridor?”



40 responses mentioned another 14 more potential improvements, including:

- Changes to traffic signals
- Make no changes
- Aesthetics
- Land-use matters
- Bus system amenities
- Park-n-Rides
- Auto congestion
- Streetcar or light rail
- Side-running BRT
- Roadway connections
- Center-running BRT
- Wider lanes
- Street drainage
- Express lanes

Questions 2 & 3. What are the strengths and weaknesses of the preliminary corridor alternatives?

Based on the vision for East Arapahoe articulated by community members, staff developed a range of potential design alternatives that incorporate complete street elements, in various combinations. These alternatives are intended to illustrate a range of potential complete street design options for East Arapahoe, from a No Change Alternative whereby no transportation improvements are made, to Alternative A, which represents the most minimal investment in complete street features (like completing gaps in the multiuse path and adding more transit vehicles and enhancing stops, but not changing the current roadway design) to Alternative D which represents the largest investment in complete street features (like maintaining current general purpose lanes and widening the street to add exclusive BRT lanes and on-street bicycle facilities and pedestrian treatments).

Respondents were asked to provide feedback on the following Conceptual Design Alternatives:

No Change: Side-running bus with three general purpose lanes in each direction and existing pedestrian and bicycle facilities and landscaping



Alternative A: Enhanced bus in mixed-traffic with three general-purpose lanes and a completed multi-use path for pedestrians and bicycles

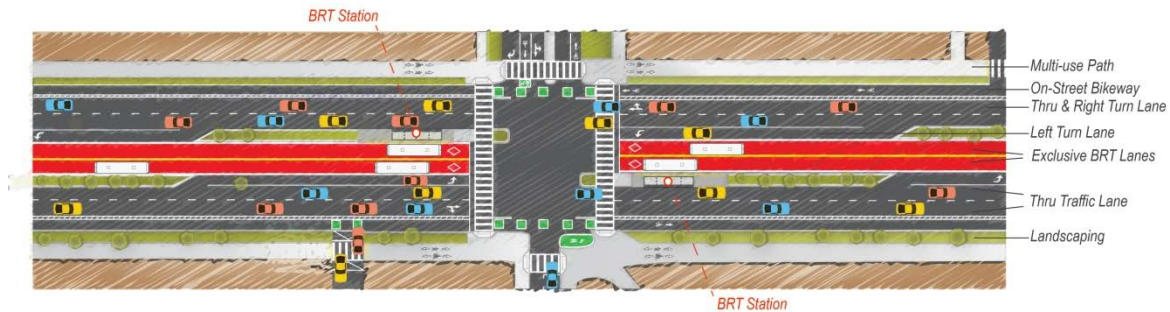


Alternative B: Side-running BRT in a semi-exclusive business-and-transit (BAT) lane (allows right turns) with two general purpose lanes, an on-street bikeway, and a completed multi-use path

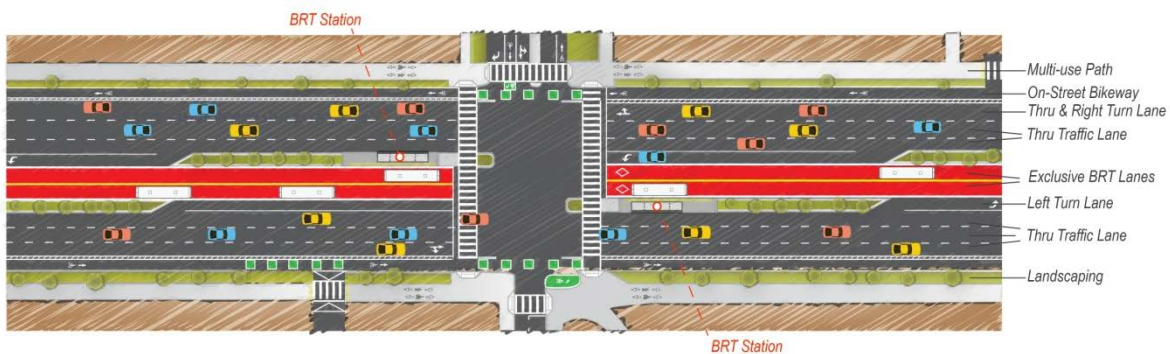


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Alternative C: Center-running BRT in an exclusive transit lane with two general purpose lanes, an on-street bikeway, and a completed multi-use path



Alternative D: Center-running BRT in an exclusive transit lane with three general purpose lanes, an on-street bikeway, and a completed multi-use path



The two open ended questions related to the strengths and weaknesses of each alternative allowed respondents to answer differently. Some respondents gave pros and cons for all alternatives, while others specifically cited a specific alternative as being either positive or negative. In tandem, the two questions related to strengths and weaknesses tell a similar story about respondent's general thoughts on the alternatives, as summarized here:

- **Alternative A:** Cited as a positive most often by those who prefer the lowest-impact option. When Alternative A was mentioned for its weaknesses, it has mostly to do with the minimal investment in transit and on-street bike facilities.
- **Alternatives B and C:** Those respondents generally in support of changes gravitate to either Alternative B or C, with various justifications given for side vs. center-running BRT. Alternatives B and C were cited as being weak primarily by respondents who do not want to see any automobile lanes repurposed for other uses.
- **Alternative D:** Most respondents who mentioned Alternative D expressed skepticism about the alternative because it is perceived as too wide.

Question 4. Do the preliminary alternatives presented represent a good range of transportation improvement options? If not, what other alternatives should be studied?

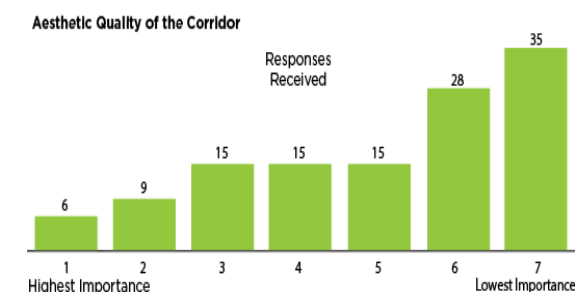
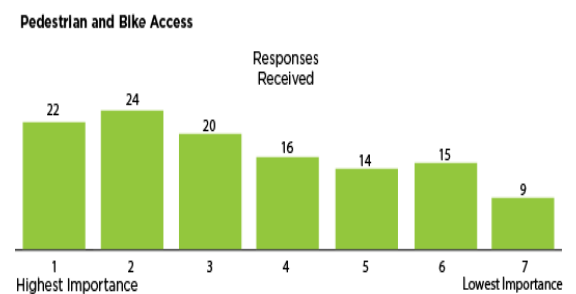
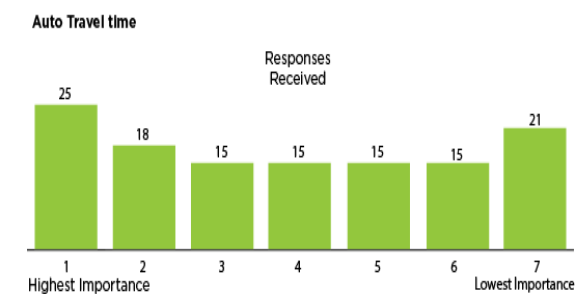
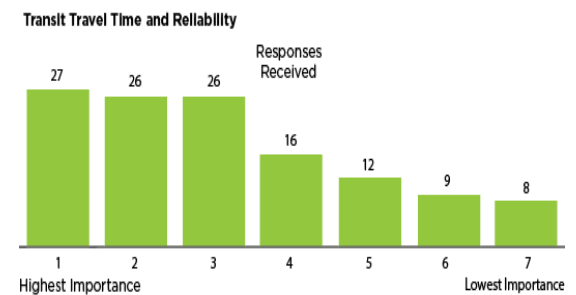
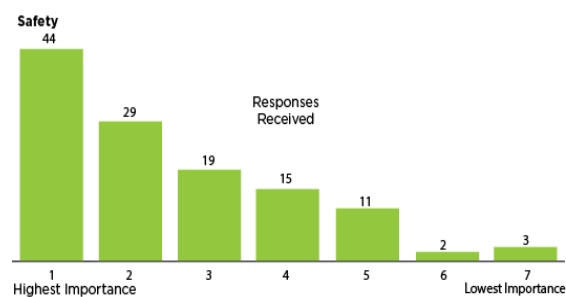
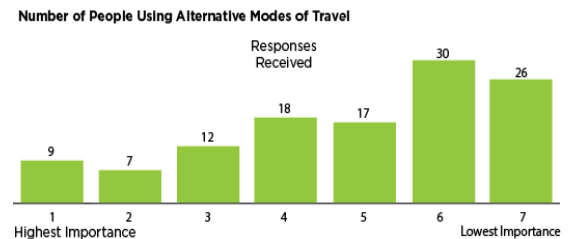
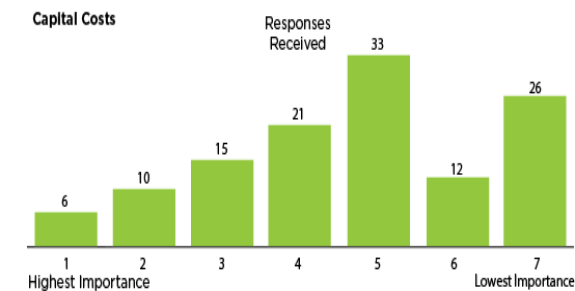
Some chose to answer simply that yes, this is a good range of alternatives. Other responses to this question answered that no, there are other transportation improvements that should be looked at, and these revealed several new ideas. These are listed below.

- Carpool lanes
- Additional automobile lanes
- Light rail or streetcar
- New exclusive off-street bike path
- Reversible general purpose lanes, with more lanes coming into Boulder in the morning and leaving in the afternoon
- Exclusive BRT lanes only during peak travel hours
- Traffic circles to replace traditional intersections
- Streetscape beautification as part of each alternative

Question 5. In your opinion, which criteria are most important to evaluate the range of alternatives? (Please rank 1 - 7, with 1 being most important)

Respondents were asked to rank the following criteria on a scale of 1-7. The following series of graphs provide an idea of what was important to questionnaire respondents.

Question 5 results: “In your opinion, which criteria are most important to evaluate the range of alternatives?”

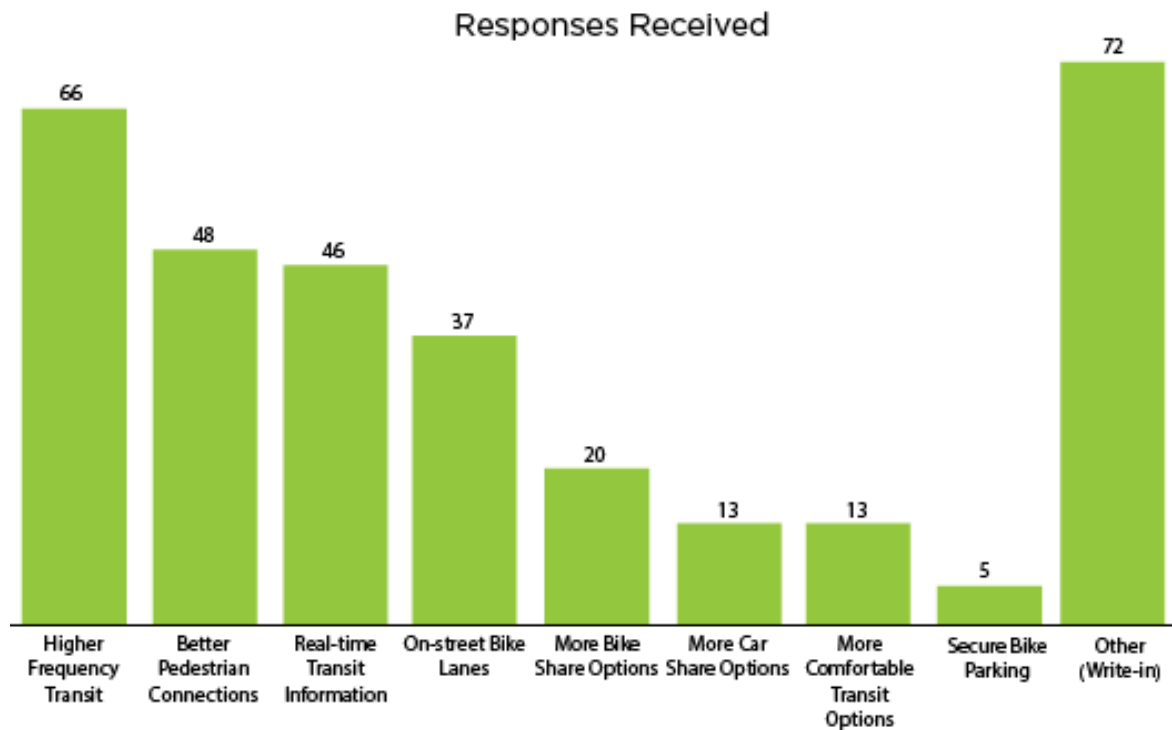


Question 6. What enhancements would allow you to consider other modes of travel than driving alone?

Respondents could choose as many of these options as they desired. They could also click “other” and write-in an answer. As shown in Figure 3, higher frequency transit is an enhancement that was valued by a majority of respondents. Other write-in responses generally reflected some of the other feedback the team has been receiving, including:

- Extending transit service hours
- Fixing the first and last-mile connections
- More transit destinations
- Pedestrian friendly infill
- More off-street bike infrastructure
- Park-n-Rides
- Bike parking
- More north-south bus routes connecting to other destinations

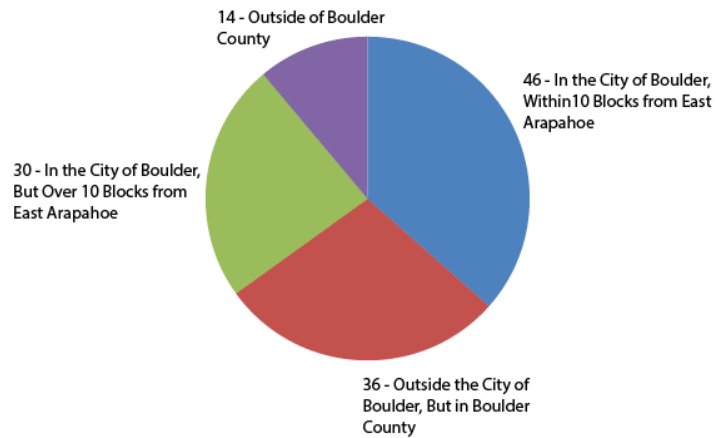
Question 6 results: “What enhancements would allow you to consider other modes of travel than driving alone?”



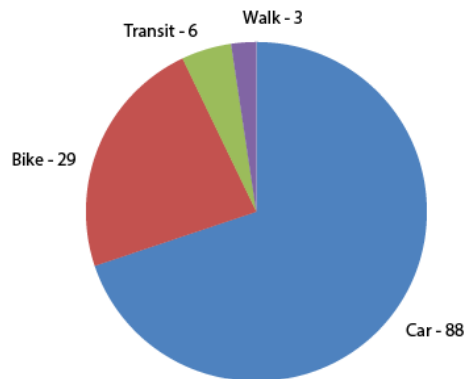
Questions 7 through 10. Where do you live? What is your primary mode of travel? Do you work in Boulder? What is your age?

Figures 4 through 7 illustrate a number of characteristics about questionnaire respondents. For example, while most respondents live somewhere in Boulder, with the highest number living near East Arapahoe, the questionnaire also attracted a relatively high number of people who live outside of Boulder. As shown in Figures 5 and 6, automobile use as a primary mode of travel is very high for those who responded to the questionnaire, as is the number of people who work inside Boulder. And, the majority of respondents to this online questionnaire were between 37 and 74 years old.

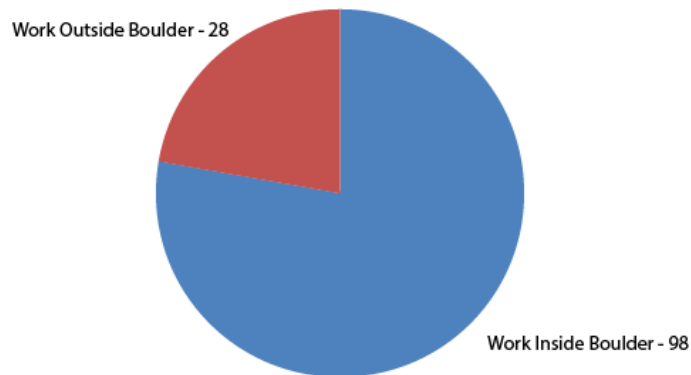
Respondent's Place of Residence



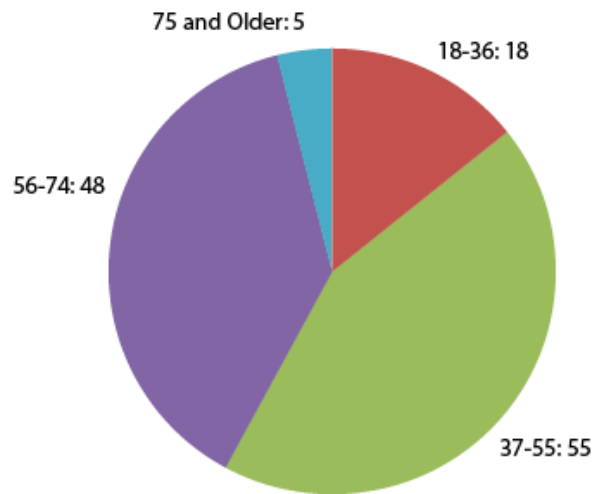
Respondent's Primary Mode of Travel



Respondent's Place of Work

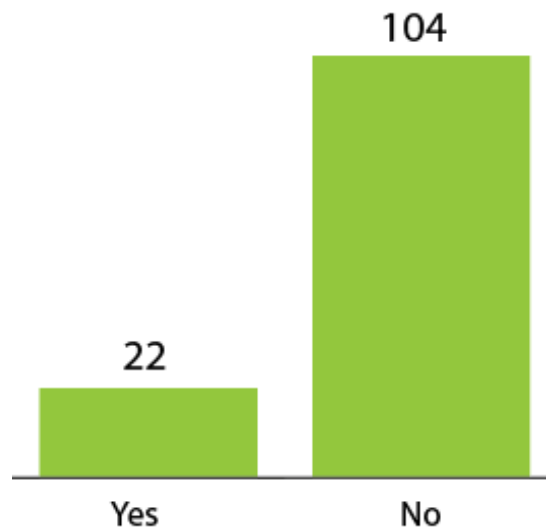


Respondent's Age



Question 11. Did you attend the East Arapahoe Transportation Plan Public Workshop on Thursday, Nov. 19?

Question 11 results: Attendance at Public Workshop



This question reveals that the majority of people who took the online questionnaire did *not* attend the public meeting in November, and this may have been their only method of feedback.

4. BUSINESS OUTREACH

June 21, 2017 Boulder chamber policy roundtable

The project team provided a briefing to members of the business community as a Boulder Chamber Policy Roundtable. Staff presented the planning process, plan context and purpose, design elements and examples of alternatives being

The following are notes, questions and input as transcribed from the business outreach meeting:

Q: Would the Center Running Bus be a different style of bus?

A: Yes. The bus would have a left-hand door and a boarding platform. But a center lane can't be phased in and takes additional space from auto capacity. Using this model, riders won't see transit travel time benefit in this corridor.

Q: How does land use factor into these decisions?

A: We are considering recommendations coming out of the planning process for 55th & Arapahoe and 29th & Arapahoe. Additionally, we're looking at population numbers and transportation projections/planned land use as part of the study. We also look at the regional land use forecast.

Q: Looking at our infrastructure, how does this tie into a "1 dig-1build" with broadband? Where is that intersection point?

A: It starts with our sustainability goals, and goals to be more accessible. This could be virtual connectivity. It must encompass a broad set of community goals, future of mobility/advanced mobility. Also, what's coming to be ready for the future, autonomous vehicles, etc. This can be a model moving forward.

Q: What is the measurement, and what are the treatments for pedestrians?

A: We have rigorous study of traffic, and lots of data. We have looked at lower/higher volume and level of service at intersections. We have also travel time studies. All scenarios show additional congestions. We are trying to find the best answer for efficiency, but we can't do nothing. Traffic signals are most commonly used to cross people, but it could be underpasses to handle conflicts between bikes and turning vehicles.

Q: We are seeing underutilized busses now. Why the confidence in the projections that folks will move to bus?

A: Here are the elements of successful system: It must be reliable, have a travel time advantage and good first and final connections. The JUMP is good example. Modeling and projection/peer project pools all come out around the same, when using arterial BRT/branded. Riders want better amenities, real time information, a little more comfort. Eugene OR, Everett WA saw 100/150% increases.

Q: Can you speak about connections for bike lanes, and will the design include burying power lines/moving irrigation? Who pays?

A: We can make changes to make travel safer for bikes in short term. Funds could come from a combination of sources: local, regional, state and federal. We would negotiate easements as development

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occurs. Burying the lines is a huge expense, and is tied to muni. It has been included in very high level cost efforts, and understood that it is key to design moving forward.

Q: Conestoga & Arapahoe seems dangerous, is this an accurate feel for how it is? Where's the transportation depot? It is hard to have faith in the planning, as needs are not being addressed. Are we on track or are we 20 years late? Will these overlap with other projects? This is bad for business. The Wendy's drive thru is a problem.

A: We know Conestoga & Arapahoe is an issue. We need the long-range vision to see where to start. We are looking at a safer way to handle the left turns, but are constrained by infrastructure.

Q: Look at the land use! We are missing major city opportunities through potential changes to land use and not looking at the housing. The map doesn't show the easements. How is the City addressing the need for housing in the city while spending money for access to other cities.

A: Subarea planning following the BVCP update will be really important. We can't solve for all regions, it's a real concern.

Q: The commuters have a choice, if 55th & Arapahoe was a more complete area, you wouldn't need complete streets. Ask the in-commuters – better bus service or complete Boulder's housing near job centers.

A: Residents or daytime residents. Not just drive time, all day long. Employment neighborhoods=15 neighborhoods. We need to solve for connections and destinations

Meetings with Individual Businesses

Throughout 2015, 2016, and 2017, meetings have been ongoing between the East Arapahoe Transportation Plan project team and businesses in the corridor. The following notes capture input and comments from these meetings. Comments have been sorted by topic.

Pedestrian Environment and Urban Design

- **Eastern gateway concept:** Several businesses and organizations at the eastern end of the corridor consider themselves the eastern gateway into Boulder and see opportunities to identify the area as such, through streetscape improvements, public art and transportation amenities like enhanced bus stops.
- #1 concern is noise
- In favor of bike and pedestrian connections that add another barrier to noise but allow area residents to walk and bike
- Dramatic changes in the next 10 years
- Boulevard concept – put parking on street
- What could we do with existing ROW
- Concerned these won't make for active lot line
- Not an appealing place
- More separation from heavy traffic
- Trees block sight line
- Path connectivity should be improved – electrical power lines to Goose Creek – build path
- Improve connectivity from Business Park to paths

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- Walk up neighborhood connections would be great; see a lot of ped activity today
- Experience, walkability, community building – important factors in location decisions
- Change “feel” of this area
- Need to move away from our cars
 - Opportunity for increased density at 63rd St. Like to see increased mixed use density, affordable housing, rent control, places for services workers to live and work
- Short term – 10’ walkways on both sides of street

Bicycle Facilities

- **Bicycle travel:** While improving bicycle and pedestrian travel on Arapahoe Avenue is important, making direct connections to businesses located off Arapahoe is just as important. Improved bicycle access is important for businesses, but not at the expense of reducing vehicle access.
- Good bike access 1/5 to block noise
- Rides bike to work – would be great to see more clear signage on multi-use path
- Most employees do not bike to work given that they live so far away
- 55th bike lane project didn’t make sense
- Don’t take up road lanes for bike facilities
- Like curbside raised protected bike lane
- Cyclists for Community
- Don’t want buffer protected bike lane
- Interest in bike facility! Ability to live east and get into town
- More staff use bikes than buses
- Important to have buffer/protection for bicyclists – Physical protection
- North- South connecting bike lanes are important (like Valmont and Baseline)

Transit

- **Transit connections:** Direct and efficient bus connections for students and employees between CU East campus and main campus are extremely important. Similarly, frequent bus connections between activity centers along Arapahoe Avenue and downtown Boulder or the 29th Street Mall would provide a convenient option for employees to run errands or grab a bite to eat.
- RTD buses – layover for drivers
- Would be good if Jump buses ran later. Extend service and more frequent
- EcoPass – benefits appreciated
- Plans are appealing in terms of being able to get people here more quickly
- Most employees are environmentally conscious. Have the Eco Pass
- Many do not use the bus because there are too many transfers and the travel time is too high to make it effective.
- Extend bus service hours – more people would take bus if it ran later
- Don’t limit ourselves with cost-effective only solutions. Light-rail would be amazing!
- Don’t like Center BRT – uncomfortable to wait in middle
- Shuttles from Table Mesa pnr to Flatiron Business Park or uber service; connections to hotels
- Need different connectivity
- Shuttles – frequent shuttles could be important like a UCAR
- More frequent buses would be good! Few services out here
- Enhanced bus and BRT (option 3)
 - Multiple modes of transportation is critical

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- More options for EcoPass, don't require all employees to have it
- Question re: commuter rail
- Having a rapid bus would be a good idea; FF and Skyride a success – model from that

Automobile Travel

- **Daytime driving within the corridor:** Employees in the corridor express that mid-day travel is a major consideration for them. Destinations like lunchtime food options can be out of range without a car, and can become inundated with automobile traffic certain times of day. The shopping center and intersection at Conestoga in specific have been mentioned as a problem spot.
- **Large vehicle travel:** Businesses and organizations that rely on truck and bus access prioritize minimizing congestion and providing as much separation between large vehicles and bicyclists/pedestrians as possible.
- Need more turn signals at intersections – like Conestoga
- Most customers drive, but many customers are from the surrounding neighborhood.
- 2014 project didn't help traffic
- 55th backed up to Baseline; affects intersection
- People will look at alternatives when traffic becomes so awful.
- Should there be restrictions on truck traffic? Weekends only?
- Limit truck hours
- Traffic trends – holding traffic volumes down, but city counts show level with little uptick in last two years; measure arterial roadways and signalized intersections; new travel time studies this year.
- Peak traffic – alternative to slug lanes coming into Boulder in A.M. and out in P.M. – very expensive
- People need cars during day
- Arapahoe and Foothills is pinch point – relook at intersection
- Worse in PM; lunchtime congestion
- Data and traffic diversion
- Mostly SOV travel
- Widening lanes doesn't fit with what city wants to do – be green; lower paid employees
- Need to be concerned with auto travel time currently 7 minute travel time – could live with up to 10+ minutes
- Train traffic is an impediment
- People won't get out in traffic during lunch hour because traffic is too heavy

Parking

- **Parking:** Managing parking will be key to considering any of the conceptual design alternatives that reduce general purpose lanes and enhance transit service.
- Fortunate to have parking; don't want to lose it because it gives you leverage against downtown Boulder; customers like easy parking
- Parking is currently adequate; in ten years we may need additional capacity
- Need to expand, but parking is limited – can't meet parking requirements
- Free parking is an asset; avoid downtown traffic; easy access
- Would like to see medical uses permitted here, but not enough parking
- Paid parking – carrot and stick; cash out

Workplace Factors

- **Regional commuting:** In conversations with businesses along the corridor, it was apparent that the majority of employees do not live in Boulder, but come from as far away as south Denver and Fort Collins. Most travel by single occupant vehicles to and from work. To attract and retain employees, commutes should be easy and inexpensive. Eliminating a general purpose lane would be extremely concerning to many businesses.
- One half of staff works east
- Rent is 1/3 of downtown and quick access to US36.
- Underserved residential and workforce – needed services!
- Half of workforce under the age of 30
- A younger workforce; most are under 30 years old. However, most of the managers are older and have been on staff for quite a long time.
- Staff comes from Denver, Westminster, Longmont – no one lives in Boulder.
- Staff travels at off peak
- A lot of new employees; most live outside boulder; millennials live in Denver; no good 1st/final mile
- More technical, R&D companies in the area
- More creative class
- Lease is 1/3 cost of what it is downtown
- Customer access is important; have two good access points
- Fear losing competitiveness because commute is getting so long
- 95% of employees don't live in Boulder
- 12 hour shifts 6-6

Land Use

- **Access on to Arapahoe:** Turning onto and off of Arapahoe can be problematic without a traffic signal. Many drivers in the area will cut through private properties in order to reach a traffic signal, and then these access points can become backed-up as a result.
- **Large institutional master plans:** Many institutions have expansion plans over time. Coordination with both their neighbors and the city will be essential.
- Housing biggest issue
- Affordable housing is the biggest issue
- Boulder Junction should be more visible
- Need land use transportation coordination
- Less restrictive zoning
- Would be tough to attract people here because its industrial and no services
- Expansion through repurposing buildings got to work for better access/important to us

Safety

- **Multiuse path:** The existing multiuse path works for families, but not for commuters. It feels dangerous at driveways because drivers are not looking for pedestrians and cyclists and signage is lacking. More education is also needed for motorists and cyclists.
- **Speed limit:** The idea of reducing the speed limit on Arapahoe was mentioned by residents and employees alike. It feels like a highway and is not conducive to walking or bicycling.
- Bad accidents at corner of 55th and Arapahoe

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- Quantify money saved by reducing accidents.
- More stoplights and ped crossings – slower travel
- County looking at underpasses/overpasses? No
- Safety is important

General

- Alt. 3 seems more feasible
- Who decides? – ultimately CDOT
- Multimodal ways to get into here – CO, Table Mesa
- Downtown
- Keep as many transportation options out here as possible
- Focus on providing options
- Can't avoid conversation about repurposing
 - Have to have good conversation about 1st and last mile solutions
- Like alt #3 because not huge redo; construction impacts on traffic is less, facilitates access to bus for lunch
- Would benefit employees and customers – Alt 3 -right direction
- Low income jobs are dispersed; need autos make road more usable; grocery store workers maximize options for people who use all modes of transportation – more options
- Education hub; B-cycle; BRT station
- Opposed to rightsizing on 55th

Boulder Community Health Focus Group

This meeting was a gathering of a cross-section of Boulder Community Health employees. The employees were briefed on the East Arapahoe Transportation Plan and its alternatives, and then given a chance to share their thoughts and ideas. The following are some notes from the discussion.

- Patients and Ambulances – is their access considered?
 - Advisory committee would be helpful
- New Regional Hubs are a good idea
 - Boulder Junction is an example of one that has been implemented
 - Local hubs could grow up in a place like Arapahoe
- EcoPasses
 - Very Helpful
 - BCycle, what about a universal pass for buses and bikes?
- Good access from the East on the bus. What would it do?
 - Would make living east more appealing financially
 - Could increase potential worker pool
- Bikes
 - Hazzard on the sidewalks
 - Won't always use the facility provided
- Park-n-rides
 - Additional locations would draw more people
- Additional FF6 service would help the hospital

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- More direct service to major employers like the hospital
- I-25 would be a great hub for direct service
- Bus hours don't cater to shifts like many have at the hospital
- Additional connections would be nice
 - 55th to 48th, Riverbend, etc.
- Icy conditions for pedestrians and bikes are not good
 - Consider this when designing
- Speed of traffic affects pedestrian comfort

Ball Aerospace Employee Meeting

A meeting to inform Ball Aerospace employees on East Arapahoe alternatives, and listen to their thoughts, was held in late November. The following are some notes from the discussion.

- Stretch of Arapahoe from Cherryvale to 75th – questions about what the previous project here accomplished
 - Project was in 2013, shoulders were added along with a center-turn lane, and BAT lanes
 - Comment: Improvements don't appear to be utilized. Necking down from 3 to 2 to 1 lane creates a bottleneck and competition to use the remaining lane.
- East of 75th
 - Boulder County is conducting a study for this stretch of SH7
 - Bottlenecks exist at key intersections including 95th street and 287. Capacity improvements in these locations are recommended
 - Further improvements have not been determined and would be longer range
 - There is a desire to maintain the rural character of the highway
- Adding Lanes
 - This option would likely lead to induced traffic, as shown in many different case studies.
 - Comment: the number of lanes on the road is not what makes somebody choose to drive
 - Question: How to get more than 2 lanes east of Boulder?
 - This is under the jurisdiction of Boulder County. This option is unlikely because it runs counter to many city and county goals.
- What kind of research has gone into ridership projections as a result of adding transit lanes?
 - Based on analysis of similar systems and peer cities.
- Would exclusive lanes continue east of Boulder?
 - It is assumed that yes, a true BRT system would have exclusive lanes most or all of the course of its length.
- Autonomous vehicles
 - Much work is being done to understand this future technology
 - Unclear if A.V.s would increase or decrease traffic
 - High capacity lanes may help accommodate A.V.s
- Ridership
 - FF has high ridership, but was a high rider route before the rebranding.
 - Would a new Jump route expect the same ridership gains?
 - Not everybody considers the FF to be a slam-dunk.
 - Culture in East County is different from Boulder-Denver
 - How to see this shift?
 - Land use is essential. Park-n-rides. Development around stations

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- Comment: Comparing this corridor to Broadway/Lincoln isn't entirely accurate because those are 1-way streets that function different.
- Why can't bikes just share space with pedestrians?
 - This is what they technically do today, but many people feel that this is not an adequate or safe arrangement. Faster moving bikes create issues in a pedestrian environment, both with pedestrians and turning vehicles
 - Lighting!

5. DAILY CAMERA

The following is a list of articles, letters to the editor, and editorials published in the Boulder Daily Camera in regards to the East Arapahoe Transportation Plan.

Articles

Boulder weighs options for making room for buses on Arapahoe – 12/8/2015 -Erica Meltzer, staff writer

Taking a "lesson learned" from the Folsom Street right-sizing controversy, Boulder transportation planners say they are meeting with residents, businesses and institutions like Boulder Community Health and the Boulder Valley School District as they prepare recommendations for the future of East Arapahoe Avenue.

Boulder is working on a transportation plan for Arapahoe between 75th Street and Folsom Street that would accommodate future rapid-transit bus service along with cars, bikes and pedestrians. The project is what remains of the Envision East Arapahoe area planning process that was sidelined last year amid intense community debate over development issues.

The Boulder City Council heard an update on the transportation project Tuesday night.

Arapahoe has three lanes in each direction along most of the area under study, a multiuse path with gaps in continuity and bus service that mixes with the rest of traffic.

Transportation planners are considering several alternatives.

- Option A is to keep three lanes in each direction, fill the gaps in the multi-use path and provide enhanced bus service without dedicated lanes.
- Option B is to turn the outside lanes into dedicated bus lanes, except for right turns, and add on-street bike lanes along with the multiuse path.
- Option C is to construct center lanes for the exclusive use of buses while keeping the outside two lanes for regular vehicle traffic and adding on-street bike lanes.
- Option D, which would require significant expansion of the road, is to provide center lanes for rapid-transit buses and keep three lanes for regular vehicle traffic along with the multiuse path and on-street bike lane.

Boulder County plans to start a study of the feasibility of rapid-transit buses connecting Boulder and the communities to the east along Arapahoe early next year.

Senior Transportation Planner Jean Sanson said planners may recommend different configurations along different portions of the road, depending on needs. In the community feedback received so far, people said they want Arapahoe to feel more like a boulevard and less like a highway, allow cyclists to use the road safely and continue to carry car traffic efficiently.

The city's Transportation Master Plan calls for "complete streets" that accommodate all users.

"We're hearing from many people that they want enhanced, on-street bike infrastructure, and they are concerned about crossing the street as much as they are about going along the street," she said.

Councilwoman Lisa Morzel said aesthetics should be an important consideration.

"I don't think we do a very good job of street design and boulevard development and really embracing the street," she said. "We're not quite there yet."

Councilman Sam Weaver asked why Arapahoe needs both protected on-street bike lanes and a multiuse path along the north side of the street. He also said the city should do outreach among commuters who drive into Boulder along Arapahoe but don't live along the corridor.

Councilman Aaron Brockett said the city shouldn't get too far ahead of the BRT feasibility study in its planning efforts.

Sanson said the recommendations will include enough flexibility to accommodate changes in bus service and will build on improvements to Arapahoe completed last year.

Boulder County eyes challenging future of Arapahoe Road corridor – 6/23/2017 - Anthony Hahn, staff writer

Boulder County officials will hold an open house next week to explore alternative ways to better serve the Arapahoe corridor, the vexed roadway between 75th Street and U.S. 287 that connects Boulder and Lafayette, as commissioners eye the next decades of growth between the communities.

The oft-traveled roadway has become a trap in the peak hours for motorists commuting between Boulder and the east county, both officials and residents say, one that frequently leaves commuters backed-up for almost a mile as they trek home.

The impact will only worsen once three large-scale developments break ground in the next year or so unless accommodations are made, officials say.

The developments — Erie's mixed-use Nine Mile Corner, the commercial site Lafayette Promenade and its adjoining SILO subdivision — are all slated to be perched at, or close to, the intersection of Arapahoe Road and U.S. 287.

The intersection is already in dire need of an engineering overhaul, according to commuters.

"I've been doing that commute for seven years now," Gretchen Minekime, a Lafayette resident who commutes to her job at Community Foundation Serving Boulder County in downtown Boulder, said Friday. "It can be frustrating.

"I leave much earlier to get into work or I go in later," she added, "and often I will stay later at work so my drive falls outside of that prime commute time. Anecdotally, it feels to me like in last three years (congestion and traffic) has increased quite a bit as there is more people living on the east side of the county needing to make their way into Boulder for work."

Officials on Monday will present recommended alternatives for enhancements to Arapahoe Road. Changes would be aimed at meeting needs related to the anticipated growth of the region and corresponding traffic demands by improving transit, cycling, and pedestrian facilities along the corridor between U.S. 287 and 75th Street, according to Marc Ambrosi, a long range planner with Boulder County.

"As part of this study we're looking at bus rapid transit system," Ambrosi said Friday. "We're expecting a lot of growth east of Lafayette and in this corridor we are hoping to support a pretty robust transit system.

"We're also looking at making improvements to the intersections," he added, "because we are seeing (issues with the intersections) as the biggest cause of delays right now, only one thru lane through those intersections, and just adding more lanes around those intersections will really help."

Existing daily traffic volumes along Arapahoe range from 17,600 to 21,700 vehicles per day. Typically, a two lane principal arterial can accommodate 16,000 VPD, according to a draft corridor conditions report.

The report signals that the corridor is currently operating over capacity.

During morning and evening peak hour operations, Colo. 7 is a commuter corridor for users traveling toward Boulder to the west and Lafayette, Brighton, and Denver to the east and south.

"One of our findings is that the corridor is very directional," Ambrosi said. "In the mornings people are going out and in the afternoon people are coming back in."

It's projected that daily traffic volumes will increase by 10 to 20 percent to between 19,900 and 24,600 VPD along the corridor, according to Ambrosi, meaning the corridor will remain above capacity.

"As we are making these recommendations our eye is always on 2040 and how we can make sure people have mobility options well into the future," he added.'

Boulder County looks to added lanes to relieve congested Arapahoe Road corridor – 6/26/2017 - Anthony Hahn, staff writer

Boulder County transportation officials unveiled plans Monday night to help ameliorate the [Arapahoe Road corridor's intensifying traffic](#) as leaders brace for decades of future growth.

Plans to improve the thoroughfare, specifically the section from 75th Street to U.S. 287 that has plagued commuters traveling between Boulder and Lafayette, include widening intersections by adding an additional lane in each direction, Boulder County Long Range Planner Marc Ambrosi said.

But that's down the road; a complete overhaul of the junction wouldn't begin until the mid-2020s, officials said.

Another option could include adding a sophisticated bus rapid transit system in the longer-term, officials said at the community open house.

Such an operation would require officials to widen even more of the predominately two-lane roadway. Because the stretch is surrounded by acres of open space and private farmland, officials are forced to balance maintaining the corridor's "rural feel" while managing the massive growth slated for surrounding communities.

"We want to find the right balance between the need to move people along the corridor and maintaining cultural assets we have out there," Ambrosi said.

Nostalgia for the bucolic aesthetic that surrounds Arapahoe likely will be short-lived. Impacts from community growth will be heightened almost immediately by three large-scale developments slated to break ground in the next year or so, officials said.

Existing daily traffic volumes along Arapahoe range from 17,600 to 21,700 vehicles per day. Typically, a two lane principal arterial can accommodate 16,000 vehicles per day, according to a [draft corridor conditions report](#).

The report signals that the corridor is currently operating over capacity.

The developments — [Erie's mixed-use Nine Mile Corner](#), the commercial site [Lafayette Promenade](#) and its adjoining [SILO subdivision](#) with roughly 400 units — are all slated to be perched at, or close to, the intersection of Arapahoe Road and U.S. 287.

It's projected that daily traffic volumes will increase by 10 percent to 20 percent to between 19,900 and 24,600 vehicles per day along the corridor, according to the conditions report — meaning the corridor would remain above capacity for the decades to come unless changes are made.

"The biggest challenge here is that we have a lot of people moving to the area," Lafayette resident George Philips said Monday. "Now we are taking this nice rural road and trying to find a way to manage this high volume of traffic."

In the short term, officials have turned their attention toward the corridor's intersections: most specifically, the crossing at U.S. 287, slated for thousands of square feet of both commercial and residential developing in the coming years.

"Our studies have shown that the (Arapahoe corridor) flows pretty well in between the intersections," Ambrosi said. "The intersections are the real issue."

During morning and evening peak hour operations, Colo. 7 is a commuter corridor for users traveling toward Boulder to the west and Lafayette, Brighton, and Denver to the east and south.

Amid concerns voiced by those in attendance Monday — the majority aimed at the crawl to and from work along the roadway — included fears of commuters' speeds and merging styles.

There is a higher-than-expected frequency of rear-end vehicle crashes along the corridor, according to the conditions report, primarily caused by the high-rate of congestion near the intersections. The report suggests that the roadway has rates similar to urban streets.

As development along the stretch between 75th Street and U.S. 287 begins to materialize, residents including Philips hope that builders will help foot the bill.

"I know that we are required to contribute somewhat for some of the traffic improvements," Avery Lajeunesse, an associate with Sustainable Urban Neighborhood Design, the architects behind SILO, said Monday. "But my understanding is that we have been working with Lafayette and CDOT to ensure that the road (leading out of the development) is more than adequate to support not only our development, but other traffic coming in and out."

Boulder County transportation officials will submit finalized plans to the Colorado Department of Transportation this fall, they said, adding that they will apply for funding between 2018 and 2020.

Boulder eyes bus rapid transit along east Arapahoe and Diagonal Highway – 9/26/2017 – Alex Burness, staff writer

Officials are eyeing major potential changes to alignment and service, including bus rapid transit, along east Arapahoe Road and the Diagonal Highway.

But both projects are in early stages of exploration, and many questions of funding and intergovernmental cooperation remain.

The Boulder City Council received an update on the matter Tuesday night, with further discussion slated for December.

Along Arapahoe Road (Colo. 7), the city and municipalities to the east are considering possible bus rapid transit.

"Erie and Lafayette are building a ton, and so is Brighton, so the idea is that this corridor is going to be traveled hugely in the future," Mayor Suzanne Jones said. "How do you plan ahead ... and also make some improvements now on the quality of life and congestion?"

The near-term focus appears to be on improvements to individual intersections, related to factors such as turning lanes, she said.

The 15-year vision, planners said, involves expanded bus service. Various models have been floated for how this might look on the roadway, including one in which buses have their own dedicated lanes in the middle of the street. But for now, the leading contender is side-running bus rapid transit, according to city staff.

Public input has shown strong desire for increased bike access along the east Arapahoe corridor.

Councilwoman Mary Young raised a planning concern as discussions move ahead.

"The communities out east, they have completely different approaches to their land-use policy than we do here," she said. "One might say that there's a mismatch. ... How do you reconcile that?"

Meanwhile, the Regional Transportation District is early in an 18-month study on the potential for bus rapid transit on the Diagonal between Boulder and Longmont.

The Colorado Department of Transportation is also exploring the potential for managed lanes — with tolls, high-occupancy exemptions and buses — on the Diagonal, according to Boulder planners.

Jones referred to using "the U.S. 36 model" for managed lanes as that study advances.

There will likely be little movement on anything big along the Diagonal for several years, as RTD's strategic plan doesn't call for significant funding to be freed up for capital spending until 2022. Even then, the amount of money expected to come available is only \$30 million.

The entirety of that pool won't go to Boulder County projects alone, and city officials discussed Tuesday the need to be opportunistic in seeking out funding for a Diagonal project, which RTD staff have also said could include a new dedicated bikeway.

Editorials

Editorial: Traffic engineering rules still apply – 7/1/2017 – Dave Krieger

We were gratified, if a little perplexed, to learn that local and state transportation planners apparently awoke from a deep sleep to discover [congestion on Arapahoe Avenue east of the city](#) and [a bottleneck on U.S. 36](#) could be improved by — gasp — adding lanes to accommodate the traffic volume.

It is an article of ideological dogma in the governments of Boulder and Boulder County that building new roads or lanes doesn't relieve congestion — a concept known as "induced demand." In the minds of some officials, this conviction appears to have morphed into the notion that no infrastructure improvements for auto travel are ever appropriate. But a basic rule of traffic engineering still applies: Capacity must be sufficient for the smooth flow of existing demand (unless, of course, you are trying purposefully to inconvenience motorists for other political purposes).

A review of existing demand on Arapahoe between Lafayette and Boulder reveals too many cars to move efficiently on a two-lane road. With population growth and housing development certain to continue in the east county, basic traffic engineering requires the infrastructure to keep up.

This goes against the ideological position of many local officials, who continue to believe that starving motorists of space will convince them to switch to bikes or buses. Unfortunately, actual human behavior indicates this is not true. Despite all sorts of well-meaning public pressure to do just that, the percentage of commuters that drive into Boulder — roughly four out of five — hasn't changed in 25 years.

As we have observed before, this is not because motorists want to confound the ideological objectives of Boulder progressives. This is because cycling is not practical for many

commuters and mass transit in these parts still presents enormous first-mile, last-mile problems that extend commute times dramatically.

Having finally acknowledged the problem, some local officials remain determined to steer commuters into the behaviors those officials prefer. Hence the enthusiasm to revamp Arapahoe not to accommodate the cars already there but to create dedicated lanes for a bus rapid transit system that does not yet exist.

Boulder City Councilman Aaron Brockett had the temerity some months ago to ask how often such buses would run. Nobody knows, of course. In part, that's because it would be up to the Regional Transportation District. In part, it's because nobody knows what the market demand might be. But it would not be surprising if ideologically-driven county officials devoted large portions of the roadway to a mode few people use at the expense of the mode most people use in yet another attempt at forced behavior modification.

Officials will respond that they are fighting climate change by trying to reduce auto emissions, a laudable goal. But it is far more likely that goal will be achieved by improvements in transportation technology — electrification of the automobile fleet, for example — than coercion. Political progressives have every right to try to persuade their constituents to behave differently, but purposefully making them miserable to force them to come around goes against the basic concept of public service.

The ramp from Foothills Parkway onto eastbound U.S. 36 was an even more egregious example, if that's possible. When U.S. 36 was rebuilt to add an express lane in each direction, the eastbound express lane made its initial appearance tantalizingly close to the Foothills ramp, but not close enough. That left two lanes of eastbound U.S. 36 and two lanes of Foothills Parkway to merge into . . . two lanes. Naturally, it became a bottleneck, with two lanes of cars backing up on each roadway and producing more emissions, not less.

The state Department of Transportation patted itself on the back for its innovative solution last week — restriping the merge area to make room for three lanes — which could have been the original configuration if the express lane had started a little earlier.

"This shows how, by thinking a little differently, we can improve operations despite constrained resources and constrained funding," CDOT Executive Director Shailen Bhatt said. "This relatively low-cost project will save 200 to 700 vehicle hours per day, according to our study."

We don't want to seem ungrateful, but anyone who works in transportation for a living and was surprised that the original configuration produced a daily traffic jam might be better off choosing another line of work.

The suspicion of many commuters — whose views don't seem to matter much to Boulder transportation planners — is that these apparent signs of incompetence are actually intentional coercive measures intended to change commuter behavior.

But they didn't. Traveling by car remains the fastest way for most commuters to get where they're going, even accounting for increasing congestion and some poor traffic engineering along the way. Until that changes, all the lectures in the world from well-meaning officials won't change the basic calculus for people trying to get to and from work as quickly as they can.

Given that fact of human behavior, it's probably best to go back to basic traffic engineering rules and make the system operate as efficiently as possible. That reduces emissions, too.

From the Editorial Advisory Board: East Arapahoe transport – 2/16/2018

Well, it finally happened. Or so I thought. One afternoon, I was heading home after work and the traffic came to a sudden standstill on Foothills heading north. I tried to find an alternate route and got mired on Independence Road where, in both directions the traffic was bumper-to-bumper and we were all just sitting still.

As I sat there I thought, "This is it." This was the day that all the roads in Boulder just filled up. They filled to capacity and no one could move — would ever move — again. I envisioned getting out of my car and walking the four miles home past the endless lines of stationary cars — most abandoned but some still occupied with parents and kids with their after-school activity outfits or uniforms on; the hope slowly fading from their young, innocent eyes.

I imagined that I finally arrived home, carless, my work shoes in tatters, my coat soiled and torn (not sure why torn, but, hey, it's my daydream) and told my husband that my car was forever trapped in the 21st-century equivalent of the La Brea Tar Pits, where centuries from now, transportation scholars will travel on field trips to excavate and study the "Great Automobile Standstill" of 2018 and the ensuing breakdown of all social norms.

It turned out to be a car accident on the Diagonal Highway and after about 90 minutes, the traffic started moving again.

Listen, Boulder, bike and bus lanes are not enough.

Fern O'Brien, fobrien@fobrienlaw.com

On Thursday, [the city asked for "feedback"](#) on the Arapahoe corridor between Folsom and 75th Street. The city is looking to improve bus travel while not slowing car traffic. The favored alternative, turning the outside lanes into lanes for buses and right turns, is "expected to decrease future travel times for all commuters" and "maintain auto travel time." Clearly auto travelers are not commuters.

The feedback session was not to listen to feedback, but to educate us on the issue. I was impressed by some aspects of the plan. It seems that the process has been reasonable, and the citizen working group agrees on the recommended alternative. I came away from the session convinced that it won't be so bad if the outside lanes of Arapahoe are turned into bus lanes, because today, those lanes are used primarily by right-turning vehicles and buses anyway.

At the same time, attempting to convince officials not to spend years constructing bus lanes between 75th and 95th will be futile. Planners are convinced that buses are the answer to congestion and pollution. It is not important that walking to a bus stop, and waiting for the bus every day to and from work, adds an hour or more to most people's day. Then there is the problem that RTD can't find drivers for the routes that they have now. In the future, bus drivers may be making a fortune. Or buses will be driverless.

Rett Ertl, rettertl@hotmail.com

My experiences on East Arapahoe include these: Biking in a group in the street at night. Cars sometimes honk, but never struggle to use the extra lane to get around.

Traveling east from the Boulder Creek path; cautiously pedaling in the shoulder against traffic where a median prevents a left turn.

Going to CHaRM or ReSource. During those businesses' hours, it's typically easy to turn left, even with my trailer, across the traffic.

Boulder Food Rescue shifts between 55th and the Community Table Kitchen. When unable to make the turn to the sidewalk with my long trailer, I slowly haul 400 pounds in the right-most street lane.

Biking on Arapahoe is unpleasant, and I do what I can to avoid it.

Installing bicycle infrastructure will improve experiences for all users. My observations indicate no need to accommodate more cars, though those who commute by private vehicle on Arapahoe might disagree. To them I say: inducing similar demand will not solve your commute problems.

Rather than inducing car demand, improved street design enhances public transit's popularity over private automobiles. A case study for this is the transformation of the BX into the Flatiron Flyer: with more frequent trips and a special bus lane, ridership increased 45 percent immediately. No matter what change is implemented, people's perspective of convenient transportation will be impacted. So let's build the community we want — less traffic, more eco-friendly transportation, and shorter commutes. Bike and bus lanes for the win.

Cha Cha Spinrad, spinradwrites@gmail.com, <https://www.twitter.com/chaspinrad>

To paraphrase Ronald Reagan, the most tiresome words in the English language are, "I'm from the city of Boulder and I'm here to listen." We've heard enough about the one-way city feedback sessions, supposedly where the little people can lend their input to a deeply engaged and caring staff, to know that they're largely charades.

As for the project being discussed, haven't we been down this road before? Why, yes we have. Back in 2014, a similar pothole was presented as the "Envision East Arapahoe" plan, now resurfaced as the "East Arapahoe Transportation Plan." If you loved the result of the two-year, \$18.5 million "improvement" from Cherryvale to 75th project, you'll get a kick out of this one.

The environmentalists believe that if you widen a road it will only lead to more traffic, yet are strangely silent on the planning of more massive office buildings and what that will do to single-auto trip demand. As Boulder County resident Scott Raney pointed out in [his guest opinion](#) in these pages, the city is "staff driven," and as such, city employees — the unelected, often unnamed, and unaccountable "staff" — have an outsized influence on Boulder city policy.

We're close to finding out just how much top-down, bureaucratic bullying the city's taxpayers are willing to put up with and pay for. People talk of a "deep state" in Washington, D.C.; Boulderites should complain about the city's "deep staff," and the city should listen.

Don Wrege, donsopinion@gmail.com

Transportation, housing, the environment and economic vitality are intertwined. Dismantling the effort to reconsider all four in the corridor and reducing it to solely a transportation plan was a mistake. Some 25,000 people commute in on Arapahoe, mainly in single-occupancy vehicles. The area employs 10,000 people but has minimal housing, dining and retail options.

Let's face it, those who sit in traffic come here for jobs and many wouldn't do so if they could afford housing in Boulder. Many Boulder homeowners don't like those darn CO2-producing, traffic-causing in-commuters but simultaneously don't want "evil" developers to build attainable housing for them because doing so would completely devastate "neighborhood character" and implode one's hard-earned investment — incidentally attained by limiting housing supply. Nonetheless, we blame high prices on demand. Apparently, our highly-educated population forgot to take that tedious macroeconomics class.

There are those who would blame our problems on tech companies, but let's remember the largest employer in town is the university (by which I am employed). Many of my colleagues commute in unless they moved here over 20 years ago. The latter cohort is nearing retirement and will age in place due to lack of affordable senior options. Where will we get our future professors? They'd much rather take a job in some other university town where they can afford to live.

This isn't a problem that's going to be solved by two more lanes so let's stop blaming transportation planners who are only trying to address our liberal ideals.

Michelle Estrella, michelleboulderDC@gmail.com, <https://twitter.com/estrellaboulder>

Guest Opinions

Ray Hedberg: No help on Arapahoe – 11/29/2015

The evening of Nov. 19, a two-hour planning update/public workshop was held to disclose the East Arapahoe (Folsom to 75th) Transportation Master Plan status. I had hopes that the city would address some of the following: the current stop-and-go traffic problem which occurs every day on Arapahoe; the narrowing of Arapahoe to a single lane in each direction under the train bridge between 63rd and 75th; the near-empty huge RTD buses; the absence of smaller and more frequent "people trolleys" serving Naropa students, Arapahoe Ridge High School, the Boulder Valley School District offices, the new Jewish Center at Cherryvale, the seniors living near Arapahoe; and outlying parking for people coming in to work in Boulder. The city's score was *zero*; the plan does not address *any* of the above nor the fundamental transportation problems in Boulder.

The city's handouts described four alternatives: A) with "enhanced" buses — perhaps longer and articulated running on existing Arapahoe; B) which reduces autos to two lanes and adds a dedicated Business and Transit (BAT) lane and *also* a dedicated shared bike and people sidewalk; C) which also reduces autos to two lanes but provides *two* dedicated "exclusive" BRT lanes in the center of Arapahoe; and D) which adds a third auto lane to C.

Clearly, the purpose of this meeting was only to promote Bus Rapid Transit (all the way to I-25); and RTD officials in attendance acknowledged they don't have any funds to address this — it would mean more taxes on top of what we already pay for the non-existent train

to/from Denver. Sounds to me a lot like another right-sizing experience in the making. City of Boulder Transportation and GO Boulder Departments — fix today's problems!

Scott Raney: Stop experimenting on us – 6/30/2017

It's disappointing to see the Daily Camera just repeating the talking points being provided to them by the city and county about highway improvements. In fact, the backups on the Foothills Parkway merge onto U.S. 36 and the two-lane Arapahoe Avenue west of Cherryvale are intentional components of the social engineering they're doing on the commuters in a futile attempt to force them onto buses. Think of them as the Folsom "right-sizing" project on steroids.

And it's not about cost, either: CDOT recommended that Arapahoe/State Highway 7 be widened to four lanes as part of the Cherryvale-to-75th phase of the project, an expansion that would have added only about 10 percent to the cost, but the city and county leadership deliberately decided not to do that, and made this decision without public hearings or any discussion of how this restriction would cause increased cut-through traffic on 55th and Cherryvale.

Now they're spreading disinformation about how they want to "preserve the rural character" of State Highway 7 and how "it's just the intersections that are the problem" to distract people from the truth, which is that they're going to cram "bus rapid transit" down our throats whether we want it or not. For example, they've provided no information about whether ridership statistics for the Jump indicate that there is a justification for widening the intersections only to enable "queue jumps" (i.e., dedicated bus lanes, like those that are causing backups and accidents on that newly "improved" section of Arapahoe).

If you've ever been caught in the backups on Foothills or Arapahoe, I recommend you contact the City Council (council@bouldercolorado.gov) and county commissioners (commissioners@bouldercounty.org) and request that they stop experimenting on us to see if intentionally inflicting gridlock on us will cause any of us to switch to using public transportation.

Dick Paquette: A matter of safety – 7/2/2017

Notice: City of Boulder or whoever is the "responsible party." It is very obvious that safety should have been the top priority for the design of the retaining wall at 6400 Arapahoe Rd. where the recent RTD bus accident occurred but it was not. If it weren't for the two trucks parked below where the accident happened the bus would have tipped upside down seven feet below and been disastrous!

There could have been people killed, maimed, etc. And much grief! I would suggest a four-foot engineered barrier wall. I'm also very concerned for my employee and our customers who are occupying the area just below this retaining wall at any time. This is the second serious bus accident on Arapahoe in a short period of time. Who knows when another more serious accident will happen. By the way, it has been at least a week or more and the responsible party has not even put up a temporary fence for the safety of people walking by. That's about normal for the city of Boulder.

Judi Duncan: Fix Arapahoe Avenue now! – 7/4/2017

I am writing, again, to register my frustration over the number of usable traffic lanes available to commuters between 75th and Cherryvale Road on Arapahoe Avenue. This is not a social experiment. Twice a day, five days a week, Arapahoe becomes backed up as people try to get to and from their work and homes between Boulder and east-lying towns. I fail to understand why taxpayers provided for the expensive reconstruction of the railroad bridge and months of construction headaches and we still have only one lane in each direction on this heavily overused road. Council states that the bucolic nature of the surrounding area would be compromised. Would they prefer frustrated drivers to use the twisting, winding two-lane country roads of Baseline or Valmont instead?

We've already paid for it, so change the painted lines in the road and knock out the curb on the south side where the eight-foot-wide sidewalk abruptly ends leaving pedestrians stranded in the middle of Arapahoe hill. One multi-use path for bikes and peds is sufficient for the number of folks walking or biking up this steep hill. One bus every 20 minutes does not require its own lane. This can't wait until 2020. Fix this now!

George Gerstle: County's plans for State Highway 7 are sound – 7/6/2017

The July 2 editorial entitled "[Traffic engineering rules still apply](#)" advocating for widening of our roads reflects frequently heard public sentiment, but is not consistent with the current engineering, financial, economic, environmental, or social realities facing the county.

There are a number of factors that must be weighed as we evaluate the future of this important regional corridor. State Highway 7 plays a critical and growing role in moving people, primarily commuters and students, between the more affordable and rapidly growing east county and Front Range communities and the increasing number of jobs in the city of Boulder. Indeed, traffic in the corridor is forecast to increase about 20 percent between now and 2040. It is also important to recognize that not everyone can, or wants to, drive a car for a variety of reasons including cost, age (both young and old), ability, environmental concern or personal choice. The portion of this corridor between 75th and Lafayette also includes the last remaining historic open agricultural landscape between Brighton and Boulder.

We have heard loud and clear that we should do everything we can to preserve this especially beautiful scenic corridor. Finally, neither the state nor the county has sufficient money to widen roads that are congested in one direction for only a relatively short period of time each day, nor would doing so be a wise long-term use of limited taxpayer funds.

We are therefore looking for the most affordable solutions that can be implemented relatively quickly, benefit as many users of the transportation system as possible, minimize environmental impacts, while also preserving this beautiful and historic signature view corridor.

Our traffic engineering analysis indicates, and public input confirms, the primary causes of congestion and accidents in the corridor are at the intersections of SH7 at 95th and SH287 and where traffic backs up behind cars making left turns to individual properties. We also have heard from corridor residents that they are reluctant to walk or bike in the corridor,

with particular concern with safety at the major intersections and that more would use transit if it were more competitive with driving. Since intersections are where the problems are, it makes sense to focus on the intersections when solving the problem.

We believe we can make the greatest difference for the most people, in the shortest time frame, at the lowest cost, and with least impact to the visual and historic character of the corridor by adding an additional through lane and bus bypass lane in each direction at major intersections, improving bike, transit and pedestrian facilities, as well as adding shoulders and occasional center turn lanes where traffic backs up behind cars waiting to make left turns into, or out of, their driveways. These changes, while not sufficient to solve all the problems in perpetuity, would provide significant benefit for all users in the short term, are more affordable, respect the special nature of the corridor, and would be consistent with longer range plans for the corridor.

More information about Boulder County Transportation current projects and planning efforts, including for State Highway 7, can be found at <https://www.bouldercounty.org/transportation/> under the Plans and Projects link.

To be clear, there is currently no funding for any of these proposed improvements. However, there is a maxim in the transportation world that "money follows plans." By developing these focused and cost effective plans *now* we will be better prepared to compete for any future funding opportunities.

Scott Raney: Do county officials have data, or just an agenda? – 7/29/2017

George Gerstle's recent guest opinion ("[County's plans for State Highway 7 are sound.](#)" Daily Camera, July 7) is just another nail in the coffin of the fantasy that public policy decision-making in the city and county of Boulder is about representing The People. It should be totally clear now that it's really about "elites" making decisions for us based on their personal agendas with no need to even provide us with the information we need to participate in the process, let alone a voice in making the final decision. In place of competent social engineering plans and justifications, they give us platitudes and talking points. His essay on transportation planning for Arapahoe/State Highway 7 is filled with obfuscation, misrepresentation, and anecdotal reports, and yet is almost completely devoid of the kinds of facts and figures we all need to make this important public-policy decision. I call for an immediate investigation and release of the *facts* that will answer these crucial questions:

1. What sort of survey or other assessment was done to measure the Will of The People (including the commuters and others who don't live in the city of Boulder) with respect to prioritizing the following issues along the SH7 route:

- a) Preservation of rural character
- b) Efficiency (travel time) of car traffic
- c) Efficiency of public transportation
- d) Support for pedestrians and bikes

e) Reduction in VMT (Vehicle Miles Traveled, a proxy for carbon and other pollution emissions)

f) Cost effectiveness (people transported per public dollar spent)

2. In contrast to Gerstle's claims about the general benefit of widening only the intersections, the information package the county has provided emphasizes only BRT efficiency via "queue jumps" which are essentially dedicated bus lanes like we see on Arapahoe east of 63rd Street. The goal seems to be to make bus transportation along SH7 *faster* than regular car travel in an attempt to discourage the use of private vehicles in favor of a government-provided alternative. They provide no data on how vehicle transit times would compare under the various alternatives (four lanes all the way to 287, four lanes usable by all vehicles near intersections, four lanes at intersections, with two of them being bus-only "queue jumps"). How can they expect The People to endorse one plan over another when they are being deliberately deprived of this information?

3. Gerstle also makes a big noise about the need for expansion in "multimodal" transportation opportunities, but includes exactly zero data to justify this. Rather than commission another \$50,000 study for this, why don't we use the data we (should) already have — the results of the expansion of U.S. 36 and that BRT experiment:

a) How many bikes/pedestrians use the new path per day? Of course it would be useful to also know what percentage of that use is for "transportation" as opposed to "recreation," but any data at all would be a huge improvement on what we have now.

b) What is the ridership of the Flatiron Flyer (RTD's BRT system) now as compared with that of the routes that it replaced?

c) What are the efficiency results for the FF BRT system (i.e. was there any change in public dollars spent or fuel consumption per passenger)?

d) How does RTD's BRT results compare with the data from their light rail routes?

4. We've never been told what the Colorado Department of Transportation recommends for the SH7 corridor. In my research on the Cherryvale to 75th section, CDOT explicitly told me that the city and county conspired to override CDOT's recommendation that the road be widened to four lanes. Are they doing this again with the section from 75th to 287?

5. None of the materials the city or the county has released makes any mention of the impact on transportation infrastructure of self-driving cars, especially those available for hire (botcars: self-driving taxi/Uber/Lyft service). Why not? Do they really believe it won't happen? Or are they predicting that it will take longer than the 20-year timeframe the highway plan should be designed to address? This technology is poised to revolutionize transportation (and our lives) in ways that make the cell phone revolution seem small potatoes by comparison. Shouldn't we be designing for the future rather than the past?

Preston Padden: Widen Arapahoe Avenue now – 8/1/2017

Three cheers for Scott Raney's [guest opinion](#) responding to [an earlier guest opinion](#) by Boulder County Transportation Director George Gerstle. Mr. Gerstle's preference for buses and bikes is admirable but not realistic for many commuters from eastern Boulder County.

Given the explosion of both residential and commercial growth, Arapahoe Avenue must be widened to four lanes all the way to U.S. 287 as soon as possible.

Paul Turley: Bite the bullet on Arapahoe – 8/4/2017

Scott Raney did an outstanding job of addressing the Arapahoe/State Highway 7 redo (["Do county officials have data, or just an agenda?"](#) Daily Camera, July 30).

George Gerstle's position to his team, to accomplish his agenda, is that there is no money for the big project. There is always money for the necessary projects! His idea cannot be allowed to happen.

The only way is to bite the bullet and make it four lanes for both private vehicles and RTD from Cherryvale to 287.

The city's design for Cherryvale to 75th was another "agenda." The users must speak up on this important transportation decision.

Judi Duncan: Try the Arapahoe Avenue commute yourself – 8/12/2017

So, widening roads isn't sexy like improving the already lovely civic area, but neither is traffic backed up, idling for miles. One of Boulder's new projects absolutely must include widening Arapahoe to at least two lanes in both directions between 63rd and 75th and as far east as U.S. 287. If you doubt that this is necessary, try the drive yourself. Traffic starts backing up from Boulder heading east towards Erie, Lafayette, and Louisville about 3 p.m., but if you want to experience the full effect, try leaving around 5 p.m., when most people get off work. You imagine that there's a terrible accident up ahead. But no, it's just the volume of cars.

The same is true in the other direction on any weekday morning, particularly around 8 a.m. The widening has already been partially accomplished, but is not being utilized. Clearly, we do not need super-extra-wide bicycle paths on both sides of this road between 63rd and 75th nor do we need a 10-foot-wide sidewalk on both sides of that section of Arapahoe. Boulder needs to stop pretending that pedestrian, bike and current bus routes are efficient ways to commute into and out of the city on a regular daily basis. Please start the process now before this gets any worse.

Eric Hall: What am I missing in city traffic analysis? – 10/11/2017

I received in the mail the city of Boulder news and updates flier for October/November of 2017. On pages 12 and 13, the flier details four proposed plans for changes to improve traffic on Arapahoe Avenue. The first option has the current three unrestricted lanes each direction for automobiles, and the flier rates this the worst for auto travel. The third option has two unrestricted lanes each direction for automobiles, and the flier rates this the best for auto travel. In other words, the Boulder Planning Department thinks that auto traffic moves quicker on a four-lane road than on a six-lane road. I'm confused. What am I not understanding?

Scott Raney: Busline of dreams (BRT on Arapahoe) – 10/21/2017

The city and county's justification for bus rapid transit (BRT) on Arapahoe/State Highway 7 from Boulder to Brighton via Lafayette is the meme "If you build it, they will come." Now they apparently [plan to do the same on the Diagonal to Longmont](#). Unfortunately for us, though, rather than simply letting George Gerstle trample his own corn field (the "cost" in the movie "Field of Dreams"), the planners responsible for preparing and evaluating BRT expect us to let them risk tens of millions of dollars of taxpayer money on something that is nothing more than a leap of faith.

They also apparently expect us to trust their reports and not go out and collect any actual evidence that will help us predict if it will work out the way they hope. Certainly you can't get it from them: I tried, and determined that not only did they not have the data, they never even asked for it! Just another example of the kind of willful ignorance that seems to be a prerequisite to join the ranks of the amateur social engineers on the city and county payrolls. Fortunately, when I contacted RTD and CDOT, they were much more forthcoming (who'd have thunk it? Government agencies that actually respond truthfully and completely when you ask them for information? What a country!)

RTD sent me a 130MB file that contained all the ridership data they had collected on the JUMP bus line for the last six months. I extracted the data from the 95th Street stop, which is a reasonable proxy for the number of people using the bus to commute between Lafayette and Boulder. The results? Median ridership on the JUMP at that intersection was only five passengers. Some other interesting features were that only 10 times in the 6,397 trips (0.1 percent) were all 26 seats on the bus full, and 5 percent of the time the bus was completely empty! Average ridership was 5.9, so total ridership on typical workdays works out to about 350 passengers.

Now please compare that with the numbers the city and county have provided in the "East Arapahoe Transportation Plan" Summary Report (you can get it from www.EastArapahoeTransportationPlan.net, click on "Draft Evaluation Results". See page 33, "Ridership in Corridor"). Note the box that says "2,400" as the "current" average daily ridership, seven times what the actual data show. Why the discrepancy? Because they're counting riders using any segment of the route, including central Boulder to the Naropa and BVSD campuses, and applying that to the entire route.

But it gets worse: They've also used an inflated factor to predict the increased ridership due to the proposed doubling of the frequency of buses: They used a factor of three to compute the low estimate and a factor of four for the high, numbers that are probably 50 percent too high (although my investigations revealed that hard data on the appropriate multiplier to use is impossible to find, such is the dismal state of the science of public transportation planning).

But it gets even worse: If you input these actual numbers back into their cost-per-rider calculations and compare the output with ride-sharing services like UberPool and Lyft Line you'll find that the total cost (fare plus subsidy plus annualized capital cost) of the city and county's BRT proposal would actually cost significantly *more* per passenger mile than those services do now! And this of course doesn't even take into account the coming revolution in self-driving cars which many have predicted will drastically reduce those costs and therefore render all bus service obsolete by 2040 (the timeframe these BRT plans are supposed to

cover). I also note that the report doesn't even mention this as an issue. But perhaps most importantly UberPool and Lyft Line also solve the first- and last-mile problem, something that bus-based transportation systems will never be able to do!

The report has many other errors and misrepresentations, but there's insufficient room to go into all of that here. Bottom line, it's time to pull the plug on this little misadventure: It's clear that asking "planners" (who aren't even engineers) to design transportation infrastructure for us to use was a mistake, just as it was in the Folsom "right-sizing" experiment. We must therefore insist that the city and county turn responsibility for SH7 over to the actual engineers at CDOT and accept their evidence-based recommendation that Arapahoe be widened to four lanes from Boulder to Brighton.

J.V. Rudd: Re-stripe Arapahoe – 11/11/2017

I want to apologize to my neighbors in Boulder who live along 55th Street and Cherryvale Road for all the traffic that goes up and down your streets during the twice-a-day rush hour, including me. If you would like to reduce the number of cars traveling on your street I highly suggest writing your Boulder City Council members as well as the Boulder County commissioners and let them know the nice, new stretch of Arapahoe Avenue from Cherryvale to 75th Street should be striped to allow for four lanes of traffic.

Much like the "right-sizing" fiasco along Folsom, the attempt to make massive bike lanes and a bus lane which runs for two blocks, hasn't worked, won't work, and Boulder needs to accept Arapahoe as a major feeder artery. Ironically, the traffic jam that forms along that stretch of road every afternoon at 5 p.m. wastes more gas than is being saved by the bus and bikes the road is trying to lure. It should be further noted, I've never seen a single bike commuter take Arapahoe. All of us (yes, I do bike to work on occasion) take Baseline or the Boulder Creek bike path. Nobody wants to risk their life on Arapahoe, or add an unnecessary hill to our commute, when two other, much more enjoyable routes already exist.

Give it up leaders. Stripe Arapahoe for two lanes in both directions, and then bask in the reduced traffic in your neighborhoods, reduced smog in your air, and happier workers in your businesses.

Johnny Drozdek and David Cook: East Arapahoe — It's About Options – 2/3/2018

Boulder may never see traffic like Manhattan, Los Angeles, or even Denver, but we are increasingly experiencing congestion that makes traffic noticeable — and inconvenient! During peak hours our roads are filled with in-commuters, parents shuttling kids to school, vacationers passing through, university visitors and scores of others. Boulder is a fabulous place to be, however the demand fills our regional travel corridors with traffic.

Along East Arapahoe we already know something must be done. Arapahoe is one of the busiest travel corridors in the area. It serves some of Boulder's largest employment centers and connects our neighborhoods to the rest of the region. Regional data for the corridor predicts as much as a 20 percent increase in vehicles in the next 20 years. Complicating matters, future land-use characteristics along East Arapahoe are undetermined. Perhaps in

20 years Arapahoe will be a vibrant corridor with shopping, restaurants, and plentiful housing — all of which require long-term planning now.

We've learned from big cities that we can't pave our way out of congestion. Studies have repeatedly shown that adding lanes sometimes provides temporary relief, but more vehicles are inevitably attracted to the widened road, and very quickly traffic congestion returns. We need better options.

What if there were a way to maintain current levels of service for automobiles (similar number of drive-time minutes), while at the same time adding alternatives for transit service that is as fast as driving? What if we could also improve the experience of pedestrians, families riding bikes, and bicycle commuters? What if doing so made the corridor safer for all users, physically more attractive, and environmentally more responsible?

Such questions have been driving the East Arapahoe Transportation Plan (EATP) for the past nearly three years. Recognizing the importance of this corridor for automobiles while seeking to enhance transit alternatives, the goal of the EATP is to find options that move as many people from Point A to Point B as quickly, safely and efficiently as possible.

To ensure all voices are engaged in the discussion, since 2016 the city has been conducting broad community outreach — from one-on-one connection with employers such as Boulder Community Hospital, Boulder Valley School District, Ball Aerospace, Naropa and others; to neighborhood and public gatherings; to attending meetings in neighboring cities to understand the needs of commuters east of Boulder.

The authors personally participated in this collaborative process as members of the community working group that included many users of the corridor: local residents, in-commuters, business and community leaders, people with disabilities and others. The group met nearly a dozen times over almost two years to discuss options and give input. Importantly, since East Arapahoe is also a state highway, transportation planners collaborated with the Colorado Department of Transportation in reviewing options. In fact, CDOT recently expressed support for the leading alternative identified in the EATP.

The leading alternative for East Arapahoe can deliver better outcomes for all types of trips — whether you're commuting to work, taking a bus to go shopping, riding your bike to meet friends for dinner, or walking to a doctor's appointment. Responsible governance demands that we seek a plan that addresses all modes of travel, provides long-term benefits such as increased safety and reduced carbon emissions, and includes flexibility for the unforeseen.

The EATP is about creating options, and the hundreds of people who've participated in the process to date have helped come up with a plan that does just that. As the study approaches making recommendations, the community working group needs your feedback. We urge you to learn more by visiting www.eastarapahoetransportationplan.net and attending our public open house on Feb. 15 at 5:30 p.m. at 5001 Pennsylvania Avenue, Boulder.

Tim Larsen: East Arapahoe -- It's About Options – 2/8/2018

If we continue to focus on one road at a time, and then only on limited segments, we will never find a solution.

Arapahoe Road is one of several that are used to bring people into and back home from working in Boulder. Go east and the problem is obvious. We need an all-encompassing effort and vision to address this problem. It starts at I-25, builds traffic through Broomfield, Erie and Lafayette. Solving East Arapahoe must include working with Boulder, Weld and Broomfield counties, as well as the cities. Years ago, the Colorado Highway Department was looking at relocating part of Highway 7 to not go through Lafayette with a new road going more directly to Arapahoe. CDOT should also be part of the effort.

We should also be looking at currently owned RTD resources. RTD owns the rail line that runs from I-25 (starting in Weld County) through Erie and on to Boulder at least to 55th Avenue. A mass transit project to bring this option to the front in planning would provide options that would change the traffic dynamic. Imagine an option to park at I-25 and come into Boulder on light rail.

We need some leadership to bring a broader vision and approach to looking at the multi-county and city options to address this issue.

Todd Vernon: A dose of commuting reality – 2/10/2017

I was cautiously optimistic when I saw [the Camera guest opinion](#) from Johnny Drozdek and David Cook last weekend about working on the big problem with Arapahoe Road east into Lafayette and Erie. Mr. Drozdek specifically is on the Transportation Advisory Board, so I was hoping for some great information.

The opinion started fantastically, acknowledging the problem along Arapahoe as a major artery into Boulder critically affecting the lives of people who work in Boulder but live in more affordable areas. According to data gathered, vehicles on Arapahoe are expected to increase 1 percent a year for the next 20 years. Umm, OK, that sounds completely incorrect, but go on.

Then, unfortunately, the opinion went immediately off the rails. The third paragraph starts with "We've learned from big cities that we can't pave our way out of congestion." Wow, about 20 seconds into reading this opinion and the most logical solution is immediately removed from the table. By this logic, no road is ever widened because, well, it's not a solution. If it's true that traffic over the next 20 years will increase only 20 percent this sounds like the perfect solution to the problem. But, I guess we aren't going to entertain that!

The rest of the opinion piece seems to be an attempt to explain that the East Arapahoe Transportation District (EATP) has been "all over this issue for over three years," and has consulted numerous businesses, neighborhoods, etc.

Hmm, I own a business in Boulder with about 100 employees and drive that corridor (painfully) every day. I was there when over two years of construction resulted in no net new lanes, but a very under-utilized two-mile bus lane. Strangely, in all this I have never heard of the EATP.

Still excited to hear more, I went to the EATP website to look at "The Plan." First off, "The Plan" appears to really only care about the part of Arapahoe that is already four lanes! Many renderings show how nice this four-lane part can be. Side elevations, trees, squirrels sitting on park benches, it's lovely, really. And very superficial.

Guys, seriously, the part of Arapahoe that is already four lanes is not the problem. The part that "could have been four lanes" but was specifically hobbled perhaps permanently by narrowing under the completely new dual railroad bridge is. The part that heads out to Lafayette and Erie is the problem. Lanes need to be added out to at least 95th Street. I'm not talking about bus-only lanes to carry the 25 people a day that ride out to 95th (show me the rider counts, prove me wrong). I'm talking about doing real traffic engineering, for real people that have children, need to commute in the snow, dare I say, have a job!

The amount of money that is spent trying to modify human behavior in Boulder is breathtaking. I implore Boulder to take this seriously, and not as another social experiment conducted on the people who bring revenue into Boulder each day that drives the tax base to torture the very people who bring that revenue in.

Scott Raney: East Arapahoe — It's Really About Limiting Your Options – 2/13/2018

Johnny Drozdek and David Cook's guest opinion (["East Arapahoe — it's about options."](#) Daily Camera, Feb. 4) continues the city and county's propaganda war against private vehicles and their owners and occupants. They also continue the intentional misrepresentation that The People have had any direct input or control over the outcome of this process when in fact it has always been "staff-driven." This term, in case you don't recognize it, is a euphemism for "bureaucratic totalitarianism," where public policy decisions are made not by The People or even by their elected representatives but instead by career ideologues hired or appointed by those representatives who use them to implement public policy without all that bothersome accountability.

I learned this term from one of the citizen members of the working group Drozdek and Cook cite as an example of how the public's input is being sought and acted upon. Unfortunately, and by these participant's own admission, the citizen members of that group had almost no input into the process. If they had, a four-lane Arapahoe/State Highway 7 option with no dedicated BRT (Bus Rapid Transit) lanes from Cherryvale to Highway 287 would have surely been included among the choices presented at the various public forums. But you won't find it among the options discussed at www.eastarapahoetransportationplan.net, nor apparently did staff even do an analysis of that option, because they explicitly wanted to deny The People the option of choosing it.

This is because the East Arapahoe Transportation Plan (EATP) is not about options or any individual's freedom to choose among them, it's about social engineering: changing The People's behavior to achieve some ideological goal. In this case, the city and county intend to intentionally inflict increased travel times for private vehicles all along Arapahoe/State Highway 7 by only adding bus-only lanes east of 75th and rededicating to buses one of the existing lanes in each direction from 28th to 63rd in an attempt to coerce people out of their cars and onto public transportation. Now this would be fine if The People actually shared that goal and approved of the method, but there is overwhelming evidence that the opposite is true: Nearly all of the letters published in the Camera and nearly all of the relevant comments collected as part of the EATP open houses express a preference for widening the road for all traffic, not just BRT (see www.matchism.org/EATP for a list of links to the Camera pieces and other background information).

This design might also be justified if it was properly engineered to account for current and projected usage patterns. Unfortunately, just like the Folsom "right-sizing" fiasco, the

people who came up with this design aren't engineers, they're "planners" who have no engineering training nor do they even think like engineers. Any qualified engineer would tell you (as the CDOT engineers have told me) that the design they are recommending is fatally flawed. State Highway 7 is already about 25 percent over capacity at 95th Street and projections are that it will be at capacity for a four-lane road by 2040. And this doesn't even account for the significant increase in traffic that will occur as a result of inexpensive and reliable botcar (autonomous vehicle) service which will eventually eliminate not only public bus service, but also finally fully implement school choice by eliminating the need for school bus service.

The bottom line is that at this point I'd recommend not wasting your time attending the "propaganda forums" that the city's staff puts on for these kinds of things. Expressing your opinion there clearly just doesn't matter and indeed may not even be conveyed up the hierarchy. Instead, I recommend you spend your time reading the actual proposals online and then communicating directly with the City Council (council@bouldercolorado.gov) and county commissioners (commissioners@bouldercounty.org), being sure to insist that they actually hold a public vote on whatever plan they choose so that we can hold them accountable. They didn't do this on the Cherryvale-to-75th project, which is why that is still only two lanes and why traffic backs up for miles in both directions in that area. But they did vote to approve the Folsom "right-sizing" plan, which is why when that project went pear-shaped they quickly reversed their decision and undid the damage their amateur social engineers had done to our infrastructure. Sure, reversing the EATP is going to result in the waste of hundreds of thousands or perhaps even millions of dollars, but at least in the end we'll get our lanes back.

Ray Hedberg: There is no East Arapahoe Transportation Plan – 3/4/2018

The Feb. 15 East Arapahoe Transportation Plan public review meeting titled itself as a review of the plan. Whoa, there is no a plan! The city conveniently stated that what they were presenting was a subcontractor developed "vision" (\$400,000+ taxpayer cost to-date) of a substantially redesigned Arapahoe traffic flow sometime in the 2040s. Clearly it did not address the existing auto traffic mess on East Arapahoe, from 63rd to 75th, *and in fact it may make it worse as it reduces the number of lanes* of automobile traffic.

It is, at best, another Expensive Grand Planner Hallucination (EGPH, pronounced eupgh or yuk for short). It seems unlikely to ever be funded and in some places requires purchasing right-of-way from private property owners. Subsequent communications with city staff have confirmed that there are *no 2018 nor 2019 plans, projects nor actions* to address the current Arapahoe Mess. We must ask *why* has this been delegated to the staff [Go-Boulder] who appear to have their heads in bikes, buses and 2040 dream clouds. It sounds a lot like the 2040 RTD trains plans that we are already being taxed for.

Maybe we really need to get weekend volunteers to re-stripe Arapahoe? Or, do we need the Boulder city manager and transportation staff to stop their focus on planning dreams and instead solve current problems?

Dom Nozzi: 'Carbarians' get it wrong – 3/22/2018

Anti-city, pro-car advocates (also known as "carbarians") urge Boulder to use the conventional methods traffic engineers have used for over a century: widening Arapahoe Avenue to "accommodate expected growth in area car trips."

One small problem. Widening has utterly failed for a century.

The trillions spent on widenings not only failed to resolve congestion. By ignoring the well-documented, inevitable impacts of induced demand, the widenings have also worsened land-use patterns, increased per-capita car trips, exponentially increased household transportation costs, increased carbon emissions, and caused financial strain to city and state government.

Carbarians call pro-city advocates "ideologues." This is ironic, since those calling for widenings have a much stronger ideological bent (the car-based, anti-city ideology). Not widening a form of "social engineering"? Really? The most extreme form of social engineering is compelling millions for over a century to be car-dependent.

By contrast, not over-emphasizing car travel and instead designing for safer rather than dangerously fast driving, we are "nudging" motorists. We retain the choice to travel by car. By comparison, pro-car design such as widenings forces most of us to travel by car. Which is, by definition, social engineering. Is it OK to engage in social engineering if doing so compels people to drive a car?

It is bizarre to claim that not widening forces motorists to abandon their car in order to "ride a bike." Unless we believe a car trip that sometimes takes minutes longer will "force" people to abandon their cars. It is also false that a growing city inevitably requires there to be wider roads. If this were true, cities with several million people would have needed to build roads that were hundreds of lanes in width.

Transportation is a zero-sum game. When conditions are modified to ease travel by a larger number of cars, walking, bicycling, or transit is made more difficult. We thereby recruit more per-capita car travel.

There are negative downstream impacts of more cars that road widening induces. By inducing higher car volumes on Arapahoe, widening imposes more noise and air pollution on Boulder, puts more wear and tear on Boulder streets, consumes more parking, makes Boulder streets more dangerous, and reduces overall quality of life in Boulder.

Not all trips on Arapahoe are long-distance, essential, time-sensitive commuter trips from small towns. Many studies show that a large number of trips on Arapahoe are relatively low-value (i.e., trips to buy a cup of coffee). Such trips are induced even at rush hour by over-sized roads such as Arapahoe, and by the lack of compact, mixed-use neighborhoods.

Ironically, it is the carbarian who is unaware of many basic engineering rules, such as the triple convergence, the barrier effect, the travel time budget, the variable nature of trip value, downstream impacts, the zero-sum game, and the social engineering that compels car travel. Worst of all, this ignores an iron law: We cannot build our way out of congestion. Widening a road to reduce congestion is like loosening your belt to solve obesity.

If you find yourself in a hole, stop digging. Stop treating Boulder like a doormat by widening roads. We need more housing — particularly more affordable housing. We can provide more

transit coupled with more park-n-rides. Provide more compact development. Make major roads complete streets (rather than car-only stroads). Create more priced parking. Convert minimum parking regulations into maximum parking requirements. Reduce the size of oversized roads.

These tactics nudge travelers toward more socially, economically, and environmentally desirable travel. Such tactics will improve the region, as they will encourage more commuters to live closer to their destinations, enhance transit service, increase in-town housing, reduce higher speed car travel, promote smaller stores (rather than Big Box stores), and increase Boulder's ability to shrink oversized parking lots and roads.

Economists show that each car trip imposes a financial *cost* on the community (a cost that most or all in the community must pay, whether they drive a car or not). Each bike/walk/transit trip results in a positive financial *benefit* for the community (a benefit that most or all in the community enjoy, regardless of how they travel).

Many cities in the past put all of their eggs into the "conventional engineering" basket. They did so while being in precisely the same situation that Boulder is in: What to do about congestion? What about all the in-commuters? They all greatly worsened their transportation situation and their quality of life.

We can do better. Let's stop making the same ruinous, bankrupting mistakes.

Dom Nozzi is a former member of the Boulder Transportation Advisory Board, but this opinion is solely his own.

Scott Raney: False claim about Arapahoe traffic flow – 3/28/2018

Dom Nozzi ("[Carbarians get it wrong.](#)" Daily Camera, March 23), one of the amateur social engineers responsible for the Folsom "right-sizing" fiasco, has apparently failed to learn the "iron rule" of traffic engineering (and democracy): It is simply immoral to impose restrictions on The People in an attempt to change their behavior without their consent. There isn't space here to address each of his lies and misrepresentations, but let's deal with the big one: "You can't build your way out of congestion." I present to you Exhibit A, South Boulder Road between Boulder and Louisville, which flows freely even during the rush hours.

But rather than give the same upgrade to Arapahoe, Dom and the city's transportation department propose to eliminate the need by merely stating that the Arapahoe and 63rd intersection operates at free flow (at or near the speed limit) even during the evening rush. The entire East Arapahoe Transportation Project plan is built upon this claim, a claim that is obviously false to anyone who has experienced it, or has used Google or Apple maps to plot a route east (they'll send you down Cherryvale rather than deal with that mess, see the demo, and much more, at <http://www.matchism.org/EATP>).

When confronted with this discrepancy the "planners" in the Go Boulder group (who are the ones running this show) offer no explanation as to why their data does not reflect reality. "That's our story and we're sticking to it" seems to be their modus operandi. Which of course is exactly how the Folsom "right-sizing" fiasco went down. It's time to take the ideologues out of transportation planning and let The People specify what they want built. If you agree, please contact City Council (council@bouldercolorado.gov) and tell them so.

Gary Sprung: Shift spending from road expansion to alternative transportation – 6/16/2018

Chuck Wibby argued on (June 6) that Boulder's decision to expand Arapahoe Avenue up to 63rd, not all the way to 75th Street, was an example city officials' "efforts to control every aspect of your life." It is obviously true that government choices about transportation infrastructure strongly influence how we travel, and where we live and work. In the 19th century, Congress wanted to expand our civilization into the West and gave subsidies for the construction of transcontinental railroads. Towns and cities grew up around those railroads. American governments in the 20th century chose to tax and spend to build roads for car travel. The decision to build a super-network of public roads and public airports created competition with private passenger railroads and destroyed what once was a fabulous transportation system. America's passenger trains in the first half of the 20th century were generally efficient and took you where you wanted to go at reasonable speed. Passenger trains connected every city and nearly every town. Often there was competition which drove down prices.

We spent bazillion dollars on public roads and now what have we got? A death toll of 40,000 people in a year; in two years more Americans dead by automobile than by the Vietnam War. Sprawled-out cities, where the access to food and most other goods requires driving an automobile. Frequent congestion that frustrates everyone. Promises that road expansion will restore the "freedom of the road" — which never works out because everyone just drives even more, and the population keeps growing, so the roads get even more crowded.

Should America spend its public money on expanding roads, or on more diverse and more safe forms of transportation? We have a partisan divide about that, with many "conservatives" favoring the continued dominance of the automobile, a vision of cars as king. It's a vision based on the wealth created by the automobile and oil industries. They convinced America that the "freedom" and independence one gets from owning a car is liberating, powerful, sexy, or just plain cool. And it's true: Road trips can be a delight. Touring America by car on vacation is way fun. In the city, when parking is free and the roads are empty, driving is efficient and fast. But how often do we get "freedom" or joy by driving our cars? How often are we "caught up in traffic?"

Instead of spending more bazillions on four-laning Arapahoe Avenue all the way to the Atlantic Ocean, we should invest in buses, trains, and paths for peds, bikes, and e-bikes. Yes, this will "control" an "aspect of your life." It will influence you to use those alternatives, because they will become more competitive with the car. Government thus will not require that you use a car. But it won't mean that government closes Arapahoe Avenue. You'll still have the freedom to drive there.

The more we spend on roads, the less we have to spend on the alternatives. It's time for America to change its priorities. For our roads, we should focus on adequate maintenance and adopt a no-expansion mode. We also need to spend our public money on a transportation system that is safe, efficient, equitable for all, and carbon-neutral. Focusing our resources on roads is unlikely to lead there.

We also need to remove some roads to re-create habitat for wildlife, the critters with whom we share this planet.

6. ONLINE COMMENTS AND EMAILS

Project staff continues receive comments via the project webpage and email.

- Would love to see more space / protection for bikes and buses. I commute every day via bike to the JCC on Cherryvale and Arapahoe, and then head west to work downtown. The westbound bike line is very narrow and cars are coming behind me fast. I am always worried that one will side-swipe me.
- I live near 95th and Arapahoe and work near 55th and Arapahoe. I choose to commute to work either driving (60%) or biking (40%). I occasionally use the JUMP bus (few times a year). If I had a subsidized bus pass, I might elect to use the bus more. As of right now, it doesn't make sense economically or functionally.

From my 4 years of 95th-to-55th Arapahoe commute, observing traffic flow and impacts of weather, construction, seasons, and municipal growth, I've made the following notes:

1. Single lane each way from 63rd to 75th causes backups.

a. The addition of an "expansion" lane near 75th seems to help a little, but most people don't know how to use it.

b. I think the culprit is the lights on either end of this segment. Driving Westbound on Arapahoe during the morning commute, the light at 63rd and Arapahoe stops up traffic unnecessarily. It seems the light stops traffic for just a few cars trying to pull out of 63rd.

c. Space exists to create 2 lane each way on this segment without widening the road. Bicycle traffic already uses the sidewalk instead of the bike lane (safer).

2. I am a bicyclist and I live and work on Arapahoe, about 5 miles apart. I never ride Arapahoe to get to work because the bicycle infrastructure does not exist East of 75th. If I ride along Arapahoe, I always choose to take the sidewalk instead of the bike lane. The sidewalks are wide (until Foothills, where I can pick up the creek path) and the bike lane is scary. It seems drivers have a hard time looking out for bikers in the bike lane. I feel safer on the sidewalk, because more drivers watch the crosswalks.

Thank you for reading my comment.

- Hello,
My input regarding East Arapahoe Expansion.
 1. Change Roadway improvements and design enhancement guidelines to:
Facilitate moving auto traffic smoothly without delays or stops as much as possible! not "Slow" traffic..., as has been bulleted.
 2. Enhanced Bus and Enhanced Bike and Ped Facilities. Bike and pedestrian main traffic should be on one side of the road only with minimal pedestrian access for buses on other side so more auto lanes can be provided. Add a changeable one way

middle lane that allows more westerly traffic in AM and easterly traffic in PM to facilitate more auto traffic moving in and out of Boulder more efficiently.

3. Side Running Bus Rapid Transit... OK but add the changeable one way middle lane as described in #1.

4. Center-Running Bus Rapid transit... Putting buses in the middle of the road requires pedestrians to have to cross to outside of roadway. This would be a gigantic problem with people stopping auto traffic often to cross in/out of center transit pathway. Pedestrian movement should not inhibit auto traffic unnecessarily.

- I request construction of a high sound wall approximately 1/2 mile east and 1/2 mile west of Westview Dr. on the south side of Arapahoe. This is important to reduce noise in the neighborhood south of Arapahoe at and near Westview Dr. I request that the sound wall be constructed now due to increased traffic noise that has already occurred as a result of the last improvements constructed on Arapahoe near Westview. Any of the proposals for additional construction will further increase the traffic noise to that neighborhood.

Thank you for consideration of this request.

- I encourage adoption of the Enhanced Bus and Enhanced Bike and Pedestrian Facilities with no reduction in the number of auto travel lanes.

The city council and transportation planning groups fail to recognize that while increasing residential growth in Boulder through high density projects that you are also significantly increasing number of cars per acre and burden on traffic arteries and carbon emissions. A zero carbon emission goal and high density population goal are simply not congruent or compatible without significant restrictions on number of autos in these new high density developments and much public re-education.

Eliminating auto lanes with the simultaneous goals of increasing growth and density are simply not compatible goals as currently structured. Our traffic in terms of number of cars, congestion and carbon footprint as a result are in complete conflict with our goals. To improve traffic we need to eliminate high density housing and also encourage job growth with strong transportation commuter plans versus continued high density population growth to lower the traffic congestion, pollution, and road cost burden on existing tax payers.

This type of approach also requires maintain existing auto arteries, not reducing them further in the face of BVCP goals of increased density, particularly since about 25%-30 of residents are senior and not able to commute via mass transit due to our changing seasons which not realistic with year round biking or walking long distances.

What criteria are you using for your evaluation and judgements in the four models proposed? The evaluations seem very slanted towards goals that are not realistic

versus our population demographics, 4 distinct seasons, and city growth goals.

In my opinion the city needs to address transportation with the goals of the BVCP in mind and not in isolation versus just our carbon emission goals.

- Please respond to the following PRIOR to the Feb 15 meeting:
 1. The Alternative #3 diagram shows 77 feet, from curb to curb, allocated for for vehicles and buses. It specifies an additional 31 feet in each East/West direction allocated for pedestrians and bicycles; this totals 139 feet.
 2. Publish the existing curb to curb width at each of the following 8 Arapahoe intersections: 55th Street, Old Tale Road, Cherryvale, 63rd, the rail overpass, 75th, 95th and US 287.
 3. Is the 31 feet designated for bicycles and pedestrians in each direction currently owned by the City of Boulder? If not what addresses are affected?
 4. Provide a diagram with measurements of the chosen alternative's design at the rail overpass on Arapahoe.
 5. How much has this effort cost to date?
 6. Strong suggestion: For the February 15 public outreach meeting, please do not divide the audience into small focus / discussion groups. This was interpreted by many of us, who attended the last meeting at the Naropa facility, as a divide and supress tactic.
- While I am supportive of this work and understand the city of boulder is limited in its scope, I urge you to consider the Arapahoe corridor as it goes further east. Please collaborate with the county and other cities-- otherwise, this sort of plan will not be very impactful for the 60,000 in-commuters. It should be part of a larger vision as much as possible, especially as things like BRT are considered. It seems to me, unless BRT is an option for in-commuters, which will take shaping the rest of Arapahoe accordingly and getting other cities or CDOT or whomever to buy in, it will fail to solve many of the issues we face and not be a compelling alternative to commuters as those buses will be stuck in traffic along with everyone else.
- I would like to provide you first-hand feedback since I bike commute, I reside a mile from Arapahoe and 75th, and I work in Boulder. I have tried bike commuting on Arapahoe several times, but the result is always unpleasant, so now I take Baseline in and out of Boulder.

When traffic on Arapahoe is essentially stopped, every weekday morning at rush hour, the biking in the bike lane or on the multi-use path is bad because of the smog from vehicles. I find it hard to breathe then.

When traffic is moving, vehicles spew large amounts of exhaust to maintain 50 MPH up the hill. Again, lots of smog so hard to breathe.

Therefore, I do not think this stretch of road (Arapahoe from 75th to BVSD) is suitable for bicycles and cars together. I've tried the generous bike lanes and the generous sidewalk/path. I recommend you concede this route to motorized vehicles, and open up another lane in each direction.

I believe your idea for an "off-street multiuse path and raised protected bike lanes" is a waste of money given the good sidewalk/path existing now. From what would the bike lanes be protected? Have you looked at how deserted the sidewalk is now? Have any of you biked this stretch of Arapahoe?

If you really want to spend money to do something good, consider a multi-use path along Baseline from Cherryvale going West as far as you can. There are a tremendous number of bikes on Baseline: commuters, recreational cyclists, and kids biking to/from school. Why not protect people where they are, instead of where they are not? The smaller hills and lower speed limits make Baseline a better focus for multi-use.

Unfortunately, I won't be in town for your 2/15/18 workshop. Feel free to contact me if you have any questions. Thank you.

- What do you define East Arapahoe as? We have lived on the 10,000 block of Arapahoe for 44 years -- we see concern for developers and city sales tax such as the Silo development adding 400 housing units and a traffic light to an already overcrowded road -- we see lots of concern for bikers and hikers . How about the people who LIVE there? We sometimes have to turn West, then North, then East to get to Erie where our daughter lives because we cannot get on Arapahoe going East. I say the real problem is not enough housing between Boulder and US 287. There is a lot of city and county owned land between here and Boulder -- how about a few thousand dwellings built on a percentage of that land? That would relieve congestion on East Arapahoe - somewhat between 75th and 95th and a lot more between 95th and 287. I know that would not be politically correct , but it would be effective. Thanks for listening.
- Given that RTD does not provide true BRT on US36, how will the city provide it on Arapaho vs just getting slightly better busses that dont include the characteristics of BRT?
- Where/when are the next informational meetings for the public about the Arapahoe East transportation plan?

- I cannot attend the meeting Wednesday on the Arapahoe Traffic Corridor as I have to work from BCH Wednesday morning, but I would like to have “my voice be heard,” as mentioned on the front page today. Below is a copy of a letter to the editor I sent to the Daily Camera a couple of weeks ago on this topic. I would very much like it if a copy could be given to the people running the meeting on Wednesday.

I want to apologize to my neighbors in Boulder who live along 55th Street and Cherryvale Road for all the traffic that goes up and down your streets during the twice-a-day rush hour, including me sometimes. If you would like to reduce the number of cars traveling on your street I highly suggest writing your Boulder City Council members as well as the Boulder County commissioners and let them know the nice, new stretch of Arapahoe Avenue from Cherryvale to 75th Street should be striped to allow for four lanes of traffic.

The attempt to make massive bike lanes and a bus lane running along this new section of road hasn't worked, and it won't work as there are simply too many people who need to travel this corridor every day. Boulder needs to accept Arapahoe as a major feeder artery for those of who commute from the East of town. The traffic jam that forms along that stretch of road every morning and afternoon wastes more gas than is being saved by the bus and bike riders the road is trying to lure. It should be noted I've never seen a single bike commuter take Arapahoe. All of the bike riders I know, and I do bike to work on occasion, take Baseline or the Boulder Creek bike path. Nobody wants to add the unnecessary hill on Arapahoe to our commute when two other, much more enjoyable routes already exist.

Please stripe Arapahoe for two lanes in both directions all the way to 75th, and then bask in the reduced traffic in your neighborhoods, reduced smog in your air, and happier workers in your businesses.

- A turn arrow light for cars turning left as they go in either direction north and south along 30th would be great. I noticed that a turn arrow light was recently installed, however it seems to always be flashing yellow and never turns green or red, so it is still just as difficult as it always was to turn left off of 30th, the flashing yellow light does not stop oncoming traffic to allow you to turn. (I live on Colorado between Foothills and 30th and this has been a big problem intersection for me. I use Foothills mostly these days just to avoid it.) I nearly killed a bike rider once turning right from 30th onto Colorado Ave; he entered my blind spot somewhere between Baseline and Colorado, I never passed him, I never saw him until he was in front of me in the intersection as I turned right and hit him....I don't even know how or when he got there....he said he was going too fast to stop and tried to make it across the intersection before I turned. I cannot make the next workshop but my email is _____ if I can be of help.
- I cannot attend the Feb 15th meeting, but here are some comments:
 Please tell the traffic people to double or triple the time of the green arrow traffic signal for drivers going north on 55th turning West onto Arapahoe. The new lights and the flashing yellow are not sufficient to allow more than a few cars to turn if there is even moderate traffic. I am asking that the left green arrow light is on long

enough so all of the cars in the turn bay can turn left in one light cycle. The turn bay for that left turn holds maybe 8 - 10 cars, you need to extend the time of the green light so all of the cars in that left turn lane get through in one light cycle. Especially during the busy morning hours, I have seen traffic backed up almost all the way south to Pennsylvania Ave. Extending the left turn signal will definitely help that problem. When the left turn bay is full and not all cars waiting to turn left onto Arapahoe get through on one light cycle, the line of cars waiting to turn left backs up extending south past the pedestrian island where there is only a single northbound lane. I have been in that situation several times. I was blocking the cars waiting to travel straight ahead north of Arapahoe, and it took two or three light cycles to eventually turn left onto Arapahoe. Locals know that if you are first in line you need to stare at the light and jam your foot in the accelerator the instant the left arrow turns green or only one or two cars get through, and you are also likely to get honked at. Sometimes the southbound traffic lighten up enough so a few more cars can turn after the arrow, but a pedestrian or two brave enough to cross Arapahoe limits that possibility. I am asking you to increase both the time of the left turn light and time the lights to make it safer for pedestrians, and time the lights similar to other busy intersections Arapaho (Foothills, 30th, 28th) where northbound left turning cars do not turn at the same time as the southbound cars.

- More input since I can not attend the Feb 15 meeting:
 You need to fix the drainage problem on the eastbound lanes of Arapahoe between Patton Drive and 55th Street. Even in a moderate rainstorm there is flooding halfway into the lane by the curb, and with a downpour or after a moderate snowfall flooding goes all the way across that lane. Standing in the bus shelter I get splashed when cars go by, also just walking on the sidewalks, crossing the street by Ozo's, etc. When I drive east along those blocks preparing to turn south on 55th, if I'm in the curb lane water splashes all over my windshield so I can't see, even turning on the wipers at high speed is not enough. Water blasts the underside of my car, I'm splashing all over other cars and pedestrians too. If I try to stay in the middle lane as long as possible my windshield still suddenly gets splashed by cars in the curb lane, who are also covered with so much water they probably can't see me as I try to merge into the curb lane to get ready to turn left onto 55th. If a bus or truck passes you it's all over! There is no safe way to travel. In addition the curb lane is constantly rutted and full of potholes, then gets rough after you pile on more asphalt. Fixing the drainage should help that problem too. When I walked along the street from Patton all the way to 55th I saw 2 or 3 small drain grates on that whole stretch of curb. It seems obvious more storm drains are needed! While you are digging up the curbs to add drainage grates and pipes please bury the power lines while you are at it, widen the sidewalks, make a nicer bus shelter, etc. I am guessing you are already planning that stuff but it doesn't make any sense to do any of that if cars and pedestrians are splashed so much nobody can see! After 25 years living in this East Boulder neighborhood I am tired of dangerous driving in rain and melted snow.
- This plan does nothing to address the need for more regular vehicle lanes. Getting out of Boulder in the afternoon is a lengthy and frustrating process. Adding lanes dedicated to mostly empty buses is a waste.

East Arapahoe needs to be widened for all vehicles.

Furthermore, I can't believe that the city would yet again propose a landscape design using grass in medians, and yet, that's what's shown. Grass looks terrible, takes far too much water (or dies from lack of it), and takes damage from de-icing fluids, sand and salt.

It is time for the city to propose an alternative that actually meets the needs of the thousands of drivers rather than pandering to the notion that somehow, some way, people who don't want to ride a bus are magically going to change their minds and hop on. The current proposal is wasteful to the extreme and has about as much chance of success as did the failed idiocy of revamping Folsom.

- If the Bus lane is going to be red-orange, make the Bike Lane GREEN! Use Green colored concrete.

Make the Bike Lane and Sidewalks continuous. Make the car driveways go over them. This way the cars know they have to look and yield for bikes and peds.

- Hello,
It is hardly clear when/if resident input has been gathered, documented, and incorporated into the EATP. Looking through the meeting minutes, it appears scant consideration has been given to the impacts on the local residential areas in the grid bordered by from Foothills (W) to Cherryvale (E), and Arapahoe (N) to Baseline (S). Nearly all of the information publicly available - such as the Alternatives Evaluation Report - pay little attention to the impact of the EATP on these residents. The only substantive commentary by the working groups or the project is included in the response to the FAQ question, "QUESTION: How will this project affect my neighborhood? Won't it cause more cut-through traffic?" However, even then, the conclusions of the study are only mentioned, but the full study itself is not disclosed.

Public forums, open houses, webpage forms - none of this is enough. What about the several thousand people that *live* in this area - what mitigations can the EATP incorporate to ensure that their quiet neighborhoods do not become littered with commuters, transients wandering from one strip mall to another, waiting for the bus to take them to their next high?

I'm not in denial of the traffic problems, and common sense tells me that tax-dollar-hungry Boulder would be more than happy to gut east Boulder and turn it into what Gunbarrel has become. People don't live - and move - here because they want to live in environments like New York, Chicago, San Francisco, Portland, et al. They live here for the quiet, convenient, great-place-to-raise-kids town that this is advertised to be. But the EATP - like most of Boulder's "sustainable growth" initiatives - appears to only favor unbridled growth without regard to retention of the character that keeps us residents here

- My wife and I are strong supporters of alternative transportation (I do a 16 mile bike commute once a week and my wife takes the bus to Denver every day). But we are

opposed to Boulder's social engineering experiments, like the Folsom "right sizing" and the fiasco of your previous attempt to "fix" Arapahoe from 63rd-75th St. Adding alternative options is great, but intentionally creating traffic jams is just wrong. You are just making our air pollution even worse, and that makes people LESS likely to bike commute. Arapahoe needs 2 general purpose lanes from Boulder all the way to 287. Adding additional features for buses, bikes, and pedestrians is great, but whatever you do, don't stick your head in the sand and deny the reality that more capacity is needed on certain roads.

Until Boulder changes the policies that drive up housing prices and make people move to the suburbs, we WILL have to build our way out of traffic jams.

- I like the alternative selected, but one concern is if getting more pedestrian and cyclist traffic works, this could also down right turners which in turn slows transit. You can death is already at 55th and Arapahoe in the morning where the odd pedestrian crossing 55th causes a tail back on right turners going West on Arapahoe to North on 55th. Another junction with this issue is at the hospital. Can there be a dedicated right turn lane in addition to the bus lane at these select junctions? We already experience a lot of impatient and lane hopping speeding drivers along Arapahoe between 63rd and foothills that makes crossing these junctions on foot or bike uncomfortable.
- There is major afternoon rush hour east-bound congestion where east-bound Arapahoe narrows to one lane due to the designated bus-only lane. (Similarly, there is major west-bound congestion in the morning.) In my experience on Arapahoe, I see the bus-only lane rarely used. Consider opening this lane to all traffic, or at least as an HOV lane, along with maintaining two lanes in each direction all the way to the 75th stoplight (currently only one lane under the railroad bridge). Thank you for your consideration and your work on this project!
- The city needs to focus on the vast majority of road users, primarily people in cars, by making it easier to drive and by making traffic flows and commutes as smooth as possible. Bikers only account for 9 percent OR LESS of road users yet so much of the city's budget for street updates goes towards bikers who represent a TINY percentage of commuters and who only bike seasonally (i.e., in winter months, the number of bikers drops precipitously). In addition, very few pedestrians use Arapahoe and yet the sidewalks are huge, which takes space away from car lanes. Instead of removing a lane for car travelers, three lanes need to be retained for car travel, and huge sidewalks can be reconfigured for a bus lane, bikes and pedestrians.
- I live in Willow Creek neighborhood off of Arapahoe, just east of 75th. Serious consideration and thought needs to be given to reducing road noise. Since the past improvements in 2014 on east Arapahoe, the car noise from the 75th & Arapahoe interchange has ruined the rural country feel of the area. Its simply getting too noisy. We can't eliminate all traffic, people commuting from the East will simply have to wait. More roads is ruining the rural feel. The "original" Boulder has been ruined by over development and more roads. Take a survey out on 75th & Arapahoe as to how many bike or walk to work from that area. Its almost non existent. All these improvements are a waste of money and provide job security for planners and

City/County employees. You are ruining Boulder, leave things alone! At a minimum, please plant lots of trees that act as a sound buffer! Thanks for your consideration

- I can't attend the Feb meeting so here is even more feedback:
 In the big master plan for the Arapahoe corridor I want to see a good plan to promote the use of electric cars. Boulder recently added a few more charging stations around the city, but Boulder is still very very far from the number of public charging stations needed. We have been driving electric cars in Boulder for 4 years, and have solar panels on our house to charge them. When we do need to power up while traveling around town, much more than half the time the available stations are In use or have a non-electric vehicle parked in the space (and no ticket). The stations are also frequently broken and even after several calls in to report a broken station it might be fixed months later. The ability to plan now for future needs in east Boulder allows the possibility to promote and provide incentives for using electric cars by incorporating adequate charging stations into the plan. Some ideas: Have park and ride lots along Arapahoe with adequate charging stations - as in 50 or more - and have additional electric wiring and regular electric plugs built in at ALL new parking spaces built in Boulder so people can bring their own cords to plug in (ideally high capacity 240 plugs) and the spaces could eventually have charging stations added. Especially more handicapped spaces with charging stations!!! Then, give all drivers and passengers in electric vehicles a free Eco Pass so they could park in east Boulder then take mass transit downtown. The charging stations should be free, but require registration for each vehicle with a card to activate charging. If you need to charge a fee maybe 5 or 10 cents per hour, just enough to discourage random people just passing through but not into Boulder. (Where to get the money? Obviously spend money on free EV charging for people, subsidize solar panels, etc, instead of millions on utility legal wrangling.) I suggest look at the area near Fisher Honda for EV parking, and ask the car dealers to help out, good business for them. In addition, equip every parking space downtown with a charging station or plug so there is a lot of incentive to buy and use less-polluting electric vehicles everywhere in Boulder. Start by putting the EV spaces in the primo spots next to entrances, etc. to add even more incentive. That way people driving cars all the way into Boulder would cause less pollution. To start give EV cars express lane or any and all extra lane privileges to EV vehicles. Also require every new residential or commercial building in East Boulder and hopefully all of Boulder to have electric plugs (ideally capable of handling 240 or high capacity charging) in every single new parking space built from now on. Otherwise people in apartments will not be realistically be able to have an electric car unless landlords allow long extension cords hanging out windows and down stairwells. If you don't believe me that Boulder does not have enough electric car charging stations I challenge every Boulder city council member, senior city official, and all planning board members to exclusively drive an all-electric vehicle around Boulder for one month. I don't mean a Tesla or even a Volt or Bolt, drive one of the older 2016 Nissan Leafs that are more affordable to everyone. If you don't know what Range Anxiety is, in a Leaf you will figure it out in a day or two.
- The EATP is not a plan. As your staff said at the Feb review meeting, it is a "vision" for 2040. A plan should contain a series of rational steps, which are reasonably possible to be funded. The existing EATP does not conform to these criteria. Is there

another organization which is working on a 2020 plan, or even a 2030 plan??
Perhaps the Go Boulder organization is not the one to deal with Arapahoe??

Many of us who attended to Feb 15 meeting had the same question - what steps are going to be taken in 2018 and 2019 to mitigate the traffic mess on east Arapahoe? No city staff person had an answer. It is clear that the Go Boulder organization is focused on B&B (bikes & buses) and lacks any focus on solving existing automobile traffic problems. In fact, reducing the number of lanes as the EATP diagrams showed, will make things worse. Perhaps the Go Boulder organization and mind-set is not the appropriate one to deal with Arapahoe??

Will the March 12 meeting deal with the many complaints documented as a result of the Feb 15 public meeting?

A PLAN should be composed of a series of steps instead of just a hallucination for a probably un-achievable vision. I suggest you remove the "P" from your project documentation.

- I am in complete agreement with Adam Kroll and also voice my concern about any reduction in car lanes. My wife and I were part of the neighborhood review process that took place 1 to 2 years ago. Could be my fault but I never got a clear indication of reduction in car lanes.

How can we and others voice our concerns?

- Today, Thursday, March 29, in the open forum in the Boulder daily camera there is a letter to the editor by Scott Ranney. I agree 100% with what God has said. The amount of money and construction disruption from the alleged improvements to Arapahoe on the east side of Boulder is a giant waste of that money and has not done one thing to approve traffic flow in that area!!

Just pay attention to what is said in that letter to the editor. If those facts are deniable I would be stunned. This is idiocy, this is the emperors new clothes.

Knowing that the current Council members were not part of the decision-making process I asked that they now involve themselves and correct the issues that are responsible for her Renda's traffic flow from 7 to 10 AM Monday through Friday and 330 to 6 Monday through Friday.

Taxpayers paid for that road improvement and they have gotten no traffic flow improvement! The bus lane is a farce ! And set up a camera and watch how few people ride their bikes on either side of that road. Although I encourage biking and I do it myself that was a monumental waste of money.

- Great editorial in today's Daily Camera 3-29-18 by Scott Raney. Building better intersections at 63rd , 75th 95th and multiple lanes thru intersections and 2 lanes minimum the rest of the east west length of Arapahoe. Please address this problem before it gets any worse.

The East Arapahoe Transportation Plan (EATP) has been underway since 2015 to identify long-range transportation improvements within the corridor, addressing the need to enhance safety and travel options, and improve conditions for all travelers. In addition to broad community outreach with members of the public, corridor stakeholders, and agency partners, the planning process involved the East Arapahoe Community Working Group (CWG), formed in 2015, to provide input and feedback, from different interests and perspectives, to the city staff during the planning process. This memo outlines the CWG's involvement and findings.

CWG Process

During its ten meetings, the CWG studied project information, asked questions, offered ideas and preferences, and shared insights on community engagement and communications. In particular, the CWG helped to:

- shape the plan goals,
- describe the character of different corridor segments,
- identify issues and opportunities for each segment, and
- review and help refine alternatives and their data-driven evaluation.

Throughout the process, the CWG has recognized and taken into consideration the difficulty of designing a transportation corridor such as East Arapahoe that must function as a regional transportation route with significant daily traffic volumes moving long distances, while also serving as a transportation route for local residents, businesses, and institutions. In particular, accommodating regional commuters (who prefer efficient travel with limited delays) with cyclists and pedestrians in a safe, pleasant environment is especially challenging. The CWG also recognizes that there are needs in the corridor today to ensure East Arapahoe is equally accessible and safe for all users, including but not limited to people with disabilities.

CWG Findings

The CWG supports a preferred vision that is a multimodal complete street design. It includes maintaining two general purpose lanes in each direction throughout most of the corridor, repurposing the existing curbside travel lanes to accommodate a combination of Bus Rapid Transit (BRT), local transit, High Occupancy Vehicles (HOV), right-turning vehicles for business access, and the eventual addition of new shared technologies such as autonomous/connected vehicles. It also includes an off-street multiuse path, raised protected bike lanes and streetscape amenities.



2040 Vision

Based on the data and what we've learned about each alternative analyzed through the planning process, we believe this vision best meets the plan's goals and benefits the most people. It is the best opportunity to move more people through the corridor, maintain or improve travel times for all users, and enhance safety and travel options. The vision will increase access and comfort for all people walking and bicycling and will create greater visibility for cyclists as well as separation from general traffic. Importantly, this local plan is supportive of and consistent with regional plans for SH 7 between Boulder and Brighton, which call for high quality-high frequency BRT, a regional bikeway, pedestrian improvements and first and final mile supportive infrastructure.

As members of the CWG, we feel that this was a credible process that accounted for both a technically rigorous analysis and extensive public input. And, we understand that the vision is a conceptual framework and more detailed design and integrated land use planning will be required to begin phased implementation over many years. Transformation of the corridor will be a long-term endeavor and a continuous, evolving process.

We are honored to have contributed to addressing the challenges and future opportunities that lie ahead of us to transform the East Arapahoe corridor into a complete street that provides safe and reliable travel options for all people.

Community Working Group Members:

- Kai Abelkis
- Dave Baskett
- Aaron Cook
- David Cook
- Johnny Drozdek
- Guy Fromme
- Aaron Johnson
- Yvan Lehuerou
- Sherry Olson
- Aaron Pasterz
- Elisabeth Patterson
- Sue Prant
- Anna Reid
- Bill Roettker
- Thomas Sanford
- Jerry Shapins
- Becca Weaver



Transportation Department

2525 13th Street, Suite 203 • Boulder, Colorado 80304 • Tel: 303.441.3900 • Fax: 303.441.4594

Mailing Address: P.O. Box 471 • Boulder, Colorado 80306 • www.bouldercounty.org

March 7, 2018

City Council Office
City of Boulder
1777 Broadway St.
Boulder, CO 80302

RE: LETTER OF SUPPORT FOR THE EAST ARAPAHOE TRANSPORTATION PLAN

Dear Council Members:

Boulder County offers this letter of support for the City of Boulder's *East Arapahoe Transportation Plan* and the recommendations it proposes.

The *East Arapahoe Transportation Plan* was developed using a comprehensive planning process including significant public and interest group outreach through their Community Working Group. This process led to a recommendation that accounts for the diverse needs of users on the corridor today and into the future, as well as meeting objectives outlined in the *Boulder Valley Comprehensive Plan* and the City of Boulder's *Transportation Master Plan*. The recommended alternative in this plan is consistent with collaborative planning efforts on the corridor undertaken by CDOT and Boulder County including the 2014 *CDOT SH 7 PEL* and the Boulder County *SH 7 PEL & BRT Feasibility Study*.

The *East Arapahoe Transportation Plan* takes into account the need to move people efficiently and safely on and through the corridor, and reflects the options identified in the SH7 corridor studies stretching from Boulder to Brighton.

Boulder County is pleased with the results of the *East Arapahoe Transportation Plan* and looks forward to implementation of its recommendation, along with future opportunities for collaboration with the City.

Respectfully,

George Gerstle
Director
Boulder County Transportation
ggerstle@bouldercounty.org



COLORADO
Department of Transportation
 Region 4

Regional Director's Office
 10601 W. 10th Street
 Greeley, CO 80634-9000

March 28, 2018

Michael Gardner-Sweeney
 Director of Public Works for Transportation
 Boulder City Council
 1777 Broadway
 Boulder, CO 80302

Dear Mr. Gardner-Sweeney,

The Colorado Department of Transportation (CDOT) supports the City of Boulder's process for the East Arapahoe Transportation Plan (EATP) for State Highway 7. CDOT is dedicated to enhancing the quality of life and the environment of the citizens of Colorado by creating an integrated transportation system, offering links between modal choices and focusing on safely moving people and goods.

The East Arapahoe corridor is on our State Highway system, and we recognize that the transportation improvements called for in the City's EATP will provide critical links to the broader SH 7 multi-modal corridor planning initiatives, connecting Boulder to I-25, and beyond to Brighton. CDOT appreciates the continued partnership with Boulder staff during development of the City's recommendations for this corridor, and we support the plans and objectives to include:

- Continued evaluation of repurposing the existing general-purpose travel lanes to accommodate local transit (JUMP) combined with future regional Bus Rapid Transit (BRT) service and new-shared technologies, such as autonomous-connected vehicles.
- Developing a corridor-long, off-street, multi-use path and raised protected bike lanes that will be maintained by the City.
- Designing intersection configurations and traffic signal practices to enhance multi-modal safety in support of CDOT's *Toward Zero Death* safety goals and the City's *Vision Zero* goal.
- Supporting the efficient and reliable movement of freight and goods through the corridor.
- Working collaboratively with CDOT to develop performance measures and trigger points with an on-going monitoring program to ensure the corridor operates safely and efficiently into the future.

We recognize the EATP's objective is setting the vision to improve access, mobility, operations and reliability, and will enhance safety for all users, people walking, biking, taking transit and driving. We look forward to continuing our collaboration with the City and SH 7 Coalition communities in realizing this vision through long- and short-term safety and multi-modal improvements.

Sincerely,

Johnny Olson
 CDOT Region 4 Director

JWO:COB:mbc

cc: K. Sheafer / Dan Marcucci, S. Engr. Prog.
 J. Eussen / Karen Schneiders, Planning Unit
 File





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