

Transportation Master Plan/Complete Streets Focus Area Summary of CU East Campus Connections Project

PROJECT SUMMARY:

The CU East Campus Connections Project is a joint work effort between the University of Colorado (CU) and the City of Boulder. This work is being developed as part of the City's Transportation Master Plan (TMP) update process to advance the multimodal goals of the "Complete Streets" focus area. In addition, the project supports the broader community goals identified in the city's Climate Commitment and Sustainability Framework.

The goal of the CU East Campus Connections project is to partner with CU to integrate the connections put forward in CU's recently completed CU-Boulder Transportation Master Plan and the connections identified in the City of Boulder's Transportation Master Plan. A particular objective is to identify those connections needed due to imminent development at CU and as potential candidate projects for the upcoming 2016 Transportation Improvement Program (TIP) funding cycle.

The CU East Campus today is characterized as a large "super block" of approximately 200 acres with few connections and significant transportation barriers. CU plans to add significantly more housing and facilities on the east campus over time during the next several decades. CU's vision for the East campus is to transform the research park to be a "full campus" integrated with the main campus with a convenient and seamless sustainable transportation network of bicycle, pedestrian and transit systems. Improved transportation connections will be critical to the success of the East Campus both in the near term and the long term and will also be beneficial to the community by enhancing the transportation network in this area. The new Biotechnology building has already been completed at the East Campus and the new Sustainability, Energy, and Environment Complex addition is estimated to be completed in 2014/2015. Recent development at the East Campus warranted a new look at the connections in the area, to see if progress can be made proactively and in partnership with CU to begin advancing on some mutually agreed upon connections.

The CU East Campus Connections project involved developing a collaborative partnership with CU and included several joint CU and City workshops to discuss draft connections. A summary of the results of the CU and City of Boulder partnering workshops are presented below. Key work products completed include a map and list of the proposed draft connections. **See Attachments: B and C.** Various CU staff collaborated on this project including CU Office of Planning, Design & Construction, and CU Parking and Transportation Management and various city of Boulder staff from Public Works and Transportation.

BACKGROUND:

The University of Colorado East Campus includes the area north of Colorado Avenue, south of Arapahoe Avenue, east of 30th Street and west of Foothills Parkway, comprising

approximately 200 acres. **See Attachment A** for a map of the study area. All of the developable land is owned by the University of Colorado, (CU) along with several private roadways. City of Boulder ownership includes public facilities providing access along Colorado and Marine. RTD provides public transit to this area and CU also operates the Buff Bus. The CU East Campus can be characterized today as a suburban research park isolated from the Main Campus and commercial centers. This type of Research Park was common in the era of the 1980's and typically designed with transportation preference to automobiles as the primary mode of transportation. The recently adopted CU Transportation Master Plan shifts the paradigm to support sustainable transportation modes of travel and "complete street" concepts for the East Campus area.

Scenarios explored by CU envision a higher density goal targeting an ultimate build-out of 4 million gross square feet, phased in over time, perhaps 40 years in the future. This is an increase from the 1.6 million gross square feet originally planned in the Research Park and the 400,000 Gross square feet of existing family housing and administrative space elsewhere on the East Campus. Overall density of the area would have a density matching the Main Campus at full build out.

A new biotechnology building was recently completed adding 336,800 square feet of lab and classroom space and in 2014 a new geo-sciences addition will be completed. The CU-Boulder Transportation Master Plan envisions bicycling, transit and pedestrian modes of travel as the primary means of campus travel. Due to recent facility investments by CU and anticipated future growth, CU expects to develop the East Campus area over time to a more vital, high density campus center that is connected to the main campus in a seamless manner by bikes, buses and pedestrians, and with improved connections for all modes to major activity and residential areas such as Williams Village; the 29th Street Retail Center; downtown Boulder and Boulder Junction.

The objective of the CU East Campus Connections Project is to integrate City and CU Transportation Master Plan work and to develop a list of agreed upon, prioritized connections in order to achieve the following goals:

- Continue the strong partnership between CU and the City of Boulder;
- Be proactive regarding east campus connections on city facilities rather than reactive after development;
- Encourage the use of sustainable transportation as the primary means of transportation between the main campus and the east campus;
- Enhance connections between the main campus, the east campus, and other important residential, commercial and key areas in the community;
- Coordinate implementation of CU and City east campus connections projects
- Transform the Colorado Avenue corridor to provide seamless connections;
- Support and enhance transit.

PROJECT OUTCOMES:

Staff conducted four workshops during August – November, 2012 that included approximately 20 staff from various City and CU staff representing diverse disciplines and departments including City of Boulder Public Works (engineers, planners) and Community, Planning and Sustainability (long range planning, urban designer), CU architects, the CU Environmental Center Director, CU Parking and Transportation Planning staff, and CU Campus Facilities Planning.

The workshops were well attended and had broad representation from both the City and CU. The final joint workshop had 15 staff (8 from the City and 7 from CU). The purpose of the workshops was to develop a list of draft connections for the CU East Campus area, particularly those connections that may be missing from the City's Transportation Master Plan, and/or CU's Transportation Master Plan and those connections that were important to expanding the bicycle and pedestrian multi-modal transportation network in the East Campus Area. The objective was to find mutually beneficial and agreed upon projects that both CU and the City may be able to pursue funding and be proactive on expanding the transportation network in the CU East Campus area, particularly given the recent development at the East Campus. Following the workshops, the draft connections were mapped using the City's GIS system. The final step identified the top projects for additional development and potential submittal for grants by CU and/or the City. Draft connections were selected utilizing the following guiding principles which are consistent with guiding principles commonly found in the City's Transportation Network Plans:

GUIDING PRINCIPLES

1. *Break up the Super block. Establish a finer grained, multi-modal network of transportation connections.*
2. *Consider the "hierarchy of access"; establish the pedestrian environment as the primary mode.*
3. *Create safe and convenient access to pedestrian, transit and bicycle networks.*
4. *Support economic vitality and improve access to local businesses.*
5. *Support City of Boulder Comprehensive Plan, CU, City of Boulder and Boulder County Transportation Master Plans.*
6. *Support City of Boulder Climate Commitment, sustainability and economic vitality goals.*
7. *Improve safety for all modes.*
8. *Improve access to CU East Campus to and from major activity centers such as: CU Main campus; 29th Street Retail area; Williams Village; Boulder Community Hospital; Boulder Junction; Downtown Boulder; and the Arapahoe commercial area.*
9. *Establish transportation connections that support CU redevelopment plans for the east campus.*

Similar to the Boulder Junction planning effort, the primary objective of the additional connections is to break up the "super block" of the 200 acre CU East Campus land and to establish a finer grain network of multi-modal connections, particularly the bike and pedestrian networks, across the campus and to the surrounding areas. While transit is equally important, this work was conducted as part of the Complete Streets Transit element of the Transportation Master Plan.

Results of the Joint CU/City of Boulder Workshops.

The workshops resulted in developing a list of 20 infrastructure projects and 3 planning study ideas. Many of the connections are already included in the TMP. Safety and connectivity projects such as constructing a new bridge over Boulder Creek (connectivity); and underpass or other safety improvement at 30th and Colorado Boulevard, and a “re-envisioning study” of Colorado Boulevard are consistent themes that arose at all of the connections workshops.

Workshop Results

- 9 New Connections (not currently in the TMP).
- 5 “Upgrades” to existing connections in TMP but may require a TMP amendment.
- 6 connections currently in the TMP for a total of 20 connections

Prioritization

A prioritization exercise conducted at the workshop resulted in the following 5 projects identified as priority by the CU and City of Boulder workshop participants:

Infrastructure Projects:

- 1) Bicycle & Pedestrian bridge over Boulder Creek
- 2) 30th & Colorado Boulevard Underpass
- 3) General enhancements to Boulder Creek Multi-use path, including safety improvements, lighting, path widening in select locations.

Planning Studies:

- 1) Re-visioning Colorado Boulevard (Main Campus to Foothills Parkway)
- 2) Corridor Study for 30th Street (Arapahoe to Baseline Road)

These priorities are intended as a gauge of mutual support between CU and the City, and may evolve pending opportunities for future grant applications and other funding opportunities by CU and/or the City.

Public Process

This project was developed with input on the work program and work products by the city’s Transportation Advisory Board and input from the public. The city and CU conducted a joint public open house in March 13, 2013. **See Attachment D: Summary of Public Open House Comments.** In addition, public input was collected during various TMP open houses during the TMP update process.

Funding Opportunities

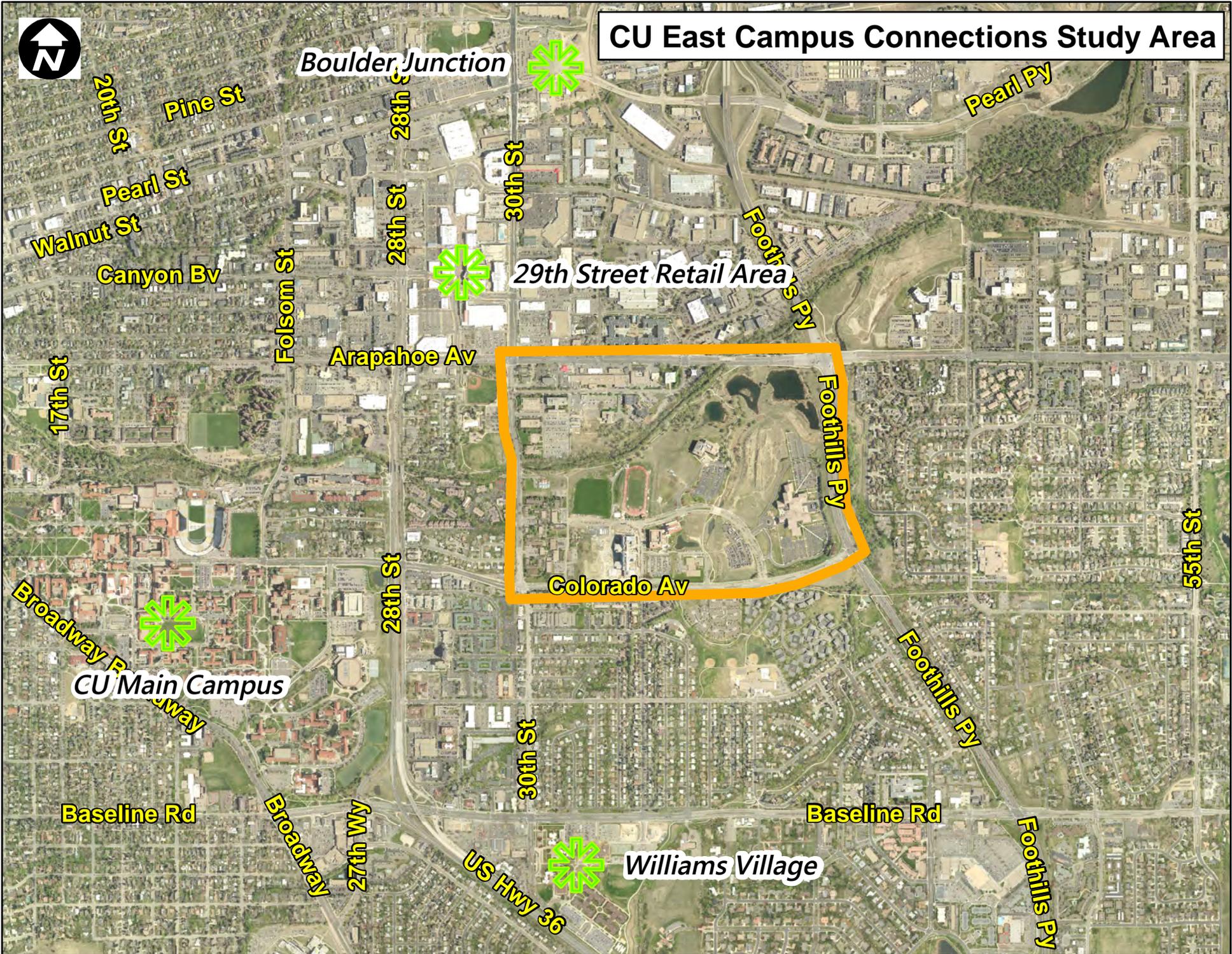
CU and the City met in 2014 to discuss funding ideas. There are several infrastructure projects that are likely to be contenders for Transportation Improvement Project (TIP) funding in the 2016 TIP cycle. The City has a well established process for City TIP applications that will start in 2014 and includes review by the TAB and a TAB

recommendation to the City Council. CU also has the ability to apply for TIP projects directly or could partner with the City in an application.

Attachments:

- A. Map of East Campus Study Area
- B. Draft Connections Map
- C. Draft Connections List
- D. Summary of Public Open House Comments
- E. CU East Campus Connectivity Goals Graphic

CU East Campus Connections Study Area



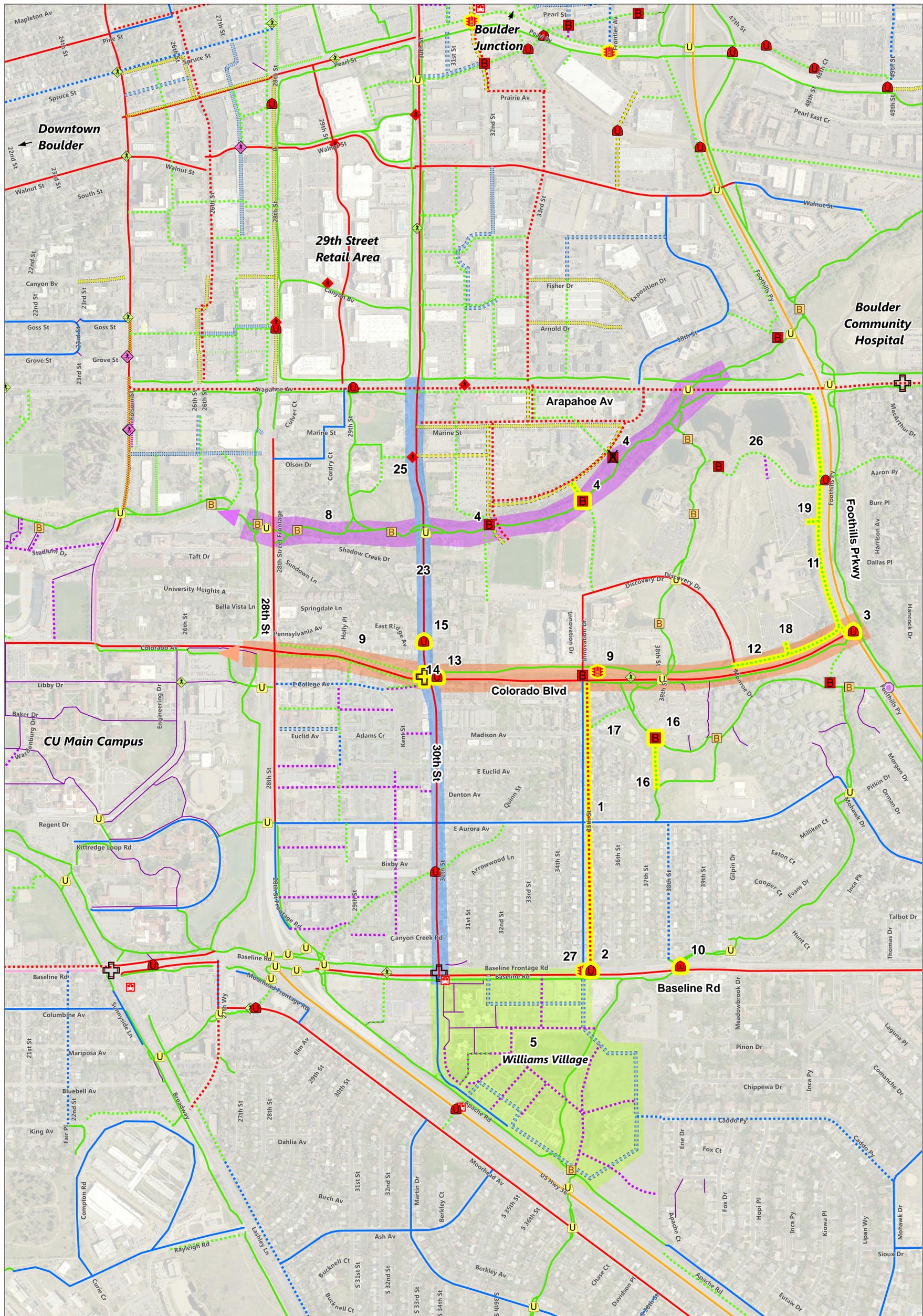


CU East Campus Connections

- Legend**
- CUEC Proposed Bike Ped Xings (Not in TMP)**
- Enhanced Ped Crossing Proposed
 - Bridge Proposed
 - Underpass Proposed
 - Existing Underpass Upgrade
 - Overpass Proposed
- TMP Proposed Bike Ped Xings**
- Transit Super Stop Proposed
 - Existing Ped Crossing Upgrade
 - Enhanced Ped Crossing Proposed
 - Bridge Proposed
 - Proposed Road Bridge Ped/Bike Upass
 - Existing Bridge Upgrade
 - Underpass Proposed
 - Existing Underpass Upgrade
 - Overpass Proposed
 - Enhanced Ped Crossing
 - Bridge
 - Overpass
 - Underpass
- Proposed Street Features CUEC (Not in TMP)**
- Intersection Improvement
 - Traffic Signal Proposed
- TMP Proposed Street Features**
- Traffic Signal Proposed
 - Intersection Improvement
- CUEC Proposed Bike/Ped Routes (Not in TMP)**
- Multi Use Bike Path Proposed
 - On Street Bike Lane Proposed
 - Designated Bike Route Proposed
- TMP Proposed Bike/Ped Routes**
- Multi Use Bike Path Proposed
 - On Street Bike Lane Proposed
 - Designated Bike Route Proposed
 - Paved Shoulder Proposed
 - Contra Flow Bike Lane Proposed
 - Sidewalk Connection Proposed
 - Soft Surface Multi Use Path Proposed
 - Multi Use Path Upgrade
 - Upgrade to Multi Use Path
 - On Street Bike Lane Upgrade
 - Sidewalk Connection Upgrade
 - Soft Surface Multi Use Path Existing Upgrade
- TMP Proposed Streets**
- Secondary Road Upgrade
 - Primary Road Upgrade
 - Primary Road Proposed
 - Secondary Road Proposed
- Existing Bike System**
- Contra Flow Bike Lane Existing
 - Designated Bike Route Existing
 - Multi Use Path Existing
 - On Street Bike Lane Existing
 - Paved Shoulder Existing
 - Sidewalk Connection Existing
 - Soft Surface Multi Use Path Existing
 - Soft Surface Pedestrian Path Existing
 - Street with Single Bike Lane Existing
- CUEC Proposed Studies**
- 30th Street
 - Boulder Creek
 - Colorado Ave
 - Williams Village



1 inch = 300 feet



CU EAST CAMPUS CONNECTIONS PROJECT		
	Draft Connection List	Lead Agency
#	<u>INFRASTRUCTURE</u>	
	SMALL: LT \$100,000	
1	Proposed bike Lane (upgrade from bike route) 35th St.	COB
5	Improve wayfinding signage at Williams Village (encourage bike/ped)	CU
12	New multiuse path north side Colorado Blvd: Discovery Dr. to Foothills H	COB
19	New multiuse path: CU bulding to west side of Foothills Hwy between Arapahoe & Colorado Blvd.	COB/CU CU
25	Enhanced Pedestrian Crossing on 30th (Scott Carpenter Park)	COB
33	Evaluate traffic control at intersection of Monroe & Colorado	COB
	MEDIUM: \$100,000 - \$1,000,000	
8	General enhancements to Bldr. Creek Path	COB
4	New bike/ped Bridge over Boulder Creek	CU
11	New multiuse path west side Foothills: Arapahoe to Col. Bvd.	COB/CU
16	New multiuse path and bike/ped bridge connecting Aurora ball fields to Aurora & 38th St	COB
17	Complete Skunk Creek Path between 35th to Multiuse Path	COB
18	New multi-use path: CU building to bus stop on Colorado Blvd between Foothills and Discovery Drive bus stop	CU CU
26	New proposed Multi-Use Path on N/S CU East Campus Property	CU
36	New multi-use path: proposed CU Medical Bldg Colorado & Foothills	COB/CU
27	New Signal at 35th & Baseline	CU/COB
	LARGE: GT \$1,000,000	
30	Improve 28th & Aurora existing Under pass	COB
10	Improve existing Baseline & 38th Underpass	COB
31	New underpass/overpass on Arapahoe, east of 30th (to sunrise shop ctr)	COB
2	New underpass - Improve Baseline Rd & 35th bike/ped crossing	COB
3	New underpass - Improve bike connection at Foothills & Colorado Blvd.	COB
9	New signal at Colorado Blvd & Innovations Dr.	CU/COB

STUDIES/OTHER		
35	Proposed Study: Revisioning Colorado Blvd	CU/COB
20	Transit Study of 28th St. Transit Connections	
23	Proposed Study: 30th Street Corridor	COB/CU
	<i>ITEM 23 assumes studying 30th first prior to infrastructure solutions</i>	
	13-New Underpass at 30th & Colorado Blvd	COB
	<i>14-30th & Colorado Blvd: Intesection/Signal Improvements</i>	
	<i>15-New underpass or overpass at 30th & Pennsylvania</i>	
34	Reclaim/Redesign: US36: Table Mesa to Baseline	COB
LEGEND		
	TOP 5 priority projects from CU/COB joint staff workshop	



CU East Campus Connections Project

Summary of Public Comment from Open Houses on March 4 & March 13, 2013

35th St Neighborhood

- Resident concerned about stoplight at 35th St and then one at Colorado, 35th, & Innovation becoming a thorough fare and short cut for others through the neighborhood for vehicles, etc.
- 35th St. resident not ok with on street bike path if it takes away parking in front of houses
- 35th St. resident ok with bike upgrades
- Make 35th St. a bike blvd with cars diverted at Aurora and no through access at Colorado for cars.
- Several comments regarding impacts in neighborhood due to “spill over” parking from CU East Campus employees parking in the neighborhood to avoid paying for parking. (35th, 37th, etc).
Comment from staff: Potential Candidate for Neighborhood Parking Program.

Underpasses

- Underpasses are not a panacea. If people don't want to walk & bike on streets, that means the streets are broken. Both 30th & Colorado should be fixed. Slow, awesome.
- A pedestrian bridge over or underpass under Arapahoe is desirable to get people to Sunrise Center, (King Super's, Moe's Bagels on north side of Arapahoe, east of 30th).
- Improve 28th Frontage and Aurora underpass to improve safety. Make it similar to the 28th & College underpass

B-Cycles/Bicycle Stations

- Bike rentals on east campus that allow for transportation from east campus to other points of interest in Boulder
- Add Bicycle stations to connect main & east campus

30th Street

- Need wider bike lanes on 30th street
- Colorado Ave between 28th & 30th , could use a lot of pedestrian and aesthetic improvements
- Biking on 30th is extremely frightening for both cars & bikers
- Too many fatalities with bikers on 30th . Please address and fix the problem.
- 30th St. bike lane is dangerous, and sidewalks very narrow. Can 30th St. be made more bike/ped friendly?
- Improve the visual aesthetics of the 30th St. corridor between Colorado Ave. & Boulder Creek (similar to 28th St). Consider a “road diet” due to private ROW on either side of road.
- 30th St. road diet – too many underpasses
- Going from 30th to east on Colorado Blvd need green arrow for increase of safety
- Add bike stations on East Campus

Colorado Ave

- Hanging trains that ride above traffic providing more safety and speed on Colorado
- Support for Connection #12 & #18. We need a sidewalk on the north side of Colorado, west of Foot hills to access the new SEEC building (McAlister building) and access the bus easier.
- Add signal at Monroe Dr. & Colorado
- Colorado Ave between 28th & 30th , could use a lot of pedestrian and aesthetic improvements

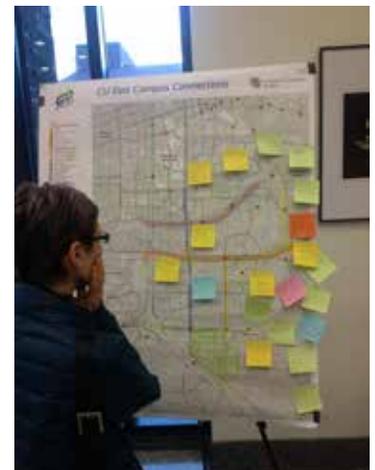
CU East Campus Property/Boulder Creek

- Remove CU's planned auto bridge to cross Boulder Creek from East Campus
- New Boulder creek path access from the East Campus (bike/ped bridge)idea is great

General Comments

- Happy to see more bike lanes, B-cycle availability & pedestrian links
- The upcoming City of Bolder East Arapahoe study should go east past 55th to Cherryvale
- Consider adding lights and illumination along the bikeways, tunnels and crossings for safety at night
- Consider increased connection to Scott Carpenter Park from East Campus

Open House Photos





CU East Campus Connectivity Goals



University of Colorado Boulder

Legend

Existing Bike Ped System

- Contra Flow Bike Lane Existing
- Designated Bike Route Existing
- Multi Use Path Existing
- On Street Bike Lane Existing
- Paved Shoulder Existing
- Sidewalk Connection Existing
- Soft Surface Multi Use Path Existing
- Soft Surface Pedestrian Path Existing
- Street with Single Bike Lane Existing
- CU East Campus Study Area

