

Transportation Master Plan Survey Summary

UNIVERSITY OF COLORADO BOULDER

SEPTEMBER 2019

Introduction

This document summarizes the responses from an online survey that was open April 19, 2019 through May 5, 2019. This survey was sent to all faculty, staff and students to their CU email address. The survey included 25 questions and 6,037 people responded. These responses are summarized in the following document. This document skips question 1 because this question was just information for the survey respondent about the survey and the Transportation Master Plan.

Survey Response Rates by Role and Gender

Role and Gender	# in Campus Population	# of Survey Responses	Response Rate
FACULTY	4883	1025	21%
F	1971	514	26%
M	2912	511	18%
STAFF	4399	1745	40%
F	2482	1132	46%
M	1917	613	32%
STUDENT -- GRAD	5433	822	15%
F	2280	410	18%
M	3153	412	13%
STUDENT -- UGRD -- FR	5018	375	7%
F	2307	252	11%
M	2711	123	5%
STUDENT -- UGRD -- SO	6360	534	8%
F	2950	338	11%
M	3410	196	6%
STUDENT -- UGRD -- JR	5986	555	9%
F	2602	345	13%
M	3384	210	6%
STUDENT -- UGRD -- SR	9348	968	10%
F	4002	587	15%
M	5346	394	7%
Grand Total	41427	6037	15%

Methodology for Weighted Averages

The following quantitative data is composed of weighted averages determined by the response rates of different population categories (see “Survey Response Rates by Role and Gender” table in the previous section). The weight of each response considers both the role and gender of the respondent. The formula for determining the weight of a response is written below with the example of female faculty as a respondent group:

$$\text{Weight} = \frac{[\text{Number of female faculty on campus}] / [\text{Total campus population}]}{[\text{Number of female faculty that responded to the survey}] / [\text{Total survey respondents}]}$$

A weight larger than 1 indicates groups that are underrepresented in the survey responses. A weight of less than one indicates a group that is over represented in the survey responses. Below is a table with the weights for each type of respondent by role and gender.

Table of Weights by Role and Gender

Role and Gender	Weight
FACULTY	
F	0.56
M	0.83
STAFF	
F	0.32
M	0.45
STUDENT -- GRAD	
F	0.81
M	1.11
STUDENT -- UGRD -- FR	
F	1.33
M	3.21
STUDENT -- UGRD -- SO	
F	1.27
M	2.53
STUDENT -- UGRD -- JR	
F	1.10
M	2.34
STUDENT -- UGRD -- SR	
F	0.99
M	1.97

Survey Response Summaries

In the following tables the abbreviation “UG” stands for undergraduate student.

Q2 - Where do you currently live?

RESPONSE	FACULTY	STAFF	GRAD STUDENT	UG - FRESHMAN	UG – ALL OTHER
Graduate & Family Housing Apartment	4%	1%	10%	0%	1%
Main campus (including Kittredge complex) residence hall	1%	1%	1%	59%	14%
Off-campus outside Boulder city limits. Please specify zip code:	51%	73%	28%	4%	13%
Off-campus within Boulder city limits. Please specify zip code:	44%	23%	61%	6%	62%
Williams Village residence hall or Bear Creek Apartments	0%	0%	0%	30%	10%
Other. Please specify:	0%	2%	0%	1%	0%
Grand Total	100%	100%	100%	100%	100%

Q3 – Where do you spend the majority of your time while attending classes or working at CU?

RESPONSE	WEIGHTED AVG
Main campus	85.86%
East Campus (i.e. Marine St or Research Park)	11.15%
Williams Village	1.84%
Not applicable (i.e. take classes online or telecommute exclusively)	1.15%
Grand Total	100.00%

Q4 – Thinking back to earlier this semester (i.e., September 2018), which mode of transportation did you typically use for the majority of your commute when getting to classes or work at CU?

RESPONSE	FACULTY	STAFF	GRAD STUDENT	UG - FRESHMAN	UG – ALL OTHER
Bike (personal bike)	20%	6%	27%	14%	19%
Bike share	0%	0%	0%	0%	0%
Buff Bus	0%	0%	1%	27%	11%
Carpool	6%	6%	2%	1%	2%
Drive alone	43%	58%	15%	2%	10%
Lyft/Taxi/Uber	0%	0%	0%	1%	0%
Not applicable (not at CU in Sept)	2%	2%	1%	4%	2%
RTD bus	22%	23%	38%	6%	20%
Skateboard	0%	0%	0%	3%	2%
Walk	5%	2%	15%	42%	33%
Other. Please specify:	3%	3%	1%	1%	1%
Grand Total	100%	100%	100%	100%	100%

Q5 - Thinking back to earlier this semester (i.e., February 2019), which mode of transportation did you typically use for the majority of your commute when getting to classes or work at CU?

RESPONSE	FACULTY	STAFF	GRAD STUDENT	UG - FRESHMAN	UG – ALL OTHER
Bike (personal bike)	13%	4%	16%	6%	9%
Bike share	0%	0%	0%	0%	0%
Buff Bus	0%	0%	2%	31%	11%
Carpool	7%	6%	2%	2%	2%
Drive alone	47%	61%	20%	4%	13%
Lyft/Taxi/Uber	0%	0%	0%	2%	1%
Not applicable (not at CU in Feb)	1%	0%	0%	0%	0%
RTD bus	23%	23%	42%	9%	26%
Skateboard	0%	0%	0%	2%	1%
Walk	6%	3%	17%	43%	36%
Other. Please specify:	3%	3%	1%	1%	1%
Grand Total	100%	100%	100%	100%	100%

Q6 - Has your residence changed since the beginning of the school year (i.e., September 2018)?

RESPONSE	WEIGHTED AVG
No	93.79%
Yes	6.21%
Grand Total	100.00%

Q7 & Q8 - Where did you live? (People who answered yes to Q6)

Response	Q7 - Sept 2018	Q8 - Feb 2019
Graduate & Family Housing Apartment	6%	6%
Main campus (including Kittredge complex) residence hall	12%	14%
Williams Village residence hall or Bear Creek Apartments	12%	9%
Off-campus outside Boulder city limits. Please provide zip code:	24%	28%
Off-campus within Boulder city limits. Please provide zip code:	39%	43%
Other. Please specify:	6%	1%
Grand Total	100%	100%

Q9 - Which mode of transportation did you use for the majority of your commute when getting to classes or work at CU today (or the last day you came to campus):

RESPONSE	FACULTY	STAFF	GRAD STUDENT	UG - FRESHMAN	UG – ALL OTHER
Bike (personal bike)	15%	4%	18%	7%	11%
Bike share	0%	0%	1%	0%	0%
Buff Bus	1%	0%	1%	31%	11%
Carpool	6%	6%	2%	2%	2%
Drive alone	48%	62%	22%	5%	13%
Lyft/Taxi/Uber	0%	0%	0%	1%	1%
RTD bus	22%	22%	38%	6%	22%
Skateboard	0%	0%	0%	2%	1%
Walk	5%	3%	18%	44%	38%
Other. Please specify:	3%	2%	1%	1%	1%
Grand Total	100%	100%	100%	100%	100%

Q10 - When you drove or carpooled the last day you came to campus, where did you (or the person that drove) park?

On- or Off-campus

RESPONSE	WEIGHTED AVG
On-campus	70%
Off-campus	28%
Neither	2%
Grand Total	100%

Type of Parking

Response	On-campus	Off-campus	Neither	Grand Total
Carpooled and was dropped off	0%	0%	68%	1%
Lot parking	98%	0%	0%	69%
Private parking space	0%	13%	0%	4%
Public lot	0%	17%	0%	5%
Street parking	0%	66%	0%	19%
Other. Please specify below.	2%	3%	32%	3%
Grand Total	100%	100%	100%	100%

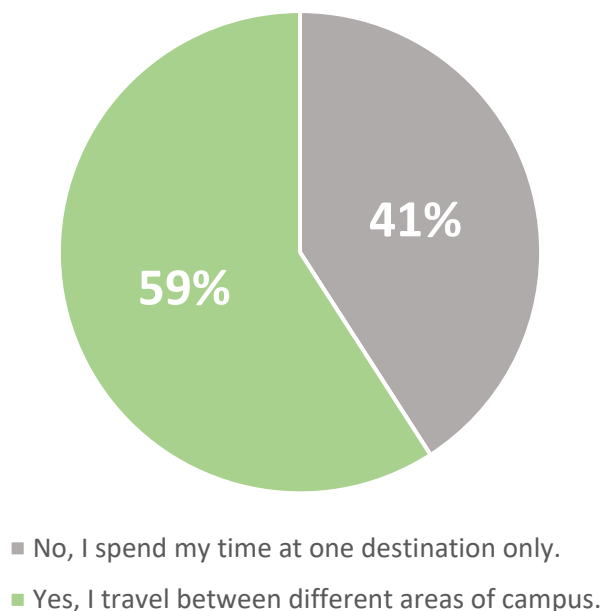
Payment

RESPONSE	WEIGHTED AVG
Permit parking	58%
without a meter (no charge)	18%
Short-term parking	11%
no charge	5%
with a permit	2%
with a meter	1%
Not Applicable	1%
with a charge	1%
with a daily charge	0%
Other. Please specify below.	2%
Grand Total	100%

Q12 - Do you sometimes travel between the different areas of campus?

Response	Weighted Avg
No, I spend my time at one destination only.	41%
Yes, I sometimes travel between Main Campus and East Campus.	36%
Yes, I sometimes travel between Main Campus and Williams Village.	13%
Yes, I sometimes travel between Williams Village and East Campus.	1%
Two or more responses	10%
Grand Total	100%

Do you sometimes travel between the different areas of campus?



Q13, Q14, & Q15 - What mode of transportation did you most recently use to get between different campus areas?

Response	Q13 Main Campus & Williams Village	Q14 Main Campus & East Campus	Q 15 Williams Village & East Campus
Bike share	0%	0%	2%
Biked (personal bike)	8%	14%	13%
Buff Bus (Q13 & 15 Williams Village/Bear Creek, Q14 Marine St)	72%	9%	19%
Carpooled	3%	4%	9%
Drove alone	9%	18%	21%
Lyft/Taxi/Uber	1%	1%	1%
Skateboarded	1%	1%	2%
Stampede Bus	N/A	44%	N/A
Walked	5%	7%	22%
Other. Please specify:	1%	2%	11%
Grand Total	100%	100%	100%

Q16 - How often do you use the following transportation services when getting to/from and around CU Boulder?

Response	RTD Local	RTD Regional	Stampede	Buff Bus - Marine St	Buff Bus - Bear Creek/Will Vill	Buff Bus - Athens North	Lyft/Uber/Taxi
2-3 times per week	11%	4%	7%	1%	6%	1%	6%
A few times per semester	36%	45%	20%	10%	19%	4%	33%
Daily	12%	6%	6%	0%	10%	0%	1%
Never	32%	39%	62%	87%	60%	95%	51%
Once per week	9%	5%	4%	1%	5%	0%	10%
Grand Total	100%	100%	100%	100%	100%	100%	100%

Q17 - Which of the following transportation-related services are you familiar with and, of those, which have you utilized?

Transportation Related Services	Familiar with or have used this
CU Night Ride	84%
EcoPass/CollegePass	78%
CU Bike Registration	70%
UMC and Folsom Bike Stations	63%
Bike Shelters	59%
Boulder B-Cycle	48%
Buff Bikes	29%
Semester bicycle rental program	27%
Late Night Transit	26%
CU Telecommute/Distance Learning Programs	21%
Guaranteed Ride Home	17%
CU Commute	12%
Vanpool	11%

Q18 - The biggest challenge(s) associated with walking at CU Boulder is/are... (select all that apply):

Response	Weighted Avg
Snow and ice on pathways make it difficult or unsafe to walk	41%
I experience crashes, near misses, or safety concerns regarding other path users on multi-use paths and sidewalks	36%
There is not enough space on pathways for people walking	21%
Streets around or through campus are uncomfortable or unsafe to cross	12%
Streets around or through campus are uncomfortable or unsafe to walk along	9%
There is not enough signage for me to find where I want to go	8%
Other. Please specify:	16%

Responses to “Other Please Specify” (1085 Free Responses)

Modal Conflicts

The most common theme in the free responses was conflict with people biking and skateboarding. Bikes or bicycles were mentioned in 182 responses and skateboards mentioned in 111 responses. This shows that conflict with these modes on sidewalks and shared paths makes walking feel unsafe or uncomfortable for some people.

Inconvenient

The second most common theme was the distance or time it takes to reach a destination walking. Time was mentioned in 103 responses as well as related keywords; long – 98 mentions, distance – 79 mentions, far – 70 mentions.

Construction

Construction was mentioned 51 times. Most of these comments did not mention specific construction areas, but rather construction as a barrier more generally, and new construction making route finding on campus difficult.

Safety

The words safe and safety were mentioned in 56 comments. Most of these comments referred to safety issues due to modal conflicts between pedestrians and people driving cars, bicycling, or skateboarding. Crossings were also mentioned frequently as safety concerns when walking.

Personal Security

Personal security was mentioned a few times in comments that used the words safe and safety. Most of the comments regarding personal security were referring to feeling uncomfortable/unsafe at night due to lack of lighting or fear of other people out at night. Night was mentioned in 24 comments.

Q19 - The biggest challenge(s) associated with **biking** at CU Boulder is/are... (select all that apply):

Response	Weighted Avg
Weather	36%
Snow and ice on pathways make it difficult or unsafe to bike	30%
Bike theft	27%
I experience crashes, near misses, or safety concerns regarding other path users on multi-use paths and sidewalks	27%
There is not enough space on pathways for people biking	26%
Distance from home	18%
There are not enough bike racks	12%
Pathways on campus are uncomfortable or unsafe to bike along	11%
Streets around or through campus are uncomfortable or unsafe to bike along	10%
Not familiar with bike repair	8%
There are not enough bike shelters	8%
Other. Please specify:	10%

Responses to “Other Please Specify” (360 Free Responses)

Infrastructure

Bike paths and bike lanes were mentioned 43 and 41 times respectively. These responses include conflicts with other modes, maintenance, and desire for more of these types of facilities in different places.

Modal Conflicts

Conflicts with cars, pedestrians and buses were all cited as challenges to biking, with cars mentioned in 35 responses, pedestrians in 33, and buses in 19.

Safety

Safety was mentioned in 29 responses. These responses cite a variety of issues from uncomfortable design of bike lanes, lack of lighting at night, modal conflict with pedestrians and vehicles, and crossings feel unsafe.

Inconvenient

Comments across other themes mentioned the distance/time it takes to bike as a challenge, and hills were mentioned in 33 comments. This indicates that distance from destinations as well as topography are currently a challenge to biking.

Q20 - The biggest challenge(s) associated with transit at CU Boulder is/are... (select all that apply):

Response	Weighted Avg
Taking transit takes too long	40%
Transit doesn't come frequently enough	39%
Transit doesn't operate when I need it to	23%
No direct route, have to transfer one or more times	22%
I need my vehicle before/after the school day	17%
There is not a bus stop near my house	17%
I do not feel safe riding/waiting for the bus	4%
Other. Please specify:	24%

Responses to “Other Please Specify” (781 Free Responses)

Bus Stops

Stops were mentioned 97 times in the free responses to transit challenges. The majority of these comments discuss lack of stops near origins or destinations and stops being too infrequent. These comments mention a variety of different bus routes, with the Stampede, Buff Bus, and HOP being the most frequent. In addition to stop placement many comments express challenges with snow covered or icy bus stops. A few comments describe full buses not stopping at their stop, waiting for two or three buses before they can get on, and buses picking up and dropping off not at designated stops in an inconsistent way.

Connectivity

The three most common locations mentioned, in terms of lacking transit connectivity, were East Campus (35 mentions), Williams Village (10), and Center for Innovation and Creativity (10).

Schedule and Time

Time was mentioned in 150 of the free responses and late was mentioned in 71. Both of these key words appear in comments about the time it takes to ride the bus, the bus is running late, and service span. Additionally, the word schedule is mentioned 42 times and wait 30 times. A large majority of the comments mentioning schedule center around buses being off schedule, either running early, late, or not showing up at all. Many of these comments express that this makes transit feel inconvenient and unreliable. Some other comments mentioning schedule discuss how transit service primarily serves peak commutes and is inconvenient or non-existent for

people commuting early morning or late at night. Many comments also discuss issues with reliability and usability of transit apps and online service information. Quite a few comments also express wanting greater frequency on certain routes. Comments mentioning the wait times for the bus for two primary reasons, buses are running late, or overcrowded buses keep passing the stop.

Children

20 comments mentioned needing more reliable transportation (like driving) for school or daycare drop offs/pick ups or in case of child related emergencies.

Q21 - The biggest challenge(s) associated with driving at CU Boulder is/are... (select all that apply):

Response	Weighted Avg
Parking costs are too high	68%
There is not enough available parking close to my destination	44%
There is too much traffic	34%
I do not have access to a vehicle	17%
There is not enough available parking close to my house	16%
Other. Please specify:	7%

Responses to “Other Please Specify” (518 Free Responses)

Parking

Parking was by far the most common topic in the free responses on driving, with 246 responses mentioning park or parking. The majority of these comments were about the cost of parking being too high, particularly for University employees. Many comments expressed a desire for a parking pass option for people who only drive occasionally (once a week to every few months). More generally a lack of parking options close to destinations was a common theme (options other than permitted lot, like short term parking, and reserved handicap parking). Some respondents mentioned that they park off-campus for free and walk rather than paying for on-campus parking. Additional reoccurring parking topics from respondents included:

- Issues with the complexity and lack of transparency about paying for parking and buying a parking permit
- Paying full price to park on campus during off-peak hours (evenings and weekends)
- Not being able to use your parking permit in other lots, particularly between an East Campus and Main Campus (and vice versa)
- Circling for parking when lots are full (even assigned permanent lots)
- Dangerous conditions in parking lots and garages

Traffic

Traffic and the time it takes to drive were mentioned 45 and 34 times respectively. Most of these responses were about traffic and congestion generally, but some specifically referenced poorly timed lights, getting in and out of parking lots, and conflicts with people walking, biking, and skateboarding.

Modal Conflicts

Modal conflict was the third strongest theme. Bikes and bicycles were mentioned 41 times, pedestrians 30 times, buses 35 times, and skateboards 11 times.

Disabilities and Mobility Challenges – Free Responses

(combined Questions 18-21)

There were 50 responses that mentioned the need for improved access for people with disabilities or mobility challenges. These responses raised a diversity of issues, many of which are echoed across the entire collection of responses but that particularly affect people with disabilities or mobility challenges. Although these responses represent a small number of all surveys, persons with a disability or mobility challenge often have fewer mobility options and face more transportation barriers than the general public and are underrepresented in transportation decision making processes. Below are some of the reoccurring themes across these responses:

Snow/Ice Removal

Ten responses noted snow and ice removal as a major hazard or barrier to persons with mobility challenges, particularly people using wheelchairs and other mobility devices. A few responses noted that an on-demand ride service for persons with disabilities/mobility challenges would be particularly helpful in the winter because of these issues.

Campus and Transit System Maps and Wayfinding

Three responses noted the need for campus and transit system maps and wayfinding that are accessible to people with visual impairments. One response brought up the need for better non-visual communication systems about the transit system, the location of stops, and changes to stops and services. This includes online information as well as communication materials at bus stops (other than just a sign) that can alert persons with visual impairments of the termination of a stop or changes in service.

Needed Transit or On-demand Options

Responses mentioned the need for regular or on-demand transportation services around campus for persons with disabilities. Creating this type of service to easily link East Campus and Main Campus was brought up in three separate responses.

Conflicts with People Biking and Skateboarding

Several responses also noted conflicts with faster modes, like people skateboarding and biking, makes getting around campus uncomfortable and potentially unsafe.

Lack of Parking or Taxi Access on Campus

Seven responses noted the need for more reserved parking near campus buildings for people with disabilities or mobility challenges who cannot walk across campus from a remote parking lot. One response also recommended that taxis (and ride hailing services) be able to drive into campus when dropping off people with disabilities or mobility challenges.

Q22 - How willing are you to sacrifice ease of accessing campus by car to reduce the university-related carbon footprint or environmental impacts?

RESPONSE	WEIGHTED AVG
To a great extent	37%
Somewhat	40%
Very little	13%
Not at all	10%
Grand Total	100%

Q23 - Overall, how easy do you find it commuting to CU Boulder?

RESPONSE	WEIGHTED AVG
Very easy	15%
Easy	31%
Acceptable	40%
Difficult	11%
Very difficult	3%
Grand Total	100%

Q24 - Overall, how easy do you find it getting around CU Boulder (including travel between Main campus, East campus, and Williams Village)?

RESPONSE	WEIGHTED AVG
Very easy	11%
Easy	31%
Acceptable	43%
Difficult	12%
Very difficult	3%
Grand Total	100%

Q25 - Is there anything more you would like to tell us about how we could improve transportation at CU Boulder (2291 Free Responses)?

Transit

Buses were mentioned in 903 responses to this question. The Buff Bus and Stampede were both called out specifically, with the Buff Bus mentioned 158 times and the Stampede mentioned 156 times. Better transit connectivity to East Campus was another common theme with 180 comments. Other common themes of responses related to buses:

- Desire for more frequent service
- More bus routes and stops
- Buses running on time and accurate schedule and bus tracking information
- Support for the EcoPass/CollegePass program, frustration for its suspension in the summer even if student still works on campus
- More connections to the region
- Improved reliability and ease of using transit

Parking

Parking was mentioned in 554 responses. The majority of comments in this topic expressed a desire for more affordable parking options. Some respondents feel the current parking fees over burden students and staff who commute from outside Boulder who may not be able to afford to live in Boulder or near a transit stop. A number of respondents suggested a part-time parking permit or permit reimbursements if they biked or walked instead, that would encourage them not to drive, but still allow the option when necessary. The second most common

theme was the desire for more parking. Some respondents suggested satellite parking lots with shuttle service into campus. Additional themes include:

- Desire for permit parking to open up evenings and weekends
- Better transit connections to East Campus including from Main Campus
- 15-minute parking/loading/pick-up and drop-off zones
- More parking spaces next to buildings for older adults and people with disabilities.

East Campus

East Campus was mentioned in 304 responses. The majority of comments related to transportation to and from East Campus were about lack of transit service and expensive or limited parking options. Many people expressed a desire for the Discovery bus and Stampede to East Campus to be reinstated or increased frequency and service options for the Marine Street Express. A desire for more reliable options to East Campus and both Main Campus and Williams Village was expressed.

Employee

The word employee was mentioned in 102 responses, faculty 59, and staff 82. The most common topic of responses that mentioned employees was parking being too expensive especially for lower-paid employees and employees who live outside of Boulder. Many respondents noted few parking options making working late or getting to remote meetings difficult. Many respondents expressed support and appreciation for the employee EcoPass program. Others expressed a desire for the option to work remotely or telework, especially during inclement weather.

Survey Attached

The survey is attached to the end of this document for reference.