TDM Plan Recommendations

Presented by CSU Parking & Transportation Services and Kimley-Horn (consultant)

July 24, 2023

1. Purpose of the TDM Plan

2. Overview of the Planning Process

3. Performance Measures & Mode Split Targets

4. Master Plan Committee Next Steps

Today's Presentation

Context for Transportation Planning Effort

1. Pandemic Impacts to Access and Mobility

2. New Leadership – Aspirations for Student Population Growth

3. Opportunity to Improve Transportation with New Developments

4. West Elizabeth Bus Rapid Transit Corridor nearing Design Completion

5. University to Adopt Vision Zero Principles – September 2023

MP Committee Action Items

- Read the TDMP for details

- Consider possible Master Plan impacts as strategies are implemented

- Adopt mode split targets

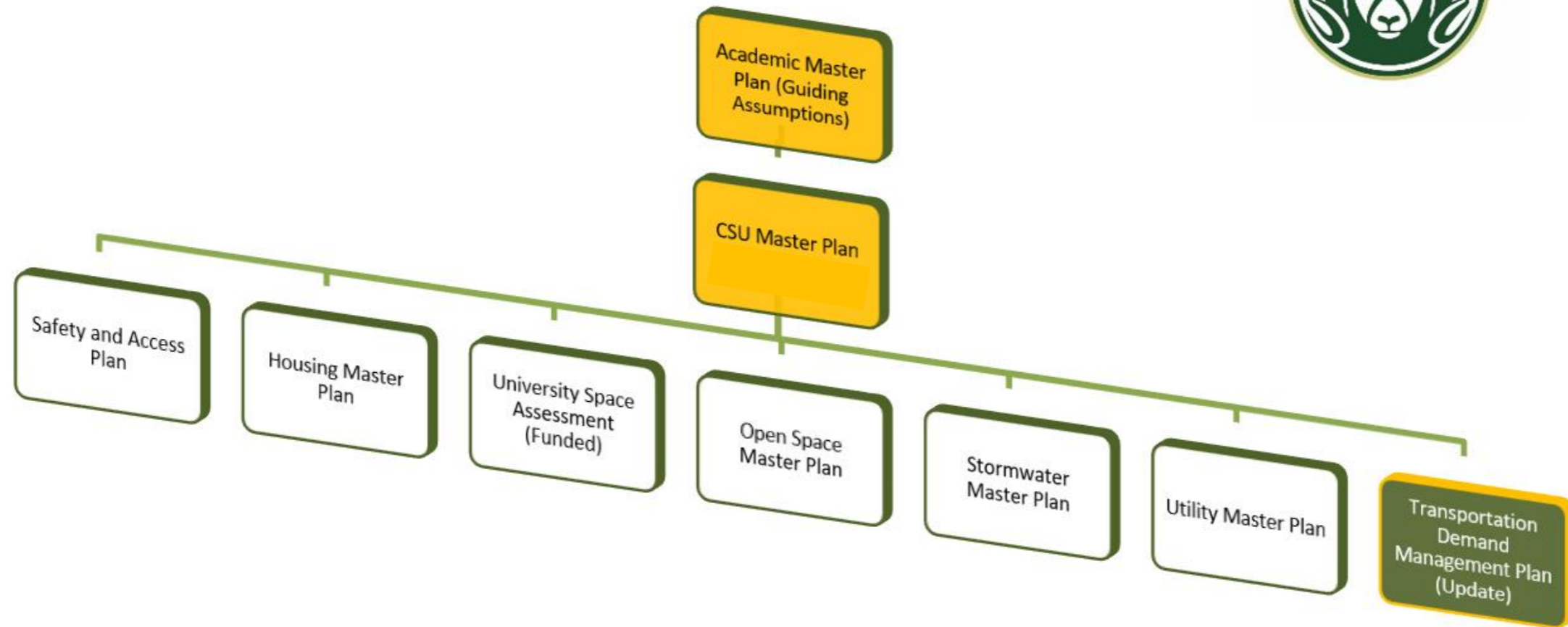- Support submission of the TDMP (as addendum to Master Plan)

TDM Plan Purpose for CSU

A 10-Year Plan for Transportation

What is TDM?

- TDM stands for "Transportation Demand Management"

- Describes a set of strategies aimed at improving transportation network efficiency

How does the TDM Plan benefit CSU?

- Plan prioritizes the quality, competitiveness, and equitable access of all transportation modes so that users have:

  - maximum travel options and

  - face fewer barriers to daily mobility

- Establishes 10-Year TDM Recommendations by Mode of Transportation

- Approaches may include:

  - safety and education programs

  - infrastructure improvements

  - incentives

  - flexible work policies

- Strategies align with CSU's multi-campus context, previous investments, and goals

- *Master Plan Committee to adopt targets / approach into the forthcoming 2024 Campus Master Plan*

TDM Plan Development

CSU Technical Advisory Committee

- Parking & Transportation Services

  - Aaron Fodge
  - Adam Anderson
  - Bradley Calahan
  - Brian Grube
  - Dave Bradford

  - Devan Durand
  - Erika Benti
  - Jamie Gaskill
  - Stephanie Zakis
  - Tiffany Glover

- Facilities Management

  - Gargi Duttgupta
  - David Hansen

- CSU Geospatial Centroid

- Guidance and input were also provided by key members of CSU departments

Budget & Timeline

- ~$175,000 budget including a $60,000 grant from CDOT for TDM improvements

- 10-month process from October 2022 to July 2023
  - Background and existing conditions
    - Development of supporting maps, charts, and tables
  - Research into national best practices and peer institutions (UC Davis, Boise State University, Oregon State University, University of Michigan)
  - Public engagement + feedback
  - Feedback synthesis and analysis
  - Development of appropriate recommendations
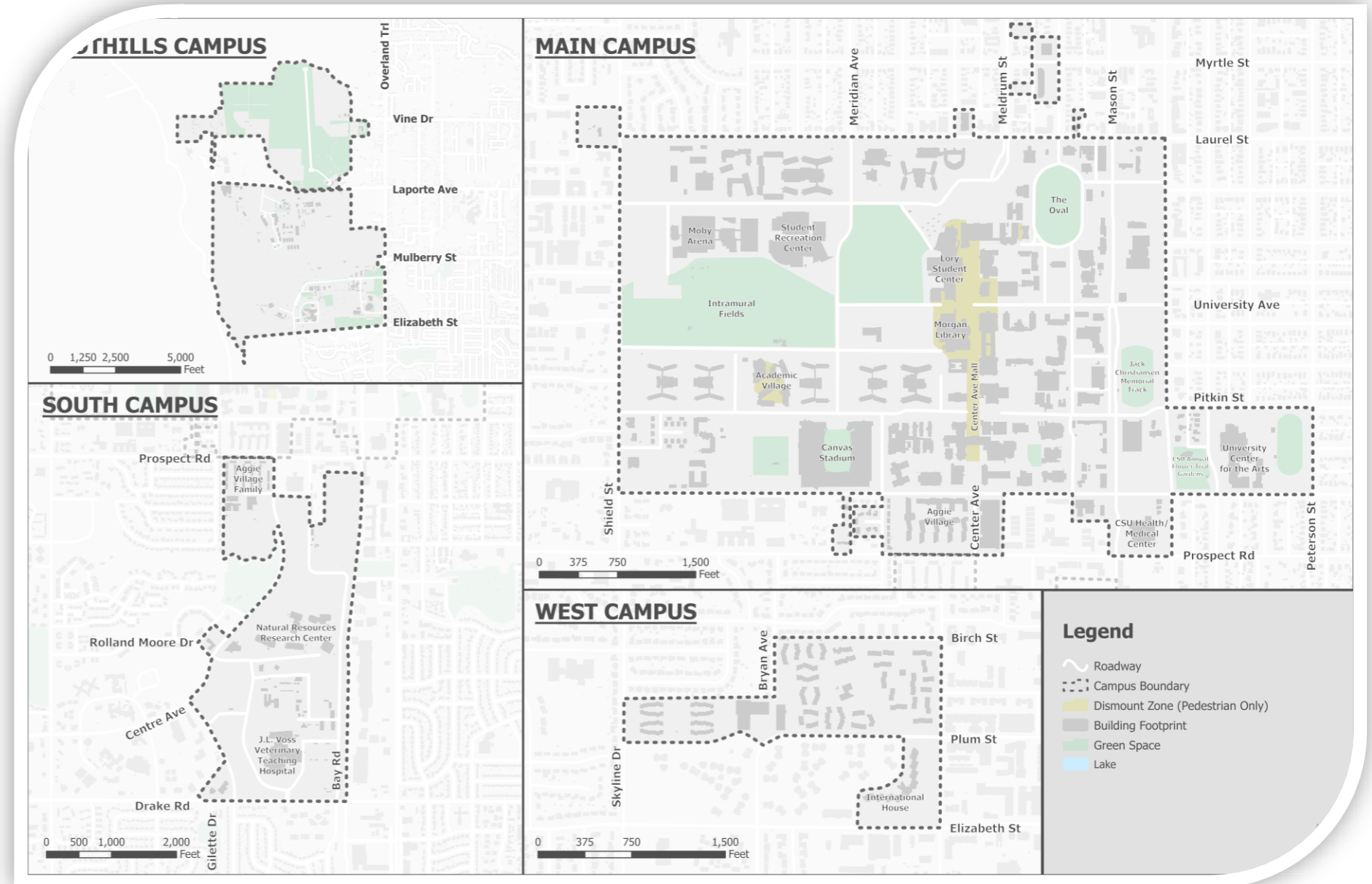
Plan Components

Infrastructure <u>Mapping</u>:

- Main Campus

- South Campus

- West Campus

- Foothills Campus

Mode Split Targets

- Through 2033

Assumptions:

- Campus Growth Rate

- Additional On-Campus Beds

- Target Parking Utilization

CSU Stakeholder Outreach

December '22 to January 2023

Phase 1 -
Introductions
Tabling Events
Map Investment Activity

February to March 2023

Phase 2 –
Focus Groups/Charter Activity
Revamped Annual Mode Split Survey open 2/22 to 3/31

April to May 2023

Analyze and incorporate stakeholder feedback

3,535 Total stakeholders engaged

34 TDMP presentations reaching **696** students, staff, and faculty

4 Activity workshops with **54** participants

7 Popup events connecting with **554** students, staff, and faculty

6 Focus groups with **36** participants

2,104 Transportation Survey respondents

91 Online transportation investment prioritization activity respondents

Colorado State University

Stakeholder Outreach – Key Takeaways

Stakeholder Outreach–Key Takeaways

Broad Support For:

- *Street and pathway infrastructure that promotes safety*
  - Better separation of bike/scooter and pedestrian infrastructure
  - Remedying conflict zones where bikes, motor vehicles, and pedestrians converge
- *Greater transit frequency and expanded hours to meet rider needs*
- *More affordable (and flexible) parking permit options, especially for hourly workers and graduate students*
- *Transportation options that feel intuitive and convenient*

Values

The CSU community values transportation options that are safe, convenient, equitable, and sustainable. These values are aligned with the spirit of the CSU Principles of Community-- respect, integrity, service, social justice, and inclusion.

Vision

Students and employees envision a campus that is simple and straightforward to access and supports many travel modes to meet the unique needs of a diverse community, actualized by thoughtful and close collaboration between university departments, university leadership, and the City of Fort Collins.

Goals

To that end, a successful Transportation Demand Management Plan will optimize transportation efficiency for travelers to and within the CSU campuses by aspiring to measurable goals such as reducing transportation-related injuries, improving student and employee transportation satisfaction, supporting the competitiveness of active and shared transportation options, and balancing transportation business needs with affordability for users who face persistent barriers to using alternative transportation modes.

Performance Measures & Mode Split Targets

Performance Measures Dashboard

Performance targets were developed based on factors such as:

- Existing mode split and historical performance (per mode split survey)

- Mode split market potential

- Peer institution stats

- Stakeholder feedback

- Prior CSU safety, sustainability, and equitability commitments

MODE SPLIT: Horizon 2033

Walking/Rolling: 11%
Biking: 14%
Transit: 12%
Carpool/Rideshare: 6%
Driving: 50%
Other (telecommute, virtual classes, dropoff, rideshare, etc.): 8%

CARBON EMISSIONS: Horizon 2040

University GHGs (commuting, fleet): **Net-zero**

SAFETY: Horizon Ongoing

Serious & Fatal transportation injuries: **Version Zero - Aggressively pursue zero serious injury/deaths**

EQUITY: Horizon Ongoing

1/4 mile from frequent transit: **Increase # households**
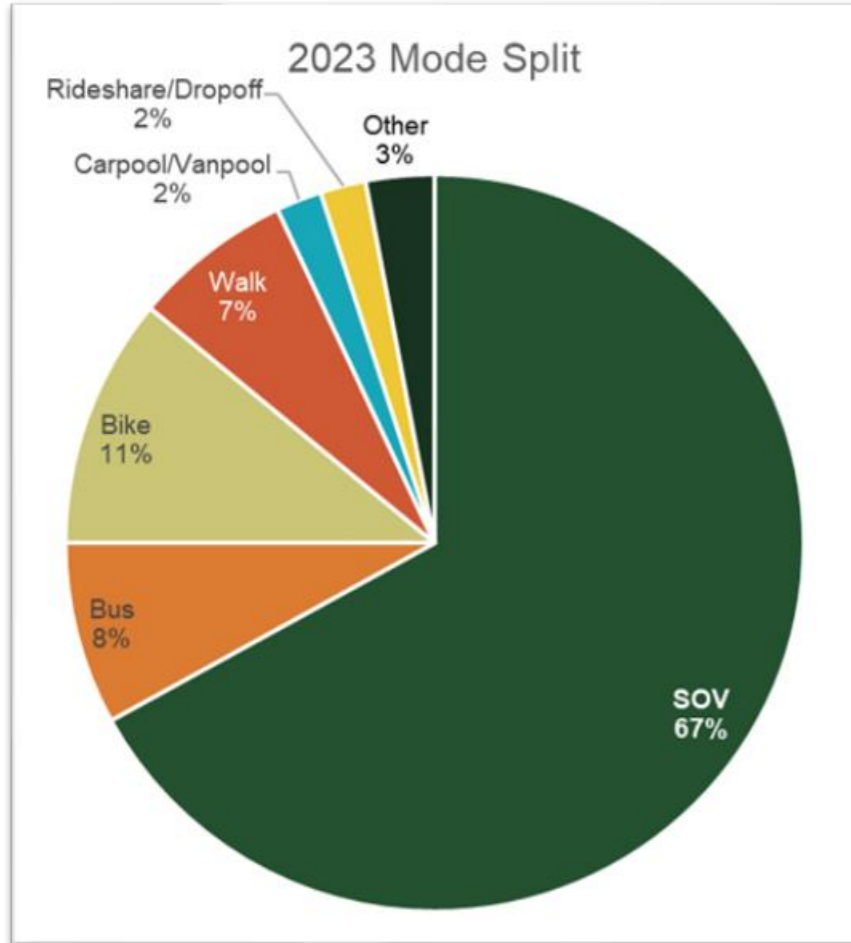1/4 mile from low-stress bikeway: **Increase # households**
Commute transportation spending: **Reduce spending**
Transportation customer satisfaction: **Increase satisfaction**

Mode Split Targets

2023 Mode Split

- Rideshare/Dropoff 2%
- Carpool/Vanpool 2%
- Other 3%
- Walk 7%
- Bike 11%
- Bus 8%
- SOV 67%

2025 Mode Split Targets

- Rideshare/Dropoff 2%
- Carpool/Vanpool 4%
- Other 3%
- Walk 9%
- Bike 12%
- Bus 9%
- SOV 60%

2033 Mode Split Targets

- Rideshare/Dropoff 2%
- Carpool/Vanpool 6%
- Other 6%
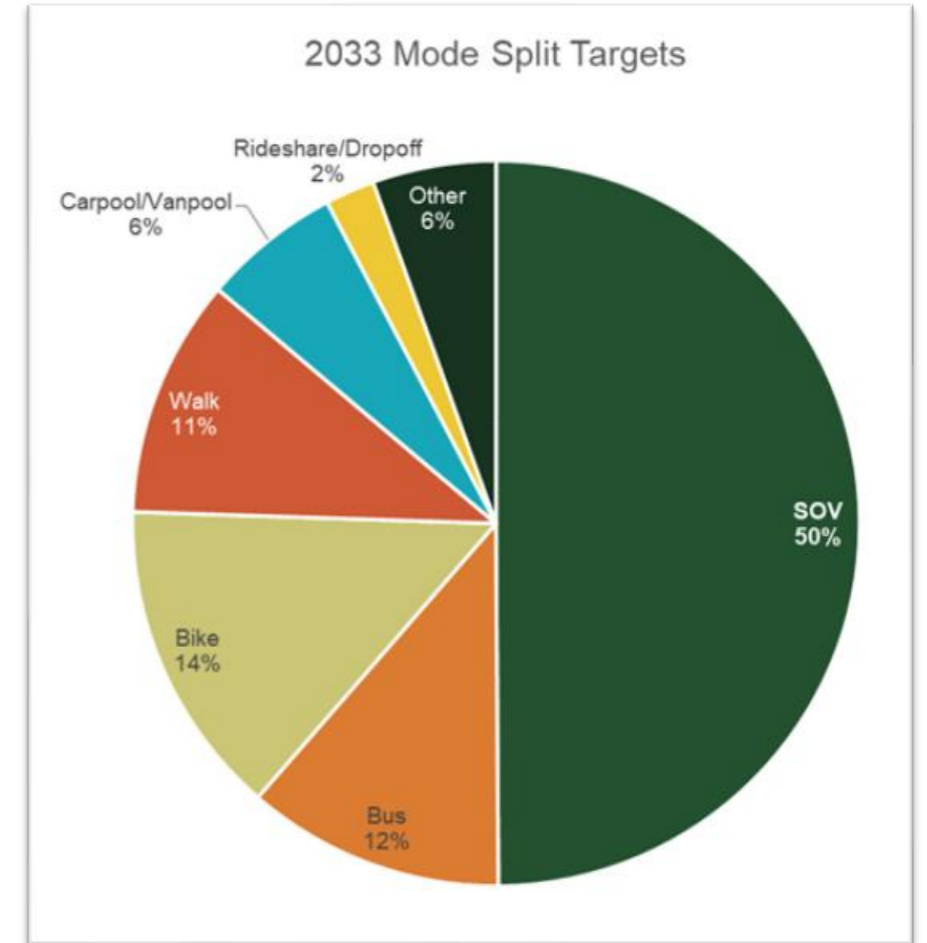- Walk 11%
- Bike 14%
- Bus 12%
- SOV 50%

Baseline (2023):

Source: Annual PTS Transportation Mode Split Survey collected in February/March 2023
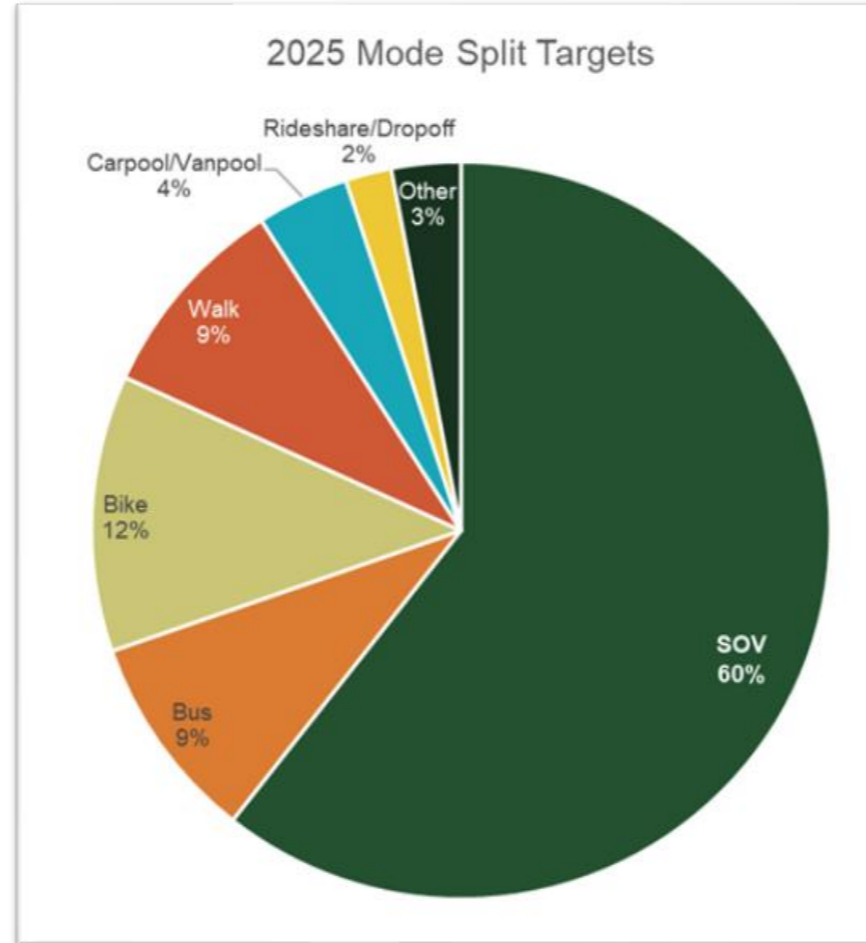
2025 Mode Split Goal:

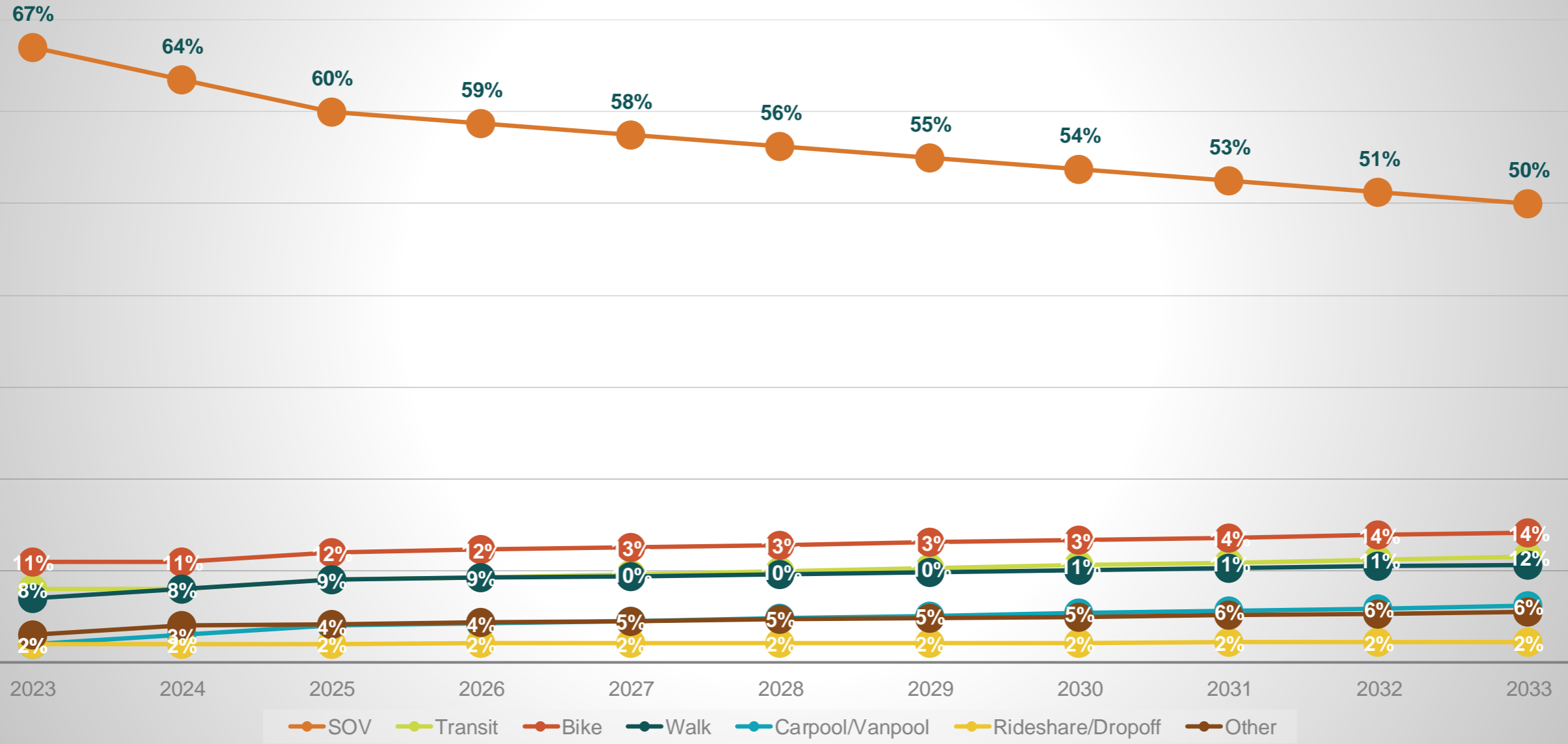Aligned w/ Colorado Employee Trip Reduction Program and adjusted based on present-day popularity and near-term feasibility

2033 Targets:

Includes assessment of past modal performance, total market potential by mode, and recent / planned investments by CSU, City, Transfort, etc.

Transportation Mode Split Targets 2023-2033

"Other" mode type includes telework, virtual classes, university fleet vehicle, longboard, scooter, etc.

Mode Split Change Factors

- Slated transit improvements such as the West Elizabeth Bus Rapid Transit route

- Propensity for higher Transfort bus ridership as a result of improved frequency of bus service on routes throughout the city

- New off-campus housing (and affordable housing, in particular)

- More on-campus housing for under- and upper-classmen (such as Meridian Village)

- The menu of infrastructure and programmatic transportation improvements recommended in Chapter 3 of this plan

- Peer universities' current reported transportation mode splits and mode split goals

Impact on Parking Supply

Metric	Baseline	Projection/Goal									
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Student Enrollment[1]	27,939	28,107	28,275	28,445	28,616	28,787	28,960	29,134	29,309	29,484	29,661
Driving Rate[2]	67%	64%	60%	59%	58%	56%	55%	54%	53%	51%	50%
Parking Demand Ratio[3]	0.30	0.29	0.28	0.28	0.28	0.27	0.27	0.27	0.26	0.26	0.26
Parking Demand[4]	8,468	8,221	7,981	7,928	7,876	7,824	7,773	7,722	7,671	7,620	7,570
Parking Supply (stalls)[5]	13,518	13,518	13,518	13,518	13,518	13,518	13,518	13,518	13,518	13,518	13,518
Parking Supply Ratio[6]	0.48	0.48	0.48	0.48	0.47	0.47	0.47	0.46	0.46	0.46	0.46
Parking Utilization % (with Baseline Supply)[7]	65%	63%	61%	59%	59%	58%	58%	57%	57%	57%	56%
Parking Stall Surplus[8]	5,050	5,297	5,537	5,590	5,642	5,694	5,745	5,796	5,847	5,898	5,948
Target Parking Utilization %[9]	-	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Recommended Parking Supply[10]	-	10,276	9,976	9,910	9,845	9,780	9,716	9,652	9,589	9,525	9,463
Parking Stall Surplus per Targets/Recommendations[11]	-	2,055	1,995	1,982	1,969	1,956	1,943	1,930	1,918	1,905	1,893

[1] Projections based on assumption of 0.6% YoY enrollment growth.

[2] 2023 baseline is derived from CSU Mode Split Survey results. Goals are based on target 50% driving mode share in 2033 that reflects a more balanced multi-modal environment for commuters.

[3] Parking demand (stalls) per total student enrollment. The baseline and goal driving rates are factored into these ratios.

[4] Baseline demand is derived from 2023 parking survey. Projections are based on projected student enrollment and target driving rates.

[5] Includes all student, employee, remote, and daily/hourly spaces at the Main, South, and West campuses.

[6] Total spaces per total student enrollment.

[7] 2023 baseline rate based on the completed Spring 2023 PTS parking utilization survey. Subsequent years are a calculation of calculated parking demand and base supply of 13,518 stalls.

[8] Baseline is based on existing parking supply of 13,518 total parking stalls minus observed parking demand. Projections are based on the base 13,518 stalls minus the projected parking demand.

[9] 80% utilization target reflects more efficiently-used parking and land resources while retaining a buffer to accommodate special events, mitigate vehicles circulating excessively to find spaces, etc.

[10] Includes a 20% supply buffer in excess of projected demand.

[11] Surplus stalls based on the existing 13,518 stalls minus the recommended parking supply.

Colorado State University
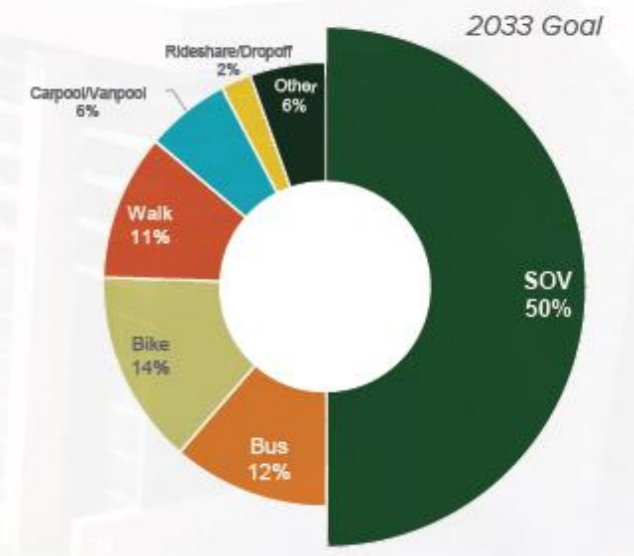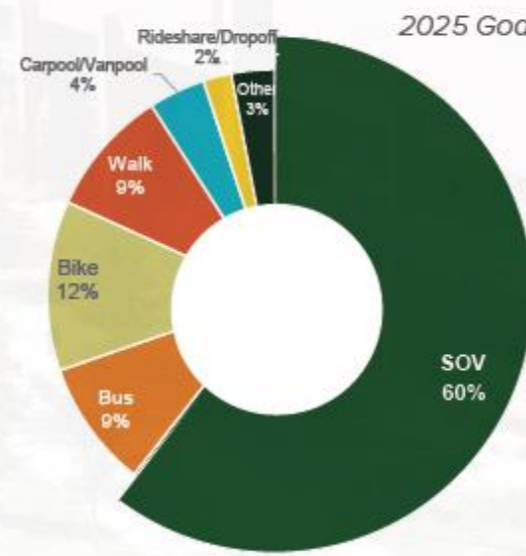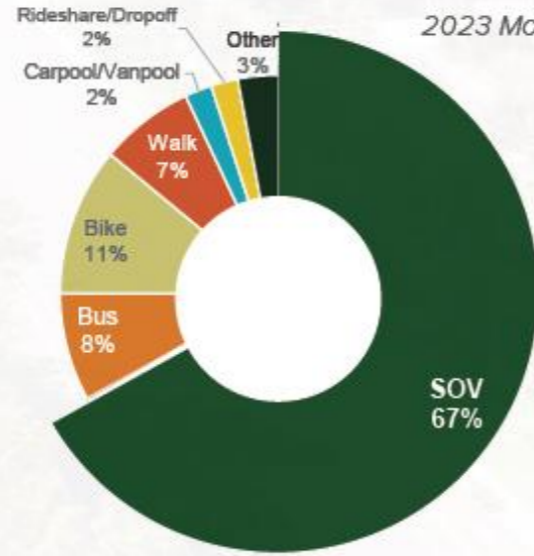
Parking Implications

- PTS measures parking utilization across Main/South Campus twice annually
- Spring 2023 average peak utilization of 65%
- TDMP projected demand for vehicle parking spaces through 2033 based on:
  - Current supply of 13,518 total stalls
    - Inventory assumed to remain constant through 2033 for illustrative purposes
  - **Placeholder** projected student enrollment growth (0.6%)
  - TDMP mode split targets through 2033
  - 20% parking supply buffer to better accommodate large events & distributed campuses
- Parking projections can assist CSU in determining need, location, and massing of new parking garages versus other land use opportunities

How Do We Get There?

Mode: Driving/SOV

Students, faculty, and staff at CSU enjoy driving to and from the campuses for flexibility and comfort. Cold and snowy winters on the Northern Front Range make driving one's personal vehicle from door to door a particularly attractive option. These drivers desire thoughtful parking permit types to suit their variable on-campus needs, especially as work and academic environments become more hybrid.

2023 Mode Split
- SOV 67%
- Bus 8%
- Bike 11%
- Walk 7%
- Carpool/Vanpool 2%
- Rideshare/Dropoff 2%
- Other 3%

2025 Goal
- SOV 60%
- Bus 9%
- Bike 12%
- Walk 9%
- Carpool/Vanpool 4%
- Rideshare/Dropoff 2%
- Other 3%

2033 Goal
- SOV 50%
- Bus 12%
- Bike 14%
- Walk 11%
- Carpool/Vanpool 6%
- Rideshare/Dropoff 2%
- Other 6%

Driving/SOV Key Takeaways

- Pursue a path to 50% driving mode share to balance the CSU transportation system
  - Better utilize the vehicle parking supply – target 80% at peak weekday times
- Identify and build more on-street pullouts to facilitate deliveries, carpooling pickup/dropoff, rideshare pickup-dropoff, and Move-in Day activities
- Continue pursuing long-term parking garage strategy, which has land use density benefits and allows for parking technologies that users seek
- Monitor demand and phase in more EV chargers in central areas of campus such as Lot 310 and Lot 425
  - Mix of Level 3 (480-volt) chargers and Level 2 (240-volt) chargers
- Place FM and similar spaces closer to building entrances when possible
- Integrate parking permit buying into a Commuter Management Platform
- Engage with parking permit customers to design more flexible and shared parking permit types that save customers money

Strategies

LEGEND

MODES: DRIVING, RIDESHARE, FLEET, BIKING, WALKING, TRANSIT, MICROMOBILITY, CARPOOL, CARSHARE

⊙ INFRASTRUCTURE & CONNECTIVITY STRATEGIES   ✎ POLICIES, PROGRAMS & INITIATIVES STRATEGY

Strategy	Mode(s)	Balance Mode Split	Promote Access & Affordability	Pursue Vision Zero/Safety	Reduce Transportation Carbon Emissions	Main	South	West	Foothills	Implementation Horizon	Estimated Cost
Improve and expand intersection + mid-block crosswalks		✓	✓	✓	✓	•	•		•	◷◷	$$
Add on-street pullouts		✓	✓	✓		•	•			◷◷	$$$
Install dynamic loading signage system		✓	✓	✓		•				◷	$
Add strategic EV charging locations			✓		✓	•	•	•	•	◷◷	$$
Decentralize motor rental pool		✓	✓		✓	•	•		•	◷	$$
Create more parking permit types/stalls for carpoolers and early/late workers			✓			•	•	•	•	◷	$
Lower parking ratios to raise parking utilization			✓			•	•			◷◷◷	$
Transition vehicle parking supply to garages		✓	✓			•	•			◷◷◷	$$$

Master Plan Committee Next Steps

TDMP Mode Split Recommendations

Mode	2023 [2]	2024	Annual SOV Rate of Growth 2022-2025 -3.5% 2025 [3]	2026	2027	2028	2029	2030	2031	2032	2033	Annual Rate of Growth 2025-2033 [4]
SOV	67%	64%	60%	59%	58%	56%	55%	54%	53%	51%	50%	-1.25%
Transit	8%	8%	9%	9%	10%	10%	10%	11%	11%	11%	12%	0.31%
Bike	11%	11%	12%	12%	13%	13%	13%	13%	14%	14%	14%	0.27%
Walk	7%	8%	9%	9%	9%	10%	10%	10%	10%	10%	11%	0.21%
Carpool/Vanpool	2%	3%	4%	4%	5%	5%	5%	5%	6%	6%	6%	0.27%
Rideshare/Dropoff	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	0.02%
Other[1]	3%	4%	4%	4%	5%	5%	5%	5%	5%	5%	6%	0.17%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	---

[1] "Other" category includes telework, virtual classes, university fleet vehicle, longboard, scooter, etc.

[2] Based on 2023 Mode Split Survey results.

[3] Target 60% single-occupancy vehicle commute rate by 2025 per voluntary Colorado Employee Trip Reduction Program.

[4] Based on 50% SOV goal for 2033, which would require a minimum average 1.25% annual reduction in SOV commuting from 2025-2033. Non-SOV modeshare increases would need to be an annual average of 0.02%-0.31% to compensate

Strategy Highlights (see Appendix)

Driving/SOV

- Prioritize investments into other modes
- Better utilize vehicle parking supply (target 80% peak)
- Pursue commuter management platform
- *Adjust pricing tiers with higher core campus rates*

Transit

- Expand routes (e.g., Around the Horn, West Elizabeth)
- Collaborate with Transfort to adjust/restore bus frequency
- Assist w/driver recruitment, partnerships, and CDL training pilots
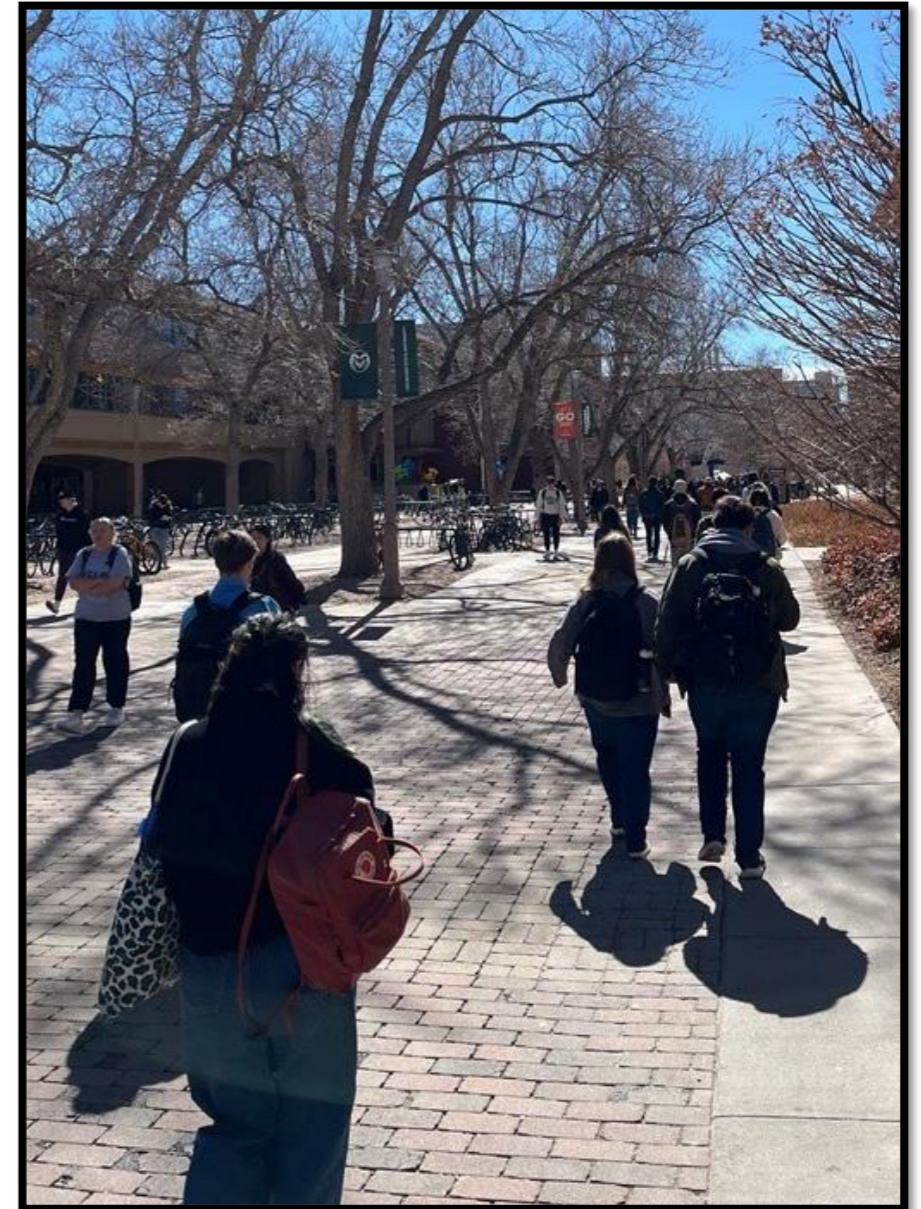- Consider CSU management of campus circulator service

Bicycle

- Adopt Toole Design Group corridor improvements
- Prioritize Vision Zero problem areas
- Connect Foothills Campus w/multiuse trails

Walking

- Prioritize on-campus housing
- Focus on 6 complete streets corridors

Fleet

- Transition to decentralized rental fleet (w/centralized maintenance facility)
- Adopt modern rental fleet management software and mobile app

Strategy Matrix

LEGEND

DRIVING | RIDESHARE | FLEET | BIKING | WALKING | TRANSIT | MICROMOBILITY | CARPOOL | CARSHARE

Strategy	Mode(s)	Objective				Campus Context				Implementation Horizon	Estimated Cost
		Balance Mode Split	Promote Access & Affordability	Pursue Vision Zero/Safety	Reduce Transportation Carbon Emissions	Main	South	West	Foothills		
Implement Mobility Hubs	transit, bike, walk, micromobility, rideshare, car	✓	✓	✓	✓	•	•		•	🕐🕐🕐	$$$
Improve and expand intersection + mid-block crosswalks	car, bike, walk, micromobility	✓	✓	✓	✓	•	•		•	🕐🕐	$$
Pursue proposed complete streets redesigns	bike, walk, micromobility	✓	✓	✓	✓	•	•	•	•	🕐🕐	$$$
Install signage and infrastructure to separate ped/bike in problem areas	bike, walk, micromobility	✓	✓	✓	✓	•	•			🕐🕐	$$$
Implement West Elizabeth BRT	bike, walk, transit	✓	✓		✓	•		•	•	🕐🕐	$$$
Increase connected + protected bike network	bike, micromobility	✓	✓	✓	✓	•	•	•	•	🕐🕐	$$
Improve bike lane snow removal	bike, micromobility	✓	✓	✓	✓	•	•			🕐🕐	$$
Expand Foothills sidewalk and bike trail network	bike, walk	✓	✓	✓	✓				•	🕐🕐	$$$
Decentralize motor rental pool	car, fleet	✓			✓	•	•		•	🕐	$$
Encourage affordable housing in walking distance	bike, walk	✓	✓		✓	•	•	•		🕐🕐🕐	$$$
Add on-street pullouts	car, transit	✓	✓	✓		•	•			🕐🕐	$$$
Install dynamic loading signage system	car, transit	✓	✓	✓		•				🕐	$
Add physical/digital drop zones for Spin devices	bike, micromobility		✓	✓	✓	•				🕐	$
Add strategic EV charging locations	car, fleet		✓		✓	•	•	•	•	🕐🕐	$$
Create more parking permit types/stalls for carpoolers and early/late workers	car, carpool		✓			•	•	•	•	🕐	$
Prioritize rideshare curbside spaces over pull in/out spaces	rideshare	✓	✓	✓	✓	•				🕐	$
Expand Around the Horn *(Frequency, # of routes, etc.)*	transit	✓	✓	✓	✓	•				🕐🕐	$$$
Add "carpool/vanpool" parking spaces in preferred locations	carpool	✓	✓		✓	•	•		•	🕐	$
Add Around the Horn service to UCA	transit	✓	✓		✓	•				🕐🕐	$$
Transition vehicle parking supply to garages	car	✓	✓			•	•			🕐🕐🕐	$$$
Lower parking ratios to raise parking utilization	car		✓			•	•			🕐🕐🕐	$

Colorado State University

Strategy Matrix Continued

Strategy	Mode(s)	Balance Mode Split	Promote Access & Affordability	Pursue Vision Zero/Safety	Reduce Transportation Carbon Emissions	Main	South	West	Foothills	Implementation Horizon	Estimated Cost
Create employee commuter management platform	biking, transit, carpool	✓	✓		✓	•	•		•	◷	$$
Expand bike route planning options and outreach	biking	✓	✓	✓	✓	•	•	•	•	◷	$$
Expand first- and third-party transit app functionality	transit	✓	✓		✓	•	•	•	•	◷	$
Run "Tap Your RamCard" challenge on buses during Fall semester	transit	✓	✓		✓	•	•	•	•	◷	$
Explore student Transfort driver pipeline program	transit	✓	✓		✓	•	•	•	•	◷◷	$$
Increase bus frequency	transit	✓	✓		✓	•	•	•	•	◷◷	$$$
Establish and promote carpool/vanpool matching program	carpool	✓	✓		✓	•	•	•	•	◷	$$
Update motor pool rental process to digital	fleet	✓	✓		✓	•	•		•	◷◷	$$$
Offer e-device safety and on-campus storage education	micromobility	✓	✓		✓	•	•			◷	$
Explore Zipcar market potential at CTC, Foothills/South Campus, and new residences	carshare	✓	✓		✓		•		•	◷	$
Increase Zipcar marketing and sign-up efforts/events	carshare	✓	✓		✓	•				◷	$$
Promote bike registration and lock education to deter bike theft	biking	✓	✓			•	•	•	•	◷	$
Right-size fleet vehicle supply and types	fleet				✓	•	•	•	•	◷◷◷	$
Implement fleet management software	fleet				✓	•	•	•	•	◷◷	$$
Transition fleet to EVs as applicable	fleet				✓	•	•	•	•	◷◷◷	$$$
Add accessible classroom layer to Interactive Campus Map	walking		✓			•	•		•	◷	$

LEGEND: DRIVING, RIDESHARE, FLEET, BIKING, WALKING, TRANSIT, MICROMOBILITY, CARPOOL, CARSHARE

Objective | Campus Context

Detailed Summary for Each Mode

MP Committee Action Items

- Read the TDMP for details

- Consider possible Master Plan impacts as strategies are implemented

- Adopt mode split targets

- Support submission of the TDMP (as addendum to Master Plan)

Thank you

Colorado State University

Appendix

List of Recommendations by Mode

Driving / SOV

- Pursue a path to 50% driving mode share to balance the CSU transportation system
  - o Better utilize the vehicle parking supply – target 80% at peak weekday times
- Identify and build more on-street pullouts to facilitate deliveries, carpooling pickup/dropoff, rideshare pickup-dropoff, and Move-in Day activities
- Continue pursing parking garages, which have land use density benefits and allow for parking technologies that users seek
- Monitor demand and phase in more EV chargers in central areas of campus such as Lot 310 and Lot 425
  - o Mix of Level 3 (480-volt) chargers and Level 2 (240-volt) chargers
- Place FM and similar spaces closer to building entrances when possible
- Integrate parking permit buying into a Commuter Management Platform
- Engage with parking permit customers to design more flexible and shared parking permit types that save customers money

Transit

- Consider alternative/expanded Around the Horn route to better serve UCA, Main Campus connections, and remote parking lots
- Collaborate with Transfort to find ways to restore bus frequency, which was a key concern raised in stakeholder feedback
  - Consider shifting Around the Horn, Gold, and/or 32 routes to CSU management and operation to enable new routing and frequency possibilities
  - Consider employing students as bus drivers with CDL attainment assistance, which is a successful model used at some peer universities
- Advocate for real-time Transfort bus location info availability for third-party transit apps so that riders have more choices for trip planning
- Prioritize multi-modal mobility hubs and bus shelters as funding becomes available

Biking

- Focus on building out more protected and well-connected facilities, safe crossings on streets and paths, and wayfinding features/signage
  - o Prioritize problem areas based on Vision Zero data
- Consider Toole Design Group's 2022 corridor redesigns for campus and adjacent areas to improve safety and separation of cycling facilities to reduce conflict with other modes like pedestrians
- Connect Foothills Campus with multi-use trails for better internal bike access
- Ensure the bike lane snow removal program follows best practices and is consistently executed after inclement weather events
- Deter bike theft through bike registration best practices:
  - o Open, national database
  - o Customer-side profile and bike management capabilities

Walking

- Install additional signage and separated infrastructure for other modes where feasible to mitigate conflicts and accidents with vulnerable pedestrians
  - ➢ Focus on 6 Toole Design Group complete streets corridors and multi-use paths where Vision Zero crashes have been reported
- Make lighting improvements in less obvious areas and in areas where FM and HDS staff frequently work, which has historically received less priority
- Maintain crosswalk paint for visibility and expand to new areas such as mid-blocks on long roadway thoroughfares like Plum St
- Expand sidewalk infrastructure at Foothills Campus
- Prioritize on-campus housing so that more students have the option to commute to campus by foot
- Develop an ADA-accessible classroom layer for the Interactive Campus Map

Micromobility

- Work with Spin to establish defined Spin device parking zones on campus for improved organization and to keep sidewalks clear
- Consider Spin credits or incentives for incoming students and/or campus residents
  - ATFAB funds
- Expand education and awareness of personal e-device building/charging policies for safety
- Follow e-device storage/charging facility norms and best practices as they become established, although costs will be high

Carshare (Zipcar)

- Monitor utilization rates and consider carshare space expansion in existing areas accordingly
- Create a plan to include carshare spaces at new residential buildings at ratios aligned with the utilization per bedroom observed at existing carshare sites to ensure supply is right-sized and process is streamlined
- Explore potential for Zipcar spaces at South Campus and Foothills Campus, which would allow for errands and connections between campuses

- Increase marketing of Zipcar availability in new and prospective student materials
- Engage with Zipcar to resume Zipcar marketing and sign-up kiosks at key events; CSU students/Rambassadors or PTS staff could co-host these events

Rideshare (Lyft, Uber)

- Improve rideshare zone identification and wayfinding through coordination with TNCs
  - More-- and more prominent-- physical signage
- Expand rideshare curbside spaces, which encourage circulation and turnover compared to designated 'back in, back out' parking spaces and are safer and easier for riders and drivers to locate with the appropriate signage
- Identify new areas for dynamic TNC/taxi and kiss and ride activity

  - CSU Transit Center

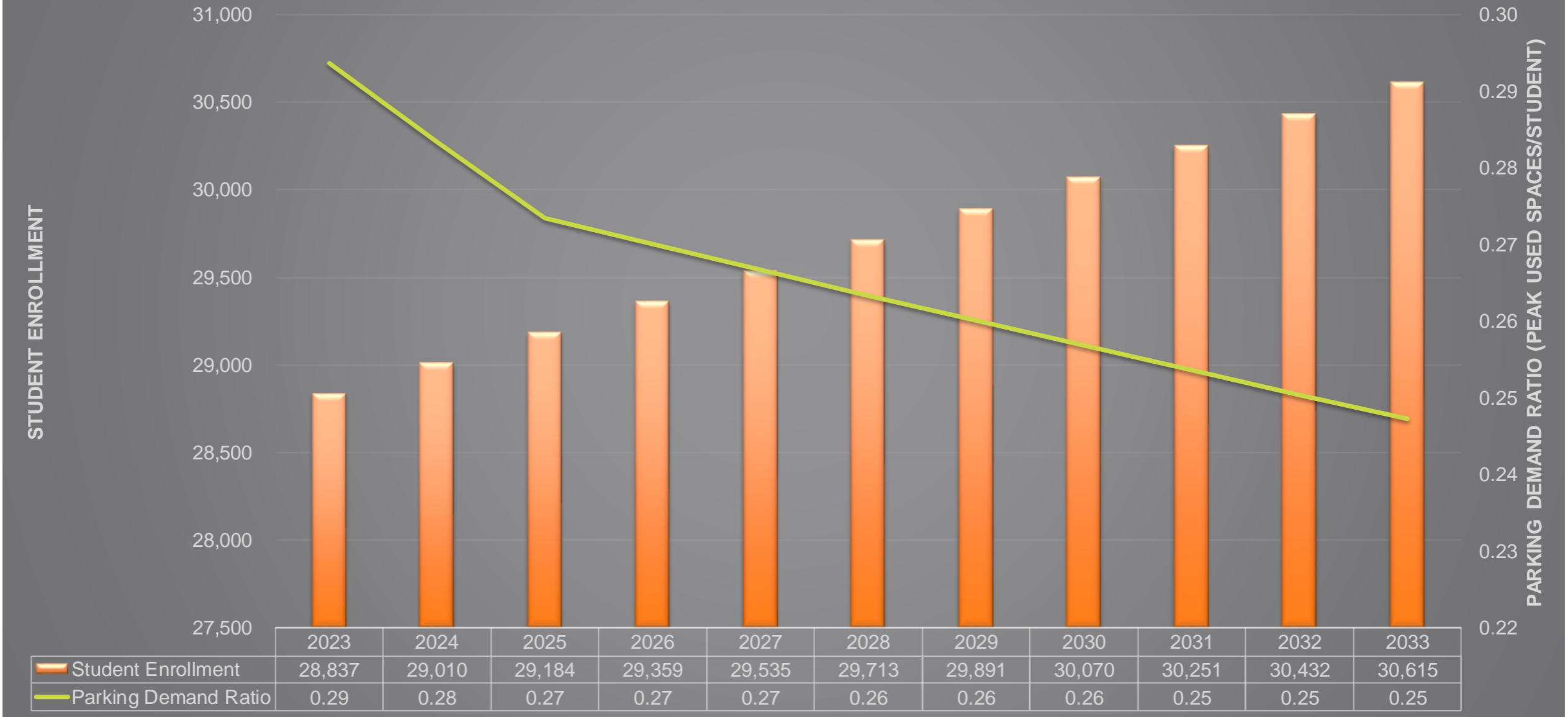 - Lake Street/Center Ave Mall

  - etc.

Carpool / Vanpool

- Consider restricting strategically located, convenient parking spaces for "Vanpool/Carpool Only" use
- Offer internal carpool- and vanpool-matching events and/or a user-friendly digital platform to assist interested users in finding follow riders who share common routes, work schedules, and other common interests
  - Digital platform ideally should integrate with the Commuter Management Platform
- Carpool/vanpool matching platform should be prominently marketed to new and existing employees
- CSU/PTS should work with taxi services, Uber, and Lyft to offer a guaranteed ride home option for vanpool/carpool users whose group ride is interrupted by driver emergencies or similar circumstances

Fleet

- Transition to a decentralized rental pool dispersed throughout key Main Campus lots
- Consider suitable location for 1 additional maintenance facility in peripheral Main, South, or Foothills campus area to meet needs of rental vehicles as well as the 700+ critical and departmental fleet vehicles
- Continue to right-size the vehicle fleets according to the 2019 Fleet Management Report provided by Mercury Associates, Inc.
  - o Adjust for increased utilization rate resulting from improved motor pool rental process
- Consider more EV vehicle adoption for appropriate vehicles as EV technologies mature
- Launch mobile app for motor pool rentals
- Adopt modern fleet management software

Parking Implications

Projected YoY Student Enrollment + Parking Demand Changes 2023-2033

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Student Enrollment	28,837	29,010	29,184	29,359	29,535	29,713	29,891	30,070	30,251	30,432	30,615
Parking Demand Ratio	0.29	0.28	0.27	0.27	0.27	0.26	0.26	0.26	0.25	0.25	0.25

Colorado State University

Parking Implications

Projected YoY Student Enrollment + Recommended Parking Supply 2023-2033

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
▇ Recommended Parking Supply	10,585	10,276	9,976	9,910	9,845	9,780	9,716	9,652	9,589	9,525	9,463
— Student Enrollment	28,837	29,010	29,184	29,359	29,535	29,713	29,891	30,070	30,251	30,432	30,615

Colorado State University