

San Francisco State University

2018 Transportation Demand

Management Plan

May 2019





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Contents

1	Int	roduction	5
2	Exi	sting Conditions and Future State 2035	6
	2.1	Past efforts: 2007 MOU and 2009 TDM Plan	6
	2.2	Existing Conditions	7
	2.2.1	1 2018 Transportation Survey	7
	2.2.2	2 Gator Pass	9
	2.2.3	3 SF State Shuttle	10
	2.2.4	4 Interviews	10
	2.3	Future State 2035 Campus Masterplan	11
3	TDI	M Plan	13
	3.1	TDM Plan Goals	13
	3.2	TDM Strategy Development Process and Framework	13
	3.3	TDM Strategies	
	3.3.1	•	
	3.3.2	· ·	
	3.3.3		
	3.3.4		
	3.3.5	Supportive Strategies	21
	3.4	Alignment with San Francisco Planning Department TDM Program	23
4	lmr	olementation Strategy	
	4.1	Institutional Organization	
	4.2	Phasing	
	4.3	Funding	
_		gets	
5		-	
		Pedestrians and Bicyclists	
	5.2	Transit	30
	5.3	Automobile	31
	5.4	Supportive Strategies	31
6	Cor	nclusion	33
Δ	nnenc	liv Δ	34

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1 Introduction

The Transportation Demand Management Plan (TDM Plan) is an update to the 2009 TDM Plan. Like the previous document, the TDM Plan sets forth transportation strategies, targets and an implementation framework to reduce automobile trips and promote sustainable alternatives to commute to/from the San Francisco State University campus (SF State). The Future State 2035 campus master plan is the foundation for the TDM Plan; this document operationalizes the policies and objectives related to TDM from Future State 2035. As such, the TDM Plan strategies and targets can be used to inform the updated Memorandum of Understanding (MOU) with the City and County of San Francisco and the mitigation measures for the Environmental Impact Report.

The TDM Plan responds to and supports SF State and California State University goals, identifying specific transportation related actions, including to:

- Promote sustainable transportation to reduce greenhouse gas (GHG) emissions¹;
- Improve student retention rates² by promoting better transportation alternatives or strategies;
- Develop a stronger relationship with the City and the community by enabling affordable and sustainable commute options;
- Reduce parking costs to be able to fund other alternatives or strategies;
- Future-proof, proactively thinking about needs resulting from emerging mobility technologies and the impacts of autonomous vehicles (AVs).

This plan was developed using information from an existing conditions analysis, the Future State 2035 plan, findings from the 2018 Transportation Survey³, as well as feedback from interviews with SF State departments. Section 2 of this document summarizes existing conditions and trends considered for the TDM Plan. Section 3 summarizes the proposed TDM strategies; Appendix A presents these strategies in a detailed "fact sheet" format. The TDM fact sheets in the Appendix are intended to be used as a guide for implementing the TDM Plan strategies. Section 4 presents the TDM implementation approach. Section 5 describes targets to measure the effectiveness in promoting sustainable and safe transportation improvements.

 $\underline{\text{https://air.sfsu.edu/sites/default/files/Fall2017\%20Student\%20Profile\%20013118.pdf}$

¹ Sources: 2014 CSU Sustainability Policy; SF State Climate Action Plan Goal.

² Freshmen 4-year graduation rate is 22.2% (Fall 2013). Source:

³ The 2018 Transportation Survey was conducted by Nelson\Nygaard Consulting Associates.

2 Existing Conditions and Future State 2035

2.1 Past efforts: 2007 MOU and 2009 TDM Plan

In 2007, SF State and the City and County of San Francisco entered into a Memorandum of Understanding (MOU) to identify transportation measures and define SF State's fair share contribution to mitigate off-campus impacts related to the University's enrollment growth and implementation of the 2007 campus master plan. As a requirement of the MOU, SF State prepared a TDM plan in 2009 that further defined how to achieve the targets agreed to in the MOU.

Since 2007, significant efforts have been made to implement strategies identified in the MOU and TDM Plan. A major result of the 2009 TDM Plan was the implementation of the Gator Pass in 2017, a transit pass funded through a student fee that offers unlimited rides on the Muni system during the academic periods. The bicycle and parking strategies in the 2009 plan have been partially implemented, but require additional infrastructure improvements, both on and off-campus, which will require ongoing collaboration with San Francisco Municipal Transportation Agency (SFMTA). The strategies and improvements contained in the 2007 MOU and 2009 TDM Plan and the current status of these items are shown in Table 1.

Table 1 - Status of 2009 TDM Plan Recommendations

Recommendation	Description	Status
19th Ave bike route	To be coordinated with the City and Caltrans	Not Implemented
Abundant bike racks	Install bike racks near entrances to all new buildings	Partially Implemented
Secure bike parking	Expand secure parking beyond bike barn	Not Implemented
On–campus bike station	Replace bike barn with bike station on Holloway Ave (part of new academic building)	Not Implemented
Participation in local planning processes	Advocate for improved bike facilities that would need to be implemented by others (specific short– to mid–term improvements recommended)	Partially Implemented
Transportation management	Enhance and expand existing programs	Partially Implemented
Universal transit pass	Implement a student transit pass (Gator Pass)	Implemented
Improve capacity of shuttles	Contract out services to operator using larger buses	Implemented
Improved boarding arrangements at Daly City BART	Co-locate shuttle and Muni Route 28 stops	Implemented
Expand car share	Locate additional car share pods on campus	Partially Implemented
Phased replacement of parking if existing central garage is demolished	Disperse parking locations on perimeter, with no net new parking	Not Implemented
Increase parking permit costs incrementally to fund replacement parking	State law prohibits use of state funds to finance capital parking investments	Partially Implemented
Replace long-term parking pass discount	Equalize semester and daily parking rates	Implemented
Participation in local transportation planning processes affecting transit services	Many short–, medium–, and long–term transit improvements listed. Improvements to Muni Route 28 is a priority.	Partially Implemented

Source: 2009 Transportation Demand Management Plan, 2007 Campus Master Plan.

2.2 Existing Conditions

2.2.1 2018 Transportation Survey

The 2007 MOU establishes a transportation monitoring and mitigation program that calls for surveys to be conducted by SF State in intervals of no more than three years or with the addition of 1,000 headcount students.

Accordingly, the University has conducted an online transportation survey and cordon count at least every three years beginning with a baseline survey in April 2008 with subsequent surveys taking place in April 2011, April 2014, April 2016, and May 2018. As outlined in the MOU, SF State collaborated with SFMTA on the original design of the survey in 2008, and with each subsequent survey, has incorporated SFMTA comment on the survey questions and report. Survey data are used to track a number of key factors such as mode split, peak hour vehicle trips, peak hour Muni ridership, and greenhouse gas (GHG) emissions.

The latest survey from 2018 identified two major regional trends affecting SF State:

- 1. Housing deficiency and associated affordability crisis
- 2. Transportation Network Companies (TNCs): including Uber and Lyft

The Bay Area's housing supply deficiency and its impacts on residential rents appears to be impacting where SF State affiliates live. Over the last 10 years, the share of SF State affiliates living in the City and County declined from 54% to 41%, while the Alameda County share increased from 14% to 21% (as shown in Figure 1). As a result, students, faculty, and staff experience longer and more variable commute times. Out-of-city affiliates riding public transit must use multiple modes to access the campus, subject to the challenges of multiple operators stringing together a single journey: these trips are rarely seamless or completely reliable.

Some respondents of the 2018 Transportation Survey reported they prefer to drive to save time or have a place to nap between classes. Extreme cases revealed that some students rent rooms during finals to avoid the stressful and time-intensive commute; some even contemplated not completing their degree due to long commutes.

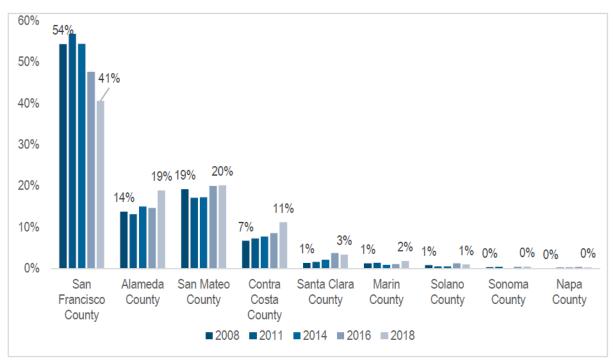


Figure 1 - Residential Location by County, 2008-2018

Source: 2018 Transportation Survey.

An increase in the use of TNCs (such as Uber and Lyft), appears to contribute to the auto mode share growth between 2008 and 2018, possibly due to the perception it is faster and/or a more convenient option than other modes, as noted by some respondents of the survey. Traffic survey counts⁴ and on-line commuter survey (in Table 2 and Table 3) indicate an increase in auto trips from about 41% to 52% over the last 10 years. Auto trips include driving alone, carpool/vanpool, being dropped off / picked up, and using a taxi or ride-hail service.

The Bay Area's limited housing supply and associated affordability crisis has seen a reduction in the number of campus affiliates living in San Francisco, which increases their travel time. Some survey respondents reported three hour commutes each way. For these people, transit reliability – particularly seamless transfers – is critical to making transit a viable option. The trends from the traffic survey data and responses from the survey indicate that the drive-alone rate increases as commuters live further from campus. People with longer commutes are choosing to drive rather than use transit based on an actual or perceived reduced travel time and cost.

Table 2 presents the overall mode share that includes all transportation options used during a commute journey, including first-mile connection. Table 3 presents the last transportation mode used by commuters to arrive at campus, a choice that results in physical impacts to the campus such as demand for curbside space and parking.

Table 2 - Mode share: all modes used to get to campus

How Online Survey Respondents Got to SF State	2018 (n=3,304)	2008 (n=3,292)
Muni	36%	36%
Drove Alone	32%	34%
SF State Shuttle	21%	21%
BART	28%	21%
Walk	30%	19%
Bicycle	2%	6%
Carpool/Vanpool	4%	7%
Dropped Off / Picked Up	7%	4%
Other bus provider than Muni (e.g. AC Transit/Golden Gate Transit/SamTrans)	7%	3%
Motorcycle/Moped	1%	1%
Other	2%	2%
Caltrain	2%	1%
Taxi or Ride-Hail Service	9%	

Source: 2018 Transportation Survey.

⁴ The number of vehicles entering and exiting the campus increased by 4.6% in comparison to 2016 and 11% in comparison to 2014. Sources: 2016 Transportation Survey and 2018 Transportation Survey.

Table 3 - Mode share: mode of arrival

How Online Survey Respondents Got to	2018	2016	2014	2011	2008	% Change Relative to 2008 ⁶
SF State	(n= 3,273)	(n=2,238)	(n=3,013)	(n=2,684)	(n=3,292)	2008 – 2018
Muni	31.4%	31.3%	29.8%	29.4%	30.6%	2.6%
Drove Alone	23.1%	20.1%	19.7%	23.0%	26.0%	-11.2%
SF State Shuttle	17.1%	17.9%	16.7%	18.7%	16.9%	1.2%
Walk	14.0%	17.5%	17.0%	13.7%	12.3%	13.8%
Taxi or Ride-Hail Service	5.3%	1.7%				
Carpool/Vanpool	2.2%	1.8%	3.9%	4.5%	4.9%	-55.1%
Dropped Off / Picked Up	2.2%	2.4%	4.7%	3.0%	2.4%	-8.3%
Other bus provider than Muni (e.g. AC Transit/Golden Gate Transit/SamTrans)	2.2%	2.1%	2.8%	2.0%	1.5%	46.7%
Bicycle	1.4%	3.4%	3.8%	4.1%	3.5%	-60%
Other	0.7%	1.2%	1.0%	0.5%	1.1%	-36.3%
Motorcycle/Moped	0.4%	0.6%	0.4%	1.2%	0.7%	-42.9%

Source: 2018 Transportation Survey.

2.2.2 Gator Pass

In 2017, SF State implemented the Gator Pass, a transit pass for students that provides unlimited rides on the Muni system and a 25% discount on BART from and to Daly City Station during the academic year, when classes are in session.

The Gator Pass concept has the potential to provide an incentive to shift auto trips to transit, through a reduction in cost and a simplified system. Feedback from respondents highlighted that the Gator Pass encouraged a shift of mindset, with some people reporting that it made them think twice before using TNCs. It also lowers the barrier to travelling to campus more often. However, in spite of the improvements from the Gator Pass, transit reliability has been a challenge to increasing mode share, especially the Muni system. Some respondents reported total transit travel time between two to three times longer than driving.

Although 97% of SF State students are eligible for the Gator Pass, only 67% are tagging the pass to commute across San Francisco. Data analysis by the Parking & Transportation Department and OneCard Department revealed that reliability is affecting commute choices, with students choosing to take BART rather than the M-Line for trips from/to downtown (either classes or leisure purposes). This may be because the M-Line⁵ is less reliable and slower to downtown⁶ compared to BART. Because these factors are not within SF State's direct control, the University will need to work with the SFMTA to identify service improvements that could increase usage of the Gator Pass.

⁵ The percentage of on-time performance of M-line ranges from 40%-50%. Source: https://www.sfmta.com/reports/percentage-time-performance accessed in September 2018.

⁶ Total travel time of M-Line is 24 minutes (Powell Station to 19th Avenue and Holloway Avenue); total travel time of BART is 15 minutes (Powell Station to Daly City Station).

2.2.3 SF State Shuttle

The SF State shuttle connects the campus to the Daly City BART Station on weekdays during spring and fall academic semesters. The shuttle is intended to provide a supplementary service to Muni for SF State affiliates. In 2016, demand exceeded 85% of capacity during the peak, indicating riders experienced overcrowding. The Gator Pass was expected to reduce crowding on the shuttle by shifting riders to Muni buses. However, the Parking & Transportation Department reports that based on shuttle ridership and Gator Pass data, shuttle ridership remained unchanged following the implementation of the Gator Pass. This may improve over time as more students learn that they can ride the 28 or 57 buses for free instead of the shuttle.

To help reduce overcrowding on the shuttle, targeted outreach is needed to raise awareness about different transit options amongst students. Improved signage and real-time transit information would help students to make more informed choices about their commute.

In addition to encouraging ridership sharing between the different services, there are other strategies that can be implemented to improve the shuttle including timing arrivals to meet class schedules. This would make a more significant difference at night, when waiting for the shuttle may be more of a safety concern. Shuttle service could also be extended into the summer session and other non-term times, if funding were available, to better meet the needs of students year-round, and reduce confusion about when the service is operating.

Interviews 2.2.4

Interviews with a number of stakeholder departments on campus were conducted as part of the process to inform the TDM Plan. The interviews with staff and students provided guidance on the most effective TDM measures. The main highlights from the interviews are listed below:

- Provide clear information on transportation options to better inform students, faculty, and staff about available incentives for taking transit, including better signage at the Muni Route 28 / 57 and SF State Shuttle bus stop at the Daly City BART station;
- Enhance outreach and marketing of transportation services and programs and expand face-toface approaches which have shown to be more effective at SF State, such as leading new students on group transit rides to help familiarize students who are new to the area with how to use transit;
- Coordinate actions between campus departments to better leverage resources, be more effective in reaching target audiences, and more effectively implement TDM strategies and programs;
- **Inform new students and employees** about transportation options including how to use the transit system, Gator Pass and get around by bike;
- Adopt technology as a means to reduce operating costs and make services more efficient for users.

2.3 Future State 2035 Campus Masterplan

In 2017, the University initiated the Future State 2035 Campus Master Plan process to plan for the increase in number of full-time equivalent (FTE) students from 25,000 to 30,000. This growth will require the expansion of residential buildings, academic buildings, student activity centers and infrastructure improvements. With this expansion, SF State plans to house 40% of students and 15% of employees on campus.

The vision for Future State 2035 is to transform the campus into a more inviting place for residents and commuters alike, promoting an environment that fosters learning and enables a strong community connection. Figure 3 presents the Future State 2035 Master Plan concept.

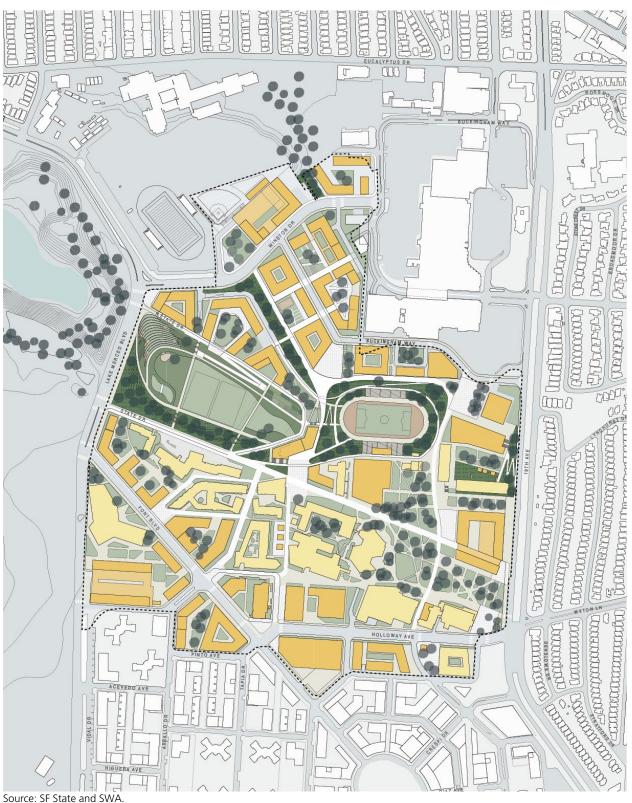
To support this vision, the Master Plan proposes improvements to pedestrian, bicycle and transit facilities. These projects promote a safe environment for people and prioritize sustainable transportation options. The following conceptual design and guidelines are included in the Master Plan:

- **Pedestrian circulation:** The Master Plan includes conceptual street design sections, a traffic calming approach for internal bicycle circulation in the Quad, identification of intersections that need design improvements for safety, and a strategy for curb management.
- Bicycle infrastructure: The Master Plan includes an internal transportation network hierarchy, conceptual designs for the proposed typologies, a connectivity strategy with the existing and planned bicycle network in the city, plans for bicycle parking and bike share stations, an identification of main regional routes and issues to address, and conceptual designs for a bicycle facility along Holloway Avenue and Font Boulevard.
- **Transit circulation:** The Master Plan includes definitions of stop locations, conceptual designs to reduce conflicts with bicycle facilities, and alternative shuttle service routes.
- Passenger loading: The Master Plan includes consolidation of areas for passenger loading in order to reduce conflicts with pedestrians, bicycles and buses.
- **Curb management:** The Master Plan includes consolidation of curbside usage to help reduce conflicts with pedestrians and bicycles and to provide dedicated spaces for transit boarding in appropriate locations.

The Master Plan's transportation ideas and concepts form the basis of the TDM Plan. The TDM Plan builds upon these concepts and reinforces and implements the Master Plan vision.

For more details on the Master Plan, please consult the Future State 2035 Report and respective Appendices.

Figure 2 - Future State 2035 Campus Master Plan



3 TDM Plan

3.1 TDM Plan Goals

During the Future State 2035 process, transportation goals and objectives were established that incorporate the University's core values and guide the transportation strategy for the Master Plan, as well as the short- and medium-term strategies proposed in this TDM Plan. The goals and objectives include:

- 1. Empower people to make informed, sustainable commute choices;
- 2. Provide no net new parking;
- 3. Work with Bay Area transit agencies to ensure adequate transit capacity to accommodate increased use;
- 4. Work with Bay Area transit agencies to make transit more convenient and increase service quality;
- 5. Discourage use of parking for those with other options, but make it affordable and usable for those who need it; and
- 6. Make bike commuting feasible (safe, easy, and fun).

Following the set of goals, the TDM Plan approach is focused on the following key strategies:

- Establish supportive actions to implement new ideas or to increase utilization of existing programs;
- Increase engagement with SF State community through face-to-face interactions, events and pilot projects that will bring more involvement of students and staff into transportation issues;
- Identify short-term and low-cost elements to implement immediately, using existing resources within SF State (partnership with other departments for better coordination and development of tools);
- Identify opportunities to reduce costs and improve budget for transportation;
- Establish mode share targets and continuous monitoring process.

3.2 TDM Strategy Development Process and Framework

During the development of Future State 2035, an initial set of Master Plan supportive transportation strategies were produced. This first set of strategies were organized by transportation mode and an initial assessment determined if implementation of the strategy could be done internally or if it requires external collaboration or leadership.

For the TDM Plan, additional short-term and medium-term actions and updates on the status of transportation programs were added to the initial list of strategies from the Master Plan. This list of strategies was further developed and refined through input from representatives from various campus departments including Sustainability, Housing Dining Conference Services, University Enterprises, Planning and Design, Disability Programs Resource Center, Parking and Transportation, Gator Pass/One Card, Campus Recreation, Police, Communications, Associated Students, Human Resources, Student Affairs, and Residential Life.

This TDM Plan presents a series of transportation strategies organized by the following transportation categories: Pedestrians, Bicyclists, Transit Commuters, Automobile Commuters and Supportive Strategies. Subcategories for each main category are presented in Table 4. Each idea is labeled with a unique ID to facilitate identification throughout this document.

Table 4 - TDM Strategies Classification

CATEGORY	SUB-CATEGORY	IDEA IDs
Pedestrian	Improve pedestrian circulation	P1, P2, P3
redestriari	Improve mobility conditions for people with disabilities	P4, P5
Bicyclists	Implement bicycle infrastructure	B1, B2, B3, B4, B5
DICYCIISTS	Support biking to/from campus	B6, B7, B8
	Gator Pass improvements	T1, 72, T3, T4, T5
Transit	SF State Shuttle improvements	T6, T7
Commuters	Public transit improvements and measures	T8, T9, T10, T11, T12
	Support riding transit to/from campus	T13, T14, T15, T16
	On-campus parking	A1, A2, A3, A4, A5, A6, A7
Automobile Commuters	Off-campus parking	A8, A9
	Supportive measures to reduce overall parking demand	A10, A11, A12
	Curb management	A13
	Institutional measures	S1, S2
Supportive	Human Resources and student life support	S3
Strategies	Land use	S4, S5, S6
	Platforms and strategies for outreach and information	S7, S8, S9

Detailed descriptions of TDM Strategies are included in the Appendix A – Fact Sheets. The fact sheets are intended to be used as a tool for implementing each strategy. The fact sheets identify:

- Whether the strategy is an internal effort or requires collaboration with external entities
- The internal or external department(s) that need to be involved
- Opportunities and challenges associated with the strategy, and
- Short-term, medium-term and long-term actions to be taken to implement the strategy.

Figure 4 presents an example of the fact sheets, which are composed of the following elements:

- A. Title of idea with ID number.
- B. Summary of characteristics to facilitate decision-making process for implementation. Includes:
 - Time frame (short-, medium-, long-term): actions to be implemented, indicating that some ideas might have actions that can be implemented in different timeframes.
 - Action (internal, external): actions might require internal coordination only or coordination with external entities.
 - <u>User (employees⁷, students⁸, residents⁹):</u> indicates the groups that will be impacted by the strategy.
- C. Type of strategy: Pedestrian, Bicycle, Transit, Automobile or Supportive Strategies.
- D. Goal: summarizes main objective of proposed idea.
- E. Description: contains a detailed description and discusses opportunities or challenges of implementing that the strategy.
- F. Actions matrix: presents suggested actions to be taken at different time frames and the responsible entities (internal or external)

⁷ Include faculty and faculty, both commuters and on-campus residents.

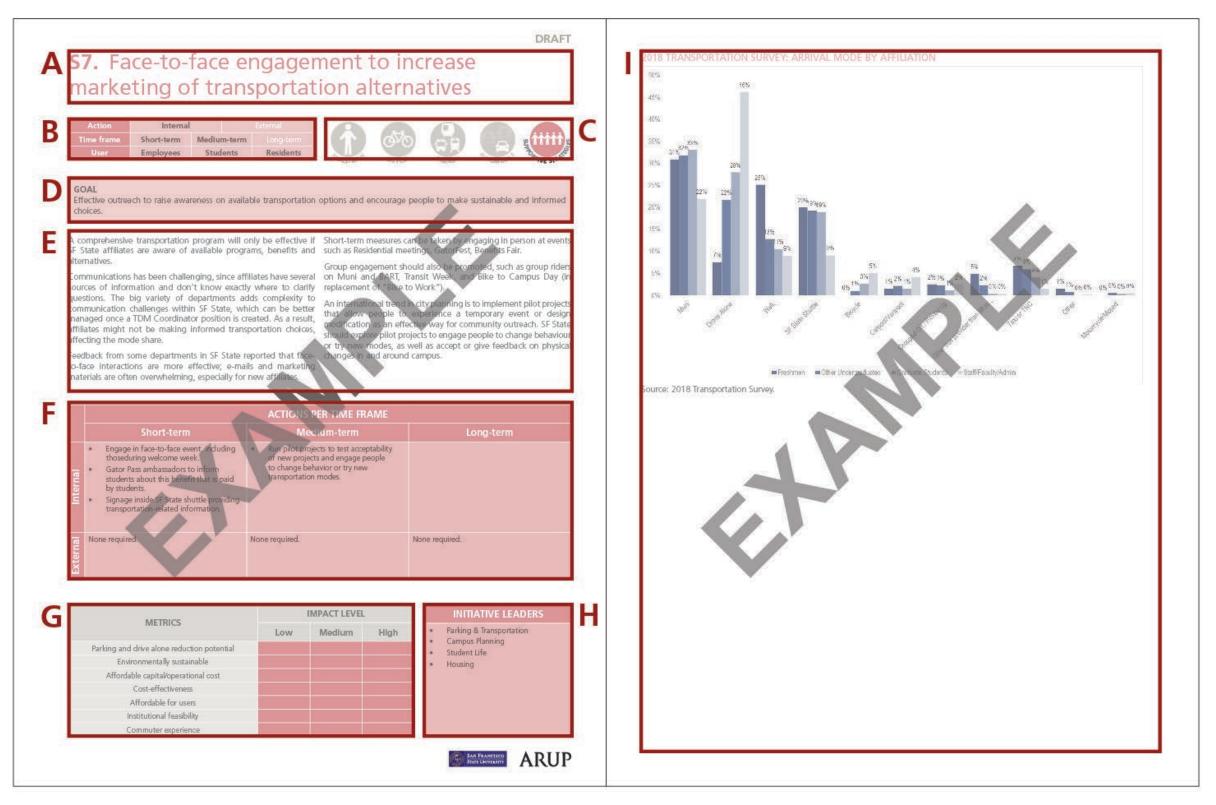
⁸ Include all students (both commuters and on-campus residents).

⁹ Focus on on-campus residents.

- G. Metrics: provides an assessment (none, low, medium or high) of the potential impact of each strategy across the following metrics:
 - Parking and drive alone reduction potential
 - Environmental sustainability
 - Affordable capital/operational cost
 - Cost-effectiveness
 - Affordable for users
 - Institutional feasibility
 - Commuter experience
- H. Initiative Leaders: Lists the internal departments or external entities that are involved in the strategy.
- Provides additional data or other information related to the strategy. Ι.

The full set of fact sheets is included in Appendix A.

Figure 3 - Example Fact Sheet



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3.3 TDM Strategies

Strategies for Pedestrians

The pedestrian strategies aim to provide a safe and improved travel environment at a human scale for pedestrians of all abilities. These strategies encourage design improvements such as traffic calming and complete streets to create a welcoming and universally-accessible environment. The subcategories of this strategy are presented below.

3.3.1.1 Improve pedestrian circulation

Strategies in this subcategory include actions and physical improvements that increase security and safety of all pedestrians circulating in and around campus:

- P1. Improve bicycle circulation on campus to minimize conflicts with pedestrians
- P2. Enhance safety for pedestrians and cyclists on campus through crime prevention programs
- P3. Design safe sidewalks and crosswalks to minimize conflicts with other modes and prioritize pedestrians

3.3.1.2 Improve mobility conditions for people with disabilities

These strategies establish measures for SF State to meet needs for all types and levels of abilities and improve access in and around campus:

- P4. Exceed the Americans with Disabilities Act (ADA) design guidelines, enable circulation autonomy for people of all abilities, and aim to provide universal access to the campus
- P5. Provide organized and clear information on available services for people of differing abilities

Strategies for Bicyclists

The bicycle strategies encourage greater bike mode share to campus by focusing on physical bicycle safety improvements and programs. Collaborating with SFMTA will be critical to implementing street design improvements to make cycling to the campus a safer and more enjoyable option. Strategies to increase the number of bicycle commuters are listed below.

3.3.2.1 Implement new or improve existing bicycle infrastructure

The bicycle infrastructure strategies improve the perception and actual safety for cyclists and create a more comfortable riding experience through improved designs at intersections and on bicycle routes. The strategies include:

- B1. Implement clearly defined bicycle paths on campus that connect with the existing bicycle network
- B2. Improve bicycle connections to BART stations and SF neighborhoods in partnership with **SFMTA**
- B3. Provide bicycle amenities on campus (parking and maintenance stations)
- B4. Implement bike share stations
- B5. Provide wayfinding specific to cyclists

3.3.2.2 Support biking to/from campus

Beyond physical improvements, actions to support bicyclist are important to create a sense of community, inform new bicycle riders and expand this group. These set of strategies include:

- B6. Establish a center for bike information and support the community of bicyclists
- B7. Facilitate enrollment in existing bicycle share programs
- B8. Subsidize bicycle commuter expenses (repair, maintenance)

3.3.3 Strategies for Transit Commuters

The 2018 Transportation Survey revealed that many drive alone commuters are willing to shift to transit if the service was more reliable and competitive with driving travel times. Improvements to the reliability, frequency and convenience of the transit network are needed to attract more users to transit. Coordination with transit providers is critical to identifying and implementing service improvements.

The SF State shuttle, Muni, SamTrans, BART and other transit agencies comprise the transit network available to campus affiliates to commute to campus. More seamless integration of these services, including timed transfers, will help to make transit a more attractive option for commuting.

The implementation of the Gator Pass has helped reduce barriers to using transit. Increasing the utilization of the Gator Pass and making it more convenient to use has the potential to increase transit mode share among students.

3.3.3.1 Gator Pass improvements

The Gator Pass inaugural year was a success. As next steps for the program, the following improvements could further the success and utilization of the Gator Pass:

- T1. Offer transit pass to staff and faculty, in exchange of a parking permit
- T2. **Extend Gator Pass usage to summer**
- T3. **Include other discounts on Gator Pass**
- T4. Educate people about Gator Pass, shifting demand from SF State Shuttle to Muni
- T5. Integrate and improve technology of the Gator Pass along with Clipper Card

3.3.3.2 SF State Shuttle improvements

The SF State shuttle provides complementary service to Muni from the Daily City BART station and is widely used among campus affiliates. Strategies to further meet the needs of campus affiliates through the shuttle have been identified through the following strategies:

- T6. Improve the capacity, frequency, and schedule of the SF State shuttle
- T7. Improve route and stop locations of the SF shuttle and the passenger experience for people of differing abilities

3.3.3.3 Public transit improvements and measures

Improvements to public transit are needed to increase transit mode share to the campus. The following strategies require collaboration with public agencies to improve transit access conditions (operation, service and network coverage) and to consider other possible discounts for SF State affiliates:

- T8. Coordinate with SFMTA on improvements to Muni operation
- T9. Collaborate with SFMTA on long-term M-Line improvements

- T10. Work with SamTrans to evaluate possible discounts to students
- T11. Foster relationship with other relevant transit agencies for potential partnerships
- T12. Implement BART-Muni discount at Balboa Park Station

3.3.3.4 Support riding transit to/from campus

The following measures can be implemented by SF State to increase transit mode share:

- T13. Improve transit stop conditions
- T14. Implement real-time information panel for all transit services
- T15. Coordinate transit benefits with University's programs in summer
- T16. Facilitate enrollment for existing public programs

Strategies for Automobile Commuters

Although TDM programs are generally focused on reducing automobile trips, some commuters have no viable alternative and many people need to drive occasionally to reach appointments or events. While these parking strategies aim to reduce automobile trips and parking demand, commuters who require a parking permit will still be able to obtain one.

Automobile strategies provide attractive alternatives to driving alone that encourage commuters to shift to more sustainable transportation choices. They also seek to discourage unnecessary automobile trips through a more restrictive parking policy and curb management.

3.3.4.1 On-campus parking

These strategies include policies and measures to be implemented by SF State for residential parking and commuter parking, including a reduction of overall parking demand and better management of parking supply:

- A1. Implement residential parking policies that restrict parking and inform about alternatives
- A2. Implement commuter parking policies and strategies to reduce unnecessary demand
- A3. Establish a parking policy that ensures parking permits are issued for those that need to drive
- Utilize parking with more efficiency A4.
- A5. Explore shared parking opportunities with Parkmerced/Stonestown
- A6. Increase availability of EV chargers
- Introduce technology to automate processes that reduce operating costs and improve A7. efficiency

3.3.4.2 Off-campus parking

This strategy establishes policies and measures to be implemented by SF State in partnership with SFMTA to improve walking and biking conditions around campus:

- Eliminate on-street parking off-campus along corridors planned for bicycle circulation A8.
- A9. Support parking pricing on city streets

3.3.4.3 Supportive measures to reduce overall parking demand

The following strategies offer flexible alternatives that help reduce automobile dependency:

- Facilitate access to services and programs offered by public agencies A10.
- Facilitate dynamic/on-demand rideshare A11.
- A12. Provide more dedicated spaces for car share in conjunction with providers

3.3.4.4 Curb management

The following strategy addresses the need for curbside management to establish prioritization of pedestrians, bicyclists and transit riders over automobiles:

A13. Designate and enforce passenger loading locations

3.3.5 Supportive Strategies

In addition to strategies focused on the specific transportation modes, the following measures are included to provide support for the implementation and management of the TDM Plan. These strategies are focused on establishing a framework for on-going implementation and evolution of the strategies, as well as monitoring and assessment of the success of the programs implemented. These include tools, platforms and other strategies to create a more efficient and effective implementation plan. Establishing a Transportation Demand Manager position is a critical first step in the implementation of supportive strategies.

3.3.5.1 Institutional measures

The following strategies provide the necessary leadership and collaboration required to implement the transportation strategies and programs to better meet the needs of students, faculty and staff:

- S1. Establish/hire a full-time Transportation Demand Manager
- **S2**. Establish a Transportation Management Association (TMA) with local stakeholders (i.e., Parkmerced and Stonestown)

3.3.5.2 Human resources and student life support

Coordination with Human Resources is needed to implement policies that encourage employees to use alternatives other than automobile:

S3. Provide support to employees to commute outside of the peak hour, including negotiating transit benefits in lieu of parking permits

3.3.5.3 Land use

The following strategies help reduce automobile trips by increasing the availability of on-campus and offcampus housing and providing services that meet the daily needs of residents:

- **S4**. Provide more on-campus housing
- **S5**. Explore master lease housing in areas well-served by transit
- **S6.** Introduce more amenities on campus

3.3.5.4 Platforms and strategies for outreach and information

Finding ways to effectively inform students, faculty and staff about available transportation choices is understood to be an important factor in increasing the use of alternative modes, particularly transit. Strategies to improve outreach and increase walking, biking and transit include:

- **S7**. Implement face-to-face engagement strategy for marketing transportation alternatives
- **S8**. **Mobility app**
- S9. **Gamification: offer rewards to transit/bicycle users**

3.4 Alignment with San Francisco Planning Department TDM Program

The Planning Department of the City and County of San Francisco has developed a "TDM Menu of Options" for developers to pick and choose TDM measures to include in their projects to reduce vehicles mile travelled (VMT) of automobile trips. Table 5 shows how the SF State TDM Plan aligns with the TDM Menu of Options.

Table 5 – Alignment of the TDM Plan Strategies with the SF Planning Department's TDM Menu of Options

	Code	Measure	SF State TDM strategies ID
	ACTIVE 1	Improve Walking Conditions	P1, P2, P3
	ACTIVE 2	Bicycle Parking	В3
	ACTIVE 3	Showers and Lockers	
A CTIVE MACRILITY	ACTIVE 4	Bike Share Membership	B7
ACTIVE MOBILITY	ACTIVE 5A	Bicycle Repair Station	В3
	ACTIVE 5B	Bicycle Repair Services	
	ACTIVE 6	Fleet of Bicycles	
	ACTIVE 7	Bicycle Valet Parking	
CAR-SHARE	CSHARE 1	Car-Share Parking	A11, A12
DEL 11/EDV	DELIVERY 1	Delivery Supportive Amenities	S6
DELIVERY	DELIVERY 2	Provide Delivery Services	S6
	FAMILY 1	Family TDM Amenities	
FAMILY	FAMILY 2	On-site Childcare	S6
	FAMILY 3	Family TDM Package	
	HOV 1	Contributions or Incentives for Sustainable Transportation	T1, T2, T3, S9
HIGH OCCUPANCY VEHICLES	HOV 2	Shuttle Bus Service	T6, T7
	HOV 3	Vanpool Program	
INFORMATION	INFO 1	Multimodal Wayfinding Signage	B5, T14
AND	INFO 2	Real Time Transportation Information Displays	T13
COMMUNICATIONS	INFO 3	Tailored Transportation Marketing Services	S7, S8
	LU 1	Healthy Food Retail in Underserved Area	S6
LAND USE	LU 2	On-site Affordable Housing	S4
	PKG 1	Unbundle Parking ¹⁰	
PARKING	PKG 2	Parking Pricing	A2, A9
MANAGEMENT	PKG 3	Parking Cash Out: Non-residential Tenants	
	PKG 4	Parking Supply	A2

Source: Menu of Options. City and County of San Francisco. http://sf-planning.org/tdm-menu-options

¹⁰ Unbundle Parking: offering a parking space for an additional cost instead of being part of the residential lease or unit purchase. SF State already offers parking for an additional fee.

4 Implementation Strategy

The proposed approach for implementing the TDM Plan aims to institutionalize transportation management within SF State and provide sufficient resources to ensure successful implementation.

4.1 Institutional Organization

A successful implementation of the TDM Plan relies of the coordination and leadership of individuals across many campus departments. The TDM Organization Chart, shown in Figure 5, presents a framework for departments campus-wide to become engaged with implementing transportation strategies through their individual areas of expertise. This will be done through a Transportation Steering Committee which is composed of numerous campus departments and coordinated by the Transportation Demand Manager.

The Transportation Demand Manager is a new position, established to guide the implementation of the TDM strategies, and track, monitor, and evaluate their progress. This position will be a full-time dedicated professional charged with coordinating other departments and facilitating the TDM Steering Committee; continually monitoring and championing the transportation needs of the University internally and externally.

The Transportation Demand Manager will actively encourage participation, ownership and leadership from other department TDM representatives through the steering committee. Regularly scheduled meetings of the TDM Steering Committee will provide a space to collaborate across departments on TDM strategies, report to the Steering Committee about on-going TDM activities and strategize about next steps as a group. The Transportation Steering Committee will be responsible for refining TDM strategies, implementing improvements, developing action plans and establishing mode share targets.

The Transportation Steering Committee will engage with other entities as needed, including:

- <u>Users:</u> representative groups or departments of each type of user impacted by transportation strategies. These groups should be consulted prior to implementation of transportation strategies to ensure their needs are reflected in the action plan and for continuous monitoring of the progress of transportation programs;
- <u>Task forces:</u> supportive groups that will help implement some of the transportation strategies, such as safety statistics, outreach, technology platforms and design-related matters;
- Other institutions: public agencies and private institutions that the Transportation Demand Manager should be engaged with for implementing regional improvements, testing pilot projects, and improving transportation programs within SF State;
- Stakeholders: potential partners for joint efforts, such as a TMA or for specific transportation strategies that would benefit from outside partnerships.

Figure 5 presents the initial set of institutions involved in the implementation of Transportation strategies.

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Figure 4 – TDM Organizational Chart

TRANSPORTATION STEERING COMMITTEE

Transportation Demand Manager

Manages transportation programs and facilitates program implementation; coordinates between departments and with external entities

Student Affairs and Enrollment Management

Parking & Transportation

- Commuter parking
- SF State Shuttle
- Alternatives to drive alone

Disability Programs and Resource Center

- ADA concerns
- Assists with resources, identifies partners, adopts technologies, implements strategies

Residential Life New Student Programs

Administration and Finance

Fiscal Affairs

• Gator Pass administration

Housing, Dining & Conference Services

• Needs from residents perspective (access to daily needs such as groceries and leisure in the city)

Facilities

Infrastructure maintenance

University Enterprises

- Active Mobility (ped/bike)
- Street design
- Planning & coordination with transit agencies
- Manage private vendors

Associated Students

- Gator Pass
- Student Outreach

Advancement

Communications



USERS

Will inform issues and concerns from their perspective, help build an equitable transportation plan and help with outreach

Students

- Associated Students
- Student Affairs & Enrollment Mamt

Staff/Faculty

- Human Resources
- Union

Residents

- University Housing
- Residential Life

Visitors



TASK FORCES

Department or groups to reach out for collaboration and help

Safety data/issues

Police Department / CARE

Outreach

- Residential Life
- Student Outreach Services

- Human Resources

• Academic Departments

IT Department

Residential Life

• CPDC

• DPRC

Technology Platforms

Design

- Campus Recreation
- Associated Students

OTHER INSTITUTIONS

Public Agencies

- SFMTA
- SF Planning
- MTC
- BART, SamTrans
- SFCTA
- CSU Chancellor's Office
- Bay Area University TDM Forum

Private Institutions

- San Francisco Bicycle Coalition
- SF Transit Riders
- Walk SF
- Shared mobility operators



PARTNERS

Private entities to partner with

Parkmerced

Stonestown Galleria

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4.2 Phasing

The TDM strategies include actions that can be implemented immediately (i.e. in the short-term) or in a longer time frame (i.e. medium- and long-term). Table 6 summarizes the general approach for each time frame. The TDM fact sheets identify specific short-, medium- and long-term actions for each strategy and identify if the implementation of actions is reliant on external entities. The timeframe for implementing specific actions can be considered in conjunction with the impact level of each strategy across various metrics in order to determine which strategies should be prioritized for implementation.

Table 6 - Phasing approach

TIMEFRAME	Short-term	Medium-term	Long-term
DESCRIPTION	Immediate implementation of strategies that are internal and low-cost	Build relationship with external entities (public agencies and private institutions)	Ensure Future State 2035 meets affiliates' needs
ACTIONS	Face-to-face outreach Establish Transportation Demand Manager and create steering committee Internal coordination between departments Improve operation and management systems to save costs	 Leverage public projects in the region (infrastructure) Work with public agencies to ensure transit services are reliable and have capacity Create partnerships for pilot projects Unify mobility platforms into a mobility app 	Refinement of transportation strategies as the master plan evolves Ensure design guidelines are protecting pedestrians and bicyclists Incorporate adjustments due to technological transportation trends if autonomous vehicles are deployed

4.3 Funding

Costs associated with TDM strategies vary widely across the measures in this Plan. While some strategies can be implemented with minimal cost, others will require identifying funding sources and developing funding strategies. Dedicated funding is also needed for the transportation survey. This funding should be included in the transportation budget overseen by the Transportation Demand Manager.

Funding strategies could include leveraging funds across several departments to help implement strategies costeffectively, incorporating TDM (particularly outreach efforts) into current programs, identifying outside partnerships, or applying for grant funding.

SF State can also facilitate campus affiliate access to existing programs that offer discounts or free programs for low-income populations such as reduced cost transit passes and bike share. Assisting campus affiliates with enrollment in these programs can make choosing non-auto modes viable for some individuals with little cost to the University.

Another potential funding strategy to be explored further is public-private partnerships with neighboring businesses and other educational institutions. This can be accomplished through a Transportation Management Association (TMA), which would provide a mechanism to pool resources for TDM strategies with collective benefits to the funding partners. A TMA can increase both the reach of the program, and the population served. Potential partners could include Parkmerced, Stonestown and/or other educational institutions. The potential benefits of a TMA include:

- Better programs at reduced costs, due to serving a larger population;
- Better service and schedules for shuttle, due to serving a larger population;
- Seamless bicycle connections and wayfinding through coordination with surrounding businesses;

- Coordinated efforts to lobby for better transit services;
- More impactful outreach campaigns
- More impactful reduction on drive alone trips in the region and coordinated discussions with TNCs;
- More impactful reduction on parking demand due to efficiency of shared parking.

Programs that can be implemented through a TMA could include:

- Last-mile shuttle service to connect with Daly City and/or Balboa Park BART Stations;
- Internal shuttle route to connect SF State, Parkmerced and Stonestown Galleria;
- Coordinated carshare and carpool programs;
- Expanded benefits for bicyclists;
- Shared parking;
- Consolidation of passenger loading locations and curb management, including for TNCs;
- Rewards for frequent commuters of non-auto transportation options.

5 Targets

Ongoing monitoring and evaluation of the TDM program is needed to track what impact implementing the TDM strategies is having on reaching the stated goals of the TDM Plan. The following targets have been established to help measure the success of the TDM program going forward. As the TDM program evolves, these targets should be reevaluated and adjusted as necessary to meet the changing transportation environment, and better align with any changes in the goals and priorities of SF State.

5.1 Pedestrians and Bicyclists

Target P1	No traffic fatalities or severe injuries on and adjacent to the campus	
DESCRIPTION	Take a Vision Zero approach to monitoring safety improvements for pedestrians and	
	bicyclists.	
ACTIONS	Coordinate with SFMTA to implement improved intersection design, signal timing and traffic calming measures to create a safer environment for bicyclists and pedestrians accessing the campus.	

Target P3	Establish a dedicated budget for pedestrian and bicycle design improvements
DESCRIPTION	Establish an annual budget to implement design improvements for pedestrians, bicyclists and ADA access.
ACTIONS	Identify potential funding sources and partnerships;
	• Prioritize projects for implementation based on their potential to reduce fatalities or severe injuries.

5.2 Transit

Target T1	Meet performance standards set for the SF State Shuttle	
DESCRIPTION	• Wait times for boarding either the SF State shuttle or Muni between Daly City and SF State should be no more than 10 minutes;	
	• Maximum load (crowding) should not exceed 85% of seated capacity in a one-hour period;	
	• On-time performance should be at least 85%.	
ACTIONS	• Create campaigns to encourage riders to use Muni as an alternative to the SF State Shuttle during the peak hour;	
	Increase frequency or vehicles if needed;	
	Monitor reliability of service;	
	Optimize routes as needed due to congestion;	
	• Discuss with SFMTA strategies to improve transit circulation, such as dedicated lanes during peak hours;	
	Modify the SF State shuttle schedule to fill in gaps in Muni service.	

Target T2	Increase utilization of Gator Pass
DESCRIPTION	• Increase average number of rides among Gator Pass users to at least 20 rides/month;
	• Increase utilization of the Gator Pass to 70% of eligible students.
ACTIONS	• Improve outreach to better reach students through social media platforms and face-to-face interactions to educate students about proper Gator Pass use, inform students that the Gator Pass is funded by all students, and encourage students to use Muni in addition to the SF State Shuttle;
	 Create campaigns, enforcement and/or strategies to encourage students to tag when using Muni for data collection and monitoring process purposes;
	 Consider other transit discounts, such as increased discounts on BART and inclusion of SamTrans.

Target T3	Coordinate with SFMTA for Muni to achieve on-time performance standards		
DESCRIPTION	Coordinate with SFMTA to help SFMTA meet their target of 85% on-time performance for Muni service is met.		
ACTIONS	• Coordinate with SFMTA on improvements for the M-Line and Muni bus routes (28, 28R, 29, 18 and 57) to help SFMTA meet their 85% on-time performance goal;		
	Discuss additional measures such as dedicated transit lanes during peak hour.		

5.3 Automobile

Target A1	Automobile trip reduction	
DESCRIPTION	Traffic volumes generated by SF State will not exceed 105% of 2014 ¹¹ baseline trips.	
ACTIONS	Implement outreach strategies to inform individuals about alternatives to drive alone	
	Work with SFMTA to reduce impacts of TNC usage	

5.4 Supportive Strategies

Target S1	Establish institutional organization and policy administration				
DESCRIPTION	Release annual report on implementation of TDM Plan strategies.				
ACTIONS	Create Transportation Demand Manager position				
	Establish transportation steering committee				
	Collaborate with internal and external departments/organizations				
	• Coordinate actions internally and engage with external institutions (public agencies and private entities)				
	Annually establish TDM objectives and monitor and report on compliance.				

¹¹ Although the MOU establishes 2008 as baseline, cordon count locations were amended since that year, therefore, 2014 has been used by the transportation surveys as baseline year to understand change over time.

Target S2	Establish mode share targets			
DESCRIPTION	Determine robust yet achievable mode split targets that will be used to evaluate the effectiveness of implementing the TDM strategies.			
ACTIONS	• Establish mode share goals through the steering committee based on data-driven analysis of what targets would represent achievable progress;			
	• Establish strategies to increase the number of respondents in the Transportation Survey to have more accurate results on mode share;			
	• Use the mode share targets to evaluate the effectiveness of the TDM strategies and refine or develop new strategies as necessary to achieve the mode share targets.			

6 Conclusion

Collaboration with stakeholders and across departments encourages and enhances the success of the TDM program. These partnerships incorporate TDM initiatives into existing ongoing tasks, duties, and programs. These efforts will be coordinated by the Transportation Demand Manager, whose position is critical to monitor, track and evaluate the progress of the TDM program. They will initiate coordination among departments and steer the direction of the overall program.

This TDM Plan is intended to be used as a guide to run a TDM program at SF State. As the program grows and evolves, it should be updated to reflect progress: including new strategies that reflect transportation technology changes and trends, responding to major changes in demographic, economic and growth in the region. The Plan should be updated periodically in conjunction with the transportation survey to account for trends observed in the data. Automobile trip reductions should be tracked as a priority indicator of the effectiveness of the TDM measures. The evolution of the Plan should be fostered by the Steering Committee and driven by the best available data and information. Strong support and policy direction from the University administration and CSU leadership will help institutionalize TDM practices at SF State.

Appendix A



MODE	GENERAL STRATEGY	ID	IDEAS
PEDESTRIAN	Improve pedestrian circulation	P1	Improve bicycle circulation on campus to minimize conflicts with pedestrians
		P2	Enhance safety for pedestrians and cyclists on campus through crime prevention programs
		P3	Design safe sidewalks and crosswalks to minimize conflicts with other modes and prioritize pedestrians
	Improve mobility conditions for people with disabilities	P4	Exceed the Americans with Disabilities Act (ADA) design guidelines, enable circulation autonomy for people of all abilities, and aim to provide universal access to the campus
		P5	Provide organized and clear information on available services for people of differing abilities
BICYCLE	Implement new or improve existing bicycle infrastructure	B1	Implement clearly defined bicycle paths on campus that connect with the existing bicycle network
		B2	Improve bicycle connections to BART stations and SF neighborhoods in partnership with SFMTA
		В3	Provide bicycle amenities on campus (parking and maintenance stations)
		B4	Implement bike share stations
		B5	Provide wayfinding specific to cyclists
	Support biking to/from campus	В6	Establish a center for bike information and support the community of bicyclists
		B7	Facilitate enrollment in existing bicycle share programs
		B8	Subsidize bicycle commuter expenses (repair, maintenance)
TRANSIT	Gator Pass improvements	T1	Offer transit pass to staff and faculty, in exchange of a parking permit
		T2	Extend Gator Pass usage to summer
		T3	Include other discounts on Gator Pass
		T4	Educate people about Gator Pass, shifting demand from SF State Shuttle to Muni
		T5	Integrate and improve technology of the Gator Pass along with Clipper Card
	SF State Shuttle improvements	T6	Improve the capacity, frequency, and schedule of the SF State shuttle
	improvements	T7	Improve route and stop locations of the SF shuttle and the passenger experience for people of differing abilities
	Public transit	T8	Coordinate with SFMTA on improvements to Muni operations
	improvements and measures	Т9	Collaborate with SFMTA on long-term M-Line improvements
		T10	Work with SamTrans to evaluate possible discounts for students
		T11	Foster relationships with other relevant transit agencies to enable potential partnerships
		T12	Implement BART-Muni discount at Balboa Park Station
	Support riding transit to/ from campus	T13	Improve transit stop conditions
		T14	Implement real-time information panel for all transit services
		T15	Coordinate transit benefits with University's programs in summer
		T16	Facilitate enrollment in existing public programs
AUTOMOBILE	On-campus parking	A1	Implement residential parking policies that restrict parking and inform about alternatives
		A2	Implement commuter parking policies and strategies to reduce unnecessary demand
		A3	Establish a parking policy that ensures parking permits are issued for those that need to drive
		A4	Utilize parking with more efficiency
		A5	Explore shared parking opportunities with Parkmerced/Stonestown
		A6	Increase availability of EV chargers
		A7	Introduce technology to automate processes that reduce operating costs and improve efficiency
	Off-campus parking	A8	Eliminate on-street parking off-campus along corridors planned for bicycle circulation
	Supportive measures to reduce overall parking demand	A9	Support parking pricing on city streets
		A10	Facilitate access to services and programs offered by public agencies
		A11	Facilitate dynamic/on-demand rideshare
		A12	Provide more dedicated spaces for carshare in conjunction with providers
	Curb management	A13	Designate and enforce passenger loading zones

MODE GENERAL STRATEGY ID IDEAS

SUPPORTIVE	Institutional measures	S1	Establish/hire a full-time Transportation Demand Manager
STRATEGIES		S2	Establish a Transportation Management Association (TMA) with local stakeholders (i.e., Parkmerced and Stonestown)
	Human resources and student life	S 3	Provide support to employees to commute outside of the peak hour, including negotiating transit benefits in lieu of parking permits
	Land use	S4	Provide more on-campus housing
		S 5	Explore master lease housing in areas well-served by transit
		S6	Introduce more amenities on campus
	Platforms and strategies for outreach and information	S 7	Implement face-to-face engagement strategy for marketing transportation alternatives
		S8	Mobility app
		S9	Gamification: offer rewards to transit/bicycle users

P1. Improve bicycle circulation on campus to minimize conflicts with pedestrians

Action	Internal			
Time frame	Short-term	m Medium-term		Long-term
User	Employees	Stud	lents	Residents











GOAL

Provide an improved biking experience on campus and reduce conflicts with pedestrians.

While biking on campus should be encouraged, having bikes in areas with heavy pedestrian activity can lead to a less desirable experience for pedestrians or even result in collisions. Proper design elements — such as designated bike paths, visual cues and signage — can help create an environment that works well for both those on foot and on a bike.

Creating clearly defined paths for biking on campus will help encourage more people to bike to campus, while maintaining a pleasant pedestrian environment. Well-designed bike paths will encourage cyclists to use the designated path rather than bike in pedestrian-only areas since they will be able to get to their destination faster without the inconvenience of being slowed down by pedestrian traffic.

Visual cues, such as colored paint, ground textures, and bollards can help indicate to cyclists when they are entering a pedestrian-only zone. Informational campaigns and signage can help with compliance from bicycle riders to dismount in pedestrian-only zones

Future State 2035 calls for an internal bicycle network designed to reduce conflicts between cyclists and pedestrians, with strategies that could work well with a dismount zone policy. Design guidelines include geometry recommendations, traffic calming measures, and physical buffers between bicycle paths and pedestrian zones.

For more details on proposed bicycle facilities and guidelines for Future State 2035, please refer to the report document and respective Bicycle Memorandum Appendix.

	ACTIONS PER TIME FRAME							
	Short-term	Medium-term	Long-term					
Internal	 Establish an awareness campaign to encourage cyclists to comply with dismount policies in pedestrian-only zones. Provide clear signage and other visual cues for bicyclists when they are entering pedestrian-only zones. 	Implement pilot projects for temporary bicycle infrastructure improvements.	 Implement the Future State 2035 internal bicycle network. Follow the design guidelines in the Future State 2035 to implement traffic-calming measures for bicycles. Locate bicycle parking at the boundaries of pedestrian areas (such as the Quad) to encourage bicyclists to park their bicycles before entering the Quad. 					
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.					

METRICS		IMPACT LEVEL			
METRICS	Low	Medium	High		
Parking and drive alone reduction potential					
Environmentally sustainable					
Affordable capital/operational cost					
Cost-effectiveness					
Affordable for users					
Institutional feasibility					
Commuter experience					

- Bicycle Group
- Office of Sustainability
- C.A.R.E. Team







P2. Enhance safety for pedestrians and cyclists on campus through crime prevention programs

Action	Internal			
Time frame	Short-term	Medium-term		
User	Employees	Stud	lents	Residents











GOAL

Improve the perceived and actual safety on campus through a combination of active and passive safety measures.

Improving the perception of safety, in addition to addressing safety through security measures, helps to create places where all people can feel comfortable being.

Both passive and active measures can help enhance safety. Passive measures include things like improving landscaping to minimize hidden areas, providing a mix of land use types that draw more people out at all times of the day, and increasing density of development to add more "eyes on the street."

Active measures include things like additional police call buttons, personal escorts, and guaranteed ride home programs. Having reliable active tools will help make people feel safe on campus and encourage them to spend more time there.

The Transportation Demand Management committee and the campus police should meet periodically to discuss what additional measures or design elements could be implemented to help improve both the perception of and actual safety on campus.

Outreach about the available active measures is needed to inform new students about the services available, including the Campus Alliance for a Risk-free Environment (C.A.R.E.), which is a trained student security team offering a variety of services to help improve safety on campus.

	ACTIONS PER TIME FRAME						
	Short-term Short-term	Medium-term	Long-term				
Internal	 Repair police call buttons that are not fully functional and review locations of the call buttons. Hold regular meetings between campus police and other departments to identify additional safety measures. 	 Assess lighting conditions for safety at night at crosswalks, along sidewalks and dark areas. Add lighting improvements where needed. 	No actions identified at this time.				
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.				

METRICS		IMPACT LEVEL			
METRICS	Low	Medium	High		
Parking and drive alone reduction potential					
Environmentally sustainable					
Affordable capital/operational cost					
Cost-effectiveness					
Affordable for users					
Institutional feasibility					
Commuter experience					

- C.A.R.E. Team
- Associated Students
- Housing, Dining & Conference Services
- Residential Life
- Bicycle Group
- University Police Department







P3. Design safe sidewalks and crosswalks to minimize conflicts with other modes and prioritize pedestrians

Action	Internal			External
Time frame	Short-term	Medium-term		Long-term
User	Employees	Students		Residents











GOAL

Identify design improvements to reduce traffic speeds and reduce conflicts between pedestrians and vehicles.

Improving safety for campus affiliates to walk to campus is necessary to increase the number of people who choose to commute by walking.

The intersection between Font Boulevard and Lake Merced Boulevard, and 19th Avenue are included on SFMTA's High Injury Network,¹ which identifies areas with high incidences of severe and fatal collisions. SFMTA reports Holloway Avenue as a corridor with a high number of "near-misses."

There are a number of short-, medium- and long-term strategies that SF State can implement to improve safety and enhance the experience of those walking to campus. Slowing speeds and reducing sites of potential conflict between pedestrians and drivers

1 Source: http://visionzerosf.org/maps-data/

are two effective ways of improving safety for pedestrians. Traffic-calming measures provide visual cues to drivers to reduce their speed. Some traffic-calming measures that should be considered include narrowing or reducing the number of travel lanes, reducing the crossing distance for pedestrians at intersections by using bulbouts or refuge islands, and adding speed humps or speed tables. Measures to reduce conflict areas include consolidating passenger loading zones to specific areas, reducing the number of driveways, and creating more pedestrian-only zones.

Coordination with SFMTA is required to implement improvements to existing intersections and roads to help reduce future incidents around campus. Identifying the types of roadway improvements should be done in partnership with Parkmerced, Stonestown Galleria, and other neighbors.

	ACTIONS PER TIME FRAME					
	Short-tern	n	Medium-term	Long-term		
Internal	 Consolidate passenger le Improve wayfinding and shared path at University 	striping plan for	No actions identified at this time.	 Redesign Holloway Avenue and Font Boulevard as specified in Future State 2035. Follow design guidelines for intersections proposed in Future State 2035. 		
External	Discuss short-term traffic strategies for Holloway a intersection between Fo Lake Merced Boulevard	Avenue and the nt Boulevard and with SFMTA.	 Work with SFMTA to implement the intersection design improvements for Holloway Avenue and 19th Avenue proposed in the Muni Forward initiative. Discuss improving other intersection designs, particularly for Font Boulevard and Lake Merced Boulevard, which are included in the high-injury network. 	No actions identified at this time.		

METRICS		IMPACT LEVEL			
IVIETRICS	Low	Medium	High		
Parking and drive alone reduction potential					
Environmentally sustainable					
Affordable capital/operational cost					
Cost-effectiveness					
Affordable for users					
Institutional feasibility					
Commuter experience					

- C.A.R.E. Team
- Capital Planning Design and Construction
- Associated Students
- SFMTA







P4. Exceed the Americans with Disabilities Act (ADA) design guidelines, enable circulation autonomy for people of all abilities, and aim to provide universal access to the campus

Action	Internal			External
Time frame	Short-term	Medium-term		Long-term
User	Employees	Students		Residents











GOAL

Improve the experience for people of all abilities to access and navigate the campus with as much autonomy as possible.

Making the campus easy to access and navigate for people of all abilities is a top priority. There are a number of strategies that can improve how people with visual, hearing, or mobility impairments access and move about the campus.

In addition to meeting Americans with Disabilities Act (ADA) design guidelines, other strategies include implementing best practices for wayfinding for those with visual impairments such as tactile paving with contrasting colors, exploring technology to improve navigation for those with visual and/or hearing impairments (such as hearing loops¹ and mobility apps), and providing convenient transportation options for those who request it (such as golf carts

for internal circulation). The services available should be promoted through targeted outreach to those who would benefit most from these services.

Several of the strategies require coordination with BART and SFMTA to address ADA concerns beyond campus boundaries, as well as and improving transit stations to better accommodate people with disabilities.

Passenger loading zones and ADA parking spaces should be located in the most convenient locations.

A Telecoil (or T-Coil) serves as a wireless antenna that picks up broadcast sound - such as announcements at transit platforms - so that they can be heard more clearly. BART has implemented a pilot project for T-coil at the Fremont BART Station. Source:: https://www.bart.gov/news/articles/2017/news20170421-0

	ACTIONS PER TIME FRAME					
	Short-term	Medium-term	Long-term			
Internal	 Train SF State Shuttle drivers to assist those who need it with boarding and alighting. Assist new students with disabilities to navigate around campus and understand best routes. Evaluate on-demand service for golf carts and the C.A.R.E. nighttime shuttle. 	 Provide clear wayfinding for accessible paths and estimated times to get to major destinations by foot and wheelchair. Add elements at transit stops to improve the experience for those with disabilities. Place ADA parking stalls in the most convenient locations. 	No actions identified at this time.			
External	Work with BART to improve accessibility conditions at the Daly City BART Station.	No actions identified at this time.	Work with SFMTA to improve accessibility conditions at the intersection between Holloway Avenue and 19th Avenue, especially to improve crossing the tracks and adjust signal timing.			

METRICS	IMPACT LEVEL		
IVIETRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Disability Programs and Resource
 Center
- Capital Planning Design and Construction
- BART
- SFMTA
- Housing, Dining & Conference Services
- Residential Life







P5. Provide organized and clear information on available services for people of differing abilities

Action	Internal			
Time frame	Short-term	Medium-term		
User	Employees	Stud	lents	Residents











GOAL

Improve outreach and awareness of available services and facilitate their use.

Numerous services are currently available to people with disabilities such as an on-campus golf cart service and the C.A.R.E. nighttime shuttle. In addition to these campus services, SFMTA runs a paratransit shuttle.

Outreach for these and newly-implemented services should be target the populations they are intended to serve. Information on transportation services should be made available during welcome week and on the Disability Programs and Resource Center website.

	ACTIONS PER TIME FRAME						
	Short-term	Medium-term	Long-term				
Internal	 Provide information during Welcome Week/Gator Fest about available transportation services, e.g. the golf cart service schedule, C.A.R.E. program information, and accessible campus routes. Include transportation information on the Disability Programs and Resource Center website. 	Include audio/visual transportation information such as real-time arrivals and announcements through existing mobile apps.	No actions identified at this time.				
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.				

METRICS	IMPACT LEVEL			
IVIETRICS	Low	Medium	High	
Parking and drive alone reduction potential				
Environmentally sustainable				
Affordable capital/operational cost				
Cost-effectiveness				
Affordable for users				
Institutional feasibility				
Commuter experience				

- Disability Programs and Resource Center
- Information Technology
- Parking & Transportation
- Housing, Dining & Conference Services
- Residential Life







B1. Implement clearly defined bicycle paths on campus that connect with the existing network

Action	Internal			External
Time frame	Short-term	Mediu	m-term	Long-term
User	Employees	Stud	lents	Residents











GOAL

Implement on-campus bicycle network facilities that connect with the existing San Francisco bicycle network.

In order to improve and better manage circulation within campus, conflicts between pedestrians and bicyclists should be mitigated through well-designed bicycle infrastructure.

Future State 2035 establishes conceptual and design guidelines for a robust bicycle network that will minimize pedestrian conflicts, provide a safe bicycling environment, appropriately locate ancillary facilities, and integrate into the larger bicycle network of San Francisco.

Well-designed bicycle paths woven into a larger city system offer greater campus access to those who complete some or all of their trips by bicycle (including on-campus residents making off-campus trips).

The network will serve residents' needs and increase safety along the corridor comprised by Holloway Avenue and Font Boulevard.

Coordination with SFMTA, Parkmerced and Stonestown Galleria is recommended to ensure the proposed network appropriately connects with future facilities planned for the city.

For more information, please refer to the Future State 2035 Campus Master Plan and respective Bicycle Memorandum Appendix.

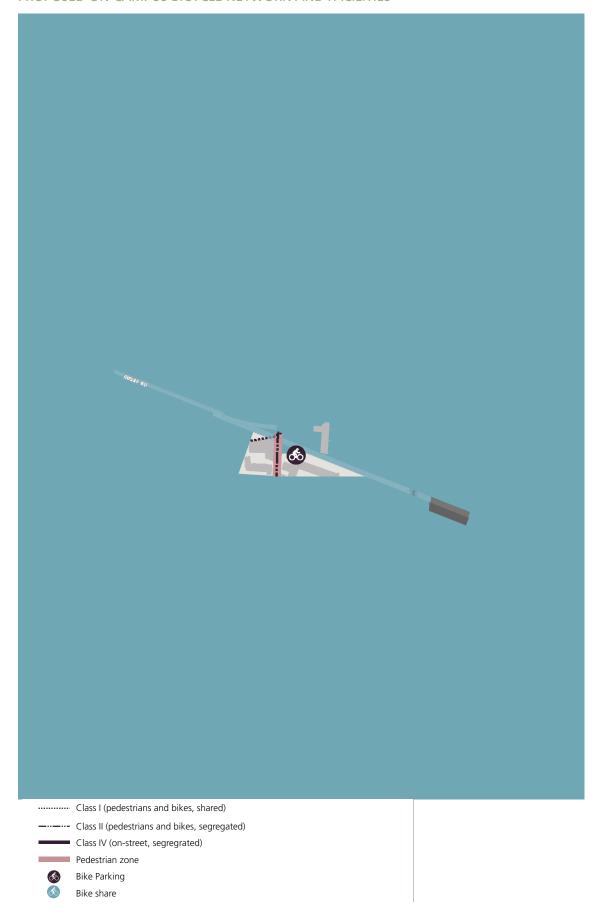
	ACTIONS PER TIME FRAME					
	Short-term	Medium-term	Long-term			
Internal	Continuous maintenance on bicycle path markings to clarify where bicycles can circulate within campus.	 Coordination with Initiative Leaders as the Future State 2035 Master Plan design is refined. Evaluate pedestrian zone approach (mandate dismounting or not). 	 Evaluate if final design is addressing design principles that ensure safe conditions for bicyclists and pedestrians. Ensure other supportive measures are implemented, including management of curb demand to ensure bicyclist safety. 			
External	No actions identified at this time.	Coordination with SFMTA, Bikeshare, Parkmerced and Stonestown Galleria to ensure consistency and seamless connections with existing and planned bicycle facilities in the city, as the Master Plan is refined.	No actions identified at this time.			

METRICS	IMPACT LEVEL		
IVIETRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Capital Planning Design and Construction
- Bicycle Group
- Parking & Transportation
- SFMTA
- Bikeshare
- Parkmerced
- Stonestown Galleria







Note: The diagram presented in this page indicates the on-campus bicycle facilities proposed, following the Future State 2035 Campus Master Plan. Source: Future State 2035 Master Plan.

B2. Improve bicycle connections to BART stations and SF neighborhoods in partnership with SFMTA

Action	Internal			External
Time frame	Short-term	Mediu	m-term	Long-term
User	Employees	Stud	lents	Residents











GOAL

Address safety along bicycle commuter routes to improve conditions of existing bicycle commuters and increase bicycle mode share.

Although the topography of San Francisco often poses challenges to biking, SF State's 2018 Transportation Survey indicates that the most common obstacle to biking is a concern about safety, not terrain. SF State sits within an auto-dominated area of San Francisco, with complex intersections and wide, fast-moving streets that pose a challenge even to experienced bicyclists.

A number of the roads in the immediate vicinity of SF State are part of the High Injury Network identified by the city's Vision Zero initiative.¹ Improving safety along major commuter routes is critical in providing safer connections and greater confidence for potential bicyclists.

Active engagement by SF State with SFMTA is necessary for creating better biking conditions in the region. Wherever possible, the University should engage with ongoing or planned design improvements with the city. Identifying and closing existing gaps through such partnerships can deliver both immediate and incremental safety improvements. Endorsement for advocacy is recommended, which may be enhanced internally (through promoting awareness among Bicycle Group and affiliates), as well as partners in the region (SF Bicycle Coalition, Parkmerced, and Stonestown Galleria).

Main routes to SF State and the initial assessment of issues were developed as part of Future State 2035.

1 Source: http://visionzerosf.org/maps-data/

	ACTIONS PER TIME FRAME							
	Short-term	Medium-term	Long-term					
Internal	Raise awareness on advocacy for increased safety along bicycle routes.	No actions identified at this time.	No actions identified at this time.					
External	 Be part of SFMTA's conversations about road improvements in the region, and coordinate actions that will benefit SF State commuters (intersection redesign prioritization, at a minimum); be part of Vision Zero group. Work with SFMTA to implement short-term traffic calming measures. 	 Establish strategic priorities (key intersections or issues) to increase safety gradually instead of waiting to implement a complete infrastructure project. Work with SFMTA, particularly on areas included in the "high injury network." 	Work with SFMTA, Parkmerced, and Stonestown Galleria to prioritize network improvements and gap closures.					

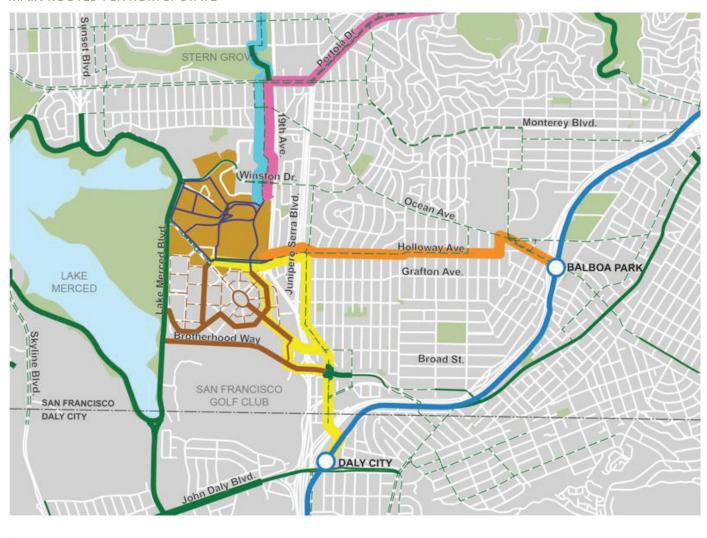
METRICS	IMPACT LEVEL		
METRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Capital Planning Design and Construction
- Bicycle Group
- SF Bicycle Coalition
- SFMTA
- Parkmerced
- Stonestown Galleria





MAIN ROUTES TO/FROM SF STATE





Note: The diagram presented in this page indicates the main regional routes to/from SF State campus. More details on intersections and other detailed issues can be found in the Future State 2035 Master Plan Report, Bicycle Memorandum.

B3. Provide bicycle amenities on campus (parking and maintenance stations)

Action	Internal			External
Time frame	Short-term	Medium-term		
User	Employees	Stud	lents	Residents











GOAL

Provide amenities that will support and encourage affiliates to use and bring their bicycles to campus.

Supportive infrastructure is critical to the viability of bicycling at SF State. A significant portion of the SF State community cannot afford the costs of maintenance or to replace a stolen bicycle. To make bicycling accessible, easy, and comfortable, it is important to provide secure, weather-protected bicycle parking, maintenance stations, and shower or changing facilities.

Taking immediate action to provide bicycle parking in weatherprotected structures and self-repair maintenance stations would help support cyclists.

Bicycle parking using electronic lockers accessed using OneCard could save operational costs, and a simpler, seamless system would attract new users.

	ACTIONS PER TIME FRAME						
	Short-term	Medium-term	Long-term				
Internal	 Install multiple secure, weather-protected, on-campus bicycle parking. Adequate resources for self-repair at maintenance stations. Identify and advertise facilities for showering or changing. 	 Make secure parking and showers part of future buildings. Set up bicycle program within Campus Recreation's Outdoor Resource Center. 	No actions identified at this time.				
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.				

METRICS	IMPACT LEVEL		
METRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Sustainability Department
- Bicycle Group
- Planning and Design
- Capital Planning Design & Construction
- Campus Recreation







B4. Implement bikeshare stations

Action	Internal		External
Time frame	Short-term	Medium-term	Long-term
User	Employees	Students	Residents











GOAL

Introduce a more flexible option than privately-owned bicycle for commuting to/from campus (either as main commute option or first-/last-mile connection).

Increasing the ability of SF State affiliates to travel to or from campus by bicycle without committing to full bicycle ownership is an important tool in building bicycle ridership. Bikeshare can fill in the gap for cyclists who encounter constraints to private bicycle ownership, thus helping increase the mode share for this transportation option.

Bikeshare can also absorb non-commute trips, particularly for oncampus residents who may find bicycling a convenient solution for occasional trips but who are unlikely to buy their own bicycle.

The proliferation of easily accessible electric bikes is also supported by bikeshare, as the current San Francisco fleet includes a number of

electric-assist bikes. Such bikes may increase the pool of potential bicyclists by mitigating the difficulty of the area terrain.

Bikeshare implementation should be considered within the greater San Francisco landscape, with an emphasis on developing comprehensive network access. SF State should discuss, with SF State and the provider, not only the provision of bikeshare stations on SF State's campus but their relationship to the network as a whole. It is essential to ensure the network covers neighborhoods populated by SF State affiliates and key transit locations for the campus (BART stations at Balboa Park and Daly City) in order to maximize the strategy's effectiveness.

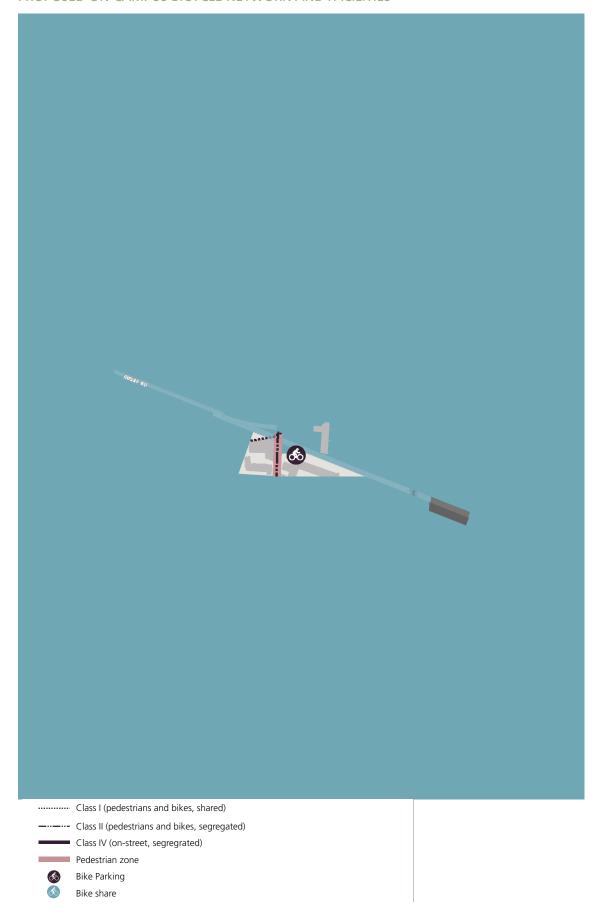
ACTIONS PER TIME FRAME						
Short-term	Medium-term	Long-term				
No actions identified at this time.	No actions identified at this time.	No actions identified at this time.				
 Work with bikeshare provider to expand stations to SF State campus. Consider implementing electric bikeshare due to topography. Ensure network coverage of bikeshare system meets the main origin/destinations of SF State affiliates. 	Work with BART to make bikeshare a viable last mile connection to campus via Daly City or Balboa Park Stations.	No actions identified at this time.				

METRICS	IMPACT LEVEL		
INIETRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Bicycle Group
- Bikeshare provider
- SFMTA







Note: The diagram presented in this page indicates the on-campus bicycle facilities proposed, following the Future State 2035 Campus Master Plan. Source: Future State 2035 Master Plan.

B5. Provide wayfinding specific to cyclists

Action	Internal			External
Time frame	Short-term	Mediur	n-term	Long-term
User	Employees	Stud	ents	Residents











GOAL

Provide clear information for bicyclists regarding routes, location of facilities, and pedestrian areas.

Seamless bicycle connections require more than just safe travelways—they must also offer clear locational guidance to users that provides route information. SF State should partner with SFMTA to implement a legible wayfinding system identifying routes to campus. This effort should bear in mind that new users will enter the system each semester, so wayfinding must be quickly intelligible, even with little to no contextual knowledge. Wayfinding elements should include distance and estimated time to common destinations, and should be consistently formatted across the system.

Beyond working with SFMTA to provide wayfinding to SF State in the broader region, SF State should improve on-campus signage geared towards bicyclists. This should be formatted in a similar manner to the broader city system, and direct users to common destinations on- and off-campus, as well as to secure bike parking, maintenance stations, and shower or changing facilities.

As part of the welcome package, a bicycle map should be available for new affiliates, especially new on-campus residents, identifying primary routes in the region for commuting and for accessing common destinations.

On-campus wayfinding can also mitigate bike-pedestrian conflicts, by channeling bike traffic away from pedestrian-heavy areas where convenient, and identifying pedestrian priority areas.

	ACTIONS PER TIME FRAME					
		Short-term	Medium-term	Long-term		
_	•	Implement wayfinding that identifies routes to common neighborhood or campus destinations.	 Incorporate bicycle routes (on- and off- campus) in a mobile, multimodal mobility app. 	No actions identified at this time.		
Interna	•	Signage should include directions to supportive amenities (e.g., secure parking).				
_	•	Include yield-to-pedestrian signage. Provide bicycle route maps.				
External	•	Implement wayfinding that identifies routes to/from SF State and to/from main destinations (e.g., BART Stations).	No actions identified at this time.	No actions identified at this time.		

METRICS	IMPACT LEVEL		
IVIETRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Capital Planning Design and Construction
- SFMTA







B6. Establish a center for bike information and support the community of bicyclists

Action	Internal			External
Time frame	Short-term	Mediu	m-term	Long-term
User	Employees	Stud	lents	Residents











GOAL

Provide institutional support for the bike community, enabling greater advocacy for bicycle improvements in the region.

ground that can support bike advocacy efforts, and thus should be supported at SF State.

While organized actions within the University such as the Bicycle Geographies course or Bike to Work Day support bicycling visibility, greater involvement could create a broader culture of bicycling. Wider engagement of the bicyclist community could attract more bicycle commuters and while increasing advocates for safe cycling infrastructure.

Developing a resource center to educate bicyclists on how to engage with the advocacy community can support SF State's efforts to increase bicycle mode share. The Office of Sustainability and the SF Bike Coalition may be good partners with whom SF State can

Cycling is more than a commute choice. It can also provide common strategize events and resources for supporting the community of bicyclists.

> The nomination of bike ambassadors to lead student outreach activities and develop new events could likewise improve organization among bicyclists. Bike ambassador roles could include:

- Educate new students about how to bike to/from campus and routes for main destinations;
- Explain benefits offered by SF State or the City;
- Share information about existing campus bike policies;
- Educate and enforce safe bicycle use within campus;
- Engage with bike advocacy in the region;
- Organize bike groups and suggest other improvements.

	ACTIONS PER TIME FRAME					
	Short-term	Medium-term	Long-term			
Internal	 Capitalize on current partnership with SF Bike Coalition: events, safety classes, and building a community of bicyclists. Incentivize group rides, especially for new affiliates. Create a program of "bicycle ambassadors". 	Expand Campus Recreation's Outdoor Resource Center to include bicycles.	No actions identified at this time.			
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.			

METRICS	IMPACT LEVEL		
METRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Office of Sustainability
- Bicycle group
- SF Bike Coalition







B7. Facilitate enrollment in existing bicycle share programs

Action	Internal			External
Time frame	Short-term	Mediur		Long-term
User	Employees	Stud	ents	Residents











GOAL

Reduce bureaucratic processes for using bikeshare.

join a program, especially if they are not familiar with the local environment.

Once a bikeshare system is implemented on campus, SF State can streamline the enrollment process by allowing its affiliates to enroll through existing programs on campus (either in person or on-line).

SF State could explore corporate programs offered by the bikeshare provider and offer membership prices at reduced costs. The University should likewise facilitate enrollment in programs for lowincome individuals (similar to Bikeshare for All from SFMTA).

Coordination between the bikeshare provider, SFMTA, Studdent Affairs and Enrollment Management, and Human Resources at SF State is needed to ensure the success of this strategy.

Enrollment processes are often a barrier for new affiliates to Work with the SF Bike Coalition should be undertaken to understand if there are other bikeshare programs available in the region that may benefit SF State affiliates, which could in turn perhaps reduce the capital costs for bikeshare memberships in the University.

	ACTIONS PER TIME FRAME						
	Short-term	Medium-term	Long-term				
Internal	 Provide information on criteria for enrollment and facilitate the enrollment process (e.g., by supplying the relevant sign-up documents at the bike center or on a website and submitted to the City or relevant departments of SF State). Coordinate with HR and Student Life to implement corporate programs that could help increase bicycle usage. 	No actions identified at this time.	No actions identified at this time.				
External	 Coordinate with SF Bike Coalition on available programs in Bay Area. Coordinate with relevant agencies and bikeshare providers to facilitate enrollment process. 	No actions identified at this time.	No actions identified at this time.				

METRICS	IMPACT LEVEL		
IVIETRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Human Resources
- Bike Group
- **Bike Coalition**
- Bikeshare provider
- SFMTA/other agencies







B8. Subsidize bicycle commuter expenses (repair, maintenance)

Action	Internal			External
Time frame	Short-term	Medium-term		Long-term
User	Employees	Students		Residents











GOAL

Offer benefits that support and encourage staff/faculty to use bicycle as a regular commute mode.

Commute cost often impacts commuters' modal decisions. Offering employee benefits such as reimbursements or pre-tax deductions for bicycle-related expenses (maintenance, bicycle purchase, equipment purchase) can improve the appeal of commuting by bike.

	ACTIONS PER TIME FRAME						
	Short-term	Medium-term	Long-term				
Internal	 Work with HR departments to develop possible benefits system. Explore options for providing commuter benefits through collaboration with University Corporation. 	No actions identified at this time.	No actions identified at this time.				
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.				

METRICS	IMPACT LEVEL		
IVIETRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Human Resources
- Finances







T1. Offer transit pass to staff and faculty, in exchange of a parking permit

Action	Internal			External
Time frame	Short-term	Medium-term		Long-term
User	Employees	Stud	lents	Residents











GOAL

Increase commuting by transit by staff and faculty.

Currently, staff and faculty receive highly subsidized parking permits that allow them to park on campus at a very low cost. Meanwhile, they do not receive the same transit benefits that students have through the Gator Pass. This strategy would give staff and faculty the choice of getting transit benefits through the Gator Pass in lieu of a parking permit.

The 2018 Transportation Survey revealed that driving alone is the top commute choice for SF State faculty and staff with 46% of the mode share. According to the same survey, about 35% who drive alone live in San Francisco. Given the close proximity of some staff to the campus as well as the availability of transit, it is possible that if the cost of taking transit were closer to the subsidized cost of driving alone, more people would take transit.

Currently, staff and faculty receive highly subsidized parking permits that allow them to park on campus at a very low cost. Meanwhile, long-run, it could reduce the demand for parking, allowing for they do not receive the same transit benefits that students have more parking spaces to be converted to other uses.

	ACTIONS PER TIME FRAME						
	Short-term	Medium-term	Long-term				
Internal	Evaluate the cost of providing the Gator Pass to faculty and staff versus the maintenance of parking spaces.	 Determine sources of funding to support expanding the Gator Pass to faculty and staff. Explore options through union contracts to offer a Gator Pass as a benefit, in exchange of a parking permit. 	No actions identified at this time.				
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.				

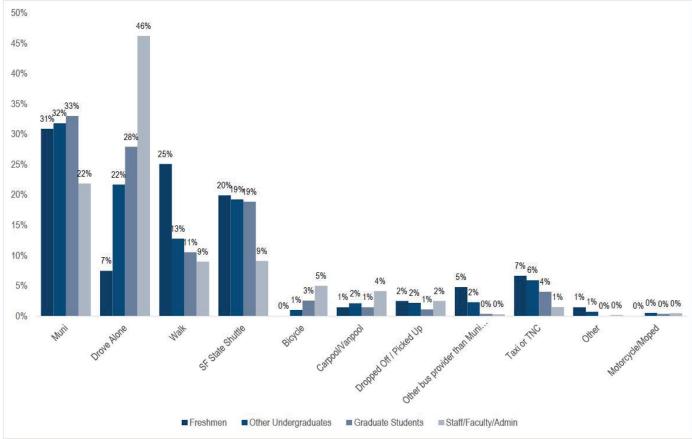
METRICS	IMPACT LEVEL		
METRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

•	Parking & Transportation
•	Human Resources
•	Finance Department





2018 TRANSPORTATION SURVEY: ARRIVAL MODE BY AFFILIATION



Source: 2018 Transportation Survey.

T2. Extend Gator Pass usage to summer

Action	Internal			External
Time frame	Short-term	Medium-term		Long-term
User	Employees	Stud	lents	Residents











GOAL

Offer transit benefits during the summer including the Gator Pass and/or SF State Shuttle.

Currently, the Gator Pass and SF State shuttle are only available to students during the regular school year. Extending the Gator Pass and/or SF State shuttle to operate during the summer would benefit students who are enrolled in summer courses.

This strategy is to explore the possibility of extending the Gator Pass and/or the SF State shuttle to students enrolled in summer classes. A stable funding source would need to be identified in order to extend the Gator Pass for summer use. Funding for the current Gator Pass is through student fees and an extension of the Gator Pass into the summer may require a vote of the student body to approve if the summer Gator Pass would also be supported through student fees.

	ACTIONS PER TIME FRAME							
	Short-term	Medium-term	Long-term					
Internal	No actions identified at this time.	Identify costs and potential funding sources for extending the Gator Pass and/or SF State shuttle to the summer.	 Extend the Gator Pass through the summer. Extend the shuttle service through the summer. 					
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.					

METRICS	IMPACT LEVEL		
WETRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Student Life
- Finances
- Associated Students
- Fiscal Affairs







T3. Include other discounts on Gator Pass

Action	Internal			External
Time frame	Short-term	Medium-term		Long-term
User	Employees	Stud	lents	Residents











GOAL

Offer discounts from other transit providers as part of the Gator Pass benefits.

The Gator Pass is funded through tuition fees paid by all students to provide unlimited rides on the Muni system and a 50% discount on BART rides at the Daly City BART Station. Additional benefits to consider are presented below:

- <u>BART:</u> increase the discount at Daly City BART Station and/ or offer the discount at the Balboa Park BART Station. This measure would impact at least 28% of commuters² and has the potential to attract more riders;
- <u>SamTrans</u>: offer a discount or free pass for SamTrans commuters. This measure would benefit 3% of commuters³, as well as on-campus residents;

<u>Bikeshare:</u> offer a discount or free pass for bikeshare. This
discount would encourage biking on and around campus and
would help improve first/last-mile connections.

Since 55% of campus affiliates live in Alameda County, expanding the Gator Pass to include additional discounts on BART would benefit the largest portion of the campus population and have the greatest potential to increase transit use. A cost-benefit analysis is required to evaluate all of the options to determine the best use of Gator Pass resources.

³ The number of respondents (2018 Transportation Survey) that take bus services other than Muni and live within San Mate County corresponds to 3.5%

	ACTIONS PER TIME FRAME				
	Short-term	Medium-term	Long-term		
Internal	 Analyze costs for each transit alternative. Evaluate cost-benefit (costs and percentage of students impacted by each alternative) for each option. 	 Coordinate with transit operators to implement the discount(s). Discuss service and operation improvements with SamTrans to increase capacity and make the system more attractive to SF State commuters. 	No actions identified at this time.		
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.		

METRICS	IMPACT LEVEL			
METRICS	Low	Medium	High	
Parking and drive alone reduction potential				
Environmentally sustainable				
Affordable capital/operational cost				
Cost-effectiveness				
Affordable for users				
Institutional feasibility				
Commuter experience				

•	Parking & Transportation
•	Fiscal Affairs
•	SamTrans
•	BART





¹ As of February 2019

² According to 2018 Transportation Survey, 28% of respondents reported using BART to get to campus.



T4. Educate people about Gator Pass, shifting demand from SF State Shuttle to Muni

Action	Internal		External		
Time frame	Short-term	Medium-term Students		Long-term	
User	Employees			Residents	











GOAL

Better balance SF State shuttle and Muni capacity by encouraging campus affiliates to use Muni 28 in addition to the SF State shuttle.

The SF State shuttle is much more popular than Muni Routes 28 and 57 when transferring from BART at Daly City, despite comparable travel times and free transfers when students use their Gator Pass (students receive unlimited rides on Muni). All Clipper card users transferring at Daly City BART to Muni are also eligible for two free rides per day, effectively making transfers free for all campus affiliates, but this policy is not applied consistently by Muni drivers. While the SF State shuttle is crowded at times, Muni routes 28 and 57 still have plenty of capacity.

There are a variety of reasons why campus affiliates might use the SF State shuttle instead of Muni: Some people may not be aware that Muni is free or that it goes to the campus. In some cases the discount has not been applied, dissuading future use of Muni. To reduce crowding on the SF State shuttle, an outreach strategy

should be developed to educate affiliates about their options. This should include face-to-face events and a social media campaign with a short video to inform new students about their options.

Real-time information and clear signage at the Daly City BART station would help people make more informed decisions about whether to use the SF State shuttle or Muni, and reinforce the free transfers policy to drivers. Complementary shuttle, BART, and Muni schedules (to avoid simultaneous arrivals) could also help balance ridership across providers (See T6).

A survey should be conducted to understand what other factors are contributing to a higher demand for the SF State Shuttle, such as reliability problems on Muni, environmental factors, a lack of familiarity, or perceived safety using transit in San Francisco.

	ACTIONS PER TIME FRAME				
	Short-term	Medium-term	Long-term		
Internal	 Hold face-to-face events informing people about usage of the Gator Pass as a benefit funded by students and not a free service. Inform affiliates about comparable bus routes to the SF State shuttle. Work across departments to create outreach materials. 	No actions identified at this time.	No actions identified at this time.		
External	 Negotiate new signage at BART clearly articulating the free transfers policy and which Muni routes will go to SF State. Coordinate with SFMTA to train drivers to set Clipper unit for free transfer on 28 and 57 routes. 	No actions identified at this time.	No actions identified at this time.		

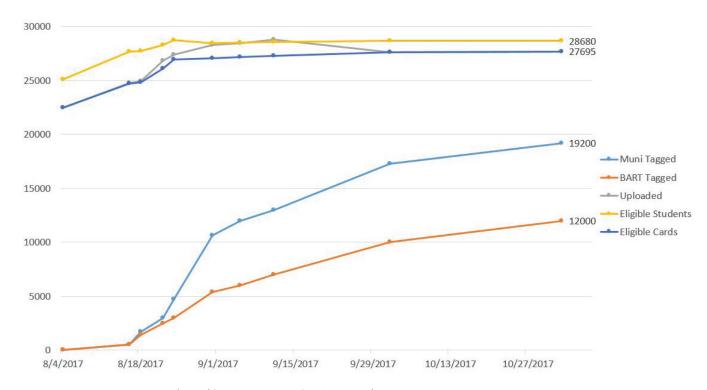
METRICS	IMPACT LEVEL			
IVIETRICS	Low	Medium	High	
Parking and drive alone reduction potential				
Environmentally sustainable				
Affordable capital/operational cost				
Cost-effectiveness				
Affordable for users				
Institutional feasibility				
Commuter experience				

	INITIATIVE LEADERS			
•	Parking & Transportation			





GATOR PASS UTILIZATION



Source: Gator Pass Program Results Parking & Transportation / OneCard, 2017.

T5. Integrate and improve technology of the Gator Pass along with Clipper Card

Action	Internal		External	
Time frame	Short-term	Medium-term Students		Long-term
User	Employees			Residents











GOAL

Coordinate with Clipper 2.0 process in upgrading Gator Pass to mobile option.

The introduction of the Gator Pass created new management processes that did not previously exist for the Parking & Transportation and OneCard departments. Several improvements can be made to reduce the costs of data management and provide a better service to users. This is being done through upgrading the Gator Pass to a mobile OneCard option.

The Metropolitan Transportation Commission (MTC) is upgrading the Clipper card to Clipper 2.0, which will include mobile payments, a mobile application, real-time information, and new fare media options. SF State should discuss with SFMTA and BART what changes would be beneficial to implement in Clipper 2.0. SF State should also coordinate with MTC to ensure that the mobile upgrades to the Gator Pass will function seamlessly with the Clipper 2.0 upgrades.

Short-term		Medium-term	Long-term	
Internal	Discuss with the IT department what coordination is needed for Clipper 2.0 and OneCard.	Adopt mobile option for Gator Pass (to be coordinated with SFMTA, BART, and Clipper 2.0).	Improve data collection processes to measure performance of the Gator Pass.	
External	Coordinate with SFMTA to set Clipper unit for free transfer on 28 and 57 routes as part of Clipper 2.0.	Coordinate with MTC, SFMTA and BART on desired changes for Clipper 2.0.	Implement a Clipper 2.0 that is seamlessly integrated with the mobile Gator Pass.	

METRICS	IMPACT LEVEL			
METRICS	Low	Medium	High	
Parking and drive alone reduction potential				
Environmentally sustainable				
Affordable capital/operational cost				
Cost-effectiveness				
Affordable for users				
Institutional feasibility				
Commuter experience				

- Parking & Transportation
- OneCard
- •
- MTC
- SFMTA
- BART







T6. Improve the capacity, frequency, and schedule of the SF State shuttle

Action	Internal			External
Time frame	Short-term	Medium-term		Long-term
User	Employees	Stud	lents	Residents











GOAL

Make improvements to the SF State shuttle to increase overall transit mode share to campus.

Improving the SF State shuttle service has the potential to reduce automobile trips generated by TNCs and drive alone commuters.¹ While campus affiliates should still be encouraged to use Muni to offset demand for the SF State shuttle, the University has direct control over shuttle improvements.

Recent data on the SF State shuttle shows that the shuttle has been operating at over 85% of capacity, and up to 100%. Outreach efforts (T4) to inform people of comparable Muni options for last-mile service should be implemented first to help reduce the shuttle demand during peak hours.

Respondents of the 2018 Transportation Survey reported that they would use the shuttle if it ran later in the evenings. The shuttle schedule should be refined to coordinate with class schedules, and

complement the Muni schedule, filling in gaps in service. Additional measures, such as increasing the number of vehicles and service frequency should be implemented only after a robust outreach campaign is completed to encourage affiliates to shift to Muni.

The SF State shuttle could begin service during the student orientation week and in the summer. Student Life should provide input on when shuttle service should be provided to support events on campus during summer.

Additional measures to improve user experience include providing real-time information, improved signage, and separating driver layover space from the shuttle queue.

	ACTIONS PER TIME FRAME					
	Short-term	Medium-term	Long-term			
Internal	 Increase capacity/frequency, especially at night, and extend services for night classes (7pm to 10:30pm). Match class schedules (e.g., shuttle departs 10 minutes after classes). Offset from Muni schedule 	Expand operation to Welcome Week and during summer.	No actions identified at this time.			
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.			

METRICS	IMPACT LEVEL		
IVIETRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

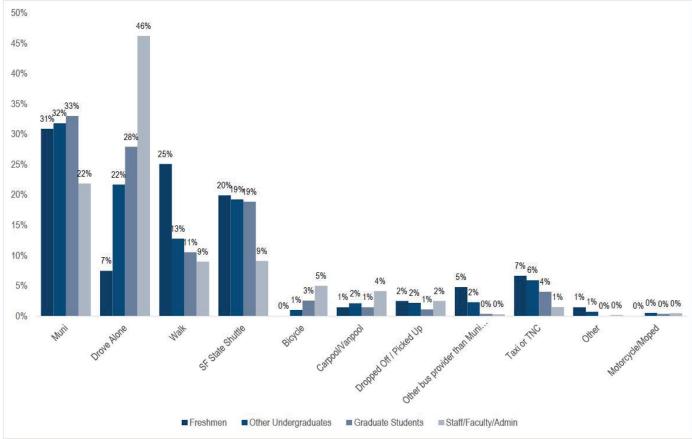
	INITIATIVE LEADERS
•	Parking & Transportation Student Life





¹ When asked about programs that would encourage shifting from Drive Alone mode, the second most popular answer was "improved shuttle service from BART to the University" (17% of drive alone respondents). Source: 2018 Transportation Survey.

2018 TRANSPORTATION SURVEY: ARRIVAL MODE BY AFFILIATION



Source: 2018 Transportation Survey.

T7. Improve route and stop locations of the SF shuttle and the passenger experience for people of differing abilities

Action	Internal			External
Time frame	Short-term	Medium-term		Long-term
User	Employees	Students		Residents











GOAL

Provide a better user experience for shuttle commuters.

This strategy is to implement the Future State 2035 plan for SF State shuttle route and stop location improvements. Refinements to the routes and stop locations should be made once the project design advances in detail.

Other improvements to the shuttle service can be made to improve the passenger experience, fill in the gaps from the Muni system, and improve the experience for people with disabilities.

In coordination with the Disability Programs and Resource Center, training and guidelines for shuttle drivers on how to properly assist people with disabilities should be provided. This could also include route deviations so that those with special needs can be picked up or dropped off at the most convenient locations.

The shuttle route and stop locations should be reviewed regularly and adjusted as needed to reflect changing needs. In addition, drivers should be allowed flexibility to take alternative routes between the Daly City BART Station and the first stop at SF State to avoid congestion and reduce travel time.

	ACTIONS PER TIME FRAME					
	Short-term	Medium-term	Long-term			
Internal	 Train drivers to help ADA passengers. Add stops to serve residential areas. Increase the number of stops or allow drivers to deviate from the route to drop off people with disabilities in a more convenient location. 	Allow drivers to take alternative routes to reduce travel time from the Daly City BART station to SF State.	Adjust the shuttle route as necessary, especially if a Transportation Management Association (TMA) is created.			
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.			

METRICS	IMPACT LEVEL		
METRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Disability Programs and Resource Center





PROPOSED SHUTTLE ROUTE AND STOP LOCATIONS FOR FUTURE STATE 2035 PROPOSED SHUTTLE ROUTES LEGEND Circular Route (two-way) Potential Expanded Route Express (to Daly City)

T8. Coordinate with SFMTA on improvements to Muni operations

Action	Internal			External
Time frame	Short-term	Mediur	n-term	Long-term
User	Employees	Stud	ents	Residents











GOAL

Collaborate with SFMTA to improve Muni's speed, reliability and frequency.

Despite the introduction of the Gator Pass and SF State shuttle, vehicle trips to campus have been on the rise, as observed in the last traffic volume counts. In the last travel survey, 26% of those commuting to campus using a car said that they would consider transit if there were "improved buses and trains to campus." This response indicates that a more reliable and fast transit service could help shift those currently driving to campus to use transit.

As shown on the next page, the Muni lines serving SF State do not meet the target for on-time performance. Through the Gator Pass, students receive unlimited rides on Muni. Providing a reliable and fast service is important to encouraging more students to make the shift to transit. The University should coordinate with SFMTA to improve reliability of the transit system to make transit a more competitive alternative to driving alone.

There are indicators that students are taking other modes instead of Muni due to reliability concerns. The travel survey results and Gator Pass data show that some students traveling to Downtown San Francisco opt to take BART from Daly City instead of using the M-Line. A comparison of travel times shows that this two-seat ride is faster than taking the M-Line.

The university should collaborate with SFMTA to prioritize transit improvements for accessing campus. Improvements could include upgrading traffic signals to prioritize transit, providing comfortable and well located shelters and stops, and exploring ways to increase speeds on the M-Line. SF State should share anonymized home location data on affiliates with SFMTA to consider route changes, including direct service to under-served locations in southeast San Francisco, and to SF State satellite locations.

	ACTIONS PER TIME FRAME						
	Short-term	Medium-term	Long-term				
Internal	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.				
External	Data share with SFMTA staff.	 Improve reliability of services. Increase capacity and frequency of existing transit routes. 	Improve connectivity to underserved communities such as Bayview.				

METRICS	IMPACT LEVEL			
IVIETRICS	Low	Medium	High	
Parking and drive alone reduction potential				
Environmentally sustainable				
Affordable capital/operational cost				
Cost-effectiveness				
Affordable for users				
Institutional feasibility				
Commuter experience				

- Parking & Transportation
- SFMTA



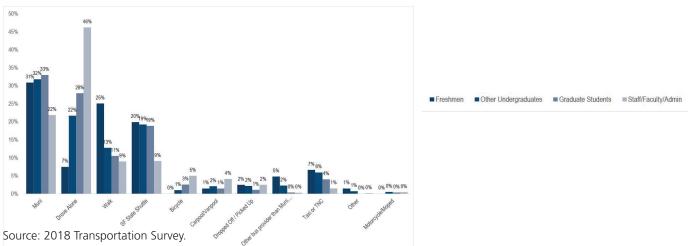


PERCENTAGE OF ON-TIME PERFORMANCE



Source: SFMTA _accessed on August 2018.

2018 TRANSPORTATION SURVEY: ARRIVAL MODE BY AFFILIATION



T9. Collaborate with SFMTA on long-term M-Line improvements

Action	Internal			External
Timeframe	Short-term	Medium-term		Long-term
User	Employees	Students		Residents











GOAL

Deliver a faster and more reliable M-Line transit service that seamlessly integrates with SF State's campus uses.

SFMTA is currently considering significant improvements to the design, infrastructure and operation of the M-Line. In the past, the M-Line was the busiest Muni route serving SF State, but now serves less than half of the SF State riders it did 10 years ago.

The M-Line is plagued with several challenges — it is unreliable, has slow travel times from West Portal to the campus (scheduled at 7 mph) and from Balboa Park to the campus (scheduled at about 10 mph), has inadequate station locations, and requires riders to cross large, busy intersections to access the platforms. Station amenities and platform conditions could also be improved.

SFMTA recognizes these concerns and has considered options for improvements through two studies. Over the last several years, SFMTA has considered two options for improving the alignment of

the M-Line near SF State: 1) moving the southbound tracks to the west side of the street and placing the northbound tracks in a tunnel adjacent to the campus, and 2) entirely burying the tracks between West Portal and Parkmerced. The Parkmerced redevelopment is a driving force in these considerations, as the development will fund an extension directly into the neighborhood. This could include relocating the 19th and Holloway station to the south side of the intersection, adjacent to Holloway Avenue.

SF State should continue discussions with SFMTA and Parkmerced on the planning and design of the M-Line re-alignment. In addition, SF State should develop design principles for consideration by SFMTA to consider for both short- and long-term changes.

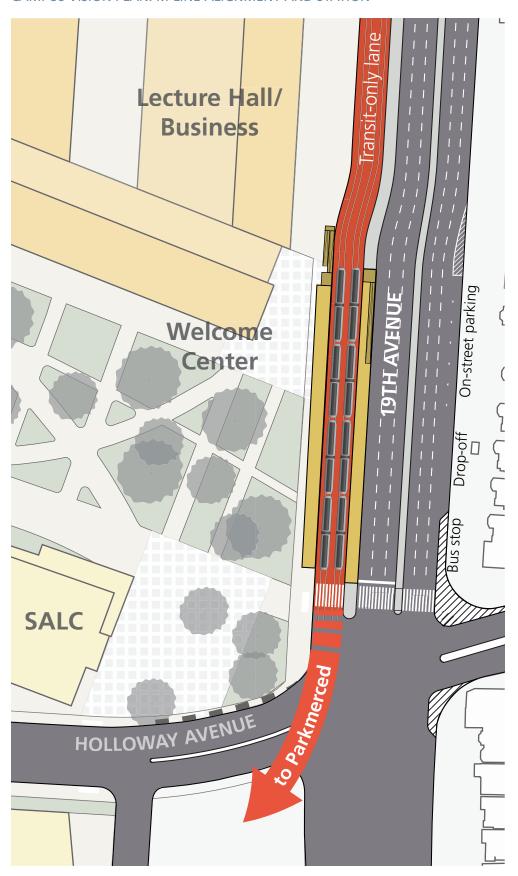
	ACTIONS PER TIME FRAME						
	Short-term	Medium-term	Long-term				
Internal	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.				
External	Continue collaborating with SFMTA and Parkmerced on the M-Line re-alignment and other improvements.	Coordinate with SFMTA and Parkmerced on the initial M-Line changes.	Incorporate alternative station locations into designs for new SF State buildings.				

METRICS	IMPACT LEVEL		
IVIETRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Capital Planning Design and Construction
- SFMTA
- Parkmerced







T10. Work with SamTrans to evaluate possible discounts to students

Action	Internal			External
Time frame	Short-term	Medium-term		Long-term
User	Employees	Students		Residents











GOAL

Explore additional discounts for transit services outside of San Francisco.

The Gator Pass is a benefit funded by students through tuition fees and should be offering as many transit discount options as possible to reflect student commute choices available.

The Bay Area housing affordability crisis has been displacing San Francisco residents without adding new accommodation suitable for new SF State affiliates to live in the city.

Besides San Mateo County residents, many on-campus residents also use SamTrans to meet daily needs such as shopping at major retailers or grocery stores.

SF State should explore additional transit discounts with other agencies in Bay Area - specifically SamTrans due to geographic

proximity to campus. Cost-effectiveness of any new transit discount scheme needs to be assessed individually to evaluate the benefit of its inclusion on the Gator Pass.

Discounts can also be issued through reimbursement similar to Golden Gate Transit or Caltrain, however it would require students to tag off.

	ACTIONS PER TIME FRAME		
	Short-term	Medium-term	Long-term
Internal	No actions identified at this time.	 Discuss with SamTrans the possibilities and costs involved for providing discounts to SF State students. Discuss service and operation improvements to increase capacity and make the system more attractive to SF State commuters. 	No actions identified at this time.
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.

METRICS	IMPACT LEVEL		
IVIE IRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

	INITIATIVE LEADERS
•	Parking & Transportation
•	SamTrans
•	Associated Students







T11. Foster relationship with other relevant transit agencies for potential partnerships

Action	Internal			External
Time frame	Short-term	Medium-term		Long-term
User	Employees	Students		Residents











GOAL

Become a partner for region-wide pilot projects that can improve commuters experience.

The 2018 Transportation Survey revealed that the majority of campus affiliates live outside San Francisco. SF State should continue form ing relationships with transportation agencies region-wide, including not only operators (BART, SamTrans, AC Transit, Tri Delta, Caltrain, VTA) but also planning agencies such as the Metropolitan Transportation Commission (MTC) to coordinate the improvement of transportation systems around the region to benefit SF State affiliates.

Engaging in conversations with transit agencies around the region could create opportunities for SF State to participate in pilot programs for innovative first-/last-mile solutions. The TDM Coordinator should build these relationships to demonstrate the interest SF State has in increasing transit mode share and expanding commute choices to the campus.

		ACTIONS PER TIME FRAME	
	Short-term	Medium-term	Long-term
Internal	No actions identified at this time.	 Engage with regional agencies and transit providers to support improved transit service for SF State commuters. Explore opportunities to be a part of pilot projects in the region. 	No actions identified at this time.
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.

METRICS	IMPACT LEVEL		
METRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Relevant transit providers and agencies
- Gator Pass
- Capital Planning Design and Construction







T12. Implement BART-Muni discount at Balboa Park Station

Action	Internal			External
Time frame	Short-term	Medium-term		Long-term
User	Employees	Students		Residents











GOAL

Prepare a cost-benefit analysis of offering a discount of free transfer to Muni at the Balboa Park BART station.

This strategy would explore the idea of extending the BART discount Since the Muni 28R and M Line services already provide a to the Balboa Park BART station.

Since the Muni 28R and M Line services already provide a connection to SF State from the Daly City BART station, a shuttle

Currently, all Clipper Card users receive two Muni free rides per day when transferring from the Daly City BART station. This transfer policy is part of an agreement between BART and SFMTA. Students can also use their Gator Pass to travel for free on all Muni services.

SF State should meet with BART and SFMTA to access the possibility of providing a similar transfer policy from the Balboa Park BART station to Muni. Currently, many SF State affiliates use Muni to reach the campus from the Balboa Park BART station, but do not receive the same transfer benefit provided from the Daly City BART station.

connection to SF State from the Daly City BART station, a shuttle service at Balboa Station is not necessary, but making Balboa Park more attractive by reducing the fare could help alleviate pressure on the shuttle at Daly City. Bicycle infrastructure improvements along Ocean Avenue would also help bridge the last-mile gap (B2).

Short-term strategies to improve the transit connection from Balboa Park BART station include providing information to students on commuting from BART and engaging in regional discussions on improving biking conditions along Ocean Ave.

A medium-term strategy includes evaluating the cost/benefit for providing a transfer agreement to Muni at Balboa Park BART station and implementing the transfer agreement.

	ACTIONS PER TIME FRAME			
	Short-term	Medium-term	Long-term	
Internal	Provide information on the SF State website about how to access the campus from the Balboa Park BART station.	No actions identified at this time.	No actions identified at this time.	
External	Prepare street design improvements for bikes along Ocean Ave between the campus and the Balboa Park BART station with City Planning staff.	 Implement street design improvements for bikes along Ocean Ave. Coordinate with BART and Muni to determine the cost-benefit of offering a free transfer to Muni from the Balboa Park BART station. 	Implement transfer agreement between BART and Muni at the Balboa Park BART station.	

METRICS	IMPACT LEVEL		
IVIETRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

	INITIATIVE LEADERS
•	Parking & Transportation BART







T13. Improve transit stop conditions

Action	Internal		External	
Time frame	Short-term	Medium-term		Long-term
User	Employees	Stud	lents	Residents











GOAL

Improve the passenger experience through providing comfortable, state-of-the-art transit stops.

Improving the comfort and convenience of taking transit is stop locations that are placed in convenient locations and includes important for attracting new transit riders and retaining existing ones. One way to improve the passenger experience is to provide comfortable and protected areas for waiting.

There are several design elements that can be incorporated to improve existing transit stops. These improvements include installing bus shelters with benches and real-time information, and providing sufficient space on the sidewalks for waiting and wheelchair access. Bus stops should be upgraded to include tactile paving and audible announcements to assist people with disabilities.

SF State should evaluate the location of transit stops and move or add transit stops to improve transit operations and provide more convenient access for riders. Future State 2035 proposes strategies to reduce conflicts with automobiles and bicycle facilities. In addition, SF State can identify locations to implement mobility hubs that provide services and facilities for transportation connections including transit, bikeshare stations and/or bicycle parking.

	ACTIONS PER TIME FRAME						
	Short-term	Medium-term	Long-term				
Internal	 Provide real-time information at all transit stops. Provide wayfinding information, including a pole with schedules. 	No actions identified at this time.	Design transit stops that include the following features: shelters, benches, weather protection, real-time transit information, and are ADA accessible.				
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.				

METRICS	IMPACT LEVEL		
WEIRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

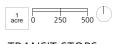
- Parking & Transportation
- SFMTA
- Capital Planning Design and Construction





PROPOSED TRANSIT STOPS





TRANSIT STOPS L E G E N D



T14. Implement real-time information panel for all transit services

Action	Internal			External	
Time frame	Short-term	Medium-term		Long-term	
User	Employees	Students		Residents	











GOAL

Install panels with consolidated real-time transit information at key locations across campus.

Providing real-time transportation information around campus can help students make more informed choices about their commutes and is a way to advertise available transit options.

SF State can also work with SFMTA and BART to provide a panel with consolidated information at Daly City, which could inform riders if the next bus to SF State is Muni or the University Shuttle.

To implement real-time information signage, SF State staff could work with College of Computer Science to plan a hackathon (or activity as part of a class) for example to program a Raspberry Pi device to publish transit real-time information. The real-time signage should include Muni, SF State Shuttle, and SamTrans arrival times. The panels should be installed at key visible locations across the campus, including: the Library, student services center, Mashouf Wellness Center, transit stops, and common areas in the residential buildings. Panels can be located indoors facing out to reduce the need for expensive weather protection.

SF State can also work with SFMTA and BART to provide a panel with consolidated information at Daly City, which could inform riders if the next bus to SF State is Muni or the University Shuttle. It should also provide next BART information for those alighting from buses, and be integrated with the fare information panels described in T4 to limit visual clutter.

In the long term, real-time information should also be provided in the existing mobility app.

		ACTIONS PER TIME FRAME						
		Short-term	Medium-term	Long-term				
lal	•	Work with the College of Computer Science or student clubs to create Raspberry Pi devices that provide transit real-time information.	No actions identified at this time.	Provide real time transit information through the existing mobile app.				
nterna	•	Place real-time panels at key locations across campus.						
	•	Work with shuttle provider to produce a real time transit feed which can be read programmatically.						
External	•	Negotiate new real time transit information signage at Daly City BART.		No actions identified at this time.				

METRICS		IMPACT LEVE	L
METRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- College of Computer Science
- Capital Planning Design and Construction
- SFMTA







T15. Coordinate transit benefits with University's programs in summer

Action	Internal		External	
Time frame	Short-term	Medium-term		Long-term
User	Employees	Stud	lents	Residents











GOAL

Offer transit benefits during the summer including the Gator Pass and/or SF State Shuttle.

Currently, the SF State shuttle does not operate during the summer. The Gator Pass is also not in effect during the summer. Extending either or both of these services into the summer would benefit students who are enrolled in summer courses.

SF State is implementing programs to improve student life on campus and build a sense of community that encourages students to spend more time at SF State. Some of these programs are scheduled during summer and would benefit from complementary transportation services.

Parking & Transportation and the Student Life department should coordinate to extend one of the transit benefits during summer.

Gator Pass would be beneficial for students who are taking classes during summer and students who are participating at the summer events. Furthermore, it would allow students to use Muni during summer for other activities, such as leisure and/or work.

On the other hand, SF State shuttle benefits employees as well. Since they are not part of Gator Pass, summer is a time that commuting on transit is harder for those who rely on SF State Shuttle, especially due to schedule at night or other off-peak hours.

A cost-benefit analysis should be conducted to understand which investment will benefit more people.

	ACTIONS PER TIME FRAME					
	Short-term	Medium-term	Long-term			
Internal	No actions identified at this time.	 Extend Gator Pass through summer; and/or Extend shuttle service through summer 	No actions identified at this time.			
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.			

METRICS	IMPACT LEVEL		
METRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Student Life
- Associated Students
- Gator Pass
- Capital Planning Design and Construction







T16. Facilitate enrollment in existing public programs

Action	Internal	Internal		External
Time frame	Short-term	Medium-term		Long-term
User	Employees	Students		Residents











GOAL

Facilitate usage of existing transportation benefits offered by public agencies.

The City of San Francisco and other public agencies offer transportation services and benefits in order to make mobility more equitable. Programs include paratransit, emergency ride home and reduced transit fares for low-income individuals.

SF State could help affiliates access these benefits by providing information on the available resources and eligibility criteria through outreach campaigns and offering help through the enrollment process.

SF State could also explore the possibility of waiving the Gator Pass fee, perhaps through a tuition credit, for low-income individuals who qualify. Transit providers often offer means-based fares to further reduce the cost of transit to low-income individuals. This is an alternative that needs to be evaluated by the Gator Pass team.

Other institutions may also offer discounted programs for lowincome individuals, such as providing discounts on bikeshare. If such benefits exist, SF State can promote these benefits rather than providing the discount directly, saving resources for other programs.

	ACTIONS PER TIME FRAME						
	Short-term	Medium-term	Long-term				
[canotal	 Facilitate enrollment in existing public programs that benefit low-income populations or those with disabilities. Evaluate if low-income individuals could be exempt from the Gator Pass fee. 	No actions identified at this time.	No actions identified at this time.				
Evtornal	No actions identified at this time.	Explore other available public benefits that could benefit SF State affiliates.	No actions identified at this time.				

METRICS	IMPACT LEVEL		
WETKICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

INITIATIVE LEADERS Parking & Transportation

- Disability Programs and Resource Center
- Transportation agencies and institutions







A1. Implement residential parking policies that restrict parking and inform about alternatives

Action	Internal		External	
Time frame	Short-term	Mediur	m-term	Long-term
User	Employees	Stud	lents	Residents











GOAL

Reduce unnecessary parking demand and supply and advertise available alternatives.

Reducing automobile trips and parking demand requires restrictive actions to discourage or limit parking.

As part of Future State 2035, the increase in the residential population will not be accompanied with an increase in available parking supply. Parking spaces will be allocated following the rates below:

- <u>Freshmen and sophomores:</u> will not be allowed to park, but 1% of student beds will have a parking spaces for ADA or other exceptions;
- <u>Juniors and seniors/graduates:</u> 12% of student beds will have a parking space;
- <u>Staff/faculty:</u> 1 space per residential unit.

Orientation sessions present an opportunity to raise awareness between students and their parents by advertising alternatives to driving, emphasizing the safety and convenience of these options.

Outreach programs should also be developed to inform residents about available choices. Group ride events for both bicycling and transit should be created and well advertised, to offer a comfortable way to introduce students to driving alternatives. Group rides can be implemented immediately.

For more information on projected parking demand and supply, refer to the Future State 2035 report and respective Parking Memorandum.

	ACTIONS PER TIME FRAME						
	Short-term	Medium-term	Long-term				
Internal	 Develop an outreach program to inform residents about transportation choices, and distribute at Orientation Day. Organize group biking and transit rides to expose residents to alternatives in a comfortable setting. 	No actions identified at this time.	Restrict residential parking for students.				
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.				

METRICS	IMPACT LEVEL		
IVIETRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness	ess		
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Housing, Dining & Conference
 Convices
- Residential Life
- Student Affairs and Enrollment







A2. Implement commuter parking policies and strategies to reduce unnecessary demand

Action	Internal		External	
Time frame	Short-term	Mediu	m-term	Long-term
User	Employees	Stud	ents	Residents











GOAL

Reduce unnecessary commuter automobile trips and parking demand.

Reducing automobile trips and parking demand usually requires restrictive actions to discourage or limit parking.

Short- and medium-term measures focused on commuter parking can be implemented by SF State to begin changing the commute behavior of those who drive to campus.

Eliminating monthly and annual permits, and the pricing discount those provide will increase the overall cost of automobile trips to campus.

Offering only daily permits will force commuters to make daily commute decisions, rather than monthly or annually. This creates an opportunity for people to reconsider driving, and make a new decision about their mode choice based on factors like commute time, convenience, or the cost of a certain mode.

Pricing parking can deter commuters who live within walking distance or near transit from traveling by car. The 2018 Transportation Survey revealed that 5% of those reporting they drove alone would be willing to shift to another mode if the University charged more for parking.

Beyond parking restrictions and/or pricing, SF State could offer a Gator Pass to staff and faculty instead of a parking permit.

In the long term, Future State 2035 parking projections expect reduced demand due to a higher percentage of affiliates living on campus, and technology changes that will likely reduce the need for parking.

	ACTIONS PER TIME FRAME						
	Short-term	Medium-term	Long-term				
Internal	 Introduce new price structure (not issuing permits to affiliates living within walking distance; higher price for commuters living in areas well-served by transit). Eliminate monthly and annual permits, introduce daily-only permits 	Offer Gator Pass to staff/faculty instead of a parking permit.	Future State 2035 will not increase the number of parking spaces compared to existing conditions.				
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.				

METRICS	IMPACT LEVEL			
METRICS	Low	Medium	High	
Parking and drive alone reduction potential				
Environmentally sustainable				
Affordable capital/operational cost				
Cost-effectiveness				
Affordable for users				
Institutional feasibility				
Commuter experience				

- Parking & Transportation
- Capital Planning Design and
- **Human Resources**







A3. Establish a parking policy that ensures parking permits are issued for those that need to drive

Action	Internal		External	
Time frame	Short-term	Medium-term		Long-term
User	Employees	Stud	lents	Residents











GOAL

Ensure that affiliates who need to drive will not be negatively affected by restrictions or pricing policies.

Creating an accessible campus requires understanding people's Convenient, easily accessible parking locations should be reserved for people with disabilities. Reduced prices or convenient parking

Although a major strategy for reducing parking demand and automobile trips includes restricting parking availability, it is important to ensure that people who need to drive, such as parents and people with disabilities are not penalized.

Parking policies should comprise restrictions and pricing measures, but also establish clear criteria for exceptions. A task force between Human Resources, the Disability Programs and Resource Center, students' representatives, Union representatives and Parking & Transportation should determine the particular conditions that make driving a necessity.

Convenient, easily accessible parking locations should be reserved for people with disabilities. Reduced prices or convenient parking locations for carpoolers should be considered as a tool to encourage high-occupancy trips to and from campus.

	ACTIONS PER TIME FRAME					
	Short-term	Medium-term	Long-term			
Internal	No actions identified at this time.	 Work with HR, students' representatives, Disability Programs and Resource Center, and Parking & Transportation to define exceptions. Ensure ADA parking spaces are located in convenient locations. Provide convenient parking spaces and discounts to encourage carpooling. 	No actions identified at this time.			
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.			

METRICS		IMPACT LEVEL			
METRICS	Low	Medium	High		
Parking and drive alone reduction potential					
Environmentally sustainable					
Affordable capital/operational cost					
Cost-effectiveness	is and the state of the state o				
Affordable for users					
Institutional feasibility					
Commuter experience					

•	Parking & Transportation
•	Disability Programs and Resource Center
•	Union representatives
•	Student Affairs and Enrollment







A4. Utilize parking with more efficiency

Action	Internal		External	
Time frame	Short-term	Medium-term		Long-term
User	Employees	Stud	lents	Residents











GOAL

Design a parking facility that operates in a more efficient way.

Designing for centralized parking structures (i.e. district parking) can improve the efficiency of parking supply by consolidating demand.

An off-street, on-campus facility should be designed to accommodate both commuter and residential parking. Since peak parking demand periods are different for commuters and residents, this centralized strategy encourages more effective use of the space through greater occupancy throughout the day.

This strategy also supports the implementation of smart parking systems, such as electronic panels that indicate how many stalls are available in each floor or lighting indicators of empty parking spaces. Such data could be made available in the multimodal existing mobility application.

	ACTIONS PER TIME FRAME					
	Short-term	Medium-term	Long-term			
Internal	No actions identified at this time.	No actions identified at this time.	 Future State 2035 proposes a consolidated garage to accommodate residential and commuter parking. Explore smart parking systems and include data of available spaces in the existing mobility app. 			
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.			

METRICS	IMPACT LEVEL		
METRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Housing, Dining & Conference Services
- Capital Planning Design and Construction







A5. Explore shared parking opportunities with Parkmerced/Stonestown

Action	Internal	ernal E		External
Time frame	Short-term	Mediun	n-term	Long-term
User	Employees	Stude	ents	Residents











GOAL

Reduce parking supply on campus and costs involved in operation.

Explore shared parking facilities with partners to further optimize parking supply and associated costs.

A shared parking arrangement may be a good strategy for all parties involved, as peak occupation for different target populations is likely to happen at different times of day for each land use (residential, retail and academic). A combined arrangement will likely require fewer parking spaces to meet the demand for all land uses, which will also produce operational cost savings.

	ACTIONS PER TIME FRAME					
	Short-term	Medium-term	Long-term			
Internal	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.			
External	No actions identified at this time.	Develop partnership with Stonestown Galleria and/or Parkmerced to explore shared parking arrangement.	No actions identified at this time.			

METRICS	IMPACT LEVEL		
METRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

Parking & Transportation Capital Planning Design and Construction Stonestown Galleria







A6. Increase availability of EV chargers

Action	Internal		External	
Time frame	Short-term	Medium-term		Long-term
User	Employees	Stud	lents	Residents











GOAL

Support reduction of greenhouse gas (GHG) emissions created by automobile trips.

To encourage the use of low-emission vehicles by commuters who continue to drive, SF State should increase the availability of electric vehicle charging sites on campus. Currently, SF State already establishes caps on daily usage, with 4-hour limit on charging spaces.

A recommendation with a longer time horizon is the implementation of more electric vehicle charging stations, coincident with an expected increase in proliferation of electric vehicles. Chargers should be accessible for both commuters and residents.

	ACTIONS PER TIME FRAME					
	Short-term	Medium-term	Long-term			
Internal	Create a task-force to request funds for additional EV chargers.	Implement additional EV chargers for commuter and residential parking.	No actions identified at this time.			
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.			

METRICS	IMPACT LEVEL		
IVIETRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Housing, Dining & Conference Services
- Capital Planning Design and Construction







A7. Introduce technology to automate processes that reduce operating costs and improve efficiency

Action	Internal		External	
Time frame	Short-term	Mediur	m-term	Long-term
User	Employees	Stud	lents	Residents











GOAL

Use technology to reduce costs and improve efficiency of parking.

sustainable cost and revenue system to continue operating. Judicious deployment of new technologies can help improve efficiency of parking use and reduce operating costs.

In the short term, SF State could implement a license plate recognition system to automate enforcement of parking permits. This technology would reduce the time and cost to check permits, while increasing revenue from more thorough enforcement.

Long-term solutions to be evaluated include: smart parking systems and gates for garages, helping optimize occupation of off-street facilities; and the implementation of demand-responsive pricing, enabled by sensors, to accurately match supply and demand of

SF State's Parking and Transportation department needs a more parking spaces. Both actions can reduce capital costs by more sustainable cost and revenue system to continue operating. effectively matching demand to existing parking supply.

	ACTIONS PER TIME FRAME					
	Short-term	Medium-term	Long-term			
Internal	Implement License plate recognition system	No actions identified at this time.	 Smart parking systems to optimize garage occupation Demand-responsive parking pricing system 			
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.			

METRICS	IMPACT LEVEL		
METRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Capital Planning Design and Construction







A8. Eliminate on-street parking off-campus along corridors planned for bicycle circulation

Action	Internal		External
Time frame	Short-term	Medium-term	Long-term
User	Employees	Students	Residents











GOAL

Improve safety for pedestrians and bicycles around campus and reduce unnecessary parking demand by eliminating convenient free parking.

The existence of free, convenient parking encourages continued use of cars as a primary transportation mode. Additionally, existing on-street parking configuration creates conflict with bicycles and pedestrians, thus reducing the appeal of those modes.

Results from the 2018 Transportation Survey revealed that 10% of drive alone respondents would be willing to shift to other transportation alternatives if free parking on-street or near their destinations were eliminated.

Holloway Avenue and Font Boulevard are major bicycle and pedestrian corridors. Ensuring safety along the corridors for these users is paramount in supporting modal shifts to biking or walking. The elimination of on-street parking on both streets will

reduce conflicts between cars and pedestrians or bicyclists, while discouraging automobile use. Parking removal will also improve the visibility of pedestrians crossing at intersections within the corridors.

Other bike corridors should be converted to no-parking zones as the Future State 2035 project evolves. ADA parking spaces should be relocated to convenient locations on campus that are easily accessible but which do not conflict with proposed bicycle facilities.

	ACTIONS PER TIME FRAME						
	Short-term	Medium-term	Long-term				
Internal	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.				
External	No actions identified at this time.	No actions identified at this time.	 Coordinate with SFMTA to eliminate onstreet parking along Holloway Avenue and Font Boulevard in order to provide a safe bicycle corridor. Coordinate with SFMTA to eliminate on-street parking along corridors that prioritize bike infrastructure. 				

METRICS	IMPACT LEVEL			
METRICS	Low	Medium	High	
Parking and drive alone reduction potential				
Environmentally sustainable				
Affordable capital/operational cost				
Cost-effectiveness				
Affordable for users				
Institutional feasibility				
Commuter experience				

	INITIATIVE LEADERS
•	Capital Planning Design and Construction
•	SFMTA







A9. Support parking pricing on city streets

Action	Internal		External	
Timeframe	Short-term	Mediu	m-term	Long-term
User	Employees	Students		Residents











GOAL

Reduce impact on SF State neighbors with a parking pricing plan that discourages all-day parking on city streets, incentivizes use of alternative modes, and generates revenue to fund streetscape and transportation improvements and maintenance.

SF State's residential neighbors are impacted by students and staff parking on city streets, often for up to eight hours a day. Parking on these residential streets is free to all users. The additional traffic and emissions generated by this parking is costly for neighbors, and inconsistent with SF State, CSU, and California policy to reduce greenhouse gas emissions. Excessive automobile parking can also reduce the City's ability to implement road diets and other stormwater management or pedestrian-friendly street treatments.

In addition, as SF State moves to more active parking management systems, the success of such new systems will be negatively impacted if abundant free parking is available nearby. Free, local parking is likely to negate the benefits of a parking management

system; thus, pricing parking on city streets is a vital component of comprehensive parking management in the SF State neighborhood.

The city of San Francisco already manages parking through permits and pricing. Implementing those same practices in areas adjacent to SF State is consistent with overall City practice and will benefit both the SF State community and its neighbors.

San Francisco's current policy is to use parking revenue to support additional transit service and other transportation projects and programs. SF State should engage with SFMTA to identify where the new net parking revenue will be spent and should advocate for transit service improvements in the SF State neighborhood.

	ACTIONS PER TIME FRAME					
	Short-term	Medium-term	Long-term			
Internal	No actions identified at this time.	No actions identified at this time.	Identify appropriate allocation of net new parking revenues.			
External	Dialogue with SFMTA on pricing and management of on-street parking on City streets.	Collaborate with SFMTA on pricing project; incorporate into overall SF State parking management program.	No actions identified at this time.			

METRICS	IMPACT LEVEL			
IVIE I RICS	Low	Medium	High	
Parking and drive alone reduction potential				
Environmentally sustainable				
Affordable capital/operational cost				
Cost-effectiveness				
Affordable for users				
Institutional feasibility				
Commuter experience				

	INITIATIVE LEADERS					
•	Parking & Transportation					
•	SFMTA					







A10. Facilitate access to services and programs offered by public agencies

Action	Internal		External	
Time frame	Short-term	Medium-term		Long-term
User	Employees	Students		Residents











GOAL

Facilitate usage of transportation alternatives offered by the City to reduce automobile dependency.

Offering flexible mobility options can help automobile commuters reduce dependency on this mode for commute trips.

SFMTA offers programs such as the Emergency Ride Home and paratransit that can provide transportation reliability that car-free commuters may need (for transit programs see T16). The existence of such programs should be widely advertised among campus affiliates. Access to these programs should be facilitated by SF State to improve access to and confidence in them.

SF State should work with other relevant agencies to understand what additional public services are offered to Bay Area citizens who do not drive, and determine how the University could facilitate affiliate enrollment.

		ACTIONS PER TIME FRAME					
		Short-term	Medium-term	Long-term			
Internal	•	Inform affiliates about available services.	No actions identified at this time.	No actions identified at this time.			
External	•	Coordinate with agencies about how SF State can streamline the process for affiliates to use the available services. Understand what services in the Bay Area support car-free commutes, and how SF State can facilitate the access to those services.	No actions identified at this time.	No actions identified at this time.			

METRICS	IMPACT LEVEL			
METRICS	Low	Medium	High	
Parking and drive alone reduction potential				
Environmentally sustainable				
Affordable capital/operational cost				
Cost-effectiveness				
Affordable for users				
Institutional feasibility				
Commuter experience				

- Parking & Transportation
- Human Resources
- SFMTA
- BART
- Other relevant public agencies







A11. Facilitate dynamic/on-demand rideshare

Action	Internal		External	
Time frame	Short-term	Medium-term		Long-term
User	Employees	Students		Residents











GOAL

Facilitate on-demand ridesharing.

Among commuters who currently drive alone to SF State but would be willing to shift to other modes, carpooling is the third-most popular alternative. In order to take advantage of this interest, carpooling access should be streamlined.

A big concern for automobile commuters is the ability to respond flexibly to personal and academic schedules, and on-demand services represent a good strategy to meet this need.

Services such as Scoop and Waze Carpool should be explored by SF State to facilitate rideshare. Use of these services can begin in a short time frame.

^{1 15%} of drive alone commuters reported they would shift from "drive alone" if there was a mobile app to match drivers and riders the night before or morning of their commute. Source: 2018 Transportation Survey.

	ACTIONS PER TIME FRAME						
	Short-term	Medium-term	Long-term				
Internal	Provide information about available on- demand carpooling services.	No actions identified at this time.	No actions identified at this time.				
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.				

METRICS	IMPACT LEVEL		
	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Human Resources







A12. Provide more dedicated spaces for carshare in conjunction with providers

Action	Internal			External
Time frame	Short-term	Medium-term		Long-term
User	Employees	Stud	ents	Residents











GOAL

Increase carshare availability to reduce automobile ownership and parking demand.

Carshare represents another flexible option for commuters who need to drive during the day. Beyond supporting on-campus residents, commuters may also find this alternative attractive, thereby reducing parking demand. Carshare offers the opportunity to drive when necessary, but to release commuters from the committed capital costs of car ownership, increasing the likelihood that they will opt for non-car commute modes when possible.

SF State should monitor carshare usage and consider the expansion of on-campus fleets if data indicates that carshare is reducing parking demand and not absorbing trips that could be made on transit or bicycle.

	ACTIONS PER TIME FRAME					
	Short-term	Medium-term	Long-term			
Internal	No actions identified at this time.	Increase carshare spaces and investigate if users are shifting from drive alone mode.	No actions identified at this time.			
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.			

METRICS	IMPACT LEVEL		
	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Housing, Dining & Conference Services







A13. Designate and enforce passenger loading locations

Action	Internal	Internal		External	
Time frame	Short-term	Medium-term		Long-term	
User	Employees	Students		Residents	











GOAL

Manage curbside usage to ensure pick-up and drop-off activities are not conflicting with other transportation modes.

demand for limited curb space, creating conflicts between passenger loading and pedestrians, bicyclists, and goods movement.

It is important to recognize that TNCs have been providing services to facilitate trips, including first-mile/last-mile during off-peak times. Many users leaving campus after 10pm use TNCs instead of driving or waiting for transit services. However, the need to prioritize walking, biking, and transit should be reflected across all transportation strategies.

Managing the use of curbspace is essential to ensure bicyclists and pedestrians circulate in a safe environment, transit operations are not impeded, and that safe passenger loading is available for those who need it. In the short term, SF State should designate areas for passenger loading, and work with TNC companies to geofence

Transportation Network Companies (TNCs) have been increasing these areas as the only available loading zones in their mobile applications.

> In the long term, a passenger loading area is proposed on Arellano Avenue in order to eliminate vehicle-bike conflicts along Holloway Avenue and Font Boulevard. Other streets should be considered if conflicts with bicycle facilities are identified during the design refinement process.

> Curbside demand should be evaluated as transportation technology evolves, especially as autonomous vehicles (AVs) are introduced. New facilities might be considered, such as converting a parking garage into a staging and passenger loading area for AVs. SF State should be careful to continue to dissuade unnecessary automobile trips, new technologies notwithstanding.

	ACTIONS PER TIME FRAME						
	Short-term	Medium-term	Long-term				
Internal	Designate locations for passenger loading that do not represent conflict with pedestrians, bicycles and transit.	No actions identified at this time.	 Consolidate passenger loading at Arellano Avenue. Do not allow passenger loading along bicycle corridors. Continue to prioritize biking, walking, and transit over automobile trips. Evaluate impacts of autonomous vehicles. 				
External	Work with providers of Transportation Network Companies (TNC) for geofencing.	No actions identified at this time.	No actions identified at this time.				

METRICS	IMPACT LEVEL		
METRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Capital Planning Design and
- SFMTA







S1. Establish/hire a full-time Transportation Demand Manager

Action	Internal			External
Time frame	Short-term Medium		m-term	Long-term
User	Employees	Stud	ents	Residents











GOAL

Create a position for a person who will coordinate transportation actions within SF State and with external public and private partners.

To achieve a successful TDM program it is necessary to create a position for Transportation Demand Manager, with dedicated time to:

- Facilitate collaboration and communication between departments to implement the TDM strategies through holding regularly scheduled Steering Committee meetings;
- Help implement, track and expand upon the transportation strategies listed in the TDM plan;
- Convene working groups or task forces to make progress on specific TDM measures.
- Monitor and evaluate progress of implementing the TDM strategies.
- Engage with public agencies and transit operators on transportation-related discussions; and

Develop partnership with outside entities.

The primary role of the Transportation Demand Manager will be to help coordinate the implementation of the TDM strategies, recognizing that implementation of the TDM strategies is a campuswide effort that requires the input and involvement of numerous departments and campus groups as well as outside entities.

	ACTIONS PER TIME FRAME					
	Short-term	Medium-term	Long-term			
Internal	 Create a position for Transportation Demand Manager. Establish a Steering Committee for implementing TDM strategies. Participate at relevant conversations with SFMTA and BART regarding to improvements that affect SF State commuters directly. 	 Develop working relationships with MTC and SamTrans. Develop partnerships with relevant stakeholders such as Parkmerced and Stonestown Galleria. Monitor and evaluate progress of TDM strategies. 	Represent SF State in the Transportation Management Association (TMA).			
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.			

METRICS	IMPACT LEVEL		
	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Capital Planning Design and Construction
- Parking & Transportation







S2. Establish a Transportation Management Association (TMA) with local stakeholders (i.e., Parkmerced and Stonestown)

Action	Internal		External
Time frame	Short-term	Medium-term	Long-term
User	Employees	Students	Residents











GOAL

Establish a partnership with neighboring groups to implement joint transportation services and plan for better transportation in the area.

Transportation Management Associations (TMAs) enable entities in a similar location to leverage resources to achieve transportation improvements that would otherwise be too costly to implement.

Some actions to be considered as a TMA can include:

- Provide a last-mile shuttle service to connect the Balboa Park BART station and/or the Daly City BART station to the campus and surrounding areas;
- Provide an internal shuttle route to connect SF State, Parkmerced and Stonestown Galleria;
- Provide a joint carshare and carpool program;

- Plan for seamless bicycle connections and wayfinding throughout the area;
- Discuss transit improvements desired in the area and communicate these to SFMTA through a unified approach;
- Develop a shared parking agreement;
- Consolidate passenger loading locations and provide a coordinated curb management approach.

	ACTIONS PER TIME FRAME					
	Short-term	Medium-term	Long-term			
Internal	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.			
External	No actions identified at this time.	Establish a TMA with Parkmerced, Stonestown Galleria and other entities that might be interested.	No actions identified at this time.			

METRICS	IMPACT LEVEL			
METRICS	Low	Medium	High	
Parking and drive alone reduction potential				
Environmentally sustainable				
Affordable capital/operational cost				
Cost-effectiveness				
Affordable for users				
Institutional feasibility				
Commuter experience				

- Parking & Transportation
- Capital Planning Design and Construction
- SF State communications (?)
- Parkmerced
- Stonestown Galleria







S3. Provide support to employees to commute outside of the peak hour, including negotiating transit benefits in lieu of parking permits

Action	Internal	ernal		External
Time frame	Short-term	Medium-term		Long-term
User	Employees	Stuc		Residents











GOAL

Make commuting by transit a more viable alternative for faculty and staff by allowing flexibility in work schedules and providing incentives to take transit.

There are several benefits that SF State can provide employees to encourage commuting by transit. Allowing flexible work schedules or telecommuting can help reduce driving and may allow some to consider transit as an option for commuting.

As reported in the 2018 Transportation Survey, many people are moving further from San Francisco, which means commute times are longer. Some respondents of the latest survey reported that they would be willing to take transit if they could make the most out of their time on campus, such as using the gym. SF State could explore the possibility of offering a discounted or free gym membership or other incentives to staff and faculty in exchange of a parking permit.

	ACTIONS PER TIME FRAME						
	Short-term	Medium-term	Long-term				
Internal	Offer discounted or free access to Mashouf Wellness Center instead of a parking permit.	Work with HR to establish policy for flexible work schedules.	No actions identified at this time.				
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.				

METRICS	IMPACT LEVEL		
IVIETRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Human Resources
- Union representatives







S4. Provide more on-campus housing

Action	Internal			External
Time frame	Short-term	Medium-term		Long-term
User	Employees	Students		Residents











GOAL

Increase on-campus population to reduce the need for commuting.

The most effective measure to reduce transportation impacts and increase number of students in SF State is to provide more oncampus housing since it eliminates the need for those students to commute to campus.

The Future State 2035 plan increases the number of on-campus housing for students, faculty, and staff. In coordination with increasing on-campus housing, the plan includes policies to restrict parking to current levels (A1).

For more information about on-campus housing, refer to Future State 2035.

	ACTIONS PER TIME FRAME						
	Short-term Short-term	Medium-term	Long-term				
Internal	Construciton of housing units.	Construciton of housing units.	 Increase the number of student beds for freshmen and sophomore. Increase on-campus housing for staff and faculty. Create incentives to reduce vehicle ownership. 				
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.				

METRICS	IMPACT LEVEL		
METRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Capital Planning Design and Construction
- Housing, Dining & Conference Services
- Residential Life
- Student Affairs and Enrollment
- Management







S5. Explore master lease housing in areas well-served by transit

Action	Internal		External	
Time frame	Short-term	Medium-term		Long-term
User	Employees	Students		Residents











GOAL

Create strategies to increase student density in areas well-served by transit.

The housing affordability crisis in the San Francisco Bay Area directly affects affiliates of SF State. The University is one of the primary regional higher education options for low-income individuals. Consequently, supportive actions are required to ensure continued equitable access to the University.

Constraints in funding may not allow for building the preferred number of on-campus housing units; alternatives should be explored.

Private developers have been considering construction of student housing in areas well-served by transit, particularly in San Francisco. SF State should partner with interested developers to construct near- or on-campus housing. An increase in local housing stock can

help reduce commute times of SF State students, increase Gator Pass usage, and lower overall transportation costs.

Other partnerships should also be considered, including considering provision for student housing in Parkmerced.

	ACTIONS PER TIME FRAME							
	Short-term	Medium-term	Long-term					
Internal	Partner with developers that are building student-appropriate units near transit facilities.	No actions identified at this time.	No actions identified at this time.					
External	No actions identified at this time.	 Look for more developers interested in building student-appropriate near transit. Discuss with SFMTA, BART, Caltrain and MTC about future transit-oriented developments (TOD) projects. Discuss with Parkmerced about providing students beds in future phases of the project. 	No actions identified at this time.					

METRICS	IMPACT LEVEL		
METRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Capital Planning Design and Construction
- Housing, Dining & Conference Services
- Residential Life
- Student Affairs and Enrollment
- Management







S6. Introduce more amenities on campus

Action	Internal			External
Time frame	Short-term	Medium-term		Long-term
User	Employees	Students		Residents











GOAL

Implement more supportive land uses that will eliminate trips outside of or far from on-campus housing.

be easier for on-campus residents to make via car. SF State can support alternative transportation modes by incorporating land uses that serve these non-work, non-school trip functions.

Short-term measures can be discussed with Housing and Student Life departments to identify whether there are current land-use needs the University can support immediately. Additional measures may include exploring discounted delivery systems of major retailers to serve on-campus residents with fewer overall automobile trips.

In the longer term, the Future State 2035 Master Plan should include a retail study to identify and incorporate land uses to support on-campus residents. Such uses may include grocery stores, pharmacies, and dry cleaning or laundry services.

Non-commute trips (e.g., grocery shopping or other errands) may As applications of new technology for logistics and goods delivery continue to change, they should be evaluated as alternatives to off-campus trips.

		ACTIONS PER TIME FRAME				
	Short-term	Medium-term	Long-term			
canotal	Work with Housing and Student Life departments to Identify if there are key land uses that are generating trips and could be incorporated to campus in the short term to discourage residents to drive.	No actions identified at this time.	Implement land uses that support on- campus residents for daily needs.			
	Identify if SF State could partner with retailers to provide delivery at low or reduced costs.	No actions identified at this time.	Explore delivery systems from big retailers			

METRICS		IMPACT LEVEL		
IVIETRICS	Low	Medium	High	
Parking and drive alone reduction potential				
Environmentally sustainable				
Affordable capital/operational cost				
Cost-effectiveness				
Affordable for users				
Institutional feasibility				
Commuter experience				

- Capital Planning Design and Construction
- Housing, Dining & Conference Services
- Student Life







S7. Implement face-to-face engagement strategy for marketing transportation alternatives

Action	Internal			External
Time frame	Short-term	Medium-term		Long-term
User	Employees	Stud	lents	Residents











GOAL

Effective outreach to raise awareness about transportation options and encourage people to make sustainable, informed choices.

if SF State affiliates are aware of available services, benefits, and alternatives. At present, given the opacity of alternative transportation information, affiliates may not be making the most efficient transportation choices for their needs.

Communicating consistent transportation information is challenging: affiliates have several sources and may not know where to direct their questions. The number of departments adds complexity to communication within SF State. Such communication difficulties can be better managed through a Transportation Demand Manager. Feedback from some departments at SF State reported that face-to-face interactions are most effective, and that e-mails and marketing materials are often overwhelming (especially for new affiliates).

A comprehensive transportation program will only be effective Short-term measures can be taken by engaging at events such as residential meetings, GatorFest, and the Benefits Fair. Group engagement should also be promoted, such as group rides on Muni and BART, during Transit Week, and on Bike to Campus Day (instead of Bike to Work Day).

> An international trend in city planning is to implement pilot projects as community outreach and eduction. These temporary projects allow people to experience an event or design modification in real time, prior to final capital expenditure.

> SF State should explore pilot projects to educate people about alternative transportation modes and supportive programs. Such events also offer the opportunity for SF State to accept feedback on physical changes around campus.

	ACTIONS PER TIME FRAME					
	Short-term Short-term	Medium-term	Long-term			
Internal	 Engage in face-to-face events, including those during welcome week. Gator Pass ambassadors to inform students about the extent of this benefit, paid for by students. Signage inside the SF State shuttle providing transportation-related information. 	Run pilot projects to test acceptability of new projects and engage people to try new transportation modes.	No actions identified at this time.			
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.			

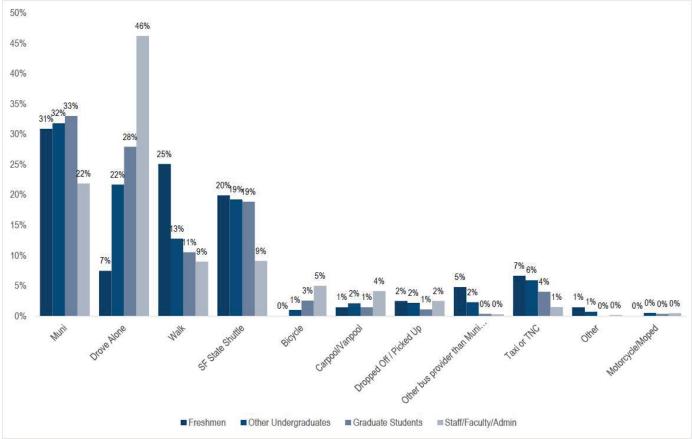
METRICS	IMPACT LEVEL		
WETRICS	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Capital Planning Design and Construction
- Student Life
- Housing, Dining & Conference Services
- **Associated Students**





2018 TRANSPORTATION SURVEY: ARRIVAL MODE BY AFFILIATION



Source: 2018 Transportation Survey.

S8. Mobility app

Action	Internal		External	
Time frame	Short-term	Medium-term		Long-term
User	Employees	Stud	ents	Residents











GOAL

Use technology to inform, facilitate and create input for transportation improvements.

Transportation information and services should be consolidated into a single app, with an improved user experience interface. The app should meet the following criteria:

- Information of available programs in a more intuitive or userfriendly approach, including eligibility criteria and process for enrolling in the program;
- Combined real-time transit information (SF State Shuttle, Muni, BART, and SamTrans);
- Real-time alerts about transit or traffic delays;
- Availability of bicycles at bikeshare stations;
- Available bicycle lockers or racks in major bicycle parking structures;
- On-demand/dynamic carpool matching tool;
- Available vehicles for carshare;

- Alerts for events or campaigns that promote specific programs with low enrollment, in order to raise awareness and help marketing these programs;
- Transportation gamification, allowing affiliates to track their own points awarded by making better commute choices and compete with other affiliates for monthly prizes;
- Consider including user reporting or optional GPS tracking to identify mode and other commute data. In order to encourage people to allow GPS tracking, this functionality can be mandatory for running for prizes or gamification programs.

It is important to make the interface attractive to affiliates in order to get commuters more involved in and proactive about their transportation choices, as well as to raise awareness about the University's transportation initiatives. SF State should partner with the IT and Computer Science departments and consider working with a TDM software specialist to improve the existing app.

	ACTIONS PER TIME FRAME					
	Short-term	Medium-term	Long-term			
Internal	No actions identified at this time.	Partner with IT and Computer Science department to upgrade the mobility app and software platform to better manage the TDM programs or partner with incubators or startups to provide it.	No actions identified at this time.			
External	No actions identified at this time.	No actions identified at this time.	No actions identified at this time.			

METRICS	IMPACT LEVEL			
IVIETRICS	Low	Medium	High	
Parking and drive alone reduction potential				
Environmentally sustainable				
Affordable capital/operational cost				
Cost-effectiveness				
Affordable for users				
Institutional feasibility				
Commuter experience				

- Parking & Transportation
- Information Technology Services





S9. Gamification: offer rewards to transit/bicycle users

Action	Internal		External	
Time frame	Short-term	Medium-term		Long-term
User	Employees	Stud	ents	Residents











GOAL

Create incentives for people to make better and sustainable commute choices.

Offering rewards that encourage people to try traveling differently may help change commuter behavior and create modal shifts.

Gamification (earning points through certain behaviors and collecting rewards) can be a strategy to increase non-automobile mode share or shift behavior (e.g., increasing transit capacity by riding outside the peak hour).

Rewards offered need not be in cash, and may include benefits such as a free semester pass at a gym, or gift cards.

	ACTIONS PER TIME FRAME				
	Short-term	Medium-term	Long-term		
Internal	 Contests and prizes at Bike to Campus Day or other events. Partner with San Francisco Transit Riders to promote an SF State Transit Week. 	Offer prizes to top transit riders or top bicycle riders	No actions identified at this time.		
External	No actions identified at this time.	Partner with on-campus departments or start-ups for gamification and application ideas	No actions identified at this time.		

METRICS	IMPACT LEVEL		
	Low	Medium	High
Parking and drive alone reduction potential			
Environmentally sustainable			
Affordable capital/operational cost			
Cost-effectiveness			
Affordable for users			
Institutional feasibility			
Commuter experience			

- Parking & Transportation
- Bike Coalition
- SF Transit Riders





