

Transportation Demand Management Implementation Plan

Prepared for:
California State University East Bay

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Introduction

The *California State University East Bay Hayward Campus Master Plan* (2009, adopted 2018) outlines a vision for the future development and accommodation of projected enrollment growth for the Hayward Hills campus of CSU East Bay. The associated Environmental Impact Report (EIR) identified several transportation impact CEQA mitigation measures with the goal of alleviating potential significant impacts to the transportation system.

Mitigation Measure TRANS-1 of the EIR requires the preparation of a comprehensive Transportation Demand Management (TDM) Implementation Plan for the Hayward Hills campus. The plan was directed to include strategies to encourage the use of non-automobile modes to access campus as growth and buildout occur. Periodic monitoring of the effectiveness of the TDM strategies (as well as other transportation characteristics for the campus) is also required to ascertain if the campus is in compliance with the vehicle trip reductions envisioned as part of the transportation mitigation measures in the EIR. Non-compliance with the vehicle trip reductions must be remedied through the provision of additional TDM strategies or the construction of off-campus transportation improvements to alleviate increases in off-campus traffic congestion.

The following monitoring and reporting actions were identified as part of the mitigation measure:

1. Prepare the Alternative Mode and Parking Planning Study (completed in January of 2020)
2. Prepare the TDM Implementation Plan (within one year of completion of Item 1)
3. Implement TDM Plan programs (throughout the life of the Master Plan)
4. Conduct monitoring of TDM program participation and alternative mode use (periodically, at least every three years, with the baseline monitoring occurring within one year of Master Plan adoption)
5. Conduct daily and peak hour traffic counts at the campus gateway intersections (periodically, at least every three years, to be conducted at the same time as the monitoring in Item 4)

Since the adoption of the EIR, the campus has implemented many of the TDM strategies outlined in the mitigation measure. Building upon that work, this report represents the TDM Implementation Plan and provides an outline of the monitoring requirements for future years.

Implementation Plan

As documented in the Alternative Mode and Parking Planning Study (AMPPS), CSU East Bay has already made significant investments in TDM strategies in anticipation of this report and the adoption of the Campus Master Plan. Ten priority strategies have been identified for implementation by the campus.

1. Enhanced AC Transit Service
2. Discounted or free transit passes (including BART)
3. Campus shuttle service
4. Carpool matching service
5. Vanpool incentive program
6. Preferential parking program
7. Adjust parking pricing
8. Guaranteed Ride Home program
9. Carpool incentives program
10. TDM program marketing
11. Telecommuting and Alternative Work Schedules

Priority TDM Strategies

This section presents detailed descriptions of the ten priority strategies including the following information:

- Description of the measure
- Responsible party or parties
- Timing of the measure: short-term (can be implemented within two years) or long-term (implemented beyond 2 years)
- Effectiveness in reducing vehicle trips to campus (as measured by associated reductions in vehicle miles traveled)
- Caveats or limitations (such as administrative issues, financial constraints, or infrastructure/bureaucratic challenges)
- Costs and co-benefits, where applicable (e.g. increased productivity, reduction in turnover, reduced tardiness)

1. Enhanced AC Transit Service

Description

This strategy seeks to increase service frequency on AC Transit Route 60. Route 60 provides service from Chabot College to CSU East Bay. The route runs three buses each hour, every 17-20 minutes, from 6:00 AM to 12:00 AM on Monday through Friday. Reducing weekday headways to 15 minutes would increase frequency on Route 60 by adding one additional bus per hour. Increasing frequency may capture more trips to campus that originate within the City of Hayward, better align student schedules with transit options, improve first- and last-mile connectivity from/to BART, and encourage transit use for students enrolled in classes at both CSU East Bay and Chabot College.

Responsible Parties

- AC Transit
- CSU East Bay

Timing of Measure

Increasing frequency on Route 60 would be a long-term strategy. Reducing headways on the route is not currently included in AC Transit's short-term service plan.

Effectiveness of Measure

Increasing frequency on Route 60 may result in a 0.3% to 6.3% reduction in VMT for CSU East Bay. Higher reductions are typically achieved through a combination of fare reduction strategies and infrastructure improvements that increase service speed.

Limitations

This strategy has a handful of potential limitations. First, CSU East Bay does not have authority over AC Transit Service. AC Transit operates 155 bus lines throughout the East Bay with a limited budget and improvement needs across the system. A strong working relationship between the University and AC Transit would be critical to improve frequency on Route 60.

Second, it may require the University paying a significant cost associated with running one additional bus per hour, such as the fuel and labor costs.

Reducing headways and increasing frequency may not necessarily improve speeds and reliability. On-time performance on Route 60 is likely impacted by heavy congestion on Second Street and B Street, particularly during pick-up and drop-off times at nearby schools, along the route during peak commute periods. Even by increasing frequencies, the buses may be delayed arriving at the BART station and the CSU East Bay campus. Improving speeds on Route 60 may require infrastructure improvements, such as "bulb-outs" at bus stops to expedite boarding and alighting, queue jump lanes, and transit priority signals. These improvements would generate significant fiscal costs for CSU East Bay, AC Transit, and the City of Hayward. Since CSU East Bay does not operate the AC Transit buses or own the infrastructure the buses

operate on, the involvement of two large bureaucracies with their own priorities is required for implementation. CSU East Bay staff will need to consider how much AC Transit and the City of Hayward may wish to prioritize improving transit speed and access to the campus, and, how hard they are willing to push to make that a priority for these agencies.

Costs and Co-Benefits

Studies¹ indicate that transit use is correlated to a healthier lifestyle with a lower mortality rate, a happier disposition, and more productivity at work. Conversely, if buses are delayed or slowed by congestion, then transit use is associated with an increase in stress and tardiness, which lowers productivity. Increased transit options may result in a better opportunity for students to use transit while aligning lifestyle and work commitments with class schedules

2. Discounted or Free Transit Passes

Description

Improving transit frequency, speed, and reliability is most effective in reducing VMT when accompanied with transit fare reduction strategies. One such fare reduction strategy is providing discounted or free AC Transit and BART passes to employees and students. The AMPP suggests providing a 25% transit discount to employees and students. Several universities within the CSU system, including San Francisco State University², San Diego State University³, and San Jose State University⁴, offer subsidized transit passes.

CSU East Bay can model their program after San Francisco State University's OneCard. OneCard is SFSU's student ID card and functions as a Clipper Card. For \$180 per semester, students can use their OneCard to receive a 50% discount to and from the Daly City BART station and unlimited rides on SF MUNI. The 50% BART discount is delivered through BART's Higher Education Discount Program⁵ (HEDP). The HEDP partners BART with local universities to provide discounted rides for college students. The University covers the difference between regular fares and the discounted fares. SFSU's 50% BART discount for students is funded by student fees and the San Francisco County Transportation Authority's Transportation Fund for Clean Air grant program.

¹ See health benefits of riding public transit at <https://www.vtpi.org/tranben.pdf>

² For information on SFSU's OneCard, visit <https://onecard.sfsu.edu/OneCardFAQ#gatorpass-faq-1>

³ For information on SDSU's discounted transit passes, visit <https://www.sdmts.com/fares-passes-pass-programs/college-passes>

⁴ For more information on SJSU's SmartPass, visit <https://www.sjsu.edu/as/departments/transportation-solutions/smartpass-overview/index.php>

⁵ For more information on BART's HEDP, visit <https://www.bart.gov/sites/default/files/docs/2019%20BART%20Higher%20Education%20Fare%20Discount%20Program%20Description.pdf>

Responsible Parties

- CSU East Bay
- BART
- AC Transit

Timing of Measure

As this strategy does not seek to alter transit service, it can be implemented in the short-term. However, securing funding may require a longer-term period for implementation.

Effectiveness of Measure

Providing discounted or free transit passes may reduce VMT by 0.3% to 14%. Free transit passes achieve higher VMT reductions. High-end reductions can be achieved when pairing this strategy with long-term transit service improvements.

Limitations

The University has two options for delivering discounted or free transit passes to employees and students. The first option is directly subsidizing transit costs for employees and students. This strategy is the most effective, efficient, and costly way of providing discounted or free transit passes. The financial cost of direct subsidies can be offset by using parking revenues to pay for transit subsidies or assessing a transit fee to employees and students each semester. This option would require action on behalf of the student governing body, which would need to vote in favor of any potential fee increase. The second option is brokering a transit discount for employees and students with AC Transit and BART. This option would result in the University incurring some administrative costs and may require negotiations with transit agencies.

3. Campus Shuttle Service

Description

The University provides complimentary shuttle service between CSU East Bay and the Hayward and Castro Valley BART Stations. The shuttle runs seven-days a week from the Hayward BART station, operating with 10-20-minute headways during peak hours. Operating hours vary depending on the day of the week, with late-night service provided Thursday through Saturday. The shuttle to the Castro Valley BART station runs Monday through Friday, with 40-minute headways. To improve this program, the University may consider increasing the Hayward shuttle frequency to 15-minute headways to ensure the shuttle is consistently capturing the four BART lines stopping at the Hayward Station. Another long-term option would be to add an additional shuttle service along Mission Boulevard, with stops at key locations, to provide greater connectivity between the Campus and Downtown. With several multi-family housing developments planned along the Mission Boulevard corridor and the transformation of the corridor into a mixed-use,

mixed-income corridor, offering a shuttle service on the corridor may encourage students, faculty, and staff to live closer to campus.

Responsible Parties

- CSU East Bay
- City of Hayward, if additional stops are required

Timing of Measure

CSU East Bay has recently made substantial changes to improve the quality and reliability of the shuttle service provided to students. Further changes may be a more long-term measure at this time.

Effectiveness of Measure

Providing shuttle service to BART helps achieve a potential VMT reduction of up-to 11%. The high-end reduction would be achieved through an associated increase in BART ridership among faculty, staff, and students. Therefore, while highly effective as a standalone service, the shuttle can become a more effective VMT reduction strategy when paired with discounted or free transit passes.

Cost and Co-benefits

Increasing the frequency and routes offered by the shuttle service would result in increased costs to the University. However, grant funding to implement or expand shuttle services are available and identified in the funding section. A co-benefit of the shuttle program is that it would complement discounted or free BART rides for students, staff, and faculty. The campus' shuttle service provides a vital first-and last-mile for BART commuters.

4. Carpool Matching Service

Description

A carpool matching program connects commuters with trips originating from the same general area. Carpooling offers users the efficiency of carpool lanes, free travel in express lanes, and shared commute costs. CSU East Bay currently offers a carpooling program for students, staff, and faculty through Waze and the Bay Area Carpool Program. Both programs allow users to indicate whether they are interested in being a driver or passenger, input their home location and schedule, and the apps connect drivers and passengers based on route and schedule. Users are also able to filter their rideshare matches based on gender and co-workers/classmates.

Responsible Parties

- CSU East Bay

Timing of Measure

Implementing a carpool matching service would be a short-term strategy and would build upon the University's current investments in the Waze Carpool program.

Effectiveness of Measure

A carpool matching program could decrease VMT by 2.5% to 8.3%. Carpooling achieves a higher VMT reduction when incentivized with designated parking spaces and a website or app.

Limitations

Carpoolers seek a consistent group to carpool with. Since student schedules change frequently, maintaining consistency among carpoolers is challenging. An app-based service such as Waze can accommodate to changing and inconsistent schedules by continually matching drivers and passengers along the same route. However, Waze recommends that passengers book their rides in advance to guarantee a ride. Therefore, carpooling may not be the best option to serve on-demand trips to campus. Instead, carpooling may be more effectively marketed to faculty and staff, who are less likely to experience frequent schedule changes.

Costs and Co-Benefits

Reduced congestion and improved air quality are two key benefits of carpooling on a collective scale. Although research is limited, anecdotal evidence suggests that employees who carpool may enjoy reduced commute stress associated with driving and increased convenience associated with high occupancy vehicle (HOV) lane time savings and preferential parking at their destination⁶. Another possible co-benefit of carpooling is community-building. Carpool passengers and riders could develop a sense of community riding to campus each day. Both benefits have the potential to boost morale and increase overall satisfaction and productivity. Carpool program participants also experience reduced out of pocket commute expenses by sharing the cost burden of fuel and vehicle maintenance.

5. Vanpool Incentive Program

Description

Vanpooling is a campus-owned or leased rideshare program that can seat up to 15 passengers in a single vehicle. Vanpooling is most effective for commuters traveling 10 miles or longer to the same destination, serving large employers (i.e. college campuses), and regions with congested freeways and rising housing costs. CSU East Bay currently offers four Vanpools for faculty and staff departing from Modesto, Manteca, Tracy, and Fairfield. Each Vanpool drops passengers off on campus between 7:00 AM and 8:00 AM and departs campus between 2:30 PM and 5:00 PM.

⁶ For benefits of carpooling see <https://escholarship.org/content/qt7jx6z631/qt7jx6z631.pdf?t=ph07of>

CSU East Bay can expand their Vanpool Program to students, as several universities already do. For example, UCLA offers 140 commuter vanpools from 80 Southern California communities daily. UCLA vanpool riders pay a monthly fare, which is subsidized up to 50% by UCLA's transportation department. CSU East Bay can collect and monitor data from their Waze carpool partnerships to identify hotspot locations with a high volume of students carpooling to campus. The University can deploy Vanpools to these locations to reduce the number of vehicle trips to campus.

Responsible Parties

- CSU East Bay

Timing of Measure

Implementing a vanpooling program would be a short-term strategy.

Effectiveness of Measure

A vanpool program may reduce VMT by 0.5% to 7.4%. High-end reduction is achieved through a campus-provided vanpool program accompanied by an incentive, such as subsidizing costs and preferential parking.

Limitations

Vanpool programs often struggle with finding vanpool riders. Since vanpools can seat 7-15 passengers, finding 7-15 passengers within the same general vicinity and same commute times or classroom schedules can be challenging. This can be exacerbated by the frequency with which student class and work schedules change. Issues associated with vehicle ownership, expense recovery and liability issues may prove to be challenging for the University to operate; however, this could be addressed by working with vanpool service providers. An additional app or website may be required to implement a large-scale vanpool program, as Waze does not currently offer a vanpool matching service, and service providers may only offer limited app or website functionality, if any.

Costs and Co-Benefits

The co-benefits of vanpooling are similar to carpooling, such as improved air quality, reduced travel times, HOV lane utilization, and community-building. These benefits may result in an increase of overall satisfaction and productivity.

6. Preferential Parking Program

Description

The VMT reductions of carpooling and vanpooling are maximized by a preferential parking program. Preferential parking includes any dedicated parking space allotted to vehicles used for carpooling and

vanpooling. Most often, preferential parking is in premium locations close to the workplace entrance, under shelter from inclement weather. The University currently offers 25 carpool or vanpool parking spaces, with five spaces in Lot A, and 10 spaces each in Lots G and H. The location of these lots is ideal considering their proximity to key buildings on campus. As the University seeks to expand the campus carpooling and vanpooling program, increasing the number of spaces in these parking lots will be imperative.

Responsible Parties

- CSU East Bay

Timing of Measure

Implementing a preferential parking program would be a short-term strategy.

Effectiveness of Measure

This strategy is minimally effective as a stand-alone strategy. When implemented with carpooling and vanpooling, a preferential parking program helps achieve high-end VMT reduction for those programs.

Limitations

By offering more spaces for carpools and vanpools, the University is likely taking spaces away from single-occupancy vehicles. This loss in spaces may be offset by more students, faculty, and staff choosing to carpool and vanpool. However, finding a parking space may be more difficult. If drivers cannot find a parking space, they are more likely to “cruise” around until they do find a parking space which increases greenhouse gas emissions and vehicle miles traveled, or could result in increased offsite parking in adjacent neighborhoods. The time someone may spend looking for a parking space may result in tardiness.

7. Adjust Parking Pricing

Description

Adjusting parking pricing to reflect the market rate of using other transportation modes can result in increased attractiveness of using alternative modes to access campus. In planning for future permit price changes, CSU East Bay should aim to modify parking pricing to a level that is even with or slightly exceeds the cost of commuting by AC Transit bus, campus shuttle and/or BART. This should be done to the extent feasible within the context of CSU collective bargaining agreements and equity for students.

Responsible Parties

- CSU East Bay

Timing of Measure

Adjusting parking pricing would be a short-term and long-term measure, depending on when the University plans on restructuring the parking permit program. This strategy would also need to be implemented with strategies providing alternative options to access campus, such as improved transit service, discounted or free transit passes, and carpooling/vanpooling.

Effectiveness of Measure

Parking pricing is an effective lever in encouraging a mode shift from driving alone by increasing the overall cost of driving. This strategy helps achieve high-end overall VMT reductions when coupled with improved transit service, discounted or free transit passes, carpooling/vanpooling programs, and services such as the existing free shuttle.

Limitations

Adjusting parking pricing may place a significant financial burden on students, faculty, and staff if implemented alone. This strategy is especially burdensome to lower-income campus stakeholders, such as students and service staff, who may not have the means to cover an increase in parking costs. The CSU East Bay main campus is located on top of a hill with limited affordable housing nearby. Given the dispersed nature of trip origins to campus, campus stakeholders are likely to access campus via a single occupancy vehicle. If parking costs increase without any other transportation alternative, this may affect future enrollment. Due to these considerations, an equity component should be considered as part of future adjustments to parking pricing.

The University can mitigate the burden of increased costs of parking for single-occupancy vehicles by offering more free parking spaces for students, faculty, and staff who choose to carpool or vanpool to campus. To prevent abuse of the carpool program, carpool spaces would only be available to carpools using Waze or the Bay Area Carpool Program. Carpool drivers enrolled in one of the two programs would receive a special carpool parking permit permitting them to park in carpool spaces. The University can monitor the carpool data to ensure that drivers attempted to pick passengers up along the way, instead of just enrolling in the carpool program for the free parking. Violators would have their carpool permit revoked.

Costs and Co-Benefits

A cost of adjusting parking pricing is the potential loss in parking revenue. Over 88% of parking revenue collected by the California State University system is generated from students. If fewer students drive alone to campus, this may impact the University's ability to operate parking on campus. However, increasing parking fees may be able to offset the potential loss in parking demand. A co-benefit of adjusting parking pricing is the generation of parking revenue to cover parking operating costs and potentially funding alternative commute strategies, such as discounted or free transit passes.

8. Guaranteed Ride Home

Description

A Guaranteed Ride Home program provides “commuter insurance” for individuals biking, walking, riding transit, or using a carpool, vanpool, or pooled rideshare to campus. In the event of an emergency or a qualified unexpected circumstance that disrupts the ability to use an alternative commute to get home, a Guaranteed Ride Home program offers the assurance of a trip home. An emergency or disruption can include a natural disaster, family/personal emergency, transit breakdowns, unexpected overtime, or late nights on campus. In this event, a commuter can take a rideshare home and be reimbursed for the cost of the ride. This program alleviates the fear of using a fixed-schedule, alternative commute mode to access campus. CSU East Bay currently participates in the Alameda County and Contra Costa County Guaranteed Ride Home programs, which are offered to faculty and staff. The University should consider offering a Guaranteed Ride Home to students who use an alternative mode of transportation to access campus. This could be done either through a cooperative expansion of the existing programs with the implementing agencies, or by the creation of a campus-specific program administered by the University. Such a program could be set up to utilize ride-hailing apps such as Uber or Lyft for maximum user flexibility. Offering a Guaranteed Ride Home to students may offer a peace of mind in the event of an unforeseen situation and encourage using an alternative mode to access campus.

Responsible Parties

- CSU East Bay
- Alameda County Transportation Commission

Timing of Measure

Implementing a Guaranteed Ride Home program custom to the campus would be a long-term strategy. Continued refinement of the existing Alameda County and Contra Costa County Guaranteed Ride Home programs would be a short-term approach.

Effectiveness of Measure

This strategy is minimally effective as a stand-alone strategy. However, offering this program may result in a higher transit or carpool/vanpool use. This strategy coupled with improved transit service, discounted or free transit passes, and/or carpooling/vanpooling can help achieve the high-end VMT reduction for those strategies.

Limitations

The University is currently limited to Alameda County’s Guaranteed Ride Home program. While several counties offer a Guaranteed Ride Home for students, Alameda County’s program currently does not offer a free benefit for students. To expand this program to students, the University would need to explore the opportunity of expanding the Alameda County program, or administer their own program, which could incur significant administrative costs.

Costs and Co-Benefits

As mentioned above, a Guaranteed Ride Home program offers peace of mind for users who may otherwise hesitate to use an alternate mode of travel.

9. Carpool Incentives Program

Description

Incentives involve offering a benefit of some kind to encourage a shift from driving alone to carpooling. Strategies to incentivize carpooling include:

- Offering reduced price parking permits for carpools
- Designation preferential parking spaces in desirable locations
- Reward programs, such as regular prize drawings, or points-based programs where participants can earn credits redeemable towards rewards based on the number of carpool trips completed
- Subsidizing a portion of cost of carpooling to campus
- A Guaranteed Ride Home program

For their new carpool program offered by Waze, CSU East Bay offered commuters a \$2 discount per ride, driver bonuses, and a \$20 sign-up bonus after completing their first carpool ride to campus. This incentive was offered between January and March of 2020. The University may consider offering a similar incentive at the start of each semester to encourage more students, faculty, and staff to carpool to campus.

Responsible Parties

- CSU East Bay

Timing of Measure

Incentivizing carpooling is a short-term measure.

Effectiveness of Measure

This strategy helps achieve high-end VMT reductions for carpooling.

10. TDM Program Marketing

Description

TDM Program Marketing involves determining consumer needs and preferences, creating appropriate products, providing useful information about programs, and promoting their use. Public knowledge and

attitudes have a major effect on travel behavior. CSU East Bay can market TDM programs in the following ways:

- Providing information on the campus website
- Assembling a Multi-Modal Access Guide for new students and employees
- Discussing alternative commute options during new student and employee orientations
- Improving wayfinding to transit stops, passenger loading/unloading zones, and bicycle or pedestrian infrastructure
- Offer prizes for students, faculty, and staff using an alternative mode to access campus
- Support or create annual events which may encourage a mode shift, such as Bike to School/Work campaigns, Rideshare Week, or sponsoring a free week of transit.
- Support programs that can facilitate first-mile and last-mile travel, such as the proposed expansion of the campus bikeshare program (including e-bikes)

Responsible Parties

- CSU East Bay

Timing of Measure

Marketing TDM programs would be a short-term strategy and build upon the University's existing marketing efforts.

Effectiveness of Measure

Marketing TDM programs can reduce VMT by 1% to 26%. High-end VMT reduction is achieved when attractive TDM programs are being marketed, such as discounted or free transit, improved transit service, or a shuttle program.

11. Telecommuting and Alternative Work Schedules

Description

Telecommuting and alternative work schedules reduces the number of trips made to work by employees by allowing and accommodating remote work and varied schedules. Alternative work schedules can take the form of staggered starting times, compressed work weeks, or flexible schedules. This measure proposes that CSU East Bay evaluate the feasibility of remote work options for staff at varying levels of responsibility and establish a program to allow for remote work or an alternative schedule for appropriate staff and faculty.

Responsible Parties

CSU East Bay

Timing of Measure

While typically this would require a long-term shift in campus operations, ongoing remote work required in response to Bay Area COVID-19 Shelter-in-Place orders has shown that many campus employees can work successfully from remote locations. This can therefore be a short-term measure, that involves formalizing and supporting these work arrangements.

Effectiveness of Measure

Encouraging telecommuting and alternative work schedules for employees can result in a 0.07 to 5.50% reduction in VMT.

Limitations

Some staff positions may require them to be on campus. The University will need to undertake a realistic assessment of which positions can and or should remain on campus in order to provide support for campus operations, safety, and operational service. This will likely require the involvement of the human resources department to communicate any changes to campus policy. Employees may not have adequate technology, equipment, or reliable internet access to facilitate remote work – in which case, the University may wish to consider providing those resources directly to employees or reimbursing them for related work from home expenses.

Costs and Co-Benefits

Telecommuting and alternative work schedules offer employees a high degree of flexibility in balancing work and home life, reduces the costs associated with commuting, and may lead to increased productivity. Costs to the university may be associated with the purchase of equipment to support remote work, as well as a potential for slightly parking revenues if fewer staff members are traveling to campus.

While this measure is specifically targeted at faculty and staff, reductions in VMT and other associated benefits can also be realized by implementing remote learning opportunities for students, and should be considered as appropriate.

Table of TDM Strategies

Strategy	Description	Responsible Parties	Timing of Measure	Effectiveness (% VMT Reduction)
Enhanced AC Transit Service	Increase service frequency of AC Transit Route 60	AC Transit CSU East Bay	Long-term	0.3% to 6.3%
Discounted or Free Transit Passes	Provide free or reduced price transit passes to students and staff	CSU East Bay AC Transit BART	Mid-term	0.3% to 14%
Campus Shuttle Service	Enhance the existing campus shuttle service	CSU East Bay City of Hayward	Long-term	2% to 11%
Carpool Matching Program	Offer programs to match students and staff with carpool partners	CSU East Bay	Short-term	2.5% to 8.3%
Vanpool Incentive Program	Expand the campus vanpool program to additional student and staff on campus	CSU East Bay	Short-term	0.5% to 7.4%
Preferential Parking Program	Increase the parking dedicated to carpools and vanpools	CSU East Bay	Short-term	N/A
Adjust Parking Pricing	Adjust the price of parking permits to be equal with the cost of other commute modes	CSU East Bay	Mid-term	N/A
Guaranteed Ride Home	Offer a guaranteed rides home program to alternate mode users in the event of emergencies	CSU East Bay Alameda CTC	Long-term	N/A
Carpool Incentives Program	Offer incentives to encourage students and staff to participate in the carpool program	CSU East Bay	Short-term	N/A
TDM Program Marketing	Continue to offer comprehensive marketing support and information on TDM programs	CSU East Bay	Short-term	1% to 26%
Telecommuting and Alternative Work Schedules	Encourage remote work and alternative work schedules to reduce trips to campus	CSU East Bay	Short-term	0.07 to 5.5%

Source: Fehr & Peers.

Funding

TDM programs at CSU East Bay are currently funded through revenues received from parking (both enforcement and the sale of permits). This is the funding mechanism that is common to most public universities, including those in the California State University system.

The strategies identified as part of this plan are intended to minimize the growth in single occupancy automobile trips to campus as enrollment increases, and as such revenues from parking permits and fines may not grow proportionate to campus growth. This may result in a need to increase user fees or to explore other supplemental funding opportunities. A student fee or subsidized fee program could be an option to provide funding for the strategies outlined in this document. This would be a political process that would require engagement with and support from the Student Governing body.

Grant programs, such as those administered by the Bay Area Air Quality Management District, can provide funding towards bikeways, bicycle parking, rideshare programs, and shuttle bus services. Most of these grants require partnership with a public agency and would require coordination with the City of Hayward.

The University can also consider policies that offset new construction with an investment in TDM programs. For example, a policy could be implemented that would require a percent of the construction dollars for a new parking garage be set aside for TDM programs. In this way, the demand on parking could be constrained in a way that would also support alternative travel modes to the campus.

In general, it is worth bearing in mind that the cost to build new parking facilities on campus will far exceed the cost of providing robust and ongoing TDM programming, and that by maintaining a low number of vehicle trips to campus, the University can avoid the expense of paying for offsite mitigations (such as traffic signals) as outlined in the EIR.

Monitoring and Reporting Program

The Campus Master Plan EIR requires that periodic monitoring of the effectiveness of the TDM strategies (as well as other transportation characteristics for the campus) be conducted to ascertain if the campus is in compliance with the vehicle trip reductions envisioned as part of the transportation mitigation measures. Non-compliance with the vehicle trip reductions must be remedied through the implementation of additional TDM strategies or the construction of off-campus transportation improvements to alleviate increases in off-campus traffic congestion.

The following items are required to be documented and/or computed as part of the mitigation monitoring program established in the Campus Master Plan EIR.

- Total AM and PM peak period/hour vehicle volume and vehicle trip generation
 - Trip generation should be evaluated at both the absolute value (vehicle volume) and derived rate per FTE student and/or FTE staff

- Current transit service availability characteristics and ridership levels
 - Routes available, headways, fares, and ridership data should be collected for AC Transit routes serving the campus and for the Campus Shuttle.
- Campus AM and PM peak period mode split
 - Mode split data should be collected via two days of 12-hour vehicle occupancy counts at the Carlos Bee Boulevard and Harder Road gateways to campus. Data should include counts of single-occupant vehicles (SOV), high-occupancy vehicles with two persons (HOV2), and high-occupancy vehicles with three or more persons (HOV3+)
- Parking demand characteristics
 - Counts of overall parking occupancy by lot should be collected to ascertain to overall parking demand. Parking fees for on-campus parking, and any change over time from the previous reporting period, should also be documented
- Peak Hour Signal Warrant analysis of Carlos Bee Boulevard/West Loop Road and Harder Road/West Loop Road
 - Comparison of intersection turning movement counts collected between 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM to the volume criteria in Warrant 3B of the California Manual on Uniform Traffic Control Devices
- Cost of automobile use for trips to campus
 - Automobile costs should include documentation of the average price per gallon of gas, estimated cost per mile for vehicle ownership (using the IRS reimbursement rate as a standard), and bridge tolls
- Data for future use in the determination of transit demand elasticities for students and employees
 - In addition to the above, fares and frequencies of transit services (including AC Transit, the Campus shuttle, and BART), average commute time by vehicle from counties with the highest student population, and on-campus parking costs should be documented

Per the Campus Master Plan EIR, monitoring is required to be conducted every three years. For consistency, data collection and reporting should reflect the same time period each year. As enrollment and travel to campus is reported to be highest during the fall semester, data collection should be conducted during the fall after class add/drop deadlines are final.

A travel survey should also be administered to students and staff/faculty to provide qualitative data that can be used to improve and fine tune program offerings. The survey should request information about how travel to campus is occurring during a typical week, as well as gain feedback on the awareness of TDM program offerings and their efficacy in mode shift.

Summary

CSU East Bay has undertaken several important steps towards compliance with the mitigations undertaken Campus Master Plan Environmental Impact Report. The ongoing monitoring of the strategies outlined in this document and subsequent reporting of the results is intended to provide the University and the City of Hayward with guidance on the need to pursue further TDM strategies and reduce the likelihood of triggering offsite mitigation requirements. As such, this plan offers a toolbox of strategies to refine and advance the current TDM program offerings and support the University's efforts to reduce vehicle trips to campus and the associated impacts on the surrounding community.