







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



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

Studies<sup>1</sup> 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

#### 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 st

### 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





## Timing of Measure

Implementing a carpool matching service would be a short-term strategy and would build upon the

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.

#### 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

### 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

Description





### 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





## **F**

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.

## **M a R P a**

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.

## **S a**

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