The key factors affecting transportation systems on the Cal State East Bay Hayward campus are topography and transit accessibility. Topography limits the practicality of bicycling or walking to campus, except for those living in very close proximity (or on campus), and the level of bus and BART shuttle service limits the amount of use those modes can capture. As a result, student, faculty, staff and visitor trips to campus occur largely by car.

On campus, walking is the primary mode due to topography. The campus is relatively compact and will continue to be a walkable campus as it builds out, as new buildings will be constructed within the current developed footprint.

This Access, Circulation and Parking Framework is designed to move the University toward a more sustainable transportation system, in which commuters and visitors have multiple convenient modes of access to and from the campus, and campus residents have minimal need to maintain a personal auto on campus.

The Access, Circulation and Parking Framework consists of physical, operational, and policy changes.
to achieve this vision. All of these elements need to be aggressively pursued in order to achieve the benefits, which include lower levels of traffic growth; fewer traffic impacts, both on campus and in the greater Hayward community; a safer and more pedestrian-friendly environment; fewer parking structures, releasing campus land to higher and better uses; and a smaller carbon footprint per FTES for the future campus.

Vehicular Circulation

Current Conditions

All campus traffic currently passes through one of the campus’ two gateway intersections: Carlos Bee Boulevard/Hayward Boulevard and Harder Road/West Loop Road. These four-lane gateways connect to a loop roadway consisting of West Loop Road, a relatively straight two-lane connector running near the west edge of campus, and East Loop Road, which varies from two to three lanes and loops around the east edge of campus providing access to the largest reservoir of parking located on the east side of campus. East Loop Road parallels Hayward Boulevard along the easternmost edge of campus, but there is no connection between the campus and city roadways. A secondary cross-campus connection is provided by Old Hillary Road, which also feeds the eastern parking lots.

Traffic is controlled by all-way stops at Harder Road and West Loop Road, and Carlos Bee Boulevard and West Loop Road, all-way stops at East Loop Road and Old Hillary Road (both ends), and a traffic signal at the intersection of West Loop Road and the Pioneer Heights access road. This signal regulates not only vehicle traffic from the residential parking lots to the south, but the high volume of pedestrians crossing between the on-campus residences and the core campus.

The campus generates about 24,000 daily vehicle trips (inbound plus outbound), and about 1,650 AM peak hour and 2,600 PM peak hour trips. Vehicle traffic peaks at the campus gateways during the hours of 7:30 – 8:30 AM and 5:00 – 6:00 PM, although mid-day
Traffic is not insubstantial. Morning peak hour traffic is split approximately 40 percent to the Harder gateway and 60 percent to the Carlos Bee gateway (with the 60 percent split 30 percent from Hayward Boulevard to the west, 15 percent Hayward boulevard to the east, and 15 percent Campus Drive to the north). In the afternoon peak hour, the proportions are similar, with slightly more traffic using Harder Road. Peak hour traffic causes periods of congestion at the all-way stops on Carlos Bee Boulevard and West Loop Road and Harder Road and West Loop Road, as the majority of drivers need to travel up to the eastern parking lots. Table 16 shows the current and projected future vehicle trip generation of the campus, given current trends.

**Vehicular Circulation Plan**

The vehicle circulation plan is shown in Figure 40. The plan retains the basic loop roadway concept, but enhances the access to and circulation within the campus in four key ways:

- A third primary gateway from Hayward Boulevard at the east edge of campus (4 lanes), opposite Parkside Drive, and a second connection roughly mid-way between Campus Drive and the new primary gateway (two lanes in-bound)
- A new north-south roadway (4 lanes) near the east end of campus that serves as the new East Loop Road connection and also feeds the parking lots and structures in that area; Old Hillary Road becomes a pedestrian mall except at its ends where it provides access to parking
- A redesigned West Loop Road, intended to serve primarily service and emergency access and some cross-campus traffic (2 lanes); the West Loop Road /

### Table 16

**Projected Vehicle Trip Generation**

<table>
<thead>
<tr>
<th>Campus Populations</th>
<th>Existing (Fall '07)</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTES</td>
<td>8,758</td>
<td>16,000</td>
</tr>
<tr>
<td>(Residents)</td>
<td>820</td>
<td>5,000</td>
</tr>
<tr>
<td>Commuter Students</td>
<td>7,938</td>
<td>10,000</td>
</tr>
<tr>
<td>Faculty/Staff</td>
<td>1,270</td>
<td>2,611</td>
</tr>
<tr>
<td>(Residents)</td>
<td>0</td>
<td>220</td>
</tr>
<tr>
<td>Total Commuters</td>
<td>9,208</td>
<td>15,391</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Existing Trip Generation (Fall 2007)</th>
<th>7,938 Commuting FTEs</th>
<th>9,208 Total Commuters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trip Rate per Commuter</td>
<td>3.055</td>
<td>0.179 0.031 0.209 0.129 0.200 0.329</td>
</tr>
<tr>
<td>Trip Rate per Commuting FTE</td>
<td>2.634</td>
<td>0.154 0.26 0.218 0.121 0.172 0.284</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Future Trip Generation (Master Plan Build-Out)</th>
<th>15,391 Total Commuters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trip Rate per Commuter</td>
<td>2.634</td>
</tr>
<tr>
<td>Total Commuting Trips Generated</td>
<td>40,530</td>
</tr>
<tr>
<td>New Student Resident Trips</td>
<td>21</td>
</tr>
<tr>
<td>New Faculty/Staff Resident Trips</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Net New Trips</th>
<th>Net new commuting trips</th>
<th>16,280</th>
<th>950</th>
<th>160</th>
<th>1,120</th>
<th>690</th>
<th>1,060</th>
<th>1,750</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net new student residential trips</td>
<td>21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net new faculty/staff residential trips*</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total net new trips</td>
<td>973</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7:30 - 8:30 AM</th>
<th>5:15 - 6:15 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADT IN</td>
<td>OUT TOTAL</td>
</tr>
<tr>
<td>Carlos Bee east of Hayward Blvd.</td>
<td>13,180 832</td>
</tr>
<tr>
<td>Harder Rd. west of Loop Rd.</td>
<td>11,070 687</td>
</tr>
<tr>
<td>Total Trips Generated</td>
<td>24,250 1,418</td>
</tr>
<tr>
<td>Trip Rate per Commuter</td>
<td>2.634 0.154</td>
</tr>
<tr>
<td>Trip Rate per Commuting FTE</td>
<td>3.055 0.179</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7:30 - 8:30 AM</th>
<th>5:15 - 6:15 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADT IN</td>
<td>OUT TOTAL</td>
</tr>
<tr>
<td>Total Commuting Trips Generated</td>
<td>40,350 2,370</td>
</tr>
<tr>
<td>New Student Resident Trips</td>
<td>21 188</td>
</tr>
<tr>
<td>New Faculty/Staff Resident Trips</td>
<td>2 20</td>
</tr>
</tbody>
</table>
Carlos Bee Boulevard intersection would be realigned to allow West Loop Road to ‘T’ into Carlos Bee Boulevard, thus emphasizing Carlos Bee Boulevard and East Loop Road as the campus through-route.

- A right-turn lane serving inbound traffic from Hayward Boulevard to the planned parking structure located between Hayward Boulevard and Carlos Bee Boulevard.

Along with the parking changes discussed in the next section, this circulation system will have the following benefits:

- Doubles the campus access points from two to four, better accommodating the traffic growth projected with the Master Plan.
- Results in less cross-campus traffic and congestion as most on-campus trips between entering campus and parking will be shorter and more direct.
- Provides a more pedestrian-friendly and connected environment on the west end of campus, where a substantial portion of the new student housing is planned.
- Improves emergency access and egress.

With this circulation network, it is likely that traffic signals would ultimately be needed at the intersections of Hayward Boulevard and the new primary campus gateway, Hayward Boulevard and the new secondary gateway, Harder Road and West Loop Road, and Carlos Bee Boulevard and West Loop Road. All-way stops would be needed at certain other locations along the new West Loop Road alignment and the redesigned East Loop Road alignment. Traffic calming treatments such as raised crosswalks, in-pavement flashers on
Figure 40
Vehicular Circulation Plan

LEGEND
- Property Line
- Primary Traffic Route
- Secondary Traffic Route
- Parking Structure Access
- Exterior Traffic
- Development Sites

0 200 400 800 Feet
crosswalks, curb extensions, and stop signs will be considered in the redesign of West Loop Road and the portion of Harder Road that divides Pioneer Heights from the academic core. Such treatments will discourage excessive speeds, discourage unnecessary use of West Loop by those traveling across campus, and discourage excessive use of East Loop Road and Harder Road by non-campus traffic. The route from Hayward Boulevard to Mission Boulevard via the new primary campus entry and East Loop Road will be available to neighborhood traffic, but will be designed with traffic-calming devices to be a slower route than the direct use of Hayward Boulevard and Carlos Bee, major 4-lane City arterials. This design will help avoid potential pedestrian-vehicular conflicts.

**Parking**

**Current Conditions**

Currently, the primary parking facilities for faculty, staff, students and visitors are large surface lots located on the east and west edges of the campus. Short-term (one-hour) metered parking spaces and spaces reserved for service vehicles are located on-street on West Loop Road and near several campus buildings.

Using 2006–2007 academic year operating data, the University provided 4,860 parking spaces for just about 8,500 full-time equivalent (FTE) students, 1,200 faculty/staff, visitors, and University-owned vehicles. However, relatively more parking was provided for faculty and staff members than for commuting students, at 980 spaces for the former and 3,370 spaces for the latter (see Table 17).

<table>
<thead>
<tr>
<th>Population</th>
<th>Number</th>
<th>Rate</th>
<th>Total Parking</th>
<th>Existing Parking ('06-'07)</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commuting Student FTEs</td>
<td>13,000</td>
<td>0.38</td>
<td>4,942</td>
<td>3,370</td>
<td>1,572</td>
</tr>
<tr>
<td>Residential Students FTEs</td>
<td>5,000</td>
<td>0.25</td>
<td>1,225</td>
<td>120</td>
<td>1,105</td>
</tr>
<tr>
<td>Faculty/Staff FTEs</td>
<td>2,611</td>
<td>0.81</td>
<td>2,126</td>
<td>980</td>
<td>1,146</td>
</tr>
<tr>
<td>Visitors/CSU vehicles</td>
<td></td>
<td></td>
<td>456</td>
<td>390</td>
<td>66</td>
</tr>
<tr>
<td>(5.5% of total parking)**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8,750</td>
<td>4,860</td>
<td>3,890</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Data from January 2007 parking occupancy surveys provided by CSU
** #s from 'Multiple year projections annotated 3'
*** (240 x 1.15)/4,860

A parking occupancy survey performed by the University in Winter 2007 (2006–2007 AY) showed that most of the faculty/staff parking was occupied in the mid-day (92 percent), but only 62 percent of the commuter student parking was occupied. Translating this data into parking supply rates for planning...
purposes, if current trends and policies continued, the University would need to supply parking at a rate of 0.38 space per commuting student FTE, 0.81 space per faculty/staff FTE, and 0.25 spaces per resident student.

Parking Plan

The above parking rates result in a projected build-out parking supply of about 4,900 spaces for commuting students, 1,225 spaces for resident students, 2,100 spaces for faculty/staff, 450 spaces for visitors and University-owned vehicles, and a grand total of 8,750 parking spaces. This is almost double the current parking supply, consistent with a doubling of the current student FTE. Virtually all net new parking would be added in multi-level structures to preserve and increase academic and residential building sites.

Rather than assuming future parking demand and resulting supply needs will mimic past trends, the parking plan proposes carefully growing the parking supply while managing the growth in parking demand with the goal of cutting that growth by approximately 50 percent. Thus, rather than adding 3,900 spaces to the current 4,860, the net addition will be 1,900 for a maximum of 6,700 spaces at build-out (see Table 18). The Transportation demand Management section outlines the programs and actions that are needed to reduce single-occupant vehicle use accordingly so that parking deficits do not occur. While the campus has space sufficient to provide up to the full 8,750 parking spaces should they ultimately be needed, the plan proposes only four or five strategically located parking structures, depending on size, configuration and demand. Potential locations and sizes are as follows (see Figure 41):
Access, Circulation and Parking Framework

1. Harder Gateway Structure – a garage providing about 1,100 spaces to be built to the northwest of the intersection of Harder Road and West Loop Road. The single access/egress point for this garage will be on West Loop Road. There will be direct pedestrian access to the academic core from this garage via a pedestrian bridge.

2. Carlos Bee Gateway Structure – a structure providing about 1,400 spaces will be built to the north of the intersection of Carlos Bee Boulevard and West Loop Road. Access to this garage will be provided from East Loop Road and eastbound Hayward Boulevard (right turn only). Egress from this garage will be provided onto East Loop Road and Carlos Bee Boulevard (right turn only).

3. East Campus Structure (North) – the area between the realigned East Loop Road and Old Hillary Road will accommodate two parking structures. The northern structure will provide 900 spaces.

4. East Campus Structure (South) – as mentioned above, the area between the realigned East Loop Road and Old Hillary Road will accommodate two parking structures. The southern structure will provide 500 spaces.

5. Residential Structure – a 500-space structure will be built for use by the residents of the Pioneer Heights residence halls.

The remaining parking supply - 2,300 spaces - will be composed of lots that will remain. Some of these lots could have expanded capacity through re-striping.

The parking structure sites are well located both to capture trips entering at all four gateways to campus, and to deliver people close to the academic core once they have parked. While drivers will choose both the gateway they enter campus by and the structure they park in based on a wide range of factors, the increased number of gateways combined with major parking intercepts at all of them should result in less congestion, relatively speaking, than occurs now with only two gateways serving trips destined to parking located largely at the far end of campus.

### Table 18

<table>
<thead>
<tr>
<th>Surface/Structure</th>
<th>No. Parking Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Structure</td>
<td>1,100</td>
</tr>
<tr>
<td>2 Structure</td>
<td>1,400</td>
</tr>
<tr>
<td>3 Structure</td>
<td>900</td>
</tr>
<tr>
<td>4 Structure</td>
<td>500</td>
</tr>
<tr>
<td>5 Structure</td>
<td>500</td>
</tr>
<tr>
<td>Structured Parking Spaces</td>
<td>4,400</td>
</tr>
</tbody>
</table>

| A Surface | 65 |
| B Surface | 745 |
| C Surface | 440 |
| D Surface | 400 |
| E Surface | 90  |
| F Surface | 190 |
| G Surface | 120 |
| Misc. Campus | Surface | 250 |

| Total Parking Spaces | 6,700 |
Figure 41
Parking Plan
Transit

Current Conditions

The Hayward campus is located approximately two miles from the Downtown Hayward BART station, and approximately three miles from the South Hayward BART station. The BART system connects Hayward to San Francisco and the peninsula, Fremont, the Dublin-Livermore-Pleasanton Tri-Valley, Richmond, and Pittsburg/Antioch/East Contra Costa County. A review of the current student residence data indicate that over half live in zip codes containing at least one BART station. A good portion of faculty and staff are likely also to have good access to BART.

While not within convenient walking or bicycling distance, primarily due to the topography, the two-mile distance between Downtown Hayward BART and the campus is bridged easily by bus and shuttle. Buses and shuttles equipped with bicycle racks enable cyclists to access campus with their bicycles.

Currently the campus is served by AC Transit Route 92, which connects the campus to downtown Hayward BART and Chabot College. Route 92 runs at 15 minute headways throughout the day on weekdays, from about 6:00 AM to 10:00 PM, and hourly on weekends; students, faculty and staff can ride free of charge with a valid University ID.

The University does not have commute mode data for students, faculty and staff. However, the relative isolation of the campus, limited bus service, and high vehicle traffic volumes entering campus on a daily basis indicate that BART is not as well-used as it could be.

Transit Plan

The goal of reduced single-occupant vehicle commuting depends to a considerable extent on increased use of transit, and most importantly BART, with a high-service level bus/shuttle connection linking BART and campus. Increased bus capacities are projected to be needed as use levels grow.

Buses and shuttles will stop on both West Loop Road and the realigned East Loop Road; it would be beneficial for the BART connector to circle the campus via the Loop Road to provide convenient access to different parts of campus, as opposed to having only a single stop on campus. The minimum long-term operating goal for the shuttle or bus service connecting to BART will be 15-minute headways continuously from 6 AM to 10 PM, with adequate bus capacity to meet increased demand at peak times.
Figure 42
Transit Plan

LEGEND
- Property Line
- AC Transit, Route 94
- AC Transit, Route 92
- Existing Shuttle Stop
- Relocated Shuttle Stop
- 2-3 Minute Walk
- Parcels

0 200 400 800 Feet

ACCESS, CIRCULATION AND PARKING FRAMEWORK
Pedestrian Circulation

Current Condition

Like most college campuses, the academic core of the Hayward campus experiences high pedestrian activity. The wider, more heavily used pedestrian corridors tend to be those running north-south, and include the western corridor running from Meiklejohn Hall to the Gymnasium, the central pedestrian mall connecting Pioneer Heights with the Music Building, and the easternmost path adjoining the Science and Art and Education Buildings. The western and central malls are relatively flat while the eastern mall is steep and has several stairways. Many east-west connections exist, but they tend to be narrower and shorter, and often involve stairs or significant hills. In some cases building stairways, bridges and elevators provide the practical connection from west to east, as in the Library/Warren Hall complex.

Because the majority of the parking supply currently is located inside the loop road serving the campus, there are relatively few pedestrian crossings on the campus' busiest road segments. One exception to this is the signalized intersection of Harder Road and the Pioneer Heights residences driveway, between the academic core and the student residences. The relocation of surface parking to the south edge of Pioneer Heights has increased opportunities for pedestrian-vehicle conflicts in this area.

Pedestrian Circulation Plans

The proposed pedestrian circulation system reinforces the existing walkways and adds additional ones to serve the all parts of the academic core (see Figure 43). The majority of pedestrians will enter the campus at one of four locations. Two pedestrian entries will be located near the parking structures at Harder Road and Carlos Bee Boulevard, where pedestrian bridges will connect them to the academic campus core. Another major pedestrian entry will be associated with the new main vehicular entry from Hayward Boulevard. This entry will serve two additional parking structures and will act as the primary visitor entrance. The fourth pedestrian entry will be located at the crossing between Pioneer Heights and the academic core and will mostly serve students living in Pioneer Heights student housing.

The vehicle circulation plan will continue to keep most cars outside the major pedestrian travel routes, as the new eastern parking structures will be located on the campus side of the re-aligned East Loop Road. However, three major pedestrian/vehicle crossing points will remain: on Harder Road at the Pioneer Heights residential area; at the Carlos Bee parking structure, located across East Loop Road from the core campus; and on West Loop Road between the new West Campus residences and Harder Road parking structure and the core campus. The first of these will continue to be regulated by the current traffic signal at Pioneer Heights. However, the current street bisecting Pioneer Heights and providing access to parking will be reconfigured as a pedestrian- and service-only mall, reducing the potential for pedestrian-vehicle conflict at
This crossing. The latter two pedestrian/vehicle crossing points will be accomplished through pedestrian bridges, which will link an upper level of each structure to the elevated land area across the intervening roadway, taking advantage of the grade changes in these locations.

The pedestrian walkway linking Mieklejohn to the Library is a highly traversed, busy route that passes through the student commons area. It is a focus of activity at lunch time and during special events.

Due to the varying topography of the campus, stairs, ramps and elevators are required to make grade transitions.
Older areas of the campus have incorporated generous stairs within the landscape to assist in grade transitions.

The middle north-south pedestrian walkway is currently a roadway with few pedestrian amenities. With planned improvements, this will be a primary cross campus route and will include special paving, landscaping and lighting.

Through the central part of the campus, wide, well-designed walkways connect destinations.
Figure 43
Pedestrian Circulation Plan

LEGEND
- Property Line
- Primary Pedestrian Promenades
- Pedestrian Circulation
- Primary Pedestrian Entries
- Pedestrian Bridge
- Parcels
- Parking Structures
Site Accessibility

The topography of campus creates circulation challenges, especially for satisfying ADA requirements. The elevators and other vertical circulation elements of buildings can provide easy and convenient access between topographic levels. The following strategies are intended to integrate campus buildings into the accessible campus-wide circulation system:

- The elevators and stairs of buildings should be used to assist with movement up and down campus slopes
- Where possible this access should be available 24 hours a day
- If programmatic or security concerns prevent 24-hour access, a building project can provide an adjacent, external elevator, such as at the New University Union
- Building entries should be located at grade level or at the level of an accessible adjacent plaza or courtyard.

Figure 40 illustrates a universal access plan for the Hayward campus that can be implemented as new facilities are constructed. All facilities shall be designed to comply with applicable provisions of California Title 24 and the American with Disabilities Act.

This master plan proposes the following new accessible routes and facilities:

- New accessible facilities at below 5% slope (1:20)
- New accessible facilities with handrails and landings, as required for routes between 5 and 8.3% slope (1:20 to 1:12)
- Improvement of existing facilities to meet the above standards
- New and upgraded ramps
- Vertical circulation within buildings.
Figure 44
Campus Access Plan

Legend
- Stairway
- Accessible Parking
- Elevator Associated with Path of Travel
- Primary Accessible Entry
- Path of Travel (0-5% Slope)
- Path of Travel Accessible Ramp (5-8.33% Slope)
**Bicycle Circulation**

The topography of the Hayward campus is largely responsible for the limited bicycle use on and around the campus. The site’s terraced nature is not conducive to bicycle circulation within the campus, and the steep slopes of both Carlos Bee Boulevard and Harder Road present a challenge to cyclists commuting from downtown Hayward.

Nevertheless, the Master Plan circulation system will accommodate bicycles used for cross-campus trips. Bicycles can share the road on East Loop Road and West Loop Road, which are intended to be 25 mph roadways. Bicycles can also use the wider pedestrian walkways; bicycle traffic is not expected to be so heavy that pedestrian-bicycle conflicts would be a problem on this campus. However, the University can consider designating dismount zones if safety concerns arise.

To promote internal campus bicycle use, bicycle parking will be provided near all residential and academic building sites, either through building-specific racks or more centrally located bike parking lots that are visible and provide convenient access to several buildings.

Transit vehicles will be equipped with bicycle racks to allow access to campus for cyclists who choose to access transit by bicycle or who desire a return trip - downhill - by bicycle.

**Service Access**

The service access and circulation plan is shown in Figure 45. New service yards will be developed as new buildings are constructed, supplementing the existing yards. A new corporation yard and central utility plant will be constructed on Parcel 18 west of the Harder Road / Old Hillary Road intersection. Primary access to the various yards/buildings will be provided from several locations on West Loop Road, East Loop Road, Old Hillary Road and the Pioneer Heights access roads. From these entry points to the central campus, service vehicles will use the major pedestrian circulation routes to travel to/from the internal service yards.

The access route through the core campus will be available via the main north-south pedestrian walk, to allow service vehicles to access buildings in the academic core. However, access on this and all primary pedestrian routes will be strictly limited to campus service vehicles, by the use of bollards and similar devices. Service access to the western part of campus will be provided via the existing roadway that connects Carlos Bee Boulevard through to West Loop Road near Harder Road.

For larger truck deliveries, the access points on West Loop Road and East Loop Road will be used, to minimize impacts on the Pedestrian Mall and the central section of Old Hillary Road. Truck deliveries should be scheduled outside the morning and afternoon peak hours, to the extent possible.
Figure 45
Service Access Plan

LEGEND
- Property Line
- Primary Service Access
- Secondary Service Access (limited access)
- Parcels

0 200 400 800 Feet

January 2009
California State University East Bay Hayward Campus Master Plan Study
Cal State East Bay - Hayward Campus
Transportation Demand Management

Perhaps the most important element of the Master Plan Access, Circulation and Parking Framework is the development and promotion of a comprehensive Transportation Demand Management (TDM) program. To evolve into a more sustainable campus, the University must move away from the current reliance on driving as the primary mode of access for commuters. The benefits of shifting commuters out of single-occupant vehicles include less on-campus and off-campus congestion; better air quality and lower noise impacts; reduced need to build more parking spaces, with a corresponding reduced financial burden on the University and faculty, staff and student fees; and greater physical planning flexibility to construct academic and residential buildings.

Efforts to shift commuters out of single-occupant cars and into carpools, vanpools, transit, and bicycling/walking are most successful when all of the following strategies are implemented:

- Meaningful financial incentives to use alternative travel modes are provided
- Alternative modes are convenient and comprehensive
- Flexibility of use is provided for

The following programs and services may ultimately be included in the campus Transportation Demand Management Plan.

Improved Transit Service

- Enhanced AC Transit Route 92 service to the Downtown Hayward BART station, ensuring

15-minute headways from 6 AM to 10 PM; or continued and enhanced campus shuttle service providing direct connection between campus and Downtown Hayward BART.

Alternative Mode Use Incentives

- Discounted or free AC Transit passes for all students, faculty and staff
- Discounted BART tickets for students, faculty and staff through the Commuter Check program or a similar program; or a ‘Clean Air Cash’ program where those choosing to commute by BART receive a cash payment and are not allowed to purchase a normal parking permit
- Carpool matching service and vanpool program
- Preferential parking for carpools and vanpools
- Continued participation in the Alameda County Congestion Management Agency’s Guaranteed Ride Home program for alternative mode users
- Provision of a flexible car rental service program (carsharing) on campus to provide access to vehicles for those who choose not to commute to campus by car or residents who do not maintain a car on campus
- Provision for participants in alternative mode programs to purchase a certain number of single-day parking permits to allow for commute flexibility and promote alternative mode use for those who may occasionally need to use a car

Parking Management

- Provide a scaled parking permit pricing structure that ties the cost of parking to the level of use and location, and that provides the funding needed to maintain and operate the parking system, including provision of new parking lots/structures
Discourage on-campus residents from bringing cars to campus, and encourage the use of transit service(s) and the flexible rental car service (when instituted) for travel off-campus.

Full implementation of these programs may take several years and will incur new costs that will need to be included in future capital and operating budgets. However, if fully implemented, a good portion of the projected parking supply may not be needed in the longer term as the campus grows toward the Master Plan build-out of 18,000 FTE students. Table 19 shows the projected effect on peak hour trip generation and peak parking demand of a robust set of transportation demand management programs and services.

Table 19
Projected Parking and Vehicle Trip Generation Reductions with TDM

<table>
<thead>
<tr>
<th></th>
<th>Existing</th>
<th>Future w/o TDM</th>
<th>Future w/ TDM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mode Share</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Drive Alone</td>
<td>79%</td>
<td>80%</td>
<td>64%</td>
</tr>
<tr>
<td>% Carpool</td>
<td>4%</td>
<td>4%</td>
<td>8%</td>
</tr>
<tr>
<td>% Transit</td>
<td>16%</td>
<td>16%</td>
<td>29%</td>
</tr>
<tr>
<td><strong>Total Parking Spaces</strong></td>
<td>4,860</td>
<td>8,750</td>
<td>6,700</td>
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<tr>
<td><strong>Vehicle Trip Generation</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>AM Peak Hour</td>
<td>1,663</td>
<td>3,009</td>
<td>2,652</td>
</tr>
<tr>
<td>PM Peak Hour</td>
<td>2,611</td>
<td>4,822</td>
<td>4,366</td>
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</tbody>
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