

APPENDIX G

Revised Transportation Demand Management Plan



TRANSPORTATION DEMAND MANAGEMENT PROGRAM

PROGRAM INTRODUCTION

Facebook's relocation to Menlo Park provides the opportunity for Facebook to continue to operate a highly successful Transportation Demand Management (TDM) Program. Currently, approximately 40 percent of employees commute to the Palo Alto Campuses by alternative modes (transit, carpool, bicycle and walk). Facebook has been successful in encouraging alternative transportation for several reasons. First, Facebook employees have flexible work schedules that allow commute travel to be more evenly spread throughout the day than would occur at a typical office development of similar scale. Second, the Facebook culture attracts many employees who thrive in an innovative environment and prefer alternative travel modes over driving alone. Third, Facebook employees are often knowledgeable of environmental issues and have a high-level of environmental consciousness, which contributes to their desire to choose more environmentally-friendly commute patterns.

Additionally, as the sole occupant of the proposed Menlo Park campus, Facebook will have the ability to exclusively control the TDM program for the sites. Rather than having to coordinate different TDM programs at multiple firms (tenants), Facebook can influence the trips for all employees accessing the campus. The program will continually evolve, being responsive to the changing needs of employees. Ultimately, these conditions will allow Facebook to maximize the efficacy of the TDM program outlined below.

RELATIONSHIP TO THE PROPOSED VEHICLE TRIP CAP

For a traditional development project, a TDM program is often designed to reduce impacts of vehicular traffic and is adopted as either a mitigation measure or a condition of use. In other cases, the implementation of a TDM program is included in a project as a matter of local policy to reduce the number of drive alone commuters. Facebook's proposal to establish a vehicular trip cap for both the AM and PM peak-periods and peak-hours establishes the maximum number of trips generated by the site, while allowing the number of employees to vary depending on the effectiveness of the TDM program.

The TDM Program is proposed as a key element to the project. The proposed peak period vehicle trip cap for the East Campus limits the number of vehicle trips that can enter and exit the Campus during the peak period and peak hour when traffic congestion on adjacent roadways is at its peak. If the TDM Program is not effective in reducing vehicular travel demand at Menlo Park, Facebook will not be able to achieve its desired employee headcount. Therefore, Facebook has a vested interest in creating and sustaining a robust and effective TDM Program.

In addition to the peak period/hour trip caps, Facebook also proposes a daily trip cap for the East Campus. This daily trip cap was developed to address potential air quality impacts, while the peak period trip cap addresses local congestion.

It is expected that the TDM Program will evolve over time to respond to changing employee demographics and needs. Based on the information currently available, the following TDM Program has been developed.

EXISTING PROGRAM FOR PALO ALTO CAMPUSES

The following strategies are currently in practice for the Palo Alto Campus. The existing TDM program is robust, and has been effective at reducing the drive alone mode share and the parking demand at each site.

- **Caltrain Go-Passes and Caltrain Station Shuttles** – All employees receive Caltrain Go-Passes funded by Facebook. Shuttle service is provided from the Palo Alto stations to the Facebook sites.
- **Employee Commuter Shuttle Bus Service** – Currently Facebook provides free-for-employees direct service between Palo Alto and San Francisco,



Campbell/Cupertino, and Mountain View for employees and vendors. Each employee has their own wi-fi card which they can use to access internet aboard the shuttles.

- **Inter-campus Shuttles** – Throughout the day, Facebook provides two 14-person shuttles that provide service between 1601 South California Avenue and 1050 Page Mill Road continuously from 5:00am to 10:00pm. The shuttle consists of about 1 to 4 trips per hour and ridership surveys from December 2010 indicate that passengers on these shuttles range from 1 to 14 (maximum capacity), with the 1:00pm shuttle at the highest occupancy.
- **Intern Shuttle** – Facebook provides a shuttle to serve the intern housing located in Mountain View and the two campuses. A total of five (5) drop-off/pick-up locations are served
- **Campus Bike Share Program** – To better serve inter-campus travel and reduce the number of shuttles on California Avenue during the day, Facebook has initiated a bike share program. This pilot program provides Facebook Bikeshare Bicycles for employees to use for trips between 1601 South California and 1050 Page Mill Road. There are currently 20 bicycles available.

A bike room for indoor bicycle parking is also provided, as well as showers, lockers, and changing room facilities.

- **Vanpool Program** – Facebook provides a Vanpool Program, which includes seven (7) vanpools from Campbell (two groups), Santa Cruz/Scott's Valley, Fremont, Oakland, South San Jose/Los Gatos, and San Jose Evergreen. Preferred vanpool parking is provided.
- **Educational and Promotional Campaign** – Facebook has held several educational and promotional events to encourage employees to use alternative modes to travel to and from the campus. Additionally, a commuter brochure for new hires was developed to provide employees with information on commute options and alternatives. A presentation to new hires is given, where employees are informed about alternative modes to work. Various incentives and programs to encourage bicycling, walking, and taking transit are also held, including competitions with raffle prizes for those who take the Commuter Shuttles, Caltrain, or vanpools.
- Facebook also participated in the **Great Race for Clean Air** sponsored by 511 in August and September 2010 (see more information: <http://www.greatraceforcleanair.com/Default.aspx>) and tied with the City of Palo Alto for highest number of participants.
- **Emergency Ride Home** – Facebook provides rides home for employees in an emergency for non-automobile commuters who may not have a vehicle readily accessible.
- **Carshare** – Facebook provides access to Zipcar vehicles located at 1601 California.
- **Preferred Parking** – Preferred parking is provided for motorcycles, expectant mothers, and vanpools.
- **Monitoring** – Twice annually, Facebook conducts a monitoring survey to track the number and mode of trips to and from the campus. This information allows the existing program to be assessed and modified to respond to developing employee needs.

EXISTING PROGRAM EFFICACY

As part of Facebook's ongoing monitoring efforts, trip generation and mode choice surveys were conducted in July 2010 and December 2010. Driveways (inbound and outbound) that serve the Facebook parking areas at the 1601 South California Avenue and 1050 Page Mill Road sites were manually surveyed to determine person trip generation and mode split for employees and visitors frequenting the Palo Alto Campus. Figures 1 through 3 present mode split for the July 2010, December 2010, and the average of the two surveys, respectively. A difference between the July and December travel surveys shows that in July, when



the weather was good and there is more daylight, the bike and walk modes were higher than in December. The three-percent drop in bike and walk modes was off-setting increases in the carpool (+2%) and drive-alone (+1%) rates. For the purposes of the trip cap calculations, it was assumed that Facebook would maintain a 40 percent alternative mode split; however, the goal of the TDM program is to achieve a higher level of alternative mode usage (50 percent).

Figure 1: Person Mode Splits- July Surveys

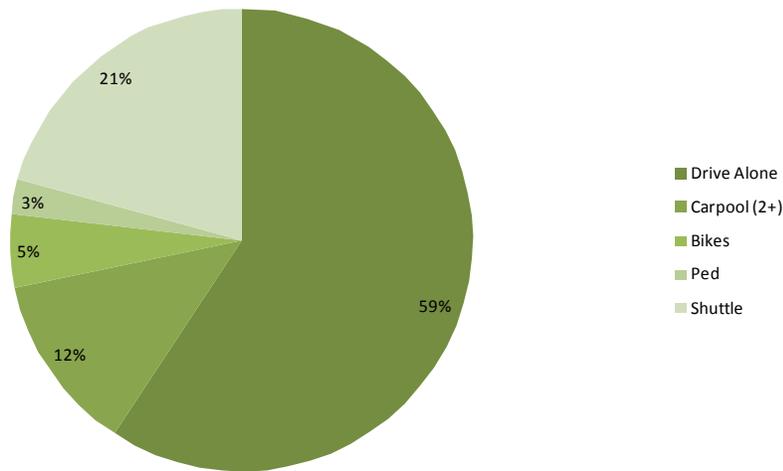


Figure 2- Person Mode Splits- December Surveys

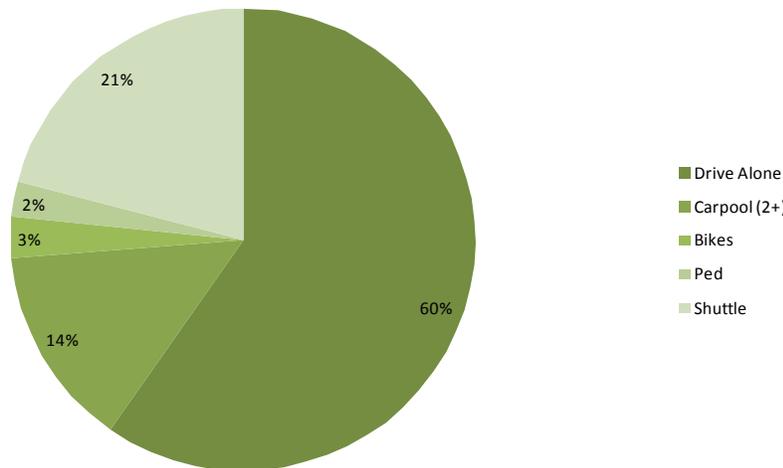
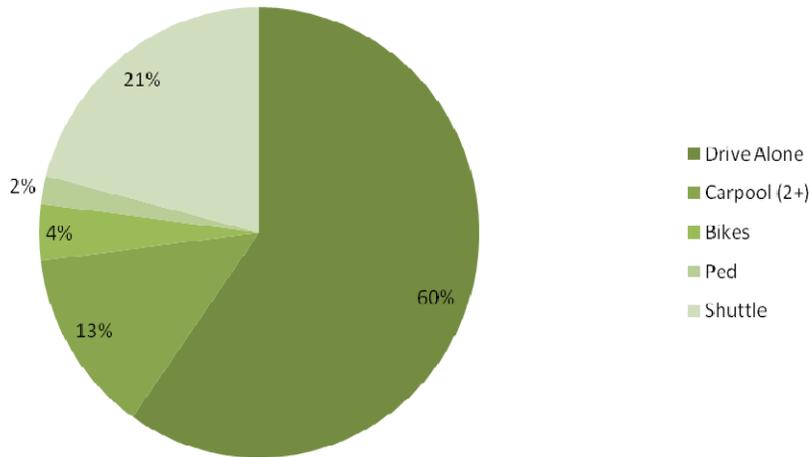




Figure 3- Person Mode Splits- Average



UPCOMING PROGRAM ELEMENTS

In addition to the existing TDM elements, the following strategies are proposed for near-term inclusion in Facebook's TDM Program. These elements are expected to be in place before Facebook begins to occupy the East Campus in Menlo Park in July 2011.

- **Facebus** – Facebook is developing a real-time shuttle/bus information system via a smartphone application to provide employees with up-to-the-minute information about the next available shuttle pick-up.
- **ZimRide** – ZimRide will provide ridesharing, vanpooling, and shuttle coordinating capabilities to any employees that have a Facebook email address. It will also provide monitoring and evaluation mechanisms to track the program's efficacy.

MENLO PARK CAMPUS

The existing TDM Program will continue to grow and evolve as Facebook transitions to its new Menlo Park Campus starting in July 2011. The Commuter Shuttle and Vanpool programs will expand, with trips serving strategic employee residential locations. Caltrain Shuttles will continue to run to the nearby stations, including Menlo Park, Redwood City, and Palo Alto. Connections to public transit systems in the East Bay will become more viable with the relocation to Menlo Park. Shuttle connections to the Fremont BART and ACE Stations will be incorporated into the Program. The following sections outline the improvements planned for the Commuter Shuttle and Vanpool programs, parking management, and walking and bicycling programs at full-build out of the Campus.

As mentioned previously, the defined TDM Program is based on the best information available at this time. As the employee base expands, the TDM Program is expected to grow and adapt in order to meet the proposed vehicular trip cap. The TDM program will be used by Facebook to maintain the AM and PM peak period trip caps of a total of 2,600 vehicles per two-hour peak period (inbound and outbound trips).

Commuter Shuttles and Vanpools

Based on employee zip code data obtained from Facebook and the proposed number of future employees on the



East and West Campuses, it is estimated that approximately 80 Commuter Shuttle round trips will be needed to serve the future Menlo Park campus. These shuttle trips will run to areas where employees are clustered, including San Francisco, San Mateo, Menlo Park, Palo Alto, Mountain View, the South Bay (including Sunnyvale, Cupertino, Santa Clara, San Jose, Campbell, and Los Gatos), and Fremont. The average trip length of the Commuter Shuttles is estimated to be 17.3 miles.

In order to determine the number of Commuter Shuttle round trips, employee data by place of residence was used to determine the potential locations and number of transit trips. The percent distribution by city of residence was used to calculate the number of future daily person trips by employee traveling to and from the Facebook campus. The average mode share distribution from the Facebook Monitoring Program analysis was applied and adjusted for each city to create mode share percentages; the basis for these mode share estimations depended on the available transportation options and population clustering unique to each city. The number of transit *person* trips was calculated by applying the transit mode share percentages to the total trips for each city. In order to quantify the number of shuttle *vehicle* trips, the total transit person trips were divided by 84. The value 84 represents the two-way or round trip based on an average shuttle size of 42 spaces.

Figure 4-4 (attached) presents the potential shuttle access routes for the East and West Campuses. The routes indicated represent those that are considered for the full build-out of the Campuses. It is anticipated that the routes would be phased in as the employee population grows on each site. Where employee residential density is not great enough to support a full shuttle, vanpools will be targeted to support travel modes outside of a personal vehicle. It is anticipated that approximately 40 vanpool round trips are needed to serve the future Menlo Park campuses. Vanpools are expected to run to areas on the Peninsula including Palo Alto, Belmont, Millbrae, and Burlingame. East Bay cities include Berkeley and Oakland. Vanpools also provide overflow service for the Commuter Shuttle routes. The average trip length for the vanpool vehicles is estimated to be 16.4 miles. Preferred vanpool parking or drop-off areas are provided.

Preferred Parking

The existing TDM Program includes preferred vanpool and motorcycle parking. At the Menlo Park Campus, carpool and electric-vehicle preferred parking are also proposed. These preferred parking spaces provide an incentive for employees to carpool or use a vehicle with zero emissions, to conserve resources and limit greenhouse gas emissions.

Walking and Bicycling Program

In addition to the expansion of the Commuter Shuttle and vanpool programs, several other strategies are planned for the Menlo Park Campus. The existing buildings in Palo Alto are located along a lower volume street with bicycle lanes, sidewalks, and a direct connection to the California Avenue Caltrain station. This environment encourages employees to walk and bike to and from the campus. To target maintaining or expanding walking and biking mode shares to the Menlo Park campus, several strategies are planned. These programs are aimed to enhance the surrounding bicycle and pedestrian environment to encourage active transportation modes to the Menlo Park Campus:

- Expanding the bicycle share program. Providing additional bicycles on-campus to provide employees the option of bicycling between or near the Campus;
- Holding bicycle rides for employees:
 - Lunch-time recreational rides;
 - “Get back on your bike” educational rides to learn or refresh bike commuting skills;
- Providing bike racks or trailers on shuttles as an alternative travel option;
- Providing a Commuter Bike Program to offer commuter bikes on loan for employees who would like to bicycle to campus.



In addition to the programmatic elements defined above, improvements to the walking and bicycling networks are needed to provide safe connections from the East and West Campuses to the surrounding network. A major component to better pedestrian and bike access is the improvements to the tunnel located at Willow Road/Bayfront Expressway, which will provide a shared-use path. This tunnel will provide Facebook employees access under Bayfront Expressway between campuses so that employees will not have to cross at the existing traffic signal. Additionally, it completes a key grade-separation connection for the Bay Trail crossing of Bayfront Expressway. It also provides the opportunity to provide an intra-campus circulator system to connect the two campuses. Appropriate technologies for this system are currently being investigated.

On-street and off-street bike network constraints and recommendations are under development. Infrastructure improvements to the bicycling and walking networks are also being evaluated by joint efforts through the Facebook planning team and the City of Menlo Park.

Proposed Shuttle Routes

- to/from Dumbarton Bridge
- to/from Palo Alto
- to/from San Francisco (option 1)
- to/from San Francisco (option 2)
- internal circulator system
- Railroad (Freight service only)
- Site Location

