CHAPTER 8: TRANSPORTATION DEMAND MANAGEMENT (TDM)

Transportation Demand Management is often defined as a set of strategies used to encourage a balanced use of transportation resources. In many instances, this approach is applied to areas where automobile use is the dominant mode of transportation contributing to congestion on the roadway network. The City’s General Plan clearly states a reduction of automobile use as a primarily goal. Application of TDM strategies is a proven way to help achieving this citywide goal.

Reducing and shifting automobile trips to other forms of transportation will help relieve congestion within the circulation network. The City of Berkeley and its residents have traditionally been in favor of such sustainable principles. Reducing vehicle miles traveled is also a direct approach to limiting and controlling Green House Gas generation and other negative environmental impacts.

To reduce automobile trips, a push/pull mechanism could be established. The push force results from policies and programs that discourage auto use and “penalize” its users in some way. This is often accomplished through pricing techniques that either requires developers to pay more when accommodating the auto or charges the auto driver for the use of facilities in certain areas. These charges to the auto user often come in the form of parking or congestion pricing.

The pull side of the mechanism results from making other options more attractive in the hope that drivers will change their travel behavior voluntarily. Investments in more bike lanes and pedestrian amenities such as sidewalks and street furniture, increasing frequency and capacity of transit, and making all these options cheaper than using the automobile is a technique to encourage alternative mode use. The city can also offer incentives for developers that will encourage them to make investments to benefit alternative modes and reduce the need to provide on-site parking. Allowing developer credits for proposed measures that will improve and increase the use of alternative modes is one way to address the issue.

Parking policies and pricing is frequently viewed as either a complementary or competing force with TDM, depending upon their use. In West Berkeley, there are very few areas that charge for parking. These conditions tend to lead to an increase in automobile use by visitors and employees compared to other areas of the city that charge for parking.

Employer programs implemented for City employees and UC Berkeley’s Bear Pass have demonstrated successful results from their efforts. The Downtown/Southside TDM plan developed for the City in 2000 was instrumental in establishing many of these programs and policies. Although transit options and
accessibility may be better in the Downtown/Southside than in West Berkeley, this model can be used to continue investments in alternative mode improvements.

8.1 TDM OVERVIEW

There are many examples of TDM strategies that have been used in Berkeley and by other jurisdictions to achieve a more balanced transportation system. These can be grouped into four categories primary categories which include:

- Incentive-Based;
- Land Use Management;
- Improvement of Transportation Options; and
- TDM Policies and Programs

Incentive-based strategies use pricing schemes to increase or decrease the use of certain transportation modes. Charging for parking or implementing tolls are ways to discourage auto use. Encouragement of other modes can be done by providing free transit passes and allowing employees to cash-out on their parking space.

Land Use Management strategies are those that promote smart growth and new urbanism through physical development. Creating a more pedestrian friendly-environment will make walking more attractive and increase the numbers of those willing to walk instead of drive. Designing communities that minimize distances between day-to-day activity centers makes non-auto modes more feasible. Transit use can be increased by promoting mid to high density development along key transit corridors. Lastly, traffic calming can be used to minimize auto use through certain residential corridors or pedestrian nodes.

Improvements to other transportation options should ideally be done before some of the other strategies are completed. These improvements can include adding bike lanes to busy arterials, providing secure bike storage facilities, or adding real-time next bus information signage at bus stop locations. If these improvements are in place prior to encouraging shifts in travel behavior, users will be more accepting of and satisfied with the alternative transportation choice.

TDM policies and programs are specially designed to target a certain change in travel behavior. Often, these are instituted and monitored by a coordinator at a citywide or employer level. They can include bike-to-work campaigns or coordinating vanpools. Marketing is an essential component to the success of these programs.
8.2 TMA INVOLVEMENT

The Berkeley Gateway Transportation Management Association (TMA) is a non-profit agency developed by the Berkeley Chamber of Commerce in the early 1980’s. The TMA is responsible for working with developers and large employers in the city to identify transportation alternatives for employees and residents. The West Berkeley Shuttle is one dedicated service co-managed by TMA and City of Berkeley that operates between the Ashby BART station and the large employment areas in West Berkeley south of University Ave.

8.3 EMPLOYER PROGRAMS

West Berkeley is home to large employers including Bayer Healthcare, Pacific Steel, and Kaiser Permanente Medical Group. The Wareham research campus is also located along Potter St. which provides 15 buildings of lab space occupied by Bayer Healthcare, Dynavax Technologies Corp, and Lawrence Berkeley National Laboratory (biotech center). These large employers and employment center provide opportunities to create effective TDM programs.

Bayer Healthcare currently manages one of the more successful employee TDM programs in the city and Bay Area and the only program in West Berkeley. Since its opening in 1992, Bayer has contributed nearly three-quarters of a million dollars toward its TDM program and has observed use of alternative modes jump from 5% to over 30%. For its efforts in this area, Bayer has been honored as Best Workplaces for Commuters for the past five years by the US Environmental Protection Agency and US Department of Transportation.

Bayer uses incentive-based strategies and improvements to other transportation modes as part of their program. Results from the program show that 33% of Bayer employees rideshared in 2006. To achieve these rates, the following measures were instituted by Bayer:

- Two vanpools, both originating in Solano County (22 employees)
- Preferential parking for carpooling (74 employees)
- Sponsorship of the West Berkeley Shuttle (75 employees)
- Participation in transit commuter check (340 employees)
- Participation in ACCMA’s Guaranteed Ride Home program (110 employees)
- Telecommute option for employees (35 employees/once a week)
- Shuttle between Bayer campuses in West Berkeley
- Providing 46 secure, enclosed bicycle lockers and showering facilities
Bayer has also recently started a separate vanpool servicing the Ashby BART and Amtrak stations. This was implemented due to overcrowding on the West Berkeley Shuttle and safety concerns for pedestrians going to the Amtrak Station. Many other concessions are provided such as on-site food services, dry-cleaning, credit union, and mail services which minimize trip making by its employees.

8.4 DEVELOPER INCENTIVES

Another role of the TMA is to work with developers to integrate TDM programs and policies into their developments. Bayer is a good example of a TDM program that was the result of a development agreement. Incentives are commonly approved by to developers as a way to reduce the amount of on-site parking required by cities. These incentives for developers could include the following:

- Dedicated transit and carpool/vanpool information centers provided on-site;
- Employment of a full-time TDM coordinator;
- Eco-pass or transit subsidy programs; and
- Provision of on-site car share spaces and/or paid subscription of the program.

West Berkeley currently has a number of parcels with infill or densification potential. Using TDM incentives for future project approvals is one step toward balancing the transportation network.

8.5 SUMMARY

Although current TDM programs in West Berkeley may not be plentiful, opportunities exist for future expansion. Following the lead of Bayer and those in the city with effective TDM programs, many employers and developers in West Berkeley can work to balance travel and reduce congestion. The West Berkeley TDM Plan will further outline and detail programs and policies specific to the study area that will work toward achieving this transportation balance.