CHAPTER 6. TIER THREE: EXPAND EXISTING PROGRAMS

Chapter Six describes the Tier Three activities. These activities expand upon existing programs.

TRANSIT 3.1 DEVELOP A CITY-SUPPORTED ECOPASS PROGRAM

Activity Description

The City (potentially through its Leading TDM Agency, *see TDM 1.1*) in cooperation with AC Transit should develop a transit pass program that allows collective groups to purchase discounted transit passes for all members of their group. This type of program is usually called an "EcoPass" program. It would allow organizations in the Study Area to have the option of purchasing fare cards for all their employees/members at a bulk discount. Employees thus receive free transit as a benefit of employment.

UC Berkeley staff and faculty and City employees should be the first collective groups to participate in this program. The program would then roll out to neighborhood, community and business groups. A Guaranteed Ride Home program for smaller groups could be included in the benefit program.

Rationale

- All employees and residents in the Study Area are located within 1/4 mile of transit service, yet transit is an underutilized resource among people who have a choice between driving and transit.
- Nearly 50% (46%) of UCB faculty and staff live within five miles of campus. Of those living between three and five miles, about 55% drive alone to campus. These trips are the ideal market for free staff/faculty transit.
- Program costs can be paid by the employers themselves or as a component of cafeteria-style benefit plans.
- There are many successful examples of prepaid fare programs implemented between employers and transit agencies around the country. They have been wise investments for all agencies involved. Transit ridership increases by as much as 30%.
- UC Berkeley offers a $6 transit subsidy for staff and faculty riding transit. Not many employees are registered for the subsidy due to how small it is. EcoPass increases the value of this benefit significantly.
- Paying a fare and the complications of having exact change are barriers to attracting choice riders to transit.

- Berkeley is an ideal City in which to implement a community-based pre-paid transit pass program, since the City already has an network of active neighborhood associations.
- Transportation programs have been geared toward commute travel. A community-based program acknowledges that short, neighborhood trips also contribute to community traffic congestion.

Issues

- This program may be a significant ongoing cost, and various controversies will arise depending on the sources of funding.
- AC Transit benefits from Class Pass, because many students travel in off-peak hours. A community Eco-Pass program could attract more riders during peak hours, when AC does not have as much excess transit capacity that it can "sell" at a discount.
- The development of such a program is dependent upon the City's ability to deepen its positive working relationship with AC Transit.
- The City will have to "sell" the concept to AC Transit and then invite AC to the table to jointly develop a community EcoPass program. This would ideally be accomplished through the transit coordinating council. There are definite benefits to AC Transit, and AC has been open to exploring new service concepts.
- UC Berkeley Faculty and Staff are the ideal "pilot" market for this program. Faculty and staff, however, would benefit more if the program included BART. BART is still negotiating with UC to be involved in Class Pass for students. It will be important to have BART at the table to understand the limitations and future potential of including BART in this program.

Examples of Success

- **Boulder, Colorado**
  The City of Boulder, Colorado developed an EcoPass program for all city neighborhood groups and employers. Employees in the downtown business EcoPass program used transit more than twice as much in 2000 as they did in 1995. This is due partly to transit service improvements, but also in large part to the EcoPass program. When the University of Colorado in Boulder began providing the EcoPass program to its faculty and staff, bus ridership increased 84% among CUB faculty and staff.

  - **Boulder's Program Costs**

    Costs and staff time that were needed to develop and implement Boulder's EcoPass program are not available.

In the employer program, the cost per employee varies depending upon the location and size of the employer. The University of Colorado pays about $50 per eligible employee, but the City of Boulder is subsidizing CU's costs in its first four years. Post-subsidy, CU's costs will be approximately $450,000.

In the neighborhood program, the annual cost per household is $50 to $80. (The typical cost of an individual bus pass ranges from $189 to $1,020 per year.)

The City of Boulder subsidizes first-time, first-year Neighborhood ECO Pass contracts 25%.

- **Valley Transportation Authority, Santa Clara County**

  VTA offers an employer Eco-Pass program. The cost per employee varies based on employer size and location. The smaller the company, the higher the per employee fee; the more transit service at the employer location, the higher the per employee fee. For companies with fewer than 100 employees located in downtown San Jose, the cost is $80 per employee. For companies with more than $15,000 employees in areas served by bus only, the cost if $5 per employee per year. (VTA's Adult Express Pass, which is equivalent to Eco Pass, costs $693 a year per person.)

Strategies to Provide Free or Discounted Transit

Free transit or discounted transit can be offered to employees through many different strategies. Figure 6-1 explains how these programs work.

FIGURE 6-1
STRATEGIES TO PROVIDE FREE OR DISCOUNTED TRANSIT

Program Type	Description
Eco-Pass	The employer pays a fee to the transit agency based on the total number of employees. Any employee can then ride transit for free. Requires cooperation of transit agency. Provides the greatest incentive for UC or any employer, including the City, to encourage increased transit ridership among their staffs.
Employee-Purchased Eco-Pass	The employer pays a fee to the transit agency based on the total number of staff and faculty members. The employer then sells the Eco-Pass to its employees at the per-head rate which the transit agency charged (e.g. $35/year)[1]. Requires cooperation of transit agency. Provides the greatest incentive for the employer to encourage increased transit ridership. Not as attractive to employees as EcoPass.
Partial Eco-Pass	The employer pays a fee to the transit agency based only on the number of employees who obtain the Eco-Pass. The per-person fee is much higher under this program than under pure Eco-Pass (e.g. $300 per person versus $35 per person). Requires cooperation of transit agency. Has a built-in financial bias for employers to discourage employees from using the program.
Parking Cash-Out	All employees are provided a "transportation allowance," which they can put toward the cost of parking, take as a tax-free transit voucher or taxable cash. Employees can receive up to $65 tax-free[2] toward transit ticket purchases.
Partial Parking Cash-Out	Employees who do not elect to purchase a parking permit, are provided with tax-free transit/vanpool vouchers or taxable cash.
Transit Subsidy	The employer can either provide up to $65/month in tax-free transit vouchers or can sell transit passes at a discount of up to $65/month.
Commuter Choice	The employer sets up its payroll so that employees who pay for parking, transit, or vanpooling can set aside these monthly payments pre-tax.

Nelson\Nygaard recommends that the University and City pursue the establishment of an Eco-Pass program for the following reasons:

- UC staff and faculty are a great market at which to target the start-up of this program. The potential for increased transit ridership among this group is high.

[1] Some transit agencies preclude employers from doing this as a condition of participating in EcoPass

[2] Increases to $100 in 2002

- Because UC already distributes a Class Pass to students, the administration and distribution of a faculty/staff pass will be more cost-effective than other methods of offering transit subsidies.
- The program will benefit all UC staff and faculty, and not just those who use transit to commute to work. Users of other modes, including drivers, will be able to use their passes mid-day to get around Berkeley. There is also a benefit to faculty and staff who live in Berkeley, since these employees will be able to use their EcoPasses for personal travel not associated with work.
- Developing an EcoPass program for faculty and staff is the first step toward developing a broader, community-wide EcoPass program that will influence more than just commute trips and more than just University-affiliated trips.

Implementation Steps

There are different models for the development of EcoPass programs. In some cases (such as the City of Boulder, Colorado) the City led the development of the program. In other cases (such as Seattle, Washington), the University led the development of the program. Finally, transit agencies (such at the Santa Clara Valley Transportation Authority) have led the development of the program.

- In Berkeley, the ideal leadership for the development of this program would come from the Transit Coordinating Council. The City, University and AC Transit members of the council would become the leadership triumvirate.
- Adopt a City Council and University directive to begin development of this element.
- The City and University should make commitments to be the first employers or "group purchasers" on-board the program once it is up and running. (This would require a preliminary estimation of what the program will cost to UC and the City. A figure of $30 to $35 per day-time shift FTE is probably accurate.)
- Develop a timeline for the pass development process to which members of the Transit Coordinating Council can commit.
- Invite VTA to present its program to the council.
- Develop goals to help guide the development of the pass program. For example:

  Set AC Transit revenue goals (e.g. revenue neutral)

  Set transit ridership goals

  Set goals for the number of passes sold or group purchasers

  Set goals to identify the markets the program should target (e.g. commuters and employers, community in general)

- Obtain AC, UC and City endorsement of the program goals.
- Develop pass program options to meet the goals. Program aspects that must be developed include:
    - Eligibility – employers? community groups?
    - Size of group required for eligibility?
    - Parameters that define a purchaser group (e.g. could members of the Downtown Business Association be considered a group?)
    - Staffing and resources for program administration and marketing. (The City is the logical funding source for this function, since this will be a Berkeley-based program. This could also become a long-term function of the Lead TDM Agency -- *see TDM 1.1*)
- A potential strategy for program development would be to phase in the program with different groups. The first eligible groups would be the University and City, followed by area employers greater than 50 employees. Next the program could be rolled out to collective groups of 50 or more members, including business associations (e.g. the Chamber) and neighborhood groups.
- Develop options for pricing mechanisms
    - Price set based on:
        - location of employer/neighborhood and the associated level of transit service
        - size of members in group (the more members, the cheaper the per-person rate)
- City parking meter and lot revenue will be a potential funding source for the development and administration of this program. It could also be used to subsidize the cost of participation in EcoPass for small, downtown employers.
- When the program is expanded to neighborhood groups, different potential methods to fund the program should be studied. These include:
    - Neighborhood associations act like employers in that they organize themselves to pay a per-head fee in order to provide passes to all people within the area. This could work well in Berkeley with its network of strong neighborhood associations. It requires a great deal of cooperation and organization among the neighbors, however.
    - Have a city match to neighborhood payment, so that city subsidizes neighborhood fees.

  - Establish "EcoPass" improvement districts in which neighbors can vote to assess themselves for the EcoPass fee.
  - Establish a city-wide vote to assess themselves for EcoPass, so that the city's entire population would be eligible.
- Small Study Area employers could be included in the program through the establishment of a transit fee paid by all downtown employers. Individual employers would not be responsible for signing up and paying for the program. Administration of the benefit could be handled through a centralized channel such as a leading TDM agency in Berkeley (TDM 1.1).

TRANSIT 3.2 MAKE KEY BUS STOPS AND TRANSFER CENTERS SPECIAL PLACES

Activity Description

Transfer centers at Berkeley BART and Bancroft/Telegraph must facilitate easy, legible transfers, and minimize conflicts between buses, cars, pedestrians, bikes, trucks and other through-traffic.

Rationale/Benefits

- Improved design at the Berkeley BART station is needed to:
    - Improve the ease of understanding the transit system in the Study Area by providing clearly readable, attractive system maps and directions in the above-ground BART plaza area;
    - Provide ample, convenient, and clearly marked bus drop-off and pick-up locations;
    - Provide an automobile drop-off/pick-up area for transit passengers;
    - Provide a taxi waiting area that does not compete with bus access or disrupt traffic lanes;
    - Serve as a gateway for transit travelers. The main exit from BART should welcome people to Berkeley, by opening toward the City and Campus. A clearly visible pedestrian line of travel should lead from the main BART egress into the Downtown (i.e. Shattuck Avenue), and then on to the Southside and UC Campus;
    - Improve its function as a connecting hub between Downtown, the University, and the Southside with directional signs;
    - Improve the perception and reality of safety at BART and at the bus stops serving the BART station by eliminating the natural hiding and lurking spaces that exist at the present location;
    - Develop a sense of place in downtown Berkeley, by creating a vibrant urban plaza;
    - Further Berkeley's plans for transit oriented development in Downtown;
    - Improve transit rider amenities at the location;
    - Improve mobility in the heart of Berkeley;

  - Enhance on-going downtown community development and the attractiveness of Berkeley as a regional draw for cultural, entertainment and shopping venues;
  - Integrate the Downtown and Southside as destinations to which people will come without their cars.
- The City and University have already embarked on successful design improvements to the Center Street corridor between Berkeley BART and campus. Design changes to the Berkeley BART plaza are a continuation of this successful project.
- The City has already considered and partially implemented design options for the area – this work should not be abandoned.

Issues

- Constructing and maintaining first-class facilities entails initial costs and an ongoing funding commitment. Identifying long-term maintenance funding is more important and more difficult than up-front capital funding.
- The existing landlords of the retail space in Constitution Plaza (retail that surrounds Berkeley BART) would ideally be partners in the process if significant changes were pursued.
- Taxicabs that pull up at Berkeley BART use a significant amount of curb space, although they provide a critical function given limited connections from BART to the Southside and Berkeley Hills. The role and space priority of the taxi stand must be assessed given overall priorities.
- Design changes may require the elimination of a small number of on-street parking spaces, which could spark controversy.

Next Steps

- The City and University should resubmit their application for a Transportation for Livable Communities planning grant for this project to MTC. Changes to make the application more attractive include:
  - Prior to submittal, obtain letters of support from:
    - the Downtown Berkeley Association (DBA)
    - the Berkeley Cultural Trust
    - the nearest neighborhood group (MAAGNA)
    - LBNL
    - BART's station area development group

    - AC Transit
  - Include additional information about Berkeley General Plan transportation and housing policies that aim to shape downtown Berkeley into a transit-oriented development.
  - Emphasize community involvement in the process – in addition to involvement from AC, BART and the DBA. Use the TDM working group as a foundation for community input in the process.
  - Emphasize that improvements to Berkeley BART are part of a broader TDM strategy for the Study Area. Explain how planned transit improvements will enhance (and be enhanced by) improvements to the BART station.
  - Include related projects from the City of Berkeley's bicycle plan (once adopted) in the TLC grant application.
  - Stress the need for the Berkeley BART station to become an attractive gateway that will draw people *on transit* to major shopping, cultural and entertainment destinations.
  - Provide more information about the deficiencies of the present site, including its inadequate curb space, circulation barriers, haven for homeless, orientation away from campus, and lack of signage.
  - Identify appropriate matching funds from the City, University and/or private sources. $10,000 to $20,000 is all that is probably needed.
- UC and the City should jointly submit the TLC planning grant (as they did the first time)
- As prescribed by TLC, the TDM working group could form the basis for community input into the development of the plan.
- If the planning grant is not received, UC and the City should develop a similar collaborative planning process as they have done for other joint planning efforts.
- Redesign of the Berkeley BART station should be included in the City's draft General Plan as part of the creation of a downtown Transit Oriented District
- A similar process may be followed for the intersection of Bancroft and Telegraph if the BART station area project is successful.

Estimated Costs

- Planning effort: $300,000
- Plaza revitalization: $1.5 million

TRANSIT 3.3 EXPAND LOCAL SHUTTLE SYSTEM ROUTES

Project Description

In order to make trips more direct and timely, the current UC shuttle system should be revised to include a more direct connection from the BART station to the Southside, or from the BART station to the library area on campus.

There are several options that should be considered for providing this connection. These include:

- A counter-clockwise perimeter shuttle traveling the reverse route as the clockwise perimeter route (exception of Bancroft/Durant.)
- A counter-clockwise perimeter shuttle traveling a route that would allow both the clockwise and counter-clockwise perimeter routes to use the same bus stop area on the east side of Shattuck Avenue at Center Street. This would create a central shuttle stop adjacent to BART regardless of which direction the traveler is headed.
- A direct connection between Downtown and the Southside that continually circulates between Center & Shattuck and Telegraph & Bancroft/Durant.
- A direct connection between BART and Telegraph/Durant that then continues on to other destinations, such as Rockridge BART or LBNL, depending on Study Area transit needs.
- A shuttle that connects BART with the library area on campus (Memorial Glade) by traveling on campus streets.

The demand for a "Smart Shuttle" should also be evaluated. This type of demand-responsive service could serve travel from campus to areas within a three mile radius of campus that are not served by existing campus shuttles. UC already has a similar shuttle route during the night. UC shuttles or changes to AC Transit routes should be considered.

Rationale/Benefits

- To get from the BART station to the southside of campus involves one of the following:
    - a long shuttle ride via the far side of the UC campus (due to the one-way-loop nature of the shuttle system)
    - an approximately 12 minute brisk walk

  - a 4 minute trip on AC Transit #7, #40, #51, or #64, plus a 3 - 5 minute walk from Telegraph & Durant to Sproul Plaza

- While AC Transit is a viable option, it is not clear to potential riders which of the AC buses serving Berkeley BART in the southbound direction will travel to the Southside. Moreover, the #7 bus runs only every 20-30 minutes; the #51, while operating approximately every 10 minutes, often has reliability problems due to its long route. Moreover, unless BART passengers have a BART Plus ticket, the eight-block ride to Telegraph costs an extra $1.35 each way, with exact change required.
- Smart Shuttles: There are many faculty and staff who live in the neighboring hills and in the neighborhoods north of campus that could utilize such a service on a subscription basis for commuting. Smart Shuttles could also serve mid-day travel demand for faculty and staff who need to travel to meetings at nearby off-campus buildings.

Issues

- Given that Bancroft and Durant are one-way streets, the closest a counter-clockwise shuttle can come to providing direct service between Berkeley BART and Sproul Plaza is to drop off at Durant and Telegraph. (Converting Bancroft into a two-way transit priority street would facilitate the service, but is not necessary.)
- Making this connection possible will require additional shuttle funding and/or reduction in service from other lines.
- A complete, counter-clockwise shuttle loop may duplicate rather than supplement portions of AC Transit routes #7 and #51. These routes already provide frequent service to students between Berkeley BART and the Southside, which is free with the Class Pass.
- The demand for a smart-shuttle concept would have to be carefully assessed.
- New shuttle services will have to be well-marketed.

Next Steps

- The lead agency to provide this shuttle service should be UC, or, if it is fully developed, the transit coordinating council.
- Development of the shuttle service could be a mitigation for UC's LRDP.
- Cost justification for the new shuttle service should be based on the cost of producing the necessary parking spaces as proposed by the LRDP and comparing the resulting increases in parking permit fees with the increases in permit fees necessary to support

the new shuttle service. In order to make this comparison and to justify the service as an LRDP mitigation, an estimate of the trip reduction impact of the new shuttle must also be developed.

- Development of the shuttle service should be done in light of broader community need. For example, in the process to make UC and LBNL shuttles free to the community, it may be determined that LBNL will discontinue providing its off-campus shuttle service *(see Transit 2.2)*. Thus, the different routes described above will need to be analyzed based on need.
- Shuttle service should be assessed in light of transit negotiations with AC Transit to improve the Class Pass program *(see Transit 2.1).* A comprehensive assessment of student ridership on AC Transit, now that Class Pass has been established for one year, will provide information about potential for better coordination between AC and UC shuttles.
- Another mitigation effort for the LRDP is the analysis and potential implementation of SMART Shuttle design concepts to serve the campus and its environs.

Estimated Costs

- $45 per operating hour; service running 6 AM to 10PM on weekdays ~ $200,000.

TRANSIT 3.4 WORK WITH AC TRANSIT TO IMPROVE FREQUENCY AND RELIABILITY ON CORE ROUTES

Activity Description

The Study Area is well served by AC Transit. AC's routes, however, serve the Study Area as they pass through it. The trunk routes serving the Study Area, such as the 51 and the 7, travel through several cities, and the long length of the 51 in particular causes bus bunching and unreliable service in the Study Area.

Several options can be studied to improve frequency and reliability on the core routes serving the Study Area: (The core routes are College, Telegraph, Shattuck, Bancroft, Durant and University Avenues.)

- short runs of Line 51 between Rockridge and Downtown Berkeley BART stations;
- GPS bus tracking;
- bus prioritization treatments;
- increased frequency; and
- an assessment of the potential of free community UC and LBNL shuttles to provide increased frequency on some of the key corridors. This may require additional routes and/or service hours

Rationale/Benefits

- As each community in the transit district's service area advocates for more transit, Berkeley must establish its voice with a clear plan for cooperation with AC.
- To compete effectively with the transit demands of other communities, Berkeley must show unified support between the City and the University and must have a clearly articulated concept of the service improvements it wants and how those improvements meet broader community goals.
- Berkeley's draft General Plan includes policy statements to advocate for additional transit services. Berkeley can also include locally-driven measures to improve land-uses, zoning, street design, and technology to support transit. *(See Transit 3.5)*

Issues

- Cost may be the only significant issue.

Examples of Success

- **Boulder, Colorado**
  The combination of campus shuttles, community bus routes and the existing fixed-route transit network provide service every 2-3 minutes in the corridor next to the University.

Next Steps

- Develop the transit coordinating council. The transit coordinating council is critical to furthering improved AC Transit and BART service in Berkeley.
- Develop a joint plan with AC, BART and Berkeley to explore actions the City can take to help public transit agencies improve local service. This may include several of the actions already described in this TDM study, such as a community EcoPass program and Priority Transit Street improvements.
- Advocate specific ideas about the additional level of resources that the City wants from AC Transit.
- The City must clearly articulate how it can help make transit more efficient and productive within the Study Area.
- Work jointly to set the political stage for these improvements and developing funding strategies.
- Identify the key transit service shortfalls in the Study Area and prioritize these needs.
- Prioritize the service improvements that are wanted to meet these needs – e.g. bus tracking or a short-turn of Line 51.

Estimated Costs

- For increased AC Transit service, operating costs per hour are $90.60 (per 1998 FTA Transit database). Financial constraints as well as prioritization of service delivery are both issues.
- If UC and LBNL shuttles were to serve this need, operating cost per hour should be estimated at $45/hour.

TRANSIT 3.5 IMPLEMENT TRANSIT PREFERENTIAL MEASURES ON CITY STREETS

Activity Description

The Berkeley Study Area has excellent transit resources, yet transit is perceived by many to be inefficient, slow, inconvenient, infrequent and unreliable. This is especially true for people making short trips within the Study Area. Many people claim that if the bus came every 10 minutes, they would take it rather than drive short distances within the Study Area. The fact is that AC Transit's #51 and the UC shuttle are scheduled to come every 10 minutes or more frequently.

Public transit in Berkeley is stuck in the same traffic as other vehicles, and has less flexibility to maneuver within the congestion. This congestion affects not just AC Transit, but also the private shuttles running in the Study Area. Lawrence Berkeley National Labs is adding another bus to its route, not to improve headways, but simply to maintain existing headways due to increases in traffic.

Berkeley can make transit more efficient by:

- Implementing transit signal priority for buses at signalized intersection;
- Establishing bus bulbs in street design and renovation;
- Implementing queue jumps for transit at signalized intersections in both the approach to the intersection and in the receiving lane once the coach has passed through the intersection; and
- Implementing HOV lane treatments on transit corridors.

Such measures speed transit through the traffic, and create an incentive for people to get on the bus to make short trips.

Rationale/Benefits

- Transit preferential measures can improve travel time and reliability, allowing frequency to be increased at no additional cost to the transit agency.
- As AC Transit evaluates bus service in key corridors, such as the College Avenue/Telegraph Avenue corridors, the cooperation of cities like Berkeley to speed transit through their streets will be critical to creating locally and regionally efficient transit.
- To the extent that more green time in the signal sequence is moving transit, transit will become more competitive with the single occupant vehicle.
- The City of Berkeley's draft General Plan identifies Transit Routes. The plan also includes a "Transit First" statement which says that transit is given priority over SOVs

on these routes. There are additional policy elements that can be included in the general plan to ensure integrated, effective transit routes.

Issues

- Cost will be an issue, along with potential reductions in automobile capacity. There may also be concerns if such measures reduce on-street parking spaces.

Next Steps

- Add policies to the City's Transit First policy to:
  - ensure prioritized vehicle treatment for transit on transit priority streets;
  - manage transit priority streets to optimize the movement of people rather than vehicles;
  - inform AC Transit and private shuttle providers of development proposals along the transit priority streets;
  - Limit non-transit-supportive land uses along transit priority streets, such as drive-through services, auto maintenance, and big-box retail;
  - Develop design standards for transit corridors that address: maximum parking ratios, building setbacks, curb cuts, pedestrian connections, and parking location. Establish sidewalk standards to ensure landscaping, comfortable sidewalk width, and maintenance standards.
- Keep AC Transit and shuttle operators informed of City plans. This could be accomplished through the Transit Coordinating Council.
- Planning and public works should jointly conduct an engineering study to identify and prioritize intersections for signal improvement.
- Prioritize intersections where queue jump lanes will provide the most benefit to transit.
- Develop plans for adding HOV lanes to transit priority streets.
- Further draft General Plan policies to implement a downtown transit oriented district.

Estimated Costs

The cost of transit preferential treatments can vary greatly depending on a large variety of engineering factors and constraints which are beyond the scope of this study.

TDM 3.1 MAKE BERKELEY A MODEL TDM EMPLOYER AND EXPAND COMMUTE BENEFIT PROGRAMS

Activity Description

The City of Berkeley's draft General Plan has a policy to make the City a model employer for TDM. The City must develop and implement a comprehensive TDM program for its employees and become a TDM leader in the City. Just as Berkeley TRiP acts as the Employee Transportation Coordinator for the UC campus, an expanded TRiP-like organization could serve in the ETC role for the City of Berkeley. In addition, the lead TDM agency (as described in TDM 1.1) could provide TDM programs that can be utilized by other employers.

Rationale/Benefits

- The City of Berkeley does not have an internal TDM plan for its own employees. Just like TRiP acts as the TDM program manager for the University, it could provide these services to the City.
- The City of Berkeley can develop TDM programs that could benefit all city employers.

Issues

- While there is general agreement that TRiP needs more attention, it is not clear how this should be done or paid for.
- It is difficult to serve the needs of both the University and the City and serve them well.
- Staff time and resources need to be better managed (See TDM 1.1)

Examples of Success

- **City of Bellevue, Washington**
  The employee Commute Trip Reduction program was started when the City Council voted down a proposed parking structure that was aimed at dealing with severe parking shortages caused by an increase in city staff. The city Employee Transportation program is managed by two city staff who dedicate about half their time to parking management and half to the alternatives program. All employees are charged for parking. Employees are offered free bus passes, free carpool parking and parking cash-out incentives of $15/month. In FY99 the program paid $30,000 to employees in incentives.

- **City of Pleasanton, California**
  The City of Pleasanton pays its employees $1.50 per day for each day the employee uses an alternative transportation mode. Employees self-report their program

participation. In 1997, 130 of 380 eligible employees participated in the program (34% of employees). These employees participated an average of 3.75 days per week. In 1997, incentive pay-outs to participants were almost $20,000. Average daily participation was 55 employees (15% of eligible employees) (i.e. 55 fewer parking spaces demanded on any given day).

- **Contra Costa County**
  Contra Costa County provides the following incentives to anyone who lives, works or drives through Contra Costa County: one-time transit incentive per person per year ($32 BART pass); Carpool - $40 gas scrip per person for joining a carpool; GRH – 6 rides per year (only those who work in CCC are eligible); Vanpool – 50% fare discount for first 3 months. Contra Costa County's annual budget for these programs is about $350,000, which includes staff time.

Next Steps

Note: It may be necessary to address TDM 1.1 before addressing the following. The new programs recommended in TDM 3.1 could be folded into the work plan for the TDM organization that would be developed as part of TDM 1.1.

Additional Campus TDM Programs

- An on-campus bicycle messenger service to eliminate faculty/staff trips across campus for deliveries and pick-ups; (Could be a student-run venture.)
- Bike promotion programs (See Bicycle 3.2); and
- Departmental bicycles (See Bicycle 3.4)

The City as an Employer *(See also TDM 1.1)*

- The City must develop a TDM program for City employees, so that the City can realize its General Plan policy to be a leader in TDM. The following steps should be followed to develop this TDM program:
  - Assess how the city provides parking to its own employees. Implement policies that set the example for how the City would like all employers to treat parking benefits.
  - Develop a TDM goal for the City (as an employer). Examples of what this goal could be include:
    - A drive-alone-rate target for City employees (either city-wide or segmented between the Study Area and the remainder of the City)
    - A 20% reduction in the drive alone rate over five years from the base year
    - An Average Vehicle Ridership Target for City employees

- Develop a TDM program to realize the goal. An effective program would include:
  - A parking cash-out program or other financial incentives for carpoolers and vanpoolers and broader and more consistent transit subsidies
  - Development of city-sponsored vanpools
  - Elimination of any free parking for city staff (rework union contracts)
  - Leadership by City Council
- Develop a monitoring program to determine if the programs are meeting the goals.

City-Provided TDM Programs

City-provided programs are TDM incentives that all employers can take advantage of. In the Bay Area, Contra Costa County and Alameda County have developed some of these services for any employer located in that county. These include:

- A community-wide Guaranteed Ride Home Program
- Start-up incentives for carpools
- Longevity incentives for carpools or vanpools
- Empty seat subsidies on vanpools

Cost Estimate

- The City of Berkeley has approximately 1,650 employees at its locations throughout the City. A TDM program operating budget for city employees could range from $50,000 to $600,000. The high-end estimate would include a transportation allowance program of $40/month to all alternative uses, assuming that 65% of employees used alternatives.
- A robust City TDM program would require a full-time staff member (which could be part of the staff of a TRiP-like organization). A minimal TDM program would require a half-time staff member.
- City-provided incentives for all employers could include city-provided start-up incentives for all modes or longevity incentives for carpools and vanpools. These program costs could range from $50,000 to $500,000 annually depending on the number of programs offered, their flexibility and their benefits.

BICYCLE 3.1 IMPLEMENT BICYCLE PLAN RECOMMENDATIONS; DEVELOP FURTHER PLANS FOR STUDY AREA

Activity Description

More people bicycle to work in Berkeley than in any other city in Alameda County. While bicycling rates are high, there is significant potential to increase bicycle mode share throughout the Study Area. One of the barriers to bicycling in the Study Area is the volume of traffic on streets that can make bicycling an intimidating, unpleasant experience. Creating an integrated bicycle network is critical to capturing the bicycle potential.
The City of Berkeley has a goal to create a bicycle-friendly city. In 2000, the City adopted a Bicycle Plan. The bicycle plan calls for the establishment of bicycle boulevards and additional bike parking.

Rationale/Benefits

- Currently, no continuous, comfortable bike routes connect the Study Area to the rest of Berkeley.
- Additional planning is needed to develop bike routes that better integrate the campus with its peripheral streets.
- Specific improvements for the Study Area, beyond what is included in the Bike Plan, should be addressed.

Issues

- Developing the bicycle boulevards will require significant expenditures plus time-consuming planning processes, working with affected residents and businesses all along the way.

Examples of Success

- Pennsylvania State University's 1999 TDM Plan calls for the installation of 12.5 miles of on-campus bike paths.
- The City of Amherst and University of Massachusetts received federally ear-marked funding to construct a bicycle connector between campus and the city bike-way.
- UC Davis has a full-time bicycle program manager and one staff person dedicated to full-time bicycle enforcement.

Next Steps

- Identify planning staff time to further the implementation of the plan. A joint planning effort could be established with the University as a mitigation to UC's next LRDP. In

this way, the University could provide staff resources and work jointly with the City to further the plan's implementation.

- Implementation of the bicycle plan could also be advocated through a revitalized Berkeley TRiP organization that serves as a joint City/University planning arm dedicated to creating an urban environment that promotes the use of alternative transportation.
- Using the criteria developed in the bike plan, prioritize the bicycle projects and programs that are in the plan.
- Develop and fund a community-input process to design the bicycle boulevard plans outlined in the overall bike plan.
- Address specific improvements for the Study Area through an addendum to the Bicycle Plan. The bike boulevards along Milvia and Channing should be improved.

BICYCLE 3.2 PROMOTE BICYCLING AS EVERYDAY TRANSPORTATION

Activity Description

Developing a culture that supports bicycling as an everyday transportation alternative requires small-scale efforts that go beyond the establishment of a bike network. These efforts make bikes feel welcome throughout the city, and include:

- Bicycle parking on shopping streets (e.g., Telegraph Avenue *see Bicycling 3.3*)
- Bicycle parking at recreational areas (e.g., Strawberry Canyon trail head)
- Bicycle signs unincorporated into city design schemes
- Bicycle parking included in all developmental projects
- Signal loop detectors for bikes at key intersections
- Roadway and intersection configuration that supports bicycling
- Bicycle promotional events and awareness campaigns

Rationale/Benefits

- Lack of information and cultural attitudes keep many people from cycling
- An on-street bicycle network is not enough to create a city-wide bicycle culture
- While Berkeley has areas that are quite hilly, the main travelways into the Study Area are relatively flat and straight

Issues

- Bicycle programs require staff time and additional program expense.

Next Steps

- Development of bicycle promotion efforts would be part of expanding Berkeley TRiP services to the University *see TDM 3.1*).
- A full assessment of successful bicycle promotion efforts on other campuses and in other cities reveals the following strategies, some or all of which could be applied to Berkeley:
    - Increase the availability of showers and clothing lockers on campus (more important for staff and faculty, than students)
    - Residence halls with bike storage ceiling hooks
    - Staff and faculty bike parking allowed in offices
    - Bike education programs, information, and special events

- Bicycle repair and maintenance courses
- Bike traffic school for cyclists cited on campus for moving violations
- Summer bike storage
- Bike maintenance space
- Staffed position: On-campus bicycle enforcement officer
- Staffed position: On-campus bicycle coordinator

Cost Estimate

- Low: $15,000
- High: $150,000 + 2 staff positions

BICYCLE 3.3 INSTALL ADDITIONAL BIKE PARKING AT UC AND THROUGHOUT THE STUDY AREA

Activity Description

There is a shortage of bicycle parking throughout the Study Area and a near absence of secure bicycle parking. Bicyclists are frequently forced to lock their bikes to parking meters and other street furniture when stopping to shop.

Rationale/Benefits

- Fear of bike theft is a significant deterrent to increased levels of cycling.
- While many people ride bicycles to UC Berkeley for classes, use of the bicycle could be expanded for shopping and other non-work/non-school trips. This is especially true in the immediate area around campus.
- Students riding bikes off campus to accomplish errands and patronize local businesses are faced with a shortage of convenient short-term bike parking.
- Lack of bike parking along retail streets causes cyclist / pedestrian conflicts along congested corridors and increases chances that cyclists will disobey traffic rules.

Issues

- On Telegraph and other busy streets with narrow sidewalks, providing additional bicycle parking may require removing on-street automobile parking spaces, as the City of Palo Alto has done.

Next Steps

- Identify key locations for bicycle parking
- Downtown and Southside retail districts should receive first priority
- Include the TAA and DBA in the process
- Couple with Bicycle 3.1 to follow the plan outlined in the City's bicycle plan
- Select racks that are most conducive to secure, convenient, short-term bike parking
- Install bike racks

Estimated Costs

- Low: $50,000
- High: $200,000

BICYCLE 3.4 PROVIDE DEPARTMENTAL BIKES FOR UC AND CITY DEPARTMENTS

Activity Description

UC departments should have access to fleet bicycles for running errands and personal trips during the day. Maintenance and supplies should be provided by a central operator in order to maximize economies of scale and ensure project success. The City already offers such a program for work-related trips. It's success should be marketed to UC.

Rationale/Benefits

- Providing fleet bicycles is a good tool to reduce commuters' need to have a car during the day for errands. It may also reduce the need to have parking spaces immediately at hand.

Issues

- While such programs are inexpensive to operate, they require someone to be responsible for their success.
- Liability will need to be addressed, just as with automobile fleets.
- The topography of the Berkeley campus makes bicycling across campus difficult to impossible for a portion of the population.

Examples of Success

- **Fort Collins, Colorado**

  The City of Fort Collins, Colorado began a program to offer abandoned and confiscated bicycles to employers and Colorado State University departments to use for business travel. CSU's Parking & Transportation Department was the first department to participate in the program. One bicycle is used by department staff to run errands around campus.

Next Steps

- Look at examples from other universities. Program design can include:
  - Joint programs with city or university police departments to use abandoned or confiscated bicycles,
  - An in-house university program or a city-provided program that offers bikes to UC as well as other employers or a combination effort run by Berkeley TRiP (see TDM 3.1),

  - An on-campus bicycle pool, e.g. "bike sharing"
  - Bicycles loaned or leased to specific departments for that department's exclusive use
  - Use of electric bikes to overcome topography obstacles
- Develop a program conducive to the University's needs.

Cost Estimate

- Low: $15,000 (use confiscated & abandoned bikes; budget covers marketing, tracking and staff time)
- High: $100,000 (provide new bikes or electric bikes, marketing, tracking, locking mechanisms, staff time)

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