

Responses to Questions about the East Bay Bus Rapid Transit Project and Draft Locally Preferred Alternative (LPA)

Following is a list of questions about the East Bay BRT Project and the City of Berkeley's staff proposal for a draft LPA compiled from written comments received through November 9, 2009 and questions submitted by the Willard Neighborhood in September 2009. Questions and answers are arranged into the following subject areas:

1. Traffic Impacts
2. Parking Impacts
3. Pedestrian and Bicycle Impacts
4. Land Use, Economic and Business Impacts
5. Transit Ridership/Demand
6. Route and Stops
7. Project Costs
8. Local Bus Service
9. Transit Fare
10. Other Questions

1. Traffic Impacts

1.1 What are the potential traffic mitigations that could be implemented in the Willard neighborhood?

[Response from AC Transit.] To ensure an effective BRT project, consideration of trade-offs related to the movement of persons in the corridor is required. Dedicated use of a travel lane for the BRT system will likely result in traffic diversion from Telegraph onto local streets. To understand the likelihood, magnitude and specific locations of this effect, neighborhood traffic analysis will be conducted as part of the FEIS/R. To address potential adverse effects to local streets, AC Transit is considering implementing a neighborhood traffic protection program. The neighborhood protection program would assist in paying for the installation of devices to reduce traffic volumes or reduce traffic speeds on local streets, should they be adversely affected by the BRT project. AC Transit and the cities will need to establish criteria for when a local street is considered adversely affected and action is warranted. Possible criteria include traffic volume increases above a certain threshold; traffic speed increases above a certain threshold; number of collisions, injuries, and fatalities; and proximity to sensitive uses such as schools, senior centers, libraries, hospitals, etc.

1.2 How will the potential for traffic diversion into neighborhoods adjacent to Telegraph Avenue be studied? How will it be determined if a neighborhood has been impacted?

[Response from AC Transit.] A neighborhood diversion analysis will be conducted to evaluate the effects of increased intersection and roadway congestion on adjacent neighborhoods. Based on findings from the neighborhood diversion analysis, AC Transit will work with stakeholder agencies to develop a policy addressing potential neighborhood diversion impacts due to the proposed BRT project.

The neighborhood diversion study will comprise the following:

- Comparison of travel times on major arterials and local streets in the vicinity of congested intersections and roadways. This information will be used to assess the attractiveness of local streets as alternate routes.
- Assessment of travel patterns where local street and major arterial travel times are similar. Trip origins and destinations will be used to determine the likelihood of diversion to local streets.
- Evaluation of potential diversion using established criteria to determine if a neighborhood is impacted. AC Transit will establish criteria in cooperation with the cities.

1.3 What provisions are being made to prevent an increase in traffic cutting through Willard and Le Conte since Telegraph will no longer be an arterial? (question from Willard Neighborhood)

Other than the Ashby intersection, no changes have been proposed along College. However, additional traffic analysis will be done as part of the FEIS, and the City will have an opportunity to review and comment on that analysis. Additional stop lights or other improvements could be added to the proposal. See LPA pages 4-2 through 4-7 and 4-9.

1.4 What will be done to facilitate a safe and timely left hand turn onto Telegraph Avenue from Ashby Avenue during rush hours? Perhaps, a dedicated left turn lane or turn signal? (question from Willard Neighborhood)

A left turn lane from Ashby has not been proposed in the draft LPA. Signal timing at all intersections along the BRT corridor will be optimized as part of the project and should facilitate turn movements.

1.5 If Dwight Way between Prospect and Martin Luther King was made a two-way street would this decrease the number of vehicles cutting through the neighborhoods? Haste could also be made into a two-way street so that traffic going north on Telegraph would no longer have to drive into the commercial district to go east on Haste. (question from Willard Neighborhood)

This question is outside the scope of what was considered in the draft LPA. Please see the Draft South Side Plan (<http://www.ci.berkeley.ca.us/ContentDisplay.aspx?id=420>) for a discussion of traffic circulation in the South Side area.

1.6 How will the BRT project impact vehicle congestion and total person throughput on Telegraph Avenue?

[Response from AC Transit.] For the DEIS/R, AC Transit developed information on vehicle delay at individual intersections on Telegraph Avenue and other roadways in Berkeley. This information is reported in the DEIS/R and the draft LPA. Using this information, AC Transit estimates that automobile travel times on Telegraph Avenue will increase somewhat in the year 2025, taking 7.1 minutes to drive during the afternoon peak hour from Telegraph and Alcatraz to Telegraph and Bancroft with the BRT in place versus 5.3 minutes without. The travel time increase during other times of the day would be less. In contrast, bus travel time between the same two points would decrease, from 6.5 minutes without BRT to 4.9 minutes with. If waiting time for buses is included, the decrease is from 12.5 minutes to 7.4 minutes.

Person delay at individual intersections is a measure that accounts for delays to all travelers, including those in private vehicles and those in buses. AC Transit is planning to develop person delay information for intersections throughout Berkeley for the FEIS/R.

1.7 Will all traffic diverters in the areas near the BRT be removed to make room for increased traffic on neighboring streets? (question from Willard Neighborhood)

No, the draft LPA does not propose changes to traffic diverters. City staff has asked AC Transit to strengthen their analysis of potential increases in traffic on neighborhood streets and to actually monitor traffic in the event that the project is implemented and to add additional calming devices if needed to reduce unanticipated impacts on neighborhood streets. See LPA page 4-9.

1.8 If the city approves BRT and traffic through neighborhood streets increases significantly as a result, would we be able to have traffic diverters installed as mitigation? (question from Willard Neighborhood)

The City is very concerned about impacts on neighborhood streets and staff have asked AC Transit to both strengthen their study in this area and to monitor traffic in the neighborhoods in the event that the project is implemented. The draft LPA lists mitigation strategies recommended by city staff, such as proposing that AC Transit pay for a monitoring program, including set-asides for additional improvements, should they prove necessary. See LPA pages 4-2 through 4-7 and 4-9.

1.9 Are AC Transit's traffic projections objective? Has the city considered getting a second opinion on this critical issue from an objective source tasked to study it (where there is no conflict of interest)? (question from Willard Neighborhood)

The traffic analysis was conducted by an independent consultant, not by AC Transit itself. In addition, the City has asked for more detailed analysis which will be conducted as part of the final environmental review. The City will have an opportunity to review the results of this updated traffic study prior to considering the merits of the BRT project.

1.10 I travel the Telegraph Ave. route north between Ashby and Haste regularly and have found that cars in the left lane on Telegraph often turn onto one or another of the side streets, holding up the left lane until the opposing traffic breaks. If there is no right lane for cars wanting to continue on Telegraph to move into, will this cause a tie-up? Will Telegraph Ave. still be a convenient travel route for cars going north-south? (question from Willard Neighborhood)

The draft LPA proposes that wherever left turns are allowed, there will be left-turn lanes, which should avoid the back-up you have identified. No left turns will be allowed at any intersection that does not provide a dedicated left turn lane, facilitating through movement.

1.11 What will be the increase in traffic on College Avenue and on Shattuck Avenue, particularly during rush hours when the traffic is ‘diverted’ from Telegraph? What will be done to mitigate the effects of this traffic? It will be more difficult to cross Shattuck and to make left turns onto Shattuck and for pedestrians to cross the street. Would it help to install a stop light at the intersection of Derby and Shattuck and have no left turns onto or off of Carleton, Parker and Blake Streets without a signal during rush hours? (question from Willard Neighborhood)

During the PM peak hour a 3% increase is projected on Shattuck and a 17% increase on College. AC Transit is proposing improvements to the intersection of College and Ashby, and other intersections could be similarly improved using adjustments to signal timing or new turn lanes. Significant additional traffic analysis will be done in the FEIS including refining mitigation measures if traffic congestion is projected to increase beyond City standards. The City will have an opportunity to consider the updated traffic data prior to considering the overall project. See LPA pages 4-2 through 4-7 and 4-9.

1.12 You will not be able to turn left at Parker, Carleton, Ward, Oregon, Howe, Dowling or Prince Streets – will this increase the traffic on other streets (Derby, Stuart, etc.)? (question from Willard Neighborhood)

There would be some increase in traffic on the remaining streets, although significant increases are not expected. This issue is very important to the City which has asked AC Transit to study traffic diversions in detail. Should BRT be implemented, staff are recommending that AC Transit fund an ongoing neighborhood traffic monitoring program and include a fund for additional traffic improvements or controls as needed.

2. Parking Impacts

2.1 Was the loss of the Anna Head parking spaces taken into account? If not, how would this affect parking in the area?

[Response from AC Transit.] The evaluation of BRT-related parking impacts covers on-street parking only. The Anna Head lot would not normally be considered parking supply comparable to on-street public spaces as it is UC Berkeley permit parking. However, loss of such parking, whatever its purpose, reinforces the need for alternative means of transportation to the Southside, such as that provided by BRT.

2.2 What is the potential impact on parking revenue from implementing the BRT Project?

The removal of metered parking spaces would result in the loss of meter revenue for the City. This would be offset to some extent by the conversion of unmetered on-street parking to metered parking. Once the BRT project is further defined, but prior to any project approval, the City will work with AC Transit to determine the fiscal impacts (both positive and negative) to the City from the BRT project.

2.3 What impact will the loss of parking have on the merchants? (question from Willard Neighborhood)

Decreasing auto access and increasing transit access will have different impacts on different kinds of businesses. Businesses that rely heavily on drivers could be impacted by parking loss; those that rely more on foot traffic are expected to benefit. The City has expressed significant concern about the parking loss on Telegraph south of Dwight and has asked AC Transit to study of a range of additional measures to ensure parking availability. See LPA pages 3-6 through 3-8.

2.4 Will we see metered parking on the side streets? (question from Willard Neighborhood)

AC Transit's current parking mitigation plan suggests that meters will only be added adjacent to businesses. The City has asked AC to consider a broader set of mitigations to reduce the impact of parking loss. See LPA pages 4-9 through 4-11.

2.5 What percentage of the parking spaces are being removed? (question from Willard Neighborhood)

The area with the most significant impact is on Telegraph South of Dwight. In this area, AC Transit counted 577 parking spaces either on Telegraph or within one-half block to a block off of Telegraph. Of these, 144 were found to be empty on a weekday afternoon. As now proposed, the LPA would result in removal of approximately 105 spaces, or 18% of those in the area surveyed by AC Transit. Parking losses in other locations are on a much smaller scale. It should be noted that the City is very concerned about the parking loss in this area and has asked AC Transit to consider additional mitigations

and parking management solutions which would increase the available supply of parking and/or better manage existing parking.

2.6 How many, if any, unmetered spaces will be converted to metered spaces? (question from Willard Neighborhood)

AC Transit has proposed to convert 65 to 70 unmetered spaces to metered use. These spaces are primarily on side streets adjacent to existing businesses and would not affect spaces located adjacent to residential land uses. It is important to note that this is an initial proposal, and that staff have suggested that additional work be done to adequately offset the impacts of parking loss should the project move forward. Please see Chapter 4 of the draft LPA for further detail.

3. Bicycle and Pedestrian Impacts

3.1 South of Dwight, there'd be bike lanes all along Telegraph EXCEPT in the one block between Ashby and Webster. Why that exception? (question from Willard Neighborhood)

This block is particularly constrained by the location of turn lanes at both Ashby and Webster, which did not allow for enough right-of-way for a separate bike lane.

3.2 Please define "sharrow" and explain the implications of having just it, instead of an actual bike lane. (question from Willard Neighborhood)

A sharrow is a stencil of a bicyclist painted on the pavement and is a visual cue to motorists that the lane is shared with cyclists. By law, bicycles share all lanes with other traffic – the sharrow is generally used when there is a high volume of cyclists. In the draft LPA, the Ashby/Webster block without bike lanes would have wider shared lanes - 13 feet, as opposed to the 10-foot lane width and 4- or 5-foot bike lanes shown on other blocks.

3.3 Can car lane be 9' instead of 10' to get a wider bike lane?

There are examples of auto lanes that are 9 feet wide, but these are generally found on lower volume streets with lower speed limits. The exact configuration of the lanes will be determined as the alternative design progresses.

3.4 How will the bicycle route streets be protected from increased car traffic? (question from Willard Neighborhood)

AC Transit's initial analysis showed very little traffic increase on the neighborhood streets. We have asked AC Transit to strengthen this analysis, which will occur with the FEIS. The City will be able to review and comment on this analysis before considering the project.

3.5 Have you considered the impacts of forcing the elderly and disabled (and anyone else) to walk an extra 3 or 4 blocks to get a bus? (question from Willard Neighborhood)

Locating BRT stops involves trading off access and speed. Bus travel times are fastest with longer distances between stops. On rail systems like BART, stops are sometimes several miles apart. Although some stops would be removed by the BRT proposal, most local stops proposed for removal are only a few hundred feet from a proposed BRT stop; in other words, one or two blocks. The City is concerned about those few locations where existing local stops are slightly less than a quarter-mile (3 or 4 blocks) from the nearest proposed BRT stop. As a result, staff has suggested that stops on Bancroft and Durant at Ellsworth – the local stops farthest from a proposed BRT stop – might be preserved.

It should be noted that although persons with mobility impairments could find it more difficult to access bus stops that are farther apart under the BRT proposal, the project would improve access conditions in a number of ways including level boarding onto buses and median refuges for pedestrians.

3.6 I often cross Telegraph on foot, especially at Derby, and it has become extremely dangerous without pedestrian islands. (question from Willard Neighborhood)

The draft LPA provides median pedestrian refuge islands at several intersections to facilitate pedestrian crossing Telegraph Avenue at both signalized and unsignalized locations.

3.7 What will pedestrian refuges (islands) look like?

The East Bay BRT project is still in the conceptual/planning phase and detailed design will occur in a subsequent phase of the project. All designs would be reviewed and approved by City staff prior to construction. Current state and regional guidelines stipulate that pedestrian refuge islands be a minimum of 4 feet wide and 8 to 12 feet long. For pedestrian refuge islands at intersections, installing a median “nose” (a small rounded area of median built to the intersection side of the crosswalk, so that the crosswalk passes through the median) can help to provide additional protection for pedestrians. Median noses can also reduce vehicles encroaching into the refuge area when making left turns.

3.8 What impact would the proposed LPA have on sidewalks on Telegraph between Dwight and Bancroft?

Sidewalks along the proposed BRT route will remain unchanged with the following exceptions:

- The curb line at the southwest corner of the Durant/Telegraph intersection. The corner will need to be redesigned. It will impact the sidewalk area between the crosswalk lines only by increasing the corner radius.
- The curb line between Haste and Channing. Currently, this separates a loading zone from a bus stop and includes a tree. If this portion of curb is removed, it will allow for improved loading area when the bus stop is converted to loading space, and will not result in the removal of vendor space. This curb could be maintained if desired.
- The curb bulb-outs at the intersection of Telegraph and Stuart would be removed.

3.9 How safe are bus stops in the middle of the street?

Well-designed platform areas in the center of the street should be safe for all users. The most comparable stops are the relatively new San Francisco MUNI T-Third light rail stops, located in the median of Third Street in San Francisco. Based on information provided by SFMTA, since the opening of the line, there have been two train-auto collisions and no pedestrian or bike collisions in the vicinity of stops on Third from the end of the line to King Street.

4. Land Use, Economic and Business Impacts

4.1 How will the potential construction of BRT stations affect zoning and other land development controls, particularly with respect to SB375?

NOTE: The following is based on staff's current understanding of California Senate Bill 375. This is new legislation and its implementation has not yet been fully defined and interpreted.

Under California Senate Bill 375, land use authority continues to reside with cities and counties. The City of Berkeley would not be required to change its General Plan which controls zoning in this area. What SB 375 does do is streamline environmental review requirements for transit-oriented developments meeting certain criteria. Among these criteria is that the project “be within one-half mile of a major transit stop or high-quality transit corridor included in a regional transportation plan. For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with a minimum of 15-minute headways during peak commute hours.” Section 21064.3 of the California Public Resources Code, meanwhile, defines a “major transit stop” as “a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.” It should be noted that some areas of the Telegraph corridor already meet this definition.

- The bill can be read here: http://info.sen.ca.gov/pub/07-08/bill/sen/sb_0351-0400/sb_375_bill_20080902_enrolled.pdf
- Legislative analysis can be read here: http://info.sen.ca.gov/pub/07-08/bill/sen/sb_0351-0400/sb_375_cfa_20080818_153416_asm_comm.html
- An analysis by the Natural Resources Defense Council can be read here: <http://www.climateplanca.org/sb375summary.pdf>
- An analysis by the California Planning & Development Report can be read here: <http://www.cp-dr.com/node/2140>.

4.2 How will the proposed BRT project impact businesses?

According to a report (see www.cityofberkeley.info/brt; September 24, 2008 - Planning Commission Item #10, BRT for Berkeley information and next steps; Attachment 6c) commissioned by AC Transit, by removing parking, BRT could have a negative impact on businesses that rely on auto access, especially those not located near stations. Over the long-term, BRT could cause a gradual shift in the retail mix away from such businesses to those driven by foot traffic. In short, some businesses would benefit, while others would not.

This distinction is key to understanding the likely impacts of BRT on businesses. Merchants, both in Berkeley and elsewhere, often oppose proposals to remove street parking or to raise the price of parking. It is certainly true that the easier access to a business is by all modes of travel, the better business will be. However, in a constrained urban environment, access by one mode often comes at the expense of others, and protecting access for cars at all costs is sometimes not the most profitable strategy.

The relative importance of access to businesses by different modes varies depending on both the type of business and where it is located. Small businesses in pedestrian-oriented neighborhoods stand to benefit most from strategies to increase foot traffic, such as improved transit access.

4.3 How would project construction impact businesses?

More detail on the impacts that construction could have on businesses will be provided in the East Bay BRT project's FEIS/R. It is likely that the construction impacts of the project would be similar to the types of construction impacts caused by roadway rehabilitation and reconstruction projects, including reduced roadway capacity and limited curb access. However, the full extent of potential impacts and possible mitigations will not be known until the FEIS/R is completed.

4.5 How will street fairs be affected?

The community's ability to hold street fairs along the proposed BRT route should not be affected. Buses would be rerouted temporarily onto adjacent streets during street closures for special events, as is currently the practice.

5. Transit Ridership/Demand

5.1 Please provide more information about transit demand (current and future).

[Response from AC Transit.] There are several travel markets to and from Berkeley that would have their transit travel time and reliability improved with the implementation of the East Bay BRT project. These include trips to UC Berkeley, Upper Telegraph and the Alta Bates/Elmwood area as well as trips to Downtown Berkeley from selected locations. For further discussion of travel markets to and from Berkeley and the opportunities to increase transit ridership with the East Bay BRT, see the East Bay BRT Berkeley Travel Market Information Technical Memorandum, dated 5 November 2009. (See www.cityofberkeley.info/brt, Berkeley Bus Rapid Transit FAQs.)

[Additional response from City staff and consultants.] The FEIS will review all ridership estimates given the details of the alternatives being studied. Ridership is affected by a number of factors including overall travel time, access to bus stops, access to key destinations, reliability, and relative cost. Many of these factors are dependent on the final design of the alternatives.

Ridership on the International-East 14th-Telegraph corridor is the highest of any existing AC Transit corridor, with over 21,000 boardings per day on the combined 1 and 1R. Ridership has increased substantially even with the modest improvements provided by the 1R. Between 2007 and 2008, ridership on the 1R route increased by 11% in North Oakland and Berkeley, and ridership at the Berkeley stops increased by over 15%. Some stops in Berkeley had even greater increases (for the 1R route): the stop at Telegraph and Webster saw a 34 percent increase in riders (161 to 215 boardings per weekday) while at Telegraph and Dwight there were 38 percent more riders (250 to 344 boardings per weekday).

6. Route and Stops

6.1 Considering that the bus stops are farther apart and that it may take longer to walk to a bus stop for many, I don't believe that the BRT will save many riders a significant amount of time, if you include the time from when you leave your door and arrive at the bus stop and when you get off the bus and arrive at your destination. Will this result in an increase in ridership on the local buses on Shattuck Avenue and on College Avenue? (question from Willard Neighborhood)

Preliminary analysis by AC Transit found that most of the current riders of Routes 1 and 1R would not have to switch stops, since all of the busiest stops are being maintained. Even for people who have to walk farther, their total travel time would be offset by increased frequency and reliability. AC Transit's ridership analysis does take total travel time into account. Of course, for some riders, especially those who live very close to a bus stop that is being eliminated, "door-to-door" times could be increased.

As for parallel bus routes, AC Transit expects some of those riders to shift to the BRT because of its anticipated greater speed and reliability. This is consistent with findings from other cities that operate BRT.

6.2 Instead of having BRT stops at the horrendous Ashby/Telegraph intersection, why not have them instead at the Webster/ Telegraph intersection? Wouldn't that reduce conflicts with turning movements, be more pedestrian-friendly, and bring BRT passengers closer to Alta Bates Hospital's main entrance? (question from Willard Neighborhood)

The draft LPA suggests station locations at the Ashby intersection so that the left-turn lanes from Telegraph Avenue onto Ashby Avenue could be lengthened to accommodate the expected left turning traffic to Ashby Avenue. If the community feels strongly about this stop location, it could be moved at the expense of left turn lanes from Telegraph to Webster.

6.3 Why does Telegraph have to be the street that BRT runs on?

AC Transit's 2002 Major Investment Study considered two other project alignments through Berkeley, namely, College Avenue Broadway and Shattuck Avenue/Telegraph Avenue. The following is excerpted from the East Bay BRT Draft Environmental Impact Statement/Report (May 2007), p.2-49.

College Avenue/Broadway: Although the College Avenue/Broadway alignment offered better service to major employment and educational centers, this alignment also had major drawbacks. College Avenue is narrow, thus, private property would have needed to be acquired to make room for a transitway. Otherwise, transit vehicles would have to travel in mixed-flow traffic, which would make transit on College Avenue less reliable and slower than transit on Telegraph Avenue. Moreover, Telegraph Avenue has more opportunities for redevelopment that would meet the project need [of supporting local and regional planning goals to organize development along transit corridors and around transit stations]. Also, a Telegraph Avenue alignment appeared to have fewer environmental impacts.

Shattuck Avenue/Telegraph Avenue: This alignment appeared to do a relatively poor job of meeting the service objectives since it closely parallels existing BART service. As a result, it was withdrawn from further consideration.

6.4 Is BRT being designed to accommodate Light Rail Transit in the future? How convertible is this?

[Response from AC Transit.] BRT stations and the alignment of the transitway were originally established with light rail transit (LRT) in mind. However, to respond to community and city staff concerns, the BRT design has been scaled back, for instance lane widths narrowed, and even the alignment modified in segments, as in downtown Berkeley, such that conversion to LRT would require substantial re-engineering in several segments. It may be possible to convert BRT to LRT using narrow streetcars as

used in Portland’s downtown circulator and in several European cities; however, an engineering evaluation will be needed to assess feasibility.

6.5 To avoid any tree removal, can the southbound station be located at Blake instead of Dwight?

Staff considered locating the station at Telegraph/Blake and at Telegraph/Dwight on the nearside of the intersection. Locating the station at Blake would require removal of eight on-street parking spaces between Blake and Parker. At the nearside of the Telegraph/Dwight intersection (on the northwest corner), there is inadequate space for a raised platform (to enable level boarding). For these reasons, staff recommended locating the station at the Dwight triangle.

6.6 What about continuing BRT down University to the Amtrak station?

[Response from AC Transit.] University Avenue from downtown Berkeley to the Amtrak station is a strong transit market. This corridor is a candidate for service improvements, and AC Transit is committed to exploring rapid transit solutions for this corridor. However, extending the proposed East Bay BRT down University Avenue is not an effective solution for either corridor. Analysis completed during the Line 51 Study as well as the Service Adjustments Plan found that a significant percentage of passengers on buses approaching UC Berkeley along University Avenue disembark in the UC Berkeley area. To determine how best to serve the University Avenue corridor, a comprehensive analysis of travelers using this corridor should be conducted.

7. Project Costs

7.1 What is the real cost (not price to consumer) of BRT?

According to AC Transit’s application for Federal Small Starts transit funding: “With the proposed BRT service, the operating cost per rider will decrease to \$1.91 (constant 2008 dollars), for a 32 percent decrease compared to the baseline.”

BART’s 2008 operating costs are \$558,736,813, and faregate boardings were 115,227,684 for a cost per passenger of \$4.85.

[Response from AC Transit.] Cost per new trip is one of several measures used by the FTA to evaluate transit projects applying for New and Small Starts funding. It measures “bang for the buck” by dividing a project’s projected capital (annualized) and operating cost into its projected increase in new transit trips. The East Bay BRT is very cost effective – its cost per new trip is \$9.70. This compares favorably with other completed and planned Bay Area transit projects (see following table).

	Cost per New Trip (2008\$)
East Bay BRT	\$9.70
BART to San Francisco Airport	\$27.40
San Francisco Third Street LRT	\$50.60
San Jose Tasman West LRT	\$26.20
San Francisco Central Subway	\$27.30
San Francisco Van Ness BRT	\$24.60

8. Local Bus Service

8.1 Where would the 51 bus stop at Ellsworth and Bancroft go? Durant?

[Response from AC Transit.] Current plans are for Route 51 buses to continue along Bancroft Way (westbound) and Durant Avenue (eastbound), using the same lane and stops as East Bay BRT buses. A station at Ellsworth is optional at this point and would not be provided unless high passenger demand and funding are identified. Current ridership at Ellsworth is relatively low.

8.2 Can AC Transit maintain parallel local bus service instead of implementing the “combined” or “all-in-one” service option?

[Response from AC Transit.] On 19 June 2009, the East Bay BRT Policy Steering Committee (PSC) recommended that AC Transit adopt the All-in-One operating plan and study it in the FEIS/R. This plan replaces both existing Route 1R Rapid Bus and Route 1 local service with BRT service with closer station spacing than the existing 1R. For more information, please refer to the attached presentation provided to the PSC on 19 June 2009.

The All-in-One operating plan showed superior results in criteria related to ongoing operations and sustainability of the system. With the All-in-One plan, 82 percent of existing 1 and 1R passengers corridor-wide and 87 percent in Berkeley would use the same station they do today (see below figure showing existing 1 and 1R ridership and proposed All-in-One BRT stations). Only 18 percent of passengers corridor-wide and 13 percent in Berkeley would have to use a different station. Of these, some would walk further than they do today, on average one additional block.

9. Transit Fare

9.1 Will you consider establishing different policies at different hours of the day and the creation of a pre-paid fare program? (question from Willard Neighborhood)

The draft LPA has identified a number of issues requiring further study and analysis, many of which are related to parking and traffic (please see Chapters 2 and 4 for a detailed discussion). The draft LPA did not specifically consider different policies at

different hours of the day since it is generally best for all users of the street to operate under the same policies at all times; however other potential solutions/mitigations such as this one are open to consideration at this point in the process.

9.2 Would discount Eco-Passes actually get more people to ride the bus? (question from Willard Neighborhood)

Reduced prices would have some effect on ridership. Cal students already have discount Eco Passes, paid for by student fees, which have increased their AC Transit use. The City Council has asked that staff and both the Planning and Transportation Commissions consider a separate proposal to AC Transit for a feasibility study, including possible funding mechanisms, of a corridor-wide Eco Pass program, including all communities along the route.

10. Other Questions

10.1 If the city decides to go with BRT, and then it turns out to be the mess that the neighbors anticipate, how hard would it be to go back to not having a reserved transit lane on Telegraph? (question from Willard Neighborhood)

City approval of the BRT project (not the LPA) would result in an agreement giving AC Transit responsibility for the dedicated lanes. AC Transit would have to approve a change to the agreement.

10.2 What are the essential differences between (a) the original BRT plan, (b) the proposed LPA, and (c) a "Rapid Bus Plus" plan in terms of dollar cost and time to implement, disruptions during construction, projected ridership and car use reduction, *and* cost to reverse "facts on the ground" if experience reveals a lousy cost:benefit balance? Assuming that costs of both implementation and reversal would be much less for a RBP (without dedicated lanes) than either the BRT or LPA, why would any responsible public official not want to try that out first? (question from Willard Neighborhood)

The "original BRT plan" consisted of a range of conceptual alternatives. The proposed LPA includes elements of both these alternatives and of new alternatives developed by Berkeley staff. Costs, ridership, traffic and other projected outcomes of the Berkeley LPA (however it is finally configured) and the "no-build" option will be developed as part of the final environmental review.

10.3 What is going to be done to improve the design of the Van Hool buses, so that it is safer and more accessible for the elderly, disabled and those with young children? (question from Willard Neighborhood)

Vehicle type is outside the scope of the draft LPA. This comment will be passed on to AC Transit.

10.4 Can new contracts stipulate that the buses must be designed and built in the USA in order to support our economy and jobs? (from Willard Neighborhood)

This issue is also outside the scope of the draft LPA. This comment will be passed on to AC Transit.

10.5 I am very much in favor of improved public transportation, but I don't think it makes sense to have a bus-only lane on Telegraph. If you look at the schedule, you will see that only about eight buses per hour go that way in each direction during the day, and even fewer at night. If you take away two auto lanes, Telegraph will be as congested as College. It would make sense in other locations such as downtown Berkeley and downtown Oakland where a number of lines pass through, if only the streets were wider. (question from Willard Neighborhood)

AC Transit is proposing to increase service to 12 buses per hour in each direction throughout the day on weekdays. The preliminary traffic analysis found that removal of two lanes on Telegraph would increase congestion, but that it would still meet City of Berkeley standards. Additional traffic analysis will be done as part of the FEIR, and the City will have the opportunity to review and comment on the traffic analysis before considering the project for approval.

10.6 Can headways be guaranteed as a condition for dedicating lanes?

[Response from AC Transit.] AC Transit is committed to providing a high level of convenient service in the corridor. As long as passenger demand justifies it, it is in AC Transit's best interests to provide frequent BRT service. Headways, or service frequencies, will be set to accommodate passenger demand and thus they could vary during the day and change over time. For example, peak headways might be initially lower—service more frequent—than off-peak and opening year service might be somewhat less frequent than service five to ten years later. However, AC Transit's projections as well as the BRT experience in other cities indicate that the demand for BRT service will more than justify five-minute daily service. Additionally, the length of the BRT corridor has been designated by each city as a regional Priority Development Area (PDA). PDA's are areas selected by cities where focused and sustainable growth will occur. By focusing growth along this corridor, neighborhoods are able to retain their "character", while the area smartly responds to the needs of the future.

10.7 So many drivers nowadays refuse to obey traffic laws, and there is very little enforcement. The same people who disregard red lights, stop signs, speed limits, crosswalks, etc., will drive in the bus lanes anyway. (question from Willard Neighborhood)

Physical features such as mountable or "rolled" curbs, rumble strips or striping and signage may be used to discourage drivers from using the median lanes. The draft LPA

did not consider this issue, but it is a subject that would be considered in more detail should the project continue to move forward. The draft LPA did not consider this issue in detail.

10.8 Could there be a study of BRT implementation in Los Angeles, Eugene and Cleveland? Have these places seen more and happier transit riders, fewer cars, and a boom in retail business along the BRT route?

Most BRT projects in the U.S. are relatively new and have only been in operation for one or two years. Further research is needed, and staff hopes will be forthcoming. The LPA appendix lists additional BRT resources.

10.9 What are other examples of BRT in California?

San Francisco is currently designing two BRT corridors that would be very similar to the proposed BRT in Berkeley. These would be on Geary Boulevard and Van Ness Avenue. Center lanes would be dedicated to buses in both cases.

Other BRT examples in California include LAMTA's Orange Line, the LAMTA Metro Rapid corridors, which have a variety of treatments to improve bus speed but generally do not include bus lanes. Nationally and internationally, there are many additional examples of planned and working BRT lines. Lines with at least some dedicated right of way on arterials, similar to the proposed project include the Boston Silverline, Lane Transit BRT, and Cleveland's Health Line. A good resource for information about various BRT projects can be found at <http://path.berkeley.edu/informationclearinghouse/brt/existing.html>

10.10 How wide are AC Transit buses?

According to the AC Transit website, AC Transit's Van Hool buses are approximately 8 ½ feet wide.

10.11 Could the proposed lane closure on Telegraph be tested?

While there are a number of "pilot testing" programs going on nationally and in the Bay Area for roadway configuration changes, this project realistically cannot be tested. The primary reason is that without median bus stops, buses would have to continue using the side lanes, creating major conflicts with the one through lane that would be provided on Telegraph. In addition, without the enhanced bus service, it is impossible to measure how much additional ridership would be attracted to transit and away from cars.

While it is not possible to accurately "test" the proposal before construction, it is possible to continue to monitor traffic conditions, and if traffic congestion exceeds standards, require that changes be made in the use of travel lanes. For example, the bus lane could be converted to a shared lane, used by all vehicles, by HOVs and trucks, or by some other subset of total traffic. The center lanes of Market Street in San Francisco

generally allow mixed flow, and while cars tend to avoid those lanes, they are mixed flow lanes that are used at times when the outer lanes are congested.

10.12 What will be the speed on Telegraph? How fast will the buses travel?

[Response from AC Transit.] The average speed of BRT buses through Berkeley is projected to be approximately 15 mph during peak periods, and somewhat faster during other periods of the day. This is roughly 30 percent faster than the existing 1R, which averages about 11 mph through Berkeley during peak periods. By comparison, autos travel at an average of approximately 16 mph along the BRT alignment today during peak periods. BRT buses would at all times travel at or below the speed limit of 25 mph. The BRT achieves its higher average speed primarily by removing interference from auto traffic and having faster boarding and alighting.

10.13 Will Rapid Bus Plus be studied in FEIS/R?

[Response from AC Transit.] An evaluation of Rapid Bus Plus will be included in the FEIS/R. AC Transit will develop a precise definition of Rapid Bus Plus, including design elements, alignment, and stations, based on the 29 September 2009 description from Berkeleyans for Better Transportation Options. AC Transit will confirm the definition with City of Berkeley staff.

10.14 Could smaller buses be used?

[Response from AC Transit.] AC Transit proposes using an appropriate mix of buses and service frequencies to accommodate the estimated passenger demand. On the most heavily used parts of the BRT, AC Transit projects peak period demand will exceed seated capacity by roughly 15 percent even with articulated buses operating every five minutes. Smaller buses have less capacity and would require AC Transit to operate more frequently, which results in more buses (and operators) and significantly higher ongoing operating costs. Current 1R Rapid service in the corridor, which BRT will replace, is provided by articulated buses and during peak trips ridership exceeds capacity.

10.15 How is the MOU (1997) reflected in this plan?

The Memorandum of Understanding (MOU) is an agreement between the City of Berkeley and UC Berkeley focused on cooperative planning efforts related to general City-campus planning efforts and efforts related to the Southwest Sports Complex. The MOU calls for consideration of upgraded transit corridor service, including consideration of light rail connections. Light rail was considered as an option in AC Transit's 2002 Major Investment Study.

10.16 How is the light rail plan, unanimously approved by the Transportation Commission (1997), reflected in the LPA?

In 2001, the City Council, with the Transportation Commission's recommendation, unanimously adopted Resolution 61,170 N.S. stating supporting "Telegraph Avenue as the preferred alignment, and bus rapid transit as the preferred transit mode". The resolution also states that spending toward bus rapid transit be coordinated to keep light rail options open as much as possible. This remains the current City policy.

10.17 Why do we need platforms when the same company that provided Portland, San Diego, etc. with trains has now (since 1997) trains with floors only 6 inches above the street?

The question relates to light rail trains that are in use in Europe. Staff is unaware of buses in use in the United States that could accommodate level boarding from a regular six-inch high curb.