Comments on the BRT Draft EIS/EIR

submitted by

Sharon Hudson
2501 Benvenue Avenue #21 Berkeley CA 94704 (510) 845-4009
sharonhudson@peoplepc.com

Date: June 14, 2007

The BRT Draft EIS/EIR provides an excellent start to a community discussion of the pros and cons of BRT, and perhaps even of some alternative ideas for BRT. But unfortunately this document is far from what is required of an EIR, as my comments and hundreds like them will reveal. It would be morally, politically, practically, and legally impossible to transition from this document to a final EIR without much more information and community process, expansion of project alternatives to include non-infrastructure alternatives, narrowing of BRT alternatives to studiable options, and publicly distributed and commented upon revisions of one or more new drafts.

As a Draft EIR, this document is conceptually inadequate, and therefore inadequate in every other way. The problem begins with the total incompatibility of the broad project goals and the extremely narrow project solutions, that is, the premature commitment to a certain kind of project—an expensive infrastructure project. This is not suitable for a public agency with a broad, somewhat intangible, mandate to serve the people. Transit success is not measured by built structures, but in its usefulness to the people. This DEIR attempts to fine-tune an infrastructure solution, without having ever shown that the infrastructure solution, as opposed to many other transit service improvements or public policy changes, serves the agency purpose or the project purpose best, or even very well.

The stated project goals are to improve transit service, increase ridership, reduce costs for AC Transit, and encourage redevelopment. However, AC Transit is not a regional land use planning agency authorized by the voters to create land use policy, under the guise of deciding on a transit plan; it is merely a public transit agency. Redevelopment, and centralizing population and development on a few corridors, may or may not be worthy goals, but that should be decided by the population of the entire service area (both those on the corridor and not), in a long, loud, public process that lasts through several election cycles, and which is well covered by local newspapers. Trying to change the land use patterns of the East Bay through a poorly publicized, confined, and difficult EIR process that almost none of the affected stakeholders is aware of is inappropriate—to say the least. We expect this of private developers, not public agencies. In any case, redevelopment should be viewed as an impact of this project, not a goal.

If we look at the first three goals, which are true transit goals, we easily see that the BRT project and the limited alternatives presented in the EIR are myopic. There are many ways to improve transit service, increase ridership, and reduce costs for AC Transit. Most of these methods do not rely on $400 million of infrastructure changes that are guaranteed to be highly disruptive, with massive detriments, and which, based on the experiences of other cities, have some significant chance of not working.

These alternatives would have been obvious if AC Transit had not narrowed its focus to a single idea (BRT or light rail) and had instead done the basic research necessary to address the real transit problems. The EIR is able to avoid considering all the other ways of improving transit, because it starts with a false assumption that leads directly to the conclusion it wishes to draw: that some kind of BRT or light-rail solution is the best way to improve service and increase

ridership. Instead, if AC Transit is going to spend $400 million of public money, and meet its responsibilities to 1.4 million potential transit users (not just those along the corridor), it should have explored many other ways to accomplish its fundamental project (and agency) goals of improving transit service and increasing ridership.

We might also shock the known world by questioning the goal of increasing ridership. The real goal, it seems to me, is to decrease unnecessary travel of all kinds. BRT seems to be an admission of failure—the failure of the three cities involved to build healthy communities. A better alternative to expensive transit experiments is to reduce the need for travel, by having healthy shopping districts and jobs in all the neighborhoods along the route. For example, BRT may give Berkeley's Southside residents a marginally faster way to go some future place along the BRT corridor to shop, but wouldn't good land use and university policies have permitted Southside to retain its own healthy, neighborhood-serving shopping district, as it had decades ago? Then people would rarely have to take any vehicle anywhere to shop. Likewise, have Oakland's land use policies left places in East Oakland without proper shopping or jobs? Perhaps $400 million could be better spent putting good jobs and shops into East Oakland, thus eliminating the need to travel, instead of marginally improving travel options.

Within its myopic approach, AC Transit has presented a number of options to the community; many people point out that we wouldn't need so many options for Southside and downtown Berkeley if there were any good ones. In any case, the result is that the DEIR does not present a project; it presents a lot of ideas for projects. Unsurprisingly, with so many options, the DEIR is unable to examine all the potential impacts in proper depth, so the impact analysis is cursory and superficial in most areas. But according to CEQA, *"The analysis must be specific enough to permit informed decision making and public participation.…[and] sufficient to understand the environmental impacts of the proposed project and to permit a reasonable choice of alternatives…"* (CEQA *Guidelines* section 15146). None of the DEIR's numerous infrastructure alternatives is accompanied by enough information to analyze its specific impacts, area by area. For example, since the BRT will facilitate growth and development around its stops, one must decide exactly where the stops will be, and how much growth will it cause there, before one can analyze the traffic, parking, and other impacts of that localized development caused by BRT.

Finally, the environmental impacts of the project are not analyzed at a meaningful scale. Traffic, parking, noise, construction, and other impacts will occur neighborhood by neighborhood, business district by business district. This EIR makes no distinction between a single mother or elderly resident of East Oakland who needs but cannot afford car, and a UC Berkeley student who lives next to campus and who does not want or need a car. It makes no distinction between areas in which residents and shoppers must search for 15 minutes for parking spaces, and those in which there is plenty of parking. It provides travel times for a 17-mile bus route, when nobody takes a bus for 17 miles; the average bus trip on the corridor is less than four miles. In addition, some of the most vital data on changes in transit ridership and auto use are omitted, incomprehensible, and/or unsupported (e.g. #13 and #14 below).

In future drafts, the overall project DEIR should be supplemented with specific information for meaningful segments of the route. For example, in Berkeley one segment might be from Dwight Way north through downtown Berkeley. Another might be from Dwight Way south to the Berkeley border or the freeway at 51st Street. These two segments have entirely different neighborhood and business environments and roadway users, and residents of each should have a specific supplemental study of the environmental impacts in their areas. At the very least, data for each city should be consolidated.

In conclusion, this DEIR is missing many important details, but its flaws are much more profound than missing information. The entire project has been narrowly defined to yield a desired infrastructure outcome. The alternatives provided are much too narrow for the broad project goals (improving service and increasing ridership). The project description is inaccessible, disorganized, and vague. The environmental impacts are painted broadly with many generalities and assertions, but few substantiated facts. And necessary mitigations have been ignored and postponed. For these reasons, I believe that the changes necessary to make this DEIR acceptable are so significant that it is best not to think of it as a draft EIR at all, but as more of an outline for the next phase of research and public involvement.

Below are some of my specific comments and questions about the draft EIR, focusing mostly on factors that relate to Telegraph Avenue in Berkeley. They are divided into six areas: (A) general questions; (B) alternatives; (C) bus ridership and auto trips; (D) growth-related project impacts; (E) traffic, pedestrian, and parking impacts; and (F) mitigations. My questions are underlined. In responding to these questions, please note that CEQA *Guidelines* section 15088(b) require specificity and factual information in the responses.

(NOTE: Enhanced bus service, which AC Transit now refers to as "Rapid Bus," I call "Enhanced Bus" throughout.)

A. General Questions:

1. **Type of EIR:** Please explain whether the EIR is a project EIR, a program EIR, a master EIR, a staged EIR, or a redevelopment plan EIR.

2. **Policy and legal implications of the EIR:** Please explain, based on the response above, how the certification of this EIR will impact future legal rights and privileges of people and entities situated along and nearby the BRT transit corridor. In addition, please explain how BRT will impact the corridor development (transit-oriented development rules and funding) differently than Enhanced Bus would. Please include, but do not limit your response, to (1) legal requirement for environmental review for future projects and parts of this project, (2) availability of government funding for future redevelopment projects by public and private entities along the corridor, (3) likely changes in zoning and public rights near "transit-oriented developments," and (3) future legal control by municipalities over roadways, parking, etc. along the corridor, after municipalities have "agreed" to accept BRT and/or after encroachment permits have been issued. Please cite all relevant governing laws and funding mechanisms.

   A 2004 AC Transit Regional Measure 2 flyer states: "All projects eligible for operating funds from Measure 2 are required to meet performance measures related to ridership and cost-effectiveness…" However, information given out at the Willard Neighborhood BRT forum in May 2006 says that Measure 2 includes $65 million for constructing BRT and $3 million annually for operating it. What are these performance measures, and how could BRT be promised funding from that source when the EIR (or even the DEIR), which studies ridership and cost-effectiveness, was not done at that time and still isn't?

3. **Areawide transit and fiscal impacts:** The DEIR states: "Because one of the primary requirements for federal funding support is that existing service not be curtailed to support the establishment of a new service, AC Transit should take steps to ensure that the implementation of the East Bay BRT Project does not hinder plans for re-growth of regular bus operations" (DEIR p. 8-10). Major AC Transit cutbacks occurred in 2003, and service is not expected to return to pre-cut levels until 2007-2008 (p. 8-8). Is service currently what it would have been without the cutbacks? What is used as the "baseline"

for deciding if AC Transit is "curtailing" other services? Is "curtailing" limited to cutting back, or does it include foregoing otherwise-to-be-expected expansion?

The BRT corridor serves 12% of AC Transit's total ridership (p. 1-1), which means that 88% is not served by BRT. The EIR claims that BRT will not impact anticipated service in other parts of the transit service area. But it is difficult to believe that there is no opportunity cost to this project. Please explain how the resources spent to feed the BRT line will not reduce actual or potential expenditures on transit elsewhere in the district that could have occurred had the $400 million not been spent on BRT. If there is any potential diminishment of service or ridership elsewhere, how was that factored into the EIR impacts assessment?

One year ago, in May 2006, Mr. Cunradi told Berkeley residents that BRT would cost $190 to $240 million. That projection was about 50% below current estimates. What makes the current forecasts any more reliable?

Please explain how the ongoing maintenance costs will compare for the No-Build and Build alternatives. Will AC Transit or local cities have the responsibility for maintaining the BRT lanes?

How much money has already been spent by AC Transit to publicize BRT and present it to the public, including salaries and staff? Please differentiate between money spent on research and money spent on public outreach. Has the University of California contributed any money to designing, researching, or publicizing BRT (including staff time at meetings) and if so, how much? Please tell how much money other agencies and entities, public and private, have contributed to the BRT effort so far, and who these contributors are.

4. **Energy use and air pollutants:** Table 4.14-1 (p. 4-152) shows that with BRT, the 2025 reduction in auto VMT in Alameda County is projected to be 0.04% (perhaps translating to about .24% from the corridor—i.e., negligible), while the increase in bus VMT would be 30%. BRT causes no net reduction in energy use, and most pollution emissions (measured at the corridor) are the same with or without BRT (p. 4-131)—although three times as many idling buses apparently increase local particulate pollution accordingly. The EIR should clarify the particulate conclusions (which don't seem to follow the data) and the impact of particulates, if any, on those near stations.

   The bottom line is that there appears to be essentially no environmental gain from BRT through the year 2025. After 2025, does AC Transit project increasing environmental gains (for example, from cleaner buses), or decreasing environmental gains (for example, as current autos are replaced by new technologies)?

5. **Environmental justice:** Figure 4.4-8 (p. 4-60) shows the income levels of areas near the BRT route. Please include a map that includes the entire AC Transit service area, not just locations near the BRT corridor, so we can see how many low-income residents are ***not*** served by BRT, especially in west Berkeley and west Oakland. Are UC Berkeley students who are supported by their parents classified according to their own incomes or that of their parents?

   Please include a similar areawide map for minority populations (p. 4-59) throughout the transit service area. Also, what percent of the minority population near the UC campus are Asian students at UC Berkeley?

   Regarding auto access, do Table 4.4-4 (p. 4-35) and the discussion of households without private transportation include the college student population of Berkeley?

The DEIR states that not all parts of the BRT system must be built, that segments can function independently, and that there currently isn't funding for the entire project. Most of the boardings on the BRT corridor currently come from the International Blvd/E. 14th Street portion of the route, and this and central Oakland are also some of the most economically disadvantaged areas on the route. Are these the places where construction of BRT would likely begin?

6. **Environmental injustice:** Currently, 7.5% of AC Transit average weekday corridor boardings take place in Berkeley. About 6% are from north of Dwight Way, because of the university. Under the projected 2025 No-Build alternative, the average weekday boardings will increase to 12%, apparently mostly because of UC expansion and because of many UC users taking short hops from Bancroft to downtown. The only reason to run BRT into Berkeley at all, especially on the designated route, is to service UC. For UC's benefit, then, Southside traffic and neighborhoods will be disrupted, and downtown Berkeley would be turned into a giant BRT turnaround. Did AC Transit study the alternative of running the BRT buses into the UC Berkeley campus and down through campus to the west circle, where they could turn around? If not, why not? This would provide interior access to the UC campus and relieve Bancroft Way and downtown Berkeley of the burden of UC's BRT encroachment.

   Even worse is the project's detriment to the large residential neighborhoods south of campus. Berkeley boardings south of Dwight way account for about 1.4% of current corridor boardings, which will rise to about 2% in 2025. The DEIR does not give any figures for segment riders, but combining City of Berkeley traffic counts and some AC Transit data, it appears that under 5% of Telegraph users between the Oakland-Berkeley border and Dwight Way are bus riders, though 50% of the road will be dedicated to them. But of the eight roadway segments projected to experience significantly "worsening traffic conditions" under BRT, five are caused by, and nearby, this segment of the BRT route (p. 3-53). They are Telegraph, Shattuck, and College Avenues near Dwight, and Adeline and Telegraph near Alcatraz. This means that the Telegraph corridor bordered by Willard, Le Conte, Bateman, and Halcyon Court neighborhoods, which get 1.5% to 5% of the benefit of BRT (depending on how you count it), and several other neighborhoods near Shattuck, Adeline, and College, which will have almost no benefit from BRT at all, will suffer over 60% of the intersection detriments of the 17-mile BRT line. This is not "justice" for Berkeley residents.

   Meanwhile, since the average time gain for BRT riders over Enhanced Bus riders is about a minute a mile, the tiny percent of people who ride BRT will save about one minute on this Berkeley segment, and perhaps two minutes in Berkeley, total. Meanwhile, over 95% of Telegraph drivers and untold drivers on nearby roads will be losing time, cutting through neighborhoods, and sitting in their idling cars longer at intersections. I guess this is "justice" because auto drivers are "bad" people who must be punished, and neighborhood livability is irrelevant.

   Of course, the intersection and congestion detriments acknowledged in the DEIR are only symbolic of the massive neighborhood detriments to south Berkeley. This includes both the neighborhoods *on* the corridor, which will be devastated with immediate traffic and parking impacts, and long-term demographic impacts, and to those *not* on the corridor, to the east and west. Surely nobody believes that southwest Berkeley, for example, will receive the same sort of transit attention with $400 million being spent on BRT, than if $400 million were distributed more evenly toward improvements all over the transit district. But we will forego this so UC students can save a few minutes per trip.

The truth is, there is no reason to have dedicated lanes in Berkeley, and every reason not to. Given this imbalance of benefits and detriments for Berkeley, is there any technical reason that, somewhere between Temescal and the Berkeley border, BRT could not become an Enhanced Bus system for the northern two miles of its journey?

7. **Poor project description:** The project description is inadequate because it is missing. The DEIR skips directly from project purpose to project alternatives, which implies that the project cannot be described because it is still so tentative. The reader must piece together the project description from scattered information. The project is difficult to understand because it is so large and contains so many undecided elements, and it is difficult to envision the project or any of its segments. Please provide an "*accurate, stable, finite project description*" "*that will be meaningful to the public*," as required under *Guidelines* section 15124 and governing case law. It is not "meaningful to the public" to expect them to piece from a 500+-page EIR what a 17-mile-long project means to them or their locale.

   I recommend dividing the route into geographical sections, and for each section providing, as suggested by the *CEQA Deskbook* "*a narrative explaining the project concept and…proposed buildings and facilities, and construction activities, build-out activities and assumptions, diagrams and conceptual drawings, and proposed supporting public services…[and] secondary support facilities*" (*CEQA Deskbook*, Project Characteristics).

   I request clear, segment-by-segment descriptions of the BRT experience and the driving experience on the corridor, which will make it much easier for the public to understand the project and its impacts on them, and for decision makers to weigh the alternatives. The experience of taking the BRT and of driving should be described in plain English, e.g.: "Driving south between point *A* and point *B,* drivers will have access to only one traffic lane. They will share this lane with regular buses and parking cars. They will not be able to pass obstructions in the lane. They will not be able to make left turns except at *C* Street. All BRT passengers, projected to be, on average (or by time of day), *N* passengers per hour, will cross the traffic lane at designated crosswalks to access BRT stations. Driving this segment will take *X* minutes, which is *Y* minutes longer/less than it does now."

8. **Need for comparative analyses**: Because this is a huge, expensive, and perhaps irreversible project, we should have an independent, impartial analysis of similar BRT experiences in cities similar to ours. Other cities have had both positive and negative experiences with similar transit systems, and it's a shame not to take advantage of this information. (Note: some things can be learned from light rail systems, but they are not comparable to BRT and should not be used to gauge the potential ridership of BRT.) I request that the EIR provide a comparative analysis of other BRT systems.

B. Alternatives:

9. **Unstudied alternatives for increasing ridership:** The DEIR asserts that the primary "need" for the project is because "existing service and facility deficiencies compromise service delivery and limit new ridership gains" (p. 1-6). However, the DEIR does not analyze any other, more important factors that "limit new ridership gains" for public transit. A recent study of commuting patterns in Austin is more sophisticated and realistic, concluding: "Overall, the commutes are getting more complex, and divorcing the examination of commute travel choices from broader nonwork activity pursuits is naïve and myopic. Informed policy actions to reduce traffic congestion should consider

the broader context in which commute travel choices are made." That study stresses the importance of chaining errands with commuting as a primary factor in whether people can shift modes, reflecting other studies that consistently show that chaining errands is a primary reason people do not take transit. A few excerpts from the Austin study are attached; the full study is at: http://swutc.tamu.edu/publications/technicalreports/167240-1.pdf.

Again focusing exclusively on the efficiency factor, the DEIR states (p. 1-15) that "60 to 70 percent of potential transit riders consider travel time and reliability as very important to their travel experience." Please explain the precise survey methodology used to determine this, including who the respondents were and how the questions were phrased. Please show the data for the other questions asked. Please explain the source of the data on the relationship between speed, reliability, and ridership in Figure 1.2-3 (p. 1-9).

Selectively emphasizing improved (faster) service as the public's primary "need" inevitably leads to the "need" for faster trips in a special lane. The DEIR fails to study the implications of many other commuter "needs," and concomitant strategies to improve transit ridership. (Please see the attached 3-page excerpts from the Austin study for some other needs and ideas for increasing ridership that require neither lanes nor $400 million.) I request that AC Transit assess a variety of alternatives for achieving the goal of increasing ridership (e.g., working with major employers to encourage flexible job start times, changing AC Transit's peculiar and stingy bus-transfer structure so people can shop by bus, etc.). In addition, transportation and planning agencies should study other methods of decreasing vehicular travel, including carpooling incentives, telecommuting, and many others.

10. **Unstudied alternative of Enhanced Bus with some BRT features:** An AC Transit BRT information packet handed out at the May 2006 Willard Neighborhood BRT forum stated: "What Makes BRT Rapid? BRT is not rapid because the operator drives fast. BRT is rapid because it reduces the time buses spend stopped [due to] intersections, traffic congestion, passenger boarding, [and] fare collection." Avoidance of traffic congestion is the only one of these factors that could not be implemented with Enhanced Bus. But it appears that an alternative of Enhanced Bus with BRT amenities like ticket vending machines, enhanced shelters, and high-tech rider information was not studied. Is there any reason that almost all the amenities listed on DEIR 2-24 could not be provided at Enhanced Bus stops? Which ones could be provided, how much new ridership would they generate, and on what basis do you make this prediction?

    What proportion of BRT's decreased travel time comes from time saved by reduced fare collection, what proportion comes from reduced number of stops, and what proportion comes from increased travel speed from having the dedicated lane? Since the dedicated lane is what costs so much and brings all the detriments, reducing travel time through the first two elements only would be an alternative well worth examining.

11. **Downtown San Leandro:** Why was removal of traffic lanes to accommodate BRT not considered for downtown San Leandro? What is the relevant difference between downtown San Leandro and downtown Berkeley?

C. Bus Ridership and Auto Trips:

12. **Missing data on ridership gains for Enhanced Bus:** AC Transit claims that speed and reliability will lead to increased ridership. Enhanced Bus has substantial improvements in speed and reliability over conventional buses, yet the DEIR states that enhanced bus did not generate enough new ridership to warrant further consideration

(p. S-2, 2-49). In May 2006, Mr. Cunradi provided figures that indicated that about 2/3 of the expected ridership gain for BRT over current buses would come from the first phase of Enhanced Bus, which means that AC Transit expected only half as much ridership gain from BRT as from Enhanced Bus, although the cost is ten or twenty times as much.

Please provide the data showing running times, stop placements, ridership increases, costs, etc. for the Enhanced Bus compared to the former buses. The Willard Neighborhood Association letter of February 19, 2004 asked for a comparison of enhanced bus and BRT, and the request was made again orally at the Willard forum in May 2006. One cannot compare Enhanced Bus with BRT without seeing the effects that Enhanced Bus has already had. Only then can we assess the likely impacts of certain or future amenities, and slightly increased speed, on potential BRT ridership.

13. **Unsubstantiated BRT ridership projections:** Ridership projections are fundamental to this project. The EIR asserts that BRT will increase corridor ridership by 56 to 76% over the No-Build alternative (p. S-13). Where does the projected ridership data come from? What was the methodology by which it was derived? Please provide predicted boardings maps for the Build alternatives.

    BRT systems sometimes fail to garner the expected ridership, and apparently the model used by AC Transit consistently overpredicts transit boardings. Based on the historical data and any shortcomings of this model, please analyze the likelihood of meeting ridership predictions, and provide cost per trip figures for scenarios in which the ridership does not meet expectations.

    It is difficult to make meaningful ridership projections in the absence of factual data, based on properly done surveys, about the driving patterns of those who either drive the corridor or live near the corridor, either systemwide or segment by segment. The DEIR should provide such data, by segment unless the DEIR provides information showing that all segment populations behave the same. The data required to predict ridership (or compare with other BRT systems) would include numbers of trips, trip purposes (work, shopping, recreational, etc.), numbers of vehicles available to households, reasons for not taking transit (chaining of activities, etc.), attitudes toward transit, likelihood of mode switching, etc. (for details of potential contributing factors, see the Austin study at http://swutc.tamu.edu/publications/technicalreports/167240-1.pdf). This is vital information that would indicate how many drivers might switch modes or reduce their trips. If the driving patterns of populations differ on different parts of the 17-mile route, then BRT may be more suitable for some locations than others. Please provide specific driving behavior data, segment by segment, so decision makers can decide whether potential ridership makes it worthwhile to remove traffic lanes on a segment-by-segment basis.

14. **Unsubstantiated reductions in auto trips:** Increased BRT ridership is theoretically tied to reductions of auto trips. However, the BRT DEIR does everything possible to confuse the issue of mode shift, erroneously leading the reader to believe that substantial numbers of people would jump out of their cars and onto BRT. This is the primary rationale for BRT.

    AC Transit states in its methodology report that "the Alameda Model is too coarse a tool to accurately estimate route choice in a corridor with multiple transit service options, such as [the BRT corridor]." This points to the need for an Austin-like study, because it is difficult to predict the reduction in auto trips without data on the driving

behavior of the drivers on any segment of the route, as mentioned in #13 above and in the Austin example. This DEIR gives no basis for any of the projected reductions in auto traffic on the BRT route. Please provide driving behavior data by segment, and projected auto reductions by segment. Please also explain the major underlying assumptions and any shortcomings of the model and methodology, and how they were compensated for in the DEIR predictions.

Clearly what most people want to know is this: When compared to those who would use Enhanced Bus (No-Build), for how many (new) trips will people with access to the BRT corridor (perhaps within _ mile) use BRT instead of driving; how many will drive but switch streets, and how many of those will switch to major streets and how many to neighborhood streets; how many will switch to or from BART or other buses; how many will use bicycles or walk; and how many trips will not be taken? Please put this data into an understandable table, and explain how the data and projections were obtained. Then indicate the proportion of the users' total annual miles this reflects, so we can see the role of BRT in people's overall driving patterns. A DEIR is not acceptable if it omits the most important data for deciding on alternatives, or presents it in a form that is incomprehensible.

My own calculations using COB traffic data indicate that less than 5% of Telegraph users in Berkeley are bus riders, but lack of data makes the calculation difficult and indirect. Please clarify: What percent of people along the BRT corridor (segment by segment) are currently in private vehicles, how many are on buses, and how many are on bicycles? Under the No-Build and Build alternatives, how would that change?

Again I may be in error because I have to rely on DEIR data that is incomplete and vague, and other data from secondary sources, but my calculations show an infinitesimal reduction in auto use on the corridor. It appears that the model assumed that 1 out of 9 new BRT riders would come from automobiles, which would be surprisingly high on a corridor that is used to access a freeway (like Telegraph north of 51st Street) and which is already well served by transit. Nonetheless, if (perhaps) 5% of corridor users are transit riders, and that increases by (perhaps) 50% with BRT (i.e. 2.5%), and if of those (perhaps) 11% come from cars, it would appear that car trips on the corridor will decrease by under 0.3%. This might be about 7 to 10 car trips on an afternoon weekday on Telegraph. This is consistent with auto VMT figures in Table 4.14-1 (p. 4-152).

However, it is not consistent with other DEIR predictions. Table 3.2-3a projects a PM peak of 1045 fewer vehicle trips per hour north of Ashby on Telegraph Avenue (p. 3-51). In addition, Appendix A-5a shows a 77% reduction in evening peak hour traffic on Telegraph. Both figures are inconsistent with data on bus boardings, COB traffic counts, and mode shift assumptions.

Table 3.2-3a leaves a reduction of about 500 peak-hour vehicle trips unaccounted for, after subtracting those shifting to other corridors. Does the DEIR want us to conclude that 500 people have left their vehicles to ride BRT, when in actuality only 7 or 8 drivers have shifted to BRT? (Even if 100% of the new BRT riders switched from cars, it would still be fewer than 100 people removed from traffic during the evening peak.) Where are the missing 500 cars? Apparently they have either decided not to take a trip or they are cutting through neighborhoods. Perhaps this is why AC Transit did not study the neighborhood traffic impacts (see #31 below).

Table 8.7-1 shows a weekday reduction of 10,200 to 20,700 VMT by automobile (p. 8-12), but there is no baseline data, so it is hard to tell what this means. How were these figures derived? How many drivers use the corridor? What is the total auto VMT for the corridor under existing, No-Build, and Build alternatives, and the total VMT for those who live on the corridor, so we can see the impact of BRT on their transportation choices. Please provide maps comparable to Figure 3.2-2 (p. 3-36) showing the 2025 peak traffic volumes and daily traffic volumes for the No-Build and Build alternatives, for the corridor and other impacted streets.

It would also be good to know how much reduction there has been in auto trips in the locations where Enhanced Bus is now operating, because that might be a measure of likely auto trip reductions under BRT. On the other hand, it may be that almost all the auto trip reduction will be created by Enhanced Bus, and very few more people can or will switch modes. Again, without any data on the driving behavior of the drivers on any segment of the route, it is hard to know. Nonetheless, please provide the data on the auto trip reduction impacts of Enhanced Bus requested in #10 above, and a discussion of what this might imply for BRT.

Finally the DEIR concludes weakly that "traffic studies show that in 2025 under the Build Alternatives there would be a small reduction in auto vehicle miles traveled in the county when compared to the No-Build Alternative. This shows a shift by some auto users to transit for certain trips by virtue of the proposed project. This reduction in auto trips, though small, would have a positive effect on transportation conditions in the area and would help support planned growth focused on the transit corridor" (p. 4-28). Please explain how failing to noticeably reduce auto use, ruining traffic flow and parking on a previously well-functioning street, diverting traffic to other roads and neighborhood streets, congesting more intersections, killing local businesses, and diverting $400 million from other transit projects, while making only slight improvements for a relatively small number of bus riders, "has a positive effect on transportation conditions."

It appears that AC Transit found that mode shift is so "small," and energy and pollution impacts so nonexistent, that the DEIR chose not to draw attention to them. But what is the justification for so much expense and entanglement of traffic if there is very little mode shift? And what is the point of forcing mode shift if it doesn't reduce either energy use or pollution?

15. **Clarifying BRT travel times and speeds:** The average time saved with BRT over Enhanced Bus will be about a minute a mile. Is this consistent throughout the corridor? The DEIR provides only aggregated data for travel speeds and times, but information from the entire 17-mile route, which nobody takes, is not very useful. Please provide travel speeds and times divided into segments commonly used by riders, for example, downtown Berkeley to downtown Oakland. Also, what is the average bus trip distance on the corridor? How reliable have AC Transit's transit travel time predictions been in the past?

    The DEIR states that the time advantages of some alternatives are "offset by increased time spent walking to…the BRT station because of the longer average distance between stations…" (p. 8-15). Is this factored into the DEIR's travel time information? If not, please do so, and show how much of the average BRT trip savings of under 4 minutes is reduced by this factor.

16. **Running below capacity:** Drivers are already annoyed by huge, nearly empty buses on north Telegraph, and may not want to see more of them in their own private lane. It will take 18 years for BRT buses to carry the 2025 projected passengers, which means that for many years the BRT lanes will carry fewer than the ideal numbers of buses, and/or the buses will carry fewer than the ideal numbers of passengers. Will there be fewer buses at the start, or fewer passengers per bus, or both? If the former, how will this impact ridership? Please provide a table showing the numbers of buses expected to run each hour or day through the years up to 2025, including local buses shown separately, and comparing the No-Build and Build alternatives, by segments. Please indicate how full these buses will be. Perhaps this data could show us a more efficient time to install BRT—later when there are more riders.

17. **Missing data on Southside and downtown ridership:** Berkeley is being asked to rearrange its entire downtown and Southside, with extraordinary impacts in both places, in order to accommodate BRT north of Dwight Way. All Southside alignments have major parking and traffic flow impacts in some neighborhood or other. Some alignments of BRT would transfer traffic onto Durant Avenue, reducing the livability of a residential and commercial street that could otherwise be turned into a very pedestrian-friendly street. Yet another plan prevents through traffic on Bancroft—a nightmarish scenario! So it is especially important to understand exactly what transit riders in that area are doing or want to do.

    Figure 3.1-2 shows a map of average weekday boardings for AC Transit, which Mr. Cunradi has said includes both northbound and southbound boardings. It is unclear whether it includes buses also serving locations off the corridor (like bus #51), in which case there may be transit users on the segment who will not be potential BRT riders. Please clarify the boarding data. For example, are the boarders at Telegraph and Bancroft going a few blocks downtown, or are some of them starting a journey to areas north of Berkeley? If the latter, how would BRT help them?

    The DEIR provides boardings maps, but no map showing how many people ride the bus each direction on each segment. For example, do most northbound passengers boarding at Ashby get off at or before Bancroft, or are they added to the Bancroft boarders going into downtown Berkeley? There could be few boardings but many riders on a segment; conversely, there may be many boardings but few riders on an adjacent segment, especially since northbound and southbound data are aggregated. A boardings map might not closely reflect segment riders unless everybody returns "home" by the same route they took out. Is this true? Please provide data showing how many people are actually riding on buses on the segments, so decision makers can better see the utilization of buses and BRT on any particular segment.

    Finally, relative to other locations on the corridor, why is there such a large increase in projected boarders (2025 No-Build) at Telegraph and Bancroft in Figure 3.1-2? How does this compare with the Build alternative? (Again, Build alternatives boardings maps are missing.)

D. Growth-Related Project Impacts:

18. **Missing data on population growth and distribution:** The DEIR states that the area population will increase by 17% by 2025 (p. 4-11). Is this under the No-Build or Build alternative? The DEIR states: "From a land use perspective, more ridership and greater accessibility would provide support for a more intensified land use pattern in the corridor" (p. 4-21). Please provide maps and/or tables showing the 2025 No-Build and

Build population densities/distributions for the transit district, and the bases for these projections. Please explain the magnitude of any difference between the Build and No-Build population projections.

19. **Unstudied impacts of induced growth:** "*The impacts of induced growth clearly must be discussed in an EIR*" (*CEQA Deskbook*). The EIR must discuss direct and indirect, long- and short-term changes in land use patterns and population growth, and irrevocable loss of resources that may impact future generations (historical resources and neighborhoods, etc.). It must study impacts that "*commit future generations to similar uses*" (*Guidelines* section 15126.2c). Secondary impacts that must be studied include changes in land use, economic vitality, population density, and construction of additional housing. In addition, *Guidelines* section 15126d states: "*It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.*"

    According to the DEIR, "the benefits of the Rapid Bus service would be focused in the vicinity of the express bus stops and in the higher-density downtown areas in the corridor" (p. 4-21). "The project may foster development activity focused around distinct nodes of activity" (p. 4-23). Since the BRT will facilitate redevelopment and transit-oriented development, and even considers this part of its project objectives, the EIR must anticipate such developments and try to ascertain their impacts. The project and the EIR must be specific enough to study the local environmental impacts of the bus stops.

    Under CEQA, the long-and short-term growth-inducing impacts must not be treated in a cursory manner, but with specificity based on facts and evidence. Although the DEIR mentions a few already-planned minor projects along the BRT route under its cumulative impacts, it fails to address the growth and redevelopment that it will induce. Any substantial individual project on the BRT route would require its own EIR under CEQA, so many such projects certainly requires major consideration in this EIR.

    Why does the DEIR fail to discuss its growth impacts entirely? In one of its most malnourished sections, 4.2.3, the DEIR states casually: "While the proposed project would support and encourage growth and land use intensification in the corridor, such growth is already contemplated in the General Plans of the three cities in the corridor and has been previously considered and analyzed as to its impacts." But CEQA does not assume that a prior EIR has done an acceptable analysis simply because it was done and certified; instead the new EIR must determine "*that the regional or areawide impacts of the proposed project have already been adequately addressed…in a certified EIR…*" (*Guidelines* section 15130d).

    I don't know about the Oakland and San Leandro General Plans, but the Berkeley General Plan EIR did not study the impacts of any specific population projections, and certainly not any impacts based on the existence of BRT. I doubt that any of the city plans has studied any "regional" or "areawide" impacts. So unless ABAG has done an EIR on its population projections, AC Transit must study the impacts of the growth that it takes credit throughout the EIR for inducing.

    As required by CEQA, I request that the EIR evaluate, with credible methodology, both known and possible future growth that is either a direct or indirect consequence of the project, both within and outside AC Transit's control. This should be on a station-by-station basis if the local environments differ or are critical, or on a segment-by-segment basis if some stations are similar.

20. **Unstudied impacts of the growth of the University of California**: The EIR must examine the "*growth-inducing impact of the proposed project*" (*Guidelines* sections 15026d, 15026.2d). The EIR must examine the way a project may "*encourage or facilitate other activities that could significantly affect the environment, either individually or cumulatively*" (*Guidelines* section 15026.2d).

    Not only is the growth of the university a foreseeable impact, it is specifically mentioned in the EIR as something BRT would facilitate: "UC Berkeley…proposes growth in student population and research and office space that would be acceptable to the City of Berkeley only if the concomitant increase in travel would not overtax the surrounding roadway network" (p. 1-12). Therefore, BRT, if successful in reducing travel, would directly contribute to the growth of UC. The DEIR thus contradicts Mr. Cunradi's statement to the joint meeting of the DAPAC and Berkeley Transportation and Planning Commissions that the growth of UC in Berkeley is part of the EIR's "underlying assumptions." Or if it is, it would be nice to have a statement from Chancellor Birgeneau or the Regents saying that the existence of BRT will have no impact on UC's growth plans.

    But the DEIR is correct: UC hopes that BRT will facilitate further expansion of UC in Berkeley. UC Berkeley has choices about where to expand, and BRT will contribute to causing that expansion to happen in Berkeley. The No-Build alternative, or transit corridors developed elsewhere, might help UC to better distribute UC Extension and some of its research facilities to other parts of the East Bay or the state. I request that, as required under CEQA, the BRT EIR study the impacts of induced UC growth in Berkeley. For the "surrounding roadway network," the DEIR should study not only how many new UC users would take BRT, but how many new users would ***not*** take BRT.

    A major part of UCB's growth impact on the community is in traffic and parking. In 2002, Jennifer Lawrence, UC planner, stated at the TAA Transportation Roundtable that about 700 of UC's approximately 5500 parking permit holders live in the BRT corridor. This is about 13% of those who currently hold permits. In addition, thousands of UC commuters park in neighborhoods near UC every day. I request that AC Transit survey these drivers to see how many would take the bus if it were 3-4 minutes faster than existing bus service. In addition, 87% of UC drivers do ***not*** live on the corridor. Please survey them and find out how many plan to move to the corridor after BRT is installed. Even if the proportion living on the corridor grows slightly by 2025, won't about 7/8 of the traffic and parking impacts of new UC drivers remain after BRT? If BRT encourages UC to expand, won't BRT actually ***increase*** UC impacts on Berkeley's "roadway network" and neighborhoods?

    If AC Transit wishes to "tier" off the UC 2005 LRDP, it must state so, explaining how it "*determines that the regional or areawide impacts of [BRT] have already been adequately addressed…in a certified EIR for [the LRDP]*" (*Guidelines* section 15130d). The mere assertion that the UC LRDP EIR was adequate does not suffice under CEQA, particularly in the peculiar situation in which the prior (LRDP) EIR was a farce because the project sponsor was its own lead agency (UC Regents).

21. **Unstudied social and economic impacts:** EIRs do not have to examine purely social and economic impacts that have no physical or environmental correlatives; including such impacts is optional. However, when the lead agency is a government entity attempting to pursue the public good, economic and social impacts should be studied.

Again, an impartial comparative study of other cities with BRTs might be helpful. Since a project goal of BRT is to change community structure, I request that the BRT EIR study the following, with depth, specificity, and sophistication:

a) impacts on existing businesses along the corridor: The EIR states that it will surely cause a business transition near the stations, and there may be an overall loss of businesses, especially given the negative experiences of some other cities. The impact on business under the "transit mall" scenario on Southside, and the likelihood of transit encouraging institutional use, must be studied in detail.

b) impacts by BRT on businesses that are not on the corridor: Will these businesses be disadvantaged, as often happens when population is diverted elsewhere? And will loss of certain businesses damage local neighborhoods?

c) impacts on the physical, historical, and social patterns of existing neighborhoods, including impacts from BRT and from the developments spawned by BRT.

22. Unstudied social and economic impacts with physical consequences: The DEIR legally must, but fails to, address economic and social impacts that impact the physical environment. For example, if BRT causes the replacement of neighborhood-serving businesses with office uses or other kinds of businesses, neighborhood residents may be forced to drive or take transit to other shopping districts. Or, large induced development projects may bombard quiet neighborhoods with increased population, noise, loss of views, demand for resources and services, etc.

I request analysis of the impacts on the physical environment resulting from economic and social changes caused by BRT, preferably at the BRT station level, or at least at the segment level. However, if AC Transit feels that the areawide cumulative impacts of all development and redevelopment along the corridor have been adequately addressed in individual city general plans, etc., then the EIR should cite the plans, and how they have adequately addressed these BRT-induced areawide cumulative impacts.

23. Unstudied residential land use impacts: BRT would induce major land use changes, which must be studied. However, the EIR doesn't seem interested in the details of these changes, preferring to express "smart growth" generalizations from a bird's eye view. It's a little like an EIR saying simply that a dam would make "major changes" in a river system, without mentioning what they are, because the politicians already decided they like the dam. But let's try to read between the lines…

According to the DEIR, BRT "would also have other effects that would make corridor locations less desirable for lower-density land uses dependent on easy automobile access…These effects would occur primarily along Telegraph Avenue in the north and International Boulevard/East 14th Street in the south" (p. 4-23). Berkeley translation?: Willard, Le Conte, Halcyon Court, and Bateman neighborhoods would become less desirable for families and homeowners and more desirable for students. But these neighborhoods struggle uphill to maintain their charm and livability in the face of student housing pressures, and they are already pretty compact by American standards. What consideration does the DEIR give to the special circumstances of these neighborhoods, or any other neighborhoods along the corridor?

24. Unstudied impacts on community cohesion: The DEIR is at its most ignorant and sophomoric (offensively so) when it discusses neighborhoods. It states: "Community cohesion is defined as the degree to which residents have a sense of belonging to their neighborhood or experience attachment to community groups and institutions as a

result of continued association over time. The proposed project potentially would have a positive impact on community cohesion, as it would provide focal points for community activity and development in the vicinity of proposed BRT stations. Because the proposed project would be constructed along existing transportation facilities, the communities and neighborhoods adjacent to the corridor would not experience a disruption in cohesion. Some existing crosswalks would be blocked by the BRT transitway, which potentially would decrease access or lengthen travel time to a particular community focal point. However, it is not anticipated that the impacts to crosswalks as a result of the proposed project would result in a substantial physical or psychological barrier that would divide, disrupt, or isolate neighborhoods, individuals, or community focal points. No displacements or relocations would occur as a result of the proposed project" (p. 4-39).

Conclusion? "The communities and neighborhoods in the immediate vicinity of [BRT] would not experience a disruption in cohesion; therefore, no mitigation measures are required" (p. 4-40). Well, that was simple! And convenient. And unmitigated drivel.

This illustrates the problem with the lack of specificity in the DEIR. Conditions differ from one neighborhood to the next. It is possible that such development might indeed help some neighborhoods. But Willard and Le Conte neighborhoods have enormous problems with lack of community cohesion, and accompanying reduced livability and crime. If the sponsors of the DEIR had any knowledge of the problems these neighborhoods already face because of their transient populations, high-density living, and student population pressures, all of which BRT will intensify, the DEIR would not draw such a misguided and simple-minded conclusion. I doubt that any sociologist would say that high-density living typically creates "community cohesion," especially not near a continuously expanding university.

Again, this points to the need for the next version of the DEIR to examine impacts within their specific contexts, instead of making simplistic assertions.

25. **Unstudied impacts of commercial land use changes:** The DEIR is slightly more realistic about commercial impacts than residential ones. It states: "While supporting local objectives for land use, [BRT] could also result in adverse impacts on automobile accessibility. Reductions in convenient on-street parking and adverse impacts on local traffic circulation could be detrimental to certain types of business activity in certain locations, which could be counter to local policies for corridor commercial areas that encourage retail activity and economic development" (p. 4-25).

The DEIR acknowledges that there will be a shift away from businesses that require auto access, and that "the greater the extent of adverse effects on auto access, the more likely that customers would be deterred and encouraged to seek businesses in other locations where parking and traffic are less problematic" (p. 4-63). Please provide information on how that would impact accessibility of a variety of businesses for neighborhood residents on different parts of the BRT route, especially for those who might not want to or be able to drive long distances to shopping malls.

On the other hand, supposedly "there would be benefits to corridor retail, service, restaurant, and entertainment businesses…" (p. 4-62). Please provide the evidence for this, especially since other cities have not all had such positive outcomes, especially with the type of "transit mall" proposed for the top of Telegraph Avenue. Again, impartial comparative studies by independent scholars would be helpful.

26. Unstudied safety issues: Both Enhanced Bus and BRT present some safety issues: both use signal priority, and BRT has a median strip transitway and the likelihood of much faster bus speeds because of fewer stops.

What are the projected accidents that may be caused by the transit signal priority (No-Build and Build)? Will there be greater possibility of accidents with BRT because of potential increased speed, or fewer accidents because of the dedicated lane? Does history show that buses are likely to speed in their designated lane, and if so, what are the projected accidents from this? What can we learn from the accidents in Miami and Los Angeles? How much of the speed gains would be lost if buses have to slow at intersections for safety reasons?

With median strip stations, all BRT riders will have to cross traffic lanes in order to board the bus. People who see their bus coming may not want to wait for a traffic light to change. What are the safety implications of this? What are the safety consequences of handicapped access in mid-street? Please report on the experiences of other cities.

27. Legal requirements for thresholds of significance: Thresholds of significance *"must be adopted by ordinance, resolution, rule, or regulation, and developed through a public review process and be supported by substantial evidence"* (*Guidelines* section 15064.7). Please explain the *public review process* that went into determining the thresholds of significance for traffic impacts for this DEIR.

28. Poor thresholds of significance, traffic: The DEIR states that "acceptable impacts are those that would not result in a worsening of traffic operations below locally accepted thresholds" (p. 3-32). The DEIR states that "it was agreed" (without specifying the public process) to use Oakland's thresholds of significant impact (3-53).

The DEIR states that intersections deteriorating from LOS C (acceptable delays) to LOS D (tolerable delays, twice as long as acceptable delays, drivers waiting though more than one signal) would "not rise to a level of concern" in terms of impact. I suspect that local drivers might disagree. Again, it may depend on the drivers: drivers rushing to work or school may be more impacted than those on a leisurely shopping trip. But unfortunately we know almost nothing about the drivers using this corridor or any segment of it, due to the lack of studies described above in #13 and #14.

In this DEIR, deterioration to LOS E is the criterion for significant intersection impact. LOS E means: "Major delays. Volumes approaching capacity. Vehicles may wait through several signal cycles and long vehicle queues form in advance of the signal. Average control delay is 55 to 80 seconds per vehicle."

For roadway segments, the threshold for mitigable impact is going from LOS E ("unstable traffic flow and rapidly fluctuating speeds and flow rates; low maneuverability and low driver comfort; substantial delay;" and average speeds as low as 7 mph on a 25-35 mph road) to LOS F ("forced traffic flow; speed and flow may drop to zero; considerable delay"). If the intersection is already at LOS F, an increase of 5% in volume is permitted.

Please explain why were these thresholds of significance for traffic impacts were used, instead of some other thresholds that might leave more room for cumulative impacts. Why should a single project be permitted to make roads and intersections deteriorate to such low levels, when many more projects in the future will also negatively impact traffic? And what about all the other roads that will deteriorate due to the project, but not to these levels? Is there no environmental impact to incremental, cumulative

deterioration? Of course there is. But there is no acknowledgment of that or mitigation for it in the DEIR. *This kind of application of thresholds turns EIRs into schedules for continued deterioration of the environment, not tools for preventing such deterioration.*

29. **Unexplained auto flow projections**: Vehicle trips along the corridor are expected to increase by about 20% from now until 2025 (p. 1-10), but the lanes for traffic use will be cut in half. Traffic congestion will increase, but it's hard to see how much, because the DEIR does not present traffic congestion impacts in an understandable form. For example, the tables on DEIR 3-51 show some decrease in auto trips, but not as a proportion of the total. Please provide existing, No-Build, and Build traffic figures for road segments, so we can see how many vehicles are now in two lanes, and will have to squeeze into one lane with BRT. Please make these tables comprehensible.

    Origin-to-destination times are much more relevant to motorists than intersection LOS statistics and mid-block capacities. Auto O-D figures are a major missing element of the traffic impact study. Please compare the automobile origin-to-destination times for each commonly-used segment of the project for existing conditions and the Build and No-Build alternatives. More stoplights will be added to the corridor. Please tell where these lights will be in Berkeley, and be sure to include their impact on the O-D data.

    It is difficult to understand how road segments on the corridor that are already congested at rush hour, and before and after special events, will function after halving their lanes, adding stoplights, and removing the opportunity to avoid obstructions such as parking vehicles and, under some BRT plans, regular buses. Please explain this, and explain the methodology by which congestion projections were made.

    The DEIR does not mention the ramifications of having so many bus riders cross traffic lanes in order to board buses. There will be a huge increase in pedestrian street crossings. Elderly and disabled bus riders may move very slowly. Will there be no increase in traffic delays at the BRT stations because of this? Please explain the impacts of increased pedestrian crossings on auto flow and safety.

30. **Unstudied special event and emergency traffic flow:** Please study how BRT will impact traffic flow both on and off the corridor during the many special events at UC Berkeley. These events are frequent enough to merit special and careful study. A related issue is emergency egress; please study this as well.

31. **Unstudied spillover traffic impacts:** "The decrease in roadway capacity along the project alignment would result in increased congestion and delay in certain locations and have a ripple effect on traffic patterns along nearby roadways. A number of motorists would take alternate routes to avoid traveling on roadways with BRT facilities" (p. 3-48). Cars per hour is an important factor in neighborhood livability, yet no diverted traffic data is provided for the nearby neighborhood streets. Please include screenline data for Benvenue, Hillegass, Regent, Dana, and Ellsworth, and Fulton streets between Dwight and Woolsey. Please study the traffic impacts on neighborhoods receiving spillover traffic, including neighborhoods surrounding the other major streets receiving the spillover traffic. (Given its expertise in "community cohesion," the DEIR might wish to cite Appleyard's famous study on traffic and neighborhood cohesion.)

    "The [diverted traffic] volume changes on parallel roadways are small to moderate" north of Ashby (p. 3-50). What was the threshold of significance for this impact and how was it determined? How were the projections calculated for the screenline (diverted traffic) volume changes (p. 3-50)? How did the DEIR determine that 200

more trips per hour on College and Adeline during the evening peak period was "small to moderate"? What is the baseline existing traffic flow there?

What is the projected increase in traffic flow (number of cars per hour) on Dwight, Haste, Channing, Durant, and on all the signaled Telegraph cross streets between Dwight and the Berkeley border, which will take diverted traffic from the unsignaled intersections? Please be sure to include baseline data.

To be meaningful, all screenline data must include existing, No-Build , and Build conditions. Please revise the DEIR to show this for all mentioned street segments, as well as for Shattuck, College, and Adeline.

32. **Unstudied congestion impacts:** When promoting public transit, policy makers frequently cite the time costs and lost hours of productivity and leisure resulting from traffic congestion. I agree that this is a major loss to individuals and family life. The DEIR points out the time savings for BRT riders (a tiny percent of corridor users), but fails to examine the equivalent costs for drivers (the vast majority of corridor users). I request that the DEIR quantify the time-cost for drivers, due to congestion, signal delays, and extra driving to avoid the left-turn and other traffic restrictions on the BRT route.

33. **Understated noise impacts:** If there are more bus riders with BRT, there will be more buses. Buses create annoying intermittent noise that is not appropriately measured by the average noise levels used in EIRs. For example, tripling the number of buses will triple the annoyance from bus noise and reduce quality of life, especially near bus stops, though it will be "insignificant" in the EIR. In addition, the standard thresholds of significance used in EIRs permit incremental noise increases that will be cumulatively unbearable over time.

    Nonetheless, the DEIR states that despite more buses, noise will actually decrease on the corridor because of reduction in auto noise (p. 4-144). AC Transit must have some bus-to-auto noise equivalency to draw this conclusion. Please provide the supporting data for the conclusion, i.e., for the data in Table 4.13-4. Please explain the relationship between bus noise and automobile noise. How many autos equal the noise impact of one bus, both when traveling and at startup from stops?

    The DEIR admits that traffic noise will increase on streets with extra traffic displaced from the corridor. However, it does not quantify these impacts or study them. Please study the noise impacts of displaced traffic in neighborhoods.

34. **Unsubstantiated pedestrian benefits:** The DEIR asserts that "slowing or reducing traffic along the BRT alignment segments with BRT lanes would make these streets more desirable as walking areas" (p. S-14). But many aspects might make it ***less*** desirable: there will be huge speeding buses behaving unpredictably at intersections and causing stoplights to behave unpredictably; pedestrians will have reduced opportunities to cross the street when they want, though they will be forced to cross traffic lanes simply to board the bus; the disabled will have to go up ramps in the middle of a busy street; pedestrians will have to wait on a platform in the middle of the street, rather than browsing store windows while waiting for a bus; sidewalks will be narrowed and obstructed in some places; excess impatient auto traffic will be crowded into a single lane; etc. Please provide evidence for the assertion that pedestrians will find this "desirable."

35. **Sharing the road:** Although my own calculations using DEIR data and COB traffic data indicate that less than 5% of Telegraph users in Berkeley are bus riders, BRT involves dedicating half of the roadway to AC Transit users. After BRT takes half the road, apparently bicyclists and drivers will fight over the remaining lane ("If the bike lane were extended by displacing curbside parking…" [DEIR S-27]). I was wondering how any street in which buses (perhaps), parking cars, and traveling cars are all squeezed into one traffic lane could be anything but nerve-wracking and dangerous for cyclists, when I noticed that "on the project alignment, the Class II bikeway along both sides of Telegraph Avenue from Dwight Way to Woolsey Street is scheduled to be widened to five feet and separated by a striped lane from adjacent parking lanes" (p. 3-83). Please show how this segment of Telegraph is wide enough for BRT platforms, possible road dividers, and wider bicycle lanes.

    Please include diagrams showing the actual scale of the street segments for figures such as Figures 2.2-7 and 2.2-8 (p. 2-18). The streets on these diagrams seem to be about 1_ times as wide as Telegraph in Berkeley, for example.

36. **Underplayed parking impacts:** Parking loss was minimized in every public meeting for five years, but it will be extraordinary! "Build Alternatives 1 and 2 would remove approximately 146 spaces, or 75 percent of curb parking, along [north] Telegraph Avenue. The displacements amount to 25 percent of total estimated supply within the Berkeley/North Telegraph survey area, which includes accessible parking on cross streets. Alternatives 3 and 4 would remove approximately 142 spaces (equivalent to 73 percent and 25 percent of, respectively, [north] Telegraph Avenue and survey area supply)" (p. 3-112). "Parking loss is possibly the most evident long-term impact" of BRT (p. 8-22). Major parking loss will also occur in Southside, downtown Berkeley, and elsewhere on the BRT route.

    Commercial parking loss would be mitigated by taking parking from residential neighborhoods (p. 3-127). The number of spaces proposed for mitigation would range from approximately 16 to 29 percent of total spaces displaced" (p. S-16). Please reconcile this information with the following statement from the DEIR summary: "Spaces currently designated for residential use would not be affected" (p. S-16). In addition, did the DEIR study whether some residents use street meters for overnight parking, or for visitor parking? If not, what impact would parking removal have on this? Also, why do Figures 2.2-7 and 2.2-8 (p. 2-18) show Telegraph BRT diagrams with parking on both sides of the street if 75% of the parking on Telegraph will be removed?

    I don't know of any neighborhood on Telegraph in Berkeley that could maintain its livability with the parking loss described above. And probably few existing businesses could maintain their viability. This would have devastating impacts on individual residents and businesses, which the DEIR trivializes.

37. **Lack of thresholds of significance, parking:** The DEIR lacks thresholds of significance for parking loss. Please provide thresholds of significance for parking loss, and the "public process" by which they were determined.

38. **Inadequate parking data:** Parking availability has a huge impact on neighborhood livability. The project requires major parking reductions in places where parking is already very difficult. Parking impacts are extremely localized, since people rarely want to park more than a few blocks from their destinations, so aggregate parking data for segments more than three blocks long is not useful if the parking conditions vary. If

parking spaces are full at Dwight but empty at Woolsey, the 36% parking availability figure for the Dwight-Woolsey segment means nothing. The DEIR provides good specific localized data for downtown Berkeley, but not for other areas.

Please study the parking impacts in much smaller segments between the Berkeley border and downtown Berkeley. For example: around Alta Bates, between that area and Derby, Derby to Dwight, Dwight to Bancroft, Bancroft from Telegraph to Oxford, and downtown Berkeley. Where parking is difficult, be sure to extend the study for several blocks on either side of the corridor, including residential areas. Please also include much more specific maps showing the current, No-Build, and projected Build parking availability, including residential neighborhoods around the corridor.

Exactly when were the parking conditions data collected for the area between Derby Street and Bancroft Way? This data needs to be collected during the Fall semester, during periods when UC classes are in session, and during the midday. If it was not, please remedy this with further studies.

39. **Unstudied parking impacts**: The DEIR asserts: "Because corridor automobile use would decrease and transit boardings would increase, demand for parking along the project alignment would decrease" with BRT (p. S-36). No evidence is given for the premise, but even if the premise is true, the conclusion does not follow. It is quite possible that new activities and development along the corridor would ***increase*** parking demand, or that BRT users would drive to BRT stations and park nearby, or that parking demand would remain the same, or that parking demand would not decrease by as much as the number of parking spaces removed, effectively increasing demand. Please provide evidence for the statement that parking demand would decrease, citing impartial comparative studies of similar transit systems if applicable.

The DEIR adopts a sanguine attitude toward the loss of commercial parking. It makes no effort to study the impact of commercial parking loss, except to acknowledge that BRT is a program for business replacement (see #25 above). Please study the impacts of parking loss on local business districts in more detail. Even where parking remains, drivers will have to delay the only traffic lane to use it. Please study the impact of this on local business activity and on traffic flow.

The DEIR ignores residential parking entirely; its lack of study, lack of concern about impacts, and lack of mitigations is both remarkable and unacceptable. "The survey area for parking was limited to areas of mixed commercial and intermittent residential uses and did not extend into primarily residential neighborhoods" (p. 3-102). However, the impacts of reduced parking ***will*** extend into residential neighborhoods. AC Transit's lack of knowledge of Berkeley's parking problems again reveals the inadequacy of its "one size fits all" approach. The DEIR must study the residential impacts of parking reductions. How are these impacts compatible with Berkeley's General Plan protections for residential parking?

The DEIR admits that some people may park near BRT stations to use the BRT, but does not pursue this potential problem. Please try to quantify this impact further, perhaps using data from other cities and transit systems.

40. **Unstudied special event parking:** Please study how BRT will impact parking during the many special events at UC Berkeley. These events are frequent enough to merit special study.

F. Mitigations:

41. **Unspecified mitigations:** The DEIR states: "Specifics of parking mitigation for an individual geographic area would be established by AC Transit, in consultation with each of the affected cities during the next phase of project design—preliminary engineering and preparation of the final EIS/EIR" (p. 3-123). Consultation and establishment of mitigations is a very good idea. However, deciding on a final project, and developing its mitigations from scratch, with no opportunity for further public input, cannot be done under CEQA in a single stage between a draft EIR and a final EIR. At the very least it would require recirculation**.**

    Under CEQA, mitigations measures must be specific, an EIR may not defer mitigations to a future time, and an EIR is not complete without mitigation measures fully described, with a monitoring program if warranted. Since the specifics of the project and thus any specific mitigations—and the mitigations for the mitigations—will not be decided until later in the process, this draft EIR does not set the stage for a final EIR without much more public process, decisions, rewriting, and recirculation. In addition, since so many environmental impacts were overlooked in this DEIR, many potential required mitigations are not yet even identified.

42. **Lack of residential parking mitigations**: Because AC Transit did not study residential parking impacts, it provided no mitigations. In fact, its suggested commercial parking "mitigation"—displacing commercial parking into residential neighborhoods—is yet another unstudied residential parking impact. How will the loss of residential parking be mitigated?

    AC Transit will presumably pay cities for their new parking restriction programs, but how will AC Transit reimburse private citizens for the time and expense of their extensive participation in instituting neighborhood parking (and traffic) protection programs necessitated by BRT?

43. **Damaging commercial parking mitigations:** Although the DEIR shows no concern for residential parking impacts, it does suggest a mitigation for commercial parking loss in Berkeley: "Unmetered, unrestricted cross street parking would be converted to metered parking to serve commercial uses fronting Telegraph Avenue. Approximately 65 to 70 spaces would be converted, "replacing" a third to a half of lost parking" (p. 3-127). Thus a commercial parking "mitigation" becomes an unstudied residential parking impact. The impacts of this "mitigation" need study.

44. **Underutilized intersection mitigations:** Changing signal timing and other mitigations for impacted intersections apparently greatly improve intersection performance under the Build alternative, sometimes until it is better than under the No-Build alternative. If there are non-monetary "costs" to these improvements, what are they? If there aren't, why can't we make these improvements under the No-Build alternative, or even today?

45. **Construction impacts:** How long would construction impacts last in any given area? If it lasts too long, construction sometimes drives businesses out of business. What mitigations are proposed for this?

46. **Encroachments:** Will AC Transit pay cities for encroachment permits, and if so, about how much? Would it be a one-time payment or an ongoing payment?

Attachment: Excerpts from "Austin Commuter Survey: Findings and Recommendations" by Dr. Chandra Bhat, 2004 (3 pages).

Excerpts from

AUSTIN COMMUTER SURVEY: FINDINGS AND RECOMMENDATIONS

by
Dr. Chandra Bhat
Associate Professor, Department of Civil Engineering
The University of Texas at Austin
with assistance from
Aruna Sivakumar, Sudeshna Sen, Jessica Guo and Rachel Copperman
October 4, 2004

On how studies should be done:

"The purpose of this executive summary is to present the major findings and recommendations of a University of Texas (UT) commuter research study that (1) Examined the demographic, employment, and overall travel characteristics of Austin area commuters, and analyzing how these characteristics impact commute travel choices and perceptions, (2) Developed a framework for evaluating the effect of alternative congestion alleviation strategies on commute mode choice, and (3) Identified broad and important issues that have to be recognized when designing and analyzing a comprehensive mobility plan for Austin. The UT research study was based on a web-based survey of Austin area commuters undertaken between December 2003 and March 2004. The data from the web-based survey was weighted appropriately to be representative of the Austin area commuter population."

> ***Note that this study targeted commuters only, which are only a portion of potential transit riders. Shoppers and recreational users, who are less likely to use transit, were not surveyed. In addition, this study did not focus on travel routes already well served by public transit. Finally, CRT is much more popular and likely to attract riders than any bus system—rapid, enhanced, or regular.***

On the factors that impact commuting behavior:

"Commuter travel behavior is characterized by various choices, such as the choice of mode, the choice of the time of day to travel, and the choice of route. These choices depend on commuters' demographics (for example, age and car ownership), work characteristics (for example, work schedule and work location), and activity participation attributes (for example, whether the commuter makes a nonwork stop during the commute or not)."

"The increasing diversity of Austin household structures (from the traditional one-worker couple/nuclear family households to two-worker couple/nuclear family households, single adult households, and single parent households) is increasing participation in nonwork activities during the commute and during the midday from work. Such chaining of nonwork activities with the commute makes it difficult to wean commuters away from driving alone to work. Overall, the commutes are getting more complex, and divorcing the examination of commute travel choices from broader nonwork activity pursuits is naïve and myopic. Informed policy actions to reduce traffic congestion should consider the broader context in which commute travel choices are made.

"A corollary to the above finding is that it is important to pursue an integrated and coordinated land-use and transportation plan to address congestion problems in Austin. For instance, a commuter rail plan should to be backed up with appropriate zoning strategies to promote the development of mixed use facilities close to the potential commuter rail stations. Such an effort would serve two purposes. The first is to foster the development of residences and offices in and around the commuter rail stations to increase transit share. The second is to facilitate the development of shopping stores, banks, post offices, and child-care facilities to obviate the need to make separate commute stops. Another complementary land-use strategy would be to facilitate eating out and personal business within walking distance of employment centers, so that a personal vehicle is not needed for such midday activity participations. This, in turn, can contribute to encouraging commuters to use non-drive alone forms of transportation during the commute."

<u>On mode shift:</u>

"About 85% of commuters make one or more nonwork stops during the commute in the course of their work week, and over 60% of commuters make a nonwork stop or return home from work during the midday on at least one of their work days.…This has an important impact on commute mode choice."

"In the overall, the increasing diversity of Austin household structures (from the traditional one-worker couple/nuclear family households to two-worker couple/nuclear family households, single adult households, and single parent households) is having the result of increasing commute and midday stop-making, perhaps because of schedule/time constraints and the resulting need to use time efficiently. The increased commute/midday stop-making, in turn, has an impact on commute mode choice..."

"The most frequent reason to make a stop before or during the morning commute is for dropping off children. The stops made during the midday period are mostly for eating out, personal business, and work-related business. A small fraction of the commuters also participate in grocery/non-grocery shopping and social (visiting friends or relatives) activities during the midday. The most frequent purpose for stops during the evening commute are grocery and non-grocery shopping, pick-up/drop-off, personal business, and recreation. Finally, commuters participate mostly in eating out, shopping or social/recreational purposes after the evening commute."

"Individuals who make midday stops on any day of the week are more likely to drive alone during their commute and less likely to use the shared-ride and non-motorized modes than individuals who do not make midday stops. This can be attributed to the need for a personal vehicle to pursue midday stops. For instance, if there is no convenient food place near a person's work building, the individual may have to drive to lunch. This, in turn, has the effect of constraining the individual to drive to work. A policy implication is that mixed land-use development strategies (such as having post-offices, restaurants, and banks around employment centers) have the potential to facilitate mode switching away from driving alone."

"The ability of auto-use disincentive actions (such as tolls, parking pricing, or peak period pricing) and high occupancy vehicle-use incentives (such as high occupancy vehicle lanes or a new commuter rail mode) to shift commuters away from driving to car/van-pooling and transit modes will be overestimated if the impact of commute and midday stop-making on commute mode choice is ignored."

"The presence of a grocery store around potential CRT stations acts as an impetus for CRT mode-use, among those individuals who pursue one or more commute stops during the week. However, the presence of a child care center around CRT stations does not provide any stimulation for CRT mode-use, even among commuters who make a child care pick-up/drop-off stop during the commute. The absence of the effect of a child care center around CRT stations on CRT mode choice may suggest that parents do not consider CRT stations to be appropriate locations, from a safety and noise standpoint, for child care centers."

"Commuters who make commute stops on one or more days of the week are very likely to drive alone on each day of the week because of the convenience and flexibility offered by driving. Consequently, it is rather difficult to "wean" stop-making commuters from driving alone.

"The results very clearly indicate the important impact of weekly commute stop-making on commute mode choice. In particular, 69.5% of commuters who never make a commute stop drive alone, compared to 87% of commuters who make a commute stop on one or more days of the week. The percentages of the bus and non-motorized modes (walk and bicycle) are correspondingly higher for commuters who do not make commute stops compared to those who do."

"The percentage of commuters using a potential CRT [commuter rail transit] system will clearly be dependent upon the service characteristics (travel time, travel cost, reliability, and availability) of the system. Using assumptions that are not unreasonable about these service characteristics, a new CRT mode is predicted to capture 1.5% of the overall mode share if the CRT mode is available to about 10% of the commuter population. The drive alone mode share reduces by 0.7%, with the remaining 0.8% being drawn from the non-drive alone modes (shared-ride, bus, and non-motorized modes). If, however, the CRT mode is available to about 25% of the commuter population, then it is predicted to capture 4.1% of the overall mode share. The drive alone mode share reduces by 2.6% in this case, with the remaining 1.5% of the CRT share being drawn from the non-drive alone modes."

On ways to increase transit use that require no infrastructure or new development:

"[One can] change commuter travel patterns by reducing travel or spatially/temporally shifting commuters' travel (teleworking strategies, work-staggering strategies, flexible work hours, and improved spatial balancing of jobs and housing to reduce commute distances)…"

Start time flexibility in work schedules:

"Work schedule flexibility is measured for the purpose of this analysis as the ease with which the respondent can arrive at work 15-30 minutes late (for arrival time flexibility) and the ease with which the respondent can depart from work 15-30 minutes early (for departure time flexibility).

"About 42% of the workers have an inflexible work schedules in both the work arrival and departure times, 30% have a flexible work schedule in both work arrival and departure, and the remaining have flexibility at either the arrival or departure end, but not both."

Telecommuting:

"That is, on a typical work day, only 2.5% of workers telework. Clearly, increasing the percentage of teleworking individuals can contribute substantially to alleviating traffic congestion."