

BRT for Berkeley Proposal for Discussion



This document describes elements of the City of Berkeley's staff proposal for a Locally Preferred Alternative (LPA) of the East Bay Bus Rapid Transit project. The proposal is *not final*. It is merely meant to provide a framework for community discussion.

Could Rapid Bus Be Improved Instead of Building Bus Rapid Transit?

City staff have received a number of questions about whether similar benefits to those promised by BRT could be achieved without the dedication of lanes, expense, and construction impacts of BRT. In response to these questions, staff have considered potential enhancements to rapid bus service beyond what is envisioned in the “no-build” alternative in AC Transit's DEIS/R.¹

One option considered by staff was a “Rapid Bus Plus” concept, developed by a citizens group,² that would implement many enhancements to rapid bus service but stop short of dedicating lanes to transit. The proposal includes:

- **Pre-paid Boarding:** Implementation of a “proof-of-payment” boarding system using low-tech ticket vending machines at stops or tickets sold by merchants. Tickets could be bought in advance and time-stamped on-board.
- **Signal Adjustments for Transit:** Enhanced transit signal priority and right turn-only signal phases to help buses avoid delays caused by cars waiting for pedestrians to cross before turning right.
- **Policy Changes:** A law requiring motorists to yield to buses attempting to merge back into traffic (this would require driver education and enforcement).
- **Improved Service Frequency:** Peak-period headways of 7 minutes and off-peak headways of 10 to 12 minutes (the technical and financial feasibility of this has not been studied³).
- **Real-time Arrival Information at All Stops:** This measure is already planned by AC Transit.

The two main elements that set “full” BRT apart from Rapid Bus alternatives, such as “Rapid Bus Plus,” are dedicated lanes and stops, or “stations” as they are sometimes described, with level boarding. “Rapid

¹ AC Transit has proposed two basic alternatives: a “no-build” alternative (a technical term used in environmental reviews), which is essentially the existing Route 1R with minor improvements, and a Bus Rapid Transit alternative.

² The Rapid Bus Plus proposal would maintain curbside bus stops and local service separate from Rapid Bus service. Its advocates have also proposed additional upgrades to AC Transit service not just in the corridor, but systemwide, such as: prioritizing the purchase of zero-emission, alternative-fuel or high-efficiency hybrid buses; using smaller buses for off-peak service; better coordinating schedules, transfers, and fares; making AC Transit more affordable; and purchasing differently designed buses. As these measures are outside the scope of the process for development of a Locally Preferred Alternative, they are not addressed here.

³ Without increases to the reliability of buses, increases in frequency can exacerbate problems of “bunching,” the phenomenon that occurs when a bus falls so far behind schedule that the following bus catches up, and is slowed down by the bus in front. Further, increasing frequency of service without a commensurate increase in speed would entail added operational expense for AC Transit.

Bus Plus” proponents have included the possibility of curbside level boarding in their proposal. However, level boarding requires features that can be difficult to implement, and may prove nearly as expensive as more fully-featured BRT stations:

- To achieve level boarding, platforms must be 13 inches high, about seven inches above sidewalk level. Any raised platform must follow Americans with Disabilities Act accessibility guidelines governing ramp length, shelter design, and sidewalk widths.⁴ To comply with these requirements, some curbside platforms would have to extend into the street.⁵
- Some stops would need to be 120 feet long, enough for two boarding areas: a raised platform for BRT, and a standard low platform for local and other non-BRT transit service. In some locations, this would require sidewalk extension.

It is true that some improvements to existing transit service could be implemented without implementing BRT, such as pre-paid boarding. However, given the significant increase in traffic congestion that has been projected, staff believes BRT is necessary to prevent a steady deterioration in transit service. Moreover, only by substantially improving the speed and reliability of transit can significant numbers of new users be attracted to transit. Staff has concluded that any proposal that does not include dedicated lanes and stations with level-boarding, even enhanced rapid bus service, would perform more like the “no-build” rapid bus alternative than the BRT alternative.

⁴ ADA requires that: 1) ramps be no steeper than 7.5 degrees, meaning that ramps would have to be approximately 13 feet long, 2) shelters be large enough to permit a wheelchair or user of mobility aids to entirely enter the space, requiring a minimum footprint of 30 inches by 48 inches, and 3) sidewalks provide at least six feet of “clear space” between the platform and building wall.

⁵ Extending the platform into the street requires reconstruction of the sidewalk and relocation of utilities.