

MacArthur BART Bicycle Access Study



PROJECT DESCRIPTION • The MacArthur BART Bicycle Access Study (“study”) is developing the best bikeway alignments for improving east/west bicycle access to the MacArthur BART Station while avoiding adverse effects on bus/shuttle operations and motor vehicle traffic. The recommended bikeway alternatives connect MacArthur BART to:

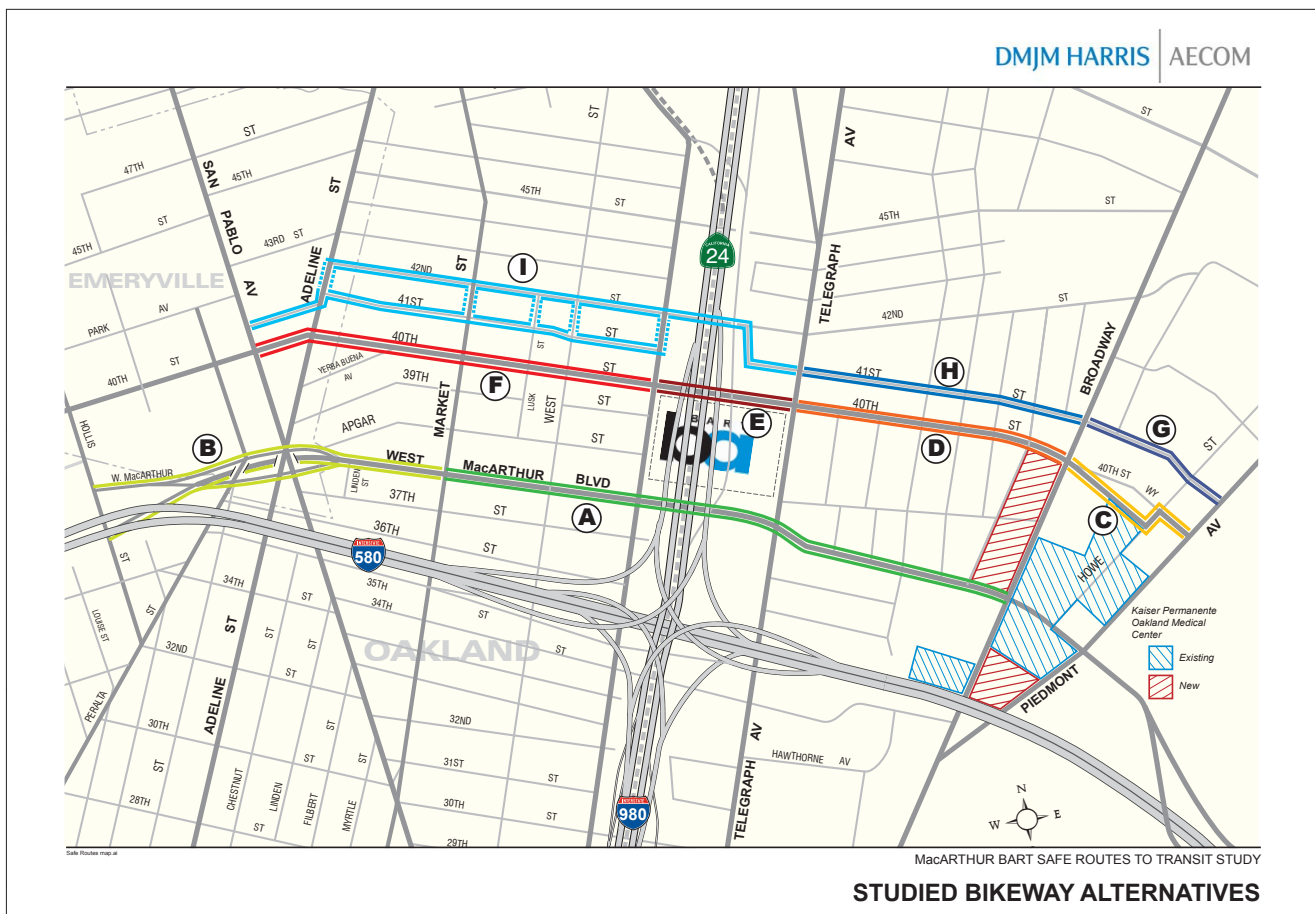
- (a) the Piedmont Avenue neighborhood and the Kaiser Hospital area to the east; and
- (b) Emeryville’s bikeway network to the west.

The study evaluated alignments and bikeway types (e.g. bike lanes or bike routes) on W MacArthur Blvd, 40th St, and 41st/42nd Sts, as shown below. The study involved staff from the cities of Oakland and Emeryville, AC Transit, and the Emery-Go-Round among other stakeholders.

PROJECT NEED • Seven percent of patrons access the MacArthur BART station by bicycle. This rate is amongst the highest bicycle mode share for all stations

in the BART system. Despite this demand, there is no bikeway that provides direct access to MacArthur BART. The City of Oakland has developed nearby bikeways that run north-south on Webster St/Shafter Ave, West St, and Market St. However, there is no east-west bikeway to serve MacArthur BART and connect these other bikeways.

CONTEXT • The City of Oakland’s Bicycle Master Plan calls for improving bicycle access to major transit hubs. This policy, known as “Safe Routes to Transit,” encourages bicycle commuting and promotes bicycle use for trips throughout the Bay Area. In Oakland, 85% of residents live within two miles of a major transit station. This two-mile distance amounts to a 12-minute bike ride. Bicycling can help Oakland reduce the 47% of its total greenhouse gas emissions that are caused by motor vehicles as well as reduce congestion near transit stations. Such improvements must be developed in a multimodal context that responds to the needs of all roadway users.



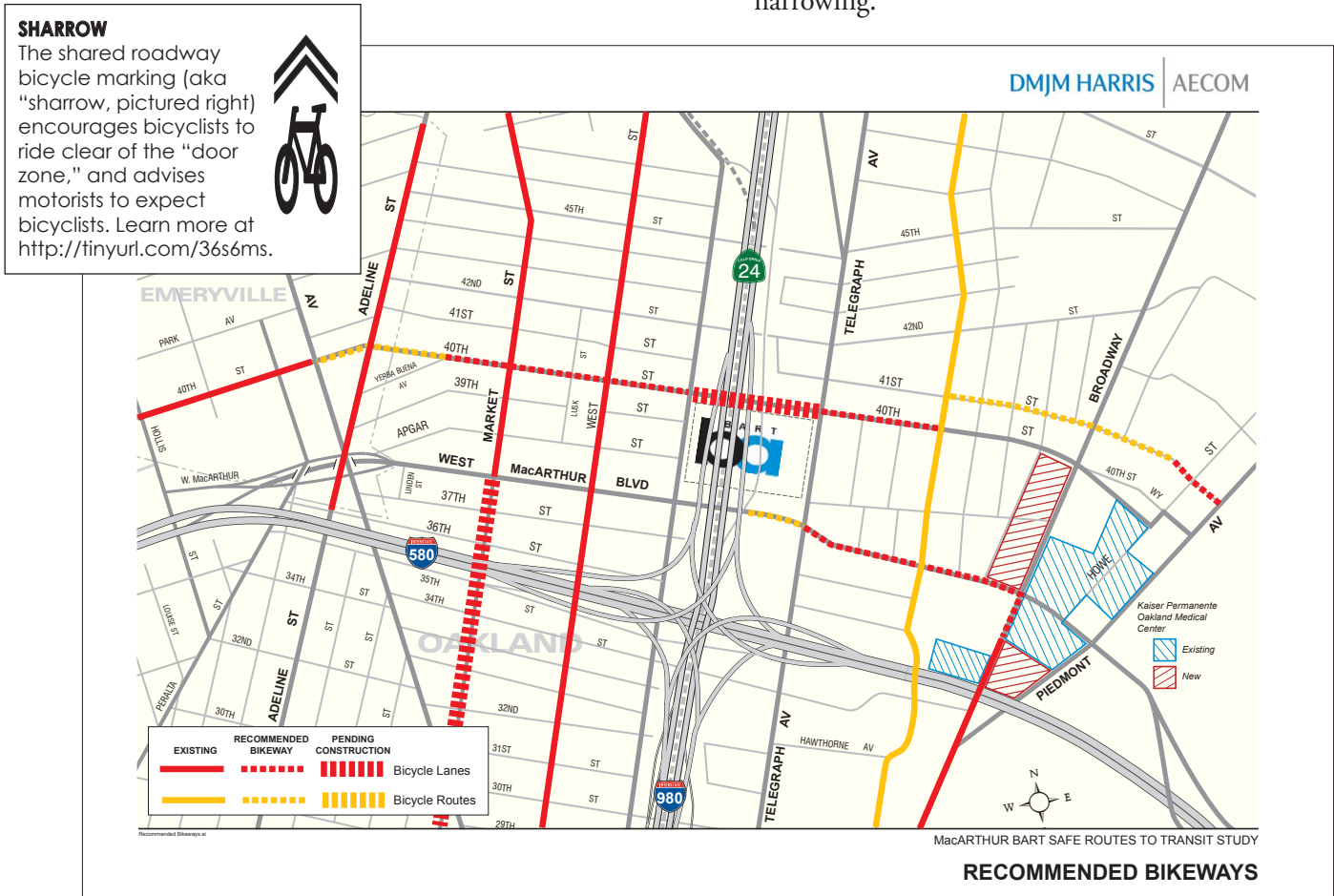
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STUDY METHODOLOGY • The study evaluated possible bikeway alignments on W MacArthur Blvd, 40th St, and 41st/42nd Sts for providing quality bicycle access while avoiding adverse effects on motor vehicle traffic, including buses and shuttles. The City of Oakland worked collaboratively with AC Transit and the Emery-Go-Round to develop a study methodology and recommendations that examine and ultimately avoid creating undue delays to transit operations. The project considered the conversion of travel lanes to bicycle lanes, median narrowing, removal of on-street parking, and travel lanes shared by bicycles and motor vehicles. The possible conversion of travel lanes to bicycle lanes was studied in detail to understand the effects on drivers, buses, and shuttles. For more information on the City of Oakland's methodology for studying the conversion of travel lanes to bicycle lanes, see "About Bike Lane Feasibility Studies" at <http://tinyurl.com/ywbpuw>.

STUDY OUTCOMES • The study recommends two east-west bikeways: one on W MacArthur Blvd and

the other on 40th and 41st Sts. On W MacArthur Blvd between Broadway and Telegraph Ave, the study recommends restriping this six-lane roadway with two travel lanes plus a bicycle lane in each direction and left turn pockets at the major intersections. These bicycle lanes would connect to the BART station via the BART frontage road that would be rebuilt as part of the transit village project.

On 40th St between Market St and Webster St, the study recommends narrowing the 16-foot median by six feet to add bicycle lanes while maintaining two travel lanes in each direction. (Note that the 40th St median between Martin Luther King Jr Wy and Telegraph Ave is already being narrowed to accommodate bicycle lanes as part of the 40th St streetscape project along the BART station.) At Webster St, the recommended bikeway jogs to 41st St and extends east to Piedmont Ave. Compared to 40th St, this segment of 41st St provides a superior connection to Piedmont Ave while avoiding AC Transit bus operations and minimizing the project costs associated with median narrowing.



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