

# 40th Street Bikeway



*The green band with sharrows on 40th Street, as viewed from West Street, looking west.*

## OVERVIEW

The City of Oakland is testing an experimental bikeway design in North Oakland, in the vicinity of the MacArthur BART Station. The design features a five-foot wide green band located in the center of the curbside travel lane with shared roadway bicycle markings (aka “sharrows”) installed on top. This treatment has been tested and found to have positive results in other U.S. cities, most notably Long Beach, CA, and Salt Lake City, UT.

The experiment is being conducted by the City of Oakland under the auspices of the Federal Highway Administration and the California Traffic Control Devices Committee. The project is the culmination of a planning and design process for improving bicycle access to the MacArthur BART Station that began in 2006 in partnership with AC Transit, Emery-Go-Round, BART, and the City of Emeryville.

## EXPERIMENT DETAILS

While green color pavement was approved for use in bike lanes in 2012, it has not been approved for use with sharrows in travel lanes shared by motorists and bicyclists. The use of such experimental “traffic control devices” must be reviewed and approved by both Federal and State regulators. The City received permission to conduct the 40th St experiment from the Federal government in January 2013 and from the State in March 2013.

The experiment has three phases. First, roadway operations were measured under existing conditions in order to establish a baseline. Second, sharrows, parking edgeline stripes, and standard “[bikes] may use full lane” signs were installed, and the same set of measurements taken. Third, the five-foot wide band of green color was installed in the middle of the curbside travel lane and the sharrows were reinstalled on top of the band. Measurements were taken a final time. Results from the experiment will inform the decision about using this treatment in other locations.

The epoxy-based coating used for the project includes a grit in the mix to provide sufficient friction under various conditions. Green is the national standard for colorized bikeways. The particular shade of green used on 40th St is the color approved by the Federal Highway Administration for use in bike lanes.

## RULES & RESPONSIBILITIES

Sharrows, with or without the green band, encourage bicyclists to ride clear of the “door zone” and advise motorists to expect and share the road with bicyclists. The markings also create continuously striped bikeways where bike lanes are not feasible. Learn more at [www2.oaklandnet.com/n/OAK025000](http://www2.oaklandnet.com/n/OAK025000).

The California Vehicle Code allows bicyclists to use the full travel lane when that lane is of “substandard width,” defined as a lane that is too narrow for a bicycle and a vehicle to travel safely side by side. This regulation is the basis for the “[bikes] may use full lane” sign, pictured.



### How can bicyclists and drivers coexist on streets like 40th St?

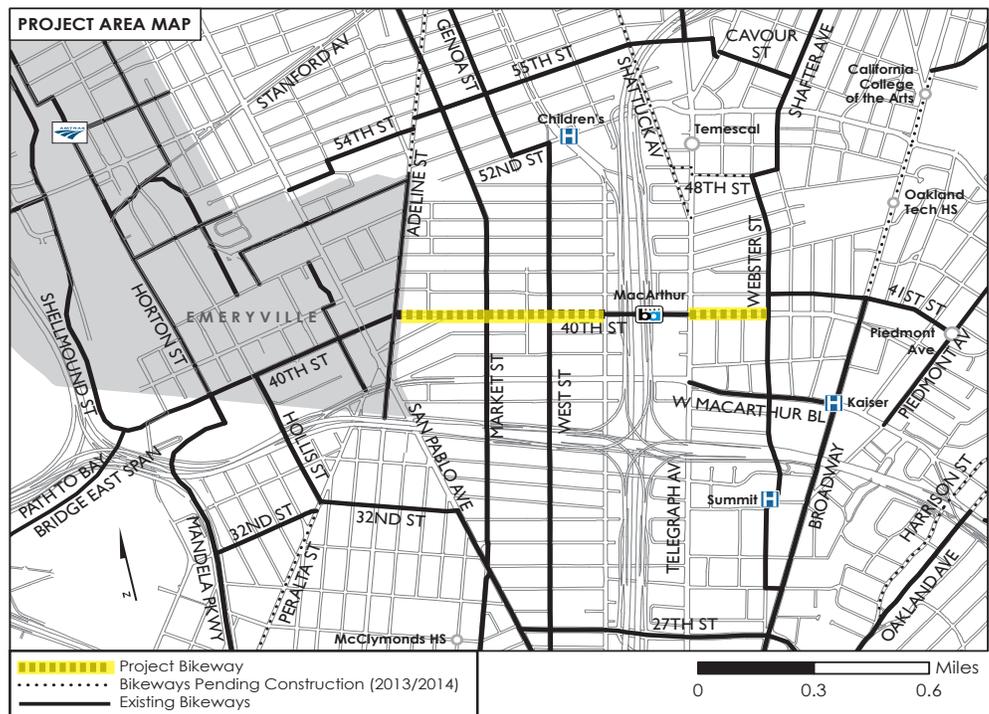
- *Bicyclists:* ride clear of the door zone; avoid passing motorists on the right; and obey traffic signals.
- *Motorists:* be considerate of bicyclists riding in the lane – they are doing so for their own safety; change lanes to pass, leaving at least three feet of space.

## WHY 40TH STREET?

### Context

As part of the East Bay's developing bikeway network, 40th St is a key east-west route that serves MacArthur BART and spans 1.8 miles in Emeryville and Oakland. To the west, 40th St connects to the bicyclist and pedestrian paths to the new Eastern Span of the Bay Bridge. To the east, the 40th St bikeway connects to bikeways on 41st St and W MacArthur Blvd serving the Piedmont Ave commercial district and Kaiser Hospital. Along its length, this bikeway corridor intersects with nine north-south bikeways: Shellmound St, Horton St, Hollis St, Adeline St, Market St, West St, and Webster St, plus Broadway and Piedmont Ave.

The 40th St Bikeway is recommended in the City's Bicycle Master Plan (2007) as a priority project. As of 2008, the number of passengers accessing MacArthur BART by bike was the fourth highest amongst all of BART's 43 stations. In 2009, bike lanes were installed from Martin Luther King Jr Wy to Telegraph Ave along the BART Station frontage as part of a Redevelopment streetscape project. Bicycle wayfinding signs were installed along 40th St and 41st St in 2010 with bikeway striping added to 41st St and W MacArthur Blvd in 2012. The MacArthur Transit Village is now under construction which will include a high-capacity bicycle parking facility.



### History

The City has made multiple efforts since 2006 to implement bikeway improvements on 40th St. Two studies were completed on the conversion of travel lanes to bicycle lanes. The "road diet" alternative was rejected due to technical issues with regional growth forecasts and concerns from AC Transit and Emery-Go-Round regarding possible delays to bus operations. An additional alternative to install bike lanes by narrowing the medians was rejected due to concerns from neighborhood advocates regarding the detrimental effects on the planted medians. The current design was a compromise that addresses the need for a bikeway on this regionally important corridor, with the added benefit of allowing the City to test an innovative treatment that is expected to improve safety for all roadway users.

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### MORE INFORMATION

Extensive project information about the 40th Street Bikeway and the MacArthur BART Bicycle Access Project is available on the City of Oakland's web site at [www2.oaklandnet.com/OAK024586#macbart](http://www2.oaklandnet.com/OAK024586#macbart).

Questions and comments may be directed to Jason Patton, City of Oakland, Bicycle & Pedestrian Program Manager, (510) 238-7049, [jpatton@oaklandnet.com](mailto:jpatton@oaklandnet.com).

If you would like to be added to the contact list for this project, please email [bikeped@oaklandnet.com](mailto:bikeped@oaklandnet.com).

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*The project is funded by a Safe Routes to Transit grant from the Metropolitan Transportation Commission matched by Oakland's share of Measure B, the Alameda County Transportation Commission's half-cent sales tax, using revenues solely dedicated to bicyclist and pedestrian projects.*