While bicycling is becoming increasingly popular in the U.S., it still makes up a miniscule portion of access trips to most rail transit stations, typically less than 1 percent. This is in stark contrast to countries like Denmark and the Netherlands, where a quarter or more of all access trips to regional rail stops are by bike. Converting park-and-ride to bike-and-ride trips would save fuel, reduce tailpipe emissions and increase physical activity. It would also shrink the amount of asphalt surrounding rail stations, freeing up land for transit-oriented development.

This study probed factors that have had a hand not only in bicycling grabbing a larger market share of access trips to Bay Area Rapid Transit (BART) stations but also in the expansion of the geographic area bicyclists are pedaling in from—i.e., “bike access sheds.” Survey data from 1998 and 2008 allowed us to identify BART stations that have become most attractive to bicyclists over time.

The Ashby station in Berkeley and the Fruitvale station in Oakland experienced the biggest gains by far—both in shares of access trips by bike and also in the sizes of their bike access sheds. Both stations lie in fairly dense urban settings (more than 20,000 people per square mile) yet also have large park-and-ride lots. From 1998 to 2008, Ashby’s shares of access trips by bike jumped from 7.4 percent to 11.8 percent while Fruitvale’s shares more than doubled, from 4.3 percent to 10 percent. These are among the highest market shares of cycling to rail stops in the U.S. Moreover, the sizes of their bike access sheds—amoeba-like territories encompassing where all but 5 percent of the longest bike access trips began—grew by 123 percent for Ashby and a remarkable 210 percent for Fruitvale. Why?
The answer is largely “build it and they will come.” Substantial investments in bicycle infrastructure—both on- and off-site—were made in both cases. Other BART stations with similar surrounding densities and parking facilities had nowhere near as much investment in bicycle infrastructure and recorded nowhere the gains of these two stations. Between 1998 and 2008, the lineal miles of bike paths, bike lanes (on the shoulder of streets) and bike routes (e.g., streets signed and sometimes traffic-calmed for cyclists) more than doubled within Ashby’s bike sheds. For Fruitvale, they more than tripled.

![Maps showing bike access sheds from 1998 to 2008.](image)

Fruitvale BART’s Bike Access Sheds: the three colored bands show the geographic territories that encompassed all but 5 percent of the longest access trips to Fruitvale BART, with light orange denoting the 95 percent access shed, darker orange the 75 percent shed, and red the 50 percent shed. Green lines show bike paths and lanes for each year.

As they approach the station, bicyclists are guided by welcoming way-finding signs that lead them to protected bike racks as well as enclosed and secure electronic lockers. Ashby and Fruitvale also are home to some of the nation’s first Bike Stations. Fruitvale’s attended Bike Station offers repair services and short-term bike rentals.

**RECOMMENDATION**

If bicycles are to play a significant role in accessing rail stations in the U.S., safe, secure and well-designed bicycle infrastructure—not unlike what has been built in parts of Europe—will be needed. These are not “amenities” but rather basic “provisions,” akin to car parking facilities for motorists. Money freed up from not having to expand park-and-ride lots is one potential source of funding. So are state and federal funding programs that aim to improve air quality and promote sustainable mobility.