

This fact sheet highlights the key findings from a December 2019 study by UC Berkeley that analyzed the travel patterns and needs of residents of affordable housing living near BART stations.

Although the study only looked at developments near BART stations, the findings are relevant to transit systems and affordable housing projects across the Bay Area.





Residential TOD provides attractive alternatives to solo driving



Affordable TOD provides many transportation benefits to a diverse set of residents



Prioritizing affordable TOD promotes equitable access to transit and opportunities

# **Key Findings and Data**

The study found that TOD is achieving many of its intended goals: residents of TOD walked and used BART more and drove less, and low-income residents reported that living near transit increased their access to key destinations.



## Residential TOD provides attractive alternatives to solo driving.

- TOD residents drove alone 37% of the time while non-TOD residents drove alone 50% of the time.
- Nearly all TOD residents who rode BART to get to work walked to the station and over two-thirds walked from their destination station to their workplace.
- Over the past 25 years, walking and biking increased sevenfold among TOD residents near the Pleasant Hill BART station, while car usage fell by over one-third. During the same period, walking and biking nearly doubled among residents near the Union City and South Hayward stations, while car usage fell by over one-quarter.



Affordable TOD provides many transportation benefits to residents with lower incomes, including seniors, families with young children, and people who are not working.

- 43% of affordable TOD residents primarily rode BART during off-peak times (8:30am-4pm) compared to 17% of market-rate residents. 57% of market-rate residents' trips took place during the morning and evening rush hours, compared to 35% for affordable TOD residents.
- Among affordable TOD residents, those without employment (including seniors) were more than twice as likely as those with employment to use BART. Affordable TOD residents primarily used BART for social and recreational purposes, while marketrate residents typically drove for those types of trips.
- TOD residents were more than three times as likely as non-TOD residents to make trips on foot (15% vs. 4%). This was especially true for households with children (20%), suggesting these developments provide safer walking environments for families.



Prioritizing affordable TOD promotes equitable access to transit and opportunity, which is critical given the Bay Area's high housing costs and persistent racial and economic segregation.

- Market-rate TOD tended to have younger, whiter, and more affluent residents when compared with affordable TOD. Marketrate residents were also more likely to self-select into these developments based on transit proximity. Affordable TOD therefore benefits lower-income residents and residents of color who otherwise might not be able to live near a transit station.
- Affordable TOD residents shared past experiences with homelessness, sudden rent hikes, or poor housing conditions that forced them to move. Investing in affordable TOD provides lower-income residents both stability and choice in housing, similar to what their market-rate neighbors enjoy.
- Affordable TOD residents were the only survey group to have (on average) fewer than one vehicle per household while 45% of participants in the affordable TOD focus groups did not own a car. Many focus group participants therefore walked, rather than drove, to nearby destinations like grocery stores.
- BART proximity provided affordable housing residents greater ability to access jobs, healthcare services, community networks, and other amenities without needing a private car. Highlights from the focus group included:
  - A resident in Colma who was able to search for jobs in the East Bay without worrying about driving
  - An East Oakland resident who went back to Chinatown every week for groceries and to see friends
  - East Bay residents who used BART to go shopping or to doctors' appointments in San Francisco, where parking is scarce and expensive

### **Study Background**

The UC Berkeley study included a survey of more than 600 residents at 62 housing developments, as well as focus groups at six affordable housing developments near BART stations. The study analyzed residential developments with 50 or more units. TOD projects were those within a quarter mile of a BART station, while non-TOD projects were located between one and two miles from a station.

The mean age for market-rate TOD was 43.4, versus 51.4 for affordable TOD. Nearly 40% of market-rate respondents TOD were white, while over 80% of affordable TOD residents were people of color. The majority of market-rate respondents had annual incomes above \$100,000, while the majority of affordable residents had incomes of under \$25,000.

# Five Changes to Make Affordable TOD Work Better for Residents

The study found that affordable TOD residents do not currently use transit as much as their market-rate peers. A combination of changes to agency practices and policies, alongside greater regional coordination, would make it easier for affordable housing residents to benefit from living near transit. It would also help achieve the climate and equity benefits of TOD.



# Focus on first and last mile connections

Distance and easy connectivity between BART stations and jobs may be an impediment to use. Less than one third of affordable TOD residents worked within half a mile of a BART station, compared to more than half of their market-rate neighbors. Integrating first- and last-mile solutions like car sharing, bike sharing, and free shuttles could help close that gap.



# Provide discounts targeted to lower-income riders

Off-peak discounts and bundled family fares could give families living in affordable housing fuller access to travel options and support the types of trips that they are more likely to take.

Clipper START, a new regional means-based fare pilot, gives discounts to lower-income riders on several transit systems. Integrated fares and passes across systems, such as the "A" Pass in San Francisco that provides unlimited rides on Muni and BART within the city, are another equity-oriented policy that could help incentivize use among lower-income riders. Widespread outreach in multiple languages and sustained coordination with resident services staff would help ensure broader uptake of these programs.



### Subsidize transit passes for affordable housing residents

The high cost of BART was a deterrent for many residents with lower incomes, especially for those traveling longer distances or with young children. Some opted to take the bus, walk, or drive to destinations instead of using BART. Market-rate residents were also three times as likely as affordable housing residents to receive a transit pass through work, suggesting that those who need subsidies most are less likely to get them. Transit agencies should offer deep discounts to affordable housing developers purchasing transit passes or pre-loaded Clipper cards ("Clipper Cash") for residents, including under the state's Affordable Housing & Sustainable Communities program.



### Safe and clean transit operations are critical to the success of TOD

Safety and cleanliness in and around stations and on trains were also cited in the survey and focus group as reasons people chose not to take BART. The agency has begun to address these concerns through increased cleaning and a new ambassador program; continuing to monitor customer perception of these issues will be important.



# Equitable TOD should emphasize accessible design elements for both TOD and station access improvements

Residents who relied on wheelchairs mentioned inadequate or inaccessible infrastructure as a deterrent to using BART, with the bus as an easier alternative. Planning for new affordable housing should prioritize the needs of people with mobility limitations and other disabilities. Solutions include functional elevators at stations, accessible buttons for station elevators and pedestrian crossings, and universally accessible pathways between stations and adjacent developments.

