



Viability of “Rolling” to Transit as Justification for 1 Mile Distance from Transit

Executive Summary

We need to be realistic about who is going to access transit from beyond ½ mile. Let’s look at what we know. SANDAG has provided us with some helpful research on the subject.

SANDAG discovered that 97% of people in the area walk to transit and 89% walk home, while 2% drive to transit and 10% drive or are driven home. That leaves only 1% rolling to transit by bike, skateboard or scooter and 2% rolling home. Those 1-2% are hardly going to populate the dense housing development SDAs will encourage beyond the ½ mile from transit that people are willing to walk. And rolling long distances is not a viable option for large portions of the population, including the elderly, families with small children and people with disabilities.

How far are people in the region walking to transit? SANDAG provided those answers, too. 70% of us walk 5 minutes or ¼ mile or less and 92% of us walk 10 minutes or ½ mile or less. Only 8% of San Diegans are willing to walk beyond ½ mile to use transit. That leaves 1-2% who are rolling and they aren’t going to fill the dense housing 1 mile from transit to justify calling it transit-oriented development.

The last thing to note about the “rolling” solution is that it is not the environmental prize winner people once imagined. Research is now showing that “rolling” is more often replacing walking than driving, so e-rollers are adding energy usage to the market, not removing GHGs. In addition, research that considers what rolling is replacing and includes the entire lifecycle of rolling devices is showing that “rolling” nets out not to be climate-friendly after all, once one considers manufacturing, power usage, short lifecycle, battery disposal, recycling, etc.

Taking all of this information into consideration, rolling cannot and should not be used to justify expanding transit-oriented development beyond ½ mile from major transit stations because:

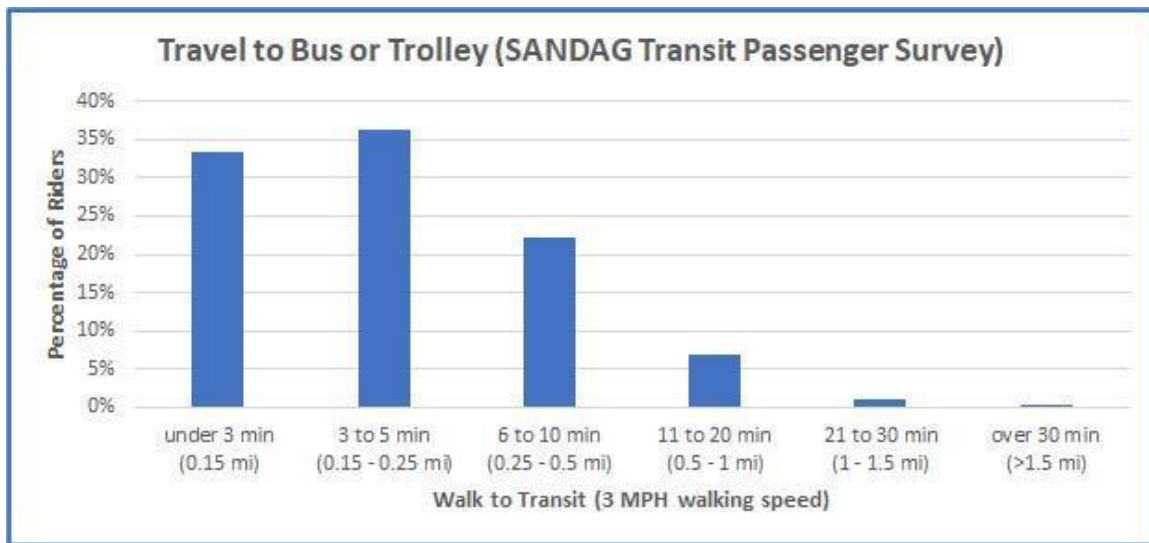
- Only 1-2% of San Diegans roll to transit
- The overwhelming majority of locals won't walk beyond 10 minutes/ ½ mile to transit
- New research indicates “rolling” is not environmentally friendly
- “Rolling” long distances is not an option for the elderly, families with small children and people with disabilities

How Do People in the San Diego Region Access Transit?

- In the San Diego region, most people walk **to/from** PuT
 - In 2019¹⁹
 - **97%/89%** walk
 - **2%/10%** come/go via auto
 - **1%/2%** roll via bike, skateboard, etc.
 - **1.5%/.8%** come/go via transit/air (long distance mode)
- People assume that micromobility options will reduce climate change emissions.
 - However, a 2022 big data study including 35 international cities (8 in the U.S.) found that, with the possible exception of station-based bike-sharing (SBBS),
 - “Shared micro-mobility programs have not achieved desirable GHG emissions reduction benefits”
 - Many factors “make shared micromobility more likely to be an environmentally unfriendly mode of transportation”
 - Lifecycle of devices
 - Power sources
 - Whether escooters/ebikes/eskateboards are replacing walking vs. car trips
 - Environmental impacts of manufacturing, collection, maintenance and disposal³⁰
 - Another new study shows shared electric bikes and scooters can increase the carbon footprint of urban transportation^{37,38}
 - Because people primarily use these vehicles for trips they would otherwise have made via walking, (non-electric) cycling, or

public transit – modes of transportation with an even lower climate impact^{37,38}

- In San Diego, per Metropolitan Transit System (MTS): "Passengers are typically willing to walk between a quarter mile and a half of a mile from a transit station to their destination; this range varies based upon factors such as route frequency, neighborhood walkability, lighting, and security."²⁰
- SANDAG research supports this.²⁶
 - 92% of people in the San Diego transit region walk 10 minutes or less to access transit (1/2 mile or less)²⁶
 - 70% walk 5 minutes or less to access transit (1/4 mile or less)²⁶
 - Only 8% walk further than 1/2 mile²⁶



2015 On-Board Transit Passenger Survey; Results of the 2015 On-Board Transit Passenger Survey for San Diego Region; Prepared for: San Diego Association of Governments pg. 19 https://www.sandag.org/uploads/projectid/projectid_494_21412.pdf

Conclusions

There are no data to suggest that most people are going to:

- Walk further than 1/4- 1/2 mile (5-10 minutes) to access transit
- Significantly increase bike trips to transit

- Buses carry only two bikes
 - Trolleys carry only one to two bikes per car
 - Only approximately secure 700 bike parking spaces at public transit in San Diego County; reserved for regular commuters²⁸
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- Significantly increase other “rolling” trips to transit

There are new studies to indicate that “rolling” is not climate-friendly

- Particularly via e-mobility devices

Sources

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