

# Measuring the Benefits of Transit-Oriented Development

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**Living close to a transit station enhances residential property values.**

This study provides an overview of the beneficial impacts of transit-oriented development (TOD) – compact, mixed-use pedestrian land uses within walking distance of transit (rail and light rail) stations. These benefits can lead to more vibrant and healthier communities and provide personal benefits to those choosing to live in TODs and near stations.

A major goal of TOD is to direct land development to where public transit and infrastructure already exist. This comes with the expectation that transit ridership will increase and auto use will decrease as the convenience of transit leads it to become the mode of choice. Increased transit ridership and decreased auto use are generally accepted as public benefits – resulting in reduced air pollution, greenhouse gas emissions, traffic congestion, and crashes, as well as health benefits due to increased physical activity, i.e., walking trips. Other benefits that may accrue to individuals, households, and communities include creating a more stable economic base and promoting community cohesion.

## Study Methods

Our objective was to document and assess the benefits gained by implementing a TOD strategy through qualitative and quantitative approaches. To do so, the research team collected and examined data from key informant interviews, focus groups of those living near four stations, and a mail and online survey of 1,629 households near eight stations. Additionally, the researchers conducted case studies of three communities that have adopted TOD strategies.

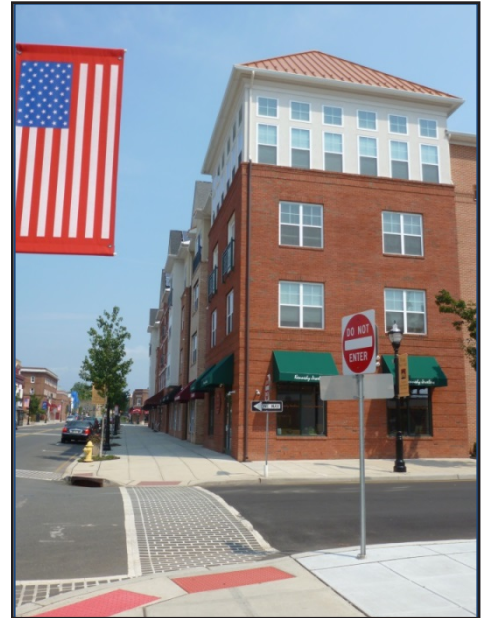
## Findings

- Professionals and decision makers in New Jersey strongly support TODs and see this as a way to rejuvenate communities while benefiting the residents.
- Focus group participants offered broad support for development near stations. These residents appreciated the rejuvenation that TOD has brought their communities, the access to transit, and the ability to walk in their downtown area. Their opinions of the retail component of some projects were mixed, as they thought that the majority of the retail was dedicated to entertainment and not to basic needs. They also expressed concerns about increased traffic endangering pedestrians.
- The researchers found that residents living within a half-mile of a station are more likely to walk and to take public transit more frequently and to drive less than those who live from one-half to two miles from a station. This finding applies even when controlling for various attitudes towards one's neighborhood, demographic factors such as income and age, vehicle ownership, how long the respondent has lived in their current residence, and features of the built environment.
- Results show that being close to a station enhances residential property values while controlling for other factors that influence valuations. TOD can also be used as a way to increase the diversity of housing choices in a community as smaller units, or more affordable units, mitigate the impact of any increase in property values.

- Casualties from traffic accidents are less frequent near rail or light-rail stations. Pedestrian casualties are less frequent in areas with more population density. Bicycle casualties are higher near stations, perhaps due to more bicycling activity.
- Out-of-pocket expenses associated with using transit are less than those associated with driving. Travel time costs, however, are increased for transit except for those boarding in lower-income communities. This conclusion is based on the research methodology that bases the value of time on average wages. Total costs of using transit are reduced for those boarding at Broad St (Newark), Plainfield, and New Brunswick.
- The researchers analyzed the impact of shifting population to be closer to the station using a regional travel demand model. If more people lived near transit stations, regional congestion would be reduced, and more people would take transit.

### Policy Recommendations

This research suggests broad benefits from focusing development near existing rail and light-rail stations. This can be accomplished by encouraging changes to zoning ordinances that may prohibit denser development. Improved pedestrian infrastructure is necessary in many areas with existing stations, especially to provide safe and convenient access. Additional funding is often needed to effectively change the street environment around stations. Both the New Jersey Transit Village Initiative and Complete Streets policies support this. Successful development near stations will boost transit ridership. In New Jersey, most trains travel into New York City and are already at capacity during peak periods. Better and more frequent service can make new development more attractive to residents, but this requires substantial additional investment to enhance capacity.



**Park Square development in Rahway, NJ**

### About the Authors

Robert B. Noland is professor of transportation planning and policy at Rutgers University and director of the Alan M. Voorhees Transportation Center. Kaan Ozbay is professor of civil engineering at New York University. Stephanie DiPetrillo is senior research specialist at the Alan M. Voorhees Transportation Center. Shri Iyer was a research associate in the Civil Engineering Department at Rutgers University and is now associate staff analyst at the New York MTA.

### To Learn More

For more details about the study, download the full report at [transweb.sjsu.edu/project/1142.html](https://transweb.sjsu.edu/project/1142.html)