Transitway Impacts Research Program (TIRP) Research Brief

Maximizing the benefits of transitways in areas of concentrated poverty

Why was the study needed?
The expanding Twin Cities transitway system will connect some of the region’s areas of concentrated poverty with more opportunities. Although proposed transitway routes are largely set, decisions including station sites, connecting bus service improvements, and station-area pedestrian infrastructure improvements have yet to be finalized. These decisions may affect the extent of the accessibility benefits people actually receive.

In this study, researchers explored these questions:

- How well can people living in areas of concentrated poverty reach jobs in the Twin Cities region?
- What is their perception of the overall transportation network?
- How can planners and policymakers maximize the benefits of transitways for people living in areas of concentrated poverty?

Key Findings

- Twin Cities residents who live in areas of concentrated poverty are unable to reach many job opportunities or face burdensome commutes.
- Residents without access to a car often need to travel throughout the region and commute almost as far as those who have access to a vehicle.
- Actual travel varies significantly based on car availability and the quality of the pedestrian environment near transit stops.
- Study participants indicate a clear need and desire for improved regional transit services.
- The quality of local pedestrian access to the transit system via the street network stands out as a critical issue.
- Transit issues such as safety, comfort, and security shape the quality of life of frequent transit users, particularly those who can’t select other transportation options.
- Enhancing the regional transitway system will help residents in areas of concentrated poverty reach jobs and other opportunities.
- Improving neighborhood walkability is a best practice for residents who depend on transit and for those who have other transportation options.
- Targeting transit improvements in areas of concentrated poverty will disproportionately benefit the people who already use transit and need it most.

“This research is an important addition to the growing literature on how important good pedestrian access is for transit customers, especially for those who live in areas of concentrated poverty.”

— Lucy Galbraith, director of transit-oriented development, Metro Transit

*Areas of concentrated poverty are census tracts where 40 percent or more of the residents have incomes below 185 percent of the federal poverty threshold; in 2017, this was $46,424 for a family of four or $23,103 for an individual living alone.*
Project Design

Researchers focused on neighborhoods with areas of concentrated poverty and took an innovative approach to collecting input from residents who are often time-pressed. They began by meeting residents at locations in their daily lives, including food shelves, social service providers, libraries, and transit centers. In this way, data collection filled participants' waiting time rather than taking their free time. Additionally, researchers employed a brief, graphical survey that used visual aids, cognitive mapping, and a mix of closed- and open-ended questions. Meeting locations were in both urban and suburban areas.

For analysis, they used an approach that blended quantitative and qualitative data analysis techniques. This included a mix of descriptive statistics, geospatial analysis, and qualitative content analysis.

Conclusions

The researchers concluded that enhancing the regional transitway system will help residents living in areas of concentrated poverty reach jobs and other activities.

In addition, they believe common best practices for improving neighborhood walkability—such as wide, well-maintained sidewalks, traffic-calming measures, convenient and safe street crossings, and the short walking distances that come with compact development—are best practices for everyone. Improvements commonly proposed to attract people who have other transportation options also help the riders who already use transit and need it most.

“These attributes are not demanded by those with other options because of stigmas or fads, but because they are genuinely good things,” says Andrew Guthrie, the study’s co-investigator. “We found that pedestrian environments around stops affect the experience of using transit in areas of concentrated poverty more strongly than transit service itself.”

From this realization, the research team believes transit- and pedestrian-oriented design is a social equity issue. “The equitable implementation of a modern regional transit system in the Twin Cities requires a comprehensive program of pedestrian improvements,” says Professor Yingling Fan, the study’s principal investigator. “An easy, safe, pleasant walk to a transit stop, and the wait for a transit vehicle, should be an unremarkable occurrence throughout the region—including in areas of concentrated poverty.”

Learn More


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