



Transitway Impacts Research Program (TIRP) Research Brief

Job Growth Impacts of Bus Rapid Transit

Photo: Metro Transit

*"In a regional transit system, each new transitway station plays a role in supporting job growth at others."
—Andrew Guthrie, Principal Investigator*

Key Findings

- The most significant factor in encouraging job growth is total street mileage near station areas, underscoring the importance of street connections between stations and their surroundings.
- Job impacts vary by transitway mode. The greatest

difference in job growth was between some type of fixed infrastructure and no continuous fixed infrastructure at all.

- Regional factors such as economic development policies were highly important in determining changes in station-area job growth.

Project Background

In coming years, bus rapid transit (BRT) will play a growing role in the Twin Cities transit system. In 2016 the A Line will open in the central metro, the Metro Red Line (in the south metro) continues to grow, and plans for additional BRT lines are advancing.

"One of the drivers behind the transitway build-out is to increase employment access by transit," says Andrew Guthrie, research fellow with the Humphrey School of Public Affairs. "Achieving that to the fullest extent possible requires job growth in station areas. Even if the same number of jobs would have been added elsewhere in the region without the transitway, jobs that are easily accessible by transit have additional social benefits."

This project examined the conditions that lead to job growth at station areas. The research aims to help Twin Cities policymakers better understand these factors and maximize the impact of public investment in transitways.

Project Design

Researchers compared job-change rates around dedicated guideway BRT, arterial BRT (in which buses operate primarily in mixed traffic), and light-rail transit (LRT) corridors before and after implementation in 15 regions around the nation. The 15 study regions were Twin Cities peer regions (as defined by the Metropolitan Council) as well as Eugene, Oregon, and Las Vegas, Nevada, which were added to increase the number of dedicated-guideway BRT stations studied. BRT corridors in the 15 regions include some mix of high-amenity stops or fixed stations, signal priority, and off-board fare collection. (All Twin Cities BRT lines will have all these features.)

The researchers separated jobs into different sector categories defined by skill level and type of work: blue collar (low-skilled, production), pink collar (low-skilled, service), and white collar (high-skilled, professional). In addition, they separately considered differences between jobs paying an annual wage less than \$40,000 and jobs paying more than that.

TIRP Sponsors and Supporters:

Anoka County

Center for Transportation Studies, University of Minnesota

Center for Urban and Regional Affairs, University of Minnesota

Central Corridor Funders Collaborative

City of Bloomington

City of Minneapolis

City of Saint Paul

Dakota County

Federal Transit Administration

Hennepin County

Hennepin–University Partnership

Metropolitan Council

Metro Transit

Minnesota Department of Transportation

Ramsey County

State and Local Policy Program, Humphrey School of Public Affairs, University of Minnesota

University Metropolitan Consortium, University of Minnesota

Washington County

CTS Research Brief
2016-02 May 2016

“Our project is unique because it uses a consistent, comparable national sample of transitway stations and directly studies job growth and loss, as opposed to less direct measures of economic activity such as commercial property values,” says Guthrie.

Findings and Policy Implications

- **Connectivity is key.** Total street mileage (excluding limited access highways) was a significant, positive predictor of jobs, and the most important factor of those examined in this study.

“Total street mileage is a measure of transportation network density—which indicates a well-connected street network,” Guthrie says. “This finding underscores the importance of fine-grained connectivity between transitway stations and their surroundings. It bodes well for the planned A Line, which primarily serves areas with a dense street grid. It also indicates that providing street connections to stations in suburban areas will be a critical step for attracting jobs.”

Streetscape improvements to help pedestrians get to and from stations may also be important to consider, he adds.

- **Fixed infrastructure matters.** The greatest difference in station-area job change was between *some* type of fixed infrastructure and *no* continuous fixed infrastructure at all. Arterial BRT stations were associated with significantly less job growth than otherwise similar LRT stations.

“Promoting a corridor identity along any transit corridor is an important strategy to attract job growth,” says Guthrie. “This is particularly important along arterial BRT



projects to create public awareness of these lines.”

- **Job sector and wage are factors.** Overall job growth was strongest near stations closest to downtown areas. Growth varied, however, by job type: distance from the central business district was a strong negative predictor of both white-collar and high-wage job growth, while dedicated guideway BRT was a negative predictor for pink-collar jobs.

“This fact seems to potentially reinforce a pattern of high-status jobs in the urban core, juxtaposed against lower-status jobs further out,” Guthrie says. “This shows a need to consider the types of jobs attracted to station areas in different parts of the region.”

- **Context counts.** Regional factors, such as population growth and economic development policies, are highly important in determining job changes near stations. “This speaks to the importance of broad, regional policies that support economic growth or that at least avert obstacles to it,” Guthrie says.

About the Research

The study’s principal investigator was Andrew Guthrie, a research fellow in the Humphrey School of Public Affairs; Yingling Fan, an associate professor in the Humphrey School, was co-investigator.

“Planned BRT corridors already serve 500,000 jobs as well as businesses that collect half of the region’s sales tax revenue. But these corridors often suffer from slow transit speeds and a lack of fixed stations. Upcoming BRT improvements will improve regional job access and position these corridors for planned development.”

—Charles Carlson, Senior Manager for BRT, Metro Transit

cts.umn.edu/Research/Featured/Transitways