

Understanding the Impacts of Transitways

Impacts of the Hiawatha Light-Rail Line on Commercial & Industrial Property Values in Minneapolis

A Transitway Impacts Research Program (TIRP) Research Brief



Photographer: Matt Miranda

Project Fast Facts

- The Hiawatha light-rail line has increased demand for commercial and industrial properties near station areas.
- Property values increase the closer they are to the light-rail station.
- The benefits of light-rail stations on commercial and industrial property value extend nearly a mile from the station area.

Project Background

This study examines commercial and industrial property value impacts of the Hiawatha light-rail line connecting downtown Minneapolis, Minnesota, to its southern suburbs. The research analyzes sale prices of commercial and industrial properties before and after completion of the line in 2004 to determine if proximity to a light-rail station affects property values.

Project Design

Prior Research

In the past, few studies have explored the connection between light-rail transit and commercial property values. In the limited research that exists, most studies have found proximity to light-rail stations has a positive impact on commercial property values—but a few have found negligible or even slightly negative impacts.

Study Area

The study examines the first operational section of the Hiawatha line, a 12-mile section of light-rail line with 17 stations. Construction on this portion of the line began in 2001 and was completed in 2004.

Researchers studied the impact that proximity to light-rail stations has on commercial and industrial property values in the area within a one-mile radius of stations before and after completion of the Hiawatha line. They then compared these changes with property value changes in a slightly larger Twin Cities sub-region in order to discount overall price fluctuations in the region's real-estate market.

Program Supporters:

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Center for Transportation Studies, University of Minnesota

Center for Urban and Regional Affairs, University of Minnesota

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Minnesota Department of Transportation

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

University Metropolitan Consortium, University of Minnesota

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Methodology

The researchers identified five sets of key factors that determine commercial and industrial property values:

1. Access to transportation, such as distance to a highway on-ramp or light-rail station
2. Access to labor, such as the number of residents in neighborhoods
3. Structural characteristics, such as number of building stories and square footage
4. Socioeconomic factors of neighborhoods, such as median household income
5. Proximity to employment centers, such as distance to downtown or shopping centers

Then, they used a statistical model to control for these factors and isolate the impact of light-rail transit access on commercial and industrial property values. The sales data used in the study begin in 2000, prior to the start of Hiawatha line construction. The data continue through 2008, the most recent available sales figures. All sales data were adjusted to constant year 2000 dollars.

Project Conclusions

The researchers found the Hiawatha line has increased the value of commercial and industrial properties within a nearly one-mile radius of light-rail stations.* Property value benefits to local communities include:

- After the light-rail line was completed in 2004, prices per building-square-foot increased from \$36 to \$56, controlling for other factors. This suggests **higher demand for properties within the station area**.
- **Property values increase the closer they are to a light-rail station.** For example, a property located a quarter-mile from a light-rail station will command more than a similar property located a half-mile from a station.
- The positive effect on property values **extends to properties as far as 0.9 mile from the light-rail transit station**—farther than the positive impact of other light-rail systems studied elsewhere in the country.

These findings shed light on questions about light-rail transit's economic benefits. They provide evidence for transit agencies to justify transitway investments and address concerns of local developers and lenders. In addition, this research can be used to consider how property values along other planned light-rail transit lines may be affected.

* Increases in property values along the line may be at the expense of losses in other areas.

About the Research

The research was conducted by principal investigator Xinyu (Jason) Cao, an assistant professor in the Hubert H. Humphrey Institute of Public Affairs, and Dr. Kate Ko, formerly a graduate student in the Department of Applied Economics. It was funded by the Transitway Impacts Research Program (TIRP), a diverse group of transportation stakeholders.

More information about the TIRP program: www.cts.umn.edu/Research/Featured/Transitways