Transitway Impacts Research Program (TIRP) Research Brief

A Toolkit for Community Engagement in Transitway Planning

Why Was the Project Needed?
Effective public engagement for transit planning needs to involve community members from the very beginning. Technologies such as Zoom that gained wider use during the pandemic have made participation possible for many more people—especially underrepresented groups. Hearing a wider range of perspectives helps agencies better understand the equity and accessibility impacts of planned transitways.

Project Phases

Phase One: Accessibility Analysis of Station Areas
Researchers analyzed the accessibility of station areas along three planned transitways in the Twin Cities area. (This phase was part of a broader accessibility analysis of the lines.) They mapped routes to key destinations—such as schools, health care facilities, and grocery stories—and evaluated the challenges transit users might face to reach them. They also looked at public works improvements that might improve the safety, security, and accessibility of transit users, especially those populations who are most transit dependent.

Phase Two: Digital Platform Evaluation
Researchers evaluated 56 digital platforms for possible use in transitway community engagement. While each platform was found to have strengths and weaknesses, all allow for a greater diversity of participants than traditional in-person meetings. The evaluation is available in a searchable spreadsheet.

Phase Three: Toolkit Development
Combining findings from the first two phases, researchers developed a toolkit that community members, transit planners, and municipal works staff can use for community engagement.

Project Outcome: A Mixed-Methods Toolkit

The new toolkit is a set of flexible tools that planners can use to engage communities early in the planning process. The tools apply to any type of transit in any location.

The tools work independently of each other, but also complement each other as part of a community engagement process. The tools work remotely and in person, on digital platforms and in print, and asynchronously and synchronously.

The toolkit describes each tool, why it is needed, who might use it, and how, when, and where to use it. The researchers found that the engagement process is a continuous cycle, and some tools need to be used before another tool gets deployed.

To ensure equitable access, the tools use common words, photographs, and icons to help those who may have little or no experience with transit planning understand concepts and convey their ideas and concerns. The photographs and icons may help people who have difficulty reading maps or who may not be able to speak or read English.

Overall, the toolkit enables people to have their voices heard throughout the planning process. The tools allow people to evaluate and score the options available to them, comment on existing and proposed conditions, and visualize what different alternatives might look and feel like once realized.

“With this toolkit, we’re not only providing tools for more robust community engagement—we’re also equipping both community members and transit planners to assess the equity and accessibility issues related to planned transitways.”

— Professor Tom Fisher
The Tools

Transit and Urban Design Flashcards
The research team created a set of 20 flashcards to describe the physical features related to transitways and urban design more generally. The flashcards ensure that everyone has the same basic understanding of the terms being used and ideas being discussed. Each category is represented by a visual icon that is then used in the other tools.

Station Area Mapping
This tool locates transit station stops on a GIS map and draws a quarter-mile circle around each one. Based on this mapping, the tool uses Google Streetview images and the icons from the new flashcards to highlight what exists—or doesn’t exist—along the routes to key destinations. It enables community members to see where a station stop might go, what effect it might have on its immediate environment, and what the experience of reaching destinations might be like.

Experiential Mapping
Mapping people’s everyday experiences is a crucial part of the process. In face-to-face community meetings, that often happens with people marking and making notes on maps. Digital tools now allow that same kind of annotation. The icons from the flashcards provide a quick way for people to raise an issue or identify a problem worth discussing.

Station Evaluation
This tool lets people rate a proposed station area on a three-point scale. The tool uses 11 categories (such as street lighting) related to those in the flashcards. This evaluation step is helpful after a proposed transit stop has been located, since it asks for responses to specific factors. It is also possible to use this evaluation tool to compare different possible sites as part of the planning process.

3-D Visualization
This tool allows users to turn a layer on or off to show what a particular improvement might look like in a particular setting. The tool uses the icons developed for the flashcards to indicate what each layer might show.

Learn More
Final report: Addressing Accessibility and Equity Along Transitways: Toward a Mixed Methods Toolkit—Part 2 (CTS 21-05, Mar. 2021). Project team: Tom Fisher (director), Joseph Hang (design and research fellow), and Dan Ogranovich and Lynda Chao (graduate students), Minnesota Design Center.