

TRANSPORTATION ACHIEVEMENT AWARD — TRAFFIC ENGINEERING

Milwaukee Avenue, Logan Boulevard to Belmont Avenue, Phase I and II — Chicago Department of Transportation – Highway Section and Jacobs

ITE—A Community of Transportation Professionals is proud to recognize the **Milwaukee Avenue, Logan Boulevard to Belmont Avenue, Phase I and II project** as the recipient of the [2026 Transportation Achievement Award](#) in the Traffic Engineering category.

ITE's Transportation Achievement Awards recognize excellence in advancing transportation to meet human needs. The Milwaukee Avenue project exemplifies this purpose by reimagining one of Chicago's most complex, historic, and heavily used corridors through data-driven traffic engineering, multimodal analysis, public engagement, and context-sensitive design.



Milwaukee Avenue cuts diagonally through Chicago's rectilinear street grid, connecting the northwest side to downtown. At Logan Square, it intersects with Chicago's historic boulevard system near the Illinois Centennial Monument, creating a high-profile civic space with deep neighborhood significance. Over time, however, the surrounding streets were converted to one-way traffic operations, widened to three or four lanes, and redesigned

with larger corner radii to accommodate faster vehicle movement. These changes made the area less welcoming for people walking and biking and more confusing for motorists required to make multiple lane changes over short distances.

The Chicago Department of Transportation selected Jacobs to reevaluate a previous Phase I study for a 1.3-mile segment of Milwaukee Avenue between Logan Boulevard and Belmont Avenue, including a once-in-a-generation opportunity to redesign the roadways surrounding Logan Square. The team began by meeting with local elected officials, assembling a project study group of key local stakeholders, collecting data, and hosting public meetings to discuss existing conditions and design concepts.

The project team developed four concepts for Logan Square and two concepts for Milwaukee Avenue. These options ranged from spot improvements and a traffic oval to alternatives that converted streets to two-way traffic, reconnected public space, realigned Kedzie Avenue, and bent Milwaukee Avenue around the square to create a larger green space and new public plaza near the Logan Square Blue Line CTA rail station. Milwaukee Avenue options also considered improvements such as bike lanes, curb extensions, fully separated bike lanes, and reorganized bus stops to improve travel speeds.

Traffic engineering analysis was central to selecting the preferred alternative. The team used StreetLight origin-destination data to understand how people entered and exited Logan Square. The analysis identified three dominant travel patterns—Logan Boulevard to Kedzie Boulevard, Milwaukee Avenue to Milwaukee Avenue, and Kedzie Avenue to Kedzie Boulevard—which represented nearly 60 percent of all trips entering the square. This data helped the team align proposed roadway operations with actual travel behavior.

Synchro models were developed to evaluate the feasibility and layout of all four concepts, and a VISSIM model was later used to analyze the most promising alternatives in greater detail. The VISSIM model incorporated vehicle lanes, traffic signals, bus operations at the Logan Square Blue Line station turnaround, pedestrian crossings, and a complex network of bike lane crossings, allowing the team to evaluate how each concept would function for all modes.

The analysis showed that Concept 4, “The Bend,” outperformed Concept 2 for the dominant travel movements across Logan Square. By providing more direct clockwise connections and eliminating the Milwaukee Avenue cut-through, Concept 4 reduced the need for extensive weaving and distributed trips more evenly around the square. Each of the three dominant movements uses a different side of the square as its primary travel path, addressing the weaving patterns that contributed to unsafe and confusing existing conditions.

Following extensive consultation with the public, agencies, and stakeholders, Concept 4 was selected as the preferred alternative. The final design included drainage and grading for new roadways and public plaza space, as well as a major urban design effort that incorporated Central American weaving patterns into the paver design to reflect the cultural heritage of the neighborhood.

The project also delivers significant bicycle and pedestrian improvements. Shared-use paths, off-street bike lanes, and dedicated bike signals were used extensively along a corridor recognized as one of the most cycled streets in the United States. Pedestrian improvements include refuge islands, raised crosswalks, Accessible Pedestrian Signals, and shortened crossings to improve access to Logan Square’s park, transit, shopping, dining, and recreational destinations.

In fall 2025, traffic signals were activated and operations were switched from one-way to two-way circulation. To support the transition, the team conducted a public information campaign, stationed crews to direct traffic at key intersections, and installed flexible bollards along the centerline to discourage wrong-way driving. The transition has gone smoothly, with additional wayfinding signs being added to help drivers adjust to the new pattern.

By combining advanced origin-destination analysis, multimodal microsimulation, traffic signal design, public involvement, and thoughtful construction staging, the Milwaukee Avenue project demonstrates the power of traffic engineering to improve safety, clarity, access, and place. ITE congratulates the Chicago Department of Transportation and Jacobs on this achievement and celebrates the project as a model for transforming complex urban corridors into safer, more intuitive, and more people-centered transportation spaces.

Learn more about [ITE's Awards Program](#).