

## APWA MINNESOTA CHAPTER PUBLIC WORKS PROJECT OF THE YEAR NOMINATION FORM

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Submission Deadline: October 1, 2022

All nomination and supporting data are to be submitted as a PDF to Sarah at <a href="mailto:sarah.lloyd@bolton-menk.com">sarah.lloyd@bolton-menk.com</a> with a maximum page size of 5 pages, including photos.

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#### **Criteria for Nomination**

- Project must be substantially completed by October 31, 2021 or October 31, 2022.
- Includes use of innovative construction management techniques and completion of the project on schedule.
- Maintained excellent safety performance and safety program throughout construction.
- Evidence of strong community relations during all project phases.
- Consideration given to the environment. Sustainable design techniques involved.
- Unusual accomplishments given adverse conditions.
- Provides future value to the public works profession and perception by the public.
- Additional considerations such as value engineering, innovative project financing, multi-agency coordination and participation.

**Reasons for Nomination:** Describe the project with the aspects and features of the project that fulfilled any of the applicable criteria listed. (Include description on a separate page.)



APWA-MN Chapter | Project of the Year Nomination

### Reconstruction

October 2022







# Project Overview on 4th Street Minneapolis

4th Street is a high-volume corridor that serves as a direct freeway access point into and out of downtown Minneapolis. There are many high-profile destinations along the corridor, including city hall, the federal courthouse, Hennepin County Family Justice Center, Minneapolis Central Library, and Police Precinct No. 1. Because it has historically favored motor vehicles, the corridor had subpar facilities for pedestrians and bicyclists.

The City of Minneapolis wanted the corridor to better serve the multiple modes of traffic that use it daily. The main focus was transitioning the corridor from one that primarily served vehicles to one that better serves all modes of transportation and makes the infrastructure more equitable for all users.

The existing one-way, eastbound corridor originally accommodated a contraflow, westbound bus lane. This lane was decommissioned, and the affected Metro Transit routes were rerouted to parallel streets. This allowed the new roadway crosssection to better accommodate wider and more accessible sidewalks and a dedicated, separated two-way cycle track. To ensure the corridor best meets the needs of all users, the pedestrian ramps were reconstructed in consideration of Americans with Disabilities Act (ADA) and Public Right-of-Way Accessibility Guidelines (PROWAG) guidance while the cycle



track was designed in accordance with the latest National Association of City Transportation Officials (NACTO) and Federal Highway Administration (FHWA) guidance. Eastbound bus service was enhanced with a wider thru-lane along the southerly curb line and accommodations for future transit priority signals. Additionally, signals were enhanced to best meet the needs of traffic in the highly congested corridor through incorporating video detection for left turn lanes, blank-out signs, changeable message signs, accessible pedestrian signals, and fiber optic interconnection.

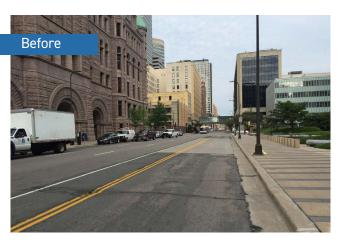


#### Innovative Construction Management Techniques

The project construction was staged to balance the needs for local access with work zone safety. Construction proceeded with block-by-block closures with access maintained for driveways, which allowed the contractor to have meaningful work areas to maximize their productivity. Intuitive detours were put into place to minimize cut through east-west traffic, while intersections were kept open to maintain north-south traffic flows.

The city proactively worked with private utilities a year in advance of the road project to accommodate their relocation and expansion plans. Xcel Energy had the most substantial work, expanding their facilities along the entire 7-block project. Getting the utility companies' work done in advance, minimized conflicts and delays during the completion of the road project.

The project was scheduled for two construction seasons, 2021 and 2022, and was completed midsummer 2022.





## Maintained Excellent Safety Performance Throughout Construction

The project was constructed within the heavily populated area of downtown Minneapolis, where lots of pedestrians, bicyclists, heavy vehicular traffic, and other non-motorized traffic exist.

Due to the dense population, site safety reviews were conducted daily with a special focus on protecting the general public. To accomplish this, the city and contractor continuously monitored construction signage and barricades to ensure clarity and safety for all corridor users.

#### Evidence of Strong Community Relations During All Project Phases

Given the prominence of the corridor in downtown Minneapolis, the project had been expected to affect local users, residents and adjacent property owners, as well as daily visitors and travelers that rely on the corridor.

Communication was initiated with adjacent property owners during the design phase, collaborating on how the new corridor layout would be coordinated with their properties, access, and operations. There were also individual inspections of adjacent buildings for areaways (underground basements extending under sidewalks and streets) to minimize impacts to these buildings and structures.

The broader community was also involved in the planning process through project open houses and collaboration with pedestrian and bicyclist advocates.

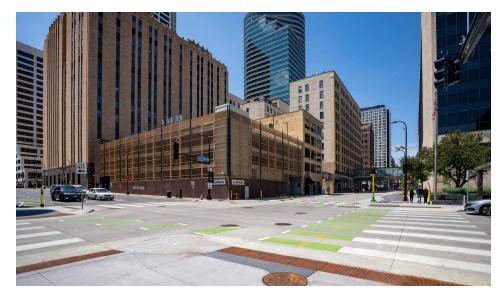
During construction, the city distributed weekly construction newsletters and conducted weekly public meetings to invite all interested parties to meet with the construction team and discuss any questions or concerns they might have. Additionally, boots-on-the-ground inspectors were always proactively communicating with adjacent property owners ahead of temporary access restrictions or other activities that could potentially disrupt their business or daily operations.

#### Environmental Considerations + Sustainable Design Techniques

This project is an example of the City of Minneapolis' commitments to complete streets and greenhouse gas reductions. The completed corridor achieves another incremental step towards the city's goal of providing convenient and safe pedestrian and bikeway networks that encourage active transportation. The new twoway protected bikeway takes bicyclists off the roadway and separates them from vehicular traffic. Intersections were designed with safer queue areas, including curb extensions, for bikes and peds, and signal systems and crosswalks were updated to facilitate safer crossings in support of the city's Vision Zero Plan.

Stormwater runoff reduction and reduced heat island effects were achieved through substantial corridor greening. New planting beds and green infrastructure were incorporated into each block of the project. Tree count along the corridor was increased by 60 percent. Three independent rain gardens were strategically incorporated along the corridor to improve overall corridor runoff quality. Additional communication has been shared with adjacent property owners, educating them on best practices of winter maintenance and salt use.





#### Unusual Accomplishments Given Adverse Conditions

Underground areaways were prominent along the corridor, being found immediately under existing sidewalk panels in many instances. The project design was optimized to minimize impacts to these structures. For example, designing proposed sidewalk elevation at or above existing elevations reduced the potential for conflicts. Nevertheless, the aged conditions of some of these areaways (some more than 100 years old) made them challenging to work around.

During construction, additional structural inspections were necessary for some of the areaways once they were exposed, and in some cases, additional work to fortify and waterproof these structures needed to be coordinated in conjunction with the road improvements. In all cases, the city and its contractor worked cooperatively with building owners to minimize impacts and costs to these stakeholders.

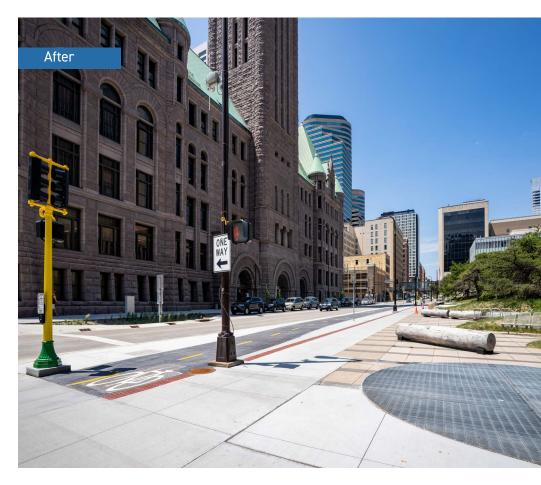
During the summers of 2020 and 2021, the project was within areas of civil unrest in downtown Minneapolis. Coordination of advanced utility work in 2020 and road construction in 2021 with local security measures had a direct impact on how the project progressed during these times. Properties adjacent to the project included city hall, Police Precinct #1, and the U.S. Federal Courthouse. All of these properties were subject to barricade and fencing perimeters at various times during the project, requiring project contractors to stage and amend construction staging accordingly. The Derek Chauvin trial was also conducted only blocks away from the project site. Protests in the area were routine, and as the verdict day approached, the project area was subject to specific security requirements in support of public safety concerns. At certain times, it was in the contractor's best interest to postpone work and even de-mobilize certain equipment from the site. The project team remained in tune with and flexible to these outside influences and was able to get through this period with no significant impacts to the project or compromises to pubic safety.

#### Future Value to the Public Works Profession and Public Perception

The corridor is exposed to far more than just the local public. It is a major one-way thoroughfare in downtown accommodating direct freeway access off of I-94 and I-394, and egress traffic exiting the city directly onto I-35W. It is adjacent to several regional destinations including city hall, county and federal courthouses, Downtown Public Library, and U.S. Bank Stadium. Along with its adjacent hotels, the corridor attracts new visitors daily. For many, it is their first impression of downtown Minneapolis when they arrive.

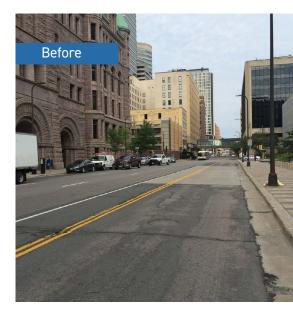
As the corridor's first major improvement in over 50 years, the aesthetic upgrade exhibited by the project is in stark contrast to the antiquated and deteriorated condition that previously existed. Additional street and pedestrian scale lighting was added in support of a safer environment at night. It was recognized by Mpls St. Paul Magazine as being the Best Street Makeover in January 2022. The overall project improvement is inherently supportive of the city's efforts to revitalize downtown after the trauma of the pandemic and civil unrest.

The corridor was featured as part of a walking tour in conjunction with the 2022 national conference of the Association of Pedestrian and Bicycle Professionals (APBP). It served as a contemporary example of how Minnesota continues to innovate its transportation corridors in support of equity and sustainability.



## Additional Considerations

While the 4th Street project was in progress, a concurrent project was occurring on Hennepin Avenue. The Hennepin Avenue project included a two-way street with separate bike lanes in each direction that cross 4th Street. Given the intersection of these two separate projects, the 4th Street design team collaborated with the Hennepin Avenue design team to ensure the various travel modes. alignments, stormwater and utility improvements, and intersection treatments were cohesive. During construction separate project contractors worked together, in the best interests of both projects,



to ensure the intersection was constructed properly and that construction staging was compatible between both projects.