APRIL 2020 | FHWA-SA-20-007

VISION ZERO SUCCESS STORY — PLANNING, IMPLEMENTATION, & EVALUATION

Milwaukee Avenue Rapid Delivery Approach — Chicago, Illinois

Key Successes

The pilot deployment of the Rapid Delivery approach allowed CDOT to test ideas, gain involvement and support, and see results quickly. The Milwaukee Avenue pilot resulted in the following outcomes:

Safer Biking:

52% - fewer people biking in the door zone.

37% - fewer people driving in bike lanes.

Safer Access to the 606 Recreational Trail:

74% - fewer people biking against traffic to access the 606 recreational trail.

Safer Intersections:

42% - fewer people failing to stop for pedestrians in uncontrolled crosswalks.

60% - more people crossing at two new crosswalks during the afternoon rush hour.

Safer Speeds:

43% - fewer people driving at > 30 mph.

16% - more people driving at < 20 mph.

Crash Data (2016 vs 2018):

23% - reduction in crashes involving people biking.

16% - reduction in crashes for all modes.

Background

Chicago's Vision Zero Action Plan[1] identified 43 High Crash Corridors, which are corridors where a disproportionately high number of people have been killed or severely injured in traffic crashes. The Chicago Department of Transportation (CDOT) adopted a Rapid Delivery approach to provide a better response to the community and quickly address road safety concerns for specific corridors. This approach uses low-cost, rapidly implemented countermeasures including new street markings, signage, colored pavement treatments, and flexible delineators.

In 2017, CDOT piloted the implementation of the Rapid Delivery approach on the Milwaukee Avenue High Crash corridor, a 1.5-mile segment between Western Avenue and Division Street[2]. This project was designed to enhance the safety of the corridor for people walking, biking, riding transit, and driving. Based on crash data collected from 2010 to 2014, there were 1,097 reported crashes. People walking and biking accounted for 20 percent of all crashes, however these more vulnerable users represented 66 percent of the injury crashes and 68 percent of the serious injury crashes in the corridor.

[1] http://visionzerochicago.org/

[2] https://visionzerochicago.org/2019/03/29/evaluation-of-milwaukee-ave-rapid-delivery-project/

U.S. Department of Transportation
Federal Highway Administration

Safe Roads for a Safer Future
Investment in roadway safety saves lives

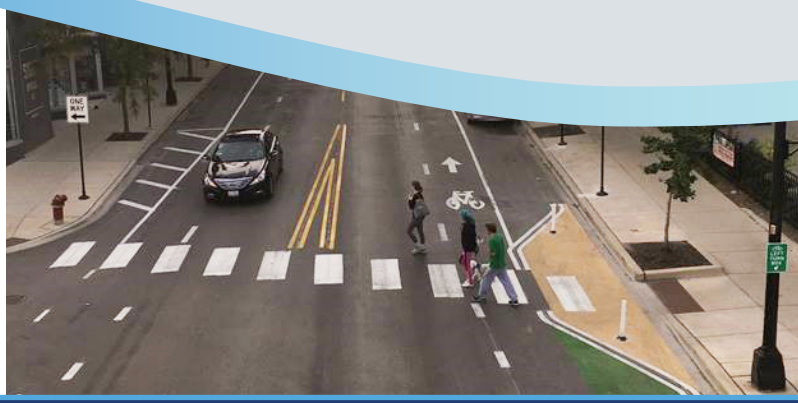

Figure 1. Graphic. Example of dashed bike lane on Milwaukee Avenue. Dashed bike lane positions motorists closer to the center line and provides more space for people on bikes.

Figure 2. Graphic. Paint and post bump-outs, reduce crossing distances, improve pedestrian visibility, and prevent illegal parking in crosswalks.

Implementation

The Milwaukee Avenue pilot project was planned, designed, and installed in six months. The project goals included providing:

- More space for people biking.
- More comfortable access to the 606, a recreational trail and park built on a previously abandoned elevated rail line.
- A reduction in crossing distances and visibility improvements for people walking.
- A reduction in high-end motorist speeds.

CDOT used the following design elements to improve street safety on Milwaukee Avenue:

- Lower Posted Speed Limit – A lower posted speed limit of 20 mph was established along Milwaukee Avenue.
- Dashed Bike Lanes – Dashed bike lanes were used where the roadway was too narrow for a dedicated bike lane. The dashed bike lane provided clearer delineation while allowing larger vehicles to occupy the bike lane, only when necessary. Dashed bike lanes are currently an experimental treatment under the Manual on Uniform Traffic Control Devices[3].
- Bike Boxes – Green bike boxes provided a space for bicyclists to wait safely at a traffic signal. The bike boxes were placed in front of the vehicle stop bar, making bicyclists more visible to drivers by giving them a head start.
- Paint and Post Bump-outs – Pavement markings and flex posts designated space for pedestrian use. They reduced crossing distances, slowed vehicular turning speeds, increased pedestrian visibility, and prevented illegal parking near crosswalks.
- Slip Lane Closures – Closure of right-turn slip lanes with low vehicle volumes reduced conflict points at complex intersections and created additional space for pedestrians to congregate while waiting for a signal.

Funding

The project cost approximately $235,000. The City funded the project through the Divvy bike share program. The City's High Crash Corridors Framework Plan[4] indicates Divvy funds are best used to fund Rapid Delivery projects installed by in-house crews or through existing CDOT contracts.

[3] https://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/mutcd/dashed_bike_lanes.cfm

[4] https://visionzerochicago.org/wp-content/uploads/2018/06/VZ_HCC_FrameworkPlan_2018-06-15.pdf

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