



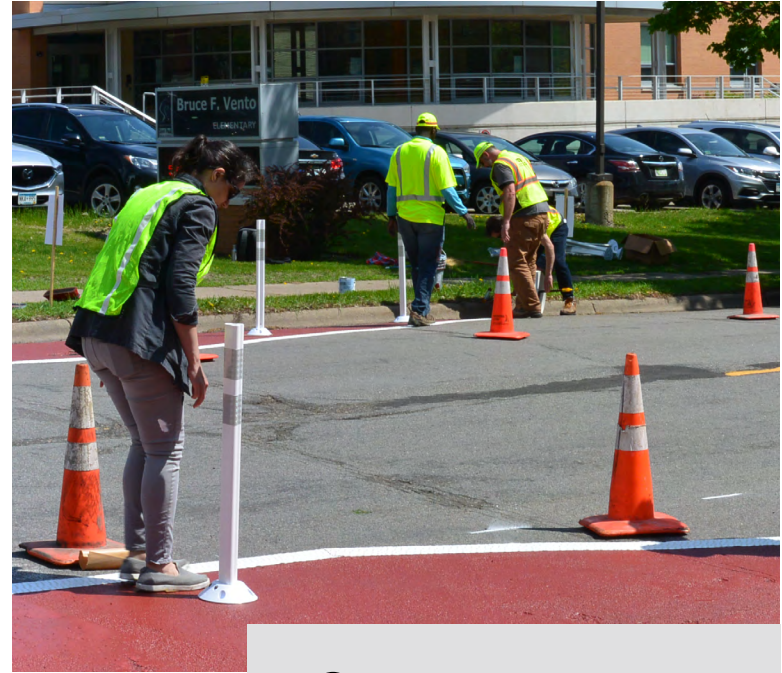
Bruce Vento Elementary

Saint Paul, MN - Case Ave E and Arkwright St N

Safe Routes to School Demonstration Project: Summary and Evaluation



DECEMBER 2022



OVERVIEW

Demonstration projects are temporary, low-cost roadway projects used to test potential long-term solutions to improve walking, bicycling, and public spaces. Projects can include bike lanes, crosswalk markings, curb extensions, and median safety islands.

The demonstration project at the Bruce Vento Elementary campus originated from a Safe Routes to School (SRTS) plan completed in 2017. In collaboration with school staff, MnDOT, project consultants, and volunteers, the City of Saint Paul installed the demonstration project in the spring of 2022.

The goal of the project was to make it easier and safer for students to cross Case Ave E and Arkwright St N, where there were concerns about crossing distances and driver speeds.

After multiple draft designs, the SRTS team decided on curb extensions at the intersection of Case Ave E and Arkwright St N. By reducing the width of the intersection, the design aims to slow drivers and allow pedestrians to cross more efficiently and safely.



PROJECT SUMMARY

INSTALLATION DATE: May 2022

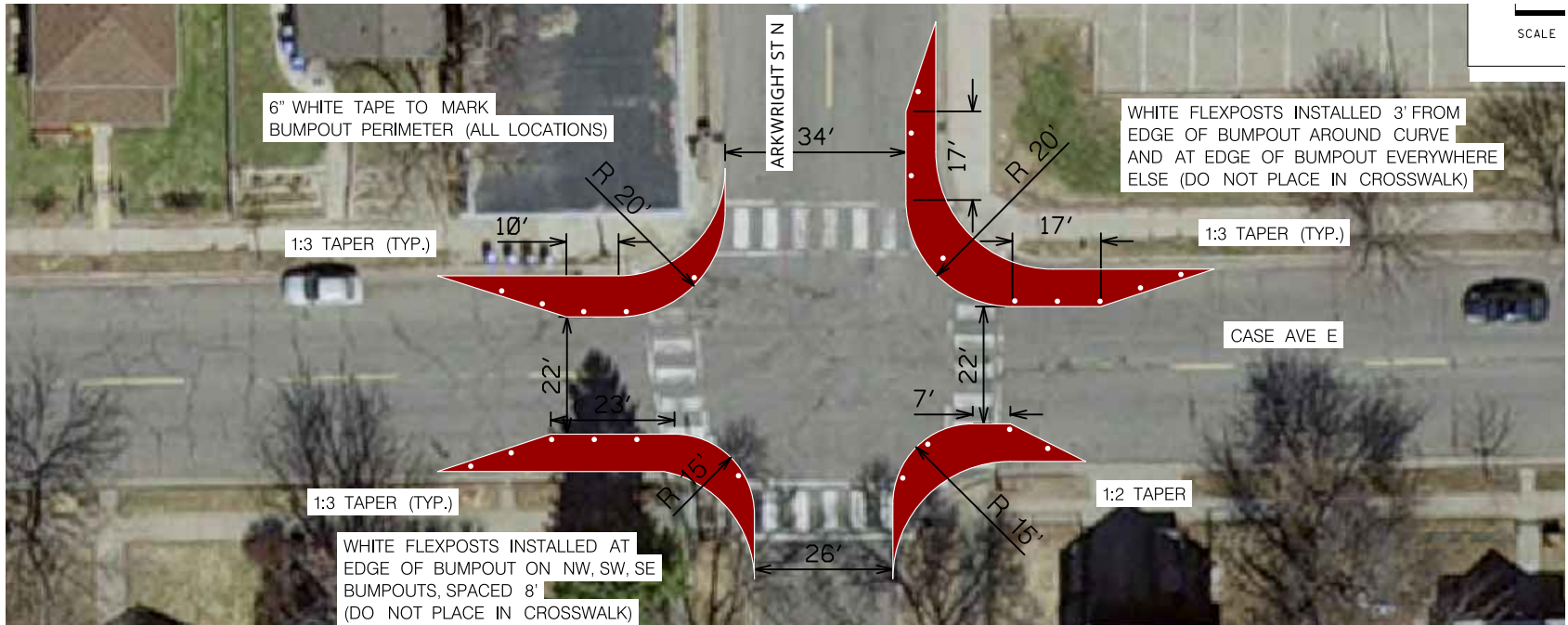
DAYS TO INSTALL: 1

MATERIAL COST: ~\$6,000

FEATURED ELEMENTS INSTALLED:

- Curb extensions (4)

Note: the intersection already had high-visibility crosswalks



DESIGN

The demonstration project at the Bruce Vento Elementary school campus consisted of two pairs of painted curb extensions at the intersection of Case Ave E and Arkwright St N.

The curb extensions are intended to alert drivers to the presence of crossing pedestrians, reduce perceived lane widths and thereby encourage drivers to slow down, and to shorten pedestrian crossing distances so that people walking and rolling have to spend less time in unprotected portions of the road. When successful, these temporary curb extensions can be made permanent with concrete curbs that connect with existing pedestrian facilities.

The design of the demonstration project was intended to test possible curb alignments in advance of a planned permanent project along Arkwright St N. The presence of Metro Transit bus stops just north of the intersection on both sides of Arkwright St N, and the significant school bus traffic through the intersection, also influenced the demonstration project design.

Overall, the design held up well, but one of the flex posts on the northwest corner came down while the demonstration project was installed. This provided input to the city about how curb radii may need to be refined for the permanent project.



EVALUATION AND LESSONS LEARNED

Safe Routes to School staff worked with the community to collect feedback about the demonstration project. This feedback helps describe the effects of the project and identify opportunities to modify and improve the design if and when the project is constructed with permanent materials. Vehicle yielding data and positive community feedback demonstrate the effects of the project.

The SRTS team fielded a survey to capture feedback from the community about the project sites. While the number of survey respondents was small, those who did respond had positive feedback about the demonstration project. One respondent

wrote, "[I] like it because it makes drivers more aware, walkers and kids safer. I worried about my kids' safety before they started going to school here." The principal at Bruce Vento Elementary also had positive feedback, stating, "The traffic speed has decreased. I truly believe this is making the neighborhood more safe!"

Driver yielding data were collected before the project was installed and while it was in place to measure whether the project helped increase rates of people driving yielding to people walking. Vehicle yielding rates increased in both the morning and the afternoon.

