

Tactical Urbanism Results

November 29, 2022
Prepared by the City of Columbus, Department of Public Service

Project Overview

The Bronzeville/Mt. Vernon Avenue Mobility and Safety Action Plan was created from fall 2020 through summer 2022. The goal of the plan is to improve traffic safety on Mt. Vernon Avenue by reducing speeding and crashes, providing more mobility options for residents to get around, and enhancing neighborhood aesthetics.

Tactical Urbanism

The Department of Public Service placed an interim safety treatment on Mt. Vernon Avenue from 20th Street to Phillips Street in September 2021 (see Figure 1).

This treatment includes the following:

- All-way STOP signs at Champion Avenue and Mt. Vernon Avenue
- All-way STOP signs at Ohio Avenue and Mt. Vernon Avenue
- Type II (ladder-style) crosswalks at 22nd Street (near Champion Middle School) and Champion Avenue
- Striped parking lanes with curb extensions delineated with flex posts along Mt. Vernon Avenue

This installation meets one of the overarching project goals from the Bronzeville/Mt. Vernon Avenue Mobility and Safety Action Plan to address crashes and near misses at the Champion Avenue and Mt. Vernon Avenue intersection. The installation is continually being monitored for effectiveness at reducing vehicle speeds and crashes and will remain in place until a preferred alternative is identified.

The following report outlines speed and crash data before and after the installation of the tactical urbanism project, including average speeds, 85th percentile speeds, crash severity, crash types, and

specific crash locations. Images before and after the tactical urbanism installation are featured on the final pages of the report.



Figure 1. Tactical urbanism project extent

Crash History

Crashes were monitored before and after the tactical urbanism installation, from October 2020 to September 2021 and after installation, from October 2021 to September 2022. Installation occurred over a two-week period towards the end of September 2021.

Total Crashes

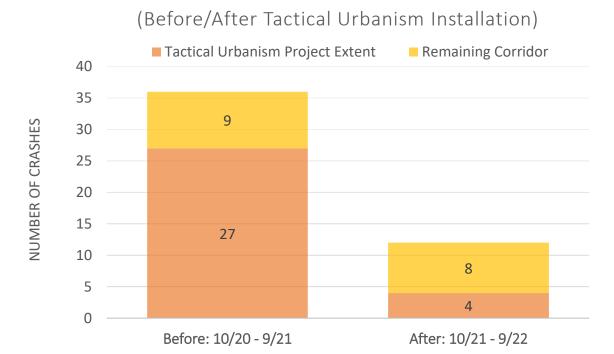


Figure 2. Total crashes before and after tactical urbanism installation

Before Tactical Urbanism (October 2020 – September 2021)

A total of 36 crashes occurred on Mt. Vernon Avenue prior to the tactical urbanism installation, from October 2020 to September 2021 (Figure 2). There were 13 minor injury crashes, four possible injury crashes, and 18 property damage only crashes on the corridor from October 2020 through September 2021 (Figure 3). The most common crash type was angle, accounting for nearly 70% of all crashes. Alcohol and drugs were not considered factors in all of these crashes. Four crashes were considered speed-related. Half of all crashes occurred at a four-way intersection.

After Tactical Urbanism (October 2021 – September 2021)

A total of 12 crashes occurred on Mt. Vernon Avenue following the tactical urbanism installation, from October 2021 to September 2022 (Figure 2). Four injury crashes were reported on the Mt. Vernon Avenue corridor between October 2021 and September 2022, including one serious injury, two minor injuries, and one possible injury. The majority of crashes (67%) resulted in property damage only (Figure 3). The most common crash types were rear end (2), angle (2), sideswipe-passing (2), fixed object (2), and parked vehicle (2). Alcohol and drugs were not considered factors in all of these crashes. Two crashes were considered speed-related. Half of the total crashes occurred outside of an intersection, with only one crash recorded at a four-way intersection.

Crash Summary - Tactical Urbanism Installation ■ Before: 10/20 - 9/21 ■ After: 10/21 - 9/22 20 18 17 18 16 **NUMBER OF CRASHES** 14 12 10 8 8 6 3 4 2 Fatal Serious Injury Minor Injury or **Property Damage** Injury Possible Only **CRASH SEVERITY**

Figure 3. Number of crashes by severity before and after tactical urbanism

The number and severity of crashes were reduced significantly after the tactical urbanism installation. Comparing crashes before and after installation shows that crashes were reduced by approximately 65% and fatal/injury crashes were reduced by roughly 83%. The changes persist over time, with the after period showing a significant reduction of crashes.

Tactical Urbanism Project Extent

Before Tactical Urbanism (October 2020 – September 2021)

Between October 2020 and September, 27 crashes occurred between Ohio Ave and Phillip St. The majority of crashes (25) occurred at the intersection of Champion Ave and Mt. Vernon Ave. One fatal crash occurred at the intersection of Champion Ave and Mt. Vernon Ave in May of 2021 and 70% of all crashes occurred at this intersection.

After Tactical Urbanism (October 2021 – September 2021)

From October 2021 through September 2022, there were 4 crashes within the installation area (20th St to Phillips St), out of 12 total crashes on the Mt. Vernon Avenue corridor (Hamilton Ave to Taylor Ave). The four crashes that occurred within the tactical urbanism project extent resulted in property damage only, with no injuries reported. Zero crashes were reported at the intersection of Champion Avenue and Mt. Vernon Avenue during this time period. Crashes occurring at the intersection of Champion Ave and Mt. Vernon Ave were reduced to 0 after installation of all-way STOP signs at the intersection following the tactical urbanism project. Figure 4 shows the crashes before and after the tactical urbanism installation at the intersection of Mt. Vernon Ave and Champion Ave.

Champion Ave and Mt. Vernon Ave Intersection

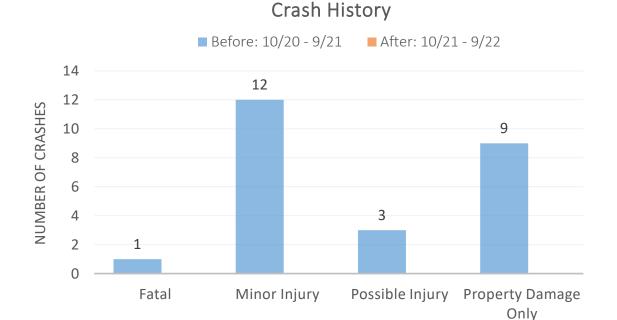


Figure 4. Number of crashes by severity at the intersection of Mt. Vernon and Champion before and after tactical urbanism

CRASH SEVERITY

Speed Data

Speed data were collected before and after the installation, with counts in September 2021, March 2022, and October 2022. Traffic counts were collected at two locations, the western end of the tactical urbanism installation between 21st St and 22nd St (Figure 5) and at the eastern end of the installation between Champion Ave and Phillips St (Figure 6). Average speeds were reduced by approximately 0-2 MPH. 85th percentile speeds (the speed at which 85% of vehicles are traveling at or below) were reduced by roughly 2-4 MPH. The results of the counts for the east and westbound lanes for each location are depicted in figures 7 and 8.

Speed Data Results (September 2021 – October 2022)



Figure 5. Approximate location of traffic counts collected between 21st and 22nd



Figure 6. Approximate location of traffic counts collected between Champion and Phillips

Speed Data (21st St to 22nd St)

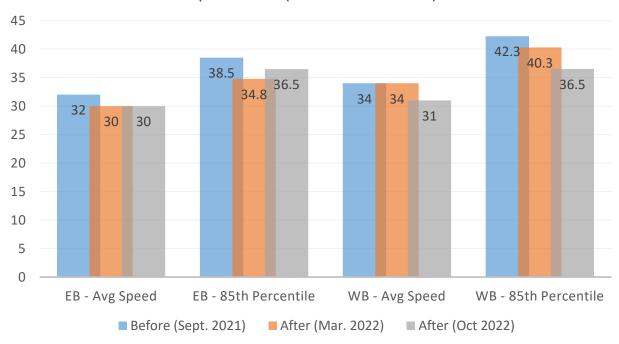


Figure 7. Speed data counts between 21st and 22nd before and after tactical urbanism

Speed Data (Champion Ave to Phillips St)

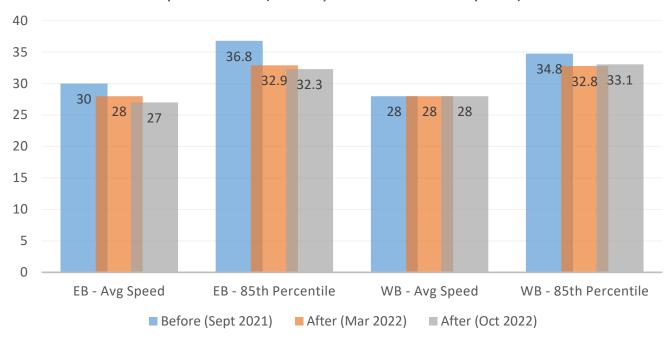


Figure 8. Speed data counts between Champion and Phillips before and after tactical urbanism

Figures 9 through 14 on the remaining pages show before and after photos of the tactical urbanism installation at select locations on the corridor. The City of Columbus will continue to monitor the tactical urbanism installation through maintenance, traffic counts, and assessment of reported crashes throughout the duration of the project lifetime.

Before & After Tactical Urbanism Installation



Figure 9. Photo of Mt. Vernon and 22^{nd} before tactical urbanism

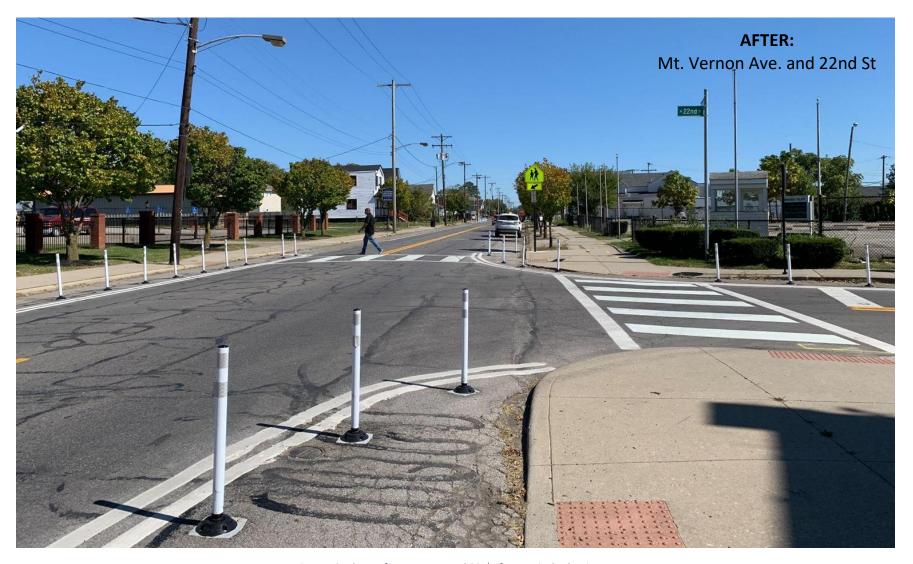


Figure 10. Photo of Mt. Vernon and 22nd after tactical urbanism



Figure 11. Photo of Mt. Vernon and Champion before tactical urbanism



Figure 12. Photo of Mt. Vernon and Champion after tactical urbanism

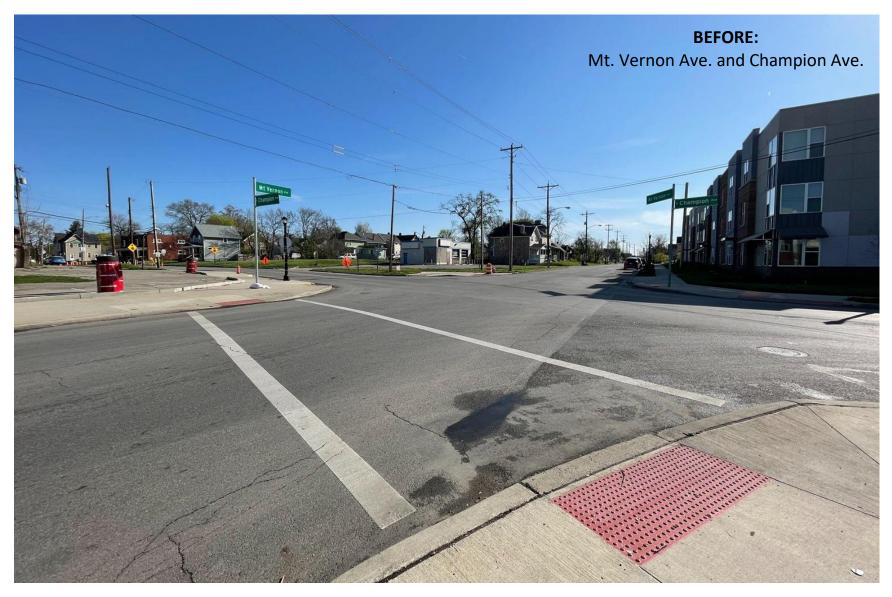


Figure 13. Photo of Mt. Vernon and Champion before tactical urbanism



Figure 14. Photo of Mt. Vernon and Champion after tactical urbanism