

West Village Healthy Streets Initiative Design Charrette Report

April 2022



GObike
BUFFALO



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Design Charrette



The West Village Temporary Traffic Calming Project 2021 report can be accessed [here](#).

At the start of the design charrette, we asked community members what their vision was for making the streets in their neighborhood safer. Table 1 shows community feedback results, as well as how many responses were recorded for each category.

Next, Justin presented on Complete Streets, describing design approaches for traffic and intersection calming, and identifying statistical information to justify the need for revised street design. Slides from that presentation can be found [here](#).

Vision Category	Total
Bumpouts	2
Community Involvement	1
Direction Signage	2
Intersection Signage	3
Mid-Block Crosswalks	1
Pavement Improvements	1
Reduced Commercial Traffic	2
Road Markings	1
Speed Humps	2
Traffic Calming	4
Traffic Pattern Changes	1
Walkable Neighborhood	1

Table 1: Community Feedback Results

Following Justin's presentation, Cindy and Justin facilitated an activity where neighbors drew on a map of their neighborhood to identify suggestions for improvements. Neighbor-suggested elements include the following:

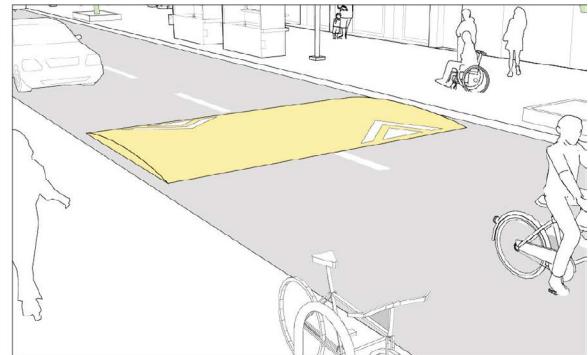
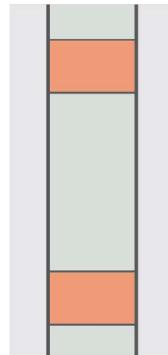
- Mid-block speed humps
- Mini-roundabouts at intersections
- Converting West Huron into a two-way street
- Keeping West Huron a one-way street but improving signage at West Huron / South Elmwood to keep drivers from driving the wrong way down a one-way street
- Alternate street directions
- Improve the West Huron / Niagara intersection to reduce crossing distance and slow down traffic turning onto West Huron from Niagara

Design Concepts



Mid-Block Speed Humps

Mid-block speed humps would require drivers to travel at a slower speed between intersections. This is a traffic calming approach that can have an immediate impact on traffic speed with minimal work. Speed humps are formed by raising sections of the road in a sinusoidal shape, typically 10–15 cm high and 4–6 m long. The dimensions can be tailored to match the target speed of the street. They are typically constructed of the same material as the roadway, but can be of different materials. An application can be made to the [City of Buffalo's Slow Streets Program](#) to have these mid-block speed humps installed on streets in our neighborhood. 90% of residents need to be in favor for the application to be approved.



Source: [NACTO Global Street Design Guide](#)



Intersection with gateway treatment. All four streets intersecting with this treatment creates a bumpout with appropriate corner radii. This effectively narrows the intersection, reduces travel speed, and shortens pedestrian crossing distance.

Source: [NACTO Global Street Design Guide](#)

Gateway Treatments (Intersection Bumpouts)

Gateway treatments alert drivers that they are entering a slower area. This treatment may include signage, entry portals, speed tables, raised crossings, and curb extensions. Corner radii directly impact vehicle turning speeds and pedestrian crossing distances as the size of the corner relates directly to the length of the pedestrian crossing. Longer pedestrian crossings take more time to cross, increasing pedestrian exposure to risk and diminishing safety. Minimizing the size of a corner radius is critical to creating compact intersections with safe turning speeds.

Design Concepts



Source: [NACTO Urban Bikeway Design Guide](#)

Shared Lane Markings

Shared Lane Markings (SLMs), or "sharrows," are road markings used to indicate a shared lane environment for bicycles and automobiles. Among other benefits, shared lane markings reinforce the legitimacy of bicycle traffic on the street, recommend proper bicyclist positioning, and may be configured to offer directional and wayfinding guidance.

Contraflow Cycle Lanes

Contraflow bicycle facilities allow bicycles to travel in both directions to facilitate a permeable and connected cycle network. This also improves overall awareness of cyclists traveling the wrong way down one-ways and identifies the need to include signage to legally allow cyclists to travel in the opposite direction of vehicle traffic flow.



Before and after contraflow implementation. Cycle-priority ground markings are added in the travel lane, and a dedicated cycle track runs in the opposite direction.

Source: [NACTO Global Street Design Guide](#)

Design Option 1



Bumpouts, Mid-Block Speed Humps, Shared Lane Markings, and Parking T's

This design incorporates locations for the [City of Buffalo's Slow Streets Program](#) to implement traffic calming measures, such as mid-block speed humps. While this is an extremely effective traffic calming method, the timeline for implementation may not have a guaranteed timeframe.



Figure 1: Proposed mid-block speed humps on Prospect



Figure 2: Proposed bumpouts at Prospect / Rabin / Georgia

This design also includes bumpouts at each intersection to slow down traffic movement through the intersection and shorten pedestrian crossing distance.

These bumpouts have the ability to have an immediate impact on speed through intersections. Additionally, these bumpouts have the ability to possess placemaking components, such as custom paint coloring and planters. These elements would make the intersections both effective and aesthetically pleasing.

Lastly, each street identified in the neighborhood should have shared lane markings. These markings indicate that the road is shared with both cyclists and drivers.



Figure 3: Shared Lane Markings on Rabin Terrace

Design Option 1



Bumpouts, Mid-Block Speed Humps, Shared Lane Markings, and Parking T's

Design Element Details

Gateway Treatments (Intersection Bumpouts)

- Planned designs at West Chippewa / South Elmwood, West Chippewa / Whitney / Georgia, Prospect / Carolina, and Prospect / Virginia
- Solid fill color to improve intersection aesthetic
- A variety of different colors can be used to fill in the bumpout

Planters Within Intersection Bumpouts

- Additional aesthetic improvements
- Provides more of a 'barrier' to keep cars from driving through the bumpout
- Bollards will also be used for increased visibility and protection of bumpouts

Mid-Block Speed Humps

- One speed hump would be located on Rabin Terrace
- A minimum of two speed humps would be located on the longer stretches of Prospect between Georgia and Carolina / Carolina and Virginia

Shared Lane Markings

- Used on all streets (W. Chippewa, Whitney, Georgia, Prospect, Rabin Terrace, Carolina, Virginia)
- This is an easy way to inform drivers that the road is shared with bicycles and not only used for cars

Parking T's

- Implemented on all streets with parking (W. Chippewa, Whitney, Georgia, Prospect, Rabin Terrace, Carolina, Virginia)
- This is an effective way to establish parking boundaries for where cars can park on the street.
- This can help mitigate the conflict of cars parking in front of driveways.
- Disclaimer: Due to the high number of driveways on all streets, parking T's cannot be displayed on Remix and would need to be measured between each driveway to ensure that parking T's are effectively implemented.

Click [here](#) to view design option 1 on Remix.

Design Option 2



Contraflow Bike Lanes, Bumpouts, Shared Lane Markings, and Parking T's

This option efficiently utilizes the available travel lane space to narrow travel lane width and add bicycle facilities. This effectively will achieve the goal of traffic calming down the longest stretch of street with the widest lane width, while allocating alternative versions of the same approach on other surrounding streets.

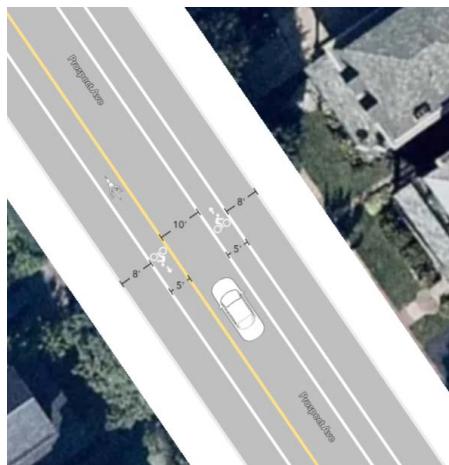


Figure 4: Proposed dedicated contraflow bike lanes on Prospect

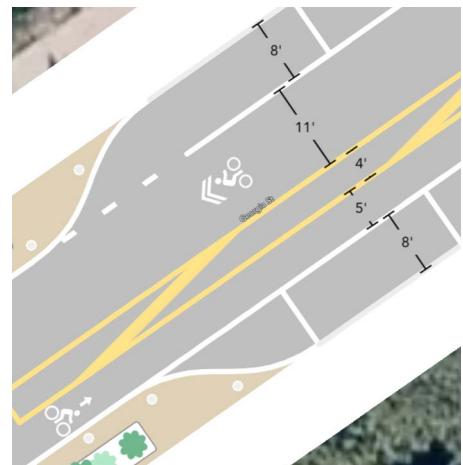


Figure 5: Proposed dedicated contraflow lane with SLM on Georgia



Figure 6: Proposed bumpouts at Prospect / Rabin / Georgia

This design also includes bumpouts at each intersection to slow down traffic movement through the intersection and shorten pedestrian crossing distance.

These bumpouts have the ability to have an immediate impact on speed through intersections. Additionally, these bumpouts have the ability to possess placemaking components, such as custom paint coloring and planters. These elements would make the intersections both effective and aesthetically pleasing.

Lastly, each street identified in the neighborhood should have shared lane markings. These markings indicate that the road is shared with both cyclists and drivers.



Figure 7: Shared Lane Markings on Rabin Terrace

Design Option 2



Contraflow Bike Lanes, Bumpouts, Shared Lane Markings, and Parking T's

Design Element Details

Contraflow Bike Lanes

- Dedicated bike lanes on Prospect Ave between Georgia and Virginia
- Cycle-priority markings are added in the travel lane with a dedicated bike lane running in the opposite direction of traffic on Georgia and W Chippewa

Gateway Treatments (Intersection Bumpouts)

- Planned designs at West Chippewa / South Elmwood, West Chippewa / Whitney / Georgia, Prospect / Carolina, and Prospect / Virginia
- Solid fill color to improve intersection aesthetic
- A variety of different colors can be used to fill in the bumpout

Planters Within Intersection Bumpouts

- Additional aesthetic improvements
- Provides more of a 'barrier' to keep cars from driving through the bumpout
- Bollards will also be used for increased visibility and protection of bumpouts

Shared Lane Markings

- Used within the travel lane on streets designed with contraflow bike lanes with one dedicated bike lane running in the opposite direction of traffic (W. Chippewa, Georgia)
- Used on all other streets (Whitney, Rabin Terrace, Carolina, Virginia)
- This is an easy way to inform drivers that the road is shared with bicycles and not only used for cars

Parking T's

- Implemented on all streets with parking (W. Chippewa, Whitney, Georgia, Prospect, Rabin Terrace, Carolina, Virginia)
- This is an effective way to establish parking boundaries for where cars can park on the street.
- This can help mitigate the conflict of cars parking in front of driveways.
- Disclaimer: Due to the high number of driveways on all streets, parking T's cannot be displayed on Remix and would need to be measured between each driveway to ensure that parking T's are effectively implemented.

[Click here](#) to view design
option 2 on Remix.

Next Steps



We encourage residents to leave comments directly on Remix to communicate feedback on specific design elements.

Elements from each design option can be mixed and matched to be incorporated into a final design.

**Click [here](#) to leave comments on design option 1.
Click [here](#) to leave comments on design option 2.**

A short tutorial video for how you can use the program to review and comment can be found [here](#).

**Please provide comments by Wednesday April 27.
A preferred option will then be finalized for implementation this spring.**