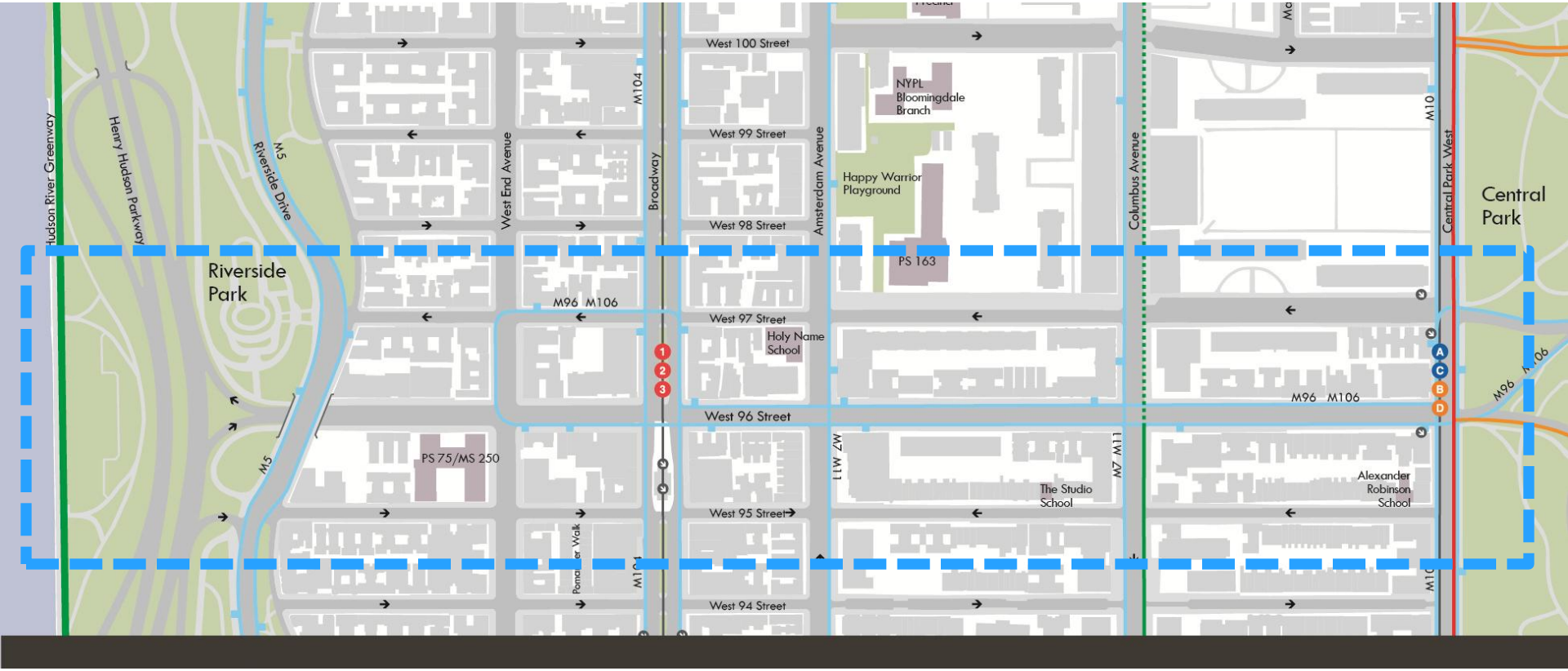
NELSON
NYGAARD

West 96th Street and Environs

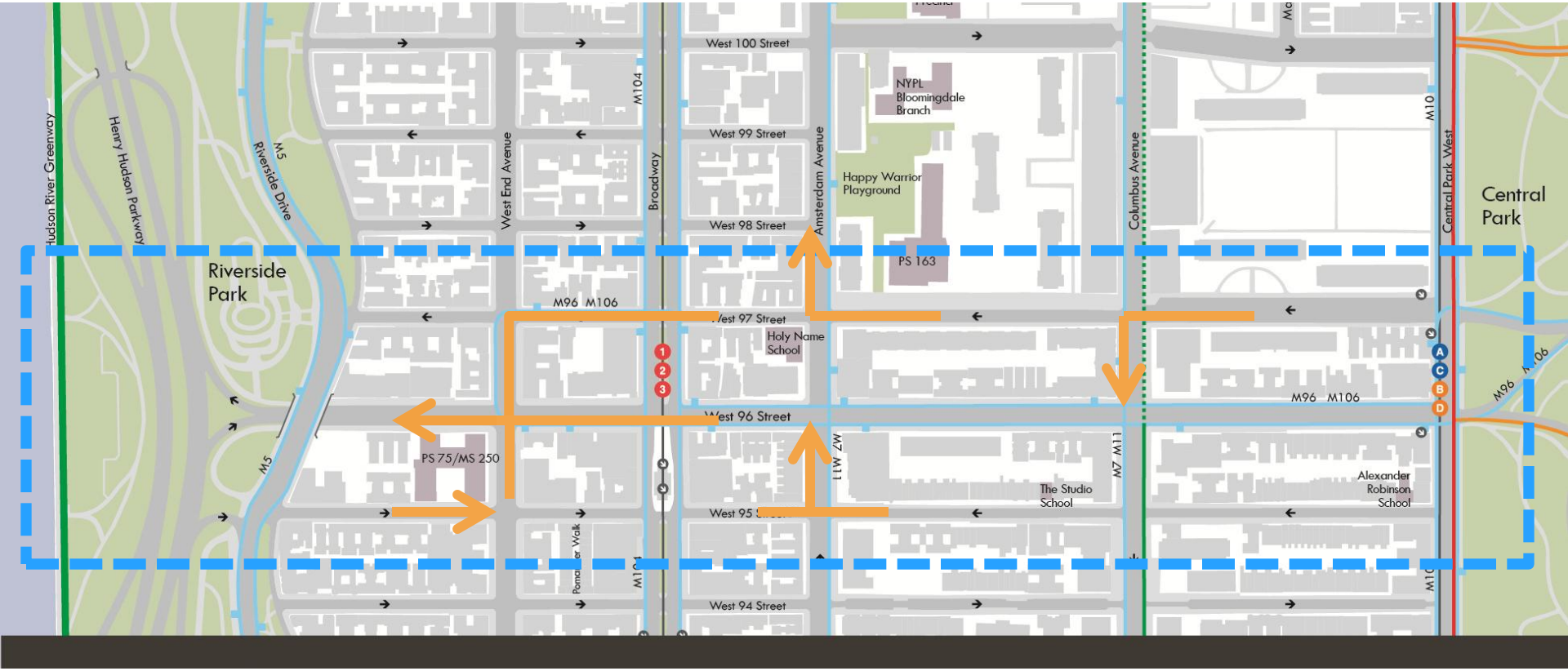
Pedestrian Safety and Circulation Study DRAFT

Presented by Will Sherman and Michael King

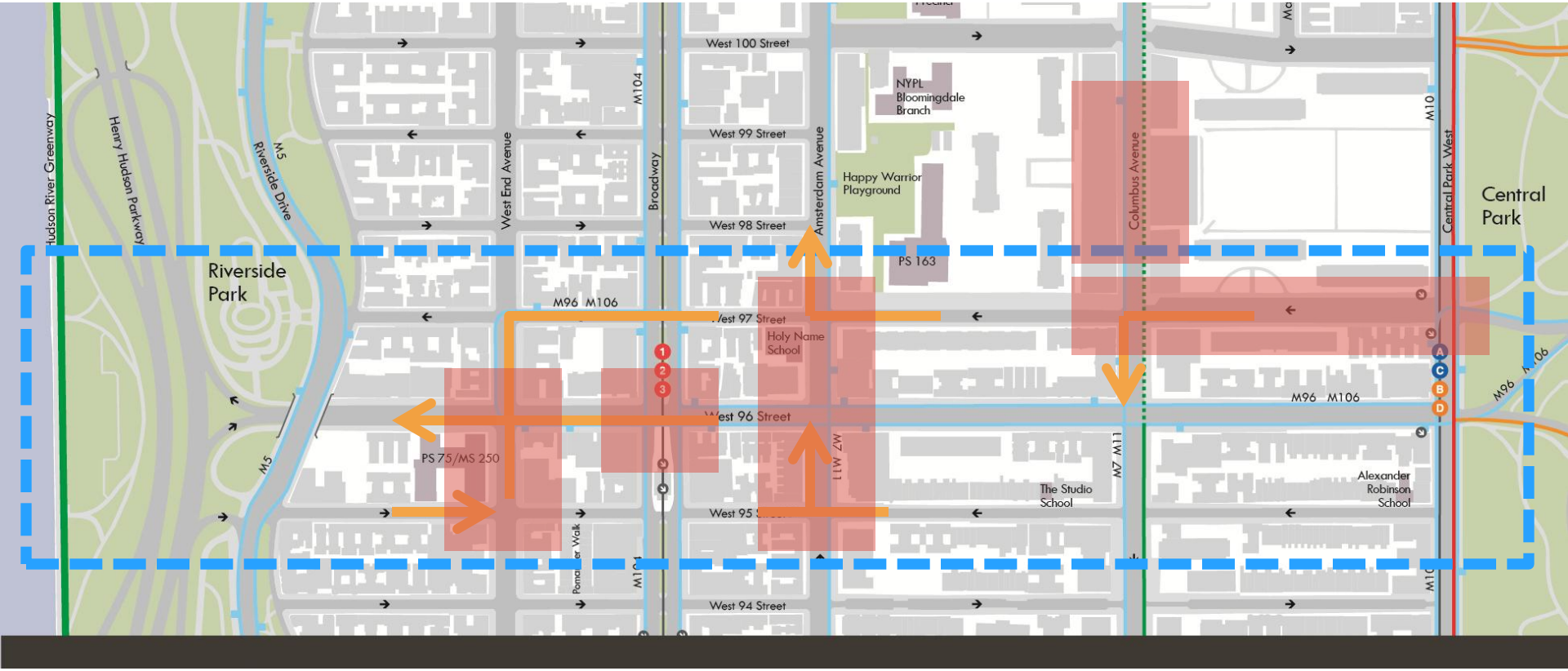
July 2013


Hudson River Greenway
Henry Hudson Parkway
Riverside Drive
M5
Riverside Park
West End Avenue
Broadway
M104
West 100 Street
West 99 Street
West 98 Street
West 97 Street
West 96 Street
West 95 Street
West 94 Street
M96 M106
PS 75/MS 250
Amsterdam Avenue
NYPL Bloomingdale Branch
Happy Warrior Playground
PS 163
Holy Name School
M7 M11
The Studio School
Columbus Avenue
Central Park West
M10
Central Park
Alexander Robinson School
M96 M106

Study Area



Major Traffic Movements & Conflicts



Potential Sites for Focused Study

Amsterdam Ave (W 95 St – W 97 St)

West End Ave (W 95 St – W 96 St)

W 97 St (Central Park West – Columbus Ave)

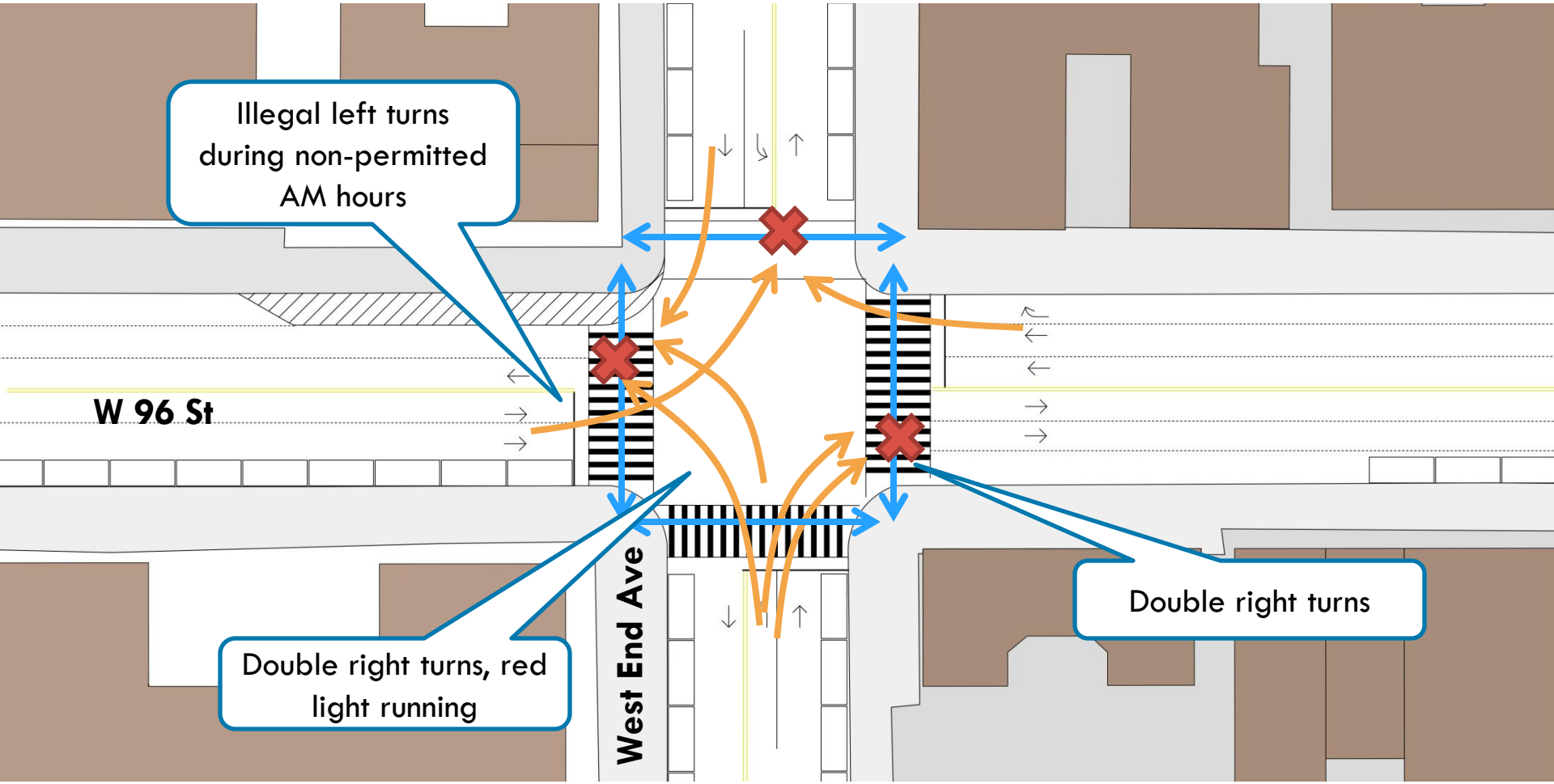
W 96 St & Broadway

Columbus Ave (W 100 St – W 97 St)

W 96 St & West End Ave

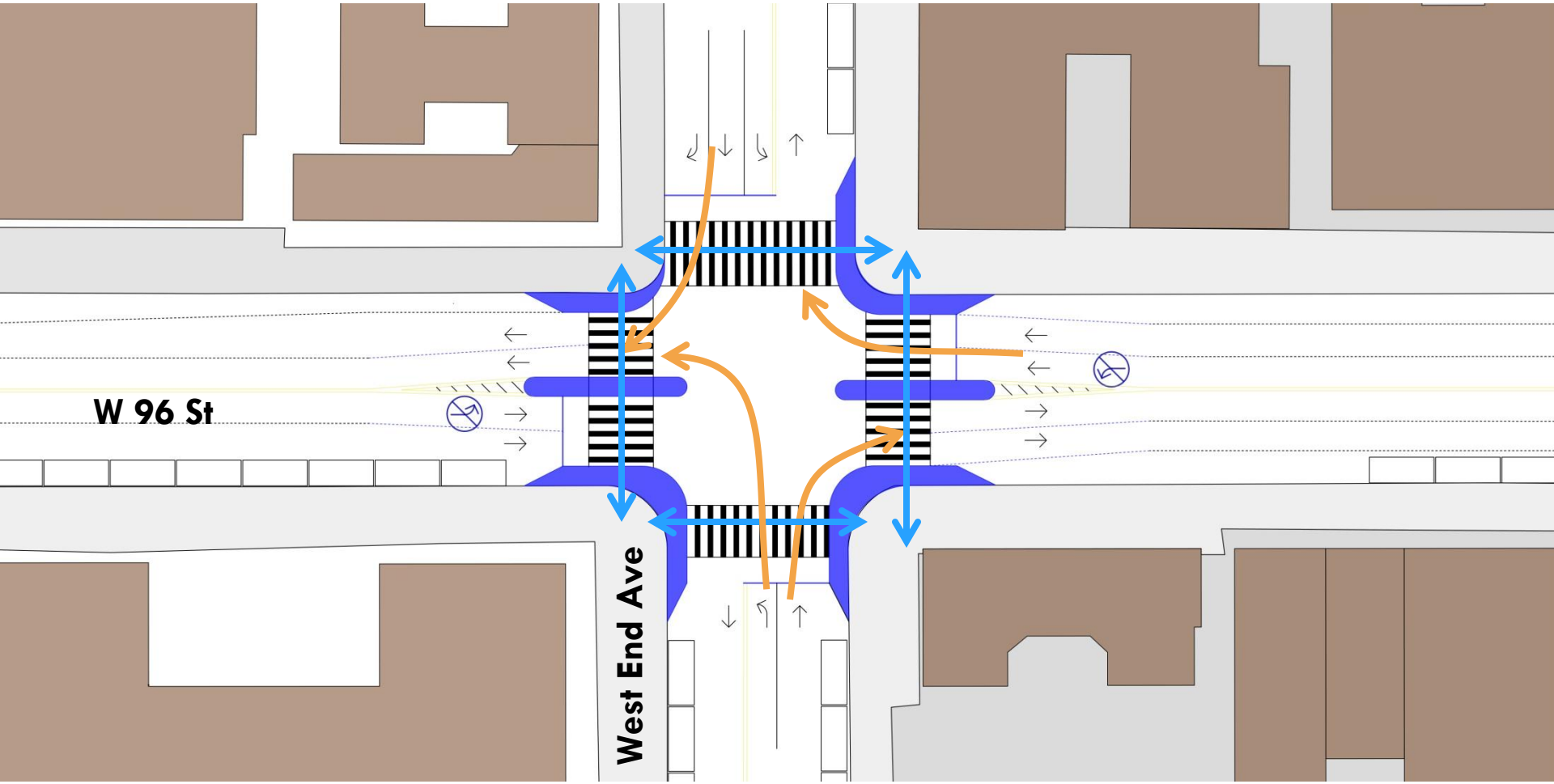
Vehicles block crosswalk

Vehicles weave between pedestrians in crosswalk



W 96 St & West End Ave

Vehicles turning westbound from West End Ave to W 96th Street create greatest conflict for pedestrians.

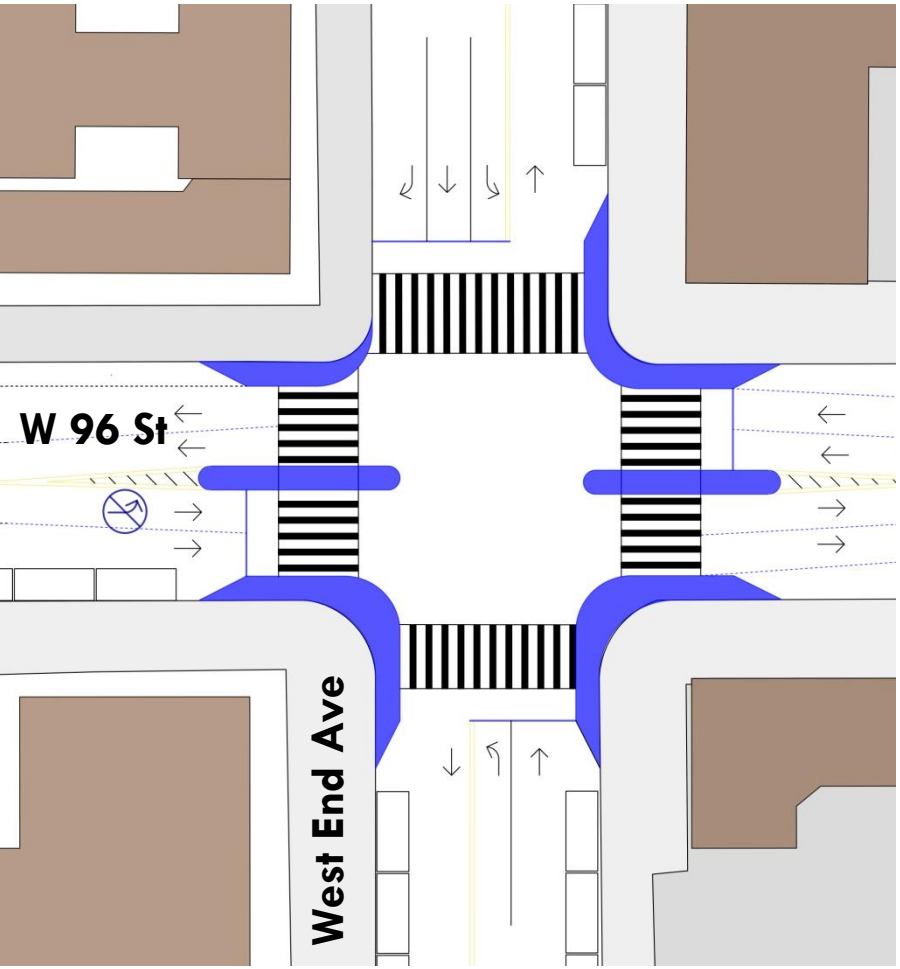


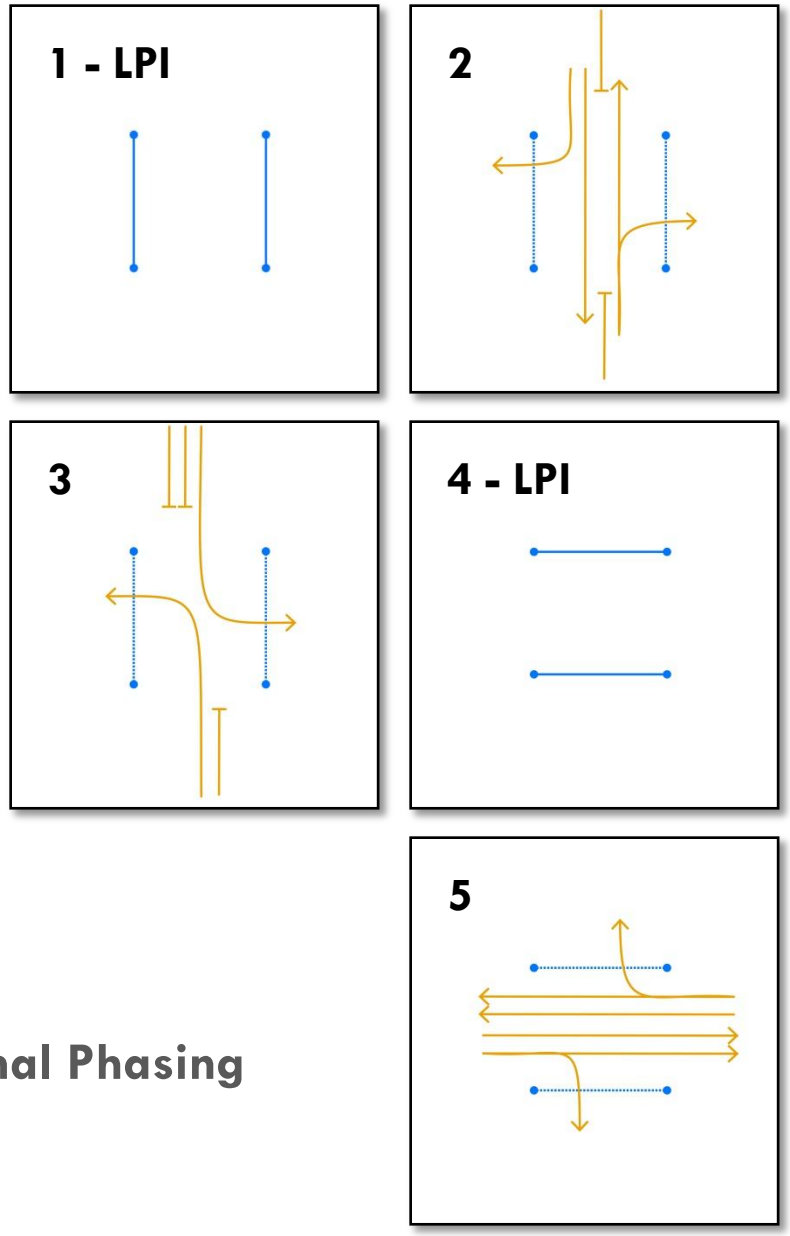
W 96 St & West End Ave Concept

Ban left turns from W96 Street 24/7.

Add curb extensions where possible.

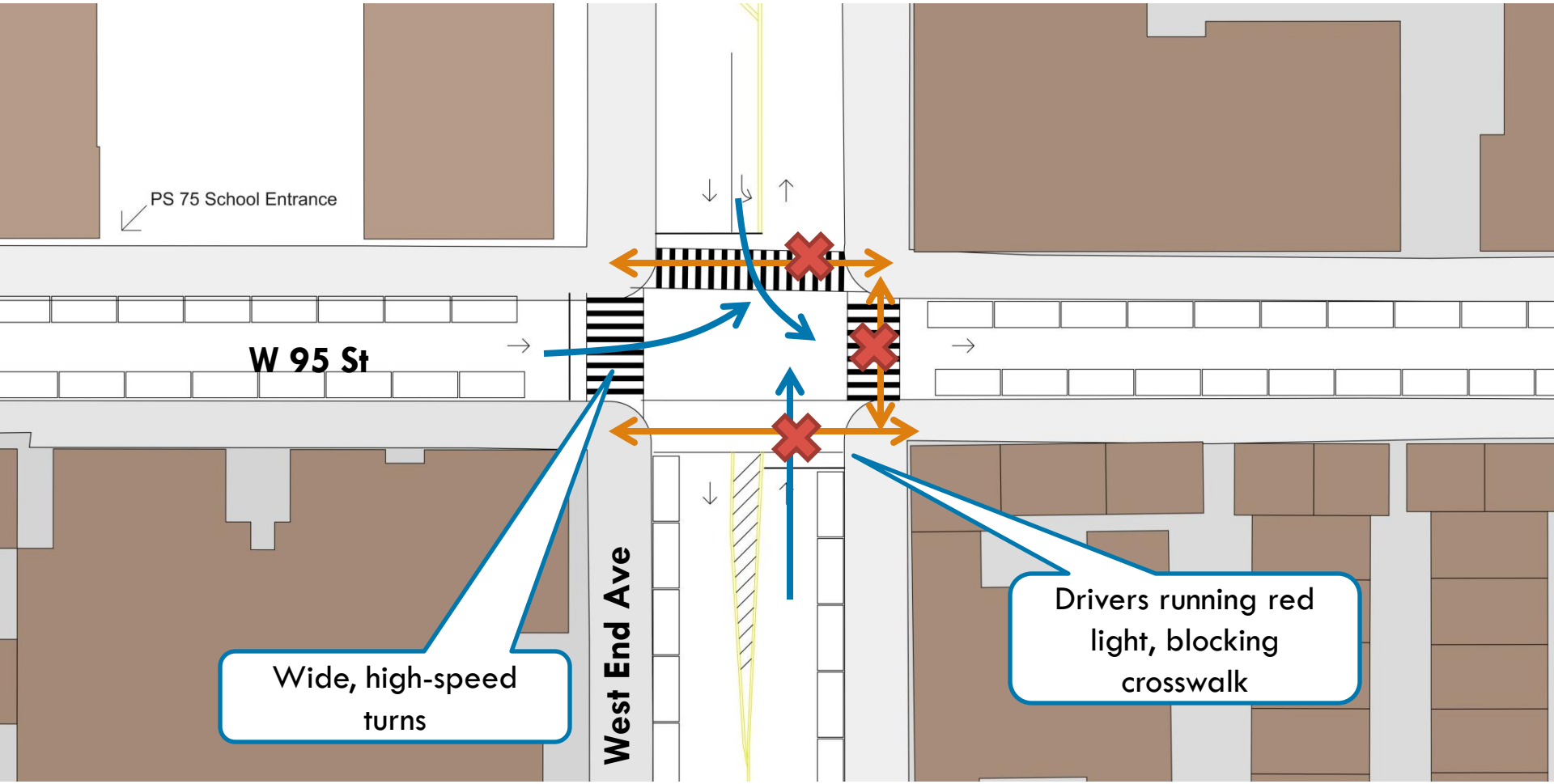
Add pedestrian refuges on W 96 St crossings.





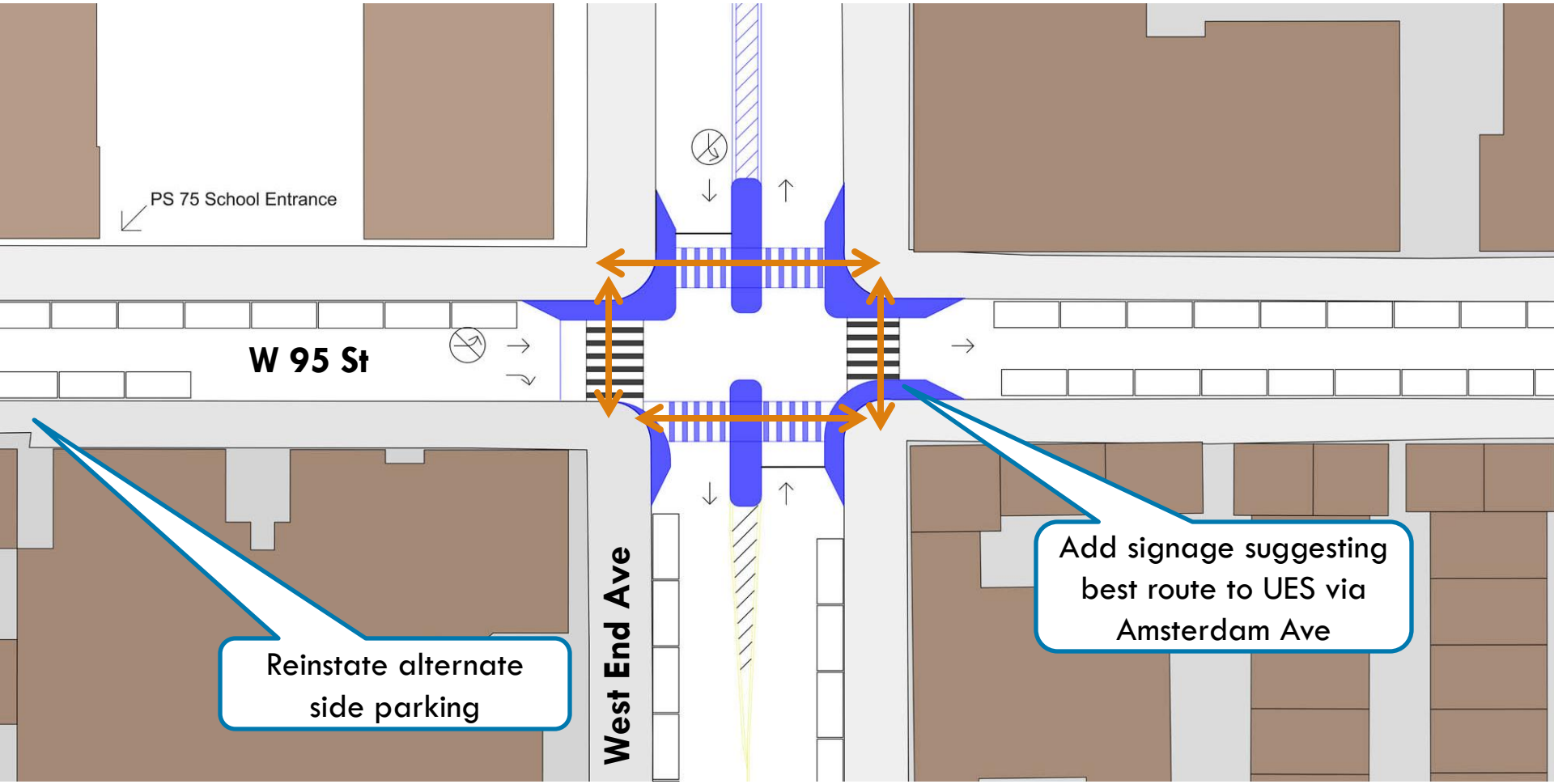
W 96 St & West End Ave Concept – Signal Phasing

W 95 St & West End Av



W 95 St & West End Ave

Pedestrians face fewer conflicts than at W 96 Street, but vehicles turn left northbound from W 95 St onto West End Ave at wide angles and high speeds, creating pedestrian conflicts.



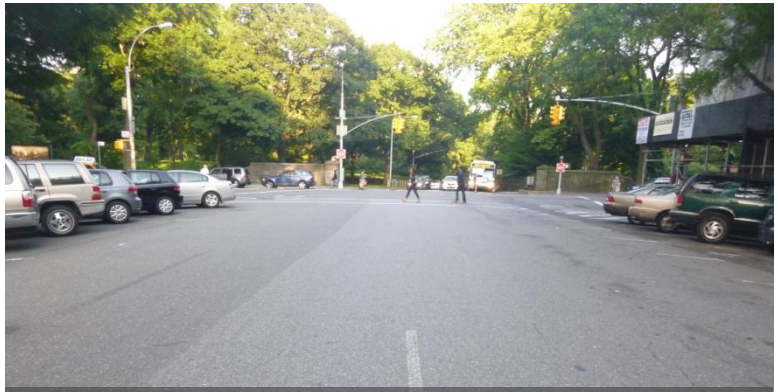
W 95 St & West End Ave Concept

Changing geometry of block to limit dangerous left turns and shorten crossings would improve functionality and safety for pedestrians.

Pedestrian Paths to PS 75

As the PS 75 entrance has moved to W 95 St, crosswalk safety across W 96th Street and across West End Ave at W 95 St is critical to accommodate pedestrian desire lines to school.

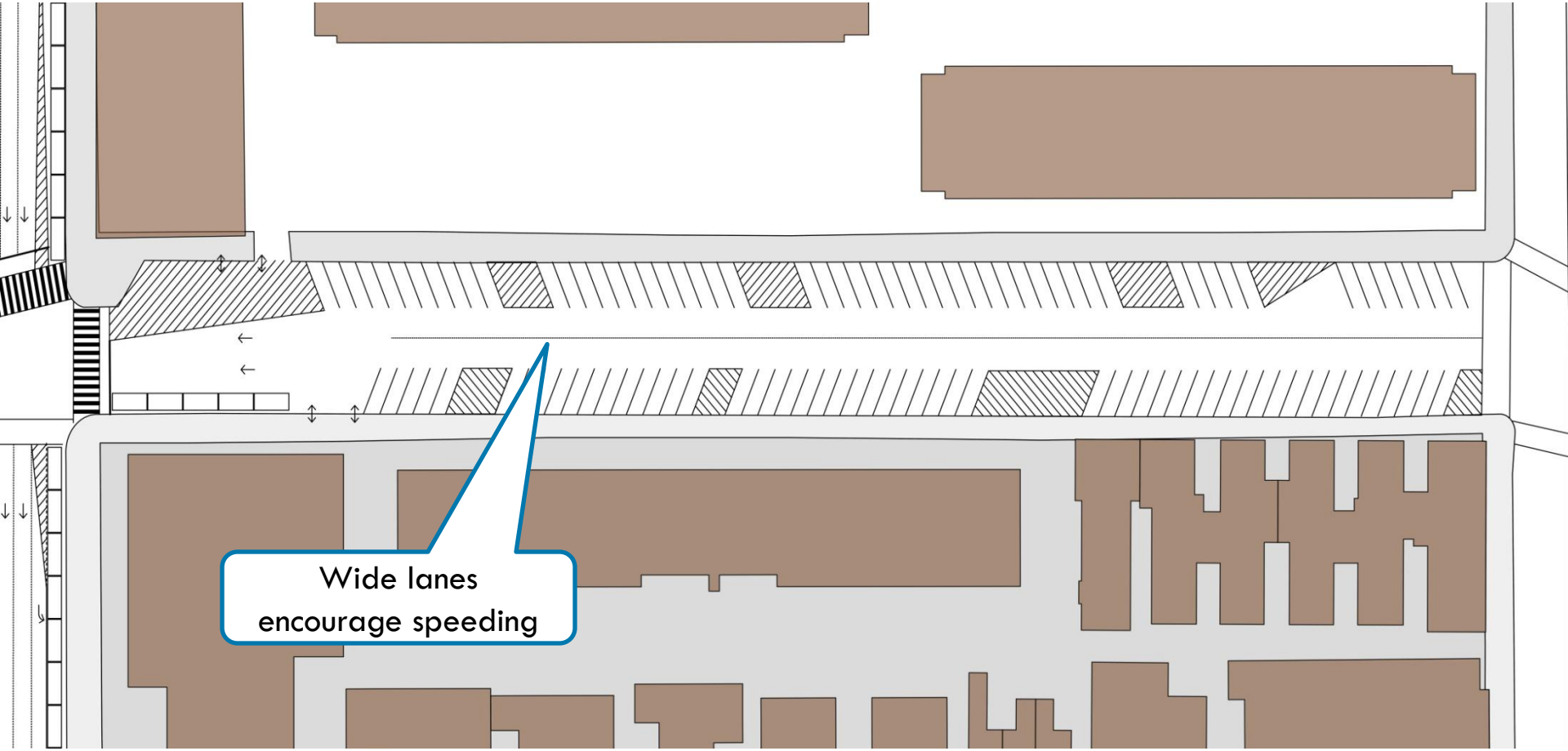
W 97 Street (Central Park West to Columbus Ave)



Two excessively wide lanes between Central Park West and Columbus Ave

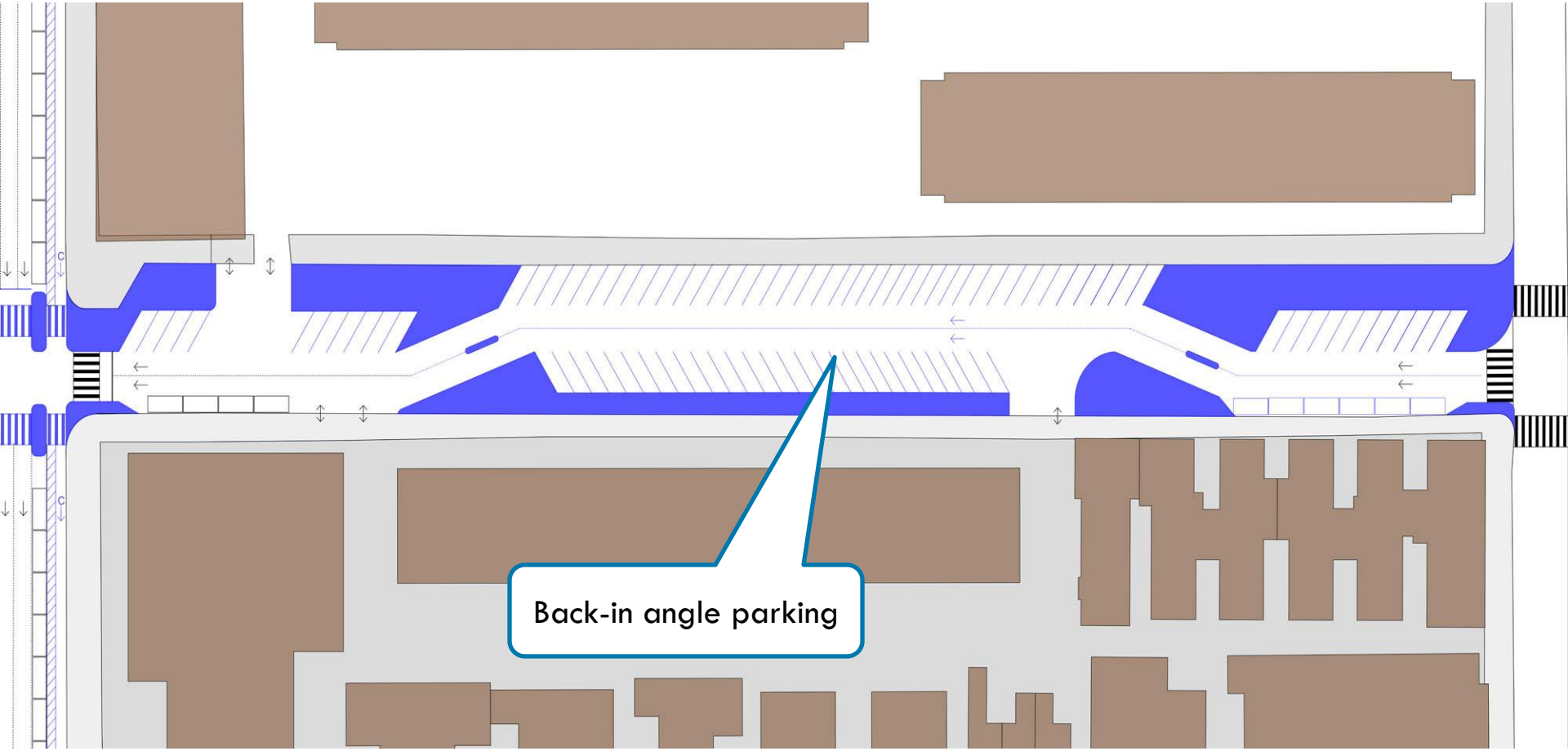
At Columbus Ave, vehicles drive outside lanes in prohibited area

Striped pavement marking does little to narrow intersection approach or control drivers



West 97 St (Central Park West to Columbus Ave)

W 97 St serves as a through route for vehicles traveling across Central Park to the Henry Hudson Parkway. Between Central Park West and Columbus Ave, the two wide and unmarked lane encourage speeding. W 97 St narrows to two lanes to at Columbus Ave and one lane at Amsterdam Ave.



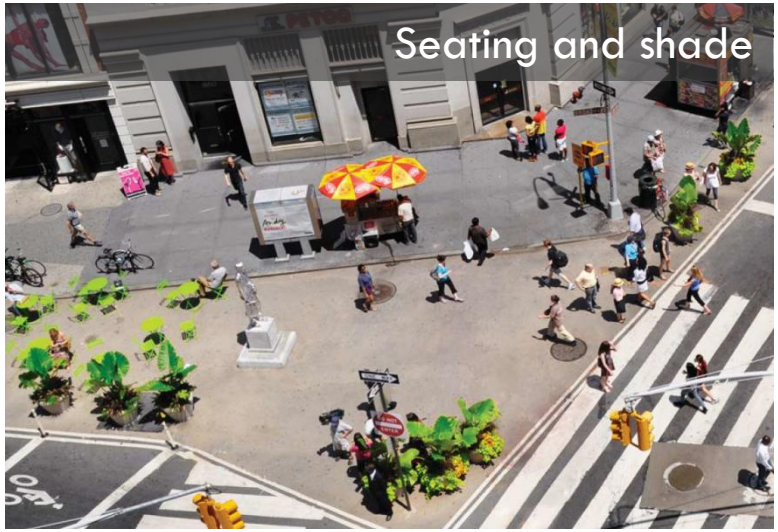
W 97 St (Central Park West to Columbus Ave) Concept

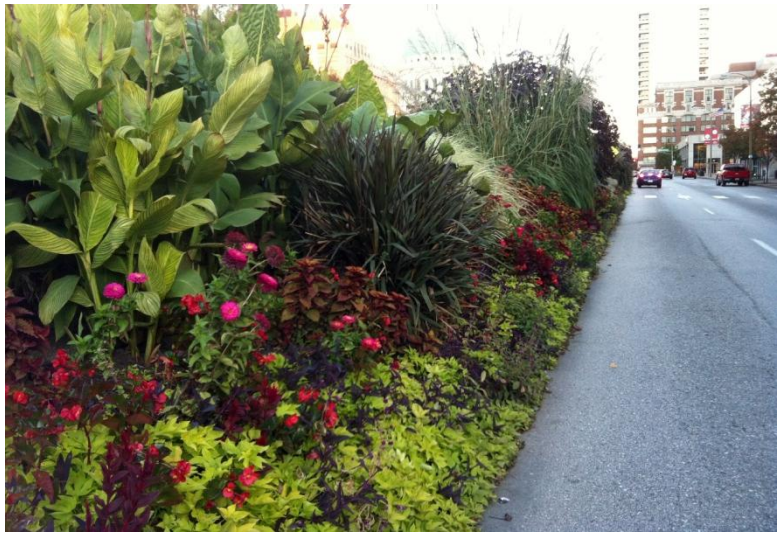
Offset curb extensions creates a chicane (designed for 20 mph), while increasing the amount of public space available for other uses.

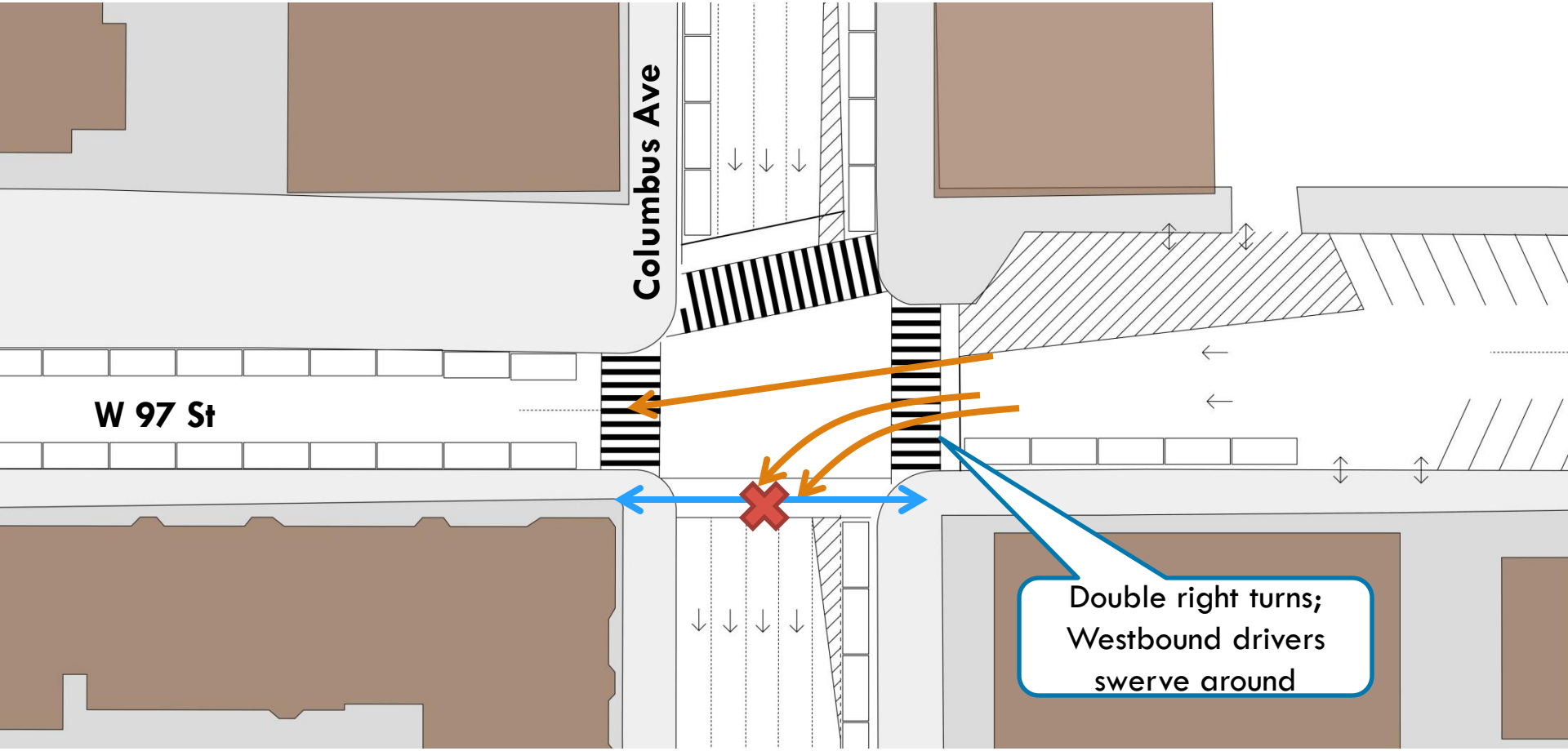
Safer back-in angle parking implemented. On-street parking changes from 112 spaces to 99 spaces.

Median islands prevent drivers from swerving into adjacent lane to avoid slowing down.

Possible Uses of Added Sidewalk Space on W 97 St

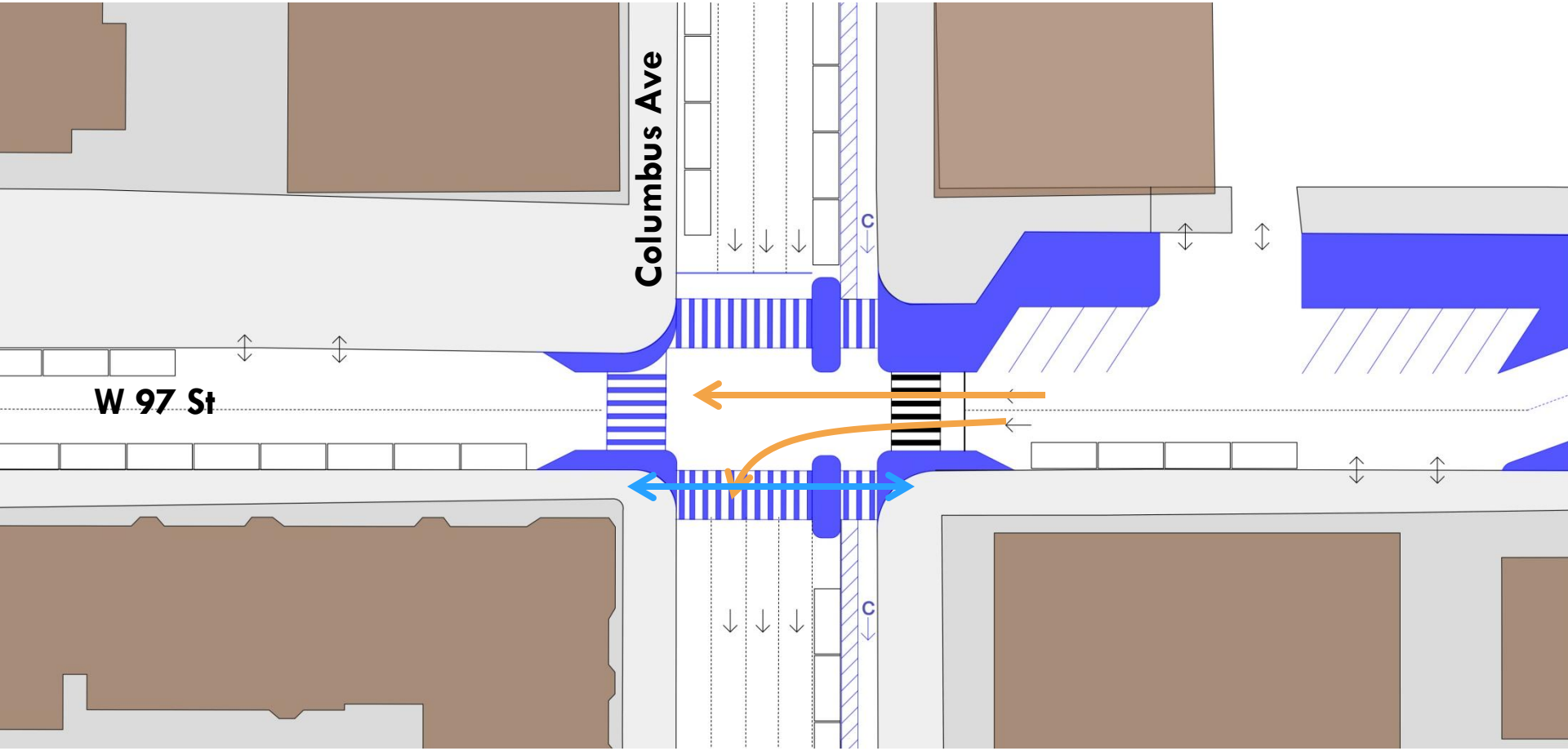






W 97 St & Columbus Ave

Southbound turns onto Columbus Avenue were the most frequently cited danger for pedestrians at this intersection. Vehicles use striped area as one or two additional lanes, entering the intersection from the east.



W 97 St & Columbus Ave Concept

Add pedestrian refuges on Columbus to reduce crossing distance.

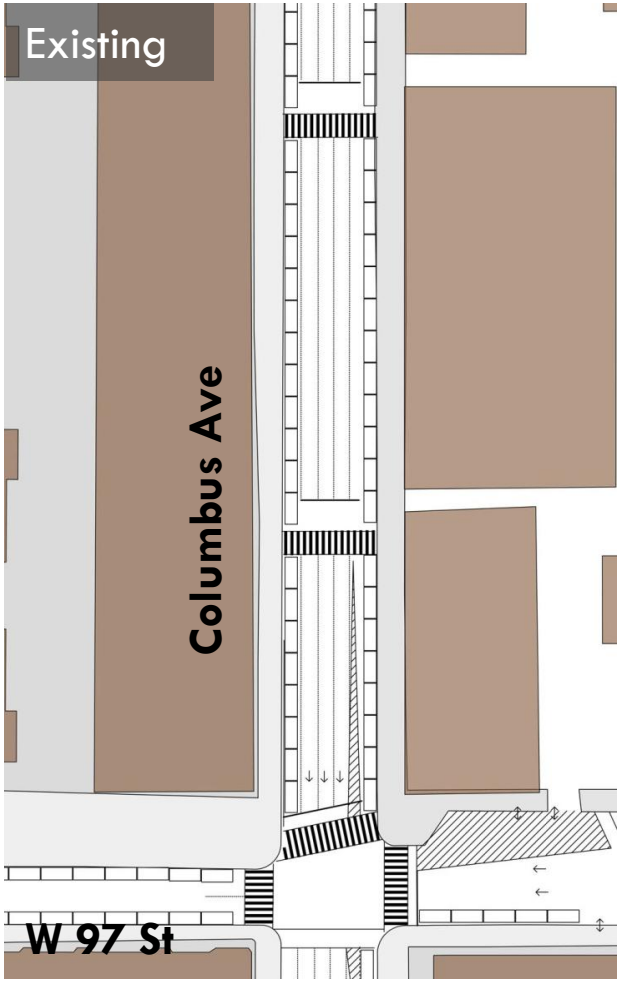
Add curb extensions where possible.

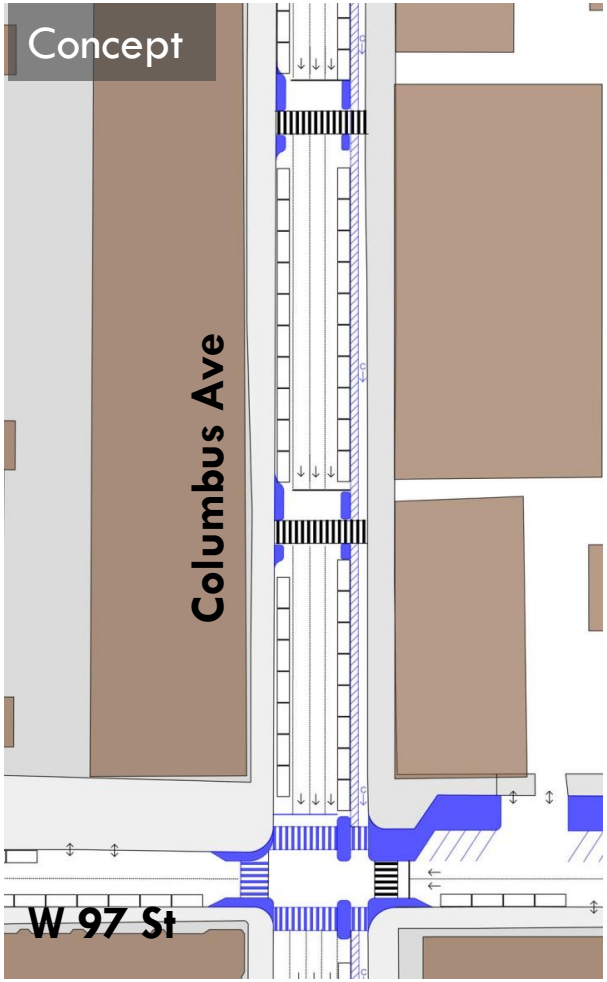
Force drivers to use marked lanes on W 97 St.

Columbus Avenue (W 100 St – W 97 St)

Long block length and no intersecting streets encourages drivers to speed

Without additional visual cues, crosswalks are insufficient to slow drivers.



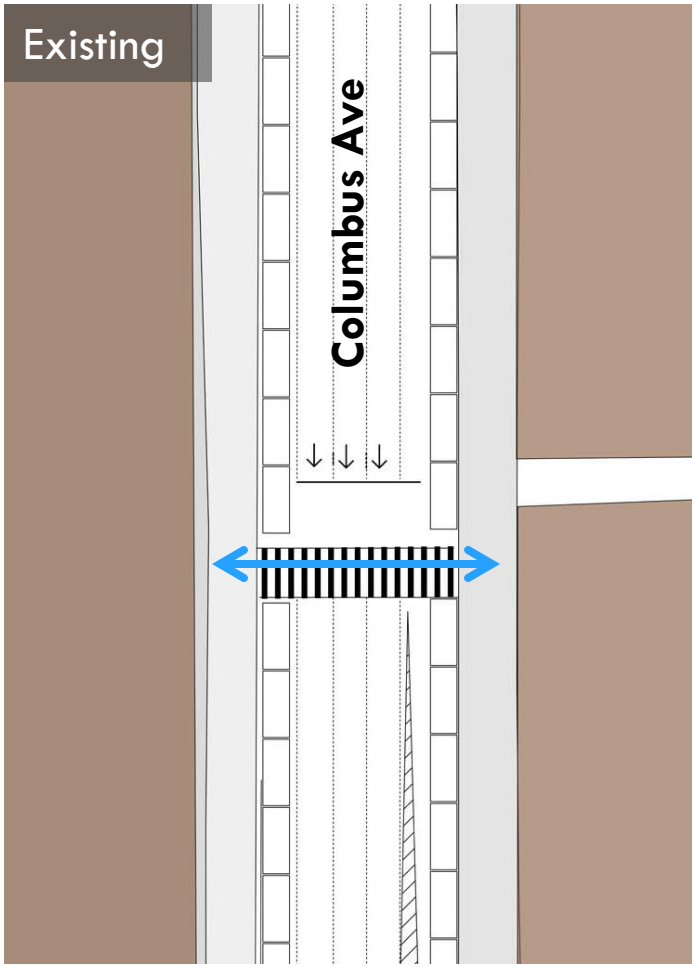


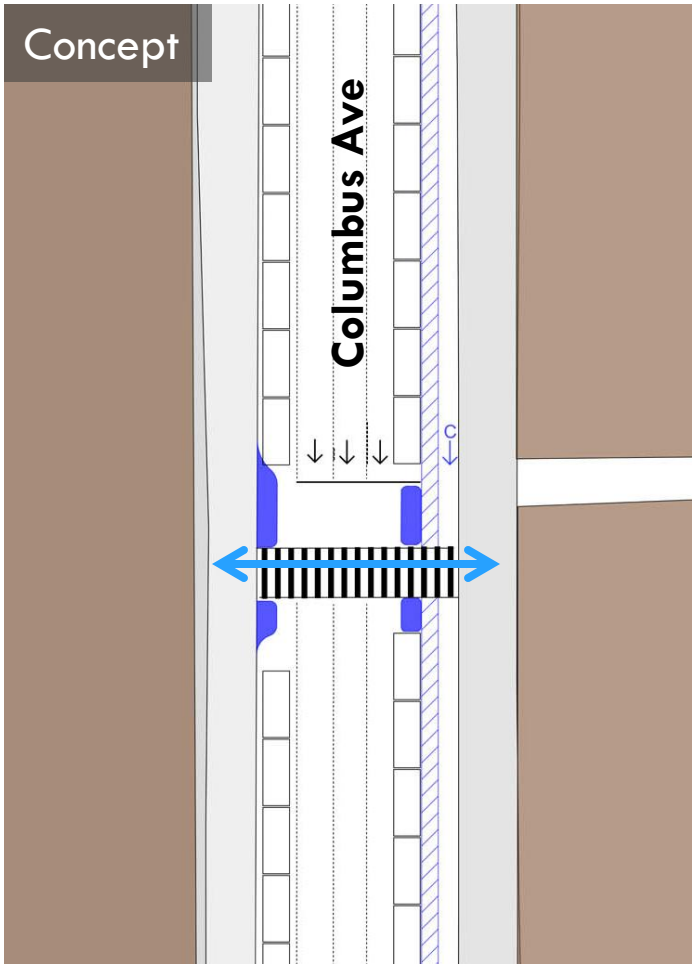
Columbus Avenue (W 100 St – W 97 St) Concept

Add pedestrian refuges on Columbus to reduce crossing distance.

Add curb extensions where possible.

Further analysis would consider signal timing to calm southbound traffic.





Columbus Avenue (W 100 St – W 97 St) Concept Detail

Add pedestrian refuges on Columbus to reduce crossing distance.

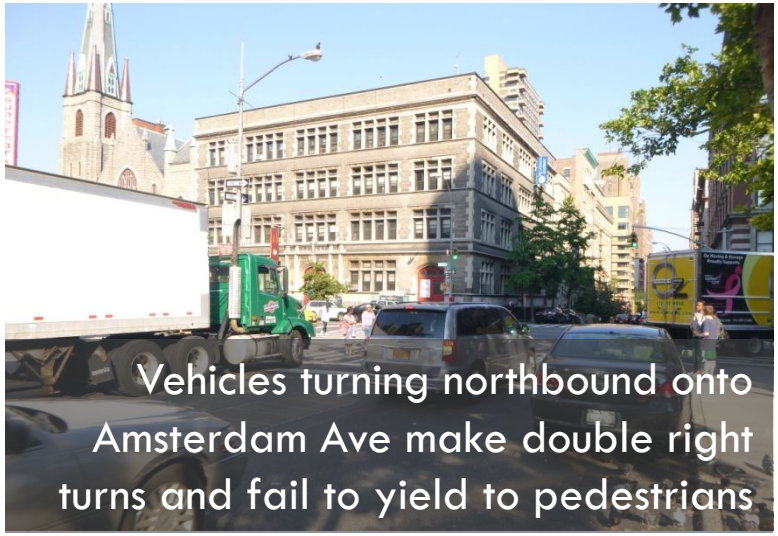
Add curb extensions where possible.

Further analysis would consider signal timing to calm southbound traffic.

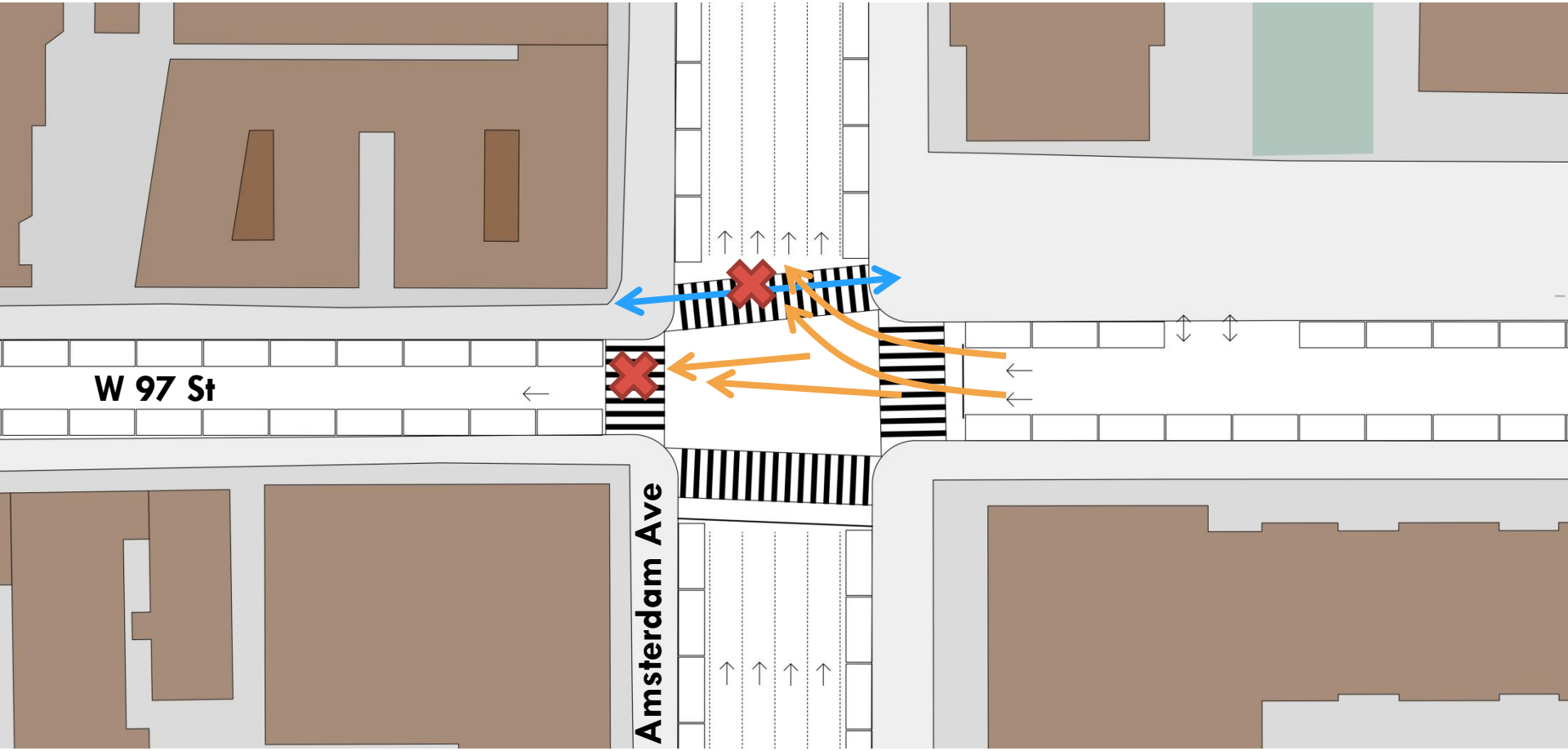
W 97 Street and Amsterdam Ave

Poor visibility between northbound drivers turning left and pedestrians in west crosswalk

Loading vehicles obstruct view of pedestrians waiting on southwest corner

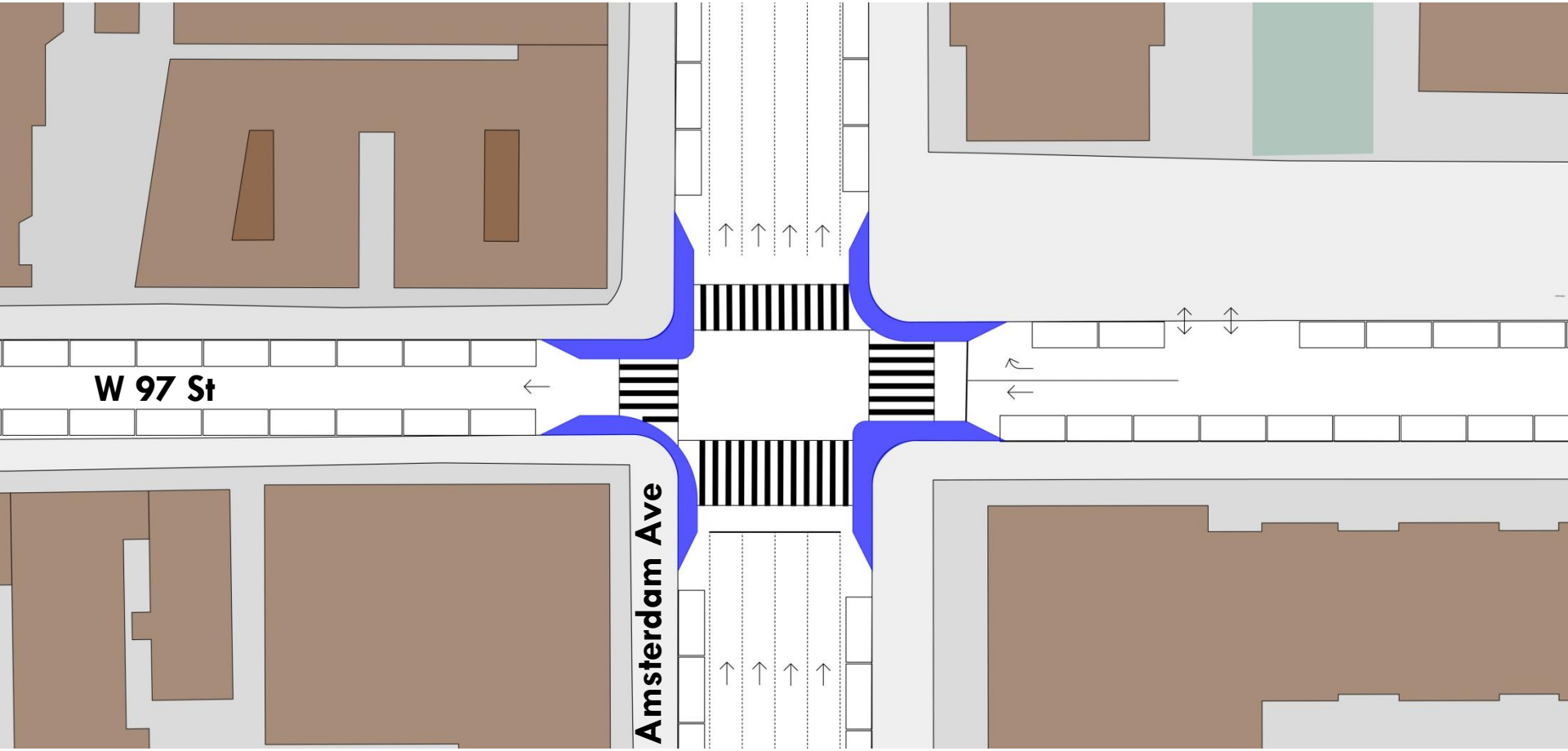


Vehicles turning northbound onto Amsterdam Ave make double right turns and fail to yield to pedestrians



W 97 St & Amsterdam Ave

Two lanes of traffic on W 97th Street converge onto Amsterdam Avenue, resulting in double right turns and pedestrian conflicts on the north crosswalk. Pedestrians on west crosswalk have poor visibility with northbound drivers turning west.



W 97 St & Amsterdam Ave Concept

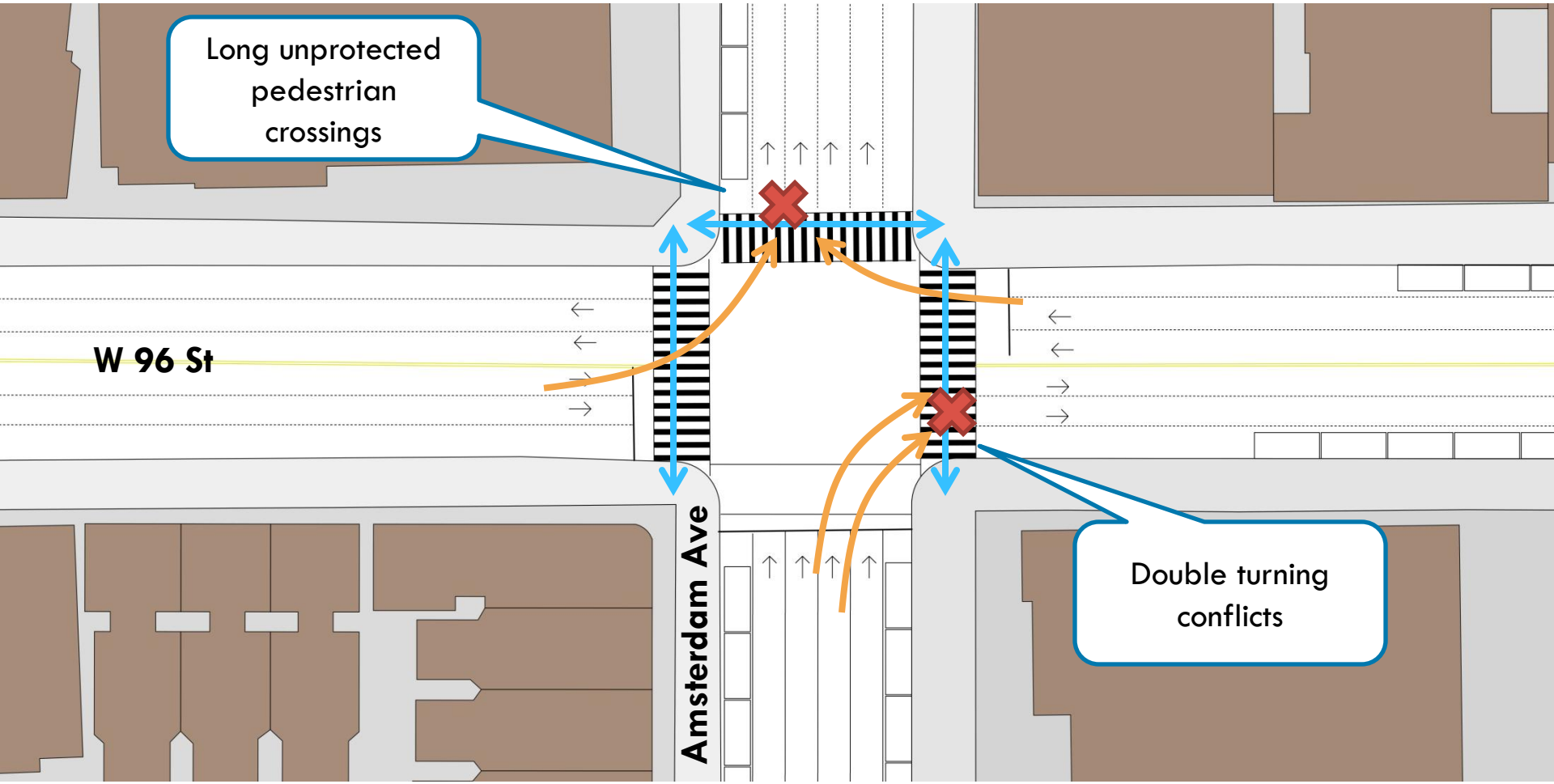
Improve sight lines between pedestrians and drivers on all legs of intersection.

Reduce conflict between drivers merging into one-lane on W 97th St.

W 96 St & Amsterdam Ave

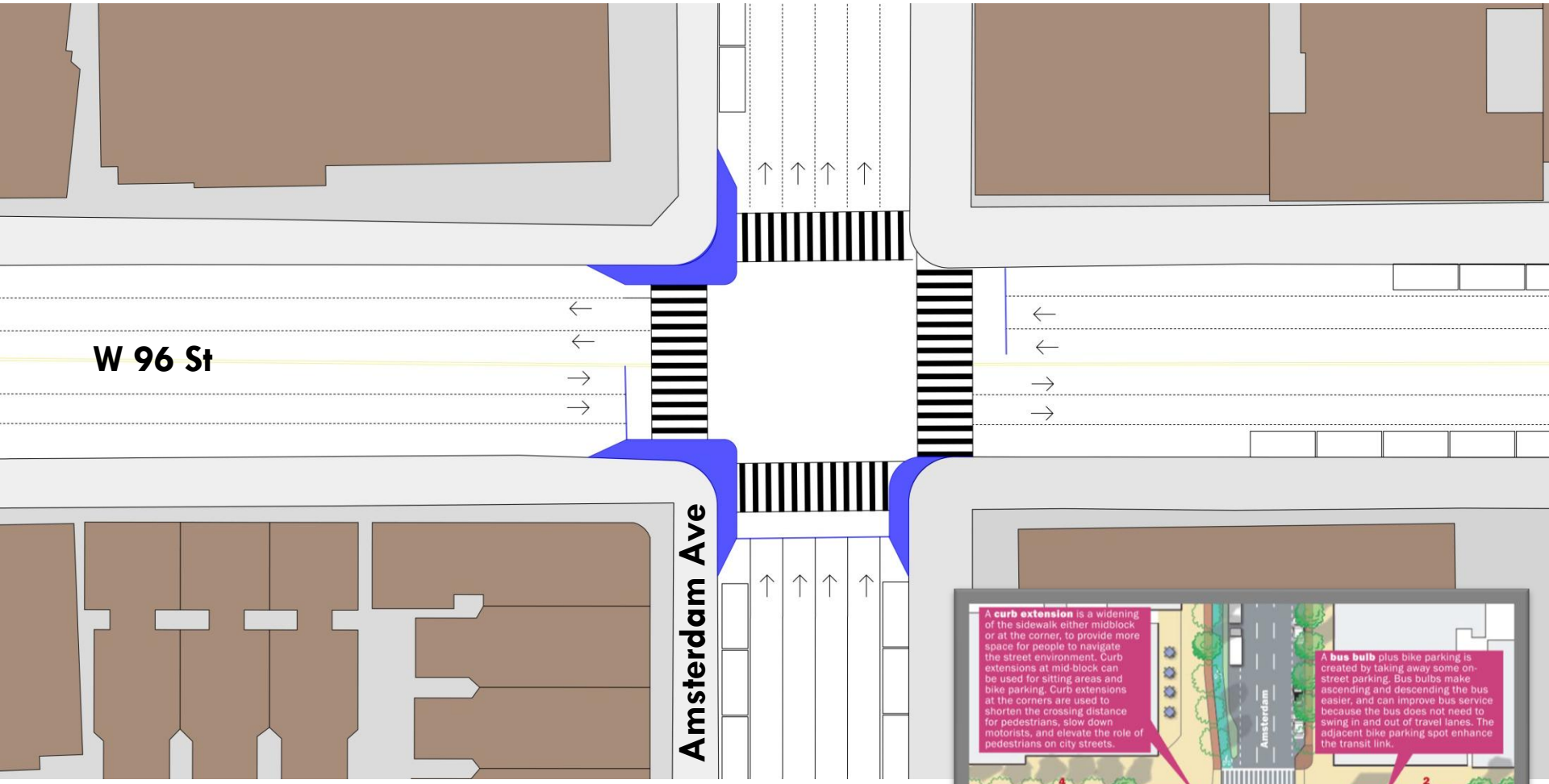
Double right turn

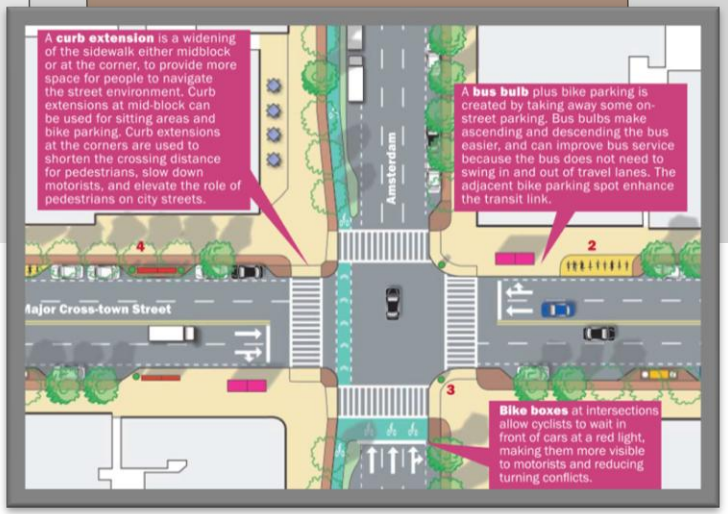
Long pedestrian crossing with conflicts from drivers turning off W 96 St



W 96 St & Amsterdam Ave

W 96 St & Amsterdam Ave is a high-crash intersection with long pedestrian crossings. Turning vehicles conflict with pedestrian movement on the north, east and west legs, including double right turns.





Blueprint for the Upper West Side

W 96 St & Amsterdam Ave Concept

Add ladder crosswalks.

Add curb extensions, similar to the concept shown in the Blueprint for the Upper West Side.

Further analysis would consider the impact of limiting turning movements and adding bus bulbs on the northeast and southeast corners.

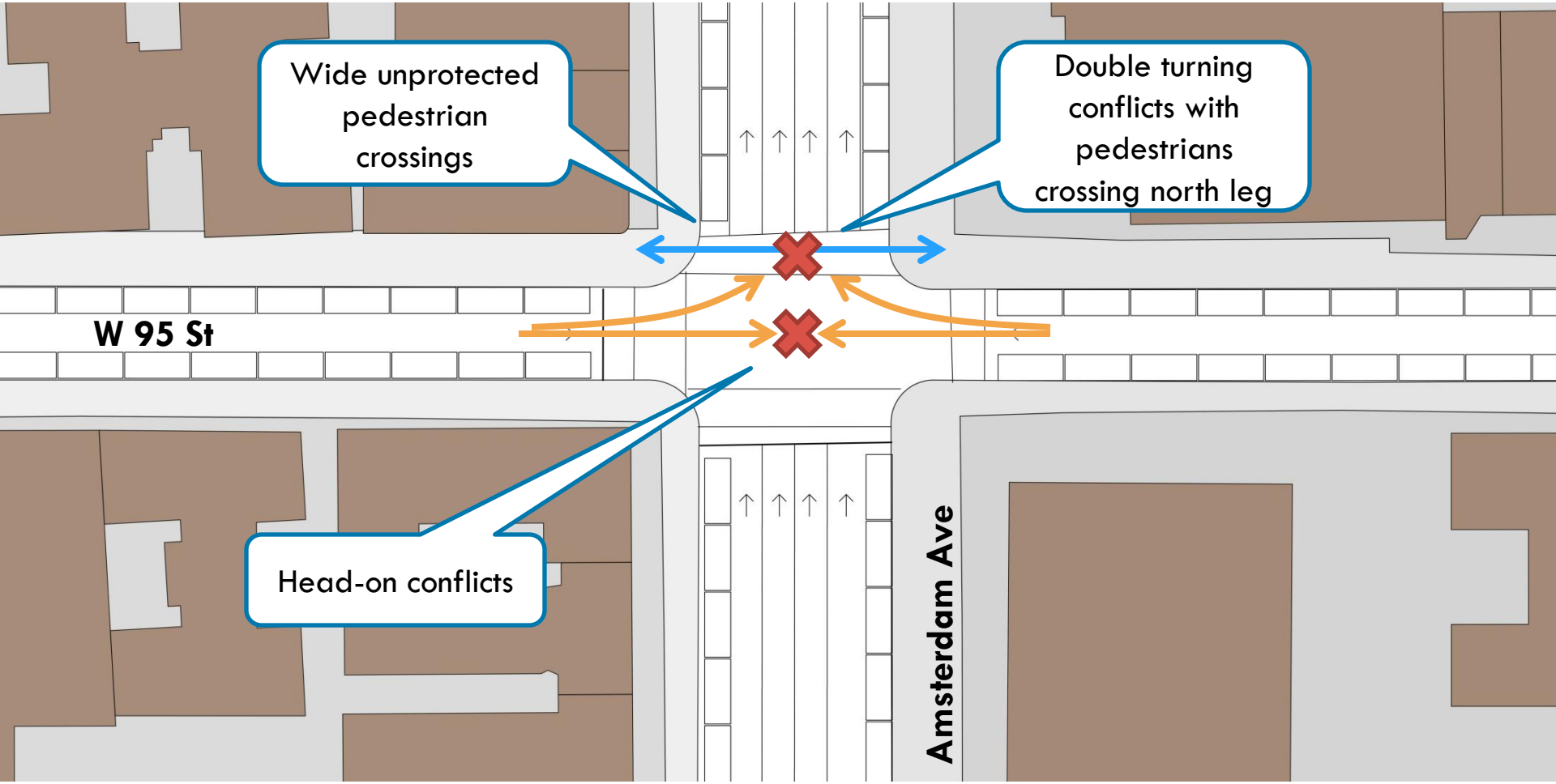
W 95 St & Amsterdam Ave

Pedestrians crossing north side face double turning conflicts

Do Not Enter signage is sometimes ignored by drivers on W 95 St

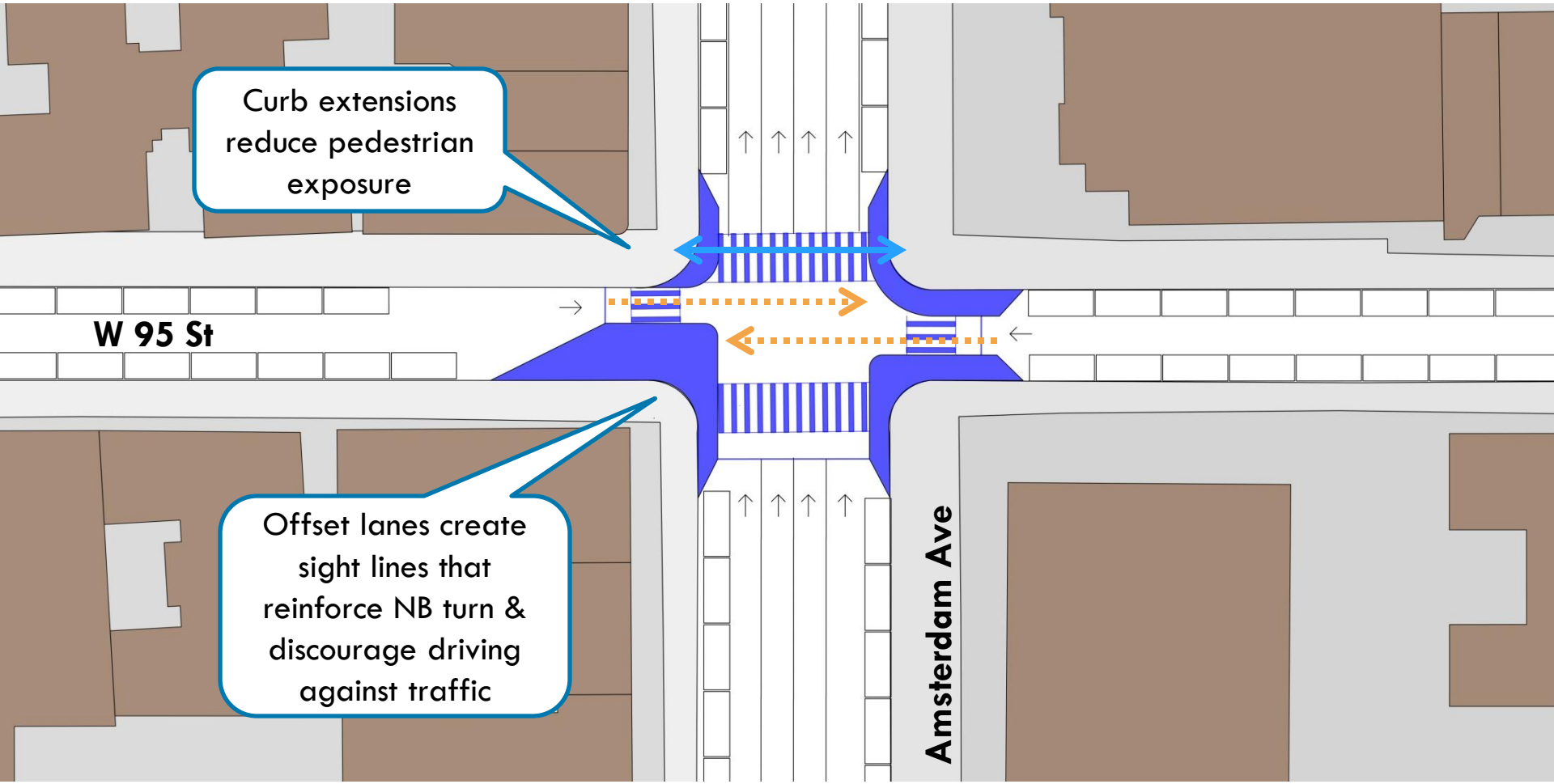
Wide unprotected pedestrian crossings

Poorly marked crosswalks and stop lines



W 95 St & Amsterdam Ave

Simple geometric changes can address conflicts between converging vehicles turning northbound on Amsterdam Ave.



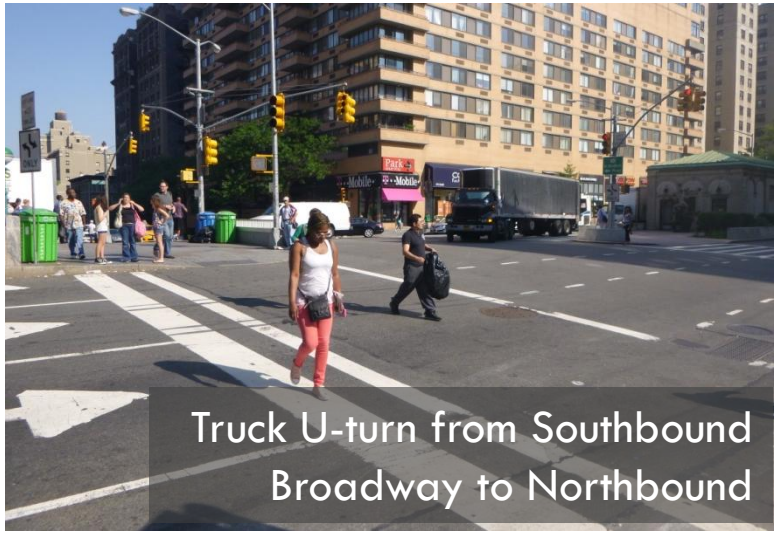
W 95 St & Amsterdam Ave Concept

Reduce head-on driver conflicts.

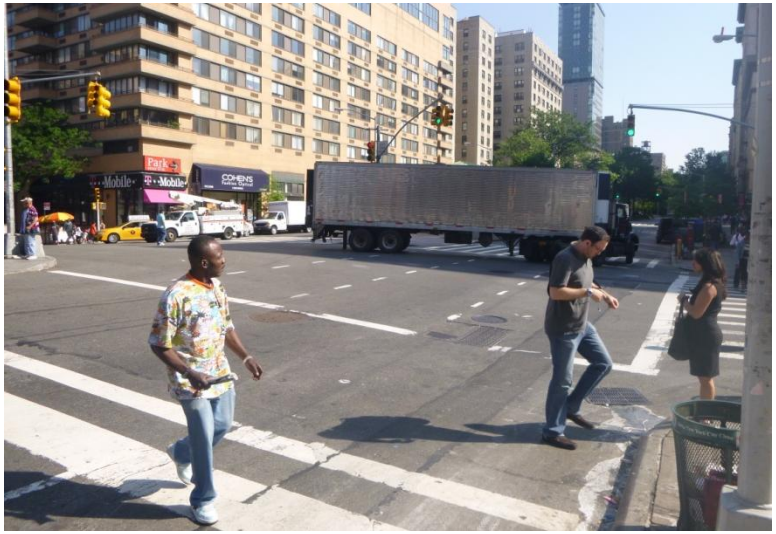
Add curb extensions where possible.

Reduce pedestrian crossing distance.

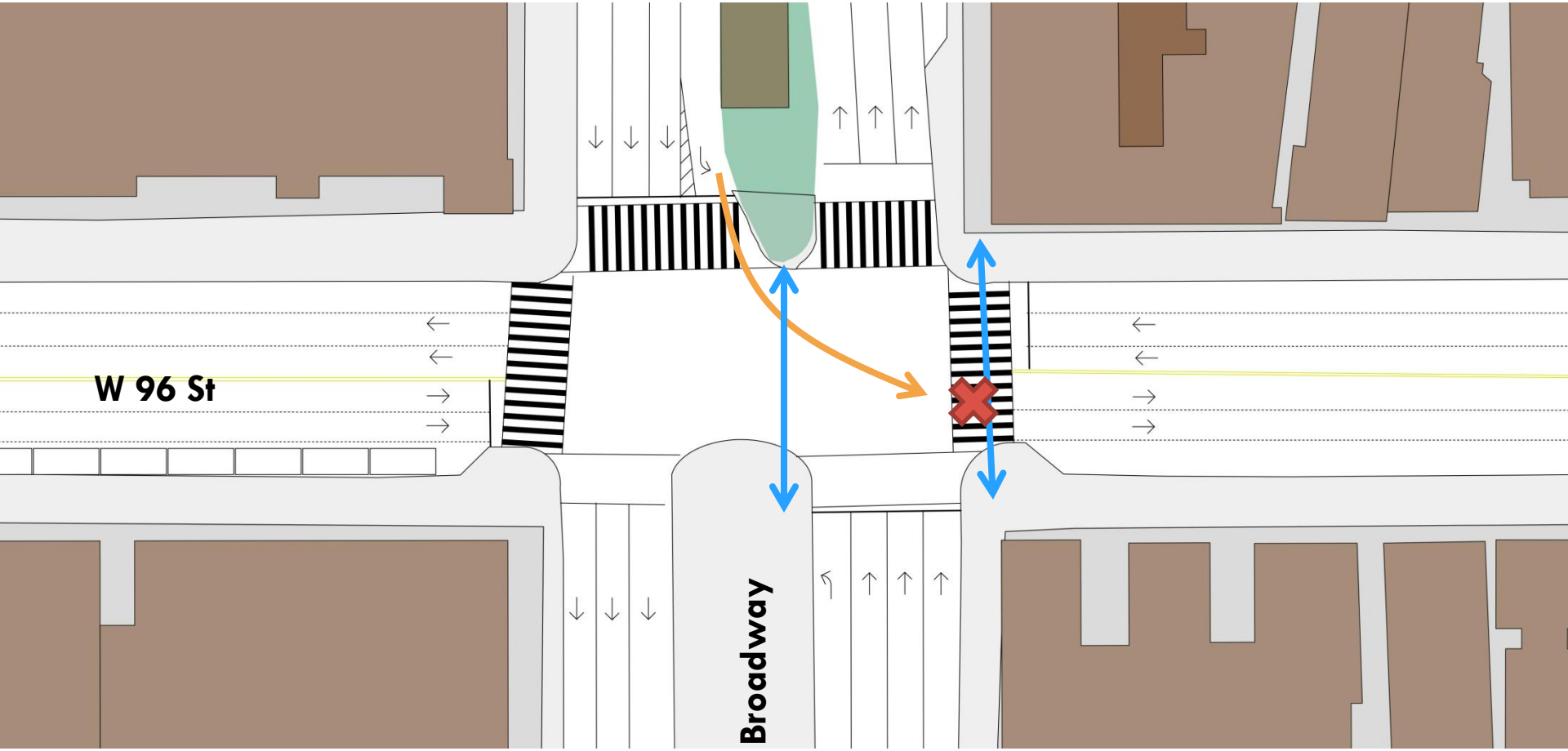
W 96 St & Broadway



Truck U-turn from Southbound Broadway to Northbound

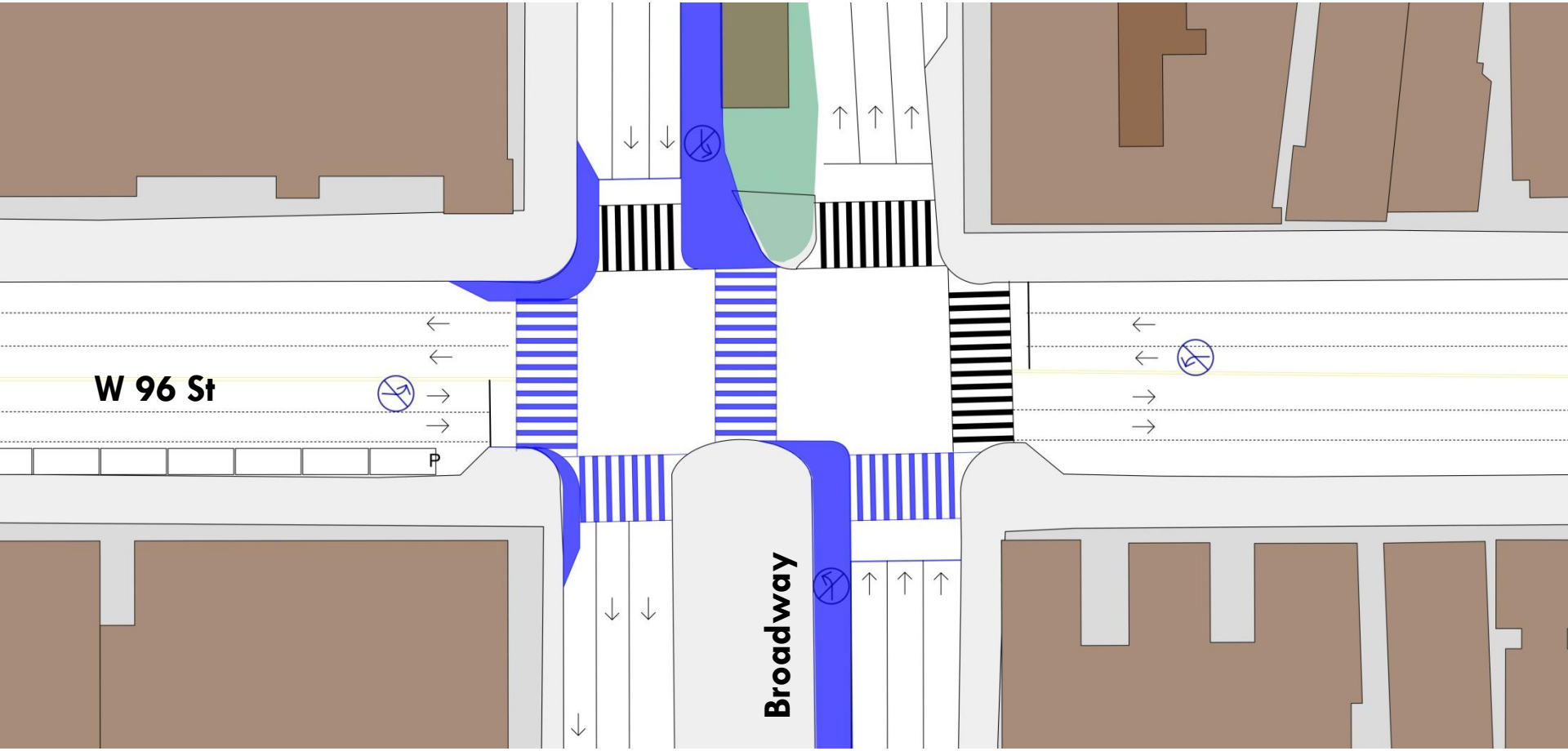


Turning vehicles conflict with pedestrians



W 96 St & Broadway

In April 2010, the MTA unveiled the new 96th St subway station. As changes to this intersection are new and conflicts remain between high pedestrian and vehicle volumes, changes to this intersection will be difficult. Leading left turn from Broadway southbound creates conflicts with pedestrians crossing with signal on east leg of intersection. Leftbound turn from Broadway northbound creates similar conflicts.

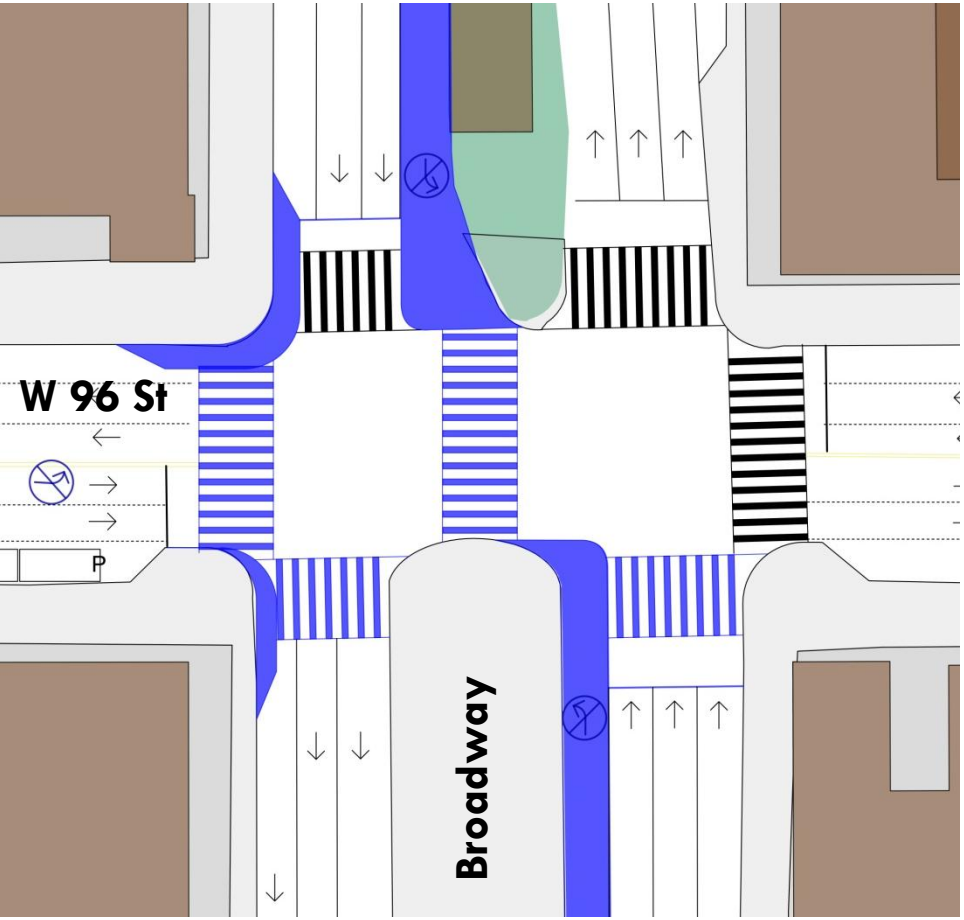


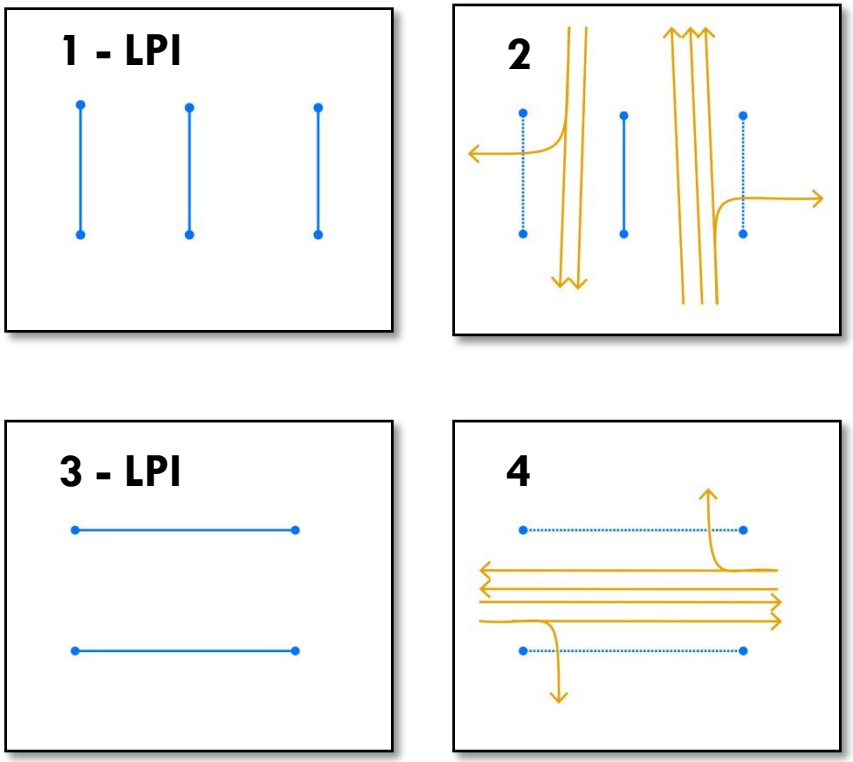
W 96 St & Broadway Concept

Ban as many turns as possible.

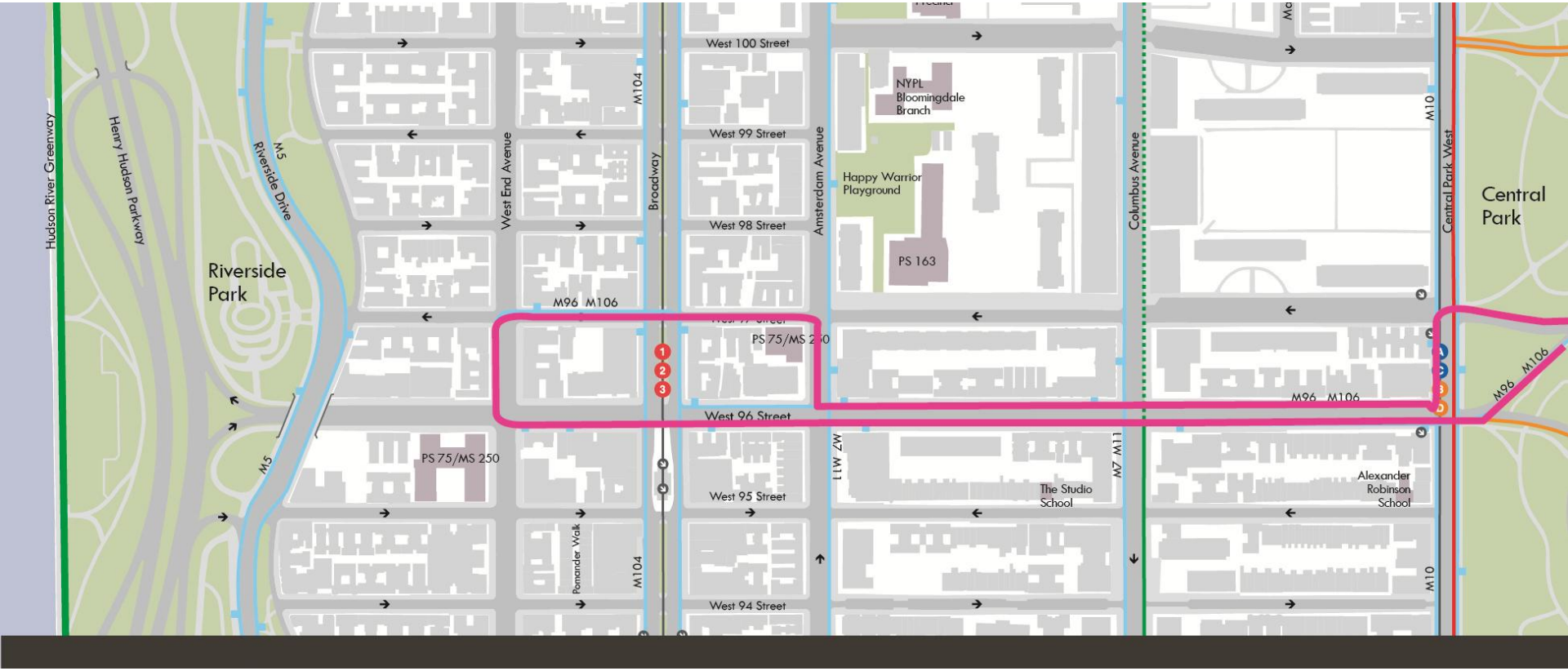
Add curb extensions where possible.

Add a median to median crosswalk.





W 96 St & Broadway Concept – Signal Phasing



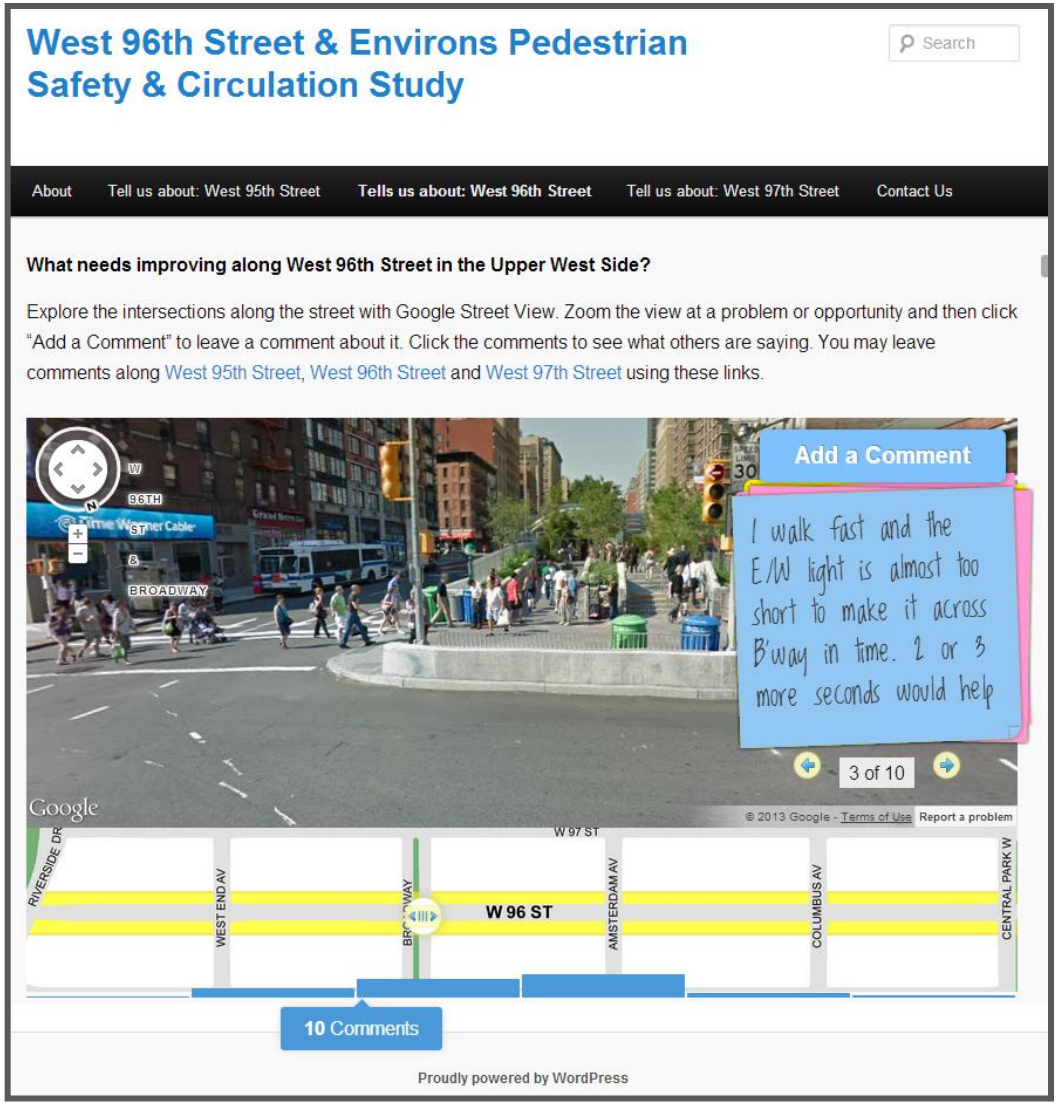
M96 & M106: Bus Route Realignment

The possibility of the W 97th Street play street ending as a result of school closing allows for a potential realignment of bus routes to avoid right turn at Broadway/W 96th St intersection.

Online Survey at Trafficcalming.info

Ongoing survey collects comments about the West 96th Street study area using Google Street View to focus on specific sites.

More than 80 comments submitted as of July 24.



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