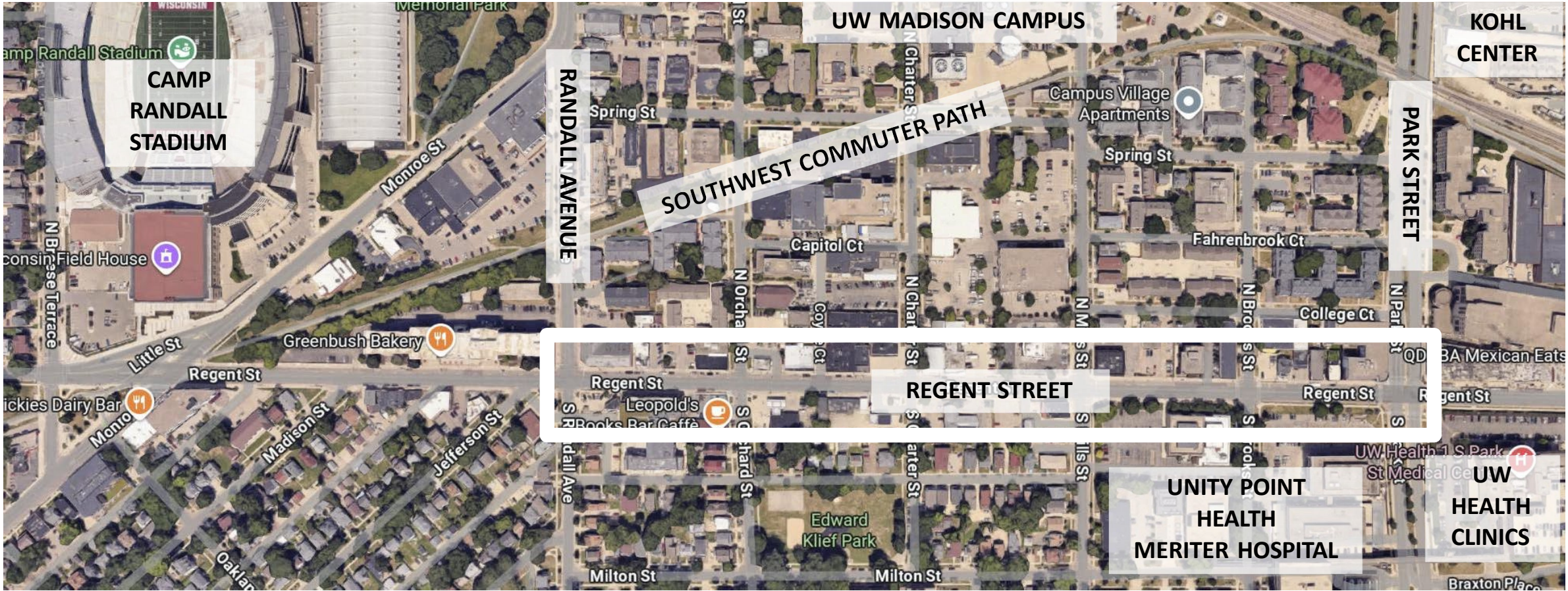
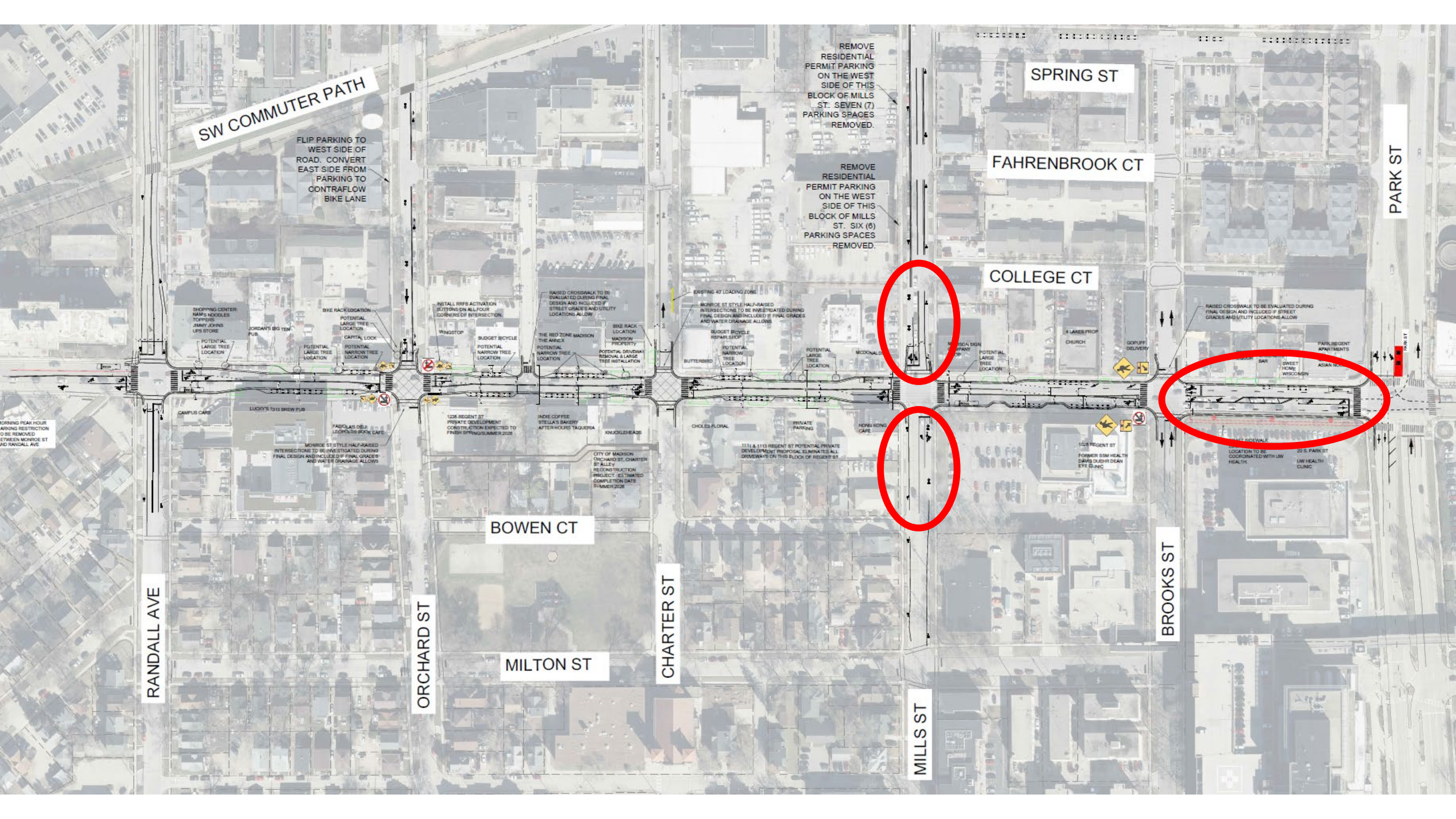


# Regent Street Reconstruction—Randall Ave to Park St



# Background

- April 15—Transportation Commission approved the staff-recommended design
  - Two lanes (one in each direction) with left turn lanes
  - Wide sidewalks with parking/delivery zones
  - Dedicated left turn lanes for westbound at Brooks Street and for eastbound at Park Street
- April 22—Board of Public Works modified design
  - Removed the left turn lanes between Brooks Street and Park Street to maintain the existing four-lane configuration
  - BPW modification required TC approval
- Staff identified improvement potential for Mills Street



SW COMMUTER PATH

FLIP PARKING TO WEST SIDE OF ROAD. CONVERT EAST SIDE FROM PARKING TO CONTRAFLW BIKE LANE

REMOVE RESIDENTIAL PERMIT PARKING ON THE WEST SIDE OF THIS BLOCK OF MILLS ST. SEVEN (7) PARKING SPACES REMOVED.

REMOVE RESIDENTIAL PERMIT PARKING ON THE WEST SIDE OF THIS BLOCK OF MILLS ST. SIX (6) PARKING SPACES REMOVED.

SPRING ST

FAHRENBROOK CT

PARK ST

COLLEGE CT

SHOPPING CENTER NAM'S NOODLES TOPPERS JIMMY JOHN'S UPS STORE

JORDAN'S BIG TEN PUB

WANGSTOP

BUDGET BICYCLE

THE RED ZONE MADISON THE ANNEX

BUDGET BICYCLE REPAIR SHOP BUTTERBREAD

MCDONALD'S

MUSICA SIGN LIBRARY CHURCH

GOPUFF DELIVERY

PARK REGENT APARTMENTS

MORNING PEAK HOUR PARKING RESTRICTION TO BE REMOVED BETWEEN MONROE ST AND RANDALL AVE

CAMPUS CARS

LUCKY'S 5013 BREW PUB

1235 REGENT ST PRIVATE DEVELOPMENT CONSTRUCTION EXPECTED TO FINISH SPRING/SUMMER 2025

INDIE COFFEE STELLA'S BAKERY AFTER HOURS TAGUENA

KNUCKLEHEADS

CHICKS FLORAL

PRIVATE PARKING

HONG KONG CAFE

1055 REGENT ST FORMER USM HEALTH DAVIS OLIVER DEAN EYE CLINIC

20 S. PARK ST LAW HEALTH CLINIC

FABRICIUS DEL LEONOLDS BOOK CAFE

MONROE ST STYLE HALF-RAISED INTERSECTIONS TO BE INVESTIGATED DURING FINAL DESIGN AND INCLUDED IF FINAL GRADES AND WATER DRAINAGE ALLOWS

CITY OF MADISON ORCHARD ST, CHARTER ST ALLEY RECONSTRUCTION PROJECT. ESTIMATED COMPLETION DATE: SUMMER 2026

311 & 113 REGENT ST POTENTIAL PRIVATE DEVELOPMENT PROPOSAL ELIMINATES ALL DRIVEWAYS ON THIS BLOCK OF REGENT ST

EXISTING 40' LOADING ZONE

MONROE ST STYLE HALF-RAISED INTERSECTIONS TO BE INVESTIGATED DURING FINAL DESIGN AND INCLUDED IF FINAL GRADES AND WATER DRAINAGE ALLOWS

POTENTIAL LARGE TREE LOCATION

RAISED CROSSWALK TO BE EVALUATED DURING FINAL DESIGN AND INCLUDED IF STREET GRADES AND UTILITY LOCATIONS ALLOW

RAISED CROSSWALK TO BE EVALUATED DURING FINAL DESIGN AND INCLUDED IF STREET GRADES AND UTILITY LOCATIONS ALLOW

RANDALL AVE

ORCHARD ST

BOWEN CT

MILTON ST

CHARTER ST

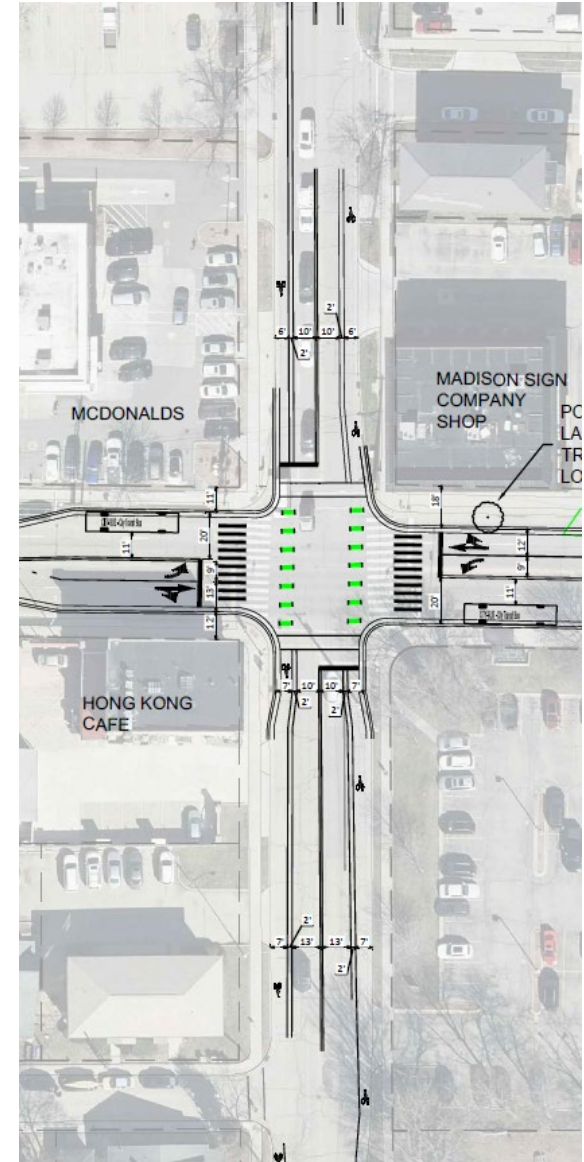
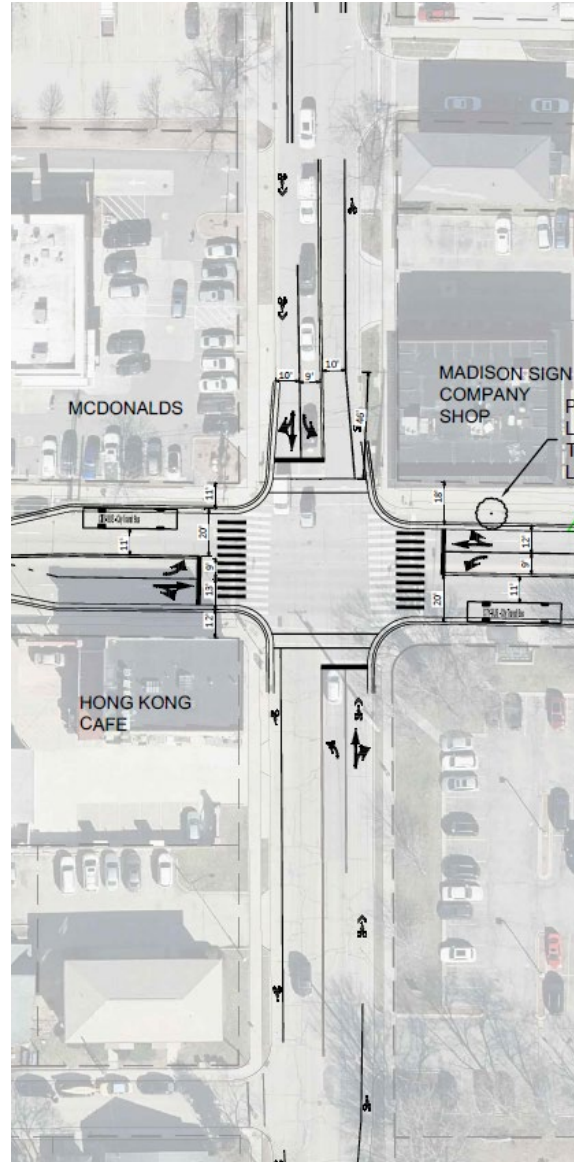
MILLS ST

BROOKS ST

**Mills Street bike lanes**

# Background

- Separately, staff recommends modifying the Mills Street design based on feedback from previous TC meetings and Mills Street being on the All Ages & Abilities bike network.



# Mills Street—Afternoon Signal Operations

			Directional Delay (seconds)			
	v/c	Overall Delay	EB	WB	NB	SB
With left turn lanes	0.82	16 sec	14	13	28	29
No left turn lanes	0.87	23 sec	21	18	33	39

			50 <sup>th</sup> Queues		95 <sup>th</sup> Queues	
	v/c	Overall Delay	NB	SB	NB	SB
With left turn lanes	0.82	16 sec	36 ft	52 ft	76 ft	100 ft
No left turn lanes	0.87	23 sec	74 ft	99 ft	121 ft	154 ft

Explanation:

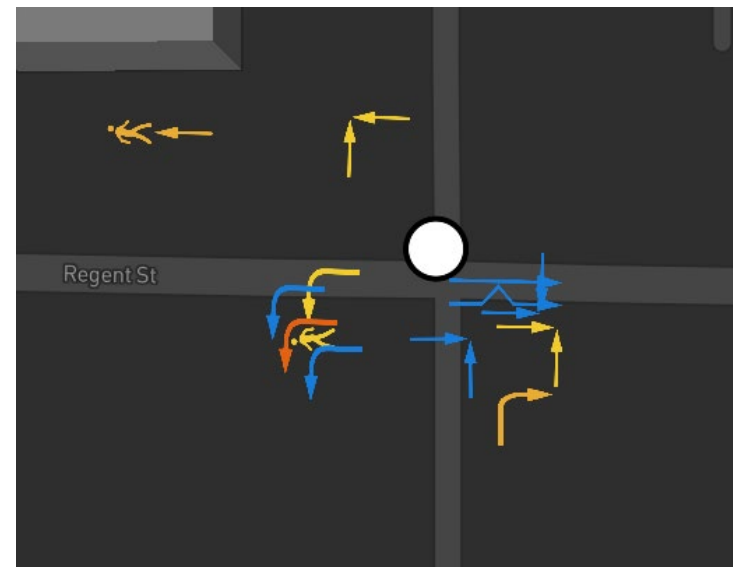
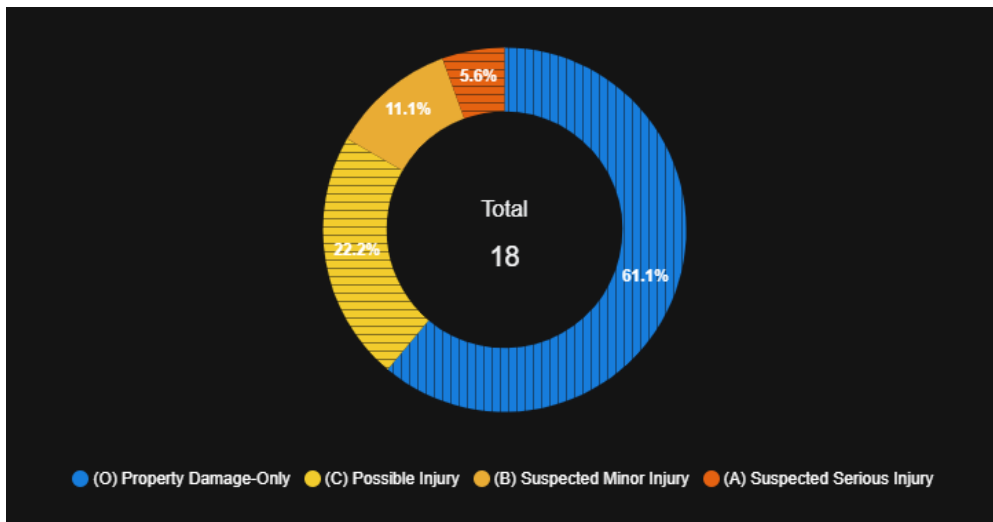
- V/C is Volume/Capacity. A v/c of 1.0 means all green time at the intersection is being used.

# Mills Street Summary

- Mills Street is part of the the All Ages & Abilities Bike Network
- Reducing lanes at the intersection allows for tighter corner radii at the northwest and southeast corners
- While queues on Mills Street are expected to be longer than today, upgraded traffic signals with vehicle detection will help manage queues and maintain efficient intersection operations

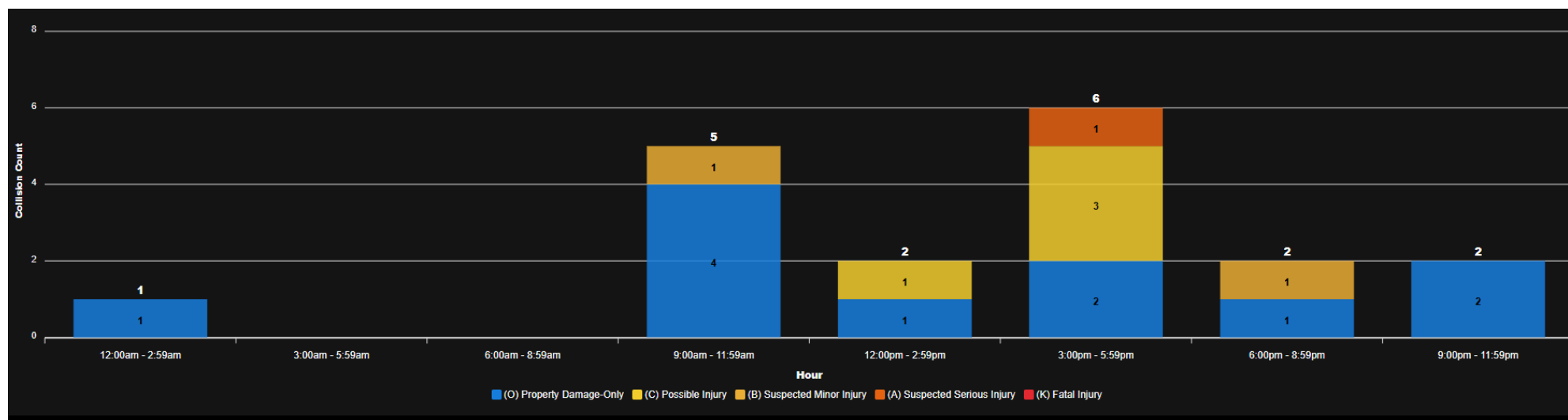
**Brooks Street to Park Street**

# Brooks St Intersection 5-Year Crash History

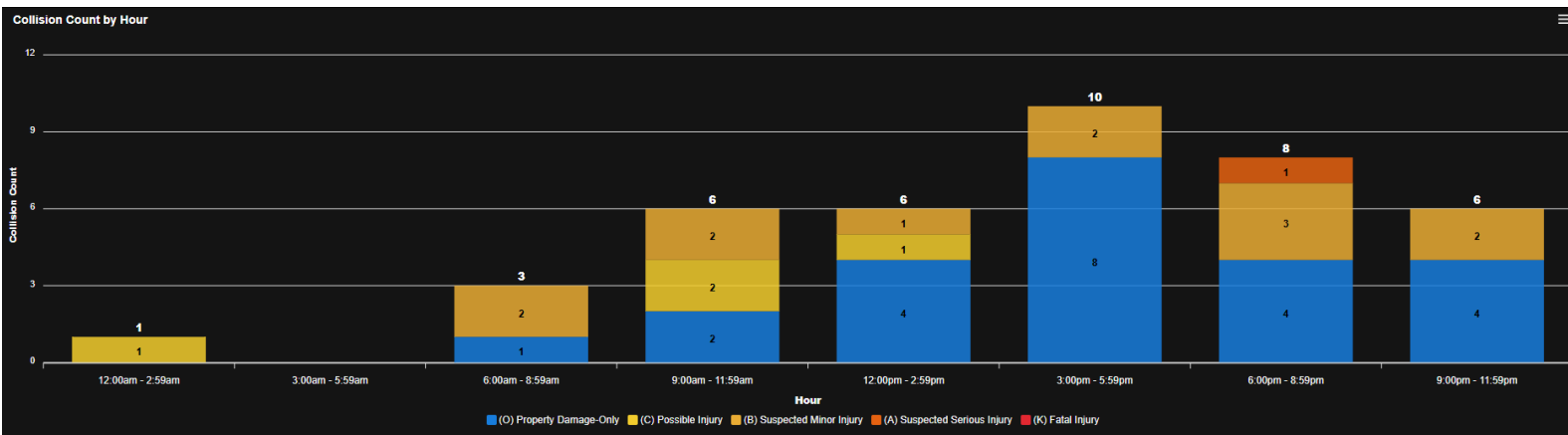
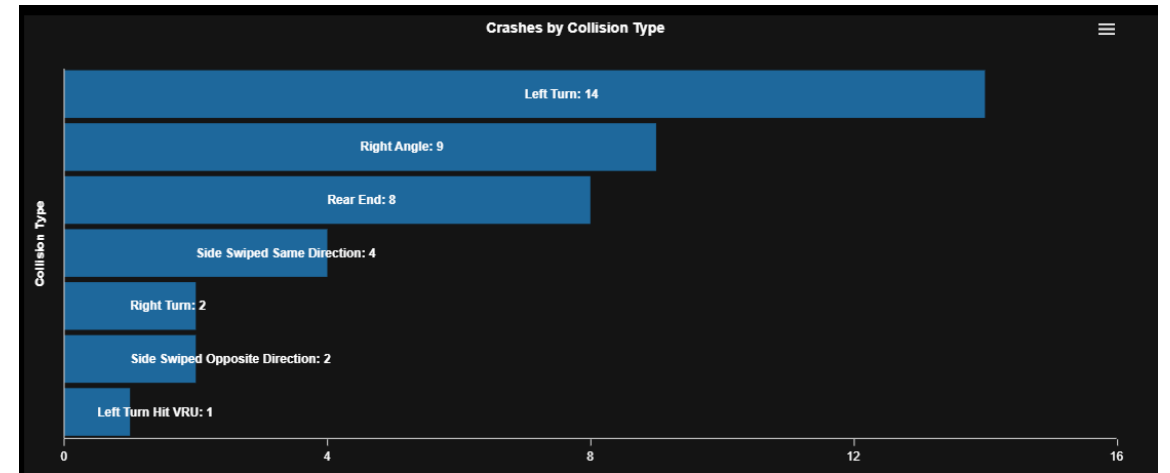
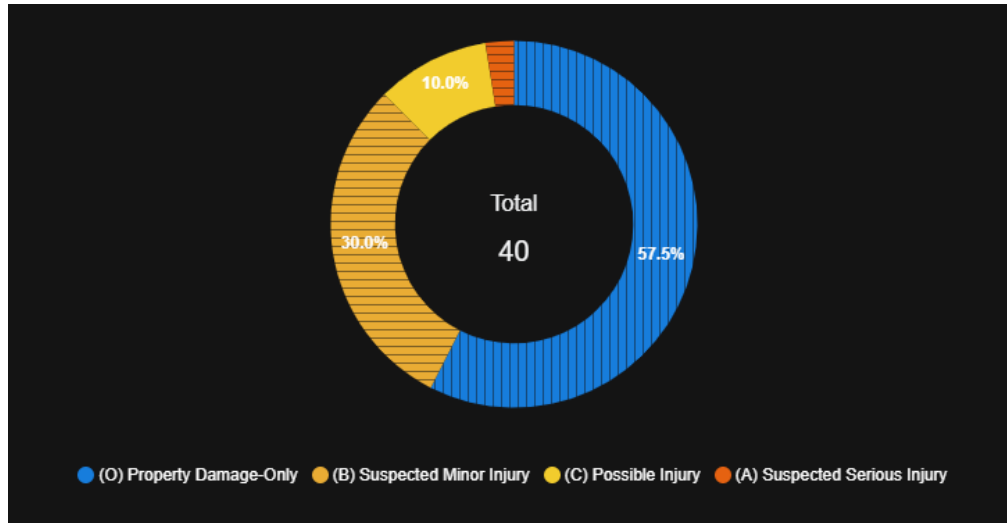
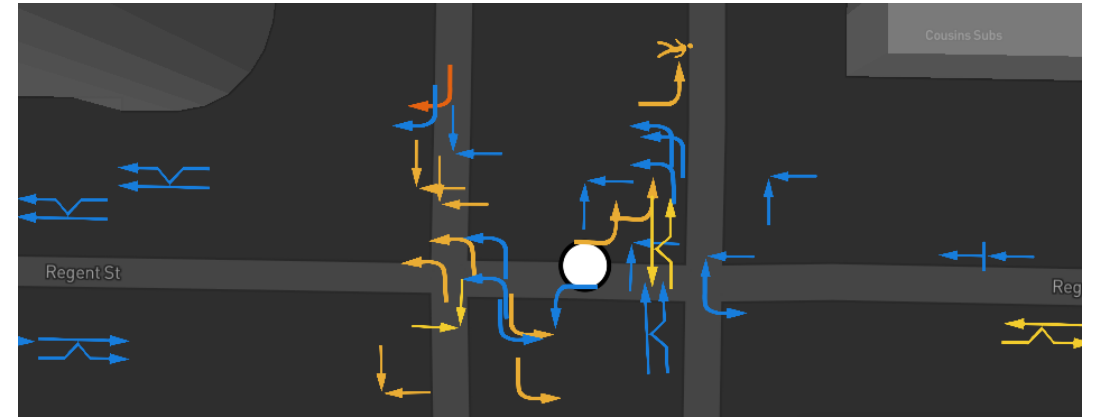


**Total Crash Count 18**

- 3rd among 12 intersections in *Ward 58*
- 8th among 54 intersections in *Alder District 8*
- T-51st among 659 intersections in *Transit Oriented Development Overlay District*
- T-113th among all 1,794 intersections in *Madison*

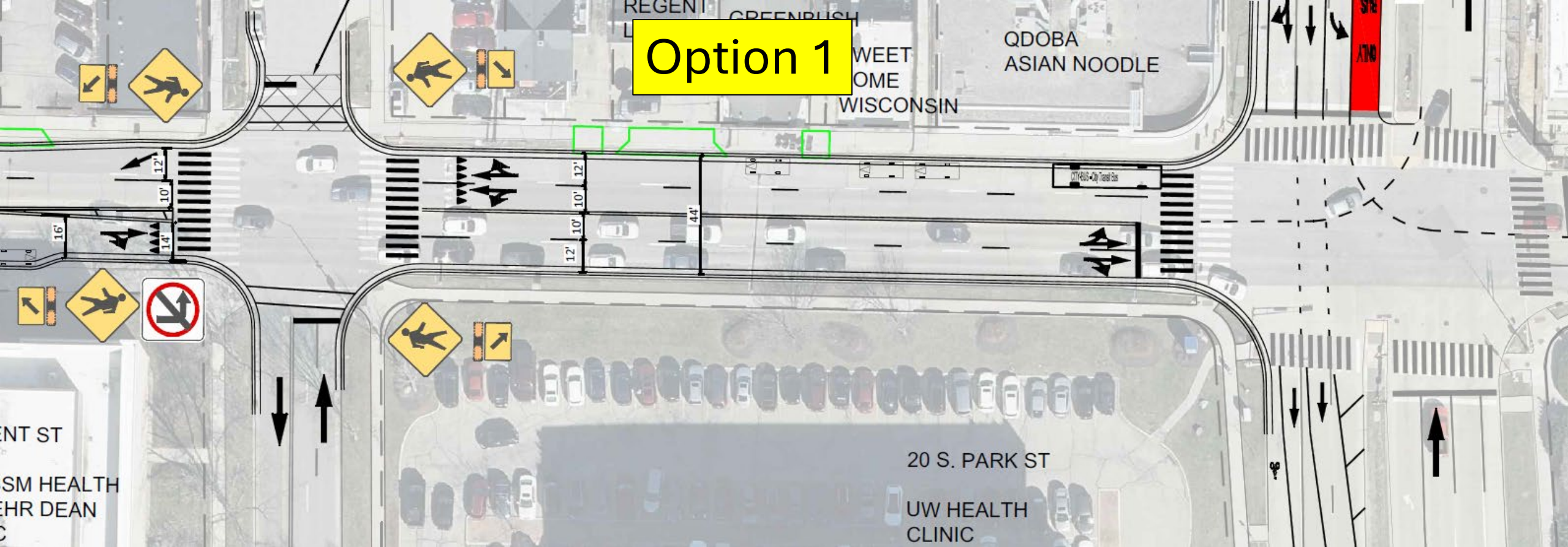


# Park St Intersection 5-Year Crash History



Total Crash Count **40**

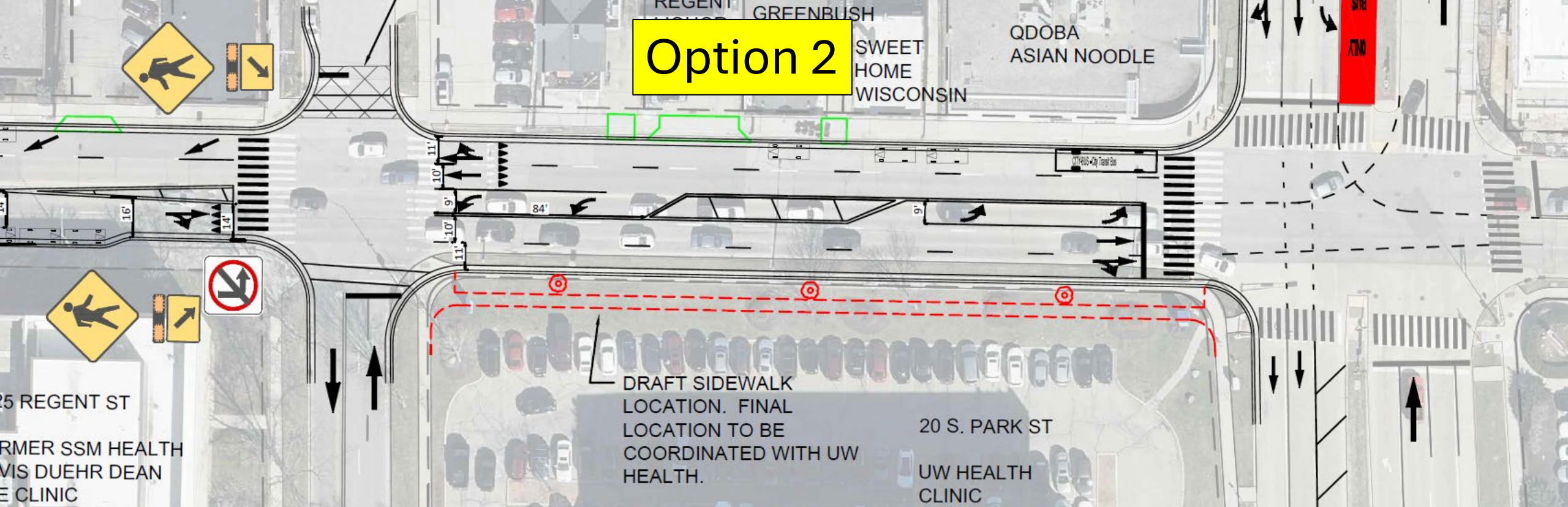
- 1st among 12 intersections in [Ward 58](#)
- 2nd among 54 intersections in [Alder District 8](#)
- 24th among all 1,794 intersections in [Madison](#)



Option 1—Four-lane Configuration

- Pros:**
- Shortest pedestrian crossing—44’ vs 54’ today and 54’ with the other lane options
  - Maintains existing UW Health property and trees
  - Maintains both crosswalks at Brooks Street

- Cons**
- Does not allow for protected-only left turn operations
  - Increased crash risk associated with permissive left turns
    - Increased conflicts with peds in north leg crosswalk
    - Increased conflicts with westbound thru traffic
  - Greater delay compared to other options
  - Queues regularly extend through the Brooks Street intersection



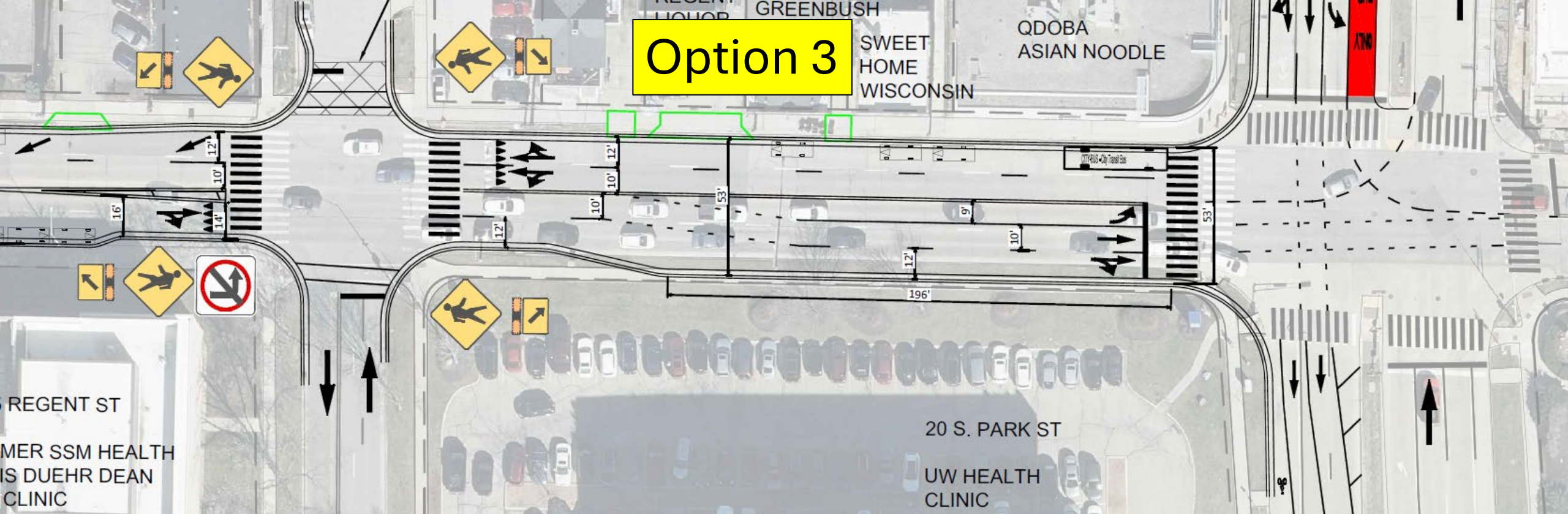
### Option 2—Left turn lanes for **both** WB at Brooks Street and EB at Park Street

#### Pros:

- Allows for protected-only eastbound left turns
- Improves pedestrian safety in the north leg crosswalk
- Reduces crashes associated with eastbound left turns by allowing protected-only left turns
- Reduces congestion and intersection queueing
- Improves future BRT operations and reliability

#### Cons

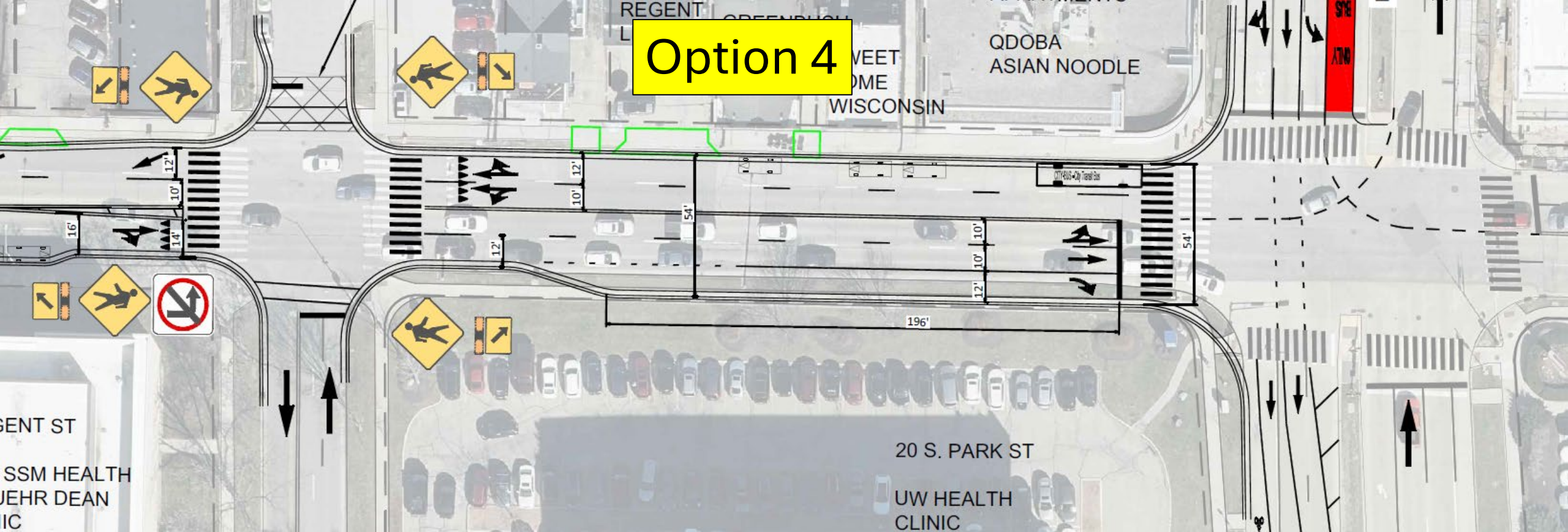
- Longer pedestrian crossing of west leg of Park Street (although same as today)
- Reduces UW Health property and tree removal (although trees would be replaced)
- Crosswalk on the east leg of the Brooks Street intersection is longer or removed entirely



Option 3--Left Turn Lane for EB at Park Street

- Pros:**
- Maintains both Brooks Street crosswalks
  - Improves pedestrian safety in the north leg crosswalk
  - Reduces crashes associated with eastbound left turns by allowing protected-only left turn operations
  - Reduces congestion and intersection queueing
  - Improves future BRT operations and reliability

- Cons**
- Longer west leg crosswalk compared to the 4-lane option (although same crossing distance as today)
  - Likely loss of two existing trees; although those would be replaced






Option 4--Right Turn Lane for EB at Park Street

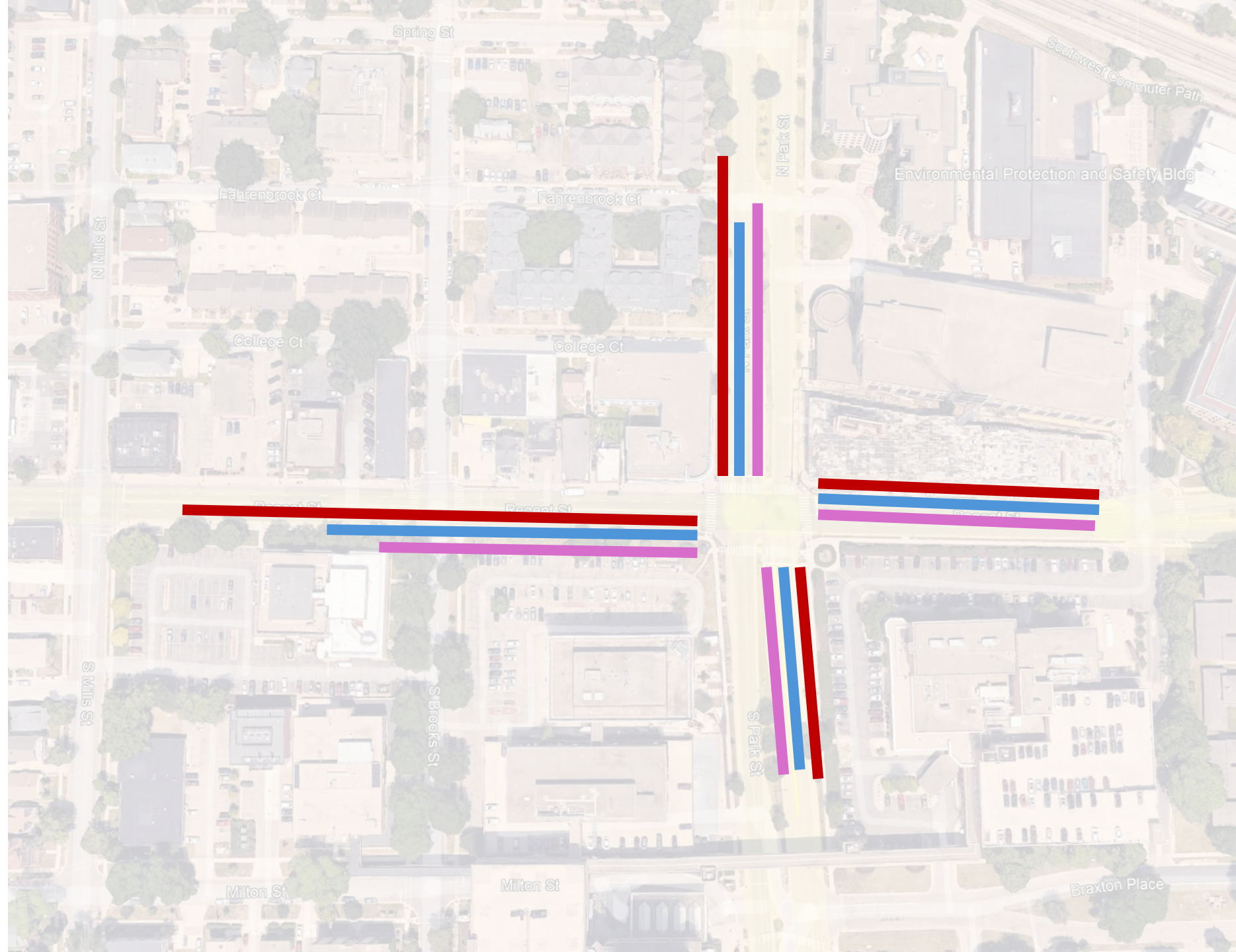
- Pros:**
- Shortest eastbound queues
  - Keep the Brooks Street intersection clear more often
  - Park Street eastbound right turns can be overlapped with northbound left turns for signal operation efficiency
  - Maintains both crosswalks at Brooks Street

- Cons**
- Eastbound left turns would remain protected/permissive
  - Higher pedestrian conflict risk in the north leg crosswalk compared to protected-only left turns
  - Longer west leg Park Street crosswalk distance compared to 4 lane option

# 95<sup>th</sup> Percentile Queues




Think of this as the longest reasonably expected line of vehicles waiting at the signal. These queues are only expected to be longer than this 5% of the time.

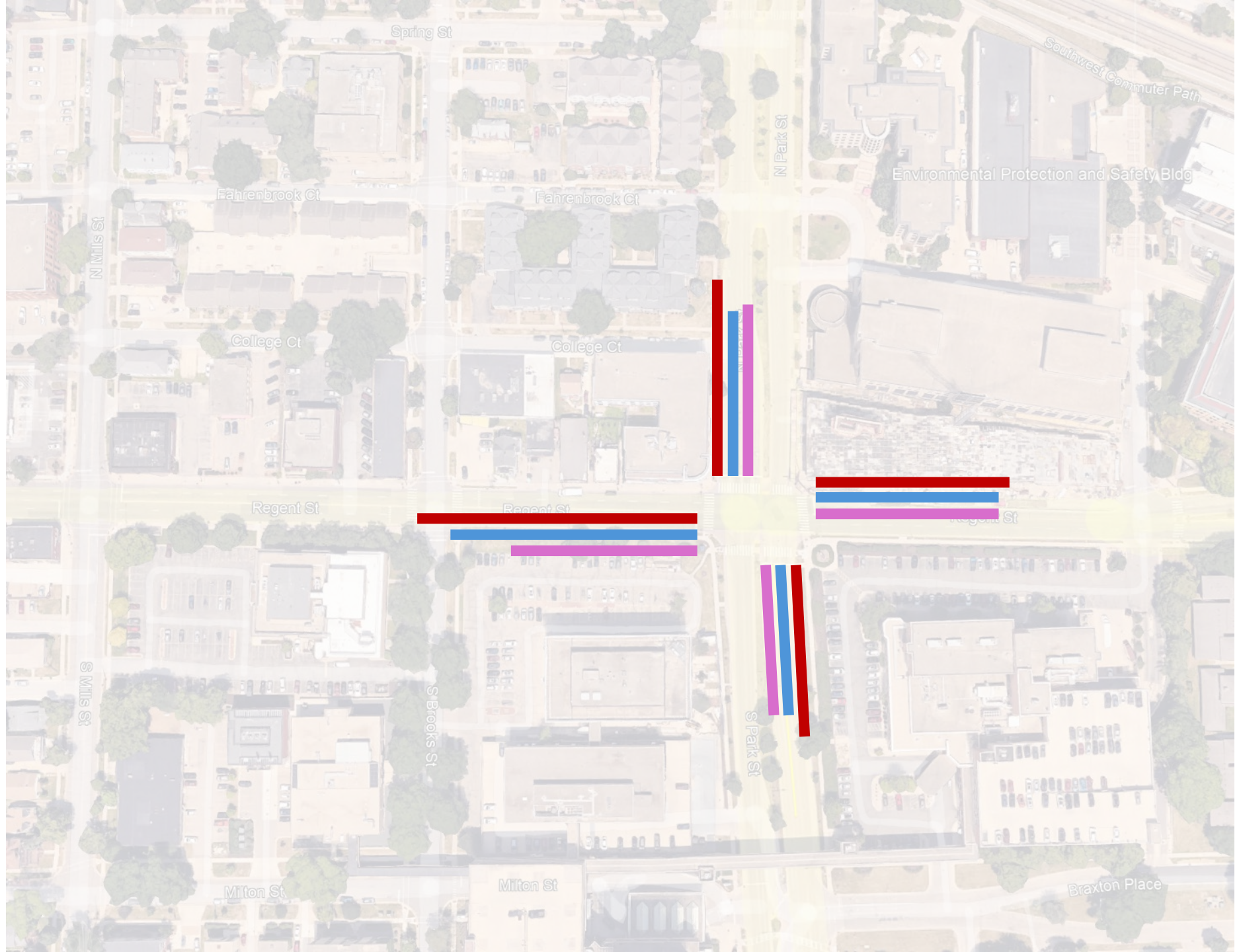
-  **Option 1**  
Four-Lane
-  **Options 2 & 3**  
Left-Turn Lane
-  **Option 4**  
Right-Turn Lane



# 50<sup>th</sup> Percentile Queues

These are the typical queues.  
Expect the queues to be longer than this half of the time and shorter than this half of the time.

-  **Option 1**  
Four-Lane
-  **Options 2 & 3**  
Left-Turn Lane
-  **Option 4**  
Right-Turn Lane



# Delays

REGENT STREET & PARK STREET OPERATIONS (PM PEAK)

	Cycle Length (Seconds)	Overall		APPROACH VEHICLE DELAY				PEDESTRIAN DELAY			
		DELAY	V/C	EB	WB	NB	SB	EB	WB	NB	SB
Option 1----Four Lane	130-FREE	52	0.98	45	37	52	79	44.9	46.5	55.4	53.6
Options 2 & 3----Add Left-Turn Only	120-FREE	39	0.79	29	41	44	50	36.8	41.7	50.4	48.6
Option 4----Add Right-Turn Only	120-FREE	39	0.85	24	39	47	56	36.0	41.7	50.4	48.6

## Explanation:

- Cycle length represents all signal phases maxed out
- Pedestrian delay represents worst-case scenario for peds arriving at the intersection
- Option 1 requires longer signal phases which leads to higher pedestrian delay
- V/C is Volume/Capacity. A v/c of 1.0 means all green time at the intersection is being used.

# Staff Recommendation

Although the west leg crosswalk would be longer, staff recommends adding a dedicated left-turn lane at Park Street. The operational and safety benefits of a **protected-only left-turn** phase at this intersection outweigh the drawback of the longer crossing distance compared to the four-lane option. This crosswalk distance would remain the same as it is today and overall intersection pedestrian delay would be lower.

## Key Benefits

- Eliminates conflicts between eastbound left-turning vehicles and pedestrians in the north crosswalk
- Improves eastbound through traffic operations and reduces sideswipe and rear-end crash potential
- Improves future North/South Bus Rapid Transit reliability and performance

# Two Recommended Motions

*Move to approve the Mills Street lane configuration of a single lane in each direction and bike lanes continuing to the Regent Street intersection.*

*Move to approve the lane configuration between Brooks Street and Park Street which includes \_\_\_\_\_.*

- *Option 1—The four-lane configuration*
- *Option 2—Both a westbound dedicated left turn lane at Brooks Street and an eastbound dedicated left-turn lane at Park Street*
- *Option 3—An eastbound dedicated left turn lane at Park Street*
- *Option 4—An eastbound dedicated right turn lane at Park Street*