



8th St NE between Franklin and Monroe

Traffic Safety, School Operations, and Bicycle Connections

September 15, 2020 – ANC 5E Update

Background

- 8th Street NE connects the Met Branch Trail
 - Currently being extended north to Fort Totten
- Relatively high share of heavy vehicles
- Relatively low overall traffic volumes
- Relatively high share of bicyclists at peak hour
- Desire to separate bikes from cars and trucks
- New signal at 8th and Monroe St NE
- Cluster of 4 schools on Edgewood St/8th St NE
- Infeasible/distant future off-street trail connection

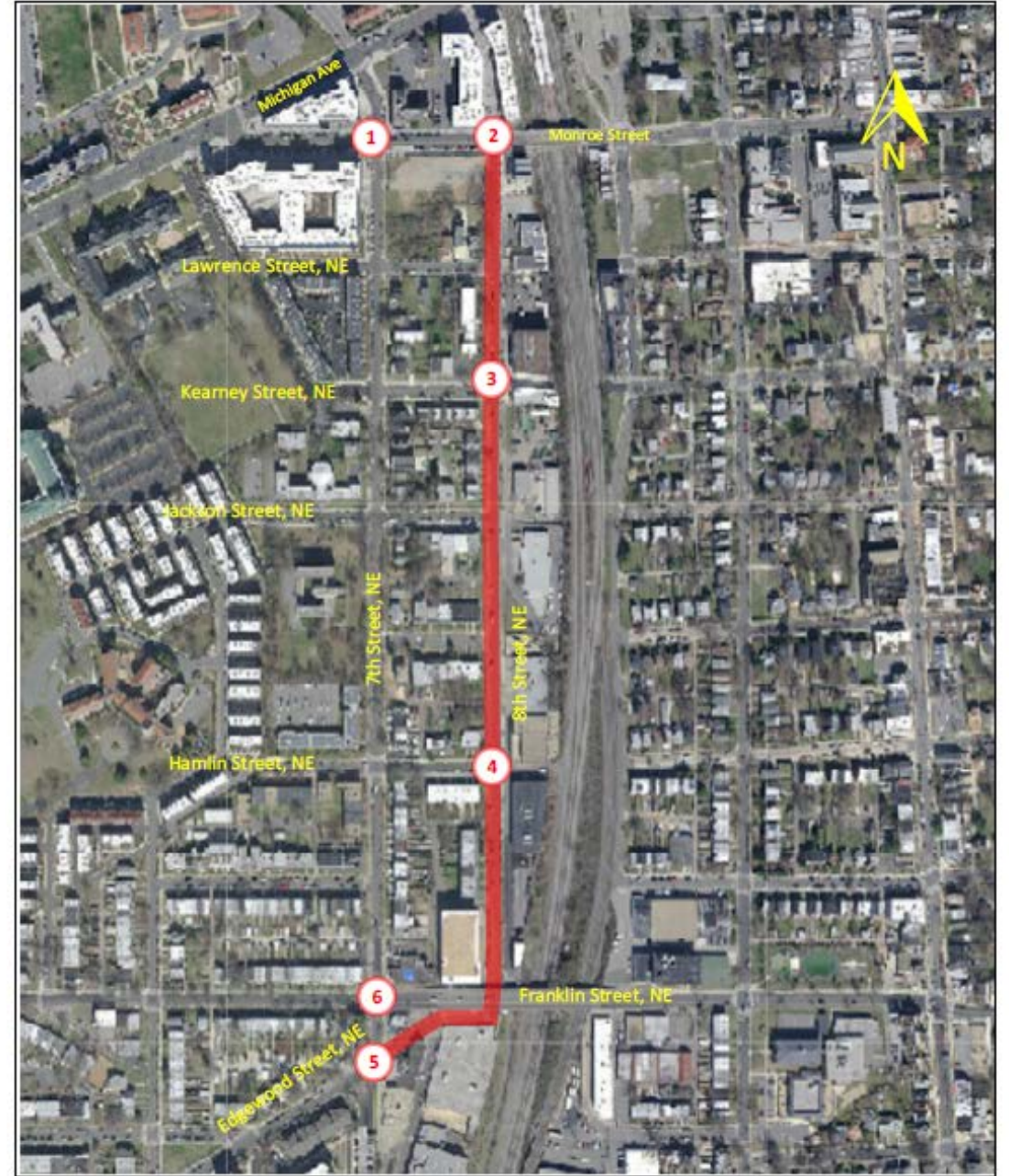
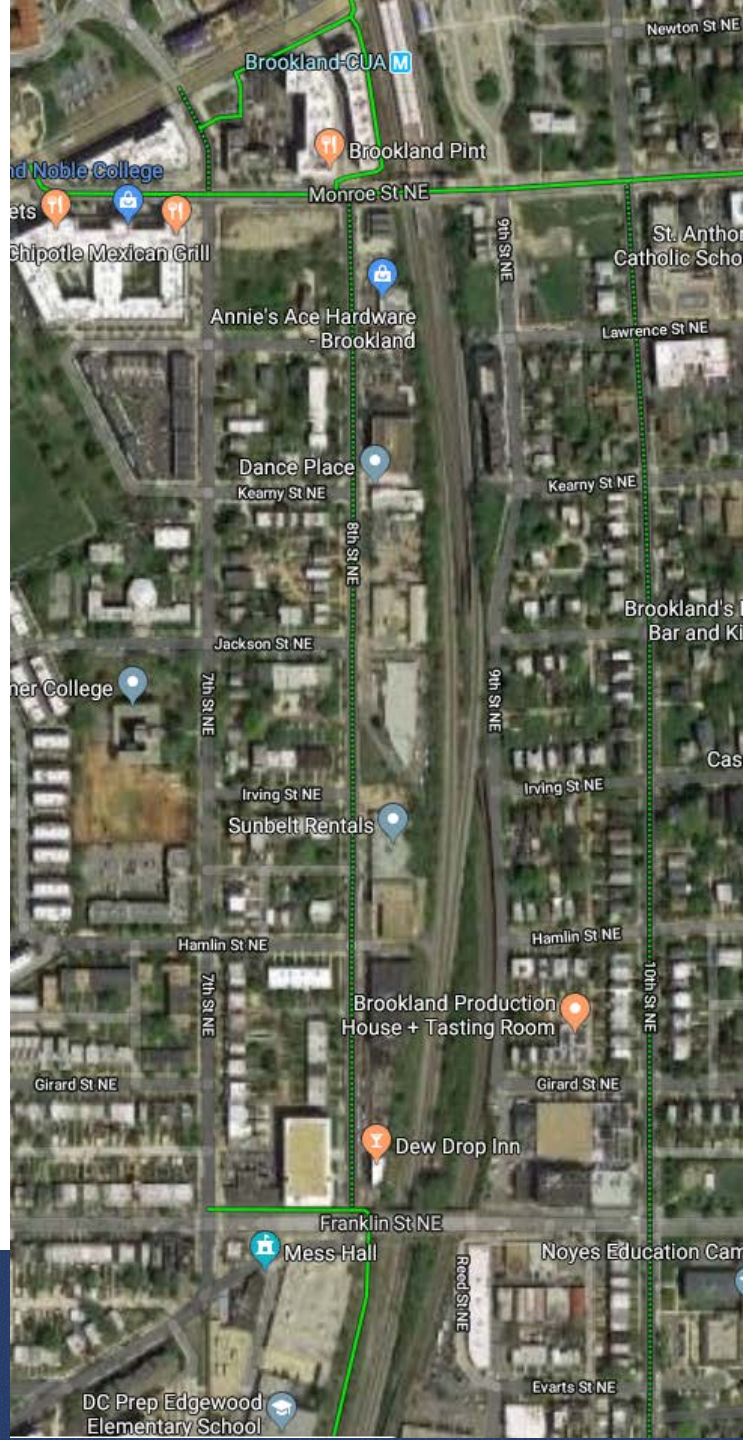


Figure 2: Study Area

Previous Work Done

- 2018 - 2019
 - Monroe Street Bridge project adds traffic signal at intersection of 8th St NE and Monroe St NE
- 2018
 - DDOT develops two-way cycle track concept on east side of 8th St NE between Franklin and Monroe
 - Concept is put on hold due to concerns over safety
 - 19 driveway crossings, overly wide driveways with primarily trucks
- 2019
 - DDOT Safe Routes to School traffic study recommends converting Edgewood St NE/8th St NE between 7th St NE and Hamlin St NE to one-way northbound operations to improve pick up and drop off for students
 - DDOT develops two-way cycle track concept on west side of 8th St NE between Franklin and Monroe





8th Street NE on-street bike & traffic safety concepts

Existing Conditions - East Side Curbside



Existing Conditions - West Side Curbside



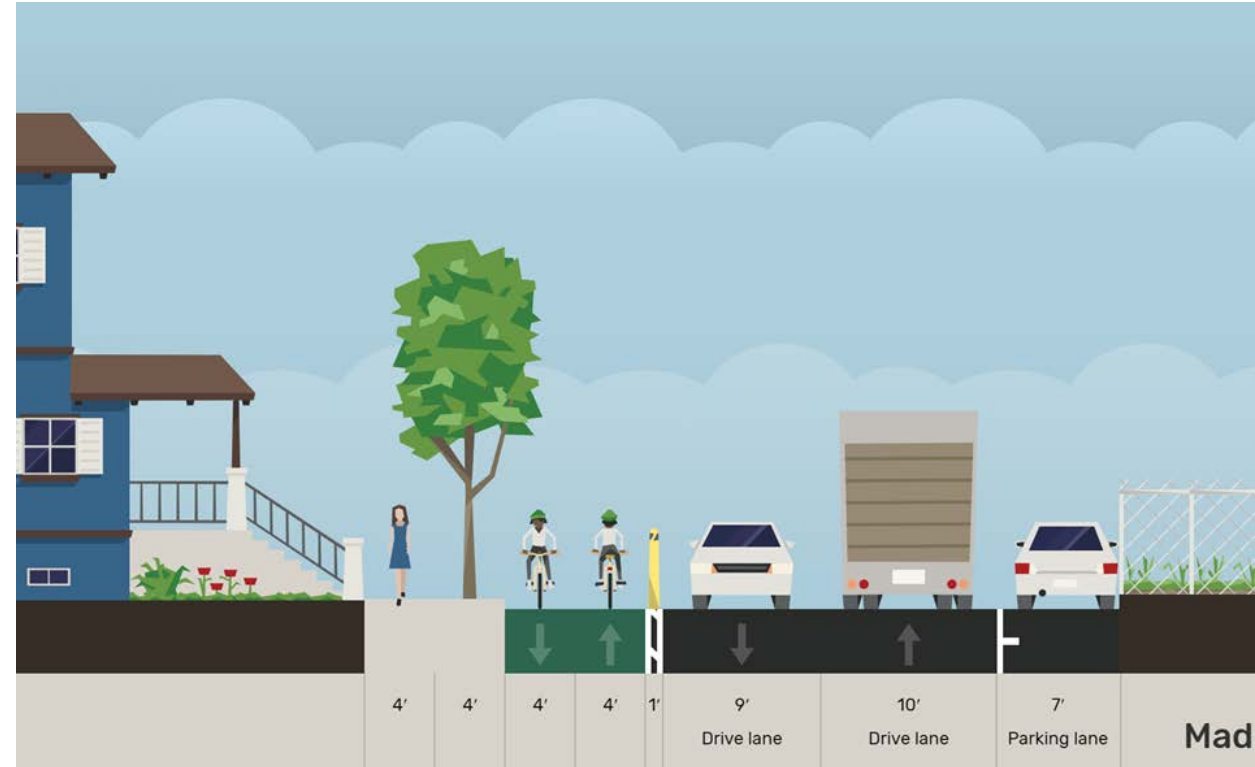
Concept 2A: West Side Two-Way Cycle Track (Two-way Traffic)

Pros:

- Separates bicyclists from traffic
- Fewer conflicts between bicyclists and vehicles
 - 5 street crossings; 6 alleys, 2 driveways
- Connects Metropolitan Branch Trail
- Preserves 2-way travel on 8th St for vehicles

Cons:

- Higher parking space removal
- Some RPP/fronting residents
- One Handicap Parking Space – must be relocated
- Conflicts with turning vehicles at cross-streets
- Conflicts with turning vehicles at driveways for vehicle traffic
- Minimum design standards for parking, travel lanes, bike lanes



Concept 2B: West Side Two-way Cycle Track with One-way Conversion

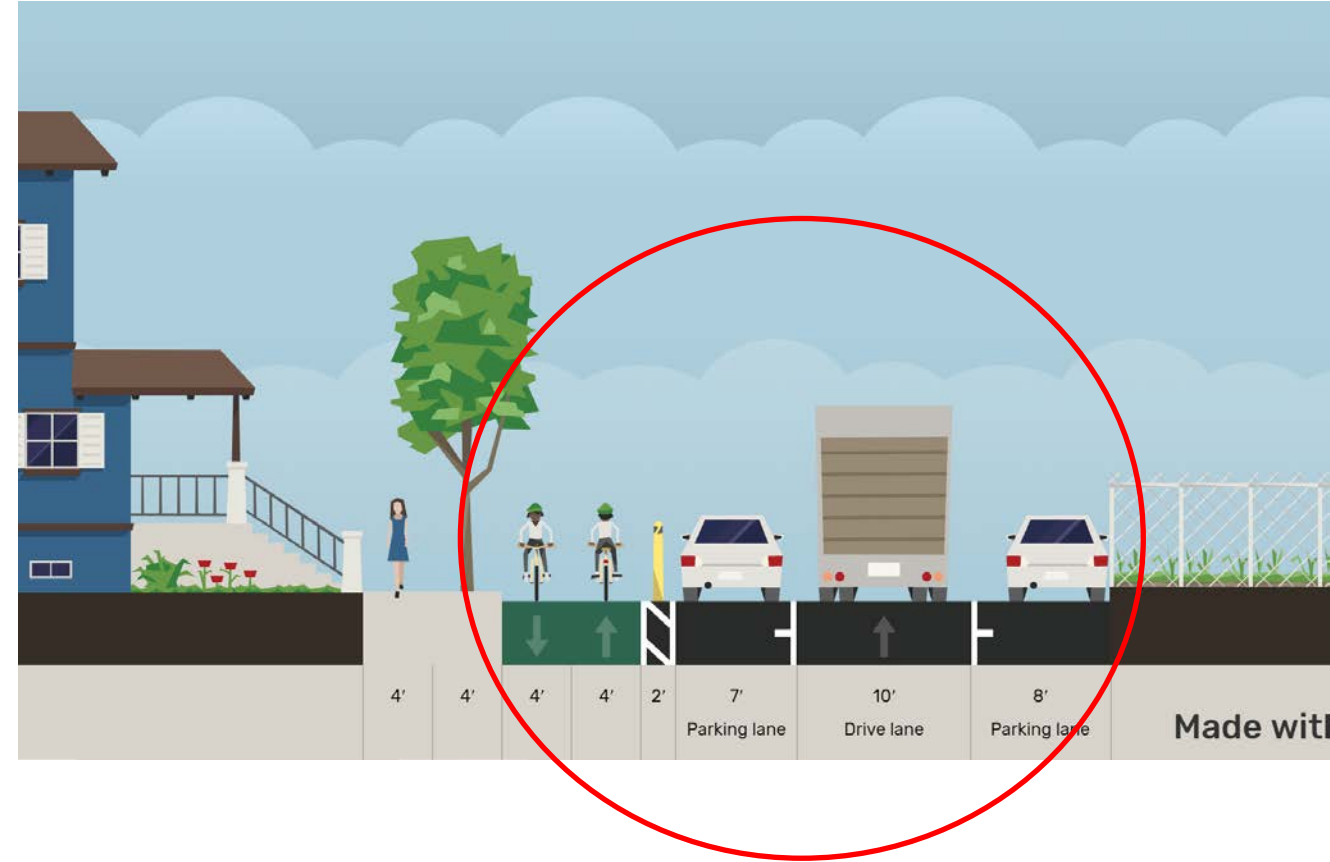
DDOT Recommended Option

Pro:

- Preserves parking on both sides *where possible*
- Operational improvements for school pick up drop off
- Separates bicyclists from traffic
- Fewer conflicts with traffic
 - 5 street crossings; 6 alleys, 2 driveways

Cons:

- Minimal traffic impacts at 7th and Franklin; 7th and Monroe
 - Can be mitigated by addition of turn lanes
- Operational impacts to business delivery, large vehicle routing
- Still parking impacts due to turning movement needs and site distance requirements
- Minimum design standards for parking, travel lanes, bike lanes



ISSUE #1 - PARKING



Parking Context – Existing Conditions

Block	Existing Parking Spaces on West Side	Notes	Existing Parking Spaces on East Side	Notes
Monroe to Lawrence	0		9	Multiple driveways, setback from intersection
Lawrence to Kearny	14	Non-RPP	11	Non-RPP
Kearny to Jackson	13	RPP; One Handicap Space	13	Non-RPP
Jackson to Irving	14	Non-RPP	13	Non-RPP
Irving to Hamlin	14	Non-RPP	0	Multiple driveways
Hamlin to Franklin	25	Non-RPP	20	Non-RPP; driveways
Total	80		66	

Parking Impacts – With West Side PBL

Concept 2A:

- Approximately 80 parking spaces removed (out of 146)
 - Estimated 13 RPP/67 Non-RPP
- One handicap parking space removed/relocated

Concept 2B:

- Approximately 56 parking spaces removed (out of 146)
- One handicap parking space would be adjacent to proposed cycle track
- Additional parking spaces may be removed to accommodate traffic operations and pick up/drop off
- Additional parking removal on Monroe St at 7th St NE to accommodate left turn pocket (4-5 spaces)

Either Concept:

- Consider adding RPP where there is currently non-RPP
 - 700 Block Hamlin (both sides)
 - 700 Block Kearny (south side)
 - 700 Block Monroe (south side)
- Consider implementing metered parking on east side of 8th St NE in certain blocks

ISSUE #2 – TRAFFIC

Existing Traffic Context: 15 Mph Speed Limit

TABLE 2: Vehicle Classification (FHWA 13-Class Scheme) – 3100 block of 8th Street, NE

Vehicle Class	Weight (lbs.)	Description	Day 1	Day 2	Day 3	72-HOUR
1	≤ 6,000	Bikes/Motorcycles	25	98	78	201
2		Passenger Cars & Trailers	895	698	1,148	2,741
3	6,001-10,000	Pickups, Panels & Vans	535	980	962	2,477
4	10,001-14,000	Buses	17	20	26	63
5		Single Unit 2-Axle Trucks-6 Tires	79	120	112	311
6	14,001-16,000	Single Unit 3-Axle Trucks	6	12	7	25
7		Single Unit 4-Axle Trucks	0	1	0	1
8	16,001-19,500	Single Trailer 3-or-4-Axle Trucks	7	6	8	21
9		Single Trailer 5-Axle Trucks	0	0	0	0
10	19,501-26,000	Single Trailer ≥6-Axle Trucks	0	0	0	0
11	26,001-33,000	Multi-Trailer ≤5-Axle Trucks	0	0	0	0
12		Multi-Trailer 6-Axle Trucks	0	0	0	0
13	≥ 33,001	Multi-Trailer ≥7-Axle Trucks	0	0	0	0
Not Classified	-	-	105	236	136	477

Traffic count data from June 2018

Traffic volumes relatively low

- Roughly 2,000 – 4,000 vehicles per day

Large vehicles roughly 6% of traffic

Traffic Analysis – One Way Conversion

- Studied impacts of one-way conversion on 8th, Monroe, 7th, and Franklin St NE
- Findings:
 - Entire study area will operate at acceptable levels or better at rush hour
 - 7th and Franklin NE
 - Install dedicated southbound left turn from 7th to eastbound Franklin
 - Possible relocation of southbound G8 bus stop
 - Stops also located at 7th/Hamlin and 7th/Edgewood
 - 7th and Monroe NE
 - Install dedicated left turn from westbound Monroe to southbound 7th
 - Moderate traffic diversion onto 7th St NE
 - 2 – 3 additional cars per minute during rush hour

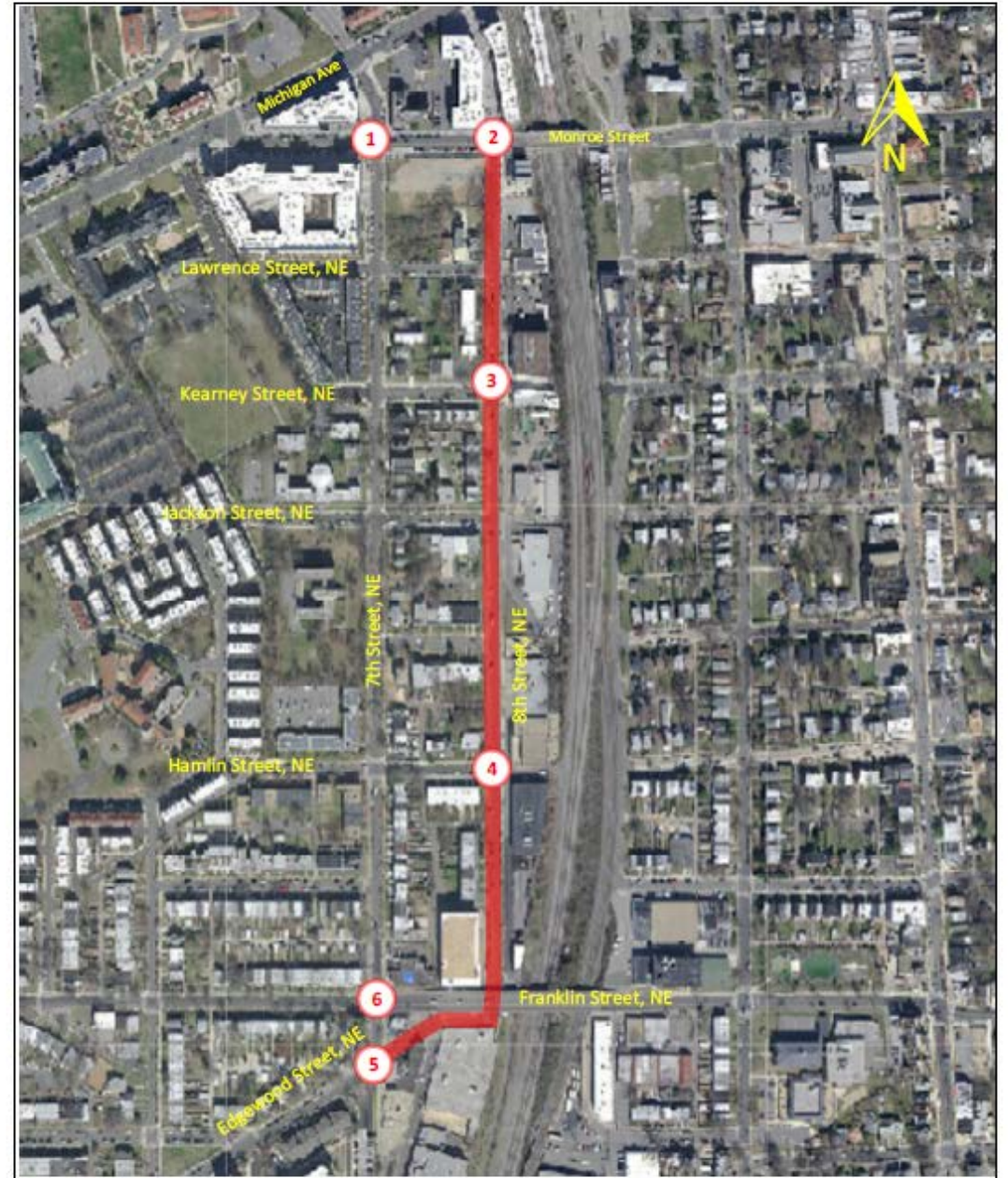


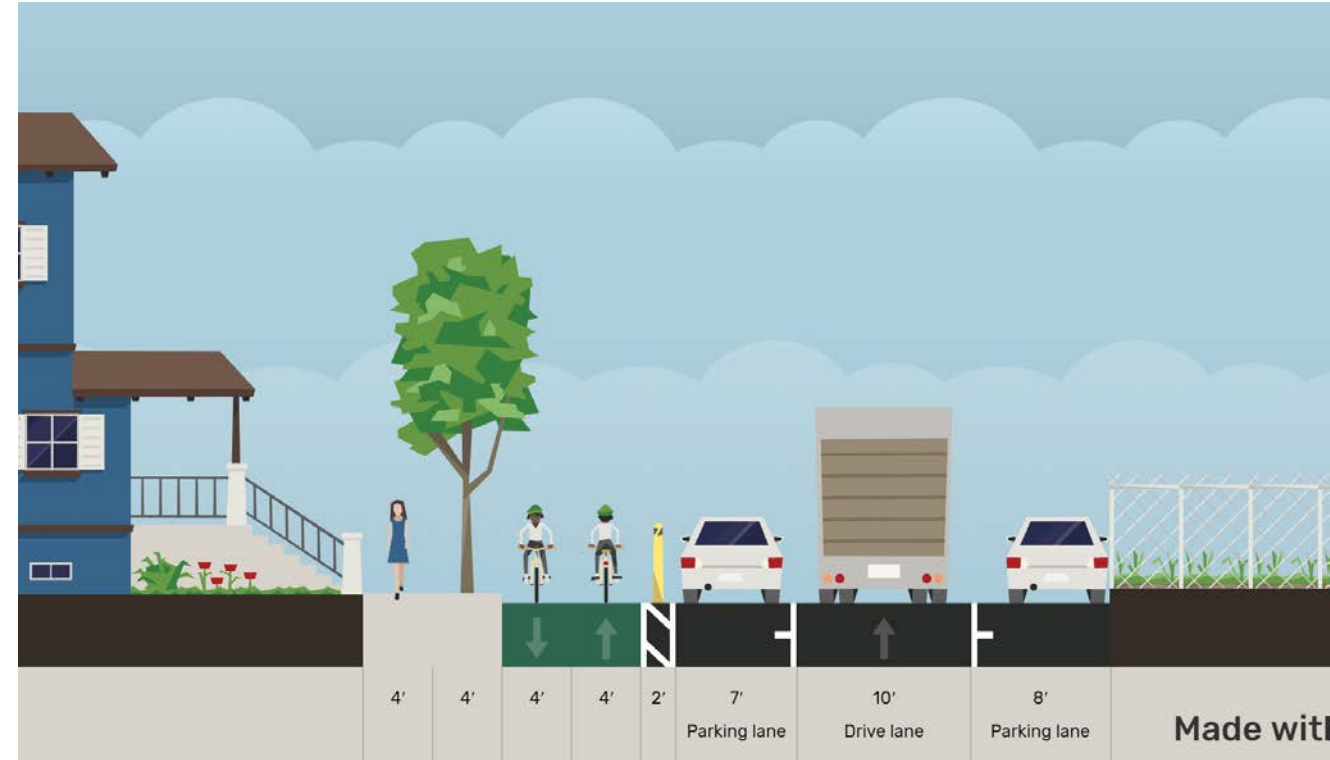
Figure 2: Study Area

ISSUE #3 – LOADING/TRUCKS

Loading/Trucks Impacts

Design will need to address:

- Impacts of one -way conversion on:
 - Curbside delivery
 - Freight/oversize vehicles
 - Oversize vehicle routing to/from businesses on 8th St potentially routing onto 7th and across side streets
 - Limited clearance at Franklin St bridge
 - Providing space for vehicles turning into/out of driveways
- Possible solutions:
 - Designated loading/unloading zones
 - Could increase parking removal
 - Specific routing on cross streets
 - Changes to truck restricted routes

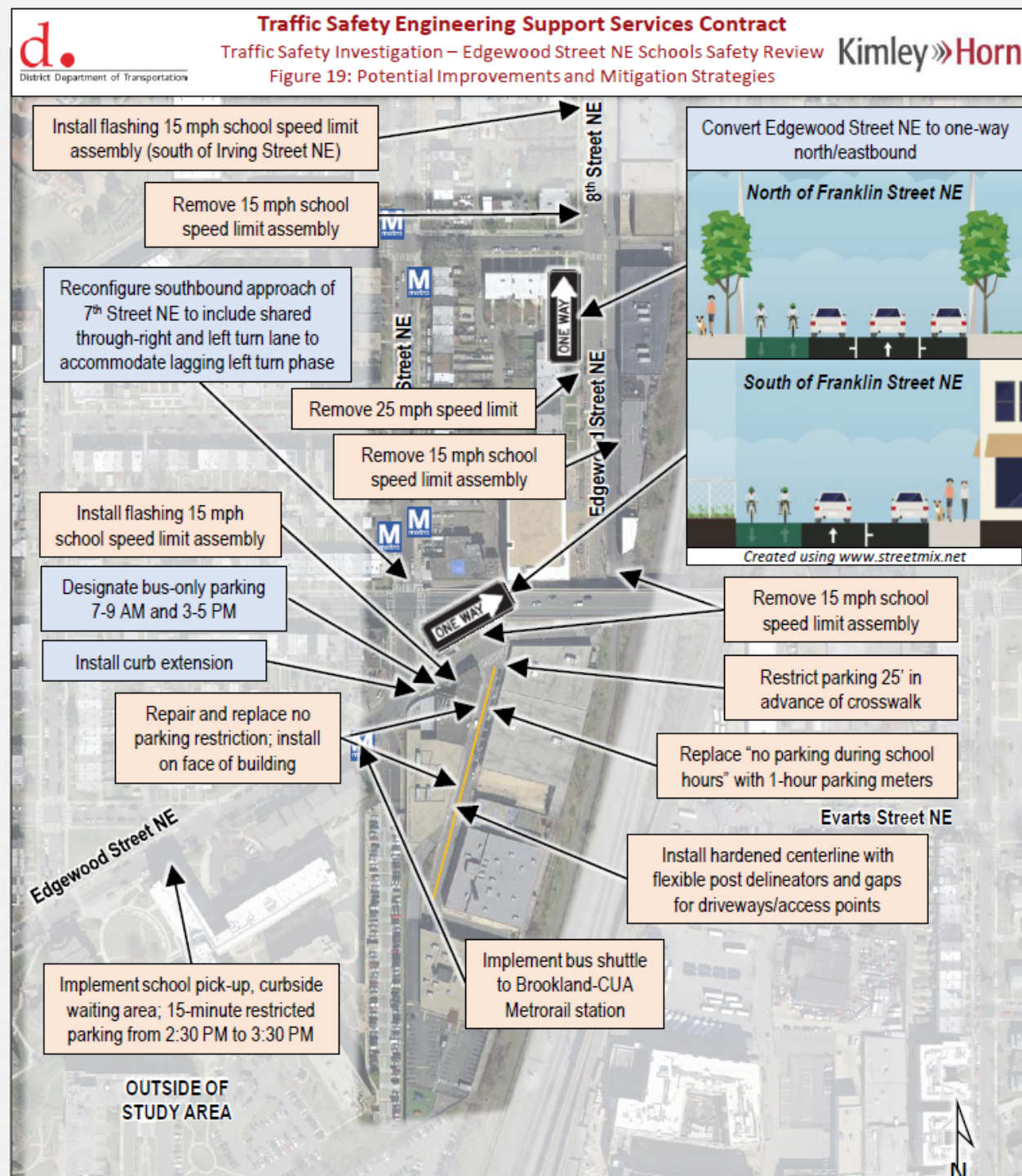


ISSUE #4 – SCHOOL PICK UP/ DROP OFF

School Pick Up/ Drop Off

2019 Safe Routes to School Study

- Long term recommendation
 - Convert Edgewood St NE to one-way north/eastbound
 - Add parking on south side of Edgewood St between 7th and Franklin St bridge
 - Add 4-5 additional spaces
 - Poor circulation contributes to congestion during school pick up and drop off
 - One-way traffic pattern between 7th St NE and Hamlin St NE improves pick up and drop off
 - Pedestrian and bicycle demand exceeds existing facilities



NEXT STEPS

Next Steps

- Present concepts to ANC5E for input
- Prepare preliminary design
- Conduct direct outreach to residents and businesses in the project area
- Prepare final design
- Issue Notice of Intent
- Install – Fall 2020/ Spring 2021

Questions or comments?

Michael Alvino

Bicycle Program Specialist – Trails

Planning and Sustainability Division

District Department of Transportation

michael.alvino@dc.gov

OTHER OPTIONS PREVIOUSLY CONSIDERED

Concept 1: East Side Two Way Cycle Track

Pro:

- Separates bicyclists from traffic
- No intersection crossings
- Connects Metropolitan Branch Trail

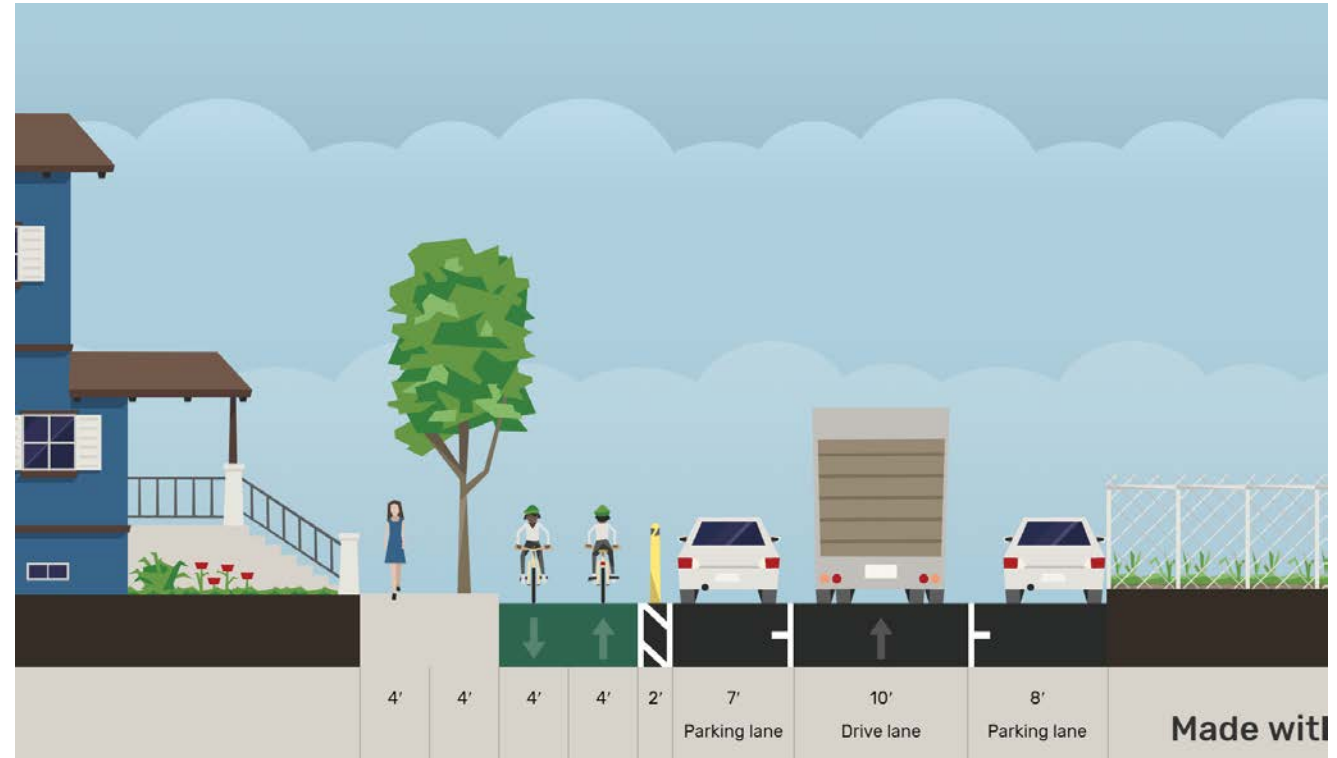
Cons:

- Bicyclist safety
- Long unprotected stretches due to driveways
 - Loading and operations happen in curbside lane
- 19 driveways, primarily industrial
- Remove ~ 57 parking spaces



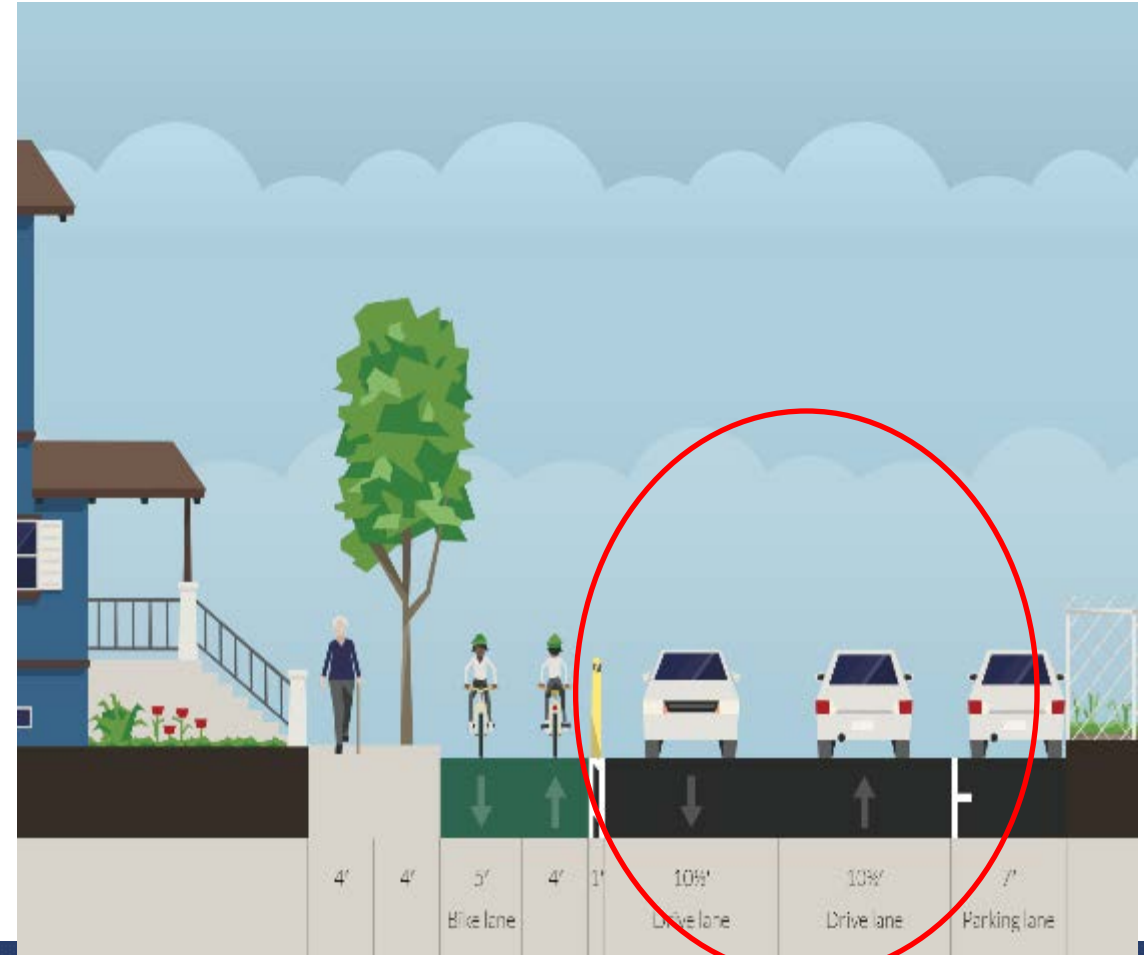
Concept 3: West Side Protected Bike Lane with one way northbound Edgewood to Hamlin

- One way northbound for cars
- Parking on both sides
- Two-way protected bike lane on west side of street
- Consistent with school traffic safety recommendations
- Paired with two-way traffic from Hamlin to Monroe



Concept 3: West Side Protected Bike Lane with two-way traffic Hamlin to Monroe

- Two-way travel for cars
- Parking on the east side of the street
- Two-way protected bike lane on the west side of the street
- Coordinated with signal crossing at Monroe



Concept 4: One-way conversion with contraflow bike lanes

Pro:

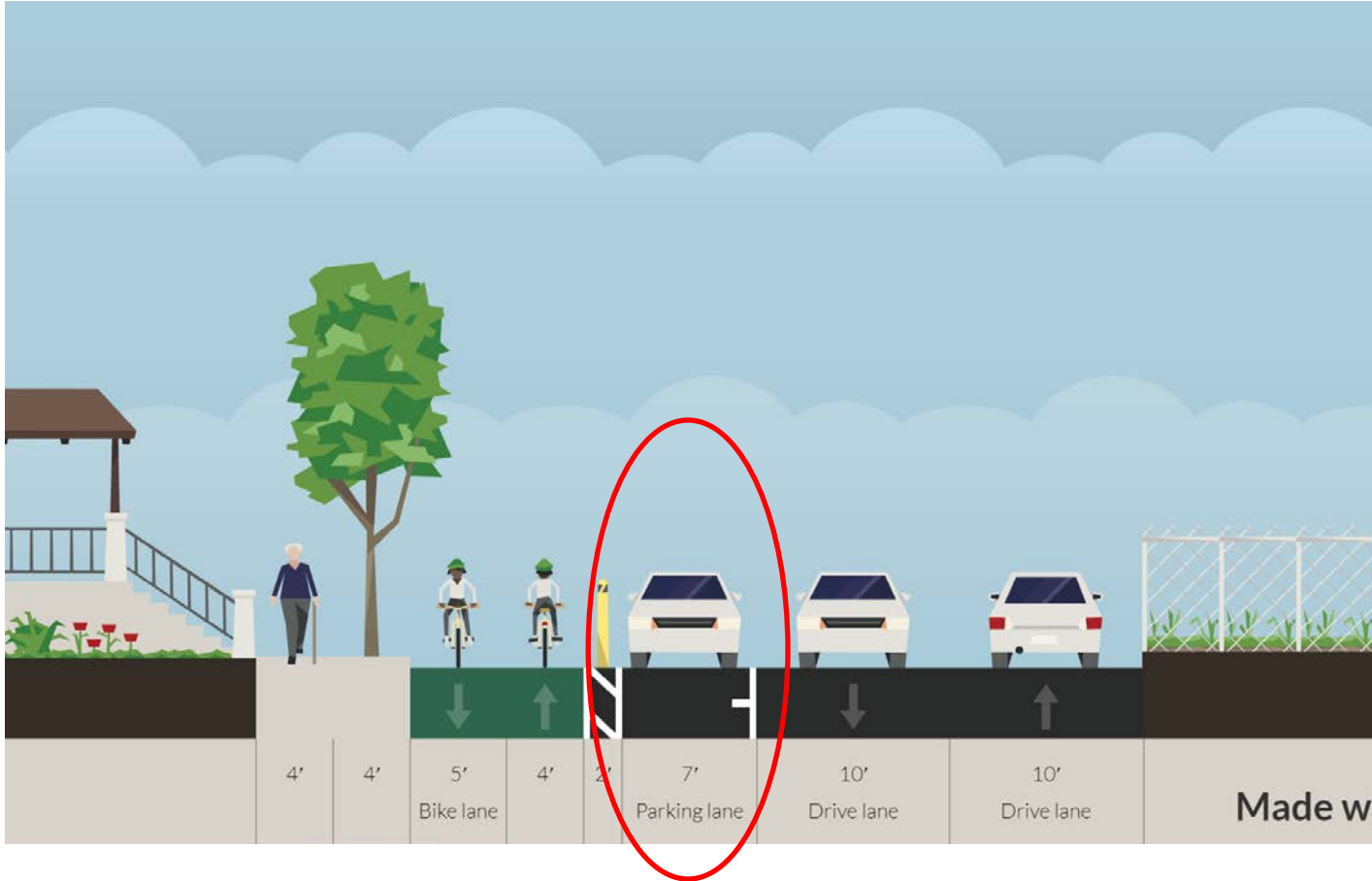
- Preserves parking/curbside
- More predictable bicyclist location for drivers
- Straightforward travel lane

Cons:

- No protection for bicyclists
- Accessibility for drivers
- Additional impacts to 7th St NE



Concept 5: Two-way with parking on west side



Pro:

- Preserves parking on residential side of 8th St NE
- Preserves two motor vehicle travel lanes

Cons:

- Loading/unloading activity in northbound lane
- Less visibility for turning vehicles
- More overall parking loss

Concept 6: Advisory lanes



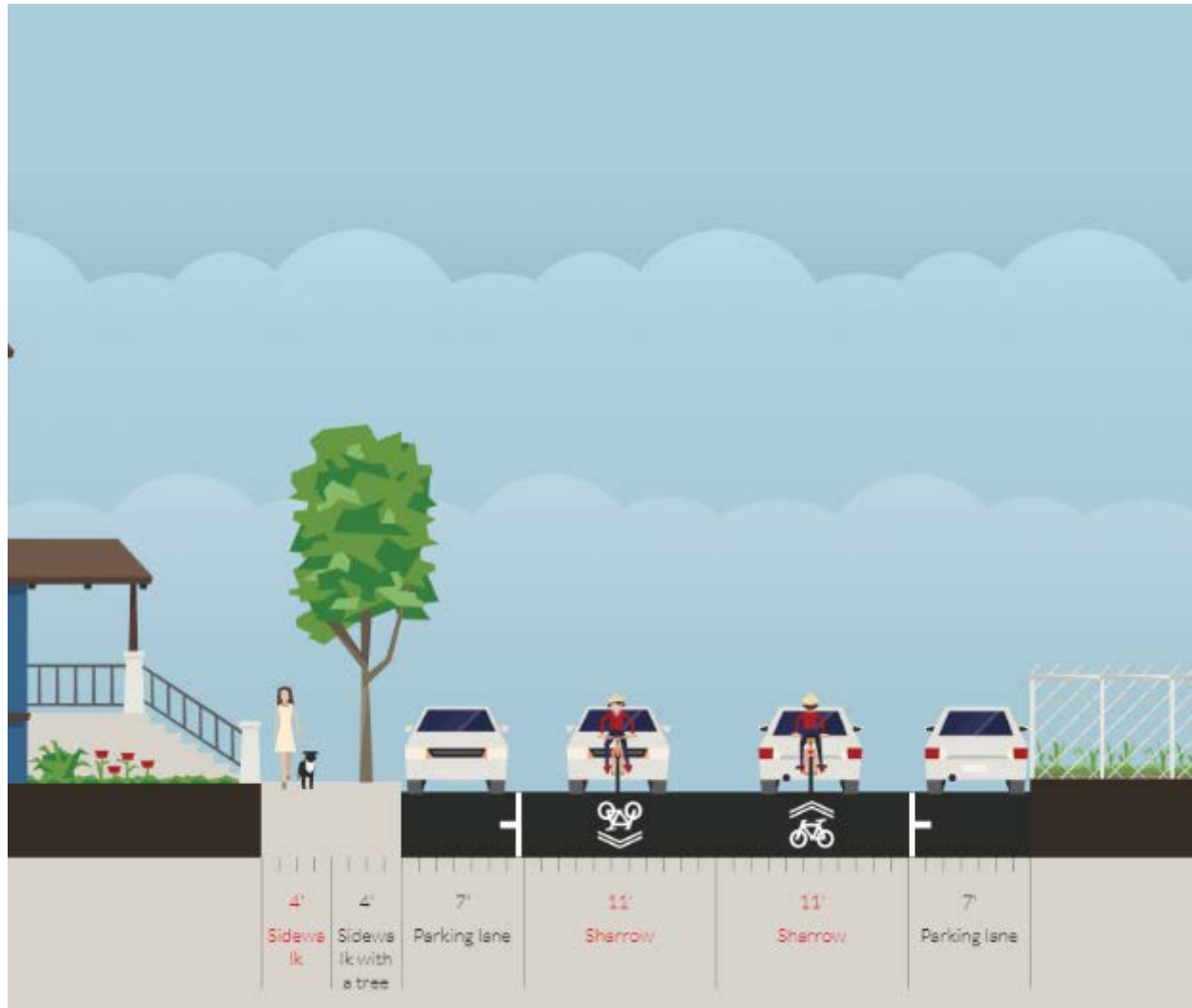
Pro:

- Preserves parking/curbside
- More predictable bicyclist location for drivers

Cons:

- No protection
- Unconventional driving lane arrangement
- Would require extensive driver education
- Experimental
- May be too much heavy vehicle traffic to work

Concept 7: Minor changes



Remove double yellow line striping

Pro:

- Easy
- Can be combined with prior two options on block-by-block basis

Cons:

- Minimal impact on bicycle rider comfort & safety

d.

District Department of Transportation