



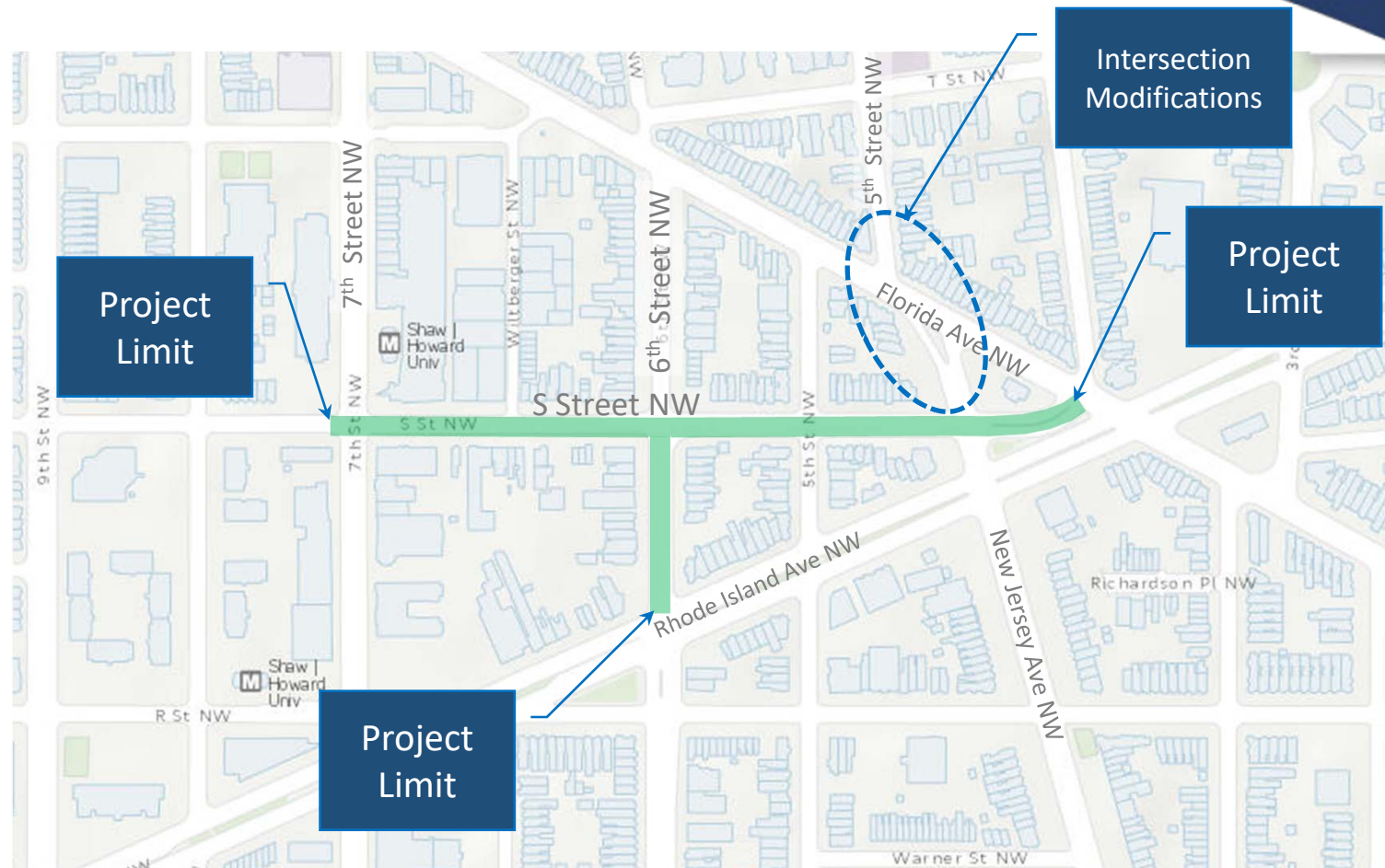
Revitalization of S Street NW  
from 7<sup>th</sup> Street NW to Florida Avenue NW

d.

Project Update to  
LeDroit Park Civic Association

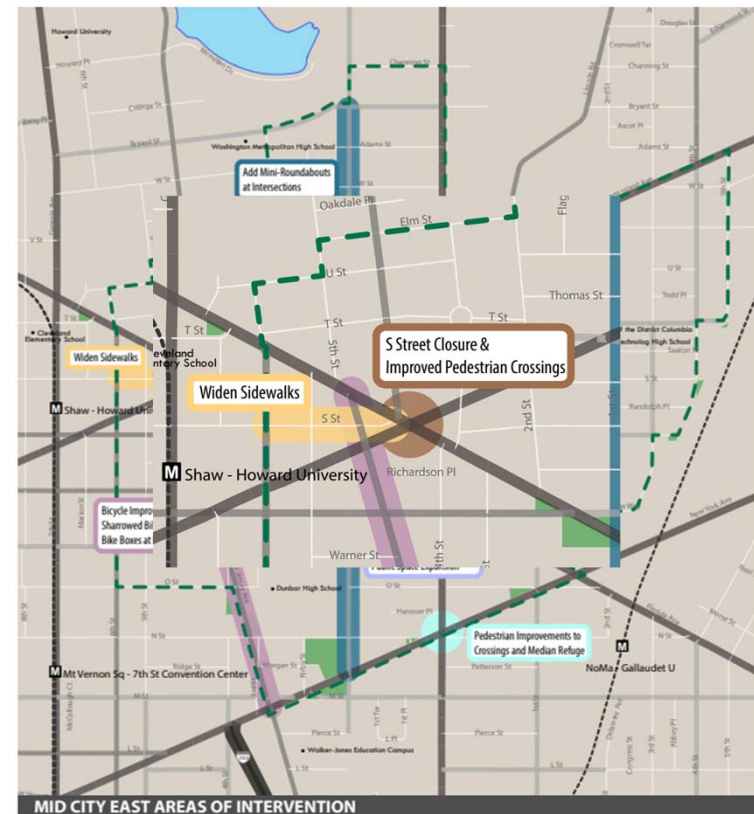
October 27, 2020

# S Street NW - Project Location



# Mid-City East Livability Study (2013)

- Serves as Small Area Plan
- Seeks to improve physical connectivity among the neighborhoods of Mid City East and their connections to the opportunities of the larger city
- Community identified needs & priorities
- S Street closure /sidewalk improvements one of 7 priority interventions
- DDOT S St. Team tasked with developing a solution that closes S Street, if feasible





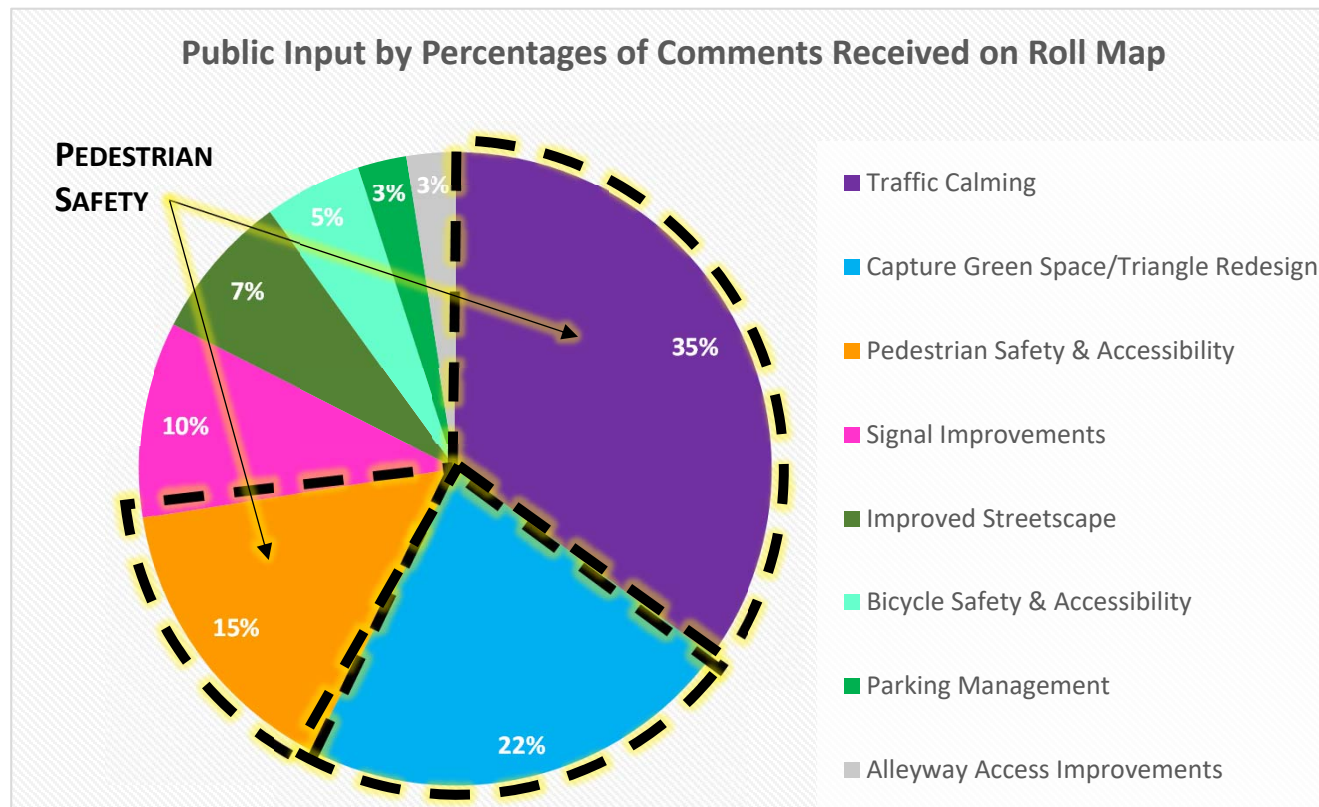


## Project Goals

- Improve safety for all travel modes
- Enhance pedestrian connectivity
- Discourage speeding
- Upgrade deficient features
  - *Sidewalk/ADA ramps; Lighting; Plantings; Deteriorating pavement/curbs/walkways*

# Public Meeting No. 1

- What we heard from the community



Meeting held  
January 2020

- 50 comments on Roll Maps
- 18 Comment Forms Submitted

*The requests for traffic calming can be considered another way of requesting pedestrian safety, and thus further emphasize pedestrian safety as a priority.*



# “The Triangle” (New Jersey Ave to Florida Ave)

## - Existing Conditions

- Consecutive, closely spaced intersections
- Blocked turning movements and intersections
- Unsafe pedestrian crossings
- Sidewalk/ Crosswalk gaps and deficiencies



## “The Triangle” (New Jersey Ave to Florida Ave)

### - Existing Conditions

The 2013 Mid-City East Livability Study identified **115 crashes in the Triangle over a 3 year period**. It was the highest crash location in entire study which addressed Eckington, Bloomingdale, eastern Shaw and LeDroit Park and the communities around the former Truxton Circle.





# “The Triangle” (New Jersey Ave to Florida Ave)

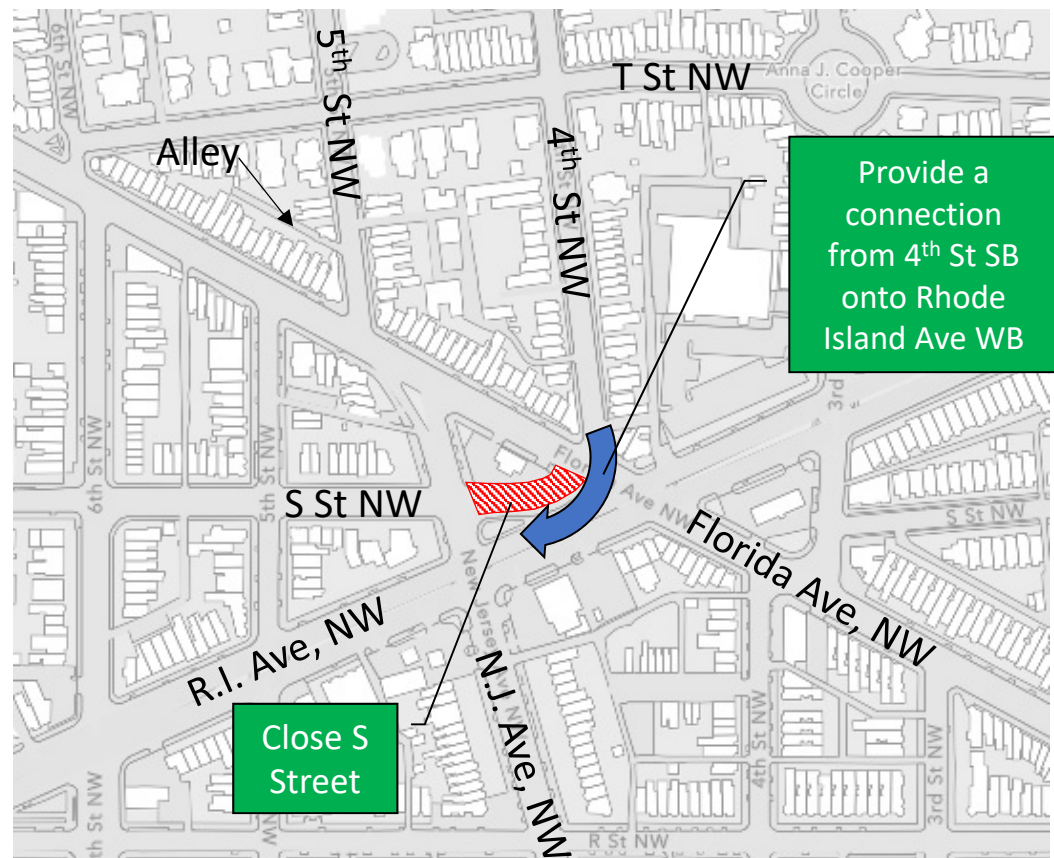
## - Alternatives Considered

1- Mid-City East Livability Study Option

2- Close S St in Triangle;  
1-Way 5th St SB, from  
Florida Ave to Alley

3- Close S St in Triangle;  
Add 2nd Lane 5th St SB,  
with Reduced Parking

4- S Street in Triangle  
Remains open; Implement  
road diet/traffic calming



S Street NW from 7th Street NW to Florida Avenue NW  
September 2020 Project Update



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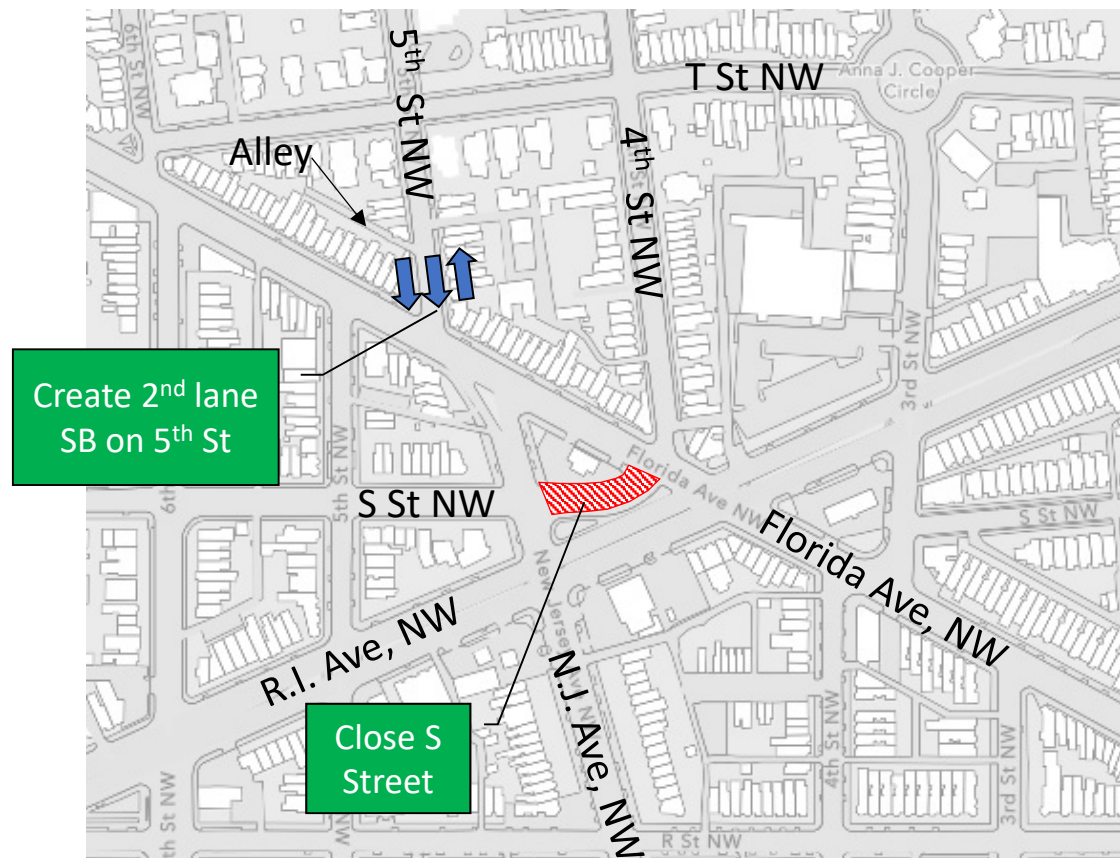
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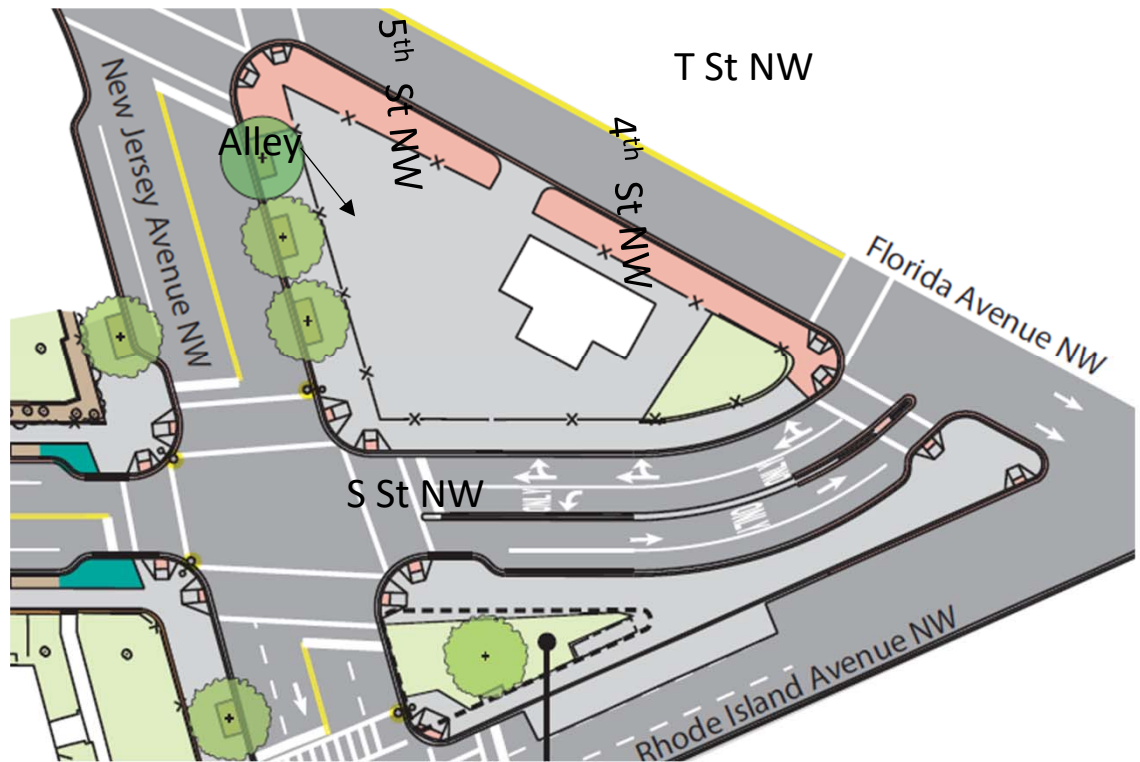
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## “The Triangle” (New Jersey Ave to Florida Ave)

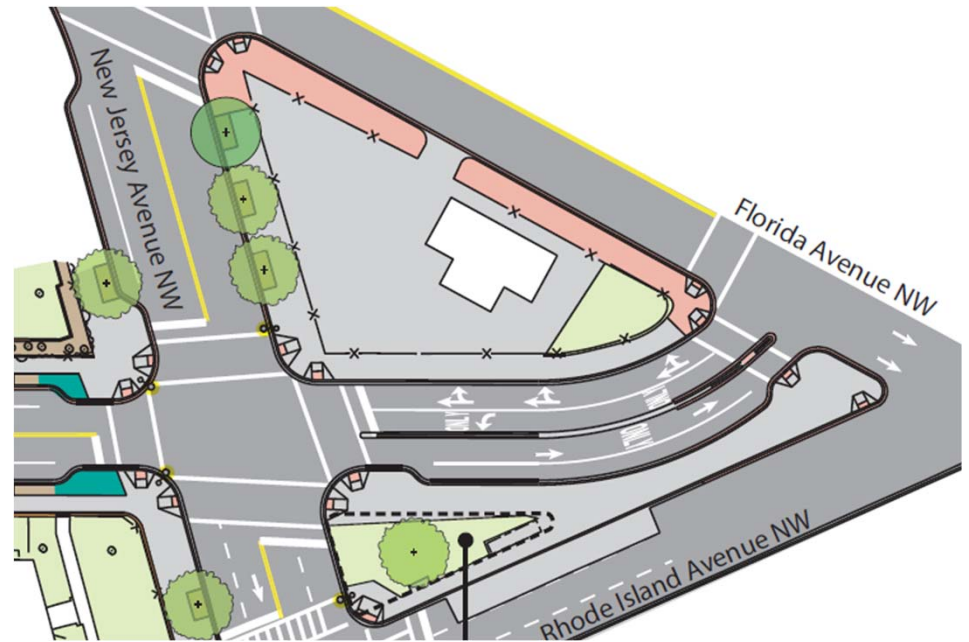
- Both Alternative 2 & 3 Meet Objectives:
  - Conflict Points reduced from **43** to **16** (S St @ NJ & S St @ FL/4<sup>th</sup>)
  - S St. Daily Traffic reduced to 3300 ADT west of 6<sup>th</sup> St, and 1800-2100 ADT east of 6<sup>th</sup> St (*versus approximately 3500 vehicles per day in no-build*)
  - Predicted reduction in crashes of 25 per year associated with S Street in triangle (*reduced by 14 per year in overall study area*)
  - Proper crosswalks across New Jersey Ave with ADA-compliant sidewalks

*Approximately 575 vehicles in both the a.m. peak travel hour and the p.m. peak travel hour, that currently use S Street in the closure area, will use other routes to reach their destinations*

## “The Triangle” (NJ Ave to Florida Ave)

### - Alternative 4 Does Not Meet Objectives:

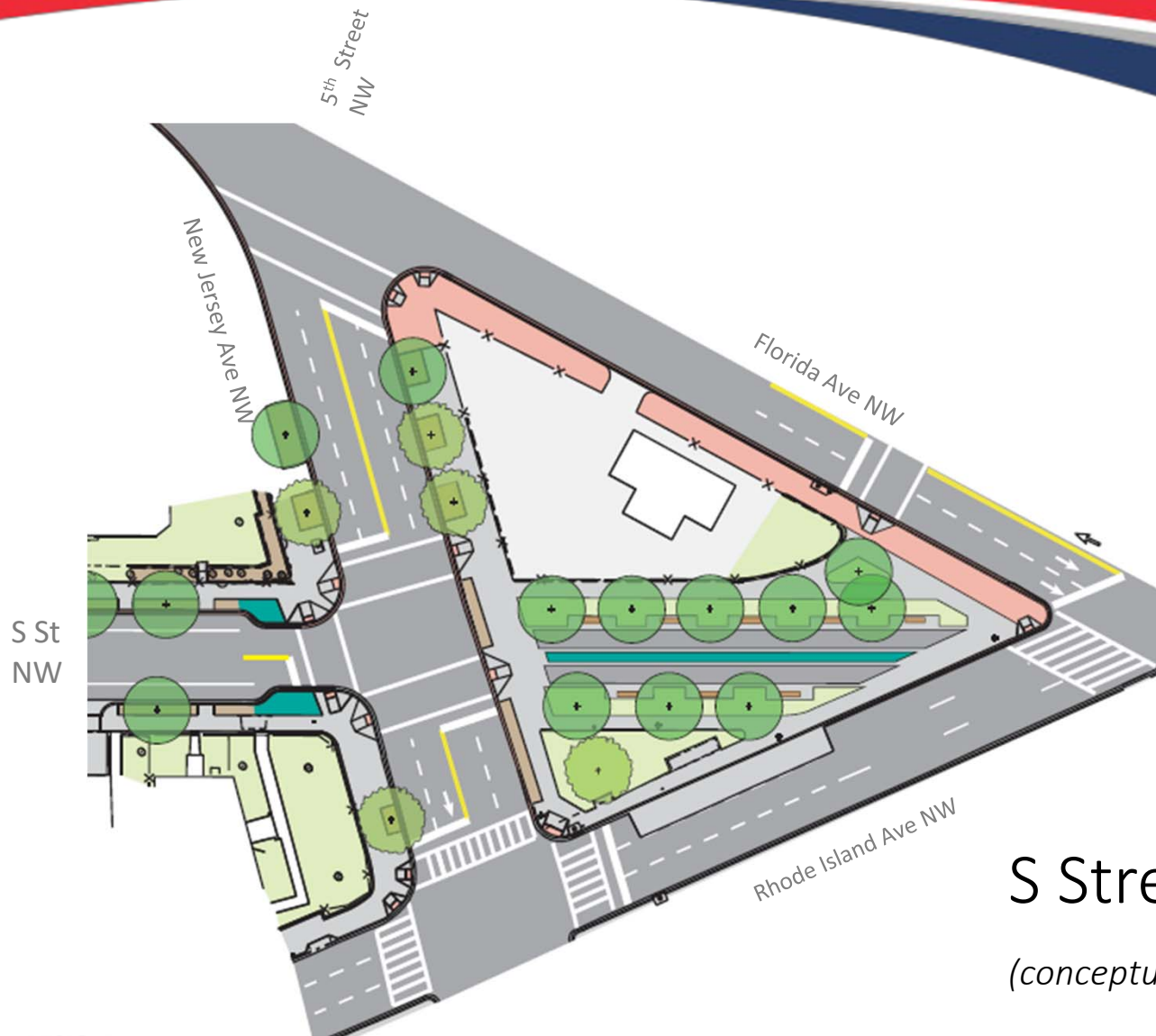
- S St. Daily Traffic not reduced (*approximately 3500 vehicles per day west of NJ Ave*)
- Conflict points remain at **43**  
(S St @ NJ Ave & S St @ Fl Ave/4<sup>th</sup>)
- Minimal or no crash reduction
- Marginal benefits:
  - 4<sup>th</sup> crosswalk added across NJ Ave
  - ADA-compliant sidewalks



## “The Triangle” (New Jersey Ave to Florida Ave)

- Both Alternative 2 & 3 Feature:
  - Close S Street in the Triangle
  - Restripe to create a 2<sup>nd</sup> southbound stacking lane on 5<sup>th</sup> Street, to better manage traffic at Florida Avenue signal:
    - Alt 2 via a 1-way conversion and peak hour parking space closures
    - Alt 3 via permanent removal of several parking spaces





## S Street Closure

*(conceptual – design not final)*

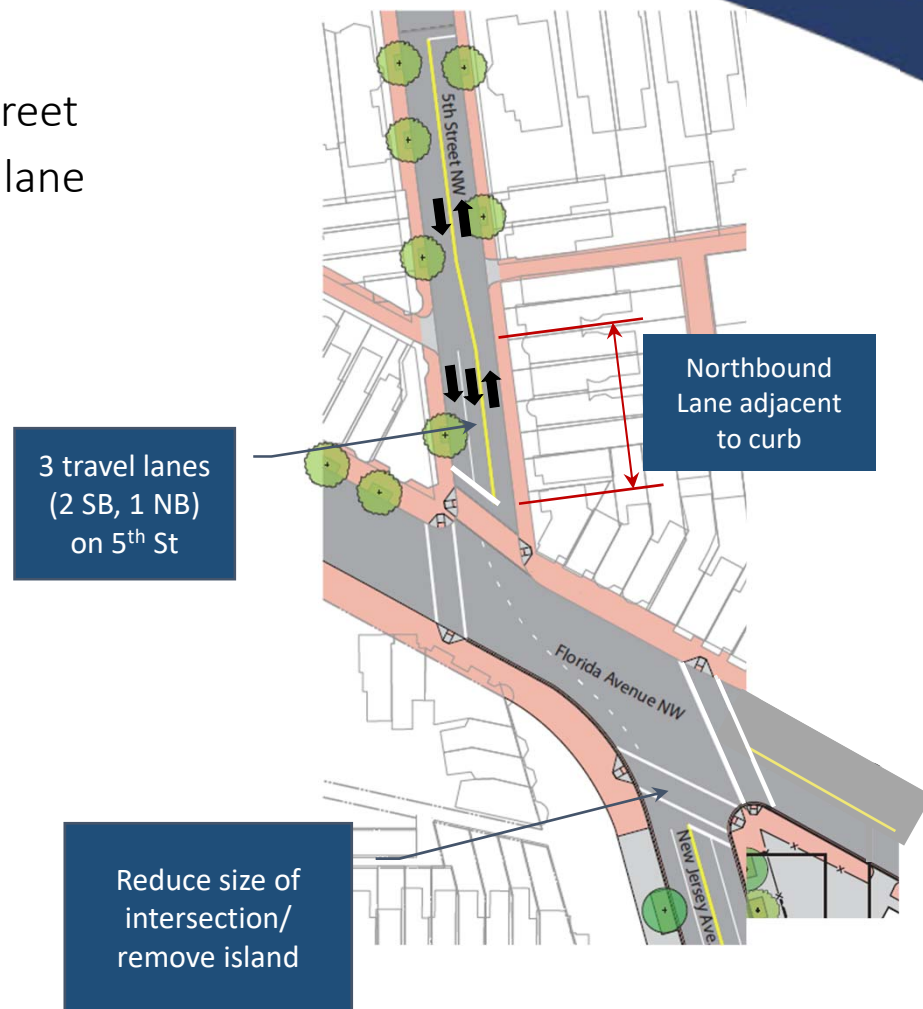
## Alternative 2

- Convert half a block of 5<sup>th</sup> Street to 1-way Southbound
- Street parking impacts on 5<sup>th</sup> St during peak hours only, Southbound Side only



## Alternative 3

- Restripe about 100 feet of 5<sup>th</sup> Street to add 2<sup>nd</sup> Southbound stacking lane for Florida Avenue signal
- Street parking impacts on 5<sup>th</sup> St northbound side (to the alley)
- Street parking on 5<sup>th</sup> St southbound impacted during rush hours only



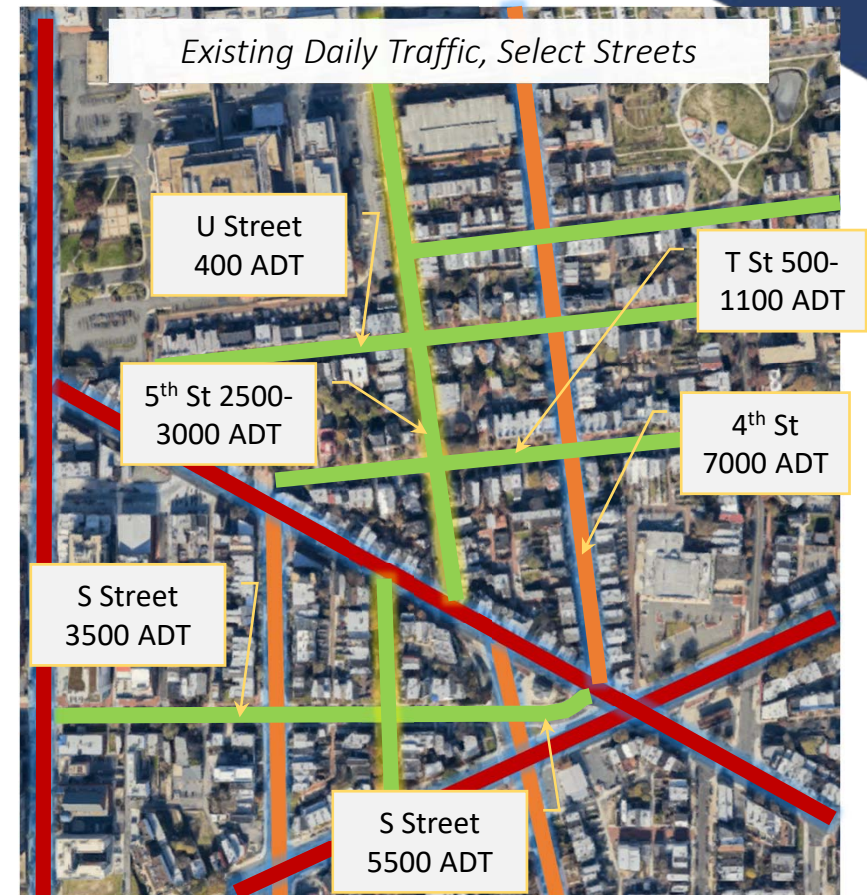
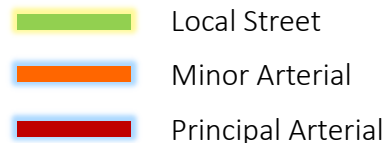


# Traffic Diversion Analysis

- Closure will result in traffic changes on surrounding streets
  - DDOT traffic division required certain capacity impact thresholds to permit S Street in triangle to close
  - Conservative traffic intersection capacity analysis was performed:
    - Assumes >90% diverted traffic stays within 3 block radius of 4<sup>th</sup> St
    - Conservative from a vehicular traffic congestion perspective
    - Analysis got a “passing grade” (level of service) - it is worst case
    - In reality many vehicles will likely avoid the area altogether once drivers find S Street closed in triangle

# Traffic Diversion Analysis Clarifications

- There is no plan to specifically direct drivers to travel on any particular street
  - *Drivers will select their own new route*
- Roads selected for diversion in traffic analysis due to their excess capacity in current condition
- Future Year: 2045 Traffic volumes are about 6.5% higher than current (pre-COVID) volumes. [100 cars today, then 106 or 107 in 2045]
- Overall intent was to balance the traffic in a way that is both equitable and appropriate to the local street grid usage and classification



# Projected “Worst Case” Traffic in LeDroit Park

## 4<sup>th</sup> Street

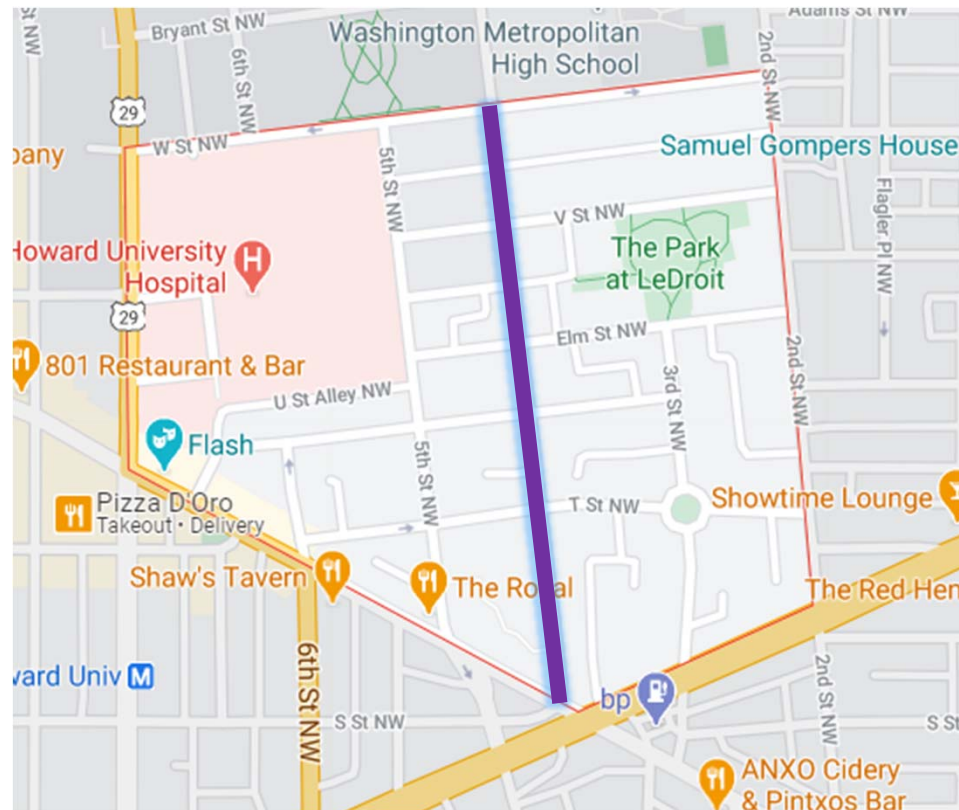
### North of Bryant

- Approx. 8000 ADT  
(current and both Alternates)

### South of W St

- Current: 7000 ADT
- Alt 2: 3500 to 5000 ADT
- Alt 3: 1800 to 5400 ADT

*Traffic volumes on 4<sup>th</sup> Street  
decrease from north to south*





# Projected “Worst Case” Traffic in LeDroit Park

## 5<sup>th</sup> Street

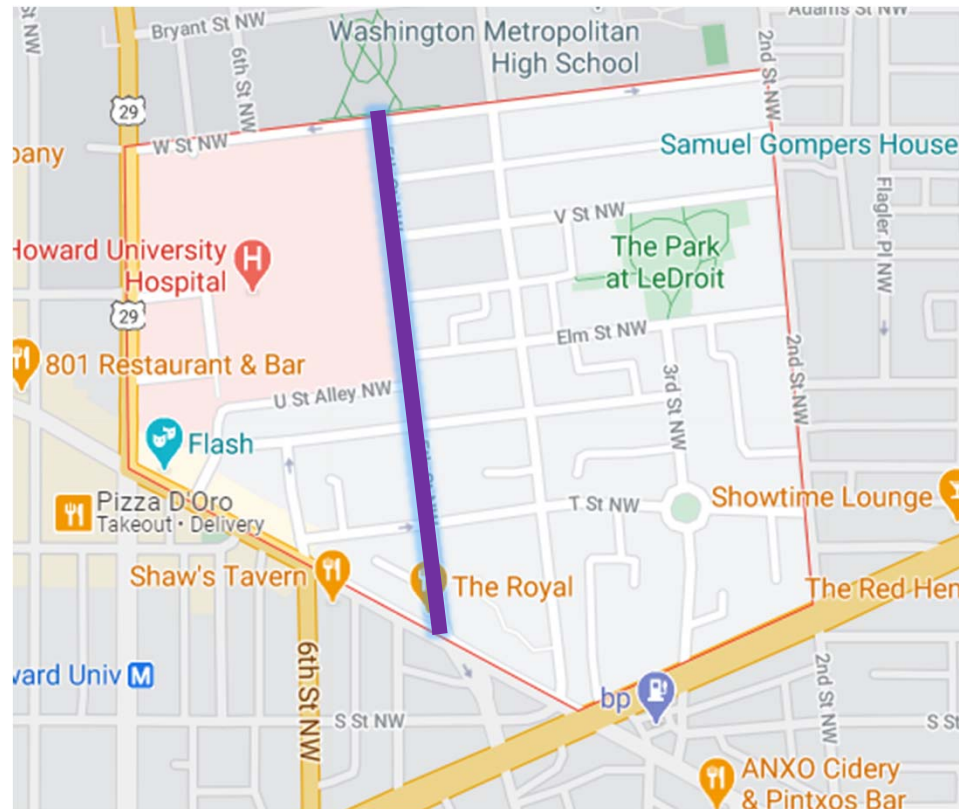
A small map snippet at the bottom right shows the LeDroit Park area. It includes labels for 'Bryant St NW', 'Washington Metropolitan', and 'Adams St NW'. A green line indicates a route or boundary.

North of T St

- ## Florida to T St

- Current: 3100 ADT
- Alt 2: 3700 ADT
- Alt 3: 5500 ADT

*Traffic volumes on 5<sup>th</sup> Street  
increase from north to south*



# Projected “Worst Case” Traffic in LeDroit Park

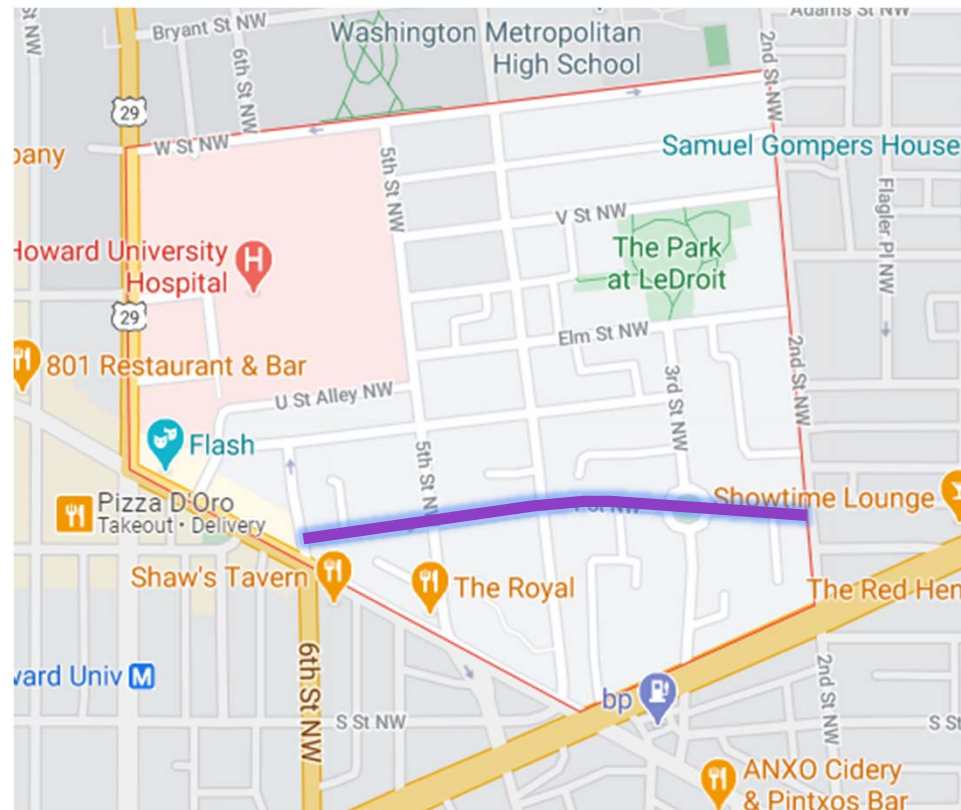
## T Street (6<sup>th</sup> to 2<sup>nd</sup>)

- Current: 500 to 1100 ADT
- Alt 2: 600 to 1600 ADT
- Alt 3: 600 to 1900\* ADT

*\* Increase is 5<sup>th</sup> to 4<sup>th</sup> only*

## Frame of Reference

- *Alt 3 rush hour (worst case), about 4 cars each minute*
- *V St between 5<sup>th</sup> and 4<sup>th</sup> sees 2000 ADT today*



# Projected “Worst Case” Traffic in LeDroit Park

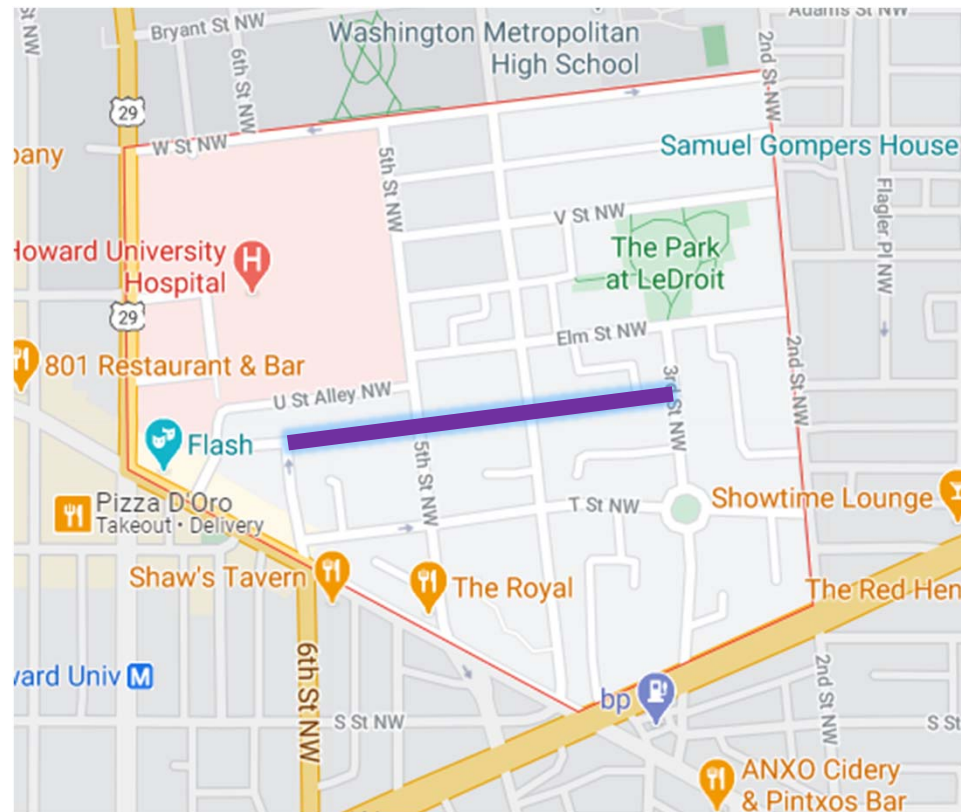
## U Street (6<sup>th</sup> to 3<sup>rd</sup>)

- Current: 400 ADT
- Alt 2: 400 to 1500\* ADT
- Alt 3: 400 to 1050\* ADT

*\* Increase is 5<sup>th</sup> to 4<sup>th</sup> only*

## Frame of Reference

- *Alt 2 rush hour (worst case),  
3 to 4 cars each minute*
- *T St between 4<sup>th</sup> and 3<sup>rd</sup>  
sees 1100 ADT today*





# Pedestrian Study

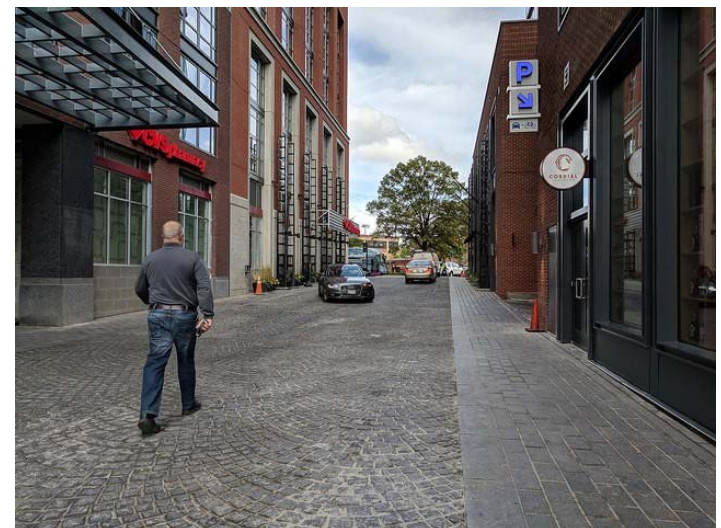
## All Ages and Abilities Review

- NACTO\* framework which strives for low stress environment for cyclists of all ages and abilities
- S St team paralleled the concept to pedestrians
- Traffic Volume Thresholds

*\*National Association of City  
Transportation Officials*






All Ages and Ability Recommendations	Traffic Volume (ADT)
Shared Street	1000 to 1500
Dedicated Pedestrian Facilities	1500 to 3000
Traffic Calming/ Protected Bike Lanes	3000 to 4000

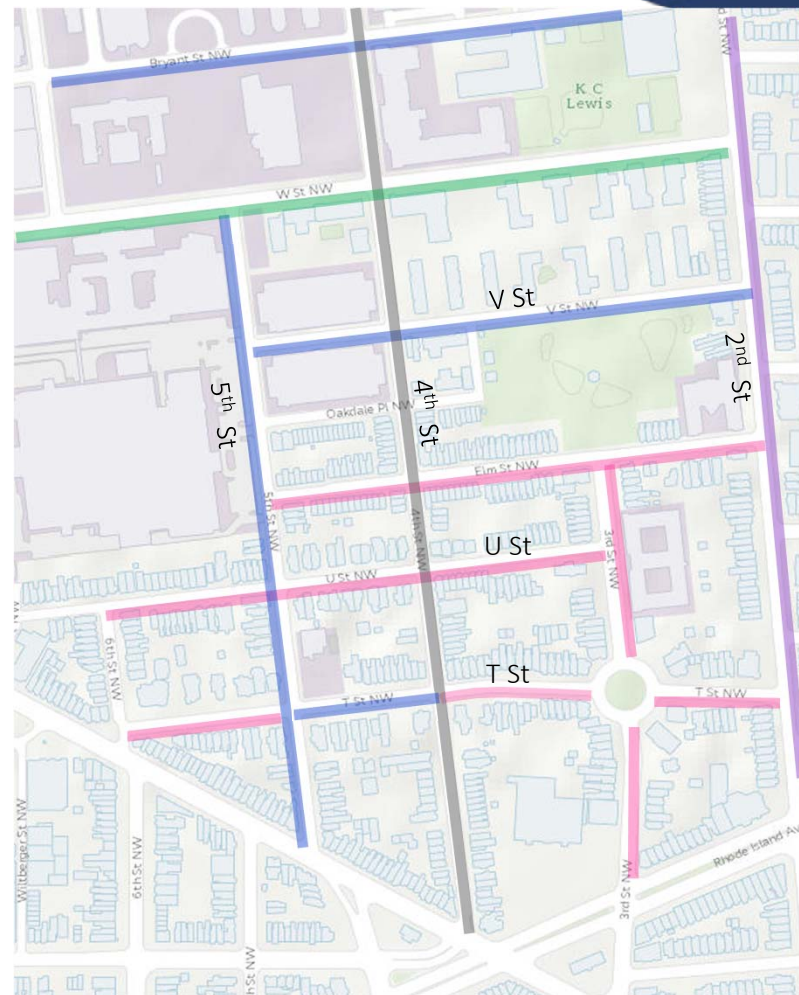
*Example Shared Street at the Wharf*



# Pedestrian Study






## All Ages and Abilities Review - *Alternative 2*

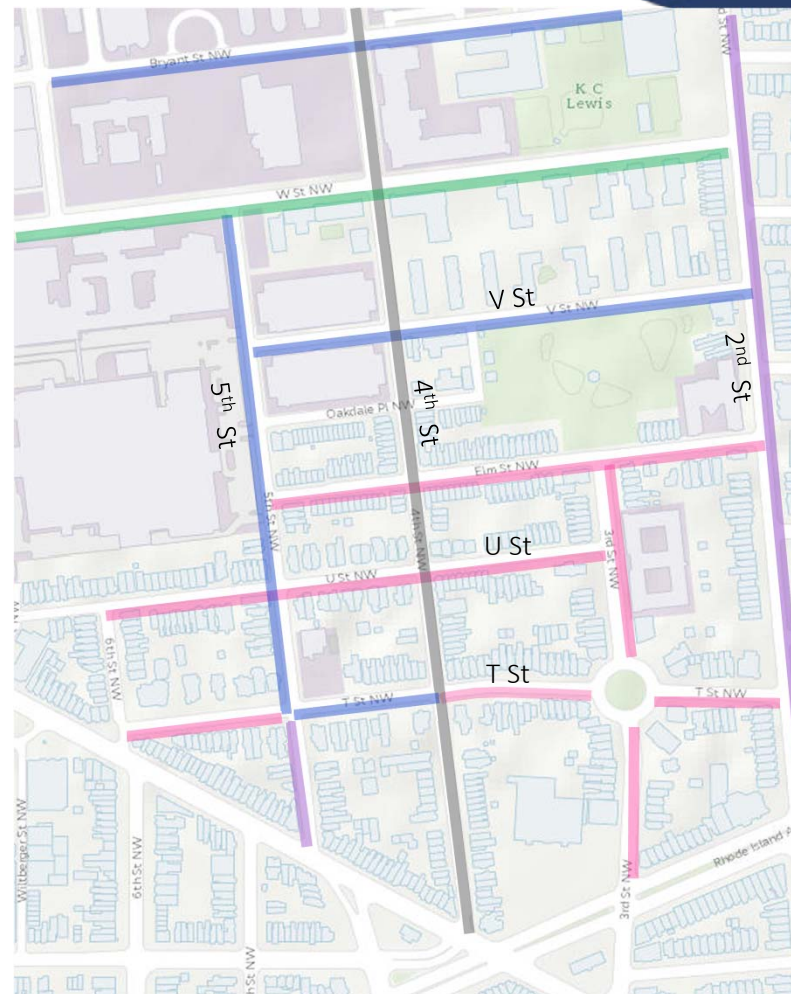
-  Meets Residential Shared Street traffic levels
-  Meets Residential Street with dedicated pedestrian facility (sidewalks)
-  Level of traffic can consider traffic calming (2<sup>nd</sup> St has speed humps)
-  W St bordering Howard University
-  4<sup>th</sup> Street (Arterial)



# Pedestrian Study

## All Ages and Abilities Review - *Alternative 3*

-  Meets Residential Shared Street traffic levels
-  Meets Residential Street with dedicated pedestrian facility (sidewalks)
-  Level of traffic can consider traffic calming (2<sup>nd</sup> St has speed humps)
-  W St bordering Howard University
-  4<sup>th</sup> Street (Arterial)





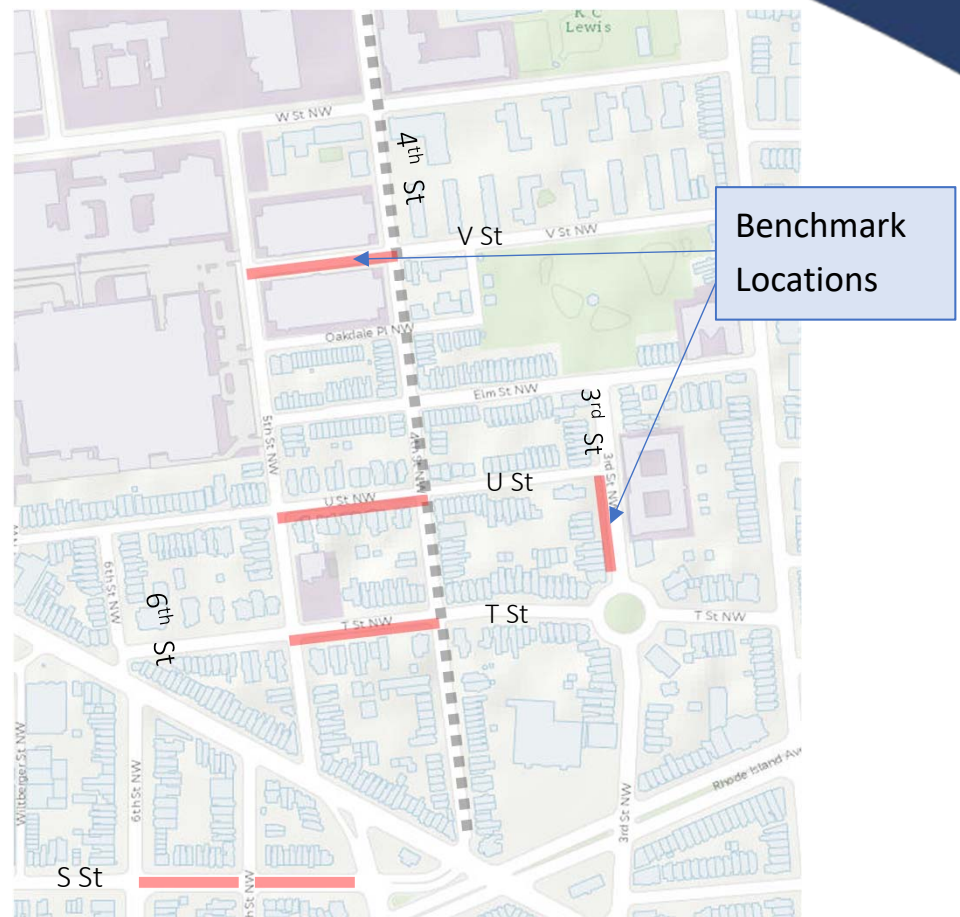
# Pedestrian Level of Service/ “Level of Comfort” Review

- Transportation Research Board NCHRP Report 616: *Multimodal Level of Service Analysis for Urban Streets*
- Measure of “level of comfort” or user satisfaction related to pedestrians travelling through corridor
- Considers lane and sidewalk widths, buffer space, traffic volume & speed

LOS	Score
A	Best Performance - Excellent
B	
C	
D	Graded Scale, high to low
E	
F	
F	Worst Performance – Very Poor

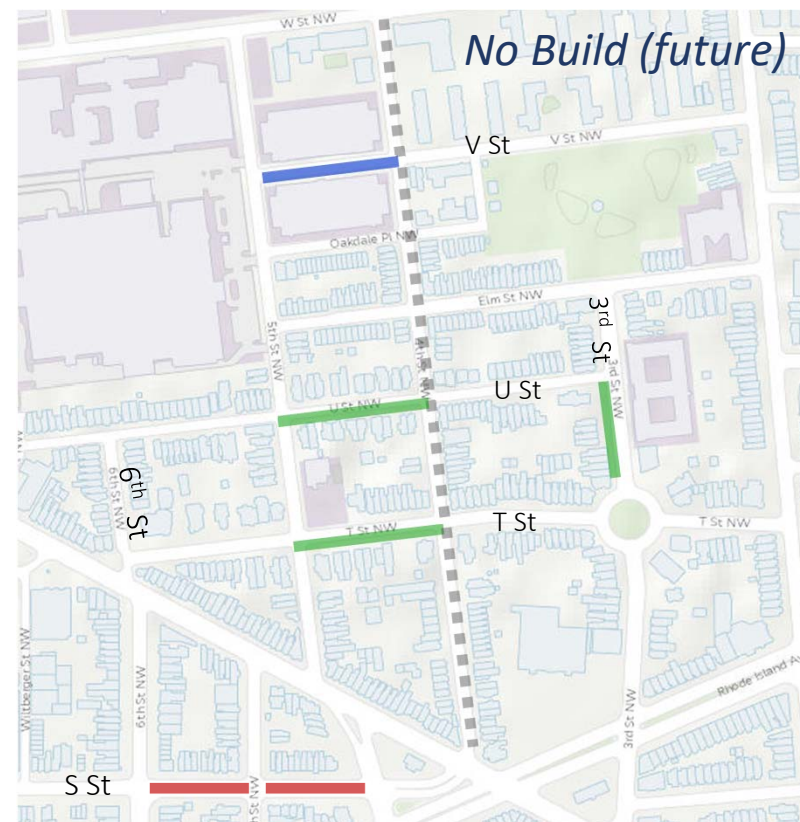
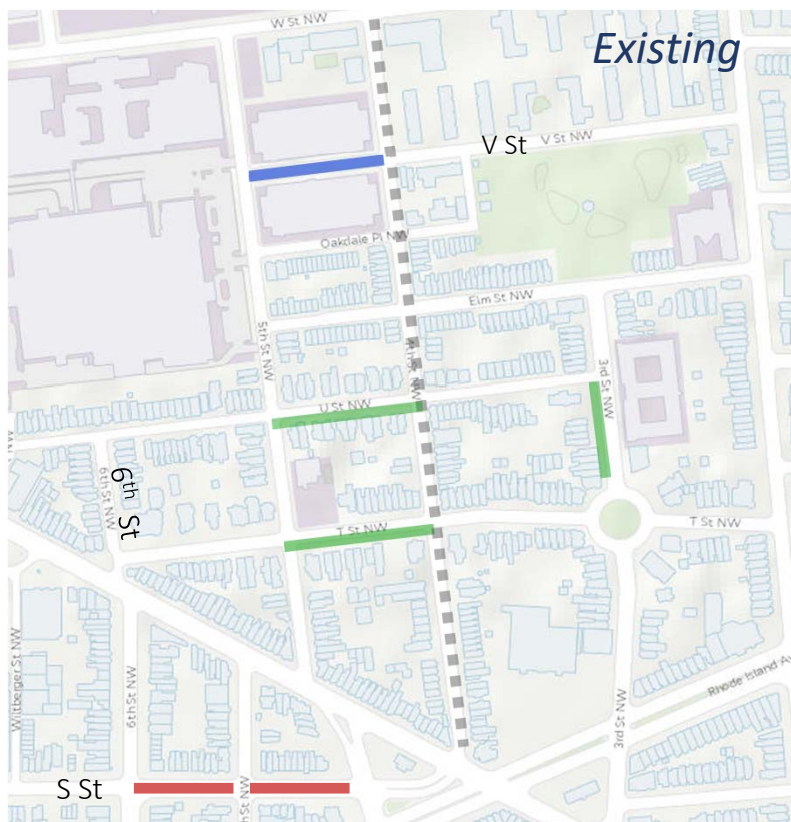


## Locations Assessed



# Pedestrian Level of Service/ “Level of Comfort” Review

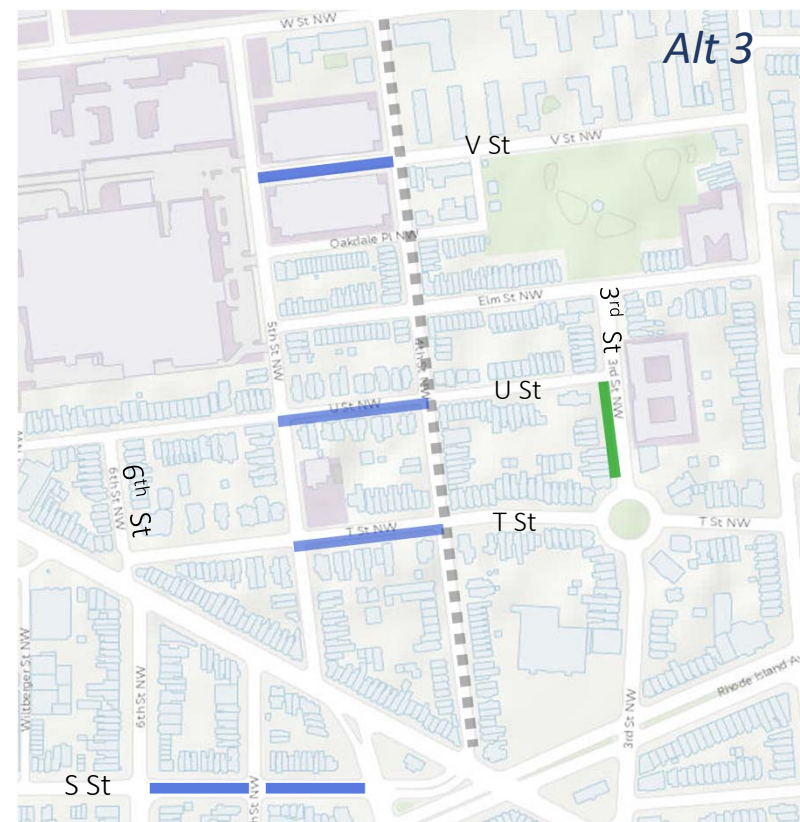
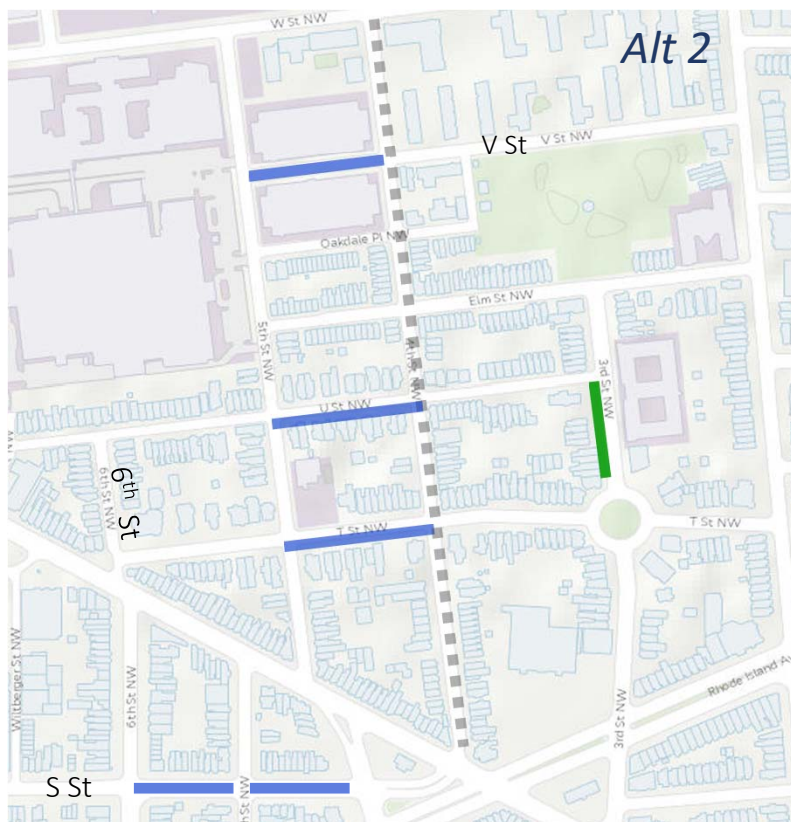
- LOS A
- LOS B
- LOS C approaching D





# Pedestrian Level of Service/ “Level of Comfort” Review

- LOS A
- LOS B
- LOS C approaching D



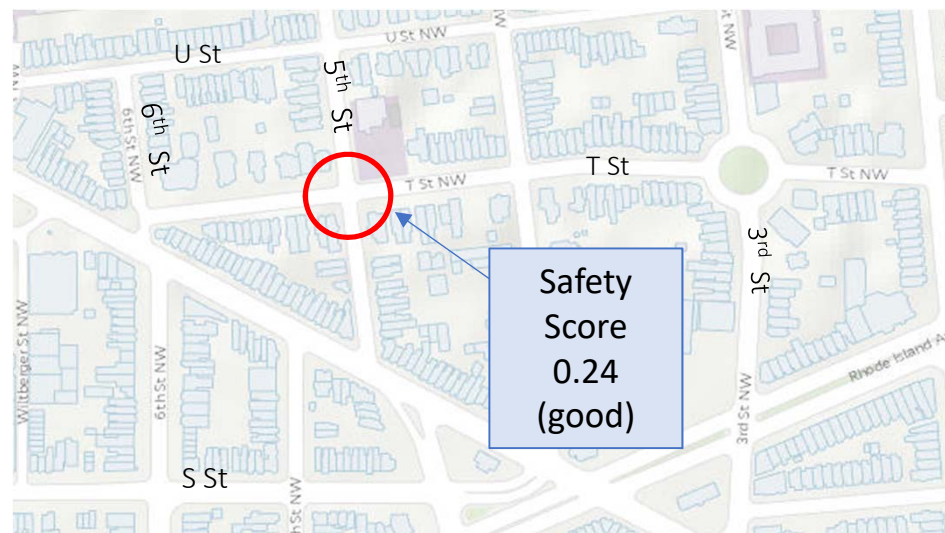


# Pedestrian Crossing Safety Review at T Street and 5<sup>th</sup> Street

- Assessed physical features, daytime visibility, nighttime visibility and accessibility
- Method developed by European Transportation Research Review Study involving 15 experts
- Considers:

- Road width
- Pedestrian Vehicular Conflict Points
- Refuge Island
- Daytime Approach Sight Distance
- Daytime Sign Visibility
- Daytime Pavement Marking Visibility
- Crossing Width
- Light Conditions
- Nighttime Approach Sight Distance
- Nighttime Sign Visibility
- Nighttime Pavement Marking Visibility
- ADA ramp presence
- Tactile Paving
- Presence of Obstacles
- ADA ramp width

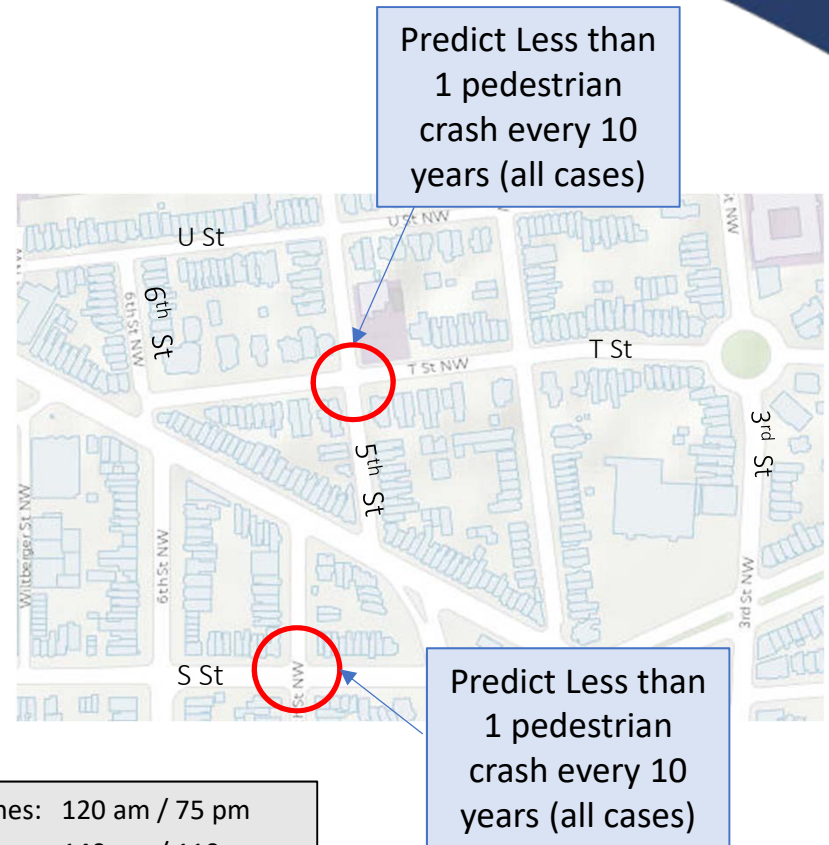
Level of Safety	Score
0 to 0.2	Excellent
0.21 to 0.40	Good
0.41 to 0.60	Sufficient
0.61 to 0.80	Unsatisfactory
0.81 to 1.0	Poor



# Pedestrian Safety Review

## T St @ 5<sup>th</sup> St & S St at 5<sup>th</sup> St

- Reviewed T Street Crash History (2017 to 2019)
  - 4 crashes in 3 years
  - No pedestrians crashes
  - 3 Bicycle crashes
- Predict pedestrian crashes based on method developed in Research Study entitled: *“Association between Roadway Intersection Characteristics and Pedestrian Crash Risk in Alameda County, California”*
- Considered vehicular and pedestrian volumes, roadway lane configuration, # of nearby non-residential driveways, # of nearby commercial properties, transit destinations, and population below age 18.



T St @ 4<sup>th</sup> St Peak Hour Pedestrian Volumes: 120 am / 75 pm  
S St @ 6<sup>th</sup> St Peak Hour Pedestrian Volumes: 140 am / 110 pm

## Pedestrian Study Conclusions

- Some residential/local streets in LeDroit Park will experience additional vehicular traffic volume, but volumes remain appropriate for the roadway classification and usage
  - 3 to 4 vehicles per minute on average, during busiest peak rush hour (60 minutes)
  - Several residential streets in LeDroit Park currently experience this level of traffic with no known concerns
- On T Street, a street used heavily by pedestrians, no pedestrian safety issues are identified
- On S Street, a street used heavily by pedestrians, pedestrian Level of Service/Level of Comfort will be measurably improved by the project
- Closure of S Street in the triangle will help balance vehicular traffic and related safety concerns across the study area

T St @ 4<sup>th</sup> St Peak Hour  
Pedestrian Volumes:

120 am / 75 pm

S St @ 6<sup>th</sup> St Peak Hour  
Pedestrian Volumes:

140 am / 110 pm



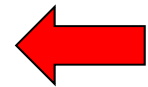
# Project Timeline

- Receive and consider public comment
- Develop alternative options to meet goals of study and what we hear tonight
- Public Outreach / Update
- Finalize Environmental Review and select build alternative
- Proceed to design
- Complete Design
- Begin Construction

January 2020

Through Spring, 2020

Aug / Oct 2020



*We Are Here*

Oct 2020

Fall 2020

Late 2021

Pending Funding



# Contacts

## DDOT Project Manager

Abdullahi Mohamed

202-671-4614

[abdullahi.mohamed@dc.gov](mailto:abdullahi.mohamed@dc.gov)

## Public Outreach Coordinator

Jerrell Johnson

202-518-9101

[Jerrell@tbaconnects.com](mailto:Jerrell@tbaconnects.com)

Website: [SstreetNW-revitalization.com](http://SstreetNW-revitalization.com)



GOVERNMENT OF THE  
DISTRICT OF COLUMBIA  
MURIEL BOWSER, MAYOR

S Street NW from 7<sup>th</sup> Street NW to Florida Avenue NW  
October 2020 Update to LeDroit Park Civic Association