

# Nannie Helen Burroughs Avenue Bus Priority Project and Transit Hub

03/26/2024



## **DDOT - Bus Priority**

- Encourage alternatives to private automobile transportation within the District
- Improve bus speeds and reliability
- Project pipeline
  - Projects approx. 1-2 miles in length
  - Allows DDOT to make improvements more quickly across more corridors
- 51 projects
  - Nannie Helen Burroughs (Minnesota Ave to Eastern Ave NE): Bus Priority Project #14



DECEMBER 2021





## **Project Timeline**

- Kick-Off (Summer 2022)
  - Internal agency meeting
  - Initial engagement with ANCs & BIDs
  - Development of project scope
  - Data collection
- Concept Development (Spring 2023)
  - Develop concepts
  - Receive initial concept review and comments
  - Scope traffic analysis
  - Conduct meetings to ANCs & BIDs
- Begin Design & Issues NOI (2024)

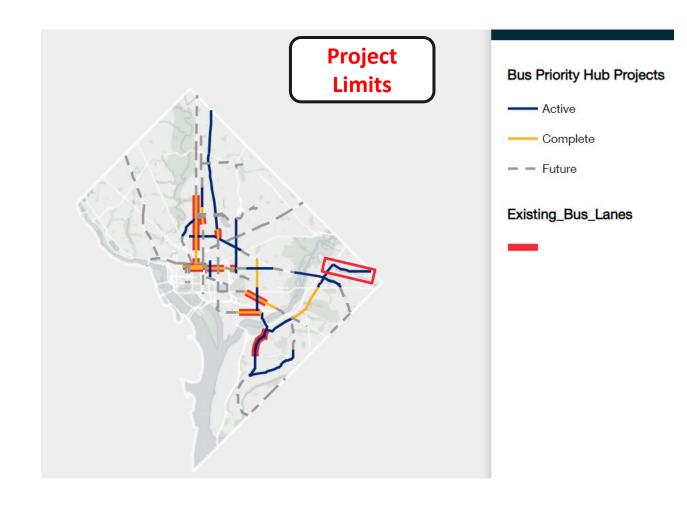


Construction (2025)



## 14. Nannie Helen Burroughs NE

- Project ~1.4 miles in length
- Connects to bus priority projects on
  - #16 Minnesota Ave (Nannie Helen Burroughs to East Capitol)
- Project Goals:
  - Increase pedestrian comfort and safety across the corridor
    - By lowering average traffic speeds and improving pedestrian visibility
  - Improving bus speeds through the intersection at Minnesota Avenue NE
  - Improve bus speeds and reliability along the corridor
    - By implementing strategies and treatments outlines in the <u>Bus Priority</u> <u>Toolbox</u>

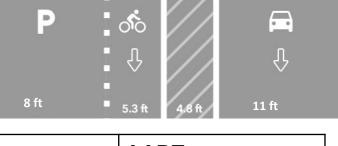


## Existing Conditions – Right of Way

- Right-of-way (ROW):
  - The roadway has a configuration is 2
    travel lanes in each direction, each lane
    ~11ft wide
  - The roadway also widens and includes a concrete median and one travel lane in each direction with a bike lane, buffer and parking lane



5.7 ft



Section of Corridor	AADT
Minnesota Avenue NE to 48th Street NE	17,892
48th Street NE to 51st Street NE	14,619
51st Street NE to Eastern Avenue NE	7,433

(Traffic Volume 2019 - Open Data DC)

58'



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11 ft

P

8 ft

#### **Bus Service**

- Average Daily Bus Boardings:
  - V2: 1,508
  - V4: 1,291
  - X9: 1,481
- Transit Service:
  - V2: 15 30minute headways
  - V4: 13 30minute headways
  - X9: 15 16minute headways
- Average Bus Frequency per Hour:
  - Eastbound: 10.5
  - Westbound: 10
- Headway Regularity:
  - 80.1% of the time (between 4/25/22 4/29/22)

 Busiest Stops along Corridor: (East & Westbound Paired Stops)



44th Street NE



49th Street NE



**Division Avenue NE** 

## **Corridor Bus Speeds:**

#### • Eastbound:

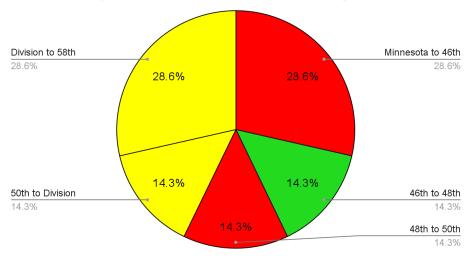
- Based on the average bus speeds measured along the project's corridor (Tableau):
  - 42.9% of the corridor's length traveled at <10 mph</li>
  - 28.6% of the corridor's length traveled at <10 mph</li>
  - 14.3% of the corridor's length traveled at <10 mph</li>

#### Westbound:

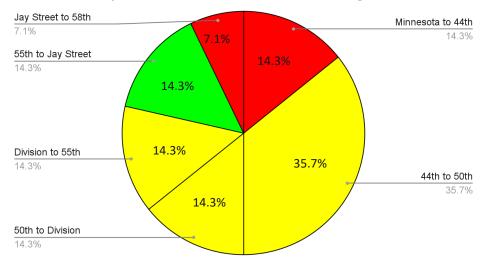
- Based on the average bus speeds measured along the project's corridor (Tableau):
  - 21.45% of the corridor's length traveled at <10 mph</li>
  - 64.3% of the corridor's length traveled at <10 mph</li>
  - 14.3% of the corridor's length traveled at <10 mph</li>

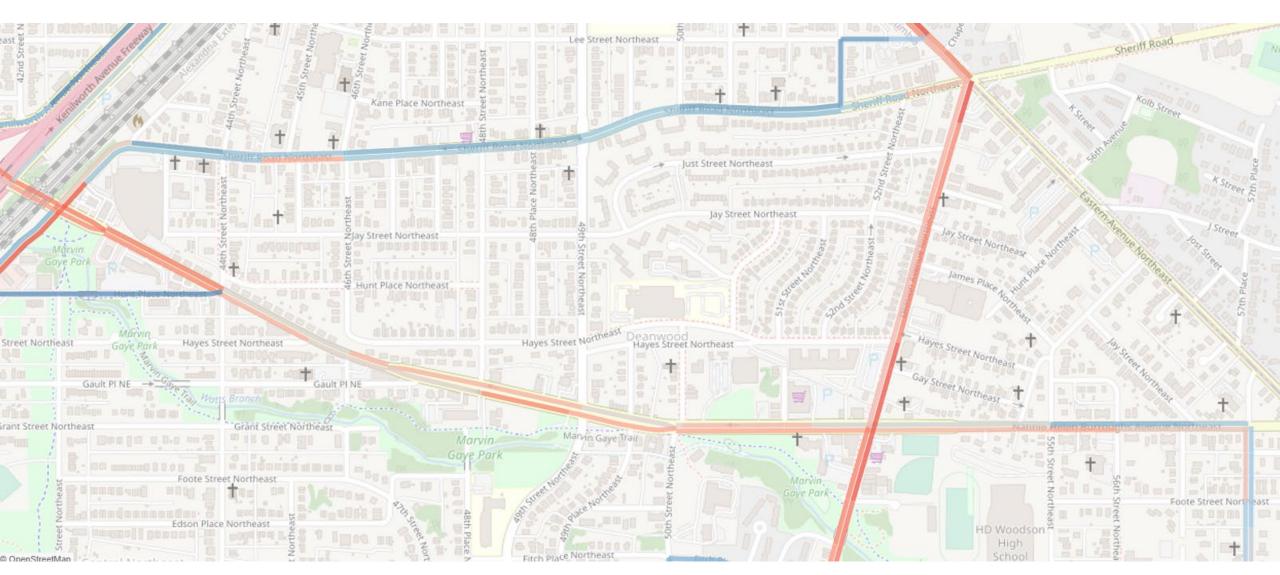
Avg. Speed	Color
0-10mph	
11-17mph	
18+mph	

#### Eastbound Speeds based on % of Corridor Length Over All



#### Westbound Speeds based on % of Corridor Length Over All





## **Corridor Concepts**

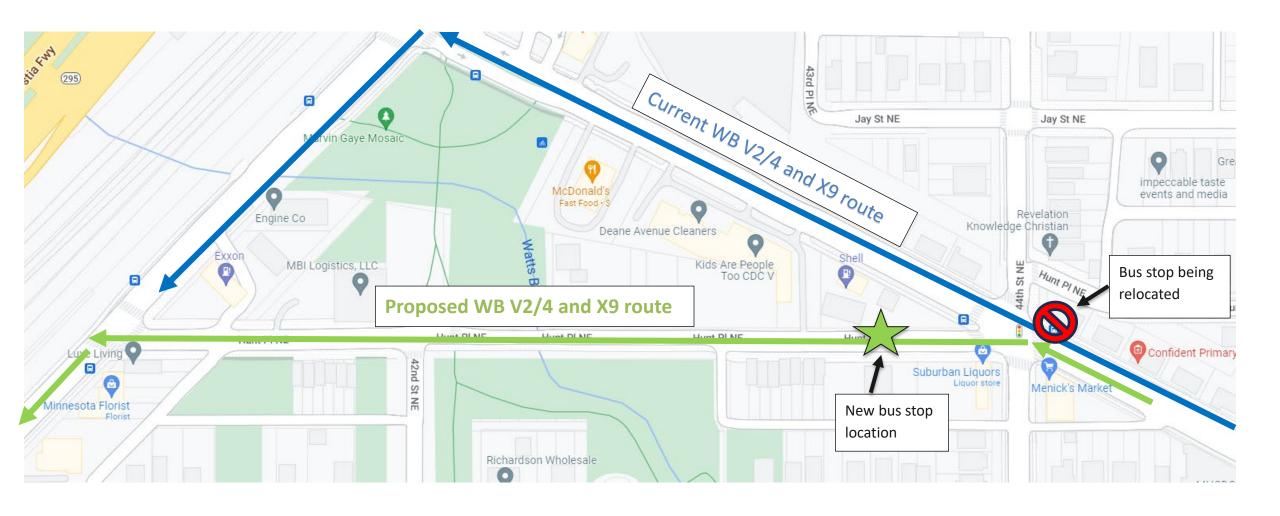
- Bus Reroute
- Bus Stop Rebalancing
- Reduced Speed Limit
- Curb and Median Extensions
- Pedestrian Refuge Islands
- Bus Bulb-Outs
- Transit Hub



#### **Hunt Place Reroute**



## **Hunt Place Re-Route Concept**



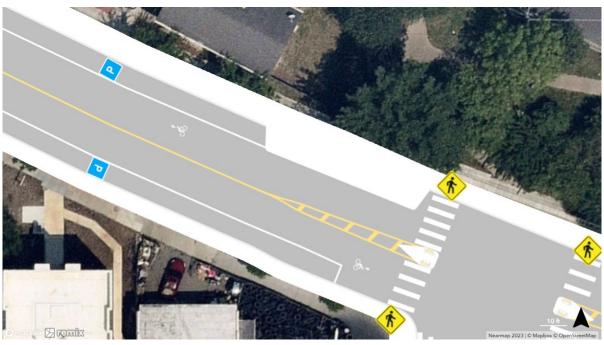


# Typical Intersection



- Pedestrian Refuges
  - Narrows Roadway
  - RFB
- Curb Extensions
  - Shortens crossing

- Bus Bulb-outs
  - Narrows Roadway
  - Improves bus speed
  - More space in waiting area for bus riders





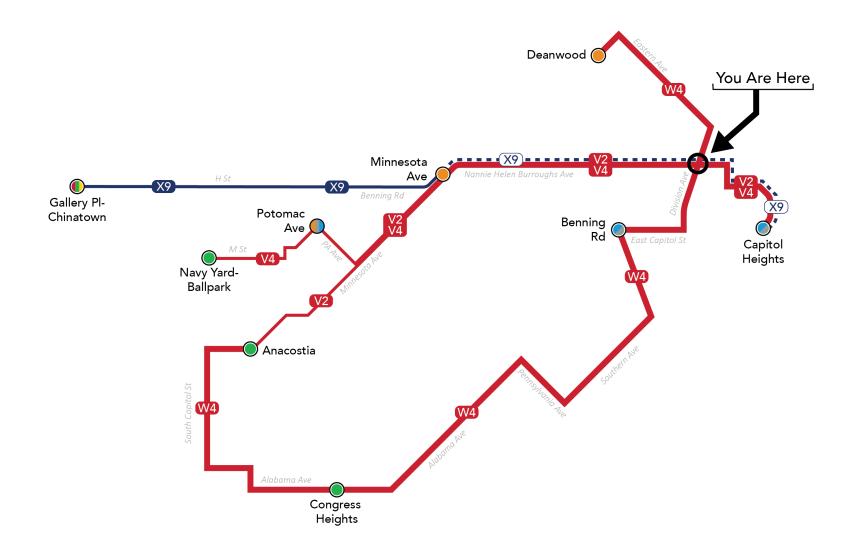
# Transit Hub



## What is a Transit Hub?

- Also known as a mobility hub
  - NOT near a Metrorail station
  - Has a variety of transportation elements to help travel from point A to point B
- Locations:
  - Nannie Helen Burroughs Ave and Division Ave
    - High Ridership bus stops
    - Transfer point between W4 and V2/4
    - Near HD Woodson High School
  - Alabama Ave and Good Hope Rd
    - In coordination with another DDOT project



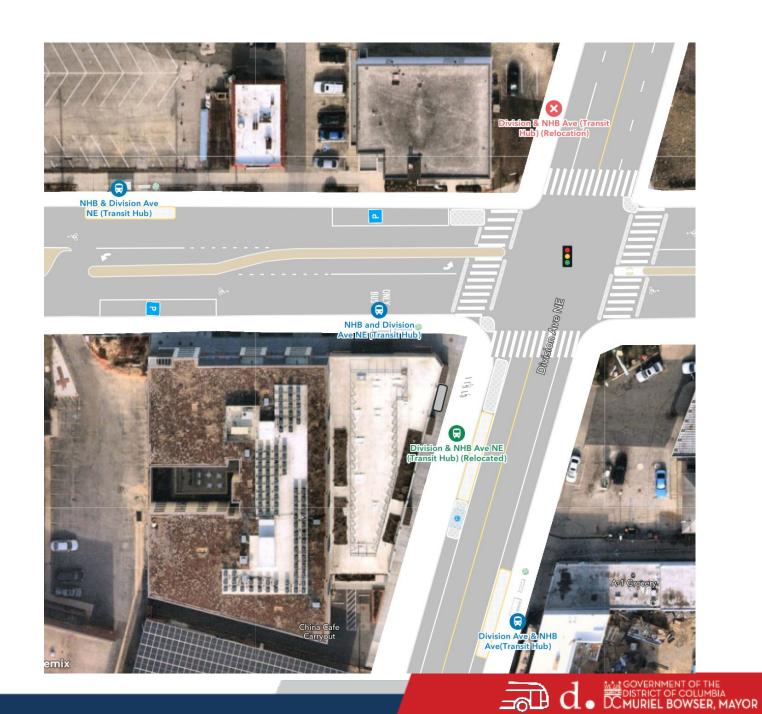


#### NHB and Division Ave Transit Hub

#### **Improvements**

- Bus Bulb-outs
- Bus Stop Relocation
- Real-time Bus Information
- Bus Shelters
- Pedestrian Safety
- Placemaking Art
- Scooter Corrals
- Enhanced Lighting
- Queue Jump





# **Summary of Design Goals**

- Rebalance Bus Stop Spacing
  - Relocate 4 bus stops from near-side to far side
  - Removing 2 bus stops because of close stop spacing
- Minnesota Avenue Intersection
  - Reroute buses to use Hunt PI to avoid backed up intersection
- Bus Stop Improvements
  - Transit hub bus stops with real-time bus arrival times
  - Installation of bulb outs at select bus stops
- Pedestrian Safety
  - Installation of pedestrian islands for increased comfort while crossing and to improve pedestrian visibility
- Traffic Calming
  - Reduced speed limit
  - Curb Extensions and daylighting

#### Thank You!

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District Department of Transportation