## Hyattsville Multimodal Safety Toolkit

Council Presentation

August 7, 2023





## **Project Team**

City of Hyattsville Department of Public Works

- Hal Metzler, Deputy Director
- Taylor Robey, Transportation Manager
- Toole Design
  - Scott Harris, Planner II
  - Ayden Cohen, Planner II
  - Dan Goodman, AICP, Director of Planning Mid-Atlantic



# How does City of Hyattsville identify and address traffic issues?

- Through our 2018 Transportation Study
  - Recommendations included specific projects as well as programmatic improvements
- Through resident requests as defined in the municipal code of ordinances (§ 114-8)
  - More information: hyattsville.org/848/Streets-Sidewalks



## Hyattsville Multimodal Safety Toolkit





## **Toolkit Purpose**

- Informs internal and external stakeholders about safety improvement options and how they are selected and implemented by staff
- Written for a community audience using easy-to-understand language
- Creates a shared understanding and realistic expectations around safety engineering tools





## **Toolkit Limitations**

- Doesn't replace engineering, feasibility, and design.
- Not intended to be a menu from which community members select the tools they want on their street.
- Only focuses on physical tools, not policy, engagement, education, etc. which can also be used to enhance safety.
- Design guidance meant to promote understanding but Additional Information section should be referenced for standards and specifications City follows for each tool.

Hyattsville Multimodal Toolkit CITYOF HYATTSVILLE



## **Sample Content: Introduction**

#### Purpose and Objectives

This toolkit is a collection of street treatments, or tools, designed to calm motor vehicle traffic and reduce crashes in the City of Hyattsville, particularly crashes between motor vehicles, pedestrians and bicyclists. This document is intended to help inform interested residents and other stakeholders about the options available in Hyattsville for calming traffic and increasing the safety and comfort of city streets for all users, but particularly those most vulnerable—pedestrians and bicyclists.

Each tool is presented on its own page, which describes the treatment and its purpose, locations where it is typically used, how it addresses roadway safety, considerations in design and placement, expected reduction in crashes (where available), and estimated cost and time to install.

#### Hyattsville Transportation Study (2018)

This toolkit builds off of the 2018 Hyattsville Transportation Study, which included a comprehensive analysis of Hyattsville's transportation network and presented a series of goals and recommendations for road network improvements. Transportation Study goals include:

- Improve safety along major roads
- Enhance and increase safe connectivity for pedestrians
- Improve traffic flow within neighborhoods
- Strengthen connectivity for cyclists
- Support development around the Metro stations and Gateway Arts District
- Support environmentally friendly, sustainable growth.
- The plan identifies the following strategies to guide the City as it invests in the local transportation system:
- Strategy 1: Complete the City's street grid with new street connections
- · Strategy 2: Design streets for lower speeds

TOOLE

DESIGN

Hyattsville Multimodal Toolkit

- Strategy 3: Prioritize people on foot in street design
- Strategy 4: Where appropriate, change traffic circulation
- Strategy 5: Prioritize the comfort of people on bikes in street design
- Strategy 6: Design intersections to improve safety for all users
- Strategy 7: Prioritize connections to and from the Metro stations and Arts Districts
- Strategy 8: Integrate trails into the local transportation network
- Strategy 9: Review parking policy and adopt new regulations.

The Transportation Study guides capital and operating investment in Hyattsville's transportation system.

This Hyattsville Multimodal Toolkit will support the goals defined in the Transportation Study and the strategies for achieving them by defining on-street traffic calming and connectivity tools that can be deployed by the City of Hyattsville.

Hyattsville Transportation Study

Figure 1. 2018 Hyattsville Transportation Study

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Final Report

December 20, 201



Hyattsville's street network is primarily narrow, lowspeed local roadways with some larger regional areterials bisecting the city. Most roadways in Hyattsville are owned and maintained by the City of Hyattsville apart from four major arterials which are owned and maintained by the Maryland State Highway Administration (SHA): Baltimore Avenue/Rhode Island Avenue, US1-A (Baltimore Avenue); East-West Highway (MD 410): Queens Chapel Road (MD 500); and parts of Hamilton Street (MD 208). Ager Road and Adelphi Road are main roadways owned and maintained by Prince George's County Department of Public Works and Transportation (DPWT).

The appropriateness of different toolkit treatments depends on several characteristics of a specific street including the number of lanes, daily motor vehicle volume, motor vehicle speeds, pedestrian and bicycle volumes, and overall street width. Additionally, some treatments are appropriately applied along a segment of roadway while others are appropriate only at intersections. The 2018 Hyattsville Transportation Study classified each street in Hyattsville as either Local, Collector, or Arterial. A map from the Study, showing the classification of each street in Hyattsville is provided on the following page. (Figure 2). For each tool in this toolkit, location guidance is provided identifying the appropriate roadway type for a given treatment.

#### Arterial Streets in Hyattsville

Each of the arterial streets in Hyattsville is owned and maintained by the State of Maryland or Prince George's County. For more information and recommendations on how to report issues or request changes on county and state-owned roadways, please see the Appendix at the end of this toolkit.



Hyattsville Multimodal Toolkit

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## **Tool Information**

Content for each toolkit tool:

- **Purpose** A short statement of the tool goal.
- **Description** A more detailed statement of what the tool is and how it works.
- **Primary Modes** Users expected to most benefit from each tool.
  - **Pedestrians**
  - **Bicyclists** ۲·
  - **Transit Riders**

SIGN

Drivers

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- **Estimated Cost** Cost ranges for implementation of each tool
  - Low Typically \$5,000 or less
  - Moderate Typically \$5,000 to \$100,000
  - Medium Typically \$100,000 to \$300,000
  - High Typically \$300,000 or more

- **Timeline** Time ranges for implementation of each tool Short – Within 1 year Medium – 1-3 years Long - 3 + years
- Safety Benefits How each tool positively impacts safety
- **Applicable Street Types** Applicable road types for each tool
  - **Controlled-Access Highways**

- **Principal or Minor Arterial Streets**
- **Local Principal or Minor Streets**
- **Other Location Guidance** Bulleted tips for tool location
- **Design Guidance and Considerations** Bulleted tips for best practices in tool deployment.
- **Expected Crash Reduction** Research based estimated probability for a tool to reduce crashes (if available).
- Additional Information Resources and research studies that engineers reference when designing for and implementing a tool

## **Sample Content: Tool Information**





#### Purpose

Optimize available roadway space to improve levels of safety and comfort for pedestrians and bicyclists.

#### Description

Road diets are the reallocation of space within a roadway to balance the needs of different users, often by converting a multi-lane roadway into two or three lanes for motor vehicles with spaces for bicyclists and pedestrians. The additional space created is typically combined with other elements such as bike lanes, transit lanes, widened sidewalks, pedestrian refuge islands, and/or curb extensions. Typically, road diets are utilized on undivided, four-lane roadways, which in turn are converted into two through lanes and a center turn lane. If the roadway volume is low enough, a center turn lane may be omitted.



#### Safety Benefits

- Reduces crossing distances for pedestrians. Reduces vehicle speeds
- Improves sight distance for turning vehicles. Improves level of comfort for pedestrian and biographics

#### Applicable Street Types

- Collector
- Local

#### **Other Location Guidance**

- Road diets are most successful on roadways with daily volumes of 8,000 to 20,000 motor vehicles.
- Road diets on roadways with motor vehicle volumes above 20,000 require further study.
- Side streets and alternative routes need to be considered when looking at the impact of the road diet.

#### **Design Guidance and Considerations**

- There are many factors to consider, including but not limited to motor vehicle speed and level of service, quality of service, existing motor vehicle volumes, peak hour and peak direction traffic flow, turning volumes, side street volume, and operation and volume of pedestrians, bicyclists, and transit vehicles.
- A three-lane road configuration should include one through lane in each direction and a twoway center left turn lane.

- Road diets can be supplemented with painted, textured, or raised center islands.
- Road diets bring significant change to street configurations, so it may be beneficial to conduct public outreach before moving forward.
- A conversion to a three-lane road can be compatible with a single-lane roundabout.

#### **Expected Crash Reduction**

The conversion of a four-lane to three-lane road diet has been found to have up to a 47% reduction in total crashes in suburban areas (Pawlovich, et al., 2006) and 29% in urban areas (FHWA, 2008).

#### Systemic Safety Potential

This is a systemic corridor recommendation that improves road conditions for all roadway users.

Additional Information AARP Livable Communities BIKESAFE Countermeasure Guide PEDSAFE Countermeasure Guide FHWA Bikeway Selection Guide





Before

After



#### Hyattsville Multimodal Toolkit

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## **Sample Content: Tool Information**

**Road Diet/Lane Reduction** 

#### **Applicable Street Types**

Collector Local

#### **Other Location Guidance**

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**Picture** 



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Name

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- Access Diverter
- Asphalt Art
- Bicycle Boulevard
- Buffered Bike Lane
- Chicane
- Conventional Bike Lane
- Crossing Island
- Curb Extension/Bulb Out
- Floating Transit Island
- High-Visibility Crosswalk

- Lighting
- Protected Intersection
- Rectangular Rapid Flashing Beacon (RRFB)
- Road Diet/Lane Reduction
- Roundabout/Traffic Circle
- Separated Bike Lane
- Shared Street
- Sidepath/Multi-Use Path
- Speed Cushion/Raised Crossing
- Yield Street



### **Asphalt Art**



### **Access Diverter**



### **Bicycle Boulevard**



**Buffered Bike Lane** 



## Chicane



### **Conventional Bike Lane**





### **Crossing Island**



### **Curb Extension/Bulb Out**



### **Floating Transit Island**



**High-Visibility Crosswalk** 



## Lighting



**Protected Intersection** 





### Rectangular Rapid Flashing Beacon (RRFB)



### **Road Diet/Lane Reduction**



## **Roundabout/Traffic Circle**



**Separated Bike Lane** 



## Shared Street



## Sidepath/Multi-use Path





**Speed Cushion/Raised Crossing** 



**Yield Street** 





## Thank you!

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