



MASSACHUSETTS DEPARTMENT OF  
CONSERVATION AND RECREATION

# Arborway Bicycle Facilities



**DCR Public Meeting #2**

**Thursday, February 5, 2015 – 6:30 p.m. - 8:00 p.m.  
Arnold Arboretum Visitor Center/Hunnewell Building  
125 Arborway, Boston**



# Commonwealth of Massachusetts

Governor

**Charles D. Baker**

Lieutenant Governor

**Karyn E. Polito**

Energy and Environmental Secretary

**Matthew A. Beaton**

Department of Conservation and Recreation Commissioner

**John P. Murray**

# DCR Mission Statement



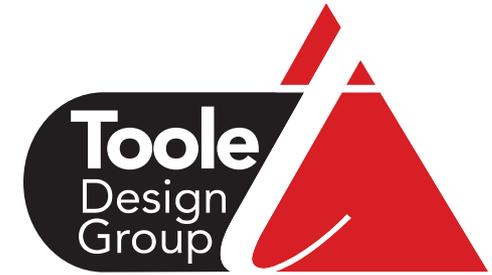
*“To protect, promote and enhance our common wealth of natural, cultural and recreational resources for the well-being of all.”*

# Tonight's Meeting - Purpose

To obtain feedback on starter ideas



# Toole Design Group's Mission Statement



*“Making walking and biking possible  
for every trip”*



# Project Goals

- Incorporate bicycle facilities
- Increase connectivity
- Improve comfort and safety for all users
- Reduce conflicts between all modes
- Increase predictability of each mode
- Maintain existing historic landscape



# Project Process

Existing  
Conditions  
Analysis

Stakeholder  
& Public  
Input

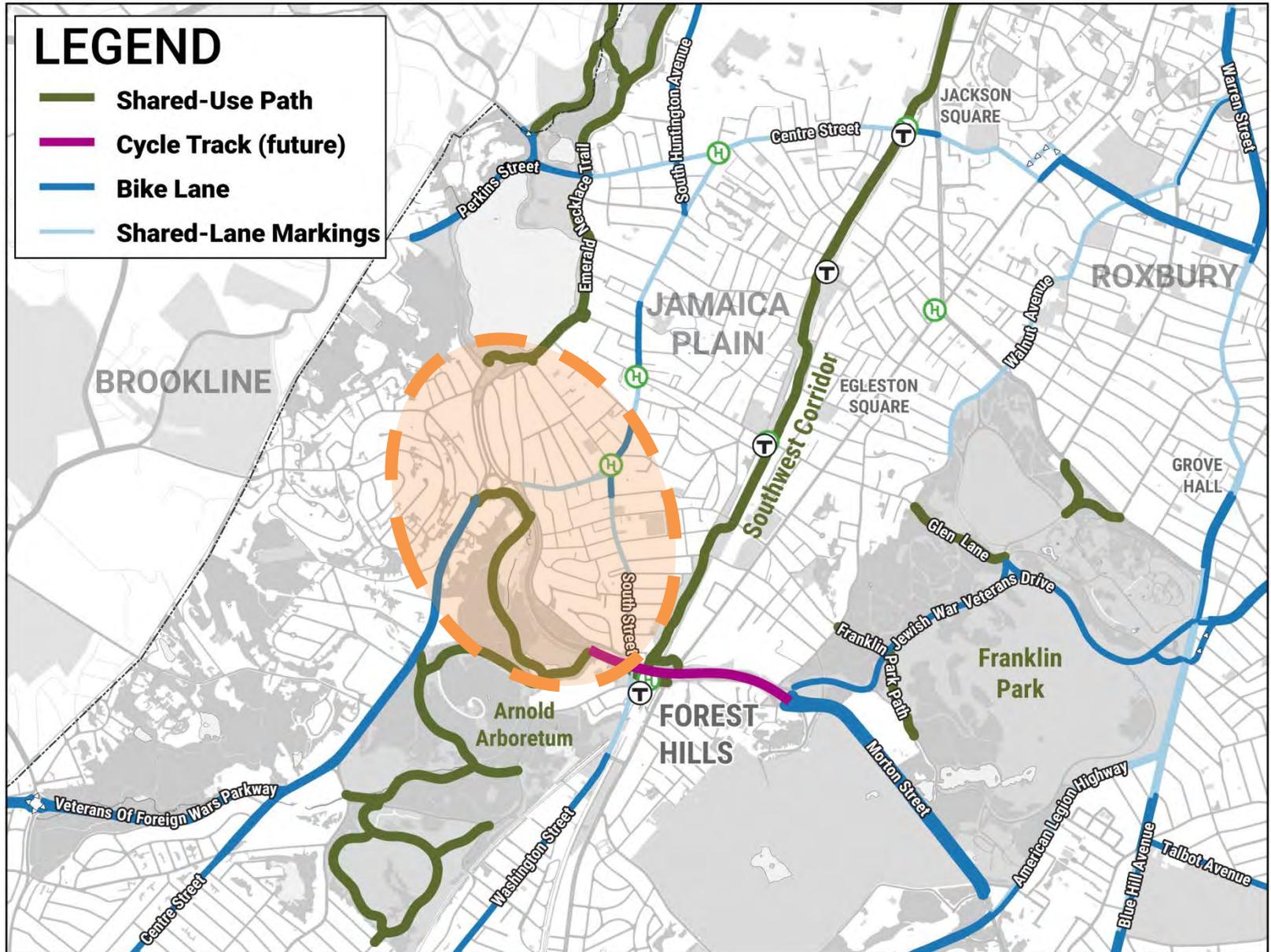
Discuss  
Starter Ideas

Develop  
Starter Ideas

Next  
Steps



# Arborway Bicycle Facilities



Why incorporate bicycle facilities

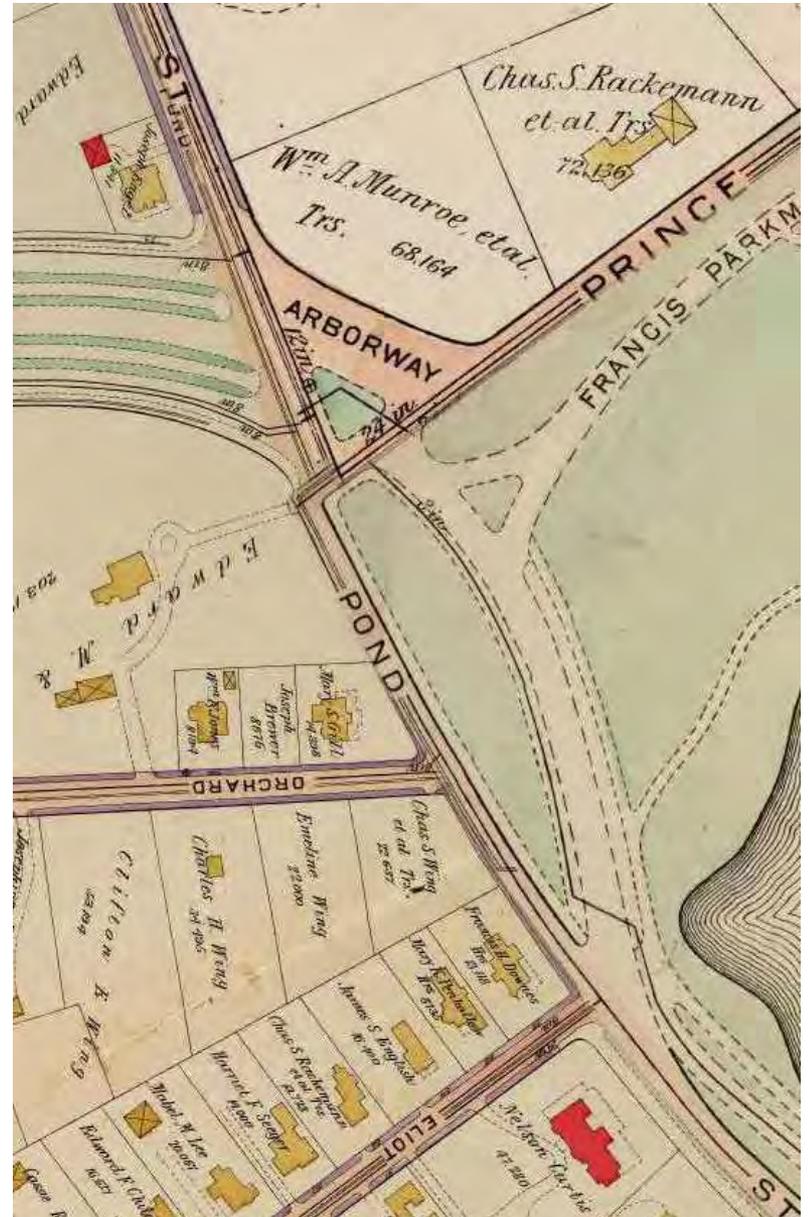
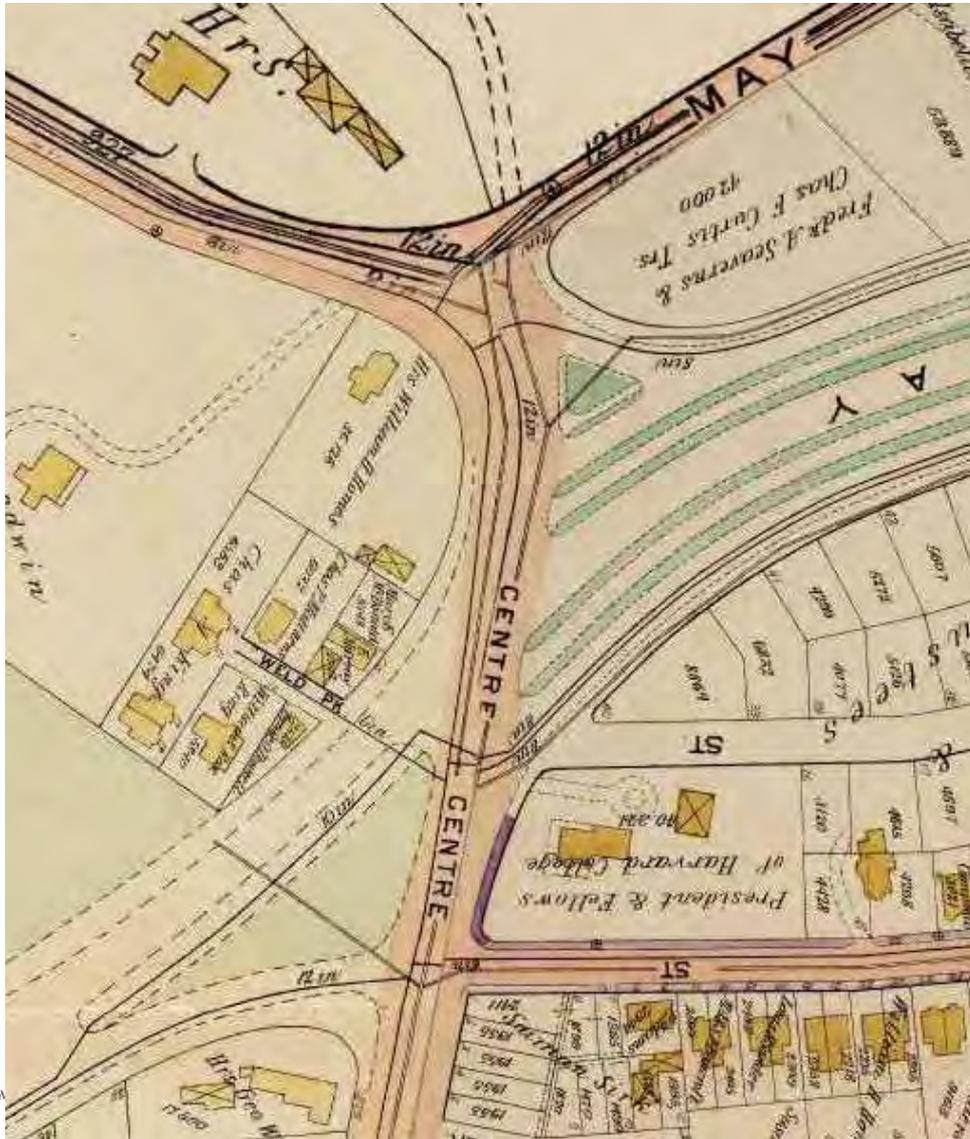
# Arborway Bicycle Facilities



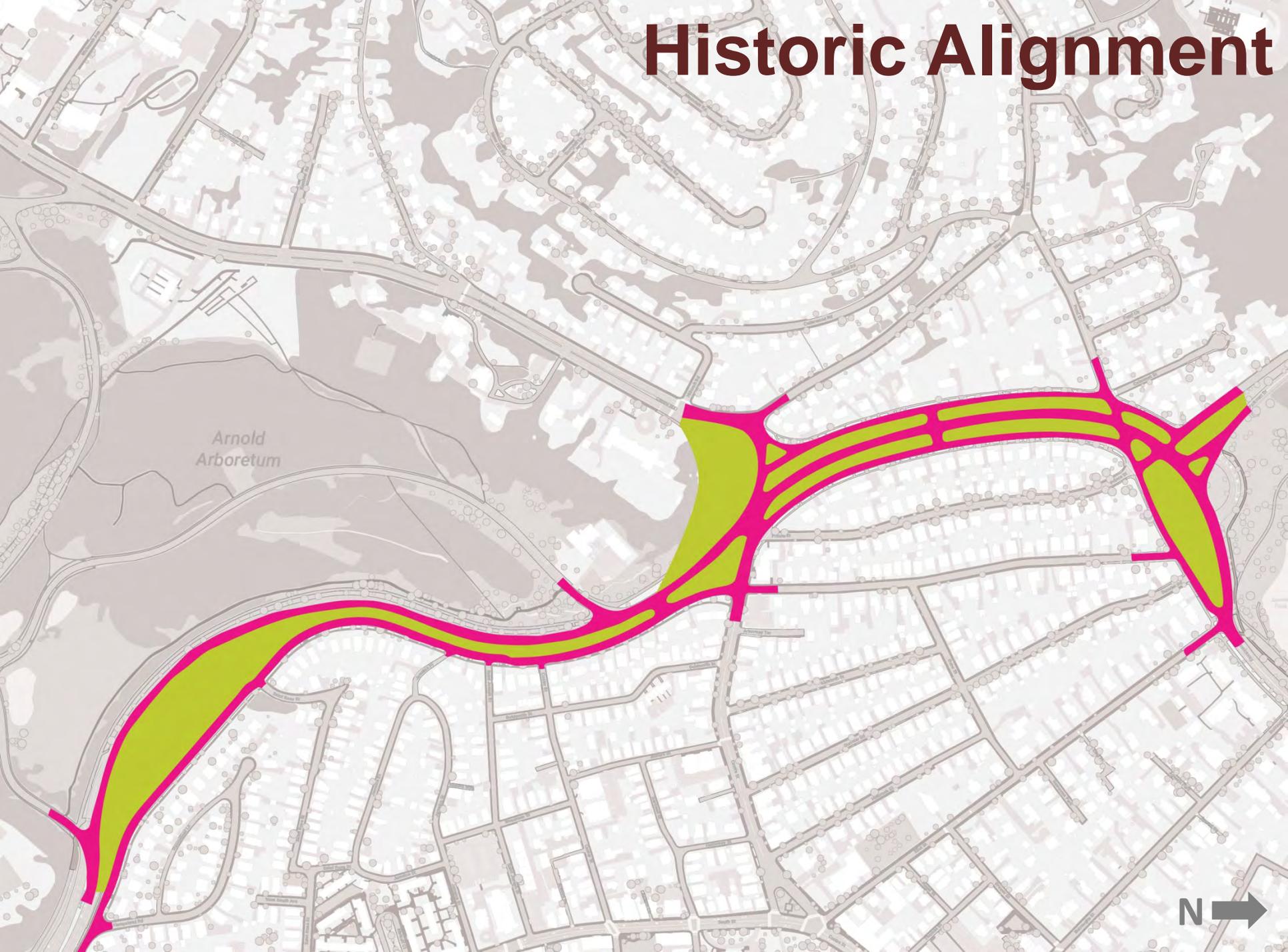
# Arborway - 1905



# Arborway - 1905



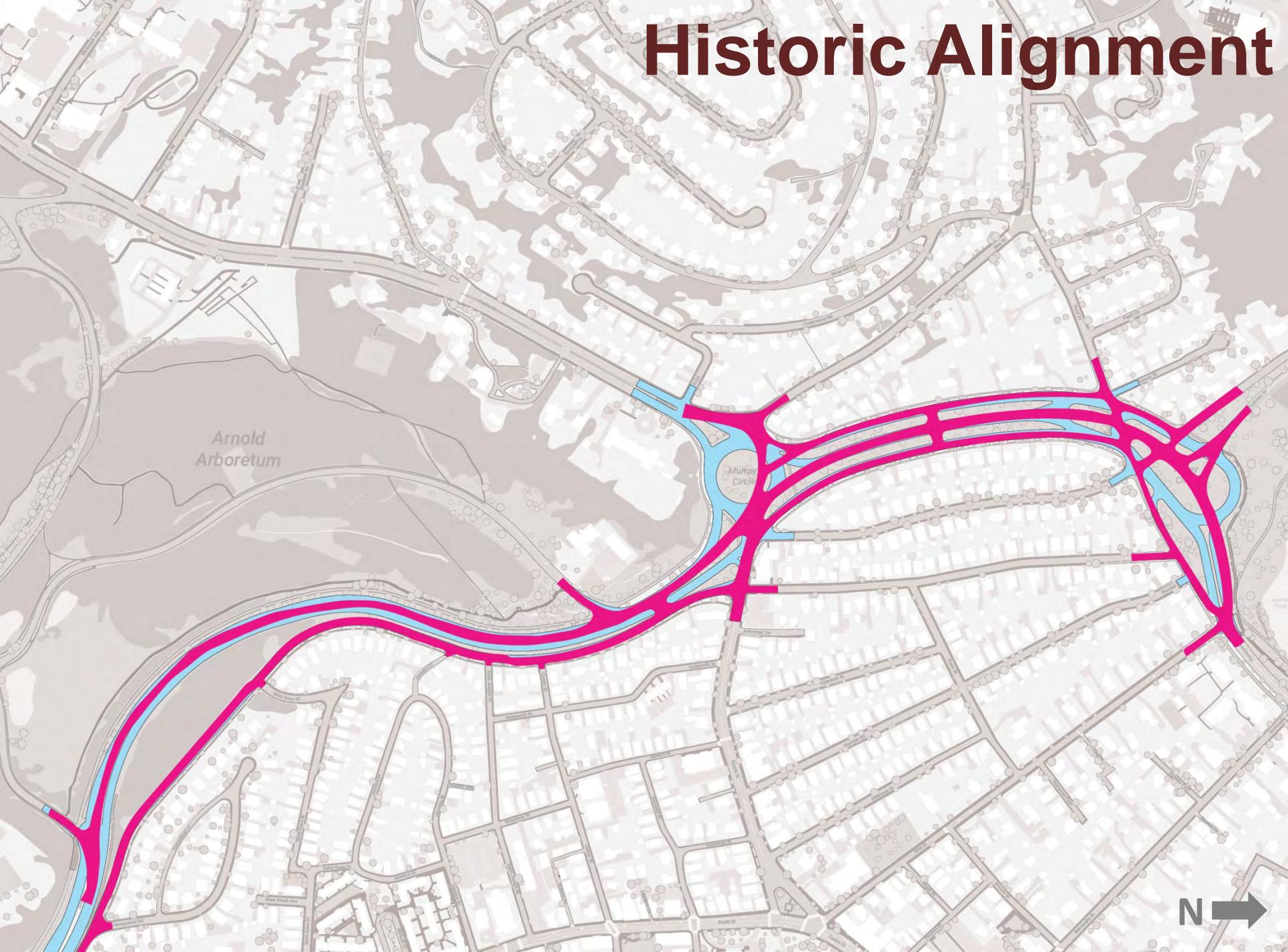
# Historic Alignment



Arnold  
Arboretum



# Historic Alignment



Arnold  
Arboretum

Murray  
Circle



# Previous Planning Projects

- Crosswalks Improvements at Arnold Arboretum and Upper Arborway (2014)
- Crosswalk and Pathway Treatment Guidelines for the Emerald Necklace Parks (2012)
- Jamaica Pond Pedestrian and Bicycle Access Improvements Project (2011)
- “Gateway to the Arborway” Landscape Treatment Plans (2008)
- Parkways Preservation Treatment Guidelines (2006)
- Arborway Master Plan (2004)
- Emerald Necklace Master Plan (2001)

## Building a Common Vocabulary – Types of Bicycle Facilities

### Bike Lane



A bike lane is an exclusive travel lane for bikes, typically located along the right side of the travel lanes on a two-way street; however, bike lanes may be located on either side of a one-way street.

### Buffered Bike Lane



Buffered bike lanes provide a higher quality bike facility where right-of-way allows. On roads with higher speeds, a buffer between the travel lane and the bike lane allows for increased comfort for

cyclists. On roads with on-street parking, a buffer may be placed between the parking lane and the bike lane, reducing dooring crashes.

### Shared-Use Path



A shared-use path is typically a paved path which may be located on an exclusive right-of-way or parallel to an existing roadway. Paths are typically two-way, open for bicyclists,

pedestrians, and other non-motorized users. Shared-use paths should be ADA-compliant and range from 10 to 14 feet wide.

### Separated Bike Lane

Separated bike lanes provide increased comfort and safety to cyclists. The lane itself may be at street level, sidewalk-level, or in between. They are separated from vehicular traffic by a vertical element, which may take the form of flex posts, planters, parked cars, curbs, or raised medians. Separated bike lanes may be one-way or two-way facilities.

#### one-way



#### two-way



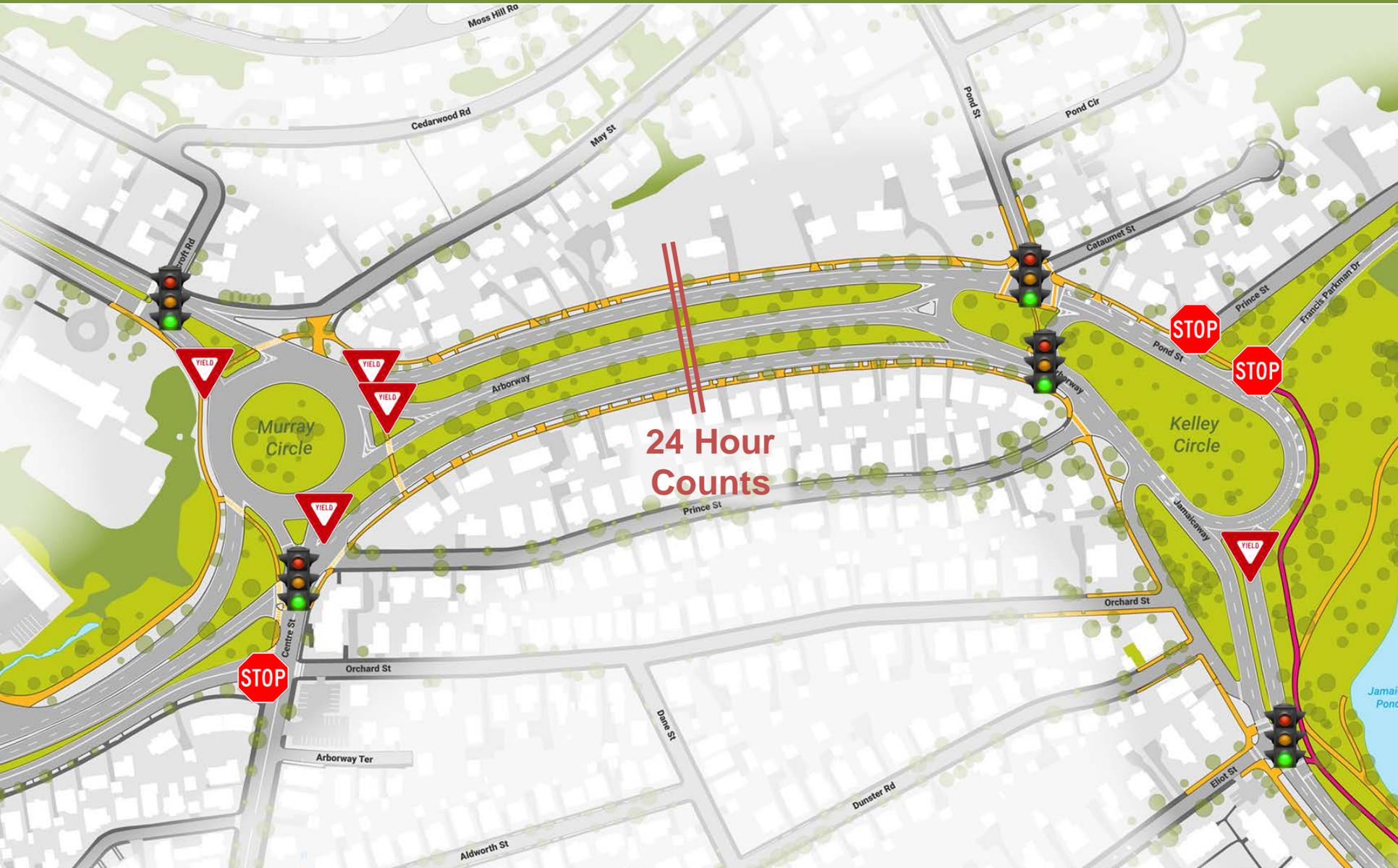
### Shared-Lane Markings



Shared-lane markings designate positioning for cyclists within lanes shared by vehicles and bicyclists and alert drivers to the presence of cyclists. Shared lane markings should be considered in

constrained corridors where installation of bicycle lanes is not feasible or as temporary until future improvements can provide full bicycle facilities.

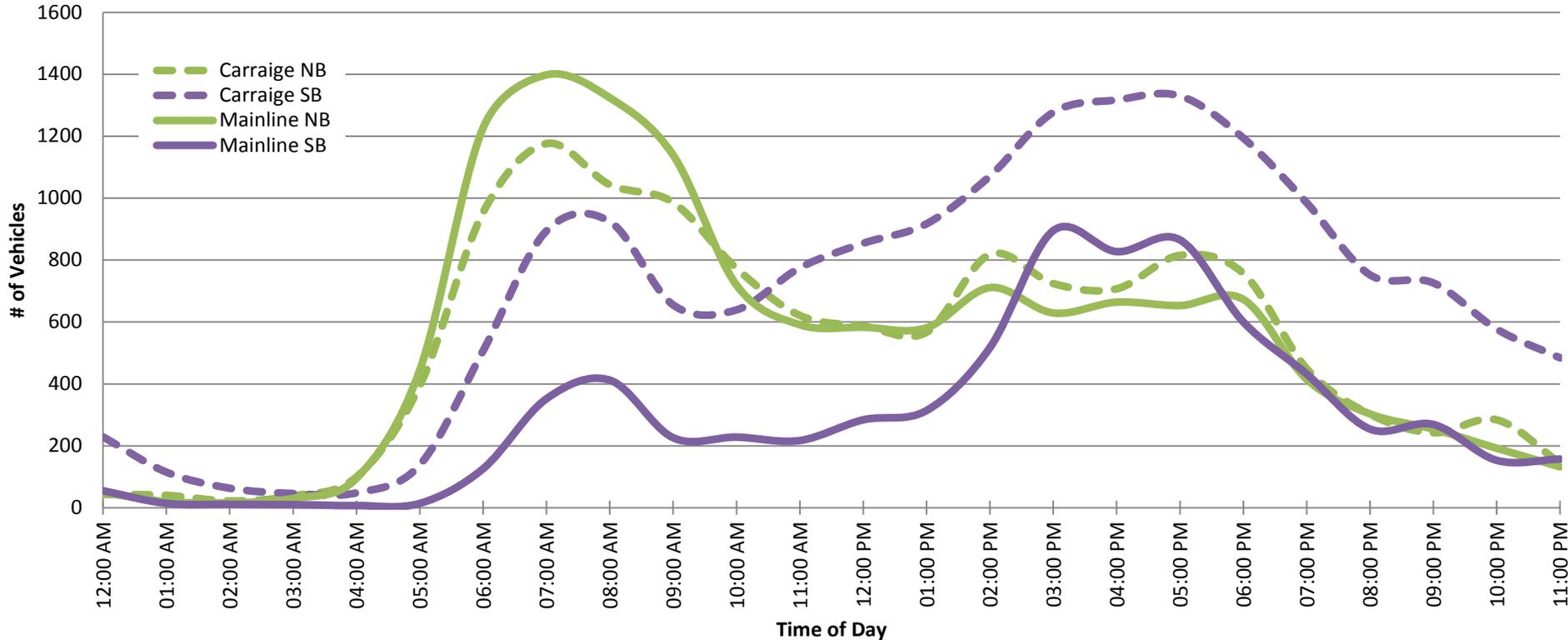
# Arborway Bicycle Facilities



24 Hour Counts

Traffic Control

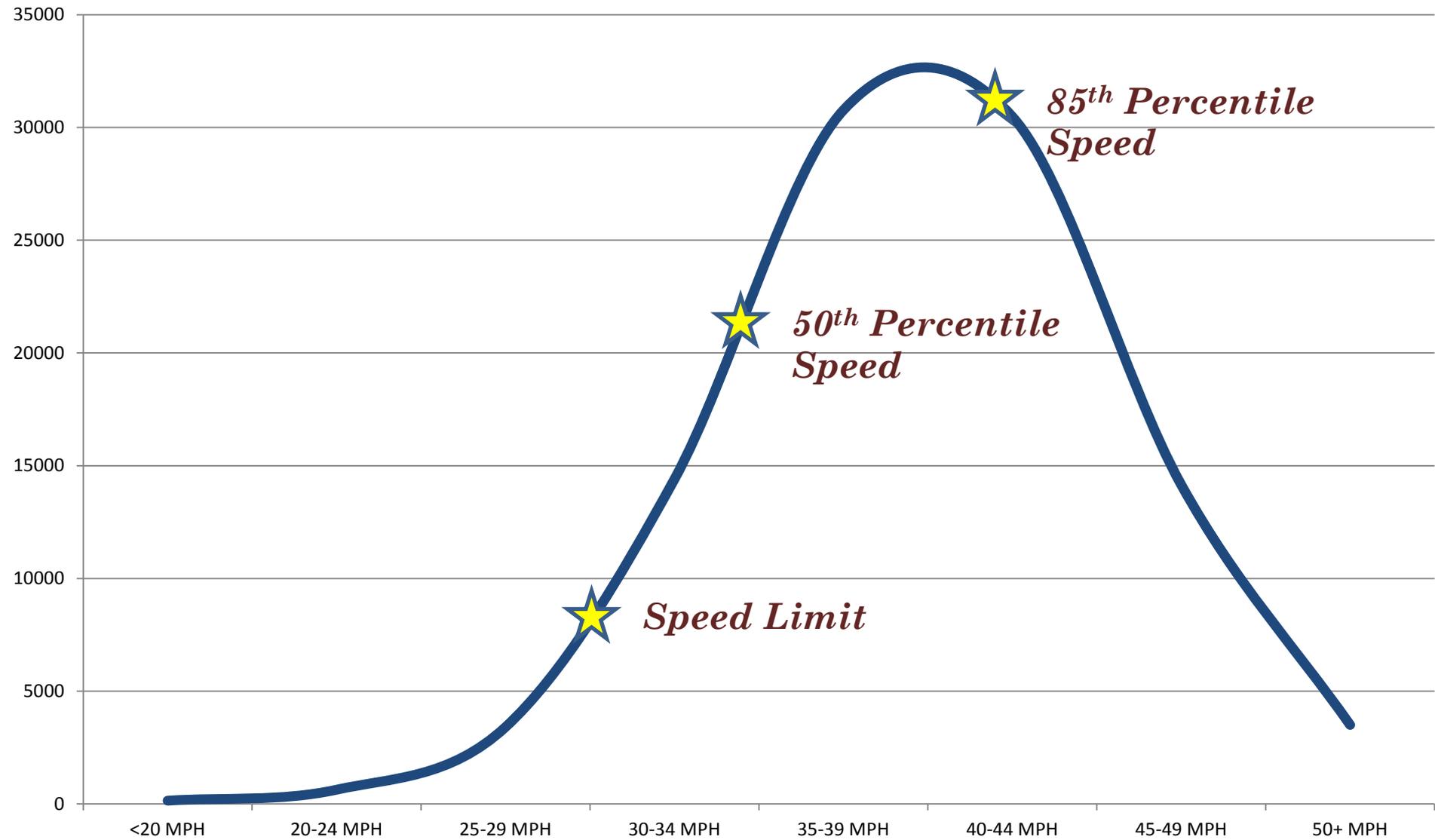
# Traffic Data: Arborway



- Average Daily Traffic ~ 49,200 vehicles per day
- AM Peak – 3,820 vph      PM Peak – 3,660 vph



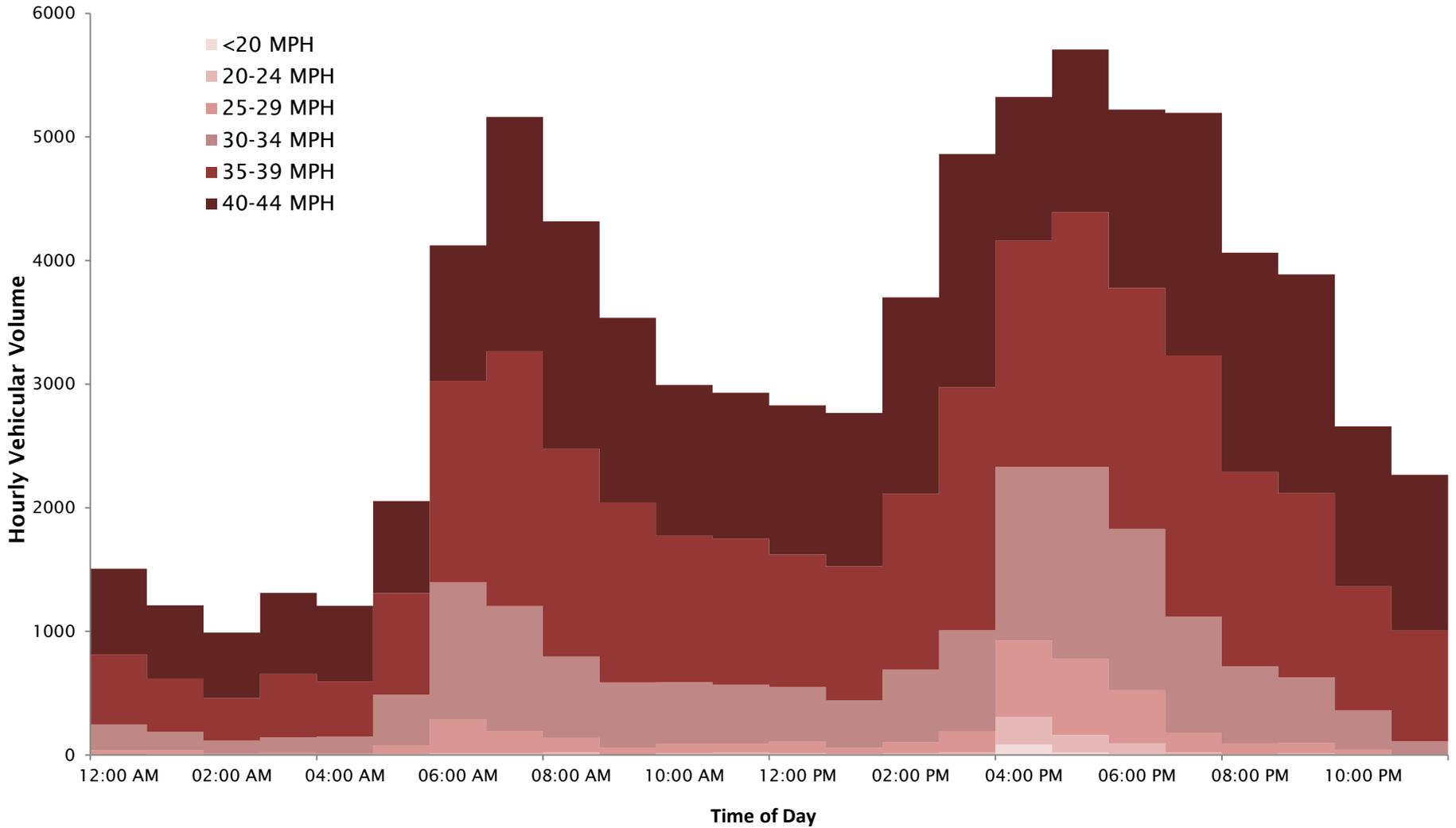
# Arborway Bicycle Facilities



## Volumes with Speed Breakdown



# Arborway Bicycle Facilities

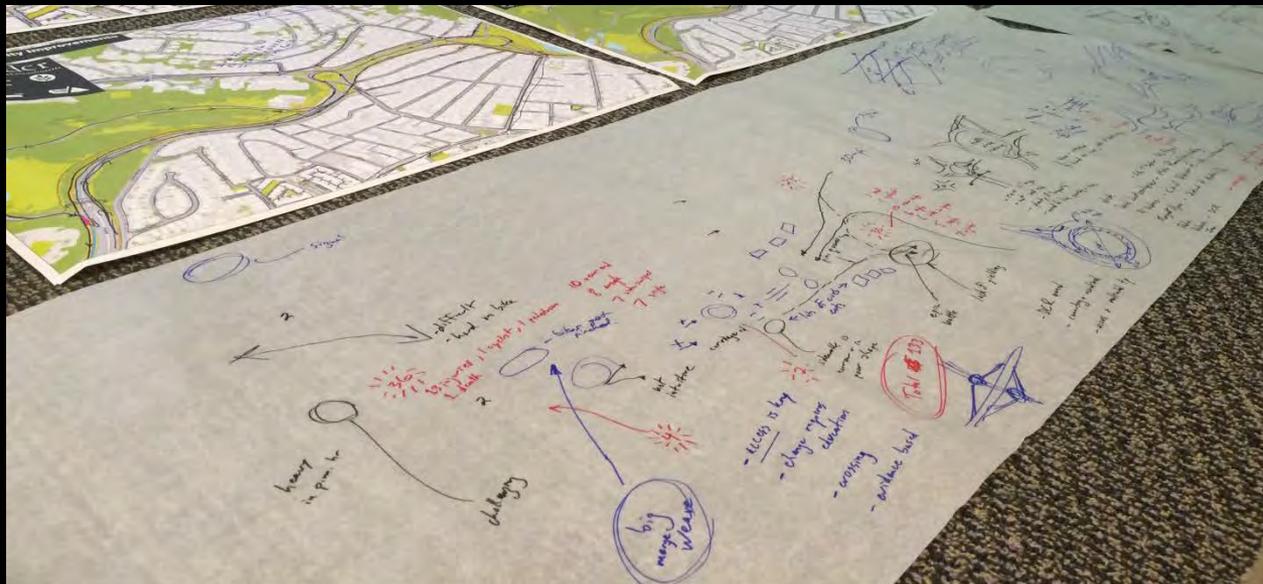


## Volumes with Speed Breakdown

## Field Observations

- Bicyclists riding on sidewalks
- High vehicle speeds between Kelley Circle and Murray Circle
- Minimal pedestrian crossing opportunities
- Many drivers don't yield to pedestrians at unsignalized crossing locations
- Queues at the Centre Street signal often back into Murray Circle

# What we heard



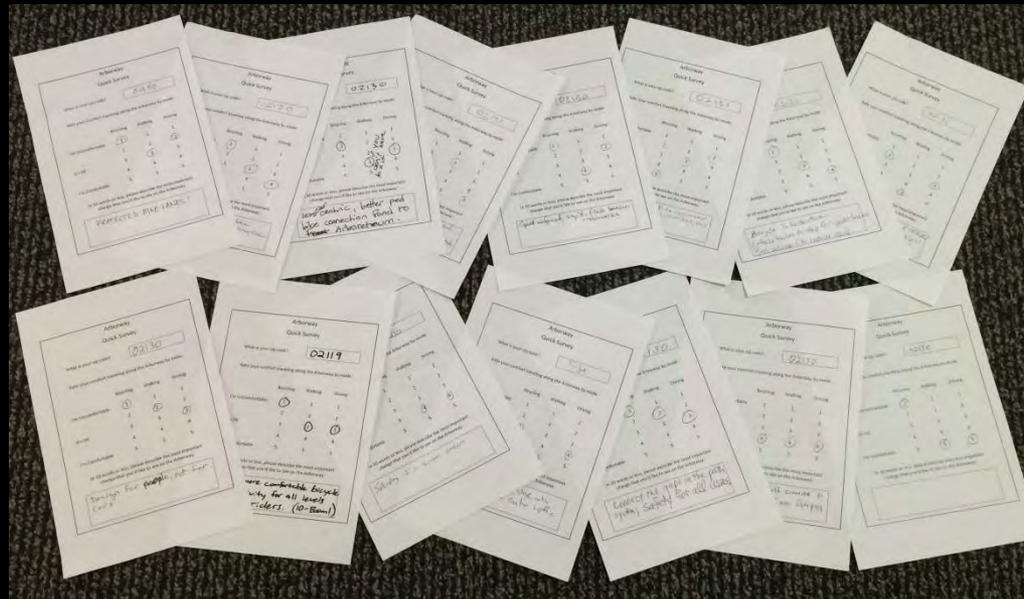
# What we heard



**CYCLETRACKS!  
CYCLETRACKS!**

**“Speeding is a  
serious concern.”**

**PROTECTED  
BIKE LANE!**



**“Less car centric.”**

**“Design for  
people not for  
cars.”**

**“Ability to cross traffic circles on foot or bicycle.”**

Trees

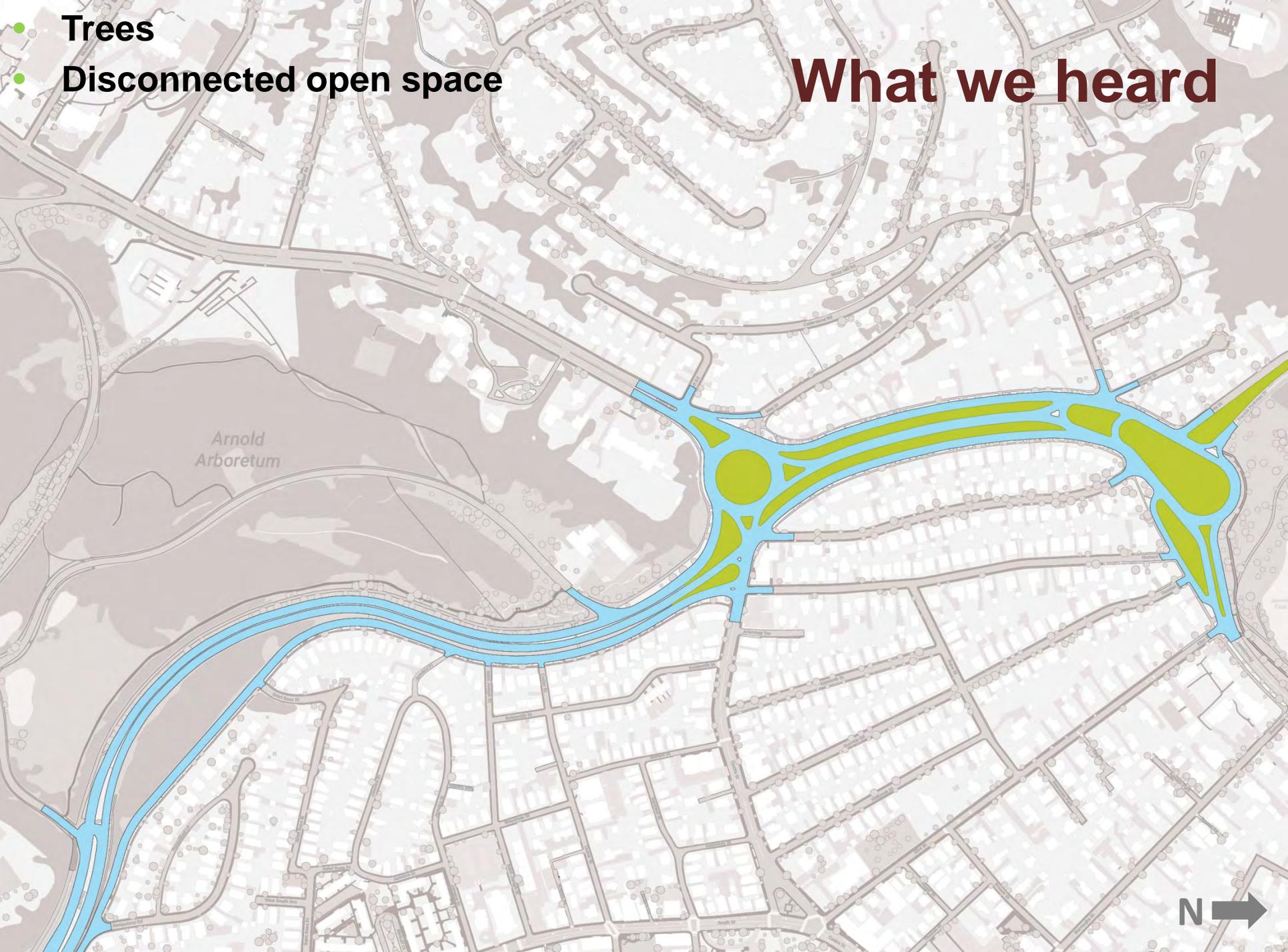
# What we heard



● Trees

● Disconnected open space

# What we heard

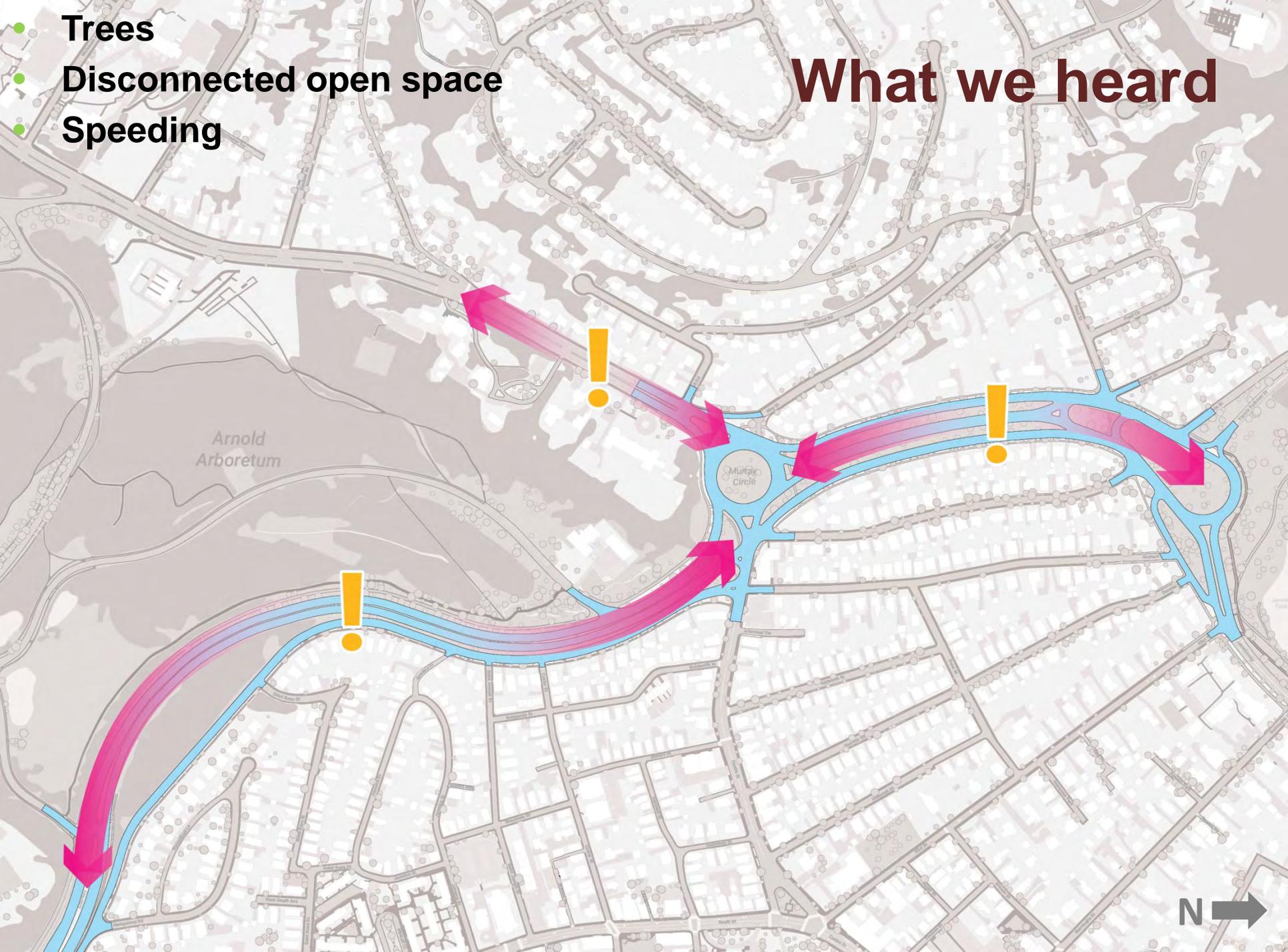


Arnold  
Arboretum



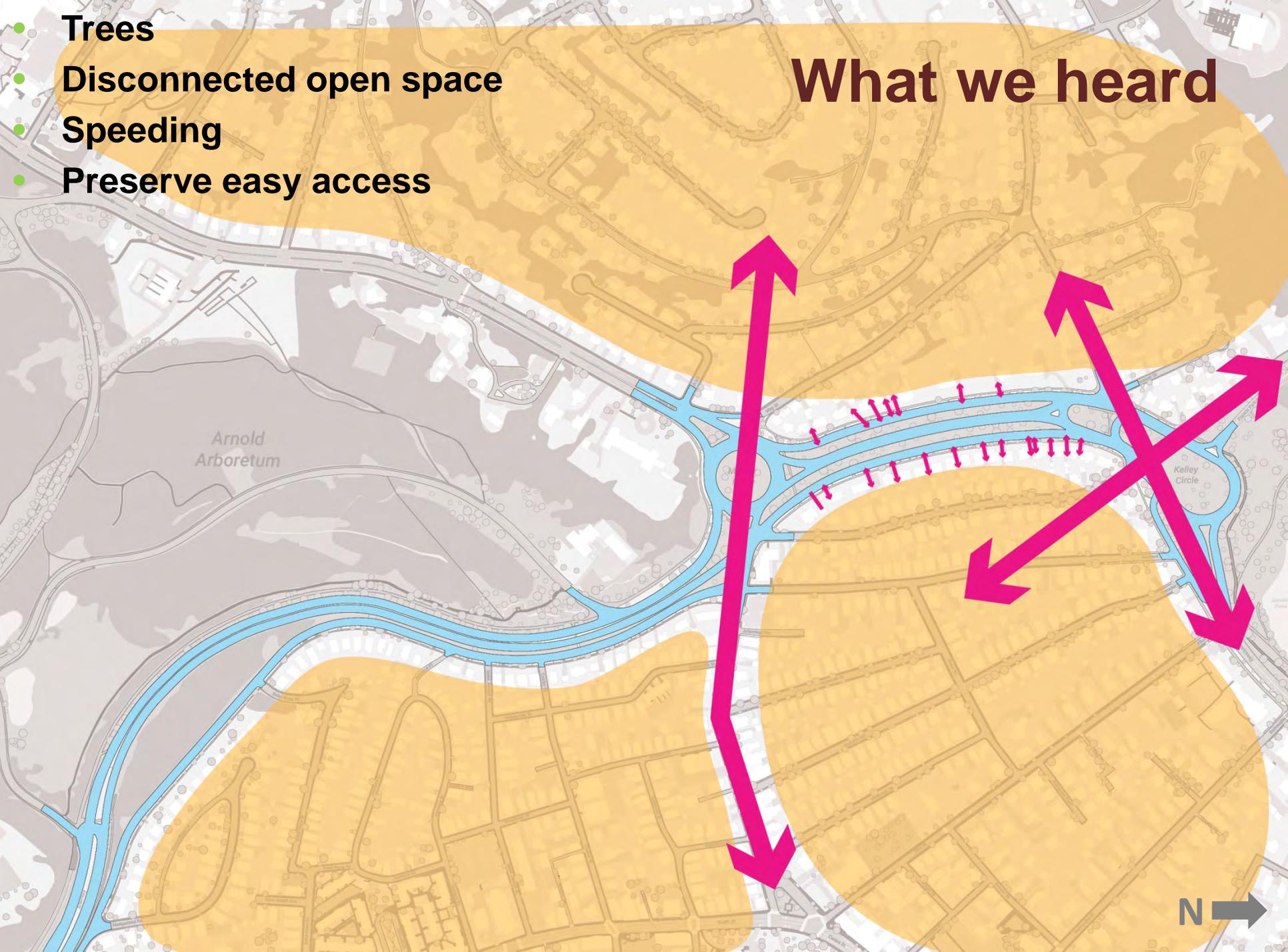
- Trees
- Disconnected open space
- Speeding

# What we heard



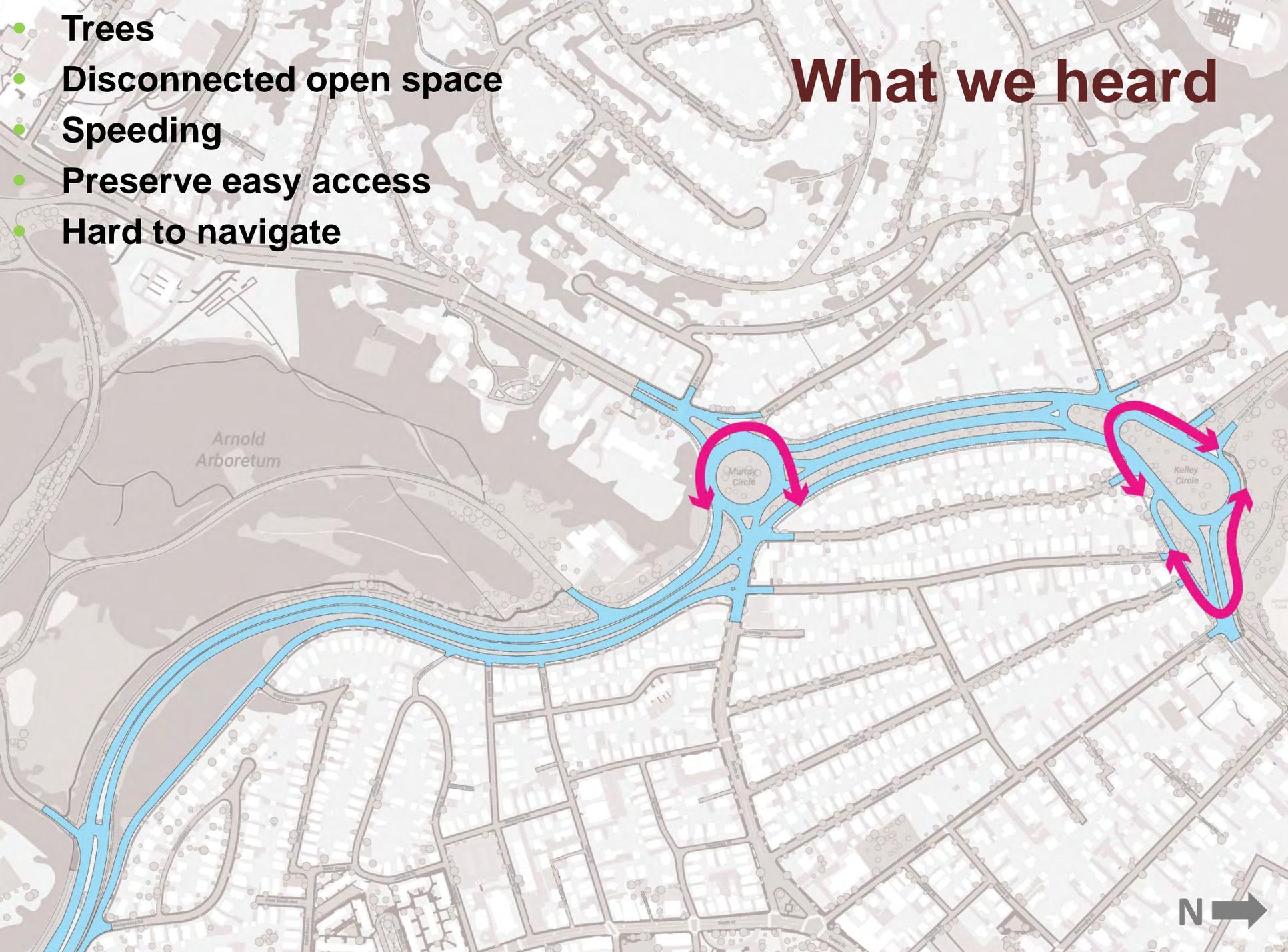
- Trees
- Disconnected open space
- Speeding
- Preserve easy access

# What we heard



# What we heard

- Trees
- Disconnected open space
- Speeding
- Preserve easy access
- Hard to navigate



Arnold  
Arboretum

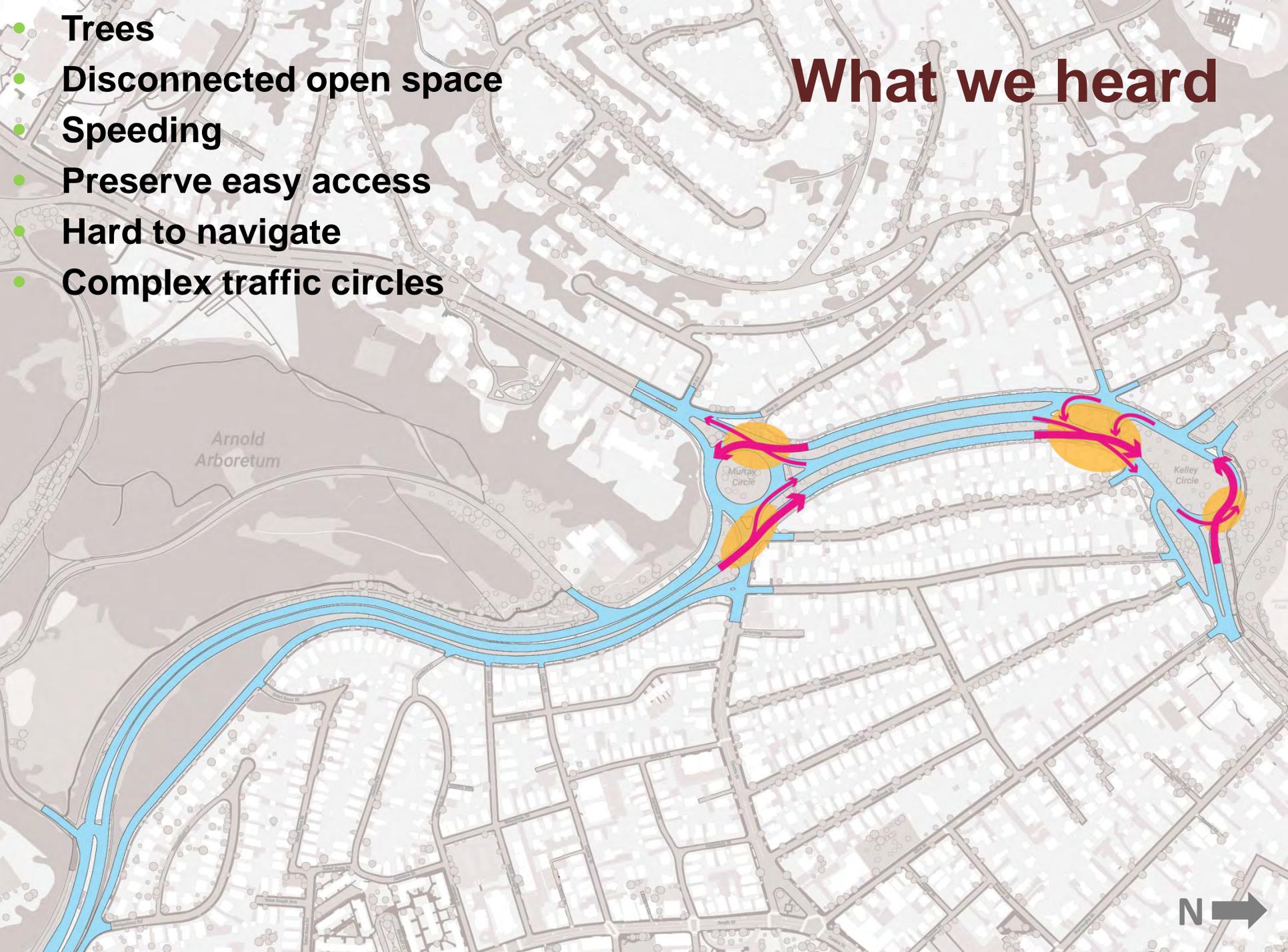
Murray  
Circle

Kelley  
Circle



# What we heard

- Trees
- Disconnected open space
- Speeding
- Preserve easy access
- Hard to navigate
- Complex traffic circles



Arnold  
Arboretum

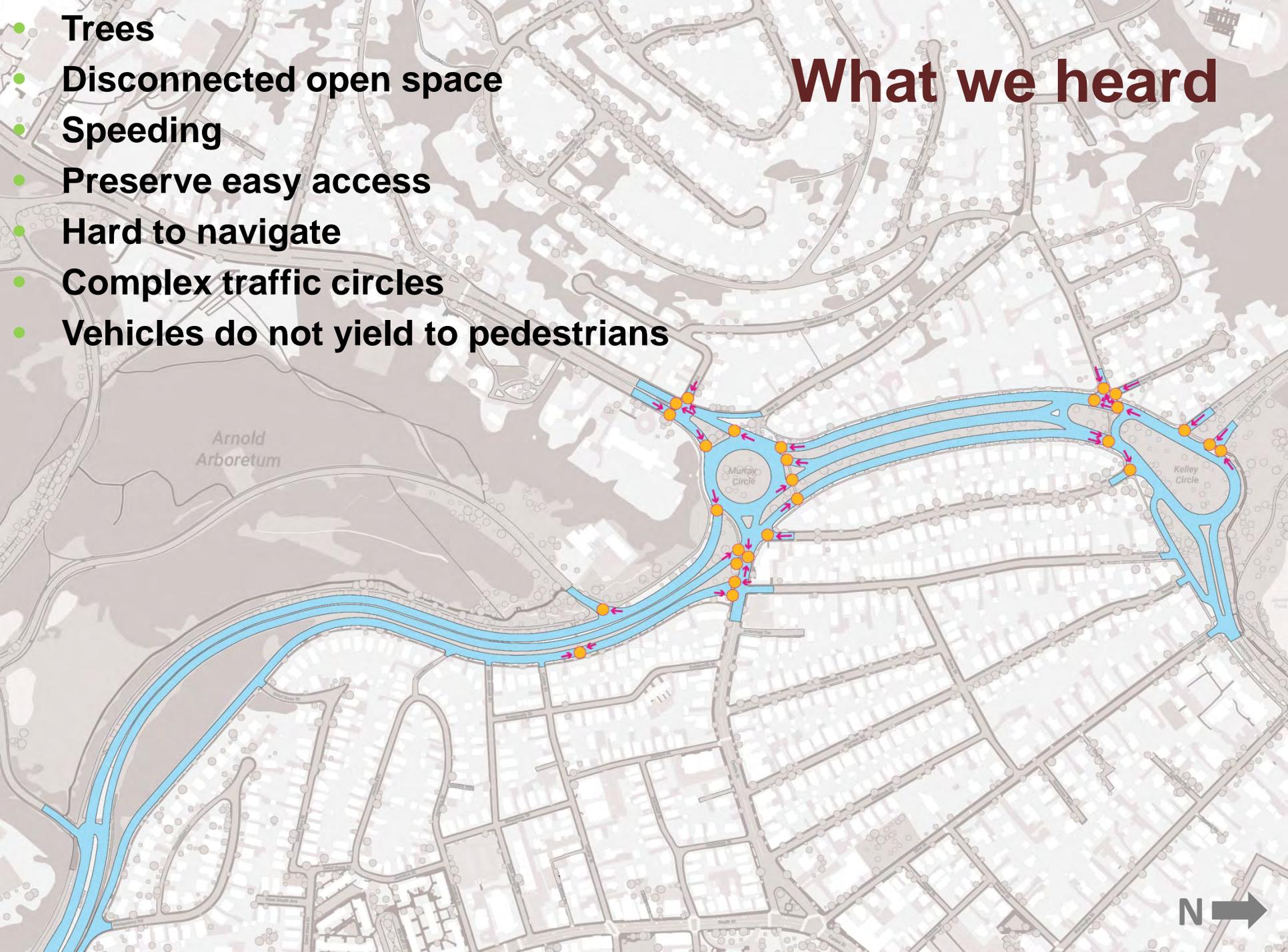
Murray  
Circle

Kelley  
Circle



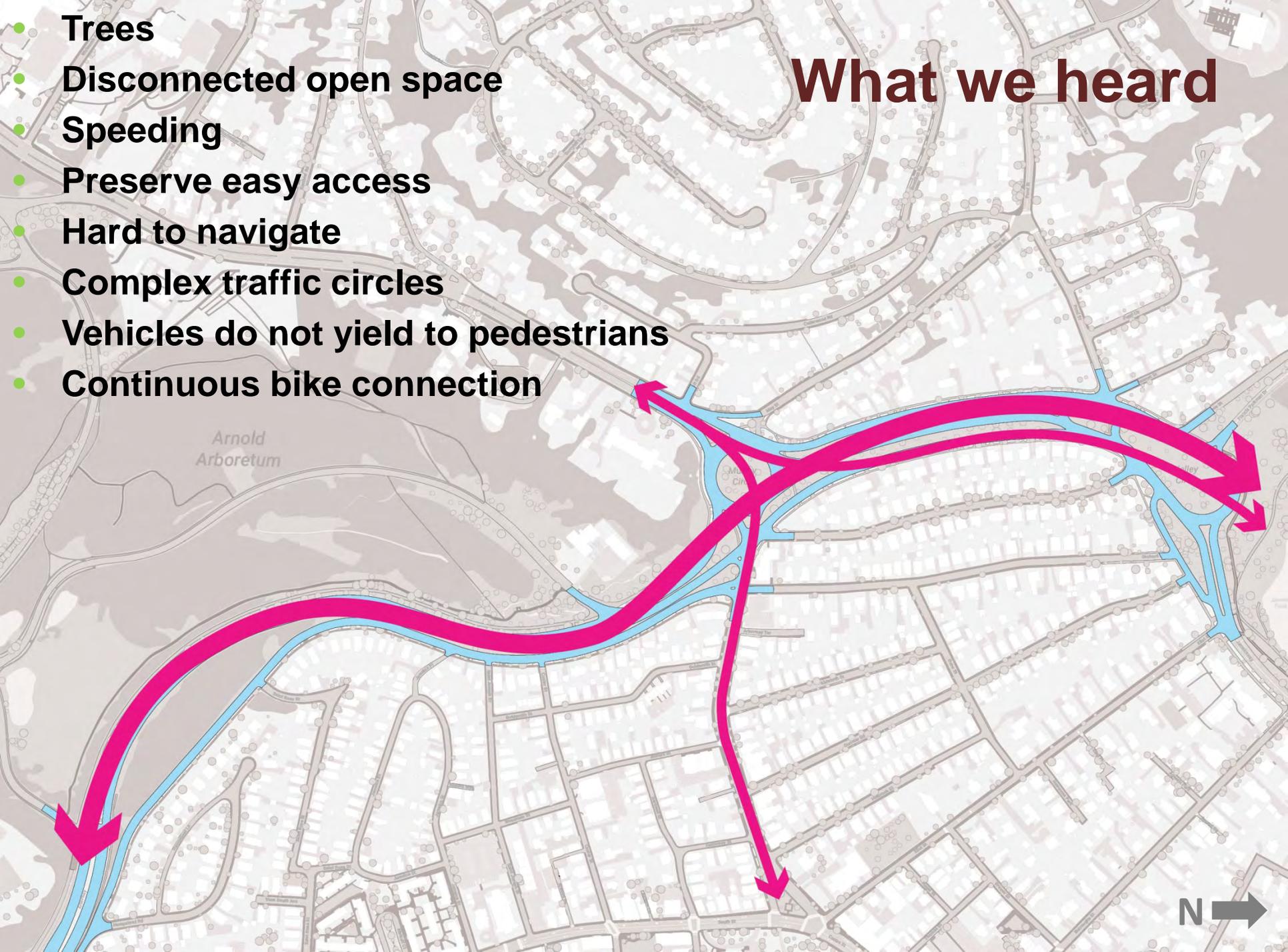
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- Trees
- Disconnected open space
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- Preserve easy access
- Hard to navigate
- Complex traffic circles
- Vehicles do not yield to pedestrians



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- Trees
- Disconnected open space
- Speeding
- Preserve easy access
- Hard to navigate
- Complex traffic circles
- Vehicles do not yield to pedestrians
- Continuous bike connection

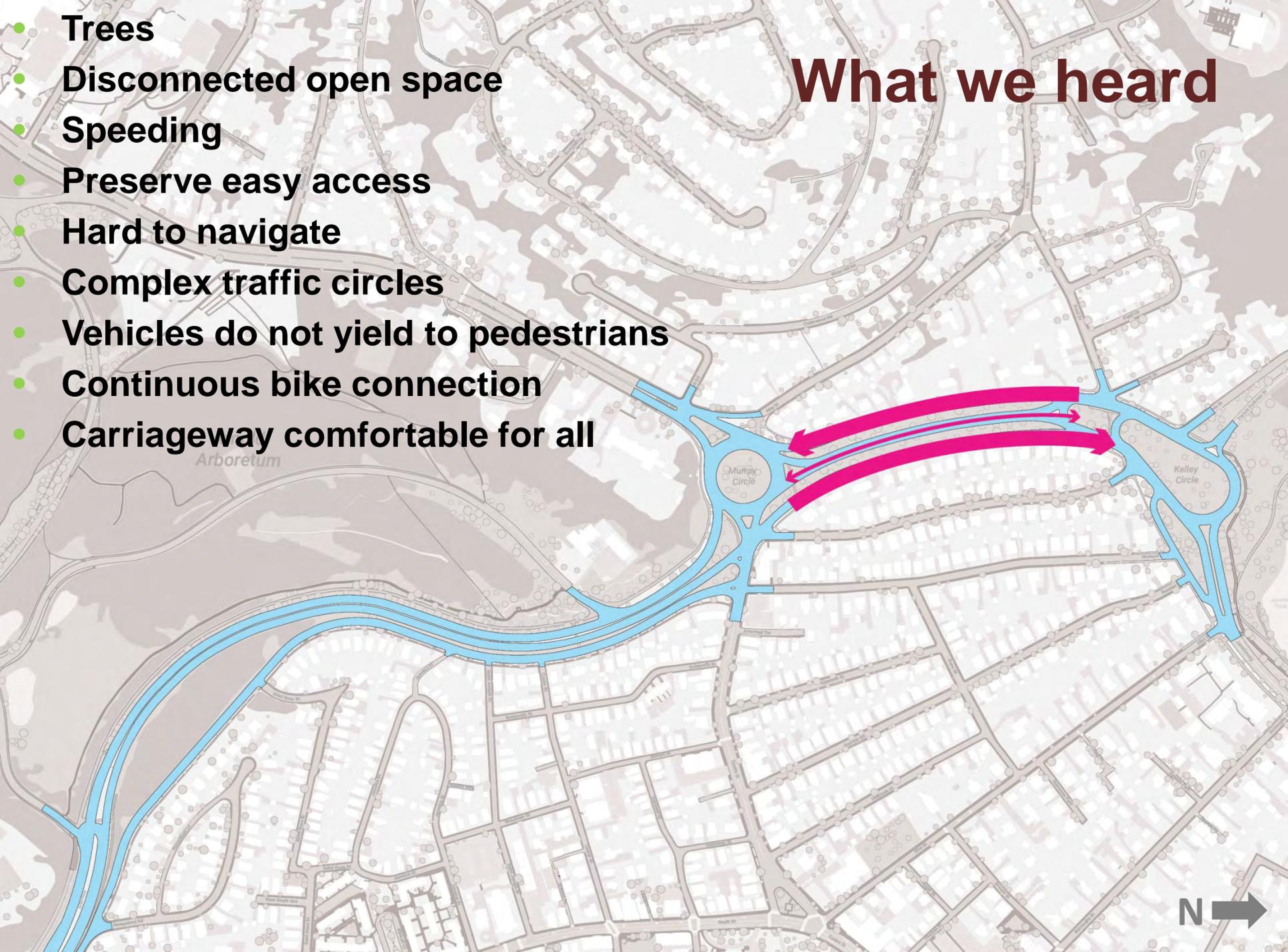


Arnold Arboretum



# What we heard

- Trees
- Disconnected open space
- Speeding
- Preserve easy access
- Hard to navigate
- Complex traffic circles
- Vehicles do not yield to pedestrians
- Continuous bike connection
- Carriageway comfortable for all



# What we heard

- Trees
- Disconnected open space
- Speeding
- Preserve easy access
- Hard to navigate
- Complex traffic circles
- Vehicles do not yield to pedestrians
- Continuous bike connection
- Carriageway comfortable for all
- Regional traffic on mainline

