



# Ardens Walkable Community Workshop

August 8, 2022



***WILMAPCO***

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For more information on Walkable Community Workshops, visit:

<http://www.wilmapco.org/walkable/>

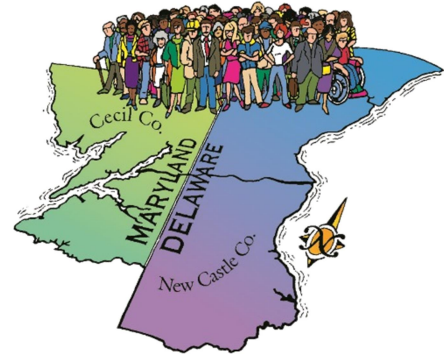
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## Introduction

### Who is WILMAPCO?

The Wilmington Area Planning Council (WILMAPCO) is the Metropolitan Planning Organization (MPO) for Cecil County, Maryland and New Castle County, Delaware. We are charged with planning and coordinating transportation investments for the Wilmington region.

The Wilmington region is home to more than 660,000 residents, most of whom (84%) live in New Castle County. Wilmington, a financial hub supporting a population just over 70,000, serves as the principal city. Urbanized development stretches outside of Wilmington along the I-95 corridor, from the Town of Elkton to the Pennsylvania border. Natural and rural landscapes, sprawling suburbs, and small towns blanket the rest of the region.



WILMAPCO's mission is to create the best transportation plan for the region, one that meets all the requirements mandated by the Federal Clean Air Act and its Amendments (CAAA) and the Infrastructure Investment and Jobs Act (IIJA).

### About the Workshop Series

WILMAPCO's *2050 Regional Transportation Plan* calls for improving quality of life, efficiently transporting people, and supporting sustainable economic development and goods movement. Making our communities more walkable achieves all of these goals.

WILMAPCO was selected for the Walkable Community Workshops (WCW) program – part of the *National Center for Bicycling & Walking* – to work directly with communities. Walkability considers how well an area facilitates safe foot traffic. The WCW program seeks to ensure that people of all ages and abilities can walk, as well as bike, easily, safely, and regularly.



## Why Walkable Communities are Important

**We are all pedestrians.** Whether we think so or not, we are all pedestrians. We may walk to work, walk for exercise, walk to do errands, or simply walk from the car to the store. We all need safe facilities for walking.

**Walking is crucial to give those who don't drive a travel choice.** Many in our region are too young to drive, have a permanent or temporary disability which prevents them from driving, have no access to a car, or choose not to drive. In the Ardens, 10% of the population is under age 18, 32% are 65 or older, and 15% of the population has a disability (2020 American Community Survey). Many people in these population groups need to walk in order to lead active and independent lives.

**Walkable communities are healthier communities.** North Americans' waistlines are getting wider, triggering a rise in related illnesses including heart disease and diabetes. In Delaware, 34% of adults are obese; 75% of adolescents do not engage in the recommended amount of physical activity for any given week; only 49% of adults get the recommended amount of physical activity; and 27% of adults engage in no leisure-time physical activity at all (according to the Centers for Disease Control, 2019). Pedestrian-friendly communities make it easier for people to integrate physical activity into their daily lives.

**Everyone benefits from walkable communities.** Even if you don't enjoy walking, you still benefit from living in a walkable community. More people walking and bicycling reduces overall levels of vehicular congestion, which benefits drivers too. Less driving also reduces air pollution and greenhouse gas emissions. There are also economic benefits with walkable communities, including higher property values and greater sales in commercial areas.



## Walkable Community Workshops

A WCW is typically a three-hour session that includes an educational presentation on what makes a community walkable, a walking audit of a specific area, and a mapping session, where participants engage in brainstorming solutions. Focusing on a particular area's walkability, participants study sidewalks, pathways, inviting streetscape, crosswalks, destinations, etc. The process gives everyone the tools for making a community walkable and provides realistic next steps that can be used to achieve their goals.

There are **three main parts of a workshop:**



**Part 1** – The presentation reviews topics such as sidewalk design, crosswalks, traffic calming, community design, and other tools that communities need to create a walkable environment.



**Part 2** – The walking audit gives participants a chance to survey the area, identify issues and think about how to apply what they learned from the presentation. Getting out and walking is key to illustrating the challenges that people face when pedestrian facilities are not available.



**Part 3** – In the mapping exercise, people share ideas for improving walkability. Participants end the session by committing to specific next steps to continue the process started at the workshop.

## Background

The three Ardens are adjacent villages in northern New Castle County, Delaware. Arden was founded in 1900, followed by Ardentown in 1922 and Ardencroft in 1950. As of the 2020 Census, the three Ardens and the small unincorporated land between them are home to 935 people. Each village was founded as a single-tax community: land within each village is held in a common trust, from which people lease properties. This limits new development, which is intended to maintain the villages' historic, rustic nature.

The villages feature a historic, interconnected network of walking paths that serve as a car-free alternative to walking in the streets. Most of the Ardens' residential streets are narrow and have low traffic speeds and volumes, making them comfortable for walking alongside motorized traffic, despite the lack of sidewalks. However, Harvey Road bisects the villages and carries higher traffic volumes at higher speeds, serving as a barrier to walking. Veale Road bisects Ardencroft and also serves as a barrier.

The Ardens Walkable Community Workshop follows on over twenty years of efforts to calm traffic on Harvey Road, as well as other roads in the area, and improve the walking path network. The findings and recommendations from this report will help inform Connecting with the Ardens: A Transportation Plan, which is anticipated to be finalized by July 2023.

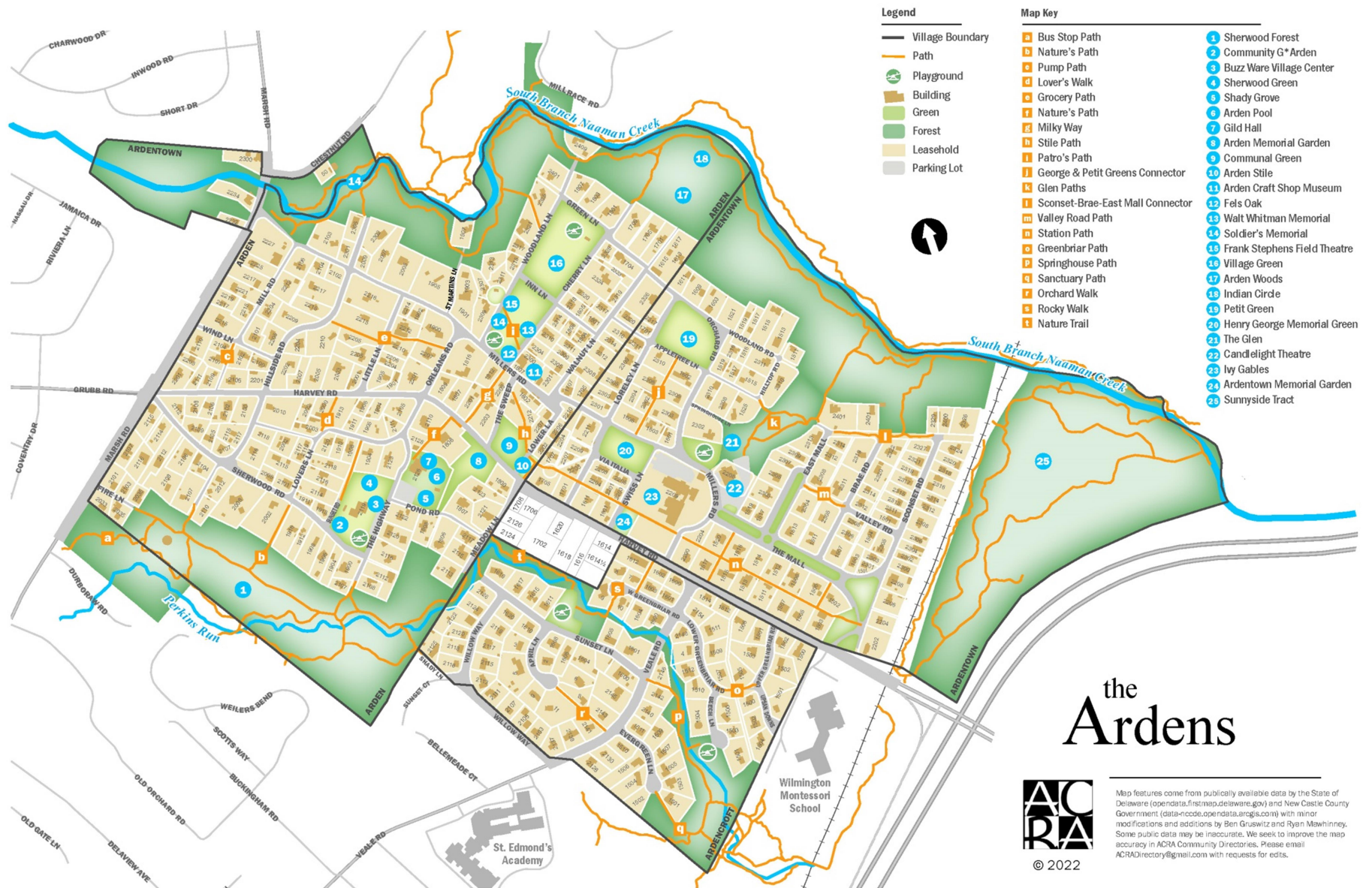
The Ardens Walkable Community Workshop was held on August 8, 2022 at the Candlelight Theatre. There were about 37 participants in addition to WILMAPCO staff. The walking audit focused on the intersection of Harvey and Veale Road, by way of Millers Road and walking paths. The group crossed the intersection several times to observe safety concerns and identify potential solutions. After returning to the Candlelight Theatre, the group discussed ideas to improve walkability throughout the Ardens and shared their ideas on several large maps.



The group walking on the Mall towards a walking path



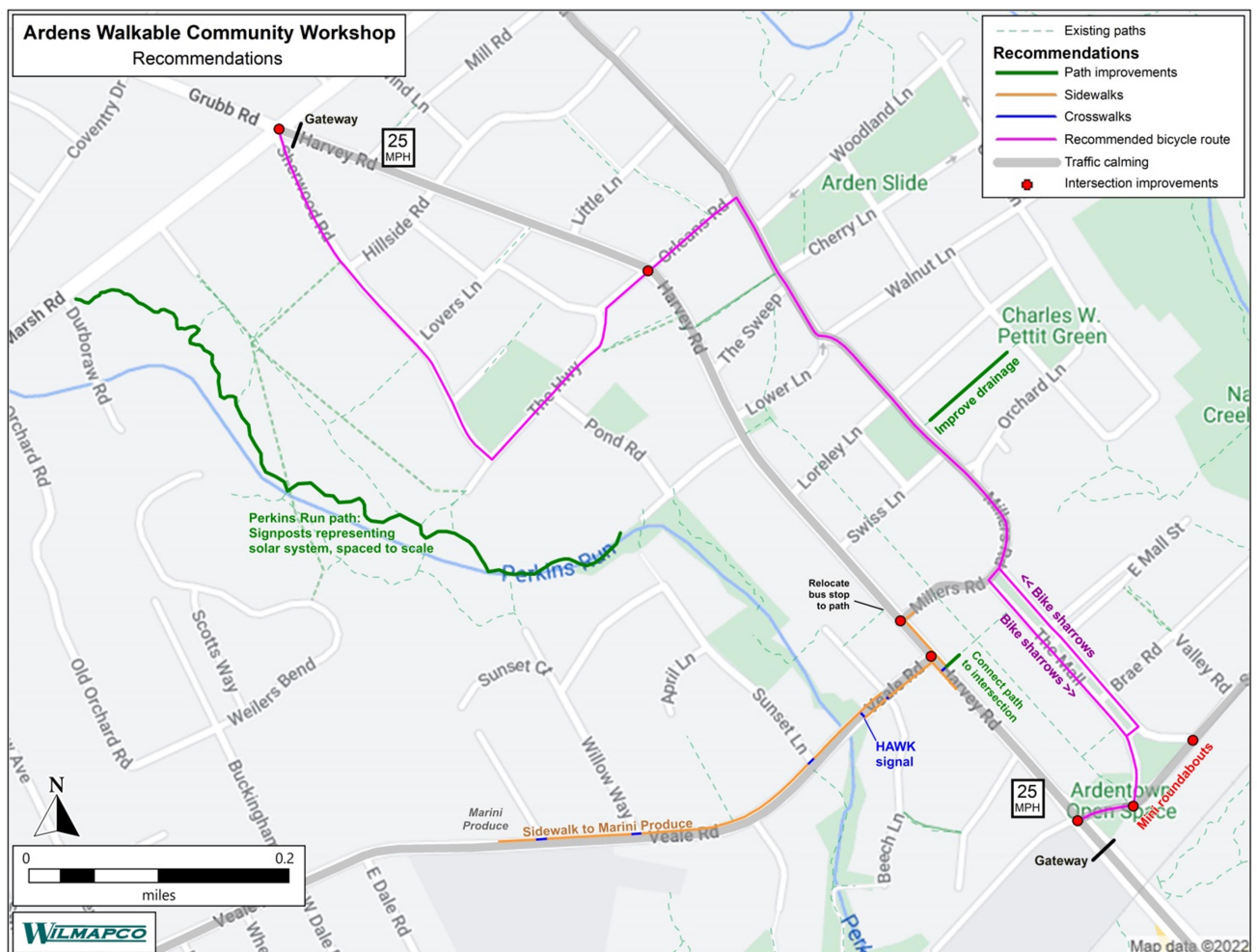
The walking audit route, including an alternative pavement-only route.



A map of the Ardens' path network, destinations, and natural areas.

## Walkability Ideas

During the mapping exercise, the group discussed challenges to walking around the Ardens and shared ideas to improve walkability on several table maps. Many ideas were presented to calm traffic on Harvey Road, Millers Road, and Veale Road; improve intersections and paths; designate a recommended bicycle route; construct sidewalks and crosswalks; relocate a bus stop; and create gateways at the entrances to the Ardens on Harvey Road, among other ideas. The map below summarizes the mappable recommendations that were shared during the workshop, and the following pages provide more detail on all feedback that was received.



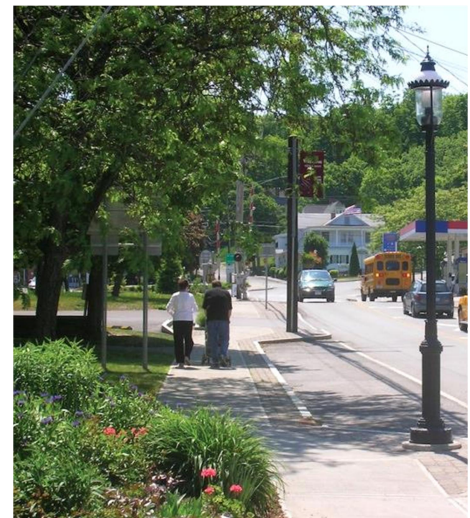
### Harvey Road Improvements

As expressed during this workshop, calming traffic on Harvey Road remains the community's top concern for pedestrian safety in the Ardens. Reducing traffic speeds on Harvey Road was the single most frequent comment received during the workshop.

The majority of the one-mile stretch of Harvey Road through the Ardens has a posted speed limit of 45 miles per hour, except the 20mph school zone near Wilmington Montessori School. Participants suggested reducing the road's speed limit to 25mph through the Ardens. Traveling one mile at 25mph adds approximately one minute of travel time compared to 45mph, which participants felt was negligible. Without active enforcement or infrastructure changes, signage alone cannot force slower speeds, but it may serve as a deterrent.

Many infrastructure changes can be made to help reduce traffic speeds. More frequent and improved crossings help calm traffic, and those recommendations are detailed on the following page. Narrowing the perceived width of the road is also an effective way to calm traffic. Participants suggested adding features along the shoulder, including planters and mannequins, which may reinforce that Harvey Road through the Ardens is a place to be, not just a road to travel through.

Making Harvey Road more comfortable to walk along can increase pedestrian activity and also help calm traffic. Participants suggested adding pedestrian-scale lighting, which better illuminate where people walk compared to overhead streetlights. They also suggested adding sidewalks or otherwise separating pedestrian space near Veale Road, detailed on page 15.



Pedestrian-scale lighting  
(Source: Alta Planning and Design)



Planters along the roadway can narrow the perceived width and help calm traffic (Source: City of Bristol, UK)

### Intersection Improvements

Improving intersections and crossings on Harvey Road, among other roads, was the second most discussed concern after reducing traffic speeds. Slowing traffic through intersections and ensuring safe pedestrian crossings are effective traffic calming goals. These goals can be achieved through several potential solutions that were proposed during the workshop.

Mini roundabouts consist of a small, circular island in the center of an intersection. These islands require drivers to slow down and navigate around them. They can be accompanied by yield signs, stop signs, or traffic signals. Yield signs would require drivers to yield to traffic that is already in the intersection. Stop signs or traffic signals would function normally, but drivers would have to proceed through the intersection more cautiously, and take left turns by driving counter-clockwise around the island.

Mini-roundabouts were recommended at both intersections of Sconset Road and the Mall, which do not currently have any traffic control devices, to help calm traffic on Sconset Road. They were also recommended on Harvey Road at each of its signalized intersections: Sconset, Veale, Orleans, and Marsh Roads. An intersection improvement project was recently completed at Harvey and Marsh Roads, but there is still the opportunity to install a mini roundabout without reversing those improvements.



A mini roundabout (Source: NACTO)

Other recommendations to improve the signalized intersections on Harvey Road include: “no turn on red” signs, “yield to pedestrians” signs, all-way stop (red lights for drivers) triggered by pedestrian push buttons, ensuring that all crosswalks have push buttons, ensuring that all legs of intersections have crosswalks, red light enforcement cameras, and HAWK (High-Intensity Activated Crosswalk) signals at crosswalks. Each

of these improvements helps indicate where pedestrians may cross and to ensure their safety.

A raised crosswalk was recommended at Harvey and Millers Road, which has a crosswalk but no traffic control devices. Speed bumps have been installed on Harvey Road in the past, but they were removed in response to noise complaints and may not be as effective as the other aforementioned solutions. This crossing could be improved with a HAWK signal.

### Recommended Bicycle Route

For people arriving in the Ardens by bike, Harvey Road would be the most natural and direct route through the Ardens. However, high traffic speeds and volumes and a lack of any kind of separated bicycle facility make biking on Harvey Road stressful and dangerous for most people. In DelDOT's bike level of traffic stress (LTS) analysis, most of Harvey Road through the Ardens was identified as bike LTS 3, which is only comfortable for very confident cyclists.

Workshop participants recommended an alternative biking route through the Ardens, entirely on low stress (bike LTS 1) streets that are considered comfortable for anyone to bike on. As shown on the map on the following page, this route follows Sconset Road, the Mall, Millers Road, Orleans Road, the Highway, and Sherwood Road, and it adds only 0.2 miles distance compared to biking on Harvey Road.

Signage and bike sharrows could guide people, especially those unfamiliar with the Ardens, through this route. Bike sharrows are pavement markings that indicate the best location in the street to bike and serve as a reminder that cyclists may use the full lane. Unlike bike lanes, which use a different symbol, streets with sharrows are not exclusively for bikes and are shared with motor vehicles. Sharrows should be placed at regular intervals along the entire route. Signage should be placed ahead of the entrances at Sconset Road and Sherwood Road and direct cyclists towards the recommended route.

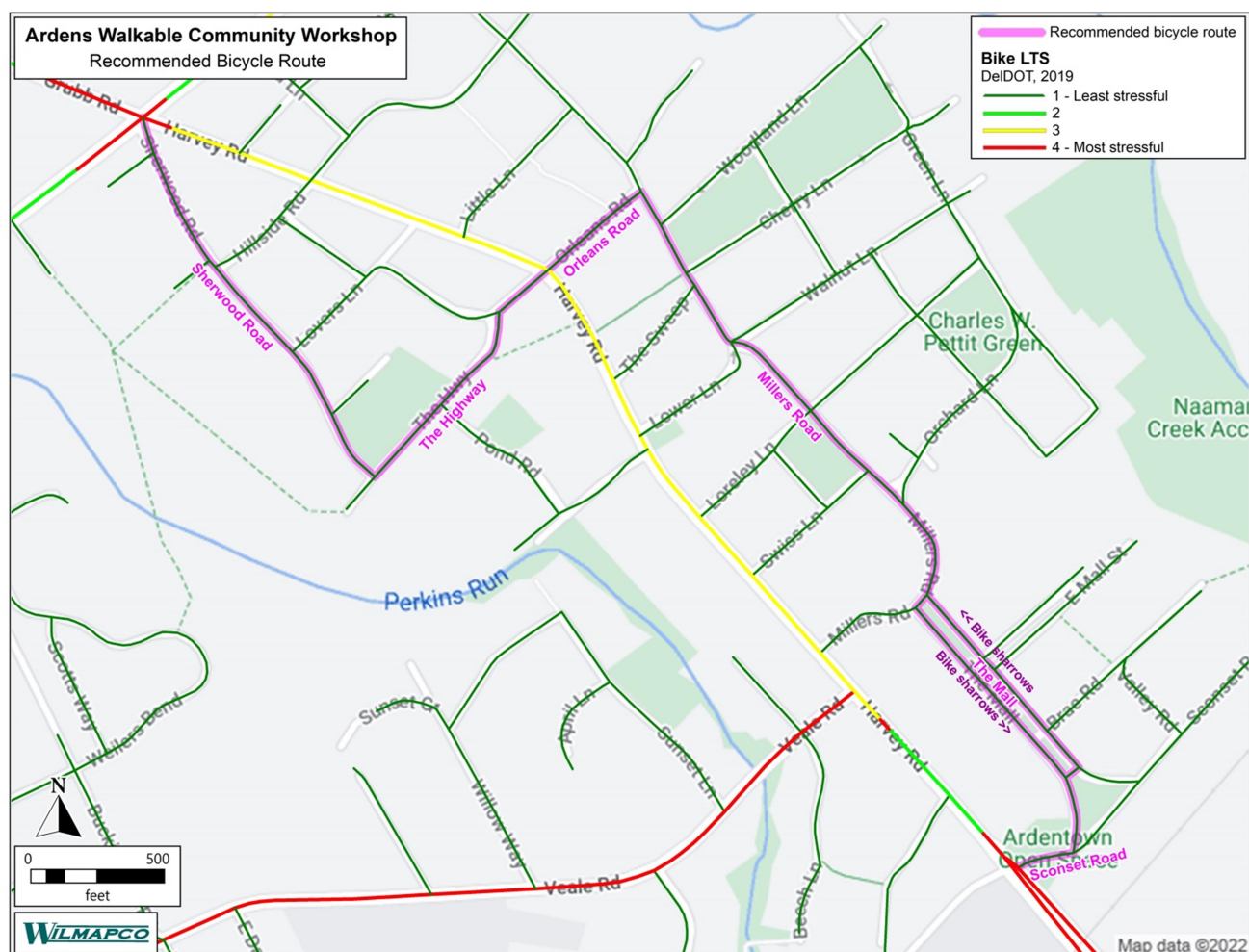


A bike sharrow (Source: Bike Cleveland)



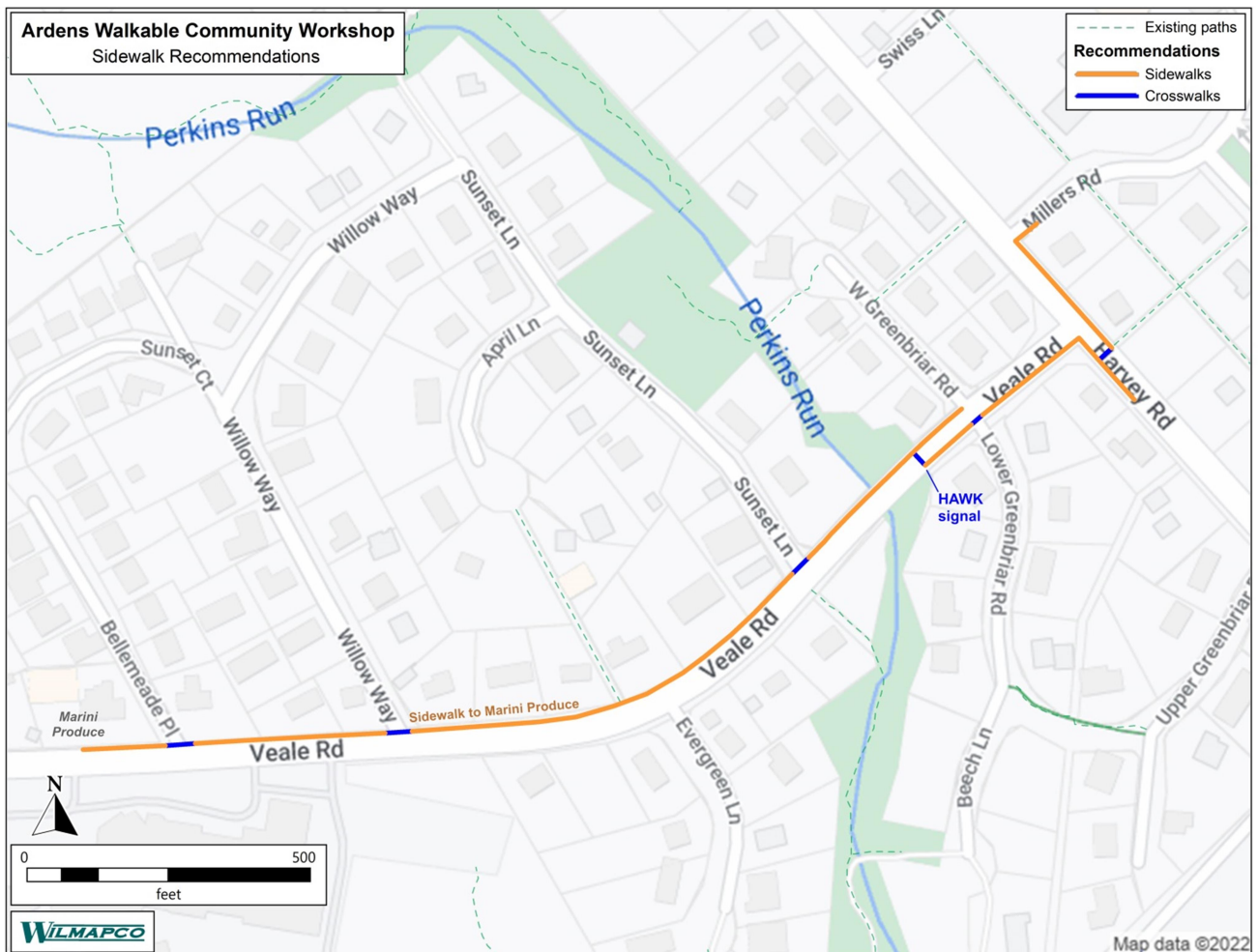
A bike wayfinding sign  
(Source: Bike Provincetown)

This bike route would be a low-cost, quick-to-implement interim solution, as future traffic calming measures could make Harvey Road a low-stress bike route. However, this route has the benefit of guiding cyclists by many of the Ardens' historic buildings, destinations, and natural areas, and it would encourage more people to arrive at these locations by bike. Signage could include wayfinding that indicates distances to destinations, as well as local art to enhance the sense of place.



## Sidewalks

The Ardens mostly lack sidewalks; the absence of major transportation infrastructure beyond pavement helps maintain the villages' rustic, historic nature, and most streets are comfortable to walk on alongside motorized traffic. Despite this, workshop participants expressed desire for sidewalks in certain locations to help calm traffic and provide a dedicated space for walking. In particular, they recommended sidewalks approaching the intersection of Harvey and Veale Roads, as well as a sidewalk on Veale Road that extends at least to Marini Produce.



Veale Road may have insufficient right-of-way to install a sidewalk while maintaining traffic lanes in both directions, without acquiring property to widen the roadway. An alternative, lower-cost solution is to replace lane markings with advisory shoulders. Advisory shoulders are designed with a narrow center area for motorists and marked shoulders for walking and biking. With advisory shoulders, motorists only enter the shoulder when no pedestrians or bicyclists are present to allow oncoming traffic to pass. Widely used in Europe, this design is still new and would require DelDOT to submit a Request to Experiment.



Advisory shoulders (Source: Rural Design Guide)

Advisory shoulders can have a substantial traffic calming effect, as they require drivers to be more aware of their surroundings, making the road much safer to both walk along and cross. High visibility, “piano key”-style crosswalks can help indicate where people are likely to cross, and they should be installed at intersections and near destinations, like Marini Produce. HAWK (high-intensity activated crosswalk) signals or RRFBs (rectangular rapid flashing beacons) are actuated by pedestrians waiting to cross and help alert motorists with flashing lights, which can be especially beneficial at night. HAWK signals include a red light, requiring drivers to stop, while RRFBs do not and require drivers to yield when people are crossing.



HAWK signal (Source: City of Little Rock)



RRFB (Source: Toole Design Group)

### Path Improvements

As shown in the map on page 8, each of the Ardens' paths has a unique name. However, most paths lack signage. Workshop participants recommended installing signs for all paths. These could ideally be placed where paths intersect with roads or other paths, and they could be simple wooden signs, matching the path signs that are currently in place. These signs would help visitors find their way around the Ardens and give each path its own identity, especially for paths which are not clearly visible.

Participants also recommended that paths that cross Harvey or Veale Road should lead to crosswalks, which would help path users find where paths continue on the other side of the road as well as alert motorists as to where pedestrians may be exiting paths and crossing. Participants also recommended ensuring that all existing crosswalks that connect to paths have pedestrian walk signals and push buttons.



An existing sign for Rocky Walk on West Greenbriar Road in Ardencroft.

Paths can be for more than just transportation and recreation. Along the Perkins Run path, also known as the Bus Stop Path, a participant recommended installing signposts that represent each planet in our solar system, spaced to scale, so that path users experience the solar system as they walk along the path.

The path that connects between the Station Path and the intersection of Harvey and Veale Roads leads to a steep hill directly down to Harvey Road. There is no shoulder on the north side of this intersection, and motorists may not be able to see pedestrians coming down from the path. Participants recommended acquiring an easement in the adjacent leasehold to extend the path through the lawn and create a more gradual slope that guides path users to the crosswalk.

Participants also expressed concern about drainage issues after it rains, particularly on the George & Petit Greens Connector Path, which can take a few days to drain. Digging drainage ditches or raising low sections of paths may help address drainage issues and ensure that paths are accessible at all times.

### Other Feedback

Many other ideas and concerns were expressed during the workshop, including:

- Install gateway or welcome signs at both entrances to the Ardens on Harvey Road
- Install bollards around the right turn from Veale Road onto Harvey Road to calm turning traffic and designate space for pedestrians
- Install solar-powered lights along paths
- Improve sightlines at the intersection of Harvey and Millers Roads and calm traffic
- Relocate the existing bus stop at Harvey and Millers Roads to the west side of the intersection to connect to Rocky Walk
- Install a raised crosswalk with a HAWK signal on the east leg of the intersection of Harvey and Millers Roads
- At the intersection of Harvey and Orleans Roads, there is no pedestrian push button, cars are often in the yard, and the intersection gets flooded when it rains
- Build a tunnel for through-traffic under Harvey Road
- Make Harvey Road local traffic only
- Make Harvey Road or Veale Road one-way
- At the intersection of Harvey and Veale Roads, build a vehicular underpass with at-grade pedestrian crossing and parkland on top of the intersection
- Install painted crosswalks, each with a different artistic look
- Refresh painted lines with wider lines
- Narrow roads throughout the Ardens, and install bump-outs to reduce crossing distances



## Next Steps

Connecting with the Ardens: A Transportation Plan is currently under development. This Walkable Community Workshop Report will help inform the development of the Plan and serve as public feedback, in addition to all other feedback received through outreach efforts for the Plan.

The Plan may incorporate ideas and address concerns documented in this report, and it may refine and expand these recommendations based on ongoing outreach efforts, traffic studies, and feasibility studies.

Funding for the recommended improvements can be pursued through several mechanisms, including the Capital Transportation Program (CTP), the Community Transportation Fund (CTF), and the Transportation Alternatives Program (TAP), which includes Safe Routes to School (SRTS).

WILMAPCO, in coordination with DelDOT, administers the Safe Routes to School program in this region. This program can provide limited funding for walkability improvements near schools, including working with staff, faculty, and students to determine the best improvements to meet each school's needs. Based on findings from the Wilmington Montessori School SRTS program, DelDOT has designed and will implement pedestrian safety improvements to the intersection of Harvey and Sconset Roads.

Community members are encouraged to participate in outreach efforts for Connecting with the Ardens: A Transportation Plan and stay informed on the study by visiting <http://www.wilmapco.org/ardens/>.

### **Funding and Implementation Resources**

#### *FUNDING PROGRAMS AND CONTACTS*

##### **DelDOT**

DelDOT administers the Transportation Alternatives Program (TAP). TAP offer funding opportunities to help expand transportation choices and enhance the transportation experience, formerly known as the Transportation Enhancements (TE) Program. TAP Activities must relate to surface transportation. Eligible projects most related to Walkable Communities include:

- Construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other nonmotorized forms of transportation
- Construction, planning, and design of infrastructure-related projects and systems that will provide safe routes for non-drivers, including children, older adults, and individuals with disabilities to access daily needs

- Safe Routes to School programs (<http://www.wilmapco.org/saferoutes/>)

In Delaware, TAP projects require a twenty percent funding match and the maximum funding amount is \$1 million.

The Statewide Bicycle and Pedestrian Improvements Program funds the design and construction of pedestrian and bicycle facilities. Funds can support projects too costly for the TAP program.

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## State Elected Officials

Community Transportation Fund (CTF) funding provides a fixed amount of funds annually to each State Senator and House Representative to be used as they and their constituents believe is best for transportation improvements within their district. Legislators may also fund their own project ideas and they have the option of banking a portion of their yearly CTF budget for up to three years in order to fund a larger transportation improvement.

[https://delDOT.gov/Publications/brochures/pdfs/ctf\\_brochure.pdf?cache=1630086607516](https://delDOT.gov/Publications/brochures/pdfs/ctf_brochure.pdf?cache=1630086607516)

## Pop-Up Demonstration Projects and Quick Build Pilot Projects

Temporary projects to test potential designs are effective at soliciting community feedback and avoiding costly design mistakes. Projects may last anywhere from less than an hour to many months. Some suggested approaches include:

- Local governments should establish a process for collaboration between agency staff and the public, which encourages community pop-up requests and establishes parameters for acceptable designs, permitting, and organizational partners.
- Communities should proactively pursue demonstration projects and direct them to locations with the greatest needs. Equitable distribution of projects should engage a variety of communities and financially support these diverse projects to level the playing field.
- Engaging the community will bring fun, energy, and creativity to the planning process. Residents, local organizations, and businesses are also effective partners at getting the word out about the demonstration.

- Evaluate the tested design, collecting information like speeds and volumes of bicycles, pedestrians, and vehicles. Also, seek out community feedback.
- Use information gained to adjust the project's design and pursue more permanent implementation.

Supported by the Delaware Department of Transportation (DelDOT), Living Lab is a research collaborative among the Institute for Public Administration, Biden School of Public Policy & Administration, and the Landscape Architecture program at the University of Delaware (UD). It seeks to catalyze community-driven, active transportation pop-up demonstrations that test the viability of long-term built-environment improvements and placemaking initiatives in Delaware.

University of Delaware Living Lab - <https://living-lab-1-udel.hub.arcgis.com/>

### Other Useful Links

- Small Town and Rural Multimodal Networks - [www.fhwa.dot.gov/environment/bicycle\\_pedestrian/publications/small\\_towns](http://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/small_towns)
- Designing for All Ages & Abilities - [nacto.org/publication/urban-bikeway-design-guide/designing-ages-abilities-new](http://nacto.org/publication/urban-bikeway-design-guide/designing-ages-abilities-new)
- Pedestrian and Bicycle Information Center - [www.pedbikeinfo.org](http://www.pedbikeinfo.org)
- League of American Bicyclists - [www.bikeleague.org](http://www.bikeleague.org)
- National Center for Bicycling and Walking - [www.bikewalk.org](http://www.bikewalk.org)
- Federal Highway Administration - [www.fhwa.dot.gov/environment/bicycle\\_pedestrian/index.cfm](http://www.fhwa.dot.gov/environment/bicycle_pedestrian/index.cfm)
- Manual on Uniform Traffic Control Devices (MUTCD) - [mutcd.fhwa.dot.gov](http://mutcd.fhwa.dot.gov)
- NACTO Urban Street Design Guide - [nacto.org/usdg](http://nacto.org/usdg)
- WILMAPCO - [www.wilmapco.org/walkable](http://www.wilmapco.org/walkable)