Healthy and Complete Communities in Delaware:
The Walkability Assessment Tool

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Preface

As the Director of the Institute for Public Administration (IPA) at the University of Delaware, I am pleased to provide Healthy and Complete Communities in Delaware: The Walkability Assessment Tool. The Walkability Assessment Tool is designed to guide municipalities in evaluating the walkability of specific areas within their towns and cities and considering strategies and policies to improve local pedestrian networks. This assessment tool serves as an updated version to IPA’s original tool, developed and published in 2010. The updated tool emphasizes the policy framework that supports walkability, provides hyperlinks to online resources, and prepares participants to engage in an interactive assessment process from pre- to post-walk activities. A video tutorial, which supplements this publication, has been produced to help participants be aware of what to look for during the in-field walkability audit.

Preparation of this updated assessment tool builds upon the University of Delaware IPA’s Healthy Communities initiative, supported by the Delaware Division of Public Health (DDPS), and the Planning for Complete Communities in Delaware project, which is an ongoing collaboration between the Delaware Department of Transportation (DelDOT) and IPA.

IPA is especially appreciative of the continued support from DelDOT staff, especially former Assistant Planning Director Ralph Reeb. Julia O’Hanlon and Marcia Scott served as Principal Investigators/Project Managers for this project, and co-authored the document with Public Administration Fellow Alexis West. In addition to IPA’s online Delaware Complete Communities Planning Toolbox, this assessment tool will also be included as a component of IPA’s online Toolkit for a Healthy Delaware.

The benefits of physical activity continue to gain national attention. The U.S. Surgeon General’s recent call to action emphasizes the need to improve access to safe and convenient places to walk and wheelchair roll. It also recognizes the importance of community design, planning, and public policy to facilitate improved built environments for more active lifestyles. Providing opportunities for all citizens to safely and easily traverse the pedestrian network to destinations of daily living is one significant way to promote physical activity and active transportation. I hope that Delaware local government officials and other stakeholders will use this assessment tool to build healthier, walkable, and complete communities.

Jerome R. Lewis, Ph.D.
Director, Institute for Public Administration

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*Healthy and Complete Communities in Delaware: The Walkability Assessment Tool*
Why Walk?

Promote an Activity-Friendly Environment

Physical inactivity has increasingly become a product of America’s automobile-centric, built environment. The U.S. Department of Health and Human Services’ 2008 Physical Activity Guidelines for Americans recommends that children be physically active for at least 60 minutes a day and adults get 30 minutes of moderate-intensity aerobic activity daily, five days a week. Yet, most Americans don’t meet these recommended guidelines; and that lack of activity is posing a great threat to the health of our nation. According to Active Living Research, activity-supportive built environments not only increase physical activity but also foster a variety of co-benefits. Creating activity-friendly environments has been correlated to positive changes in chronic illness, safety/injury prevention, mental health, social benefits, economic benefits, traffic congestion, air pollution, and carbon emissions.

Foster Active Transportation

Active transportation is any human-powered mode of transportation. Pedestrian infrastructure and facilities that are well designed, constructed, and maintained can promote active transportation. Due to safety concerns raised by vehicular traffic and inadequate pedestrian and biking facilities, individuals are frequently reluctant to use alternative modes of transportation. According to the Centers for Disease Control and Prevention’s (CDC’s) Transportation Health Impact Assessment Toolkit, providing safe and convenient opportunities for active transportation also promotes transportation equity for people who don’t drive or own cars.

CDC’s Toolkit states that investing in walkable communities can “increase the comfort of the on-road experience and improve the appeal of active modes [of transportation] for all people.”

Walking is the easiest and most affordable way to improve physical activity and promote healthier lifestyles.
Support U.S. Surgeon General’s Call to Action for Walkability

In September 2015, the U.S. Surgeon General announced a new public health initiative entitled, “Step It Up! The Surgeon General’s Call to Action to Promote Walking and Walkable Communities,” aimed at preventing chronic illness through active lifestyles centered on walking. The initiative is ultimately aimed at promoting walking as a simple way to increase physical activity, which is proven to promote positive mental health, support healthy aging, and prevent chronic disease risk factors such as high blood pressure and weight gain. The Surgeon General’s call to action focuses on:

- Designing communities to make walking to work, school, shops, and other destinations an attractive and convenient option;
- Designing transportation systems with sidewalks, crosswalks, and infrastructure to improve public health and enhance pedestrian safety;
- Educating communities on the benefits of walking and physical activity; and
- Planning of public transit and cycling infrastructure, which can extend the range that an average person can walk.

Ensure Transportation Equity

Walking and Transportation Accessibility

Everyone is a pedestrian! Most trips by car, transit, or bike begin by walking. Many roads are designed with only cars in mind, but at least one-third of Americans do not drive, including children, adolescents, many older adults, people with disabilities, and low-income individuals. Many non-driving Delawareans face difficulties navigating pedestrian-unfriendly areas. In Delaware, 22% of residents are under the age of 18, 15.9% are over the age of 65, 12% are persons with disabilities, and 7.4% have no access to vehicles. In addition, walking is often the critical “first- and last-mile” connection for people who rely on public transportation. This includes economically disadvantaged individuals who do not own cars, people who do not drive, and/or persons with disabilities. Creating walkable, safe, and pleasant pedestrian areas creates transportation equity for mobility-constrained and special-needs populations.
Americans with Disabilities Act

The Americans with Disabilities Act of 1990 is a civil rights law that pertains to nondiscrimination on the basis of disability. Title II of ADA requires state and local governments to make all public facilities and services readily accessible to and usable by individuals with disabilities and to address barriers to community services, transportation, and facilities. The policy on accessibility issued by the U.S. Department of Transportation (USDOT) states,

Accessibility is a civil right. The key function of transportation, at its most fundamental level, is to provide basic mobility to society. It is our responsibility to strive to ensure that transportation systems are not only safe and efficient, but also usable by all—including persons with disabilities.

In 2011, the U.S. Access Board issued proposed guidelines to ensure that states and local governments conduct accessible design, construction, and maintenance, of all pedestrian facilities in the public right-of-way. Pedestrian facilities include public sidewalks, shared-use paths, trails, curb ramps, crosswalks, pedestrian islands, or other public walkways. To achieve ADA compliance, local governments must complete an ADA self-evaluation to identify barriers to accessibility, prioritize actions to address the barriers, and set forth a Transition Plan with steps necessary to complete modifications identified through self-evaluation.
Benefits of Walkable Communities

Safety Benefits

Delaware was the most dangerous state in America to be a pedestrian, according to the National Highway Traffic Safety Administration. Nearly three pedestrians died in traffic accidents per 100,000 residents in 2012. Over a quarter of all traffic fatalities in Delaware involve pedestrians. Studies show that walkable neighborhoods have much lower rates of traffic fatalities compared with automobile-oriented areas.

Health Benefits

According to the 2015 annual “State of Obesity” report, Delaware is the 17th most obese state in the U.S. and has the 20th highest childhood obesity rate in the nation. Fewer than 28% of Delawareans meet the minimum guidelines for moderate physical activity. Walking is the easiest and most affordable way to improve physical activity and promote healthier lifestyles. Walking can help people exercise by accident. While walking, people can become more physically active, without even realizing it!

Environmental Benefits

Delaware is the 25th least energy inefficient state in the country. Since transportation is responsible for one third of all U.S. greenhouse gas emissions, encouraging walkable communities in Delaware would greatly benefit the state’s environmental standing. One quarter of all trips in the U.S. are one-mile or less, yet most of these trips are taken by car. Creating diverse travel options, which are safe and accessible for everyone, can promote increased use of sustainable modes of transportation (e.g., walking, cycling, and transit) that are associated with environmental benefits related to greenhouse gas emissions, stormwater runoff, and water quality.
Transportation Benefits

Providing a variety of multi-modal transportation choices, such as walking, can help reduce traffic congestion, lower road maintenance costs, improve air quality, and achieve a multi-modal transportation system consistent with the national Complete Streets movement and state policy. Delawareans take more than 10.2 million passenger trips each year on buses, commuter trains, and other forms of transit. Complete Streets can promote a balanced transportation system and make walking to transit a viable option. In addition, it is cheaper to redesign existing roads to accommodate multi-modal travel than to construct new, multi-lane, fast-speed highways that benefit only motorized travel and increase traffic capacity.

Economic Benefits

AAA estimates that the average household cost to own and operate one car in the U.S. is nearly $9,000 per year. Walkable communities allow families to reduce expenses associated with owning and operating cars. As society becomes more focused on creating sustainable communities, walkable neighborhoods will be in higher demand. A recent study by the Brookings Institute provides evidence that “neighborhoods with environmental features that facilitate walkability and attract pedestrians have higher office, residential, and retail rents, retail revenues, and higher value residential for-sale properties,” signaling increased sales opportunities. A higher Walk Score can increase a property’s value anywhere from $4,000 to $34,000 for a residential property or from 9% to 54% per square foot for a commercial property, depending on the level of change in walkability. This economic growth in the real estate sector will result in higher collectible property-tax revenue that can be reinvested into a community. Surveys by the National Association of REALTORS® show a growing preference for communities with amenities such as a mix of housing types, various destinations within walking distance, public transportation options, and less parking. Market demand for walkable places may outpace availability in some urban areas.
Policies Supporting Walkability

Consistent with federal transportation investment policies and directives, the Delaware Department of Transportation (DelDOT) has shifted from away from an auto-centric transportation system to one that provides safe, efficient, and multi-modal options. The State of Delaware has consistently funded transportation improvements and supported programs that support walking, biking, and transit usage.

Safe Routes to School

In an effort to encourage safe travel for children to and from school through the Safe Routes to School (SRTS) program, the Delaware General Assembly passed Senate Bill 353 in September 2002. The bill directs DelDOT to seek federal funds to implement pedestrian safety measures and traffic calming strategies. It also authorizes DelDOT to provide grants to schools and school districts that demonstrate need for transportation reform measures, can provide plans that have the potential to secure child safety, encourage travel to school by walking or biking, and promote community involvement in that process. Each participating school’s plan is encouraged to include engineering, education, enforcement, encouragement, and evaluation considerations in either infrastructure (e.g., sidewalks, crosswalks, traffic calming, bicycle facilities) or non-infrastructure (e.g., planning, hiring of SRTS coordinators, education, enforcement programs) components.

Complete Streets

A complete street is a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for users of all ages and abilities including bicyclists, pedestrians, transit riders, and motorists, appropriate to the function and context of the facility. Complete streets facilitate active transportation.

Governor Jack Markell issued Executive Order Number Six in April 2009 for the state to create and implement a Complete Streets policy. Subsequently, the Delaware Department of Transportation (DelDOT) released its Complete Streets policy in January 2010. The policy requires DelDOT to consider all modes of transportation, particularly active modes of transportation, in its development and scoping phases of construction to ensure that all infrastructure users are considered in the design and maintenance of its transportation system.

Use this guide to evaluate the extent to which your community’s vision, plans, policies, design standards, and facility maintenance practices are consistent with complete-streets principles.
Vulnerable Road Users Law

The Vulnerable Road Users Law was enacted by Senate Bill 269 and approved by Governor Jack Markell in August 2010, making Delaware the second state in the nation to enact such a law. The law defines vulnerable roadway users to include pedestrians, road maintenance crews, cyclists, skateboarders, rollerbladers, and those traveling by means of moped, motorcycle, farm vehicle, and animal. In addition to defining this classification, the law imposes stricter penalties and a conviction of inattentive driving if a motorist injures or kills a vulnerable user.

Walkable, Bikeable Delaware

The Delaware General Assembly unanimously passed the “Walkable, Bikeable Delaware” Resolution in May 2011 to support the goal of “linking cities and towns by a network of off-alignment multi-use paths that can be used by commuters in addition to recreational pedestrians and bicyclists.” The legislation enables DelDOT to allocate funds to infrastructure investments in walkway and bikeway networks in an effort to connect destination-oriented population centers. Since 2011, the Delaware General Assembly and the Wilmington Area Planning Council (WILMAPCO) have invested considerable state and federal funding in statewide pedestrian and bicycle improvements, greenways, and trails projects.

Commitment to Accessible Transportation

Title II of ADA requires that public entities (including state and local governments) make public facilities, programs, and services accessible to persons with disabilities. As a provider of public
transportation services and programs, and as a state transportation agency, DelDOT must comply with ADA Title II and is committed to providing compliant pedestrian accessibility for everyone.

Sidewalks, street crossings, and other elements in the public right-of-way can pose challenges to accessibility. The U.S. Access Board has issued Accessibility Guidelines that focus mainly on facilities on sites. Yet, additional guidance is necessary to address conditions and constraints unique to public rights-of-way. In 2014, DelDOT conducted its ADA Self-Assessment to identify barriers to accessibility, and subsequently released an ADA Transition Plan. In January 2016, DelDOT issued its Pedestrian Accessibility Standards for Facilities in the Public Right of Way or “DelDOT Pedestrian Standards.” The standards combine into one document the requirements, guidelines, and best practices for accessible pedestrian facilities in the public transportation right-of-way.

Strategic Highway Safety Plan

The Delaware Strategic Highway Safety Plan: Toward Zero Deaths aims to “eliminate fatalities on Delaware’s roadways through a multi-agency approach that utilizes education, enforcement, engineering, and emergency services strategies,” with the ultimate goal of reducing the fatality rate to 1:100 million vehicle miles traveled by 2018. In addition, Governor Markell’s 2015 Executive Order Number Fifty-Four establishes an advisory council on walking and pedestrian awareness in an effort to reduce pedestrian injuries and fatalities.

“Walk Smart” Campaign

The “Walk Smart” Campaign is a partnership between the Office of Highway Safety, DelDOT, and local and state law enforcement to provide education to communities about the importance of safe pedestrian travel practices and to utilize heavier law enforcement of motor vehicle behavior in areas with high pedestrian crash data. The Office of Highway Safety provides materials for DelDOT to distribute to municipalities interested in participating in the campaign.
Purpose

The Walkability Assessment Tool provides municipalities with guidelines for evaluating walkability and considering strategies to improve local pedestrian networks.

Overview

1. **Step One: Preparing for the Workshop and Walk**

   Advanced preparation ensures the success of the assessment process. This step identifies and engages stakeholders in evaluating the walkability of an area or specific neighborhood within a jurisdiction. It provides a Walkability Assessment Questionnaire to address the “who, what, why, when, how, and where” in planning workshop logistics. A series of visual prompts are provided that correspond to an online, narrated presentation. These prompts will help participants prepare for and understand what to look for during the in-field walkability audit.

2. **Step Two: Let’s Get Walking**

   Begin the workshop with a brief orientation and narrated presentation on “The In-Field Walkability Audit: An Overview of What to Look For” to familiarize participants with what to look for during the walk.

3. **Step Three: Path Forward**

   After the audit, work with the stakeholder group to prioritize recommendations, prepare a written summary, present findings, gain support, and develop an action plan that considers the need for plans, policies, design changes, funding support, maintenance plans/agreements, technical assistance, and outreach/education.

The Walkability Assessment Checklist enables participants to record their observations while walking and talking during the audit. Upon completing the in-field walkability audit, participants immediately reconvene in a facilitated workshop setting for an interactive mapping exercise to build consensus and develop an action plan for improvements.
Step One

The first step of the walkability assessment process is to complete a Walkability Assessment Questionnaire to clarify the municipality’s goals and objectives related to walkability. The purpose of the questionnaire is to address the following:

- Who will lead the jurisdiction’s walkability assessment efforts (i.e., who will facilitate/conduct the process and review and share outcomes; what department(s) will be represented)?
- What are the municipality’s major issues or concerns regarding the walkability of its community (e.g., sidewalk issues, connectivity among destinations, accessibility of walking paths or trails, safe routes to school, pedestrian safety)?
- Why should the municipality conduct a walkability assessment (e.g., consider strategies to improve pedestrian safety, non-motorized transportation opportunities, multi-modal transportation strategies, mobility and accessibility for people of all ages and abilities, connectivity to/from community destinations and public transit, pedestrian infrastructure and the built environment)?
- When should the workshop and in-field walkability audit be conducted?
- Where is the area targeted for the in-field walkability audit?
- How does the jurisdiction plan to conduct outreach and engage stakeholders? How will outcomes of the workshop and walkability assessment process be used to build support for infrastructure improvements?

A representative of the municipality should complete the questionnaire, with input from stakeholders and prospective workshop participants, prior to scheduling the workshop and in-field walkability audit.

The Walkability Assessment Questionnaire begins on the next page.
### The Walkability Assessment Questionnaire

- **Completed by**
- **Entity**
- **Title**
- **Email**
- **Date**
- **Phone**

1. Why should the municipality conduct the walkability assessment?

2. To what extent does the town/city currently educate or provide information to its citizens on healthy community resources (e.g., newsletters, websites, flyers, social media)?

3. What is the Walk Score® of the area(s) that are being considered for audit? It will be helpful to compare the area’s Walk Score® to outcomes of the in-field walkability audit and workshop.

4. Will the results of this assessment be incorporated into any future plans, policies, or budgets (e.g., comprehensive plan, Complete Streets policy, ADA transition plan, municipality’s operating and/or capital budget)?
Review Plans

Local government comprehensive plans are the foundation for land use planning in Delaware. The comprehensive plan communicates a community’s goals and vision for the future, provides a blueprint for future land use, and provides guidance for establishing the laws, policies, and programs to achieve implementation. As described in Healthy Communities: The Comprehensive Plan Assessment Tool, the comprehensive plan—particularly relevant maps and the transportation and recreation elements—should be reviewed prior to the workshop and in-field audit.

Title II of the Americans with Disabilities Act (ADA) of 1990 requires public entities to complete a self-evaluation of services, policies, and practices to identify barriers to accessibility, prioritize actions to address the barriers, and set forth a schedule for those actions. If the jurisdiction has conducted a self-evaluation and/or prepared a transition plan, those documents should be reviewed with respect to the area to be evaluated during the walkability assessment.

Do goals, objectives, and recommendations within the comprehensive plan, and other planning documents, address the need to:

- Provide a well-connected, continuous grid of streets, pedestrian facilities, transit, and bicycle facilities that enables a range of alternative transportation options, modes, and routes?
- Start or enhance a Safe Routes to School Program?
- Institute Complete Streets principles to provide multi-modal transportation options for people of all ages and abilities?
- Adopt policy initiatives or design guidelines to increase physical activity, active transportation, and recreation opportunities?
- Identify and address public policy or community design barriers that inhibit creating a safer walking environment, human-scaled design practices, mixed-use and compact development?
- Provide for a well-designed, accessible, and maintained pedestrian circulation system that enhances walk appeal?
- Has the jurisdiction conducted an ADA self-evaluation and/or prepared an ADA transition plan?
- If so, have those documents been reviewed with respect to the area to be evaluated during this walkability assessment?
- Has DelDOT’s ADA Inventory and Assessment Application been reviewed to identify locations of pedestrian facilities located in the DelDOT right-of-way that have been inventoried and evaluated for ADA compliance?
- Has the jurisdiction identified potential ADA barriers within the public right-of-way—including curbs, sidewalks, pedestrian crossings, pedestrian signals, shared-use paths, parking lots, and bus stops?
Identify and Engage Stakeholders

Public involvement is a fundamental part of the walkability assessment process. Stakeholders should be identified and engaged throughout the process.

Participants in the assessment process and workshop will vary, depending on the size and composition of the jurisdiction and outreach effort. Larger municipalities may already have a standing committee or planning commission that is working to improve a community’s overall health and walkability.

Other jurisdictions may wish to consider forming an ad hoc committee consisting of stakeholders and volunteers who are interested in improving the walkability of a specific neighborhood or district.

In either case, additional outreach should be conducted to make sure participants are diverse and represent community interests. Stakeholders should include (1) professionals from the local government, public safety agencies, health organizations, DelDOT, metropolitan planning organizations (MPOs), and local media; (2) state and local elected/appointed officials including state legislators, mayor and council members, planning commission members, and committee representatives; and (3) citizen stakeholders including special-needs and vulnerable populations, representatives of health and safety advocacy groups, bicycle and recreation enthusiasts, local school leaders, neighborhood civic association leaders, citizen organization representatives, and local business representatives.

- Has the jurisdiction identified and engaged a diverse group of stakeholders to participate in the assessment process and workshop—including professionals, state and local officials, and citizen representatives?
- Has the jurisdiction conducted outreach to include community members that have special needs (e.g., individuals with mobility issues, visual or hearing impairments, persons with disabilities or transportation-disadvantaged populations, such as non-car households, non-drivers, children, older adults, low-income individuals)?
- Does the targeted stakeholder group consist of approximately 20 to 40 people?
- Do stakeholders include potential champions who will build support and advocacy for plans, policies, funding, and technical assistance to improve pedestrian infrastructure and conditions?

TOOL TIP
For Walkable Community Workshop Resources, including a sample invitation, agenda, and press release visit www.wilmapco.org/walkable/.
Target Area for the Assessment

Is there a specific area, neighborhood, or street segment within the town or city that is targeted for the walkability assessment?

For its Walkability Community Workshops, WILMAPCO recommends aiming for a route length of no more than six blocks for a “walking and talking” time of approximately one hour.

☐ Defined areas around a specific destination (e.g., school, library, post office, community center, park) or group of destinations (e.g., commercial center, downtown area). Specify:

☐ Routes between destinations or groups of destinations (e.g., school and local park or playground). Specify:

☐ A neighborhood, as defined by geographic (place-oriented) boundaries or social (people-oriented) components. Specify:

☐ Known problem areas for pedestrians (e.g., locations of traffic accidents involving pedestrians; roadways with high traffic speed and/or volumes; and areas that pose potential conflicts with motor vehicles, have large intersections, lack mid-block crossings, have low pedestrian visibility, insufficient pedestrian infrastructure, lack accessible features, and have gaps in connectivity to pedestrian networks or other transportation modes). Specify:
Plan Logistics for the Workshop and In-Field Walkability Audit

When scheduling the workshop consider what will be examined during the audit. For example, if a primary concern is walkability for a Safe Routes to School initiative, the audit should be conducted when children ride to or from school rather than a weekend or during evening hours. Also consider seasonal issues (e.g., snow, freezing, flooding, vegetation overgrowth, or encroachment onto pedestrian facilities).

Once an area has been selected for the audit, a pre-tour—or physically walking the area in advance of the workshop—may be conducted with volunteers and key representatives of the jurisdiction.

Ideal public venues for the workshop include town halls, firehouses, libraries, senior centers, schools, or community meeting rooms.

Schedule Workshop
- What season, day of the week, and time should the workshop be held?

Pre-Tour the Selected Area
- Are there locations along the route where the group should stop to make critical observations?
- Has the route length been tested? WILMAPCO aims for a route length of no more than six blocks for a walking and a talking time of approximately 1 hour.

Select a Workshop Location
- Has a public workshop venue been selected and reserved that is near the selected walkability audit route?

Does the workshop venue:
- Meet ADA accessibility requirements?
- Allow for set up of video presentation to be shown prior to the in-field walkability assessment or have Internet connectivity if the online version is streamed from YouTube?
- Provide tables and chairs arranged to facilitate a mapping exercise for break-out groups of 6–8 people following the in-field walkability audit?
- Permit serving of refreshments for workshop participants?
- Has the workshop been scheduled and publicized at least 4–6 weeks in advance of the event?
- Have the workshop participants been invited to participate at least 4–6 weeks in advance of the workshop?
- Has contact information been provided for participants to RSVP?
- Will participation by a public body (e.g., municipality’s elected or appointed officials) generate a quorum? If so, the workshop must be publicly advertised at least 7 days in advance to meet Freedom of Information Act (FOIA) requirements. Check with the municipal clerk or solicitor for jurisdiction-specific FOIA procedures.
**Gather Workshop Materials**

Have the following materials been prepared in advance to bring to the workshop?

- IPA’s narrated video presentation, “The In-Field Walkability Audit: An Overview of What to Look For.” The presentation should be downloaded in advance from IPA’s Delaware Complete Communities Planning Toolbox. If Internet is available at the venue, the video may be accessed on Complete Communities YouTube Channel.

- Projector and screen to display the narrated presentation

- One letter-sized (8.5-in. x 11-in.) street map for each participant, which shows the selected route, to be used during the in-field audit. Google Maps is recommended.

- One table-sized, large-scale map (1-in. = 200 ft. preferred) of the audit area, for each group of 6–8 people, to be used during the workshop’s interactive mapping exercise

- Colored markers, stickers, and pens to mark up the table-sized map

- Masking tape to hang completed large-scale maps

- Sign-in sheet

- Agendas

- Clipboards

- Name tags

- Safety vests

- Cameras

- Easels with pads

- Refreshments

- One Walkability Assessment Checklist (described in Step 2) for each participant to document observations during the in-field walkability audit.

**Confirm Workshop Participants Attendance**

- Affirm the date, time, and location of the workshop.

- Remind participants to wear comfortable shoes and clothing appropriate for the weather.

- Enlist volunteers (or key committee members/staff) to arrive at the workshop at least 45 minutes early to help greet and sign in participants, distribute handouts, and set up materials and refreshments.

- Recruit volunteers for key roles (such as in-field group leaders, photographers, and note takers).

- Provide an electronic copy of the workshop agenda and “The Walkability Assessment Tool Visual Prompts: What to Look For on Your Walk” (see next section).
Visual Prompts

What to Look For on Your Walk

The purpose of this section is to help workshop participants recognize common issues with pedestrian environments that contribute to safety, connectivity, access, and mobility issues.

Participants should note that pedestrian infrastructure and transportation facilities are not designed to be “one-size-fits-all.” Pedestrian infrastructure and facilities should be planned, designed, and constructed to respect and consider the adjacent land use, landscape, and roadway contexts for urban, suburban, and rural settings. Therefore, a walkability assessment should consider the need for “context-sensitive solutions.” This considers both the existing and future context of transportation and land use as well as balances the needs of pedestrians, cyclists, transit users, and motorists. Proper sidewalk maintenance is just as important as correct design and construction techniques.

Safety

Creating safe and walkable communities requires the proper design, construction, and maintenance of pedestrian facilities in the public right-of-way. Sidewalks, crosswalks, pedestrian signals, curb ramps and other pedestrian facilities must be safe and readily accessible to and usable by people of all ages and abilities. Because most trips by transit begin by walking, the lack of continuous sidewalks, pedestrian lighting, and maintenance can present challenges to transit users. Providing safe “first- and last-mile” connections—or pedestrian travel to/from public transportation—is paramount to boosting transit ridership. During the walkability assessment, observe the common street safety issues, which appear to be lacking in photo examples that follow.
1. Street Safety Issues

**Lighting**
Is the area well lit, with pedestrian-scaled lighting fixtures that provide a sense of safety and security to pedestrians?

**Speed-Management**
Is there regulatory or warning signage, traffic-control devices, or traffic calming measures (e.g., roundabouts, curb extensions, roadway narrowing treatments, road diets, or on-street parking) to moderate high-speed traffic?

**Buffers Between Traffic and Pedestrians**
Are there buffers between sidewalks and the roadway (e.g., landscaping, street furniture, on-street parking, bike lanes) to provide space between vehicles and pedestrians to enhance safety and comfort levels?
2. Sidewalk Safety Issues

**Presence**
Are well-designed and maintained sidewalks present on both sides of the street?

**Continuous**
Are sidewalk networks continuous, accessible, and free from gaps to ensure mobility for all pedestrians—including those with visual impairments or physical disabilities? Do pedestrian networks provide first- and last-mile transit connectivity?

**Obstructions**
Are sidewalks free from signs, garbage cans, cones, vehicles, poles, vegetation, and other objects that restrict access and prohibit pedestrians from traveling safely along the sidewalk?
Are sidewalk surfaces stable, firm, level, slip resistant, and separated from motorized traffic? Are sidewalks free of cracks and obstructions, aligned, and easy to navigate?

Does both the design and maintenance of pedestrian facilities (e.g., sidewalks, curb ramps, crosswalks, pedestrian islands, transit stops, trails) provide accessible routes that are continuous, in good repair, and unobstructed?

Is there adequate winter maintenance of accessible pedestrian facilities?
3. Crosswalk Issues

Does the pedestrian environment provide marked crosswalks, used in combination with traffic calming measures and signalization/signage, to provide safe crossing areas for pedestrians?

Is each crosswalk effectively designed with correct layout of pedestrian elements? Are high-visibility crosswalk markings used to guide pedestrians and alert drivers to a crossing location?

Does each corner have curb ramps aligned with crosswalks? Do curb ramps have detectable warnings (e.g., truncated domes) for persons with low vision and/or visual impairments?
Pedestrian Islands

On wider streets, is there a pedestrian island on the median strip to provide a refuge area for pedestrians crossing streets? Is a mid-block crossing, or a pedestrian bulb-out (e.g., curb extensions) provided to minimize pedestrian exposure to traffic when crossing?

Accessible Pedestrian Signals (APS)

Do signals have visual (Walk/Don’t Walk), audible tones (count-down indicators), and speech messages? Is the physical design, location, and placement of the pedestrian signal device accessible?

Crosswalk APS Timing

Do crosswalks have appropriate APS signal phasing for pedestrians to safely cross streets?
Accessibility

In addition to good design and safe accommodation, accessibility is an intrinsic part of planning, retrofitting, constructing, and maintaining pedestrian facilities. The Americans with Disabilities Act (ADA) Title II requires public entities (state and local governments) to ensure that all public facilities and services are barrier free and readily accessible to and usable by individuals with disabilities.

1. Sidewalk Design and Accessibility Issues

Are sidewalks at least 5-feet wide to accommodate two pedestrians walking side-by-side, or a person using a mobility device such as a wheelchair?

Do driveway grades across sidewalks (i.e., cross slopes) provide a level crossing for pedestrians and those using mobility devices? Changes in cross slope within the sidewalk corridor should meet ADA requirements.
DetectableWarnings

Do sidewalks have level, detectable warnings (e.g., truncated domes) that help people with low vision and/or visual impairments determine the boundary between the sidewalk and street? Is the treatment even with the sidewalk to provide access for people using mobility devices?

Curb Ramps

Are curb ramps placed perpendicular to crosswalk intersections? Do they provide a smooth transition between the sidewalk and the street? Do other locations need curb ramps (e.g., on-street parking, loading zones, bus stops, and mid-block crossings)? Do landing pads at the top of the curb provide a level maneuvering area for persons using assistive mobility devices?

In 2011, the U.S. Access Board issued proposed guidelines that specifically address accessibility of pedestrian facilities in the public right-of-way and DelDOT Pedestrian Standards were issued in 2016. The guidelines/standards ensure that sidewalks, pedestrian street crossings, pedestrian signals, and other facilities for pedestrian circulation and use constructed or altered in the public right-of-way by state and local governments are readily accessible to and usable by pedestrians with disabilities. While on your walk, observe the absence or presence of the following design features that facilitate accessibility for all users.
2. Crosswalk Design and Accessibility Issues

<table>
<thead>
<tr>
<th>Signalization</th>
<th>Push Buttons</th>
<th>Surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do accessible pedestrian signals (APS) communicate information about the</td>
<td>Are crosswalk buttons installed at a height that is accessible to pedestrians</td>
<td>Is the crosswalk surface (e.g., colors, textures, designs) delineated to ensure public safety? Do individuals using assistive mobility devices easily navigate the surface? Brick pavers or uneven surfaces may create accessibility issues for persons with disabilities.</td>
</tr>
<tr>
<td>Walk/Don’t Walk intervals at signalized intersections in non-visual formats to</td>
<td>and individuals using assistive mobility devices?</td>
<td></td>
</tr>
<tr>
<td>pedestrians who have low vision and/or visual impairments? Do signals provide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>visual and auditory cues?</td>
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</table>
Connectivity

In order to travel to and from a destination, an individual may walk, drive, cycle, ride transit, or in many cases—use a combination of transportation modes. To enhance first- and last-mile connectivity to transit, barriers must be identified and addressed—including ADA accessible pedestrian infrastructure, walking distance to a transit stop/station, missing or inadequate sidewalks, dangerous crossings, poor lighting, and perceived safety/security issues. During the in-field walkability audit, observe the following features that foster or impede multi-modal transportation connectivity.

1. Transit Connectivity Features

Does the bus stop/station include a shelter, and if so, does it include an ADA-accessible wheelchair bay? Is there an ADA-compliant landing pad/level lift area to accommodate persons using assistive mobility devices? Is the shelter well-lit and located in a safe and secure location?

Are route and timetable information, and wayfaring maps, displayed at each stop to ensure that passengers are correctly informed about available routes and destinations?
1. Transit Connectivity Features

<table>
<thead>
<tr>
<th>Amenities</th>
<th>Sidewalks</th>
<th>Parking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are other amenities (e.g., lighting, seating, trash receptacles, bike racks/storage) available?</td>
<td>Since walking is often the “first and last mile” for transit trips, are there continuous, accessible, and connecting sidewalks leading to/from the bus stop?</td>
<td>Are transit stops accessible from park-and-ride or other parking locations? Are there crosswalks and curb ramps to enhance pedestrian access?</td>
</tr>
</tbody>
</table>
2. Intermodal Connectivity

**Large Pedestrian Networks**
Are sidewalks connected to larger pedestrian networks and/or off-road multi-use trails/pathways?

**Bicycle Facilities**
Is there access to *low-stress*, on-road bicycle facilities, off-road multi-use trails/paths, bike sharing, and secure places to park/store bikes?

**Public Transit Connectivity**
Is there sufficient first- and last-mile connectivity to public transit? Are pedestrian destinations safely accessible from transit stops?
2. Intermodal Connectivity

**Intercity Bus Connectivity**

Is there safe pedestrian access to private intercity bus transportation (e.g., Greyhound, Megabus)? Is there connectivity to other transportation modes and facilities (e.g., bike sharing/storage, parking, public transit, private transportation and/or ride-sharing services)?

**Rail System Connectivity**

Is there safe pedestrian access to regional rail/train stations (i.e., SEPTA, Amtrak)? Is there connectivity to other transportation modes and facilities (e.g., bike sharing/storage, parking, public transit, private transportation and/or ride-sharing services)?

**Walk Appeal**

Designing aesthetically pleasing and comfortable walking routes greatly increases the chance that more people will choose to walk as a form of active transportation. **Active Living Research** indicates that economic-, social-, and public-safety benefits of specific street-scale, built environment features promote walking and biking. During the audit, participants should observe whether features are present or nearby that add to the comfort and appeal of an area.
1. Ideal Walk Appeal Features

Is the streetscape well designed to incorporate safe and accessible pedestrian facilities (e.g., sidewalks, curb ramps, crosswalks, pedestrian islands, gathering spaces)?

Are streets pleasant, enjoyable, and rich with pedestrian amenities (e.g., street furniture, trees and landscape design, landscape buffers, pedestrian-scaled lighting, traffic-calming measures)?

Is the comfort and walk appeal achieved through a mix of uses, access to destinations of daily living, and multi-modal connectivity?

Features

- Pedestrian-Scaled Lighting
- Traffic Calming Measure: Roundabout
- Street Scaping
- Seating
- Trees, Planters, Parked Cars as Buffers
- Pedestrian Island
- Marked Crosswalks
Step Two

Facilitate the Workshop

The facilitated workshop setting provides an opportunity for participants to observe and record walkability issues within a specific area that has been pre-selected in advance of the workshop. Once participants arrive, sign-in, and informal introductions are made, the designated workshop leader/facilitator should show the narrated presentation and explain the process for observing and documenting conditions during the in-field walkability audit. The audit allows participants to evaluate actual walkability conditions of the selected area, and “walk and talk” about observations with workshop leaders and participants. It is followed by an interactive mapping exercise that allows participants to share ideas and viewpoints, connect with other stakeholders, document current walkability conditions, gain new perspectives, and build consensus about improvement strategies.

In advance of the workshop:
- Download (on a laptop computer or USB) the narrated presentation on “The In-Field Walkability Audit: An Overview of What to Look For.” It is available online on IPA’s Delaware Complete Communities Planning Toolbox and Complete Communities YouTube Channel.

One hour before the workshop:
- Set up the equipment to show the narrated presentation.
- Arrange tables and chairs to accommodate 6–8 people; provide one large-scale map at each table.
- Arrange easels with pads to take notes during the interactive mapping exercise.
- Set up a table for refreshments and a table to sign in/provide handouts to workshop participants.

To initiate the workshop:
- Sign-in workshop participants; provide name tags, copies of the agenda, 8.5-in. x 11-in. street maps, and the Walkability Assessment Checklists.
- Make introductions and explain the purpose of the workshop, roles of participants, and agenda.
- Show the narrated presentation “The In-Field Walkability Audit: An Overview of What to Look for.”

Prior to the conducting the in-field walkability audit:
- Address questions regarding the narrated presentation and what to observe.
- Distribute reflective safety vests.
- Introduce the Walkability Assessment Checklist (see page 33), procedures for conducting the in-field walkability audit, and the plan to reconvene immediately following the in-field audit for a debriefing and mapping exercise.
**Explain Use of the Walkability Assessment Checklist**

The Walkability Assessment Checklist is designed as a downloadable document as part of this assessment tool. It should be printed out in color and distributed to participants at the workshop for use during the in-field audit.

During the audit of the designated area, the facilitator should ask participants to reference maps and use the checklists when considering the overall condition of pedestrian facilities.

Participants should use the checklist to document and note locations of issues with pedestrian facilities, crosswalks and intersections, and comfort and appeal. The small 8.5-in. x 11-in. maps of the area can also be marked up to pinpoint problem areas that may be targeted for improvements.

Several people involved in the audit may be assigned roles. Some people may mark up a map to document issues, another may record comments or observations, and someone may serve as the photographer to capture issues or problem areas.

Following the in-field audit, participants should discuss conditions observed and documented on the checklists.
Using the Checklist

This checklist is designed for participants to inventory the safety and accessibility of pedestrian facilities, connectivity to transit and other transportation modes, and the walk appeal of the streetscape.

Participants should observe and document on the checklist the existence, condition, and/or maintenance of pedestrian facilities (e.g., sidewalks, crosswalks, median islands, accessible pedestrian signals, curb extensions, curb ramps) and streetscape amenities (e.g., trees, pedestrian lighting, benches, wayfaring signage).

Use the checklist to evaluate the accuracy of the area’s Walk Score®.

Pedestrian Facilities: Design and Conditions

1. Are there sidewalks present on both sides of the street?
   - Yes
   - No, only on one side of the street
   - No, not on either side of the street

2. Are the sidewalks sufficient and well maintained?
   - Yes
   - No, some problems (check all that apply):
     - The sidewalk is not continuous (has gaps)
     - The sidewalk is misaligned
     - The sidewalk has substantial cracks or maintenance issues
     - The sidewalk surface is poorly constructed

- The sidewalk is obstructed (e.g., poles, signs, shrubbery, trash cans)
- The sidewalk is not a minimum of 5-feet wide to accommodate two pedestrians or person using an assistive mobility device (e.g., wheelchair, cane, walker)
- The pedestrian network has insufficient lighting (e.g., street lighting is not scaled to pedestrians, does not allow pedestrians and motorists to see one another, does not enhance safety and security)
3. Do the pedestrian facilities safely accommodate people of all ages and abilities (including vulnerable road users)?

- Yes
- No, some problems
  (check all that apply):
  - Sidewalk surfaces are problematic (unstable, uneven not firm, or non-slip resistant)
  - Changes in cross slope within the sidewalk corridor (e.g., driveways crossings) do not meet ADA requirements
  - Curb ramps are not aligned with crosswalks at each intersection
  - Curb ramps do not have level, detectable warnings (e.g., truncated domes)
  - Curb ramps do not provide a landing pad for assistive mobility devices, or a smooth transition between the sidewalk and the street
  - The sidewalks are not wide enough

Other issues and observations:

Locations of problems:

4. Is the sidewalk part of a larger pedestrian network?

- Yes
- No, some problems
  (check all that apply):
  - Sidewalk network is not continuous or has gaps
  - Sidewalks lack connectivity to pedestrian facilities, adjacent neighborhoods, community-oriented destinations, multi-use trails/paths, transit stops

Other issues and observations:

Locations of problems:
5. Which transportation facilities are connected to the pedestrian network in this area?
   - None
   - Check all that apply:
     - Bike facilities
     - Off-road, multi-use trails/paths
     - Public bus facilities
     - Private bus facilities (e.g., Greyhound, Megabus)
     - Train stations

6. Does the pedestrian network foster/provide first- and last-mile connectivity to transit?
   - Yes
   - No, some problems (check all that apply):
     - Lack of continuous and connecting sidewalks to transit stops/locations
     - Lack of transit shelters
     - Transit shelters are available, but lack passenger amenities
     - Lack of crosswalks with accessible curb ramps leading to transit stops/locations
     - Poor maintenance

Other issues and observations:

Locations of problems:

7. Is there a buffer area between the sidewalk and roadway?
   - No
   - Yes, check all that apply:
     - Landscaped area (e.g., trees, grass, planting strip)
     - Street furniture
     - Bike lanes
     - On-street parking

Other issues and observations:

Locations of problems:
## Crosswalks and Intersections

1. **Are streets safe and easy to cross?**
   - Yes
   - No, some problems (check all that apply):
     - Road was too wide
     - Blocked line of sight to allow for safe street crossing (e.g., parked cars, trees, or plants blocking view of traffic)
     - Drivers seem to be inattentive toward pedestrians
     - Road segment lacks speed management measures to reduce motor vehicle speed (e.g., regulatory or warning signage, traffic-control devices, or traffic calming measures)
   
   Other issues and observations:

   Locations of problems:

2. **Are there sufficient crosswalks at intersections?**
   - Yes
   - No, some problems (check all that apply):
     - Crosswalks are not located at each intersection
     - Crosswalks are not marked with highly visible treatments
     - Crosswalks are not used in combination with other traffic calming measures
     - Mid-block crossing areas are needed
     - Pedestrian island is needed on median strip
     - Curb ramps are not installed perpendicular to crosswalks
     - Curb ramps do not have detectable warnings (truncated domes)
   
   Other issues and observations:

   Locations of problems:

3. **Is there sufficient crosswalk signalization & timing?**
   - Yes
   - No
   - Crosswalks lack accessible pedestrian signals (APS)
   - APS are available, but signal phasing is insufficient to allow for safe crossing
   - APS do not provide a combination of visual (Walk/Don’t Walk), count-down indicators, and audible tones/speech messages
   - Placement of crosswalk APS button is too high or not accessible
   - Signal timing was insufficient to allow safe crossing

   Other issues and observations:

   Locations of problems:
### Comfort and Appeal

“Present” facilities are along the walking assessment area, while “nearby” facilities are within a short distance (no more than one or two blocks) from the walking audit area.

#### 1. What destinations are present (P) or nearby (N)?

Check all that apply:

<table>
<thead>
<tr>
<th>P</th>
<th>N</th>
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<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank</td>
<td></td>
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<tr>
<td>Laundry/dry cleaner</td>
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<tr>
<td>Indoor fitness facility/recreation center</td>
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<tr>
<td>Senior center</td>
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<tr>
<td>Playground/park/trailhead</td>
<td></td>
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<tr>
<td>School (elementary, middle, high)</td>
<td></td>
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<tr>
<td>College/technical school/university</td>
<td></td>
</tr>
<tr>
<td>Retail stores</td>
<td></td>
</tr>
<tr>
<td>Employment centers</td>
<td></td>
</tr>
<tr>
<td>Smoke-free public spaces</td>
<td></td>
</tr>
<tr>
<td>Multi-modal facilities (e.g., bus stops, train stations, bike parking/storage, bike-sharing service, private transportation, and ride-sharing services)</td>
<td></td>
</tr>
<tr>
<td>Other, specify:</td>
<td></td>
</tr>
</tbody>
</table>

#### 2. How pleasant is your walk?

Check all that apply:

- Needed more grass, flowers, or trees
- Lacked sense of security
- Not well lit
- Dirty, lots of litter or trash
- Lack of maintenance
- No bench or place to rest
- Lacked sense of safety (perception of high-speed traffic or crime)

**Other issues and observations:**

**Locations of problems:**

Conduct a Debriefing and Mapping Exercise

Following the in-field audit, participants will immediately reconvene in the workshop setting for an interactive mapping exercise. Participants should break into groups of 6–8 people and go to tables set up with large-scale maps, markers, and stickers. Within each group setting, participants should discuss observations and information documented on their Walkability Assessment Checklists.

Participants can use markers and place stickers on the large-scale maps to note locations of issues, concerns, and possible improvements that may require changes in engineering, signage, policies, law enforcement, and educational programs.

Following the mapping exercise, the workshop leader/facilitator should ask each group to report on ideas and suggestions for walkability improvements.

As a whole, the workshop participants can discuss conditions observed and build consensus on key issues and recommendations for improvements. Collectively, agreed upon issues and ideas for improvements can be summarized on flip charts or notepads.
The workshop leader/facilitator should pose the following questions to workshop participants to identify priority issues:

**Priority Issues**

1. Were there unexpected problem areas or concerns identified during the walk and completion of the mapping exercise that were not listed on the Walkability Assessment Questionnaire (Step One)?

2. What were the **three** greatest areas of concern for each of the following Walkability Assessment Checklist categories:

   **Pedestrian Facility: Design and Conditions**
   1. 
   2. 
   3. 

   **Crossing Streets and Intersections**
   1. 
   2. 
   3. 

   **Comfort and Appeal**
   1. 
   2. 
   3.
Step Three

Each community is unique, and there is not a one-size-fits-all approach to initiate pedestrian improvements. However, the following path forward is suggested to initiate plans, policies, programs, design improvements, and educational/outreach programs to enhance walkability.

Identify and Prioritize Concerns

With assistance from professional planners, consultants, and/or workshop facilitators:

- **Compile** all pre-audit data and in-field audit outcomes (individual assessments, photos, mapping exercises).
- **Analyze** all compiled information and look for themes related to the presence, condition, and/or accessibility of the pedestrian network—including pedestrian facility design and conditions, crosswalks and intersections, and comfort and appeal.
- **Identify and prioritize** issues that:
  - Require immediate attention to address safety concerns.
  - Reflect the consensus of the group in terms of walkability.
  - Are “low-hanging fruit” or improvements that can be easily achieved with minimal funding, technical assistance, plan/policy changes, or engineering design (e.g., crosswalk marking, signage, signalization, education, enforcement).
  - Would achieve the “most bang for the buck” or most impactful improvements with least investment, in terms of walkability.

Establish the goals for necessary for plan, policy, community design and program improvements.

Prepare a Written Summary

With assistance from professional planners, consultants, and/or workshop facilitators to:

- Summarize outcomes of the in-field audit/workshop. Include the following details.
- Purpose – Why was the assessment undertaken?
- Location – How was the area selected and why?
- Special needs of vulnerable and targeted populations (e.g., non-car households, non-drivers, children, older adults, and persons with disabilities)
- Description of outreach effort, including list of workshop participants
- Types of pre-assessment data that were used/collection
- Map of the low-stress bikeability-assessment area(s)
- Identification and prioritization of issues
- Ideas for improvements
- Suggested “next steps”

Present Findings to:

- **Key local and state officials**
  - Request to make a public presentation at the jurisdiction’s planning commission meeting, relevant advisory board/committee meeting(s), and council meeting.
• Arrange to meet with the local jurisdiction’s staff members who are involved in planning, public works, public safety, finance, and parks and recreation.

• Make in-person presentations to appropriate legislative committees of the Delaware General Assembly and/or conduct one-on-one meetings with state legislators that represent the jurisdiction.

- **Agencies/entities/organizations** that provide technical assistance, funding, and/or grants.
  - Present to committees for state and/or regional Metropolitan Planning Organizations (MPOs), DelDOT, DNREC’s Division of Parks and Recreation.
  - Meet with representatives of local foundations and companies that provide community grants.

- **Entities concerned with public safety and health**
  - Get on meeting agendas to present findings to task forces, committees, or auxiliary groups for local public safety agencies, school boards, community healthcare systems, and non-profit organizations to gain support for education and outreach campaigns.

- **General public** via press releases, newsletter articles, social media, and “news” sections of local government and partner websites

- **Advocacy groups**
  - Attend meetings and community events hosted by civic or home owners’ associations, bicycle advocacy groups, school associations (PTAs), nonprofit groups, faith-based organizations, Main Street and business-interest groups to raise awareness, engage, and recruit other interested community members.

Meeting Preparation

In preparation for meetings with local officials and agencies, remember these tips:

- Call at least one month in advance to request time on the meeting agenda.

- Ask how many committee members will be in attendance. Bring enough handouts for the group.

- Print or display maps at sizes referenced on page 16. Ensure the maps are legible.

- Arrive early and be prepared with the handouts and technology you need for your presentation.

- Stay on topic. Present the walkability assessment findings with emphasis on the information that is relevant to that specific organization. Do not use the meeting as a platform to discuss unrelated concerns.
Gain Support and Strengthen Partnerships

Establish:

- **Plans**
  - Incorporate provisions for walkability within the transportation element of the local government’s Comprehensive Plan. See IPA’s Healthy Communities: The Comprehensive Plan Assessment Tool and the Active Living and Healthy Design: A Scorecard for Comprehensive Plans for guidance.
  - Consider the need for specialized plans that emphasize safety, connectivity, accessibility, and walk appeal, such as transportation circulation-system plans, trail studies, parks and recreation master plans, maintenance programs, streetscape plans, and Complete Streets plans.
  - Improve multimodal connections, or foster interconnectivity among the state’s network of shared-use trails and pathways.

- **Policies**
  - Update or revise the jurisdiction’s ADA transition plan to describe, prioritize, and schedule physical changes needed to address accessible public rights-of-way and pedestrian facilities—including multi-or shared-use paths and maintenance of accessible facilities.

  - Evaluate existing policies, need for new policies, or consistency with state policies (e.g., Complete Streets) to ensure that transportation infrastructure is designed, built, constructed, and maintained to safely accommodate travelers of all ages and abilities—including motorists, pedestrians, bicyclists, and transit riders.
  - Advocate policy changes to address barriers to and support safe conditions for pedestrians of all ages and abilities—including vulnerable road users.
Design standards

- Work with DelDOT officials to seek guidance on multi-modal facility design that support the state’s Complete Streets policy.
- Ensure that pedestrian facilities (including multi-use trails/paths) are designed to meet ADA accessibility standards and provide accessible public rights-of-way (e.g., sidewalks, pedestrian street crossings, pedestrian signals, and other facilities for pedestrian circulation and use constructed or altered in the public right-of-way).
- Consider the need for context-sensitive transportation solutions that fit within the context of the road use and setting. For example traffic-calming measures can be incorporated in roadway design based on the use and classification of the roadway (e.g., urban, suburban, and rural roadway contexts).
- If a streetscaping project is planned, consider the need to design spaces that balance needs of all roadway users and wherein people can safely walk, bicycle, drive, take transit, and mingle. Well-designed and maintained streetscapes create comfortable, beautiful streets that complement Complete Streets principles.
- Work with partners to design safe and attractive multi-modal environments near major transit corridors and stations that provide linkages for pedestrians and bicyclists from origins and destinations to transit.

Funding support

- Seek support for pedestrian facility improvements and maintenance costs within the local jurisdiction’s annual budget and/or long-term capital improvement plan (CIP).
- Seek support for pedestrian facility improvements from DelDOT or the MPOs via federal funding programs such as the Transportation Alternatives Program (TAP), Congestion Mitigation and Air Quality (CMAQ), or Safe Routes to School (SRTS).
- Contact state legislators to seek Community Transportation Funding for small transportation projects that don’t meet state agency funding priorities.
- Consider tying non-motorized improvements into already planned transportation system improvement projects.
- Leverage funding support for grants or other sources from non-profit entities and/or private organizations.

Facility maintenance plans

- Ensure that the jurisdiction’s plans for facility maintenance are consistent with and complement municipal maintenance agreements with DelDOT.
- Ensure pedestrian infrastructure is well maintained and free from hazardous conditions/obstructions.
- Consider seasonal and winter maintenance needs.

Technical assistance

- Contact WILMAPCO, Dover/Kent County MPO, Salisbury/Wicomico
County MPO, and/or DelDOT for further assistance and support.

Provide Outreach and Education

Education and awareness are tools that reshape the travel behavior of motorists, pedestrians, and bicyclists. Seek support and assistance from public safety officials, advocacy groups, parks and recreation departments, and non-profit organizations to do the following:

- Teach and advocate safe pedestrian behavior and proper use of pedestrian facilities.
- Educate motorists and enforce safe driving.
- Maintain and improve pedestrian facilities and amenities.
- Plan for route expansion and connectivity to adjacent pedestrian routes, trails, and multi-modal facilities, including transit facilities.
- Support local “Safe Routes to School” programs that address walking safety for school students.

Stay Engaged

Strategic actions and initiatives that engage community members, advocacy groups, local leaders, and partner agencies are more likely to be implemented. Continue working with all stakeholders to ensure that progress is achieved and sustained.
Glossary of Healthy Community Terms

**Accessible:** Accessible facilities are those that can be reached, used, and traversed by people of all ages and abilities without difficulty.

**Accessible Pedestrian Signals (APS):** An accessible pedestrian signal and pedestrian pushbutton is an integrated device that communicates information about the WALK and DON’T WALK intervals at signalized intersections in non-visual formats (i.e., audible tones and vibrotactile surfaces) to pedestrians who are vision impaired or have low vision.

**Active Transportation:** Also known as Non-Motorized Transportation and Human-Powered Transportation, includes walking, bicycling, small-wheeled transport (skates, skateboards, push scooters, and hand carts), and wheelchair travel.

**Americans with Disabilities Act (ADA):** According to its website, the Americans with Disabilities Act (ADA) is a federal civil rights law that became effective on July 26, 1990, in order to give equal opportunities to individuals with disabilities. It is a comprehensive civil rights law that prohibits “discrimination and ensures equal opportunity for persons with disabilities in employment, state and local government services, public accommodations, commercial facilities, and transportation” and telecommunications. Title II of ADA provides comprehensive civil rights protections for “qualified individuals with disabilities.” The Title II regulation covers “public entities,” which include any state or local government and any of its departments, agencies, or other instrumentalities.

**ADA Transition Plans:** Title II of the Americans with Disabilities Act (ADA) of 1990 requires local and state government to make all relevant services readily accessible to individuals of all physical and mobility capability. As a part of this law, public agencies that employ 50 or more employees are required to develop and carry out an ADA Transition Plan. This document identifies accessibility needs of that particular agency, and an improvement to remedy that problem, along with a projected time frame for its completion. Following the adoption of a transition plan, agencies are required to regularly update their plans to address updated accessibility issues.

**Assistive Mobility Devices:** Any device designed or adapted to help people with physical limitations to perform actions, tasks, and activities (e.g. wheelchairs, crutches, or canes).

**Bicycle Facilities:** Facilities designed to accommodate bicycle travel for recreational or commuting purposes. Bikeways are not necessarily separated facilities (such as off-road paths), but may be designed to be shared and operated along with other travel...
modes (such as painted on-road bike lanes or sufficiently wide shoulders with bicycle signage).

**Buffer:** The area between the outside edge of the roadway and the roadside edge of the sidewalk or pedestrian facility that provides a space between pedestrian traffic and motorized traffic; this buffer can contain paved areas, grassy areas, or trees.

**Built Environment:** The human-made surroundings that provide the setting for human activity, production, and consumption. The built environment consists of houses, office buildings, roads, and entire cities.

**Complete Communities:** Described as “attractive, inclusive, efficient, healthy, and resilient,” complete communities are more compact, provide a greater mix of land use, offer activity oriented destinations, foster sociability, and promote greater economic competitiveness. The Institute for Public Administration (IPA) at the University of Delaware has identified five elements of a Complete Community: (1) **Complete Streets**, (2) **Efficient Land Use**, (3) **Healthy and Livable**, (4) **Inclusive and Active**, and (5) **Sustainable and Resilient**. Explore the online Delaware Complete Communities Planning Toolbox to learn more about planning tools, community design tools, and public engagement strategies.

**Complete Streets:** Complete Streets are streets designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists, and transit riders of all ages and abilities must be able to safely move along and across a “complete” street (National Complete Streets Coalition).

**Comprehensive Plan:** A document containing text and maps that lays out a municipality’s general development strategy, position on population growth, infrastructure needs, and community issues, among other topics. In Delaware all municipalities are required to develop land-use plans, and municipalities with a population of over 2,000 are required to develop and adopt a comprehensive plan.

**Connectivity:** A measure of how well transportation facilities (such as roads and sidewalks) are connected to each other and to important destinations.

**Context-Sensitive Solutions:** Commonly referred to as CSS, Context-Sensitive Solutions is an approach to tackling transportation projects that seeks to include the unique needs of specific communities. This concept discounts a one-size-fits-all design of roads and streets.

**Crosswalk:** Also known as a pedestrian crossing, a crosswalk is a point on a roadway that employs some means of assisting pedestrians or other non-motorized transportation modes to safely cross the road. Crosswalks usually consist of some combination of on-road paint, a crossing signal for pedestrians, and signage warning motorists of the presence of pedestrians. Crosswalks are most commonly located at signalized intersections but can be located anywhere along a roadway.
**Curb Cut:** Also known as a Curb Ramp, a curb cut is a short ramp installed where a sidewalk meets a road to create a smooth transition between the two surfaces rather than a steep drop of several inches. Curb cuts are essential for sidewalk users such as bicyclists, pedestrians with limited mobility, and those using wheelchairs or strollers.

**Density/Compact Development:** Density refers to the amount of dwellings or other buildings per acre in a particular area of development. Higher density (compact) developments allow for a greater amount of activity to occur on a smaller amount of land, thus conserving open spaces and natural resources. Compact development also creates a situation in which origins and destinations, such as homes and places of work, are located closer to each other, allowing for more active forms of transportation.

**Detectable Warnings:** (see Truncated Domes)

**Greenway:** A corridor of undeveloped land, usually including some kind of trail or pathway that is provided for recreational purposes and/or environmental protection.

**Healthy Community:** Individual behavior, such as physical activity participation and eating habits, is usually considered the main determinants of one’s physical health. However, since the built environment reflects a community’s opportunities for physical activity, access to healthy foods, injury prevention, and safety, it is important to consider this dimension to assess a community’s health. The *Toolkit for a Healthy Delaware* is designed to help local governments create healthy communities by developing plans, policies, community design strategies, and programs to help residents enjoy active and healthy lifestyles.

**Land Use:** Efficient land use is one element of a complete community. The comprehensive plan is a requirement for all local governments in Delaware. It is treated as law. The comprehensive plan is the foundation for planning in Delaware. Zoning, subdivision, and other regulatory tools are the principal means for implementing the plan. *Title 22, Chapter 7, Section 702* of the Delaware Code requires Delaware municipalities to prepare comprehensive plans that “[encourage] the most appropriate uses of physical and fiscal resources of the municipality and the coordination of municipal growth, development, and infrastructure investment actions with those of other municipalities, counties and the State.”

**Mobility:** The ability to move or be moved from place to place (*FHWA*).

**Multimodal:** The availability of transportation options using various modes (such as automobile, bicycle, and pedestrian) within a system or corridor (*FHWA*).

**Multi-Use Trail/Path:** An off-road trail or path, paved or unpaved, intended for use by pedestrians, bicyclists, joggers, skaters, and others for recreational or transportation purposes.

**Neighborhood:** A geographical area that is a subset of a larger town or city, usually defined by shared social or architectural features that set it apart from adjacent areas.

**Paved Trail:** A relatively smooth path covered with paving material such as asphalt, concrete, or macadam. Paved trails can include off-road paths, such as...
as greenway trails, as well as sidewalks alongside a roadway.

**Pedestrian Facilities:** Includes sidewalks, crosswalks, median islands, accessible pedestrian signals, curb extensions, curb ramps, multi-use trails/paths.

**Pedestrian Network:** A continuous sidewalk or pedestrian-facility system that allows pedestrians to make uninterrupted trips and accommodates stroller or wheelchair users to utilize the sidewalks (Kansas City Walkability Plan). The USDOT has issued a *Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations*.

**Public Right-of-Way:** The public right-of-way, or right of pedestrians or vehicles to proceed with priority along a given route of transportation, varies by location and situation. It is the responsibility of the local and state government to ensure accessibility considerations when altering or improving sidewalks, pedestrian street crossings, pedestrian signals, and other facilities for pedestrian circulation and use.

**Safe Routes to School:** A federally funded and state-administered program that encourages local schools and jurisdictions to undertake projects that will encourage children to walk or bicycle to school and to make such trips safer.

**Sidewalk:** A paved walkway along the side of a street; also the portion of a right-of-way intended for pedestrian use.

**Streetscaping:** Changes to the street and surrounding areas intended to improve the experience of pedestrians and others using the area; streetscaping improvements can include changes to the road cross-section, traffic management, sidewalk conditions, landscaping, street furniture, and building fronts. The aesthetic appeal elements of streetscaping include beautification initiatives, attractive lighting, street furniture, clean streets, and outdoor dining, contribute to a town’s sense of place (*Victoria Transportation Policy Institute*).

**Transportation Equity:** Access to safe transportation is not equal across all demographics. In order to ensure a more socially equitable system of transportation, access must be provided to all forms of transportation, especially through sidewalks, regardless of an individual’s physical capability or mobility needs.

**Traffic Calming:** A way to design streets using engineering principles to encourage people to drive more slowly. Traffic calming involves physical and visual cues that induce drivers to travel at appropriate speeds (Kansas City Walkability Plan).

**Traffic Signals:** Electronic signaling devices located at road intersections to control competing flows of traffic.

**Truncated Domes:** Truncated domes are the standard design requirements for detectable warnings that help people with visual impairments determine the boundary between the sidewalk and street. They are small, raised domes that form a square or radial pattern at sidewalk breaks to serve as a tactile indicator for individuals using assistive visual devices.

**Vulnerable Road Users:** In August 2010, Delaware was the second state in the nation to pass a *Vulnerable Road Users Law*. This Bill (SB 269) amends the careless or inattentive driving law by enhancing the
penalty for a careless or inattentive driver who contributes to the serious physical injury of a vulnerable user in a public right-of-way. The Bill defines vulnerable users in public rights-of-way as a pedestrian, including those persons actually engaged in work upon a highway, or in work upon utility facilities along a highway, or engaged in the provision of emergency services within the right-of-way; a person riding an animal; or a person operating any of the following on a public right-of-way, crosswalk, or shoulder of the highway: a farm tractor or similar vehicle; a skateboard; roller skates; in-line skates; a scooter; a moped; a bicycle; or a motorcycle.

Walk Score®: Walk Score is a number between 0 and 100 that measures the walkability of any address (with 0 being least walkable and 100 being most walkable). It is based on an algorithm that ranks communities nationwide based on an area’s number of common destinations (business, restaurants, parks, schools) within walking distance of any given starting point.

Walk Smart Campaign: The “Walk Smart” Campaign is a partnership between the Office of Highway Safety, DelDOT, and local and state law enforcement to provide education to communities about the importance of safe pedestrian travel practices, as well as heavier law enforcement of motor vehicle behavior in areas with high pedestrian crash data. The Office of Highway Safety provides materials for DelDOT to distribute to municipalities interested in participating in the campaign.

Walkability: Walkability is often measured according to the environmental, health, financial, and safety benefits offered to pedestrians within a community. More broadly, walkability is a measure of how conducive an environment is to walking.
Online Resources

Active Living Research
• Making the Case for Designing Active Cities
• Active Living and Healthy Design: A Scorecard for Comprehensive Plans

America Walks
• Social Equity Benefits of Walking
• Safety Benefits of Walking
• Transportation Benefits of Walking
• Economic Benefits of Walking
• Health Benefits of Walking
• Environmental Benefits of Walking

American Association of State Highway and Transportation Officials (AASHTO)
• Guide for the Planning, Design, and Operation of Pedestrian Facilities

American Council for an Energy-Efficient Economy
• Delaware

Brookings Institute
• Walk this Way: The Economic Promise of Walkable Places in Metropolitan Washington, D.C.

Centers for Disease Control and Prevention (CDC)
• Transportation Health Impact Assessment Toolkit

Delaware Coalition for Healthy Eating and Active Living (DE HEAL)

Delaware Department of Transportation (DelDOT)
• Accessibility
• ADA Self-Assessment and Transition Plan
• Delaware Complete Streets Policy
• Delaware Statewide Pedestrian Action Plan
• Delaware Strategic Highway Safety Plan: Toward Zero Deaths
• DelDOT Development Coordination Manual, Chapter 5
• Pedestrian Accessibility Standards for Facilities in the Public Right-of-Way

Delaware Office of the Governor
• Executive Order Number Fifty-Four

Delaware Office of Highway Safety
• Pedestrian Safety

Department of Justice
• Americans with Disabilities Act Title II Regulations

Federal Highway Administration
• FHWA Memorandum: Bicycle and Pedestrian Facility Design Flexibility
• Manual On Uniform Control Devices (MUTCD)

Google Maps

Infrastructure Report Card
• Delaware

Institute of Transportation Engineers (ITE)
• Designing Walkable Urban Thoroughfares: A Context Sensitive Approach
Institute for Public Administration, University of Delaware
- Complete Streets in Delaware: A Guide for Local Governments
- Delaware Complete Communities Planning Toolbox
  - Americans with Disabilities Act: What Is It?
  - Comprehensive Plans
  - Complete Streets
  - Content-Sensitive Transportation Solutions
  - Local Government Steps to Achieve ADA Compliance
  - Parks and Recreation Master Planning
  - Streetscaping
- Healthy Communities: A Resource Guide for Delaware Municipalities
- Healthy Communities: The Comprehensive Plan Assessment Tool
- Toolkit for a Healthy Delaware
  - Glossary of Healthy-Community Terms
  - Healthy Community

State of Delaware
- Delaware Complete Streets Policy
- Complete Streets Policy: A Guide for Local Governments
- Winter Maintenance of Pedestrian Facilities in Delaware: A Guide for Local Governments

National Complete Streets Coalition

National Highway Traffic Safety Administration
- Office of Disease Prevention and Health Promotion
  - Physical Activity Guidelines

Public Affairs Resources
- AAA: Your Driving Costs

Reconnecting America
- Walking the Walk: How Walkability Raises Home Values in U.S. Cities

Robert Wood Johnson Foundation
- New Report Finds 23 of 25 States with Highest Rates of Obesity are in the South and Midwest

State of Delaware
- Delaware Trails and Pathways

United States Access Board
- Shared Use Path Accessibility Guidelines (SUPAG), ANPRM, and Architectural Barriers Act Accessibility Guidelines for Shared Use Paths
- Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way

U.S. Department of Transportation
- Design Guidance Accommodating Bicycle and Pedestrian Travel: A Recommended Approach
- Planning Glossary
- Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations
- Requirements to Provide Curb Ramps
- Safer People, Safer Streets Initiative
- Snow Removal on Sidewalks Constructed with Federal Funding
Sidewalks, crosswalks, pedestrian signals, curb ramps and other pedestrian facilities must be safe and readily accessible to and usable by people of all ages and abilities.
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The University of Delaware’s Institute for Public Administration (IPA) addresses the policy, planning, and management needs of its partners through the integration of applied research, professional development, and the education of tomorrow’s leaders.

Please also visit our Delaware Complete Communities Planning Toolbox at http://completecommunitiesde.org.