POLICY ON INFRASTRUCTURE GUIDELINES FOR NON-MOTORIZED TRAVEL INVESTMENTS

For

LAKE COUNTY, ILLINOIS

LakeCounty
Division of Transportation

December 2010

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Report

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Lake County Division of Transportation

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1. Introduction

1.1 Overview

Non-motorized modes of travel—bicycling, walking, and access to transit—are important components of Lake County's multimodal transportation mix. This document is intended to serve as a tool for the Lake County Division of Transportation (DOT) to consider non-motorized transportation enhancements when planning County roadway improvements. It offers general principles and policies that Lake County DOT intends to follow to provide bikeways, walkways, and other non-motorized enhancements along County roadways, and sets forth policies under which non-motorized enhancements will be considered.

1.2 Purpose

Lake County DOT recognizes that roadway improvements offer opportunities to improve safety, access, and mobility for all travelers, and that non-motorized travel modes are integral elements of the transportation system. The Lake County DOT strives to provide for the safety and mobility of all users of the County's transportation system, so that all users may be safe when traveling along or across County roadways. To improve non-motorized facilities along its roadways, Lake County DOT proposes to establish and implement a Policy on Infrastructure Guidelines for Non-Motorized Travel Investments, or Non-Motorized Travel Policy. The intent of the policy and guidelines is to articulate an approach for considering accommodating bicycle, pedestrian, and other non-motorized modes of travel on and across the County's roadway system. The policy and guidelines are intended to codify the County's existing practices, and to formalize its process for considering non-motorized enhancements when improving County roadways. These guidelines apply to roadways under Lake County DOT's jurisdiction.

1.3 The Importance of Non-Motorized Travel

Lake County is a collar county in the seven-county northeastern Illinois region, which includes Cook, Kane, Kendall, McHenry, DuPage, and Will counties. It contains a diverse mix of urban, rural, agricultural and recreational land uses. As in most suburban areas, the automobile dominates Lake County. However, County officials and residents recognize the importance of bicycle and pedestrian facilities not only for recreation but also for transportation.

In areas undergoing new development, there is an opportunity to incorporate non-motorized facilities from the start. In areas already developed, there are opportunities to retrofit County roadways with bicycle and pedestrian facilities when undertaking roadway improvements.

Good transportation policies are based on the premise that the public right-of-way is to be shared by all travel modes: well-designed roads accommodate all users. Increased commitment to, and investment in, bicycle facilities and walking networks can help meet goals for cleaner, healthier air, less congested roadways, and more livable, safe, cost-efficient communities. Walking and bicycling provide low-cost mobility options that place fewer demands on local roads and highways.

The non-motorized travel policy and accompanying guidelines are intended to support the Lake County DOT in implementing transportation improvements that include consideration

of both motorized and non-motorized facilities that accommodate and encourage multiple travel modes.

1.4 Lake County DOT's Non-Motorized Travel Policy

When undertaking improvements to roadways under its jurisdiction, Lake County DOT will strive to provide appropriate accommodation for vehicles, pedestrians, bicyclists, transit users, and persons of all abilities. The policy applies to new construction or reconstruction projects[1] except in pavement resurfacing projects that do not widen the existing traveled way. Non-motorized improvements may be included in pavement resurfacing projects where accommodations can be added within the overall scope of the original work.

- Bicycle and pedestrian ways shall be given full consideration and be established in all urbanized areas unless exceptional circumstances exist, as defined below.
- In rural areas, where road sections are uncurbed, paved shoulders shall be included in all new construction and reconstruction projects.
- Sidewalks, bicycle facilities, street crossing, pedestrian signals, signs, transit stops and facilities, and all connecting pathways shall be designed, constructed, operated and maintained[2] so that all pedestrians, including people with disabilities, can travel safely and independently.
- The planning, design, and development of County roadways will consider the following factors to improve non-motorized facilities:
  - Planning projects for the long-term—Design and construction of new facilities likely will anticipate future demand for bicycling and pedestrian travel, and not preclude the provision of future improvements.
  - Designing context-appropriate facilities to the best currently available standards and guidelines—Design of facilities for bicyclists and pedestrians will follow current design guidelines, standards, and best practices. Given the diversity of the natural and built environment throughout the County, flexibility in accommodating different modes of travel is essential. The policy will be implemented so as to consider the character of each specific area and the needs of all users.
  - Addressing the need for bicyclists and pedestrians to cross roadways as well as travel along them—Design of intersections and interchanges will accommodate bicyclists and pedestrians in a manner that is safe, accessible, and convenient, even where bicyclists and pedestrians may not commonly use a particular travel corridor.
- Lake County DOT shall implement these provisions unless the following exceptional circumstances exist:

[1] "Construction or reconstruction" refers to all projects where a roadway is built or upgraded. Walkways and bikeways don't necessarily have to be provided on projects such as signal or signing improvements, landscaping and other incidental work. Preservation overlays are also excluded if the only intent of the project is to preserve the riding surface in usable condition, without any widening or realignment. Projects where the entire depth of the roadway bed is replaced are usually considered reconstruction projects.

[2] Operation and maintenance of non-motorized facilities is, in many cases, a local agency, rather than a Lake County DOT responsibility. These obligations are established between the Lake County DOT and partnering agency in conjunction with the decision to provide such facilities.

- Bicyclists or pedestrians are prohibited by law
- The costs of establishing non-motorized facilities would be excessively disproportionate to the need or probable use (excessively disproportionate is defined as exceeding 20 percent of the cost of the transportation project)
- There are right-of-way restrictions
- There is lack of support from the community
- There are safety risks that cannot be overcome
- Other factors indicate absence of need

Exceptions for the non-inclusion of these provisions shall be approved by the County Engineer and be documented with supporting data that indicates the basis for the decision.

1.5 Implementation of the Policy

This Non-Motorized Travel Policy will take effect for new County roadway improvement projects initiated after the start of Lake County DOT's 2011 fiscal year, which begins December 2010. For projects started before December 2010, the policies and guidelines will not apply. However, if there is an opportunity to incorporate non-motorized enhancements into roadway design projects that are under way; Lake County DOT will make reasonable attempts to do so.

2. Federal and State Policies Relating to Bicycle and Pedestrian Facilities

2.1 Federal Transportation Policies

Since the 1990s, federal transportation bills and other federal policies have established the importance of incorporating multiple travel modes when undertaking roadway improvements, and have led to the institutionalization of bicycle planning processes at the state and local levels.

In 1991, Congress passed historic legislation that set a new direction for transportation policy. The Intermodal Surface Transportation Efficiency Act (ISTEA) recognized the role of bicycling and walking in creating a balanced, intermodal transportation system. The Act initiated a major policy shift in federal funding priorities by making federal funds more accessible for State and local bicycling and walking facilities and programs.

The follow up legislation, the 1998 Transportation Equity Act for the 21st Century (TEA-21), emphasized the accommodations of non-motorized transportation users. It carried forward the same programs for bicycling established in ISTEA and included several new and stronger directives:

- State and Metropolitan Planning Organization (MPO) long-range plans are to "provide consideration of strategies that will increase the safety and security of the transportation system for motorized and non-motorized users."
- Bicyclists must be given "due consideration" in state and MPO plans.
- Bicycle facilities are to "be considered, where appropriate, with all new construction and reconstruction of transportation facilities."

The 2005 transportation reauthorization bill, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: a Legacy for All Users (SAFETEA-LU) confirmed and continued the principle the safe accommodation of non-motorized users shall be considered during the planning, development, and construction of all Federal-aid transportation projects and programs. A distinctive component of SAFETEA-LU regulations was the encouragement of incorporating multi-modal transportation systems into earmarked surface transportation projects. This allowed for funding of transportation projects that support the provision of non-motorized and transit services and mobility.

The SAFETEA-LU bill has been extended through 2010, and a reauthorization bill to restore SAFETEA-LU policy is in progress.

2.2 Other Relevant Federal Policies

The Americans with Disabilities Act (ADA), enacted in 1990, provides rights and protections to people with disabilities. It states that "No qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any such entity." The U.S. Access Board's Accessibility Guidelines for Public Rights-of-Way (PROWAG, 2005) contains provisions specific to public rights-of-way. These guidelines are intended to ensure that access for persons with disabilities is provided wherever a pedestrian way is newly built or altered, and that the same degree of convenience, connection, and safety afforded the public generally is available to pedestrians with disabilities. The guidelines do not require alterations to existing public rights-of-way. Instead, they apply where a pedestrian route or facility is altered as part of a planned project to improve existing public rights-of-way.

In March 2010, the USDOT established its "Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations,"[3] which called for full inclusion of pedestrians and bicyclists in transportation projects, with particular attention paid to transit riders and people of all ages and abilities, referred to as a Complete Streets policy. The goal of the policy is to incorporate safe and convenient walking and bicycling facilities into transportation projects, stating that every transportation agency has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. The policy encourages transportation agencies to go beyond minimum standards to provide safe and convenient facilities for these modes.

"Complete Streets," according to the National Complete Streets Coalition, reflects a new way of thinking about how streets are designed. The basic premise of complete streets is for roads consistently to be designed with all users in mind. Complete Streets policies seek to make roadways more pedestrian and bicycle friendly, without compromising motor vehicle travel.

2.3 State Policy

Illinois passed Complete Streets legislation in March 2007 stating that bicycle and pedestrian ways must be given full consideration in the planning and development of state

[3] U.S. DOT Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations; signed on March 11, 2010 and announced March 15, 2010; available online at http://www.fhwa.dot.gov/environment/bikeped/policy_accom.htm; accessed June 16, 2010.

transportation facilities. In June 2010, Illinois Department of Transportation (IDOT) issued BDE Procedure Memorandum 68-10 which in turn revised and updated Chapter 5 and Chapter 17 of the Bureau of Design and Environment Manual to include "Revised Policies and Procedures for Bicycle and Pedestrian Accommodation (Complete Streets)." The memorandum sets forth requirements for considering bicycle and pedestrian accommodations in conjunction with state roadway improvements.

3. Non-Motorized Facilities Coordinator

In conjunction with establishment of this policy, Lake County DOT has a designated "Non-Motorized Facilities Coordinator" to review all projects to make sure they are comply with applicable guidelines and polices. The coordinator is responsible for working with other Lake County DOT staff to address non-motorized issues, and to coordinate the public outreach efforts to ensure that appropriate parties are given opportunity to provide input regarding non-motorized facility needs. This also includes coordinating with transit providers, as detailed in Section 4.4. The coordinator also will document exceptions and obtain approval for exceptions from the County Engineer.

4. Non-Motorized Travel Policies and Guidelines

4.1 Bicycle Considerations

4.1.1 General

Bicycles can safely share roadways with motor vehicles when appropriate consideration is made during the design and construction of new, rehabilitated, or reconstructed roadways. Each specific location merits consideration of the appropriate type of accommodation that fits the context of the roadway. Accommodation can be any improvement intended to improve bicycle travel or interaction between bicycles and motorists, and can include a range of measures from signing, to type of bike facility provided. Lake County DOT's process for determining the appropriateness of providing bikeways involves the following steps:

1. Evaluate the criteria (as detailed below and provided in the Appendix) to determine whether bicycle accommodation is warranted for the project.
2. If the context of the facility allows the inclusion of bicycle facilities, assess the appropriate type of accommodation needed and coordinate with local jurisdictions, as appropriate.
3. If a bicycle facility is not applicable or justified, document the reasons why accommodations are not appropriate in the Bicycle and Pedestrian Scoping Checklist.

If bicycle accommodation should not or cannot be provided, the reasons for not doing so shall be approved by the County Engineer and documented in the project file.

4.1.2 Guidance on Where to Consider Bikeways

Lake County DOT will consider providing on-road or off-road accommodations for bicycle travel in roadway projects when any of the following exist:

- The roadway is designated in the network of a regionally or locally adopted bike plan.

- There is evidence of bicycle travel within the proposed project limits (this may be determined by observation of bicycle traffic or through the public coordination process).
- Bicycle-related generators are near the proposed project (e.g., schools, parks, residential neighborhoods, employment or shopping centers, libraries, transit facilities).
- The route provides access across a natural or manmade barrier (e.g., river, railroad, access-controlled roadway). If bicycles are allowed on either end of a bridge, access across the bridge must be provided.
- The roadway project will adversely affect the recreation or transportation utility of an independent bikeway or trail. (e.g., roadway projects can sever at-grade paths and trails, they can increase projected roadway traffic volumes to a level that prohibits safe crossings at-grade, or they can prohibit sufficient time for safe crossing of a widened roadway.)
- The local entity supports the provision of bicycle facilities.
- Public interest in and support for bicycle accommodations is determined at the planning and preliminary engineering public coordination stage.

The Bicycle and Pedestrian Checklist (see Appendix) will be completed to determine whether bicycle accommodation is needed and appropriate for the project. In addition, Lake County DOT will coordinate with affected local agencies and other interested groups (as detailed in Section 4.5) to assess nearby bicycle travel, planned development of recreational trails, or other generators.

4.1.3 Types of Bikeway Accommodations to be Considered

Lake County has defined three types of bicycle facilities: paved shoulders (both continuous and intermittent), bike lanes, and bike paths. The first two are accommodated within the roadway, whereas the third is separate from the roadway (sometimes parallel to a roadway, sometimes unrelated to a roadway). Facility type details are summarized in below; Section 7 provides additional guidance materials regarding bicycle design that may be consulted as needed or desired.

Paved Shoulders. A paved shoulder is the part of the roadway contiguous with the traveled way. Among other functions,[4] adding or improving paved shoulders often can be the best way to accommodate bicyclists. According to AASHTO (1999), paved shoulders should be at least 4 feet wide to accommodate bicycle travel. Where 4-foot widths cannot be achieved, any additional shoulder width is deemed better than none at all. The measurement of usable shoulder width should not include the width of a gutter pan, unless the pan width is 4 feet or greater. Shoulder width of 5 feet is recommended from the face of the guardrail or other roadside barriers. Additional shoulder width may be appropriate if other conditions warrant.[5]

[4] The functions of modern roadway shoulders are to accommodate an increasing encroachment of traffic; to expedite water runoff from travel lane pavement; to provide added space for construction and maintenance activities; to provide other usage such as bicycle paths or slow-moving vehicle and equipment lanes; to reduce edge stresses and edge and corner deflections; and to reduce the development of pavement edge dropoffs (*Source:* Technical Advisory T 5040.29).

[5] AASHTO's *A Policy on Geometric Design of Highways and Streets* (1994) provides guidance on when wider shoulders are recommended—such as on heavily traveled and high-speed roads and those carrying large numbers of trucks.

A paved shoulder may be used to accommodate bicycle travel without specific markings and signs present, or it can be signed as a preferred route for bicycle use. AASHTO lists several criteria to consider before signing a route. If a paved shoulder is to be signed as a bike route, the shoulder width should meet or exceed 4 feet.

Continuous Paved Shoulders. Continuity of paved shoulder width is desirable, where possible, in order to provide a consistent surface for bicyclists that is off the mainline of the roadway.

Intermittent Paved Shoulders. In some cases (for example, when shoulder width must be reduced because of roadway conditions), mitigating factors may reduce the minimum recommended paved shoulder width of 4 feet. Circumstances under which a minimum shoulder width may not be achievable include locations where the roadway transitions to curb and gutter, at culverts, at intersections, right turn lanes, and bypass lanes. In these cases, a consistent, continuous paved shoulder width may not be possible for the entire segment of roadway. These situations occur most frequently under pavement resurfacing projects, where additional right-of-way is not being acquired and the existing cross section of the roadway is not being modified.

Bicycle Lanes. A bicycle lane is a section of roadway designated by striping, signing, or pavement markings for preferential or exclusive use by bicyclists. It delineates the right-of-way assigned to bicyclists and motorists, in part to provide for more predictable movements by each. The AASHTO (1999) recommended minimum width for a bike lane for roadways with no curb and gutter is 4 feet. For curb and gutter sections, the recommended width of a bike lane is 5 feet from the face of a curb or guardrail to the bike lane stripe. If parking is permitted, AASHTO details additional criteria regarding placement of the bike lane and appropriate widths. Bicycle lanes are marked with signage and pavement markings.

Bicycle Paths. Bicycle paths (referred to by AASHTO as a shared use path) are facilities on exclusive right-of-way and with minimal cross flow by motor vehicles. The path is physically separated from motor vehicular traffic by an open space. The path may be within the road right-of-way or within a park or easement. Paths are normally two-way facilities. The AASHTO (1999) recommended pavement width is 10 feet, but 8 feet may be considered where path usage is low, where space is limited, or where roadways have pathways on both sides. Similarly, 12 feet may be considered a better suited width where path use is expected to be high, or where substantial use by different types of users is expected. Bicycle paths are marked with signage.

4.1.4 Selecting the Appropriate Facility Type

Selecting the appropriate type of bikeway depends on many factors, including the targeted user groups, specific corridor conditions, potential impacts, and facility costs. Elements to consider when evaluating the appropriate roadway treatment to accommodate bicycling include the type of bicycle user targeted, roadway environment (urban vs. rural), traffic volumes, traffic speeds, and percentage of heavy vehicles, among others. Section 7 provides additional guidance materials that may be consulted regarding the selection of the appropriate bicycle facility type.

4.1.5 Documentation

After need has been established and the appropriate accommodation has been identified, Lake County DOT will convey that information to the appropriate local agency. Not all accommodations require a local match or maintenance participation, as identified below under "Funding Issues/Cost Participation." In projects that require local participation, if the local agency chooses not to participate in the accommodation, the Lake County DOT will request that the local agency provide an official response to the DOT indicating their non-participation, for inclusion in the project file/records. Without local agency participation, the Lake County DOT will consider the next highest and best accommodation feasible.

4.1.6 Maintenance and Jurisdiction

Responsibility for ongoing maintenance of bikeway facilities within the roadway surface (paved shoulders and bicycle lanes) is assumed to be an integral part of Lake County DOT's roadway maintenance. Maintenance by the Lake County DOT is limited to repairing the surface, resurfacing, removing snow, striping, signing, and possibly sweeping. Such maintenance is on the same schedule as normal roadway maintenance.

Maintenance[6] and jurisdiction of bicycle paths constructed parallel to the roadway that are considered part of the Lake County DOT's overall County bikeway system (as identified in the County's Transportation Plan) are the responsibility of the Lake County DOT. Snow removal along bicycle paths is not part of Lake County DOT's routine maintenance.

Jurisdiction and maintenance of bicycle paths constructed parallel to the roadway that are considered part of a local agency's bikeway system are the responsibility of the local jurisdiction. Jurisdiction and maintenance shall be determined in consultation with local jurisdictions or others early in the planning process. If the local agency does not agree to maintain the bicycle facility, the County will not construct it, even if warranted.

4.1.7 Funding Issues / Cost Participation

Bicycle facilities are considered an integral part of a roadway project for funding purposes, and eligible for County cost participation. Further, bicycle facility construction can be considered for federal aid participation. In such cases, cost shares will apply to federal aid matching amounts. An agreement between the Lake County DOT and local agency will formalize the division of cost between the County and the agency, based on the following recommended criteria:

- **Paved Shoulders—**The County will pay all costs for paved shoulders indicated for bicycle accommodation. The County will assume responsibility for the maintenance of these facilities.
- **Bicycle Lanes to be Part of a County's Bicycle System—**The County will pay all costs for on-road bicycle lanes that are or will become part of its bicycle system. The County will assume responsibility for maintenance of those facilities.

[6] Routine maintenance responsibilities may be delegated by agreement to the local agency with Lake County DOT retaining responsibilities for capital maintenance. Routine maintenance includes regular inspection for debris removal. Capital maintenance includes repairing the surface, resurfacing, striping, and signing.

- **Bicycle Lanes to be Part of a Local Agency's Bicycle System—** The cost may be proportioned 80/20 between the County and local agency for the construction of new on-road bicycle lanes as follows:
  - ***Utility adjustments*** – The local agency will pay the entire cost of local utility adjustments.
  - ***Other items*** – The cost may be proportioned 80/20 between the County and local agency for barriers, retaining walls, engineering, and other collateral items required solely for bicycle lane construction.
  - ***Right-of-way—*** The cost may be proportioned 80/20 between the County and local agency for right-of-way if acquired solely for bicycle lane construction. The County will pay for the entire right-of-way if additional right-of-way is required to construct a County-proposed roadway cross section.
  - ***Maintenance—*** The County will assume responsibility for the maintenance[7] of on-road bicycle lanes.
- **Bicycle Paths to Be Part of the County's Bicycle System—** The County will pay all costs for bicycle paths that are or will become part of the County's bicycle system, as identified in the County's Transportation Plan. The County will assume responsibility for maintenance[7] of the facilities.
- **New Bicycle Paths or Adjustment to Existing Paths that are Part of a Local Agency's Bicycle System—** The cost may be proportioned 80/20 between the County and local agency for the construction of new bicycle paths as follows:
  - ***Utility adjustments—*** The local agency will pay the entire cost of local utility adjustments.
  - ***Other items—*** The cost may be proportioned 80/20 between the County and local agency for barriers, retaining walls, engineering, and other collateral items required solely for bicycle path construction.
  - ***Right-of-way—*** The cost may be proportioned 80/20 between the County and local agency for right-of-way if acquired solely for bicycle path construction. The County will pay for the entire right-of-way if additional right-of-way is required to construct a County-proposed roadway cross section.
  - ***Maintenance—*** The local agency will assume responsibility for all maintenance costs associated with local agency bicycle paths.
- **Local Bicycle Facilities Above and Beyond Selection Criteria—** If facility selection criteria for bicycles are not met and the local agency still requests path installation, the local agency is financially responsible for all costs for installing the path, including any necessary right-of-way and construction. Maintenance responsibilities will be determined, based on the type of facility constructed (see previous descriptions).

[7] Routine maintenance responsibilities may be delegated by agreement to the local agency with Lake County DOT retaining responsibilities for capital maintenance. Routine maintenance includes regular inspection for debris removal. Capital maintenance includes repairing the surface, resurfacing, striping, and signing.

4.2 Pedestrian Considerations

4.2.1 General

Pedestrian walkways, or sidewalks, are an integral part of transportation corridors. Sidewalks facilitate pedestrian travel, provide access to public transportation, and provide access to various destinations. Lake County DOT's process for determining the appropriateness of providing sidewalks involves three steps:

1. Evaluate the criteria (as detailed below and provided in the Appendix) to determine whether pedestrian accommodation is warranted.
2. If the context of the facility allows inclusion of pedestrian facilities, coordinate with local jurisdictions, as appropriate.
3. If the context of the facility does not allow appropriate application of a pedestrian facility or if a facility is not justified, document why accommodations are not appropriate in the Bicycle and Pedestrian Scoping Checklist.

Not including sidewalks as part of the project shall be approved by the County Engineer and documented in the project file.

4.2.2 Guidance on Where to Consider Sidewalks

Pedestrian accommodations will be considered if they are not already available and any of the following conditions exist:

- There is evidence of pedestrian activity, based on physical evidence or on the public coordination process.
- There is a history of pedestrian-related crashes.
- There is existing or planned development, as documented in a local comprehensive plan or through the public coordination process, that would attract pedestrian travel.
- A state, local, or county-adopted pedestrian network or policy has designated pedestrian improvements in the area of the specific roadway project.
- The roadway provides primary access to a school, park, recreation area, or other significant destination, or across a natural or manmade barrier.
- Public interest in and demand for pedestrian facilities are determined at the planning and preliminary engineering stages of the project development process.

Project limits may be extended beyond county roadway improvements for short distances to include pedestrian facilities at nearby intersections, to provide pedestrian access to public transportation facilities, or to avoid short gaps in sidewalks.

The Bicycle and Pedestrian Checklist (see Appendix) will be completed to determine whether travel demand has been met and pedestrian accommodation is needed. In addition, Lake County DOT will coordinate with affected local agencies, as detailed in Section 4.5.

4.2.3 Types of Pedestrian Accommodations to be Considered

Lake County DOT's preferred facility for pedestrians is a sidewalk. Sidewalks typically are constructed of concrete, adjacent to curbs or separated from the roadway by a buffer zone. They provide separation from motor vehicle traffic, a hard smooth surface on which to walk, and the opportunity to clearly indicate crossing points and movements at intersections.

Design, location, dimensions, dedications, easements, and reservations must conform to applicable local agency and County policies and plans for sidewalks.

The preferred minimum width for sidewalks is 5 feet. When obstructions do not allow a width of 5 feet for a short distance, a clear sidewalk width of a least 4 feet may be allowed. Sidewalk dimensions and clear widths must conform to the accessibility requirements established under ADA. Sidewalks wider than 5 feet may be considered if compatible with the local sidewalk network, where there are high pedestrian volumes, or where there is no buffer between high speed and high volume roadways. This should be evaluated on a case-by-case basis.

Ideally, it is desirable to have sidewalks on both sides of roadways, when feasible. Providing sidewalks on both sides enables pedestrians to travel along both sides of a roadway, and minimizes the need for pedestrian crossing points. This should be evaluated on a case-by-case basis.

Sidewalks cross driveways and streets. As a rule, the sidewalk should be continuous across driveways and include appropriate transitions for grade changes associated with crossings. For most driveways, it is desirable for the sidewalk elevation to control the driveway design, rather than for the driveway to cut through the sidewalk.

Sidewalks and curb ramps must be accessible by all users, including those with disabilities. Sidewalks or walkways that serve as a route of travel between public buildings or facilities must be designed in accordance with the provisions of the ADA, including curb ramps at roadway or driveway crossings.

Section 7 provides additional guidance materials regarding sidewalk design that may be consulted as needed or desired.

4.2.4 Documentation

After need has been established, Lake County DOT will inform the local agency. Local match and maintenance participation is indentified below under "Funding Issues and Cost Participation." If the local agency chooses not to participate, the Lake County DOT will request that the agency provide an official response to the DOT indicating nonparticipation, for inclusion in the project file/records.

4.2.5 Maintenance and Jurisdiction

Jurisdiction and maintenance of sidewalks constructed parallel to the roadway are the responsibility of the local agency and will be coordinated early in the planning process. If the local agency does not agree to maintain the sidewalk, the County will not construct it, even if warranted.

4.2.6 Funding Issues and Cost Participation

Sidewalks are considered an integral part of a roadway project for funding purposes, and eligible for County cost participation. Further, all sidewalk construction can be considered for federal aid participation. In such cases, cost shares will apply to federal aid matching amounts. An agreement between the Lake County DOT and local agency will be created that will formalize the division of cost between the County and the local agency based on the following recommended criteria:

- **New Sidewalks and Adjustment of Existing Sidewalks—** The cost may be proportioned 80/20 between the County and local agency for new sidewalks within the project termini or for short distances outside the project termini as may be required to connect sidewalks to significant pedestrian generators (e.g., schools, transit facilities).
  - ***Utility adjustments.—*** The local agency will pay the entire cost of local utility adjustments.
  - ***Other items.*** The cost may be proportioned 80/20 between the County and local agency for pedestrian barriers, retaining walls, engineering, and other collateral items required solely for sidewalk construction not necessitated by the roadway project.
  - ***Right-of-way.*** The cost may be proportioned 80/20 between the County and local agency for right-of-way if acquired solely for sidewalk construction. The County will pay for the entire right-of-way if additional right-of-way is required to construct a County-proposed roadway cross section.
  - ***Decorative sidewalks—*** The local agency will be responsible for 100 percent of the incremental difference (rather than the full cost) between the cost of standard sidewalk and decorative sidewalk; the standard sidewalk cost may be proportioned 80/20 between the County and local agency.
  - ***Maintenance*** – The local agency will assume responsibility for all maintenance costs associated with sidewalks.
- **Pedestrian Facilities Above and Beyond Selection Criteria—** If facility selection criteria for sidewalks are not met and the local agency still requests sidewalk installation, the local agency is financially responsible for all costs for installing the sidewalk, including any necessary right-of-way and construction. The local agency will be required to assume jurisdiction and maintenance responsibility for the sidewalk.

4.3 Street Crossings

4.3.1 Intersection Crossings

General. Walkways along a road provide mobility in one direction, but a successful pedestrian network provides safe and convenient crossing opportunities. Lake County DOT seeks to provide for pedestrian crossings of County roadways so as to increase the safety of pedestrian users and promote pedestrian traffic.

Guidance on Where to Consider Intersection Crossing Enhancements. When undertaking roadway or intersection improvements, Lake County DOT will consider the following measures to improve pedestrian travel at signalized intersections or stop control approaches:

- Provide marked crosswalks at all approaches of an intersection at which there is a pedestrian or bicycle facility with which to connect, or where there is evidence of pedestrian activity, except where conditions would create safety issues (e.g., at crossings with heavy turn volumes where protected signal phasing for the heavy movement or other solutions are infeasible, or at intersections with inadequate sight distance of pedestrians).
- Provide countdown pedestrian indications at signalized intersections where marked pedestrian crossings exist or are planned (except in locations proximate to railroad crossings, where the rail crossing signals take priority over, and interrupt, roadway traffic signal timing).
- Consider additional pedestrian intersection enhancement measures when conditions warrant (e.g., at a bus stop or bus shelter, school, hospital, or park, or other factors that indicate there is a high crossing demand based on land uses or population density).

When undertaking roadway or intersection improvements at unsignalized crossings, Lake County DOT may consider the following measures to improve pedestrian travel:

- At locations where there are sidewalks with which to connect, consider providing a marked crosswalk across the side road.
- Consider crossing measures in designated school zones (additional measures, school signs and markings, and traffic signals with pedestrian signals in conjunction with the marked crosswalk).
- Provide marked crosswalks at locations where engineering judgment dictates that the number of motor vehicle lanes, pedestrian exposure, average daily traffic (ADT), posted speed limit, and geometry of the location would make the use of specially designated crosswalks desirable for traffic/pedestrian safety and mobility.
- Under conditions that justify a marked crosswalk, consider additional measures (i.e., traffic calming treatments; traffic signals and pedestrian signals, where warranted; or other substantial crossing improvements), based on engineering analysis.

Design Considerations. Pedestrian intersection enhancement measures can include high visibility crosswalk markings and advance yield lines; median refuge islands; street and crosswalk illumination; curb extensions to shorten crossing distance; pedestrian-activated flashing beacons; and advance crosswalk warning measures, as warranted. The selection of design measures should be part of engineering analysis. Section 7 provides reference materials that may be consulted as needed or desired.

4.3.2 Mid-Block Crossings

General. It may sometimes be necessary to address how pedestrians will cross a street away from intersections. Lake County DOT seeks to provide for pedestrian crossings of County roadways so as to increase the safety of pedestrian users and promote pedestrian traffic.

Guidance on Where to Consider Mid-Block Crossings. Lake County DOT may consider installing a mid-block crossing if any of the following conditions exist:

- A crossing is specifically requested by a community.

- A location is a source of a substantial number of mid-block crossings (e.g., based on physical evidence, or based on the public coordination process).
- The safety and capacity of adjacent intersections, or large turning volumes, create a situation where it is difficult to cross the street at the intersection.
- Existing or proposed land uses create high concentrations of pedestrians or bicyclists needing to cross.
- Pedestrians cannot otherwise recognize a proper place to cross, or there is a need to delineate an optimal location to cross.
- A mid-block crossing warrant/engineering analysis justifies mid-block crossing.

Design Considerations. Mid-block crossings can be as simple as traffic signs and pavement markings or include treatments such as raised refuge islands, curb extensions, warning flashers, or signals. The approval of a mid-block crosswalk location and selection of design measures should be part of engineering analysis. Section 7 provides reference materials that may be consulted as needed or desired.

4.3.3 Grade Separated Crossings

General. Grade-separated bicycle and pedestrian crossings represent the highest level of investment in non-motorized infrastructure. Thus, they are less common in their application than intersection or mid-block crossings. Many of the considerations that apply to mid-block crossings for pedestrians and bicyclists also apply to grade-separated crossings. Therefore, the policy for mid-block crossings should also be reviewed in conjunction with this policy. Grade separations should offer enough benefit that using it to cross a transportation corridor is more desirable than using an at-grade crossing location.

Guidance on Where to Consider Grade Separations. Lake County DOT may evaluate the appropriateness of overpasses and underpasses on a case-by-case basis, considering the following factors:

- Grade-separated crossings generally may be considered only for regional trail connections and heavily used facilities.
- The type of pedestrian travel, travel generators (e.g., large generators and attractors that cannot cross at grade, such as over an interstate, freeway, or major arterial), amount of anticipated non-motorized traffic, and the safety impacts of not providing a grade separation all will be evaluated.

Design Considerations. A mid-block crossing warrant analysis should be conducted before considering a grade-separated crossing. When a mid-block crossing is found to be insufficient to handle expected demand or to pose safety concerns, additional engineering analysis should be conducted to determine if a grade separated crossing is a reasonable alternative.

4.3.4 ADA Compliance Issues

General. Title II of the ADA contains both general and specific obligations for state and local governments. Several of those obligations affect the design, construction, maintenance, and improvement of pedestrian facilities, particularly curb ramps. The Act specifically requires

that facilities constructed or altered be designed and constructed to be readily accessible to and usable by people who have disabilities.

Guidance on Where to Consider ADA Enhancements. When undertaking roadway improvements, Lake County DOT will accommodate universally accessible pedestrian linkages by adhering to the following policies:

- All sidewalks and sidewalk ramps on both public and private property must comply with ADA accessibility guidelines and be constructed to prevailing AASHTO standards.
- When an intersection is being constructed or altered, ADA-accessible curb ramps will be provided at all intersections where there is existing or proposed sidewalk with which to connect.

Design Considerations. Lake County DOT follows the ADA accessibility guidelines for specific standards and requirements regarding facility widths and crossings, slopes, and surface types. Additional documents, referenced in Section 7, provide guidance on current best practices for accommodating pedestrians with disabilities for sidewalks and shared-use paths, intersections, crosswalks, and signalization. These can be used as needed or desired.

Maintenance and Jurisdiction. Maintenance and jurisdiction of ADA curb ramps at intersections and crossings would be the responsibility of the local agency having jurisdiction over the non-motorized facility. Jurisdiction and maintenance shall be delegated by agreement with local agencies or others early in the planning process.

4.4 Transit Considerations

4.4.1 General

As an agency with interest in providing an interconnected and sustainable transportation system for its residents, the Lake County DOT recognizes the importance of regular and timely coordination with the transit agencies that operate in Lake County. To achieve that goal, Lake County DOT will regularly coordinate with both Pace and Metra on projects, as well as at the program level.

4.4.2 Guidance on Where to Consider Transit Enhancements

For each roadway improvement project that the County undertakes, project level coordination will be undertaken with the appropriate transit agency (Pace, Metra, or both) when any of the following conditions occur:

- The roadway provides access to a nearby bus transit stop (a Pace shelter or signed stop), or Pace boarding/alighting data indicate a stop is needed.
- The roadway provides access to a nearby Metra train station.
- When evaluating additions to, extensions of, or reconstruction or improvement of bicycle or pedestrian routes that are within 1/2 mile of an existing transit stop or station.

Coordination will be undertaken with the railroad owner when a county roadway improvement crosses a rail line or abuts a railroad right-of-way.

Coordination will be undertaken with the transit agency, or agencies, during the project development process when alternatives or plans have not yet been firmly established and the flexibility remains to integrate design changes without substantial revisions to design work.

Lake County DOT will initiate annual program level coordination with each transit agency (Pace and Metra) with the intent being to share information and seek opportunities to optimize the agencies' investments by identifying both near-term projects and long-term goals that may coincide.

4.5 Coordination and Public Input

4.5.1 General

Reasonable effort will be made to solicit input of agencies, organizations, and persons who have an interest in the project, and to initiate coordination as early as practicable in project development.

4.5.2 Guidance on Public Input Considerations

Lake County DOT shall initiate early coordination with appropriate agencies that have interest in the project or have information or expertise concerning non-motorized travel issues that the project may involve.

- For capacity upgrade projects, coordination will be through a project initiation letter soliciting input.
- For other projects (such as pavement resurfacing, intersection improvements, etc.), coordination will be through e-mail correspondence to affected agencies.
- For larger design projects (such as Phase I design projects), Lake County DOT follows procedures outlined in IDOT's design manuals (the *Bureau of Local Roads Manual* and the *Bureau of Design and Environment Manual*) which involve more extensive coordination.

If it is determined through the initial project coordination that a community has its own non-motorized travel or complete streets policies, Lake County DOT will further coordinate with affected government agencies to integrate the County's policies with other policies (e.g., IDOT's policies and municipalities' policies).

The following agencies shall be contacted to help assess any nearby bicycle travel or planned development of recreational trails or other generators:

- Local municipality
- Local township
- Park District or Forest Preserve District
- Illinois Department of Natural Resources (as appropriate)
- School District

Small group meetings, one-on-one meetings, or other coordination efforts may be necessary, depending on the project. Lake County DOT will determine the appropriate level of coordination necessary on a project-by-project basis.

5. Performance Measures

The object of collecting data and evaluating performance measures is to gauge progress toward improving conditions for pedestrians and bicyclists in Lake County. Performance measures can be used to assess the effectiveness of the policy and guidelines.

Lake County DOT will establish and track the following measures to gauge its success in implementing non-motorized travel modes within its project development process:

- Number of projects processed using the Non-Motorized Travel Policy Guidelines
- Number of projects granted an exception to providing non-motorized enhancements, and the reason the exceptions were required (measures how often non-motorized facilities cannot be accommodated, and general reasons why)
- Linear feet/miles of new bike facilities created
- Linear feet/miles of new sidewalks created
- Specific types of other non-motorized enhancements incorporated into roadway plans (e.g., number of intersections upgraded, number of curb ramps improved)
- Annual monitoring of pedestrian and bicycle crash data (over time, this measure would compare crash trends in terms of pedestrian and bicycle exposure)

Performance measures established as part of this process shall be incorporated into Lake County DOT's existing reporting process. Further, performance measures shall be reevaluated from time to time to determine if modifications are needed.

6. Implementation Steps

Development of the Lake County Non-Motorized Travel Policy and guidelines is a first step to restructuring procedures to accommodate all users on every project. An effective policy should prompt Lake County DOT to consider other future procedures that may be needed to better implement its Non-Motorized Travel Policy. Future actions that may be considered include (1) review and update of design standards; (2) review of processes and ordinances that should be created or changed; (3) education and training, both internal and external; and (4) additional data collection and project performance efforts. These suggested actions are neither mandates nor firm commitments. Rather, they provide a menu of actions that can be considered, evaluated, and implemented as resources of manpower and funds allow.

- **Review and Update of Design Standards—**Continue systematically reviewing specific design details and standards. This could include review of Lake County DOT's existing design requirements and standards, with the goal being to modify or expand details relating to non-motorized facilities and enhancements, such as the following:
  - Typical sections for various treatments
  - Bicycle signage preferences and details on frequency in which they are posted, and treatments for merging or ending bicycle lanes

  - ADA sidewalk ramp details and material type preferences

- **Review of Processes, Ordinances, and Plans within the County's Project Development Process—**Consider reviewing of processes and ordinances, and development of additional plan documents that could lead to better implementation of the non-motorized policy, such as the following:

  - Require that sidewalks be required along County roadways as a condition of development (this would require modifying the Lake County Unified Development Ordinance).

  - Require construction of a pedestrian facility, if appropriate, as a condition of an access permit to a County roadway (this would require either modification of the Lake County Highway Access Regulation Ordinance or the County's design standards).

  - Systematically review processes and coordination with other Lake County divisions or departments to determine other opportunities to enhance non-motorized facilities.

  - Consider developing a Bikeway and Pedestrian Plan. In addition to containing an inventory of facilities, crosswalks, connectors, and other pedestrian roadway facilities, the plan could assess the condition, use, and demand of the network, and prioritize improvements.

- **Internal Education and Training—**Retraining of staff is an essential component of the roadway design process. An important first step has been adopted as part of this guidelines document, that is, designation of a non-motorized transportation facilities coordinator to ensure that non-motorized policies and guidelines are implemented consistently. Other steps, such as making all Lake County Divisions aware of the new policy coming from a high level should not be overlooked. Other potential actions could include, but are not limited to:

  - Train staff and consultants to plan and design for walking and bicycling. Balancing the needs of all users is a challenge, and doing so with every project requires specialized tools and skills.

  - Encourage local and partner agencies and jurisdictions to use or adopt or endorse the DOT's Non-Motorized Travel Policies, and work with partner agencies and jurisdictions to promote principles that contribute to a safe and comfortable walking and bicycling environment.

  - Require that consultants review the DOT's non-motorized policies and guidelines as a pre-requisite or requirement of design contracts.

- **External Education —**Consider education and information activities relating to the County's non-motorized goals and policies targeted to external agencies, advocacy groups, and the public. Potential education methods include:

  - Collaborate with bicycle advocacy groups and educational institutions, as appropriate, regarding non-motorized facility enhancement opportunities.

  - Work with other Lake County agencies to increase awareness among County residents about the health and fitness benefits of bicycling and walking.
  - Expand the Lake County Government Web site to include information regarding non-motorized travel as a way to disseminate material on bicycle facilities, safety, and efforts to increase bicycle use. The Web site could give bicyclists an opportunity to provide suggestions and submit maintenance requests.

- **Additional Data Collection—C**onsider additional data needs that may help track the success of these policies and of the County's road network in serving all users. Over time, as Lake County DOT considers and puts into practice changes to policies, ordinances, or design standards, consideration should be given to whether additional measures can be employed to monitor the success of non-motorized policies and procedures.

7. Additional Reference Materials

This section contains additional reference materials that the Lake County DOT can consult, as needed, as part of specific project development. It is not meant to be an all-inclusive list of available resources but represents the most commonly accepted resources consulted in non-motorized facility design.

Bicycle Considerations	
FHWA. 1994. *Selecting Roadway Design Treatments to Accommodate Bicycles* (FHWA-RD-92-073).	Defines procedures for determining the appropriate bicycle facility type. Provides look-up tables," which suggest appropriate design treatments given various factors related to traffic operation and design and to the environment.
AASHTO. 1999. *Guide for the Development of Bicycle Facilities*.	Provides specific guidance on bicycle facility types.
AASHTO. 2001. *Policy on Geometric Design of Highways and Streets* (The Green Book).	Includes guidance on bicycle facility design, and may be used, as appropriate.
IDOT's *Bureau of Design and Environment Manual and PM 68-10*	Provides a look-up table which suggests appropriate design treatments given various factors related to traffic operation and design and to the environment; also provides detailed design for facilities.
FHWA. 2009. *Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways*.	Specific signage criteria and standards by which traffic signs, road surface markings, and signals are designed, installed, and used.
Pedestrian Considerations	
AASHTO. 2004. *Guide for the Planning, Design, and Operation of Pedestrian Facilities*	Guidance regarding sidewalk design
FHWA. 1999. *Americans with Disabilities Act Accessibility Guidelines, Part 2 Designing Sidewalks and Trails for Access*	Guidance regarding accessible sidewalk design.
IDOT's *Bureau of Design and Environment Manual and PM 68-10*	Design guidelines for sidewalks

Intersections	
AASHTO. 2004. *Guide for the Planning, Design, and Operation of Pedestrian Facilities*.	Pedestrian crossing design considerations and standard for both signalized and unsignalized intersections; also design considerations for mid-block crossings
ITE. 1998. *Design and Safety of Pedestrian Facilities, an ITE Recommended Practice*	Detailed design considerations for determining whether placement of a mid-block crossing is appropriate.
FHWA. 2009. *Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways*.	Pedestrian crossing design considerations and standard for both signalized and unsignalized intersections
FHWA. 2003. *Safety of Marked and Unmarked Crosswalks at Uncontrolled Intersections*.	Engineering design considerations and guidance for unsignalized intersections.
FHWA. 2001. *Designing Sidewalks and Trails for Access Part 2—Best Practices Design Guide.* FHWA-EP-01-027. September.	Accessible design guidelines
Public Rights-of-Way Access Advisory Committee. 2005. *Building a True Community—Final Report*. November.	Accessible design guidelines
FHWA. 2005. *Draft Guidelines for Accessible Rights-of-Way*. FHWA-SA-03-019. November 23.	Accessible design guidelines
Accessible Public Rights-of-Way, Planning and Designing for Alternations, July 2007 (Public Rights-of-Way Access Advisory Committee)	Accessible design guidelines

8. Works Cited

AASHTO (American Association of State Highway & Transportation Officials). 1999. *Guide for the Development of Bicycle Facilities*.

AASHTO. 2001. *Policy on Geometric Design of Highways and Streets* (The Green Book).

AASHTO. 2004. *Guide for the Planning, Design, and Operation of Pedestrian Facilities*.

FHWA (Federal Highway Administration). 1994. *Selecting Roadway Design Treatments to Accommodate Bicycles* (FHWA-RD-92-073).

FHWA. 1999. *Americans with Disabilities Act Accessibility Guidelines, Part 2 Designing Sidewalks and Trails for Access*.

FHWA. 2009. *Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways*.

FHWA. 2001. *Designing Sidewalks and Trails for Access Part 2 – Best Practices Design Guide.* FHWA-EP-01-027. September.

FHWA. 2003. *Safety of Marked and Unmarked Crosswalks at Uncontrolled Intersections.*

FHWA. 2005. *Draft Guidelines for Accessible Rights-of-Way*. FHWA-SA-03-019. November 23.

Institute of Transportation Engineers (ITE). 1998. *Design and Safety of Pedestrian Facilities, an ITE Recommended Practice*

Public Rights-of-Way Access Advisory Committee. 2005. *Building a True Community – Final Report*. November.

Public Rights-of-Way Access Advisory Committee. 2007. *Accessible Public Rights-of-Way, Planning and Designing for Alternations.* July.

U.S. Department of Justice. 1994. *ADA Standards for Accessible Design*.

Glossary

AASHTO—American Association of State Highway & Transportation Officials.

access management—The systematic control of the location, spacing, design and operation of driveways, median openings, and street connections of roadways.

accessible—Describes a facility in the public right-of-way that complies with the ADA Standards for Accessible Design.

American with Disabilities Act of 1990 (ADA)—Federal law prohibiting discrimination against people with disabilities. Requires public entities and public accommodations to provide accessible accommodations for people with disabilities.

American with Disabilities Act Accessibility Guidelines—Provides scoping and technical specifications for new construction and alterations undertaken by entities covered by the ADA.

bicycle—As a human powered vehicle with two tandem wheels. This may be expanded to include vehicles with three wheels (tricycle), four wheels (quadricyle), or even a single wheel (unicycle).

bicycle accommodation—Designing and managing the transportation network to expand travel opportunities for bicyclists by minimizing potential travel disruptions and maximizing safety. Bicycle accommodations may include facilities for the exclusive or semi-exclusive use of bicycles, such as bicycle lanes, bicycle paths, marked shared lanes (sharrows); as well as other interventions to make a transportation network or facility safer or friendlier for bicycle users. Examples of accommodations include installing drainage grates in a bicycle-friendly direction or avoiding chip-sealed surfaces.

bicycle facility—A physical facility provided for the exclusive or semi-exclusive use of bicycles. Examples of bicycle facilities include shared roadways (no bikeway designation), marked shared roadways, bikeways (bicycle lanes, bicycle paths), and end of trip facilities (bicycle parking and storage facilities).

bicycle lane—Part of the roadway, adjacent to the travel lane, designated by striping, signing, and pavement markings for the preferential or exclusive use by bicycles. bicycle path—A public way, separated by grade or other physical barrier from motor traffic, that is designated by official signs or markings for use by persons riding bicycles.

bicycle route system—A system of bikeways that provide continuous routing through a community or urban area.

bicycle route—A roadway shared by both bicycles and other forms of transportation which has been designated as a preferred route for bicycle use by the means of signs or pavement markings.

crosswalk—Any part of a roadway at an intersection or elsewhere that is distinctly indicated for pedestrian crossing lines or other pavement markings applied to a roadway surface. Crosswalks may vary based on context and potential designs include the ladder style, traditional, diagonal, staggered continental styles.

mid-block crosswalk—A crosswalk where motorized vehicles are not controlled by a traffic signal or stop sign.

Manual of Uniform Traffic Control Devices (MUTCD)—A document issued by the FHWA to specify the standards by which traffic signs, road surface markings, and signals are designed, installed, and used. The current version is the 2009 National MUTCD.

pedestrian accommodation—Designing and managing the transportation network to expand travel opportunities for pedestrians by minimizing potential travel disruptions and maximizing safety. Accommodations may include dedicated pedestrian facilities, such as sidewalks and crosswalks; facilities for the semi-exclusive use of pedestrians, such as a shoulder; or other design features to increase the safety of a facility for a pedestrian, including signage, pedestrian signals (automatic or demand actuated), and other actions, such as retiming signals or reducing crossing width.

sidewalk—The portion of a roadway right-of-way designed for preferential or exclusive use by pedestrians. Sidewalks may be located adjacent to the curb or separated from the travel way by landscaping or buffer to increase the safety or comfort of their use.

shared roadway (shared lane)—A roadway open to both bicycle and motor vehicle travel, including those containing no bicycle designation.

shoulder—The part of a highway, paved or unpaved, contiguous to the outside travel lane, primarily used as an accommodation for stopped vehicles, emergency uses, as lateral support of base and surface courses of a roadway, or for use by pedestrians, mobility aid users, and bicyclists when other accommodations are not available.

> continuous paved shoulder—Characterized as a consistent shoulder pavement width along the entire segment of a corridor.
>
> intermittent paved shoulder—Characterized as a varying shoulder pavement width along a segment of a corridor because of project-specific circumstances.

Appendix
Bicycle and Pedestrian Checklist

Lake County Division of Transportation
Non-Motorized Travel Accommodations Checklist

Planning and Programming Facilities Checklist

Prepared by:	
Date:	
Project Name:	
Section Number:	
Begin Station:	
End Station:	
Scope of Project:	
Construction Year:	

If the Project meets the criteria described in Lake County DOT's *Policy on Infrastructure Guidelines for Non-Motorized Travel Investments*, or Non-Motorized Travel Policy, every effort should be made to include bicycle and pedestrian accommodations in the project. The Project Team shall use the following information and questions to facilitate discussion in determining the level of accommodations for bicyclists and pedestrians.

Lake County Division of Transportation
Non-Motorized Travel Accommodations Checklist

Planning and Programming Facilities Checklist

	Yes / No	Comments
Consistency with Planning Documents / Community Land Use		
Is the roadway designated part of a regionally or locally adopted bike plan or pedestrian way?		
– Lake Co Transportation Plan	☐ Yes ☐ No	
– Lake Co Forest Preserve	☐ Yes ☐ No	
– Municipal planning document(s)	☐ Yes ☐ No	
– Local or State park plans	☐ Yes ☐ No	
– Local bike organization plans	☐ Yes ☐ No	
Is the transportation facility in a city, town, municipality or village?	☐ Yes ☐ No	
• Does the local entity support the provision of bicycle facilities or Is there a specific request or desire for a specific non-motorized facility along the route??	☐ Yes ☐ No	
• Is there public interest in and support for bicycle or pedestrian accommodations, as determined at the planning and preliminary engineering public coordination stage?	☐ Yes ☐ No	
Is the transportation facility the "main street" in a community or town?	☐ Yes ☐ No	
Is there is existing or planned development (as documented in a local comprehensive plan or through the public coordination process) that would attract pedestrian or bicycle travel along the route to be improved?	☐ Yes ☐ No	
Existing and Future Context Considerations		
Do bicycle or pedestrian facilities already exist?		
• Bicycle path	☐ Yes ☐ No	☐ 1 side ☐ 2 sides
• Bicycle lane	☐ Yes ☐ No	☐ 1 side ☐ 2 sides
• Sidewalk	☐ Yes ☐ No	☐ 1 side ☐ 2 sides
• Bicycle or pedestrian facility crosses the project	☐ Yes ☐ No	
Is there is evidence of bicycle travel or pedestrian activity within the proposed project limits? (may be determined by observation, physical evidence, or through the public coordination process)?	☐ Yes ☐ No	
Is the roadway in close proximity to hospitals, elderly care facilities or the residences or businesses of persons with disabilities?	☐ Yes ☐ No	
Is the roadway in close proximity to a school? (if yes, coordinate with school to determine if bike or pedestrian facilities have been proposed under the "Safe Routes to Schools" program)	☐ Yes ☐ No	
Are bicycle or pedestrian generators located along or near the roadway (e.g. residential neighborhoods, employment or shopping centers, libraries, school, park, recreation area, transit facilities).	☐ Yes ☐ No	

Safety Considerations		
Are there documented bicycle / pedestrian crashes in the area?	☐ Yes ☐ No	
Is there a high amount of crossing activity at intersections or midblock locations?	☐ Yes ☐ No	
Is there a high amount of night crossing activity?	☐ Yes ☐ No	
Does the route provide access across a natural or man-made barrier (i.e. rivers, railroads or access-controlled roadways)?	☐ Yes ☐ No	
Will the roadway project negatively affect the utility of an independent bikeway (e.g., roadway projects can negatively affect at-grade paths / trails when they create a barrier, when the projected roadway traffic volumes increase to a level that prohibits safe crossings at-grade, or when the widening of the roadway prohibits sufficient time for safe crossing)?	☐ Yes ☐ No	
Transit Considerations		
Is the roadway a designated Pace transit route, does it intersect with a Pace route, or is it within close proximity to a Pace route?	☐ Yes ☐ No	
Is the roadway within ½ mile of a Metra station?	☐ Yes ☐ No	
Does the roadway cross a rail line or abut a railroad right-of-way?	☐ Yes ☐ No	
Is the roadway near transit park and ride lots?	☐ Yes ☐ No	

Upon consideration of the information above, the Project Team will determine the appropriate level of bicycle and pedestrian accommodations that will be included in the Project. When determining the appropriate type of accommodations for a bicycle and pedestrian facility, the Project Team should seek guidance from guidelines as recommended in the Non-Motorized Travel Policies and on the Ordinances, State specifications, Standards, and Reports, and other Federal guidelines that Lake County DOT relies upon for regulatory assessment.

If bicycle and pedestrian accommodations cannot be included in this project, please select from the following as reasonable justification and provide explanation:

Bicyclists or pedestrians are prohibited by law	
The cost of establishing non-motorized facilities would be excessively disproportionate to the need or probable use (defined as exceeding 20 percent of the cost of the larger project)	
Lack of support from the community	
Safety risks cannot be overcome	
Lack of right-of-way or other right-of-way constrictions	
Other factors indicate an absence of need *Briefly describe the reasons why not (scarcity of population, no known usage by bicyclists or pedestrians, or other factors that indicate absence of need)*	

Completed by Non-Motorized Facilities Coordinator

Approved by County Engineer