

Overview of Design Guidance in Illinois

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To support the Existing Conditions Assessment for the Illinois Department of Transportation's Active Transportation Plan, Alta Planning + Design, Lochmueller Group, and Sam Schwartz Consulting developed this memorandum to provide a high-level overview of active transportation design guidance. The memorandum summarizes how federal, state, and local design guidance and resources shape the development of active transportation infrastructure in Illinois.



Overview of Design Guidance in Illinois

Summary

This memorandum examines how federal, state, and local design guidance—as well as planning and policy documents from key government agencies and advocacy organizations—shape the development of active transportation infrastructure in Illinois. The resources discussed include both national and state design standards as well as recent best practice guidelines. Treatments described are proven safety countermeasures to assist nonmotorized vehicle user safety. Featured are innovative facility types of which are being deployed selectively across a variety of land use contexts and jurisdictional scales. The table highlights each resource’s relationship to active transportation and identifies opportunities for action, supporting the Illinois Department of Transportation (IDOT) and its partners throughout the state in their efforts to continue advancing walking and rolling modes across the transportation system.

Evolution of Active Transportation Design Guidance

The field of active transportation design has moved forward rapidly over the last few decades and continues to evolve as communities adopt Complete Streets policies, align climate and transportation goals, and prioritize safety for vulnerable roadway users:

- › Nationally, many states consider the American Association of State Highway and Transportation Officials (AASHTO) *Guide for the Development of Bicycle Facilities* (also referred to as the Bike Guide) and *Guide for the Planning, Design, and Operation of Pedestrian Facilities* (or Pedestrian Guide) as the definitive resources for active transportation design guidance.
- › These resources have been supplemented by publications from institutions such as the Federal Highway Administration (FHWA), the National Association of City Transportation Officials (NACTO), the Institute of Transportation Engineers (ITE), the National Cooperative Highway Research Program (NCHRP), and other local transportation and planning agencies, providing a wealth of design guidance and sharing of best practices.
- › In Illinois, IDOT’s first formal bicycle policy document was adopted in 1995. Additionally, the first designs specific to bikeways and pedestrians were incorporated in Chapter 17 of the 1998 version of the *Bureau of Design and Environment Manual* (BDE Manual) and Chapter 42 of the *Bureau of Local Roads and Streets Manual* (BLRS Manual). These chapters have been updated in 2010 and 2019. Current guidance for active transportation infrastructure in this chapter remains largely based on

AASHTO's 2012 Bike Guide, FHWA Bicycle Facility Selection Guide, and NCHRP reports. These IDOT chapters may be updated when the version 2.0 AASHTO Bike Guide is published, presumably in the near future. Policy changes should be given to designers to enhance the expectations of bicycle and pedestrian innovation updates.

- FHWA issued new guidance on November 16, 2023, for local agencies and state DOTs as part of the Bipartisan Infrastructure Law. Planning NHS route work *shall* use FHWA recognized guides to enhance the nonmotorized infrastructure on non-interstate, NHS routes. Non-NHS route projects typically under local agency jurisdiction may also use the nonmotorized design guidance recognized by FHWA if the state does not currently have policy on the subject and so long as the infrastructure does not conflict with state or federal law or rules.

Major Themes

A major theme that has emerged from extensive review of these design guidance resources is a greater need for context sensitivity when it comes to implementing local active transportation infrastructure. This concept aligns with Illinois' Complete Streets Policy and IDOT's departmental objectives to fully consider the needs of all roadway users in a manner that is sensitive to local contexts. Further, the FHWA specifically encourages state Departments of Transportation (DOTs) to prioritize pedestrians and cyclists as equals among other modes, emphasizing the need to go beyond minimum requirements to proactively plan robust active transportation networks.¹ Additionally, as the following resources demonstrate, there is no shortage of guidance profiling innovative treatment types and proven safety countermeasures that planners and engineers have at their disposals. Designers should be aware that design exceptions to these policies are attainable when coordinated with the appropriate State personnel and referencing the most appropriate external design guidance.

As communities in Illinois seek to encourage the use of active transportation and provide additional opportunities for people of all ages and abilities to have greater mobility options, agencies throughout Illinois can benefit from remaining attentive to how design standards shape efforts to provide safe and inclusive active transportation infrastructure.

¹ Federal Highway Administration, "United States Department of Transportation Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations" (2010), https://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/policy_accom.cfm

Timeline of Statewide Active Transportation Planning & Design Guidance in Illinois

Year	Effort	Agency	Outcomes
1970s	IDOT begins assisting in the construction of trails and addition of shoulders intended for bicycling on state routes.	IDOT	First example of IDOT support for bicycling as a mode of transportation and inclusion of active transportation users on state facilities.
1990	Passage of the Americans with Disabilities Act (ADA) of 1990.	United States Congress	Title II of the ADA specifically prohibits discrimination against individuals based on disability by public entities at the local level, requiring agencies to provide accessible transportation infrastructure such as sidewalks, crossings, and public transit.
1992	Adoption of IDOT's original ADA Transition Plan.	IDOT	The plan discussed goals for attaining compliance with the ADA of 1990 and plans to allocate resources statewide to provide accessible pedestrian infrastructure. The plan received updates in 2015 and 2021 to re-evaluate agency policies and ensure adherence to the latest accessibility guidelines.
1994	Passage of the Illinois Bikeway Act (605 ILCS 30/).	Illinois General Assembly	Appropriated state funds for bicycling infrastructure and supportive programs for some of Illinois' first bicycle lanes, demonstration projects, education programs, and research.
1995	Adoption of IDOT's first formal bicycle policy document, BDE Technical Memorandum 95-21.	IDOT	First incorporation of designs pertaining to bikeways included in IDOT's BDE Manual.
1998	Revision of BDE Manual to include Chapter 17, Bicycle and Pedestrian Accommodations.	IDOT	Largely based on the 1991 AASHTO Bike and Pedestrian Guides, this revision enshrined explicit design parameters for active modes into the BDE Manual for the first time.
2007	Incorporated Complete Streets policies into Bicycle and Pedestrian Ways laws. (Public Act 095-0665).	Illinois General Assembly	Stipulates that bicycle and pedestrian ways shall be given full consideration in the planning and development of transportation facilities on state-led projects.
2013	Bureau of Local Roads and Streets Manual (BLRS) Update.	IDOT	Updated Chapter 42 to reflect the 2012 AASHTO Bike Guide.



Year	Effort	Agency	Outcomes
2014	Release of the first-ever Illinois Bike Transportation Plan.	IDOT	Provides IDOT with policies, best practices, and strategic direction for implementing a safe, sustainable, and multimodal transportation system in Illinois.
2019	Substantial revisions to Chapter 17 of the BDE Manual regarding the ways in which nonmotorized accommodations should be considered and incorporated on IDOT projects (based on PA 095-0665 and recommendations from the Illinois Bike Transportation Plan).	IDOT	These revisions modified and expanded design guidance and criteria for bicycle and pedestrian accommodations, including the introduction of Bicycle Level of Service (BLOS), buffered and separated bicycle lanes, and updated sidewalk and crosswalk design standards.
2021	Amendments to the Illinois Complete Streets Policies under Bicycle and Pedestrian Ways law, 625 ILCS 5/4-220. (HB0270/ Public Act 102-0660).	Illinois General Assembly	Expands IDOT's obligation to establish bicycle and pedestrian ways in or within one mile of any municipality with a population of over 1,000 people and removes the 20% local cost match for these projects.
2021	Revisions to Chapters 5, 17, and 48 of the BDE Manual to comply with HB0270/PA 102-0660).	IDOT	Incorporates all the requirements from the law as part of HB0270/PA 102-660 into IDOT Policy updates for Cost Participation, Bicycle and Pedestrian Accommodations, and Urban Highways & Streets Chapters of the BDE Manual.

Table Hierarchy

The following table compiles the most significant design guidance resources used for developing transportation facilities in the State of Illinois, especially those pertaining to active transportation infrastructure, as well as other advisory documents. To make the resources more navigable, they are organized according to the following hierarchy:

- Documents are divided into three sections: Resources directly pertaining to the State of Illinois/IDOT, Local Resources, and other National Resources.
- Within these sections, documents with legal or regulatory authority are presented first, followed by those that are more supplemental in nature (i.e., legislation/design standards vs. design guidance).

- Resources from government agencies (e.g., IDOT, FHWA, etc.) are presented first, followed by resources from professional or advocacy organizations.
- Finally, resources are presented chronologically by year of publication or latest revision (oldest to newest).

As this body of work is continuously evolving and expanding, the following inventory is not comprehensive of all advisory guidance available. Practitioners should remain alert to future updates and newly issued resources as they are released.

Resource Information	Relationship to Active Transportation
State of Illinois/IDOT Resources	
<p><u>Illinois Accessibility Code</u></p> <p>Institution: Illinois Capital Development Board</p> <p>Relevant Land Use Contexts: Rural, Suburban, Urban</p> <p>Last Updated: 2018</p>	<p>The Illinois Accessibility Code implements the Environmental Barriers Act (410 ILCS 25) by establishing minimum scoping and technical design requirements to ensure that the built environment in Illinois is design, constructed, and altered to be accessible and usable to all individuals, including those with disabilities. The Code resolves differences between accessible design standards by adopting the stricter of state or federal design standards (thereby providing the greatest degree of access) and applies to all public facilities in the State of Illinois with the full force and effect of law.</p>
<p><u>Bureau of Local Roads and Streets Manual</u></p> <p>Institution: IDOT</p> <p>Relevant Land Use Contexts: Rural, Suburban, Urban</p> <p>Last Updated: 2018</p>	<p>The Illinois <i>Bureau of Local Roads and Streets Manual</i> (BLRS Manual) plays a significant role in the development of active transportation infrastructure in the State of Illinois. The BLRS Manual is a resource that provides guidelines and standards for the design and construction of local roads and streets, which include infrastructure for all modes of transportation, including walking and biking. The intended audience of this document are municipalities and counties, as well as consulting engineers and contractors involved in the maintenance of local roads and streets. IDOT uses this manual to review local and county projects that receive state funding, motor fuel tax, or others. It includes guidance on topics like road cross-sections, intersection design, pavement conditions, and maintenance standards for local roads. Local public agencies are generally encouraged to consider the travel needs of all users of transportation corridors, and to understand the generators of local active travel more specifically.</p>



Resource Information

Relationship to Active Transportation

Incorporated Complete Streets policies into Bicycle and Pedestrian Ways laws. (Public Act 095-0665)

Institution: Illinois General Assembly

Relevant Land Use Contexts: Rural, Suburban, Urban

Last Updated: 2021

Incorporated Complete Streets policies into Bicycle and Pedestrian Ways laws, originally passed in 2007, stipulated that bicycle and pedestrian ways shall be given full consideration in the planning and development of transportation facilities and established in conjunction with the construction, reconstruction or other change of any state transportation facility within one mile of an urban area, except in resurfacing projects that do not widen the traveled way or where approved by the Secretary of Transportation based upon documented safety issues, excessive cost, or absence of need. HB0270 accelerates the development of active transportation infrastructure by amending this policy in several important ways – first, “urban area” is more carefully defined as a municipality with a population of over 1,000 people. Second, the policy directs IDOT not only to establish bicycle and pedestrian ways, but also to solely fund these projects. Municipalities may exempt themselves from this requirement by passing a resolution stating that a bicycle or pedestrian way does not fit within their development plan.

[Illinois Supplement to the Manual on Uniform Traffic Control Devices, Revision 3](#)

Institution: IDOT and FHWA

Relevant Land Use Contexts: Rural, Suburban, Urban

Last Updated: 2021

The Illinois Supplement to the MUTCD provides additional standards and guidance for traffic control devices related to pedestrian and bicycle transportation. The document includes only minor changes or additions directly related to active transportation are stated in the document. These pertain to in-street pedestrian crossing signs, pedestrian hybrid beacons, school crosswalk warning assemblies, and in-roadway warning lights at crosswalks. There are no revisions to Part 9 – Traffic Control for Bicycle Facilities.

[Bureau of Design and Environment Manual](#)

Institution: IDOT

Relevant Land Use Contexts: Rural, Suburban, Urban

Last Updated: 2023

The *Bureau of Design and Environment Manual* (BDE Manual) is a comprehensive and expansive design guidance document established by IDOT. It serves as a guiding document for IDOT staff and consultant personnel for a wide spectrum of transportation projects, encompassing all types of vehicles and modes of transportation. While the BDE Manual covers many aspects of transportation, it dedicates specific attention to addressing the unique challenges and needs of active travelers within the broader transportation landscape, aiming to promote safety, accessibility, and integration with other facilities. Chapter 17 of the BDE Manual is of particular significance in this regard. This chapter centers on bicycle and pedestrian accommodations and includes extensive guidance for both on-road and off-road considerations relative to site context. It primarily relies on the AASHTO Green Book for design guidance, while also allowing for the utilization of design features found in FHWA publications, NACTO guidelines, and other recognized documents (provided they align with the ILMUTCD). Recently, the facility selection table for on-road bicycle accommodations in the BDE Manual has been updated to include one-way separated bicycle lanes for the first time.

Resource Information	Relationship to Active Transportation
<p><u>Illinois Bike Transportation Plan</u></p> <p>Institution: IDOT</p> <p>Relevant Land Use Contexts: Rural, Suburban, Urban</p> <p>Last Updated: 2014</p>	<p>The <i>Illinois Bike Transportation Plan</i> serves as the transportation alternatives chapter of the <i>2012 Illinois State Long-Range Transportation Plan (LRTP)</i> and follows that plan's theme of Transforming Transportation for Tomorrow. It provides IDOT with policies, best practices, and strategic direction for implementing a sustainable, multimodal transportation system in Illinois. The plan provides over 200 recommendations and action items designed to enhance IDOT's ability to provide safe and cost-effective accommodations for cyclists across Illinois. The recommendations address a variety of topics including facility design and maintenance, network gaps, grant funding programs, safety education and enforcement, and internal governance and coordination. In addition, the plan includes performance measures designed to evaluate progress towards implementation. Some of the issues addressed in the plan include: a statewide and regional analysis of current accommodations, policies, and planning documents; an evaluation of IDOT's Complete Streets policy and other bicycling-related statutes; a review of national bicycling trends, best practices, and their applicability in the Illinois transportation context.</p>
<p><u>Illinois Long Range Transportation Plan</u></p> <p>Institution: IDOT</p> <p>Relevant Land Use Contexts: Rural, Suburban, Urban</p> <p>Last Updated: 2019</p>	<p>The purpose of the LRTP is to provide direction for the development of the Illinois transportation system. The LRTP vision for transportation in Illinois is to provide innovative, sustainable, and multimodal transportation solutions that support local goals and grow Illinois' economy. IDOT is required to complete an LRTP every five years, per state legislation, and a major theme of the 2019 iteration was a stakeholder desire for increased multimodal travel options throughout the state, including specifically the further development of active transportation infrastructure to improve community livability, strengthen freedom of mobility, and bolster resiliency.</p>
<p><u>Bicycle and Pedestrian Accommodations Study</u></p> <p>Institution: IDOT</p> <p>Relevant Land Use Contexts: Suburban, Urban</p> <p>Last Updated: 2019</p>	<p>This expansive guidance document offers a supplement to Bureau of Design and Environment policy for incorporation of bicycle and pedestrian accommodations along Illinois roadways based on currently available research and national guidance. The document is intended for use by planning and engineering staff at IDOT and largely focuses on projects in urban and urban core areas, however it may apply to areas throughout Illinois seeking to encourage incorporation of bicycle and pedestrian facilities within roadway improvement projects. The study documents overall findings on a variety of active transportation facility types, summarizing their impacts on safety, operations, and maintenance activities. Treatment types discussed include such accommodations as contra-flow bike lanes, raised crosswalks, curb bump-outs, median refuge islands, and many more.</p>

Resource Information

Relationship to Active Transportation

[TRA-23: Guidelines for Establishing Pedestrian Crossings](#)

Institution: IDOT

Relevant Land Use Contexts:
Rural, Suburban, Urban

Last Updated: 2021

These guidelines outline the policies and procedures related to evaluating and designing pedestrian crossings in Illinois. It applies to both new crossings and the assessment of existing ones and distinguishes between different types of crossing locations, recognizing that unique guidance is required for each. The guidelines for implementation place the responsibility for evaluating requests to establish pedestrian crossings on the IDOT districts. Initial evaluations consider various factors, including traffic volume, speed limits, crossing distances, pedestrian volume, crash history, lighting, and more. Different criteria are applied to legs of intersections without control and midblock locations. Site-specific design considerations encompass accessibility standards, refuge islands, lighting, parking restrictions, and other elements. The policy also discusses pavement markings, signs, beacons, and other elements essential for pedestrian safety.

[ADA Transition Plan for Programs and Facilities in the Public Right-of-Way](#)

Institution: IDOT

Relevant Land Use Contexts:
Rural, Suburban, Urban

Last Updated: 2021

The *ADA Transition Plan* outlines key actions for IDOT to make Illinois' transportation system accessible to all, particularly those with disabilities. Further, this transition plan fulfills the requirements of Section 504 of the Rehabilitation Act of 1973 and Title II of the ADA of 1990 to conduct a self-evaluation and detail how the agency is ensuring that all its facilities, services, and programs are fully accessible. The Transition Plan documents past accomplishments and establishes a compliance inventory database for sidewalks maintained by IDOT, curb ramps, crosswalks, pedestrian signals, rest areas and weigh stations.

[Illinois 2023 State Freight Plan](#)

Institution: IDOT

Relevant Land Use Contexts:
Rural, Suburban, Urban

Last Updated: 2023

While the plan does not explicitly reference active transportation facilities or facility design, it does highlight freight movements' impact on communities through which freight travels (Chapter 6), outline goals, strategies, and actions to mitigate those impacts (Chapter 10), and detail how projects that are shown to mitigate freight related impacts in certain communities are awarded additional points in the competitive freight program project selection (Chapter 9).

[The Rating System – Bicycle Level of Service](#)

Institution: IDOT

Relevant Land Use Contexts:
Rural, Suburban, Urban

Last Updated: 2023

IDOT has developed a Bicycle Level of Service (BLOS) rating system to inform cyclists about road suitability for biking across the state. BLOS formula is driven by the Highway Capacity Manual methodology and is included in IDOT's form BDE 1703. This system assesses thousands of road segments, categorizing them into six scales ranging from bright green (most suitable) to dark red (least suitable). Several factors contribute to these ratings, including traffic volumes, traffic speed, truck traffic percentages, pavement condition, lane/shoulder widths, the number of lanes, and on-street parking. Under this system, even a high-speed road with moderate traffic can receive a high suitability rating if it has wide lanes, ample shoulders, and a well-maintained surface. The BLOS is used to produce county-level suitability maps and primarily targets adult cyclists with average or better-than-average experience who are comfortable sharing the road with vehicular traffic. The system is not intended as a guide for children or other inexperienced cyclists, who are most likely to face the greatest barriers to active travel.

Resource Information

Relationship to Active Transportation

Local Resources

[Complete Streets Chicago: Design Guidelines](#)

Institution: Chicago Department of Transportation (CDOT)

Relevant Land Use Contexts: Urban

Last Updated: 2013

Complete Streets Chicago demonstrates the city's commitment to prioritizing safety, accessibility, and balance among all road users. By placing pedestrians at the forefront of its modal hierarchy, IDOT's guidelines emphasize creating streets that accommodate not just motor vehicles but also pedestrians, cyclists, transit riders, and freight. This pedestrian-first approach aligns with the overarching goal of making Chicago's streets more "complete" by favoring pedestrians over automobiles, these design guidelines prioritize community livability and safety. The guidelines develop a system of street typologies, ranging from pedestrian ways to thoroughfares, to ensure that street design complements its context, offering flexible design values to accommodate a range of conditions. Further, the guidelines emphasize the importance of thoughtfully designed intersections and crossings to ensure compact and safe junctions. By adopting performance-based guidance, including designing streets for target speeds at or below the speed limit, and creating a new design vehicle based on delivery trucks, these guidelines encourage safer, more balanced streets. In addition, the document details procedures for project delivery, creating a framework for achieving the city's goals of reducing crashes, injuries, and traffic fatalities while also increasing the share of trips made by cycling. By pursuing these policies and procedures, these guidelines promote the development of active transportation infrastructure and creating a safer, more accessible transportation system for all residents of Chicago.

[Vision Zero Chicago: Action Plan 2017-2019](#)

Institution: City of Chicago

Relevant Land Use Contexts: Urban

Last Updated: 2017

Chicago is one of many communities around the nation that have signed onto the Vision Zero Network, a collaborative campaign to help communities eliminate all traffic fatalities and serious injuries while also increasing safe, healthy, equitable mobility for all. Vision Zero commits to several principles—most important among these are that traffic crashes are not "accidents," and that the tools and technology to prevent loss of life across the city's and state's roads already exist. Published in 2017, this plan seeks to invest additional resources in communities most affected by traffic violence, change behaviors and perceptions to build a citywide culture of safety, design streets so that they are safer for all users, and encourage and implement policies that create safer vehicles and drivers. The plan relies on proven methods and design strategies to reduce crashes, including the collection and use of data to prioritize resources, choosing effective street designs that prioritize safety over capacity, identifying and preventing the most dangerous roadway behaviors, and launching education campaigns to promote greater roadway safety.

Resource Information	Relationship to Active Transportation
<p><u>Bike Decatur: Regional Bicycle Master Plan</u></p> <p>Institution: Decatur Urbanized Area Transportation Study</p> <p>Relevant Land Use Contexts: Rural, Suburban, Urban</p> <p>Last Updated: 2021</p>	<p>The plan details a vision and goals for bicycling in the region and recommends a complete bicycle network that prioritizes access to high quality bicycle facilities. These recommendations generally follow current best practices, and the plan references the IDOT BDE Manual, BLRS Manual, AASHTO <i>Guide for the Development of Bicycle Facilities</i>, the FHWA <i>Small Town and Rural Multimodal Networks</i>, and the NACTO <i>Urban Bikeway Design Guide</i> as guiding documents for facility applicability and selection. Recommended facility types include shared roadways (bike routes, bike boulevards, and advisory bike lanes), visually separated facilities (conventional and buffered bike lanes), and physically separated facilities (cycle tracks, side paths, and shared-use paths). The plan also recommends adopting a Complete Streets ordinance to integrate active transportation considerations into transportation planning, project development, and maintenance activities.</p>
<p><u>ON TO 2050</u></p> <p>Institution: Chicago Metropolitan Agency for Planning (CMAP)</p> <p>Relevant Land Use Contexts: Rural, Suburban, Urban</p> <p>Last Updated: 2022</p>	<p>CMAP's <i>ON TO 2050</i> Plan serves as a comprehensive blueprint for the sustainable development and growth of the metropolitan Chicago region over the coming decades. The plan outlines strategies and goals in areas like transportation, land use, housing, economic development, and the environment. In terms of active transportation design guidance, the plan focuses on promoting a multimodal transportation network that accommodates walking and biking as viable modes of transportation throughout the region. CMAP aims to enhance the walkability and bikeability of communities by investing in sidewalks, crosswalks, protected bike lanes, and more. By fostering safe and accessible walking and biking environments, the plan contributes to reducing congestion, improving air quality, and enhancing the overall quality of life for residents. <i>ON TO 2050</i> is not only a strategic framework for sustainable regional development but also a driver for the development of active transportation infrastructure specifically, benefiting both current and future generations in the region and aligning with other goals across the community, prosperity, and environmental policy landscapes.</p>
<p><u>Working Collaboratively with IDOT</u></p> <p>Institution: Active Transportation Alliance</p> <p>Relevant Land Use Contexts: Rural, Suburban, Urban</p> <p>Last Updated: 2017</p>	<p>This resource offers guidance to municipalities in Illinois on how to collaborate with IDOT to incorporate a Complete Streets approach into roadway projects by summarizing the IDOT project delivery process and explaining the relationship of active transportation infrastructure to relevant design guidance standards used by the department. IDOT holds ownership of critical thoroughfares in many communities in Illinois, possesses approval authority for projects on these routes, and mandates that any project using state or federal funding must gain IDOT approval before construction initiation. This document traces the evolution of Complete Streets policy in Illinois, from the 1990s when IDOT introduced a bike/ped accommodation policy to the establishment of the State's official policy in 2007. Notably, Illinois' Complete Streets law does not apply to regular road resurfacing projects, unlike many other Complete Streets policies across the country. It further breaks the IDOT project delivery process into its three phases, noting that Phase I is the most crucial point for municipalities to collaborate with IDOT to create project scopes that meet the needs of all roadway users, which might call for design features such as lane reductions or other design changes.</p>

Resource Information**Relationship to Active Transportation****National Resources****[Manual on Uniform Traffic Control Devices for Streets and Highways \(11th Edition, December 2023\)](#)****Institution:** Federal Highway Administration (FHWA)**Relevant Land Use Contexts:**
Rural, Suburban, Urban**Last Updated:** 2023

The *Manual on Uniform Traffic Control Devices* (MUTCD) plays a significant role in shaping the development of all transportation infrastructure in the United States. It provides the standardized guidelines and regulations for traffic control devices and road signage, which directly impact the safety, comfort, and functionality of pedestrian and cycling infrastructure. When designing active transportation facilities such as crosswalks, bike lanes, and shared-use paths, planners and engineers frequently refer to the MUTCD to ensure compliance with federal and state regulations.

[Public Right-of-Way Accessibility Guidelines](#)**Institution:** US Access Board**Relevant Land Use Contexts:**
Rural, Suburban, Urban**Last Updated:** 2023

The *Public Right-of-Way Accessibility Guidelines* (PROWAG) is a set of accessibility standards issued by the US Access Board under Title II of the Americans with Disabilities Act (ADA) and the Architectural Barriers Act (ABA) of 1968. PROWAG is designed to ensure that pedestrian facilities in public rights-of-way are readily accessible and usable by individuals with disabilities. These guidelines cover a range of key accessible features, including pedestrian access routes, alternate pedestrian access routes, accessible pedestrian signals, crosswalks, transit stops, on-street parking, and more. The purpose of PROWAG is to address the ongoing challenges faced by pedestrians with disabilities due to inaccessible sidewalks, crosswalks, and other pedestrian facilities. These guidelines are crucial for providing equal access to pedestrian facilities, as pedestrian travel is a primary means of transportation for many individuals with disabilities. PROWAG specifies detailed requirements for pedestrian access routes, accessible pedestrian signals, crosswalk treatments, transit stops, and more, aiming to provide clear standards for accessibility. By addressing the need for accessible pedestrian facilities, PROWAG contributes to creating an inclusive and equitable environment for all pedestrians, including those with disabilities, in the public right-of-way. The guidelines also help state and local governments, transportation agencies, and federal entities ensure compliance with federal accessibility requirements under the ADA and ABA. PROWAG represents a significant development in the effort to make public rights-of-way accessible, improving the overall mobility and independence of individuals with disabilities.

Resource Information	Relationship to Active Transportation
<p><u>US Department of Transportation Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations</u></p> <p>Institution: FHWA</p> <p>Relevant Land Use Contexts: Rural, Suburban, Urban</p> <p>Last Updated: 2010</p>	<p>This policy statement reflects the federal government’s commitment to promoting active transportation infrastructure development, emphasizing that safe and convenient walking and bicycling facilities should be incorporated into transportation projects and recognizing that walking and bicycling offer various benefits, including improved health, reduced emissions, and more livable communities.</p>
<p><u>Bicycle and Pedestrian Facility Design Flexibility Memorandum</u></p> <p>Institution: FHWA</p> <p>Relevant Land Use Contexts: Rural, Suburban, Urban</p> <p>Last Updated: 2013</p>	<p>This memorandum expresses FHWA’s support for taking a flexible approach to bicycle and pedestrian facility design. Citing AASHTO’s Bike and Pedestrian Guides as the primary national resources for designing active transportation facilities, the FHWA also endorses NACTO and ITE guides for additional flexibility as communities continue to build out their active transportation networks.</p>
<p><u>Questions and Answers about Design Flexibility for Pedestrian and Bicycle Facilities</u></p> <p>Institution: FHWA</p> <p>Relevant Land Use Contexts: Rural, Suburban, Urban</p> <p>Last Updated: 2014</p>	<p>Developed as a follow-up to FHWA’s “Bicycle and Pedestrian Facility Design Flexibility Memorandum” (see previous entry), these questions and answers clarify FHWA’s perspective on NACTO’s <i>Urban Street Design Guide</i> and its relationship to the concept of design flexibility, following its publication in 2014.</p>
<p><u>Separated Bike Lane Planning and Design Guide</u></p> <p>Institution: FHWA</p> <p>Relevant Land Use Contexts: Suburban, Urban</p> <p>Last Updated: 2015</p>	<p>This design guide outlines planning considerations for separated bike lanes, providing a menu of design options to achieve separation while also considering midblock design factors for driveways, transit stops, accessible parking, loading zones, and others. It provides detailed intersection design information covering topics such as turning movement operations, signalization, signage, and on-road markings. Case studies highlight best practices and lessons learned throughout the document.</p>

Resource Information	Relationship to Active Transportation
<p><u>Achieving Multimodal Networks: Applying Design Flexibility and Reducing Conflicts</u></p> <p>Institution: FHWA</p> <p>Relevant Land Use Contexts: Rural, Suburban, Urban</p> <p>Last Updated: 2016</p>	<p>FHWA's <i>Achieving Multimodal Networks</i> guide emphasizes the importance of multimodal transportation networks in providing access to jobs, education, healthcare, and other essential services across urban, suburban, and rural areas in the United States. The guide promotes the idea that interconnected pedestrian and bicycle infrastructure is vital for making walking and biking a feasible transportation choice, contributing to community health, equity, and overall quality of life. This publication serves as a resource for practitioners looking to establish multimodal transportation networks and focuses on ways planners and designers can leverage the flexibility inherent in existing national design guidance to address common roadway design challenges and barriers. The primary objective is to reduce conflicts among various transportation modes and ensure that walking and bicycling are safe, comfortable, and attractive options for people of all ages and abilities.</p>
<p><u>Small Town and Rural Multimodal Networks</u></p> <p>Institution: FHWA</p> <p>Relevant Land Use Contexts: Rural, Suburban</p> <p>Last Updated: 2016</p>	<p>While much of the research and analysis of active transportation infrastructure design has taken place with larger cities in mind, this guide recognizes that active transportation is even more common in many small towns and rural communities than it is in some urban areas. This resource fills a gap in design guidance by applying existing national guidelines to rural settings and small towns, addressing challenges specific to rural areas, and focusing on opportunities to make incremental improvements in such contexts.</p>
<p><u>Bikeway Selection Guide</u></p> <p>Institution: FHWA</p> <p>Relevant Land Use Contexts: Rural, Suburban, Urban</p> <p>Last Updated: 2019</p>	<p>This document is a resource supporting transportation practitioners in making informed decisions about the trade-offs between different types of bikeways, highlighting the linkages between the bikeway selection process and overall transportation planning process. The guide emphasizes the critical role of comfort, not just safety, to appeal to a broader spectrum of potential active travelers and to achieve FHWA's goal of a 30% mode share for walking and bicycling trips by 2025. The guide bases its selection of bikeway types primarily on factors like traffic volume, operating speeds, functional classifications, and land use contexts. Included in the guide are policy frameworks for promoting active travel, key aspects of the planning process to incorporate relevant bikeways, and real-world example across a range of common roadway types demonstrating how bikeway choice influences travel decisions across other modes.</p>

Resource Information

Relationship to Active Transportation

[A Policy on Geometric Design of Highways and Streets, 7th Edition](#)

Institution: American Association of State Highway and Transportation Officials (AASHTO)

Relevant Land Use Contexts: Rural, Suburban, Urban

Last Updated: 2018

This guidance, commonly known as the “Green Book,” is a foundational resource for highway and street design. While primarily focused on motorized transportation, its principles and guidelines nonetheless influence the development of active transportation infrastructure, as design parameters related to lane width, intersection design, and roadway layout directly shape the safety and accessibility of walking and rolling facilities. Designers are encouraged to consider not only vehicular movement, but also that of people, goods, and services. Intended as a comprehensive reference manual to assist in administrative, planning, and educational efforts related to roadway design, this policy is not intended to be a prescriptive design manual. Rather, it provides guidance to engineers and designers crafting unique design solutions that meet the needs of all street users on a project-by-project basis. The Green Book applies only to streets and roads that are part of the National Highway System, but some cities apply its recommendations to all streets. The policy repeatedly emphasizes the needs for context sensitivity, design flexibility, and the consideration of multimodal needs.

[Guide for the Development of Bicycle Facilities, 4th Edition](#)

Institution: AASHTO

Relevant Land Use Contexts: Rural, Suburban, Urban

Last Updated: 2012

The AASHTO Bike Guide is a fundamental resource for the design and development of bicycle infrastructure in Illinois. The guide serves as a reference for shaping active transportation infrastructure by providing detailed guidelines on the planning, design, and implementation of bike facilities. The guide clarifies the elements needed to make bicycling a more safe, comfortable, and convenient mode of transportation and reiterates that bicyclists should be expected on all types of roadways, except where otherwise prohibited. The guide was developed prior to other cycling facility design guidance such as NACTO’s *Urban Bikeway Design Guide* (2012) and FHWA’s *Separated Bike Lane Planning and Design Guide* (2015)—as such, AASHTO’s Bike Guide does not consider separated bike lanes as its own category of facility type. Its content ranges from planning process considerations to the design of on- and off-road facilities, as well as bicycle parking and maintenance/operational considerations. An update to AASHTO’s Bike Guide is expected in the coming years.

[Guide for the Planning, Design, and Operation of Pedestrian Facilities, 2nd Edition](#)

Institution: AASHTO

Relevant Land Use Contexts: Rural, Suburban, Urban

Last Updated: 2021

This resource provides guidance on the planning, design, and operation of pedestrian facilities along and across streets and highways. Specifically, the guide focuses on identifying effective measures and describing appropriate methods for accommodating pedestrians on public rights-of-way, which vary among roadway and facility types. It also recognizes the profound effect that land use planning and site design have on pedestrian mobility and active transportation more broadly, underscoring the need to plan for safety and protect the most vulnerable of roadway users. The guide is intended for use by planners, roadway designers, and transportation engineers, at both the state and local levels, who make daily decisions affecting pedestrians and active transportation infrastructure.

Resource Information	Relationship to Active Transportation
<p><u>Urban Street Design Guide</u></p> <p>Institution: NACTO</p> <p>Relevant Land Use Contexts: Suburban, Urban</p> <p>Last Updated: 2013</p>	<p>NACTO's <i>Urban Street Design Guide</i> is a comprehensive resource offering guidelines and recommendations for designing urban streets with a focus on safety, sustainability, and improved livability. It provides a framework for designing streets that prioritize pedestrians, cyclists, and public transit users, promoting multimodal and active transportation options while reducing the dominance of cars. The guide emphasizes the importance of context-sensitive design, tailoring street layouts to suit the unique needs and characteristics of communities as far ranging as urban centers, suburban downtowns, and quiet residential streets. A central component of the <i>Urban Street Design Guide</i> is its emphasis on Complete Streets and attention to active transportation design features. Streets should be designed to accommodate all users, regardless of their mode of transportation or level of mobility, and support diverse modes of transport through inclusion of bike lanes, pedestrian-friendly crosswalks, transit stops, and green infrastructure. By promoting designs that cater to multiple modes of transportation and consider streets not just as corridors for the conveyance of people, goods, and services, but also as front yards, parks, playgrounds, and public spaces, the guide encourages the development of vibrant, people-centered environments that enhance economic vitality, foster social interaction, and improve livability.</p>
<p><u>Urban Bikeway Design Guide, Second Edition</u></p> <p>Institution: NACTO</p> <p>Relevant Land Use Contexts: Suburban, Urban</p> <p>Last Updated: 2014</p>	<p>The NACTO <i>Urban Bikeway Design Guide</i>, a companion to the <i>Urban Street Design Guide</i>, is a specialized resource dedicated to promoting safe, efficient, and user-friendly bicycle infrastructure in urban areas. It plays a pivotal role in active transportation planning by providing comprehensive guidelines and design recommendations specifically tailored to enhancing cycling as a mode of transportation. The guide emphasizes the critical role of bicycle facilities in promoting active transportation and offers a wide array of design options and strategies for creating conventional bike lanes, protected bike lanes, bike boulevards, and other cycling infrastructure that can be incorporated into the existing urban landscape. It encourages cities and communities to prioritize and invest in bicycle friendly infrastructure, promoting cycling as a sustainable and healthy mode of transport. It further underscores the importance of creating interconnected networks of bike facilities that link a variety of destination types, making it easier for people to choose cycling as a viable means of commuting for everyday trips as well as for recreation.</p>
<p><u>Designing for All Ages and Abilities: Contextual Guidance for High-Comfort Bicycle Facilities</u></p> <p>Institution: NACTO</p> <p>Relevant Land Use Contexts: Rural, Suburban, Urban</p> <p>Last Updated: 2017</p>	<p>NACTO's <i>Designing for All Ages and Abilities</i> is a design guidance resource that highlights the significant need to create urban environments that enable people of diverse skill levels and experiences to engage in active mobility through provision of high-comfort bicycle facilities. The guide underscores the importance of comfort and accessibility as fundamental principles in urban design. It advocates for streets and public spaces that are designed to be inclusive toward a wider group of potential cyclists, tapping into the latent demand for better and safer places to ride and ensuring that everyone, regardless of age or physical ability, can comfortably and safely get around. The resource provides detailed facility selection guidance to prioritize features such as protected bicycle lanes, shared streets, bicycle boulevards, and separated bikeways. Treatments are based on roadway contexts such as target motor vehicle speeds, maximum motor vehicle volumes, and key operational considerations to determine the most appropriate facility types for reducing stress and ensuring accessibility to the widest possible slate of potential users.</p>

Resource Information

Relationship to Active Transportation

[Don't Give Up at the Intersection: Designing All Ages and Abilities Bicycle Crossings](#)

Institution: NACTO

Relevant Land Use Contexts:

Rural, Suburban, Urban

Last Updated: 2019

NACTO's *Don't Give Up at the Intersection* underscores the critical role of well-designed intersections in promoting safe and accessible active transportation options for a wide variety of users. The guide recognizes that intersections, the places where vehicle-bike conflicts are most likely to occur, are key points in the urban landscape where the safety and comfort of cyclists and pedestrians must be prioritized. This guide expands and updates the NACTO *Urban Bikeway Design Guide* by offering detailed guidance and innovative design solutions for creating bicycle crossings that are safe and user-friendly. It emphasizes the importance of clear and intuitive intersection design, including features like protected bike intersections, dedicated bike intersections, minor street crossings, and signalization strategies to reduce conflicts and increase comfort and safety. Further, the guide addresses the importance of intersection design in ensuring equitable access to transportation options, particularly in underserved communities.

[Designing Walkable Urban Thoroughfares: A Context Sensitive Approach](#)

Institution: ITE

Relevant Land Use Contexts:

Suburban, Urban

Last Updated: 2010

Endorsed by the US Department of Transportation in its 2013 "Bicycle and Pedestrian Facility Design Flexibility Memorandum," this resource provides valuable design guidance for walkable urban environments that add economic value, contribute to sense of place, complement adjacent land uses, and support multimodal safety, mobility, and accessibility. Addressing both planning and design approaches, the document discusses streetside, traveled way, and intersection design elements like frontage and furnishing zones, lane widths, medians, bike lanes, on-street parking, midblock crossings, pedestrian refuge islands, transit stops, curb radii, roundabouts, pedestrian crossing treatments, and curb extensions.

[State Leadership for Safer Streets](#)

Institution: The League of American Bicyclists (LAB)

Relevant Land Use Contexts:

Rural, Suburban, Urban

Last Updated: 2022

The League of American Bicyclists' Bicycle Friendly States rankings, Report Cards, and 2022 National Report offer a set of resources providing a comparative framework to help states assess and identify areas of improvement within their DOTs to promote active transportation. The rankings in the report are based on publicly available data and surveys conducted with state DOT officials and bicycle advocacy organizations. The Bicycle Friendly State Report Card highlights the top five "Bicycle Friendly Actions," including the presence of safe passing laws, Complete Streets policies, an emphasis on bicycle safety, recent statewide bike plans, and a minimum level of federal funds allocated to biking and walking of at least 2% (Illinois has made progress on all of these). The report assigns category scores and grades to states based on various criteria ranging from infrastructure and traffic laws to programming and education. It also draws lessons from other high-achieving Bicycle Friendly States such as Massachusetts, Oregon, Washington, California, and Minnesota, showcasing their successful initiatives related to speed limits, climate action, active transportation funding, and infrastructure development.

Looking Ahead

The breadth and diversity of these resources demonstrate that there is a vast amount of design guidance available for bicycle and pedestrian facilities. Although the content of this memorandum is not exhaustive, extensive review of these documents has shown:

- Some design guidance resources have been specifically developed to target active travelers and to enhance the viability of transportation alternatives, such as NACTO's *Don't Give Up at the Intersection* or FHWA's *Achieving Multimodal Networks*, among others.
- Still, several of the most critical design standards shaping active travel networks are subsumed within larger design manuals, such as the BDE and BLRS Manuals. These remain the primary references on bicycle and pedestrian policy and design and have critical roles in determining how Illinois' roadway network ultimately functions.
- Since the incorporation of the first bicycle and pedestrian design accommodations to the BDE Manual in 1998, IDOT has made significant and meaningful improvements to update and expand its active transportation

design standards as innovation in the field has continued. These include incorporation of a Bicycle Level of Service (BLOS) analysis and new facility typologies such as separated bicycle lanes, for example. These manuals should follow the evolution of bikeway and pedestrian designs.

- As this important progress has taken place, past IDOT planning efforts have identified that the manuals compartmentalize much of their active transportation-related guidance into a single chapter.¹ While helpful in terms of providing easy access to relevant project development design information, this may also risk making active travel accommodations in Illinois appear supplemental rather than integral to the structure and design of the larger transportation network.

Elevating these design standards to be equal in practice with other modes will be key to enhancing the guidance available to planners and engineers who seek to create safe, connected, and equitable active transportation networks. This will further align active transportation goals with public health, the environment, local economic vitality, and affordable and accessible transportation options for all users.

¹ Illinois Department of Transportation. 2014. Illinois Bike Transportation Plan. <https://idot.illinois.gov/transportation-system/transportation-management/planning/active-transport-projects/bike-plan.html>