



1. INTRODUCTION

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(Credit: Kimley-Horn and Associates, Inc.)



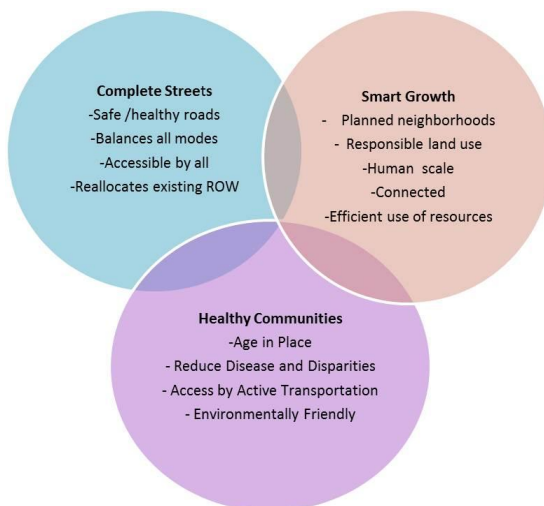
CONTEXT

A growing number of communities are discovering the value of their streets as important public spaces for many aspects of daily life. People want streets that accommodate all modes of transportation, are safe to cross or walk along, link healthy neighborhoods, offer places to meet people, connect us to daily needs, and have a vibrant mix of land uses. More people are enjoying the value of farmers' markets, street festivals, and gathering places, and are expressing the desire to walk and ride bicycles throughout their neighborhoods.



*Complete Streets accommodate all users
 (Credit: City of Portsmouth, VA, and Urban Advantage)*

People from a wide variety of backgrounds are forming partnerships with schools, parks, health agencies, neighborhood associations, environmental organizations, and other groups in asking their local governments to create streets and neighborhoods that fit this vision. In Broward County, municipalities are pursuing Smart Growth policies, which encompass Complete Streets. In fact, the Smart Growth America organization recently incorporated Complete Streets into its mission. Complete Streets are an essential ingredient in creating livable, walkable neighborhoods.



*The Complete Streets, Smart Growth, and
 Healthy Communities partnership
 (Credit: Urban Health Partnerships, Inc.)*

As a result, an increasing number of local governments are looking to modify the way they design their streets. They are often stifled by standards and guidelines that prevent them from making the changes they seek. Some want to modify their standards and manuals, but don't know how, or don't have the resources. The *Broward Complete Streets Guidelines* manual presents an opportunity for communities to design their streets for smart growth, health, safety, livability, sustainability, and more. It also provides a template that can be adopted to replace existing local manuals. The sponsors of this manual make it freely available to any community that wants to use



all or any part of it. This manual may be modified, customized, or expanded upon at the pleasure of the end user. The manual will be made widely available in hopes that many more communities will fulfill their objectives in making and remaking their streets as valuable public space that serves many needs.

WHAT ARE COMPLETE STREETS?

A Complete Street, as defined by the National Complete Streets Coalition (NCSC), is a street where the entire right-of-way is planned, designed, and operated for all modes of transportation and all users regardless of age or ability. Pedestrians, bicyclists, transit riders, and motorists of all ages and abilities must be able to safely move along and across a Complete Street. Complete Streets make it easy to cross the street, walk to shops, catch the bus, bike to work, and enjoy many other healthy activities.

As described by the NCSC, there is no singular design prescription for complete streets – each one is unique and responds to its community context (*Complete Streets FAQ*, National Complete Streets Coalition, www.completestreets.org). Some features that a complete street may include are sidewalks, bike lanes (or other innovative bicycle facilities), special bus lanes, comfortable and accessible public transportation stops, frequent and safe crossing opportunities, median refuges, accessible pedestrian signals, landscaped curb extensions, bioswales, roundabouts, on-street parking, and secure bicycle parking, among others. A complete street in a suburban area may look different than a complete street in the urban core, but both are designed with the same principles in mind to balance safety and convenience for everyone using the road.



*Comfortable public transportation stop
(Credit: Human Transit)*

WHY COMPLETE STREETS?

Incomplete streets – those designed with only cars in mind – limit transportation choices by making walking, bicycling, and taking public transportation inconvenient and unattractive.

Conventional street design solely to move motor vehicle traffic must be modified to conform to the complete streets goal. Incomplete streets either directly or indirectly cause a number of problems for communities, including the following:

“Currently, everyone drives. I’ll end up moving to a city with higher walkability if we can’t change this.”

- (24-year old North Lauderdale Broward Complete Streets Public Workshop participant)



- Lack of opportunity to be active as part of daily life; therefore increasing probability of chronic diseases and other negative health outcomes attributed to sedentary lifestyles.
- Lack of viable transportation choices.
- Senior citizens being geographically limited because they cannot cross streets.
- Children becoming overweight, unnecessary neighborhood congestion, and air pollution around schools, all due to children being driven to school rather than walking.
- Unnecessary driving for short trips.
- Overconsumption of energy.
- Unnecessary emission of greenhouse gases.
- Economic hardship and recession when energy prices rise.
- Streets that do not support neighborhood retail.
- Neighborhoods that lack livability.
- Polluted waterways.
- Underground water aquifers drying up.
- Dehydrated streetscapes causing unnecessary importation of water for landscaping.
- Uplifted sidewalks.

However, complete streets reverse this outcome by providing the following benefits among others.

Capacity. Complete streets can improve the efficiency and capacity of existing roads by moving more people in the same amount of space. Complete streets can maintain volume, reduce speeds, and conveniently accommodate bicyclists and pedestrians. Increasing productivity out of the existing road and public transportation system is vital to reducing congestion.

Equity. Complete streets are for everyone. People of all ages, abilities, and income will have more options when making essential trips such as to work, school, the grocery store, or for healthy recreation. Walking, bicycling, and taking public transportation are less expensive forms of personal transportation than relying on automobiles.

Public Health. Complete streets promote active transportation, which is human-powered transport (walking, bicycling, accessing public transit). Currently, one-third of our nation's children are overweight or obese according to the Centers for Disease Control and Prevention (CDC). The CDC identified a strong correlation between planning and investments in infrastructure and some of the most serious health concerns facing the United States, including heart disease, obesity, and diabetes.

Safety. Making these travel choices more convenient and attractive means making them safer. Half of Haddon's ten strategies for road traffic injury prevention mirror Complete Streets principles (*Road Traffic Injury Prevention Training Manual, TRIPP, 2006*). Roadway improvements that have been recommended to reduce the annual toll of injuries and fatalities to pedestrians and bicyclists are well documented (Zegeer, C., et al, "*Analysis of Elderly Pedestrian Accidents and Recommended Countermeasures*", 1993). Adding complete streets



*Image of a complete street within a main street corridor context
(Credit: AARP)*

elements to existing roadways improves safety for all users (Hallett, I., et al, "Evaluation of On-Street Bicycle Facilities Added to Existing Roadways", 2006).

Sustainability. The Broward Metropolitan Planning Organization (MPO) 2035 *Long Range Transportation Plan* (LRTP) calls for a shift from investment in automobile-centric projects to transit and other modes that support transit. Complete streets support this sustainable transportation vision established by the MPO and its constituencies.

The Time is Right. Many interests are aligning for safer, healthier streets. AARP, American Public Health Association (APHA), Safe Routes to School National Partnership, Smart Growth America, Institute of Transportation Engineers (ITE), American Planning Association (APA), American Society of Civil Engineers (ASCE), and many other national organizations have demonstrated being a strong supporter of complete streets. Locally, more than 1,800 Broward residents across many walks of life and employees from diverse professions participated in Complete Streets Phase 1 Public Involvement. Survey results from the Phase 1 Public Involvement indicate that two-thirds of residents who stated they would never travel without a car in current conditions, would consider walking and biking to nearby destinations if one or more Complete Streets elements were incorporated in the right-of-way. After an information session, 98 percent of the participants stated they wanted to see Complete Streets in their local communities.

More than 100 cities across the United States and at least three MPOs have adopted complete streets policies. Many local governments right here in Broward County are already beginning to redesign their streets to conveniently accommodate more modes of transportation. Furthermore, through the Centers for Disease Control and Prevention (CDC) Communities Transformation Grant, locally known as the Transforming Our Community's Health (TOUCH) initiative, Broward County municipalities have the opportunity to receive technical assistance to pursue Smart Growth policies by encouraging supportive land use decisions. These policies will provide a strong framework for the implementation of complete streets based on the Smart Growth principles listed below.



- Provide a range of housing opportunities and choices.
- Aim to increase efficiency of utilizing water and energy resources.
- Preserve and create open space.
- Create distinctive buildings and neighborhoods with a strong sense of place.
- Promote mixed land uses serviced by a variety of transportation modes.
- Make development decisions more predictable, quicker and cost effective.
- Create walkable sites, neighborhoods and community designs.
- Encourage community and stakeholder collaboration.
- Promote regional collaboration.
- Strengthen and direct development towards existing communities.
- Take advantage of compact building design.



The Promenade at Coconut Creek, which is the first project of Coconut Creek's Main Street Area vision for a sustainable, mixed-use downtown district that incorporates Smart Growth principles through adopted design standards.

(Credit: Kimley-Horn and Associates, Inc.)



*Hillsboro Boulevard bike lane and streetscaping
(Credit: City of Deerfield Beach)*

PURPOSE OF THE COMPLETE STREETS GUIDELINES

Local governments depend on manuals for design guidance on new streets, as well as for retrofitting and modifying existing streets with new development, and when new subdivisions are being built. Along with land use planning, street manuals play a large role in determining urban form. Street manuals, in effect, serve as the “DNA” of streets. As such, they help to determine how walkable and bicycle-friendly neighborhoods and communities are, how conducive cities are to transit use, and how livable communities become.

The *Broward Complete Streets Guidelines* manual is based on complete streets principles that aim to design streets for people of all ages and physical abilities and accommodate all travel modes. The *Broward Complete Streets Guidelines* manual offers another way to design streets and provides guidance for those municipalities that decide to adopt these principles. The result will be more livable neighborhoods with healthier residents due to opportunities for increasing social capital (by interacting more regularly with neighbors) and for active transportation (walking, bicycling, and accessing public transportation).



*Roundabouts are a complete street strategy
(Credit: Alena Alberani)*



LEGAL STANDING OF STREET MANUALS

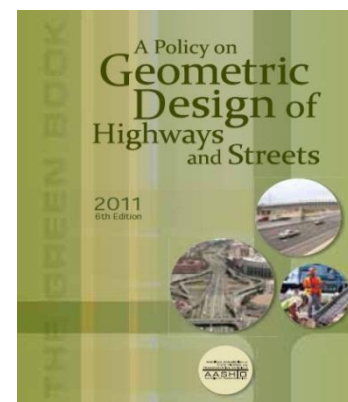
Local jurisdictions generally follow some established standards for designing streets. Much confusion exists as to what they must follow, what is merely guidance, when they can adopt their own standards, and when they can use designs that differ from existing standards. This section untangles the myriad of accepted design documents. It is critical for local jurisdictions to understand how adopting the *Broward Complete Streets Guidelines* meshes with other standards and guides. The most important of those standards and guides are the following.

- The American Association of State Highway and Transportation Officials' (AASHTO) *A Policy on Geometric Design of Highways and Streets* (the "Green Book")
- The *Manual of Uniform Minimum Standards for Design, Construction, and Maintenance for Streets and Highways* (the "Florida Greenbook")
- Broward County Public Works Guidelines
- The Florida Department of Transportation's (FDOT) *Plans Preparation Manual* (PPM)
- The Federal Highway Administration's (FHWA) *Manual on Uniform Traffic Control Devices for Streets and Highways* (MUTCD)
- Americans with Disabilities Act (ADA) regulations and standards
- Local manuals or street design standards

A description of the federal-aid roadway classification system helps to frame the requirements of each of these documents. For the purposes of understanding design standards and guides, the federal roadway classification system is the existing system of street classification for federal funding. Local governments that wish to use certain federal funds allocated by the federal-aid system are required to use a streets classification system based on arterials, collectors, and local streets. The federal-aid system encourages cities to designate more of these larger streets and concentrate modifications along the larger streets. In Chapter 4, "Street Networks and Classifications," an alternative system that is based on context is recommended. In order to maintain eligibility to access these funds, local jurisdictions can use both systems, for example, arterials/collectors and urban boulevards/avenues.

AASHTO GREEN BOOK

A Policy on the Geometric Design of Highways and Streets (the AASHTO Green Book, 6th Edition, 2011) provides guidance for designing geometric alignment, street width, lane width, shoulder width, medians, and other street features. Design guidelines are given for intersections, freeways, arterials, collectors, and local roads. The intent of the Green Book is to provide guidance to designers by referencing a recommended range of values for dimensions; it is not intended to be a detailed design manual that could supersede the need for the application of sound engineering principles by the designer. Although the Green Book's guidelines are generally organized by functional classification, some local





jurisdictions apply its guidelines uniformly to all streets.

Furthermore, the Green Book provides guidance that local jurisdictions often unnecessarily treat as standards. The Green Book encourages flexibility in design within certain parameters to permit independent designs tailored to particular situations. In addition, AASHTO published *A Guide for Achieving Flexibility in Highway Design* to further this context-sensitive approach. For example, 10-foot lanes, which local jurisdictions often avoid out of concerns of deviating from standards, are well within AASHTO guidelines.

FLORIDA GREENBOOK

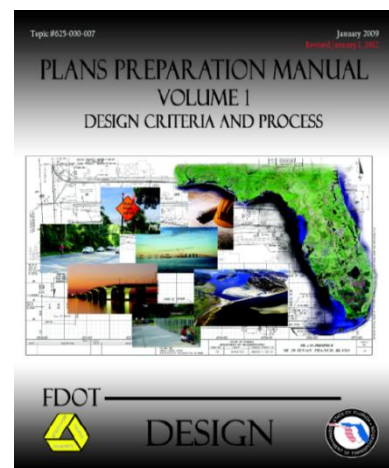
The *Manual of Uniform Minimum Standards for Design, Construction, and Maintenance for Streets and Highways* (the Florida Greenbook) is intended to provide minimum standards for use on all public streets that are not part of the State Highway System. Florida Administrative Code Rule 14-15.002, which adopted the May 2011 Florida Greenbook, became effective June 4, 2012. Significant modifications are included in the May 2011 Florida Greenbook that expand Chapter 8 (Pedestrian Facilities) and Chapter 9 (Bicycle Facilities) to provide improved guidance. In addition, a new chapter on Traditional Neighborhood Development (TND) was added to the Florida Greenbook since the previous 2007 version. The Florida Greenbook is available on the FDOT website (<http://www.dot.state.fl.us/rddesign/FloridaGreenbook/FGB.shtm>).

BROWARD COUNTY PUBLIC WORKS GUIDELINES

The *Final Report on Alternative Roadway Design Guidelines for Broward County* (May 2008) outlines roadway design guidelines consistent with one of the County's priority goals of establishment of a "sense of place". The guidelines are consistent with the county-wide *Community Design Guidebook* (CDG), prepared by the local architecture firm Anthony Abbate Architect, P.A., which develops, promotes, and sets forth the basis for implementing urban design guidelines and principles for use within Broward County that are sensitive to emphasizing and reinforcing the distinctive character of the County and the unique charm of its various cities and places. As an example, the CDG's "Urban Main Street" illustrative street sections, developed with county engineering, transit, and transportation agencies, typically include 11-foot wide travel lanes, on-street parking, bicycle lanes, wide sidewalks, and small turning radii at street intersections.

FDOT PLANS PREPARATION MANUAL

The FDOT *Plans Preparation Manual* (PPM) Volume I outlines the design criteria and procedures for use on the State Highway System (SHS) and on FDOT projects. The criteria in the PPM represent requirements for the State Highway System, which must be met for the design of FDOT projects unless approved



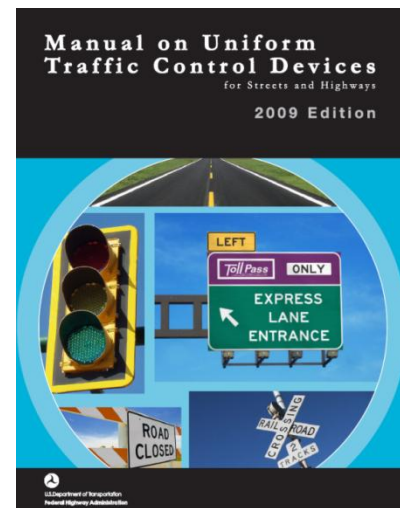


exceptions or variations are obtained in accordance with procedures outlined in the PPM. The PPM Volume I contains several chapters of interest to implementing complete streets on the SHS including Chapter 2 (Design Geometrics and Criteria), Chapter 8 (Pedestrian, Bicycle, and Public Transit Facilities), Chapter 21 (Transportation Design for Livable Communities), and Chapter 25 (Design Criteria for Resurfacing, Restoration, and Rehabilitation [RRR] projects).

The PPM Volume II sets forth requirements for the preparation and assembly of contract plans for FDOT projects. Of note is PPM Volume II Chapter 6, which includes typical cross sections.

MUTCD

The Federal Highway Administration's (FHWA) *Manual on Uniform Traffic Control Devices for Streets and Highways* (MUTCD) provides standards and guidance for the application of all allowed traffic control devices including roadway markings, traffic signs, and signals. FHWA oversees application of the MUTCD. The State of Florida chooses to adopt the Federal MUTCD as its manual for signs, pavement markings, and traffic control devices.



The rules and requirements for the use of traffic control devices are different than for street design criteria. Local agencies have limited flexibility to deviate from the provisions of the MUTCD in the use of traffic control devices due to the relationship between the MUTCD, the Code of Federal Regulations (CFR), and state law. The MUTCD does provide flexibility and options within its general provisions for items such as application of standard traffic control devices, use of custom signs for unique situations, traffic sign sizes, and sign placement specifics. However, agencies do not generally have the flexibility to develop signs that are similar in purpose to signs within the MUTCD while using different colors, shapes, or legends. Agencies also are not authorized to establish traffic regulations that are not specifically allowed or are in conflict with state law. The provisions of the MUTCD and related state laws thus make it cumbersome to deploy new traffic control devices. This can result in complications, especially in the areas of speed management, pedestrian crossings, and bikeway treatments.

Request for Experimentation

The State of Florida and the Federal Highway Administration have procedures called "Request for Experimentation" (RFE) that allow local agencies to experiment with traffic control devices that are not included in the current MUTCD. Such demonstrations are not difficult to obtain from FHWA for testing of new devices, especially as they relate to pedestrian and bicycle facilities, but the requesting agency must agree to conduct adequate before-and-after studies, submit reports on the performance of the experimental device, and remove the device if early results are not promising (see FHWA flow chart on the following page). Once federal approval



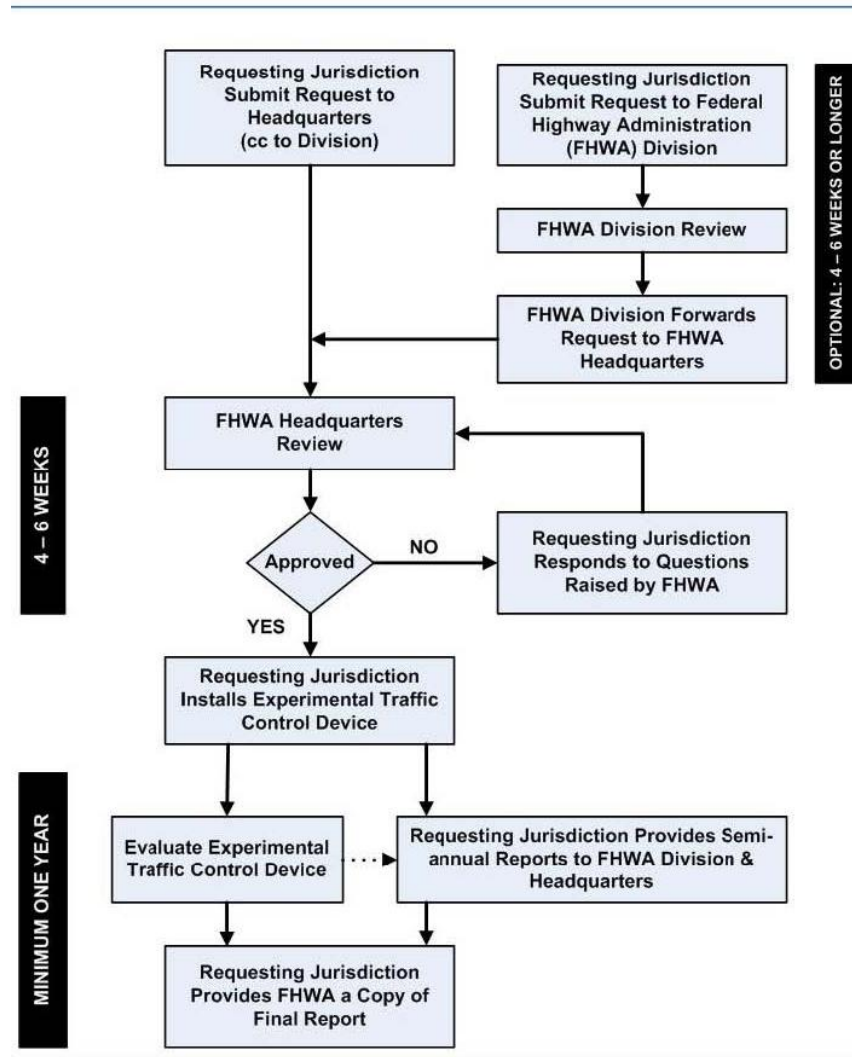
is granted for the experiment, the local jurisdiction has been given some legal protection from liability suits.

The MUTCD is amended through experimentation. After one or more experiments have shown benefit, the new devices are sometimes adopted into the manual. A recent example of a successful amendment to the MUTCD is the shared lane bicycle marking (sharrow). More information on sharrows can be found in Chapter 9, "Bikeway Design."



Sharrow pavement marking
(Credit: Kimley-Horn and Associates, Inc.)

OBTAINING EXPERIMENTATION APPROVAL FOR NEW TRAFFIC CONTROL DEVICES



MUTCD experimentation process
(Source: Federal Highway Administration)



Warrants

The MUTCD establishes warrants for the use of some traffic control devices. For example, stop signs and traffic signals are expected to meet minimum thresholds before application. These thresholds include such criteria as number of vehicles, number of pedestrians or other users, distance to other devices, crash history, and more. These warrants are often viewed as preventing local engineers from applying devices that, in their opinion, may improve safety. For example, trail and/or pedestrian crossings of busy, high-speed, wide arterial streets may need signals for user safety, but signals may not meet the MUTCD warrants.

However, the MUTCD suggests that strict adherence to the warrants is not the only factor to evaluate when considering whether a traffic control device is justified. The warrants are a component of a broader engineering investigation, and are not a substitute for engineering judgment. The MUTCD lists the satisfying of a warrant as “guidance” for implementing an approved traffic control device. Guidance is defined in Section 1A.13 of the 2009 MUTCD as “a statement of recommended, but not mandatory, practice in typical situations, with deviations allowed if engineering judgment or engineering study indicates the deviation to be appropriate.” The MUTCD typically uses the verb “should” for guidance conditions, as differentiated from the verb “shall” for standards.

As with street design guidelines, local jurisdictions may establish their own warrants or modify those provided in the MUTCD to suit their context in order to use some traffic control devices. In special circumstances that deviate from the warrants, local jurisdictions need to document their reasons for the variation. For example, local jurisdictions may establish that trail crossings or school crossings qualify for certain traffic control devices.

ADA REGULATIONS AND STANDARDS

Public rights-of-way and facilities are required by law to be accessible to persons with disabilities through Title II of the Americans with Disabilities Act of 1990 (ADA) (42 U.S.C. 12131-12164) and Section 504 of the Rehabilitation Act of 1973 (Section 504) (29 U.S.C. 794). Agencies must provide ADA accessibility wherever a pedestrian facility exists.

Regulations implement this requirement by imposing standards for accessible features such as curb cuts, ramps, continuous sidewalks, and detectable warnings. The Department of Justice (DOJ) ADA regulation is 28 C.F.R. Part 35. The DOT Section 504 regulation in 49 C.F.R. Part 27 governs public agencies, with the ADA incorporated in 49 C.F.R. 27.19. Any project for construction or alteration of a facility that provides access to pedestrians must be made accessible to persons with disabilities.

The U.S. Access Board is the federal agency responsible for developing ADA design standards. The Access Board’s ADA Accessibility Guidelines serve as the minimum baseline for the standards. The following publications on accessible pedestrian design are available on the Board’s website (www.access-board.gov).



- ADA Standards for Transportation Facilities
- Accessibility Guidelines (ADAAG)
- Proposed Public Rights-of-Way Accessibility Guidelines (PROWAG)
- Pedestrian Access to Modern Roundabouts
- Detectable Warnings: Synthesis of U.S. and International Practice
- Accessible Pedestrian Signals

The *Broward Complete Streets Guidelines* manual includes design information regarding ADA accessibility in Chapter 7, “Universal Pedestrian Access.”

LOCAL STREET MANUALS

Local jurisdictions follow the AASHTO Green Book, the Florida Greenbook, or design guidance from organizations such as the Institute of Transportation Engineers (ITE) out of the general need for a comprehensive set of street design guidelines and out of liability concerns. Neither federal nor state law mandates adoption or adherence to these guides. However, local jurisdictions often adopt them to protect themselves from lawsuits. Furthermore, many don't have the resources to develop their own standards and practices, so they adopt those in the AASHTO Green Book or the Florida Greenbook, or another previously adopted manual, or those of other jurisdictions.

The manuals that many jurisdictions use today embody principles based on moving motor vehicle traffic at the highest speed efficiently practical as the primary role of streets. The result is many wide, high-speed streets that are designed to move cars but compromise other important community goals and may work against present day community needs. Common direct outcomes of existing manuals within urbanized areas can include the following:

- Streets that are nerve-racking and uncomfortable for pedestrians to cross
- Streets that are not safe for bicyclists
- Streets that encourage motor vehicle high speeds
- Streets that are not safe for the motorists they are designed to serve
- Narrow sidewalks with little or no buffer that are not comfortable to walk along
- Inconvenient street crossings for people in wheelchairs
- Unsightly and uninviting streets
- Auto-oriented land uses that are uninviting and intimidating to people walking, biking, and using transit
- Street water runoff systems that funnel rainwater to the storm drains and directly to waterways
- Poor selection of street trees, if any
- Excessive exposed hardscape leading to a rise in temperatures – the heat-island effect

A question often posed by plaintiffs' attorneys in traffic-related crashes is, “Did the jurisdiction follow established or prevailing designs, standards, and guidance?” If the attorneys can prove



that the local jurisdiction deviated from these, they enhance their chances of winning a judgment against the jurisdiction. Therefore, protection from liability is paramount.

Local governments are authorized to adopt or modify their own practices, standards, and guidelines that may reflect differences from the AASHTO Green Book or the Florida Greenbook. If these changes generally fall within the range of acceptable practice allowed by nationally recognized design standards, the adopting agencies are protected from liability to the same extent they would be if they applied the AASHTO Green Book or the Florida Greenbook. Most changes to streets discussed in the *Broward Complete Streets Guidelines* fall within the range of the guidelines or recommended practices of nationally recognized organizations such as AASHTO, ITE, Urban Land Institute (ULI), and Congress for the New Urbanism (CNU).

Working within previously established urban guidelines generally should result in a design that is protected from liability. The AASHTO Green Book or the Florida Greenbook are silent on many design features, and do not always consider the needs within unique contexts. In these cases, local jurisdictions can develop their own guidelines and standards and incorporate international equivalents or practices from other jurisdictions. Local governments may adopt the guidance in these Guidelines, which compiles best practices in creating complete streets.



*Pedestrians enjoying a wide sidewalk with landscaping
(Credit: Kimley-Horn and Associates, Inc.)*

Local jurisdictions can also utilize designs that fall outside the ranges specified by nationally accepted guidelines and standards, but these practices can potentially increase liability unless done with great care. When agencies elect to utilize designs that fall outside the guidelines of nationally recognized documents, they need to use additional care to ensure they do not expose themselves to liability.

To minimize liability, local jurisdictions either need to adopt their own standards (which should be based on rationale or evidence of reasonableness), or they can conduct an experimental project (Request for Experimentation) as discussed earlier in the MUTCD sub-section. When conducting an experimental project, agencies need to show that they are using the best information that is reasonably available to them at the time, document why they are doing what they are doing, use a logical process, and monitor the results and modify accordingly. This is because the agency may be required in the future to show that its design is reasonable, and the agency may not be able to cite a nationally published guideline or recommendation to support its local action. Often, these experimental projects are conducted because the design engineer has reason to believe that the new or evolved design will be safer or otherwise more effective for some purpose than if the prevailing standards and guides had been used. These



reasons or rationales are based on engineering judgment and should be documented to further minimize exposure to liability.

Unless otherwise noted, everything in these Guidelines can readily be adopted and incorporated. In addition, these Guidelines carry the credibility of the many transportation professionals who produced it.

In some cases, AASHTO design guidelines may not provide information on innovative or experimental treatments that have shown great promise in early experiments and applications. Since AASHTO is a design guide, agencies have some flexibility to use designs that fall outside the boundaries of the AASHTO guide. Deviation from the range of designs provided in the AASHTO guide requires agencies to use greater care and diligence to document their justification, precautions, and determination to deviate from the guidelines. In Florida, the precautions to establish “sovereign immunity” should be followed based on *Florida State Statute 768*.

Local agencies may currently use many other reports and documents to guide their roadway design and transportation planning. Other documents provide valuable procedure and reference data, but they do not set standards. They can be referred to and defined as standards by local agencies, but the local authority often has the flexibility to selectively endorse, modify, or define how these informational documents can be used or incorporated into its engineering and planning processes. Also, newer versions of these documents have additional information that can conflict with the local historical approach.

The expected results of the design approaches presented in this document are generally intended to improve safety and/or livability. As a result, implementation of these features should generally reduce liability and lawsuits. There is no way to prevent all collisions or lawsuits, but adopting policies, guidelines, and standards while performing experimental projects with reasonable precautions is a defensible approach.

HOW TO USE THE COMPLETE STREETS GUIDELINES MANUAL

Since many local jurisdictions lack the resources to undertake a major revision of their manuals, this document offers a template for local jurisdictions to begin updating existing manuals. Local jurisdictions may use this document in any responsible way that helps them update their current practices, including adopting the entire *Broward Complete Streets Guidelines* and inserting the jurisdiction’s name into the text. They may also choose to adopt certain chapters in full or in part.

Local jurisdictions can use this document to assist with meeting the requirements of *Florida State Statute 335.065*, which requires transportation projects to consider bicycle and pedestrian improvements.



The *Broward Complete Streets Guidelines* manual is available to any local jurisdiction in Broward County that wishes to adopt or use it. The document is offered in a MS Word format to allow customization. The document's sponsors ask local jurisdictions using it to do two things.

1. Keep the acknowledgements pages to recognize the people whose contribution made this manual possible and to carry the credibility of the authors with the document.
2. Inform the manual's sponsors (via means described in the acknowledgements) that they have used the manual so the sponsors can track jurisdictions benefitting from it.

ADOPTION AND IMPLEMENTATION

The *Broward Complete Streets Guidelines* is suitable for adoption by local and regional agencies to guide planning and design of streets. This adoption process allows agencies to indicate that the features and provisions of the plan are applicable for use by the adopting agency. This is a necessary first step in properly incorporating the provisions of the street manual. However, agencies will have to take additional steps to ensure that their implementation practices are modified to reflect the recommendations of this manual.

Local agencies will likely need to review their stepwise approach to street design through all stages of the process, from advance planning through preliminary design and construction. Critical points will include project identification, preliminary cost estimates for funding, and a multi-disciplinary approach to preparation of design drawings.

During adoption, as well as after adoption, local jurisdictions will need to ensure that their various departments are all operating with the same practices. These include entities such as but not limited to public works, traffic engineering, transportation planning, street services, maintenance, signal operations, street lighting, planning, redevelopment, fire, and other departments.

Broward Complete Street Guideline Development Process



Thanks to a Centers for Disease Control and Prevention (CDC) grant, the Broward Regional Health Planning Council and the Broward MPO have been able to support the development of the Broward Complete Streets Guidelines. Through intense community organization, it is hoped that these guidelines reflect Broward's concerns, questions, and desires for Complete Streets. The above timeline illustrates the team's timeline for adoptions of the Guidelines.



HOW THE BROWARD COMPLETE STREETS GUIDELINES DOCUMENT WAS CREATED

The *Broward Complete Streets Guidelines* document is based on the original work of the *Los Angeles County Model Design Manual for Living Streets*. The *Broward Complete Streets Guidelines* document is funded through a Transforming Our Community's Health (TOUCH) grant, which is part of the U.S. Department of Health and Human Services' Community Transformation Grants to support public health efforts to reduce chronic diseases, promote healthier lifestyles, reduce health disparities, and control health care spending. The Broward Regional Health Planning Council (BRHPC) is commended for their efforts as recipient and overall manager of the TOUCH initiative. The press release on the subsequent pages provides additional information and outlines the conditions and goals of the TOUCH initiative.

BROWARD COMPLETE STREETS TECHNICAL ADVISORY COMMITTEE

Local officials in Broward County have modified this manual as appropriate for Broward-specific conditions, laws, regulations, standards, and policies. The Broward Complete Streets Technical Advisory Committee (TAC) was assembled to provide the technical assistance in preparing the document. In addition, the document was reviewed through the Broward Metropolitan Planning Organization (MPO) process.



*Broward Complete Streets TAC
(Credit: Broward MPO)*



A complete list of the Broward Complete Streets Initiative Technical Advisory Committee (TAC) members is listed below:

- Alena Alberani, Sustainable Community Partners
- Scott Brunner, Broward County Traffic Engineering
- Paul Carpenter, City of Coral Springs
- Aylin Costa, Broward County Highway Construction and Engineering
- Andi Crawford, Broward YMCA
- Bill Cross, South Florida Regional Transportation Authority
- Heslop Daley, City of Fort Lauderdale
- Arlene Davis, Port Everglades
- Eric Dumbaugh, Florida Atlantic University
- Ellen Feiler, Broward County Department of Health
- Maribel Feliciano, Broward County Air Quality
- Jerry Ferguson, City of Deerfield Beach
- Pattie Gertenbach, Broward Bicycle/Pedestrian Advisory Committee
- Carolina Gutierrez, University of Miami – Miller School of Medicine
- Lori Hall, City of Miramar
- Ronald Kareiva, FDOT
- Gloria Katz, Smart Growth Partnerships
- Lynn Kunins, Florida Introduces Physical Activity and Nutrition to Youth (FLIPANY)
- Rick Labinsky, Hallandale Beach
- Michael Madfis, Community Involvement Roundtable/Smart Growth Partnership
- Amanda Martinez, City of Deerfield Beach
- John-Mark Palacios, FDOT Office of Modal Development
- Teina Phillips, Broward Regional Health Planning Council
- John Ramos, Broward County Transit
- Joy Riddell, AARP
- Jonathan Roberson, Broward County Transit
- John Rude, Broward Urban River Trails
- Peter Schwarz, Broward County Planning Council
- Richard Tornese, Broward County Highway Construction and Engineering
- Kevin Walford, City of Fort Lauderdale
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FOR IMMEDIATE RELEASE

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Broward Regional Health Planning Council Awarded \$1.76 Million to Help Create Healthier Communities in Broward County, Florida

Affordable Care Act to improve health in states and communities, which can control health care spending.

Today, Broward Regional Health Planning Council (BRHPC) was awarded a grant of \$1.76 million for **Transforming Our Community's Health (TOUCH)** in Broward County, Florida.

This grant is part of the U.S. Department of Health and Human Services' (HHS's) Community Transformation Grants to support public health efforts to reduce chronic diseases, promote healthier lifestyles, reduce health disparities, and control health care spending.

Overall, HHS awarded approximately \$103 million in prevention grants to 61 states and communities, reaching more than 120 million Americans. The Community Transformation Grants will support the planning and implementation of state and community projects proven to reduce chronic diseases—such as diabetes, heart disease, stroke, and cancer.

David Hughes, BRHPC Board Chair, commented that “the efforts made by BRHPC and their partners to apply for a Community Transformation Grant demonstrates the level of support, collaboration and commitment our county has to address key health issues while serving the residents of Broward County.”

Nationwide, the Community Transformation Grants will focus on three priority areas: tobacco-free living; active living and healthy eating; and evidence-based quality clinical and other preventive services, specifically prevention and control of high blood pressure and high cholesterol. BRHPC will also address ways to create a safe built environment to complement active living and healthy eating. BRHPC is one of 35 across the country that was awarded an implementation grant. Broward County was the only grantee in Florida.

“Programs developed and supported through this Community Transformation Grant enforce the new realization that personal choice and action play a vital role in our long term health. Good health will only be attained by focusing on programs pertaining to prevention and healthy lifestyles thereby enabling individuals and families to experience a better quality of life” said **Sue Gunzburger, Mayor of Broward County**.



According to Health Foundation of South Florida **President and CEO, Dr. Steven E. Marcus**, “Health Foundation was actively involved in the BRHPC leadership team as we knew this award would help transform prevention to be at the forefront of impacting the health of the nearly 1.8 million residents.”

The grants are expected to run for **five years**, with projects expanding their scope and reach over time as resources permit. Specifically, the **TOUCH** initiative will include efforts to decrease exposure to tobacco use, improve policies and practices that increase access to healthy foods and physical activity across the County, increase the use of high-impact, quality clinical preventive services related to obesity, and implement strategies to create a safe built environment that supports many of the above strategies.

“This is great news that this crucial funding is on its way to South Florida,” said **U.S. Rep. Debbie Wasserman Schultz (FL-20)**. “In the United States, chronic diseases such as heart disease, cancer, and diabetes are some of the leading causes of death, disability, and health care costs, accounting for 75 percent of all medical costs each year. Although chronic diseases are among the most common and costly health problems in the country, they are also among the most preventable. I’m grateful to the Broward Regional Planning Council and all of its partners for their efforts to improve the health and well being of South Floridians.”

To learn more about Community Transformation Grants, visit www.cdc.gov/communitytransformation.

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Note: All HHS press releases, fact sheets and other press materials are available at www.hhs.gov/news

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HOW THE ORIGINAL L.A. LIVING STREETS MODEL MANUAL WAS CREATED

As mentioned earlier, the original manual was a project of the Los Angeles County Department of Public Health called the *Los Angeles County Model Design Manual for Living Streets*. The department funded the production of this manual through a federal Communities Putting Prevention to Work grant to expand opportunities for people to bicycle and walk as an obesity prevention effort. The Luskin Center for Innovation at the University of California, Los Angeles, funded the chapter titled “Streetscape Ecosystem,” to address environmental sustainability issues related to streets.

A multidisciplinary team including many of the top street designers in the U.S. produced this manual. The team contained experts from traffic engineering, transportation planning, land use planning, architecture, landscape architecture, public health, sociology, and other backgrounds. The team also included experts serving in leadership roles for the following national and local organizations:

- AARP Public Policy Institute
- American Society of Landscape Architects
- Association of Pedestrian and Bicycle Professionals
- California Department of Health Services
- California Strategic Growth Council
- City of Long Beach
- City of Los Angeles Planning Department
- Council for Watershed Health
- Congress for the New Urbanism
- Federal Highway Administration
- Green Los Angeles Coalition
- Institute of Transportation Engineers
- Los Angeles Chapter of the American Institute of Architects
- Los Angeles County Department of Public Health
- National Complete Streets Coalition
- Project for Public Spaces
- Safe Routes to School National Partnership
- Smart Growth America
- UCLA Luskin Center for Innovation
- U.S. Access Board
- Walkable and Livable Communities Institute



*L.A. Living Streets Manual authors at charrette
(Credit: Dan Burden)*

For a complete listing of all the contributors, please visit the Acknowledgements section of this manual.