

2015 Educational Series

Bicycle & Pedestrian Program



TxDOT Bicycle and Pedestrian Program



Pedestrian and bicycle bridge, Austin

OVERVIEW

Bicycle and pedestrian facilities are important components of the Texas transportation system and serve as growing transportation modes, especially in urbanized areas. Walking or cycling can reduce fuel consumption, traffic congestion and air pollution. These cost-effective forms of personal transportation also support energy conservation, public health, social activity and environmental quality. The Texas Department of Transportation (TxDOT) is committed to planning, designing, and constructing facilities to better accommodate bicyclists and pedestrians with safer and more convenient facilities. Statewide and regional bicycle and pedestrian coordinators work with department staff, local transportation planners, and bicycle advocates to develop bike lanes, bike paths,

sidewalks, and other facilities that support walking and bicycling as part of transportation.

In keeping with TxDOT's overall goals, the Bicycle and Pedestrian Program strives to:

- Promote a safer and more convenient bicycle and pedestrian system
- Address congestion by including consideration of bicycle and pedestrian accommodations in project scoping
- Connect Texas communities via usable bicycle and pedestrian networks
- Develop a best-in-class state agency bicycle and pedestrian program.

TxDOT's Bicycle and Pedestrian Program is part of TxDOT's Public Transportation Division. The Program is governed by both federal and state

law. Section 217, Title 23, United States Code (U.S.C.), authorizes the use of federal funding for a position of Bicycle Coordinator to promote and facilitate the increased use of nonmotorized modes of transportation, including developing facilities for the use of pedestrians and bicyclists, plus educational, promotional, and safety programs. Section 201.902, Texas Transportation Code, directs TxDOT to designate a statewide bicycle coordinator as well as a bicycle coordinator in each regional office. The bicycle coordinators assist TxDOT in developing plans to enhance the safe use of the state highway system by bicyclists. Section 201.902 further directs the Texas Transportation Commission (TTC) to adopt rules relating to use of roads in the state highway system by bicyclists, including provisions for:

- The specific duties of the statewide bicycle coordinator and the regional bicycle coordinators
- The consideration of acceptable national bicycle design, construction, and maintenance standards by bicyclists
- Obtaining comments from bicyclists on:
 - Highway projects that might affect bicycle use
 - The use of a highway for bicycle events
 - Department policies affecting bicycle use on state highways.

Title 23 of the United States Code directs each state to develop a Statewide Transportation Plan (STP) and a Statewide Transportation Improvement Plan (STIP) for all areas of the state. The STP and STIP provide for the development, integrated management and operation of transportation systems and facilities (including accessible pedestrian walkways and bicycle transportation facilities) that will function as an intermodal transportation system for the state and as an integral part of an intermodal transportation system for the nation.

In response to both the United States Department of Transportation's federal policy statement on Bicycle and Pedestrian Accommodations, Regulations and Recommendations and the Americans with Disabilities Act of 1990, TxDOT has established guidelines for the consideration of bicycle and pedestrian accommodations as part of the scoping for all transportation projects with department oversight.

In addition to TxDOT's incorporation of safer and more convenient walking and bicycling facilities into transportation projects, TXDOT administers several

federally funded programs to address serious safety issues. Strategies include bike and pedestrian education and the development of new bike and pedestrian facilities.

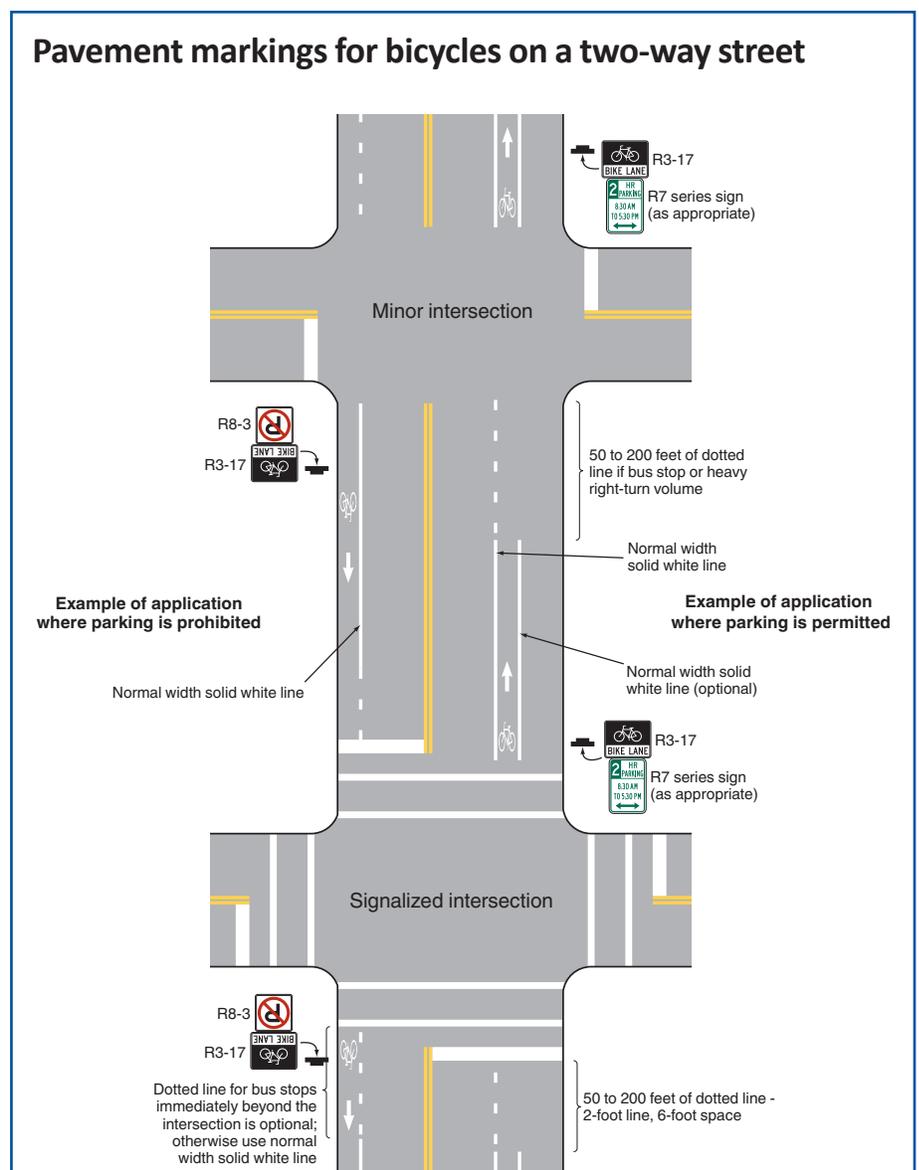
TxDOT's Unified Transportation Program (UTP) covers 10 years and guides development and authority for planning, construction, and maintenance of transportation projects. Pedestrian and bicycle project opportunities exist under several funding categories.

Program funding is available in areas where air pollution levels persistently

exceed the national ambient air quality standards. The Congestion Mitigation and Air Quality (CMAQ) program funds transportation projects that improve air quality and reduce traffic congestion and may include pedestrian and bicycle projects.

Metropolitan Mobility and Rehabilitation funding is obligated through local metropolitan planning organizations with TXDOT consensus and may include pedestrian and bicycle accommodations as part of a larger project.

Several safety programs exist,



including Section 402 State and Community Highway Safety funds for non-infrastructure projects, including provisions for safety training and education on walking and bicycling as alternative modes of transportation. Approximately one million dollars are spent annually on pedestrian and bicycle education and safety through TxDOT's Traffic Operations Division. Additionally, the Highway Safety Improvement Program funds infrastructure projects aimed at reducing traffic fatalities and serious injuries and may include pedestrian and bicycle accommodations as stand-alone projects or as part of larger transportation projects.

The Transportation Alternatives Program (TAP) was authorized under Section 1122 of the federal Moving Ahead for Progress in the 21st Century Act (MAP-21), and includes several project types formerly eligible under the Transportation Enhancements Program.

Since 1993, TxDOT has awarded over \$337,000,000 in Transportation Enhancement (TE) Program funds for bicycle and pedestrian improvements

statewide. The TE funds have been distributed to communities across the state including 341 pedestrian and bicycle projects. TE projects were used to design and construct shared use paths, new or rehabilitated sidewalks with ADA improvements, designated bike lane striping, improved roadway crossings with designated crosswalks, upgrades to existing pedestrian signals, pedestrian and bicycle signage, pavement markings and lighting. TE funds were also used to design and construct several pedestrian bridges and make infrastructure modifications to improve bicycle and pedestrian mobility. The TE Program ended with SAFETEA-LU and was replaced with the TAP in 2012.

The TE and TAP have historically provided the greatest opportunity nationally for funding pedestrian and bicycle projects. The TAP includes specific funding allocations to allow for local project selection in large urbanized areas through a competitive process administered by metropolitan planning organizations. Additional funding is allocated for small urban and rural areas, which are awarded through a competitive process

administered by the state department of transportation. The TAP rules were approved by the Texas Transportation Commission in September 2014 and a call for TAP projects is anticipated in January 2015.

TxDOT recognizes the need to incorporate pedestrian and bicycle accommodations into the planning and design of all transportation projects. To address that need, TxDOT's Design Division has issued memoranda to TxDOT's District Engineers to provide guidance.

In the evaluation of state-maintained roadways, excluding Interstates, other freeways, and frontage roads, 40% of the remaining state highway system's 68,421 centerline miles have a paved outside shoulder width greater than or equal to 4 feet (27,286 miles). Additionally, interstates with shoulders that are located between major metropolitan areas may be used by bicyclists.

BICYCLE ADVISORY COMMITTEE

Rule §1.85, Subchapter F, Chapter 1, Part 1, Title 43, TAC, authorizes TxDOT to create project advisory committees, including TxDOT's Bicycle Advisory Committee (BAC). The purpose of the BAC is to advise the Texas Transportation Commission on bicycle issues and matters of mutual concern between the department and the bicycling community. By involving representatives of the public, including bicyclists and other interested parties, TxDOT helps to ensure effective communication with the bicycling community, and that the bicyclist's perspective will be considered in the development of departmental policies affecting bicycle use, including the design, construction and maintenance of highways. The committee reviews



Barrier-separated cycle track, Austin

TxDOT Bicycle Advisory Committee



Name	Location	Term Expiration
Billy Hibbs, Chair	Tyler	8/31/16
Howard Peak	San Antonio	8/31/15
Anne-Marie Williamson	Wichita Falls	8/31/15
Margaret Charlesworth	San Angelo	8/31/15
Julia Murphy	San Antonio	8/31/16
Robert Gonzales	El Paso	8/31/16
Russ Frank	Houston	8/31/16
David Steiner	Lufkin	8/31/17
Jason Fialkoff	Austin	8/31/17
Karla Weaver	Dallas/Fort Worth	8/31/17
Vacant	TBD	TBD

- Community information and education programs
- Public information campaigns, such as “Bike Safety Month” (May) and “Back to School Safety Month” (September)
- Public information about school zone crosswalk safety
- Public information about older adults and impaired pedestrians.

Engineering

The statewide and regional bicycle and pedestrian coordinators collaborate with transportation planners and engineers within the department and with other agencies and local governments to encourage the integration of bicycle and pedestrian accommodations as part of transportation project scoping. TxDOT provides technical expertise on bicycle and pedestrian issues, including guidance and information about facility design, TxDOT policies, and federal, state and local regulations. Bicycle facilities and pedestrian walkways shall be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation facilities, except where bicycle and pedestrian use are not permitted.

Encouragement

The statewide bicycle and pedestrian coordinator works to ensure that the needs of bicyclists and pedestrians are regularly considered and addressed, especially when TxDOT develops or revises its operating policies, plans and programs. The coordinator represents the department on bicycling and pedestrian issues at the state and national levels and works with local governments, advocacy organizations and others to advance the development of safe and accessible walking and bicycling facilities.

and makes recommendations on items of mutual concern to the department and the bicycling community. The committee provides information and recommendations to the Commission. In 2013, the Commission authorized an increase in committee membership from seven to eleven. As memberships expire, new members will be appointed by the Commission.

THE FIVE E’S

The League of American Bicyclists has identified essential elements across five categories that are consistent in making great places for bicycling, including education, engineering, encouragement, enforcement and evaluation (Five E’s). In support of the League, TxDOT considers the Five E’s.

Education

Education can be a powerful tool for changing behavior and improving skills. Pedestrians, bicyclists and motorists can all benefit from educational tools and messages that communicate the rules of the road and the rights and responsibilities of the various modes of travel. TxDOT works with bicycling advocacy organizations to

develop and provide educational programs that encourage Texans of all ages to learn to ride and to improve their skills and abilities in order to promote safer bicycling and walking. TxDOT sponsored the creation of a comprehensive bicycle and pedestrian safety education curriculum, the “Safe Cyclist Curriculum,” which has been used by teachers and others to educate and teach life-saving bicycle and pedestrian safety skills. Physical education teachers and coaches are encouraged to integrate bicycle safety education as part of their physical education objectives. TxDOT’s Traffic Safety Section manages Section 402 funding for non-infrastructure projects. Depending on the department’s priorities, which will be determined prior to an announcement for a call for projects, the following project types may be eligible:

- Comprehensive school-based pedestrian and bike safety education programs
- Helmet distribution programs
- Pedestrian safety programs for older adults
- Training in the use of pedestrian and bicycle design guidelines

Enforcement

The statewide and regional bicycle and pedestrian coordinators work with TxDOT's Traffic Operations Division and law enforcement agencies to educate law enforcement officials and others about state laws that apply to bicyclists and pedestrians. Increasing the number of law enforcement officials that have received bicycle and pedestrian safety education and enforcement training bolsters efforts to enforce those laws – for motorists, bicyclists, and pedestrians alike, which increases safety and helps reduce accident-related fatalities, injuries and property damage.

Evaluation

The statewide bicycle and pedestrian coordinator works with TxDOT and its Bicycle Advisory Committee to identify the needs and concerns of bicyclists and pedestrians. Project proposals received through a competitive Call for Projects are evaluated with respect to those needs and concerns as well as the priorities established under that Call for Projects. The coordinator serves as a central contact for department staff, local entities, pedestrian advocates, and bicycle advocates on matters related to bicyclists and pedestrians.

FUTURE BICYCLE AND PEDESTRIAN PLANNING

TxDOT plans to develop an interactive State Bikeway Map to identify designated bikeways on state-maintained roadways and provide current roadway data at the click of a button. The map will emphasize the use of consistent terminology to identify existing bikeways and provide a direct link to roadway data critical to bicyclists considering riding on state

Bikeway Terminology



The department is encouraging consistency in the terminology used to describe bikeways and recommends the following nationally recognized terminology and definitions for standard use within TxDOT and with other agencies statewide.

Shared Roadway – The 2012 American Association of State Highway and Transportation Officials (AASHTO) definition: “A roadway that is open to both bicycle and motor vehicle travel.” The 2011 Texas Manual on Uniform Traffic Control Devices (TMUTCD) definition: “A roadway that is officially designated and marked as a bicycle route, but which is open to motor vehicle travel and upon which no bicycle lane is designated.” A signed shared roadway must include posted bike route signs and may include pavement markings.

Bicycle Lane – The 2011 TMUTCD definition: “A portion of a roadway that has been designated for preferential or exclusive use by bicyclists by pavement markings and, if used, signs.” AASHTO (2012) added this expanded language to its definition: “It is intended for one-way travel, usually in the same direction as the adjacent traffic lane, unless designated as a contra-flow lane.”

Shoulder – 2012 AASHTO definition: “The portion of roadway contiguous with the travel way that accommodates stopped vehicles, emergency use, and lateral support for sub base, base, and surface course. Shoulders where paved are often used by bicyclists.” A signed shoulder shall include posted bike route signs and may include pavement markings.

Shared Use Path – 2012 AASHTO and 2011 TMUTCD definitions are fundamentally the same. TMUTCD definition: “A bikeway outside the travel way and physically separated from motor vehicle traffic by an open space or barrier, and either within the highway right-of-way or within an independent right-of-way or within an independent alignment. Shared use paths may also be used by pedestrians (including skaters, users of manual and motorized wheelchairs, and joggers) and other authorized motorized and non-motorized users. Most shared use paths are designed for two-way travel.”

Cycle Track – The National Association of City Transportation Officials (NACTO) definition: “An exclusive bicycle facility that has elements of a separated path and on-road bike lane. A Cycle Track, while still within the roadway, is physically separated from motor traffic and is distinct from the sidewalk.”

roadways. The interactive feature will allow customers to review roadway data such as the average daily traffic, the posted speed limit, and the width of the motor lanes and shoulders, surface material, etc.

TEXAS DEPARTMENT OF TRANSPORTATION

MISSION STATEMENT

Work with others to provide safe and reliable transportation solutions for Texas.

GOALS

- Maintain a safe system
- Address congestion
- Connect Texas communities
- Become best-in-class state agency

VALUES

- Trust
- Integrity
- Responsibility
- Excellence
- Service

This document is part of an educational series on transportation issues
produced by the Texas Department of Transportation.