

# BICYCLE & PEDESTRIAN PROGRAM

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**2019-2020  
EDUCATIONAL  
SERIES**

# BICYCLE & PEDESTRIAN PROGRAM

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## 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 bicycling can reduce fuel consumption, vehicle emissions and traffic congestion. These low-cost forms of personal transportation also support energy conservation, improve public health, contribute to economically vibrant, family-friendly communities, encourage social interaction and enhance 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. TxDOT statewide and regional bicycle and pedestrian coordinators work with local transportation planners and bicycle advocates to develop bike lanes, shared use paths, sidewalks and other facilities that support walking and bicycling.



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

- Improve safety by planning, designing and constructing bicycling and pedestrian facilities that suit the characteristics of each project location.
- Pursue the best available data to plan and deliver the right bicycle and pedestrian accommodations for various roadway users.
- Share data, tools and guidance; fund projects; and engage the community to facilitate development of infrastructure that meets the needs of bicyclists and pedestrians.
- Encourage development of cost-effective, well-designed, low-maintenance solutions.
- Optimize performance of the bicycling and pedestrian networks by emphasizing connectivity and accessibility while supporting economic vitality.
- Participate in educating engineers, planners and the public on safer driving, bicycling and walking.

TxDOT's Bicycle and Pedestrian Program is governed by both federal and state law. Federal law authorizes the use of federal funding for a bicycle coordinator position to promote and facilitate the increased use of non-motorized modes of transportation, including development of facilities for the use of pedestrians and bicyclists, as well as educational, promotional and safety programs. State law directs TxDOT to designate a statewide bicycle coordinator and a bicycle

coordinator in each of TxDOT's 25 district offices. The bicycle coordinators assist TxDOT in developing plans to enhance the safe use of the state facilities by bicyclists. State law also directs TxDOT to adopt rules relating to use of roads in the state highway system by bicyclists, including provisions to:

- Promote consideration of bicycle design, construction and maintenance standards.
- Encourage comments from bicyclists on:
  - Highway projects and programs that might affect bicycle use.
  - The use of a highway for bicycle events.
  - TxDOT policies affecting bicycle use on state highways.





## PLANNING & FUNDING – BICYCLE & PEDESTRIAN PROJECTS

Federal law directs each state to develop a Statewide Transportation Improvement Plan (or “STIP”) for all areas of the state. The Statewide Transportation Improvement Plan provides for the development and integrated management and operation of transportation systems and facilities (including accessible walking and bicycling facilities) that will function as an intermodal transportation system for the state and nation.

In response to both the Americans with Disabilities Act of 1990 and the United States Department of Transportation’s federal Policy Statement on Bicycle and Pedestrian Accommodations, Regulations and Recommendations, TxDOT has established guidelines for the consideration of bicycle and pedestrian accommodations as part of the scoping process for all transportation projects with TxDOT oversight, taking into consideration existing and anticipated facility systems and needs.

In addition to providing safer and more convenient walking and bicycling facilities as part of transportation projects, TxDOT administers several federally funded programs to address serious safety issues. Strategies include driver, bicyclist and pedestrian education implement to countermeasures to address identified safety concern and constructing separate bicycling and pedestrian facilities.

TxDOT’s Unified Transportation Program (or “UTP”) covers 10 years and guides development and authority for planning and construction of transportation projects. Opportunities for development of pedestrian and bicycle

facilities exist under several funding categories in the Unified Transportation Program.

Congestion Mitigation and Air Quality (or “CMAQ”) funding is available in areas where air pollution levels persistently exceed the national ambient air quality standards. Congestion Mitigation and Air Quality funds may include pedestrian and bicycle projects and are distributed by Metropolitan Planning Organizations (or “MPO”) to transportation projects that improve air quality and reduce traffic congestion.

Metropolitan Mobility and Rehabilitation funding is obligated through Metropolitan Planning Organizations in collaboration with TxDOT and may include pedestrian and bicycle accommodations as either independent projects or as part of a larger project.

TxDOT has several plans and programs that compliment the Bicycle and Pedestrian Program.

The State Highway Safety Program supports community highway safety programs that provide funds for non-infrastructure projects, including provisions for safety training and education on walking and bicycling as alternative modes of transportation. TxDOT currently spends approximately \$1 million annually on pedestrian and bicycle education and safety.

The Texas Strategic Highway Safety Plan identifies the serious crash types that the Highway Safety Improvement Program will fund in order to meet the state’s goals and objectives of reducing fatal and serious injury crashes in Texas. The Highway Safety Improvement Program funds construction and operational improvements for highway safety projects located both on and off the state highway system. Because serious pedestrian crashes are on the



rise and pedestrians are more likely to sustain serious or fatal injuries compared with vehicle occupants, pedestrian countermeasures are funded as a separate category. In addition, bicycle improvements may be funded as part of larger transportation projects.

The most recent federal surface transportation authorization bill, Fixing America's Surface Transportation Act (or "FAST Act"), provided for the creation of the Transportation Alternatives Set-Aside Program for funding projects formerly eligible under the Transportation Alternative Program or Transportation Enhancements. Since 1993, TxDOT has awarded about \$447,000,000 in Transportation Alternative Program and Transportation Enhancements program funds for bicycle and pedestrian improvements statewide. These funds have been distributed to communities across the state, including 448 pedestrian and bicycle projects. Projects are used to design:

- Construct shared use paths.
- New or rehabilitated sidewalks with Americans with Disabilities Act improvements.
- Designated bike lane striping, improved roadway crossings with designated crosswalks (*see Pavement Markings for Bicycle Lanes on a Two-Way Street on page 5*).
- Upgrades to existing pedestrian signals, pedestrian and bicycle signage and pavement markings and lighting (*see Pavement Markings for Bicycle Lanes on a Two-Way Street on page 5*).

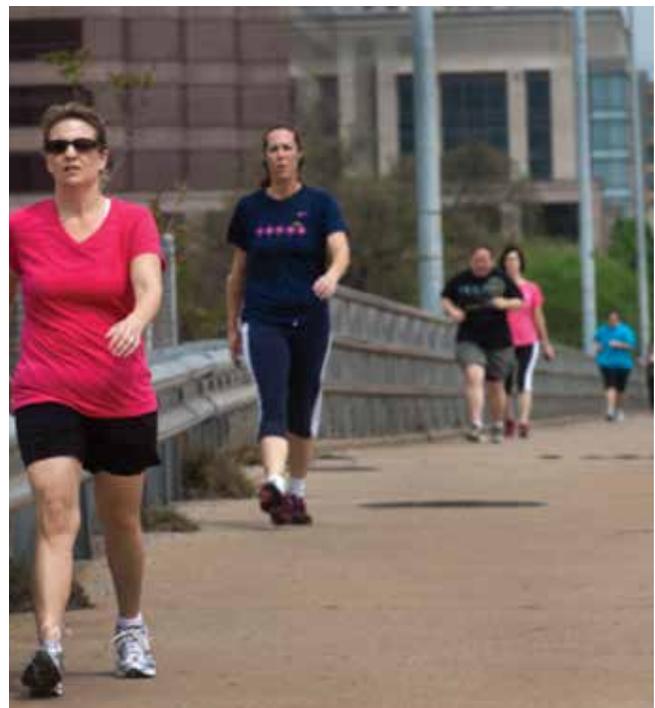
Transportation Alternative Program and Transportation Enhancements program funds are also used to design and construct several pedestrian bridges and make infrastructure modifications to improve bicycle and pedestrian mobility.

The Transportation Alternative Program and Transportation Enhancements program have historically provided the greatest opportunity nationally for funding pedestrian

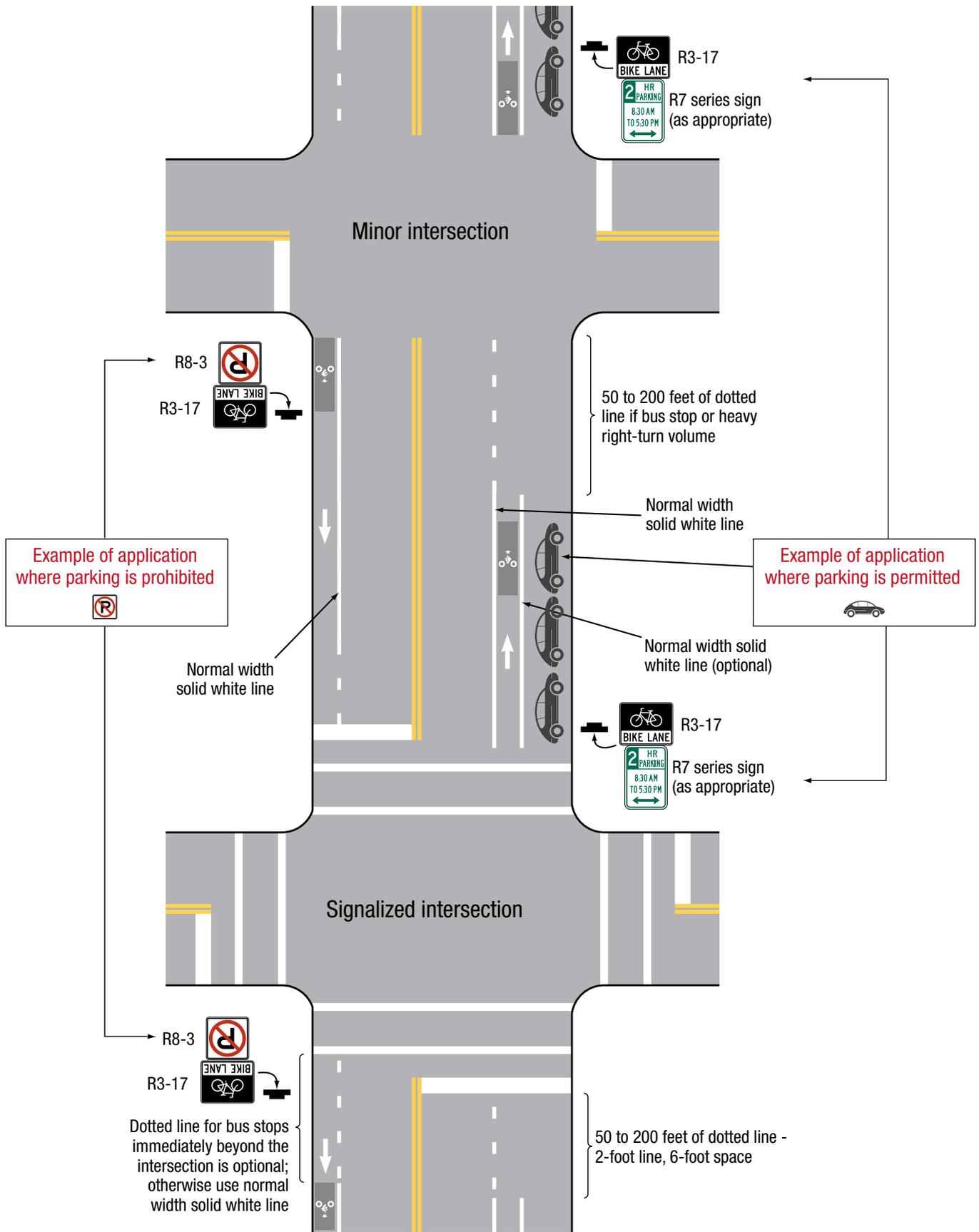
and bicycle projects. The programs include specific funding allocations to allow for local project selection in large urbanized areas through a competitive process administered by Metropolitan Planning Organizations. Funding allocated for small urban and rural areas are awarded through a competitive process administered by TxDOT. TxDOT awarded Transportation Alternative Program and Transportation Enhancements program funds through competitive calls for projects in 2015 and 2017.

To maximize walkability and pedestrian safety statewide, TxDOT transferred a portion of Transportation Alternative Program and Transportation Enhancements Program funds to its existing program addressing Americans with Disabilities Act improvement needs on the state roadway system. This program constructs pedestrian mobility, accessibility and safety improvements. Additionally, TxDOT is updating its Americans with Disabilities Act Transition Plan and developing a Pedestrian Access Plan that will include a comprehensive pedestrian and Americans with Disabilities Act infrastructure inventory and prioritization tool for selecting the right projects.

TxDOT recognizes the need to incorporate pedestrian and bicycle accommodations into the planning and design of all transportation projects. In the evaluation of state maintained roadways, excluding interstates and urban freeways and expressways, 51 percent (38,805 miles) of the remaining state highway system has paved outside shoulder width of at least 4 feet. Additionally, interstate highways with shoulders that are located between major metropolitan areas may be used by bicyclists.



# Pavement Markings for Bicycle Lanes on a Two-Way Street



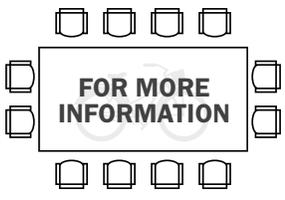
# FUTURE BICYCLE & PEDESTRIAN PLANNING

In 2016, TxDOT initiated a Bicycle Tourism Trails Study. An example network of Texas bicycle tourism routes was developed using quantitative and qualitative routing criteria that TxDOT's Bicycle Advisory Committee developed. The example network was further refined with input from TxDOT's district offices and regional planning organizations. The study serves as an initial high-level network analysis for statewide bicycle tourism consideration and future development. Elements of this study may be featured in future bicycle planning efforts.

Additionally, TxDOT has contracted with Texas A&M's Transportation Institute to research and develop Texas-based best practices for bicycle and pedestrian count monitoring. This research includes deployment of pilot tests, the development of a statewide database of existing bicycle and pedestrian user counts and guidance on adjusting data. Upon completion and further implementation, this research and its products will better inform engineers and planners statewide about facility usage patterns, ultimately resulting in safer bicycle and pedestrian facilities in the future.

## BICYCLE ADVISORY COMMITTEE

TxDOT's Bicycle Advisory Committee advises TxDOT on bicycle issues and reviews and makes recommendations on matters of mutual concern between TxDOT and the bicycling community. By involving representatives of the public, including bicyclists and other interested parties, TxDOT helps to ensure that there is effective communication with the bicycling community and that the bicyclist's perspective will be considered in the development of TxDOT policies affecting bicycle use, including the design, construction and maintenance of highways. The Bicycle Advisory Committee members are appointed by the Texas Transportation Commission to voluntarily serve staggered three-year terms.



**FOR MORE INFORMATION**



SCAN WITH SMART PHONE

Find a current list of members and other resources at [www.txdot.gov](http://www.txdot.gov) keyword search "Bicycle Advisory Committee".

## Bikeway Terminology

TxDOT is encouraging the consistent use of terminology to describe bikeways and recommends the following nationally recognized terminology for standard use within TxDOT and with other agencies statewide.

**Shared Roadway** – The American Association of State Highway and Transportation Officials (or "AASHTO") (2012) definition: "A roadway that is open to both bicycle and motor vehicle travel." The (2011) Texas Manual on Uniform Traffic Control Devices 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) Texas Manual on Uniform Traffic Control Devices definition: "A portion of a roadway that has been designated for preferential or exclusive use by bicyclists by pavement markings and, if used, signs." Association of State Highway and Transportation Officials (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** – Association of State Highway and Transportation Officials (2012) 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** – Association of State Highway and Transportation Officials (2012) and The Texas Manual on Uniform Traffic Control Devices (2011) definitions are fundamentally the same. Texas Manual on Uniform Traffic Control Devices 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 or Separated Bicycle Lane** – The National Association of City Transportation Officials definition: "An exclusive bicycle facility that has elements of a separated path and on-road bike lane. A Cycle Track or Separated Bicycle Lane, while still within the roadway, is physically separated from motor traffic and is distinct from the sidewalk."

# TEXAS DEPARTMENT OF TRANSPORTATION



## VALUES:

### People

People are the Department's most important customer, asset, and resource. The well-being, safety, and quality of life for Texans and the traveling public are of the utmost concern to the Department. We focus on relationship building, customer service, and partnerships.

### Accountability

We accept responsibility for our actions and promote open communication and transparency at all times.

### Trust

We strive to earn and maintain confidence through reliable and ethical decision-making.

### Honesty

We conduct ourselves with the highest degree of integrity, respect, and truthfulness.

## VISION:

A forward-thinking leader delivering mobility, enabling economic opportunity, and enhancing quality of life for all Texans.

## MISSION:

Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.

## GOALS AND OBJECTIVES:

- **Deliver the Right Projects** – Implement effective planning and forecasting processes that deliver the right projects on-time and on-budget.
- **Focus on the Customer** – People are at the center of everything we do.
- **Foster Stewardship** – Ensure efficient use of state resources.
- **Optimize System Performance** – Develop and operate an integrated transportation system that provides reliable and accessible mobility, and enables economic growth.
- **Preserve our Assets** – Deliver preventive maintenance for TxDOT's system and capital assets to protect our investments.
- **Promote Safety** – Champion a culture of safety.
- **Value our Employees** – Respect and care for the well-being and development of our employees.



This document is part of an educational series on transportation issues produced by the Texas Department of Transportation. This document, the full Educational Series and other helpful resources can be found online at [www.txdot.gov](http://www.txdot.gov) keyword search "State Legislative Affairs".