Texas Department of Transportation

MEETING AGENDA

TxDOT Bicycle Advisory Committee (BAC)
April 6, 2020 - 9:30 A.M.
Note: This meeting will be held remotely via Webex
Teleconference instructions below

1.	Call to Order.
2.	Safety briefing.
3.	Approval of minutes from January 17, 2020 BAC meeting. (Action)
4.	Report from TxDOT's Public Transportation Division Director regarding statewide bicycle and pedestrian matters.
5.	Discussion and recommendation on Texas Transportation Commission charge to review and make recommendations on expanding the charge of the BAC to address a wider range of related transportation service options, including pedestrian options and personal mobility devices. (Action)
6.	Update on Bikeway Design Effort – Phase I implementation and Phase II approach. (Action)
7.	Update from committee members on local and statewide issues.
8.	Public comment – Due to the virtual format of the meeting, public comments may be submitted by email to BikePed@txdot.gov by April 16, 2020, to be included as part of the meeting record.
9.	Adjourn. (Action)

I certify that I have reviewed this document and that it conforms to all applicable *Texas Register* filing requirements.

CERTIFYING OFFICIAL: Becky Blewett, Deputy General Counsel, (512) 463-8630.

BAC Members

Karla Weaver, Chair, Dallas/Ft. Worth
Bobby Gonzales, Vice Chair, El Paso
Clint McManus, Houston
David Ham, Midland
Eva Garcia, Brownsville
Frank Rotnofsky, Laredo
Jeff Pollack, Corpus Christi
Mike Schofield, Austin
Rick Ogan, San Angelo
Trent Brookshire, Tyler

TxDOT Technical Staff

Eric Gleason, Director, Public Transportation Division (PTN)
Donna Roberts, Program Services Section Director, PTN
Bonnie Sherman, Bicycle & Pedestrian Program Manager, PTN
Noah Heath, Bicycle & Pedestrian Planner, PTN
Carl Seifert, Transportation Planner (Contractor), Jacobs

* * *

Teleconference instructions:

Event address for attendees:
https://txdot.webex.com/txdot/onstage/g.php?MTID=e699b6f885ef57cd1bb2e0549c53611d7
Event number/Access code: 731 798 595
Event password: Bac0406
To receive a call back, provide your phone number when you log-in, or call the number below and enter the access code (above).
United States TOLL: +1-415-655-0003

MINUTES FOR ADOPTION
Bicycle Advisory Committee – Teleconference Meeting
200 E. Riverside Drive, Austin TX 78704 – Classroom A
January 17, 2020

BAC Committee Members Present and Participating:

In-Person:
Karla Weaver, *Dallas/Fort Worth, Chair*
David Ham, *Midland*
Eva Garcia, *Brownsville*
Frank Rotnofsky, *Laredo*
Jeffrey Pollack, *Corpus Christi*
Mike Schofield, *Austin*
Rick Ogan, *San Angelo*
Trent Brookshire, *Tyler*

Via telephone:
Robert Gonzales, *El Paso, Vice Chair*

TxDOT Present and Participating:

Marc Williams, Deputy Executive Director, TxDOT (ADM)
Eric Gleason, Director, Public Transportation Division (PTN)
Donna Roberts, Program Services Section Director (PTN)
Bonnie Sherman, Statewide Bicycle / Pedestrian Coordinator (PTN)
Noah Heath, Statewide Bicycle / Pedestrian Planner (PTN)

Also Present and/or Participating:

Carl Seifert, Jacobs Engineering Group
Shawn Turner, Texas A&M Transportation Institute

AGENDA ITEM 1: Call to Order.

Karla Weaver calls the meeting to order at 9:32 A.M.

AGENDA ITEM 2: Safety Briefing.

Bonnie Sherman provided a safety briefing beginning at 9:34 A.M.

AGENDA ITEM 3: Approval of minutes from October 11, 2019, BAC meeting.

Karla Weaver introduced this item at 9:35 A.M.

MOTION Eva Garcia moved to approve the October 11, 2019 BAC meeting minutes.

SECOND Rick Ogan seconded the motion.

The motion passed unanimously at 9:35 A.M.

AGENDA ITEM 4: Report from TxDOT's Public Transportation Division Director regarding statewide bicycle/pedestrian matters.

Eric Gleason delivered the Director's report beginning at 9:36 A.M.

Eric Gleason announced the resignation of Shawn Twing from the committee, and explained the options to fill the vacancy. Eric also shared the 2019 Bicycle Friendly State Report Card for Texas published by the League of American Bicyclist Bicycle, which generated discussion.

Comments: Eric Gleason, Karla Weaver, Eva Garcia, Trent Brookshire, Jeff Pollack, and Frank Rotnofsky

AGENDA ITEM 6: Discussion on Texas Transportation Commission charge to review and make recommendations on expanding the charge of the BAC to address a wider range of related transportation service options, including pedestrian options and person mobility devices. (Action)

Chair Weaver asked to switch Agenda Items 6 and 5 due to Deputy Executive Director William's limited time 9:50 A.M.

Noah Heath presented the item at 9:50 A.M.

The presentation generated discussion amongst BAC members about possible expansion of scope for the committee.

No action was taken at this time.

Questions/Comments: Eva Garcia, Karla Weaver, Robert Gonzales, Rick Ogan, Mike Schofield, David Ham, Frank Rotnofsky, Jeff Pollack, Donna Roberts, Marc Williams, and Noah Heath.

AGENDA ITEM 5: Update on Bikeway Design Effort – Phase I implementation and Phase II approach. (Action)

Bonnie Sherman presented this item at 10:55 A.M.

MOTION Eva Garcia motioned to acknowledge and endorse Phase I implementation and Phase II approach. (Action)

SECOND Frank Rotnofsky seconded the motion.

The motion passed unanimously at 11:12 A.M.

Questions/Comments: Karla Weaver, Eric Gleason, and Bonnie Sherman.

AGENDA ITEM 7: Presentation on TxDOT activities for bicyclist and pedestrian counting.

Shawn Turner presented the item at 11:13 A.M.

Questions/Comments: Eva Garcia, Shawn Turner, Bonnie Sherman, and Karla Weaver.

AGENDA ITEM 8: Presentation on Federal Highway Administration peer exchange for bicycle/pedestrian count technology pilot.

Karla Weaver presented the item at 11:27

No Comments.

AGENDA ITEM 9: Update from committee members on local and statewide issues.

Karla Weaver introduced this item at 11:40 A.M.

Reports from BAC Members including: Jeff Pollack, Frank Rotnofsky, Trent Brookshire, Eva Garcia, David Ham, Rick Ogan, Mike Schofield, and Karla Weaver.

AGENDA ITEM 10: Public comment – public comments will only be accepted in person.

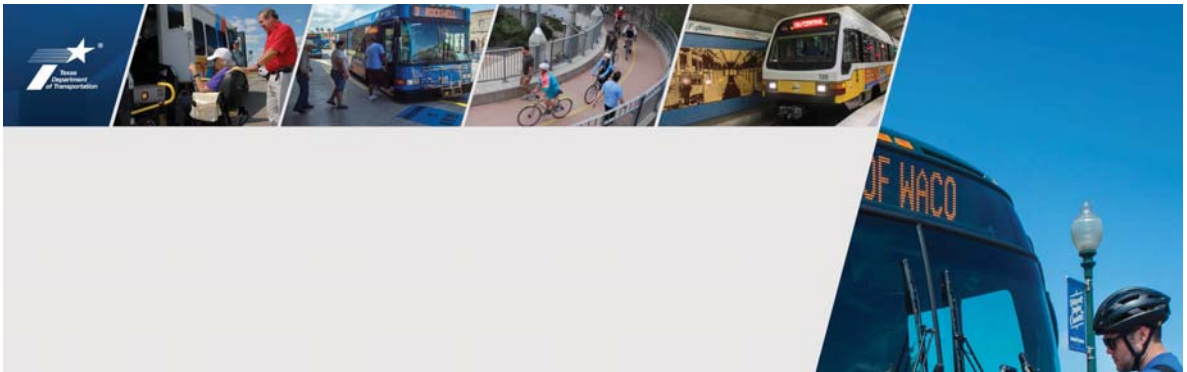
Karla Weaver introduced Robin Stallings, BikeTexas, at 12:00 P.M. Mr. Stallings commented on Agenda Item 5.

Karla Weaver introduced Curtis Rogers, Austin Bicycle Advisory Council, at 12:05 P.M. Mr. Rodgers commented on Agenda Item 5.

AGENDA ITEM 11: Adjourn. (Action)

Meeting adjourned at 12:10 P.M.

Prepared by:	Approved by:
Noah Heath Public Transportation Division	Karla Weaver Chair, Bicycle Advisory Committee



BAC Scope Expansion Draft Recommendation

Quarterly BAC Meeting
April 6, 2020

New request from Texas Transportation Commission

"The commission charges the committee with the following priorities:

1) *Review and make recommendations on expanding the charge of the committee to address a wider range of related transportation service options, including pedestrian options and personal mobility devices; and*
2) *Review and make recommendations of enhancements to safety and efficiency in the design of bicycle facilities."*

Texas Transportation Commission Minute Order 115565 - August 29, 2019

Draft recommendations

- Expand the scope of the Bicycle Advisory Committee to include pedestrians
- Expand the scope of the Bicycle Advisory Committee to consider personal mobility devices (micro-mobility) as it relates to bicycle and pedestrian issues
- To ensure a holistic approach, consider diversifying the future membership composition of the committee to include members with varying backgrounds related to bicycle and pedestrian interest

Questions

Please send additional questions and comments to:

Bonnie Sherman, AICP
TxDOT – Public Transportation Division
Statewide Bicycle and Pedestrian Coordinator
Bonnie.Sherman@txdot.gov
(512) 486-5972

Noah Heath, AICP
TxDOT – Public Transportation Division
Bicycle and Pedestrian Planner
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(512) 486-5973

Carl Seifert, AICP
Carl.Seifert@Jacobs.com
(512) 486-5974
JACOBS

Bikeway Design Effort

Update

April 6, 2020

Presentation agenda

1. Phase 1: Implementation update
2. Phase 2: Facility Selection Principles
3. Discussion
4. Next Steps

Phase 1 Areas of Concurrence: Implementation Update (1 of 3)

1) Standardize bikeway design guidance so TxDOT engineers refer to one source
   - Design Division is developing interim guidance as well as more comprehensive long-term updates to TxDOT's Roadway Design Manual and associated processes and guidance
2) Initiate District bicycle plans statewide
   - Compile best practices (2020)
   - Consultant procurement - Initiate District bike plans (2021)
3) Continue to incorporate bicycle criteria into Project Safety Scoring Tool
   - Tool development in process by Design Division
4) Develop District-level bike/ped design engineering subject matter expertise
   - Developed TxDOT internal SharePoint website (2019)
   - Organize/establish agency-wide "Community of Practice" (2020)
5) Promote collection of bike/ped data
   - On-system pedestrian and bicycle facility inventory (2020 completion)
   - Training for staff, local governments, and contractors in basic non-motorized count best practices (2020)
   - New user-friendly Strava online platform being rolled out (2020)
   - Initiate data collection procurement (2020-2021)

Phase 1 Areas of Concurrence: Implementation Update (2 of 3)

6) Refine DSR or develop scoping tool to address b/p needs based on context
   - Scoping requirements pending Bikeway Design Effort Phase 2 (2020)
   - Design Division reviewing options for tool development
7) Refine requirements to better incorporate temporary b/p facilities (detours) in traffic control plans
   - Traffic Safety Division incorporated pedestrian detours into District traffic control plan review/score sheet
8) Refine existing or create new TxDOT training classes
   - Pending Community of Practice
9) Refine comment response process to better document bikeway needs
   - Future coordination with Transportation Planning and Programming Division (TPP)
10) Update standard contract to ensure consistent b/p accommodation and allow for design flexibility
   - Coordination with Professional Engineering Procurement Services Division initiated

Phase 1 Areas of Concurrence: Implementation Update (3 of 3)

11) Develop informational handouts to strengthen bike/ped involvement at PDCC & DCC
    - Future coordination with TPP
12) Create a state-level clearinghouse of bike/ped transportation plans
    - Consultant scope underdevelopment (2020-2021)
13) Assess bike and ped consultant qualifications separately
    - Pre-certification qualifications modified; in process. (2021)
14) Formalize bike/ped performance measures as part of department project scoring and selection processes (e.g. Decision Lens)
    - Future coordination with TTP
15) Develop guidance and awareness for annual District bike meeting/hearing
    - Future coordination with TPP

Bikeway Design Effort: Overview

PHASE 1: *Project Development Processes* *Sept 2018 – July 2019*

PHASE 2: *Bikeway Design Guidance* *July 2019 – Jan 2021*

Parallel Tasks:

- *Disseminating information*
- *Local government coordination*

Phase 2 Topics: Overview

Design Topic Categories	*Preliminary Discussion Topics*
Facility Selection	• Land Use Context/Design user • Continuum of facility types • Understanding constraints/trade-offs • When wide outside lanes are appropriate/necessary • Possible endorsement of FHWA Bikeway Selection Guide
Corridor/ Linear Bikeways	• Shared vs separated bike/ped facilities • Rumble strip types and appropriate usage • Preferred barrier types for SUPs and SBLs • 1 way vs 2 way; 1 side vs both sides for SUPs/SBLs • Applying AASHTO and NACTO?
Intersections & conflict points	• Green pavement markings • Bike signals • Protected intersections • Driveways and RRD crossings • Signage & pavement markings for safer intersections
Maintenance	• Surface treatment materials (thermos, MMA, etc.) • Reducing lane widths to add bike lanes • Maintenance of barrier separated bikeways • Overlay materials (aggregate size)

Facility Selection: We presume that bikes and peds will be considered

"… 'due consideration'… should include, at a minimum, a **presumption** that bicyclists and pedestrians, including persons with disabilities, **will be accommodated in the design of new and improved transportation facilities**, bicyclists and pedestrians should be included **as a matter of routine**, and the **decision to not accommodate them should be the exception rather than the rule**."

- ***FHWA Bicycle and Pedestrian Planning, Program, and Project Development***

https:///www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/guidance_2019.cfm#bp2
Revised 9/26/2019

Facility Selection Concepts

Helping transportation practitioners consider and make informed trade-off decisions for selecting the safest bikeway type for a project/corridor.

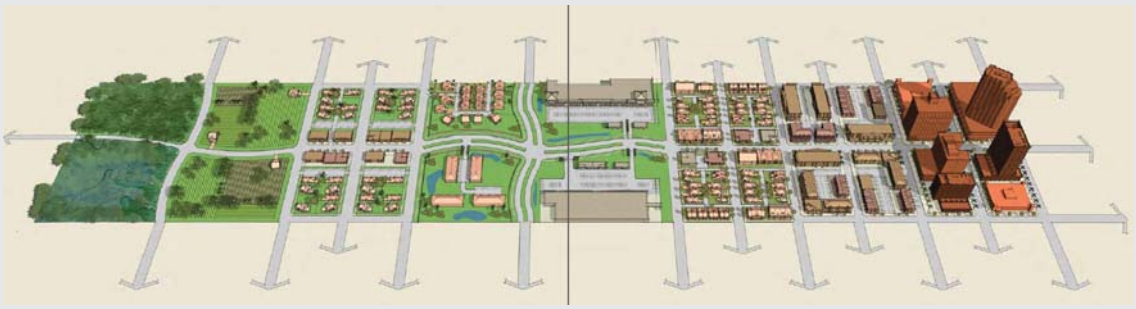
- Criteria important to bikeway selection
  - Land Use Context
  - Design User
  - Roadway characteristics (context-sensitive trade-offs)
  - Functional classification
  - Engineering judgement
  - Existing network plans or local input
  - And others (e.g. *on-street parking, bicycle demand, peak hour traffic volume, driveway/intersection density, vehicle mix, and curbside activity*)

Safety in Numbers

- Low-stress, connected bikeways positively correlate with increased bicycling
- Bicycling risk decreases as bicyclists numbers increase

Best facility in one location ≠ Best facility in all locations

What is the land use context for the project?



Natural	Rural	Rural Town	Suburban Residential	Suburban Commercial	Urban General	Urban Center	Urban Core

Florida DOT

	Rural	Rural Town	Suburban		Urban Center	Urban Core

AASHTO Green Book & Colorado DOT

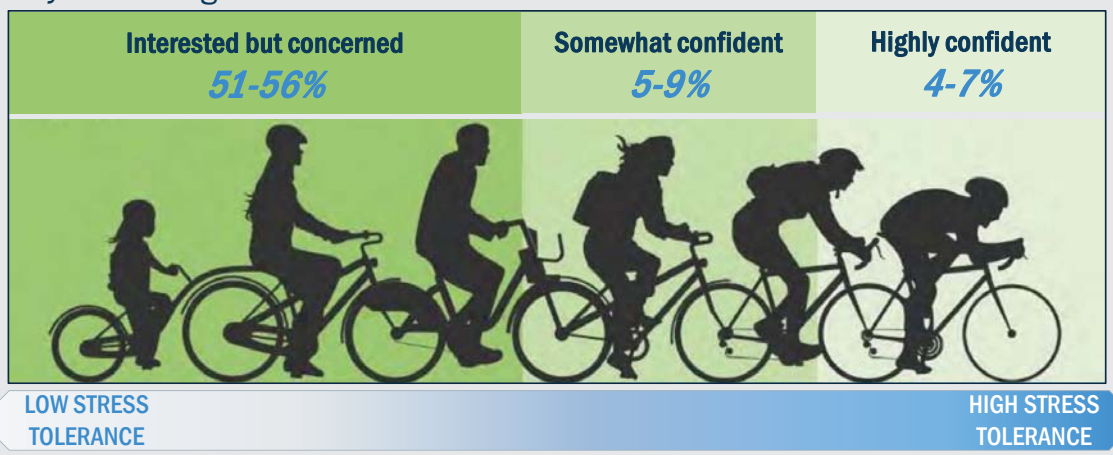
	Rural		Suburban			Urban

TxDOT

FDOT Context Classification. August 2017.

Who should the design user be?

Bicyclists Design User Profiles



Dill, J. McNeil, N (2012). Four Types of Cyclists? Examining a Typology to Better Understand Bicycling Behavior and Potential

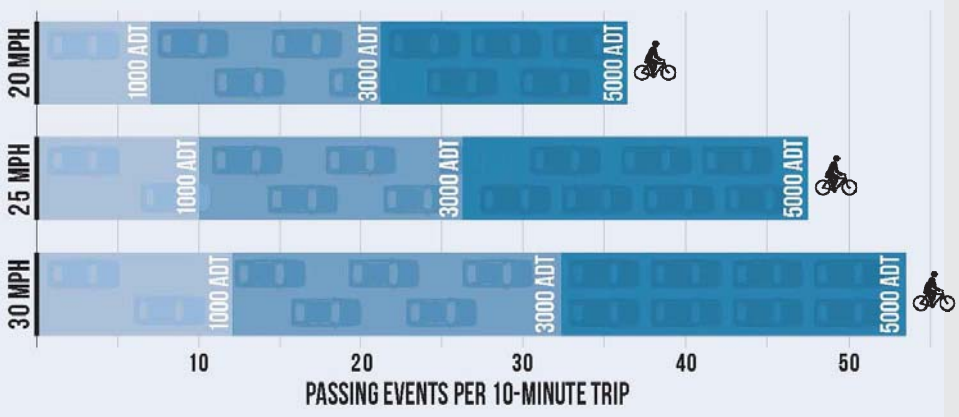
How does a project fit into the local bicycle network?

- Low-stress bicycle networks (aka: "all ages and abilities", "high comfort network")
  - Separate bicyclists from traffic using SBLs and SUPs
  - Have resulted in bicycling rates of 5 to 15% in US.
    - 15 to 50% in countries with supportive policies, land use, and transit
- Basic bikeway network
  - Bikeways include bicycle lanes and shoulder and treatments to slow motor vehicle speeds
  - Have resulted in bicycling rates of 2 to 3% in US.
- Traffic-tolerant bicycle network
  - Serves only highly confident bicyclists
  - Result in bicycling rates under 2%
- Blended network
  - Focused *all ages and abilities* spine network for important connections supplemented with *basic bikeway network* serving less popular destinations

FHWA (2019). Bikeway Selection Guide. https://safety.fhwas.dot.gov/ped_bike

Connection between speed and volume

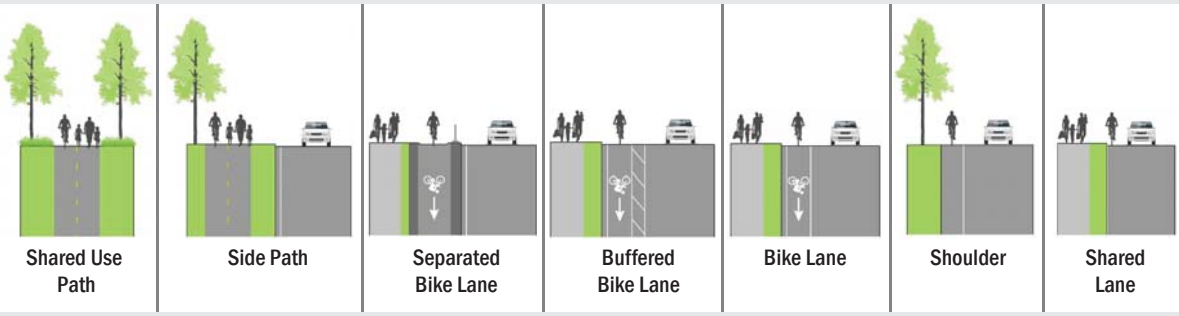
Conflicts increase with speed and volume



- Proximity to motor vehicle traffic is a significant source of stress and discomfort for bicyclists.
- Crash and fatality risks rise sharply for users when motor vehicle speeds exceed 25 mph.

NACTO (2017). Designing for All Ages & Abilities: Contextual Guidance for High-Comfort Bicycle Facilities. https://https://nacto.org/wp-content/uploads/2017/12/NACTO_Designing-for-All-Ages-Abilities.pdf

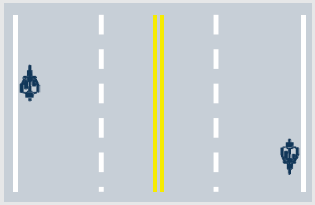
Consideration of on-street versus separated facilities



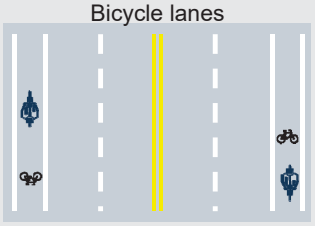
Consideration of wide outside lanes

- Where right-of-way constraints prevent bike lane, wide outside lanes can facilitate passing maneuvers.
- Comparing wide outside lane (WOL) and bicycle lanes,
  - Studies varied about where bicyclists ride [1, 2]
  - Studies varied about how much separation vehicles provide for bicyclists [3, 4]
- FHWA Bikeway Selection Guide[5]:
  - Wide outside lanes are associated with increases in motor vehicle speeds, which reduce comfort and safety for bicyclists
  - Not recommended for bicycling except as an interim treatment for retrofits where an existing road is being re-striped and all other travel lanes have been narrowed to minimum widths
  - In urban settings, shared lanes are generally only recommended for speeds less than 35 mph and volumes less than 3,000 ADT

Wide outside lanes



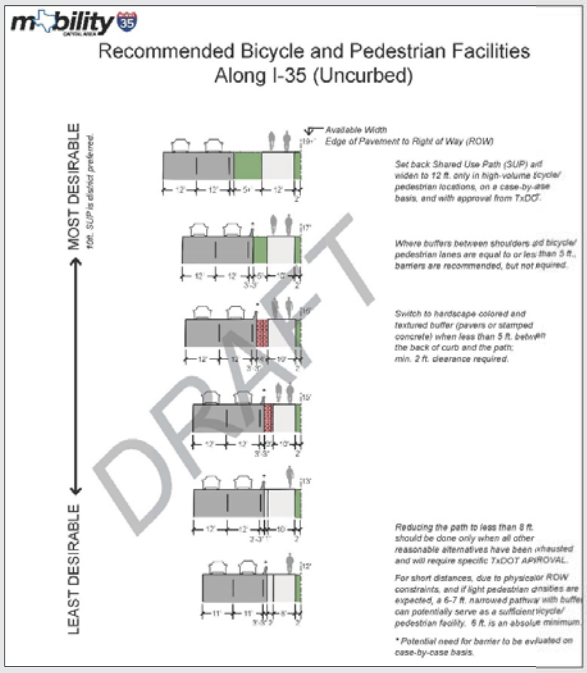
Bicycle lanes



[1] NCHRP 766: *Recommended Bicycle Lane Widths for Various Roadway Characteristics.* Torbic et al. 2014.
[2] Harkey, D.L., and J. R. Stewart. *Evaluation of Shared-Use Facilities for Bicycles and Motor Vehicles*. In Transportation Research Record: Journal of the Transportation Research Board, No. 1578. Washington, DC, 1997, pp. 111-118.
[3] Hunter, W.W., et al. A Comparative Analysis of Bicycle Lanes Versus Wide Curb Lanes: Final Report. FHWA- RD-99-034. 1999.
[4] Sando, T. et al. Operational Analysis of Interaction between Vehicles and Bicyclists on Highways with Wide Curb Lane. 90th Annual Meeting of TRB, 2011.
[5] FHWA, 2019. *Bikeway Selection Guide.* p 29

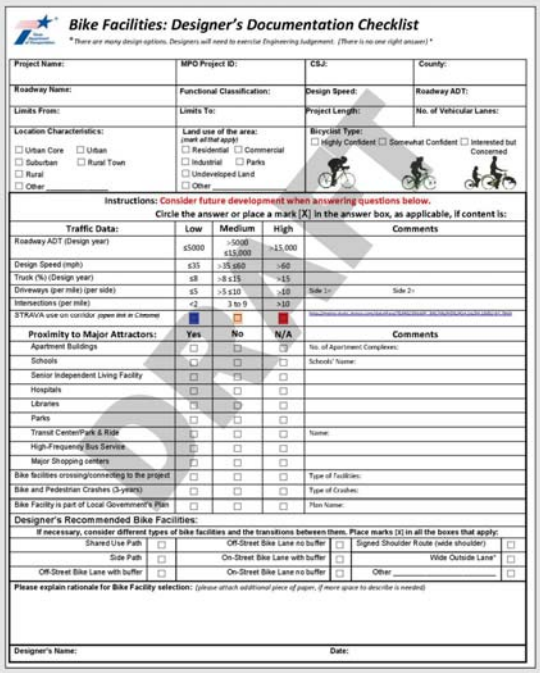
TxDOT District selection guidance examples

Bikeway recommendations by ROW available



Mobility 35, TxDOT Austin District

Designer's bikeway selection checklist



TxDOT Houston District

Phase 2 topics overview

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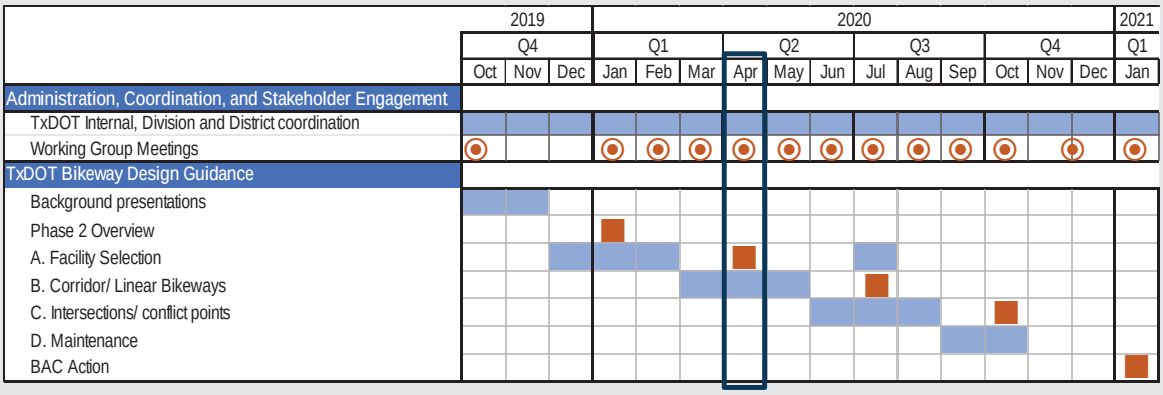
Phase 2 schedule overview



BAC Working Group Meeting

BAC Meeting

Discussion

Questions

Please send additional questions and comments to:

Bonnie Sherman, AICP
TxDOT – Public Transportation Division
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