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Texas A&M Transportation Institute

Training and Implementation Resources for Pedestrian and Bicyclist Count Data

Technical Report 5-6927-01-IPR1

Cooperative Research Program

TEXAS A&M TRANSPORTATION INSTITUTE
COLLEGE STATION, TEXAS

in cooperation with the
Federal Highway Administration and the
Texas Department of Transportation
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16. Abstract

A previous Texas Department of Transportation (TxDOT) research project (0-6927) developed a statewide pedestrian and bicyclist count database (https://mobility.tamu.edu/bikepeddata/), as well as guidance and requirements for collecting and submitting additional count data to this statewide database.

This implementation project developed three training components to effectively disseminate this technical information to TxDOT district and regional/local agency staff:

1. Short overview webinars to convey basic concepts and generate interest for in-depth training.
2. In-depth training workshops to address technical details related to three main topic areas: (a) data collection and equipment, (b) data summary and analysis, and (c) data use for decision-making.
3. An online resource page to highlight various online documents and resources.

This implementation report documents the availability of these training resources.

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TRAINING AND IMPLEMENTATION RESOURCES FOR PEDESTRIAN AND BICYCLIST COUNT DATA

by

Shawn Turner
Senior Research Engineer

Phil Lasley
Associate Research Scientist

Robert Benz
Research Engineer

and

Michael Martin
Assistant Research Scientist

Texas A&M Transportation Institute

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TEXAS A&M TRANSPORTATION INSTITUTE
College Station, Texas 77843-3135

DISCLAIMER

This research was performed in cooperation with the Texas Department of Transportation (TxDOT) and the Federal Highway Administration (FHWA). The contents of this report reflect the views of the authors, who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official view or policies of FHWA or TxDOT. This report does not constitute a standard, specification, or regulation.

The United States Government and the State of Texas do not endorse products or manufacturers. Trade or manufacturers' names appear herein solely because they are considered essential to the object of this report.

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- Lead: Bonnie Sherman, TxDOT.
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CHAPTER 1. INTRODUCTION

BACKGROUND

Texas Department of Transportation (TxDOT) Research Project 0-6927 involved development of a statewide pedestrian and bicyclist count database (https://mobility.tamu.edu/bikepeddata/), as well as guidance and requirements for collecting and submitting additional count data to this statewide database. The results of this research project are summarized in the project summary report (https://tti.tamu.edu/documents/0-6927-PSR.pdf) and documented in full in the final project report (https://tti.tamu.edu/documents/0-6927-R1.pdf). The research team also developed two other guides in the TxDOT 0-6927 project to provide technical information on pedestrian and bicyclist count data:

- *Guide for Seasonal Adjustment and Crowdsourced Data Scaling*: https://tti.tamu.edu/documents/0-6927-P6.pdf.
- *Guide for Pedestrian and Bicyclist Count Data Submittal*: https://static.tti.tamu.edu/tti.tamu.edu/documents/0-6927-P7.pdf.

Training on these technical resources is needed to effectively disseminate this information to TxDOT district and regional/local agency staff.

PROJECT OBJECTIVE

The objective of this implementation project was to develop and deliver training on pedestrian and bicyclist data collection, analysis, and use in decision-making. The training took several forms, including overview webinars, in-depth technical sessions, and an online resource page.

CHAPTER 2. DOCUMENTATION OF TRAINING

TRAINING OVERVIEW

This implementation project focused on three training components:

1. **Short overview webinars** to convey basic concepts and generate interest for in-depth training.
2. **In-depth training workshops** to address technical details related to three main topic areas: (a) data collection and equipment, (b) data summary and analysis, and (c) data use for decision-making.
3. **An online resource page** to highlight various online documents and resources.

SHORT OVERVIEW WEBINARS

Short overview webinars were held online on February 6 and 11, 2020. These webinars were intended to convey basic concepts at a summary level and were designed to last a maximum of 90 minutes. Both overview webinars had the exact same content but were offered on two different weekdays to ensure maximum participation. For both dates combined, the total attendance was more than 130 participants. The webinars were recorded for later viewing (see https://tti-tamu.webex.com/recordingservice/sites/tti-tamu/recording/play/b3020c23499f48788243c74cf6b0eee5). Figure 1 illustrates the February 11 online webinar recording.

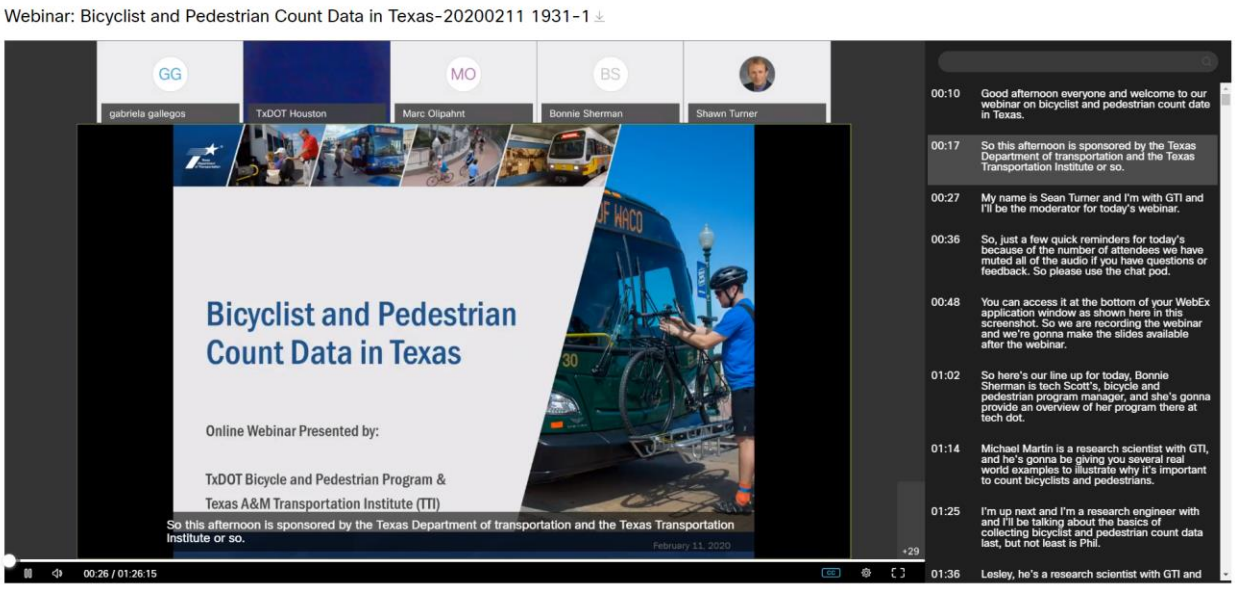

Figure 1. Illustration of Online Recording of Short Overview Webinar Training.

IN-DEPTH TRAINING WORKSHOPS

The original work plan called for an in-depth, in-person, full-day training workshop to be held in four locations:

1. Rio Grande Valley/Pharr District.
2. San Antonio.
3. Dallas–Ft. Worth.
4. Houston.

These in-person workshops were planned for March, April, and early May. The first workshop (Rio Grande Valley/Pharr District) was held on March 6, 2020, in Weslaco. The onset of the COVID-19 pandemic caused concerns about in-person training, and the in-person workshops were postponed until later in June or July. In May, it was obvious the pandemic was going to affect in-person training throughout the summer. Therefore, TxDOT and the Texas A&M Transportation Institute (TTI) decided to change the in-person training to online training.

The in-person training included three distinct sections: (1) collecting data; (2) summarizing and analyzing data; and (3) using data for decision-making. Therefore, TxDOT and TTI decided to convert each of these three sections to a single-session, three-hour training module, to be delivered one per week on three consecutive weeks. The three online modules were delivered in late July and early August, and all online training events were recorded for online access afterward.

- Module 1, July 23: Data collection and equipment: https://youtu.be/kL5Bs617BPw.
- Module 2, July 29: Data summary and analysis: https://youtu.be/_Y8_wIzKHiM.
- Module 3, August 4: Data use for decision-making: https://youtu.be/LonLva61ufg.

Also, all training material (i.e., presentation slides) was provided via online hyperlinks after the training sessions. This online training material was also included on the online resource page described in the next section. Continuing education credits for this in-depth training were made available through the American Planning Association.

Figure 2 illustrates the online recording of a live demonstration of the statewide database software during the July 29 training session. Figure 3 is a screenshot of the online training materials from Module 1.

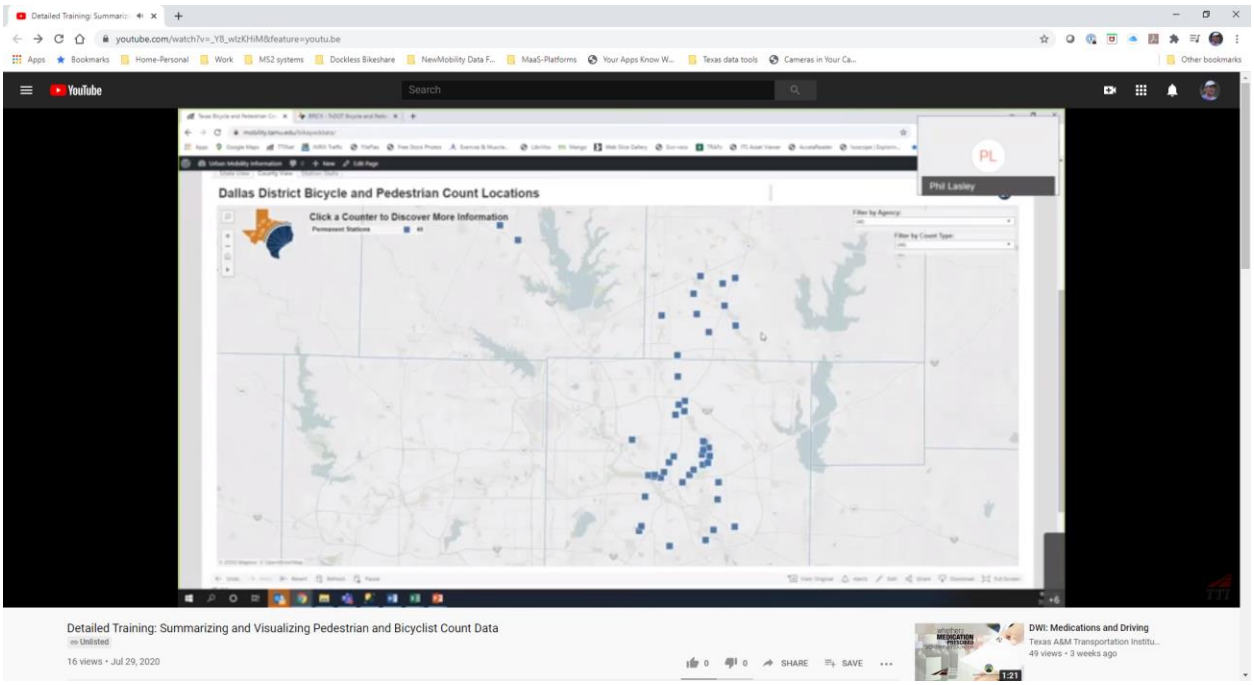

Figure 2. Illustration of Online Recording of In-Depth Training Session.

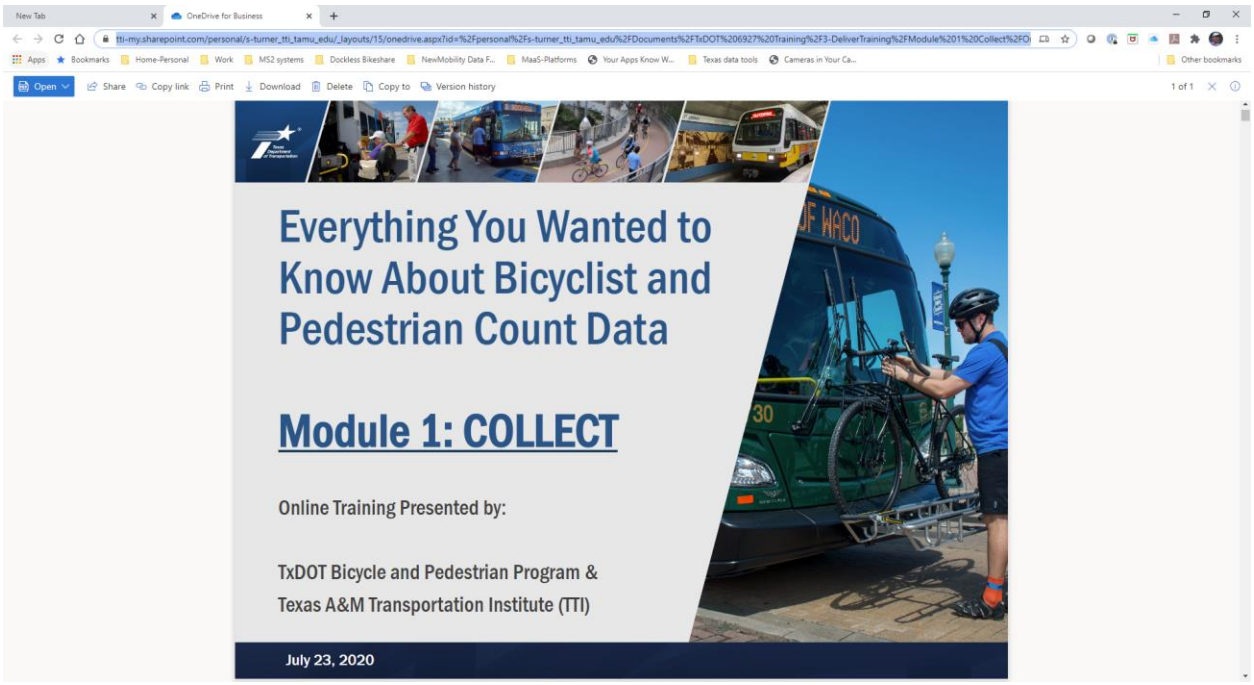

Figure 3. Illustration of Online In-Depth Training Material.

ONLINE RESOURCE PAGE

The third implementation component was an online resource page to be hosted on TxDOT's Bicycle and Pedestrian Program webpage. This resource page highlights key online resources, including the previous research reports and the training material developed in this implementation project.

As of mid-August 2020, the resource page was publicly available at https://www.txdot.gov/inside-txdot/modes-of-travel/bicycle/bicycle-pedestrian-count/bicycle-pedestrian-count-resources.html (see Figure 4 for screenshot).

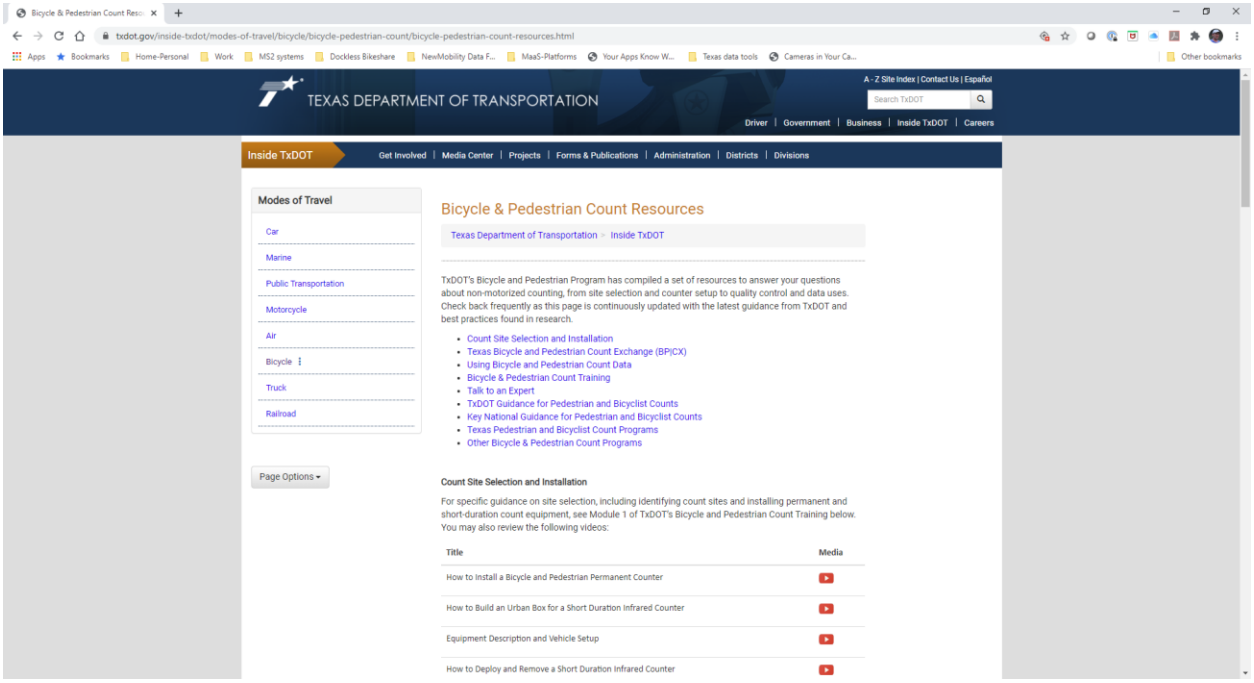

Figure 4. Screenshot of TxDOT Bicycle and Pedestrian Count Resource Page.

CHAPTER 3. CONCLUSIONS AND RECOMMENDATIONS

Despite complications from the COVID-19 pandemic, there was very high interest in the training offered in this implementation project. Originally, the in-depth training was planned for in-person sessions at four locations around Texas. After the first in-person training was held in person in the Pharr District in early March, the remaining three training sessions were converted to an online format, as described earlier.

The participation in the online training events exceeded expectations, and in several cases involved almost 100 participants.

- February 6 Overview Webinar: 82 online participants.
- February 11 Overview Webinar: 53 online participants.
- March 6 In-Person Training (Pharr District): 26 in-person participants.
- July 23 Online Module 1 on Data Collection and Equipment: 85 online participants.
- July 29 Online Module 2 on Data Summary and Analysis: 66 online participants.
- August 4 Online Module 3 on Data Use for Decision-Making: 64 online participants.

Having this many participants at an in-person training event would have been very challenging.

There is a high level of interest in pedestrian and bicyclist count data, as indicated by the participation in the online training events. Many of the participants, though, were from regional and local agencies, like cities and metropolitan planning organizations. This participation by regional and local agencies mirrors the amount of count data in the statewide pedestrian and bicyclist count database. Therefore, it is critical for TxDOT to maintain ongoing communication and coordination with regional and local agencies that are collecting and using pedestrian and bicyclist count data for a variety of decisions.