## GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES, 5<sup>TH</sup> EDITION

## **CHAPTER SUMMARIES**



The 2024 *Guide for the Development of Bicycle Facilities*, 5<sup>th</sup> Edition, contains a total of 16 chapters, including seven (7) revised chapters and nine (9) new chapters.

The following table provides a summary of each chapter.

CHAPTER #	TITLE	NEW OR REVISED	DESCRIPTION
Chapter 1	Introduction	Revised	Chapter 1 provides an overview of the purpose, scope, and structure of the guide, as well as explains the range of potential values of design elements, as used throughout the guide.
Chapter 2	Bicyclist Operation and Safety	Revised	Chapter 2 provides the designer with a basic understanding of the types of bicyclists that use bikeways and streets, their operational preferences, types of bicycles and their performance characteristics, and common safety challenges.
Chapter 3	Bicycle Planning	Revised	Chapter 3 describes how to apply principles of safety, comfort, connectivity, and legibility to plan for low-stress bicycle networks. It also reviews the different types of plans that may contain elements related to bicycling and approaches to bicycle planning.
Chapter 4	Guidance for Choosing a Bikeway Type	New	Chapter 4 provides a framework for selecting a preferred bikeway type based on traffic characteristics in different land use contexts. It is based on FHWA's <i>Bikeway Selection Guide</i> , which was developed to assist transportation agencies in the development of connected, safe, and comfortable bicycle networks that meet the needs of people of all ages and abilities.
Chapter 5	Elements of Design	New	Chapter 5 provides guidance for elements of design that are common to a wide range of bicycle facility types, including design speed, sight distance, operating width, geometric design treatments for street crossings, and common traffic control devices.
Chapter 6	Design of Shared Use Paths	Revised	Chapter 6 provides information on shared use paths (commonly referred to as trails, paths, or greenways), which are paths designed for and generally used by bicyclists, pedestrians, and other active transportation users.
Chapter 7	Design of Separated Bike Lanes and Side Paths	New	<b>Chapter 7</b> provides guidance on the design of separated bike lanes and side paths.
Chapter 8	Bicycle Boulevard Planning and Design	New	Chapter 8 provides an overview of key traffic calming and traffic management treatments common on bicycle boulevards.
Chapter 9	Design of Shared Lanes and Bike Lanes	Revised	<b>Chapter 9</b> provides guidance for the design of shared lanes and bike lanes in all contexts, including at mid-block and intersection locations.

CHAPTER #	TITLE	NEW OR REVISED	DESCRIPTION
Chapter 10	Traffic Signals and Pedestrian Hybrid Beacons	New	Chapter 10 provides design guidance on how to accommodate people biking at pedestrian hybrid beacons and traffic signals, including traffic signal head options for controlling bicycles, signal phasing, signal timing, and detection.
Chapter 11	Bicycle Facility Design at Interchanges, Alternative Intersections, and Roundabouts	New	Chapter 11 provides high-level principles on the design of interchanges, alternative intersections (e.g., diverging diamond interchanges, displaced left-turn intersections, or quadrant roadway intersections), and roundabouts that are designed to move high volumes of traffic, while also striving to improve safety.
Chapter 12	Rural Area Bikeways and Roadways	New	Chapter 12 primarily provides design strategies for bicycle travel through rural context areas connecting rural town, suburban, and urban context areas.
Chapter 13	Structures	New	Chapter 13 discusses the structures found on shared use paths that allow crossings of high-volume roadways and railroad lines to prioritize the movement of bicyclists on important regional routes.
Chapter 14	Wayfinding Systems for Bicyclists	New	Chapter 14 references the Manual on Uniform Traffic Control Devices for Streets and Highways (FHWA, 2023), which provides the provisions for the design and placement of bicycle guide signs and provides supplemental information regarding these sign systems, based on national best practices.
Chapter 15	Maintenance and Operations	Revised	Chapter 15 addresses maintenance policy, design, operations, and funding. A good maintenance program protects public funds invested in bikeways so that the infrastructure remains useful long after installation.
Chapter 16	Bicycle Parking, Bike Share Siting, and End-of-Trip Facilities	Revised	Chapter 16 describes bicycle parking and end-of-trip facilities and provides guidance on how they may be designed to meet the needs of bicyclists. It also covers the placement of bike sharing stations and provides a brief overview of bike share station typologies, as well as placement and utility considerations.