

BIKEWAY FACILITY DESIGN AND SAFETY IMPROVEMENTS (TE-52)**COURSE OUTLINE****Module 1** (1.5 hours): Introduction and Class I Facilities (Paths & Trails)

- Introduction
- Workshop overview
- User Characteristics (Geller typology)
- Low Stress Networks
- Standards and Guides
- Design parameters (Speed, Width, grades etc.)
- Legal and Liability Issues
- Class I facilities
 - o Widths
 - o Continuity
 - o User Amenities
 - o Construction Materials and Life Cost considerations
 - o Landscape
 - o Median Facilities

Module 2 (2 hours): Class II (Bike Lanes) and Class III (Routes, Boulevards, and Greenways)

- Class II Facilities
 - o Intersections and Approaches
 - o Widths
 - o Colored Pavements
- Class III facilities
 - o Bike Boulevards
 - o Sharrows

Exercise: Design an intersection approach with Right Turn Lane.

Module 3 (2 hours): Class IV and Enhanced Facilities

- International Treatments
- Class IV Facilities
 - o Cross sections and widths
 - o One-way vs Two way
 - o Intersections and Driveways
 - o Bicycle Signals
 - o Transitions
 - o Safety Considerations
 - o Maintenance

Exercise: Design layout for a Class IV bikeway in a suburban environment

Module 4 (1.5 hours): Safety, Special Programs (parking, bike share) and Case Studies

- Safety Management
 - o Collisions and Countermeasures
- Programs and Special Facilities
 - o Parking Infrastructure
 - o Bike Share
- Case Studies