

Sample Bicycle Facilities Planning & Design Course, Two-Day Format

The following agenda is only a sample; we are pleased to customize it for your audience... taking as much or as little time as warranted per topic, based on specific needs of the region or audience. Instructors are knowledgeable and diverse in their understanding of the topics included. They are quick to modify content and can make final changes on short notice (even during a course). All topics are usually covered, unless otherwise specified, but close attention will be paid to issues and topics defined as locally critical. Lunch-time field evaluations can also be scheduled.

Course Preparations: It is best to schedule at least one hour of pre-course consultation and room set up, immediately prior to a course (afternoon or evening before). As an additional option Walkable Communities staff can arrive a day early to audit and photograph local conditions and problem areas (for additional fee), illustration and analysis of which would be included in the training

Course Costs: The two-day, bicycle facilities training is best handled with two instructors who team-teach the curriculum. Instructors fees of \$1,400 per person per day include all travel time expended and course preparation time. Instructor fees do not include expenses. The course can be taught, using only a single instructor, as a cost-cutting measure, but the attendees will not gain the benefit of the additional expertise and experience of the second instructor.

Room and Equipment – Host agencies or organizations must provide two Kodak-type carousel projectors with zoom lenses, two large screens (6x9 feet or larger), and a public address system. Seating should be classroom style. It is essential that the room can be fully darkened. Lighting with rheostat controls is preferred. Rooms with dedicated use, which can be fully secured are preferred.

Course Manuals – camera-ready materials can be provided for local reproduction and distribution

Typical Course Agenda

- 8:00 Registration
- 8:30 Welcome by local official or host (It is ideal for key officials (mayor, Sec. of Transportation, etc.) to make positive, opening statements.
Introductions, Purpose of Course
- 8:45 Bicycling Characteristics, Trends, Issues
 - Who rides and why, rider characteristics
 - Separation vs. Integration in Traffic Systems
 - Designing for Bicyclists and Motorists
 - Physics of Bicycling
- 9:45 Break
- 10:00 Planning Bicycle Facilities
 - Policy Driven vs. Map Driven
 - Planning Techniques
 - Citizen Planning and Participation
 - Charrettes in Bicycle and Greenway Planning
 - Land Use Issues, Open Grid vs. Modern Suburbia
 - Intermodal Issues (train, ferry, bus, air, etc.)
 - Arterial Treatments
 - Retrofitting and Creating Links
 - School/Campus Trip Planning

- Planning for Multi-Use Pathways and Greenways
 - Implementation of Plans
- 11:00 Engineering Basics
 - Principles of Design
 - Basics of Design and Design Characteristics
 - Design – based on corridor speed
 - Design – based on frequency and types of conflict
 - Safety and Human Factors, Vision and Reaction Time
 - Avoiding Common Design Errors
- 11:30 Risk Management and Tort Liability
 - Principles of Tort Liability
 - Sample Cases
 - Reducing Your Risk through Design
 - Reducing Your Risk through Maintenance
- 12:00 Lunch (can be sponsored or “on your own”)
- 1:00 On-Road Bikeways
 - Shared Roadway
 - Difference between shared and wide curb lane
 - Shoulder Bikeways
 - Surface Conditions
 - Bike Lanes
 - Bike Lanes at Intersections
 - Avoiding Errors
 - Railroad Crossings, Drainage Grates, etc.
 - Rumble Strips, Ramps, etc.
- 2:30 Innovative Designs
 - Raised Bike Lanes
 - Pigmented (red) Bike Lanes
 - Contra-Flow Bike Lanes
 - Bike Lanes and Transit
 - Bicycle Boulevards
 - Bicycles and Traffic Calming
 - Bicycles at Roundabouts
 - Restriping Existing Roadways
 - Retrofitting Existing Roadways
- 4:30 End of First Day

Day Two

- 8:30 Bicycles and Intersection Design
- 9:30 Maintenance and Operations Issues
- 9:45 Break
- 10:00 Multi-Use Pathways and Greenways
 - Overview of Key Recreation Issues
 - Principles of Design
 - Shared Use Concepts
 - Safety and Security
 - Path/Trail Criteria
 - Trailheads, Lighting and Accessories
 - Maintenance and Operations

- 11:30 Construction Practices and Tips
 - Trail Maintenance and Operations Issues
 - Building Affordable Trails
- 12:00 Lunch
- 1:00 Structures – Design, Operations, Maintenance
 - Independent Bridges
 - Shared-Use Bridges
 - Overpasses
 - Tunnels
 - Retrofitting Existing Structures
 - Other
- 2:00 The following areas can be emphasized, based on local needs:
 - Campus Planning and Design
 - Parking and Showers
 - Other Commuting Topics and Issues
 - Bikes on Transit and Other Intermodal Issues
 - Panel Discussion & Local Case Studies/Issues
- 3:45 Closing Remarks
- 4:00 End of Day Two