

## **Complete Streets Planning and Design (PL-11)**

### **Course Description**

Complete Streets are planned, designed, operated, and maintained to provide safe and comfortable travel for all users of all ages. Complete Streets provide for all modes of transportation, including pedestrians, bicyclists, transit vehicles, and motorists, as well as allow for emergency response, road maintenance, and goods movement. This course covers the planning and design of Complete Streets, including the history of Complete Streets; the policy environment for Complete Streets, particularly in the California legislative environment; how to integrate Complete Streets with the urban planning process; and how to design streets, intersections, crossings, and interchanges consistent with the Complete Streets approach.

### **Topics Include**

- the history of Complete Streets
- the policy environment for Complete Streets
- new planning trends affecting decisions regarding transportation
- integrating Complete Streets with general plans, specific plans, RTPs, TIPS, and the entitlement process
- layered networks
- design manuals and guidelines relevant to Complete Streets
- cross-section element design: travel lanes, parking, shoulders, pedestrian facilities, bicycle facilities
- experimental and innovative bikeway design
- signalized intersection and uncontrolled crossing design

### **What You Will Learn**

Students will gain an understanding of the Complete Streets approach and its application to planning and design. Students will learn how to plan for future Complete Streets as well as how to retrofit existing streets to provide for all modes of transportation. Additionally, students will learn how to evaluate complicated trade-offs between modes of transportation.

### **Who Should Attend**

This course is intended for urban planners and transportation engineers at local, regional, and state agencies, as well as consultants. Both new and experienced planners and engineers will benefit. The course is primarily appropriate for urban perspectives; however, it will address Complete Streets in rural environments as well.

### **Credits**

This course grants 1.6 CEUs and 16 AICP CM credits.

### Location

Handlery Hotel, San Francisco Union Square (San Francisco, CA)

### Date and Time

This class begins on 06/10/2014 and ends on 06/11/2014. The class meets Tue & Wed: 8:00 AM-5:00 PM, 2 Sessions.

### Notes

For the group rate for sleeping rooms at the Handlery Union Square Hotel in San Francisco, call: 415-781-7800 or email: [reservations-sf@handlery.com](mailto:reservations-sf@handlery.com). Group rate expiration date: May 10, 2014

### Class Fees

Category	Description	Amount
Course Fee (Basic)	CA Public Agency	\$ 295.00
Course Fee (Alternate)	Standard fee	\$ 595.00

This class is offered in partnership with the [California Department of Transportation, Division of Local Assistance](#). Registration fees are subsidized with funding from the Cooperative Training Assistance Program. Reduced rates are available to employees of California's city, county, regional, and other public agencies only.

For more questions about registration, email: [Registrar@techtransfer.berkeley.edu](mailto:Registrar@techtransfer.berkeley.edu) or call 510-643-4393

### Instructors

#### Matthew Ridgway, AICP, PTP, Principal, Fehr & Peers

Matthew Ridgway has been involved in many of Fehr & Peers' highest visibility and most complex multi-modal projects. He is the leader of the firm's pedestrian and bicycle practice, serves as part of the team developing/maintaining the FHWA Pedestrian and Bicycle Information Center, is a member of the Transportation Research Board Bicycle Transportation Committee, and is past Chair of the Institute of Transportation Engineers' (ITE) Pedestrian and Bicycle Council. He has developed hundreds of multi-modal plans and designs. He has also contributed to a variety of publications, including ITE Planning Urban Roadway Systems (2012); UC Berkeley Technology Transfer, Guide for Conducting Pedestrian Safety Assessments in California (2008); AASHTO Guide to the Development of Bikeways (2012); UC Fundamentals of Traffic Engineering (16th Edition in 2007); and ITE Informational Report on Bicycle Innovations (2002).

#### Charles Alexander, P.E., Associate and Bicycle/Pedestrian Design Specialist, Fehr & Peers

Charlie Alexander is one of Fehr & Peers' foremost bicycle and pedestrian planning, engineering, and safety experts and is a registered civil engineer in California and Washington. He is the deputy leader of Fehr & Peers' pedestrian and bicycle practice. Charlie's project experience includes serving as the project manager or staff lead for over 50 bicycle- and pedestrian-related projects in the past four years and covers a breadth of subjects from long-range planning to innovative bikeway designs. He is an elite-amateur cyclist and has a lifetime of experience bicycling for recreational and utilitarian purposes.



## **COMPLETE STREETS PLANNING AND DESIGN (PL-11)**

### **COURSE OUTLINE**

#### **DAY 1**

8:00 - 8:15 AM            INTRODUCTION

8:15 – 9:15 AM            COMPLETE STREET POLICIES

- What are Complete Streets?
- History of Complete Streets
- Federal and California Policy Environment
- Design Manuals and Standards
- Local Policies

9:15 – 9:30 AM            BREAK

9:30 – 10:30 AM          NEW PLANNING PARADIGM

- Transportation and Land Use Interactions
- Planning Trends: Climate Change, Shifting Demographics, Emphasis on Safety, etc.
- Integrating Complete Streets with General Plans, Specific Plans, RTPs, and TIPs
- Integrating Complete Streets with the Entitlement Process: Traffic Impact Studies (TIS), Impact Fees, and Mitigation Fees

10:30 TO 11:30 PM        PLANNING ROADWAY SYSTEMS

- Context Sensitive Solutions
- Layered Networks, Transects, and Street Typologies
- Multi-Modal Level of Service (MMLOS)

11:30 to 2:00 PM        LUNCH AND WALK AUDIT

The group will walk to a predetermined lunch location. After lunch, the group will take a pre-planned walk to a focus neighborhood for the afternoon group exercise (courses will be hosted in walkable, urban areas).

2:00 to 4:00 PM            GROUP EXERCISE AND REPORT OUT

The instructors will break the group into smaller groups of five to ten people to gather around pre-prepared large-scale aerials of the area walked after lunch. Each group will: (1) identify broad neighborhood-scaled ideas related to land use and transportation; and (2) identify and solve at least one small-scale implementation step (roadway or intersection redesign, conceptual land use plan, etc.).

## DAY 2

### 8:00 – 9:30 AM COMPLETE STREETS IMPLEMENTATION

Standards and Guidance: Highway and Street Design and Traffic Control Design

Design Manuals versus Guidelines

Exceptions to Standards Process

Resources: Caltrans HDM, California MUTCD, AASHTO “Green Book”, AASHTO Guide for the Development of Bicycle Facilities, NACTO Urban Bikeway Design Guide, etc.

### 9:30 to 9:45 AM BREAK

### 9:45 – 11:30 AM DESIGN OF STREETS, INTERSECTIONS, CROSSINGS, AND INTERCHANGES

Traffic Calming

Travel Lane Width

Cross-Section Elements: Parking, Shoulders, Pedestrian Facilities, Bicycle Facilities

Experimental and Innovative Bikeway Design

Transit Facilities

Complete Streets Coordination with Routine Maintenance

Signalized Intersection and Uncontrolled Crossing Design

Roundabouts

Interchange Design

Case Studies of Successful and Unsuccessful Strategies used in California

### 11:30 to 2:00 PM LUNCH AND WALK AUDIT

The group will walk to a predetermined lunch location. After lunch, the group will take a pre-planned walk to a focus corridor and/or focus intersections for the afternoon group exercise (courses will be hosted in walkable, urban areas).

### 2:00 to 4:00 PM GROUP EXERCISE AND REPORT OUT

The instructors will break the group into smaller groups of five to ten people to gather around pre-prepared large-scale aerials of the corridor and/or intersections visited during the walk audit. Each group will: (1) identify the positive practices and issues of each facility related to complete streets; and (2) use what was learned in the Complete Streets course to develop candidate improvements for each corridor and/or intersection.