Seminar Outline: Designing Urban Arterials For Walkability

December 5, 2006

DC Council Chambers
One Judiciary Square
441 4th Street NW
Washington, D.C. 20001

Instructor: James M. Daisa, P.E.
Kimley-Horn and Associates, Inc

Total Time: 6 Hours and 15 minutes (excluding breaks and lunch)

Sign-in 8:30 AM

Introduction (9:00 AM - 15 minutes)
- What communities want
- Objectives
- Principles for design
- Focus of the course
- Tenets of designing walkable thoroughfares
- Placemaking as a design criteria

DDOT, MDOT, & VDOT Speakers (9:15 AM – 50 minutes)

DDOT – Ken Laden, Associate Director for Transportation Policy and Planning
MDOT – Dennis German, Chief, Community Design Divison
VDOT – Randy Hodgson, AICP, VDOT-NOVA Transportation Planner

Break (10:05 AM - 10 minutes)

Thoroughfare Design and the Transportation Planning Process (10:15 AM - 15 minutes)
- Integration with planning and project development
- Network planning
- Network design principles
- Connectivity
- Network design guidelines

Design Framework (10:30 AM - 30 minutes)
- Placemaking
- The concept of context zones
- Features that create context (land use, site design, building design)
- Thoroughfare types (introducing the Boulevard, Avenue, and Street)
- Functional classification in thoroughfare design
- Design controls

Using thoroughfare types in design
Thoroughfare type characteristics
Vehicle Mobility Priority thoroughfares
Thoroughfare examples

Design Controls and Thoroughfare Design (11:00 AM - 15 minutes)
Design controls in walkable thoroughfare design
The concept of target speed
Design factors that influence target speed (urban areas)
Design vs. control vehicle
Walkable vs. conventional thoroughfare design approach
Speed and capacity of urban streets

Walkable Thoroughfare Design (11:15 AM - 15 minutes)
Considerations in cross-section design
Stages in cross-section design
Design in constrained right-of-way
Transitions
Design parameters
General parameters for vehicle mobility priority thoroughfares

Lunch (11:40 AM – 12:30 PM)

Participant Exercise (12:30 PM - 60 minutes)

Roadside Design (1:30 PM - 20 minutes)
Roadside defined
The urban roadside – uses and activities
Roadside components
- Edge zone
- Furnishings zone
- Throughway zone
- Frontage zone
- Clear zones on urban thoroughfares

Traveled Way Design (1:50 PM - 20 minutes)
The urban traveled way
Lane width
Medians
Street trees
Bicycle lanes
Mid-block crosswalks

Break (2:10 PM – 10 minutes)

Intersection Design (2:20 PM - 30 minutes)

- Urban intersections
- General principles
- Design elements
  - Curb return radii
  - Curb extensions
  - Channelized right turns
  - Modern roundabouts

Participant Exercise (2:50 PM - 70 minutes)

Areas of Debate and Continuing Discussion (4:00 PM - 15 minutes)

- Design speed vs. target speed
- Lane widths
- Maximum number of moving lanes
- Design vehicle
- Role of level of service
- Clear zones/street trees in urban areas
- Mid-block crosswalks
- Extensive use of bike lanes