

# **National Capital Region Transportation Planning Board**

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## **DRAFT**

### **Seminar Outline: Designing Major Urban Thoroughfares for Walkable Communities**

**December 5, 2006**

**DC Council Chambers  
One Judiciary Square  
Washington, D.C. 20001**

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

**Total Time: 6 Hours and 40 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

#### **DC, MD, VA Department of Transportation Speakers (9:15 AM - 1 hour, 15 minutes)**

- DDOT – TBA**
- MDOT – TBA**
- VDOT – Fred R. Hodgson**

#### **Break (10:30 AM - 10 minutes)**

#### **Thoroughfare Design and the Transportation Planning Process (10:40 AM - 15 minutes)**

- Integration with planning and project development
- Network planning
- Network design principles
- Connectivity
- Network design guidelines

#### **Design Framework (10:55 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 (11:25 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

**Lunch (11:40 AM – 12:30 PM)**

**Participant Exercise (12:30 PM - 60 minutes)**

**Walkable Thoroughfare Design (1:30 PM - 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

**Roadside Design (1:45 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 (2:05 PM - 20 minutes)**

- The urban traveled way
- Lane width
- Medians
- Street trees
- Bicycle lanes
- Mid-block crosswalks

**Break (2:25 PM – 10 minutes)**

**Intersection Design (2:35 PM - 30 minutes)**

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

**Participant Exercise (3:05 PM - 70 minutes)**

**Areas of Debate and Continuing Discussion (4:15 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

