

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)

Introduction (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 (1 hour, 15 minutes)

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

Thoroughfare Design and the Transportation Planning Process (15 minutes)

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

Design Framework (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 (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

Participant Exercise (60 minutes)

Walkable Thoroughfare Design (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 (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 (20 minutes)

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

Intersection Design (30 minutes)

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

Participant Exercise (90 minutes)

Areas of Debate and Continuing Discussion (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

