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 441 4th Street NW 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 – Ken Laden, Associate Director for Transportation Policy and Planning

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