Planning Urban Roadway Systems

[An ITE Proposed Recommended Practice]

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Chapter 1- Introduction

• **Planning** = Focus on overall planning

• **Urban** = Focus on urban and suburban

• **Roadway** = Entire public right-of-way; multimodal emphasis

• **Systems** = Look at entire network; holistic view
Difference in Recommended Practices

Planning Walkable Urban Thoroughfares: A Context Sensitive Approach

- Design and performance of thoroughfare
  - Context-sensitive
  - Multi-modal
  - Some network guidelines

Planning Urban Roadway Systems

- Principles for design and performance of the entire network
  - Connectivity
  - Multi-modal, layered networks
  - Special situations

Chapter 2 - Context

- Identifies two types of networks
  - Traditional
  - Conventional
Chapter 3 - Principles
1 & 2 = Balance
Balanced, layered multimodal networks that serve pedestrians, bicyclists, transit riders, motorists, and freight/goods movement.

Principle 3: Connectivity
Have a high degree of connectivity to help provide multiple routing options for users (including emergency services).

Challenges of a Connected Network:
- Streets have been there for a long time
- Right-of-way is constrained
- Street connections difficult to add
  - Natural barriers
  - Residents & developers oppose connections
- Outdated codes

Solution: connect to the degree practical – at least non-motorized
**Principle 4: Appropriate Network Density**

Appropriate to the land use patterns and urban form that are served.

**Principle 5: ROW=Public Realm**

Treat roadways as public spaces that influence urban environments.

Go beyond the street

Use all of the public right-of-way

to relate to private development
Principle 6: Sustainable

Be planned with consideration of environmental, social and economic issues.

Chapter 4- Functional Classification

- Functional Classification - Conventional

New Typologies
Chapter 4- Layered Networks

• **Complete Streets** = accommodate all modes if possible

• **Layered Networks** = provide priority to particular mode to improve efficiency and safety

Guidelines – Multimodal Level Of Service

Illustration of Alternative S (bicycle/pedestrian bridge) and analysis by mode
Chapter 5 – Planning Process

Key Components

• Vision - Involve the public
• Need - short and long term
• Constraints - fiscal, environmental
• Alternatives - modes, street and land use patterns
• Evaluation - fair, consistent, pragmatic

Process Should Be:

• Meaningful to community
• Understandable
• Appropriate for decisions to be made

Chapter 6- Special Issues

• Transitions: rural ➔ suburban ➔ urban
• TND and TOD (Traditional Neighborhood Development and Transit-Oriented Development)
• Traffic Calming – retrofit and new
• Road Diets - create more multimodal
• One-way and two-way streets - tradeoffs
• Transitions freeways to surface streets - access; service roads
Chapter 7- Implementation

- Plan your layered networks
- Communities will implement high priority improvements
- Build support with stakeholders
- Don’t only take the easy route
- Phase implementation as needed
- Integrate modes and land use needs
- Make realistic cost estimates

Planning Urban Roadway Systems

- Proposed Recommended Practice published July 2011
- Copies available from ITE: www.ite.org
- Review and provide comments by December 1, 2011
- Final Recommended Practice printed 2012
Questions?

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