Context Sensitive Solutions for the Design of Major Urban Thoroughfares

Presented by

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at
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The Partners

- Federal Highway Administration
- Institute for Transportation Engineers
- US Environmental Protection Agency
- Congress for the New Urbanism
Purpose

Provide guidance for the design of urban thoroughfares that is consistent with CSS principles
Guiding Principle

The guide should be consistent with and build on existing guides including the AASHTO Green Book
A Decade of Change

Traffic Calming

Flexibility in Design

Context Sensitive Design

Esthetic Design

Roundabouts
Looking Beyond the Pavement
A Dynamic Tension

the mobility function
A Dynamic Tension

the place function
The Congress for the New Urbanism

New Urbanism is an urban design movement that came on the scene in the late 1980s.
Stapleton, Denver, Colorado
Stapleton, Denver, Colorado
The New Urbanism and Chicago
New Urbanism

Walkable, Mixed-use Neighborhoods

Vs

One use districts connected by auto-oriented thoroughfares
New Urbanism = Urbanism
Why the New Urbanism?

- Smart Growth
- Multimodal
- Less auto-dependant
- Less Congestion
- Safe for all road users
- Quality Places
We Need True Urban Streets for Urbanism to Flourish
Towards Context Sensitive Thoroughfares for Urban Areas

- Define the Context
- Define appropriate thoroughfare types
- Design the street network
- Control Speeds
Define the Urban Context
The Urban Transect

T1 Rural Preserve
T2 Rural Reserve
T3 Urban Edge
T4 Urban General
T5 Urban Center
T6 Urban Core

http://www.newurbannews.com/transect.html
Define Urban Thoroughfare Types
Arterial or Collector?
Boulevard or Expressway?

Avenue or Highway?

Street or Road?
<table>
<thead>
<tr>
<th>Boulevard</th>
<th>Expressway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avenue</td>
<td>Highway</td>
</tr>
<tr>
<td>Street</td>
<td>Road</td>
</tr>
<tr>
<td><strong>Urban</strong></td>
<td><strong>Rural</strong></td>
</tr>
</tbody>
</table>
Los Angeles, CA
Design the Street Network
Stephen Marshall
Street Network (or Pattern): Who is in charge?

Transportation Designer/Planner

- Highway alignment
- Traffic flow
- Intersection design
- Route Location

Urban Designer/Planner

- Built Form of Streets
- Public spaces
- Development Control
- Land use

Adopted from Stephen Marshall
Street Network Pattern Affects…

- Traffic volumes
- Livability
- Modal Accommodations
Controlling Speed
Pedestrian Safety and Vehicle Speed

(USDOT – National Highway Safety Administration, 1999)
Design Speed
vs
Target Speed
Timeline for Urban Thoroughfare Project

Phase 1

- June 8, 2005 – Work session on May draft
- Oct. 2005 – Final technical draft
- Jan. 2006 – Publish as an ITE proposed recommended practice
- March 2006 – ITE Technical Conference on CSS

Phase 2

- Through 2006 – Receive user comments
- 2007 – Final recommended practice
Urban Streets are Complex Organisms

To create great streets we need a design process that embraces complexity in a way that fully integrates both the mobility and place functions of the street
The Need for Urban Streets Designers

We also need to start training designers that are generalist who understand all the aspect of the street design process