

# The “ITE/CNU Manual”



## User-Initiated Changes and Implementation

Brian Bochner

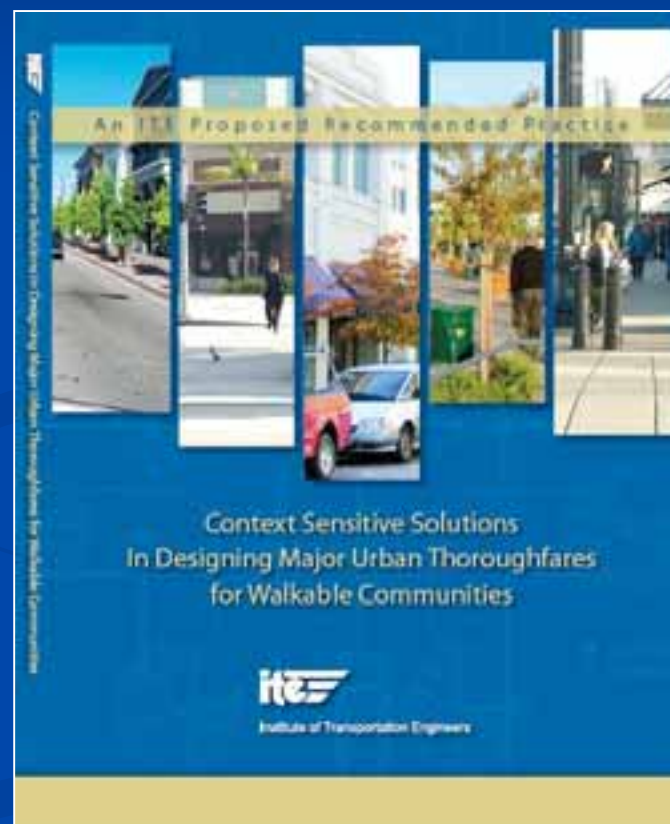
Texas Transportation Institute

College Station, Texas

# What is the “Manual?”

## *Context Sensitive Solutions In Designing Major Urban Thoroughfares For Walkable Communities*

- Guidelines – apply CSS to
  - Major thoroughfares
  - Urban
  - Multimodal
  - All users
  - “Walkable” areas
  - Planning
  - Design
- Proposed ITE recommendation
  - Published
  - Subject to refinement Guidelines



# Sponsors

- Federal Highway Administration
- Environmental Protection Agency



# Partner Preparers

- Institute of Transportation Engineers
- Congress for the New Urbanism



# Context Sensitive Solutions

“...develop a transportation facility that fits into its physical setting ...while maintaining safety and mobility **considering the total context** within which the transportation project will exist...**in harmony with the community...**”

FHWA CSS website

# Report Objectives

- Aid context sensitive design
- CSS principles for planning, project development
  - Network
  - Corridor
  - Project
- Create a design framework
- Present criteria and guidance
- Consistent with established guidance

# Contents – Proposed Recommended Practice

## ■ Introduction

- Overview

## ■ Planning

- Network and corridor planning
- Design framework

## ■ Design

- Principles, criteria, guidelines
  - Roadside
  - Traveled way
  - Intersections
- Design in constrained rights-of-way
- Flexibility
- Examples



"Fact Sheet" Series

# Current Status of Proposed RP

- Published March 2006
- Received nearly 850 user comments
- Comments to be addressed
- Multi-disciplinary Advisory Committee to assist
- Revised Recommended Practice for final approval expected late 2008



E14th Corridor - San Leandro, CA Source: Community, Design + Architecture

# Changes to be Proposed



# Clarify Role of Guidelines vs. Standards

Address "tension" between:

- New guidelines



- State and local standards
- (*Not*) AASHTO
- Refer to implementation program

State  
DOT  
Manuals

Local  
Streets  
Standard  
s

# Better Position Guidelines vs. Standards

Making headway with standards

- New section: CSS  $\neq$  standards!
- Deviation from standards  $\neq$  additional risk
- √ Designer must *still design responsibly*
  - √ *By law*
  - √ *By ethics*

# Clarify Role of Guidelines vs. Standards

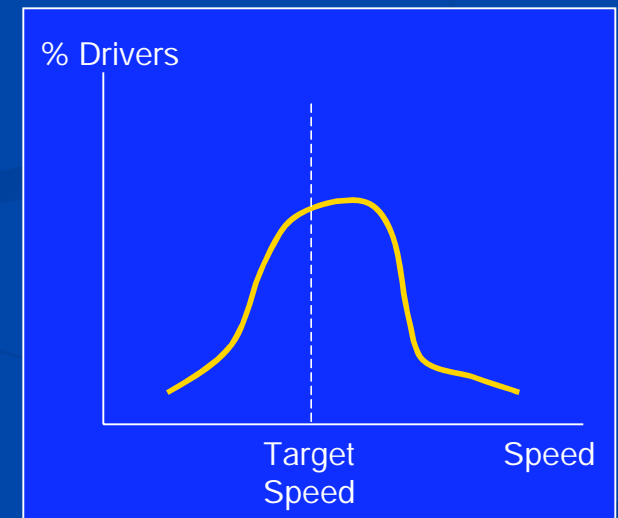
Must be properly promoted

- From agency perspective
- Risk
- Responsibility
- More benefit than risk



# Target vs. Design Speed

- Target speed = maximum desired operating speed
- Currently proposed
  - Design speed = Target speed + 5 mph
  - Reason: speed dispersion
- Suggested
  - Design speed = target speed
- Discuss with Advisory Committee



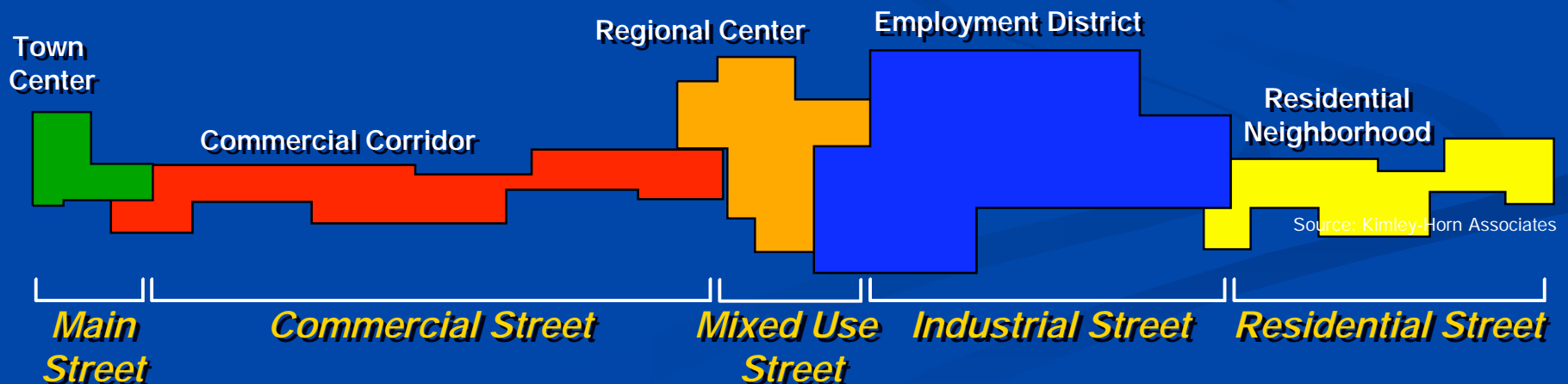
# Expand Thoroughfare Types

## Current types

- Boulevard
- Multi-way boulevard
- Avenue
- Street

## Additional possibilities

- Define by adjacent land use
  - Main street
  - Commercial street
  - Mixed-use street
  - Residential street
  - Industrial street
- Major effort
- Discuss with Advisory Committee

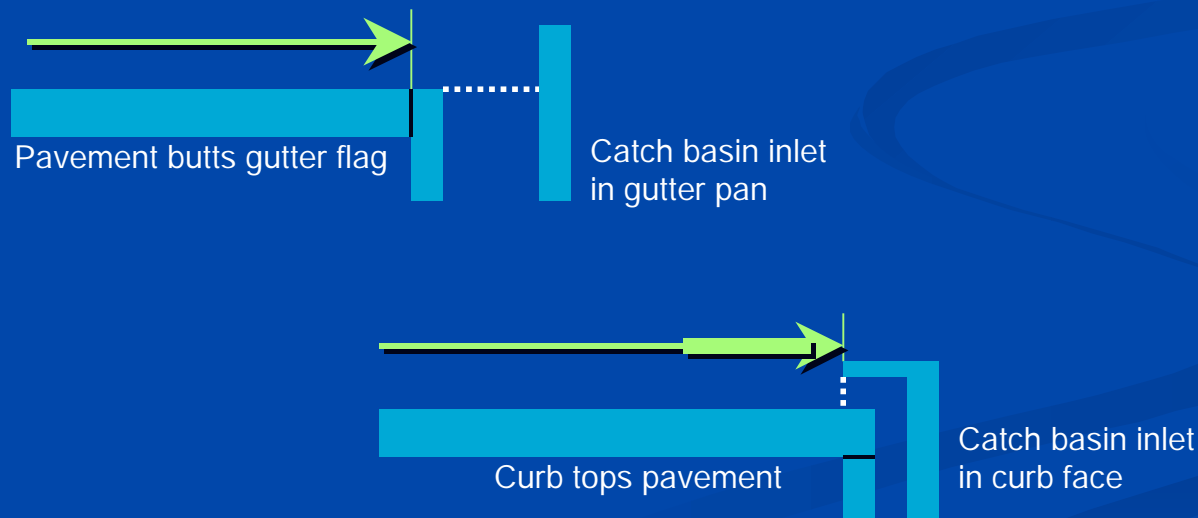


# Consider Narrower Traffic Lanes and Increased Range

- Currently tables of widths by
  - Functional classification
  - Thoroughfare type
  - Context zone
  - Land use category
- Widths vary
  - Most 10-11 feet (11-12 at 35mph+)
  - A few 10-12 feet
- Request for 9 foot widths
- AASHTO
  - Minimum 10 feet for major street
  - Permits 9 feet for turn lane on local streets

# Clarify Pavement Dimensions

- Outside limit gutter flag or curb face
- Issues
  - Drainage inlet design
  - Pavement joint with gutter flag
- Propose dimensions based on curb/inlet design
- Discuss with Advisory Committee



# Clear Zones

- Chapter 8 does have clear zone section
  - Does not advocate clear zone width below 40mph
  - Recommends
    - Vertical curbs
    - Minimum 1\_ foot setback from curb face
    - Safe sight triangles
  - Recommends 10 foot clear zone for 40+ mph



# Provide Mid-Block Signalization Criteria

- Users seek MUTCD warrants or guidelines
- MUTCD signal warrant #4
  - Pedestrian volume warrant
  - Applicable to mid-block
- Add reference to MUTCD warrant #4 in midblock cross-section



# Geometric Measures to Limit Speeds

- Measures requested
- Proposing to add section

## Measures

- Smaller turning radii
  - Intersections
  - Street segments
  - Narrower lanes
- Lane width
- Curb extensions
- Medians
- Alternative paving
- Street trees
- Curb parking
- Roundabouts
- Raised intersections
- Traffic signal progression
- High visibility crosswalks
- Building enclosure
- Urban design features
- Vehicle speed signs

# Expand Section on Emergency Vehicles

- Chapter 9 has brief section
- Requests
  - More detail
  - Support for more restrictive geometrics
  - Precedents and examples
- Recommending to Advisory Committee



# Guidelines for Small Town Main Streets

- Frequent need
- Discuss with Advisory Committee



# Other Changes to be Discussed

- More and better examples
  - Photos
  - Illustrations
  - Visualizations
  - Case studies
- Many editorial refinements
- Index and more detailed table of contents
- Building location and orientation
- Section on favorable court decisions
- More on ADA polices and requirements
- Broaden section on trade-offs

# Implementation Challenges

- Resistance to change
- Perceived higher cost
- Traditional performance measures (i.e., LOS)
- Lack of clear understanding of CSS
  - What is a CSS project?
  - How to measure success?
- Liability concerns



# Implementation

- ITE to prepare strategy
  - Review FHWA audit
  - Conduct survey
  - Develop actions
  - Implement
    - Develop information
    - Promote acceptance



New York, NY

