Street Design Guidelines for Livable Communities

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Tenets of Context Sensitive Solutions

- Balance safety, mobility, community and environment
- Involve public and stakeholders
- Interdisciplinary teams
- Multimodal
- Flexibility in design
- Incorporate aesthetics

Source: Minnesota Department of Transportation

Conventional vs. Context Sensitive Approach

- Engineers & Designers working together with
  - Decision makers
  - Citizens & Businesses

Conventional

Context:
- Rural

Design criteria primarily based on:
- Design speed
- Forecast travel demand
- Level of service

CSS Approach

Context:
- General values
- Urban values
- Suburban values

Design criteria primarily based on:
- Community values
- Urban center
- Urban core
- Mobility for all modes

Context Sensitive Tenet – Street Design Changes as Context Changes

"Thoroughfare design is not just sensitive to context—but part of the context and helps define the place"
Meeting of Three Contexts

- Community Needs
- Built & Natural Environment
- Design Excellence in the Public Realm
- Multi-modal Transportation

Defining Context & Street Together

- Region & City
- District & Neighborhood
- Building & Site

- Mixed use walkable places
  - Neighborhoods for living
  - Employment districts for working

- Regional Patterns
  - Land Use Patterns
  - Transportation Network

Places29 – Albemarle County, Virginia
CSS Elements in Urban Contexts

Elements of the Cross Section

- Realms of the Street
  - Context Realm
  - Pedestrian Realm
  - Travelway Realm

Sidewalk Zones

- Edge
- Furnishing
- Throughway
- Frontage

Sidewalk - Throughway Zone

- Pedestrian travel
- Must be clear of obstacles
- Absolute minimum 4’ width, wider on streets with many pedestrians

(ITE/CUI Urban Thoroughfare Design Manual - Kimley Horne Associates and CD+L)
Sidewalk - Frontage Zone

- Defined by building façade, landscaping, or fence
- Used for window shopping, entering & exiting buildings
- May be use for displays & outdoor seating
- Must not impede on the Throughway Zone

Sidewalk - Furnishing Zone

- Landscaping, lighting, utilities, and amenities for pedestrians
- Buffering from traffic (combined with parking lane, bike lane, etc.)
- Defines street character: aesthetic detail of elements, setting rhythm, reducing clutter...
- Appropriate width determined by street and context

Sidewalk - Edge Zone

- Interface between roadway and sidewalk
- 6" minimum, 18"-24" minimum for parked car door swing, 4' minimum for circulation at transit stops
- Does not need vertical definition

Intersection Design

- Avoiding large undefined open spaces
- Providing safe circulation for all modes
Intersection Design
• Avoiding large undefined open spaces

Green Streets
• Integrating Streets & Context with Natural Environment

Intersection Design
• Creating opportunities to improve context

Green Streets - Example Project
• Street Planters
SW 12th St, Portland, OR
San Francisco Better Streets

- Defining a Vision
- Departmental Coordination
- Defining Street Types
- Creating a Toolkit

Why the Better Streets Plan?

- Developed Parcels: 57% of city land
- Parks: 18% of city land
- Streets: 25% of city land

Why the Better Streets Plan?

- Need of Agency Coordination

- Need for -
  - Standards for street design & maintenance
  - Framework for implementation
  - Citywide ‘cookbook’ for use by all agencies
### Residential Neighborhood Street

- **Basic Improvements**
  - More consistent tree & landscape planting
  - Pedestrian-scale lighting
  - Corner curb extensions at corners with major streets
  - High visibility crosswalks with directional curb

### Details

- **Street Design Elements**
  - Curb Extensions
  - Curb Radii
  - Pedestrian Crossings
  - Median and Median Islands
  - Sidewalk and Median Pocket Parks
  - On-street Parking Lanes
  - Curb Cuts
  - Intersection Treatments
  - Special Conditions

- **Streetscape Elements**
  - Urban Forest
  - Lighting
  - Paving
  - Street Furnishings
  - Consolidated Parking Meters
  - Wayfinding Signage
  - Public Art

- **Sub-surface Elements**
  - Stormwater Treatment
  - Underground Utilities

### Other Considerations

- Stormwater management
- Reuse of underused r.o.w. space
- Culturally-sensitive plantings
  - For Asian residents, feng shui can be important in designing the streetscape
- Urban forest as habitat

### Redesign of a Neighborhood Street
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