Good Community by Comprehensive Street Design

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Building Livable Communities with Transit
San Francisco, 2008
Why Focus on Street Design?

- Projected Growth in CO2 Emissions from Cars and Light Trucks

**Source:** S. Winkelman (Center for Clean Air Policy) calculations based on EIA’s *Annual Energy Outlook 2008 (Early Release)* and the Energy Independence and Security Act of 2007.
Why Focus on Street Design?

**Effect on VMT Growth Rate**
under low-carbon scenario (2030)

- Fuel Cost Increase 38%
- Transit Revenue Miles 12%
- Population Density 20%
- Highway Lane Miles 30%

65% Transportation & Land Use Related

Growing Cooler: Urban Land Institute

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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. CSS Design Approach

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

<table>
<thead>
<tr>
<th>Conventional</th>
<th>CSS Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Context:</td>
<td>Context:</td>
</tr>
<tr>
<td>Urban</td>
<td>Suburban</td>
</tr>
<tr>
<td>Rural</td>
<td>General urban</td>
</tr>
<tr>
<td></td>
<td>Urban center</td>
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<tr>
<td>Te</td>
<td>Urban core</td>
</tr>
<tr>
<td>Design criteria primarily based on:</td>
<td>Design criteria primarily based on:</td>
</tr>
<tr>
<td>Transportation function</td>
<td>Community values</td>
</tr>
<tr>
<td>Design speed</td>
<td>Transportation function</td>
</tr>
<tr>
<td>Forecast travel demand</td>
<td>Street type</td>
</tr>
<tr>
<td>Level of service</td>
<td>Adjacent land use</td>
</tr>
<tr>
<td></td>
<td>Mobility for all modes</td>
</tr>
</tbody>
</table>
Context Sensitive Solutions Approach

Citizen Groups
- Planning
- Scoping
- Project Development

DESIGN

- Right of Way
- Bidding
- Construction

Source: Kimley Horne Associates
Meeting of Three Contexts

Community Needs

Built & Natural Environment

Design Excellence in the Public Realm

Multi-modal Transportation

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Defining Context & Street Together

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

Regional Patterns
- Land Use Patterns
- Transportation Network

Places29 – Albemarle County, Virginia
Defining Context & Street Together

• Region & City
• District & Neighborhood
• Building & Site

• Mixed use walkable places
  – Neighborhoods for living
  – Employment districts for working

Places29 – Albemarle County, Virginia

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Defining Context & Street Together

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

Street Enclosure
Height to Width Ratio

Gap in Context
Buildings do not provide Desired Context
Match of Context and Thoroughfare
Conversion of an Urban Arterial

- Assessment looked at:
  - Land Use and Urban Design
  - Transportation
  - Demographics & Real Estate Market Conditions
District Concept Plan

- Creates Distinct Districts and Activity Centers
- Identifies Opportunity Sites for Future Development
Opportunity Site for Revitalization

- Existing Conditions - old auto row
Opportunity Site for Revitalization

- Public investment in street
Opportunity Site for Revitalization

- Townhome Courtyard Infill
Opportunity Site for Revitalization

- Mixed Use - Condos over retail
Places29: Fully Integrated Planning

• Existing Suburban Strip & Subdivision Edge of Charlottesville, Virginia

• Community Goals:
  – Mixed use & vital neighborhoods
  – Transportation choices
  – Open Space preservation
Places29: Initial Roadway Network

- Establish Parallel Routes to support US 29 as through route
- Provide Connectivity across US 29 with grade separations
- Establish bicycle and trails network
Places29: 2050 Roadway Network

- Establish wider network connectivity to support land use
- Continued Network building in conjunction with (re)development activity
Places29: Future Neighborhood Framework

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# Places29: Future Neighborhood Framework

## Definition

<table>
<thead>
<tr>
<th>Centers</th>
<th>Land Uses organized around Centers</th>
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</thead>
<tbody>
<tr>
<td>Civic Green</td>
<td>Uptown</td>
</tr>
<tr>
<td>Neighborhood Service</td>
<td></td>
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<tr>
<td>Community</td>
<td></td>
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<tr>
<td>Destination</td>
<td></td>
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</table>

## Diagram

![Diagram](image)

## Summary Description

- **A Civic Green Center** is primarily an urban open space (not just a natural area) that includes:
  - Uses fronting onto the center
  - Multiple access points to neighboring residential or employment areas
  - Design elements that provide a sense of arrival and civic presence

- **A Neighborhood Service Center** is a cluster of mixed-use buildings that:
  - Neighborhood-serving retail/service uses on the first floor
  - An optional urban open space located adjacent to the mixed-use buildings

- **A Community Center** is a retail/service mixed-use center that:
  - Is typically anchored by a grocery store
  - Contains additional retail/service, commercial, and other uses as well as residential uses that give it a mixed-use character

- **A Destination Center** is a mixed-use center that:
  - Is anchored by commercial uses, including a range of retail, entertainment, service and employment uses that draw from the larger region
  - Includes residential uses on upper floors
  - Is designed with multiple connections to surrounding residential or employment neighborhoods

- **An Uptown** is a special mixed-use area that:
  - Is the most urban portion of Place29
  - Includes a broad range of employment and residential uses and activities in a mixed-use environment

- **A Mixed Use Neighborhood** is an existing or future mixed-use area that:
  - With a range of single-use and mixed-use buildings that include housing on upper floors
  - Mixed-use area may extend beyond the boundary of the 1/4 mile walking distance from the Center

- **An Employment Neighborhood** is an existing or future employment area that:
  - Uses are organized around a Center that provides services and recreational opportunities for workers
  - Employment uses are located within 1/4 mile walking distance from the Center

## Photo Example

![Photo Example](image)

## Map Symbol

![Map Symbol](image)

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Use **BRT** to connect Regional Activity Centers

- Employment – Rio Road/US 29 and Greenbrier Area
- UVA
- Downtown Charlottesville

Provide **Circulator** through Area south of Rio Road

- Use parallel/frontage roads
- Link lifestyle/retail destinations
- Allows for wider BRT stop spacing/faster trip time
Places29: Long-term Transit Network

- **Use BRT/Streetcar** to connect Regional Activity Centers
  - Employment - NGIC, GE
  - Fanuc, UREF
  - Airport
  - UVA
  - Downtown Charlottesville

- **Provide Circulators** in Uptown Area and S. of Rio Road
  - Use parallel/frontage roads
  - Link lifestyle/retail destinations
  - Allows for wider BRT stop spacing/faster trip time
  - Suitable for Modern Streetcar
Places29: Multi-modal Streets

• Freeway to Parkway

Location B
Existing Condition

Street Type: Freeway
Context Zone: NDT 2 - Reserve
Land Use Type: Reserve
Places29: Multi-modal Streets

- Freeway to Parkway

Location B
Potential Future

Street Type: Parkway
Context Zone: NDT 2 - Reserve
Land Use Type: Reserve
Places29: Multi-modal Streets

- Auto-oriented to Multi-modal Avenue with commercial strip

Location C
Existing Condition

Street Type: Avenue
Context Zone: NDT 3 - Urban Edge
Land Use Type: Commercial Mixed Use Center
Places29: Multi-modal Streets

- Auto-oriented to Multi-modal Avenue with Mixed Use Center

Location C
Potential Future

Street Type: Avenue
Context Zone: NDT 4 - Urban General
Land Use Type: Urban Mixed Use Center
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