Performance Measurement of Contact Sensitive Solutions (CSS) in Urban Thoroughfare Design

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Performance Measures for Transportation and Livable Communities
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CSS – Core Principles

• Shared stakeholder vision
• Comprehensive understanding of contexts
• Continuing collaboration to achieve consensus
• Flexibility and creativity
Performance Measures (PM) of CSS

• Assess the performance
  – Agency
  – Project
  – Context

• Perspective
  – Process
  – Outputs
  – Outcomes

• Use conventional and direct participant quantification methods
Agency Level Applications

Application

Project Development Phase

Objectives
Issues
Interests

Data
Considerations

CSS Strategies and
Principles

Performance
Measures

Estimation
Methods

Performance
Assessment
• Project performance outcomes - such as
  – Operation
  – Safety
  – Mobility (by mode)
  – Appearance
  – Service to users
  – Effects on adjacent activities
  – Create lasting value for the community
  – Support for other objectives
  – Quality of life, etc.
### Performance Measurements of CSS in Urban Thoroughfare Design

#### Possible PM for Planning/Design Phase of CSS Project

<table>
<thead>
<tr>
<th>Applicability</th>
<th>PROCESS Type of Results/Sample Measures</th>
<th>CSS Type of Results/Sample Measures</th>
<th>OUTPUTS Type of Results/Sample Measures</th>
<th>CSS Type of Results/Sample Measures</th>
<th>OUTCOMES Type of Results/Sample Measures</th>
<th>CSS Type of Results/Sample Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodate objectives</td>
<td>Design features (e.g., pavement, lighting, crossing frequency, target speed, streetscape, etc.)</td>
<td></td>
<td>Resulting quality of service</td>
<td></td>
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<tr>
<td>Percent of stakeholder objectives included in adopted project objectives</td>
<td>Number of separate locations with walkable features (e.g., curb extensions, bike lanes, signalized crosswalks)</td>
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<td>Multimodal quality of service</td>
<td></td>
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<tr>
<td>Percent of stakeholder interest categories represented in adopted project objectives</td>
<td>Percent of blocks with 400 feet or less between crosswalks</td>
<td></td>
<td>Percent of pedestrian throughway length to be shaded by street trees or overhead structures 5 years after project completion</td>
<td></td>
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<tr>
<td>Design flexibility</td>
<td>Safety features (all modes)</td>
<td></td>
<td>Stakeholder satisfaction with project design</td>
<td></td>
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<tr>
<td>Number of different alternatives examined</td>
<td>Percent of blocks with at least ___ feet between traffic lanes and ped. throughway</td>
<td></td>
<td>Level of satisfaction based on survey after review of final design and visualizations</td>
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<tr>
<td>Required degree of compliance with agency of jurisdiction design standards</td>
<td>Average distance along major thoroughfares between signalized crosswalks</td>
<td></td>
<td>Percent of stakeholders satisfied with design based on responses at final public meeting to discuss design</td>
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</tr>
</tbody>
</table>

*Column legend: P = CSS core principle number; Q = quality number; O = outcome number. An entry of “S” indicates support for other outcomes.*
Lancaster Avenue Case Study

• Lancaster Avenue - Fort Worth, Texas

• Downtown segment

• Reconstruction
  – State highway route
  – Transfer to City
  – Promote
    • Redevelopment
    • Revitalization

Downtown Ft. Worth 2010. Source: Google Maps
Lancaster Avenue Redevelopment

- Reconstruct Lancaster to aid redevelopment
- Commitment to collaborative effort involving stakeholders
  - City
  - TxDOT
- Transfer Lancaster to City after reconstruction
  - Delete from state highway system
  - Convey surplus ROW
Collaborators

- Downtown Ft. Worth, Inc.
- City of Ft. Worth
- Ft. Worth South
- TxDOT

Lancaster Steering Committee
Chair by Mayor Moncrief
33 Members

Lancaster Task Force
(City Departments/Agencies)
- Planning and Development
- Transportation and Public Works
- Parks and Community Services
- Public Events
- Housing and Economic Development
- Law
- Finance Management Services
- Intergovernmental Affairs
- Information Technology Solutions
- Fort Worth Public Art
Project Vision and Goals

• 3-day Steering Committee workshop
• Consensus vision and goals
  1. Create a great pedestrian street
  2. Promote infill mixed-use development along the corridor
  3. Showcase area for existing historical buildings
  4. Link the south side of downtown Ft. Worth with the medical district
Project Performance Measures

• Have the project vision and goals been realized?
  – Agency
  – Project/Facility
  – Context
1. Create a great pedestrian street
   • Total sidewalk area
   • Curb extensions, crosswalk lengths, median widths, pedestrian refuges
   • Walkability – perceived safety (on-street parking, slower traffic flow), aesthetic components, streetscape features, lighting

2. Promote infill mixed-use development along the corridor
   • Acreage available for redevelopment
   • Number of sites redeveloped
   • Increased tax base for City
3. Showcase area for existing historical buildings
   • Number of historic buildings renovated

4. Link the south side of downtown Ft. Worth with the medical district
   • Connectivity through site and surrounding parcels
Meeting Project Vision and Goals

1. Create a great pedestrian street
   - Wider sidewalks
   - Streetscape environment
Meeting Project Vision and Goals

1. Create a great pedestrian street
   • Sidewalk extensions (bulbouts)
   • Pedestrian countdown signals
   • Midblock crosswalks
Meeting Project Vision and Goals

1. Create a great pedestrian street
   • On-street parking
Meeting Project Vision and Goals

1. Create a great pedestrian street
   • Pedestrian scaled lighting
   • Light sculptures in medians
2. Promote infill mixed-use development along the corridor
   • Surplus right of way available for development
2. Promote infill mixed-use development along the corridor.

- T&P terminal building restoration/reuse
- Sheraton Hotel and Spa refurbishment
- New Omni Hotel and Condominiums
3. Showcase area for existing historical buildings
   • T&P Building Renovation to T&P Lofts
Meeting Project Vision and Goals

4. Create link between the medical district and the south side of Fort Worth
   • Pedestrian connectivity
   • To project perimeter
   • Through redevelopment parcels
For more information regarding

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Please visit the Institute of Transportation Engineers website at [www.ite.org/css](http://www.ite.org/css)
Questions?

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