Context Sensitive Solutions in Practice

CSS Workshop
South Texas ITE Section & WTS-San Antonio Region

Gary W. Schatz, P.E., PTOE
Austin Transportation Department
July 27, 2010
Traffic Engineering “Basics”

- Mobility - movement of people and goods within the transportation system
- Traffic - includes all roadway users
  - Pedestrians
  - Bicyclists
  - Transit riders
  - Motorists
  - Ridden or herded animals\(^1\)

\(^1\) Texas Transportation Code §541.301
Traffic Engineering “Basics”

• Intersection Efficiency ➔ Corridor Capacity

  – Roadway       Up to 1,900 vehicles/hour/lane
  – Intersections
    • All-Way Stop  Up to 400 vehicles/hour/approach
    • Traffic Signal Up to 600 vehicles/hour/lane
    • Roundabout   Up to 1,200 vehicles/hour/lane
CSS In Practice: The Context

• Population and Vehicular Traffic Increasing
  – Limited modal options
  – Aging population
  – ADA is 20 years old; Limited progress

• Limited Funding and “Political Will”
  – Aging infrastructure
  – New corridors unlikely
  – Acquiring ROW challenging
  – Socio-economic and Environmental Impacts
CSS In Practice: Austin Strategic Mobility Plan

Strategic Mobility Plan
Vision & Mission

- **Vision:** An integrated mobility network for all of Austin
  - provide safe, efficient and diverse choices for people to travel.

- **Mission:** Prioritize City transportation plans and investments according to key community values to meet the vision; support and inform the Imagine Austin Comprehensive Plan as well as other City planning efforts.

From Austin Strategic Mobility Plan Open House, June 17, 2010
CSS In Practice:
Austin Strategic Mobility Plan

Community Values
(from Forums and Online Surveys Feb. – Mar. 2010)

Relative Importance

% of Total Comments

- Efficiency
- Regional Integration
- Mobility Choices
- Sustainable Growth
- Environmental Stewardship
- Investment & Eco Development
- Safety
- Neighborhood Connectivity

From Austin Strategic Mobility Plan Open House, June 17, 2010
CSS In Practice: Austin Strategic Mobility Plan

From Austin Strategic Mobility Plan Open House, June 17, 2010
CSS In Practice: Great Streets

From Great Streets Development Program, City of Austin, 2010
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Fifth Street, Austin, Texas
CSS In Practice: Great Streets

N. Lamar by *Whole Foods*, Austin, Texas
CSS In Practice: Great Streets

Austin City Hall, Second Street & Lavaca Street, Austin, Texas
CSS In Practice: Great Streets

Nueces Street, Austin, Texas
CSS In Practice:
Great Streets

Second Street & San Antonio Street, Austin, Texas
CSS In Practice: Great Streets

Second Street, Austin, Texas
CSS In Practice: Grand Oaks, Austin, Texas

(Image from Google Earth)
CSS In Practice:
Grand Oaks, Austin, Texas
CSS In Practice:
Grand Oaks, Austin, Texas
CSS In Practice:
Grand Oaks, Austin, Texas
CSS In Practice:
Grand Oaks, Austin, Texas
CSS In Practice:
Grand Oaks, Austin, Texas
CSS In Practice: Modern Roundabouts

College Street – Asheville, North Carolina
(Images from www.iihs.org)
CSS In Practice: Modern Roundabouts

Dunning Street (SR 9) – Malta, New York
(Image from Google Earth)
CSS In Practice: Modern Roundabouts

East Main/Idaho/Maryland Road/SH 20 Ramps Roundabout – Grass Valley, California
(Image courtesy of Reid Middleton)
CSS In Practice: Modern Roundabouts

Jefferson/Webb/Coffey Roundabout – Daingerfield, Texas (Before)
(Image courtesy of Brown & Gay, Inc.)
CSS In Practice: Modern Roundabouts

Jefferson/Webb/Coffey Roundabout – Daingerfield, Texas (After)
(Image courtesy of Brown & Gay, Inc.)
CSS In Practice: Modern Roundabouts

US 2 & US 302 Roundabout – Montpelier, Vermont
(Image courtesy of City of Montpelier, Vermont)
CSS In Practice:
Modern Roundabouts

Roundabout at Cotton Elementary School – San Antonio, Texas
(Image from Google Earth)
CSS In Practice:
Modern Roundabouts

Roundabout at Cotton Elementary School – San Antonio, Texas
CSS In Practice: Modern Roundabouts

SH 10 Roundabout – Hanover, New Hampshire
CSS In Practice: Issues of the Profession

• Standard Designs vs. Creation of Place
• Engineering vs. Imagineering
• Auto-centric vs. People-centric

“Find a way to say ‘yes’ so that when you do say ‘no’, they believe you.”

M.C. Ollar, P.E. Division Engineer, Oklahoma Department of Transportation
Questions?
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