

Charlotte's Urban Street Design Guidelines: *A Tool for Context-Based Planning*

2005 Midwest CSD&S Workshop
August 25, 2005

Overview

- Charlotte's Urban Street Design Guidelines (USDG)
- Why we need the USDG
- Objectives of the USDG
- Applications to Planning

Why Are We Developing the USDG?

1. We need to better prepare for growth
2. Our customers want better streets

“They Are Coming” to Charlotte

- 2000 – 2030 population growth equals:
 - St. Louis (348,000)
 - Pittsburgh (335,000)
 - Cincinnati (331,000)



QUEENS ROAD WEST



SOUTH BOULEVARD



Current Standards Do Not Create the Streets People Want



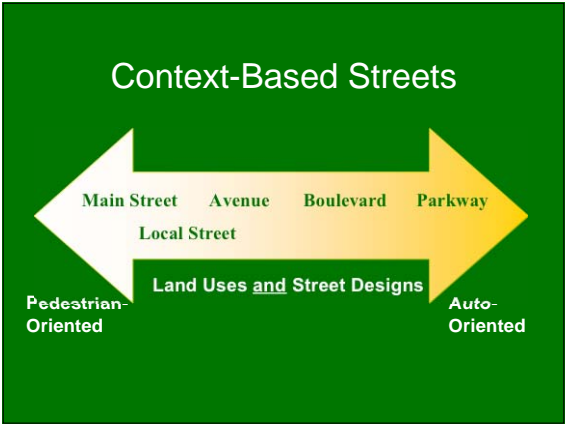
Objectives of the USDG

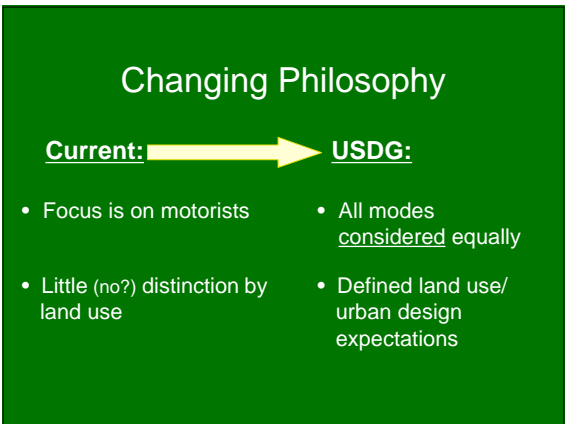
1. Economic development/quality of life
2. Transportation choices
3. Integrating transportation and land use



USDG Contents

- Ch. 1 – Redefining Charlotte’s Streets
- Ch. 2 – Designing Streets for Multiple Users
- ★ Ch. 3 – Applying the Guidelines
- Ch. 4 – Segments
- Ch. 5 – Intersections
- Ch. 6 – Glossary
- Appendices







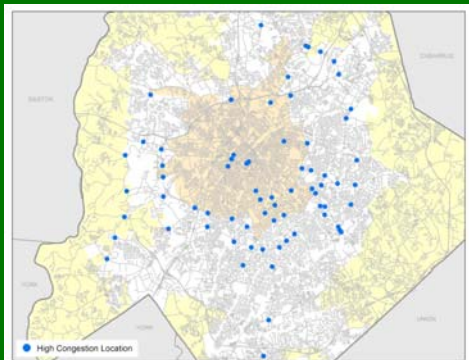
USDG Classification Map(s)

- Existing and future classifications
- Future map to be updated through various planning processes
- Will guide land use and transportation decisions for street segments and intersections

Evaluating Signalized Intersections: Charlotte DOT's Traditional Approach

- One-hour standard
- Volume-to-Capacity (V/C) ratio
 - .85 - .94 “moderately congested”
 - .95 and above “significantly congested”
- High Congestion List (HCL)

High Congestion Locations



Changes Under the USDG:

- Context-based evaluation and design
- Direct comparisons between motor vehicle, pedestrian, and bicyclist levels of service (LOS)
- Congestion analyzed for longer time period – two-hour standard

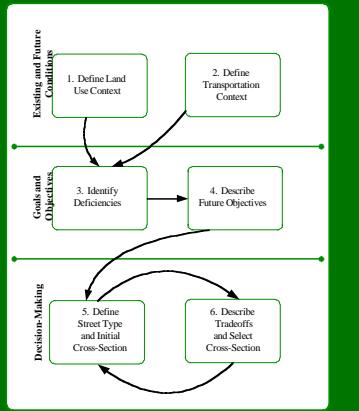
Impact on HCL List?

- Under traditional approach
 - 136 intersections meet conditions for “improvements”
- Under the new approach
 - 46 intersections meet at least one condition for “improvements”

The USDG and CIP Projects

- Projects rated and ranked by various criteria
- Application of “Six-Step” process is one criterion
- Removal of descriptive language (e.g. “widening”), where possible

The Six Step Process



The USDG and CIP Programs

- Recommending programs to implement USDG:
 - “Farm to Market” Roads
 - Connectivity
 - Livable Centers
 - Mid-Block Crossings

Where are we now?

- USDG currently under public review
- Adoption expected in fall
- Implementation to be ongoing

In summary, the USDG:

- Are starting to affect priorities for City projects
- Are affecting design of City projects
- Need to be supplemented with various implementation actions
- Need to be supplemented with \$\$\$

And, USDG will need to be:

- Supplemented with various policy implementation actions
- Supplemented with \$\$\$

Questions?