Planning and Implementing Complete Streets in Charlotte, NC

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New Policies
Transportation Action Plan

- Multi-modal transportation plan
- Describes projects, programs, and policies
- Adopted by City Council in May, 2006
Urban Street Design Guidelines (USDG)

- Comprehensive design guidance for city streets
- 6-step planning and design process
- 17 adopted policy statements
- Adopted by City Council in October, 2007
USDG 6-Step Process

Existing & Future Conditions
1. Define Land Use Context
2. Define Transportation Context
3. Identify Deficiencies
4. Define Future Objectives
5. Define Street Type & Initial Cross-Section
6. Describe Tradeoffs & Select Cross-Section

Goals & Objectives

Decision-Making
Roadway Classification Study

- Speed limit
- Access
- Driveways
- Driveways not permitted
- Traffic signals
- Stop sign with permitted lefts
- Right-in/right-out
- Grade separation
- Medians
- Pedestrian/transit access along roadway
- Pedestrian/transit access separate facility
- Bike lanes along roadway
- Multi-use path separate facility
Roadway Classification Study (continued)
Subdivision Ordinance

• Establishes requirements for all subdivision activity

• Determines how street network will be created during development

• Has force of law
Most streets are local streets and private developers build local streets
Modifying Ordinance Based on Experience

Area Plans

CIP Projects

Conditional Zoning

2010
“Filling in” Street Network
Analyzing Existing Deficiencies

- ~40% thoroughfares - no sidewalks
- ~70% local streets - no sidewalks
- ~50% signalized intersections - poor pedestrian level-of-service
- ~95% intersections - poor bicycle level-of-service
- ~20% thoroughfares - highly congested
Pedestrian LOS at Signalized Intersections
Policies + $ = Projects

~$450 million in projects

- Rozzelles Ferry Rd.
- Charlottetowne Ave.
- Cindy Ln.
- East Blvd.
- Hickory Grove Rd.
- Old Pineville Rd
- Prosperity Church Rd.
- Stonewall Ave.
- Morris Field Dr.
- W. Trade/Rozzelles Ferry
- Woodlawn/South
- 49/John Kirk
Prioritization Criteria for Thoroughfares/Arterials

- Reduce congestion
- Improve safety
- Provide multi-modal options
- Support transit
- Support land use planning objectives
- Increase accessibility to Uptown/other economic centers
- Improve connectivity
- Support neighborhood/economic redevelopment
- Improve intermodal connectivity
- Provide positive cost-effectiveness
Selection Criteria for Sidewalks

- Traffic volumes
- Connectivity to other sidewalks
- Proximity to a school
- School type
- Proximity to a park
- Proximity to land uses serving the elderly or people with disabilities
- Proximity to transit
- Proximity to neighborhood serving land uses

- Evidence of a worn path
- Roadway related safety need
- Length of proposed sidewalk
- Existing Curb/Gutter/Drainage
- Pedestrian Friendly Index rating
- Proximity to pedestrian overlay district
Intersection Capacity/Multi-Modal Enhancement Projects

1. Congestion
   - Existing vs. improved volume-to-capacity ratios
   - Existing and future traffic volumes

2. Safety
   - Accident data analyses
   - Crash patterns, locations, deficiencies

3. Multi-modal options

4. Operations and other considerations
3. Multi-modal options
   - Improves pedestrian LOS
   - Improves bicycle LOS
   - Supports transit
   - Land use
   - Improves connectivity
4. Operations and other considerations

- Mitigate operational problem
- Multi-phased or adjacent to another CIP project
- Right-of-Way available or minimal amount needed
- Economic development incentive provided
- Air quality/environmental benefit
- Opportunity for public/private partnership
- Other considerations to fund
Criteria for Upgrading Farm-to-Market Roads

- Congestion and Safety
  - Average annual weekday traffic
  - Crash rates
  - Substandard cross section
- Location
- Cost
Criteria for Upgrading Farm-to-Market Roads (continued)

• Congestion and Safety

• Location
  – Within city limits
  – ¼ mi. buffer to: school, transit, park/greenway
  – Sidewalk connectivity
  – Bicycle connectivity
  – Primary access routes to high school

• Cost
• Congestion and Safety
• Location
• Cost
  – Length of improved segment
  – Existing utility conflicts
  – ROW impacts
  – Usable widening strips
  – Bridge/culvert deficiencies
NC’s Strategic Transportation Investments Law

- Highway Quantitative Scoring Criteria
  - Congestion
  - Benefit/cost
  - Economic competitiveness
  - Safety score
  - Pavement score
  - Lane width
  - Shoulder width
  - Multimodal
  - Accessibility/connectivity
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Questions?