



**CHARLOTTE**<sup>TM</sup>  
CHARLOTTE DEPARTMENT  
OF TRANSPORTATION

# Creating More Complete Streets in Charlotte, NC



CSS National Dialog

August 11, 2010



- Norm Steinman, AICP
  - Manager, CDOT Planning and Design Division



- Explain Why Charlotte Needs Complete Streets
- Discuss How the USDG Are Intended to Create Complete Streets
- Describe Some of the Plans and Projects Completed with the USDG

# Why Does Charlotte Need Complete Streets?

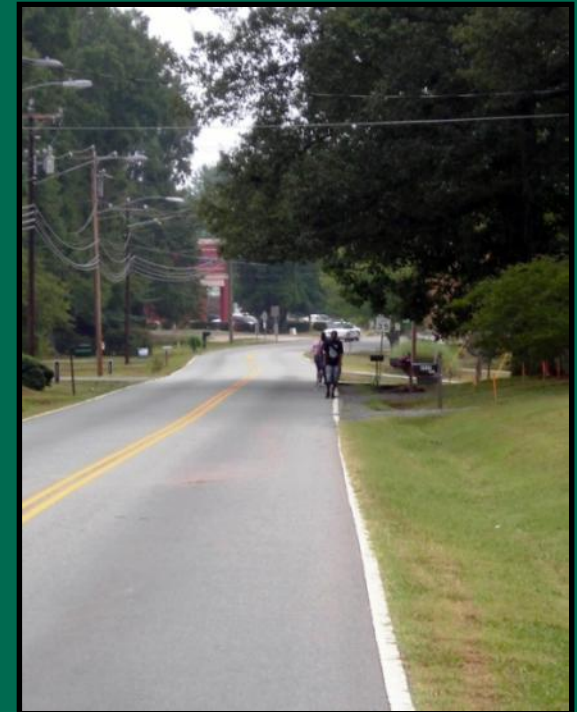
- Existing Deficiencies
- Public Opinion
- Growth





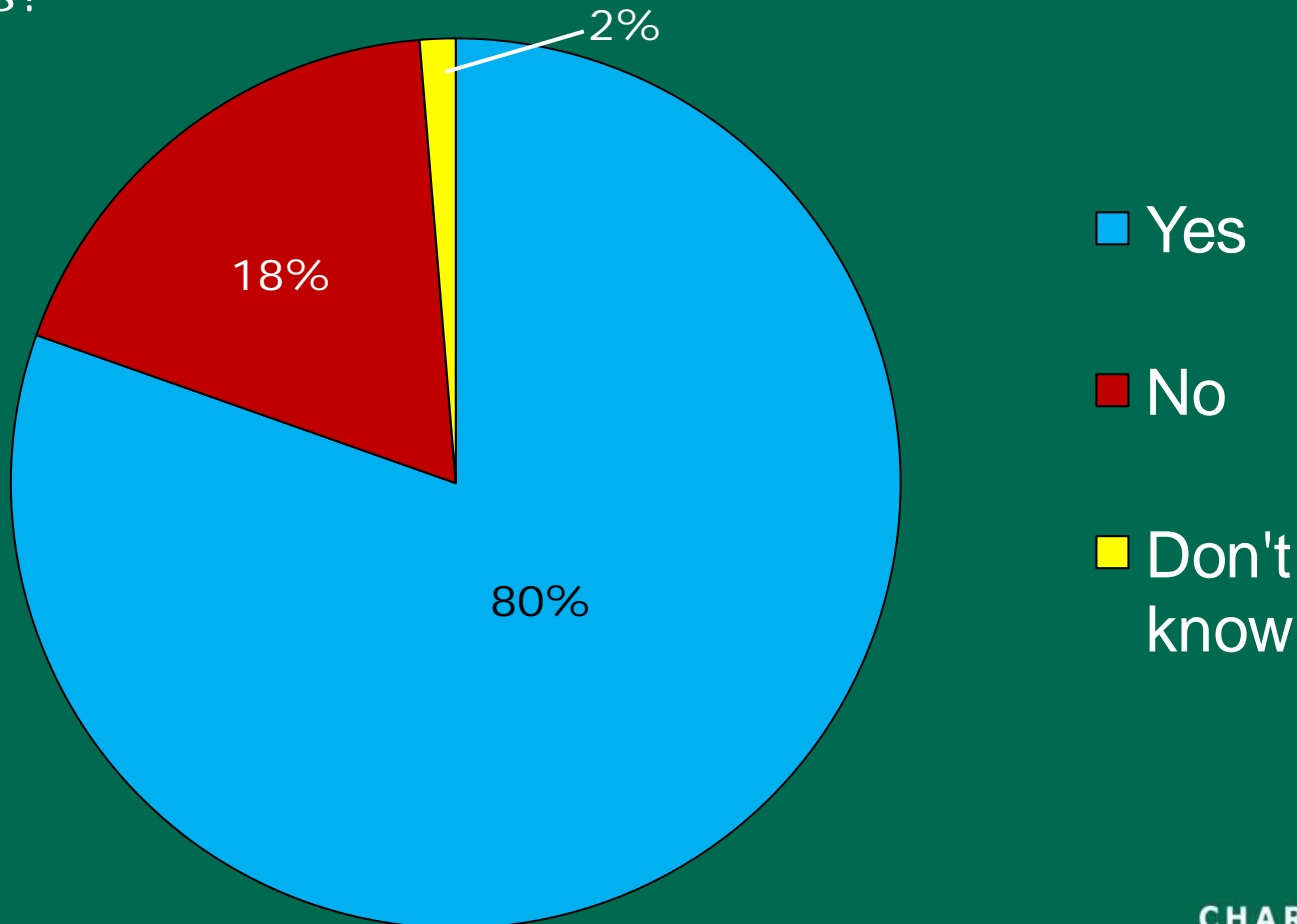
# Existing Deficiencies

- ~45% thoroughfares - no sidewalks
- ~75% local streets - no sidewalks
- ~50% intersections - poor pedestrian level-of-service
- ~95% intersections - poor bicycle level-of-service
- ~20% thoroughfares - highly congested



# 2010 Charlotte-Mecklenburg Annual Survey

Do you believe streets should be **designed to accommodate all users** including motorists, pedestrians, bicyclists, and transit users?



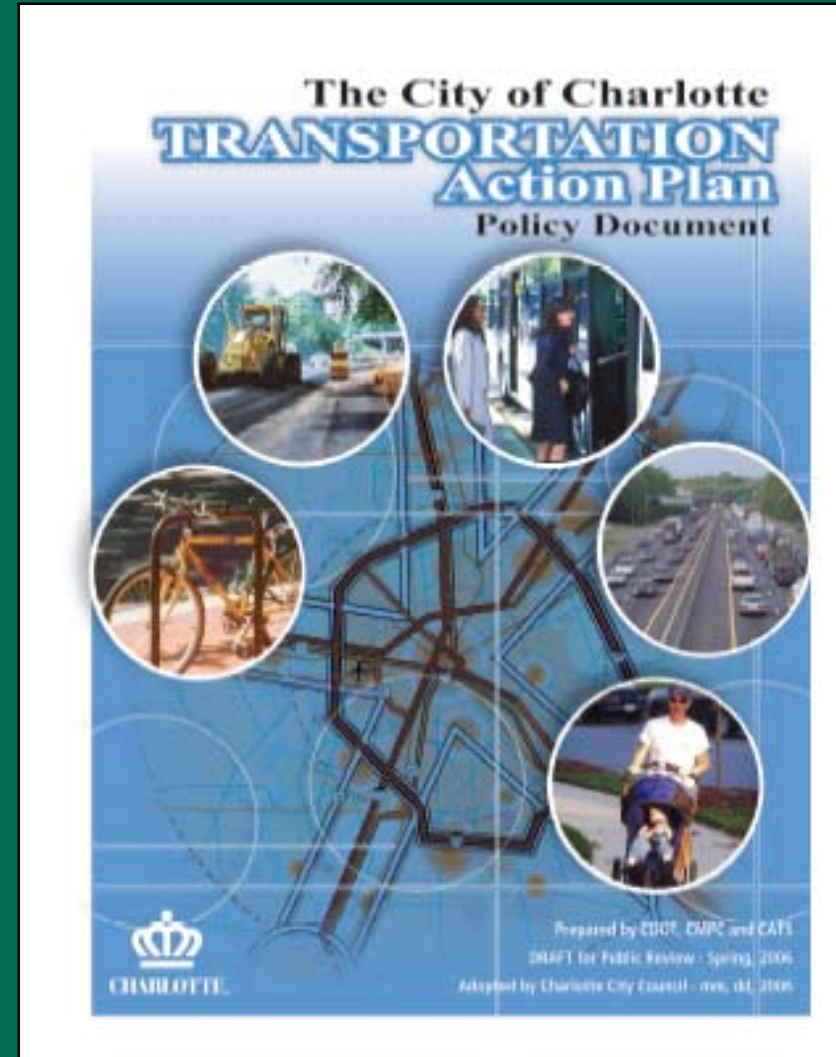
# “They Are Coming”

- Charlotte’s 30 year population growth equals:
  - St. Louis (348,000)
  - Pittsburgh (335,000)
  - Cincinnati (331,000)



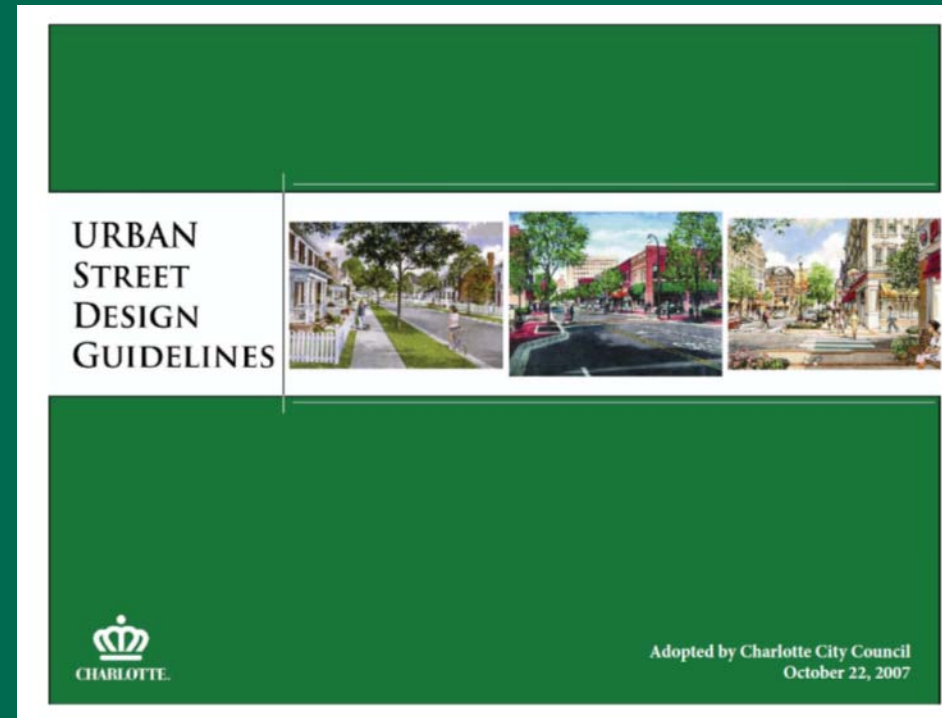
# Transportation Action Plan (TAP) and Urban Street Design Guidelines (USDG)

- TAP is Charlotte's long-range comprehensive transportation plan
- TAP describes policies, projects and programs
- USDG are applied to design streets and blocks

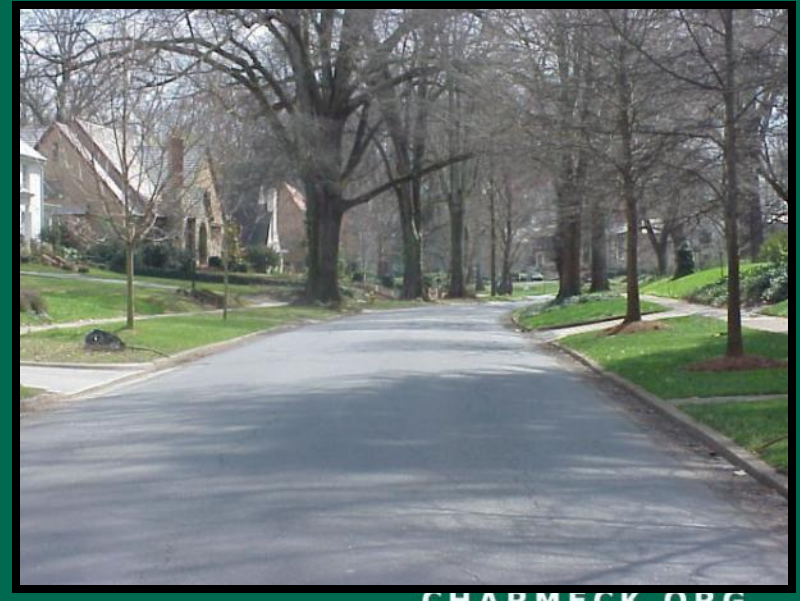


# How the TAP and USDG Work Together

- TAP Goal 2 – provide more and better travel choices
- “More” (quantity) specified in TAP policies and TAP programs
- “Better” (quality) defined by the USDG



The City will promote context-sensitive streets (i.e., by designing transportation projects within the context of adjacent land uses, to improve safety and neighborhood livability, promote transportation choices and meet land use objectives), consistent with the City's Urban Street Design Guidelines.



# Key Content of the USDG

- (17) policy statements
- (6-step) planning and design process
- (land-use based) street options
- design requirements and expectations  
(dimensions, tradeoffs)



- Apply street classifications and design elements throughout Charlotte and ETJ
- Apply 6-step process
- Apply USDG to publicly and privately built streets
- Mutually reinforce land use and transportation decisions

# Intent of USDG Policy Statements (cont.)

- Create better network for pedestrians, bicyclists, and neighborhood residents (require appropriate block lengths and creek crossing intervals)
- Expand tree canopy
- Design intersections for all modes
- Include traffic calming



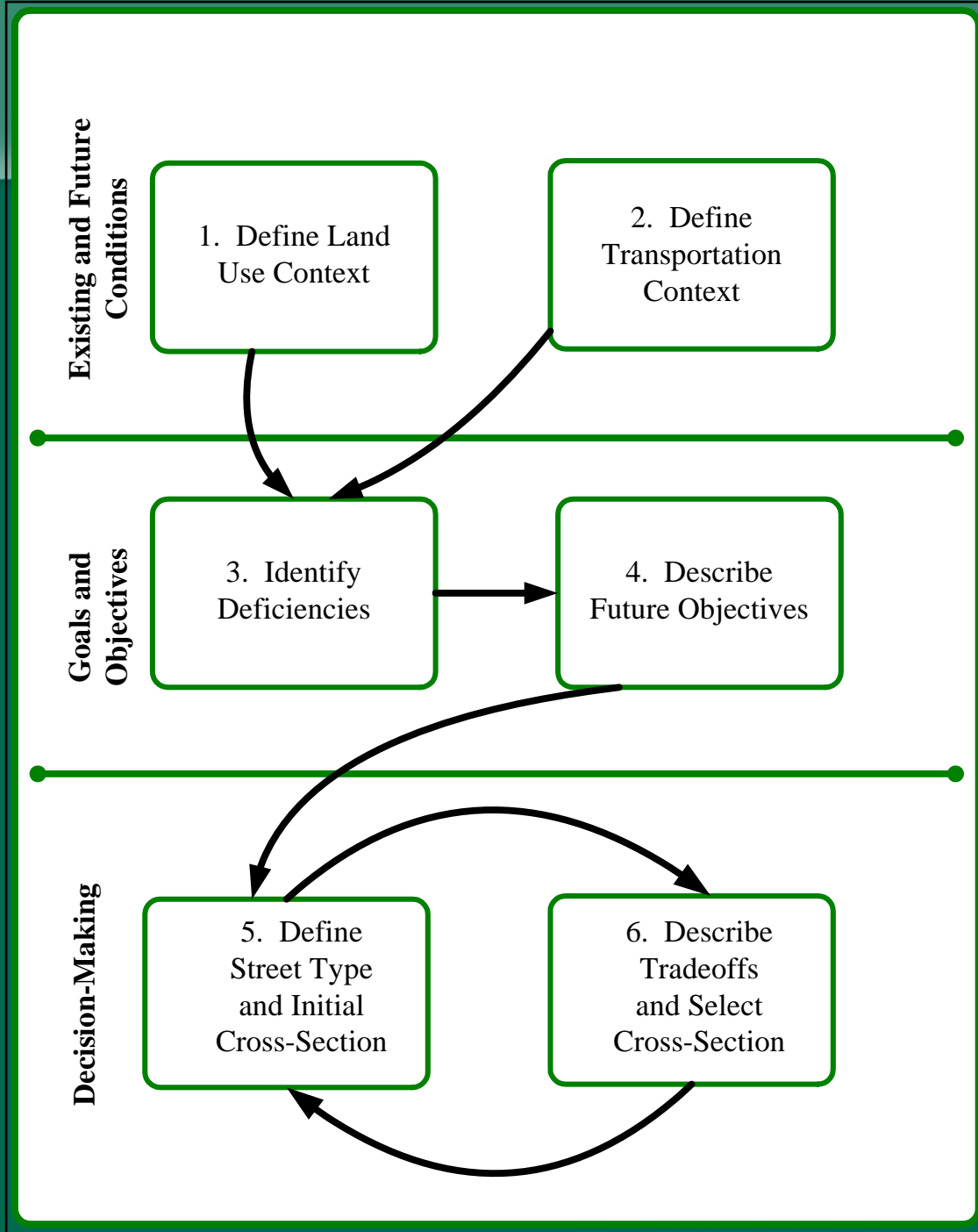


By adopting the USDG, the **City Council declares** that it is the **policy** of the **City** of Charlotte to:

- #1: Apply the USDG to the planning and design of new and modified streets in Charlotte and its Sphere, including State-maintained surface streets.



# The Six-Step Process



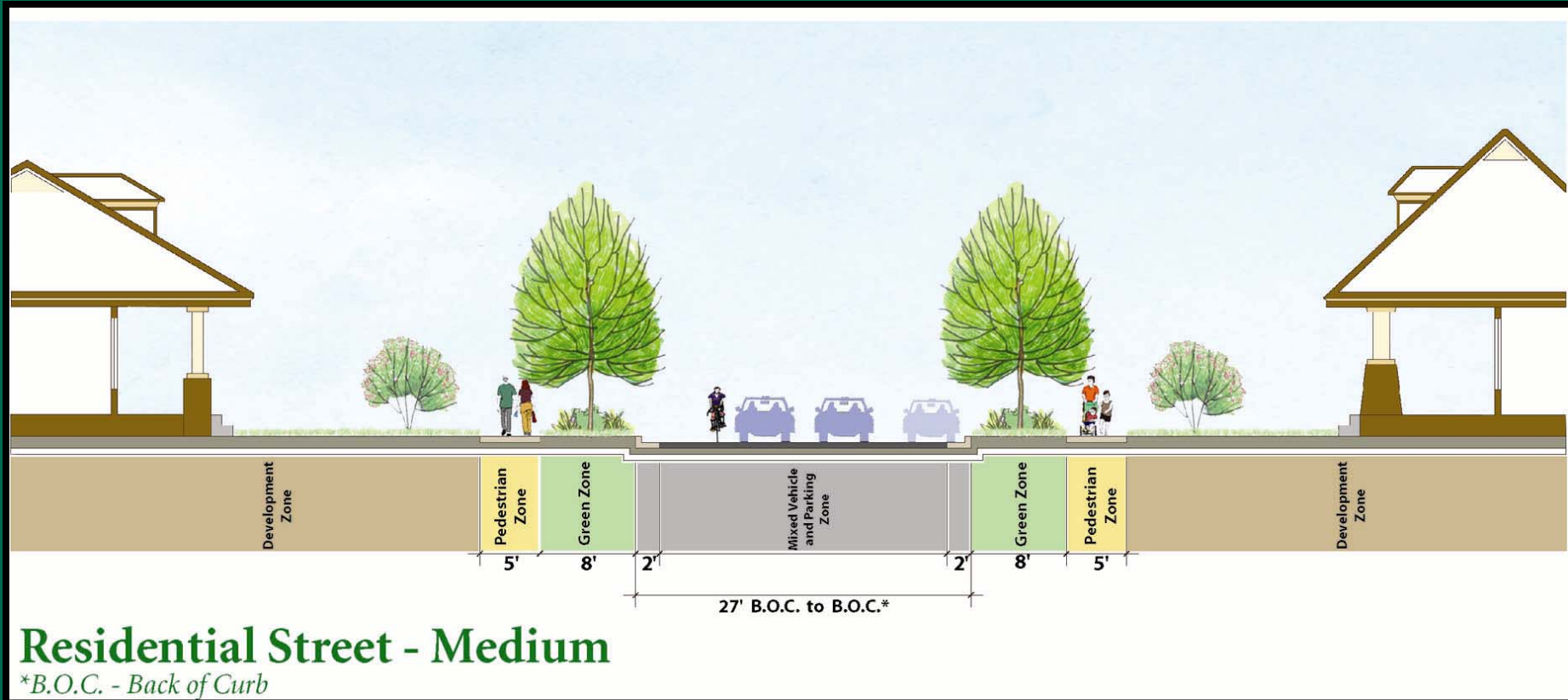
# Example of Questions in 6-Step Process

## Step 2: Existing and Future Transportation

- Daily and hourly traffic volumes?
- Posted and operating speeds?
- Bicycle lanes or routes?
- Bus stops or transit services?
- Sidewalks and crossings?
- Relationship to street network?
- Changes in connectivity and capacity?

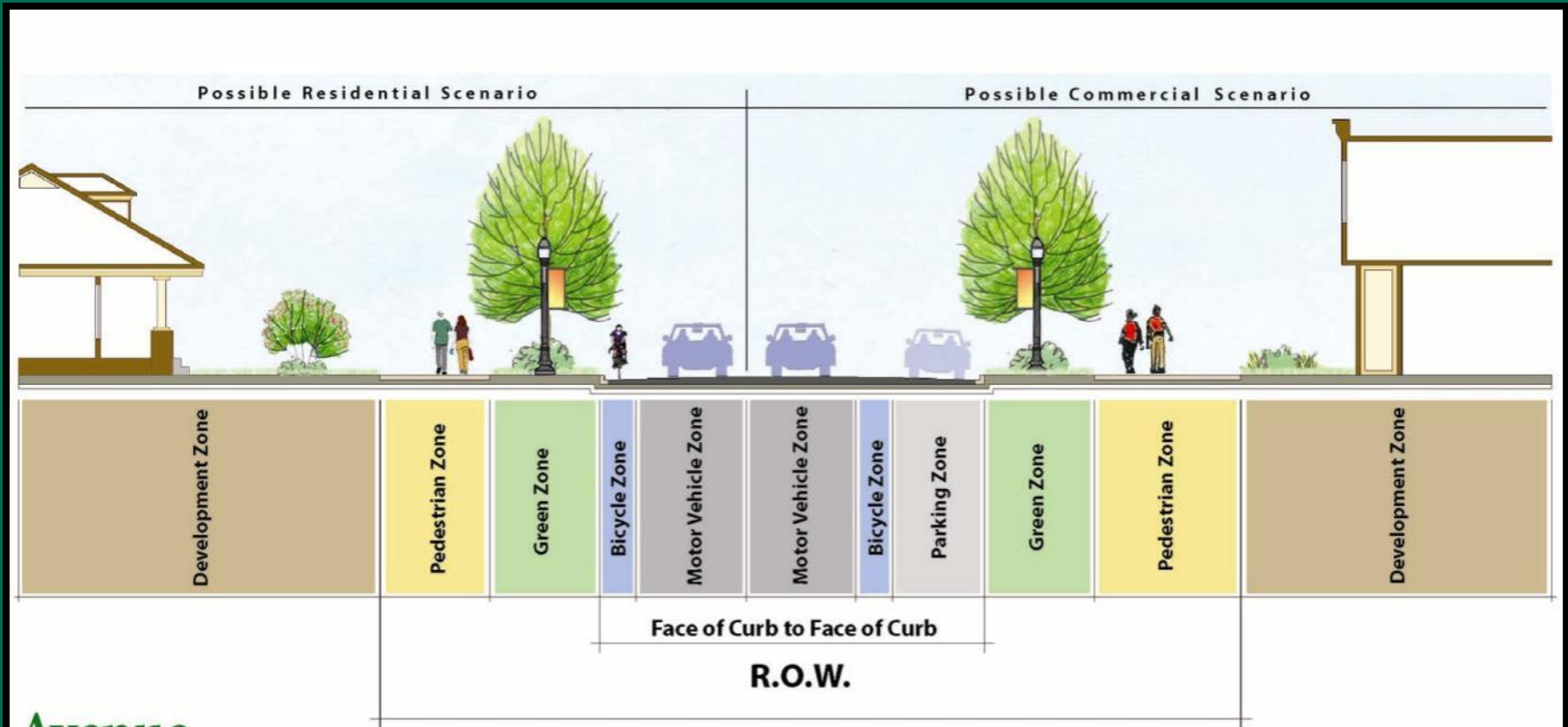


# Context-Based Prescriptive Design





# Context-Based "Not Prescriptive" Design



## Avenue

*For dimensional information refer to specific guidelines for each zone (development, pedestrian, green, bicycle, parking, motor vehicle)*

## **Transportation Research Record No. 1878**

Methodology to Assess Design  
Features for Pedestrian and Bicyclist  
Crossings at Signalized Intersections

Norm Steinman and David Keith Hines

- CIP projects
  - Major Roadways
  - Farm-to-Market Roads
  - Intersections
  - Sidewalks
  - Neighborhood Improvement
  - Connectivity
  - Traffic Calming
- Area plans
- Rezonings



# Rozzelles Ferry Road





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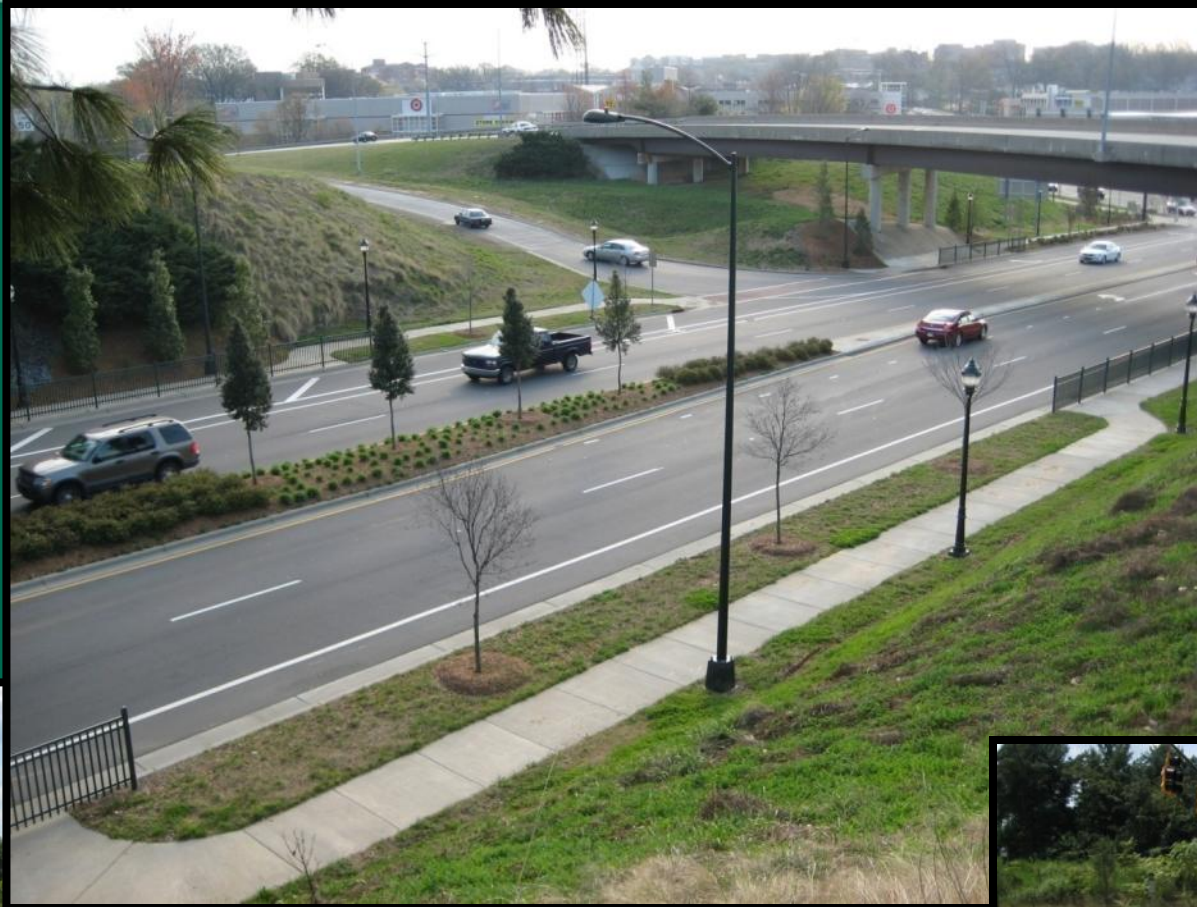
# Rozzelles Ferry & West Trade





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# Stonewall Street



Completed	Since 2005	Anticipated /Underway
9	Thoroughfares rebuilt/extended	17
19	Streetscapes and road-conversions	8
11	Intersections	8
37	Sidewalks	66
9	Area Plans	6
171	Rezoning	



# Charlotte's Urban Street Design Guidelines

For further information, contact:

Tracy Newsome

[tnewsome@charlottenc.gov](mailto:tnewsome@charlottenc.gov)

or

Mark Cole

[mcole@charlottenc.gov](mailto:mcole@charlottenc.gov)