



CHARLOTTE

BROOKSHIRE BOULEVARD ROADWAY CLASSIFICATION STUDY

Steering Committee Launch

February 2, 2012

- Define the framework for the study
- Provide feedback for community outreach strategy
- Not choose any classifications today

- Study Purpose
- Classification Systems & Policy Context
- Brookshire Boulevard
- Committee Role & Next Steps

Roadway Classification

Functional Purpose

Design Elements

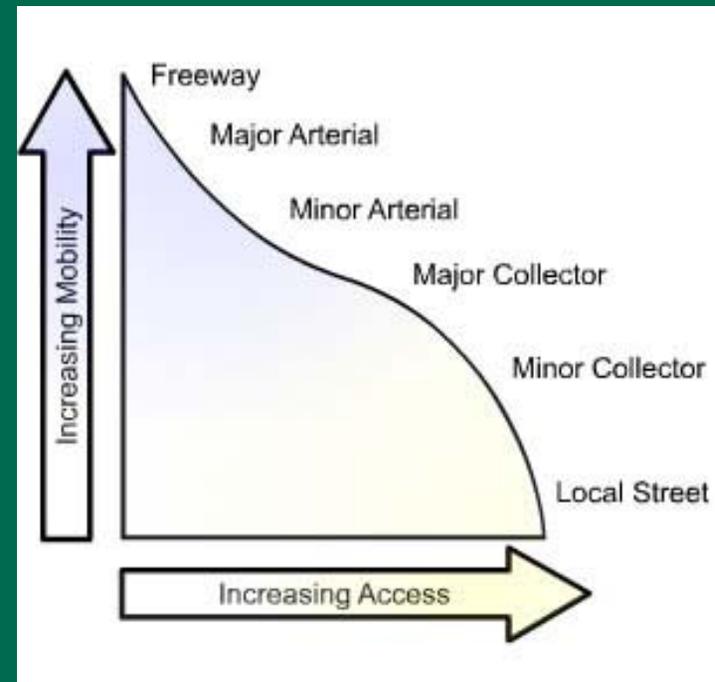
Access Strategies

User Benefits & Impacts

Land Use Context

Transition Points

Conventional Federal
Functional Classification



Source: FHWA

What does “Roadway Classification” mean?

- Motorists – speed limit, lane widths, median widths, shoulder, curb & gutter, street lighting, and driveway & street connections
- Pedestrians – sidewalk location and width, intersection crosswalks, pedestrian signals, median refuge, bus stops, and mid-block pedestrian crossings
- Bicyclists – bike lane location and width, multi-use paths, connectivity to greenways & trails, and overall bicycle accommodations
- Development – land use, setbacks, access, and connectivity

- Develop an overall plan for “functional” or “roadway type” classification
- Determine appropriate classification and cross section by segments and transition areas
- Consistency and compatibility in land development and transportation investment decisions
- Over time, the results of this Study will affect access, development, and mobility for existing and new businesses and residents along these roadways.

- It is NOT a preliminary or final design project
- It is NOT a construction project
- It is NOT a maintenance project
- It is NOT a widening or alignment study
- It is NOT a right-of-way acquisition project
- It is NOT an environmental assessment
- It is NOT a land use plan
- It is NOT a funding prioritization plan

- Federal Highway Administration (FHWA) Functional Classification
- Thoroughfare Plan
- Comprehensive Transportation Plan (CTP)
- City of Charlotte Urban Street Design Guidelines (USDG)
- NCDOT Complete Streets

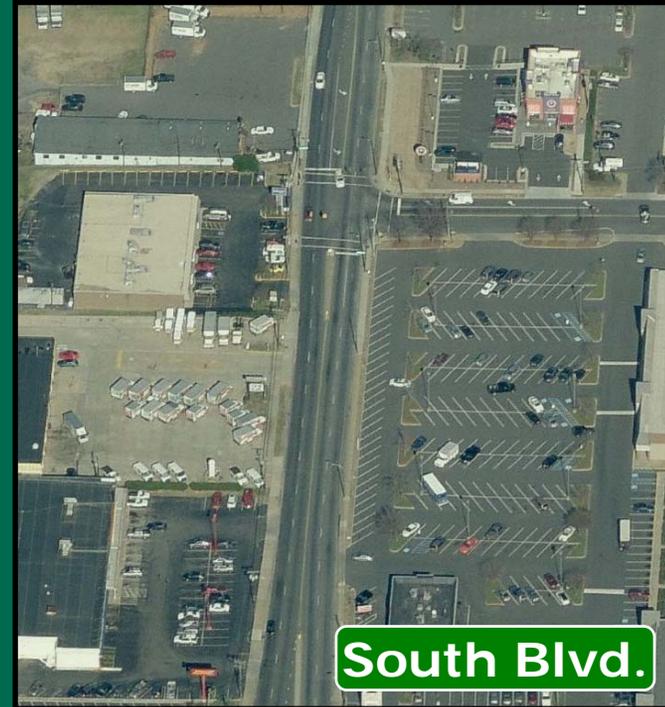
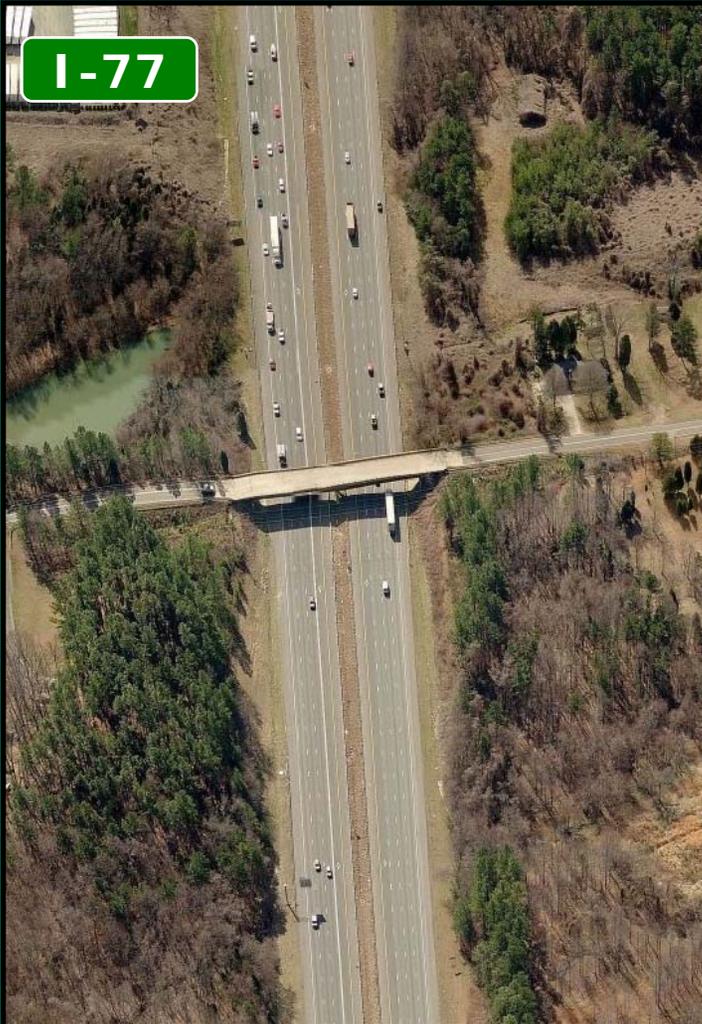
Classification	Description
Principal Arterial	Includes interstate, other freeways and expressways, and other principal arterials (with no control of access).
Minor Arterial	More emphasis on land access than principal arterials, and offer a lower level of traffic mobility.
Collector	The collector street system provides both land access service and traffic circulation within residential neighborhoods, commercial and industrial areas.
Local	Serves primarily to provide direct access to abutting land and access to the higher order systems.

Note: "Collector" and "Local" classifications are not appropriate for this corridor.

Source: FHWA



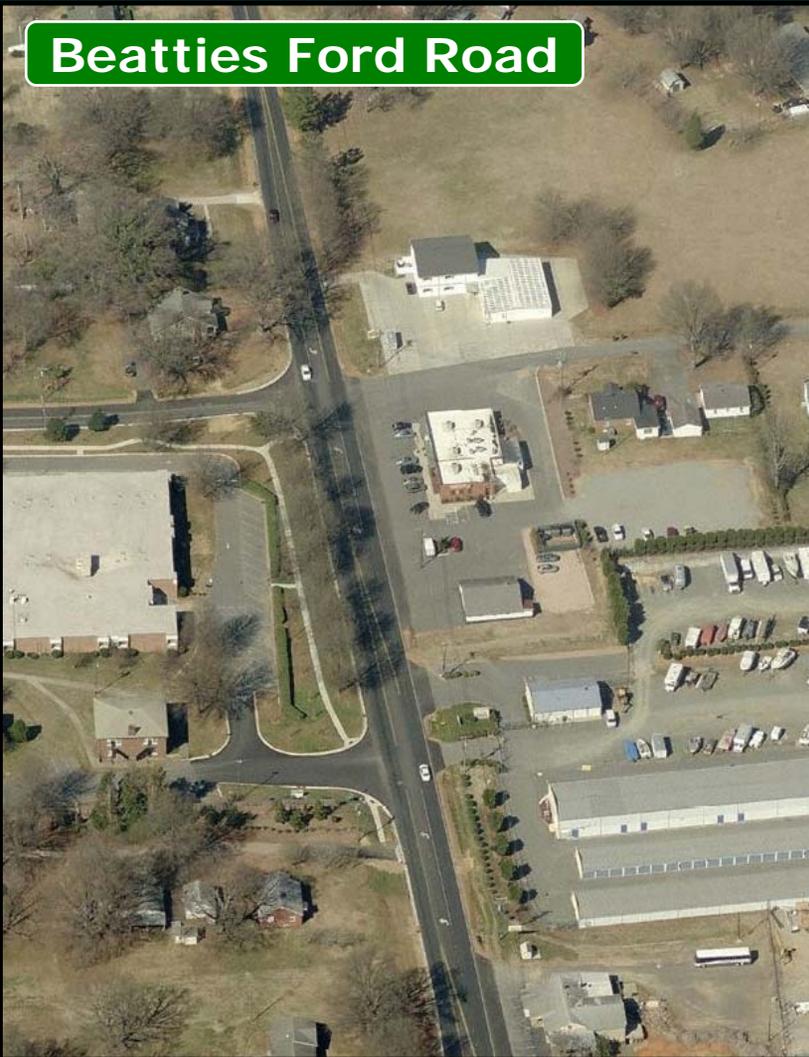
Examples of Principal Arterials



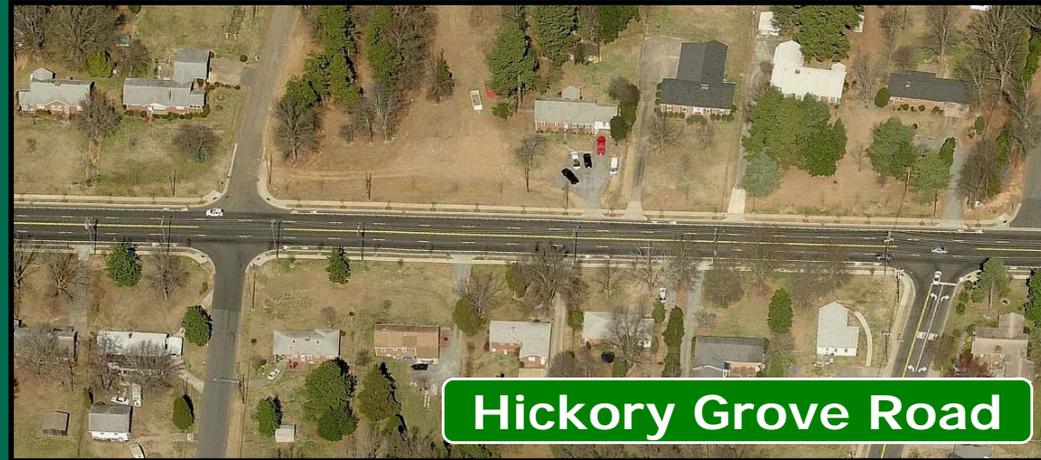


Examples of Minor Arterials

Beatties Ford Road



Hickory Grove Road



Oakdale Road



Classification	R/W width	# of Lanes	Access Control	Median	Left turn lanes at signals
Freeway/Expressway	350'	4+	Full or partial	Closed	NA
Limited Access Thoroughfare	200'	4-6	Partial	>30' wide	1-2 lanes
Commercial Thoroughfare	150'	4-6	None	Always	1-2 lanes
Major Thoroughfare	80-100'	4-6	None	Varies	1-2 lanes
Minor Thoroughfare	60-70'	2-4	None	Rare	0-1 lane

Source: NCDOT and MUMPO

Thoroughfare Plan

Limited Access Thoroughfare

Brookshire Blvd.
(north of Bellhaven Blvd.)

Major Thoroughfare

Brookshire Blvd.
(south of Bellhaven Blvd.)

Classification	Functional Purpose	Speed Limit	Access Control	Driveways	Cross Section Elements	Median Crossovers
Freeway	High mobility, low access	55+	Full	Not allowed	Min. 4 lane w/ median	Not allowed
Expressway	High mobility, low to moderate access	45-60	Limited or partial	1/parcel; limited to right-in/right-out	Min. 4 lane w/ median	Allowed with spacing limitations
Boulevard	Moderate mobility, low to moderate access	30-55	Limited, partial, or none	Allowed	Min. 2 lane w/ median	Allowed with spacing limitations

Source: MUMPO

Expressway

Brookshire Blvd.
(north of Bellhaven Blvd.)

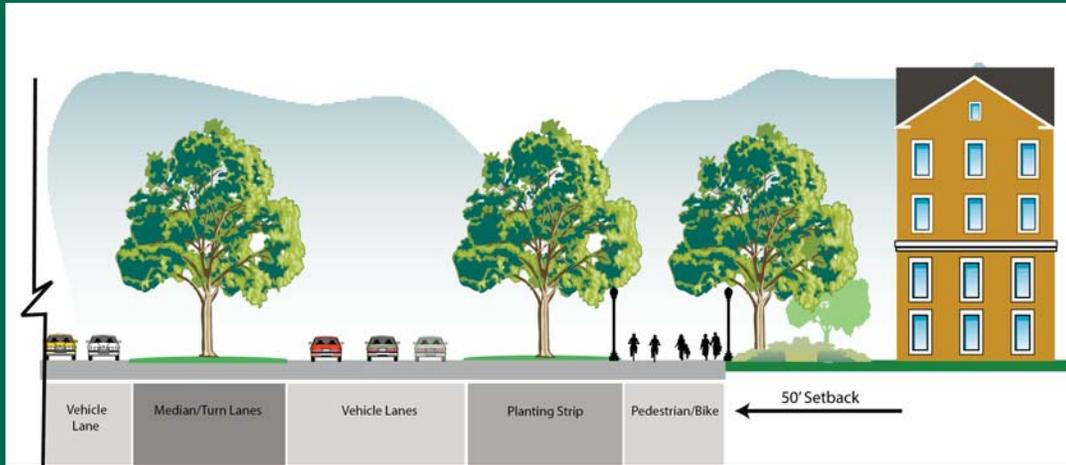
No segments of Brookshire Blvd. are currently classified as “Boulevard” by the draft CTP



Classification	Posted Speed Limit	# of Lanes	Lane Width	Medians	Sidewalks	Bicycle Accommodations	Block Length
Parkway	Up to 55	4-6	12'	20'	Separate, parallel facility; 10' shared path	Separate, parallel facility; 10' shared path	½ mile preferred
Boulevard	Up to 45	4	10-11'; 14' for shared bike lane	17'	6'	5' bike lane	1000-2000'
Avenue	30-40	2-4	10'	Not typical (16' in residential areas)	6'	4'	600'

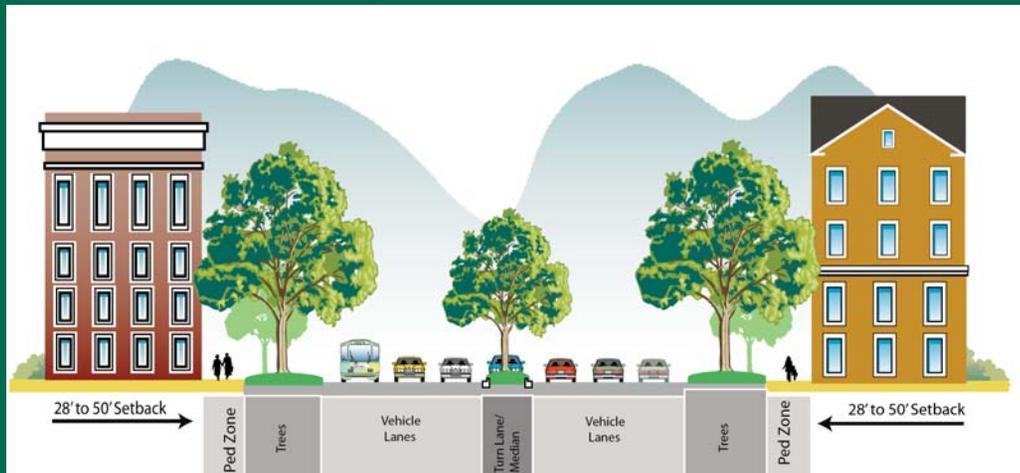
Note: "Avenue" classification is not appropriate for this corridor.

Source: City of Charlotte



Parkway

Partial section only



Boulevard



NCDOT Complete Streets

Classification	Target Speed	Lane Width	Medians	Sidewalks	Bicycle Accommodations	Access Point Spacing
Urban/Suburban Parkway	>35	11-12'	17'6"-32'	Separate, parallel facility; 10-20' shared path	Separate, parallel facility; 10-20' shared path	>1000' (<5 access points per mile)
Urban/Suburban Boulevard	25-40	10-11'; 14' for shared bike lane	8-30'	6-20'	4-6'	400-1000' (5-15 access points per mile)
Urban/Suburban Avenue	25-35	10-11'; 14' for shared bike lane	0-17'6"	6-20'	4-6'	Varies depending on functional classification

Source: NCDOT Complete Streets (Draft 1/20/2012)



NCDOT Complete Streets

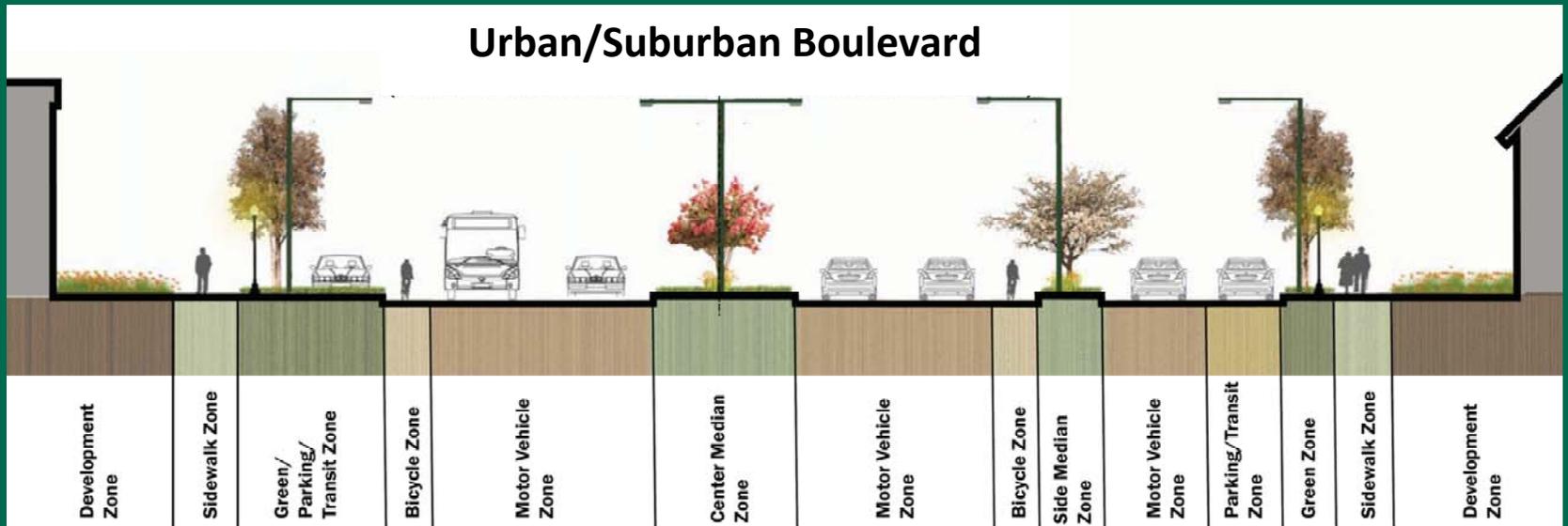
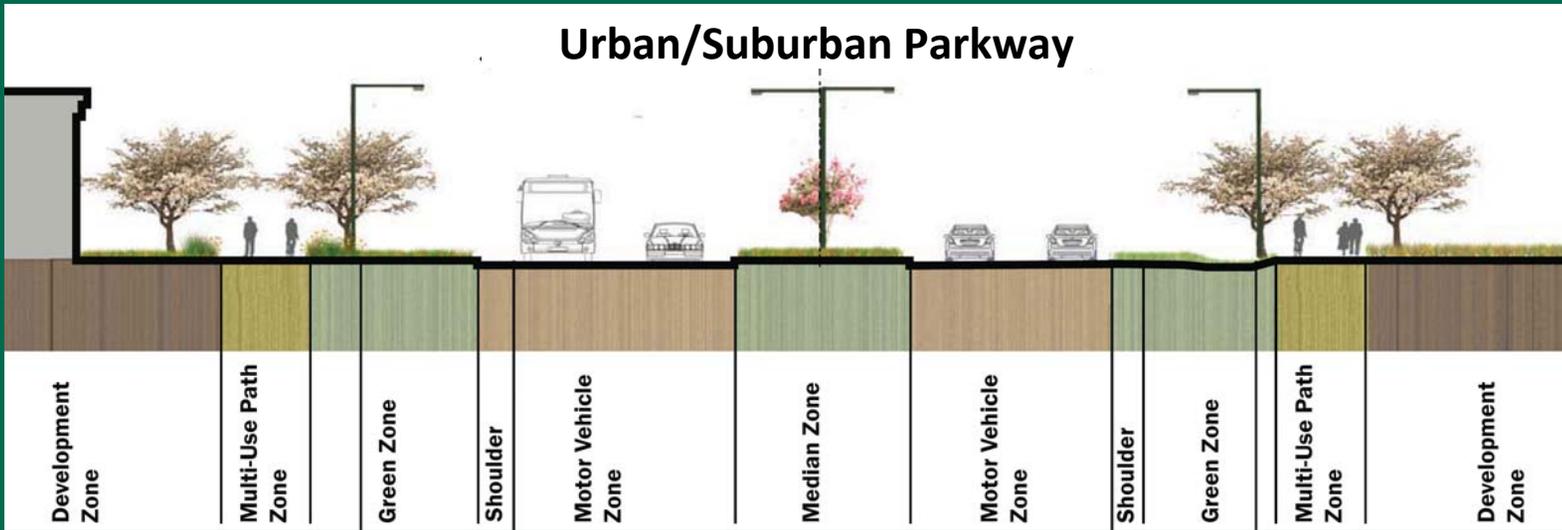
Urban / Suburban	Street Type	Main Street			Avenue			Boulevard	Parkway
	Target Speed (MPH)	20-25	20-25	20-25	25-35	25-35	25-35	25-40	> 35
	Traffic Volume	H / M	M	M / L	H	M	L	H	H
	Access Density	H	H	H	M	H / M	H	L/M	L
Functional Classification	Arterial	Collector	Local	Arterial	Collector	Local	Arterial	Arterial	

Suggested Ranges:

Traffic Volume	L - Low M - Moderate H - High	Less than 8,000 vpd 6,000-24,000 vpd Greater than 20,000 vpd	
Access Density (Traffic Signal Spacing and Access Point Spacing)	L - Low M - Moderate H - High	Up to 1 signal per mile 1 - 3 signals per mile More than 3 signals per mile	OR OR OR Greater than 1000 ft. average spacing between access points (less than 5 access points on each side of street) 400 -1000 ft. average spacing between access points (5-15 access points per mile on each side of street) Less than 400 ft. average spacing between access points (more than 15 access points per mile on each side of street)

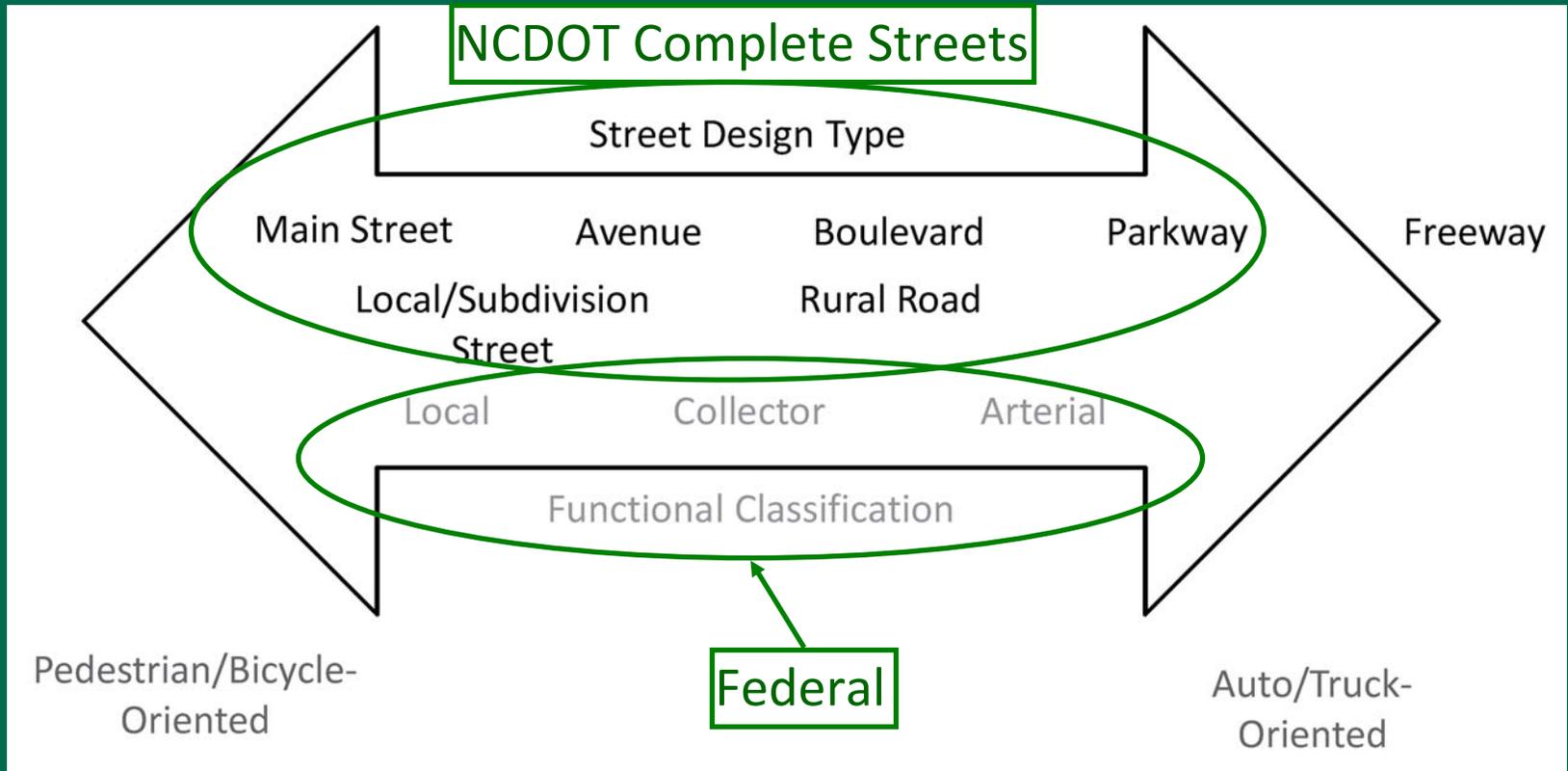
Note: Access points include street intersections and commercial access points (excluding single family residential). Access points should be counted on both sides of the street when determining the number of access points.

Source: NCDOT Complete Streets (Draft 1/20/2012)





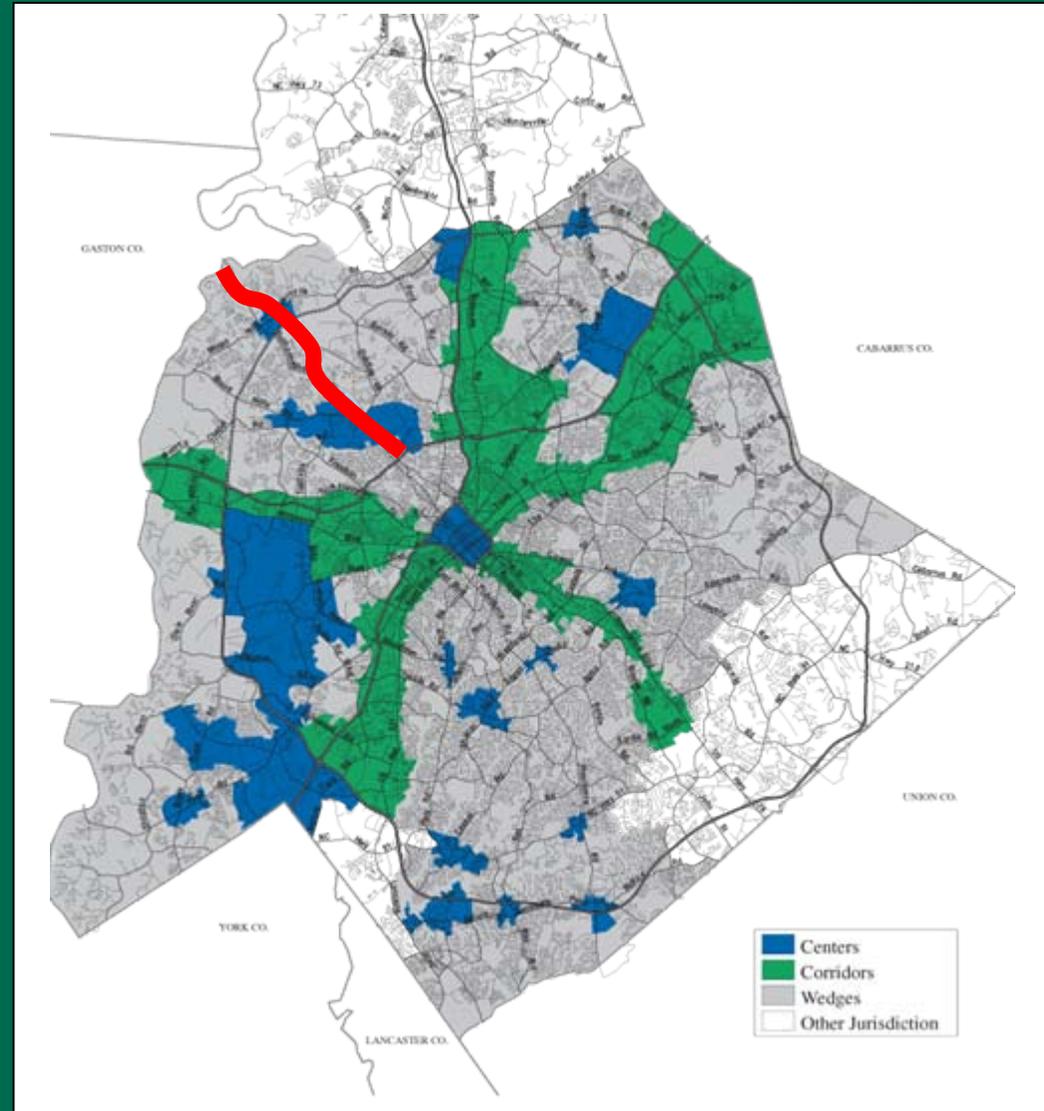
NCDOT Complete Streets



Source: NCDOT Complete Streets (Draft 1/20/2012)

Centers, Corridors and Wedges Growth Framework

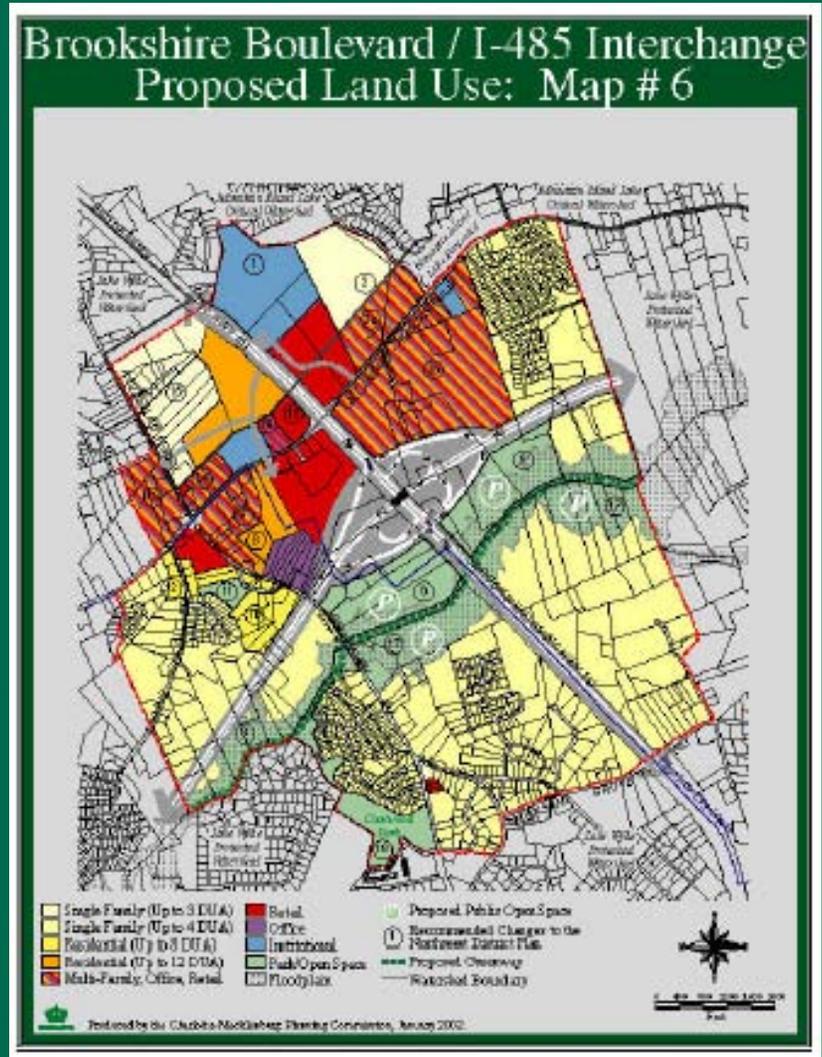
- Framework provides “starting point” for developing area plan recommendations
- Paw Creek Industrial Center
- Mountain Island Mixed-Use Activity Center
- Northwest Wedge



Adopted Plans

Westside Strategy Plan (2000)

Brookshire/I-485 (2002)



Adopted by MUMPO

Classification Types

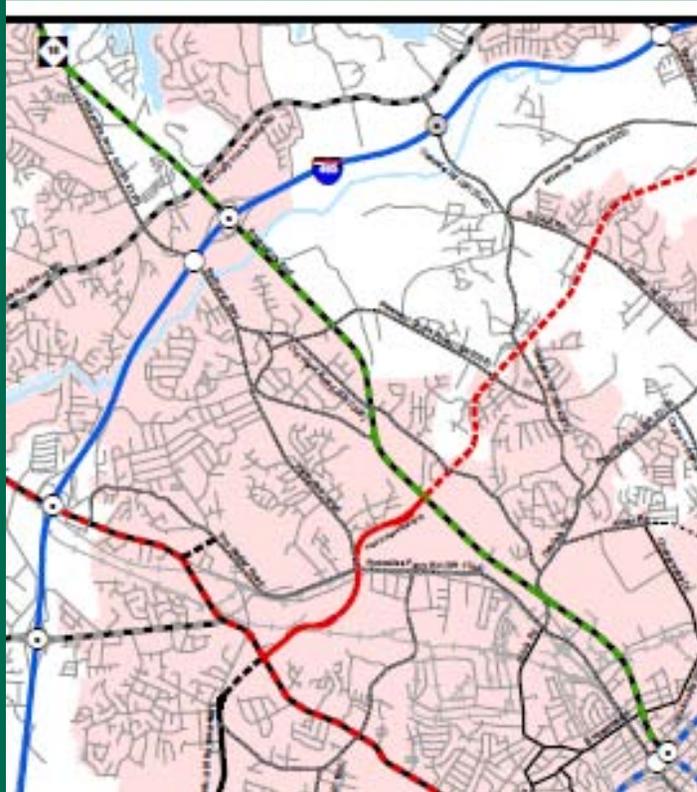
Proposed Alignments

Used by City Zoning and
Subdivision Ordinances



CLASSIFICATION	EXISTING	PROPOSED
FREEWAY-EXPRESSWAY		
CLASS II		
MAJOR THOROUGHFARE		
MINOR THOROUGHFARE		
INTERCHANGE		
GRADE SEPARATION		
RAILROAD		

Draft Comprehensive Transportation Plan (CTP)



Comprehensive Transportation Plan

Plan date: August 30, 2011

Freeways

-  Existing
-  Needs Improvement
-  Recommended

Expressways

-  Existing
-  Needs Improvement
-  Recommended

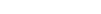
Boulevards

-  Existing
-  Needs Improvement
-  Recommended

Other Major Thoroughfares

-  Existing
-  Needs Improvement
-  Recommended

Minor Thoroughfares

-  Existing
-  Needs Improvement
-  Recommended

-  Existing Interchange
-  Proposed Interchange
-  Existing Grade Separation
-  Proposed Grade Separation

The following projects are identified as funded in the 2035 Draft LRTP:

- Fred D. Alexander Boulevard (4 lanes) from Freedom Drive (NC 27) to Brookshire Boulevard (NC 16) [2010-2015]

- Project Limits – North of I-85 to Mecklenburg/Gaston County line
- 2010 Average Daily Traffic Volume –
 - 17,000 (between Bellhaven Blvd. and I-485)
 - 36,000 (north of I-85)
- 2035 Projected Average Daily Traffic Volume –
 - 25,700 (at Mecklenburg/Gaston County line)
 - 67,000 (at I-85)
- Posted speed limit – 45-55 mph
- Radial thoroughfare connecting Mecklenburg, Gaston, Lincoln and Catawba Counties with Charlotte's Center City
- Crosses two interstates (I-85, I-485)
- Complex assessment of tradeoffs for competing stakeholder perspectives



Brookshire Boulevard @ Rozzelles Ferry Rd

1978





Brookshire Boulevard @ Rozzelles Ferry Rd

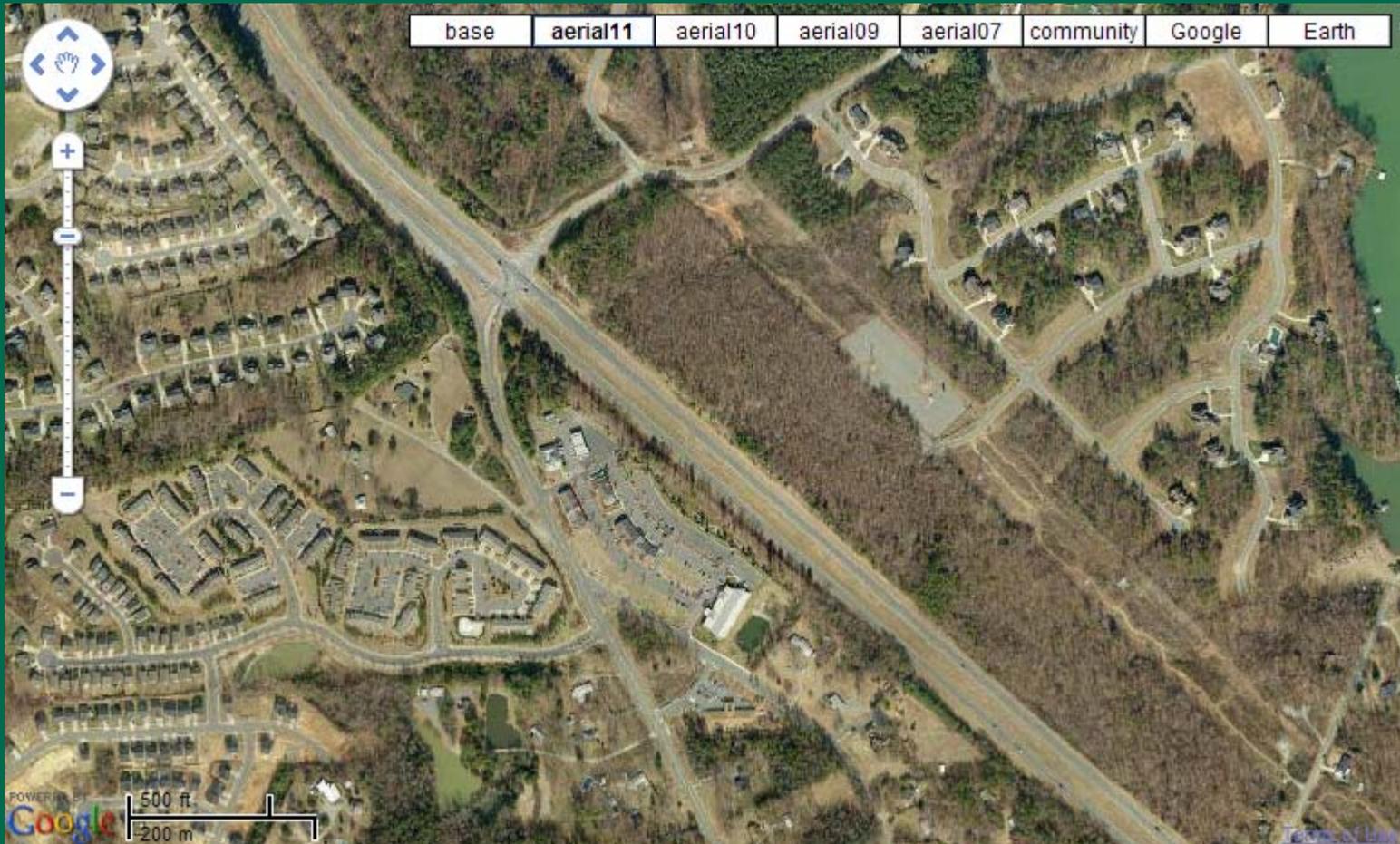
1997





Brookshire Boulevard @ Rozzelles Ferry Rd

2011





Brookshire Boulevard @ Mt Holly – Huntersville Rd

1978



Brookshire Boulevard @ Mt Holly – Huntersville Rd

1997





Brookshire Boulevard @ Mt Holly – Huntersville Rd

2011



Brookshire Boulevard @ Oakdale / Hovis Roads

1978



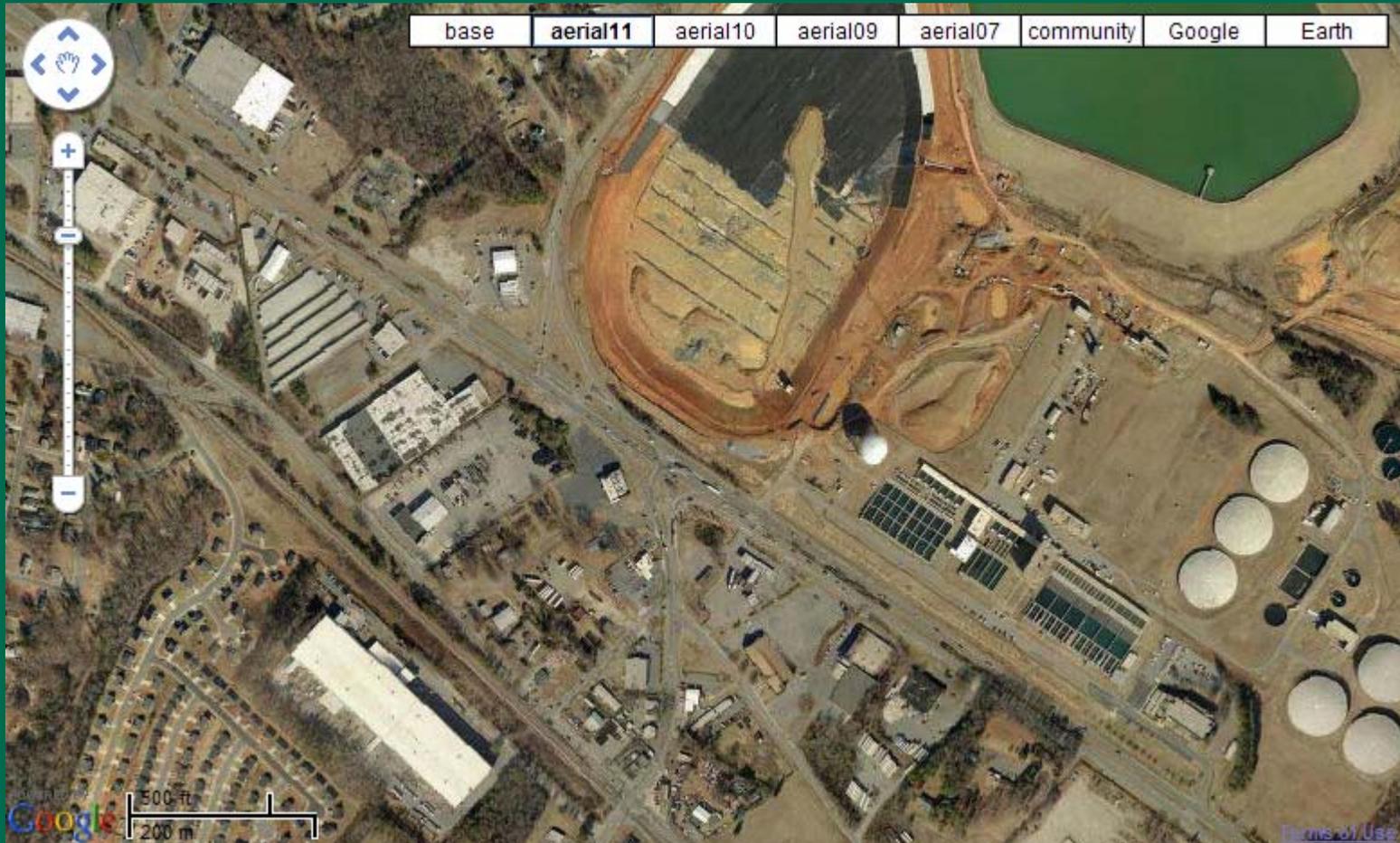
Brookshire Boulevard @ Oakdale / Hovis Roads

1997



Brookshire Boulevard @ Oakdale / Hovis Roads

2011





Brookshire Boulevard @ Hoskins Rd

1978



Brookshire Boulevard @ Hoskins Rd

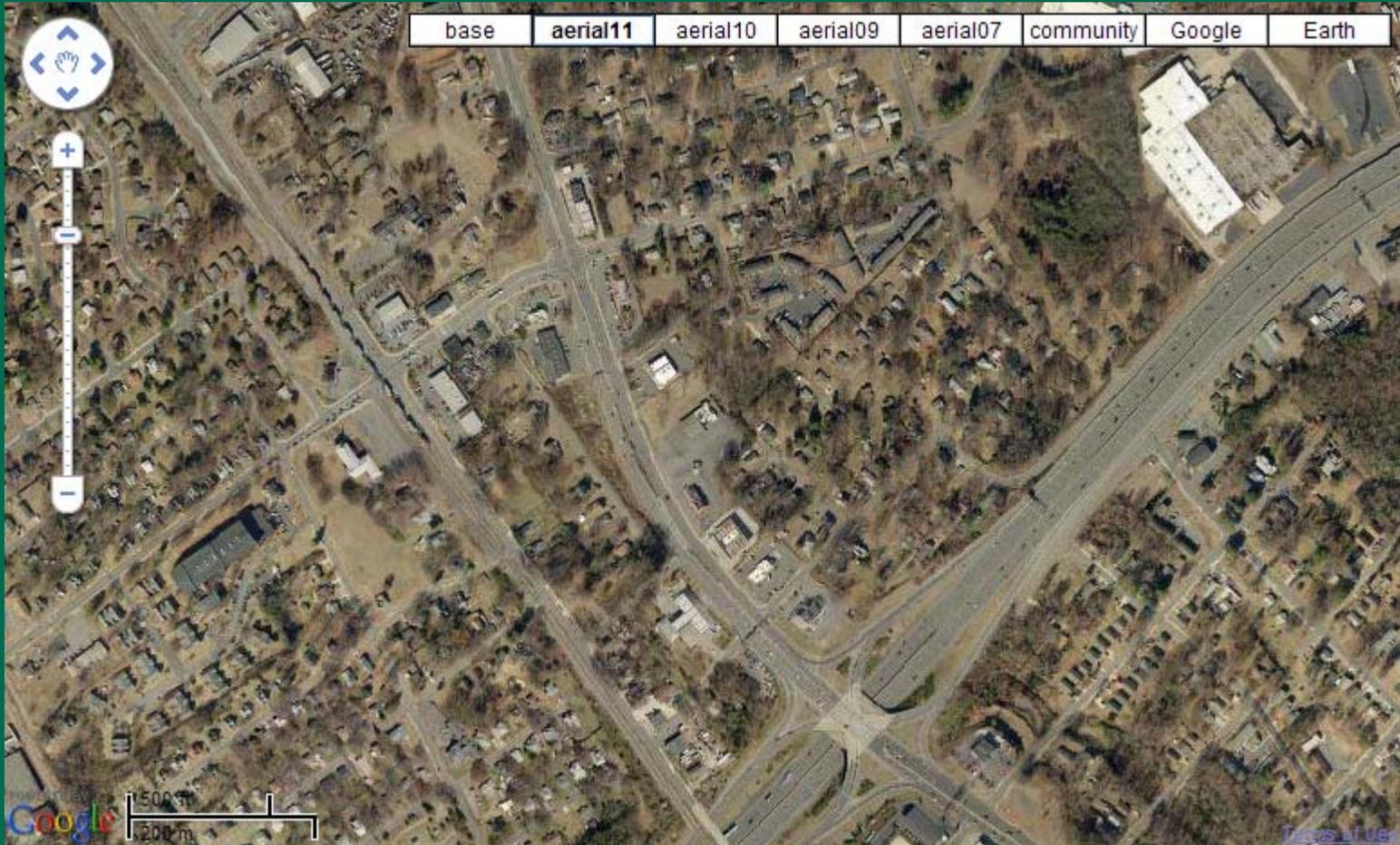
1997





Brookshire Boulevard @ Hoskins Rd

2011





Brookshire Boulevard

Boulevard





Brookshire Boulevard

Parkway





Brookshire Boulevard

Boulevard





Brookshire Boulevard

Parkway





Brookshire Boulevard Current Classifications

Segment	<u>Brookshire Boulevard Current Classifications</u>				
	FHWA Functional Classification	Thoroughfare Plan	CTP	USDG	NCDOT Complete Streets
I-85 to Bellhaven Boulevard	Principal Arterial	Major Thoroughfare	Expressway	Boulevard	N/A
Bellhaven Boulevard to Mecklenburg/Gaston County Line	Principal Arterial	Limited Access Thoroughfare	Expressway	Parkway	N/A

Focus of the Brookshire Boulevard Roadway Classification Study





- Steering Committee – solicit input from stakeholders
- Stakeholders – provide feedback
- CDOT, MUMPO, NCDOT – project oversight; project funding; approval of study recommendations
- Consultant Team – analysis, recommendations

- Define framework of the study
 - Presentation and Corridor Tour (not choosing classification today)
- Choices, tradeoffs, develop vision
 - Public Outreach, Stakeholder Interviews (February/March 2012)
- Analysis, Findings & Recommendations (April 2012)
- Public Meetings to present recommendations (May/June 2012)
- Refine Vision, Adjust Findings & Recommendations, Finalize Study (June/July 2012)

- Brian D. Horton, AICP
CDOT Project Manager
704-432-5237
bhorton@charlottenc.gov
- Visit <http://cdotprojects.charlottenc.gov> and click on “Brookshire Blvd. and W.T. Harris Boulevard Study” to find out more. Survey forms available online in 2-3 weeks.

