



CHARLOTTE
CHARLOTTE DEPARTMENT
OF TRANSPORTATION

Creating Complete Streets in Charlotte, North Carolina

Triangle Bicycle and Pedestrian Workshop
May 2, 2014

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Center City Transportation Program Manager
Charlotte Department of Transportation

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There are many forms of active transportation...









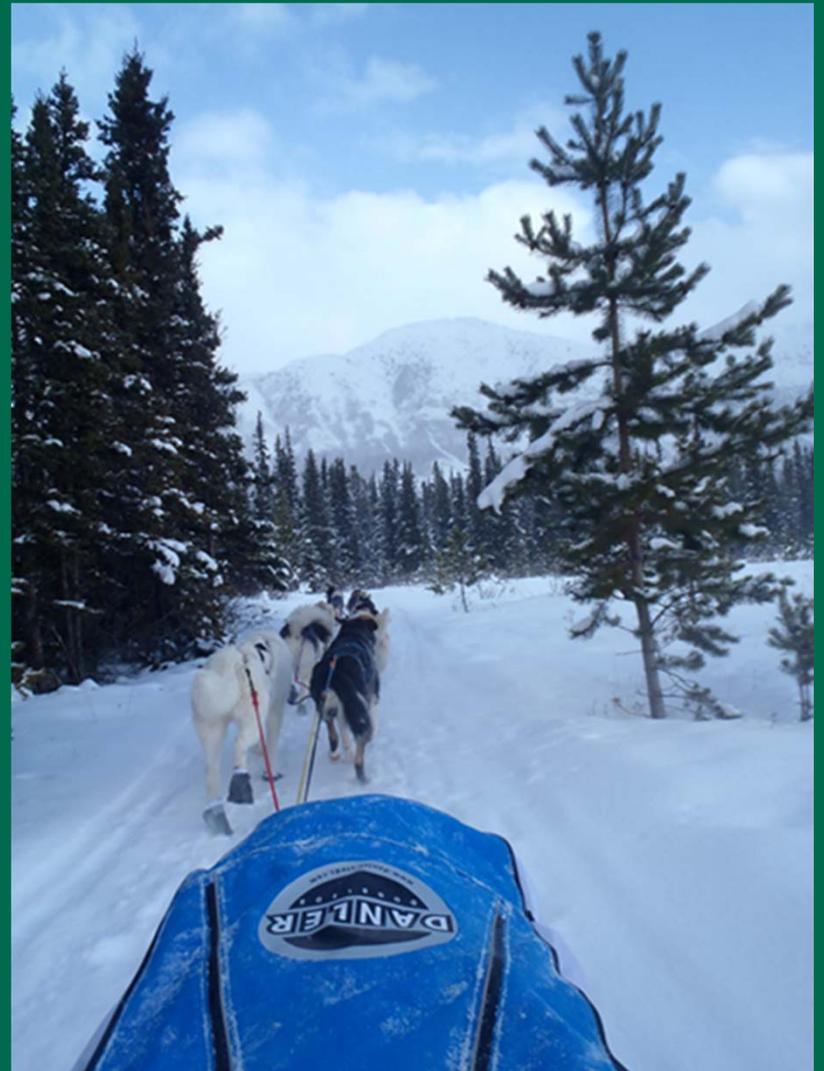
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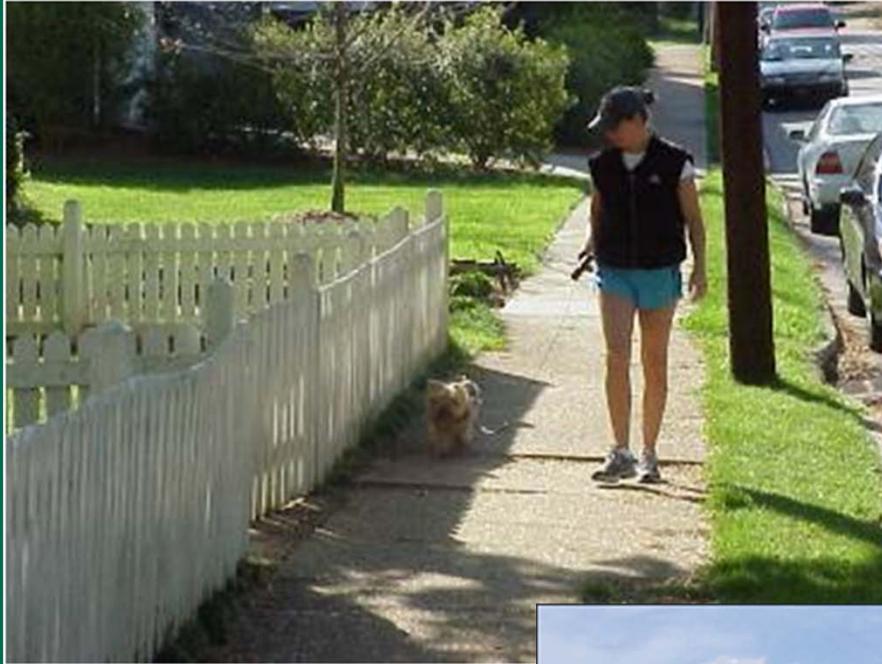
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What about walking, biking, transit and 'motoring?'



- Safety
- Mobility
- Comfort
- Placemaking



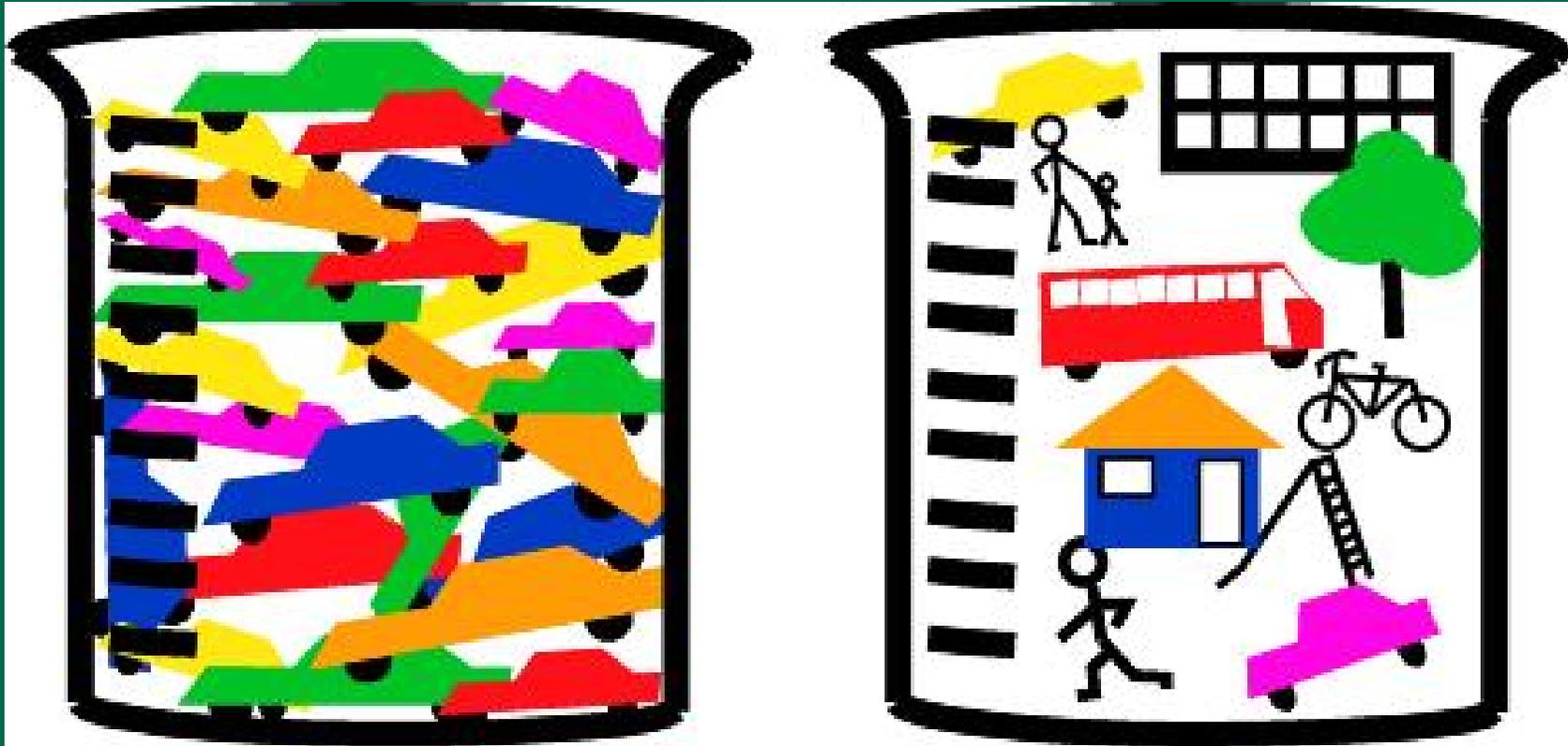


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Why Complete Streets?



Charlotte's Philosophy Changed...



*Transportation investments can be used to move people
and create better places...streets can be memorable!*

Building a Livable City – requires partnerships



Slides by Urban Advantage



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Building a Livable City – requires partnerships



Slides by Urban Advantage



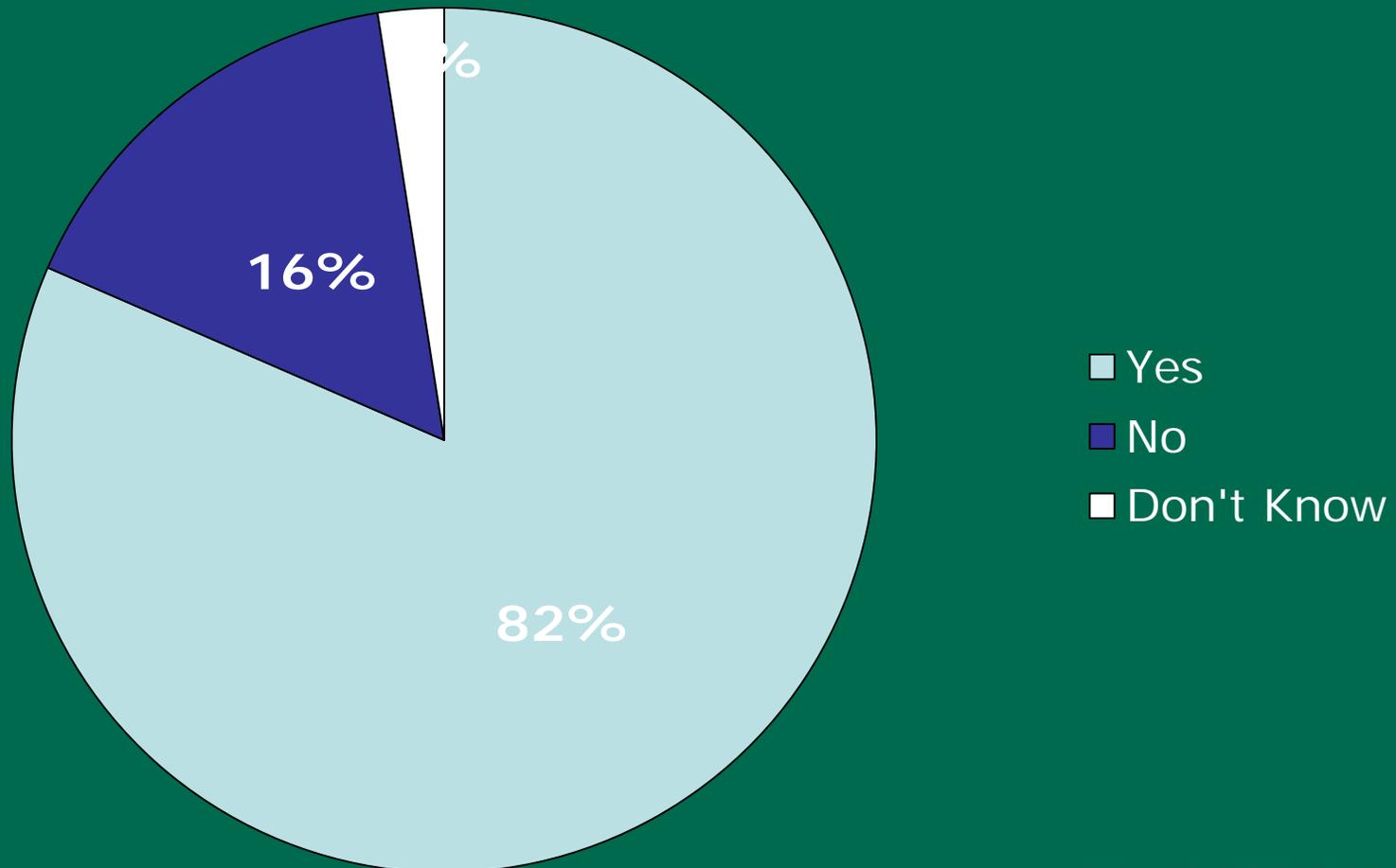
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The "Market" Wants Livable, Walkable Communities



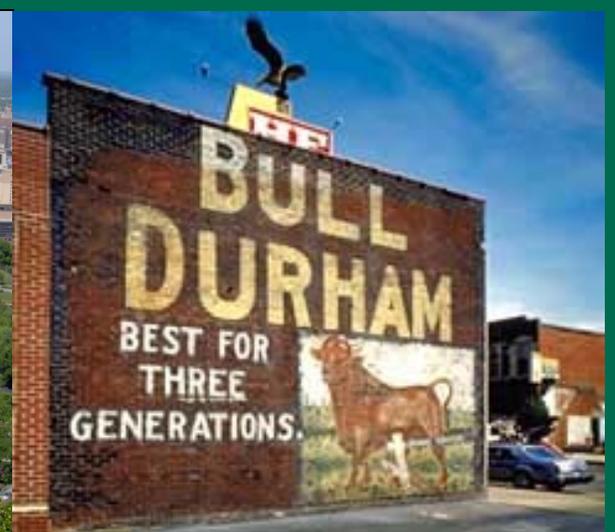
Incomplete Streets: Not What People Want

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



“They Are Coming”

- Charlotte’s projected 2010-2030 population growth equals:
 - Orlando (236,000)
 - Birmingham (230,000)
 - Durham (229,000)



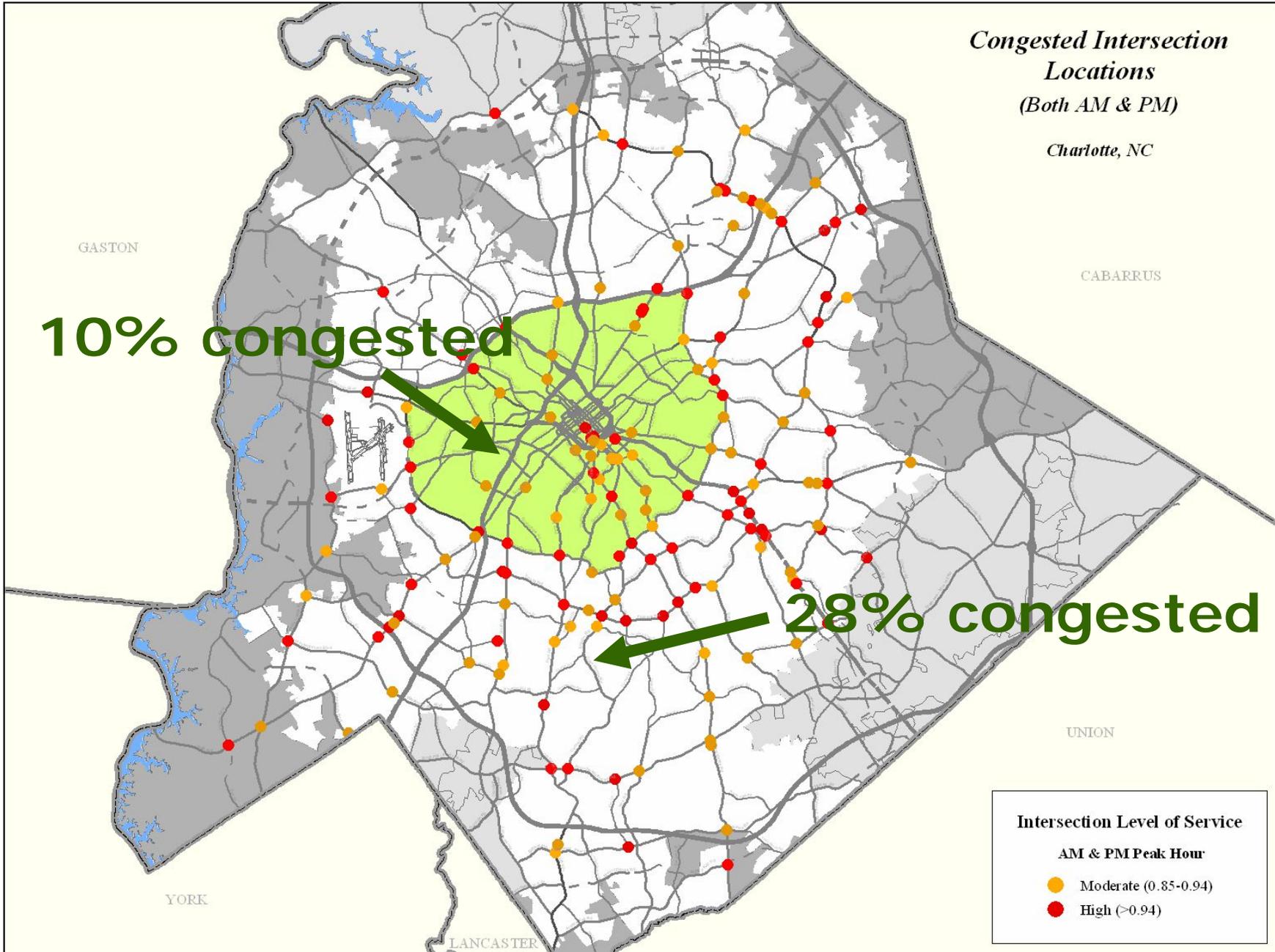
*Congested Intersection
Locations
(Both AM & PM)
Charlotte, NC*

10% congested

28% congested

Intersection Level of Service

- AM & PM Peak Hour
- Moderate (0.85-0.94)
 - High (>0.94)



Streets Report Card

- ~20% thoroughfares – very congested
- ~40% thoroughfares - no sidewalks
- ~70% local streets - no sidewalks
- ~50% signalized intersections - poor pedestrian LOS
- ~95% intersections - poor bicycle LOS





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City of Trees



City of Walking





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City of Bikes



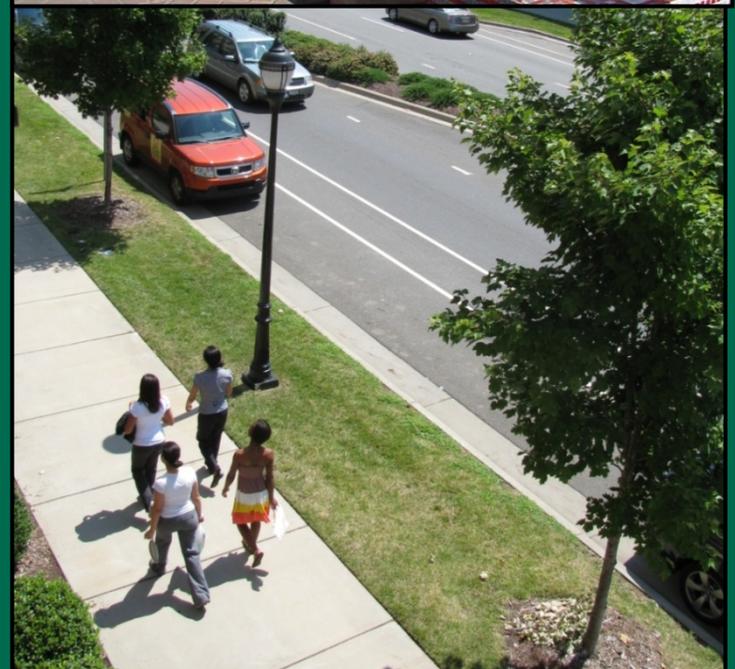
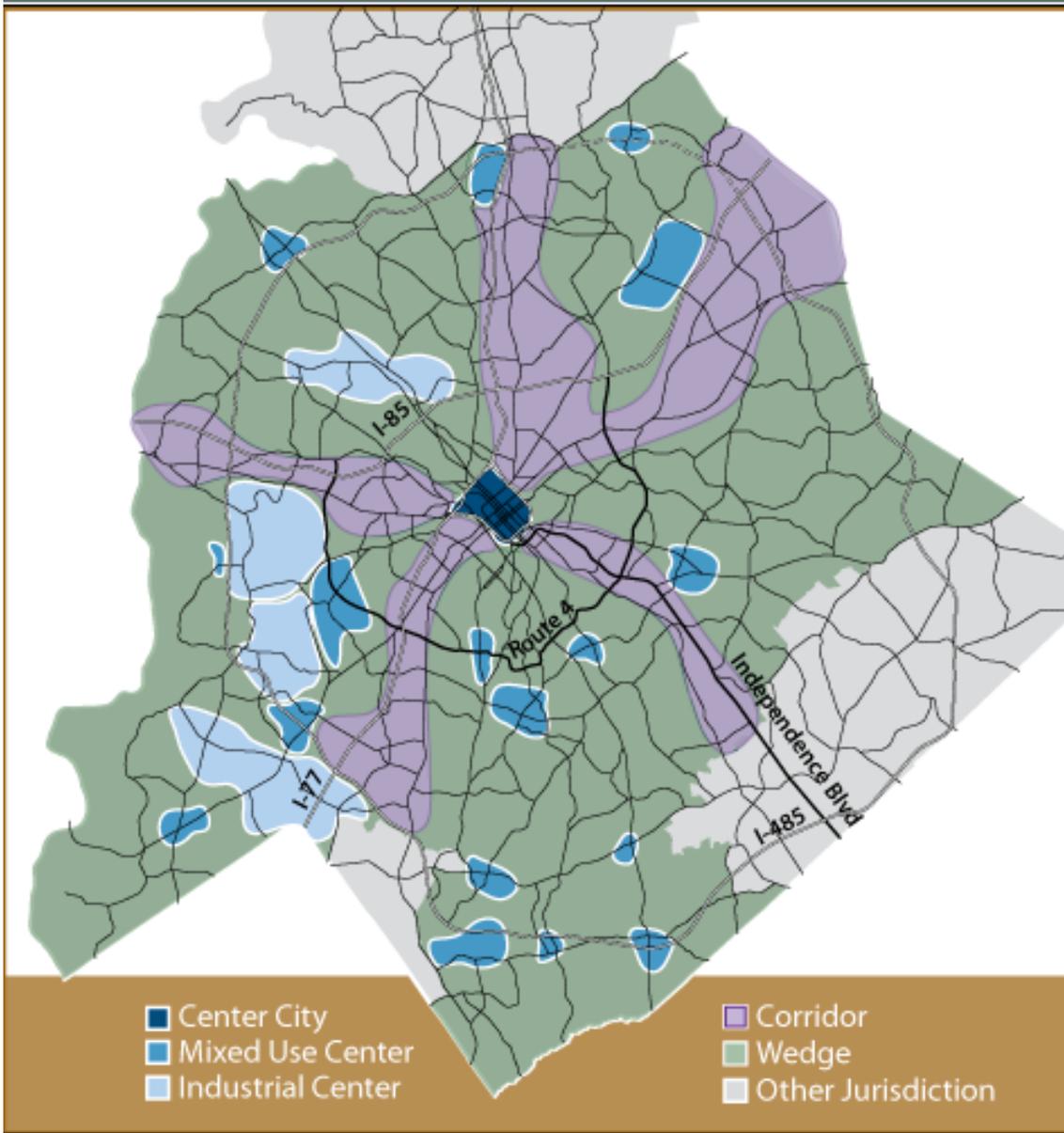
City of Great Places





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Goals for Charlotte and Our Streets





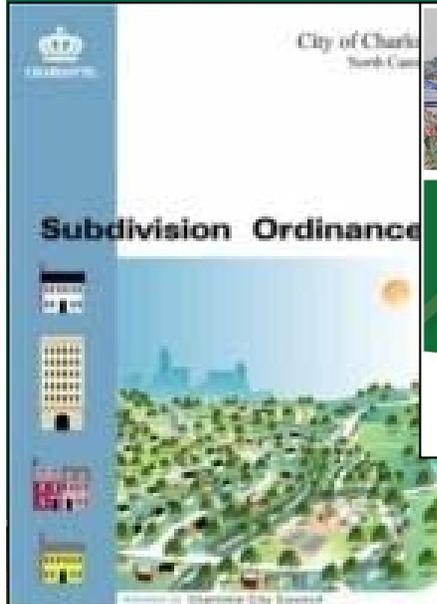
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What Did We Do?

URBAN STREET DESIGN GUIDELINES

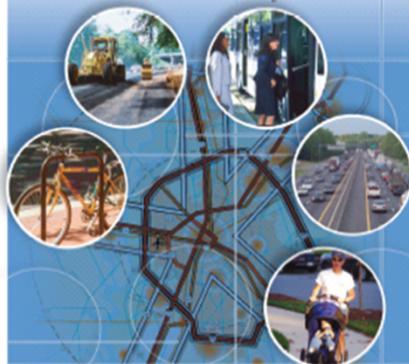


Adopted by Charlotte City Council
October 22, 2007

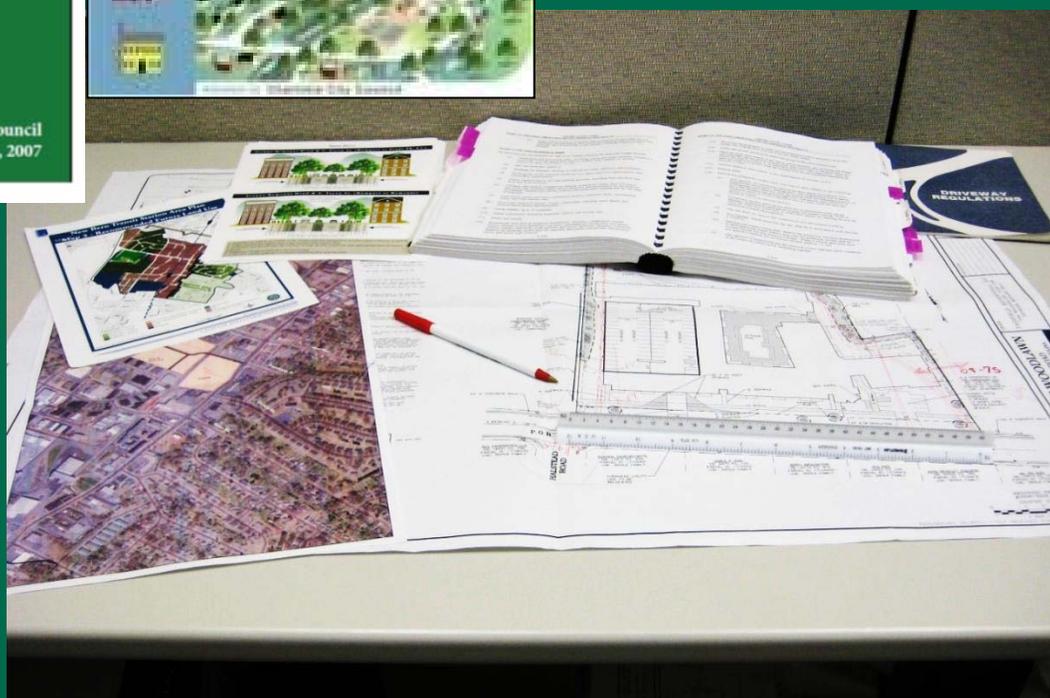


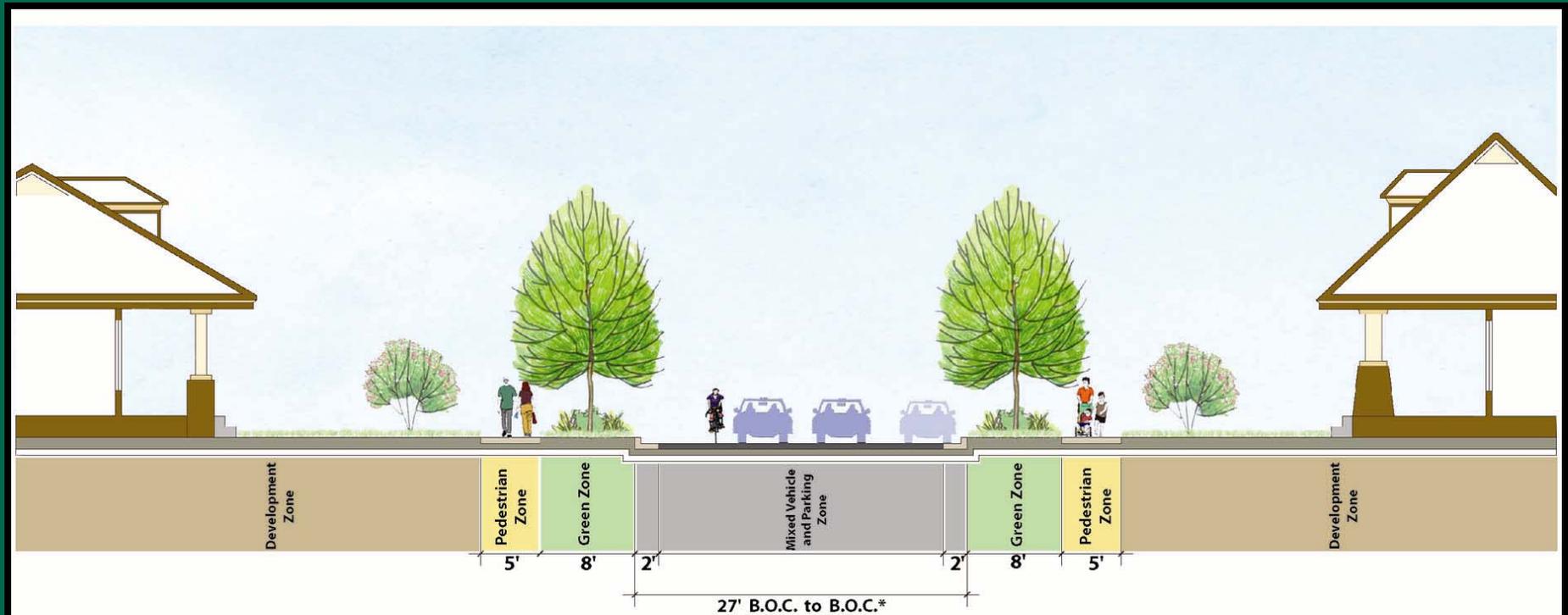
Charlotte-Mecklenburg Planning Department
Adopted by City Council
February 27, 2012

The City of Charlotte TRANSPORTATION Action Plan Policy Document



Prepared by CDOT, DMPC and CATS
DRAFT for Public Review - Spring, 2006
Adopted by Charlotte City Council - Nov. 08, 2006



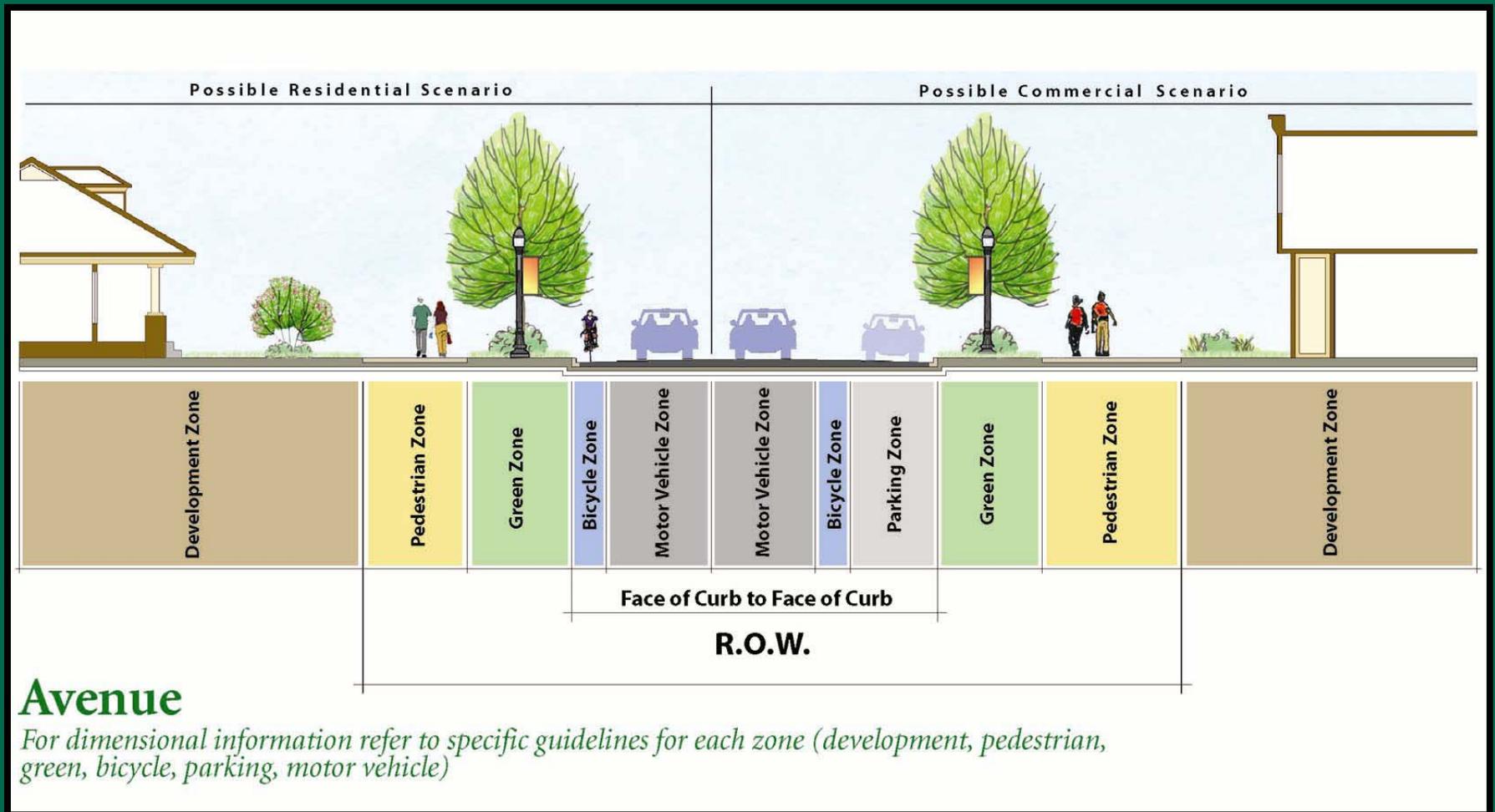


Residential Street - Medium

*B.O.C. - Back of Curb



“Non-Prescriptive” Design



The USDG 6-Step Process

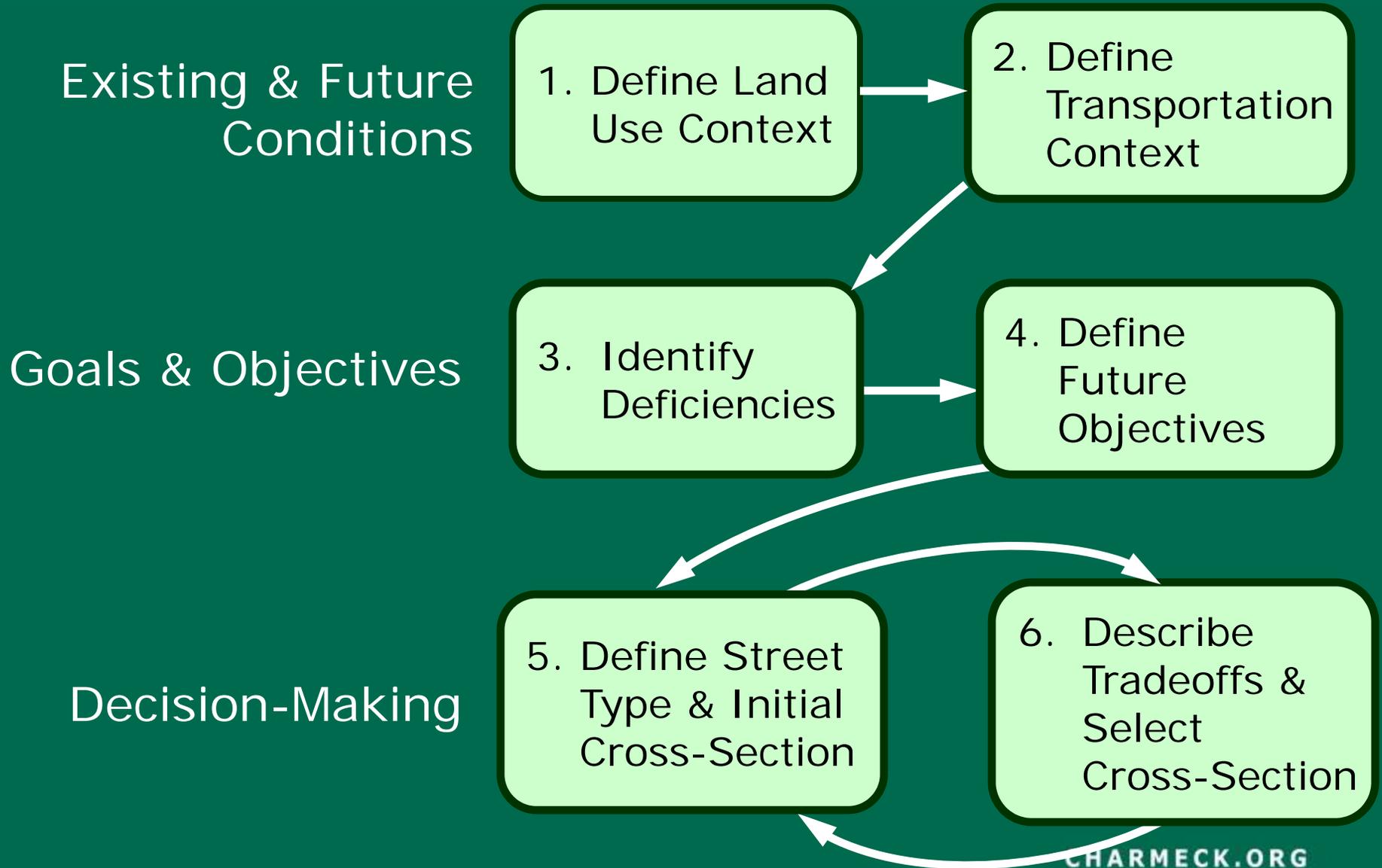
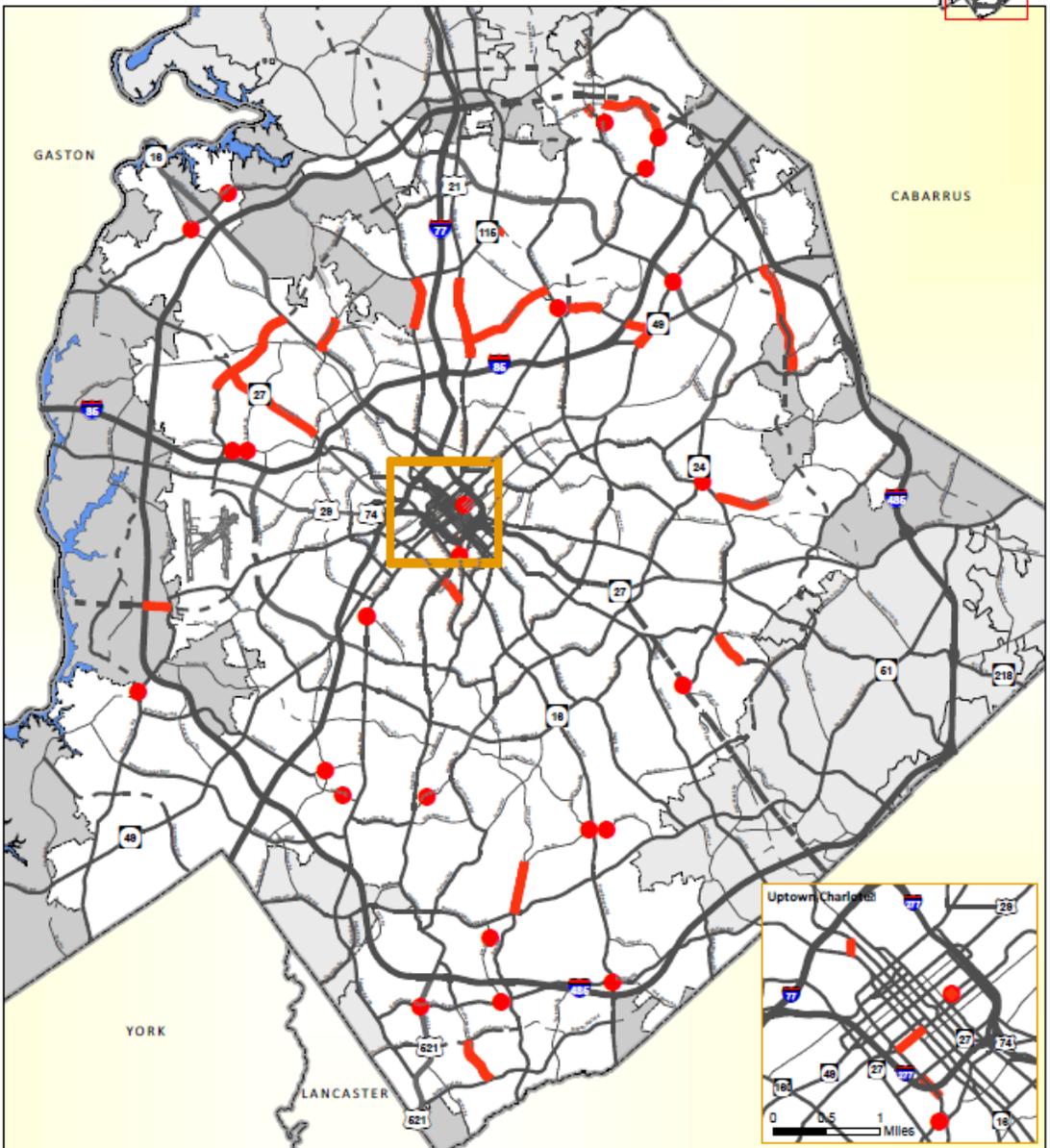


Figure 2 - Transportation Projects Programmed or Implemented By the City Since TAP Adoption



Programmed or Implemented Projects
● Intersection
— Roadway

0 1 2 Miles

Charlotte Department of Transportation
Planning & Design - GIS
December 7, 2012

Results

Charlotte has **constructed over \$400m** of road and intersection projects – all are “complete streets”.



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Results



Kenilworth Ave



East Blvd



South/Woodlawn



Raintree Ln

Rozzelles Ferry Road





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West Morehead Street





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Stonewall Street





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Charlottetowne Avenue



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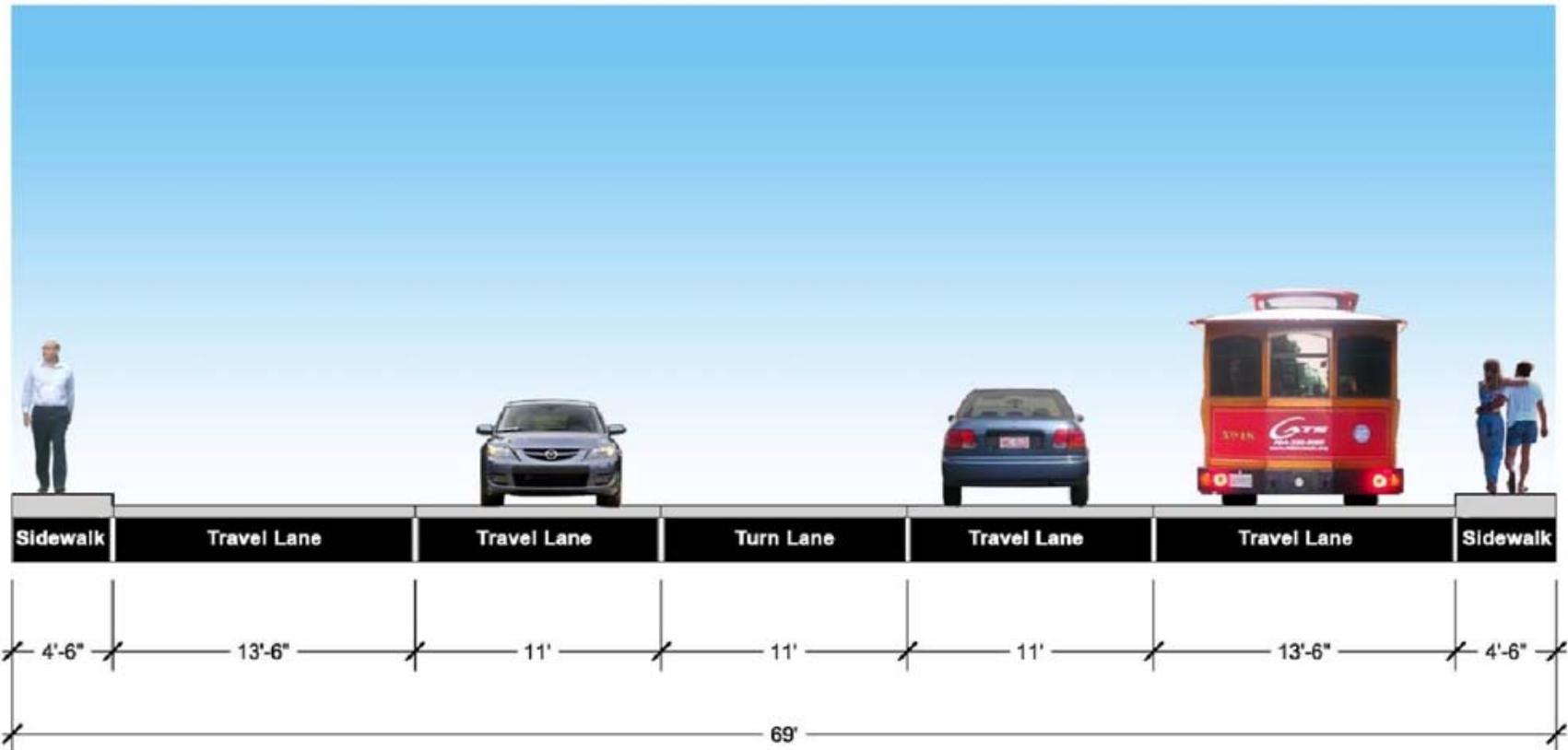
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Case Study: John Kirk and NC 49



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Case Study: Tryon Street Bridge over I-277



Existing Conditions



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Tryon Street Bridge



Case Study: East Boulevard Before

Can we as Active Transportation advocates and professionals help to balance our community's bottom line, through better street design?



East Boulevard After



East Boulevard After



East Boulevard After



Case Study: Commonwealth Before





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Commonwealth After

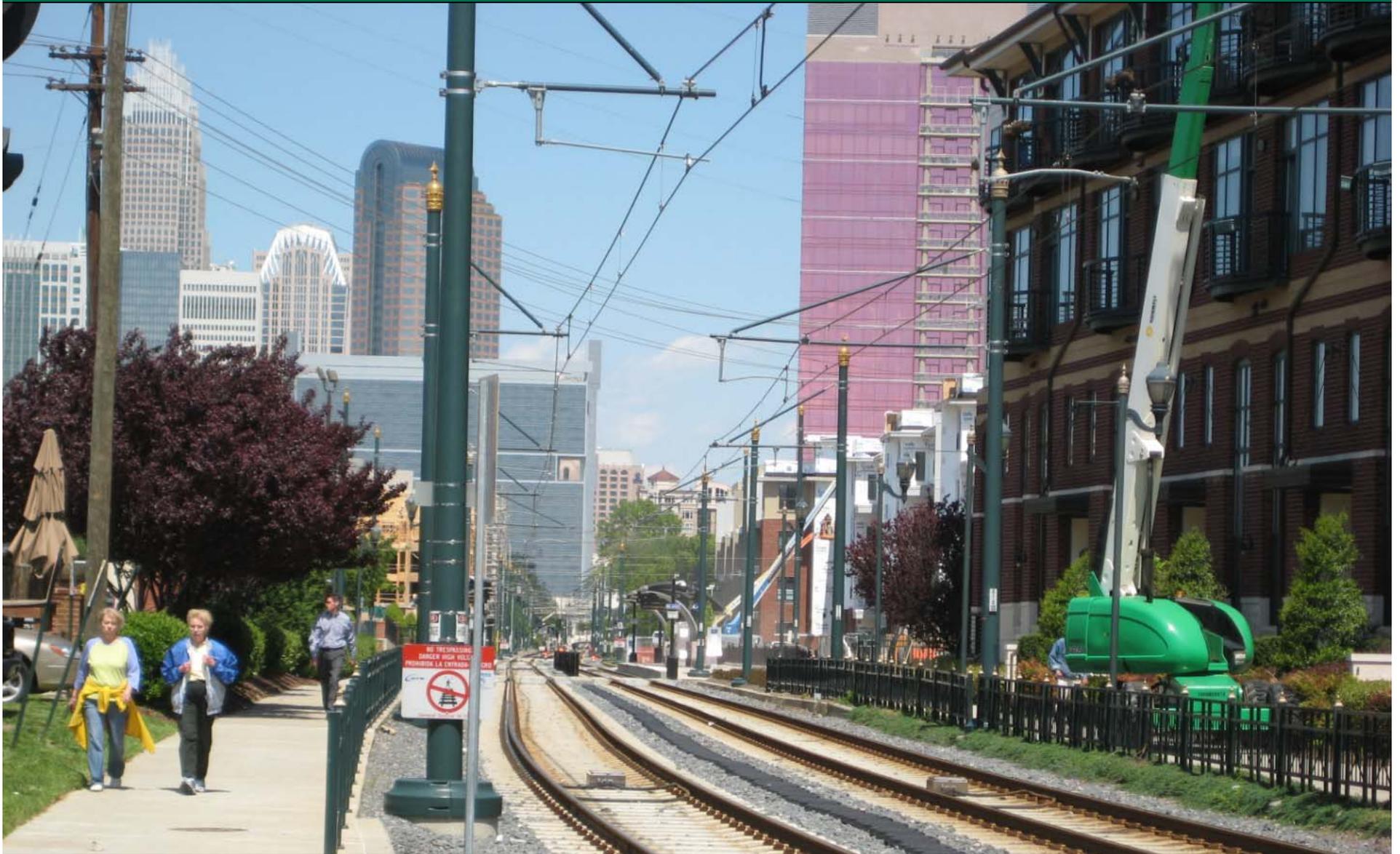


Capitalizing on Light Rail (Bland St. & E/W Stations)





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South End

- **\$1.45B** New Private Investment (2005-2013)



Annual Tax Revenue: **\$18.6M**

- City Tax Revenue: \$6.8M
- County Tax Revenue: \$11.8M





street front retail

office

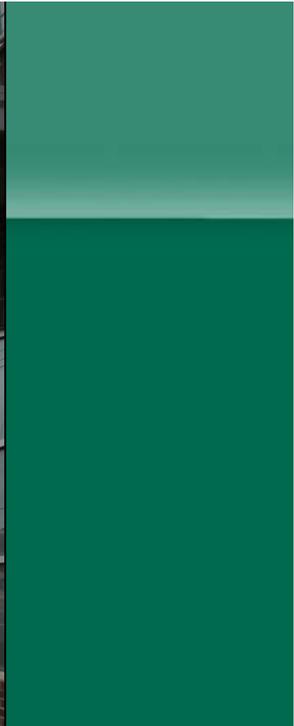
condos

Light Rail

South Blvd

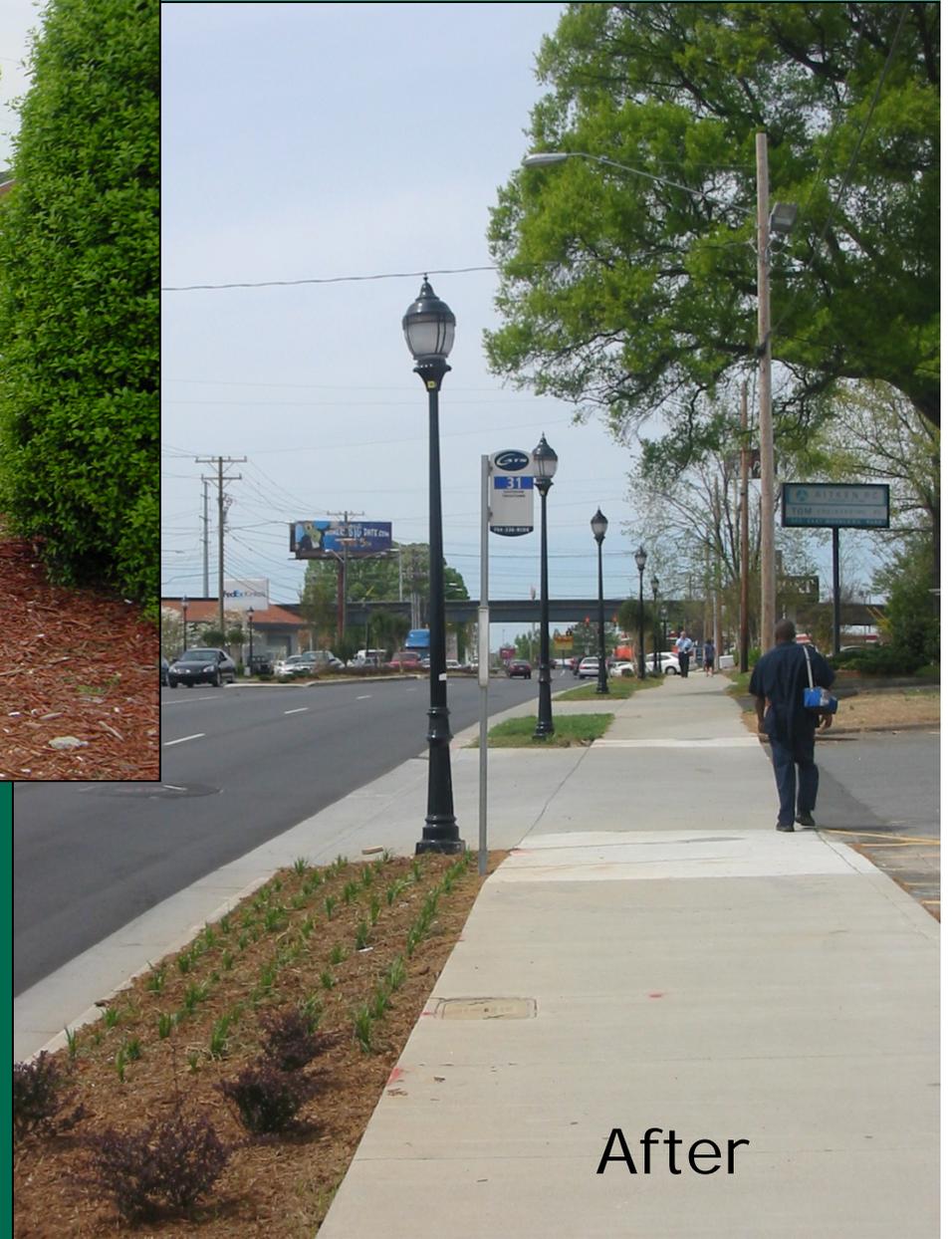
big box retail

townhomes





Before



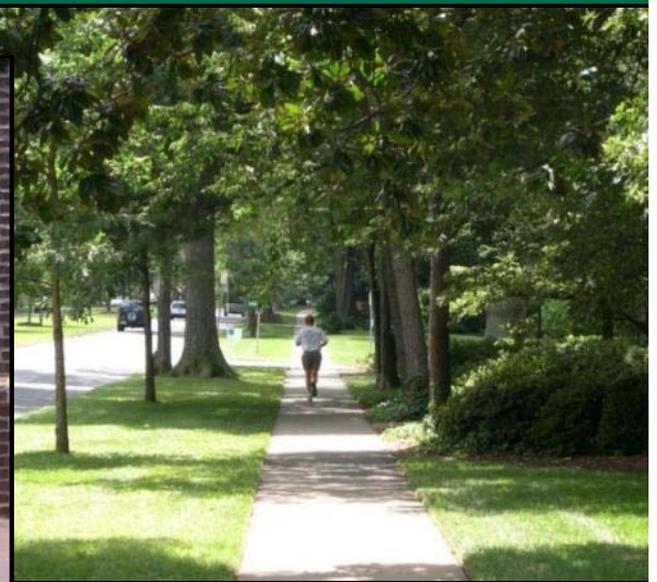
After



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It's More Than "Just Streets"

- The way you organize/design land uses and streets matters – you have to get both right...public realm.
- ~13% of all land in Charlotte is **STREETS**...
 - How “memorable” are your streets and land uses?
 - Great cities have great streets and great places.



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When Designing Complete Streets...

- Listen to concerns of public
- Do sufficient planning & design analysis to address concerns
- Collect before and after data to test expectations

In the case of two Charlotte conversions (Selwyn and East):

- Significant traffic did not divert to local streets
- Speeds are reduced after conversion
- Crashes changed as expected with lower overall crash frequencies

- Project should begin at neighborhood level...what do they want from their street?
- 3-laning seems counter-intuitive - need to educate – *show who else is converting roads*
- Get Council and neighborhood on board
- **Build advocates** for the project – show them how to be successful



- A **concept drawing** is worth a 1000 words...
- Construction period will be difficult – especially with islands and stamped crosswalks
- Weather the storm during construction – be proactive with media
- *Do before/after studies*



Recommended Before/After Studies

- Volumes
- Speeds
- Travel time
- Accident rates
- **Video of peak queues**
- Bike/ped volumes (if necessary)
- Resident/business surveys (if necessary)



Conversions can be challenging,
but they are worth it!



Is this livable?



"Once you realize that you can use your streets to improve the quality of life, the economics and the environmental health of your city, I think that's a transformative moment."



Janette Sadik-Khan, former director NYC DOT, 2011



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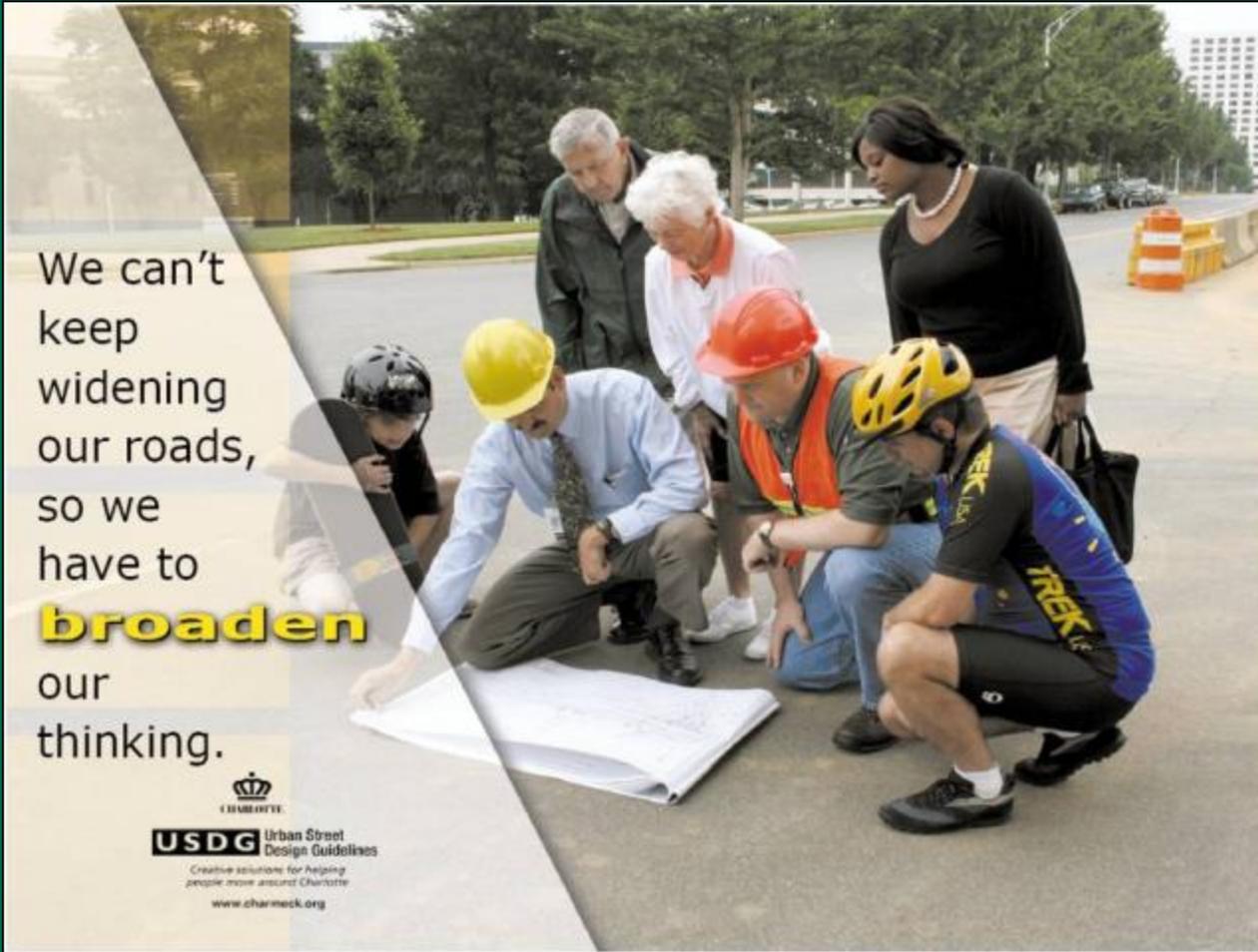
Charlotte's continued thinking...

We can't
keep
widening
our roads,
so we
have to
broaden
our
thinking.



USDG Urban Street
Design Guidelines

Creative solutions for helping
people move around Charlotte
www.charmeck.org



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But we still have work to do...



Thank You!

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Center City Transportation
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City projects built with bike lanes:

- Rozzelles Ferry Rd.
- Central Avenue
- Charlottetowne Ave.
- Cindy Ln.
- Dewitt Ln.
- East Blvd.
- Hickory Grove Rd.
- Old Pineville Road
- Prosperity Church Rd.
- Stonewall Ave.
- W. Morehead St.
- Archdale Dr.
- Arrowood Rd.
- Clanton Rd.
- Morris Field Dr.



(60+ miles of bike lanes)