CHARLOTTE

CHARLOTTE DEPARTMENT OF TRANSPORTATION

Implementing the Network

Challenges and Solutions

Danny Pleasant, AICP
Charlotte Dept of Transportation

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Purpose

Discuss challenges to network connectivity and what Charlotte is doing to overcome them.

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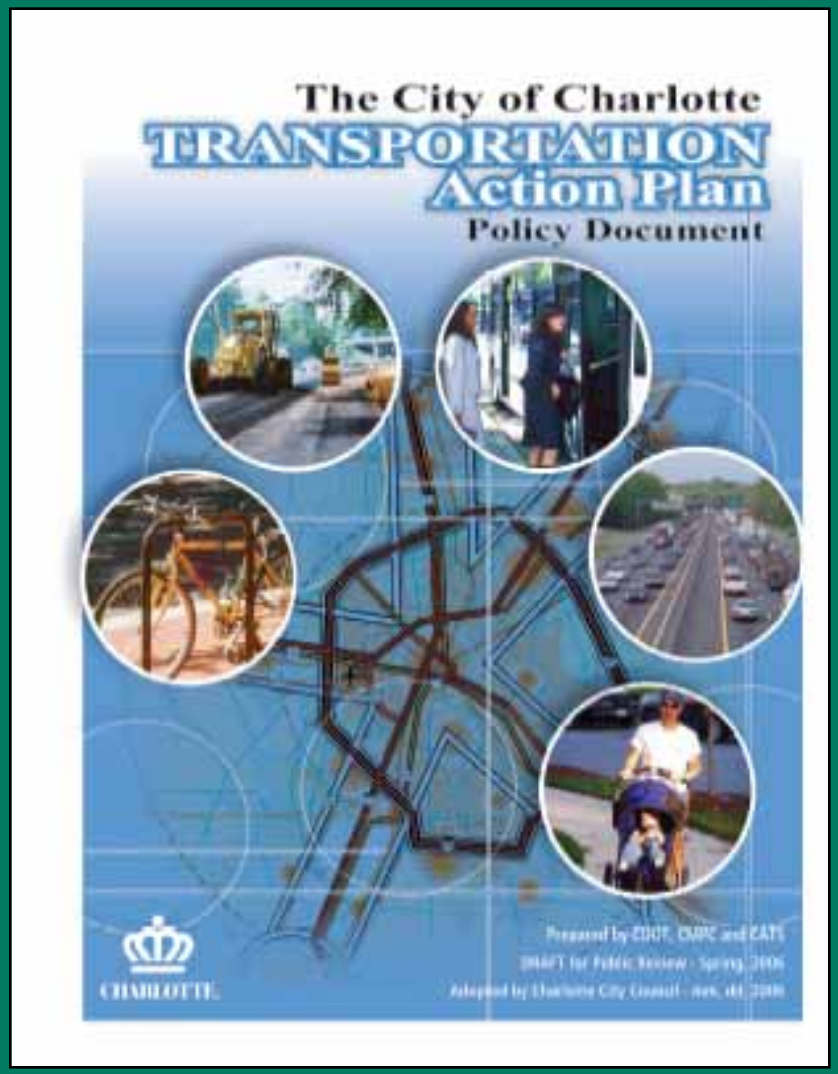
The USDG and the TAP

- Charlotte's first comprehensive transportation plan
- Describes <u>policies, projects and programs</u>
- USDG are the "streets" component of the TAP
- Many TAP policies either
  - refer to the USDG or
  - depend on the USDG for full implementation



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TAP Objective 2.9

The City will maintain its connectivity ratio of 1.45 inside Route 4, and increase its connectivity ratio outside Route 4 from 1.19 to 1.35, by 2015.

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Three Key Concepts in the TAP and USDG

1. Context-based streets
2. “Complete” streets
3. “Complete” street network

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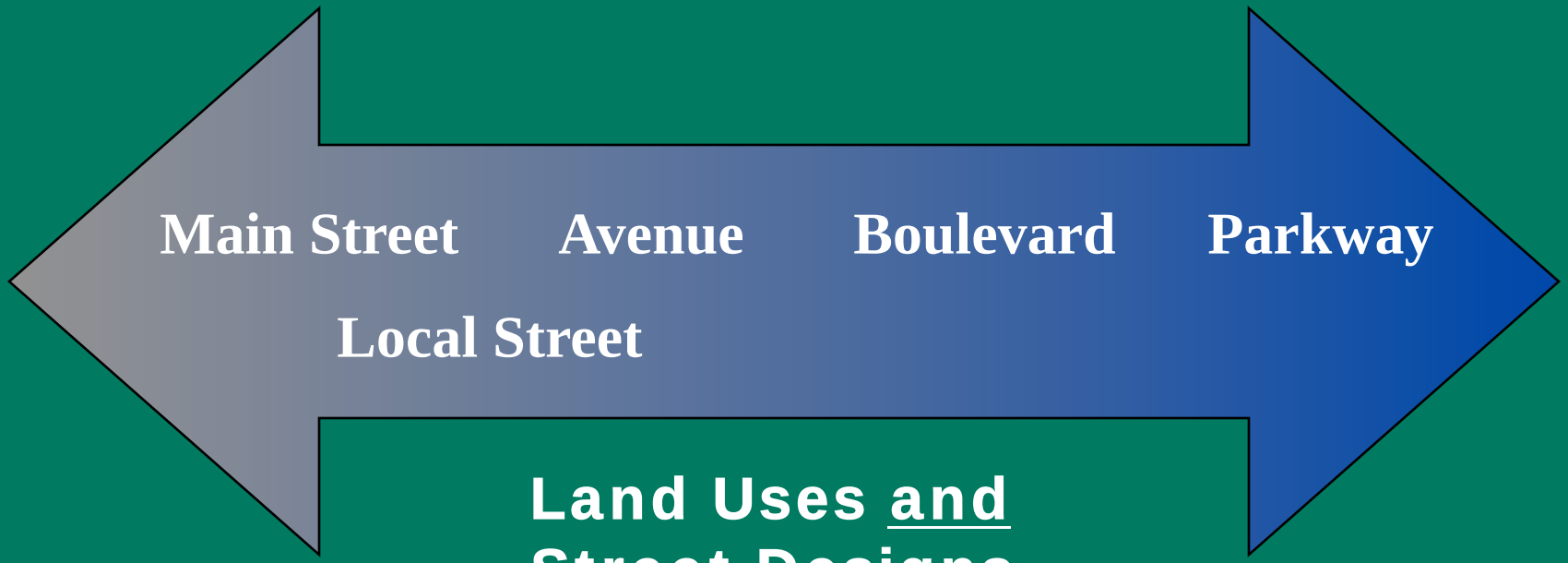
A Complete Street Network



Pedestrian-Oriented

Auto-Oriented

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Complete Streets – Better Streets

- Sidewalks – match the width to the context
- Planting strips – make them wider for street tree canopy
- Bicycle lanes and signed routes (Bike Plan) – provide more options for more cyclists
- Intersection analysis and design – make them safer and more functional for all
  - Bicycle and Pedestrian Levels-of-Service
- Traffic calming – build it into new streets
- Six-step process – use it to create better streets

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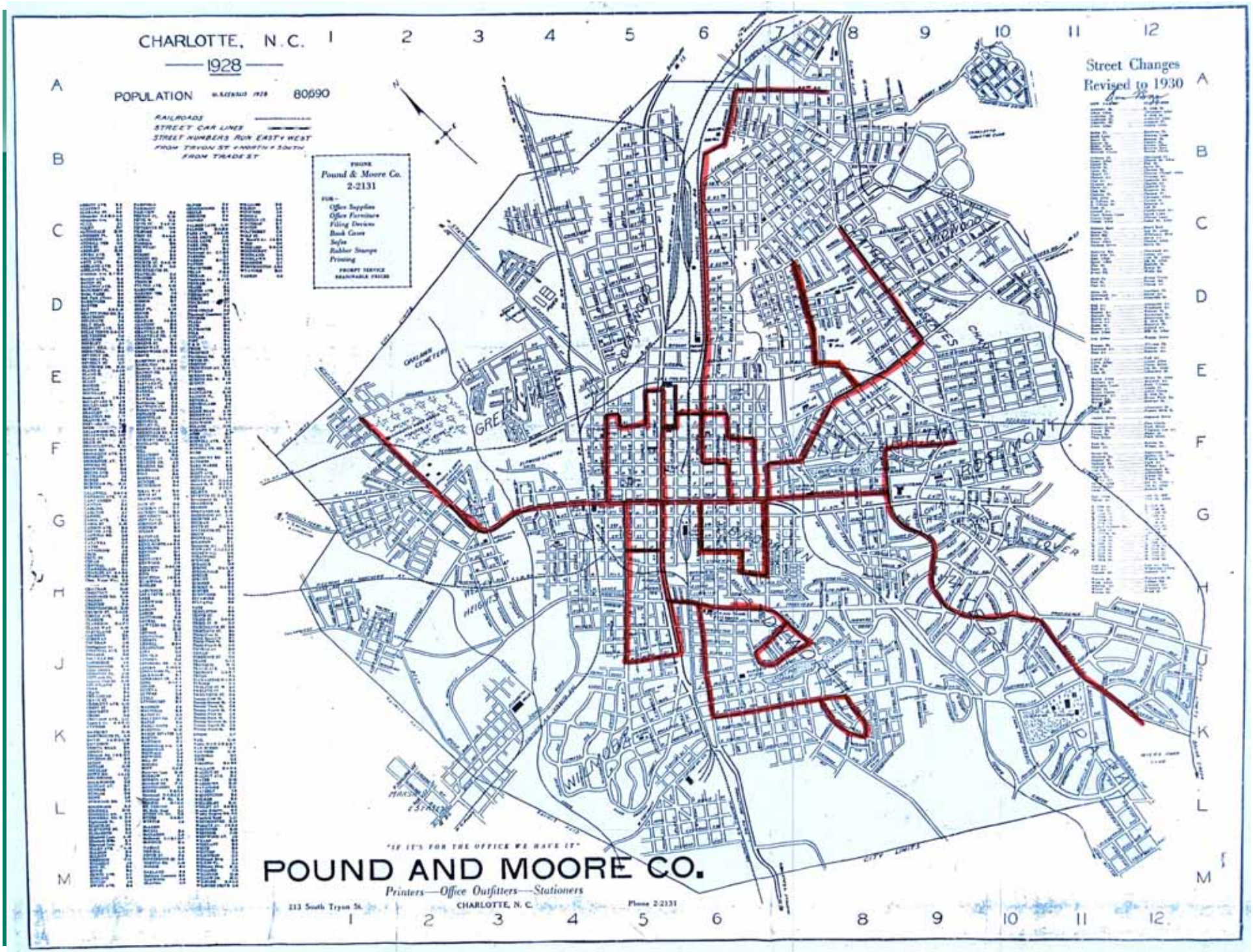
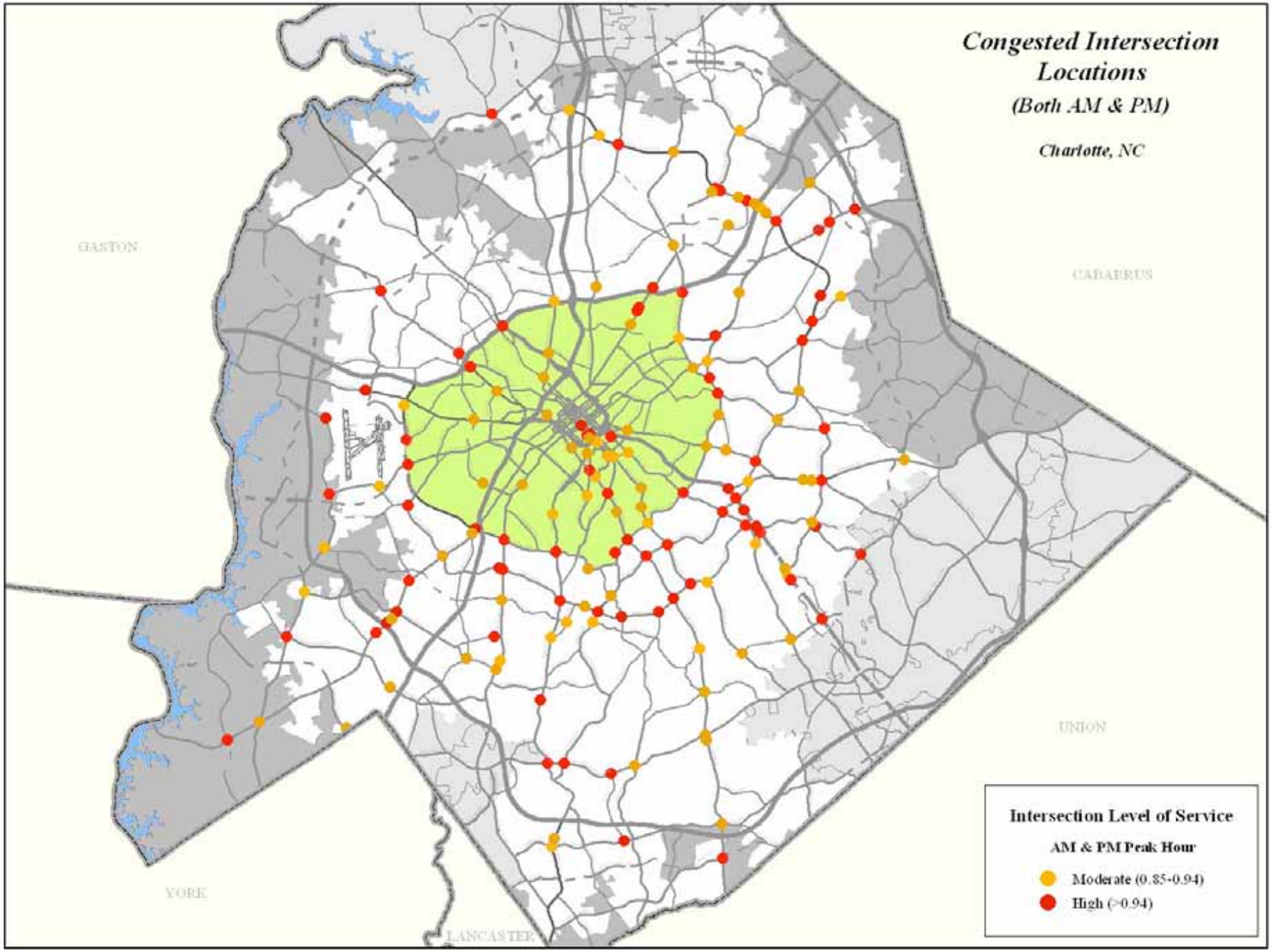
Having better streets means
we need to have more streets


CHARLOTTE, N.C.
1928
POPULATION U.S. CENSUS 1920 80,090
RAILROADS
STREET CAR LINES
STREET NUMBERS RUN EAST & WEST FROM TRYON ST. & NORTH & SOUTH FROM TRADE ST.
PHONE
Pound & Moore Co.
2-2131
FOR—
Office Supplies
Office Furniture
Filing Devices
Bank Cages
Safes
Rubber Stamps
Printing
PROMPT SERVICE REASONABLE PRICES
Street Changes
Revised to 1930
"IF IT'S FOR THE OFFICE WE HAVE IT"
POUND AND MOORE CO.
Printers—Office Outfitters—Stationers
213 South Tryon St.
CHARLOTTE, N. C.
Phone 2-2131


Congested Intersection Locations
(Both AM & PM)
Charlotte, NC
GASTON
CABARRUS
UNION
YORK
LANCASTER
Intersection Level of Service
AM & PM Peak Hour
Moderate (0.85-0.94)
High (>0.94)

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The USDG Calls for Smaller Blocks and Appropriately Designed Streets

- Connections
- Walkability
- Route choices
- Development flexibility
- Capacity

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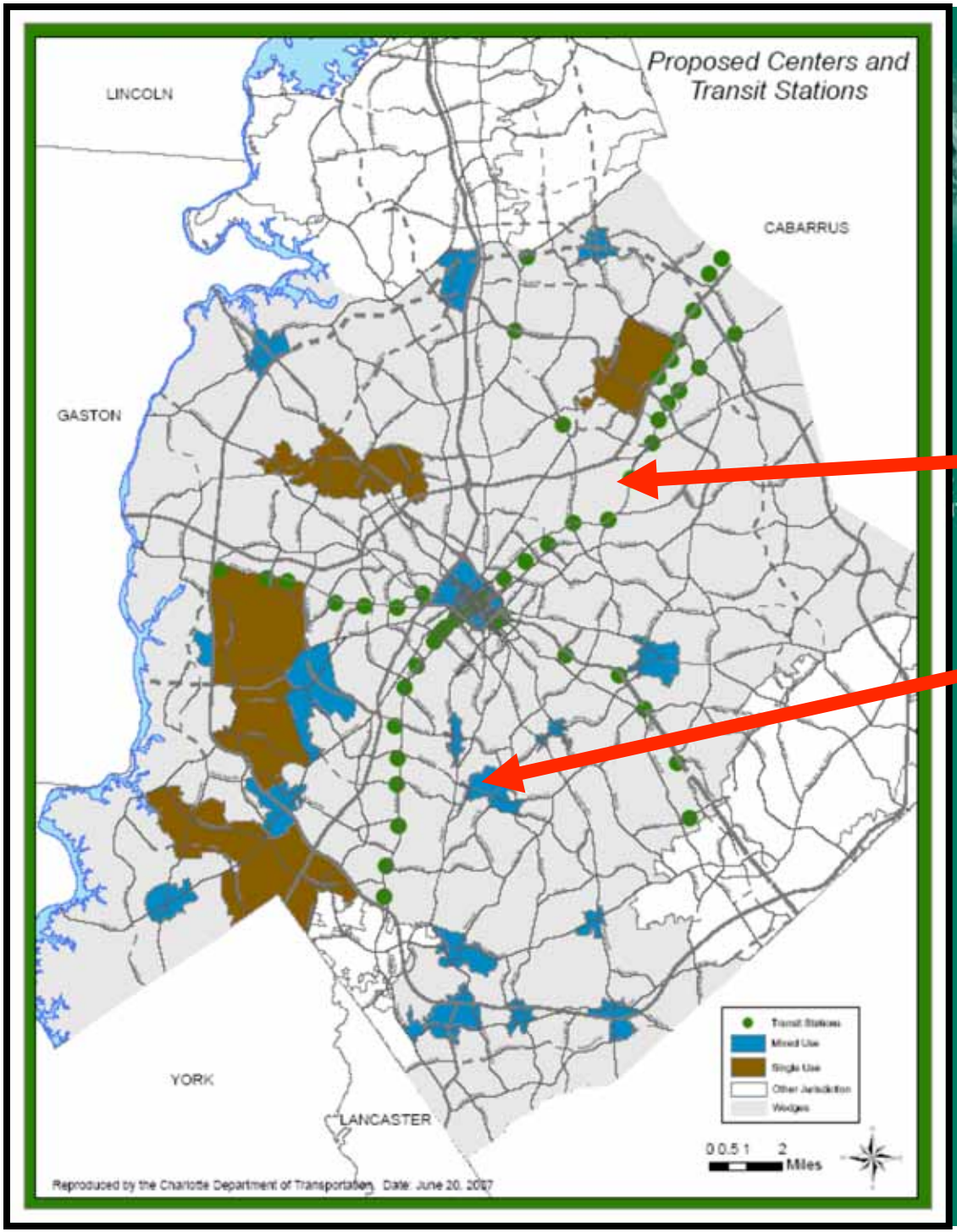

400’ blocks

500’ blocks

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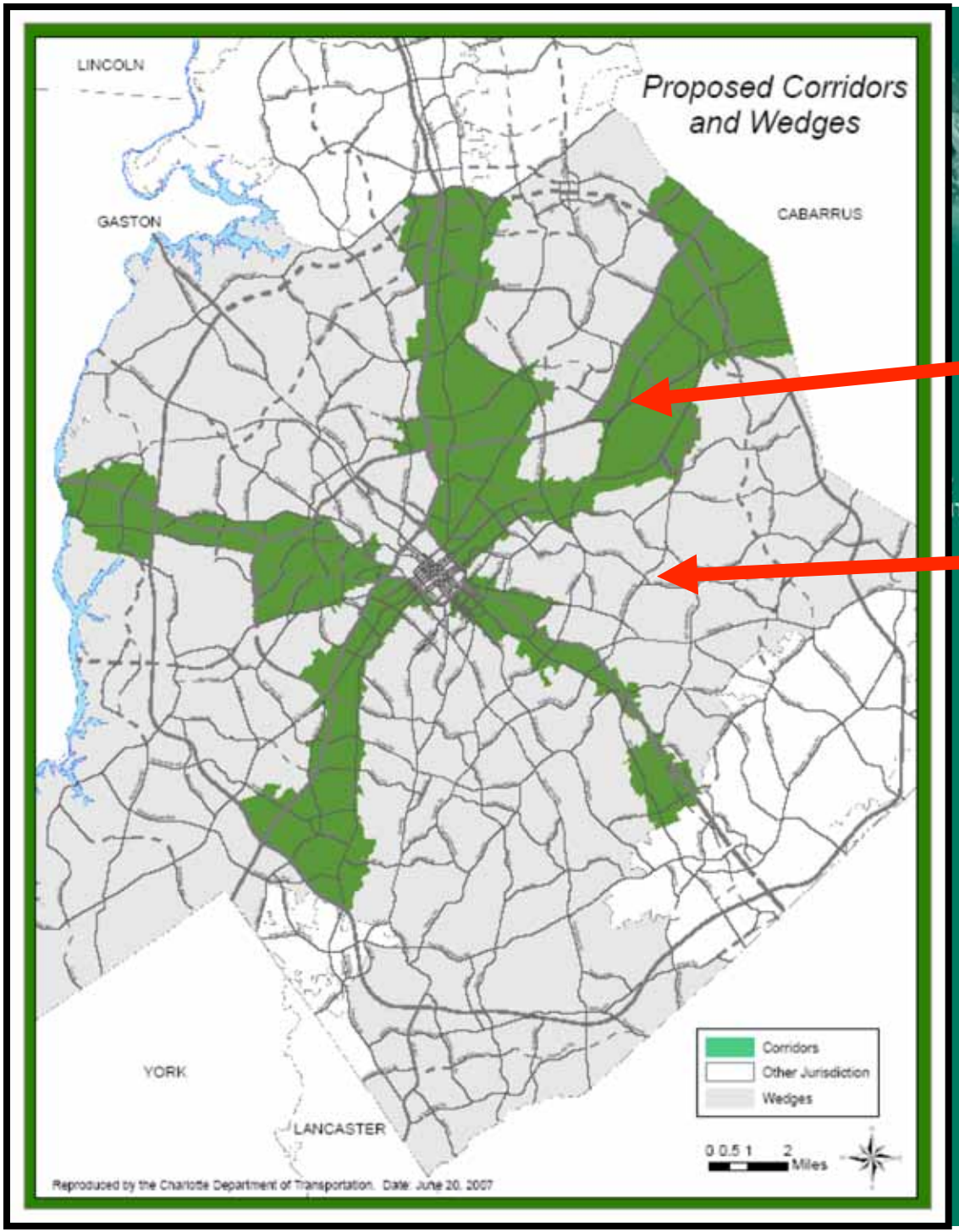

600’ blocks

500’ - 800’ blocks (depends on land use)

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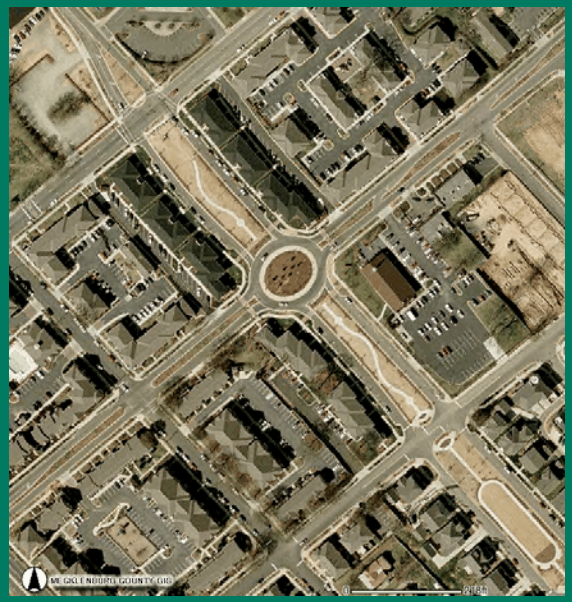
More Than Just Internal Block Size

- Recommend connections (streets) to adjacent development at the same intervals as internal blocks
- Recommend more creek crossings, but at larger intervals than other connections



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Challenges to Building the Network:

- Keeping the connections we already have
- Decades of disconnected development
- Getting enough new connections through green field development
- Getting connections through re-development and infill
- NIMBYism
- The natural environment – creeks and topography
- Funding – who pays?

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Challenge

Keeping existing connections

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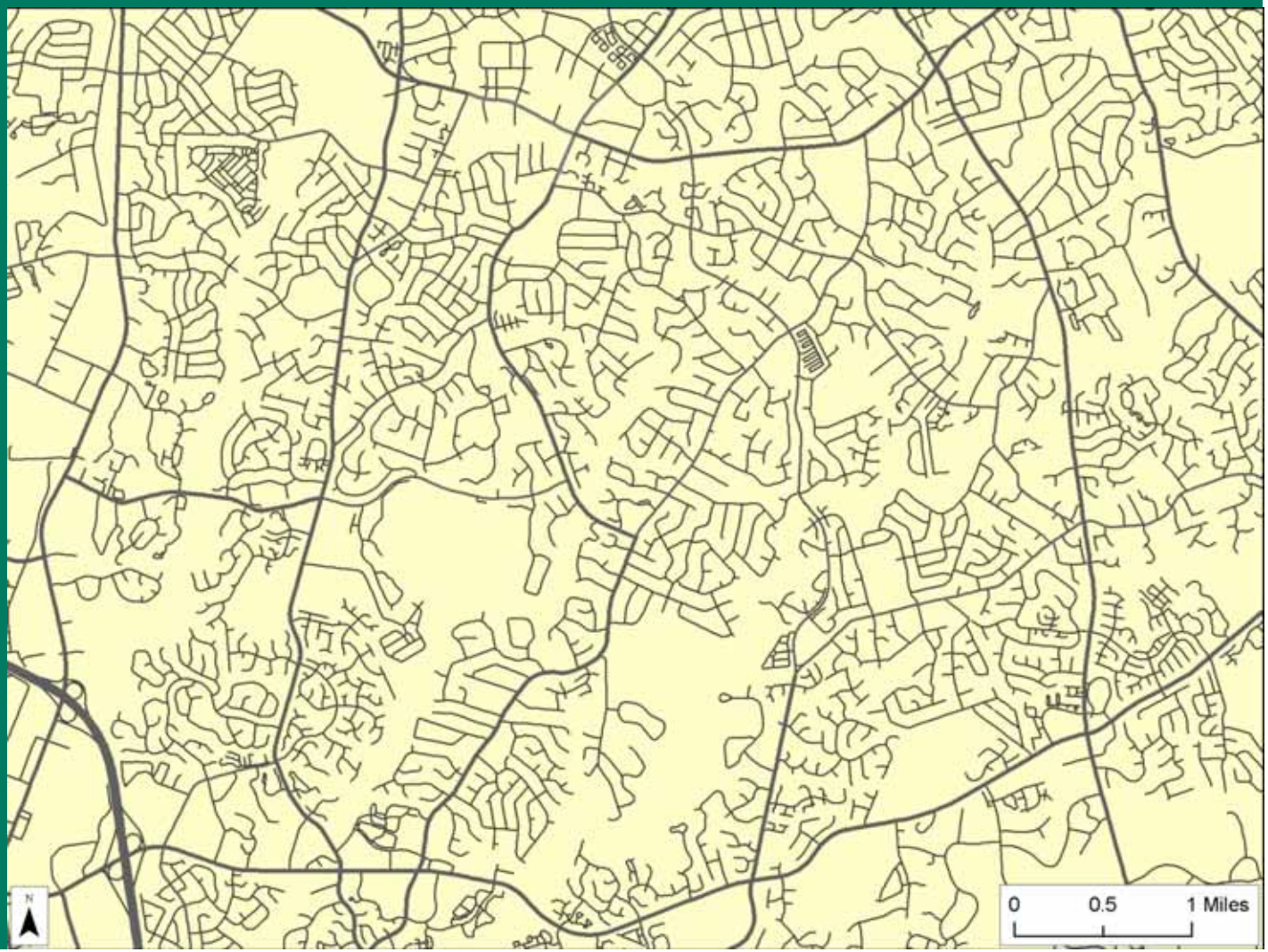
Challenge

Decades of Building Disconnected Network



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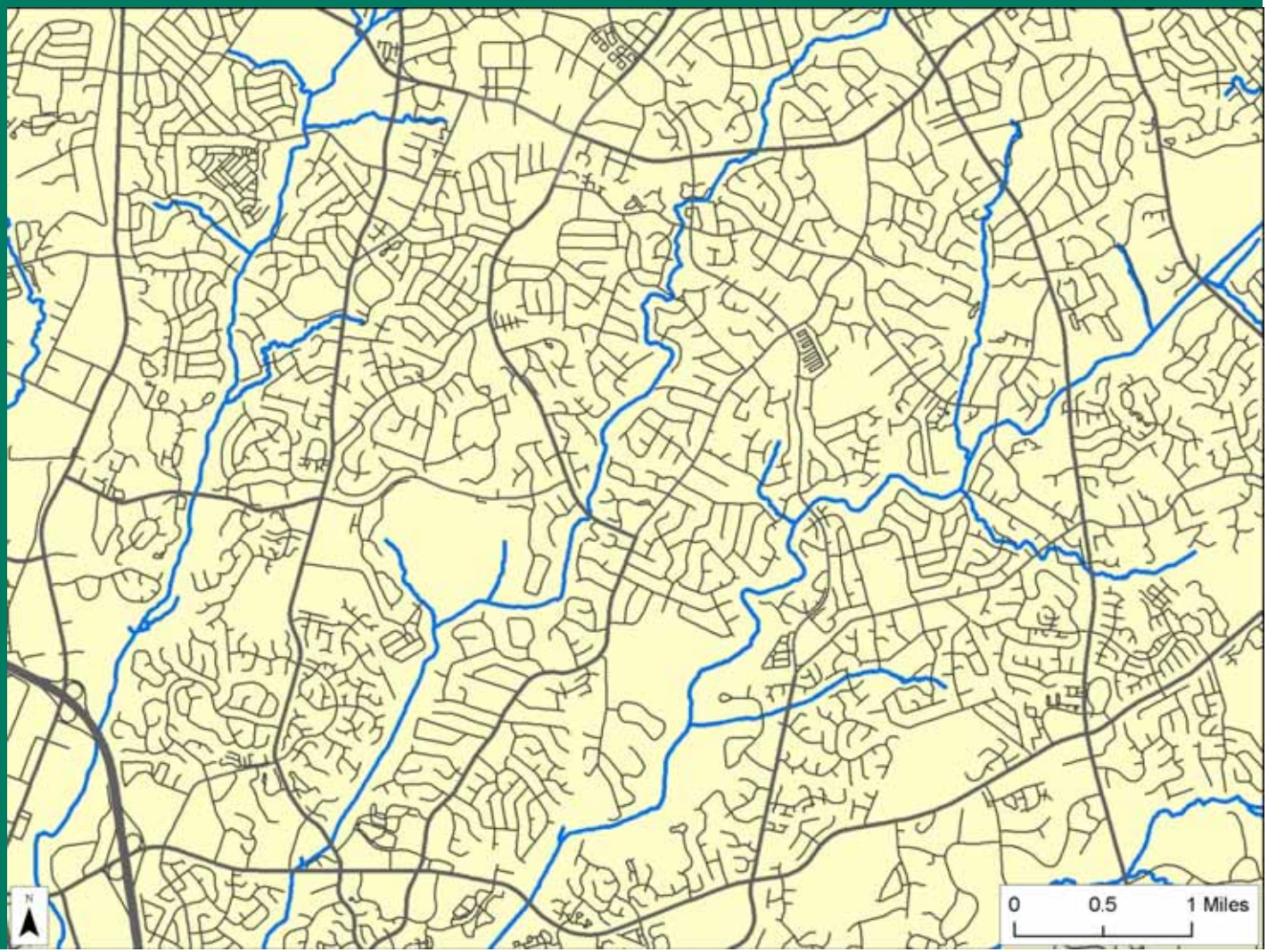
Challenge

Topography can prevent connections



Challenge:
Infill and redevelopment opportunities lost
N
0
200
400 Feet

N
0
200
400 Feet

Connectivity Program

Challenges

- NIMBYism (sometimes)
- Funding

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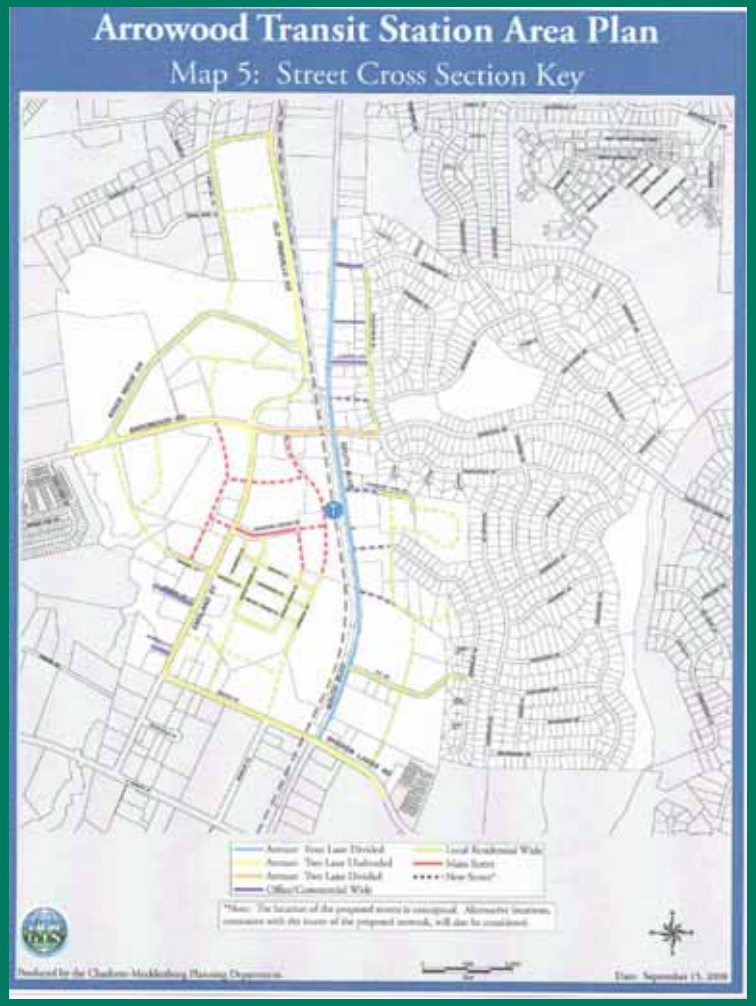
Getting More Streets

- CIP projects
  - Major Roadway
  - Intersections
  - Sidewalks
  - Neighborhood Improvement
  - Connectivity
  - Traffic Calming
- Area plans
- **Rezonings**
- **“By-right” development?**



Implementing the USDG

Amending the City Code to reflect USDG:

- Subdivision Ordinance
- Zoning Ordinance
- Expect particular emphasis on block lengths, spacing of connections, spacing of creek crossings
  - “Exclusions and allowances”

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"Exclusions and Allowances" for Connections

Intended to provide exceptions to "hardships" – the general question:

- Build the street?
- Build a public street or a private street?
- Build a stub?
- Simply preserve the ability to build a future street?
- None of the above?

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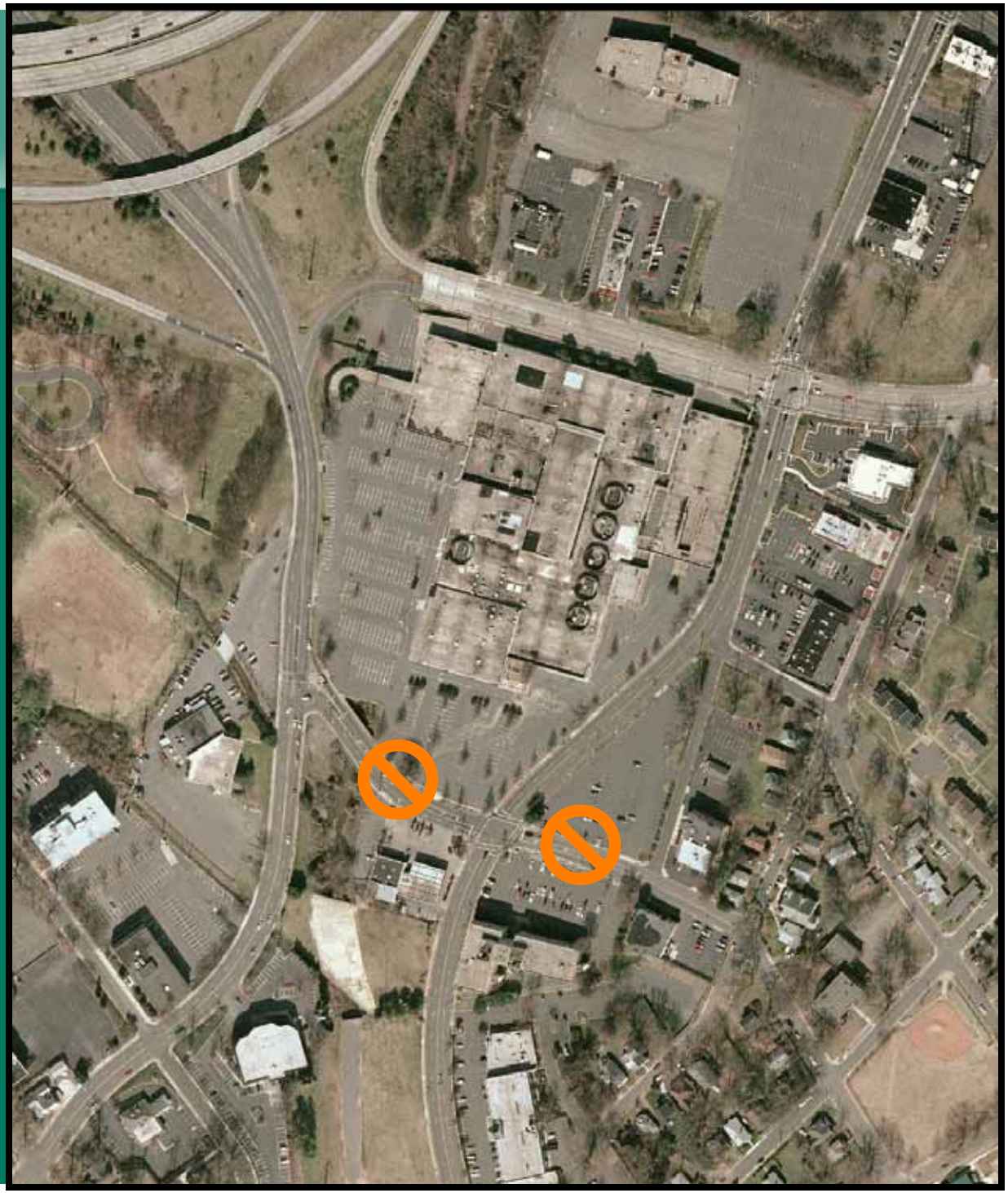
- Re-development – challenges and opportunities



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The Metropolitan

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Implementing the USDG

- The policy guidance is in place
- The need for more (and better) streets is clear
- Many of the same challenges still exist
- Ordinance updates will be challenging, as well
- Combining clarity with flexibility is key

Questions?