MINUTES
TOWN OF PITTSBORO
WORKSESSION
CHATHAM COMMUNITY LIBRARY
AUGUST 24, 2013
7:00 A.M.

Mayor Pro Tem Baldwin called the meeting to order.

ATTENDANCE

Members present: Mayor Randolph Voller, Commissioner Pamela Baldwin, Jay Farrell, Michael Fiocco, Bett Wilson Foley and Beth Turner.

Staff present: Manager Bryan Gruesbeck, Clerk Alice F. Lloyd, Attorney Paul S. Messick, Jr., Planner Stuart Bass, Engineer Fred Royal and Parks Planner Paul Horne. Philip Culpepper was also in attendance.

WORKSESSION

Manager Gruesbeck thanked everyone for being present at the early morning meeting. He said the purpose of this worksession is to get staff points of view on the project.

Staff went over the following information:

The following memorandum was sent to the board for discussion.

From: Planning and Engineering Staff
Via: Bryan Gruesbeck
CC: Attorney Messick
Date: August 16, 3013

Introduction

Chatham Park LLC is proposing to rezone approximately 7,000 acres of land within the Town's Extraterritorial Planning Jurisdiction. The property is primarily vacant and undeveloped, located on the eastern side of Pittsboro.

Current zoning districts associated with the property include Highway Commercial, Conditional Use (C-2 CU), Highway Commercial (C2), Mixed Use Planned Development (MUPD), Residential-Agricultural (RA), Residential-Agricultural 2 Acres (RA-2), Residential-Agricultural 5 Acres (R-A5).

The request is to apply the Planned Development District (PDD) to the property.

Background

This district is established and intended to promote innovative land planning, design and layout of large development projects that may not otherwise be permitted under general zoning district standards, subdivision regulations, or other development requirements. (The words "standards", "requirements", and "regulations" are used interchangeably in Article V when referring to development standards). The PDD district promotes innovative land planning, design and layout by:

(1) Reducing or eliminating the inflexibility that sometimes results from strict application of zoning and development standards or regulations that were designed primarily for individual lots;
(2) Allowing greater freedom in selecting the means to provide access, light, open space, and design amenities;
(3) Allowing greater freedom for a broad mix of various land uses in the same development;
(4) Promoting quality urban design and environmentally sensitive development by allowing development to take advantage of special site characteristics, locations, and land uses;
(5) Encouraging quality urban design by allowing higher densities when such increases are supported by superior design or the provision of additional amenities; and
(6) Advancing public health, safety and general welfare.

In return for greater flexibility, planned developments in this district are expected to deliver communities of exceptional design, character and quality that preserve critical environmental resources and provide open space amenities. Such communities incorporate creative design in the layout of buildings, open space, and circulation; assure compatibility with surrounding land uses and neighborhood character; and provide greater efficiency in the layout and provision of roads, utilities, and other infrastructure. Because flexibility is essential for the development of such communities, variations from otherwise applicable regulations and standards may be granted with the adoption of the required Planned Development District Master Plan (PDD Master Plan).

Timeline to Date

May 3, 2013	Application Received.
May 6, 2013	PDD Application to Planning Board.
May 13, 2013	PDD Application to Town Board of Commissioners.
May 20, 2013	Staff Meeting to discuss application.
June 3, 2013	Planning Board Meeting, referred to Town Board for Public Hearing.
June 24, 2013	Public Hearing Town Board of Commissioners.
July 1,2013	Planning Board Meeting, Recommend Approval
July 22, 2013	Public Hearing Town Board of Commissioners.
August 12, 2013	Presentation to Board at Regular Meeting By Chatham Park. LLC.

Application Review Comments

Requirements of PDD Master Plan

The following is an excerpt from the PDD Zoning Ordinance and details the requirements of a Master Plan for the purposes of this zoning district.

5.8.3 Required PDD Master Plan

Submittal of an application to rezone property to a PDD shall include submission of a Planned Development District Master Plan (PDD Master Plan). The PDD and the PDD Master Plan shall be treated as a single item when acted on by the Board of Commissioners. The form and elements of the PDD Master Plan are listed below.

The PDD Master Plan shall include the following *(comments are listed in italics):*

- a map, including parcel numbers, showing the parcels proposed for the PDD (County GIS maps are adequate); *Does not meet stated requirements, can't correlate parcel ID#s with specific parcels*

- a topographic map(s), for the property included in the proposed PDD (County GIS maps are adequate); *Meets stated requirements*

- a list of permitted uses proposed in the PDD; *Meets stated requirements*

- the general locations of the proposed uses; *Lacks sufficient detail*

- a summary of the amount, quantity, or gross density of those uses proposed in the PDD; *Lacks sufficient detail*

- a map(s) showing the locations of water bodies appearing on USGS or NRCS Soil Survey maps within or adjacent to the boundary of the proposed PDD; *Appears to meet stated requirements*

- a map(s) showing the locations of wetlands, stream buffers, the 100 year floodplain, and slopes greater than 20%; *Appears to meet stated requirements, but the maps are not at a particularly usable scale – applicant should submit all GIS data to Town Staff for greater analysis. All information in the proposed plan is public information, not proprietary*

- a utility plan that includes the type and general location of the following existing and proposed public utilities:

- Water; *Lacks sufficient detail for service delivery planning*

- Wastewater; *Lacks sufficient detail for service delivery planning*

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- Reuse water; *Lacks sufficient detail for service delivery planning*

- A general plan addressing stormwater within the proposed PDD; *proposed performance standards are good but incomplete. The town's stormwater ordinance should be the regulatory document*

- A public service plan for the PDD that evaluates potential impacts on:

- Police service *these seem to lack sufficient detail, but will defer to the professional judgment of our Police Chief*

- Fire service *these seem to lack sufficient detail, but will defer to the professional judgment of our Fire Chief*

- Schools; *schools are a County Function, would defer to the professional judgment of the County School Superintendent*

- A multi-modal transportation plan for the PDD that includes:

- The location of existing and proposed major roads in and adjacent to the PDD; *lacks sufficient detail, only major thoroughfares and greenways are shown*

- A general plan for an on-site transportation system that addresses vehicular, bicycle, transit and pedestrian circulation; *Not in plan in any significant detail– lacks specificity*

- The location of known historic structures or sites within the PDD; *Appears to meet stated requirements – not sure of the relevance though, will these sites be preserved in some way?*
- A recreation and open space plans that includes the locations and standards for greenways, open spaces, and recreation areas within the PDD; *see detailed comments below in the Parks Section and recommendations from the Parks and Recreation Advisory Board*

- A boundary buffer plan showing transition treatments between the proposed PDD and adjacent properties; *Not in plan – lacks specificity*

- Proposed land development standards/regulations for the PDD; and, *These mostly envision using regulations written in the 1980s for a town of 2000 – 4000 for a new development of 50,000 people. All subsequent ordinances should apply to the PDD.*

A plan for development phasing within the PDD. *Lacks a meaningful phasing plan*

Please note the following sections as they relate to the Planned Development District as prescribed in the Zoning Ordinance. The requirements highlighted in bold below are addressed

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to a degree but not to any level of specificity which would make subsequent reviews of development proposals easily understandable for compliance.

5.4.1 NOTES TO THE TABLE OF AREA, YARD AND HEIGHT REQUIREMENTS
NOTE 15. Planned Development Districts

(a) Development standards established by the approved PDD Master Plan shall be the applicable development standards within the PDD. Such standards may include, but are not limited to, **building height, building separations, building setbacks, lot size, yard, buffer and landscape requirements or other development standards**. Except as otherwise provided by the approved PDD Master Plan, property within an approved PDD shall be subject to all applicable regulations, subdivision plan approvals, site plan approvals, and other permits and approvals required by Town ordinances.

Comment: Existing standards as prescribed by the zoning ordinance are waived but no new standards provided for the development.

5.8.3 Required PDD Master Plan

Submittal of an application to rezone property to a PDD shall include submission of a Planned Development District Master Plan (PDD Master Plan). The PDD and the PDD Master Plan shall be treated as a single item when acted on by the Board of Commissioners. The form and elements of the PDD Master Plan are listed below.
The PDD Master Plan shall include the following:

- **A boundary buffer plan showing transition treatments between the proposed PDD and adjacent properties;**

Comment: Plan alludes to possibilities for buffer treatments but does not offer specific recommendations or designs.

- Proposed land development standards/regulations for the PDD; and,

Comment: There is nothing in the Plan other than references to existing ordinances and regulations. Should provide at least an outline of applicable Codes, Covenants and Restrictions that will be required. No discussion or mention of form and how it relates to density. No reference to building types and design.

- A plan for development phasing within the PDD.

Comment: Some analysis describing phasing, not necessarily dates, but the order of development for Specific Sections as described. (Are the sections the basis for the development phasing?) In any case, I would think that each section would necessitate something akin to a master plan or small area plan to indicate what will develop, something more than just a set of unit counts.

5.8.4 Land Use Mix

(a) A mix of land uses is expected in the PDD zoning district. **The PDD Master Plan shall identify how uses will be mixed within the PDD**. Uses may vary for and within areas or phases of the PDD and it is acknowledged that the mix of uses may need to change over time.
Page 8 of the proposed Master Plan, third paragraph, states that "It is clear, based on the map and table presented, that land uses have been mix and mixed (TYPO) in a way that meets the intent of the PDD zoning district".

Comment: This is not clear. There should be written descriptions of the proposed area uses for sections that were identified on the Land Use Plan. Also, some graphic examples would be helpful. Some description of form with which to evaluate projects in the future is a necessity. There should be some analysis or reasoning as to how and why the number of dwelling units and gross square footage for the individual sections were derived.
5.8.4 Land Use Mix

(b) **Planned developments containing both residential and nonresidential uses shall be designed, located, and oriented on the site(s) so that non-residential uses are accessible to residents of the development**. In general, the proposed development shall provide for connectivity of land uses through a network of roadway improvements and pedestrian sidewalks and/or trails and/or bicycle facilities, the final layout of which will be determined as specific site plans or subdivision plans are approved.

Comment: A critical component is the street design and associated network, to create an organized structure and network that can be implemented over time. This needs to be described and articulated in more detail, as it is a critical organizing principle. There should be a greater emphasis on interconnectedness of the street network. How will a street grid be incorporated, what are the design standards? How is the localized street network grid / layout to be developed? Schematics need to be approved. Public roads, private roads, how is what and where decided.

Further explanations of some of the required elements are listed in Sections 5.2.2, Note 10; 5.4.1, Note 15; and 5.8.4 through 5.8.8 b. In addition the applicant may choose to include other items or plans. The elements of the PDD Master Plan may be presented in various forms and can include any combination of text and illustrations deemed appropriate by the applicant. The forms chosen should clearly illustrate the element of the PDD Master Plan being presented.

Selected Section by Section Comments

Site Analysis

Most of the maps lack contextual information and are at such a scale as to be of limited value. It is recommended that the Town acquire the GIS data required to produce the developer's maps from the developer in order to perform more critical analysis of the developer's proposed Land Use.

The 27 "Sections" are too broad to provide enough indication of the form of future development. The gross densities of even the densest sections are characteristic of suburban sprawl, not urban development. This is true of even for the higher density mixed use residential sections projected to contain about 7.5 units per acre. Typically 12 DU/ acre is considered minimum for efficient regular service by mass transit. Higher densities are associated with greater fiscal and environmental sustainability. One of the stated intents of the PDD is to "encourage quality urban design by allowing higher densities when such increases are supported by superior design or the provision of additional amenities."

While it is an oversimplification to equate the lone factor of density with superior planning and design in and of itself, when critiquing a plan which uses only gross density as it's yardstick with no indication of the organization, distribution, or form of the development except in the vaguest possible terms it's appropriate, at a minimum, for the Town to ensure that enough of the project is at a sufficient level of density to avoid the many well documented undesirable pitfalls of suburban sprawl and overly auto-dependent development.

Transportation

A transit oriented development (TOD) approach would be superior from a long term fiscal perspective. Contrary to the statement in the master plan on pg. 26 that "Over time, the system can mature by laying the groundwork with simple, cost effective technology such as shuttles or busses," mass transportation systems don't evolve very well from initial sprawl conditions. Planning the high density areas suitable for transit (again, about 12 DU/ acre minimum required for efficient regular service) at the outset is a more responsible model.

It is recommended that the *NCDOT Complete Streets Design Standards Manual*, not just the generalized complete street approach (as proposed), be the minimum standard throughout the development.

Parks, Greenways, Recreation and Open Space

The greenways are infrastructure associated with the multi-modal transportation system described within the document. As such, major greenways and side paths need to be funded like roads, via the developer, not through recreation fee in lieu funds as currently proposed. As proposed, "In cases where the greenways parallel a public street right-of-way, the greenway may be constructed within the public street right-of-way as a multi-use trail in place of a sidewalk." We applaud this, but since there would already be a requirement to build the sidewalks, we do not feel as though a recreation fee in lieu funds should be used to fund these paths.

Private recreation facilities should not be used to satisfy public park requirements. A private pool, for instance, not open to the general public, would not serve the recreational needs of the public at large. Funds used to develop these facilities should not count toward meeting Town recreational requirements. Perhaps the land area for these facilities could be counted toward meeting recreation requirements, in part or in whole, at the discretion of the Town. All proposed park or recreation areas would need to be approved by the Town and meet the suitability requirements of the current subdivision ordinance, or an alternative agreed upon standard.

Utilities / Stormwater/Environment

Utilities are the critical component of the new infrastructure, particularly the provision of water and wastewater.

The Master Plan does not include information, specifically in the form of a Utility Plan or Phasing Plan sufficient for the Town to clearly understand and thereby prepare for the delivery of utilities and services such as potable water to Chatham Park. Further narrative, phasing or potable water delivery requests should be provided in sufficient detail for Town planning purposes.

Adequate engineering analyses are required to review alternatives, costs, and feasibility. Current questions include but are not limited to the following.

- Will the Enterprise Funds be able to expand at the required rate from the existing impact fees alone?
- Will new development fees from Chatham Park allow our Enterprise Funds to be more revenue neutral?

Currently, the Enterprise Funds are running at an unsustainable rate, with many improvements and maintenance needs pending.

Potable Water Treatment and Delivery

The Town will deliver potable water to Chatham Park in addition to other new customers. Therefore, due to the apparent large scale and complexity of the Chatham Park Development, it requires sufficient planning and long-term infrastructure investment considerations. We believe the Town should request and obtain a potable water delivery schedule from Chatham Park. A phased schedule and request of potable water delivery is recommended. This could be limited to sub-phases to allow for more accuracy and uncertainties further out. As an example, we believe that the next 12, 24, 36, 48 and 60 months could be reasonably provided. The required Utility Plan should be submitted that includes this data in more detail than what has been provided. All assumptions to verify the delivery request should be provided.

With a completed and approved Utility Plan, the Town can begin to develop a plan for infrastructure improvements and allocations taking all aspects of Town growth into consideration. This could include, water plant treatment capacity, system upgrades, raw water source considerations, etc. The outcome will include capacity increase design, cost estimates, alternatives, permitting requirements, financing options, scheduling, etc.

Note on current raw water sources: The Haw River is the Town's sole source of raw water supply for the near term. The Town is in the process of investigating with DENR an increase in withdrawal from the Haw River to meet anticipated demand increases approximately over the next ten years. On a parallel track, the Town has been participating in the Jordan Lake Partnership, where water allocations from Jordan Lake will be applied for beginning in January,

2014. The allocation application will require detailed water demand data, including data from Chatham Park.

Most recently a sub-group entitled "Western Intake Partners" (WIP) has formed. WIP has met on several occasions recently and is comprised of Town of Pittsboro, Chatham County, Orange Water and Sewer Authority (OWASA) and the City of Durham. WIP is in the early stages of assessing the feasibility of constructing a raw water intake, treatment plant and distribution system on the western shore of Jordan Lake. This process will take many years to reach the point of treated water delivery from Jordan Lake. Therefore, we believe the Haw River will be a primary resource for the Town for the foreseeable future.

Sanitary Sewer Collection and Treatment

It remains unclear what processes, permits, ownership and technologies Chatham Park is anticipating for sanitary sewer collection, treatment, discharge and reuse. We believe that further discussions related to sewer allocation at the Robeson Creek WWTP is warranted for near term projects until more information is provided concerning new wastewater treatment to support the PDD.

Note on the existing Robeson Creek WWTP: The Town is entering an initial planning phase to up-grade the existing WWTP to meet pending nutrient requirements as well as to increase the total effluent discharge. To this end, the Town has initiated contact with DENR concerning this increase request. We believe we have sufficient time to carefully consider our WWTP issues along with the needs of Chatham Park over the next several years.

Stormwater/Environment

The Master Plan limits or omits a discussion of natural resource impact avoidance/preservation and most importantly water quality protections. The Master Plan should include some language addressing the following statements:

- "The PDD District promotes innovative land planning, design and layout by:
    - "Promoting quality urban design and environmentally sensitive development by allowing development to take advantage of special site characteristics, locations and land uses", and;
    - "Encouraging quality urban design by allowing higher densities when such increases are supported by superior design or the provision of additional amenities".

- "In return for greater flexibility, planned developments in this District are expected to deliver communities of exceptional design, character and quality that preserve critical environmental resources and provide open space amenities."

We believe that the Master Plan should include definitions for "critical environmental resources" and "open space." We also believe that the special site characteristics of the land including Significant Natural Heritage Areas (SNHA's), steep slopes, etc., should be considered as critical environmental resources.

We are currently working with Chatham Park to review perennial and intermittent water bodies with the intent to recommend the classification of these water bodies and ultimately riparian buffer widths for these water bodies with the PDD.

It is recommended stormwater management practices in Chatham Park shall be compliant with the Town's pending Jordan Stormwater Ordinance for New Development, and the proposed Soil Erosion and Sedimentation Control Ordinance, at a minimum. As Low Impact Development (LID) practices are developed, accepted and published in the NCDENR Stormwater Design Manual, those practices will apply within the PDD.

Larger Questions / Issues / Comments

References have been made specifically to the Woodlands in Texas and to Reston, Virginia. Is Chatham Park to emulate these developments? These are both successful planned developments but different. The Plan does not really describe a model for development or a clear vision. A clearer articulation of the vision as described in the presentations (e.g., their slideshows) would be helpful. And then what are the checks within the Plan to see that the vision is realized?

How to incorporate Chatham Park into the existing town and community from an annexation perspective and a community perspective?

How to accommodate other developers and proposals, what happens to the existing downtown?

Although not a specific requirement, should an affordable housing element be included? This is a component of the Town's Land Use Plan.

There is no mention of the Southwest Shore Conservation Assessment Chatham County, NC {Prepared by Triangle Land Conservancy Raleigh, NC and The Center for Sustainable Community Design, Institute for the Environment, University of North Carolina-Chapel Hill}? Did this figure into the land use assessment and design of the project at all? No mention is made of State Natural Heritage Area.

The historic resources were located and are referenced in the document. Will there be any effort to categorize, incorporate into the development, protect and/or preserve?

A few items pushed out to a further date - police plan, fire plan, tree ordinance, sign ordinance – and will require additional discussion and resolution.

Next Steps / Process

A coherently construed large-scale planned community has inherent advantages to a collection of smaller scale developments. A master planned community of the scale of the proposed Chatham Park, holds great promise, potential and, if properly planned and executed, the opportunity for excellence. All stakeholders recognize this potential and desire a successful outcome for this project.

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Pittsboro's new zoning district, the Planned Development District (PDD, henceforth) allows a developer the ability to trade "increased flexibility in the planning process in exchange for "exceptional design, character, and quality that preserve critical environmental resources and provide open space amenities."

In a broad sense, it is incumbent upon the developer, through their submitted master plan, to demonstrate that their project would embody "exceptional design, character and quality," through their articulation of development patterns, design standards, and other objective criteria that demonstrate the many well documented benefits of a planned development. In addition, in a very specific sense, the developer's master plan must satisfy article 5 section 8.3 of the PDD detailing the minimum requirements of an acceptable master plan.

The developer has great flexibility and few constraints in their ability to detail a clear vision for their development through their master plan. A master plan should demonstrate that, via the flexibility granted through the PDD, the proposed project would raise the bar in some way. It should demonstrably raise existing standards and show how these standards would produce "superior design".

A master plan detailing a clearly articulated pattern of development which is both fiscally and environmentally sustainable should be approved. We need a plan which balances the legitimate profit motives of the developer with the interests of the Town for an efficient organization and distribution of land use, which in turn will foster greater efficiencies in associated utility and transportation networks.

Recommendations

Decide the manner of further consideration of the proposal. Items for consideration:

(1) Whether to obtain professional assistance in review of the Master Plan.

- If yes, whether the BOC is to select such consultants or delegate authority to the staff.
- Timeframe to accomplish review (realistically not less than 60-90 days and perhaps longer, subject to modification after consultant hired);
- How to finance review?
- Define the scope of such review: planning primarily with input from other disciplines as appropriate, but subject to modification after planning consultant hired);
- How to incorporate input from the BOC during the review process—2 board member committee, full BOC work sessions?
- How to allow/encourage public input in a more structured format outside of a public hearing. Also subject to modification after planning consultant hired.

(2) If the Board of Commissioners is not interested in professional assistance, then what is our process / timeline for review?

- Town Staff to provide a more detailed review – presumably following additional discussion and feedback from the developer?
- Other professional agency review and comment, (e.g., Chatham County)?
- Specify time frame.
- Still the issue of how to incorporate input from the BOC during the review process—2 board member committee, full BOC work sessions?
- Citizen review committee / input? How to allow/encourage public input in a more structured format than a public hearing?
- How to incorporate public comments into review?
-

In any case, once a finalized, formal review is completed, the BOC can decide what elements it wishes to pursue with the developer. That should engender some revisions from the applicant.

Planner Bass, Parks Planner Horne and Engineer Royal made the following PowerPoint presentation.

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Master Planning Considerations

August 24, 2013 Work Session

The goal.....

- Pittsboro's Planned Developmet District.....in return for greater flexibility, planned developments in this district are expected to deliver communities of exceptional design, character, and quality that preserve critical environmental resources and provide open space amenities.....

- And some issues for consideration.....

Case Study

City of Raleigh

- Considering ROI in Capital Projects
- Guiding development to preferred areas in order to capitalize on infrastructure efficiencies
- Invigorating the urban core - placemaking

Return on Investment (ROI) & Planning

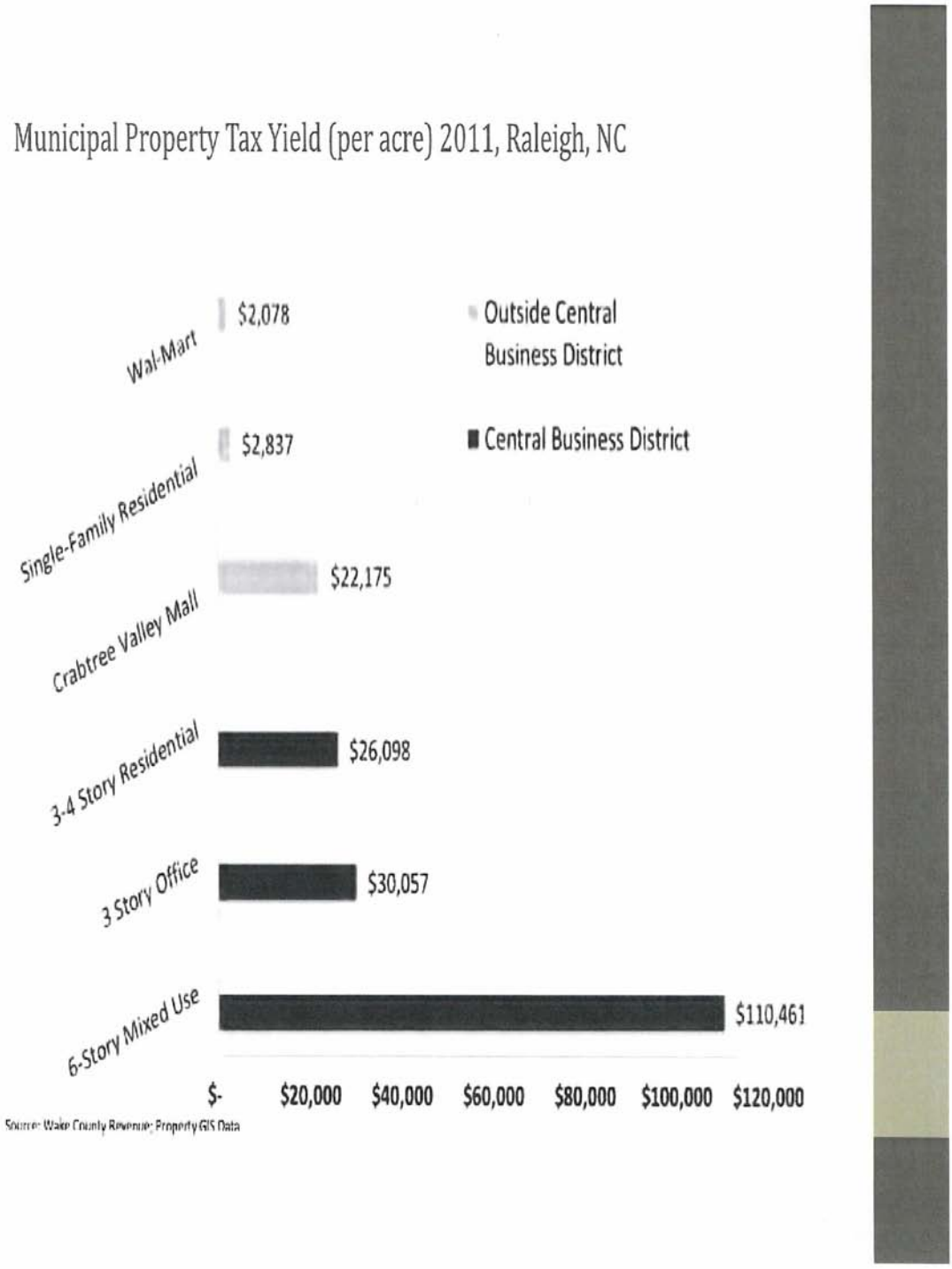
- "For years planning was just about visioning, and now planning is about economic development, it's more about job retention and job creation," he said. "What I've found in my travels is that most planners don't consider ROI when they're analyzing projects. Most elected officials don't consider ROI when they're considering or approving projects. I think that's beginning to change. As people look long term on how they're going to maintain this infrastructure, there are smarter and better ways to invest taxpayers' money to get a high return on investment but also minimize your maintenance costs down the line."

ROI

-Mitchell Silver

President of American Planning Association

Chief Planning and Economic Development Officer for the Department of City Planning in Raleigh, North Carolina

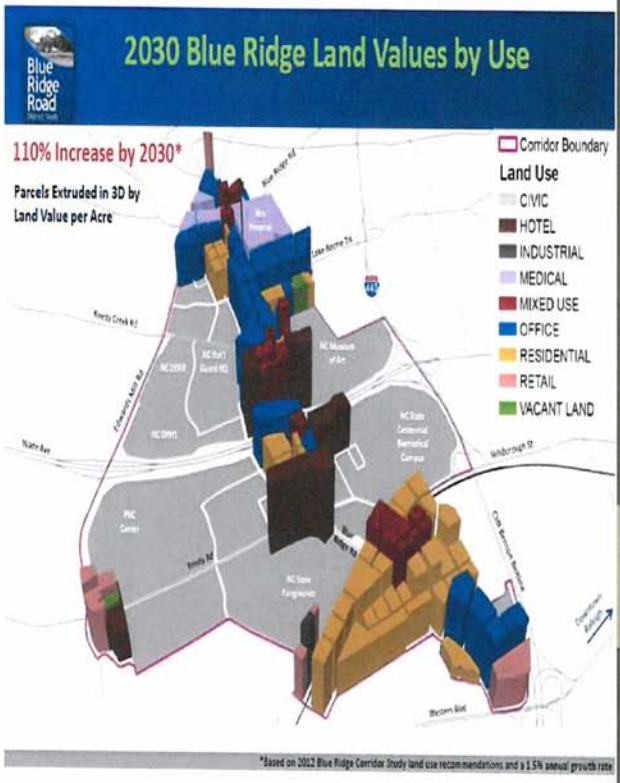

Municipal Property Tax Yield (per acre) 2011, Raleigh, NC
Wal-Mart
$2,078
Single-Family Residential
$2,837
Crabtree Valley Mall
$22,175
3-4 Story Residential
$26,098
3 Story Office
$30,057
6-Story Mixed Use
$110,461
Outside Central Business District
Central Business District
$-
$20,000
$40,000
$60,000
$80,000
$100,000
$120,000
Source: Wake County Revenue; Property GIS Data

Return on Infrastructure Investment

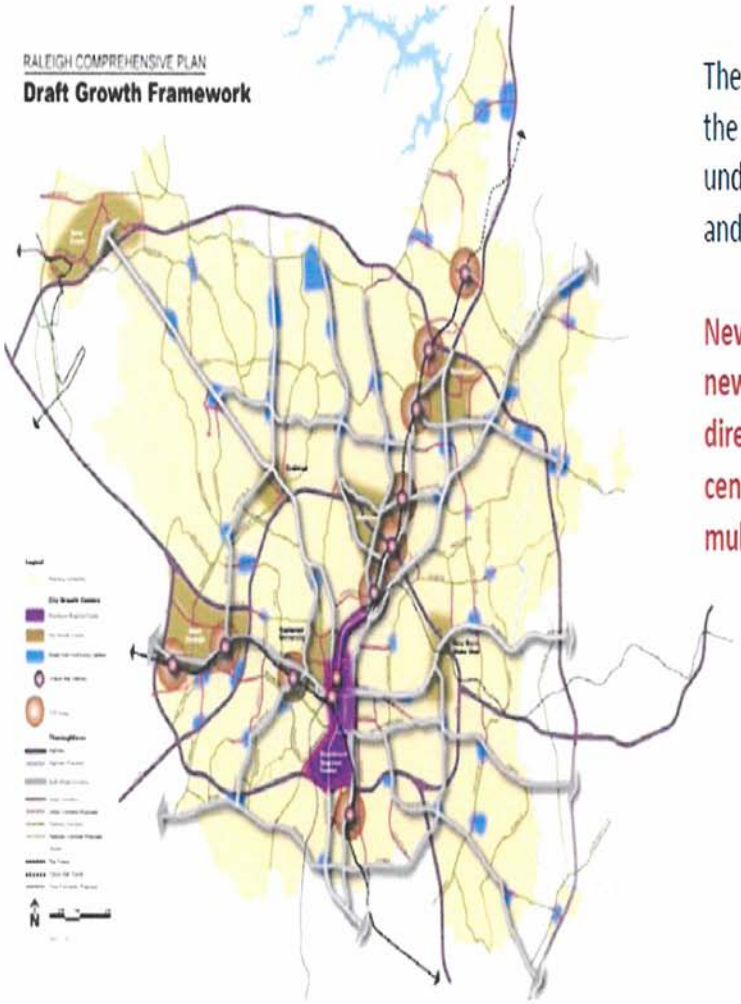
Downtown high rise residential on 3-acre site pays off its infrastructure in 3 years. The return on infrastructure investment is 35%.

Suburban multi-family complex on a 30-acre site pays off its infrastructure in 42 years. The return on infrastructure investment is 2%.

-Source Public Interest Projects, Inc.



Growth Framework Map



The city is over-supplied on the suburban product and under supplied on mixed use and urban product.

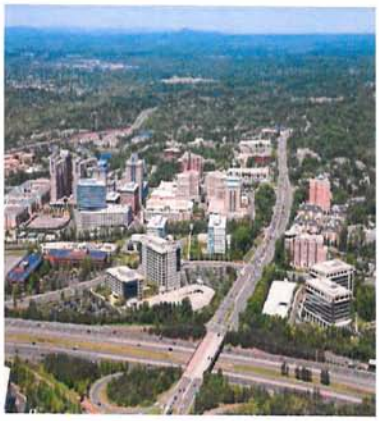
New direction: 60% of all new growth will be directed to 8 growth centers and 12 multi-modal corridors.

Source: City of Raleigh

The Pattern, Density, Form, & Organization of development MATTERS

The pattern and form of land development has long term implications for the fiscal sustainability of municipal budgets and the tax payers local governments serve.

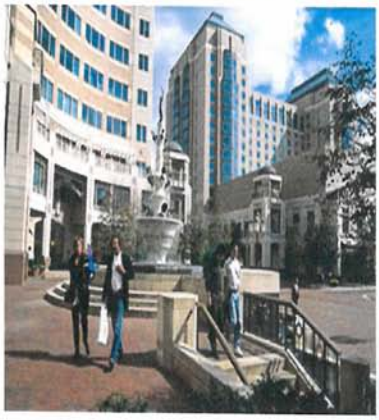
"The planning of such a town requires far more responsibility and consideration than has characteristically gone into suburban development." –Reston Master Plan 1962



Reston, Va.

Clear guiding vision

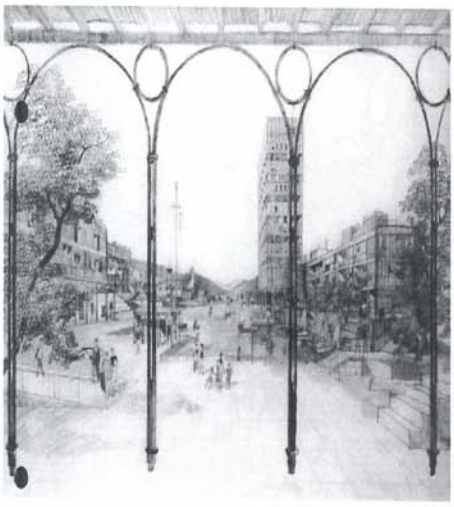
Codified vision



The 1962 Master Plan was about the same length as the master plan before our consideration.

The 1962 Master Plan provided **underlying principles guiding the form of the development**, maps illustrating the pattern of development, water and sewer plans detailing pipe dimensions, a plan for schools, etc.

Through multiple sets of owners and over the span of 40 years the development seen today largely corresponds to the initial vision in many significant regards.



SUMMARY OF LAND USE ALLOCATIONS

Residential Sector	5,348	Acres
Residential		
Medium Density 20 D.U. per acre		580.0
Low Density (3.8 D.U. per acre)		3,260.0
Churches (35 @ 3 acres)		105.0
Community Shopping		112.0
Education (3 IS + 3 HS = 6 @ 20 acres)		120.0
Post Graduate HS		42.0
Major Roads		186.0
Major Open Spaces		
Lakes	82.9	
Golf Courses	253.5	
Parks	503.6	
		840.0
Commercial		20.9
Cemetery		32.1
Hospital Complex		30.0
Other Community Facilities (TC)		20.0
Employment Sector	1,152.0	
Industrial Park and District		822.0
Reserve for Government Facilities		330.0
Town Center (Commercial Area)		100.0
Elementary Schools (15 @ 10 acres)		150.0
Total Land Area		6,750.0

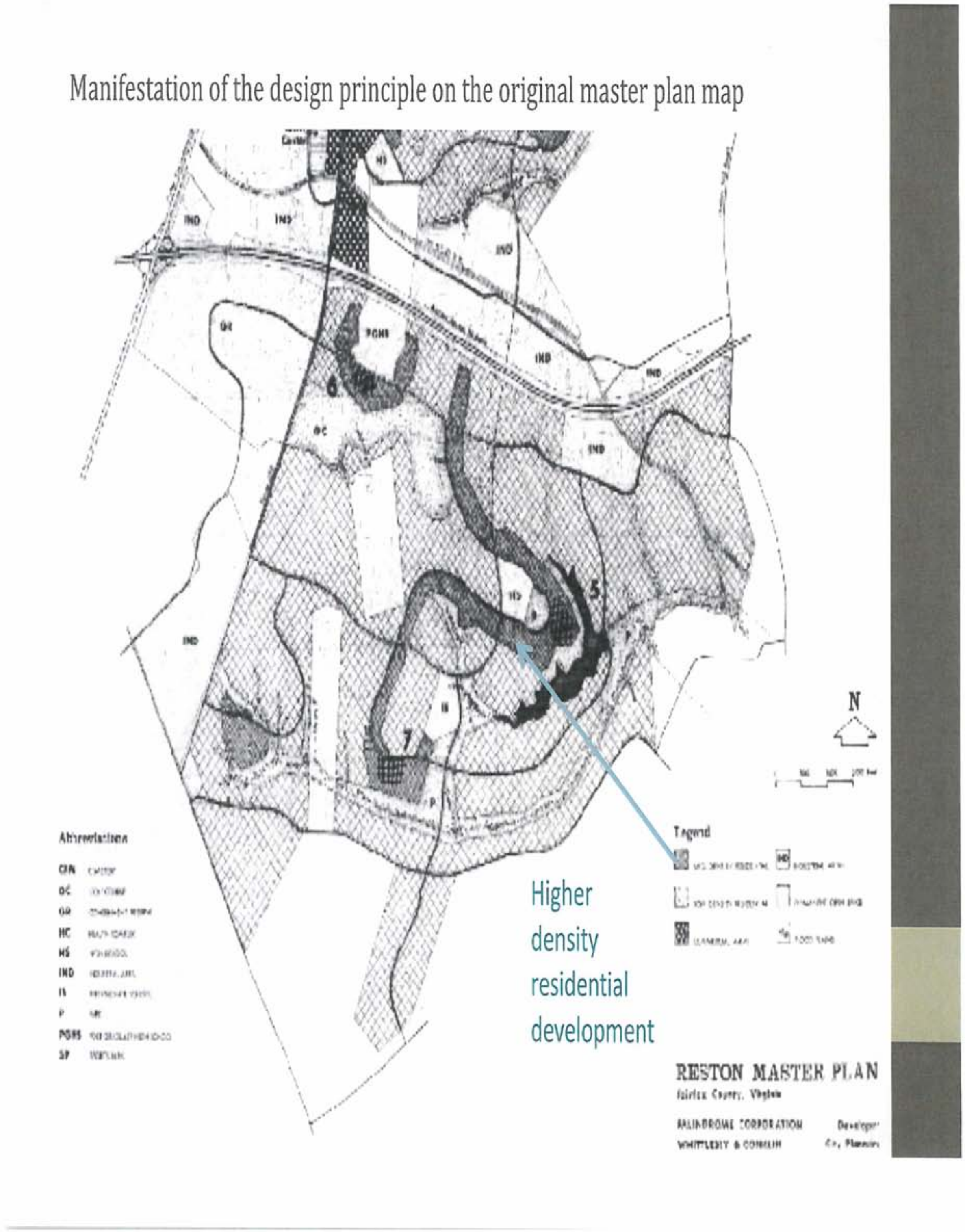
One example of a guiding design principle

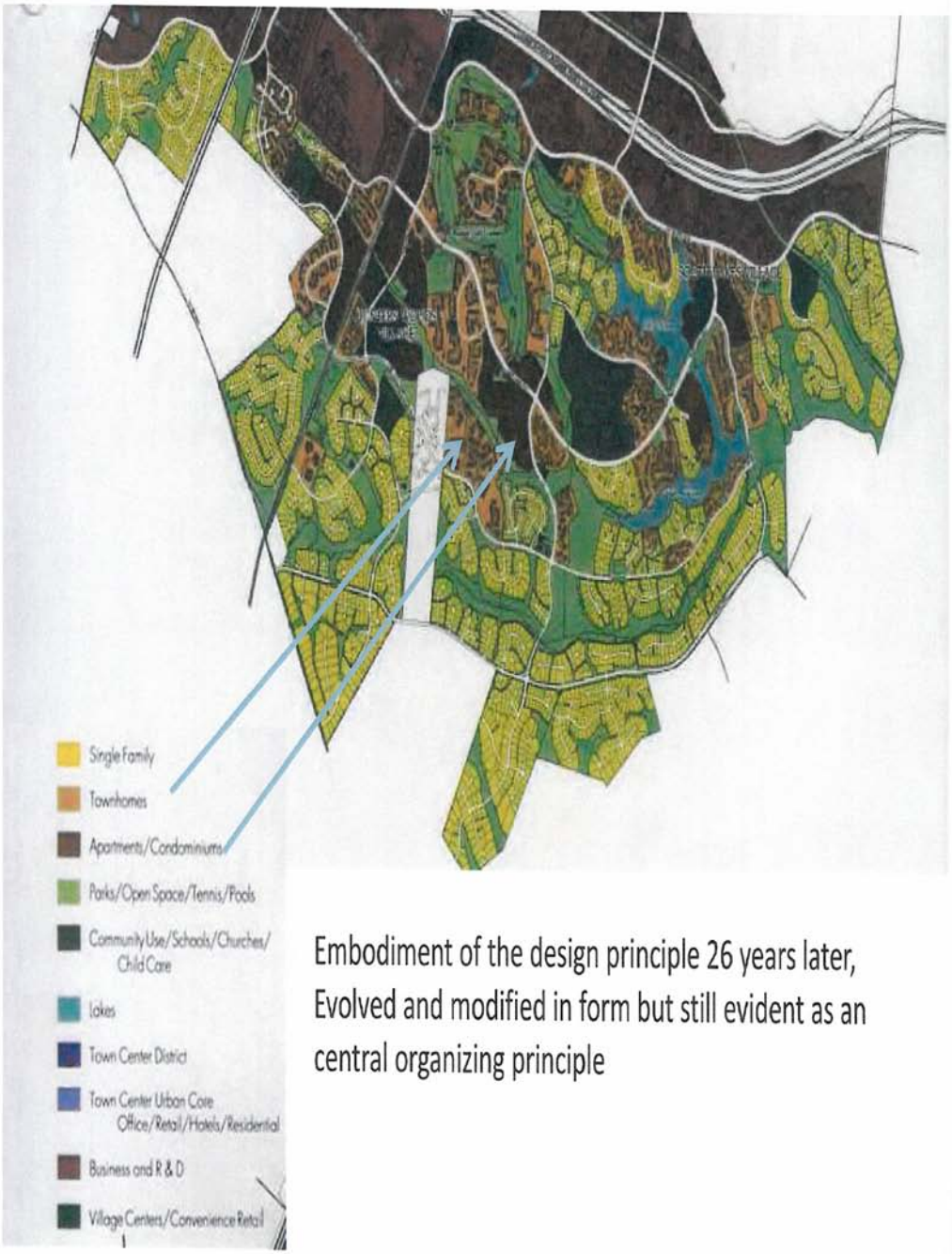
Sinews of form and activity

These sinews of higher density development will form the activity spines of the residential areas. In addition to the town houses located along their central walkways, all the village centers of activity will also be located along their route. These busy ways will lead to the local shopping center and to the schools. Along these walkways the pedestrian will have uninterrupted access to the full range of neighborhood facilities. These walks will have something of the busy life and character of a fine city street, with all of its visual and social interest, without its problems of automobile traffic.

The pedestrian gets his way

These sinews of life and activity will be within walking distance of almost every house in Reston. These walkways will, of course, be used by children and teenagers in their daily trips to school, by bicycle or walking.

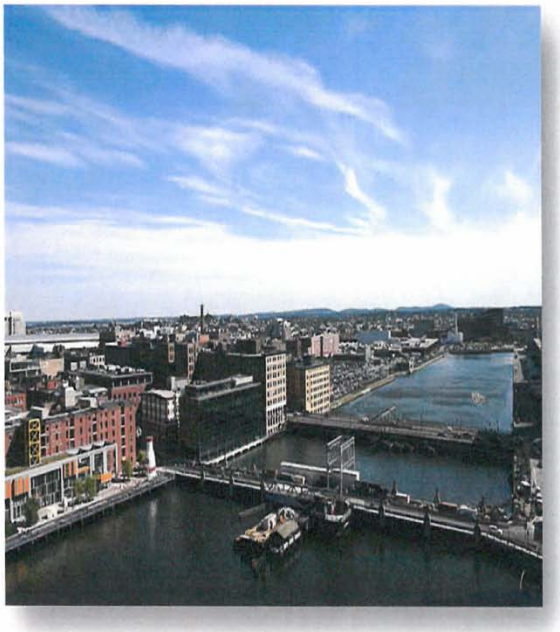

Manifestation of the design principle on the original master plan map
IND
PGHS
OC
IS
N
Abbreviations
CEN
OC
OR
HC
HS
IND
IS
P
PGHS
SP
Legend
Higher density residential development
RESTON MASTER PLAN
Developer



Embodiment of the design principle 26 years later, Evolved and modified in form but still evident as an central organizing principle

True to form through over 40 years and multiple sets of project owners.

Boston



Entrepreneurial Innovation Clusters in an Urban Setting

BOSTON'S INNOVATION DISTRICT

What's exciting about these innovation hubs is that, despite the ability to work from anywhere, cities are proving that innovation happens best when tech companies and startups cluster. Not only is that good for businesses, it's good for the city because it leads to more infill development where people can live near their work, which leads to a larger transit ridership.

Here's how the city puts it:

"Ideas need a tight ecosystem to foster creative growth – distance equals death. The ability for small firms to generate ideas and intermingle with larger firms who have the access to capital and the ability to scale and grow those ideas is imperative in entrepreneurial fields. This tight location clustering leads to job creation as well as more efficient product and service design. These Innovation District clusters become the new economic engines for the region, retaining homegrown talent from the surrounding city and intellectual institutions."

Robert Siegel talks with Brookings Institution vice president Bruce Katz, founding director of the Brookings Metropolitan Policy Program, about his new book, The Metropolitan Revolution: How Cities and Metros Are Fixing Our Broken Politics and Fragile Economy. Katz and his co-author Jennifer Bradley argue that "innovation districts," combining office space, residential buildings, and mixed-use retail, will be epicenters of the new urban economy. –NPR Transcript

Urban Innovation Districts May Be Cornerstones Of New Urban Economy

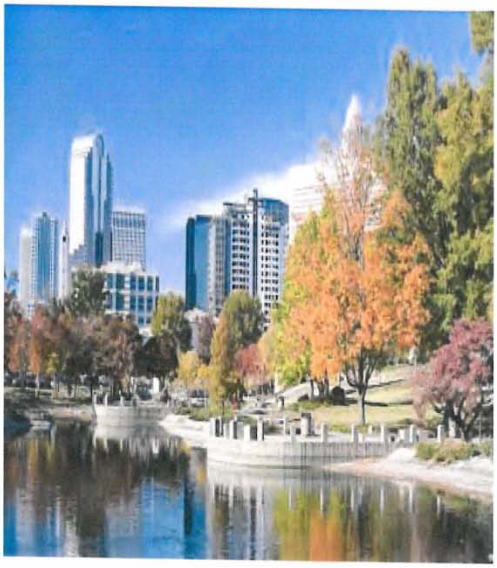
SIEGEL: You make an interesting distinction and an interesting point. You say back in the 19th century, there were obvious industrial zones where coal and steel might come together in the same area and factories right nearby. Then you cite the 20th century model of the suburban research park, the Research Triangle of North Carolina being the epitome of that. And you say that's passé. Today's industries actually flourish much more in a true urban environment.

KATZ: Yeah. Something is changing in the United States and, frankly, around the world that is profound. Every economic era has its own spatial geography of innovation. And when we built these science parks, like Research Triangle, the notion was that companies will go out to the exurbs essentially and go to isolated corporate campuses where they can invent and innovate, but keep your inventions secret and keep their workers separate from workers in other firms.

Urban Innovation Districts May Be Cornerstones Of New Urban Economy

MILLENNIALS
A PORTRAIT OF GENERATION NEXT

The other thing that's happening is with the Millennials, right, they seem to be sending a signal to the market: We want to live in quality places; we want choices in how we get to work; we may actually want to live close to our place of employment. That's why cities and urban spaces and suburbs, as well, are being revalued. And we see that not just in Detroit, in the core, but around MIT in Cambridge, around Georgia Tech in Atlanta, around many parts of the country that have these really beautiful downtown and midtowns, with ample assets.



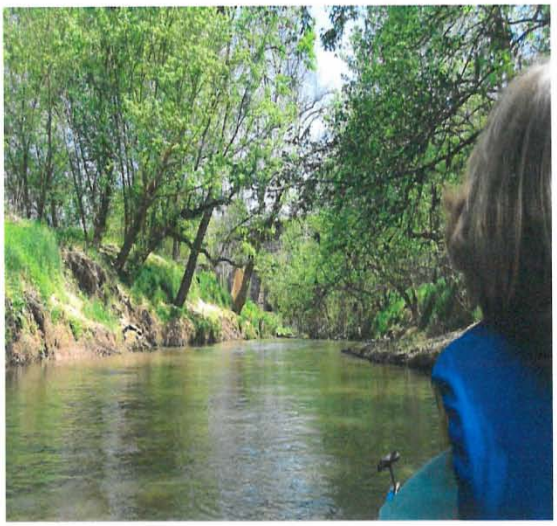
Charlotte, NC

Strategic Conservation of Open Space

Transit Oriented Development

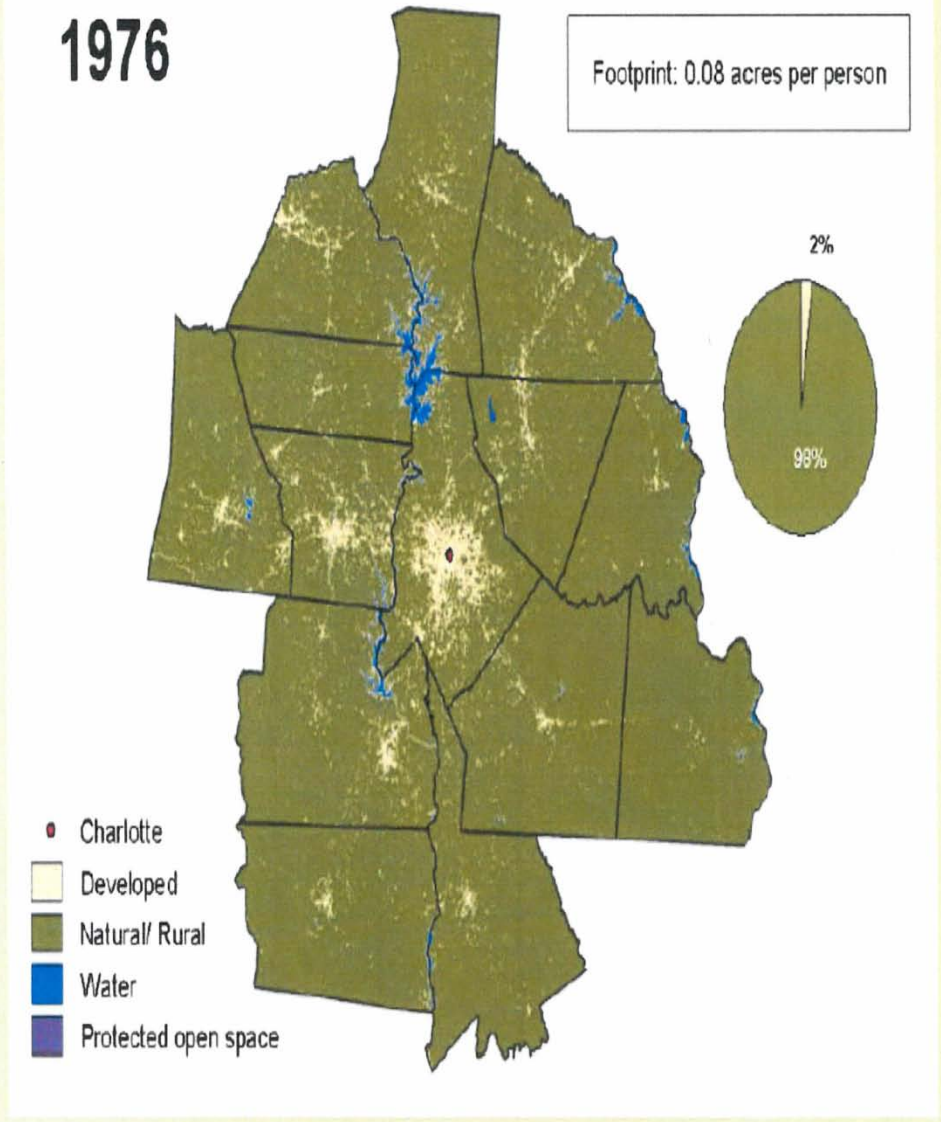
Benefits of Conserved Land

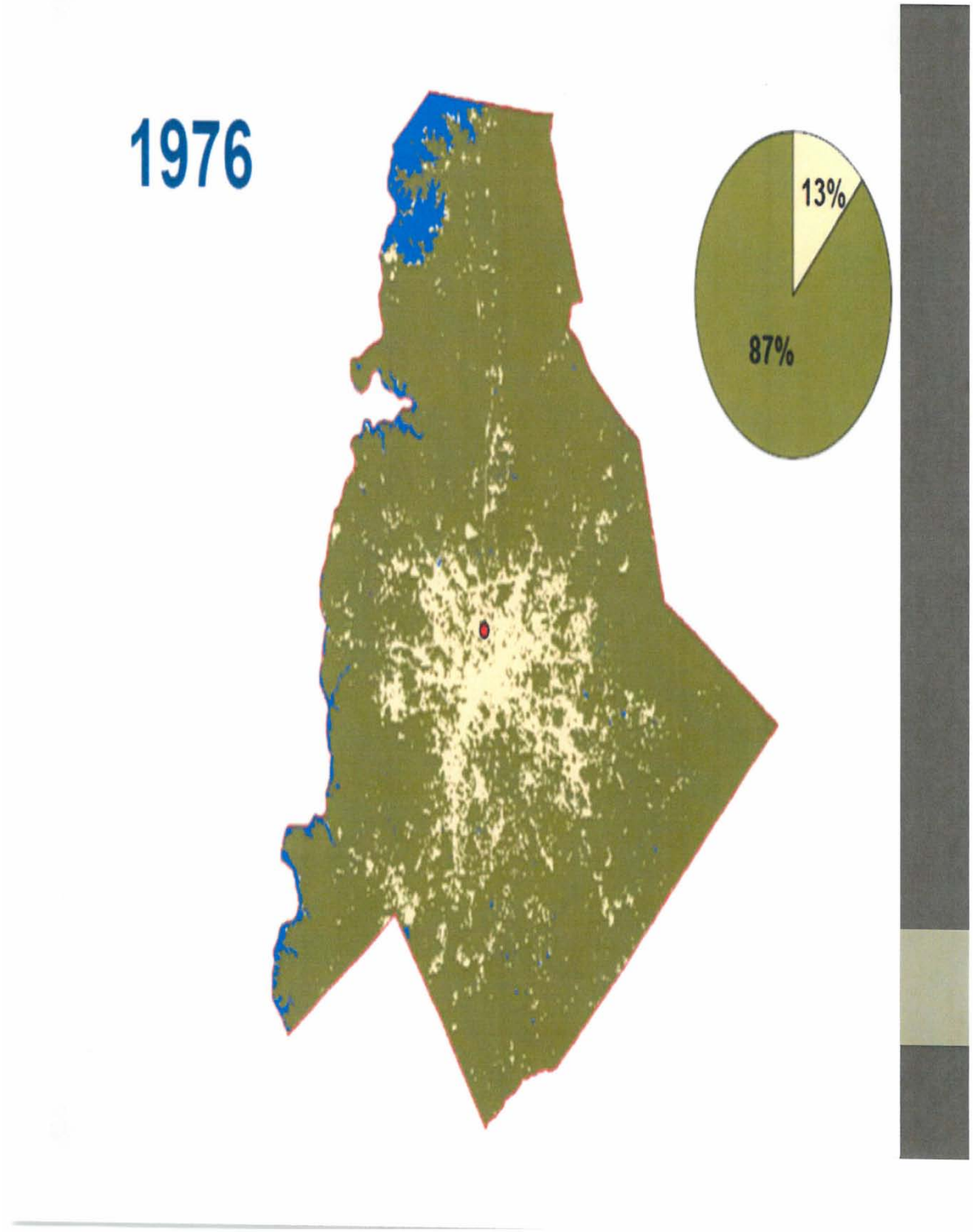
- Environmental
  - Air Quality
  - Water Quality
  - Wildlife/ Habitat
- Economic
  - Tax Benefit (ie. tax values around Duke Forest vs. surrounding area)
  - Tourism
  - Direct Revenue
- Societal
  - Health
  - Education
  - "Quality of Life"

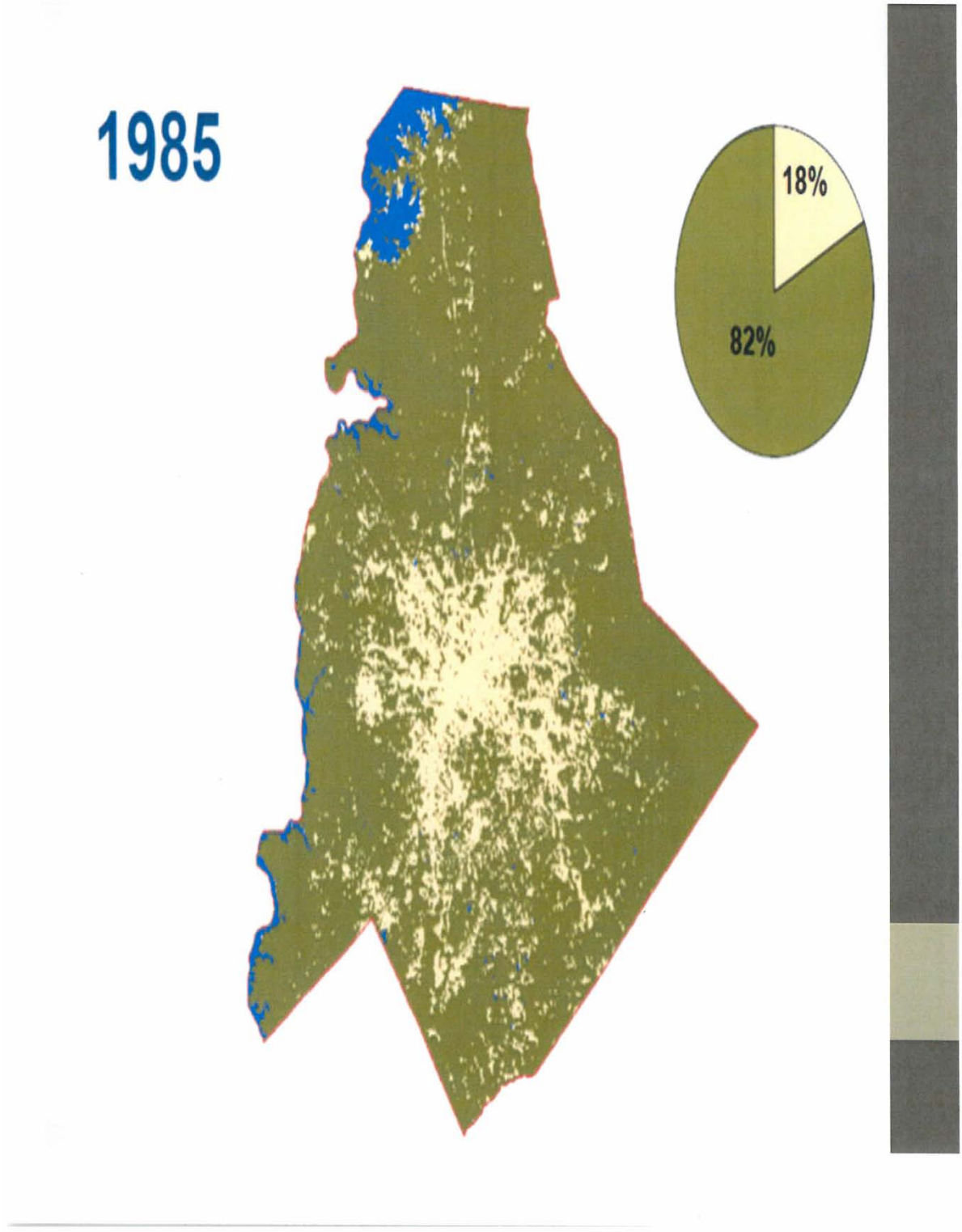


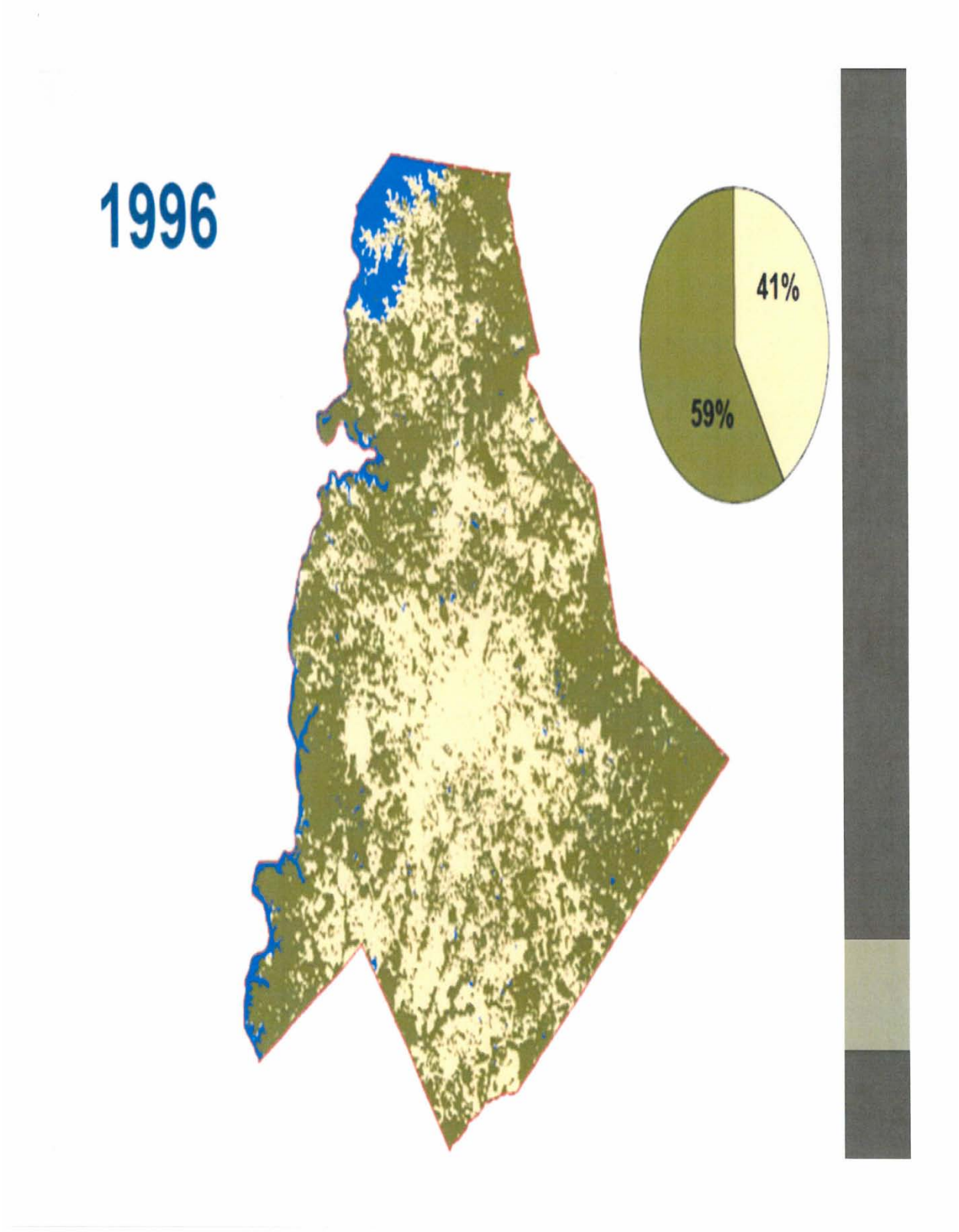
Quantity Predicted Conversions

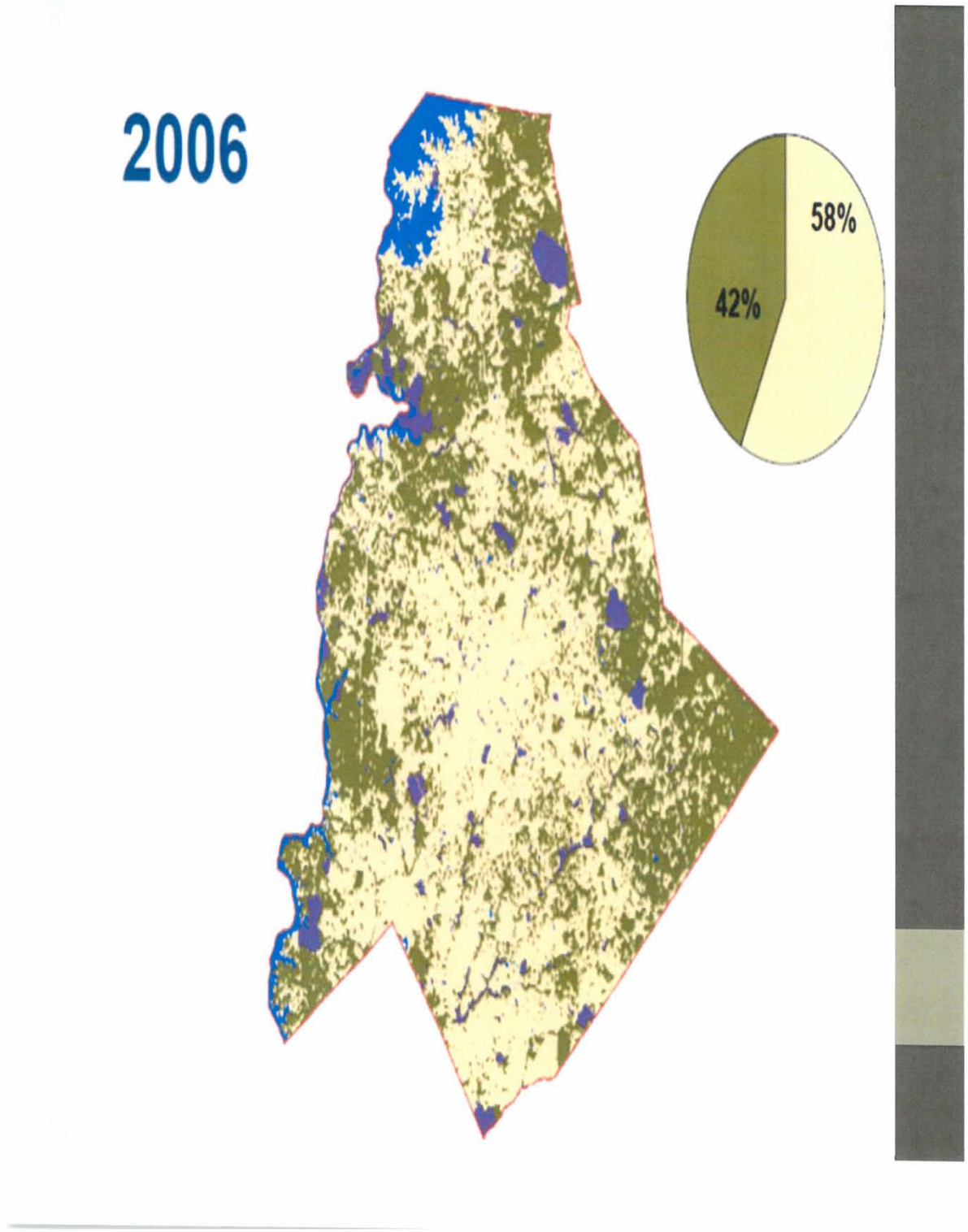
UNC Charlotte 2008 Study / Catawba Lands Conservancy

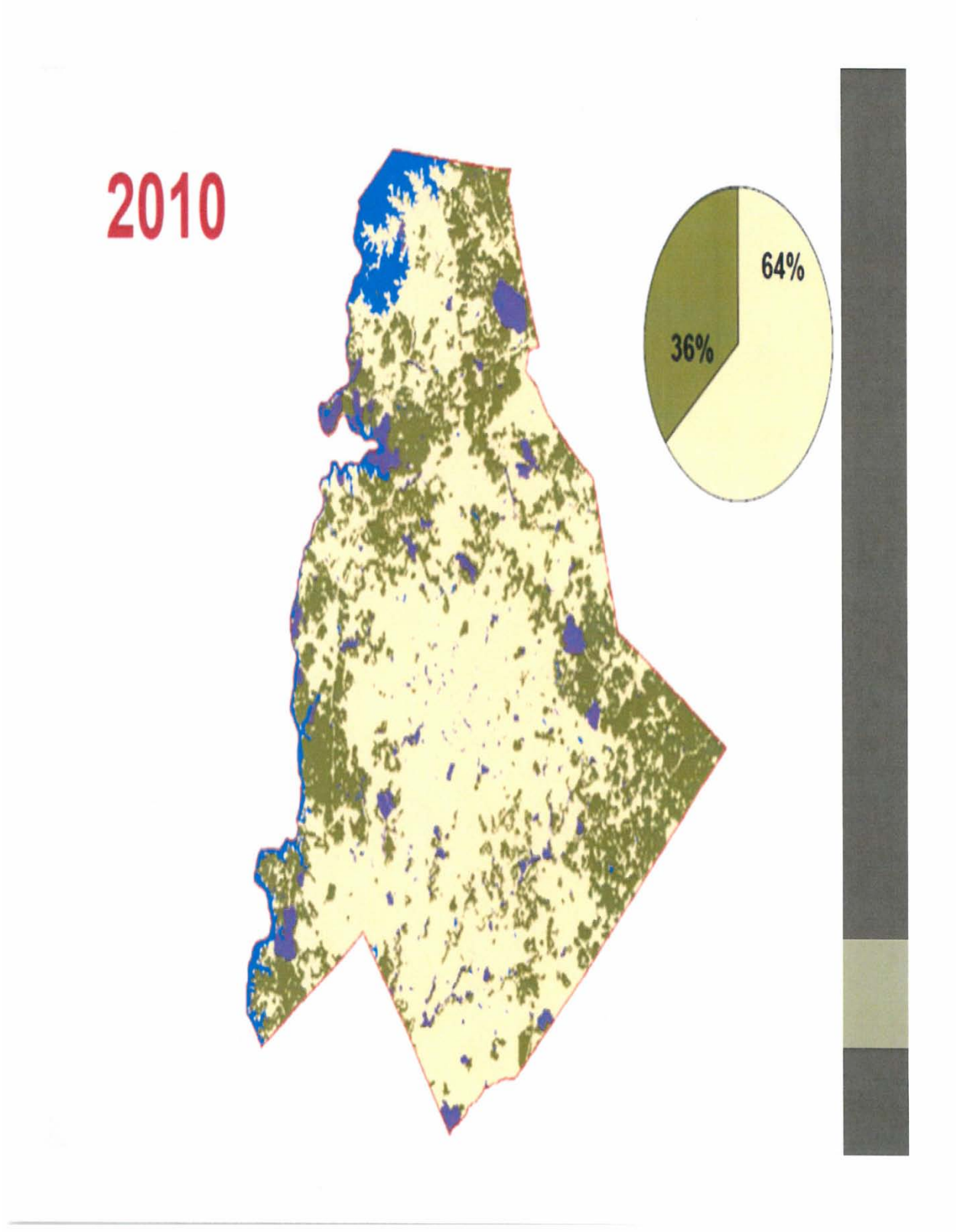


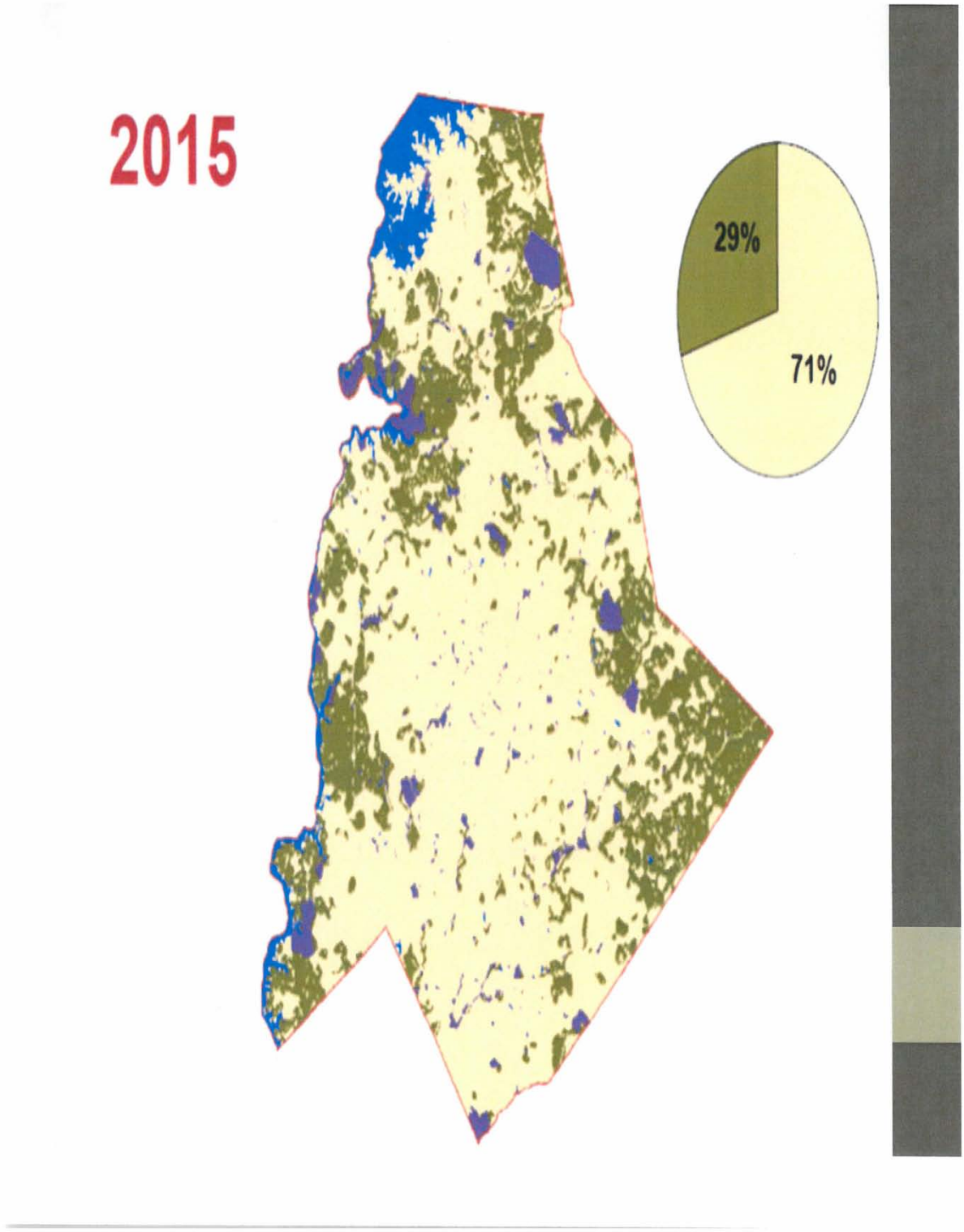

1976
13%
87%

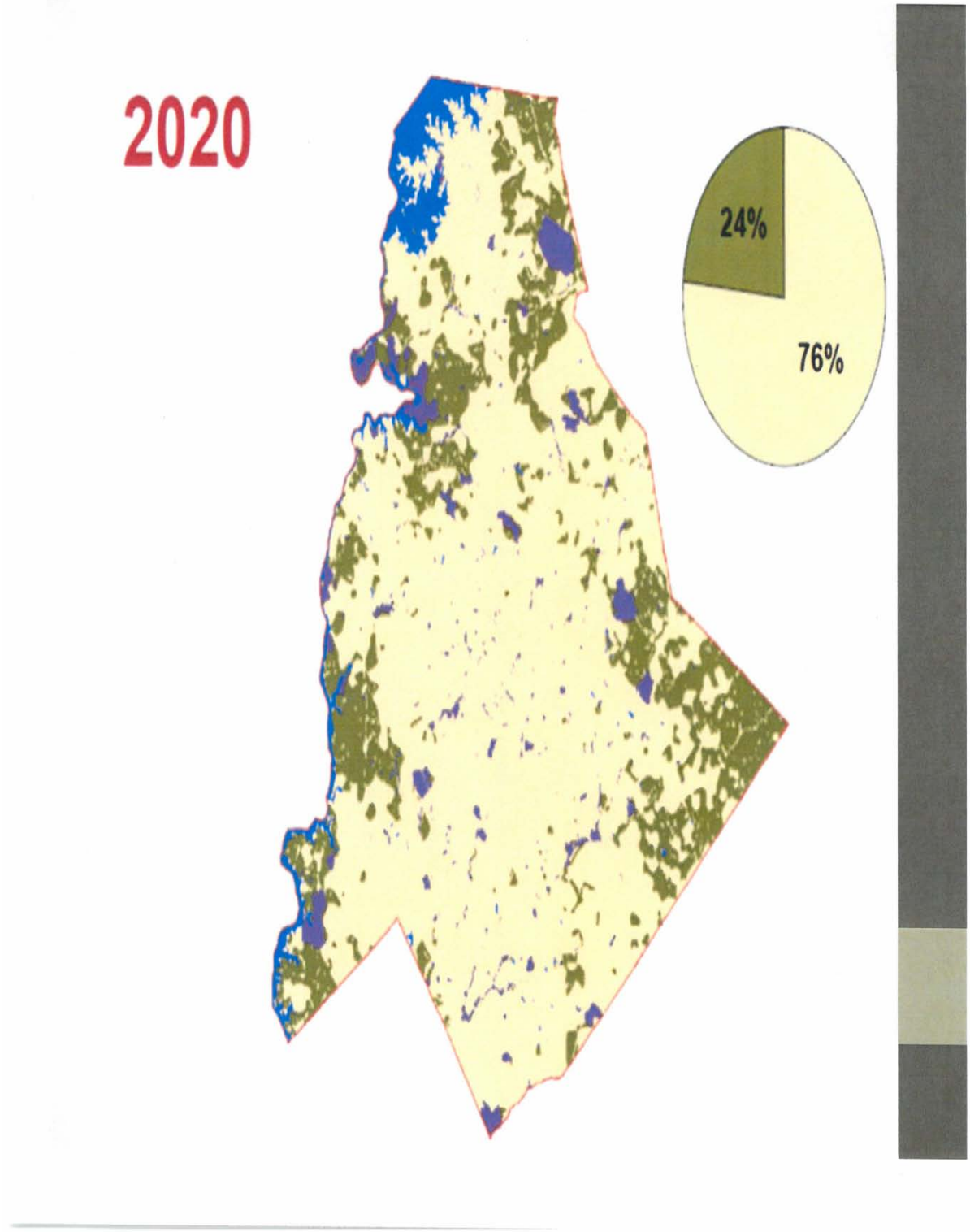

1985
18%
82%

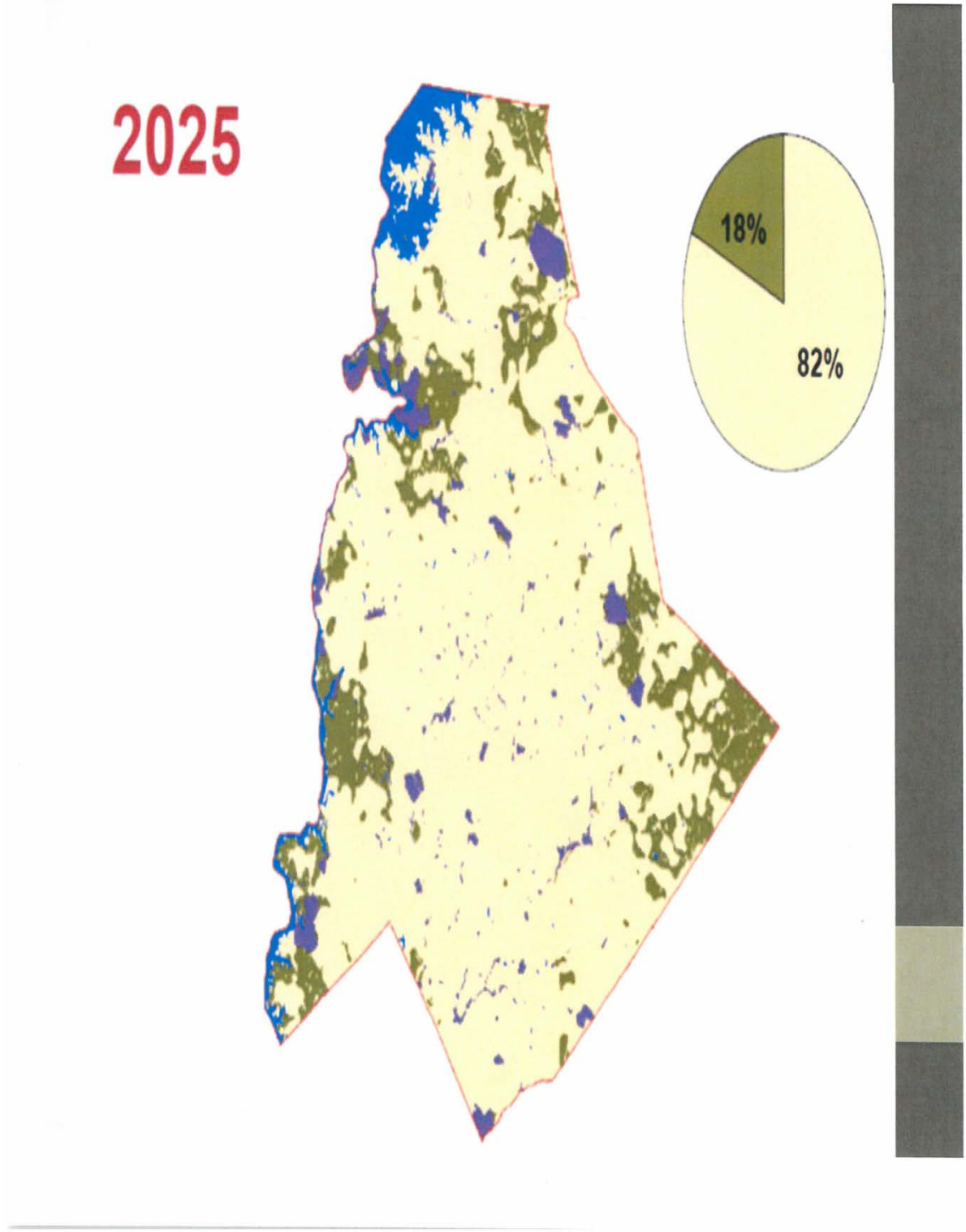

1996
41%
59%

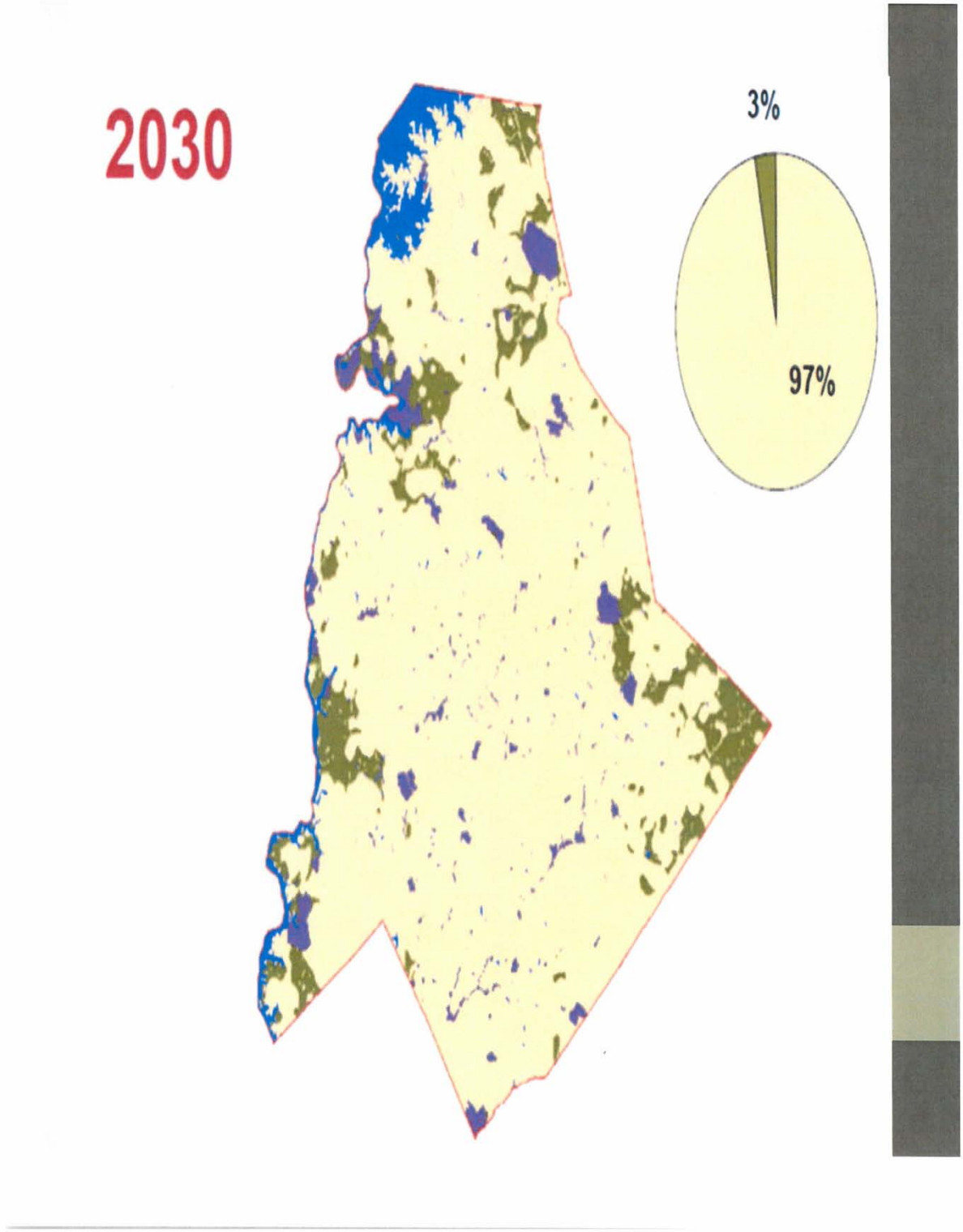

2006
58%
42%

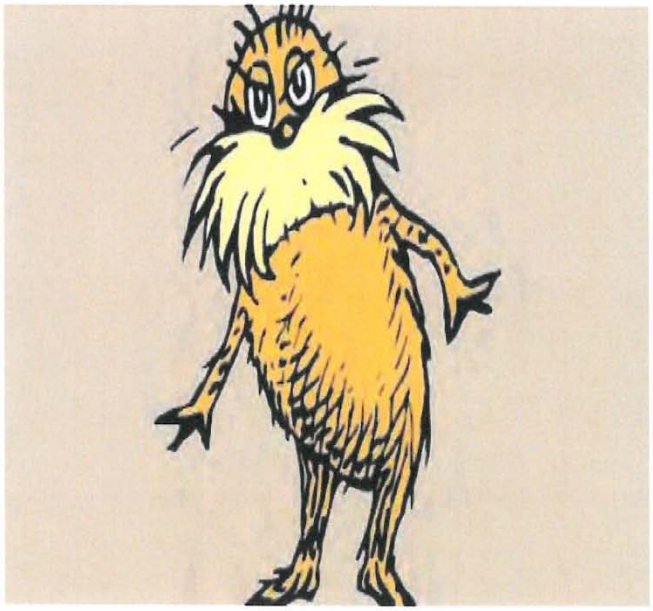

2010
64%
36%


2015
29%
71%


2020
24%
76%


2025
18%
82%


2030
3%
97%



If...

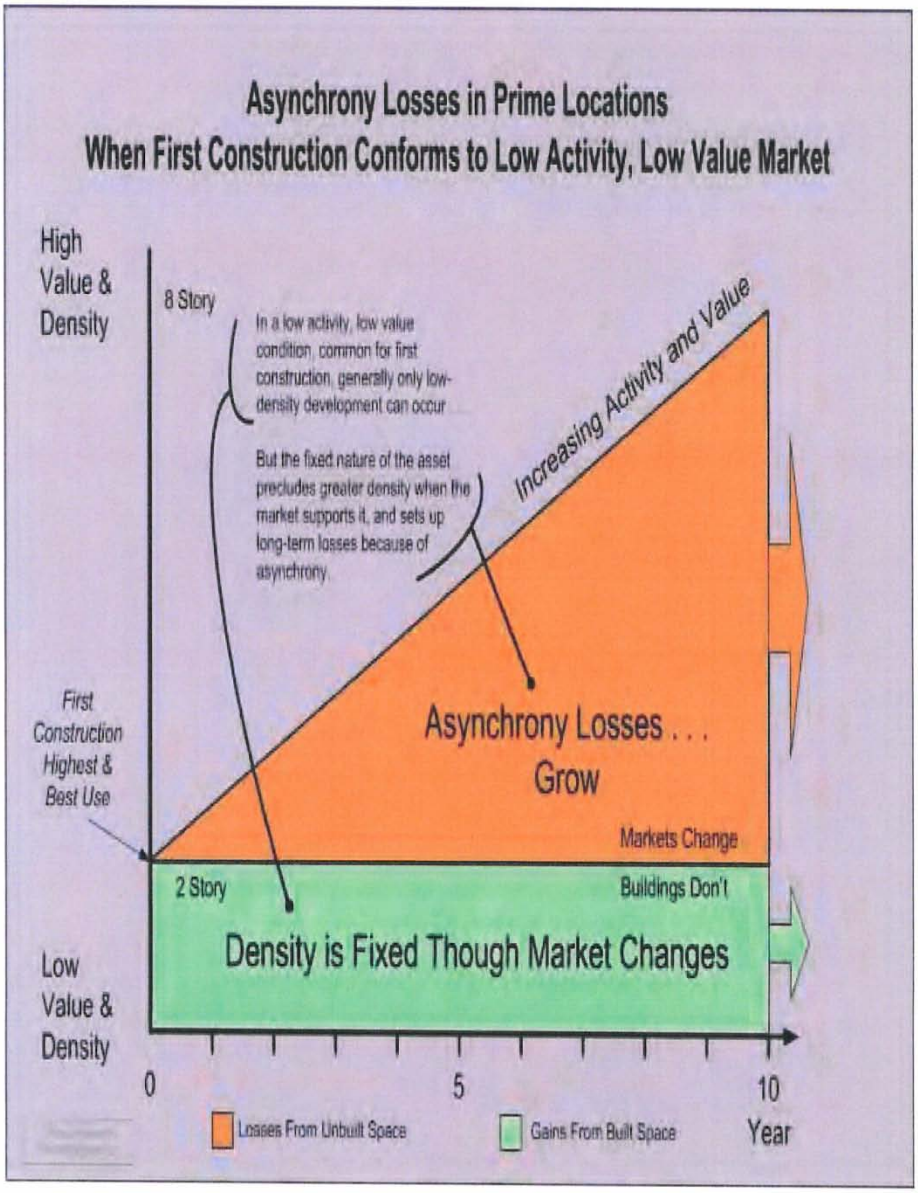
the conservation of raw land is valued, now's a good time to consider which areas warrant special consideration, how much conservation is appropriate, defining open space requirements, consideration of regional trail connections, etc.

Charlotte, NC

- Transit Oriented Development

A transit-oriented development (TOD) is a mixed-use residential and commercial area designed to maximize access to public transport, and often incorporates features to encourage transit ridership. A TOD neighborhood typically has a center with a transit station or stop (train station, metro station, tram stop, or bus stop), surrounded by relatively high-density development with progressively lower-density development spreading outward from the center. TODs generally are located within a radius of one-quarter to one-half mile (400 to 800 m) from a transit stop, as this is considered to be an appropriate scale for pedestrians.

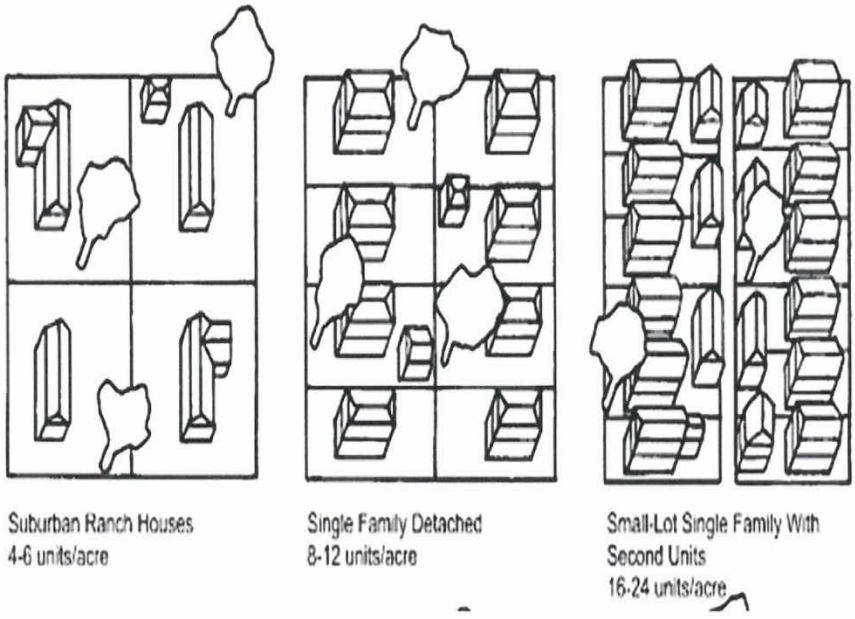
Planned Densification via TOD



Sustainable Density

Many smart growth advocates consider 28 units per acre as a sustainable urban density. The minimum density usually seen necessary to support frequent public transit service is 12 units per acre, so this average density, if combined with a highly connecting street fabric and good street design, should make for a walkable and transit-oriented neighborhood environment.

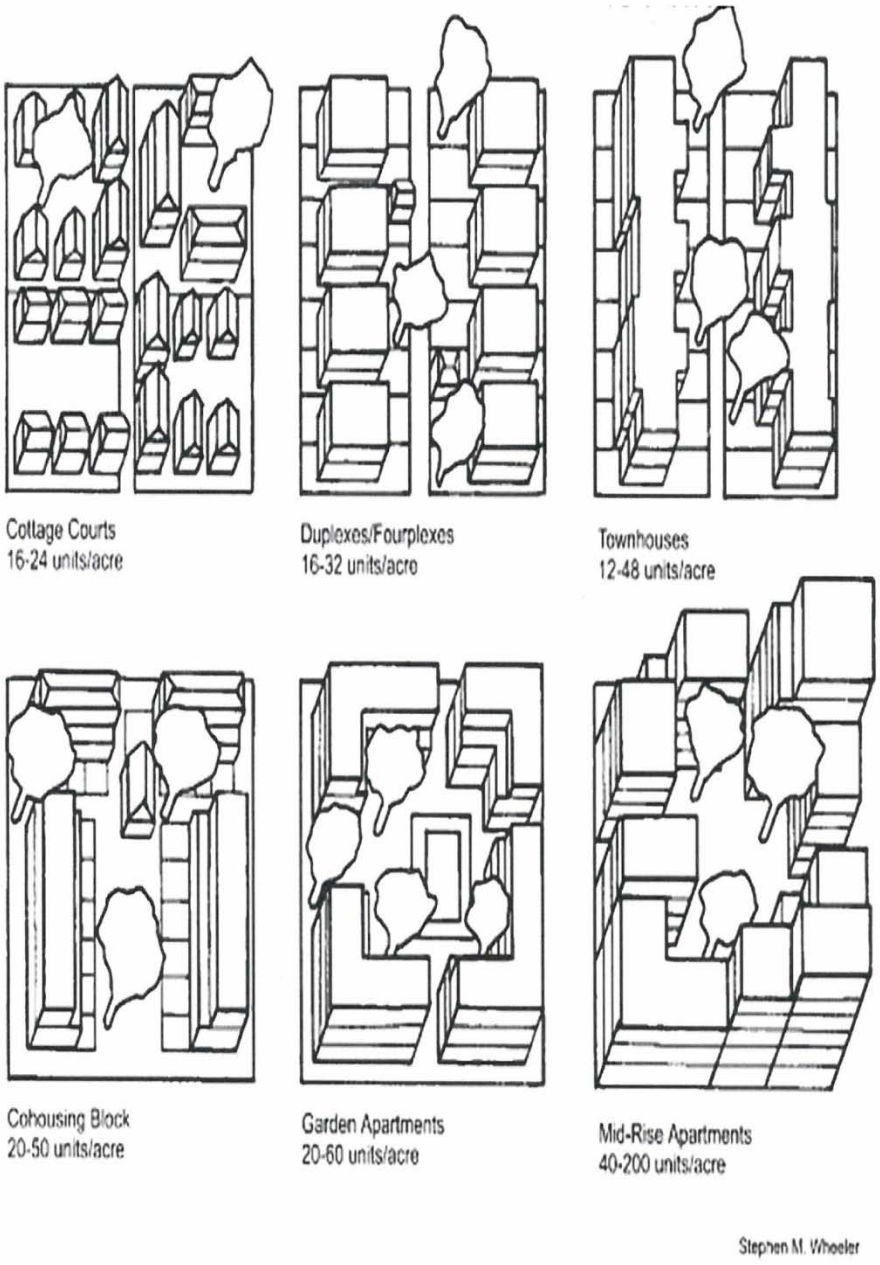
HOUSING TYPES AND DENSITIES



Suburban Ranch Houses
4-6 units/acre

Single Family Detached
8-12 units/acre

Small-Lot Single Family With Second Units
16-24 units/acre


Cottage Courts
16-24 units/acre
Duplexes/Fourplexes
16-32 units/acre
Townhouses
12-48 units/acre
Cohousing Block
20-50 units/acre
Garden Apartments
20-60 units/acre
Mid-Rise Apartments
40-200 units/acre
Stephen M. Wheeler

▼ RECOMMENDED COLLECTOR STREET SPACING

Transportation

"Complete streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street."

Bogotá Columbia

In the 1990s the capital of Colombia considered building an elevated urban highway called the Inner Ring Expressway that would have encircled the city's downtown district. The mayor of Bogotá at the time, Enrique Peñalosa, preferred a transportation strategy that deemphasized car ownership. As a result the expressway plans were scrapped and replaced with a 28-mile bicycle-pedestrian corridor now known as the Juan Amarillo Greenway.

Peñalosa also crafted a new mobility plan for the city that focused on public transportation — in particular, bus-rapid transit. For the same cost of the expressway, Bogotá got a cleaner, more sustainable system that carries 1.8 million people a day. The system "is especially important to low-income and middle-income citizens who represent the majority of Bogotá's population," write the authors of the new report. As if that weren't enough, the city's traffic fatalities have dropped 89 percent, and travel times in the transit corridors have fallen 32 percent.

Maintaining a vibrant Historic Downtown Pittsboro

- Sales Office Downtown?
- Linkages of Greenway Transportation Corridors to Downtown?
- Investments Downtown?

Stormwater Management, Water Supply & Wastewater

Stormwater & Low Impact Development (LID)

LID Goal: Mimic pre-development hydrology response to maintain clean streams and lakes

This means ~ Do not significantly change the volume, speed, rate (gallons per minute) or discharge location of stormwater runoff from new development or redevelopment

How to do LID?

Principle #1: **Limit land disturbance** – That means to cluster development and leave "substantial" open space.

Principle #2: **Limit impervious surfaces** - That also means to cluster development and leave "substantial" open space.

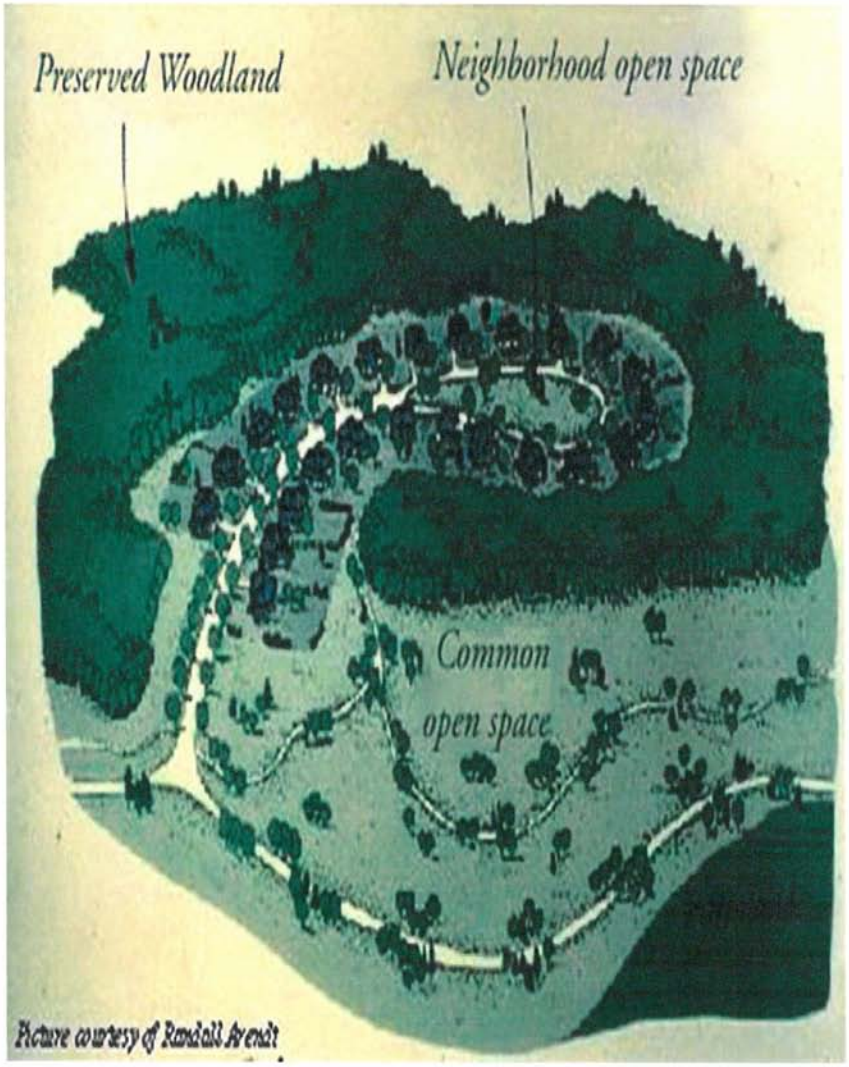
Principal #3: **Increase infiltration** - That means to use the best existing soils first and use engineered soils second. Place in the open space the soils that best infiltrate naturally.

Principal #4: **Manage smaller-scale watersheds** - That means to incorporate smaller stormwater BMP features into the landscape where the runoff is generated.

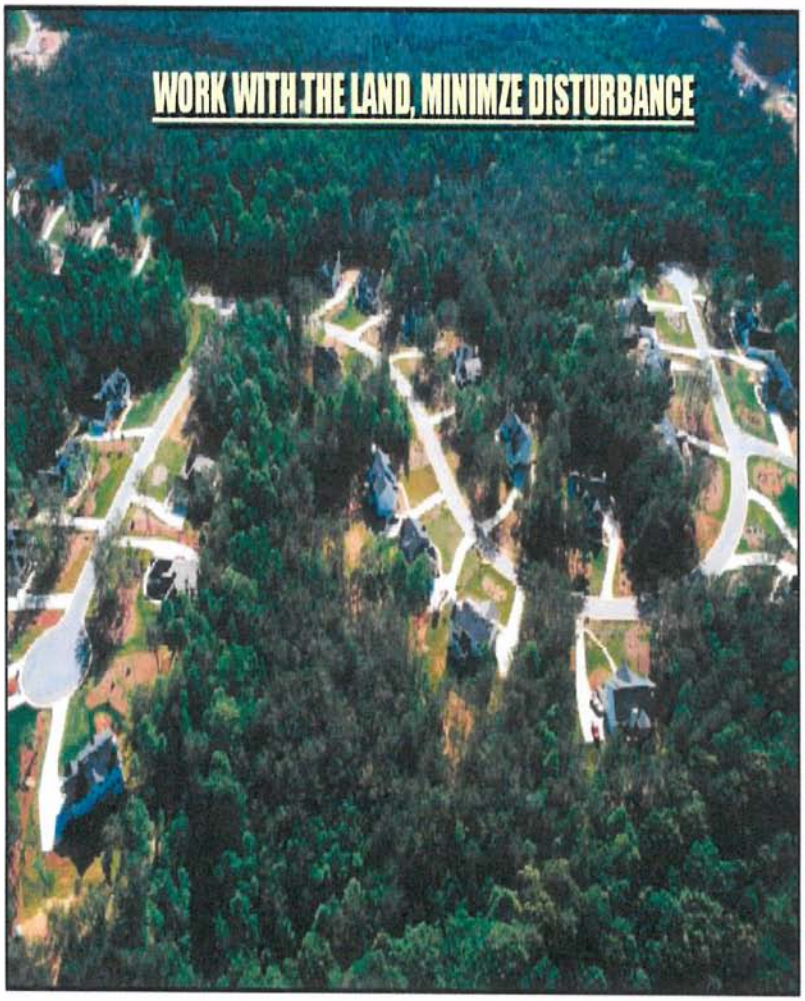
Conventional Stormwater vs. LID

Large wet ponds and mass grading is conventional

Less grading and more open space is LID



LID Stormwater = win-win



This is LID.....

...and so is this.

Key points to suggest

- Define and use LID as the standard requirement. Special variance/conditions for conventional stormwater approval.
- Define "open space" and "critical environmental resources".
- Develop special review and administrative procedures for Chatham Park.
- Develop triggers for staff resources and determine Town costs up-front to the extent practical.

Water, Sewer and the Enterprise Fund (EF)

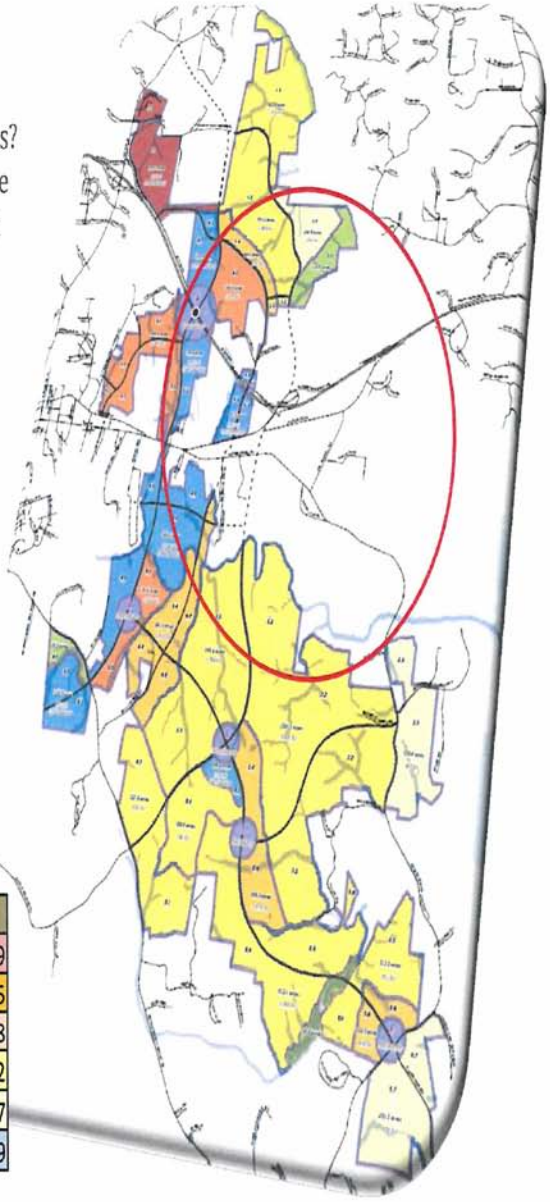
- The EF should be addressed, with or without CP.
- The EF has been tapped since 2006 for capital projects. It is currently not fiscally sustainable.
- An EF financial planning analysis is recommended that will lead to a series of alternatives and recommendations for improved fiscal health.
- Chatham Park will require substantial increases in capital planning and financing, engineering and staff resources.

Engineering: General CP/Town issues

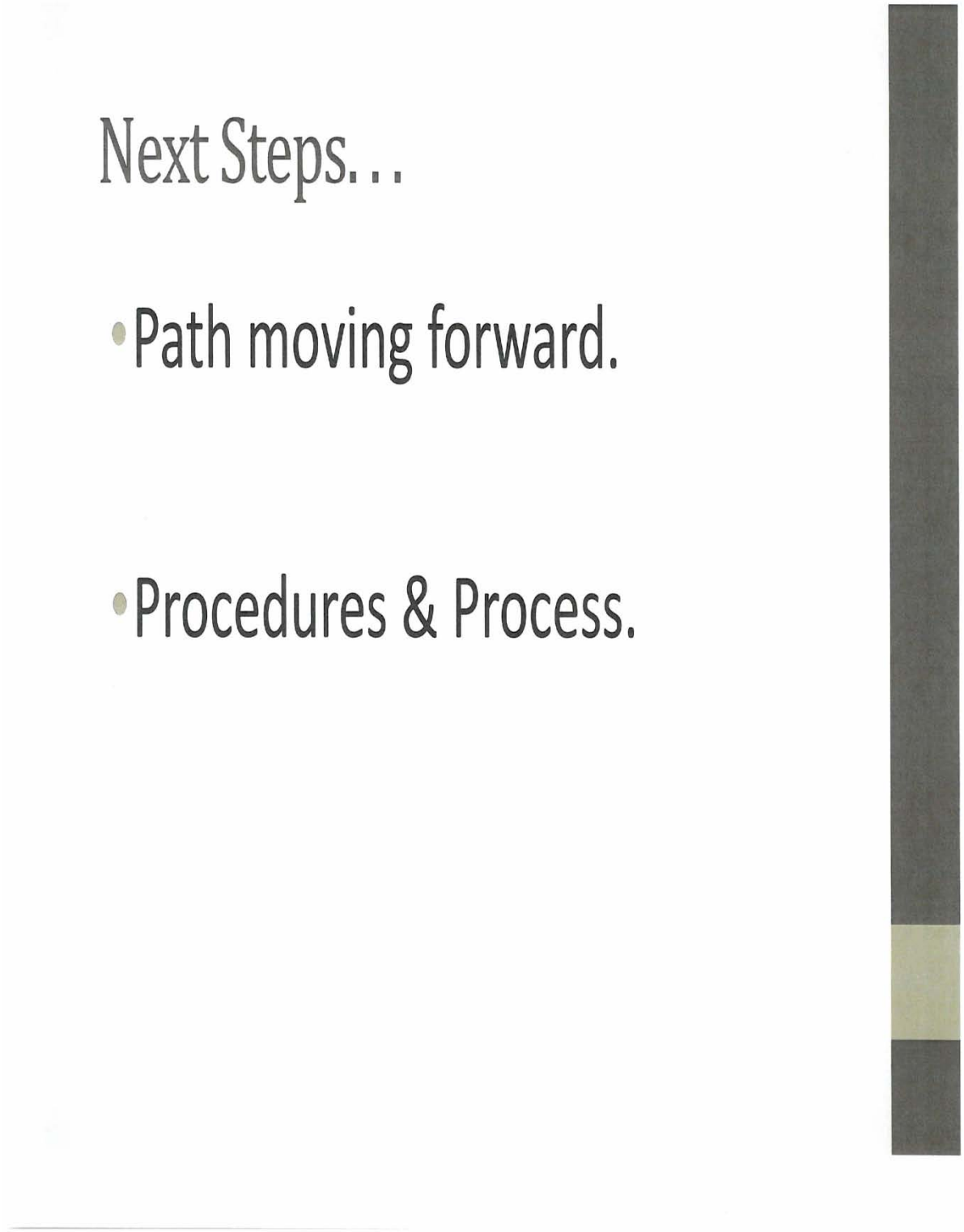
- Adopt the Jordan Stormwater Ordinance for New Development
- Consider Soil Erosion and Sedimentation Control Ordinance
- Review stream and buffer issues with Chatham Park
- Consult with DENR concerning water and wastewater capacity issues and report findings to BOC
- A detailed Phasing, Utility and Local Transportation Plan is recommended
- Public Water Supply is a big issue moving forward. Need detailed demand data for Town planning. Ie: Haw River and Jordan Lake Allocation

Planning Beyond Chatham Park

- Update of Land Use Plan
  - More extensive visioning process?
- Create Unified Development Ordinance
- How best to handle areas near but not within Chatham Park
- Infrastructure Planning
- Comprehensive Plan
- Staffing Needs Assessment
- APF Requirements?



Category	Avg DU/Acre	% Total
Mixed Use	3.55	3.29
Residential - Mixed Use	7.56	20.65
Residential - Parkway	8.83	21.38
Residential	2.96	40.42
Residential - East	2.4	5.27
Research and Development	2.91	8.99



Commissioner Foley asked to be excused.

After much discussion the board agreed to have a committee to study the Chatham Park Master Plan. The committee will consist of Commissioner Fiocco and Commissioner Baldwin and a representative from the Fire Department, Police Department, Finance, Public Utilities and Chatham County Schools.

Commissioner Fiocco said he would like to get the meetings started this week.

The meeting was adjourned at 10 am.

_____
Randolph Voller, Mayor

ATTEST:

_____
Alice F. Lloyd, CMC, NCCMC
Town Clerk

DRAFT