CHATHAM COUNTY COMPREHENSIVE PLAN

Steering Committee Meeting 11/20/2016

PLAN CHATHAM

working together to preserve & progress

AGENDA

1. **Welcome and Introductions (10 min)**
   - *Comments from the Chair*
   - *Approval of September and October Minutes*
   - *Review of Schedule*
2. **Land Use Discussion (30 min)**
3. **Intermediate Findings & Preliminary Recs (40 min)**
   - *Environment / Resiliency*
   - *Parks and Rec*
   - *Housing*
4. **Discussion (20 min)**
5. **Other business (20 min)**
   - *Next Steps*
   - *Upcoming Meetings*
   - *December or January SC*
     - *Future Transportation Needs*
     - *District Level Discussion / Work Session*
   - *Public Meetings*

THE PLANNING PROCESS

NEAR TERM SCHEDULE

Meeting / Milestone	Date	Description
Steering Committee Meeting #8	10/20	• **Finalize goals** • Review intermediate findings (Focus on Land Use, Utilities, Environment and Parks and Recreation) • **Discussion/work session #2**
Draft Deliverables and Related Meetings	September-October	• Green Infrastructure Map, Food Desert Analysis Map, Strategic Farmland Map, Draft Framework Plan (Rough Draft of FLU Map) • Draft preliminary Recommendations and Strategies
Steering Committee Meeting #9	11/17	• Review intermediate findings for elements (Housing, ~~**Agriculture**~~, Environment & Open Space, Resiliency) • **Strategies work session #3**
Steering Committee Meeting #10	December or January?	• Continue discussion on plan elements (i.e. **Agriculture**, future transportation needs, district level worksession) • Review draft public meeting materials
Public Meetings	January or Feb (TBD)	• Present draft recommendations

ENVIRONMENTAL GOALS

- **Preserve the rural character and lifestyle of Chatham County.**
  - OBJ: Preserve and restore cultural and historic resources.
  - OBJ: Preserve farms and lifestyle in the western part of the county and forests and open space in the eastern part of the county.

- **Conserve natural resources.**
  - OBJ: Maintain and restore the quality and quantity of groundwater and surface water resources.
  - OBJ: Preserve and protect the ecosystem services provided by green infrastructure.

ENVIRONMENTAL POLICY IDEAS

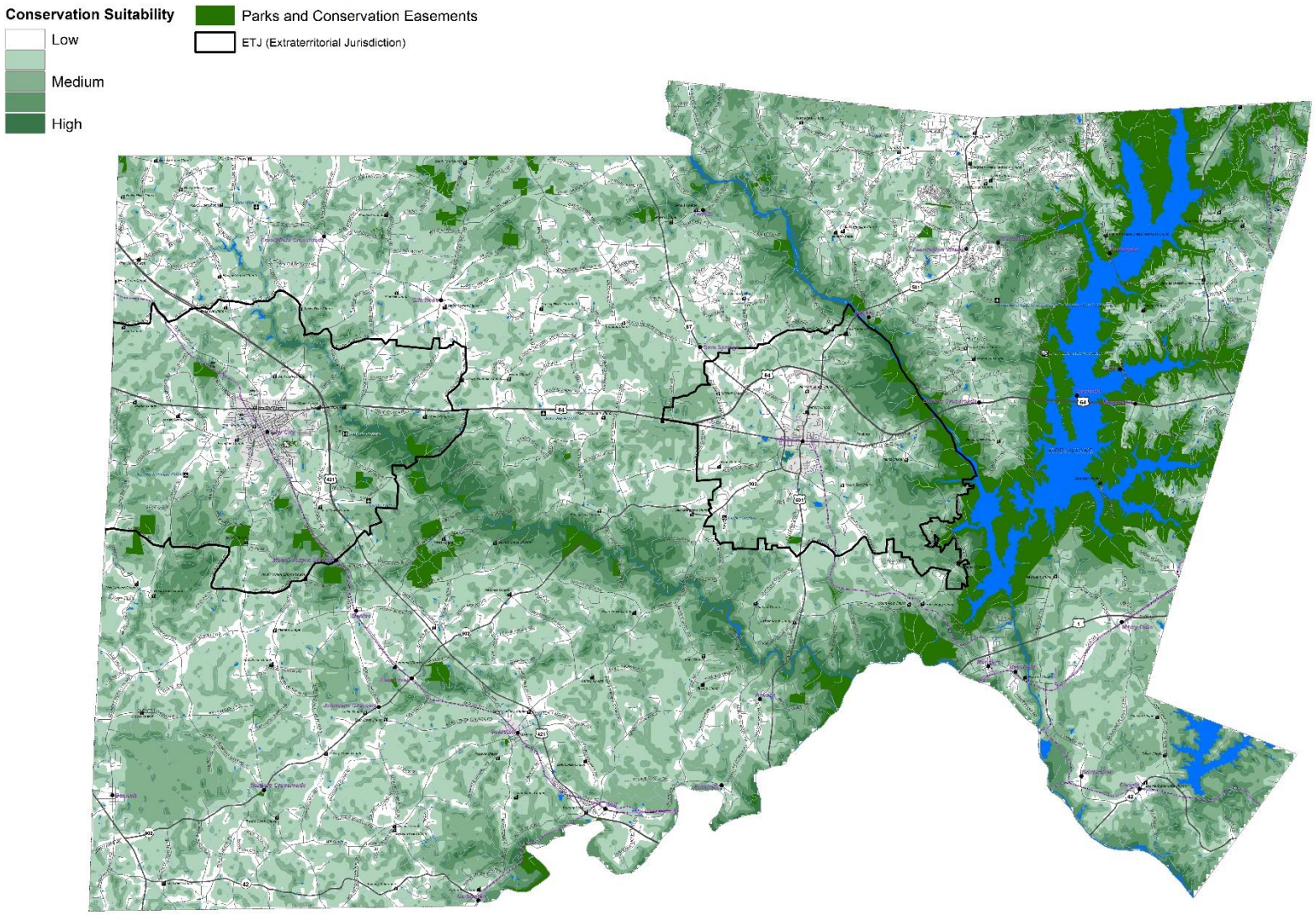
Preserve landscape level concentrations and connections of green infrastructure

- Strategy: Protect Natural Heritage Natural Areas (NHNAs), habitat hubs and wildlife corridors through acquisition and partnerships with non-profits and private entities

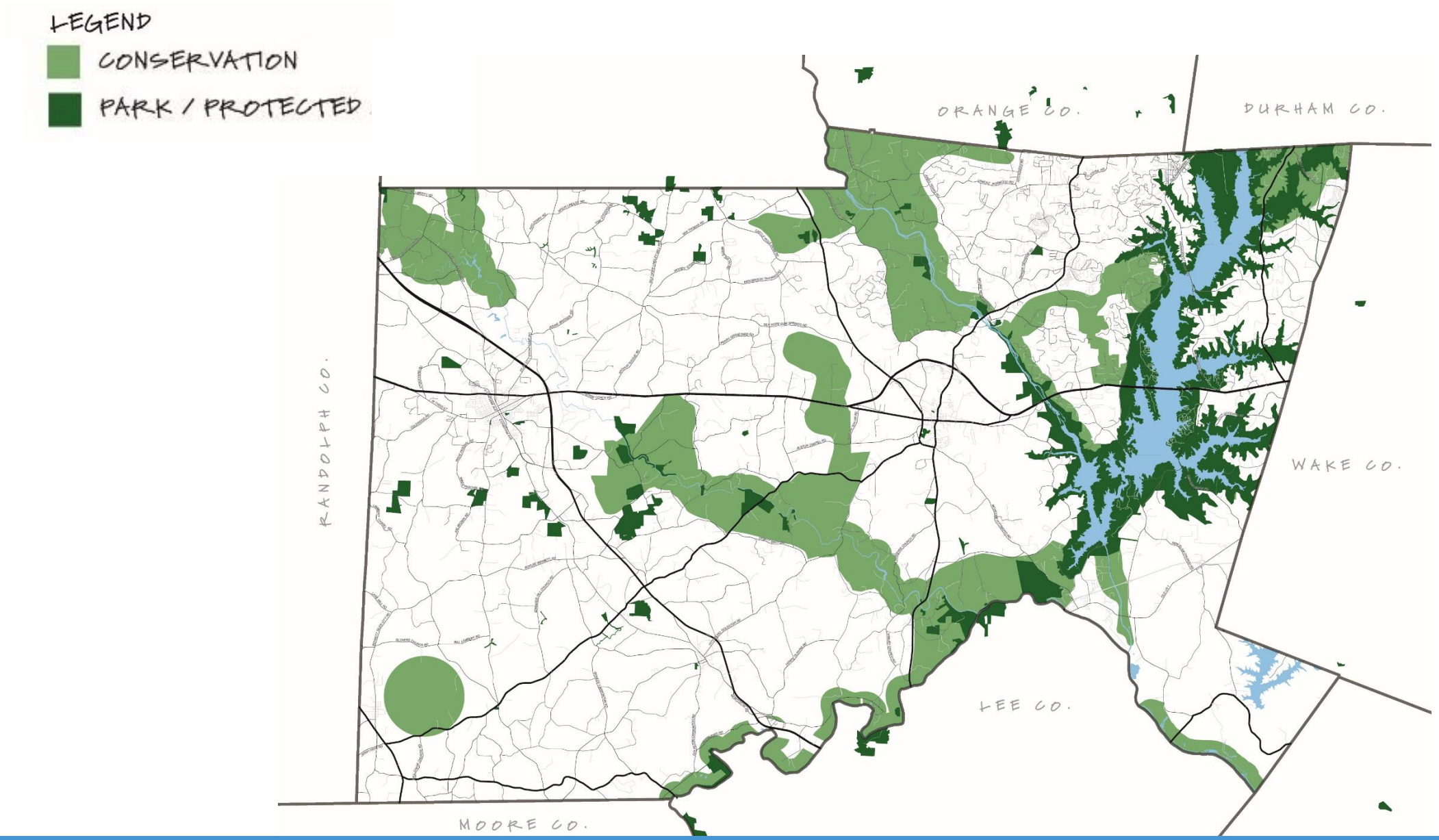
Each development conserved green spaces but did not connect them.

These sites maintained connections between them while achieving the same level of development.

Importance of connected green space (Source: Evaluating and Conserving Green Infrastructure Across the Landscape, Karen Firehock)



CONSERVATION SUITABILITY / LANDSCAPE LEVEL GI



CONSERVATION AND PROTECTED LANDS

CONSERVATION

CHARACTERISTICS

The natural features are the primary elements of these areas. Development, which is predominantly residential, is sensitively integrated into the landscape.

- Mix of uses include SF detached lots and attached units with overall very low density, some tourism related uses allowed
- Buildings: 1 and 2 stories in height
- Streets: Limited (sufficient to connect homes within and provide access per fire code), and LID design
- Public/open space: Passive recreation areas, greenway trails, variety of valuable NR areas

POLICY IDEAS

Encourage or require agricultural friendly design in Agricultural Areas and in Rural Areas

- Minimize impacts on existing operations
  - Cluster development away from adjacent operations (to the degree possible depending on utilities, soils, etc.)
  - Preservation or establishment of vegetative buffers
- Overall low density in areas without access to public water
  - Limit water extensions in Ag areas
  - Consider SUP requirement for private WW systems and Community wells
- Open space that maintains rural character
  - Preserve rural views from public roadways
  - Use of conservation lots (larger holdings)
  - Agriculture Conservation Subdivisions (I.e. Willowsford)
  - Clarify design criteria and/or additional density bonus for working lands

Agricultural friendly “hamlet” (Source: Randal Arendt)

BIG IDEA

PERMANENTLY PROTECT 30,000 ACRES OF LAND BY 2040

OBJ: Integrate everyday and “wild” nature into daily lives

Strategy: Coordinate with private landowners, developers, non-profits and the state

Strategy: Obtain land for new natural preserve park type

ENVIRONMENTAL POLICY IDEAS

Encourage or require conservation design in and near Conservation and Protected Lands and in Rural Areas

- Modified submittal requirements for conventional and conservation subdivision design (CSD)
- Discourage conventional subdivisions (at least in certain areas)
- Modifications to procedures, requirements and incentives to make CSD a more attractive option for smaller properties (i.e. <50 acres) including density bonus adjustments (sliding scale based on parcel size), modifications to street requirements, off-site septic allowances (contingent on soil survey results)
- Public viewshed protection provisions

2 out of 4 new large scale developments have chosen the Conservation Subdivision Design option

ENVIRONMENTAL POLICY IDEAS

Protect and improve site level green infrastructure

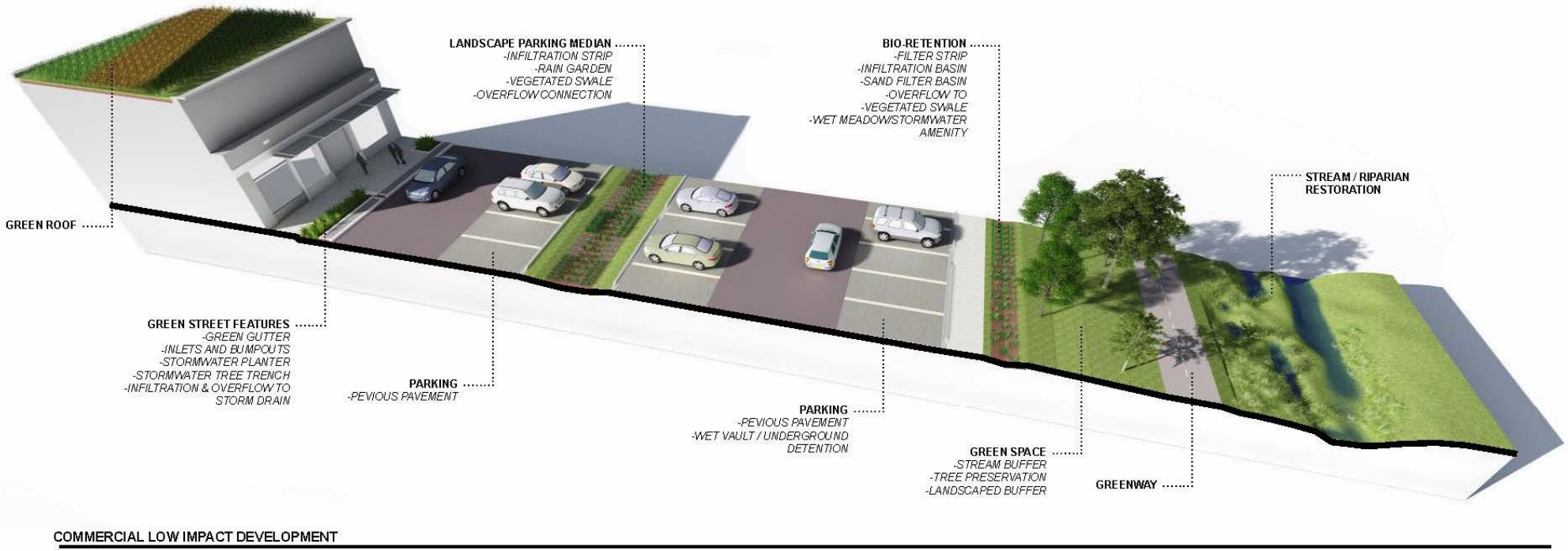
- Examples
  - Wildlife corridors
  - Mature forest
  - Hedgerows
  - Riparian areas
  - Drainage-ways (above USGS defined “blue-line” Streams)

Site Level Green Infrastructure

ENVIRONMENTAL POLICY IDEAS

Require/incentivize Low Impact Development (LID) techniques in and near Centers

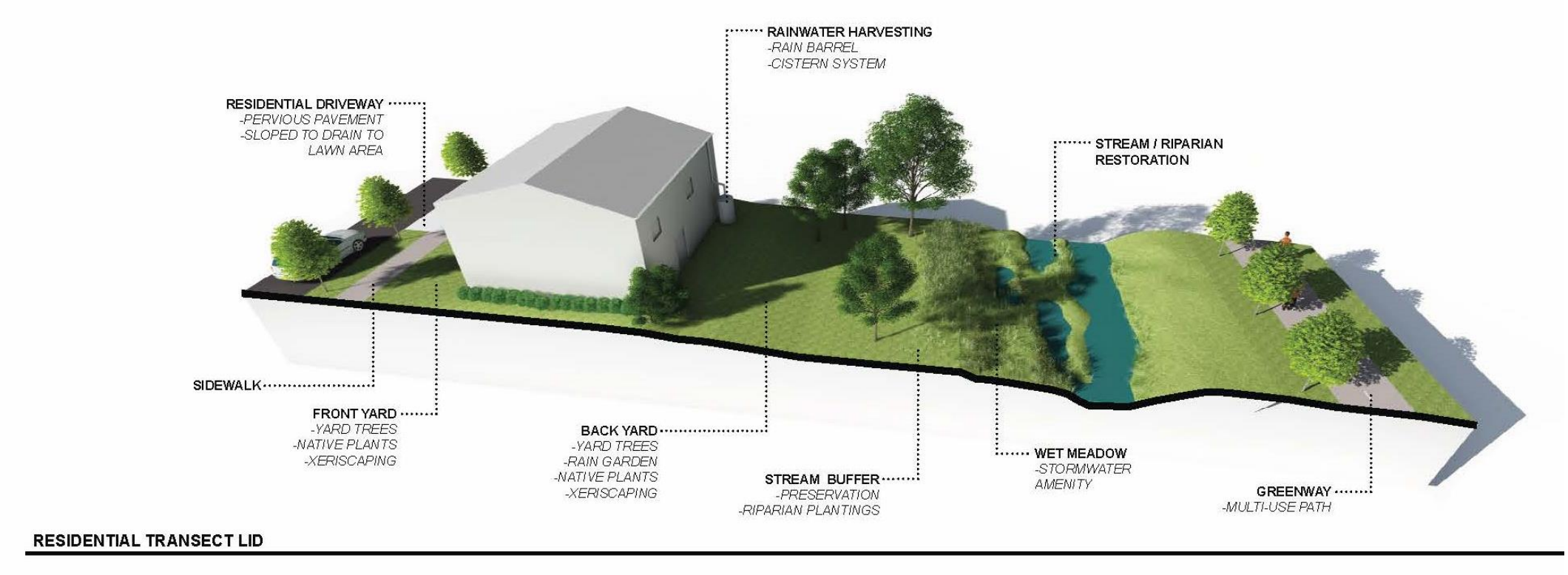
- LID techniques can improve the quality of stormwater run-off and reduce velocity and quantity. Green Stormwater Infrastructure (GSI) that increases infiltration and/or delays run-off such as pervious pavement, stormwater planters, filter strips, sand filters, cisterns and rain gardens would be appropriate.



ENVIRONMENTAL POLICY IDEAS

Require/incentivize Low Impact Development (LID) techniques in and near Compact Residential Areas

- Some LID techniques are appropriate for commercial and some for residential development at different densities.



ENVIRONMENTAL POLICY IDEAS

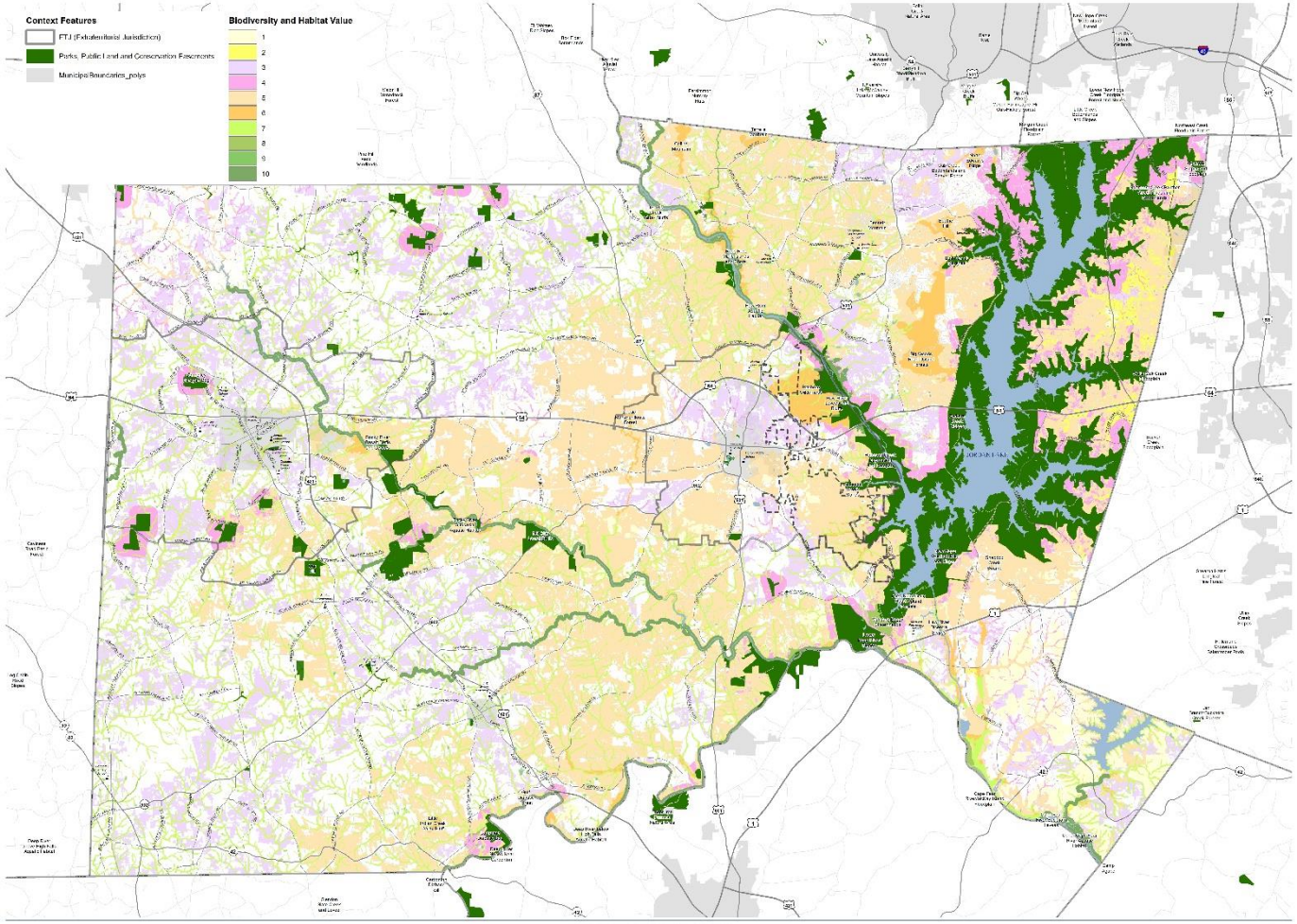
Maintain and improve water quality

- Strategy: **Maintain riparian buffers** higher than state standards
- Strategy: Encourage development design to **preserve additional uplands** (i.e. conservation subdivisions)
- Strategy: **Provide incentives** for preservation of upper drainage-ways, reforestation of riparian areas, and stream restoration

ENVIRONMENTAL POLICY IDEAS

Improve education and awareness of natural assets

- Strategy: **Improve outreach and access to environmental data** (website updates and education activities)
- Strategy: **Update biodiversity and wildlife habitat assessment** created during the CCCP, augment with updated/additional data



Biodiversity and Wildlife Habitat Assessment created during Chatham County Conservation Plan

RESILIENCY GOAL

- **Become more resilient by mitigating, and responding and adapting to emerging threats.**
  - OBJ: Improve emergency response and limit risk associated with natural and man-made disasters (drought, floods, energy costs and availability, etc.).
  - OBJ: Become/remain a carbon negative county.
  - OBJ: Encourage resource efficient building standards.

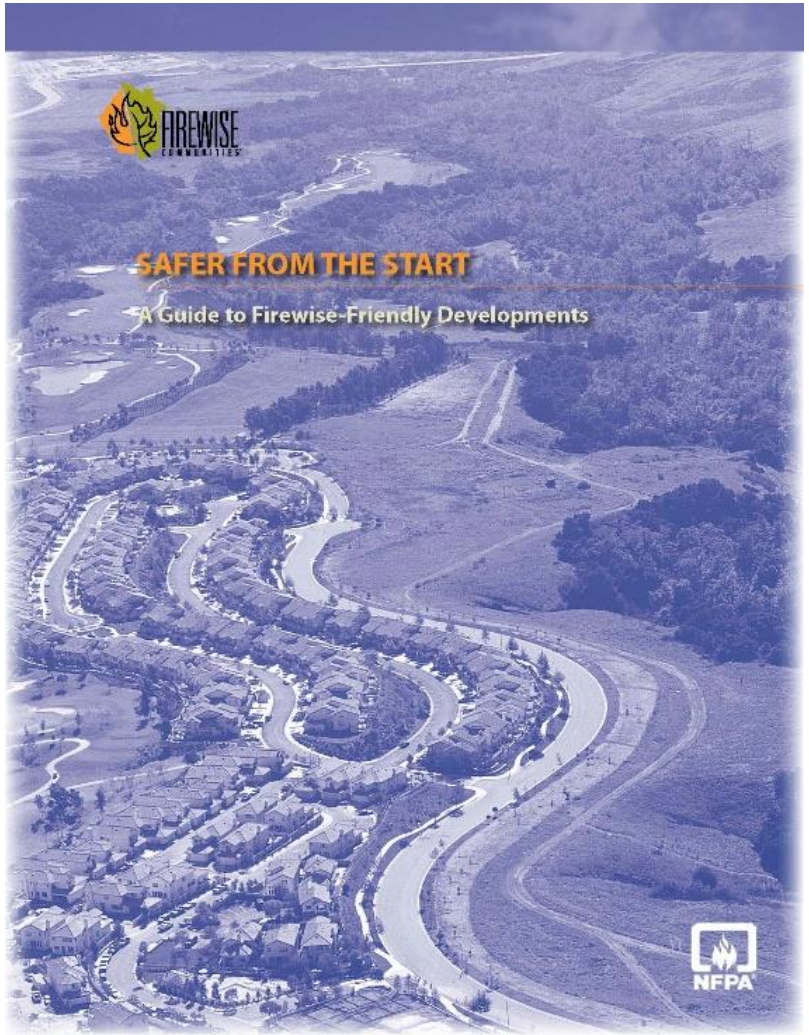
RESILIENCY POLICY IDEAS

Mitigate impacts of drought, fire and flooding

- **Update landscape planting guidelines** to emphasize native species, diversity, drought tolerant plants, xeriscaping and other sustainable landscaping practices
- **Encourage "Firewise" development design** in rural areas
- **Discourage alterations of the floodplain** (100 year and 500 year)

Improve emergency response

- Coordination with departments needed to determine priorities

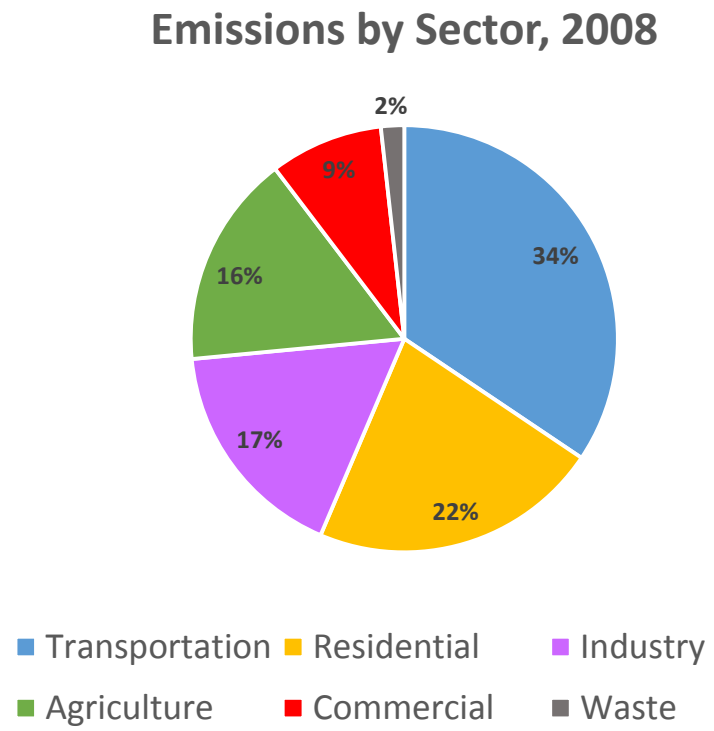


BIG IDEA

BECOME / REMAIN A CARBON NEGATIVE COUNTY

Strategy: Update emissions inventory

Strategy: Study sequestration to establish baseline for carbon balance



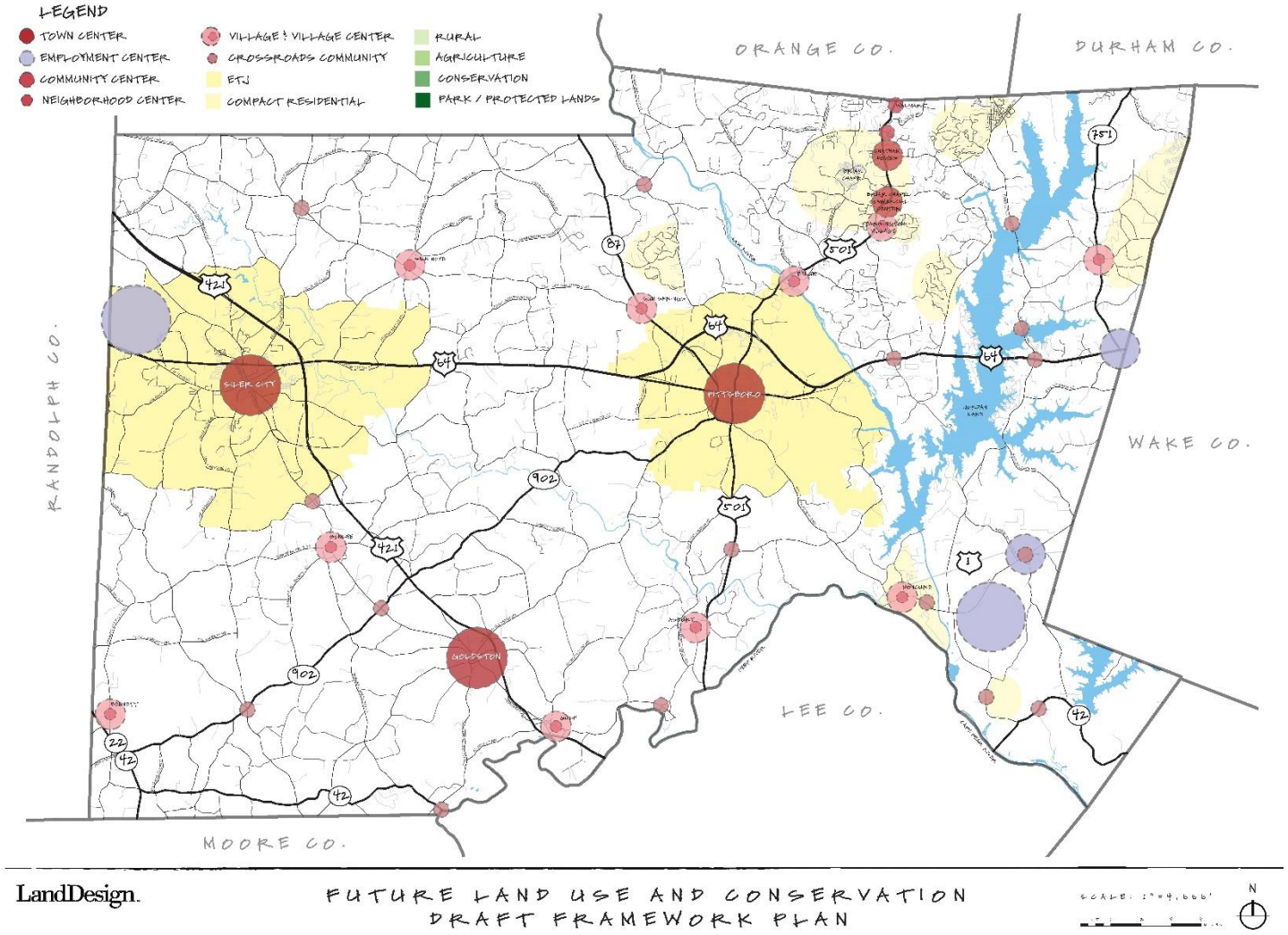
“a compact urban form, and its corollary--a rural/agricultural countryside--greatly reduce greenhouse gas emissions and provide for carbon sequestration.”

American Planning Association

RESILIENCY POLICY IDEAS

Concentrate higher density mixed use development in designated areas to encourage walking and biking trips and support successful transit service

- Strategy: Modification to Compact Communities Ordinance
- Strategy: New MXU zoning district(s) for flexibility
- Potential target: 70% of new growth in designated centers



RESILIENCY POLICY IDEAS

Explore density transfer techniques to preserve Rural, Agricultural, and Conservation Areas as greenbelts

- Strategy: **Encourage voluntary density transfer** for residential (dwelling units) and nonresidential development (built-upon area)
  - 1 for 1 transfer of dwelling units
  - 1% for 1% transfer of built upon area
  - Would require approved plat for both properties or a conservation easement on the sending property

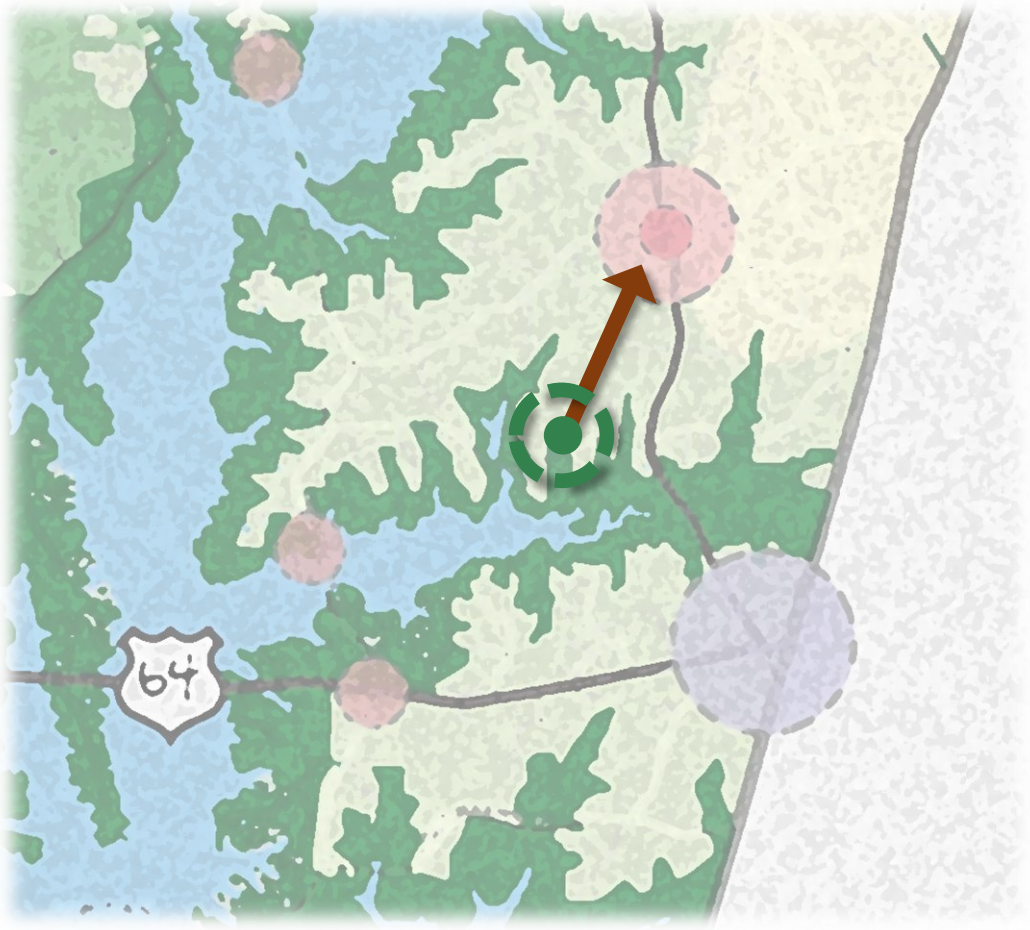
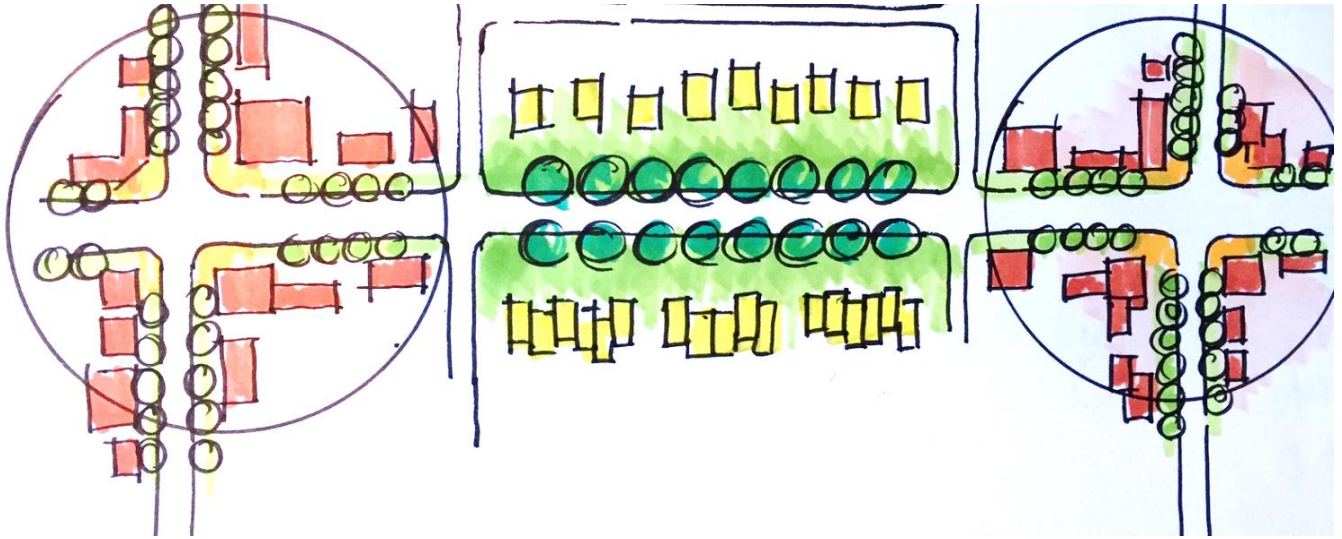


Illustration of potential density transfer

RESILIENCY POLICY IDEAS

Discourage strip commercial development

- Strategy: **Limit the location of commercial development to nodes** along major collectors and arterials.
- Strategy: **Amend land development regulations** to establish location standards for commercial development that pushes it to nodes and to discourages it along specific segments, such as
    - Maximum distance from types of intersections identified as appropriate
    - Minimum distance between nodes
    - Landscaping requirements and large setbacks that create a “green break”



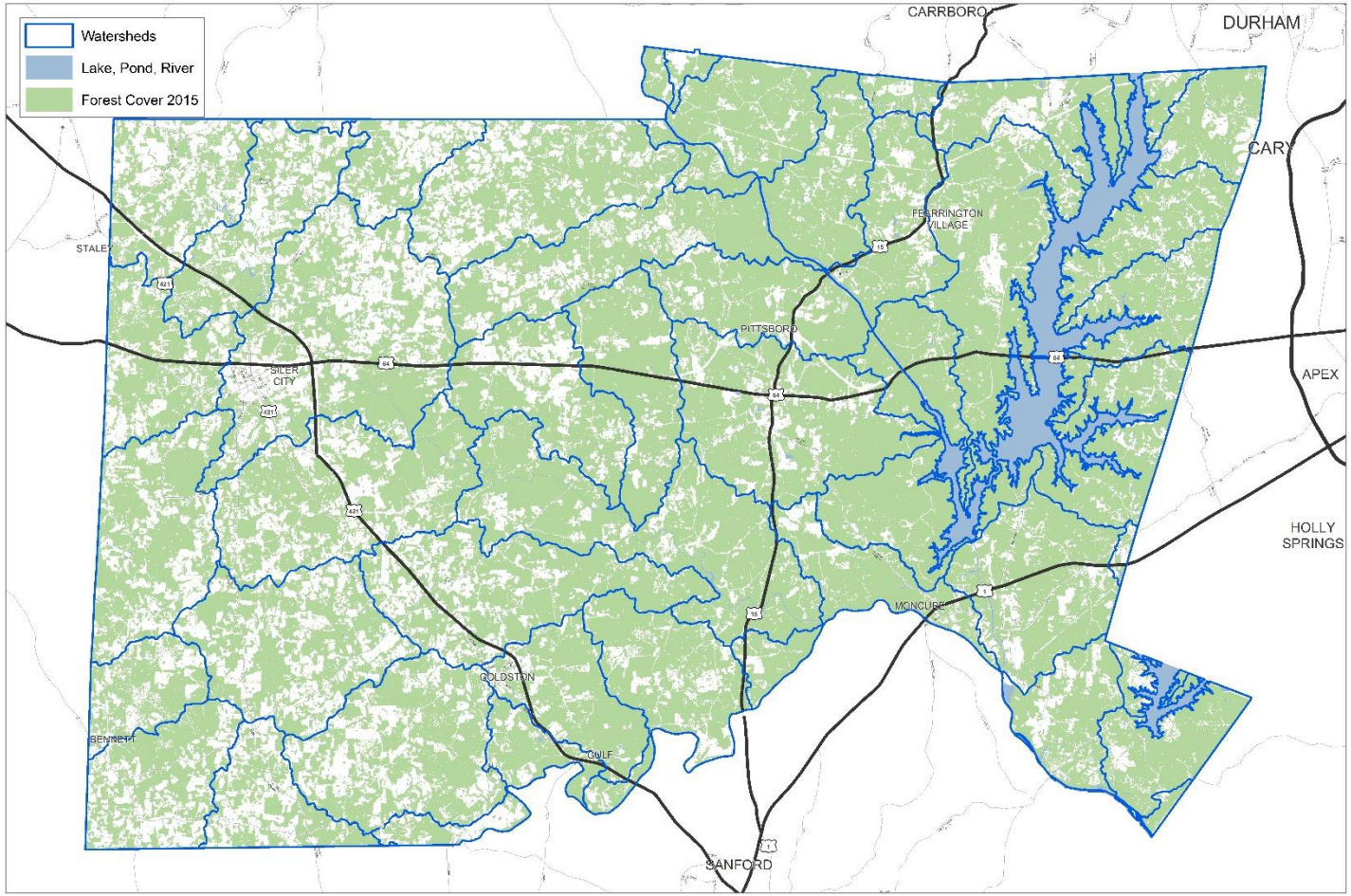
RESILIENCY POLICY IDEAS

Preserve and improve tree canopy

- Current forest cover is 68%.

"Converting 10 percent of the watershed from forest cover to developed area increases chemical treatment costs by 8.7 percent, which would be an annual increase of over $65,000 for the typical treatment plant…"

-AWWA's Source Water Protection Committee

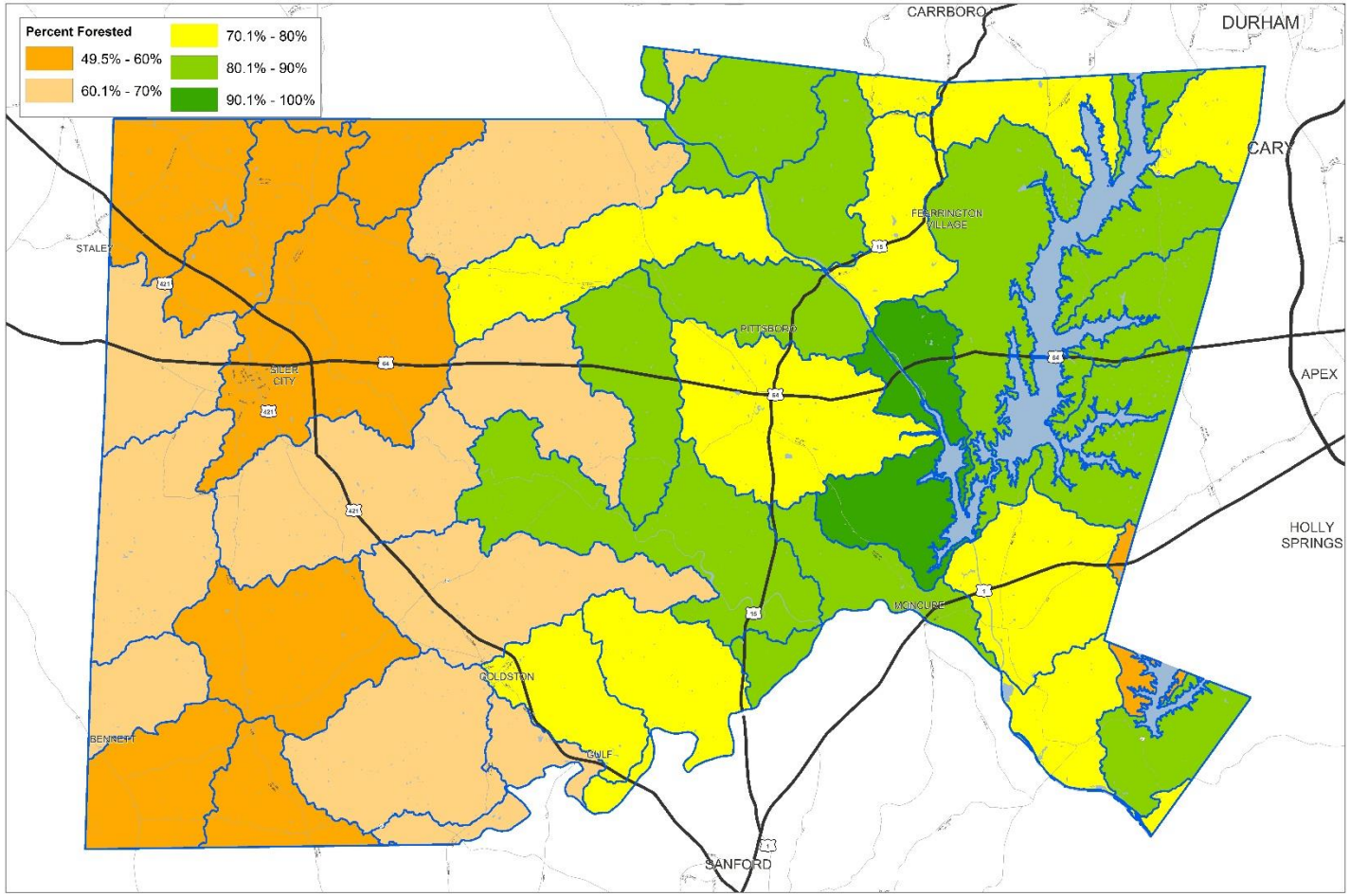


Forest Cover based on 2015 USDA Cropscape Data

RESILIENCY POLICY IDEAS

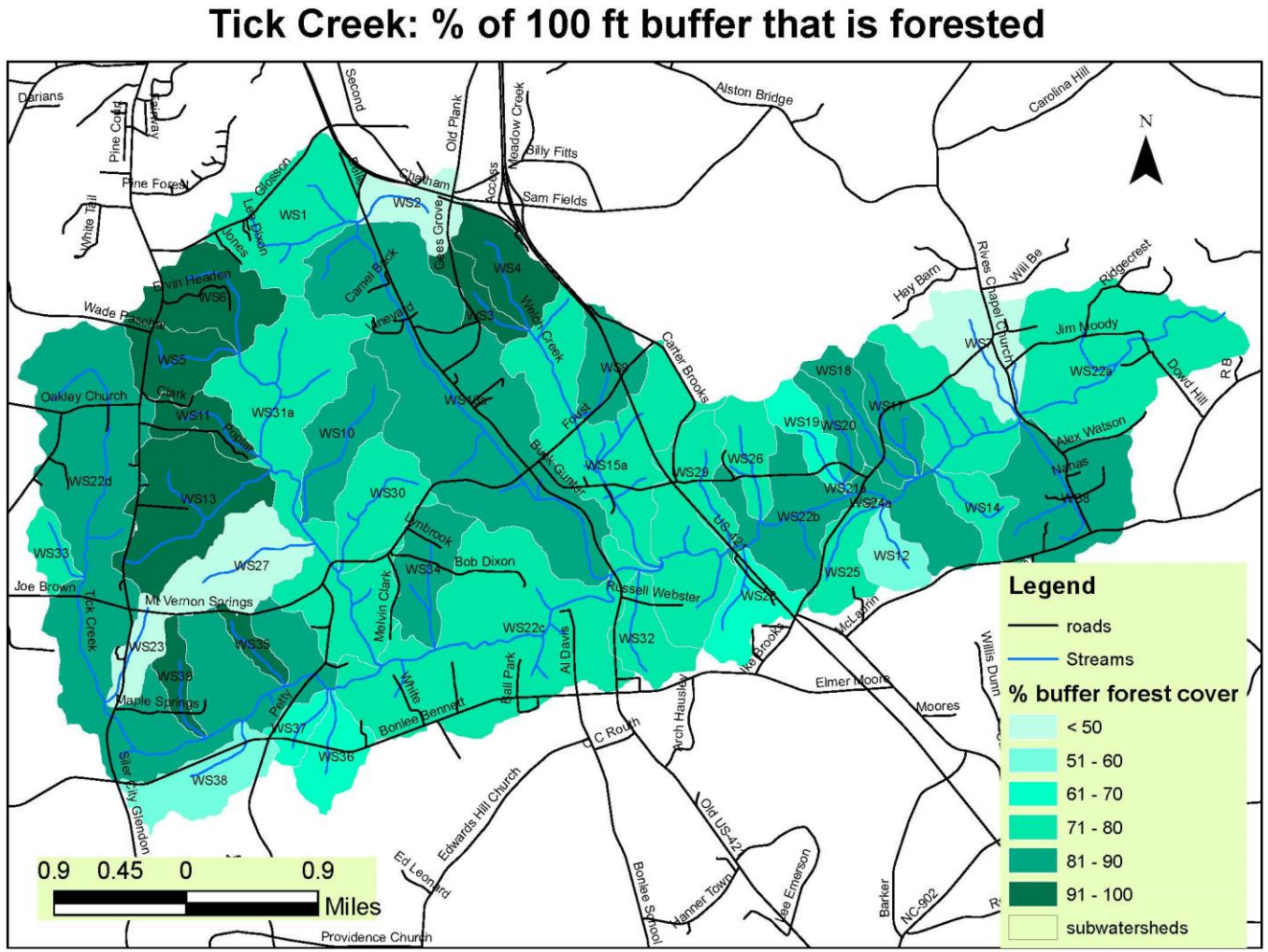
Preserve and improve tree canopy

- Strategy: **Preserve forest cover** through site design
- Strategy: Conduct additional **studies to determine cause of impaired streams**
- Strategy: Conduct **riparian and stream restoration projects** in threatened sub-watersheds
- Strategy: **Encourage BMPs** in agricultural and timber operations

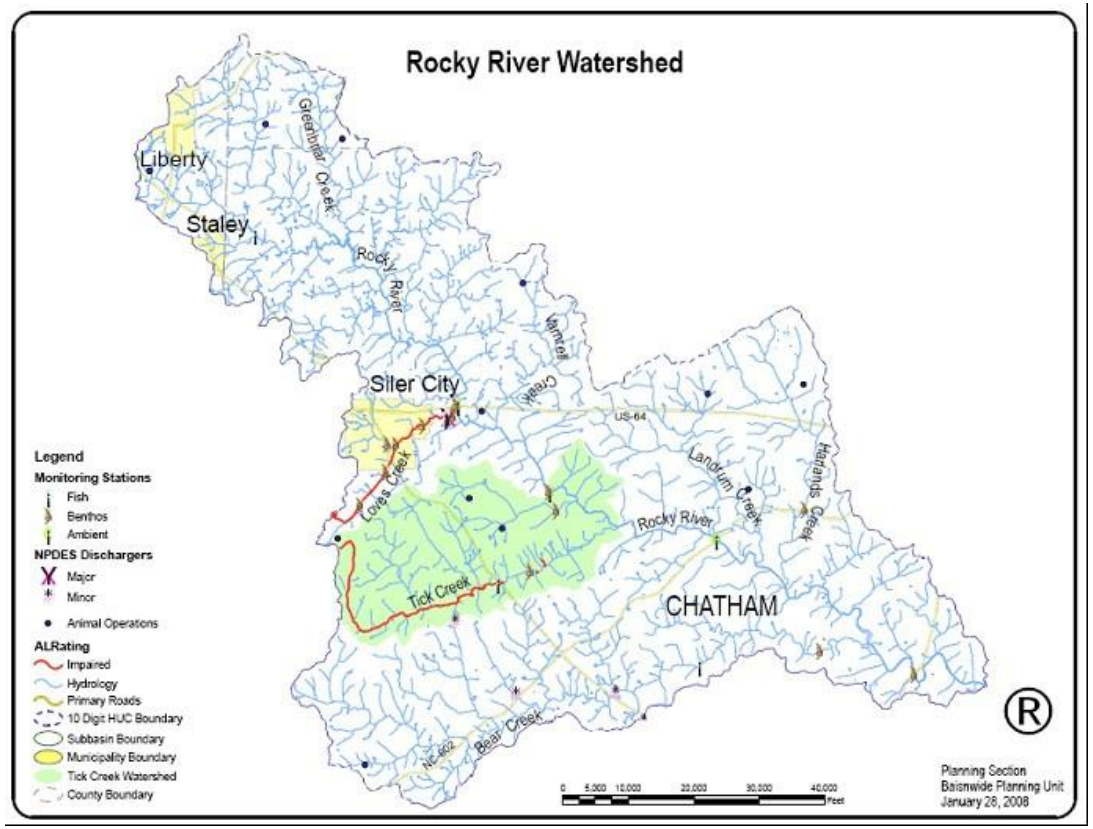


Percent Forest Cover by Watersheds based on 2015 USDA Cropscape Data

CASE STUDY



Source: NCSU WECO



Source: Rocky River Heritage Foundation

RESILIENCY POLICY IDEAS

Increase energy and water efficiency of buildings

- Strategy: Encourage **infill and reuse** of buildings and sites
- Strategy: **LEED by example**—county owned buildings LEED certified or equivalent
- Strategy: Develop a LEED or LID **recognition program**
- Strategy: Encourage the use of cisterns, rain barrels and other **rainwater collection**
- Strategy: Encourage/require communities over a certain size to include **water reuse systems**

Pasa Tiempo Park in Clovis, CA

RESILIENCY POLICY IDEAS

Encourage alternative energy

- Strategy: **Permit on-site renewable energy generation** as a principle or accessory use in appropriate zoning districts
- Strategy: Allow by-right solar and wind systems; consider relaxed setbacks for these systems
- Strategy: Orient blocks and buildings to maximize active and passive solar access

Solar water heater and vegetated roof at the CCCC Sustainable Technologies Center

RESILIENCY POLICY IDEAS

Reduce per capita transportation emissions from transportation

- Strategy: Recruit jobs and increase access to broadband reduce rate of out-commuting
- Strategy: Increase walking, biking and transit trips
  - Density and design of development
  - Improved transit stops
  - Bike Racks
  - Expanded transit service
  - Complete Streets in key areas
- Strategy: Encourage electric vehicles
  - Invest in public EV infrastructure
  - Encourage EV infrastructure in new development

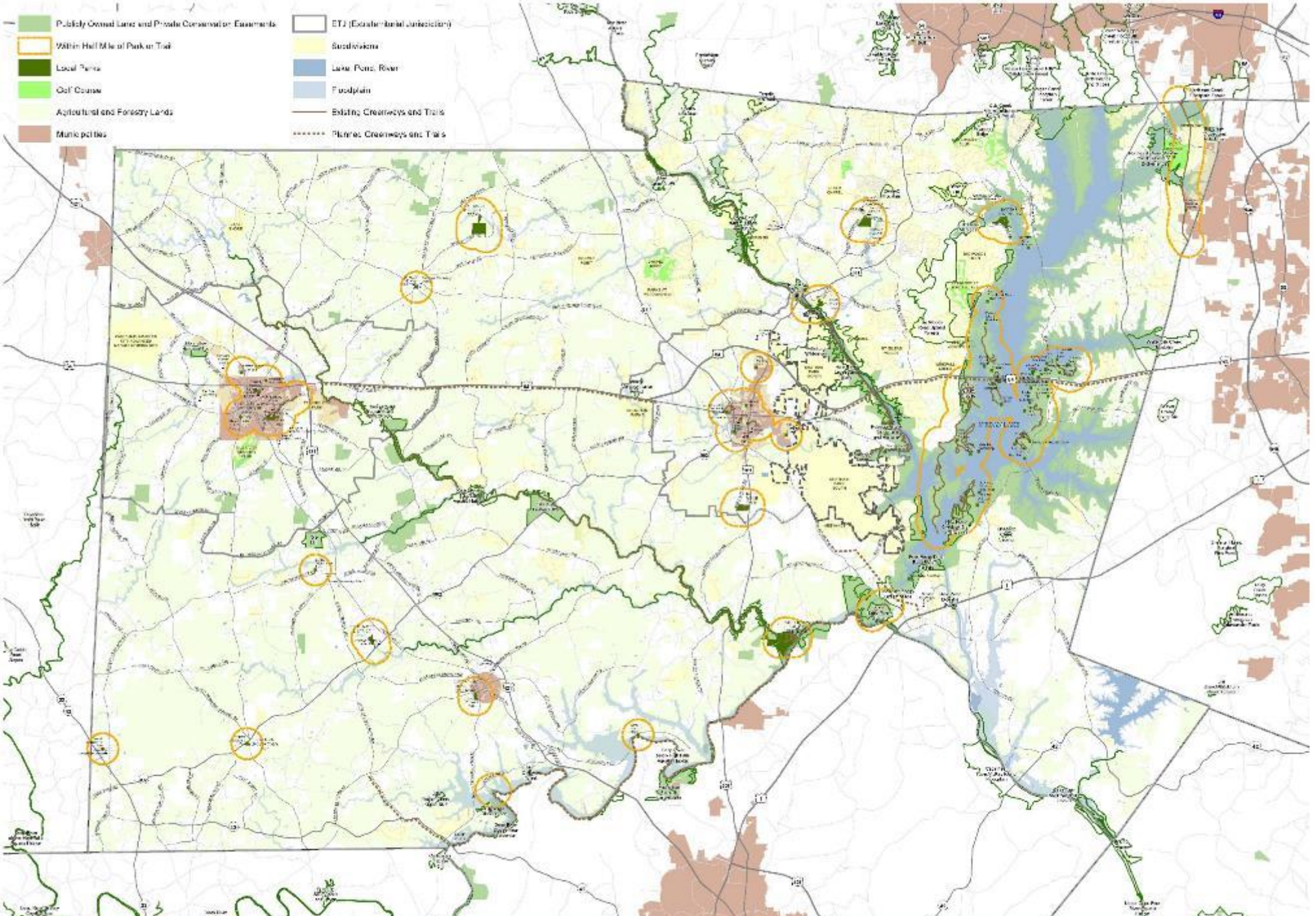
PARKS AND RECREATION GOAL

- **Provide recreational opportunities.**
  - OBJ: Provide expanded recreation opportunities and improve access to parks, community facilities, trails and open space.
  - OBJ: Appeal to all ages and provide geographic equity.
  - OBJ: Improve local access and build on natural, cultural and historical assets to encourage tourism.

Parks and Recreation

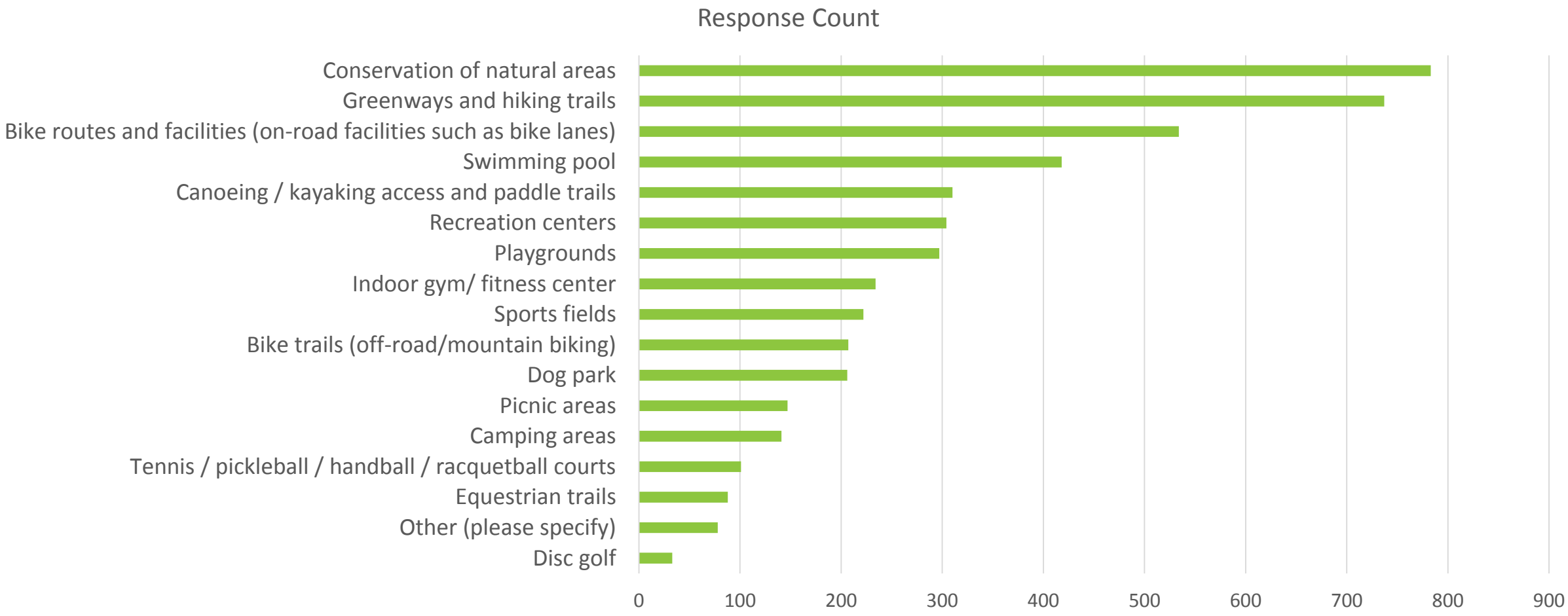
CURRENT ACCESS TO PARKS		
Residential parcels within 0.5 miles of a park	3,358	13%
Residential parcels within 0.5 mile of a complete trail or park	4,297	17%
TOTAL RESIDENTIAL PARCELS	25,799	

CONNECTIONS



CONNECTIONS

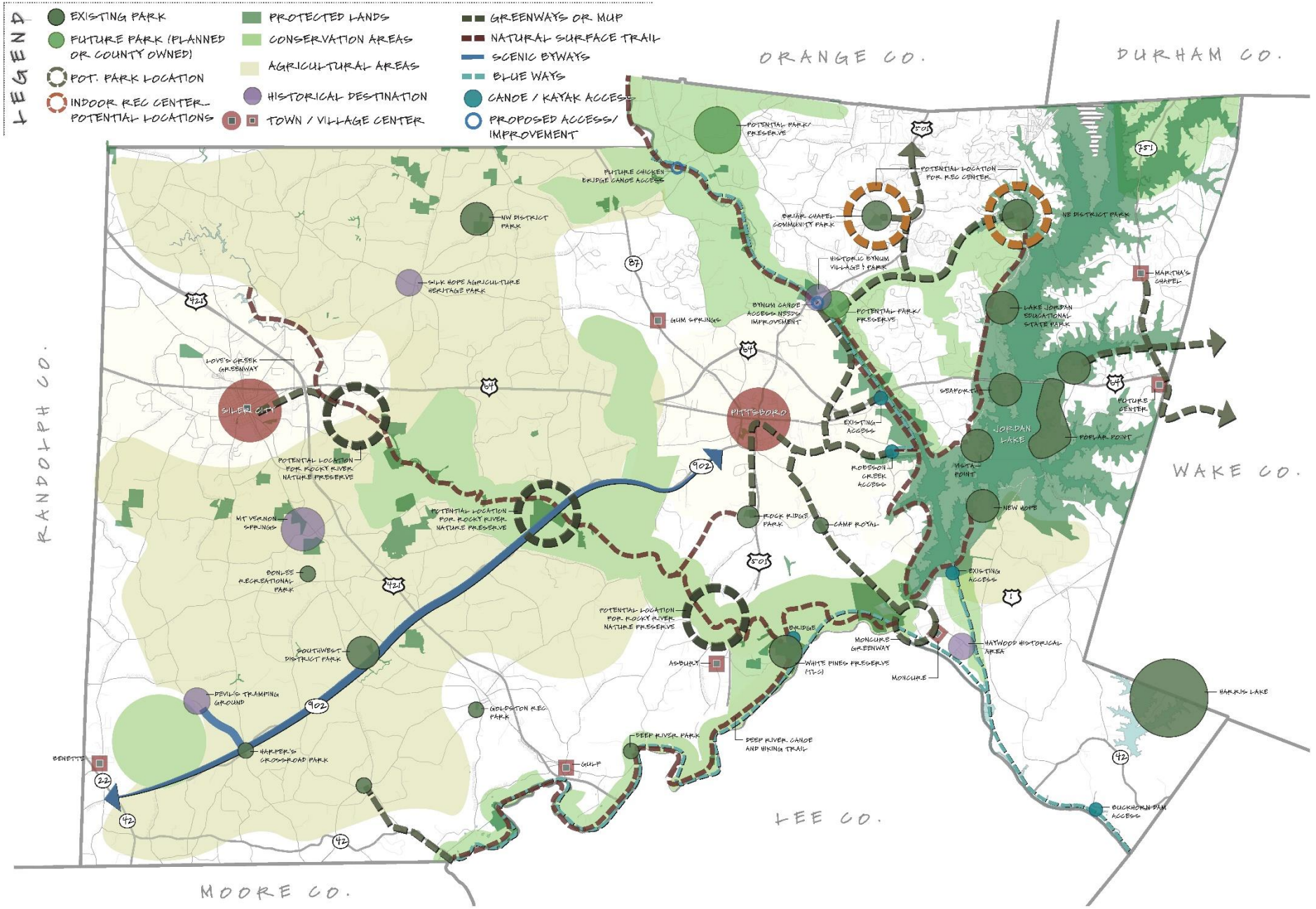
Q16: What should be the highest priority recreational facilities for the County? (Choose up to 4):



Parks and Recreation

- **Maintain and improve existing parks**
- **Address Access and Level of Service** (LOS) gaps and determine realistic goals
  - Build **trails and greenways** (need trails coordinator position)
  - Promote **active transportation** (i.e. complete streets)
  - Need for **indoor rec center** that is multi-purpose
- Leverage **natural, cultural and historic resources** (i.e. tourism)
  - Improve **river access** (Haw, Deep, Rocky and Cape Fear)
  - Revisit **park types** (i.e. need for nature preserve / passive recreation and historical park type)
- Specify role of **private development to provide access to open space**—wild and everyday nature

DRAFT RECS



LandDesign.

GREENWAYS / PARKS / DESTINATIONS FRAMEWORK PLAN

SCALE: 1" = 4,666'

N

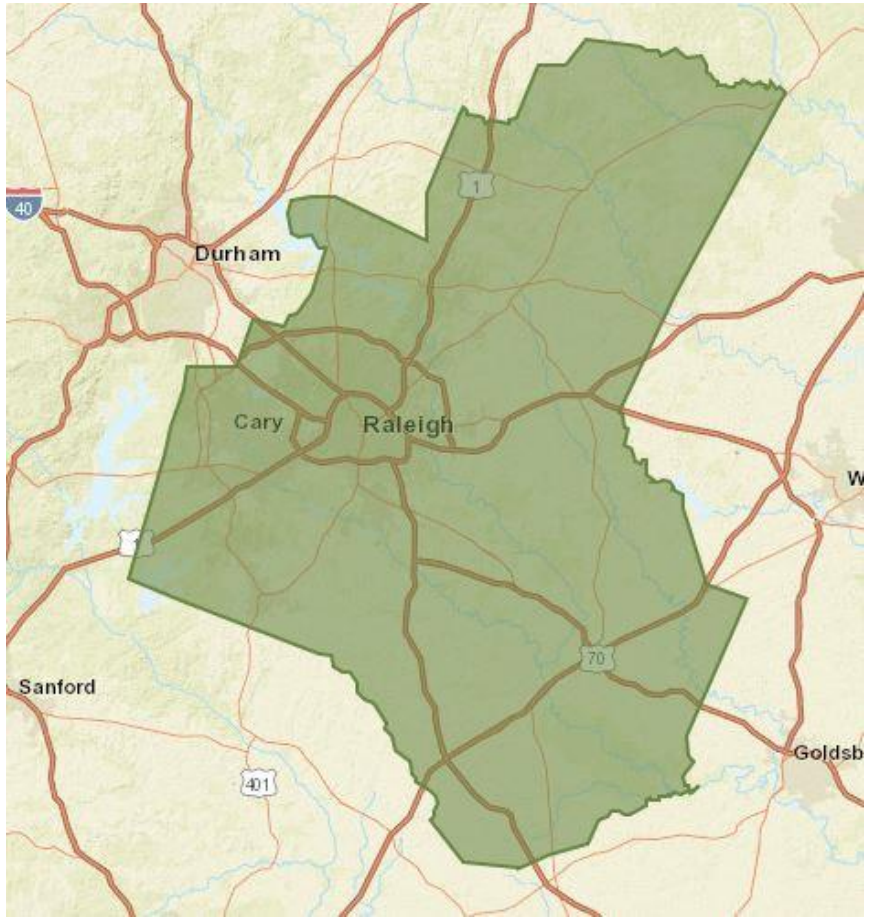
DRAFT CONCEPT

HOUSING GOAL

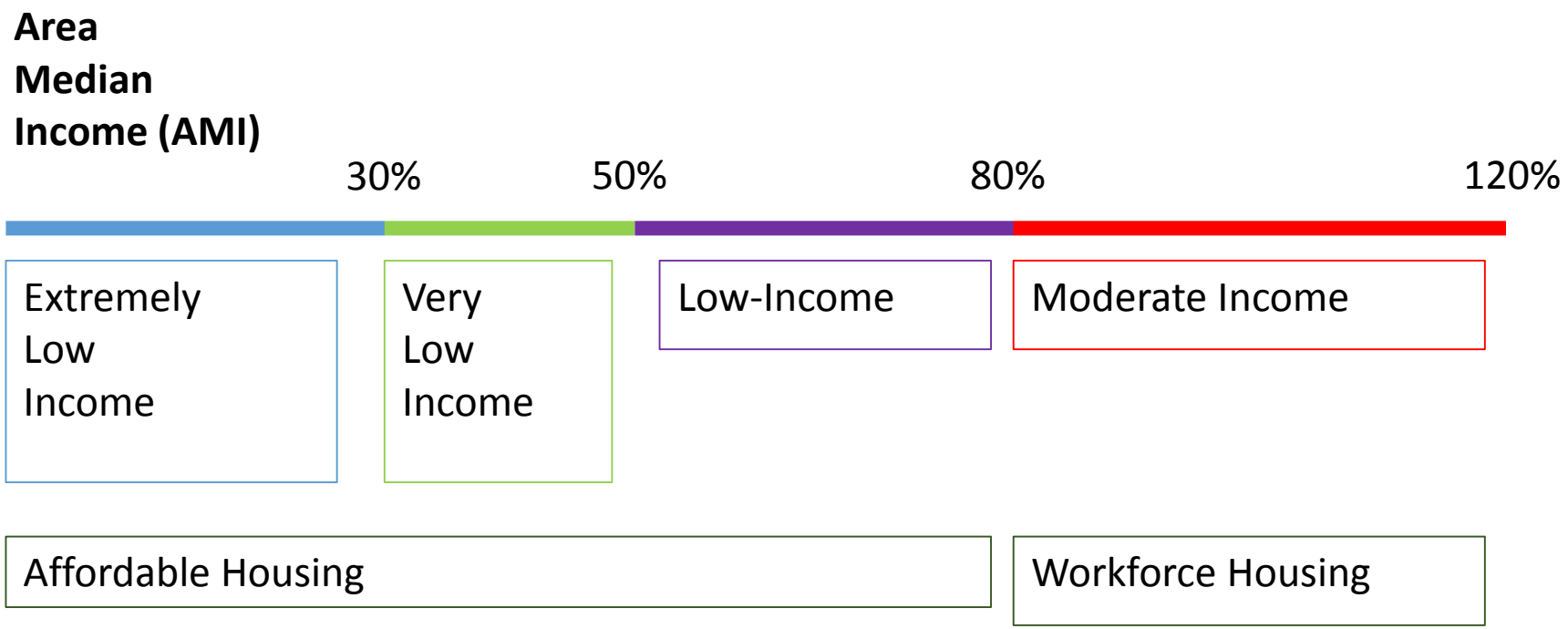
- **Provide equitable access to high-quality education, housing and community options for all.**
  - OBJ: Provide housing and community options (types, locations and prices) for all ages and incomes.
  - Metrics: Number of affordable housing units by type.

Definitions

- **Area Median Income (AMI)**
  - AMI is determined by HUD and is the Median income of the Metropolitan Statistical Area, which includes Orange, Durham, and Chatham Counties
  - AMI in Chatham County is $65,700

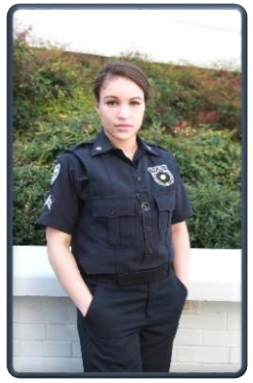


Definitions



Definitions & Need

Teacher in Chatham County
53% AMI



Law Enforcement Worker in Chatham County
60% AMI

Social Worker in Chatham County
71% AMI

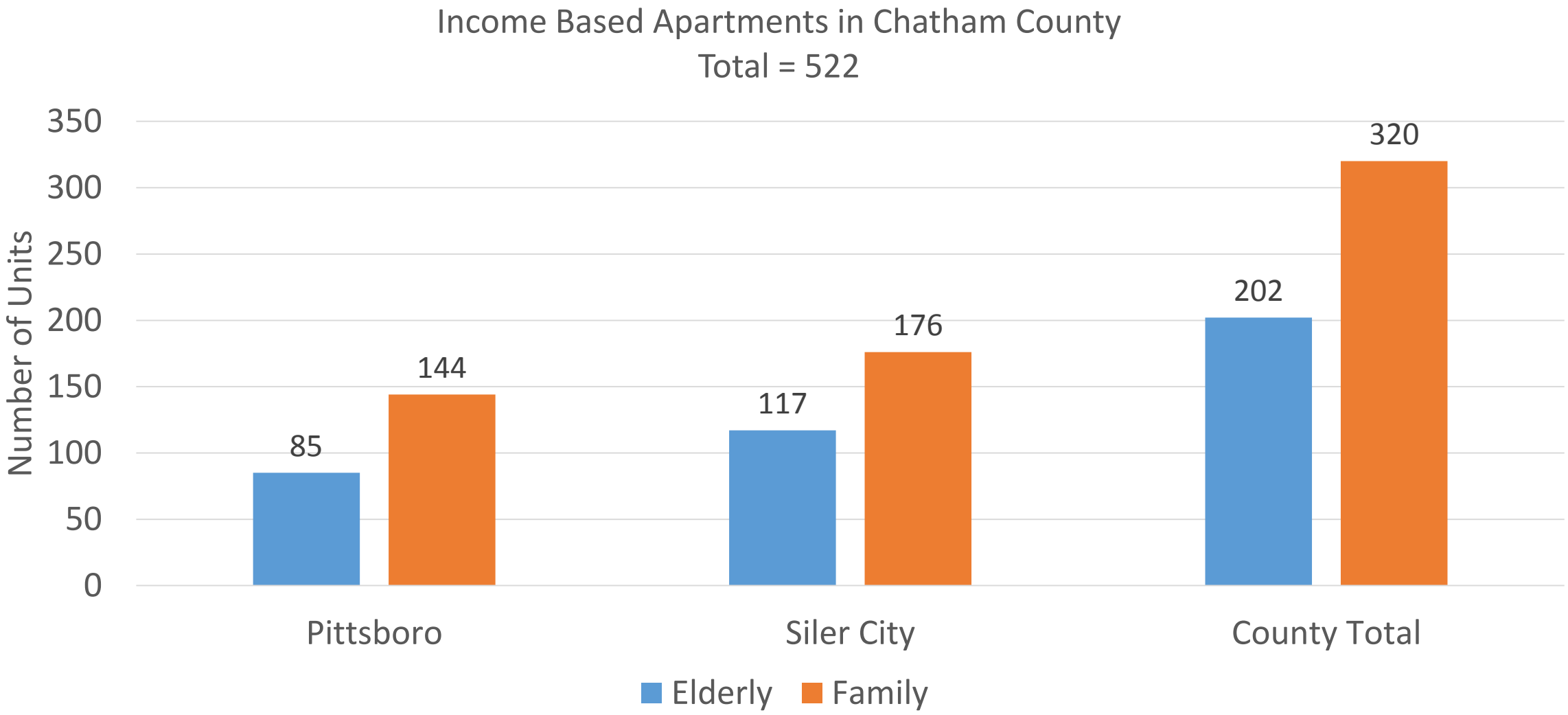
30% 60 % 80% 120%

Childcare Worker in Durham-Chapel Hill MSA County
33% AMI

Bus Driver in Durham-Chapel Hill MSA
57% AMI

Electrician in Durham-Chapel Hill MSA
63 % AMI

Housing Assistance Needs



Affordability Index

Model	Braxton	Carroll	Adams	Village 1	Village 2	Village 3	Village 4	Stroud	Bearden	Kohler	Ford	Vanderbilt
Size	1195	1295	1340	1251	1412	1465	1527	1572	1788	1794	2076	2211
Base Price	**$154,900**	**$147,400**	**$168,400**	**$168,400**	**$174,400**	**$179,900**	**$193,900**	**$240,900**	**$251,900**	**$253,900**	**$271,900**	**$286,900**
Insurance	$0	$0	$0	$0	$0	$0	$0	$720	$720	$720	$720	$720
HOA	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$300	$300	$300	$300	$300
Property Taxes	$1,942	$1,848	$2,111	$2,111	$2,186	$2,255	$2,431	$3,020	$3,158	$3,183	$3,409	$3,597
House Charlotte Eligible?	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No
Total Down Payment Assistance Eligible	$0	$15,000	$15,000	$15,000	$15,000	$15,000	$7,500	$7,500	$7,500	$7,500	$7,500	$7,500
To Finance	$110,000	$132,400	$153,400	$153,400	$159,400	$164,900	$186,400	$233,400	$244,400	$246,400	$264,400	$279,400
Down Payments	0%	10%	9%	9%	9%	8%	4%	3%	3%	3%	3%	3%
Mortgage Payment plus Mortgage Insurance												
Scenario 1	$584	$703	$815	$815	$847	$876	$990	$1,240	$1,298	$1,309	$1,404	$1,484
Scenario 2	$680	$818	$948	$948	$985	$1,019	$1,152	$1,442	$1,510	$1,523	$1,634	$1,726
Scenario 3	$893	$1,075	$1,246	$1,246	$1,295	$1,339	$1,514	$1,896	$1,985	$2,001	$2,148	$2,269
Scenario 4	$1,049	$1,263	$1,463	$1,463	$1,520	$1,573	$1,778	$2,226	$2,331	$2,350	$2,521	$2,665
Total With Taxes, PMI, HOA												
Scenario 1	$871.00	$989.96	$1,101.48	$1,101.48	$1,133.35	$1,162.56	$1,276.74	$1,526.34	$1,584.76	$1,595.38	$1,690.97	$1,770.63
Scenario 2	$966.54	$1,104.95	$1,234.72	$1,234.72	$1,271.80	$1,305.78	$1,438.64	$1,729.06	$1,797.03	$1,809.39	$1,920.62	$2,013.31
Scenario 3	$1,180.28	$1,362.22	$1,532.79	$1,532.79	$1,581.53	$1,626.20	$1,800.83	$2,182.58	$2,271.93	$2,288.17	$2,434.38	$2,556.21
Scenario 4	$1,335.84	$1,549.45	$1,749.72	$1,749.72	$1,806.94	$1,859.39	$2,064.43	$2,512.64	$2,617.54	$2,636.62	$2,808.28	$2,951.32
INCOME REQUIRED- Assume Housing costs as 30% of income												
Scenario 1	$36,126	$40,885	$45,346	$45,346	$46,620	$47,789	$52,356	$62,340	$64,677	$65,102	$68,925	$72,112
Scenario 2	$39,948	$45,485	$50,675	$50,675	$52,158	$53,518	$58,832	$70,449	$73,168	$73,662	$78,111	$81,819
Scenario 3	$48,498	$55,775	$62,598	$62,598	$64,547	$66,334	$73,320	$88,590	$92,164	$92,813	$98,662	$103,535
Scenario 4	$54,720	$63,265	$71,275	$71,275	$73,564	$75,662	$83,863	$101,792	$105,988	$106,751	$113,617	$119,339

Housing Assistance Needs

522 income based apartments

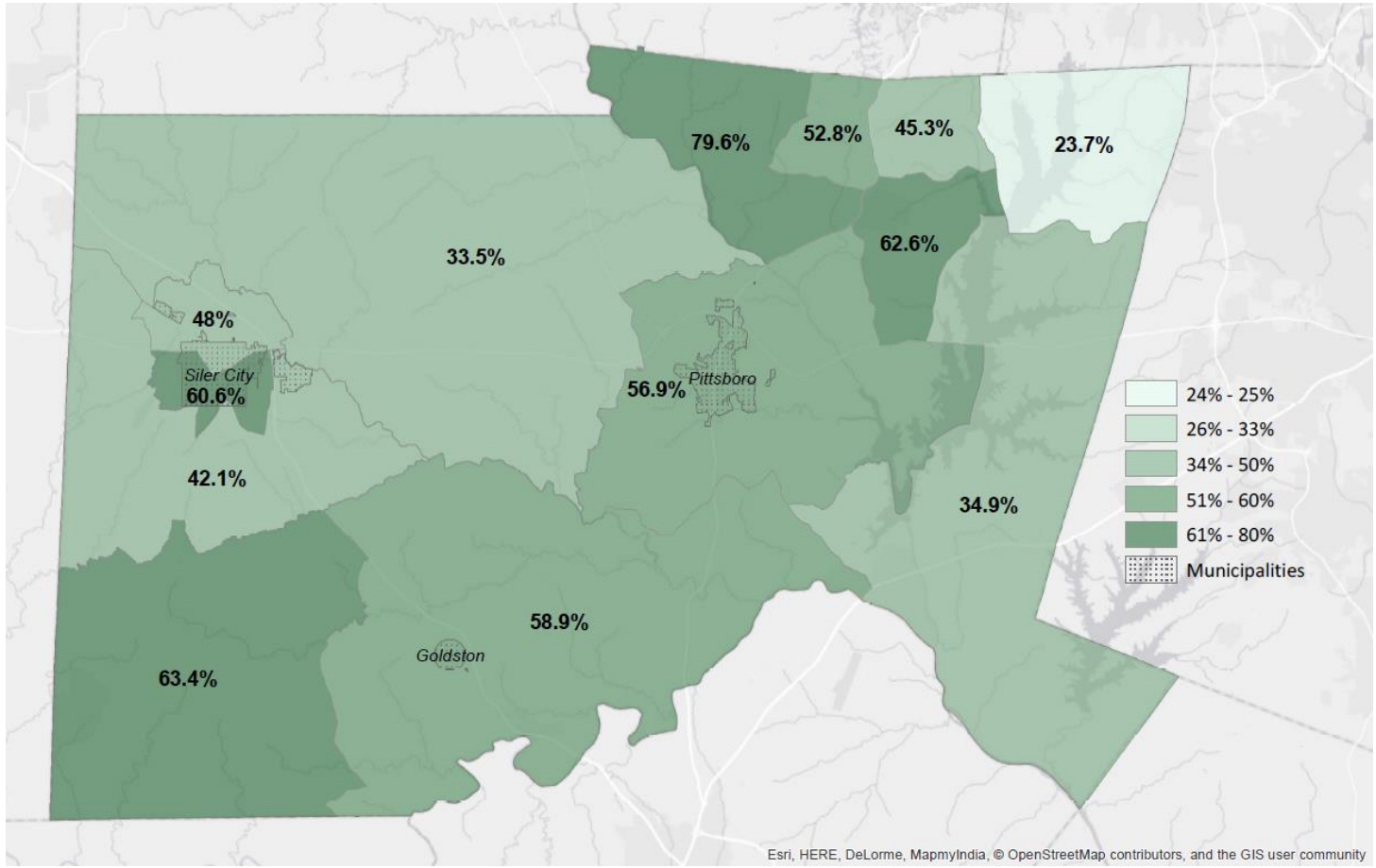
\+ 470 affordable housing vouchers

\- 60 overlapping households

= 932 household receiving housing assistance

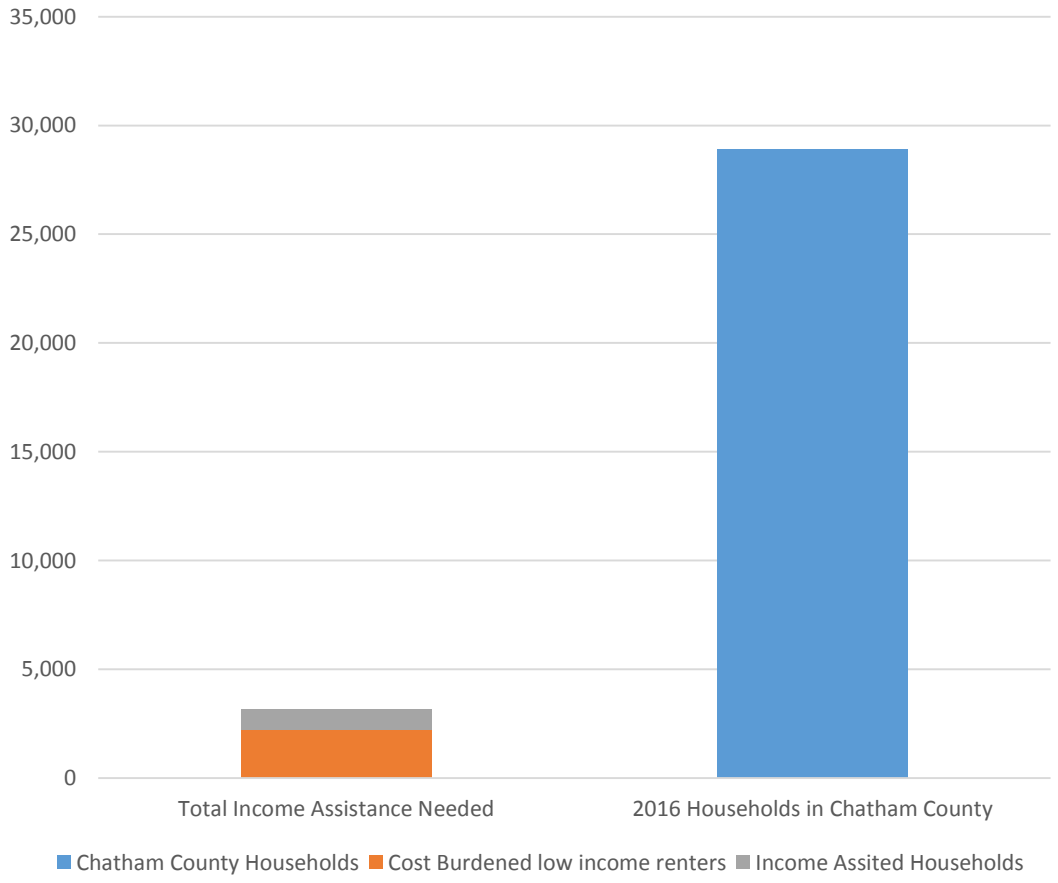
- 2,235 low income renters who are still cost burdened

Cost-Burdened Renter Households



Data from the 2010-2014 Census Bureau's American Community Survey

Numbers



		Total Income Assistance Needed	2016 Households in Chatham County
Cost Burdened low income renters	8%	2,235	
Income Assisted Households	3%	932	
Total Income Assistance Needed	**11%**	**3,167**	**28,902**

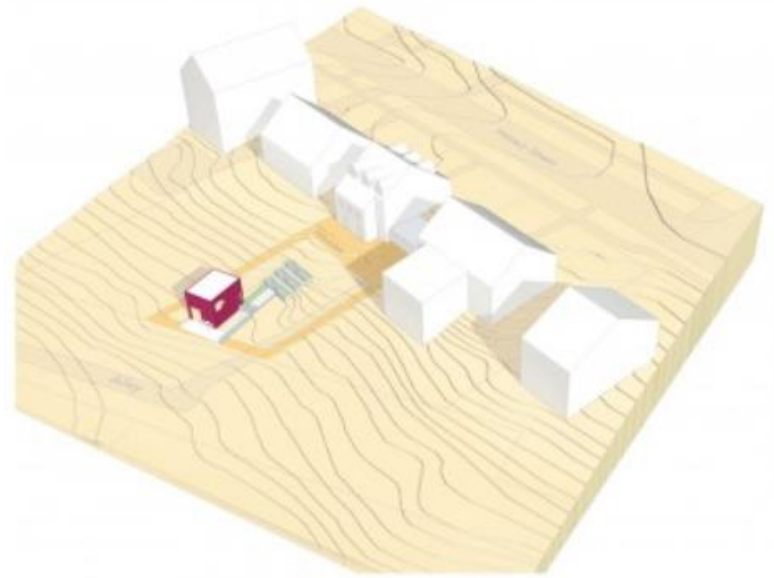
Numbers

- **Projected new housing units = 1,000/year**
  - If 10% of new housing construction were dedicated to affordable housing = 100 Affordable Housing units/year
  - It would take 23 years to meet the unmet demand for affordable housing
  - This does not take into account new households that will need affordable housing
  - For context Habitat for Humanity built 10 homes last year

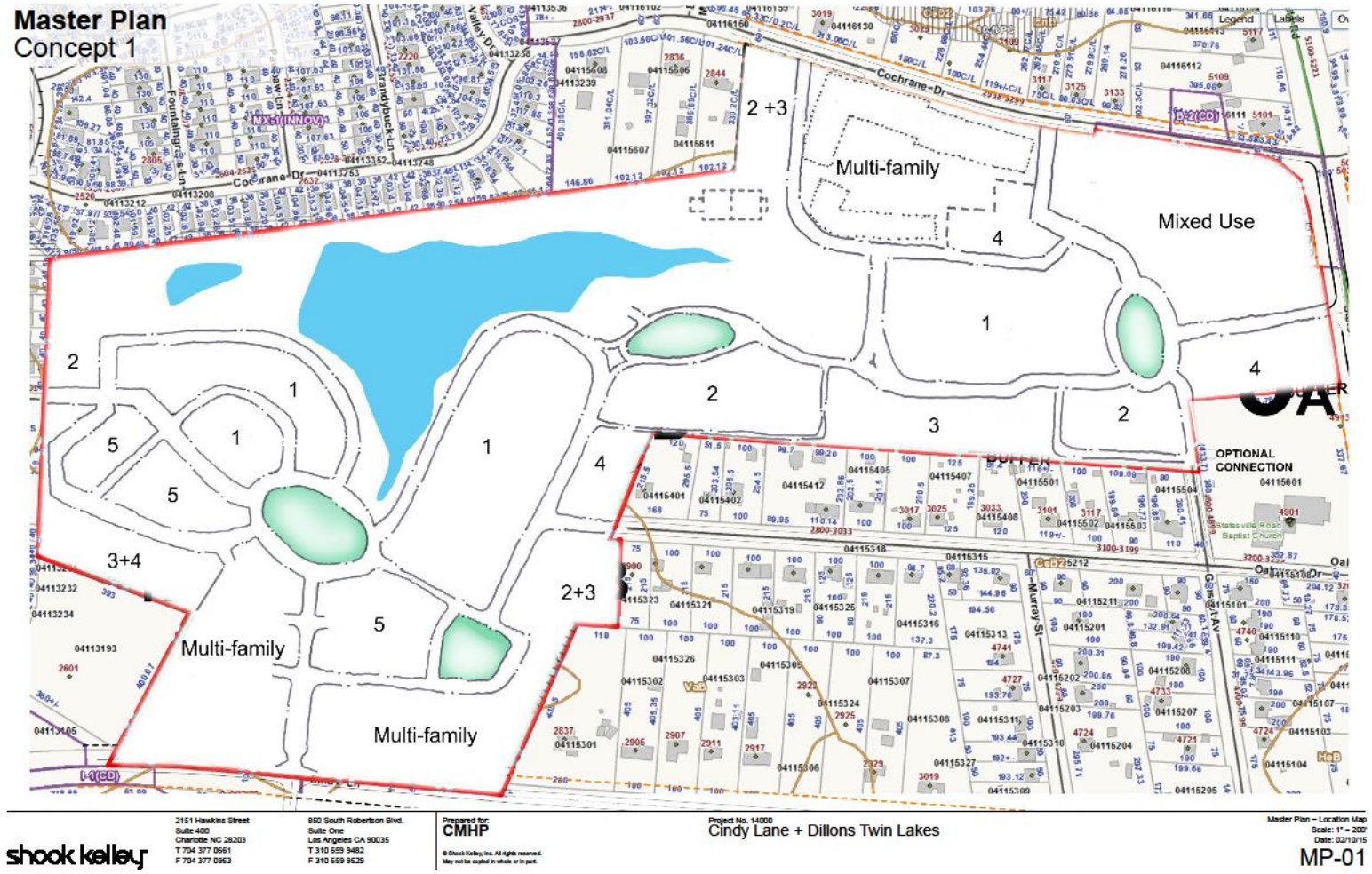
Prototypes

- Mini-PUD
  - Location: Appropriate in Towns and near Centers, in Compact Residential Areas
  - Size & Product types
    - 60+ units
    - Ideally 2 or 3 product types
    - MF – In Town jurisdiction, Attached, Detached (cottage/patio or zero lot line), Accessory Dwelling Units (ADUs)

- Rural
  - Location: Rural and Agricultural Areas, in areas without utilities
  - Size & Product types
    - 1-12 units
    - SF Homes, duets, ADUs



Mini PUD Prototype Precedent



Rural Precedents

Metal Prefab

Serenbe

Prefab Precedents

Vermont

Davidson

CalAtlantic Homes Prototypes

Bearden Floor Plan

1,788 SF
3 Bed
3 Bath
2 Car Garage
2 Stories

CalAtlantic Homes Prototypes

Andover Floorplan

3 Bed, 2.5 Bath
1,527 SF

Brookfield Floorplan

3 Bed, 2.5 Bath
1,465 SF

CalAtlantic Homes Prototypes

Dorchester Floorplan

2 Bed, 2.5 Bath
1,412 SF

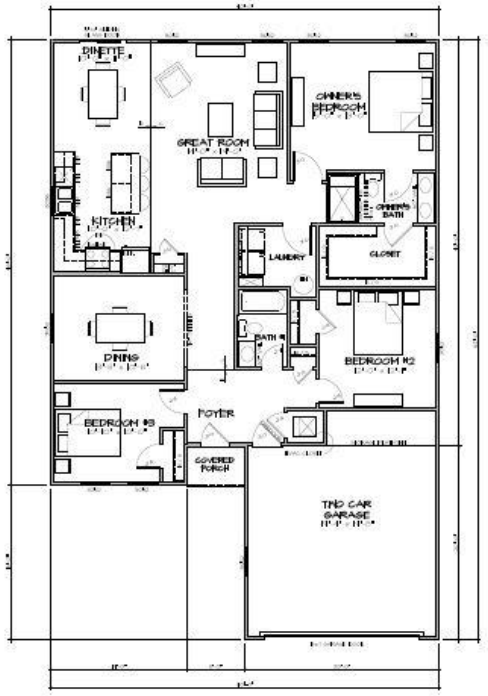
Carlisle Floorplan

3 Bed, 2.5 Bath
1,251 SF

Production Builder NVR, Inc. Prototypes

Stewart Floorplan

FRONT ELEVATION "K"



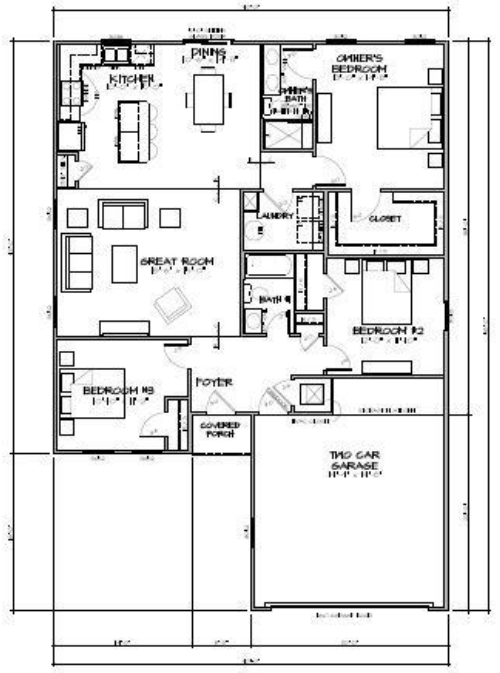
FIRST FLOOR PLAN

1,697 SF
3 Bed
2 Bath
2 – Car Garage

Production Builder NVR, Inc. Prototypes

Palmer Floorplan

FRONT ELEVATION "K"



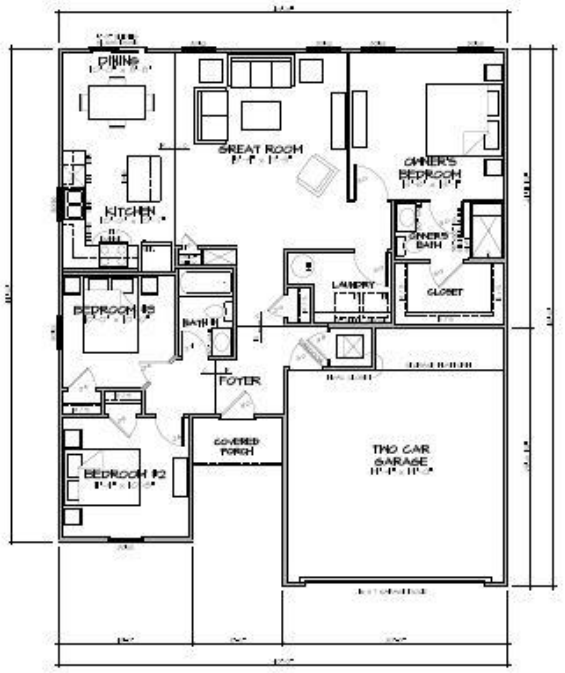
FIRST FLOOR PLAN

1,530 SF
3 Bed
2 Bath
2 – Car Garage

Production Builder NVR, Inc. Prototypes

Nicklaus Floorplan

FRONT ELEVATION "K"



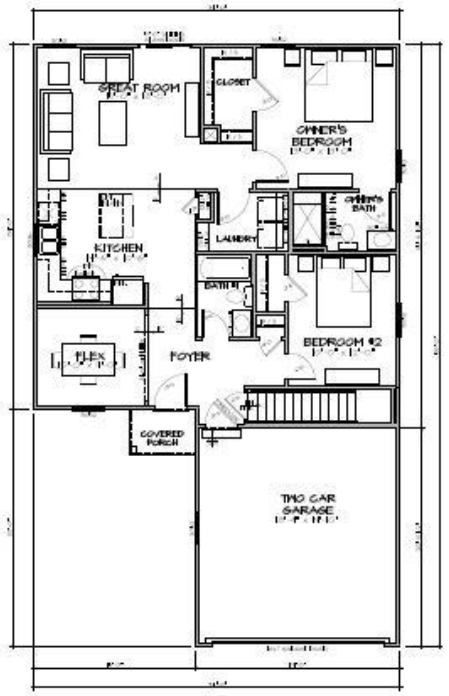
FIRST FLOOR PLAN

1,323 SF
3 Bed
2 Bath
2 – Car Garage

Production Builder NVR, Inc. Prototypes

Hogan Floorplan

FRONT ELEVATION "K"



FIRST FLOOR PLAN

- 2-Car Front Garage
- 2 Bed
- 2 Bath
- 1,134 SF

Policy recommendations for Land Developers, Homebuilders & Multifamily Developers

- Inclusionary Zoning:
  - Flexible by end user/Target demographic
  - locational parameters
  - pricing / rates
  - Delivery parameters/ timing.
  - Other
- Contributions:
  - Land
  - Fee reductions
  - Private Public partnerships