



Carrboro Connects – Task Force Meeting #2 Agenda

Thursday, October 22, 2020

5:30 – 8:00 PM

Remote Meeting*

1. Opening and Introductions, Catherine Fray, Chair (5 min)
2. Town Council Member Welcome (5 min)
3. Quinton Harper, David Jessee and Tim Turner, Co-Chairs – Quick check of Meeting #1 Notes and Discussion with Task Force on Conversation Café interviews. Moderated by Teresa Lockamy, Lockamy Consulting (15 min)
4. Climate Action Plan, Laura Janway, Environmental Sustainability Coordinator, Town of Carrboro (15 min)
5. Climate, Ecosystem and Social Equity, Marcella Keenan, CNT (35 min)
 - Has the Town established goals related to all the issues we've discussed?
 - What issues do we need to focus on more as a Town to have a greater impact?
6. Break-Out Discussions – All groups discuss vision and goals for Climate, Ecosystem and Social Equity (40 min)
 - Review vision and goals from existing plans.
 - Discuss components of a vision that should carry forward into the comprehensive plan around:
 - climate resiliency
 - natural resources
 - social justice (related to climate resiliency and natural resources)
7. Report Back, Teresa Lockamy (15 min)
8. Engagement Update – Website, Social Media and Marketing for Community Meeting, Erin Cigliano (10 min)
9. Debrief and Next Steps, Patricia McGuire and Scott Goldstein (5 min)
10. Adjourn!

*To view the meeting, please [email Trish McGuire at pmcguire@townofcarrboro.org](mailto:pmcguire@townofcarrboro.org) or call 919-918- 7324 to receive an invitation to view the meeting. If you wish to make public comment, at the time of public comment, the staff person will be able to allow speakers to remotely enter the meeting one by one to comment. Please send any written statement or materials to the email provided above. Requests to remotely attend the meeting shall be made within 24 hours of the meeting start time, and should specify if the requester wishes to make any comments. Any materials will be forwarded to task force members.



Carrboro Connects – Task Force Meeting #1 Summary

301 West Main Street, Carrboro, North Carolina 27510

DRAFT 10/9/2020

September 17, 2020 – Remote Meeting via Zoom

Task Force Members	Public	Town Staff	Consultant Team
Catherine Fray (Chair)	Leigh Anne King	Ben Berolzheimer	Cyatharine Alias
David Jessee (Co-Chair)	Barb Stenross	Rebecca Buzzard	Marcella Bondie Keenan
Quinton Harper (Co-Chair)		Evan Crane	Carol Brobeck
Sarah Brown		Julie Eckenrode	Erin Cigliano
Wamiq Chowdhury		Charles Harrington	Benito Garcia
Lorie Clark		Jon Hartman-Brown	Scott Goldstein
David Dixon		Laura Janway	Teresa Lockamy
Miles Fitch		Anita Jones McNair	Heidy Persaud
Braxton Foushee		Patricia McGuire	Francie Sallinger
Maggie Funkhouser		Tina Moon	Drew Williams Clark
Rachel Gaylord-Miles		Marsha Pate	
Lauren Joca		Marty Roupe	
Conner Lopez			
Elmira Mangum			
David Markiewicz			
Dan Mayer			
Mark Moshier			
Eliazar Posada			
Abirami Raja			
Soteria Shepperson			
Amy Singleton			
Jacqueline Thompson			
Rasam Tooloee			
Anahid Vrana			

OVERVIEW

September 17th, 2020 marked the first meeting of the Task Force for the Carrboro Connects Comprehensive Plan. The meeting was held remotely via Zoom from 6-8:30pm, with participation from nearly 50 people including Task Force members, Town staff, members of the public, and the consultant team. Prior to the meeting, Task Force members were given some pre-meeting homework. They were asked to: send in photos of places of interest or things they are passionate about in Carrboro, complete a brief questionnaire to share areas of interest and demographics to ensure diverse representation, and review a [Draft Interview Summary](#) of conversations with over 60 Carrboro residents, officials, and community leaders.

The first meeting focused on the vision for the plan, an overview of community engagement, and breakout discussions regarding issues and opportunities by topic area.

MEETING OPENING, WELCOME, AND INTRODUCTIONS

Catherine Fray, Task Force chair, opened the meeting at 6:05 PM with a warm welcome, thanking everyone for joining. Catherine then handed it off to Mayor Lavelle, who welcomed the group and set the tone for the evening:

“Your participation means a great deal to me and our Town Council...We value your perspectives and this marks the beginning of what will be a really visionary experience for our town. This is our first ever comprehensive plan – we didn't think we'd be doing this over Zoom, but we're thankful you're here today because we want to get this plan right. We have a lot of priorities in town – a pandemic, climate change, our fight against systemic racism...a lot of important work at the local level. And you all get to be part of it with the comprehensive plan.”

Next, Mayor Pro Tempore Foushee shared remarks via a pre-recorded video. She explained the importance of the comprehensive planning process and the Task Force's role in it:

“We understand that a comprehensive plan is critical to shaping our collective future. This plan will help to guide decisions that will shape us, our children, and grandchildren. It will lead to our town becoming a more just, resilient and sustainable community....we are asking that you really lean in. Your participation is so critical – you are the eyes and ears of planning process. In your role as task force member we ask that you reach into your networks, pull in more people, and let's make sure that everyone has an opportunity to participate. Now let's get planning!”

CHARGE FOR THE TASK FORCE

Catherine Fray went over ground rules and Zoom tips for the meeting, and then shared her thoughts on the charge for the Task Force:

“You all are the tip of iceberg and we need you to reach out to your network – the plan is about bringing all of us together, not just those of us here but all those who we can reach. Carrboro Connects is about those connections, the process, and making sure we can all be creative and collaborative and learn from each other.”

Quinton Harper and David Jessee are Co-Chairs of the Task Force. Quinton shared opening remarks as well, motivating the Task Force members to celebrate past planning work and to recognize the power of collaboration in this process:

“I want you all to take a moment to celebrate yourselves because you have done a great job in your various roles in Carrboro...there's been a lot of great work over the past few years. We simply won't be able to hit our goals if we're doing this alone—we are stronger together...There are so many folks who are not here tonight whose voices are equally valuable. I hope we can bring the stories of those voices into this space.”

Following Quinton's remarks, David prompted all participants to use the chat tool in Zoom and type one word to describe how they were feeling in that moment—some of the most commonly mentioned words were: **hopeful, excited, energized, motivated, optimistic, curious, and ready.**

WHY DO A COMPREHENSIVE PLAN NOW?

Patricia McGuire, Planning Director for the Town of Carrboro, explained why the Town has decided to undertake a Comprehensive Plan in the current moment. Though Carrboro has done a tremendous amount of planning, these plans have usually been focused on one topic, rather than the sum of many topics in a comprehensive way. Vision 2020, completed twenty years ago, was the last time the Town “checked in about what the Town as a whole thought of itself and the future and set forth a broad vision for the Town.”

“So why now? Our town's population has changed, and some needs and wants are different now. We need to check in with people and understand what they want now and how they see interests and desires going forward. The Town has an opportunity and need to address racial equity and the changing climate – two tremendously huge issues that face us and intersect with so many other things that are functions of the Town,” stated Patricia McGuire.

WHAT IS A COMPREHENSIVE PLAN AND WHAT CAN IT ACHIEVE?

Scott Goldstein is a Principal at Teska Associates, a community planning consulting firm, and the Project Manager for the Carrboro Connects Consultant Team. Scott described what a comprehensive plan is and what it can achieve:

- Thorough and thoughtful assessment of existing and future conditions.
- Expression of vision, values, and expectations.
- Guidance for desired development and services that guides regulations and programs.
- Realistic description of fiscal and human resources needed to accomplish vision, values, and expectations.
- Process for evaluation and updates.

He also emphasized the importance of community engagement, calling for the Task Force members to bring in new perspectives as part of this community-wide effort: “This is a way to lay out an agenda for how your partners will work together—we really hope the plan lays out a coordinated set of activities across the private sector, nonprofit sector, and government. It's about taking the values you share as a community and putting them into decisions that the Town makes.”

VISIONING EXERCISE

Next, Teresa Lockamy, of Lockamy Consulting and the Carrboro Connects consultant team, led the group through a visioning exercise. Using an online, live-polling platform called Mentimeter, Teresa guided participants through four questions. Meeting participants provided answers by typing into their phones during the meeting, and then their anonymous answers would appear on the shared screen in real-time. These questions and results are shown below (note: this exercise was not intended to be a statistically significant survey, but rather a way to check in and get a general understanding of Task Force sentiments.)

How would you describe Carrboro today in three words?



What would you like Carrboro to be in 20 years? (3 words)



What are the greatest challenges in reaching this vision (one or two phrases) ?

NIMBY	NIMBYs	Balancing priorities successfully
Apathy	Being afraid to get uncomfortable	scarcity mindset
Affordable housing	Lack of affordable housing.	Resistance Consensus
Finite land	Economic development	Market dynamics and limited resources
Affordability,	Climate change	Systemic racism.
Expertise needed	Civic pride in how we present ourselves	Inclusion, short sightedness, lack of empathy
Sprawl	Fiscal constraints	Affordability
Limited resources	Overcoming invisible biases	Limited vision of leadership
Reaching and including of diverse communities.	thinking inside the box	Not a lot to of places to grow. Inclusionary housing important with lack of NIMBY.
Tragedy of the commons	Recognizing institutional problems	adhering to a fixed mindset without true openness to compromise
No sprawl	Cul de sac communities	Growing population
Engagement	BANANA-Build absolutely nothing anywhere near anyone	Consensus
lip service	Climate change	A lack of sources for increased tax revenues in lieu of raising the base tax rate
Being comfortable with different types of neighbors.	Realistic development timelines for the entitlement process and construction	Limited resources
Agree	Address racial economic and social justice	Address racial, economic and social injustices

What principles should guide the plan?



RACE AND EQUITY PRINCIPLES

Anita Jones-McNair, Recreation, Parks & Cultural Resources Director for the Town of Carrboro, provided an overview of the Town's efforts towards race and equity:

"Thank you for your commitment to shaping the town of Carrboro for years to come. It is important that the framework begins and ends with racial equity. Our deliberate journey began in October of 2018 when the Council unanimously voted to begin race and equity work. In November, we joined GARE, which stands for Government Alliance for Race and Equity...The Town developed a leadership core team, and that core team is currently participating in a North Carolina cohort that culminates in October. We started conversations with our partners in Orange County so that we can have a county-wide message and plan, and each jurisdiction is now a member of GARE. Once we finish our participation in the cohort, training of staff, boards, commissions, and task forces like this will begin. The virtual training is about six hours and those details will be forthcoming. We also would review our practices and procedures using a racial equity lens."

Anita also shared the Town of Carrboro's Vision statement on race and equity:

The Town of Carrboro envisions being a community where race does not determine outcomes and all have equitable opportunities and resources. We envision a time when participation in community events, programs and advisory boards represent community demographics. All will feel safe, secure and know their voice is valued. We strive to be an inclusive and open minded organization that has a culture created by its diverse staff, which serves the public through a social (racial) justice lens.

COMMUNITY ENGAGEMENT AND WEB SITE

Erin Cigliano, Principal at Teska Associates and Engagement Lead for the Carrboro Connects consultant team, then provided an overview of the community engagement plan and the project website.

“Outreach is so much more than a website or a meeting – it requires a multifaceted process, clear communication, and engaging with partners early and often. Creating comfort, building trust, and providing choice are essential. Success of the plan depends on hearing from all members of the community, and to do that we can’t rely on just one tool or one means.”

Erin explained several different approaches: interactive tools, in-person engagement, and various forms of information sharing – marketing, promotion, and reporting back. The Carrboro Connects outreach process will be transparent, intentional, and focused on building relationships. We will tap into different ways that people are already communicating, and try new forms such as virtual keynote speakers, idea-sharing via text message, and posters around town in different languages.

Erin shared the process and thinking behind the Carrboro Connects project identity (logo). Building meaningful connection starts with identity. The project team took information shared in interviews to create a logo that would resonate with the spirit of Carrboro. It is trilingual (English, Spanish, and Burmese) and includes three slightly different logos as part of an identity suite that celebrates the different facets at play in the plan: race and equity (orange color scheme, similar to Carrboro’s racial equity logo), climate change (the green color scheme), and social and cultural vibrancy (multi-color version).



Erin then walked through the project website, www.carrborconnects.org. Different tools include a “My Block, My Carrboro” mapping tool to understand which neighborhoods participants are representing; a Share Ideas tool, a Q&A tool, and a Map Input tool for comments focused on specific areas and plan issue areas. Finally, the site registration tool doubles as an engagement tracker to make sure that all segments of the community are participating in the process.

TOPIC AREAS OF PLAN & INTERVIEW FEEDBACK

Scott Goldstein then shared a brief recap of the 60 stakeholder interviews conducted to date. The main sentiment expressed in these interviews is that the community of Carrboro is a wonderful place that is continually striving for better. Questions asked in the interviews are similar to some of the questions we are asking in this meeting and will continue to ask in the beginning phases of engagement, which is intentional—we really want to identify Carrboro’s values, so that those values can connect to the strategies and projects that emerge from the plan.

The comprehensive plan, and this meeting's breakout sessions, will focus on the following five topics areas, with additional cross-cutting themes that frame all aspects of the plan:

Topic Areas

1. Environment and Climate Change
2. Transportation and Infrastructure
3. Economic Sustainability
4. Affordable Housing
5. Recreation, Parks and Culture

Cross-Cutting Themes

- Race & Equity
- Climate Action & Resiliency
- Fiscal Sustainability
- Income Inequality

BREAK OUT DISCUSSIONS

All meeting participants were assigned to two breakout groups, based on preferences expressed in a pre-meeting questionnaire. The notes that follow are from discussions held in each of the topic area's two sessions.

Recreation, Parks and Culture

BREAKOUT GROUP 1 ATTENDEES:

Task Force Members: Braxton Foushee, Leigh Anne King, Anahid Vrana,

Staff: Charles Harrington, Anita Jones McNair

BREAKOUT GROUP 2 ATTENDEES:

Task Force Members: Wamiq Chowdhury, Amy Singleton, Alyson West

Staff: Charles Harrington, Anita Jones McNair

Q1: How would you characterize Carrboro's focus on recreation, parks, arts and culture?

- "MLK park was packed, visual arts -- you turn your head in 2-3 directions, fire department has the most beautiful mural -- I want to see more art in parks!"-- Anahid Vrana
- "We need a comprehensive bike connectivity plan that integrates art "-- Anahid Vrana
- "We do a great job on naming parks, but we can do a better job of telling the stories of older parks, Libba Cotton Trail. My son loves going to the historic marker on Weaver Street." -- Leigh Anne
- "Lived in Carrboro for nearly 30 years, so pleased with MLK Park opening. It is fabulous to see this park has been built." -- Amy Singleton

- “I have been here for 2 years, I moved here largely because of the access to arts and culture. This is definitely the smallest town I’ve lived in. Access to music, wonderful venues, cat’s cradle, culture -- I’ve made a ton of friends here -- artists and creators, (cohesion through the arts and culture). I’d love to see this preserved and furthered in the future. Ensure it is genuine and authentic -- not top down.” – Wamiq Chowdhury
- “For the size of our town, we really put our foot forward in integrating arts into projects from a municipal standpoint.” – Alyson West
- “Carrboro is very green, but the park space is less green / need more trees... and not as accessible. Caroline North Forest is a missed opportunity, this could be opened up to more ppl, make it a nature preserve, more navigable terrain.” – Alyson West

Q2: Where would you like Carrboro to be in 20 years?

- “Do we have enough stuff for people in their later ages? Are there chances for multi-generational interactions? What does this look like in the recreation sense?” – Leigh Anne
- “There is an opportunity for a community center -- this needs to be a huge cooperative between Carrboro, Chapel Hill, and Orange County so there is shared access.” – Anahid Vrana
- “We need to take on a dedicated effort with DOT. Biking out to 86 is treacherous at best. So many people do it to get out of town -- and it is not safe. Women typically ride on Wednesdays, men on Saturdays.” – Braxton Foushee
- “I could not agree more -- Carolina North and Adams Tract -- improve the connectivity. I would love to see more connectivity between Bolin Creek. The area around the high school, and connectivity therein is great, but we still have work to do.” – Amy Singleton
- “Carrboro Music Festival is my favorite; I haven’t been to the Film Festival. I am happy to know the arts center will be in their own free-standing space; lots of fun stuff on the horizon!” – Amy Singleton
- Location: Rogers Road Area - Those kids play soccer, two big fields - we have a good mixture of kids participating between ages 7-12 in other areas that we don’t see all the time. Need to understand better what they are doing in other parts of town.
- How can we celebrate more cultures? How welcome do people who are lower income, from foreign countries feel coming to our parks? Do we have an understanding of perceived access and whether our parks are inclusive and welcoming? – Leigh Anne
- “Use arts and culture to further breakdown silos between communities. We have a real opportunity to be intentional with our arts and culture spaces -- being led by the community and what folks would like to see. Particularly, engage specific demographics within those communities, ages, socioeconomic backgrounds, etc. Think about how to design spaces and integrate programming so folks come and use them.” – Wamiq Chowdhury

- “There are a lot of opportunities with the library branch going in, as a community public space --- something to take advantage of, for sure.” – Alyson West

3. What are the challenges facing recreation, parks and culture?

- “Be intentional. Go to the community, door to door, ask folks their experience.” – Wamiq Chowdhury
- “Connectivity and access no matter where you live, keep transit lines open.” – Amy Singleton
- “Prioritize health benefits of greenspace and make it a metric and goal.” – Alyson West

Economic Sustainability

BREAKOUT GROUP 1 ATTENDEES:

Task Force Members: David Jessee, Elmira Magnum, David Markiewicz, Miles Fitch, Quinton Harper, Abirami Raja

Staff: Jon Hartman-Brown, Marty Roupe

BREAKOUT GROUP 2 ATTENDEES:

Task Force Members: Barb Stenross, Connor Lopez, Jacqueline Thompson, Lauren Joca, Mark Mosher, Abirami Raja, Soteria Shepperson, Rasam Tooloee

Staff: Lorie Clark, Jon Hartman-Brown

Q1: How would you characterize Carrboro’s focus on economic sustainability today?

- Businesses needs more support and fewer barriers to startup/operations:
 - Taxes and building rents are high, therefore the capital needed to start a business is high and operational costs require highly successful businesses
 - Black Indigenous People of Color (BIPOC) and low-income entrepreneurs face the greatest barriers—need more support and would benefit from a more supportive business environment with lower costs to entry
- Too many employees cannot afford to live in Carrboro or even Orange County, testament to lack of affordable housing
- Development is piecemeal and would be better if done at a larger scale, such as by block
- The Chamber of Commerce gave a report last week indicating that Carrboro is at the top of the state for taxes and expensive places to operate a business—ahead of Chapel Hill. Carrboro is not a place where you want to be—if you want to be economically sustainable. You don’t want to be the folks with the highest taxes.” – Mark Mosher

- “Here at the coffee shop, it's like how do we sell coffee? What else can we find to sell? Sustainability has been very difficult. Also, even before the pandemic, a lot of the businesses were family owned and if that person left, the building was just abandoned because it costs so much money to start businesses here.” - Soteria Shepperson, Business Owner, Johnny's Gone Fishing

Q2: Where would you like Carrboro to be in 20 years regarding economic sustainability?

- Support small, local businesses because they tend to better support the community
- A greater mix of property types to help lessen the tax burden for everyone
- Business-friendly environment that allows for the creation and growth of small businesses
- “Economic sustainability should make sure people can love, work and play in Carrboro. Many people can do only 1 or 2, not all 3. The Comprehensive Plan needs to outline the principles around how we make decisions to apply a consistent framework in the review of development proposals.” – Abi Raja
- “Many chain stores in Carrboro are the highest producing stores, which is great, but it increases the price to do business and makes it more difficult for small businesses to open and operate.” -David Jessee
- “We want sustainable, equitable, livable—to have that it will take a system approach wherein we don't gain one at the expense of another. We need to make sure that businesses can market themselves. The Town needs to be welcoming to business owners.” - Rasam Tooloee

Q3: What do you think are the greatest challenges relating to economic sustainability?

- Reducing end costs for residents and businesses by understanding the root causes of higher cost development
- Maintain high standards but lessen the friction that businesses face
- “Greatest challenge will be to accomplish our goals and keep things affordable. Diversity is what brought me to this community.” – David Mosher

Environment and Climate Change

BREAKOUT GROUP 1 ATTENDEES:

Task Force Members: Wamiq Chowdhury, Lauren Joca, Barb Stenross

Staff: Laura Janway, Marsha Pate, Tina Moon

BREAKOUT GROUP 2 ATTENDEES:

Task Force Members: David Dixon, Abirami Raja, Anahid Vrana

Staff: Laura Janway, Marsha Pate, Tina Moon

Q1: How would you characterize Carrboro's focus on the environment?

- Town's desire on environment and climate change, there is strong voice on town council and active community members. Have just started learning what the environmental boards do – in state of flux for future structure. Been impressed on general desire. There's a lot of focus on individual choices and practice. Curious to learn more about the business regulation side of it. The intersection of issues: sustainability and housing affordability. – Wamiq Chowdhury
- There's a lot that the state doesn't let the town do – Carrboro can't [ban] plastic bags. Working with business to recognize the businesses that are green. EAB advised recognizing great businesses doing green things. There are ways to recognize instead of regulating. – Laura Janway
- Would like to see us do more. Concerned about loss of trees in the area. Stormwater and more development going in. The importance of removing invasive plants and educating the public. Like the town's focus on trying to reduce fossil fuels regarding transportation. – Barb Stonehaus
- "As a resident, don't see a lot of actionable changes. Can't say that there's a plan to make the climate and environment changes. We talk about how the environment is great, but I don't see resources going into it." – Abirami Raja
- "The intention and desire are good. The map to achieve the intention isn't in place. The context is always changing also. The area is filled with environmental scientists with all the academic institutions. We should tap into their expertise to help inform the plan." – Anahid Vrana
- "Carrboro positions itself as ecofriendly – with people taking alternative transportation. It's hard to see the implementation because it's hard to have big capital projects that show off what the town is doing. I think a lot more is dependent on how the residents are able to live their lives. So, town should enable carefree lifestyles and education programs around the environment." – David Dixon

Q2: Where would you like Carrboro to be in 20 years?

- Retrofitting and revisiting stormwater management in the heavily built out areas. The downtown areas and just outside of that. The built-out areas don't have same regulations as the newly developed areas. – Lauren Joca

- “Hearing from seniors about a walkable Carrboro and opportunity for those with mobility issues to access businesses as well. There’s another layer of walkability when thinking about those with less mobility.” – Marsha Pate
- “Actively work on addressing racial equity piece of climate change. In Chapel Hill, some studies show where the coal plant sits and it’s more low income, minoritized residents. We need to keep track of disparate impacts because a lot of times those are not easily visible to the community.” – Wamiq Chowdhury
- “Want to maintain outdoor space. That is what people love about Carrboro. Want to continue invest in green ways, parkways, outdoor areas. For Climate Change, it crosses everything. Any project we do, should include a climate change conversation. It needs to be a part of everyday conversation.” – Abirami Raja
- “In terms of living in town but outside – the NC climate allows for an outdoor experience. I’d like to be sure of an energy footprint. Things are built and constructed with multi-purpose task. The farmers market can be a market and a playground and a concert hall and a town meeting hall. Want a footprint that is small and efficient. Composting system – get everyone on it. Needs to be a huge part of children’s and grandchildren’s education.” – Anahid Vrana
- “Environmental preservation. If and when Carrboro continues to develop needs to be done thoughtfully. Would like infill development and increase density where it makes sense. In terms of resilience, manage and cope with the effects of climate change, not just reduce carbon footprint. It’s going to get hotter no matter what. How do we make sure people can weather the increasing droughts?” – David Dixon

Q3: What are the biggest challenges to getting to this vision for the environment?

- “Keeping a handle on emissions is really important, it’s great that it’s a priority now.” – Marsha Pate
- Limitations on municipal government powers. So, using positive measures instead of regulations. – Wamiq Chowdhury
- “Loss of biodiversity is a major problem; deer pressure is huge.” – Barb Stenross
- “We need to pack houses into an area to keep the environments safe while maintaining health and safety of the homes. We have to think about the balance for good lifestyle.” – Anahid Vrana
- Addressing climate change and managing the balancing of goals and prioritization that might conflict.

Housing

BREAKOUT GROUP 1 ATTENDEES:

Task Force Members: Rachel Gaylord Miles, Amy Singleton, Mark Mosher, Jacqueline Thompson, David Dixon, Eliazar Posada, Maggie Funkhouser

Staff: Rebecca Buzzard

BREAKOUT GROUP 2 ATTENDEES:

Task Force Members: Sarah Brown, Braxton Foushee, Catherine Fray, Quinton Harper, Jacqueline Helvey, Elmira Mangum Soteria Shepperson,

Staff: Rebecca Buzzard

Q1: How would you characterize Carrboro's focus on housing?

- Developers struggle to understand the process of affordable housing as it not currently clear
- Need to update town rules (C.U.P.) to better reflect desired affordable housing goals
- Carrboro has a lengthy process to get things approved and must step up to identify what it wants
- Current housing climate feels exclusive (leaves people out), inequitable (few housing options) and unaffordable to many (i.e. teachers, town emps., service workers, etc.)
- "Developers struggle to understand the process of affordable housing as it not currently clear."

Q2: Where would you like Carrboro to be in 20 years?

- Need to know what the public wants re: affordable housing, inclusionary zoning, mixed, more density?
- People have no biases re: affordable housing: accept mixed wealth communities
- Find ways to change land use guidelines re: home ownership for lower income workforce
- Attract developers with desire to build quality affordable housing
- Important to build wealth through home ownership among people of color, housing that people can buy
- "Think creatively re: potential affordable housing options (e.g., use of town land, tiny home developments, mobile home parks, adjust density allowances to account for limited land, etc.)" – Amy Singleton

- “Affordable housing does not just mean more affordable rental units; need affordable homes for sale.” – Eliazar Posada
- “Renters should not be unduly financially burdened by cost of rent.” “A place where no one is unhoused.”
- “People who work in Carrboro should be able to afford to live in Carrboro – not just mobile homes.”

Q3: What do you think are the greatest challenges relating to affordable housing?

- Agree on “what makes housing affordable in Carrboro?”
- Zoning and land use are significant factors in determining what kind and where development will occur
- People are opposed to certain types of development, citing NIBYism – creates conflict and no compromise
- No enabling NC legislation to be able to use tools (used in other states) to address critical elements of affordable housing
- Align transportation goals with affordable housing to avoid gentrification

Transportation and Infrastructure

BREAKOUT GROUP 1 ATTENDEES:

Task Force: Sarah Brown, Connor Lopez, Catherine Fray, Rasam Tooloee, Alyson West

Staff: Patricia McGuire

BREAKOUT GROUP 2 ATTENDEES:

Task Force Members: Miles Fitch, Maggie Funkhouser, David Jessee, David Markiewicz, Rachel Gaylord Miles

Staff: Marsha Pate, Tina Moon

Q1: How would you characterize Carrboro’s focus on transportation and infrastructure?

- Public transport doesn't cover my neighborhood, making active trans more difficult and unsafe for his kids. Suggested smaller buses, increased engineering and safety treatments and more bike lanes. – Rasam Tooloee
- Agreed with need for striped lanes, biceped network is disconnected – Catherine Fray

- “NCDOT owns many roads though, so Town may not have jurisdiction, but traffic calming is important.” – Alyson West
- “Mostly use bike or car, bike paths are pretty shoddy, disconnected.” – Connor Lopez
- Another common theme is parking, which usually decodes to parking downtown – Catherine Fray
- “Aspirational”, we’ve done a lot of the easy work, bike plan etc., now we need to pick off some of the harder stuff.” – Rachel Gaylord Miles
- “Disconnected bike network, need a master plan for biking and parking, not so popular but we need a central parking location that is easy to find/access (mentioned it would be nice to have a parking app).” – David Jesse
- “We don’t have a parking problem, we have a transportation problem”, but once you get far from downtown it isn’t practical to assume you can cycle downtown, the parking problem is that we have a downtown parking problem and not so much a suburban area parking problem. – David Markiewicz

Q2: Where would you like Carrboro to be in 20 years?

Transportation

- Fewer cars, more focus on mobility justice, address disability access
- Fewer fossil fuel powered vehicles
- Health and wellbeing should be metrics in transportation as opposed to auto-based metrics (thruput, delay, congestion, etc.)

Energy

- Make the grid more resilient – such as battery backup in MF so can store in off-peak and use in peak
- Climate Change/Energy can be polarizing, because it’s often an all-or-nothing strategy, need aggressive but achievable strategies/benchmarks. Self-sustaining in 20 years would be great
- Nuclear viable stopgap during transition from fossils to renewables

Stormwater

- Use the Public ROW for green infrastructure

Q3: What are the biggest challenges to getting to this vision for transportation and infrastructure?

- “Town’s patchwork approach, needs to be more unified and resilient planning (integrated). Creating public/private citizen collaboration, Town can only control a fraction of what goes on in the town.” – Catherine Fray
- “Working with NCDOT, they do own most of the roads that we’re naming as not being great.” – Sarah Brown
- Understand that you need to increase revenue without increasing rate, but which comes first? – Maggie Funkhouser

DEBRIEF AND NEXT STEPS

Following the two breakout sessions, meeting attendees were brought back into the main Zoom session for a quick debrief and summary of next steps:

“These issues are deep and take deep conversations, I’m excited to hear everybody’s feedback and voice and I feel very assured that we will come out of this process trying to make a better Carrboro.” –Quinton Harper

“There’s a lot to take on here, but that’s where you folks step in and I feel confident that we’ll be able to streamline all input that comes in and have successful outreach to make sure that all voices are heard.” –David Jessee

Next Steps:

1. Continue to send photos (and why you took them) to Scott at sgoldstein@teskassociates.com
2. We will be sending out a link to a dedicated website for Carrboro Connects soon!
3. We will be sharing draft Issues and Opportunities reports to review before the next Task Force meeting.
4. Conduct 3 interviews before the next meeting.
5. Upcoming meeting Dates:
 - a. Oct 22 5:30 PM | Task Force Meeting 2
 - b. Oct 29 7:00 PM | Community Meeting 1 (since changed to November 19)
 - c. Nov 12 5:30 PM | Task Force Meeting 3
6. Race and Equity Training
7. For those interested, Orange County Planning is hosting a Transit Summit on Oct 1 at 5:00-8:00 PM (www.octransit2020).

ADJOURNMENT

Task Force Meeting #1 adjourned by 8:32pm. Thank you to all who participated for your time and enthusiasm!



ISSUES AND OPPORTUNITIES: CLIMATE, ECOSYSTEM AND SOCIAL EQUITY

DRAFT 10/9/2020

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1. INTRODUCTION

This section presents an overview of issues and opportunities regarding Carrboro's terrestrial and aquatic ecosystems within the contexts of climate change and social equity. This includes climate projections for the Carrboro region, climate resilience and social vulnerability to climate change impacts, as well as ecosystems and natural areas, and a summary of goals and strategies. Note, further information related to stormwater infrastructure (e.g., drainage systems and green stormwater infrastructure) can be found in the Transportation, Water, and Energy Infrastructure chapter.

Carrboro's future does not come without its challenges. Carrboro has experienced extreme weather events, like flooding from Hurricane Fran, Florence, and Michael, and droughts between 2000-2002 and in 2007, which will likely increase in the future. Stormwater management practices, used in older developments prior to the current land use ordinance, inadequately address stormwater issues todayⁱ. In addition, non-native turf grass lawns continue to contribute to stormwater runoffⁱⁱ and negatively impact local biodiversity.

Carrboro residents care deeply about the environmental ecosystems within Carrboro and the impact of climate change on the community. One of the six strategic goals of Carrboro's Capital Improvement Plan is to "incorporate energy and climate protection strategies." The town regularly updates its greenhouse gas inventory and as of March 2019 has calculated a 14% reduction in total community greenhouse gas (GHG) emissions from 2012. Residents actively volunteer to maintain natural areas and support nature-based solutions in response to climate change concerns. With an active base of residents, Carrboro desires to implement community initiatives to preserve and enhance its natural systems as demonstrated by the recent green neighborhoods initiative.

This chapter reviews regional climate trends and delves into issues of climate resilience, preservation and restoration of ecosystems, and their intersection with social equity. Equity must be at the forefront of the planning process to ensure that climate change, natural preservation, and proposed solutions do not disproportionately harm Black or other people of color, refugees, disparate gender identities, or low-income communities. This chapter underscores the importance of a comprehensive plan that protects and restores the quality of life for each Carrboro resident.

2. OVERVIEW AND DATA TRENDS

Carrboro is situated within beautiful natural areas and is taking ambitious efforts towards mitigating climate change to protect and enhance its ecosystem and its people.

A. CLIMATE TRENDS AND IMPACTS

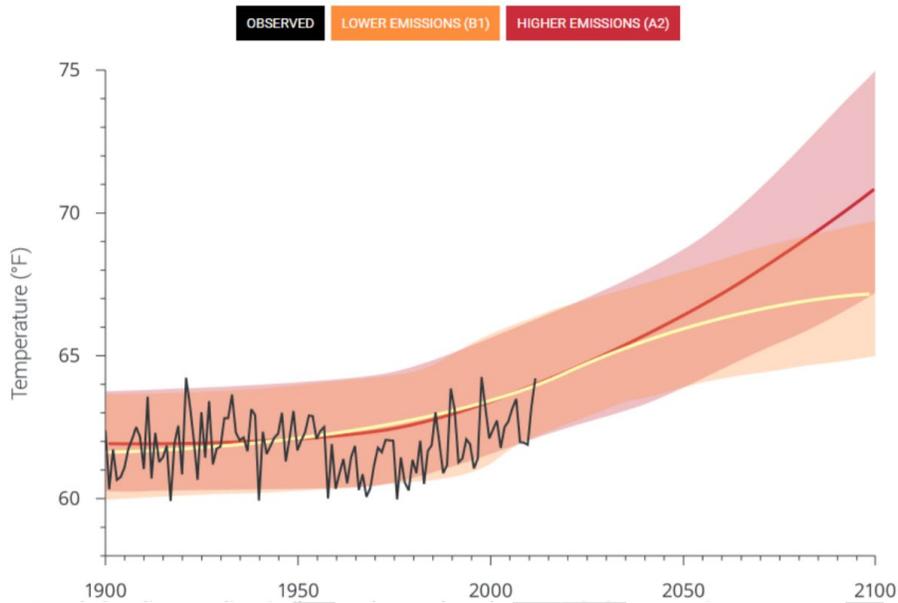
Around the country, communities are facing climate impacts. According to the National Climate Assessment by the U.S. Global Change Research Program, higher temperatures and heavy downpours have been increasing nationally, especially over the last three to five decades.ⁱⁱⁱ Coastal flooding, due to sea level rise, is putting the very existence of some communities at risk. Powerful hurricanes fueled by warming oceans can destroy neighborhoods. Severe droughts are threatening water supplies. Longer, dryer summers are leading to deadly and destructive wildfires. Experts warn of other coming threats from climate change, such as tropical diseases and food system disruptions. Ecosystems are being threatened too. Species around the world are stressed by a changing climate that threatens their habitats, their food chains, and their natural rhythms. This change can be noticed at home when we see trees blooming earlier and earlier each year.

North Carolina-based researchers have confirmed similar trends for the Piedmont region of North Carolina, where the Town of Carrboro is located.^{iv} Climate change impacts in the Carrboro region are likely to be significant over the next century. Extreme heat, flooding, and droughts are among the most important climate risks for the region. Local ecosystems may also be negatively impacted, including the loss of native animal and plant species.^v

TEMPERATURE TRENDS

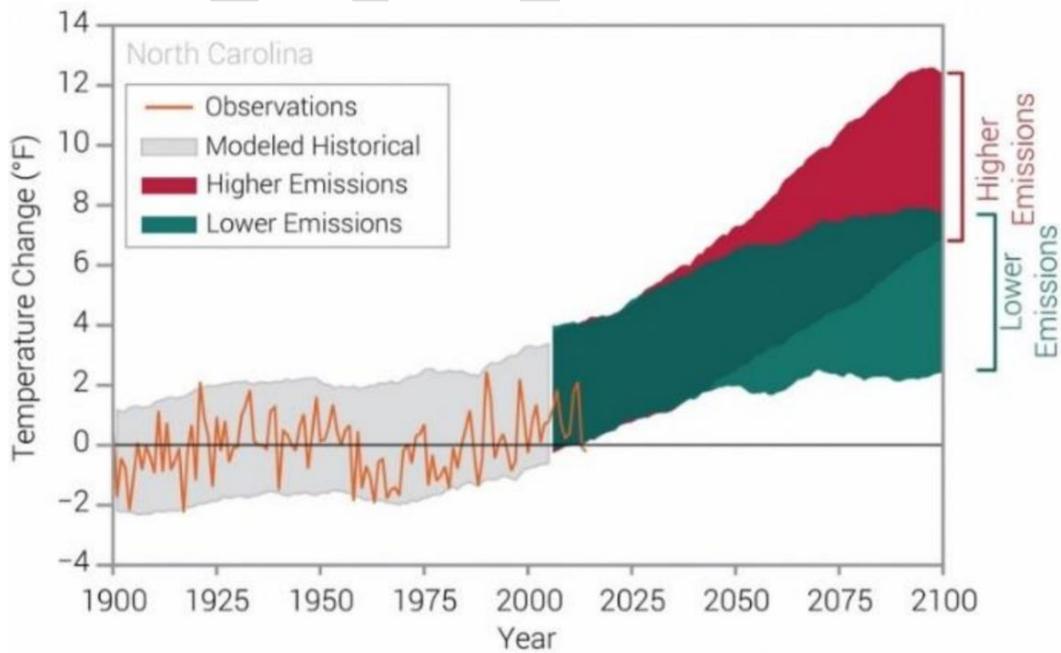
Climate modeling indicates that temperature impacts in the Piedmont region will worsen due to climate change. By the end of the century, the average temperature is projected to increase by 2°–6°F under the lower impact scenario, and by 6°–10°F under the higher impact scenario. Climate models project a substantial increase in the number of very hot days and very warm nights by mid-to-late century under both scenarios. By the end of the century, the number of very hot days is projected to increase between 9 to 99 days depending on the scenario. The number of very warm nights is projected to increase between 7 to 79 days depending on the scenario. It is likely that the number of cold days and cold nights will eventually decrease. Consequently, this indicates an increase in energy needed for cooling residences and buildings.

Figure 1: Southeast Temperature: Observed & Projected^{vi}



(Carter et al., 2014)

Figure 2: Temperature Change: Observed & Projected^{vii}



(Frankson et al., 2017)

CLIMATE IMPACT: EXTREME HEAT AND IMPAIRED AIR QUALITY

Urbanized areas are more prone to heat waves because of the urban heat island effect. Cities can be more than 5 degrees warmer than surrounding rural areas, and as much as 22 degrees warmer on still nights.^{viii} Urban heat island results from a loss of vegetation, removing shade and natural cooling, and an increase in heat-absorbing building materials, such as asphalt parking lots and building rooftops.

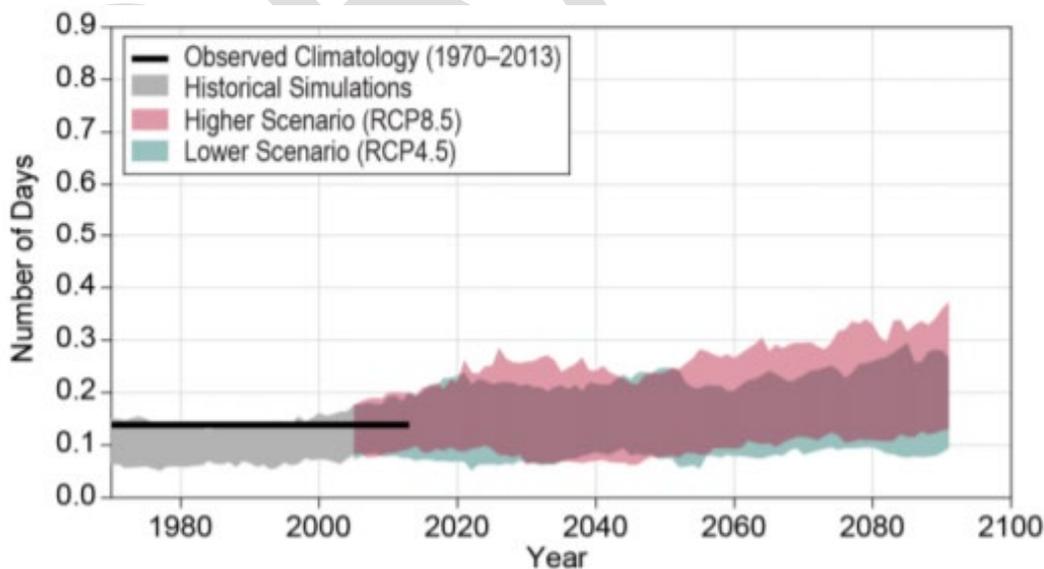
From 2000 to 2009, extreme heat was the leading cause of weather-related deaths in the U.S.^{ix} Extreme heat degrades air quality.^x Heat also interacts with mental health conditions: suicide rates rise with heat waves; some medications interfere with body temperature regulation; and dementia is a risk factor for heat-related death making older populations especially vulnerable.^{xi}

Extreme heat also has economic and follow-on climate impacts. Extreme heat triggers greater use of air conditioning, which raises energy bills for households. In turn, the demand for energy increases the amount of GHGs and other pollution released by power plants,^{xii} which contributes to climate change.

PRECIPITATION TRENDS

Climate modeling indicates that precipitation impacts will also worsen due to climate change. It is likely that severe thunderstorms will increase in frequency. By the end of the century, the annual number of days with extreme precipitation (3 inches or more) is projected to increase by up to 115% under the lower scenario, and 200% under the higher scenario. Conversely, future droughts are projected to be warmer than historical events, with more severe impacts on rainfed agriculture and natural vegetation.^{xiii}

Figure 3: Observed and Projected Extreme Precipitation Events: Piedmont Region of NC (1970-2100)
Annual Days with Precipitation \geq 3 Inches^{xiv}



(Kunkel et al., 2020)

CLIMATE IMPACT: FLOODING AND IMPAIRED WATER QUALITY

Certain areas within Carrboro are vulnerable to both riverine and urban flooding. Urban flooding occurs outside of FEMA-designated floodplains and is defined as the inundation of property or streets by stormwater runoff. It can include impacts ranging from water entering living spaces or seeping through foundation walls, to erosion, to undesirable ponding of water. In Carrboro, flooding can generally be attributed to the following factors.^{xv, xvi}

- Climate
- Geology
- Land Use and Development
- Stormwater Infrastructure

Flooding is a consequence of changes in precipitation patterns, characterized by more high-intensity storms due to climate change, as discussed in the previous section. In addition, soils in some areas have limited infiltration capacity, due both to local geology and historical land use, resulting in loss of topsoil and compaction.

Flooding is exacerbated by historical and current patterns of land development. Today, Carrboro's land use and development patterns include the subdivision of land and location of some buildings in lower lying, flood-prone areas; buildings with living and accessory space (e.g., split-levels and basements) constructed "below grade" (i.e., underground) or "at grade" (i.e., at ground level); land conversion to impervious and less pervious surfaces; and development in many areas that preceded federal, state, and local regulation, supporting analyses, and standards. Impervious surfaces prevent the natural processes of stormwater management. Consequently, rain becomes stormwater runoff and contributes to local flooding and ecosystem issues.

The health and economic impacts of flooding are significant. In a survey of Illinois flood victims, 84% reported stress; 13% reported ill health; 41% lost the use of part of their property; 63% lost valuables; and 74% lost work hours in order to handle repairs to their home.^{xvii} Flooding, especially when coupled with warmer temperatures, can create indoor air quality problems, such as mold, and result in respiratory problems. One national study estimated that 21% of asthma cases are related to building dampness.^{xviii} Warmer temperatures and changes in rainfall patterns may also increase the risk of contracting diseases carried by pests^{xix} and is linked to asthma caused by a longer pollen season.

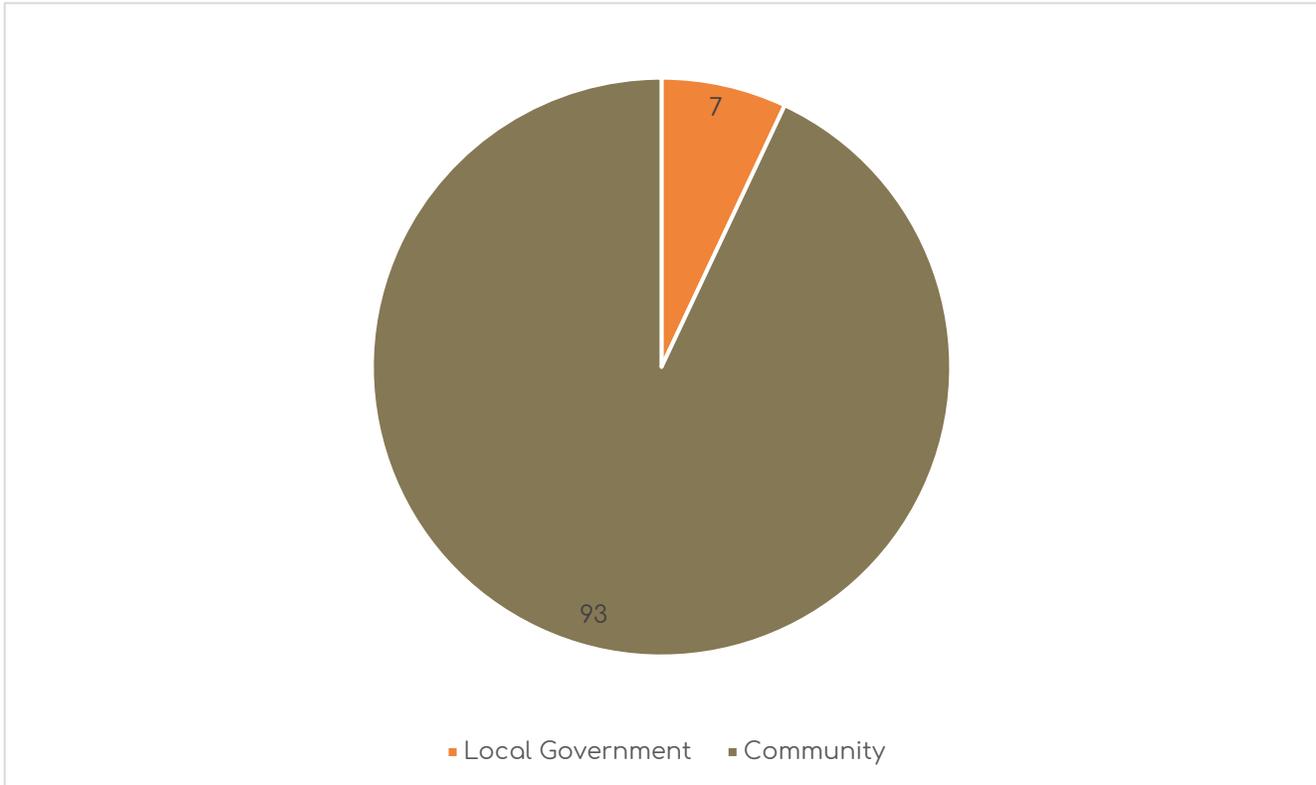
GREENHOUSE GASES

Climate change impacts are mainly driven by greenhouse gas emissions (GHGs). GHGs enter the atmosphere and trap heat absorbed by the earth, thus warming Earth and affecting climate systems. The 2017 Community Climate Action Plan (CCAP) recommended the Town adopt the goal of a 50% reduction per capita GHG emissions by 2025. In 2019, the Environmental Advisory Board recommended changing the CCAP and the 2014 Energy and Climate Protection Plan (ECP) goals to an 80% community reduction of 2010 GHG levels by 2030.

The Town has completed a baseline Greenhouse Gas Inventory and updated it regularly since 2012.^{xx} As of March 2019, the Town has achieved a reduction of approximately 14%.^{xxi} Carrboro has pursued strategies such as performing energy audits, installing higher efficiency ballasts and bulbs,

installing programmable thermostats, supporting a community solar project at the Town Commons, contributing to NC Green Power for renewable energy, converting street lamps to LED lights, the Green Neighborhoods Initiative, reducing municipal fleet emissions,^{xxii} and energy efficiency retrofits for municipal and residential buildings.^{xxiii}

Figure 4: Comparison of Community vs Local Government GHG Emissions in 2012 ^{xx}



(Agudelo-Frankel et al., 2015)

B. ECOSYSTEMS

Carrboro's residents strongly value ecosystems as a part of Carrboro's sense of place. Interviews with stakeholders in 2020 cite the importance of nearby lakes, creeks, and forests, for the purposes of recreation, conservation, and businesses. In 2000, the town created a 20-year vision, part of which emphasized strong interest in environmental protection. Two decades later, the recently adopted Climate Action Plan for Carrboro continues this effort by focusing on alternative energy systems and

development patterns to mitigate climate change, keep ecosystems intact to maintain biodiversity, and protect natural resources.^{xxiv}

The Town of Carrboro previously partnered with the Center for Neighborhood Technology (CNT) to conduct [RainReady Carrboro](#), a study in Upper Toms Creek for constraints and opportunities regarding "green infrastructure" on residential properties. According to a recent pilot study of Tom's Creek in Carrboro, the increase in impervious surfaces, such as roads and rooftops, and compacted soils often found in lawns and other portions of suburban landscapes, have increased risk of stormwater runoff, flooding, interfered with ecosystems, and created an artificial barrier for wildlife.^{xxv}

CLIMATE CHANGE'S THREAT TO ECOSYSTEMS

The damage of climate change to ecosystems cannot be overstated. In the North Carolina Climate Science Report, the threat climate change poses to ecosystems, particularly forests, is significant because over half of North Carolina consists of forests.^{xxvi} Drastic weather events, such as heatwaves and droughts, threaten already fragile ecosystems across North Carolina, including Carrboro.

DROUGHTS AND HIGH TEMPERATURES

Carrboro is no stranger to droughts, and the threat of severe droughts continues due to climate change. As climate change increases the severity of droughts, ecosystems are placed in greater danger. The North Carolina Climate Science Report indicates the increased likelihood of severe high temperatures and droughts. This increase will raise the risk of more frequent forest wildfires than usual, threatening wildlife and the ecosystem.^{xxvii} Another key threat from abnormally high temperatures and droughts is the "savannahfication" of forests, or their transformation into open (less dense) woodlands, in southeastern United States.^{xxviii}

PATTERNS OF DEVELOPMENT

Over the years as Carrboro has continued to grow and develop, the landscape has become more and more impervious. However, the Town of Carrboro requires through their land use ordinance that 40% of open space be preserved in all new developments (since 1995). A large portion of development in Carrboro, particularly near downtown, was completed prior to the implementation of floodplain management regulations.^{xxix} Land management practices resulted in looking at a loss of trees, conventional lawn care, increasing impervious surfaces such as paved roads, and historical development in flood-prone areas threaten the biodiversity and health of Carrboro's ecosystems.

Trees are important for managing climate impacts, they reduce stormwater run-off by reducing erosion, and through stormwater infiltration and evapotranspiration. Between 2002 and 2010, Carrboro lost approximately 4% of its tree canopy.^{xxx} This decline of tree canopy threatens biodiversity, air quality, and heat and stormwater management. Birds and pollinating insects that rely on trees can suffer a decline in population, with follow-on environmental and economic repercussions. Trees reduce heat in urban areas through shading and evapotranspiration, and improve air quality by absorbing carbon dioxide and other gases/pollutants. In 2014, the town approved updated tree canopy coverage standards, which requires that residential land uses include at least 40% canopy coverage.^{xxxi}

The conventional household lawn can contribute to the endangerment of ecosystems' biodiversity. Residents may, without realizing, plant invasive species which can pose a threat to native plant species, with follow-on effects to the ecosystem and local economy. For example, native plant species are often where native insects lay their eggs, and these insects are a primary food source for 96% of native birds in North America. By increasing competition for soil nutrients, invasive plant species endanger native plant species, threatening not only native insects populations, but ultimately, also native bird populations.^{xxxii} Economically, the loss of these native insects will cost more than \$9 billion in lost pollination.^{xxxiii} The average lawn also lacks the ability to effectively absorb rain during storms. The common turfgrasses used for lawns, like Bermuda, Fescue, Zoysia, have a shallow root system, which makes them much less efficient at absorbing rain and can contribute to stormwater run-off and urban flooding.^{xxxiv} Furthermore, lawn care fertilizers and other chemicals can create polluted run-off, damaging local waterbodies.^{xxxv} By contrast, native species are better adapted to the climate, more effectively absorb stormwater, and require less watering.

Carrboro's Community Climate Action Plan cites development pattern impacts that can be modified to reduce ecosystem damage. Development along creeks and in floodplains has also contributed to increased stormwater runoff. Increased stormwater runoff leads to flooding, erosion, and nonpoint source pollution.^{xxxvi} Planning for and installing riparian buffers, vegetated areas along creeks, can mitigate these negative impacts.

Carrboro's land use ordinance includes open space requirements. Stated goals of these requirements include preservation of open vistas, environmentally sensitive lands, habitat for wildlife, historically or archaeologically important areas, and passive recreation.^{xxxvii} Generally, when intentionally planned to support local ecosystems, open space requirements can provide economic and health benefits, support local water infrastructure, and create opportunities for community development.^{xxxviii} With careful planning and consideration of social equity impacts, open space can achieve these goals, while furthering equity goals and avoiding disproportionate harm or costs to marginalized populations.

RETHINKING DEVELOPMENT

Carrboro's strong interest in protecting ecosystems is reflected in the capital improvements and budget of Carrboro, which cites climate protection strategies as one of the six strategic goals for a ten-year Capital Improvement Plan (CIP). Interviews with residents indicate an interest in promoting infrastructure that does not threaten Carrboro's ecosystem. Green infrastructure uses natural strategies, such as plants and soil mixes, to provide infrastructure services such as stormwater infiltration and conveyance^{xxxix}. A recent study for a flood-prone area of Carrboro recommended small-scale distributed green infrastructure, such as home gardens, as a strategy for natural stormwater management.

Figure 5: Green Infrastructure and “Co-Benefits”^{x1}

Benefit	Reduces Stormwater Runoff				Increases Available Water Supply	Increases Groundwater Recharge	Reduces Salt Use	Reduces Energy Use	Improves Air Quality	Reduces Atmospheric CO ₂	Reduces Urban Heat Island	Improves Community Livability					Improves Habitat	Cultivates Public Education Opportunities
	Reduces Water Treatment Needs	Improves Water Quality	Reduces Grey Infrastructure Needs	Reduces Flooding								Improves Aesthetics	Increases Recreational Opportunity	Reduces Noise Pollution	Improves Community Cohesion	Urban Agriculture		
Practice																		
Green Roofs	●	●	●	●	○	○	○	●	●	●	●	●	○	●	○	○	●	●
Tree Planting	●	●	●	●	○	○	○	●	●	●	●	●	●	●	●	○	●	●
Bioretention & Infiltration	●	●	●	●	○	○	○	○	●	●	●	●	●	○	○	○	●	●
Permeable Pavement	●	●	●	●	○	○	○	○	●	●	●	○	○	○	○	○	○	○
Water Harvesting	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○

● Yes ○ Maybe ○ No



<https://www.cnt.org/publications/green-values-strategy-guide-linking-green-infrastructure-benefits-to-community>

(Center for Neighborhood Technology, 2020)

The Community Climate Action Plan recommends modifications to landscaping methods to support ecosystems and their biodiversity. The plan recommends the creation of a community initiative to promote action and education on the importance of expanding and preserving Carrboro's tree canopy. The plan also recommends promoting native species through an information campaign for residents, and removing invasive species in public spaces.^{xii} Carrboro has committed to improving urban forestry and native pollinator habitats, and its actions have led to recognition as a Tree City by Arbor Day Foundation and as a Bee City by Xerces Society, both most recently in 2019.

Figure 6: Bolin Forest and Quarterpath Trace Subdivision Urban Forest Stewardship Efforts (2015)^{xlii}



(J. Wesley Aycock IV & James M. Clark, 2015)

C. SOCIAL EQUITY

Environmental impacts may not occur equally across a community. Localized conditions may mean that one neighborhood experiences more flooding, perhaps because it is at a lower elevation or has more impervious area. Some neighborhoods may have less-well maintained or undersized sewer pipes or lack vegetation that can infiltrate runoff. In communities where neighborhoods are segregated by race, class, or other population characteristics, flooding can be an environmental justice issue. Some neighborhoods of color experience “municipal underbonding” — a condition in which municipal limits do not include a location that would otherwise be considered within the boundary due to the historical context. The Roger Eubanks Community, where a landfill was sited, advocated for decades to be provided with sewage infrastructure.^{xliii}

Some populations have been shown to be more susceptible to heat-related illness and death, including older individuals, children, homeless individuals, and outdoor workers.^{xliiv} Studies also show differences in heat impacts according to race, ethnicity, and socioeconomic status. Nationally, non-citizens are more likely to die of heat exposure than citizens.^{xliiv} Several factors may contribute to higher heat-related deaths and illnesses, including quality of housing, social, cultural, or linguistic isolation, and access to cooling strategies, such as operable windows, cool public spaces, and air conditioning.^{xlivi}

The historical federal housing policy of redlining was a practice in which Home Owners' Loan Corporation evaluated city blocks for their mortgage risks, with several factors including racial make-up of the neighborhood impacting risk level.^{xliivii} These maps were used in cities across the U.S. to deny home loans or insurance to neighborhoods based on racial characteristics. Other communities, that did not have specific redlining maps, often practiced racial restrictive covenants, in which the deed included a clause that prevented certain races from ever owning the property.^{xliiviii} While evidence has not been found of specific redlining maps for Carrboro, patterns of housing discrimination impacted where Blacks could rent or buy homes. The patterns of segregation persist in environmental and economic conditions that can still be seen today, in communities across the nation. For example, a study of 108 cities consistently demonstrated that formerly redlined areas were warmer than non-redlined neighboring areas by up to 7 degrees Celsius.^{xliix}

3. KEY ISSUES AND OPPORTUNITIES

Various opportunities and impediments were identified during the analysis of existing plans and commentary from Town staff and committees. The findings are listed below.

A. CLIMATE RESILIENCE

Carrboro is a largely built-out community seeking to become resilient to uncertain social, financial, and ecosystem impacts of climate change. Carrboro's necessary response is two-fold: 1. Preparing for the inevitable impacts of climate change with resiliency measures and 2. Reducing GHG emissions.

Preparation has included newer developments built to updated code requirements, but older areas are not being retrofitted at the same pace. The higher cost of new development and infrastructure must be balanced against the benefits of enhanced resilience.

The town's land use regulatory authority is a key tool to unlock opportunities. The Land Use Ordinance can be refined to direct development, transportation, and infrastructure, in such a way to improve the community's climate resiliency.

The financial cost to fully implement the 2017 Climate Action Plan over the next ten years is high. The town only has direct control over municipal emissions. Plan implementation should not unduly burden residents with property taxes or fees, but residents should actively participate in reducing their own GHG footprint. Carrboro's climate action strategy depends heavily on broad community participation. For example, the town does not have authority over vehicles, all roadways or transit, limiting the ability to reduce GHGs from vehicles. Many residents have taken on responsibility by expressing concern about climate change, desiring to learn about nature-based small solutions, and serving as valuable volunteers.

B. PRESERVATION OF NATURAL AREAS

Preserving Carrboro's natural ecosystems was a pronounced interest across many of the conducted interviews. The threat to ecosystems, particularly forests and creeks, is important to the community because they recognize the forest and trees of Carrboro as a part of the town's identity. Many are open to taking action that would preserve and protect these natural areas and their ecosystems from further damage.

Interviewees shared a positive attitude towards consideration of the environment in future infrastructure decisions. The Carrboro's Community Climate Action Plan suggests increasing the tree canopy through a community initiative and would likely be met with support due to community interest in preserving Carrboro's trees and ecosystems. Furthermore, initiatives to educate the community on the negative effects of lawns on ecosystems and how to plant native species are small scale initiatives that the community would be open to considering and participating in based on their conservation driven responses. Additionally, the town could benefit from a long-term forest replanting plan that accounts for climate change benefits.

Stakeholder interviews cite local ecosystems and the economic impact of Carrboro's natural areas as vital for Carrboro. Accessibility to natural areas, including the Carolina North Forest, nearby University Lake, creeks, and greenways, is a positive feature mentioned by many interviewees. These features are a beneficial asset both for recreational purposes and local ecosystems, as well as

attracting visitors to town. Carrboro can capitalize on these benefits by partnering with agencies and entities that own the natural areas to preserve them, foster responsible recreation in these areas, and manage nearby new development to protect the fragile ecosystems in these areas.

C. SOCIAL EQUITY

Carrboro is home to diverse residents, including historically Black community areas, Latinx, Burmese, and Korean populations, served by a variety of grassroots organizations and community institutions. Some areas and populations within Carrboro are disproportionately impacted by climate change. A more inclusive community conversation around climate resilience requires integration of affordable housing, environmental justice, and racial equity contexts.

Particular areas of flooding concern include older developments built without stormwater facilities and the Rocky Brook Mobile Home Park, a development at the confluence of two creeks. The Town has explored options for increasing affordability to underserved residents with the new stormwater utility fee, and strategies for balancing infrastructure needs against social equity and affordable housing priorities. By State statute, fees must be based on stormwater impact without socioeconomic consideration, but the plan may explore other innovative tools within local authority.

Other potential areas of social inequity include proximity to pollution sources, energy burden, access to healthy food, and neighborhood traffic calming and sidewalk improvements. The Town is currently partnering with the Government Alliance on Racial Equity (GARE) to examine its plans and programs and develop new strategies for equity.

DRAFT

4. SUMMARY GOALS AND STRATEGIES FROM EXISTING PLANS AND INITIATIVES

Carrboro remains committed to protecting its natural areas and implementing actions that increase the town's resilience to climate change. The following plans highlight recommendations that reflect their values, environment, and people. For a more descriptive context, please see the full documents.

A. FACILITATED SMALL AREA PLAN FOR CARRBORO'S NORTHERN STUDY AREA 1999 TOWN OF CARRBORO

Preservation of Natural Areas

- i. Goal 1: Patterns of growth which minimize negative impacts and maximize positive impacts on the community and the natural environment. Recommended measures included the following. Set standards for conservation lands in addition to wetlands and steep slopes, and by offering a range of densities with rise in relation to the percentage of land which is to be conserved. The contents of plans submitted for review should be required to provide greater detail about the natural and cultural features occurring on the proposed development site and – to a lesser extent – on any adjoining undeveloped properties.
- ii. Goal 3: Conservation of natural and environmentally sensitive areas, and the protection of environmental quality. Recommended measures include the following. Amend the streamway buffer ordinance to incorporate site-specific impacts on water quality. Create a Conservation Overlay District. Encourage the active participation of land trusts in conserving environmentally sensitive areas. Support statewide enabling legislation to allow the transfer of development rights.
- iii. Goal 6: Adequate provision of publicly accessible parks and recreation facilities. Recommended measures include the following. Require conservation land to inter-connect.
- iv. Goal 9: Continuation of the character and natural beauty of the Study Area. Recommended measures include the following. Recommended measures include the following. Adopt town-wide design measures to ensure that new development is harmonious with the attractive features of existing development. Farmland Preservation: Work with the County to encourage the preservation of active farmland, and to limit the conversion of farmland to developed uses outside the Transition Areas.

B. LITTLE CREEK WATERSHED 2003 ASSESSMENT

Preservation of Natural Areas

- i. Implement feasible and cost-effective stormwater retrofit projects to mitigate the hydrologic effects of existing development. Priority should be given to areas with the most density. Long-term retrofits should be considered during infrastructure improvements. Additionally, implement effective stormwater management for all new development to prevent further channel erosion and habitat degradation, for example infiltration practices and low impact development practices.
- ii. Develop a strategy to address toxic inputs such as source reduction and stormwater treatment methods. Additional methods may include stormwater and dry weather sampling strategies to target pollutant removal and installation of best management practices for stormwater volume control and velocities. Furthermore, organic loading must be addressed by identifying and eliminating illicit discharges, education of residents about fertilizer use and installation of features to remove excess nutrients.
- iii. Implement stream channel restoration activity in conjunction with stormwater retrofit best management practices to improve aquatic habitat. Additionally, the Town of Carrboro should consider rapid establishment of stabilizing vegetation in new construction.
- iv. Cooperate with OWASA and Town of Chapel Hill to improve riparian vegetation condition along sanitary sewer rights of ways and greenways. All partners should commit to limiting disturbance of riparian areas to the minimum extent necessary to maintain infrastructure.

C. MORGAN CREEK LOCAL WATERSHED 2004 PLAN

Preservation of Natural Areas

- i. Identify best management practices for retrofitting and current designs to address the negative impacts of stormwater runoff in conjunction with natural channel design and bioengineering methods to restore aquatic habitats. Some practices may include stormwater wetlands, detention ponds, and rain gardens.

D. BOLIN CREEK WATERSHED RESTORATION PLAN 2012 TOWN OF CARRBORO

Preservation of Natural Areas

- i. Implement selected strategies for watershed management and restoration (Appendix 5), including: Engineered stormwater control structures; Pollution prevention measures; Ecosystem function rehabilitation and restoration measures; Cleanup, remediation, and mitigation measures; Erosion control and soil protection or rehabilitation practices; and Infrastructure mitigation techniques.

- ii. Implement policy measures, including stormwater fee credit policies, incentive programs, and reverse auctions (Appendix 5).
- iii. Implement planning measures and techniques, including cluster development, site fingerprinting, low impact development/design, “new urbanism,” transit-oriented development, brownfields development, preservation of existing natural area, and greenspace or “greenscape” requirements (Appendix 5).
- iv. Implement targeted outreach methods and tools to address a variety of watershed management issues (Appendix 6). Select method or tool by identifying key audience groups positioned to creating positive change.

E. ENERGY AND CLIMATE PROTECTION PLAN

Climate Resilience

- i. Update town's Land Use Ordinance to include provisions for tree protection and open space to foster growth of urban forestry. Additionally, explore opportunities to recognize the many benefits of urban trees such as climate protection and energy benefits.

F. COMMUNITY CLIMATE ACTION PLAN 2017 TOWN OF CARRBORO

Climate Resilience

- i. Pursue watershed restoration actions to protect local streams from changing precipitation patterns due to climate change.

Preservation of Natural Areas

- i. Create a stormwater utility.
- ii. Study the extent to which the deer population and climate change affect natural ecosystems.
- iii. Study and implement a comprehensive organics collection and composting program.
- iv. Support tree preservation, protection, and conservation efforts, including the formation of a community-led tree coalition for the community forest.
- v. Pursue regulatory and non-regulatory approaches to discourage non-native and invasive plants and encourage native plant use.

Social Equity

- i. Support efforts to reduce utility cost to integrate climate action and social equity initiatives.

G. NPDES PHASE II: STORMWATER MANAGEMENT IN CARRBORO: COMPREHENSIVE STORMWATER MANAGEMENT PLAN 2018 TOWN OF CARRBORO

Preservation of Natural Areas

- i. Implement a variety of specific stormwater best management practices (BMPs) addressing regulatory requirements, public education and involvement, detecting and eliminating illicit discharges, controlling runoff, and preventing pollution from municipal operations.
- ii. Establish a program to identify and prioritize opportunities for retrofit projects that will improve water quality.
- iii. Continue to identify and pursue watershed restoration activities in Bolin Creek including ecosystem monitor, partner collaboration, targeted outreach to encourage citizens to adopt BMPs, and completion of a new significant restoration project.
- iv. Continue to fund retrofits and other watershed restoration measures through the stormwater utility and enterprise fund.

H. RAINREADY CARRBORO PILOT STUDY 2019 TOWN OF CARRBORO

Climate Resilience

- i. Implement a targeted and multifaceted communications plan to address the varying concerns of residents experiencing different types of flooding. Identify local resident "champions" who can partner with the Town to support the development of the program and serve as a liaison to residents. Cultivate resident-led groups that can participate in program outreach and consensus building efforts.
- ii. Offer a technical assistance and cost-share grant program to residents seeking to install green infrastructure as a solution for localized flooding. Partner with local organizations who can launch and deliver aspects of the program. Consider coordinating program delivery across Town departments, to support program administration tasks. Identify funding and financing mechanisms to support the long-term operation of the program.

Social Equity

- i. Identify program design options that provide financial support to enable lower income residents to participate in a technical assistance and cost-share grant program to install green infrastructure.
- ii. Conduct targeted outreach to owners of rental housing and consider program design options to encourage participation in the technical assistance and cost-share green infrastructure program.

I. ENO-HAW HAZARD MITIGATION 2020 DRAFT PLAN

Climate Resilience

- i. Look for opportunities to mitigate repetitive loss of structures. Opportunities should include funding mechanisms to retrofit critical and municipal facilities to improve resilience against climate concerns and energy backup generators for new municipal critical facilities.
- ii. Establish comprehensive framework for plans, policies, and regulations pertaining to land use and its relation to natural hazard mitigation. Relatedly, protect and conserve land with environmental and natural hazard mitigation such as open space.

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