



Town of Carrboro

Town Hall
301 W. Main St.
Carrboro, NC 27510

Meeting Agenda Town Council



Tuesday, May 4, 2021

7:00 PM

Remote Meeting - View Livestream or Cable TV

18

7:00-7:05

A. ROLL CALL

7:05-7:15

B. POETRY READING, RESOLUTIONS, PROCLAMATIONS, AND ACKNOWLEDGEMENTS

1. [21-147](#) Proclamation: Municipal Clerks Week
2. [21-148](#) Proclamation: Mental Health Awareness Week
3. [21-149](#) Proclamation: Bike Month

7:15-7:20

C. ANNOUNCEMENT OF UPCOMING MEETINGS

7:20-7:30

D. PUBLIC COMMENT

Comments are limited to three minutes per speaker.

7:30-7:40

E. CONSENT AGENDA

1. [21-146](#) Approval of Minutes from the April 6, 2021 and April 20, 2021 Meetings
2. [21-141](#) American Rescue Plan Act Project Ordinance
PURPOSE: To recognize and appropriate funding made available to the Town by the American Rescue Plan Act
Attachments: [American Rescue Plan Act Project Ordinance](#)

3. [21-145](#) Approval of the 2021-2022 HOME Investment Partnerships Program Annual Plan.

PURPOSE: The purpose of this item is for the Town Council to consider approving the HOME Investment Partnerships Program's Annual Plan activities for FY 2021-2022.

Attachments: [Attachment A- HOME FY22 Resolution](#)
[Attachment B Orange County NC FY22 Action Plan Summary](#)

4. [21-151](#) Authorization for Mayor Lavelle to Submit a Letter to NC Department of Environmental Quality in Regards to Opposition for the Title V Permit Renewal Application for the UNC Chapel Hill Coal Plant

Attachments: [Attachment A: UNC Coal Plant Permit Letter for Council](#)

F. OTHER MATTERS

7:40-8:10

1. [21-142](#) Orange County Recovery and Transformation Plan Update

PURPOSE: To discuss and provide feedback on the Orange County Recovery and Transformation Plan.

Attachments: [Attachment I: Recovery and Transformation Plan Update - Presentation](#)

8:10-8:50

2. [21-143](#) Discussion of Manufactured Home Communities in Carrboro

PURPOSE: The purpose of this item is for the Town Council to discuss manufactured home communities in Carrboro and consider the possibility of creating a regionally unified manufactured home strategy.

Attachments: [ATTACHMENT A Orange County Mobile Home Park Survey](#)
[ATTACHMENT B Carrboro Manufactured Home Park Information](#)
[ATTACHMENT C Carrboro Manufactured Home Park locations](#)
[ATTACHMENT D Chapel Hill Staff Presentation Mobile Home Park Development Displacement 1.20](#)
[ATTACHMENT E Chapel Hill Strategy Report](#)
[ATTACHMENT F Orange County Risk Mitigation and Housing Displacement Fund Policies 5.20](#)
[ATTACHMENT G Orange County Proposed Rapid Response Protocol](#)
[ATTACHMENT H ROC Model - Chapel Hill Summary](#)

8:50-9:40

3. [21-144](#) Facilities Rehabilitation - Town Hall & Century Center Concept Plans

PURPOSE: The purpose of this agenda item is for the Public Works Department and consulting architect, Jim Spencer Architects (JSA), to present concept plans for Town Hall and Century Center and receive feedback from the Council.

Attachments: [Attachment A - Town of Carrboro Renewed Facilities Project Report](#)

9:40-10:00

4. [21-150](#) Update on Bike Share and Consideration of Town Code Amendments Relating to Bike Share, E-Bikes, E-Scooters and other Micromobility Devices, and Bikeways

PURPOSE: The purpose of this agenda item is to provide the Town Council with an update on a proposed bike share pilot and to consider amendments to the Town Code that would add new definitions and establish standards relating to bikeways, shared use systems, e-bikes and other micromobility devices.

Attachments: [Attachment A - Draft Town Code Amendments for Shared Active Transportation Systems 4-29-2021](#)
[Attachment B - UNC Gotcha Service Area Map](#)
[Attachment C - PBIC_Brief_MicromobilityTypology](#)

G. MATTERS BY COUNCIL MEMBERS



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Agenda Item Abstract

File Number:21-147

Agenda Date: 5/4/2021

File Type:Agendas

In Control: Board of Aldermen

Version: 1

Proclamation: Municipal Clerks Week



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Agenda Item Abstract

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Proclamation: Mental Health Awareness Week



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Version: 1

Proclamation: Bike Month



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Approval of Minutes from the April 6, 2021 and April 20, 2021 Meetings



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Agenda Item Abstract

File Number:21-141

Agenda Date: 5/4/2021

File Type:Agendas

In Control: Board of Aldermen

Version: 1

TITLE:

American Rescue Plan Act Project Ordinance

PURPOSE: To recognize and appropriate funding made available to the Town by the American Rescue Plan Act

DEPARTMENT: Town Manager; Finance

CONTACT INFORMATION: David Andrews; Arche McAdoo

INFORMATION: The American Rescue Plan Act was signed into law on March 11, 2021 and provides funding to state and local governments to assist with pandemic rescue and recovery efforts. These funds may be used for a range of activities including: 1) revenue replacement for the provision of government services to the extent the reduction in revenue is due the COVID-19 public health emergency; 2) premium pay to essential employees; 3) assistance to small businesses, nonprofits, household and hard-hit industries, and economic recovery; and 4) investments in water, sewer and broadband infrastructure.

For “non-entitlement unit of local government”, of which the Town is, the United States Treasury will allocate and pay funds to state governments and the state will distribute funds to non-entitlement units of local government. It is estimated that the Town will receive \$6.2 million under the Act. Fifty percent of these funds are expected to be distributed to the Town in May 2021 with the other fifty percent distributed in 2022. All funds must be expended by the end of calendar year 2024.

The US Treasury Secretary is expected to issuance further clarification and guidance on the use of funding under the Act. Such issuance(s) will be consistent with the range of activities stated in the Act. In the meantime, the Town needs to put in place the proper protocols for the appropriation and accounting for this funding. The attached special revenue project ordinance appropriates the use of these funds for the broad activities outlined in the Act and establishes a special revenue fund to account for these funds. Should the amount of funds to be received by the Town or program activities change, this project ordinance may be amended by the Council.

FISCAL & STAFF IMPACT: The estimated revenues to be received by the Town under the American Rescue Plan Act is \$6.2 million. These are one-time funds and there is no guarantee of such future funding.

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RECOMMENDATION: It is recommended that the Town Council adopt the attached American Rescue Plan Act Grant Funding Project Ordinance.

ATTACHMENT A

AMERICAN RESCUE PLAN ACT GRANT FUNDING PROJECT ORDINANCE

WHEREAS, on March 10, 2020, Governor Cooper, by Executive Order 116, declared a state of emergency to prevent the spread of COVID-19; and,

WHEREAS, on March 27, 2020, Executive Order 121 imposed a statewide Stay at Home Order, directing people to stay at home except to visit essential businesses, exercise outdoors or help family members; banned gatherings of more than 10 people; and directed everyone to physically stay at least 6 feet apart from others; and,

WHEREAS, the pandemic has dramatically impacted the local economy, including local government revenues; and,

WHEREAS, the American Rescue Plan Act (ARPA) signed into law on March 11, 2021, provides funding to state and local governments to assist with pandemic rescue and recovery efforts; and,

WHEREAS, ARPA funds may be used for 1) revenue replacement for the provision of government services to the extent the reduction in revenue is due the COVID-19 public health emergency; 2) premium pay to essential employees; 3) assistance to small businesses, nonprofits, household and hard-hit industries, and economic recovery; and 4) investments in water, sewer and broadband infrastructure; and,

WHEREAS, the Town of Carrboro is estimated to receive an estimated \$6.2 million of ARPA funding; and,

WHEREAS, all funding must be spent by the end of calendar year 2024; and,

WHEREAS, the Town is a “non-entitlement unit of local government” Treasury will allocate and pay funds to state governments and the state will distribute funds to non-entitlement units of local government; and,

WHEREAS, the Town Council deems it to be in the best interest of the Town and the additional revenue from the ARPA will significantly aid in the Town’s pandemic rescue and recovery efforts.

NOW THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF CARRBORO THAT:

1. The Town accepts funding from the American Rescue Plan Act (ARPA) in the amount of \$6.2 million or any other dollar amount as may be granted to the Town under the ARPA.
2. ARPA funds are to be used for the following activities:

- a. revenue replacement for the provision of government services to the extent the reduction in revenue is due the COVID-19 public health emergency;
 - b. premium pay to essential employees;
 - c. assistance to small businesses, household and hard-hit industries, and economic recovery; and
 - d. investments in water, sewer and broadband infrastructure;
3. The Town Council shall review and approve specific programs and/or activities developed to carry out the activities identified in Section 2 above.
4. ARPA funds will be used in compliance with provisions of the ARPA and other directives issued by the US Treasury Department or other federal agencies.
5. The Town Manager is authorized to enter into any grant agreement or other agreement, certifications, and conditions necessary to secure ARPA funds.
6. A Special Revenue Fund entitled “American Rescue Plan Act” is to be established for the purpose of accounting for these funds,
7. Current fiscal year 2020-21 Special Revenue Fund budget shall be amended to include ARPA revenues in the amount of \$6.2 million and appropriated for the activities in Section 2 above.
8. Within five (5) days after adoption of this ordinance, the Town Clerk shall file a copy of this grant funding project ordinance with the Finance Director.
9. This Ordinance is effective upon adoption by the Carrboro Town Council.



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Agenda Item Abstract

File Number:21-145

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TITLE:

Approval of the 2021-2022 HOME Investment Partnerships Program Annual Plan.

PURPOSE: The purpose of this item is for the Town Council to consider approving the HOME Investment Partnerships Program's Annual Plan activities for FY 2021-2022.

DEPARTMENT: Housing and Community Services

CONTACT INFORMATION: Rebecca Buzzard, Housing and Community Services Director, 919-918-7438, rbuzzard@townofcarrboro.org <<mailto:rbuzzard@townofcarrboro.org>>

INFORMATION: Every year, state and local governments ("Participating Jurisdictions") that receive HOME Investment Partnerships Program ("HOME") funds from the U.S. Department of Housing and Urban Development ("HUD") are required to complete an [Annual Action Plan](https://orangecountync.gov/DocumentCenter/View/15308/Orange-County-FY-2021-2022-HOME-Annual-Action-Plan-DRAFT-32921?bidId=>) <<https://orangecountync.gov/DocumentCenter/View/15308/Orange-County-FY-2021-2022-HOME-Annual-Action-Plan-DRAFT-32921?bidId=>>> that lays out how they will allocate HUD funds for the upcoming program year in order to address the goals and priorities in the [Consolidated Plan](https://orangecountync.gov/DocumentCenter/View/10806/Orange-County-NC-Consolidated-Plan-FINAL?bidId=>) <<https://orangecountync.gov/DocumentCenter/View/10806/Orange-County-NC-Consolidated-Plan-FINAL?bidId=>>>.

Orange County is a special type of Participating Jurisdiction, called a Consortium, consisting of Orange County and the Towns of Carrboro, Chapel Hill, and Hillsborough. Orange County serves as the lead entity for the Orange County HOME Consortium. To enhance collaboration on affordable housing among the jurisdictions in the County, the Orange County Local Government Affordable Housing Collaborative (the Collaborative) was formed in 2017. The Collaborative includes elected officials and staff from the each of the four participating jurisdictions and serves as the HOME Program application review team, charged with developing an annual HOME Program plan. The Annual Action Plan was completed based on the HOME award recommendations made by the Local Government Affordable Housing Collaborative, detailed in the section below. All participating jurisdictions must approve and authorize submission of the plan prior to submittal to the U.S. Department of Housing and Urban Development (HUD).

For FY 2021-2022, Orange County anticipates receiving the following HOME resources:

FY 2021-2022 HOME Funds	\$ 378,743
FY 2020-2021 HOME Funds (returned by CASA)	\$ 200,000
HOME Program Income	\$ 13,306

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Local Match	\$ 85,218
Total	\$ 677,267

The above amounts are estimates and may be adjusted according to the actual allocation received from HUD. Each jurisdiction's contribution of the local match is based on its population. The Town's contribution to the matching funds is 15% of the total match, or \$12,488 (estimated).

The Collaborative reviewed the received applications for the FY 2021-2022 HOME Program on March 25, 2021 and made the following funding recommendations for consideration by each of the jurisdictions' elected bodies:

Habitat for Humanity - Homebuyer Assistance	\$ 434,393
Pee Wee Homes - Rental Construction	\$ 100,000
EmPOWERment - Rental Acquisition	\$ 105,000
Administration (10% of HOME Funds, per statute)	\$ 37,874
Total	\$ 677,267

The above amounts may still be adjusted according to the actual allocation received from HUD. A summary of each of the above projects can be found in Attachment B.

FISCAL & STAFF IMPACT: The Town of Carrboro's portion of the required HOME matching funds is estimated to be \$12,488, 15% of the total local match, which will be budgeted from the Affordable Housing Special Revenue Fund.

RECOMMENDATION: Staff recommends that the Council (1) approve the plan developed by the Collaborative for use of \$677,267 (estimated funding) of FY 2021-2022 Orange County HOME Program funds; and (2) authorize this plan to be incorporated into the FY 2021-2022 Annual Action Plan to the 2020-2025 Consolidated Plan for Orange County for submission to the U.S. Department of Housing and Urban Development.

**RESOLUTION APPROVING THE FY 2021-2022 HOME INVESTMENT
PARTNERSHIP PROGRAM ANNUAL PLAN**

WHEREAS, the Town of Carrboro is a member of the Orange County Local Government Affordable Housing Collaborative (the Collaborative); and

WHEREAS, the Collaborative reviewed applications for HOME funding on March 25, 2021 and

WHEREAS, the Collaborative agreed by consensus on the following final funding recommendations:

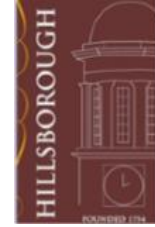
Habitat for Humanity – Homebuyer Assistance	\$ 434,393
Pee Wee Homes – Rental Construction	\$ 100,000
EmPOWERment – Rental Acquisition	\$ 105,000
Administration (10% of HOME Funds, per statute)	\$ 37,874
Total	\$ 677,267

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF CARRBORO:

Section 1. Approves the recommended plan for FY 2021-2022 Orange County HOME Program funds.

Section 2. Authorizes this plan to be incorporated into the FY 2021-2022 Annual Action Plan to the 2020-2025 Consolidated Plan for Orange County for submission to the U.S. Department of Housing and Urban Development.

Section 3. This resolution shall become effective upon adoption.



Orange County, NC HOME Consortium FY 2021-2022 Annual Action Plan Summary

Annual Goals and Objectives

	Goal Name	Start Year	End Year	Category	Needs Addressed	Funding	Goal Outcome Indicator
1	Home Buyer Assistance	2020	2024	Affordable Housing	Housing for Low- and Moderate-Income Households	\$434,393	Direct Financial Assistance to Homebuyers: 3 Households Assisted
2	Rental Construction	2020	2024	Affordable Housing Homeless	Housing for People Experiencing Homelessness Housing for Low- and Moderate-Income Households	\$100,000	Rental units constructed: 3 Housing Units
3	Housing Rehabilitation/ Preservation	2020	2024	Affordable Housing	Housing for Low- and Moderate-Income Households	\$105,000	Rental units rehabilitated: 2 Housing Units

Projects

#	Project Name	Description
1	Habitat for Humanity – Homebuyer Assistance	Funds will be allocated to Orange County Habitat for Humanity to provide deferred payment zero interest mortgages to an estimated fifteen (15) homebuyers in the Fairview Community in Hillsborough earning between thirty percent (30%) and eighty percent (80%) of the area median income. (The final number of homebuyers assisted may be more or less than 15 and will depend on homebuyer underwriting.)
2	Pee Wee Homes – Rental Construction	Funds will be allocated to Pee Wee Homes to finance construction of three (3) small rental units at 106 Hill Street in Carrboro. Units will be leased to households experiencing homelessness and earning less than thirty percent (30%) of the area median income.
3	EmPOWERment – Rental Acquisition	Funds will be allocated to EmPOWERment, Inc. for acquisition of a duplex containing two (2) units at 706 Gomains Avenue in Chapel Hill. Units will be leased to households earning less than thirty percent (30%) of the area median income.

Affordable Housing

One Year Goals for the Number of Households to be Supported	
Homeless	3
Non-Homeless	17
Total	20

One Year Goals for the Number of Households Supported Through	
Rental Assistance	0
The Production of New Units	3
Acquisition of Existing Units	17
Total	20



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Agenda Item Abstract

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Authorization for Mayor Lavelle to Submit a Letter to NC Department of Environmental Quality in Regards to Opposition for the Title V Permit Renewal Application for the UNC Chapel Hill Coal Plant

April [REDACTED], 2021

Submitted Via Email

Division of Air Quality
N.C. Dept. of Environmental Quality
1641 Mail Service Center
Raleigh, North Carolina 27699-1641
DAQ.publiccomments@ncdenr.gov

Re: UNC.15B; Comments of the Town of Carrboro on the Title V permit renewal and modification application for the University of North Carolina at Chapel Hill

Dear Sir/Madam:

Thank you for the opportunity to comment on UNC-Chapel Hill's Title V permit renewal and modification. The Town of Carrboro has a significant interest in this issue, as UNC's coal-burning power plant lies on the border between Chapel Hill and Carrboro and therefore affects air quality for residents of Carrboro's neighborhoods and visitors to our central business district as much as it impacts those in Chapel Hill.

Furthermore, the Town of Carrboro has adopted climate justice goals for doing our part to mitigate the climate emergency that we are in. Climate scientists describe a quickly closing window of time to phase out all greenhouse gas emissions globally. With every day of inaction we increase the probability of triggering irreversible tipping points that threaten the existence of many species including our own.

We are troubled by UNC needing to renew this permit at all. In 2010 former Chancellor Holden Thorpe committed to closing the plant and abandoning the use of coal by 2020. Now, in 2021, UNC has a newly revised plan that papers over the previous commitment with an undefined timeline for phasing out coal.

It is disturbing that *any* coal fired power plants are still being permitted by NCDAQ. Aside from that, , there are two main areas of concern that the Town of Carrboro has with the draft permit that the N.C. Division of Air Quality (DAQ) has proposed for UNC's air-polluting facilities:

A. Heat Input Limit

DAQ's proposal to remove from the permit the limit on how much coal UNC may burn per hour (or "heat input limit") is very troubling. From a commonsense perspective, allowing UNC to burn unlimited amounts of coal within a one-hour period releases uncontrolled amounts of air pollution into our community. The recent revelation from the ongoing Clean Air Act litigation against UNC that the university has violated its heat input limit 269 times since May of 2019 demonstrates the real and present danger to the public health in our community. Federal Judge Catherine C. Eagles' October 2020 ruling that the heat input limit in UNC's current air

permit is an enforceable limit further reinforces the significance of this provision in DAQ's pollution control program for UNC.

With this recent history in mind, it is disconcerting to see DAQ proposing to absolve UNC of its responsibility to control its air pollution through this most basic of pollution-control measures. We call upon DAQ to reinstate the heat input limit in UNC's new Title V permit, and to make it an explicitly enforceable permit limit.

B. Sulfur Dioxide and Nitrogen Dioxide Emission Limits

A related problem is that DAQ's draft permit contains no limit on the total amount of deadly sulfur dioxide and nitrogen dioxide pollution that UNC may emit. Exposure to these pollutants may result in asthma attacks, a variety of respiratory illness, heart attacks, and even premature death. This problem with DAQ's proposal is related to our prior point; DAQ cannot enforce a limit on the total amount of sulfur dioxide and nitrogen dioxide pollution UNC can emit without also imposing a heat input limit on the university. We call upon DAQ to impose limits on the total amount of sulfur dioxide and nitrogen dioxide UNC may emit through its new Title V permit.

Please understand the urgency of this matter and do your part by immediately denying this permit.

Sincerely,

Lydia E. Lavelle
Mayor, Town of Carrboro;



Town of Carrboro

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Agenda Item Abstract

File Number:21-142

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TITLE:

Orange County Recovery and Transformation Plan Update

PURPOSE: To discuss and provide feedback on the Orange County Recovery and Transformation Plan.

DEPARTMENT: Town Manager's Office

CONTACT INFORMATION: David Andrews, Town Manager, dandrews@townofcarrboro.org
<<mailto:dandrews@townofcarrboro.org>>; Rebecca Buzzard, Special Projects Manager,
rbuzzard@townofcarrboro.org

INFORMATION: The town has been participating in a countywide recovery planning effort jointly funded by Orange County, Chapel Hill, Hillsborough, and Carrboro through CARES funds. In May, 2020 the Town Council received a [report <https://carrboro.legistar.com/LegislationDetail.aspx?ID=4538374&GUID=E779D265-7B64-452A-BD7F-1C5CB30C1EB1&Options=ID|Text|&Search=recovery>](https://carrboro.legistar.com/LegislationDetail.aspx?ID=4538374&GUID=E779D265-7B64-452A-BD7F-1C5CB30C1EB1&Options=ID|Text|&Search=recovery) by Travis Myren, Orange County Deputy County Manager outlining the recovery planning process. In the [November 10, 2020 agenda <https://carrboro.legistar.com/LegislationDetail.aspx?ID=4688915&GUID=B6969C1F-DBBC-4180-94F9-3A0B02499116&Options=ID|Text|&Search=recovery>](https://carrboro.legistar.com/LegislationDetail.aspx?ID=4688915&GUID=B6969C1F-DBBC-4180-94F9-3A0B02499116&Options=ID|Text|&Search=recovery), a progress report was provided to the Town Council that outlined the project development, presented draft goals, and clarified the next steps in the process.

The goal of the recovery planning effort is to reduce weaknesses in the County's critical physical, social, and institutional systems - while creating a brighter future for all residents. The effort began with community input received from surveys, workshops, and focus groups that helped to describe and quantify the impacts of COVID-19. A diverse stakeholder group was formed to help design goals and initiatives addressing these impacts. As part of this effort, a training was also held for community partners on cost recovery, specifically focused on funding programs available to promote community resilience.

More information on the process and the plan itself can be found at
<<https://www.orangencforward.org/resources/>>

The plan's five goals are:

- Address fundamental needs of all residents.
- Create safe, stable, and affordable housing solutions.
- Promote a dynamic, equitable, and sustainable economic recovery.

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- Streamline access to community-based resources.
- Combat the negative effects of social distancing to promote community healing.

The Plan looks at these goals from the following perspectives: Economic, Housing, Human Services, Health, Natural and Cultural Resources, Community Planning and Capacity Building, and Intergovernmental Affairs and Public Information.

The Plan was created with significant efforts to reach communities of color and underserved populations and consider the impacts of the pandemic with a racial equity focus. This Plan will also directly relate to the GARE planning effort currently underway.

FISCAL & STAFF IMPACT: The plan identifies potential funding sources for implementation. Some of the efforts are ongoing and have dedicated funding; other strategies require additional funding. The plan may help guide the use of American Rescue Plan Act funding.

RECOMMENDATION: Staff recommends that the Town Council review the Recovery and Transformation Plan and provide feedback. The intent is for each jurisdiction to formally endorse the plan in June.



Orange County

Recovery and Transformation Planning Project

May 2021



HAGERTY



ORANGE COUNTY
NORTH CAROLINA



Agenda

Project Overview

Stakeholder Engagement

Plan Overview

Next Steps



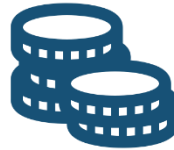
What Was the Purpose of the Project?



Analyze

Impact Assessment

- Understand the impacts of COVID-19 on economy, community health, housing, and social services.



Train

Cost Recovery Training

- Train county, municipal, and non-profit stakeholders on best practices for reimbursement under common federal programs.



Plan

Long-Term Recovery and Transformation Plan

- Describe goals, strategies and initiatives to drive community-informed recovery.



How Was the Project Organized?



Phase 1

Describe and quantify the impacts of COVID-19.



Phase 2

Establish a diverse stakeholder group to design strategies and initiatives addressing impacts.



Phase 3

Record countywide strategies and associated initiatives in the Recovery and Transformation Plan.



Phase 4

Implement the plan and monitor community needs.

Agenda

Project Overview

Stakeholder Engagement

Plan Overview

Next Steps



Who is Involved in Recovery Planning?

Individuals and organizations participating in the planning effort are experts and professionals across seven sectors, with over 30 different types of public and non-profit organizations in each group.

Experts and professionals across these sectors...

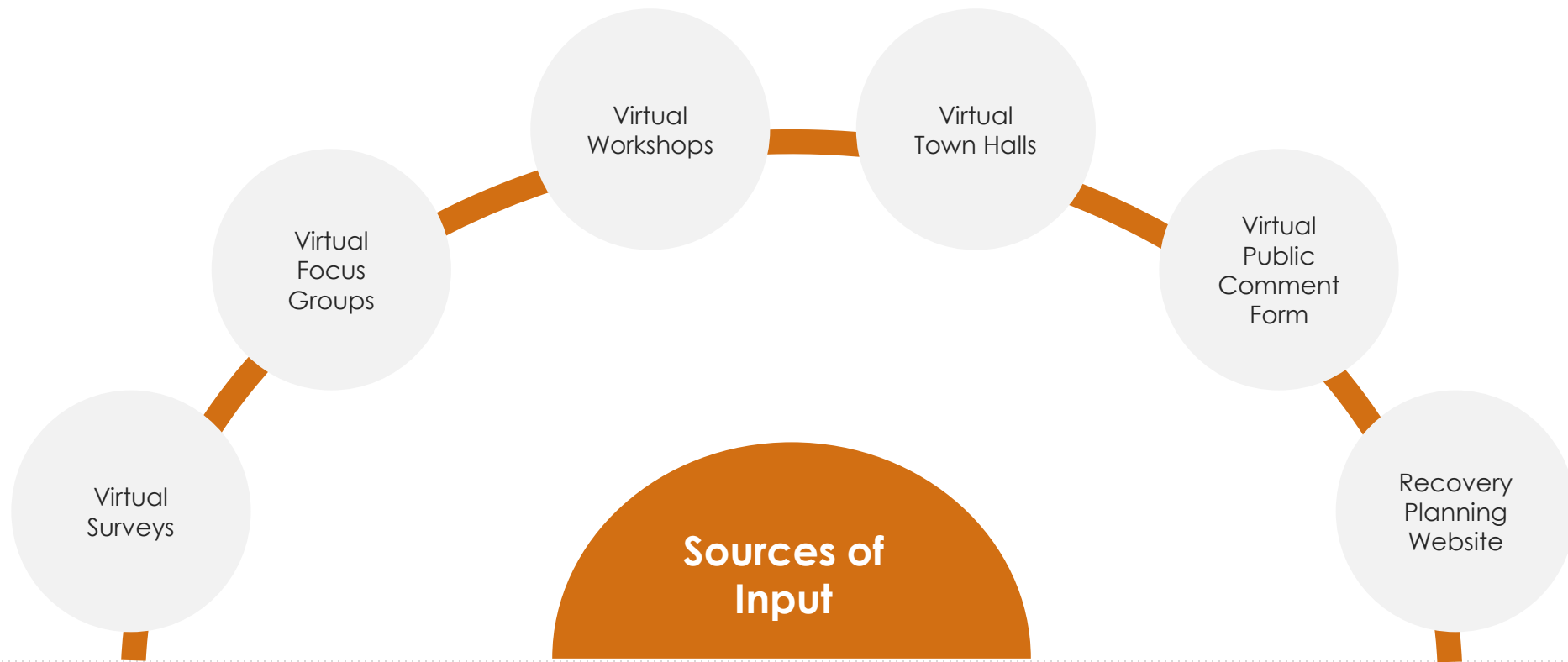
...and the public





How Did the Public Inform the Plan?

Comments received from the public were included in the plan (see *Community Input Annex*) and helped guide conversations with Orange County and municipal government to finalize the plan. It is essential to understand the public's priorities, so that recovery stakeholders can fairly distribute available resources to try and meet those priorities.



How Was Racial Equity Integrated into the Plan?

To align with the Guiding Vision and the county's efforts to achieve social and racial equity, the project held a consistent focus on equitable community engagement.



Community Leader Meetings were held to garner input from communities of color.



Public engagement materials were translated into Spanish, Mandarin-Chinese, Burmese, and Karen.



Targeted outreach was conducted to encourage communities of color to participate in plan review surveys and meetings.



Feedback from communities of color was prioritized in proportion to the elevated COVID-19 impacts they faced.



The planning process was coordinated with the efforts of Orange County's Government Alliance on Race and Equity.

Agenda

Project Overview

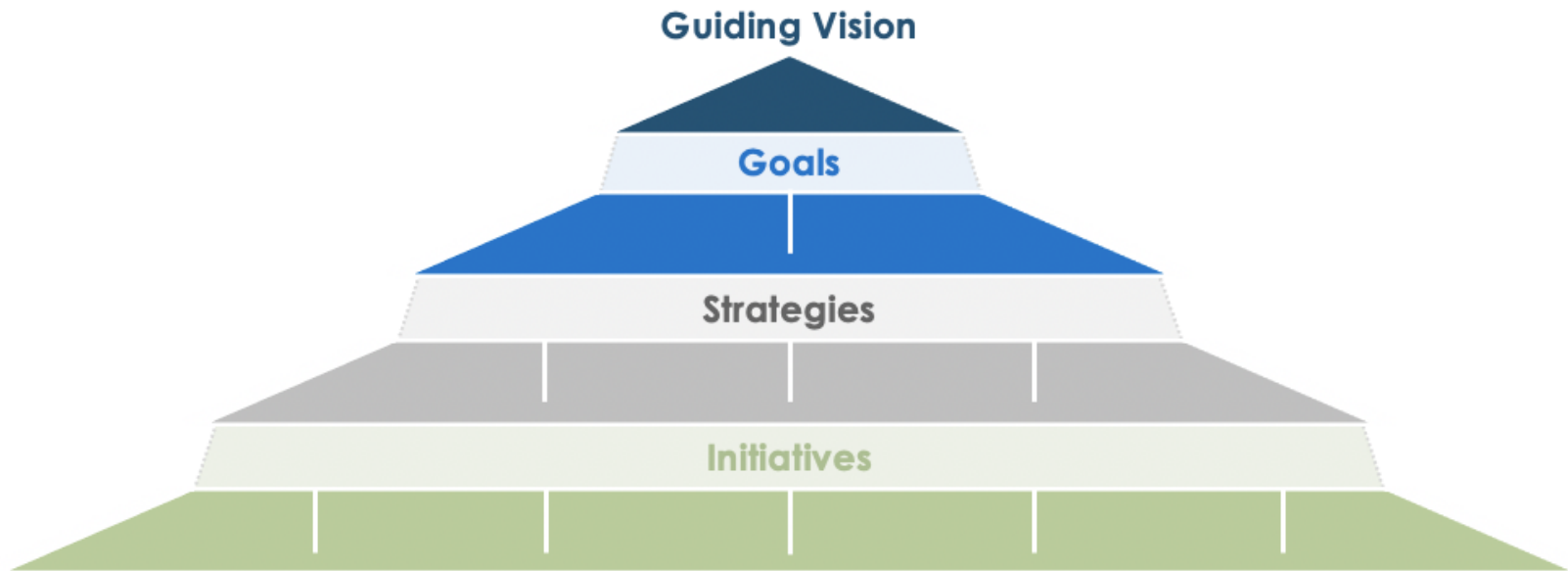
Stakeholder Engagement

Plan Overview

Next Steps



How is the Plan Organized?





What is the Plan's Guiding Vision?

Leverage recovery from the COVID-19 pandemic to strengthen and transform Orange County by improving economic sustainability, providing resources, and achieving social and racial equity.



What are the Goals of the Plan?

The plan is based on five recovery goals, identified through community input and the gaps revealed by the Impact Assessment.



Address fundamental needs of all residents;



Create safe, stable, and affordable housing solutions;



Promote a dynamic, equitable, and sustainable economic recovery;



Streamline access to community-based resources; and



Combat the negative effects of social distancing to promote community healing.



Strategies & Initiatives: Economic

Provide support for small businesses.

- Provide direct financial support to local businesses when funding is available.
- Create the ability to quickly convert existing local funding programs to support future disaster response and recovery efforts.
- Establish communication channels between economic development practitioners as well as to and from businesses in Orange County.
- Provide technical support and business mentorship to small business owners, including e-commerce and other emerging industries.

Identify and address regulatory barriers to economic recovery.

- Examine and address barriers to starting and expanding small business and provide resources or amend policy to help businesses overcome these barriers.
- Identify and address policy and infrastructure barriers to remote work and operations, including broadband access.
- Engage operators and regulators to determine which temporary policy changes should be made permanent.

Drive local economic growth and encourage local spending.

- Develop collaborative marketing strategies to bring new business and enhanced local spending to the county.
- Increase the resilience of the county's key industries.
- Provide support to the arts and entertainment industry of Orange County.
- Build a shared understanding that a successful economy equals a successful community.

Strengthen and expand the local workforce.

- Identify and develop targeted training programs for residents to meet the needs of local employers.



Strategies & Initiatives: Housing

Incentivize the development of affordable and accessible housing.

- Evaluate housing stock, density, and regulations to reinforce policy changes that promote housing development and increase affordable housing.
- Continue to increase the number of subsidized housing units available locally and promote broader landlord acceptance of vouchers.
- Track tax foreclosures and evaluate opportunities to purchase property and develop into affordable housing.

Rehabilitate, improve safety, and preserve the affordability of existing housing.

- Investigate opportunities to change the process through which land use designations are reconsidered and adapted.
- Use flexible funding to support timely repairs, weatherization, and rehabilitation of affordable housing units.
- Increase flexible funding to continue efforts to reduce mobile home displacement on rented property.
- Use rehabilitation, repair, or modification to increase the availability of affordable housing compliant with the Americans with Disabilities Act.

Ensure continuation of and streamlined access to housing support programs, including emergency housing assistance.

- Expand capacity to support the implementation of solutions that address identified gaps in housing programs and resources.
- Continue and streamline the provision of emergency housing assistance, eviction diversion, and coordinated entry programs.
- Continue efforts to end homelessness in Orange County by addressing evolving gaps in the homeless system.
- Partner with health entities to direct funding toward housing as a social determinant of health.



Strategies & Initiatives: Health

Continue monitoring, testing, and eradicating COVID-19.

- Continue to provide equitable and accessible testing and vaccines for COVID-19 for free or minimal cost.
- Provide transportation to testing and vaccination sites from various locations throughout the county.
- Foster partnerships with educational institutions to develop comprehensive resources on disease prevention, monitoring, and reporting.

Promote economic recovery and bolster existing healthcare systems.

- Encourage local employers to partner with Carolina PROSPER to receive assistance with improving workplace safety.
- Partner with academic institutions to conduct a gap analysis of public and private healthcare, mental health, and substance abuse service providers.
- Support growth of the county's healthcare systems through healthcare-focused workforce development programs, expansion of telehealth, and appropriate liability protections.
- Work with non-profit and public entities to help individuals who are positive with or recovering from COVID-19 avoid lifelong debt.

Promote better access to mental and behavioral health services.

- Continue efforts to improve access to and destigmatize the use of mental and behavioral health support services.
- Continue efforts to improve access to and destigmatize substance-abuse support services.
- Strive to mitigate the effects of social isolation on harder-to-reach populations.
- Improve mental health care and support for first responders and medical care providers.

Address historic or systemic health disparities.

- Improve access to quality healthcare for historically marginalized communities.
- Appoint an advisory committee to address the unique needs of historically underserved communities with representation from affected communities.



Strategies & Initiatives: Human Services

Promote job opportunities that provide thriving wages or increase quality of life.

- Develop systems to connect people to job opportunities in the county.
- Perform a gap analysis to determine necessary policy changes around minimum wages and subsidized employment opportunities.

Streamline access to community resources.

- Streamline and expand food access to reduce hunger.
- Establish and advertise a centralized online database of non-governmental organizations to improve equitable access to community resources.
- Support coordination between regional, county, and municipal transportation systems by securing additional funding.
- Increase equitable access to high-quality cellular service and broadband, especially in rural areas.

Prevent widening of the achievement gap.

- Establish public-private partnerships to provide low- or no-cost after-school, weekend, and summer childcare.
- Partner with local schools to provide additional resources and outreach aimed at alleviating instability and improving at-home learning environments.
- Partner with schools to provide extra support for students with disabilities and their families.
- Establish a scalable technology support program to provide free or low-cost computer and peripheral rentals by expanding the existing Chapel Hill Laptop Lending Program.
- Provide technology training on relevant platforms to the community.



Strategies & Initiatives: Natural & Cultural Resources

Prevent the deterioration of natural resources.

- Coordinate planning efforts to understand how the community utilizes public spaces and whether the expansion of public spaces is necessary.
- Monitor and address indirect impacts from COVID-19 on the natural environment.
- Expand programs educating residents about their role as stewards of natural resources and the natural environment.

Provide cultural and recreational opportunities for all residents.

- Utilize oral histories to tell the story of the pandemic.
- Pursue opportunities to expand and pool resources across organizations and jurisdictions to coordinate and cross-promote free and safe activity offerings.
- Support and promote community-driven multicultural arts projects and programs that enable community healing, recovery, and resilience.

Support sustainable local agriculture systems.

- Provide technology training for agricultural producers to promote the utilization of e-commerce and alternative distribution models.
- Strengthen economic independence for agricultural producers and reduce reliance on grants and subsidies.
- Incentivize expansion of sustainable local food systems to provide support for families experiencing food insecurity.



Strategies & Initiatives: Community Planning & Capacity Building

Promote climate change mitigation and adaptation efforts.

- Leverage findings from the long-term recovery planning process to update climate action plans across the county.

Build collaborative programs between government and the community.

- Establish an active volunteer network by creating a countywide Voluntary Organizations Active in Disaster group.
- Work with academic institutions to support student access to resources necessary for their success.



Strategies & Initiatives: Intergovernmental Affairs & Public Information

Support open lines of communication between the public and local governments.

- Align and streamline information for disaster-impacted residents across local government websites.
- Make it easier for residents that do not speak English very well to engage with local governments.
- Enhance local understanding of how community members interact with government to increase civic engagement.
- Develop a 24-hour chat portal or hotline for community members to share concerns or inquiries.

Promote equitable public engagement in planning processes.

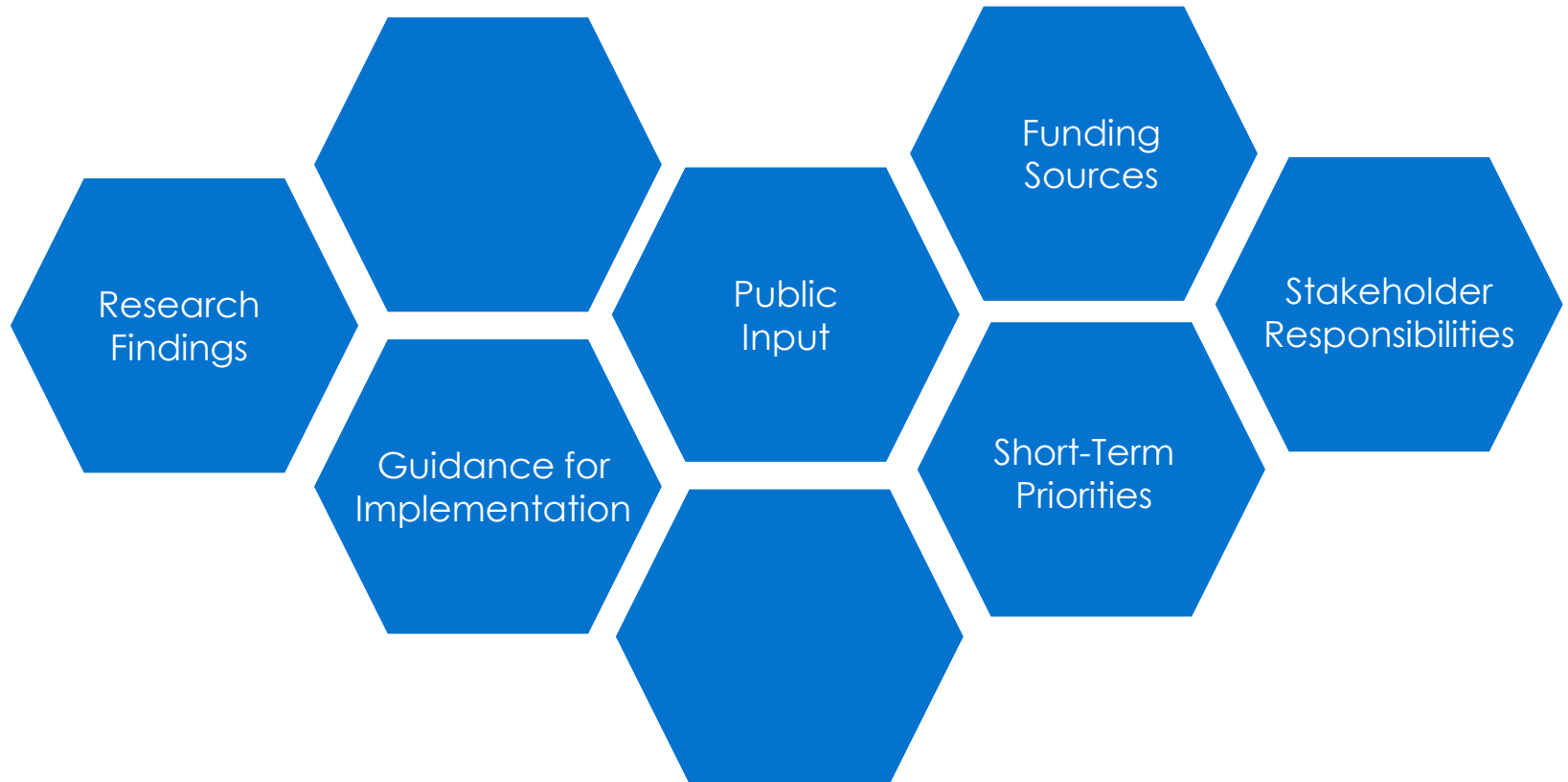
- Continue to engage the community, especially historically marginalized populations, to ensure this plan is adapted to meet the evolving needs of all residents.
- Build a culture of information-sharing to help improve racial equity planning and implementation outcomes for the whole county.

Consistently deliver essential government services.

- Develop integrated continuity of operations plans to consistently provide critical services across local governments.
- Seek and secure additional funding to continue essential emergency support services.



What Else is in the Plan?



Agenda

Project Overview

Stakeholder Engagement

Plan Overview

Next Steps



The Role of Elected Officials

Elected officials have an essential role in implementing and socializing the Long-Term Recovery and Transformation Plan, including the following actions:

- Reviewing the plan.
- Providing input on and endorsing the plan.
- Supporting organizations (Recovery Support Functions) implementing the plan.
- Continuing to represent community needs and elevate the concerns of the most impacted populations as the plan is revised and maintained as a living document.



Thank You!

orangeNCforward.org



HAGERTY





Town of Carrboro

Town Hall
301 W. Main St.
Carrboro, NC 27510

Agenda Item Abstract

File Number:21-143

Agenda Date: 5/4/2021

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In Control: Board of Aldermen

Version: 1

TITLE:

Discussion of Manufactured Home Communities in Carrboro

PURPOSE: The purpose of this item is for the Town Council to discuss manufactured home communities in Carrboro and consider the possibility of creating a regionally unified manufactured home strategy.

DEPARTMENT: Housing and Community Services & Planning, Zoning, and Inspections

CONTACT INFORMATION: Rebecca Buzzard, Housing and Community Director, rbuzzard@townofcarrboro.org <<mailto:rbuzzard@townofcarrboro.org>>; Patricia McGuire, Planning, Zoning, and Inspections Director, pmcguire@townofcarrboro.org <<mailto:pmcguire@townofcarrboro.org>>; Anne-Marie Vanaman, Management Specialist, amvanaman@townofcarrboro.org <<mailto:amvanaman@townofcarrboro.org>>

INFORMATION: Manufactured home communities, which are an existing source of affordable housing for many, have become a County-wide topic of discussion in light of recent development pressures. The Town Council has requested an agenda item on this topic for discussion. To facilitate the discussion, staff has provided background and resource information.

Manufactured homes are factory-built, prefabricated homes built on a permanent chassis that adhere to [HUD construction standards](https://www.hud.gov/program_offices/housing/rmra/mhs/mhshome) <https://www.hud.gov/program_offices/housing/rmra/mhs/mhshome> established in 1976. Prior to 1976, these homes were called “mobile homes” and the term is often still used today. Manufactured homes are not typically moved once they are placed on the home site, unlike “trailers” which are designed for travelling. According to a [2017 study by the Urban Institute](https://www.urban.org/urban-wire/new-evidence-shows-manufactured-homes-appreciate-well-site-built-homes) <<https://www.urban.org/urban-wire/new-evidence-shows-manufactured-homes-appreciate-well-site-built-homes>>, new manufactured homes are estimated to be 35-47% cheaper than site-built homes and have an annual appreciation rate of 3.4%. On November 20, 2017, the Orange County Board of Commissioners received a presentation and recommendations from the Mobile Home Park Work Group. This group consisted of local government staff, for-profit developers, and non-profit housing staff and was formed to discuss and evaluate the opportunities and obstacles in redeveloping existing mobile home parks and developing new affordable housing to address the needs of mobile home park residents at risk. The agenda item also provided a survey conducted by Orange County that showed manufactured home owners appreciate their tight-knit communities and the proximity to good schools, public transportation, and employment which their manufactured home parks provide. Although some residents noted that they would like to move into site built single-family homes, most could not afford to

do so, and they did not know where they could afford to move to if their community was redeveloped. The agenda item and survey are provided in Attachment A.

Carrboro has four manufactured home communities: Rocky Brook and Pine Grove - located within the Town's Limits; Calvander and Homestead Acres - located in Carrboro's Transition Area 1. Most of the homes in these communities are older and many are in need of repair. The Orange County Home Preservation Coalition (OCHPC) reported to Council on [April 13, 2021 <https://carrboro.legistar.com/LegislationDetail.aspx?ID=4908512&GUID=3A24EF05-0B35-4A6E-9386-E7542FE0DE3C&Options=&Search=>](https://carrboro.legistar.com/LegislationDetail.aspx?ID=4908512&GUID=3A24EF05-0B35-4A6E-9386-E7542FE0DE3C&Options=&Search=>) that 79% of their Carrboro applicants seeking critical repairs owned detached houses. However, OCHPC received a disproportionate amount of applications from manufactured home residents (10.5%) compared to Town supply (1.5%). Attachments B and C provide location and information about the Carrboro manufactured home communities.

The County and Towns are in various stages of developing manufactured home policies for their respective jurisdictions. Carrboro staff began working on this issue with the AHAC prior to the pandemic and revisited the creation of a policy at their March, 2021 meeting. County and Town Housing staff, local nonprofits such as EmPOWERment and Justice United, the Orange County Home Preservation Coalition, and the Orange County Affordable Housing Coalition have also been working on manufactured home preservation, including resident engagement, streamlining funding assistance and exploring expanding eligibility parameters to include manufactured home renters.

For background, a copy of the Town of Chapel Hill's presentation for a January 2021 Town Council work-session is included in Attachment D, Chapel Hill's Manufactured Home Park Strategy is included in Attachment E, and Orange County's Mitigation and Housing Displacement Fund Policies and proposed Rapid Response Protocol are provided in Attachments F and G respectively. One of the strategies explored in the Town of Chapel Hill's work session was [Resident Owned Communities <https://rocusa.org/>](https://rocusa.org/) (ROC). Attachment H is their summary of the ROC model. The ROC model was also [presented <http://orange-nc.granicus.com/MediaPlayer.php?view_id=2&clip_id=1454&meta_id=37042>](http://orange.nc.granicus.com/MediaPlayer.php?view_id=2&clip_id=1454&meta_id=37042) to the Orange County Board of County Commissioners on April 6th.

There is a movement for all jurisdictions to collaborate to develop a unified strategy that can be implemented County-wide. It has been suggested that the Collaborative, made up of housing staff and one elected official from each jurisdiction, could work on a unified manufactured home strategy. [In 2017 <https://carrboro.legistar.com/LegislationDetail.aspx?ID=3161767&GUID=D1E21369-58F6-4BC3-A039-9B68069D5516&Options=ID|Text|&Search=HOME>](https://carrboro.legistar.com/LegislationDetail.aspx?ID=3161767&GUID=D1E21369-58F6-4BC3-A039-9B68069D5516&Options=ID|Text|&Search=HOME), the elected officials voted to expand the scope of work and rename the HOME Consortium Program Review Committee as the Orange County Local Government Affordable Housing Collaborative. The revised scope includes broader discussions about affordable housing issues, including to:

- strategize about funding options; provide updates on projects and affordable housing efforts, as well as code or policy changes;
- provide oversight of performance measures and expenditure rates (to be developed by the staff for review by the Collaborative)
- help tell the story of the impact of our affordable housing initiatives; develop shared targets and goals for affordable housing preservation and development and track progress over time;

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and serve as advocates for affordable housing in Orange County (elected officials)

During the most recent Collaborative meeting, on March 25th, the elected representatives requested to meet more frequently and indicated they would like to discuss the creation of a regionally unified manufactured home strategy.

FISCAL & STAFF IMPACT: Fiscal and staff impact will vary based on specified follow-up action.

RECOMMENDATION: Staff recommends the Town Council discuss this item and provide direction to staff.

**ORANGE COUNTY
BOARD OF COMMISSIONERS
ACTION AGENDA ITEM ABSTRACT
Meeting Date: November 20, 2017**

**Action Agenda
Item No. 6-b**

SUBJECT: Presentation of the Mobile Home Park Survey Report and Recommendations

DEPARTMENT: County Manager, Housing,
Human Rights, and Community
Development, Planning and
Inspections, and Health

ATTACHMENT(S):

1. June 20 BOCC Mobile Home Park Work Group Information Item
2. Mobile Home Park Survey Report
3. Summary of Tools Used In Other Jurisdictions
4. Mobile Home Park Recommendations

INFORMATION CONTACT:

Sherrill Hampton, 919-245-2490
Travis Myren, 919-245-2308
Craig Benedict, 919-245-2575
Meredith McMonigle, 919-245-2071

PURPOSE: To present the Mobile Home Park Survey Report and Work Group recommendations.

BACKGROUND: For many years, there has been interest in addressing the vulnerability of residents living in mobile home parks in Orange County. The Orange County Board of Commissioners allocated \$1 million in the FY2015-16 budget process to address preservation and retention of manufactured homes parks and/or to assist in the acquisition of property and land banking for future residential development as an affordable housing alternative. During the FY2016-17 budget process, the BOCC allocated another \$1 million to the land banking program.

Mobile Home Park Work Group

Following the establishment of the land banking program and designated funding from Orange County, local housing partners began to discuss and evaluate the opportunities and obstacles in redeveloping an existing mobile home park or developing new affordable housing addressing the needs of mobile home park residents at risk. Orange County Habitat for Humanity invited interested, local individuals to form an informal ad hoc committee that became known as the Mobile Home Park Work Group. The Work Group consisted of local government staff, for-profit developers, and non-profit housing staff and continues to meet as facilitated by County staff.

Over the course of several months, the Work Group reviewed and discussed several issues facing mobile home park residents and owners. The main issue identified by the Work Group was that mobile home park residents, specifically in Chapel Hill and Carrboro, were faced with losing their homes thereby resulting in displacement as a result of redevelopment of the existing parks. In addition, these residents faced limited affordable housing options due to a lack of available mobile homes and/or mobile home spaces elsewhere and increasing housing costs in the Towns.

After identifying the main issues that may be unfolding in the immediate future, the Work Group set out to identify goals, explore options, and consider strategies that would assist in developing effective recommendations to address the mobile home park issue in Orange County. Additional information regarding the Mobile Home Park Work Group is included in [Attachment 1](#).

Mobile Home Park Survey Report

Throughout the process, the Mobile Home Park Work Group stressed the need to learn more about the mobile home park residents. In order to develop an effective strategy to deal with the potential conversion of mobile home parks, the Work Group recognized it was imperative to learn about the needs and obstacles current mobile home park residents are facing. In addition, the group identified the importance to collect information regarding residents' social and economic needs in order to create successful recommendations in the future. In order to gather input and data on existing residents, the Orange County Family Success Alliance initiated a survey campaign in August which included the completion of 100 surveys from eight (8) mobile home parks in Orange County. The Mobile Home Park Survey Report is included in [Attachment 2](#). Information collected from this survey was utilized to develop the proposed mobile home park recommendations.

Best Practices

See [Attachment 3](#) – Summary of Tools Used In Other Jurisdictions

Mobile Home Park Work Group Recommendations

Based on best practices, drafted mobile home park strategies, mobile home park evaluations, and the Mobile Home Park Survey Report, the Work Group formulated four (4) recommendations which are provided below and detailed in [Attachment 4](#).

1.	Mobile Home Park Improvement and Expansion Program (Short Term)
	Orange County establishes a loan program for mobile home park owners to improve and/or expand their existing park. This strategy would be part of an overall Rental Rehabilitation Initiative for Investor-Owners with 25 or less properties. In addition, it is also recommended that up to \$500,000 from the \$2M Affordable Housing/Land Bank Set-aside in the approved Capital Investment Plan be used to initially fund this Initiative. Currently, the remaining balance in the Affordable Housing/Land Bank Set-aside is \$1,706,600.
2.	Repair and/or Replacement Program Component (Short Term)
	Orange County establishes, with local funds, a repair and/or replacement program component for residents living in a mobile home, whether rental or owner-occupied. This strategy would be part of the County's existing Single-Family Housing Rehabilitation and Urgent Repair Programs. Presently, assistance for mobile home repair is <u>only</u> available under the County's Urgent Repair Program and applicants must own the land, as well as the mobile home. If the recommendation is approved, it would allow for the inclusion of residents who do not meet the aforementioned ownership requirements but either have the owner's written approval for proceeding with the repairs and/or replacement or own the mobile home but not the land. In addition, it would allow for mobile home repair and/or replacement under the County's Single-Family Rehabilitation Program. Currently, there is a combined total of \$455,468 available for these programs.
3.	Mobile Home Park Development (Long Term)
	Orange County uses designated funds to pursue the development of a mobile home park and/or mixed housing development on an undeveloped parcel with access to transportation, goods, services, employment, and public water and wastewater infrastructure in the County.
4.	Greene Tract (Long Term)
	Orange County, the Town of Chapel Hill, and the Town of Carrboro elected officials and staff continue to explore affordable housing opportunities on the Greene Tract, with a focus on alternatives for displaced mobile home park residents and utilization of a portion of the Greene Tract.

FINANCIAL IMPACT: There is no negative financial impact associated with this item.

SOCIAL JUSTICE IMPACT: The following Orange County Social Justice Goals are applicable to this agenda item:

- **GOAL: FOSTER A COMMUNITY CULTURE THAT REJECTS OPPRESSION AND INEQUITY**

The fair treatment and meaningful involvement of all people regardless of race or color; religious or philosophical beliefs; sex, gender or sexual orientation; national origin or ethnic background; age; military service; disability; and familial, residential or economic status.

- **GOAL: ENSURE ECONOMIC SELF-SUFFICIENCY**

The creation and preservation of infrastructure, policies, programs and funding necessary for residents to provide shelter, food, clothing and medical care for themselves and their dependents.

RECOMMENDATION(S): The Manager recommends that the Board:

1. Receive the presentation;
2. Discuss as appropriate; and
3. Endorse the recommendations contained in Attachment 4.

MEMORANDUM

TO: Board of County Commissioners
Bonnie B. Hammersley, County Manager

FROM: Affordable Housing Land Banking/Mobile Home Park Work Group

DATE: June 20, 2017

SUBJECT: Information Item – Update on the Affordable Housing Land Banking/Mobile Home Park Work Group

Please accept the following memorandum regarding the Affordable Housing Land Banking/Mobile Home Park Work Group.

Background

For many years, there has been interest in addressing the vulnerability of residents living in mobile home parks in Orange County. The Orange County Board of Commissioners allocated \$1 million in the FY2015-16 and FY16-17 budgets for a land banking program. This program was established by the BOCC to address land banking of mobile homes parks, and/or to assist in the acquisition of property for future residential development as an affordable housing alternative. The goal was for these funds to support the development of affordable housing by acquiring improved and unimproved land for current and future affordable housing developments.

Mobile Home Park Work Group

Following the establishment of the land banking program and designated funding from Orange County, local housing partners began to discuss and evaluate the opportunities and obstacles in redeveloping an existing mobile home park or developing new affordable housing addressing the needs of mobile home park residents at risk. Orange County Habitat for Humanity invited interested, local individuals to form an informal ad hoc committee that became known as the Affordable Housing Land Banking/Mobile Home Park Work Group. The work group consisted of local government staff, for-profit developers, and non-profit housing staff including:

- Susan Levy, Habitat for Humanity
- Robert Dowling, Community Home Trust
- Jess Brandes, CASA
- Travis Myren, Orange County
- Craig Benedict, Orange County
- Ashley Moncado, Orange County
- Judy Johnson, Town of Chapel Hill
- Edward Barberio, Town of Chapel Hill
- Eric Chupp, Capkov Ventures, Inc.
- Elam Hall, Eller Capital Partners
- David Beck, Self Help

Over the course of several months the work group reviewed and discussed several issues facing mobile home park residents and owners. The main issue identified by the work group was that mobile home park residents, specifically in Chapel Hill and Carrboro, were faced with losing their homes and displacement as a result of redevelopment of the existing parks. In addition, these residents faced limited affordable housing options due to a lack of available mobile homes and/or mobile home spaces elsewhere and increasing housing costs in the Towns.

After identifying the main issues that may be unfolding in the immediate future, the work group set out to identify goals, explore options, and consider strategies that would assist in developing effective recommendations to address the mobile home park issue in Orange County.

Mobile Home Park Strategies

In order to address concerns related to mobile home parks, the work group proposed several strategies with the intent to mitigate displacement, preserve existing mobile home supply, and increase mobile home supply. The development of these strategies was based on a review of other communities' efforts addressing mobile home park conversions, similar to Orange County, and other successful case studies. In addition, these strategies incorporated approaches to address mobile home park concerns, based on the work group's experience and knowledge, as well as existing resources including the mobile home park inventory and maps. The purpose of collecting and drafting these strategies was to review and determine what options may be available for Orange County to successfully implement in order to address local concerns and goals related to mobile home parks. These strategies include:

- Mobile home urgent repair and rehab program;
- Mobile home park outreach campaign;
- Mobile home space/home lease or rental program;
- Rezoning of existing mobile home parks;
- Resident mobile home park purchase and management;
- Government funded financial incentives for park improvements;
- Government funded infrastructure improvements;
- Mobile home park revitalization and/or expansion;
- Government purchase of existing mobile home park;
- Government purchase, revitalization, and/or expansion of existing mobile; home park; and
- Government purchase of undeveloped land for future development

Mobile Home Park Evaluation

While identifying and evaluating the proposed strategies, the work group also began a preliminary assessment of existing mobile home parks in the county. The purpose of this assessment was to determine the opportunity and capacity to employ the proposed mobile home park strategies in Orange County. As a result, the work group drafted key criteria to identify and evaluate mobile home parks where the proposed strategies may be feasible in Orange County. These criteria included:

- Access to public transportation, health services, government services, education, shopping, and employment centers;
- Condition of the mobile home park, homes, infrastructure, and amenities;
- Vacancy rate;
- Access to existing or planned public water and wastewater infrastructure;
- Estimated infrastructure costs;
- Future expansion and redevelopment opportunities;
- Future and existing land use and zoning, including surrounding parcels;
- Potential acquisition costs; and
- Current and future ownership, partnership, and management opportunities

Utilizing these criteria, the work group was able to identify several existing mobile home parks and potential new locations in the county where the individual strategies may be implemented successfully. This provided the group with a starting point for modifying the strategies and drafting recommendations that would be attainable and practical based on Orange County's resources and circumstances.

Next Steps

Moving forward, the work group will begin coordinating community outreach efforts with existing stakeholders and the Orange County Family Success Alliance in order to seek input from existing mobile home park residents. In addition, the work group will be drafting and finalizing recommendations to the Orange County Board of Commissioners. The final recommendations will include action steps with additional information, including identified locations in the county where the recommendations may be implemented and various items for consideration by the BOCC for successful outcomes. These recommendations will be presented for review and comment at the September 19 BOCC meeting. At that time, the BOCC may request further information from the work group and/or determine the next steps in the process based on information received.

If you have questions, please contact Ashley Moncado, Orange County Special Projects Planner, by phone at (919) 245-2589 or by e-mail at amoncado@orangecountync.gov or Craig N. Benedict, Orange County Planning Director, by phone at (919) 245-2575 or by e-mail at cbenedict@orangecountync.gov.

Mobile Home Park Survey

10/9/2017
Orange County Health Department
Family Success Alliance

Acknowledgments

Deepest thanks and appreciation go first and foremost to the residents of the mobile home parks in Orange County for their time and participation.

We would also like to thank the following people:

Survey Collectors

Antonia Cortes
 Brittany Bulluck
 Claudia Yerena
 Erika Cervantes Munoz
 Mariela Hernandez

Data Team

Coby Jansen Austin
 Dominika Gazdzinska
 Meredith McMonigle
 Kiana Redd
 Juliet Sheridan

County Manager, Bonnie Hammersley
Deputy County Manager, Travis Myren

Orange County Planning and Inspections Department, especially Ashley Moncado

Executive Summary

A survey was conducted of 8 mobile home parks in Orange County identified as high risk for displacement and/or because of an interest in general information about residents and living conditions. 96 surveys were conducted by Navigators from the Family Success Alliance. Almost all families were Hispanic, very low income, and own their own homes, but rent space from the mobile home park. Most of the families are satisfied living in their current mobile home and prefer not to move. Residents often look to their neighbors for assistance with child care, transportation, and other services. Many also rely on public transportation to get to medical appointments, work, and school.

Although residents are generally satisfied, many residents also feel they don't have many options other than living in their mobile home; their low income limits their ability to move elsewhere, and they prefer not to move because of the schools, public transport, and proximity to services. The residents were also very clear that moving into an apartment complex is not a preferred option—they commented that in addition to the huge difference in cost, there's a lack of privacy and concern about limited places for children to play. Although not collected in the survey, documentation status was also an issue raised by many families as a significant obstacle in securing affordable housing.

The biggest concerns residents had about the parks themselves were infrastructure in the mobile home parks and the age and condition of their mobile homes. Many of the homes are very old—the newest home was manufactured in 2002, and residents are concerned about limitations on moving their homes based on the age and condition of the home and the cost to move it. When it comes to management, residents commented that many of the mobile home parks need infrastructure maintenance, especially for roads and landscaping, e.g., filling in potholes with gravel, for dead trees to be cut down, fixing drainage issues.

The Navigators, who administered the surveys, noted that residents often seemed proud of their homes and hoped to stay there long-term. Many residents also shared that they are carpenters, electricians, and construction workers and discussed their ability to contribute their extensive skills to the building or repairing of homes and the park.

In summary, many of these mobile home parks consist of tight-knit communities of families with children, who are proud of their homes and where they live. They own their own homes and would like to own their land as well. Because of their documentation status and their income, many of these families feel they have no place to go—that they can't afford to move and are afraid that they won't qualify for assistance, if developers displace them.

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Introduction

For many years, there has been interest in addressing the vulnerability of residents living in mobile home parks in Orange County. The Board of Commissioners allocated funds in the FY 2015-16 and FY 2016-17 budgets to address land banking of mobile home parks and/or to assist in the acquisition of property for future residential development as an affordable housing alternative. An ad hoc committee of local housing partners and county staff began meeting last fiscal year to discuss and evaluate the opportunities and obstacles. The voices of mobile home residents were not a part of this initial process, and the committee recognized the need for their input. Therefore, Navigators with the Family Success Alliance, who have personal and programmatic connections to mobile home park residents, partnered with the county manager's office to visit various mobile home parks during a four-week period in August and September to conduct a survey and gather input from residents.

Survey Methodology

Out of approximately 100 mobile home parks in Orange County, 8 parks were selected by the Planning Department as areas of special interest owing to developer activity or an interest in general information about residents and living conditions. These parks were assigned to FSA Navigators, who had a goal of a 33% response rate, or around 100 surveys total. In Table 1, each of the eight priority mobile home parks are listed, with the goal and actual number of surveys collected. The Planning Department's selections for those parks at high risk of displacement were mostly in Chapel Hill and Carrboro; although these parks represent a small fraction of all parks in the county, these parks are overrepresented in the survey.

In early August, a letter was sent to residents of the selected parks to notify them that surveys would be conducted (see Appendix A). Survey piloting and data collection took place from August 9, 2017 to September 11, 2017. Each survey took between an hour to an hour and a half, and 82% of them were conducted in Spanish. Families who participated were given a \$10 gift card to Walmart.

The Navigators used snowball sampling—each of them had contacts within the mobile home parks, and enlisted those contacts in helping them find other families who would be willing to participate. They also waited at the school bus stop, mailboxes, and other gathering areas in order to begin conversations with residents and encourage their participation. This sampling method means that there may be selection bias in terms of who agreed to undertake the survey. The Navigators did knock on doors cold, but some families refused to open the door or refused to participate.

Specifically, because sometimes the maintenance workers live in the mobile home parks, they received the introductory letter explaining the survey and asking for participation. Many of the residents expressed fear that the maintenance workers had told their landlords about the survey and would retaliate against them if they responded. This fear was especially prevalent in some mobile home parks compared to others. Despite the best efforts of our Navigators, some families refused to participate.

Results

Survey Overview

There were 96 surveys completed, with some mobile homes reaching higher rates of participation than others.

#	Mobile Home Park Name	Street Address	City	Purpose/ Objective	Approx. Survey Goal (32.5%)	# Occupied Sites	Actual # Surveyed	% Sampled
1	Airport Road	1575 Martin Luther King Jr Blvd	Chapel Hill	Displacement	10	33	23	70%
2	Byrdsville	1801 Old NC 10	Hillsborough	General Feedback - Hillsborough	15	47	13	28%
3	Caroline	4931 Howe St	Durham	General Feedback – Eno Area	21	66	16	24%
4	Homestead	6421 NC 86 S	Chapel Hill	General Feedback – Orange County	3	9	4	44%
5	Lakeview	1000 Weaver Dairy Rd	Chapel Hill	Displacement	10	33	6	18%
6	Rocky Brook	500 S Greensboro St	Carrboro	Displacement	13	41	13	32%
7	Tarheel	1208 Martin Luther King Jr Blvd	Chapel Hill	Displacement	23	72	14	19%
8	Village AKA Wright's	1660 Martin Luther King Jr Blvd	Chapel Hill	Displacement	7	24	7	29%
					102	325	96	30%

Demographics

Overall, most of the participants were Hispanic (89%), with 8% of participants who were African-American, and 4% of participants who were white.

Here is a table of the main demographics:

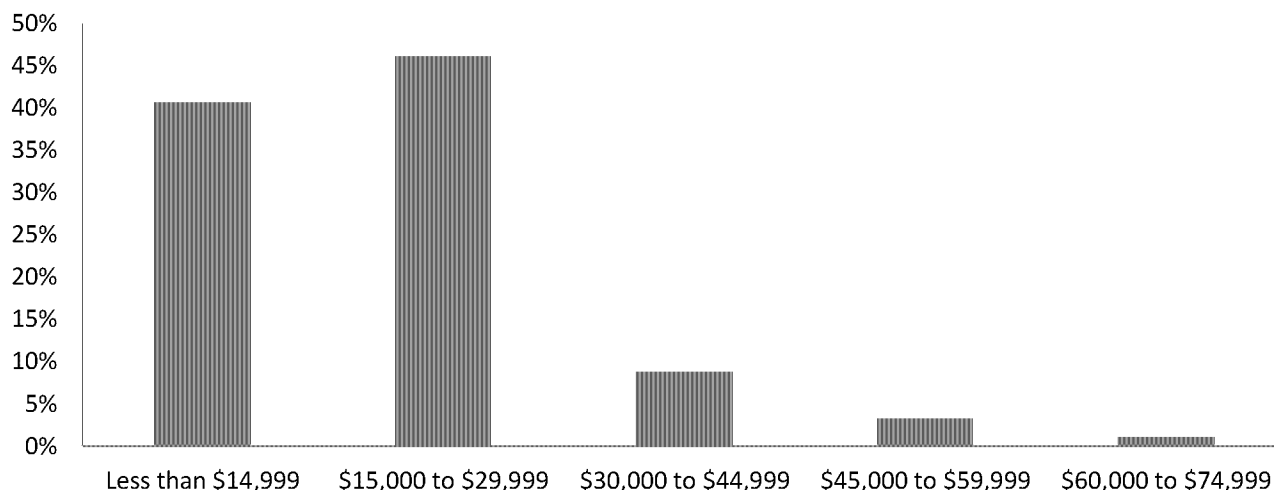
Race/Ethnicity	% (number)
Hispanic	88.5% (84)
African-American	8.3% (8)
White	4.2% (4)
Household Information	
Average Members of Household	4.1
Average Number of Children	1.8
Average Adults Contributing to Household Costs	1.4
Percent with Children (0-17 y/o) in Household	76%
Percent with Seniors (62+ y/o) in Household	8%

School District Attended (if children in household)	
Orange County Schools	40.3%
Chapel Hill-Carrboro City Schools	59.7%

Annual Household Income

The families in this study were almost entirely very low income. Almost all families (87%) make less than \$30,000 per year.

Annual Household Income, % of Respondents



Looking at Area Median Income, HUD defines AMI for a family of 4 in Chapel Hill as \$73,300. Given that the average members of the households for families in our study was 4.1, almost all of the families (85%) represented are at or below 40% of AMI, with 2 in 5 families at or below 20% of AMI.

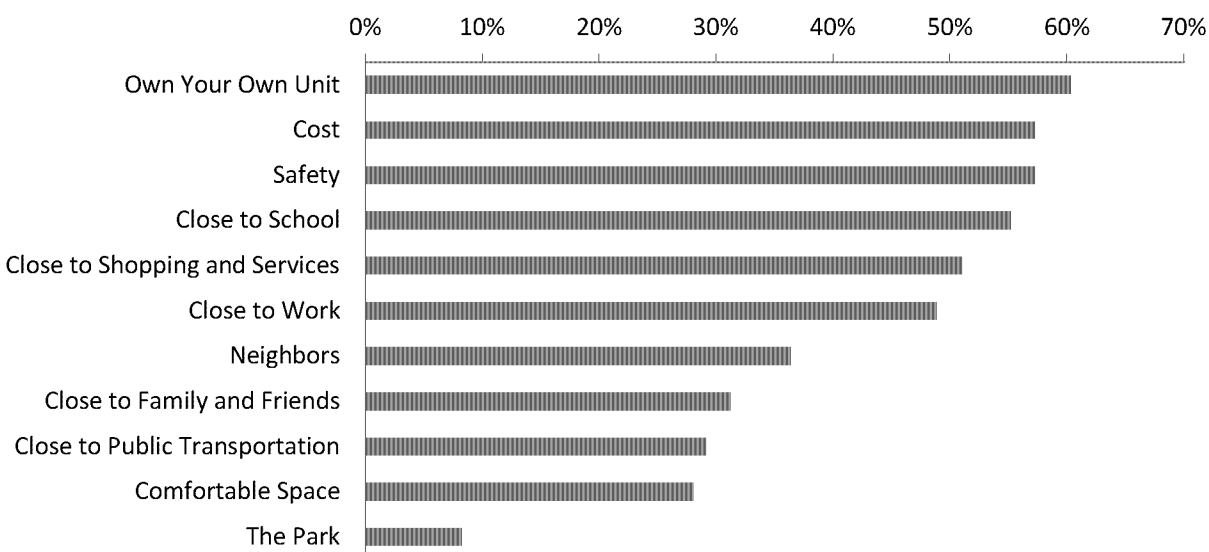
Current Mobile Home Information

59% of respondents live in mobile home parks located in the Town of Chapel Hill, 14% in the Town of Carrboro, 3% in the Town of Hillsborough, and 24% in Orange County, outside of town limits.

When asked how long they had lived in their mobile home, a quarter had lived there 1-4 years (25%), more than a quarter for 5-9 years (28%), one fifth for 10-14 years (22%), and 12% for 15-19 years. The majority of families owned their home (83%) but rented their park space (89%).

Overall, almost all of the residents were satisfied or very satisfied with their current mobile home (95%).

What do you like most about your current home?



Cost Information

Most families own their own home, which means they pay for their mobile home space, water, electricity, and assorted other costs. The average rent for the mobile home space was \$342; once the average cost for utilities is included, the total cost of housing is approximately \$568 per month.

For families who do not own their homes, the average total monthly cost for renting the mobile home is \$489 per month. When added to the others costs those residents pay, which in some cases includes space rental and usually includes utilities, is approximately \$787 per month. It is important to remember that very few families rent their homes: only 17% of families are bearing this higher cost.

A majority of families (70%) said that rent has increased at least one or more times in the last 12 months, and on average, rent increased \$44 dollars, with a maximum increase of \$90 dollars. These costs are broken down below:

Type of Bill	Average Cost per Month	Minimum Cost	Maximum Cost
Mobile Home Mortgage	\$489	\$200	\$850
Mobile Home Space	\$342	\$280	\$450
Water	\$64	\$20	\$200
Electricity	\$158	\$50	\$350
Other (Including internet, cable, and cellphone)	\$192	\$18	\$400

Owning or Renting Their Home

Almost all of the families preferred to own their homes in the future (95%), and almost the same number of families wanted to own their land in the future (94%). When asked about selling their mobile home that they currently own, around half of families (56%) said that they would sell if they could. More

families who live in the County instead of in town limits indicated that they would sell their homes compared to those who live in the city limits (61% vs. 54%).

Services

Public Transportation

40% of families used public transportation. Of these families, the most common reason to use public transportation was for medical appointments or health services (74%). Getting to work (68%) and school (58%) were also common responses.

If the family did not use public transportation, all of them except one family said that they have a car and drove themselves (96%).

Services

When families were asked about where they went to access services, the service a majority of families mentioned that they would ask their neighbors were child care (52%). The next most common areas where residents would reach out to their neighbors were for transportation (42%), carpenters (40%), and electricians (30%). Most other services, including computer repair, lawn care, car repair, medical care, and produce or food were sought outside the mobile home park.

Internet

Almost three-quarters of the mobile home parks had access to the internet (72%), and 80% of families living in those parks are connected to the internet in their homes.

Of the 28% of families who do not have access to the internet, half of them access it through their cellphones. One fifth of those families access the internet at the library, and around the same number don't use the internet (equivalent to less than 6% of all respondents).

Relocation

When asked about their preferences for their ideal living situation, 87% of families agreed that a detached single family home would be ideal. Similarly, 82% of families said that a multi-family or apartment building would be their least preferred option. Some families said that they would never choose to live in an apartment building.

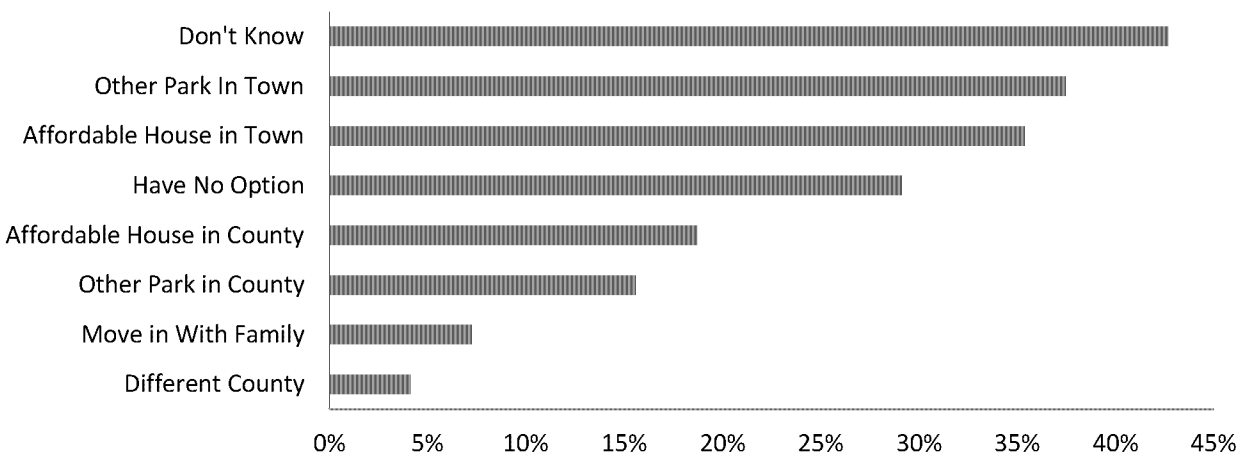
A majority of families selected a mobile home as their second choice (62%), and 59% listed an attached single family home like a townhome or duplex as their third choice.

Chapel Hill and Carrboro residents were asked if they would be happy relocating to outside of the Chapel Hill-Carrboro area. More than three fourths of families (80%) responded that they would not want to relocate outside of the Chapel Hill-Carrboro area. Only 1 in 5 families indicated that they would be willing to move outside CHC.

When asked why they would not want to relocate outside of the Chapel Hill and Carrboro area, almost half of the families cited the school system as the primary reason they would not want to leave. That reason is closely followed by being close to work and the store and liking the area. Almost 20% of families said that they depend on the public transportation system, as they can't drive.

If the mobile home park closed, most families didn't know what options they had (43%), although another park in town or an affordable house in town were common responses. It is important to note that almost a third of families said they didn't have another option if their park closed (29%).

Options Families Would Consider if Park Closed



Most families do not want to move from their current mobile home park (85%). The most common priorities influencing families' decisions to move were the school system, proximity to family and friends, affordability, home ownership options, and proximity to stores and services.

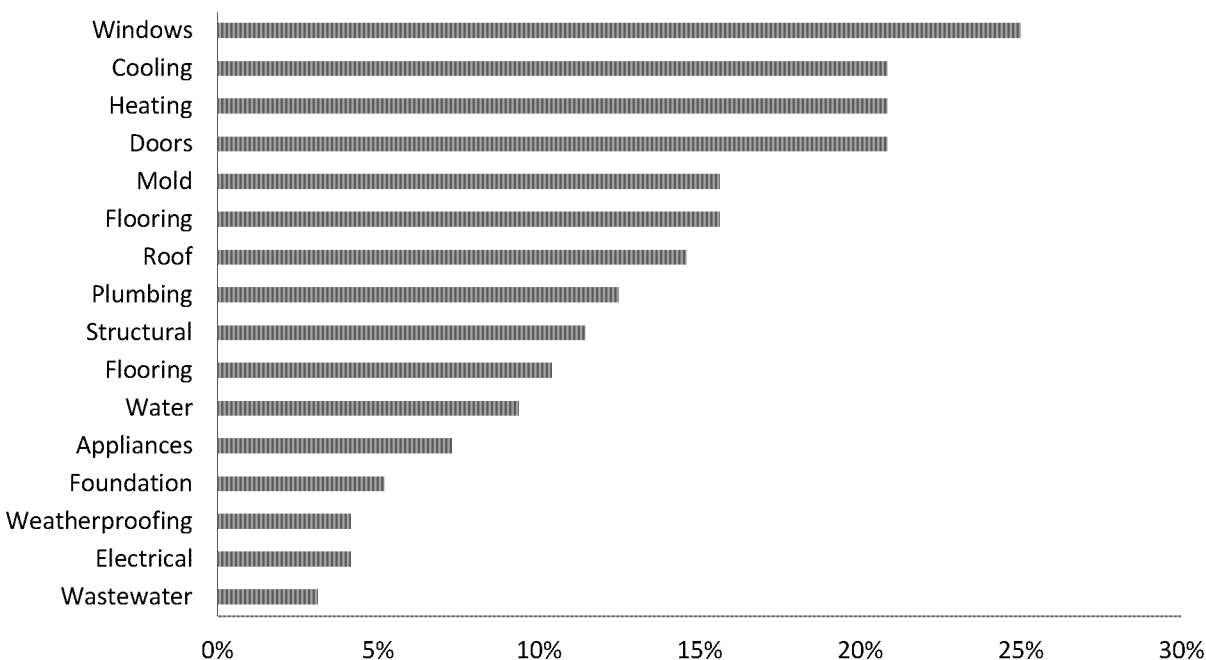
When asked if funding was available to move their existing mobile home, 68% of families would apply, but some families expressed reservations about whether they would qualify and that their mobile home might not be moveable. Additionally, they mentioned that some parks required that homes be less than 10 years old in order to move in; none of the survey respondents would meet that requirement.

Mobile Home Conditions

All of the mobile homes in the survey were built before 2002. The majority were built in the 1990's (42%), with around a quarter built in the 1980's (27%). The oldest house was built in 1960, the most common year of manufacture was 1996, and the median year was 1986. Almost all of the homes (94%) were single-wide homes. In addition, two-thirds of homes had modifications like additions, porches, decks, or ramps.

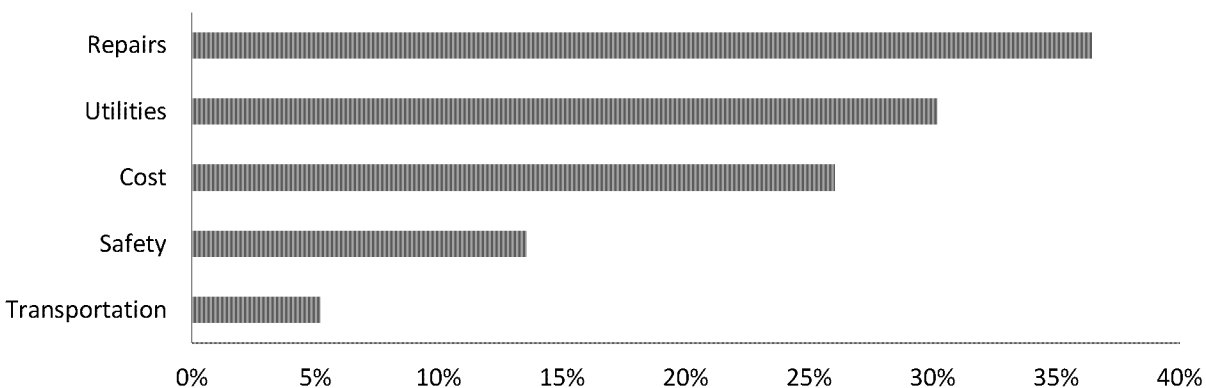
When asked about issues, the most common responses were windows, doors, heating and cooling, mold, flooring, and the roof.

Problems with Mobile Homes



Overall families' greatest concerns about their home were related to repairs, utilities and cost. Safety and transportation were also mentioned as concerns.

Families' Greatest Concerns Related to Their Home



Approximately half of the families stated that their homes would not be able to relocate without significant damage (50%), and 40% of families said that their homes could be relocated; 10% did not answer the question.

There were differences in condition of the home between respondents in the Chapel Hill-Carrboro area and the Hillsborough and greater County area. In the Chapel Hill-Carrboro area, 49% of families said that

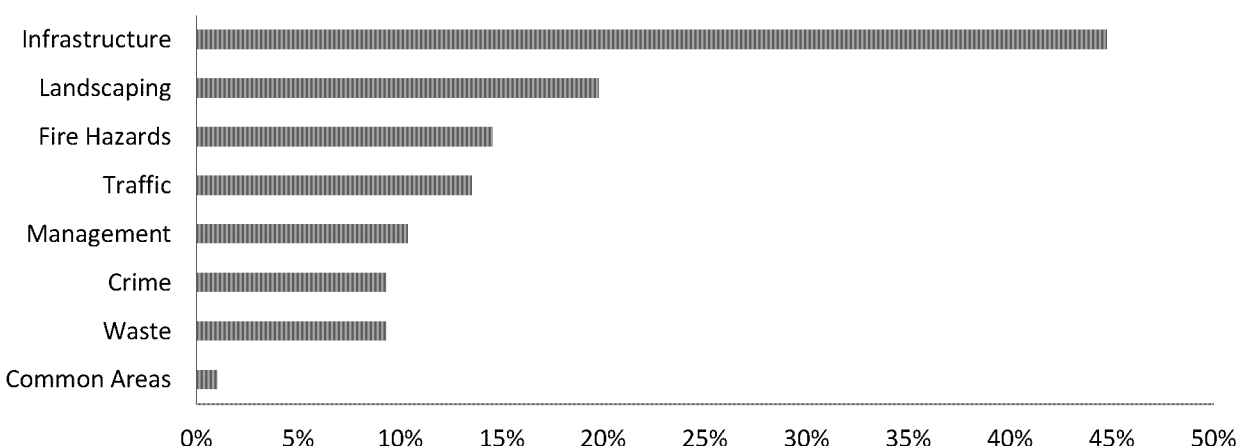
their homes could not be moved without significant damage, compared to 65% of families in the County who could not move their homes.

When asked if they would apply for funding to repair and maintain their homes, 84% of families would apply.

Park Management

Only 17% of families were dissatisfied with current park management, although families had many suggestions for how to improve the mobile home park. They were asked about their greatest concerns related to their mobile home park, and their answers were overwhelmingly related to infrastructure problems:

Families' Greatest Concerns about Their Mobile Home Park



Improvements to the Mobile Home Park

When families were asked how the mobile home park could be improved, the most common responses were to improve and fix the roads, with more than double the responses of other issues. Those suggestions included adding gravel in places, repaving areas, and fixing potholes.

Other common concerns included adding green areas and a park or playground for children, having more space between homes, adding more lighting, and improving the quality of the water.

Living conditions in the parks have mostly stayed the same over the past three years, with 69% of families experiencing approximately the same living conditions. For those residents where conditions had changed, more of them had changed for the worse rather than the better, although they were around the same (16% worsened, while 14% improved).

Management Responsiveness to Resident Concerns

In the past, 2 in 5 families have tried to contact management with a problem about the park. Of those families, more than half of them (55%) were dissatisfied with management's responsiveness.

When asked about retaliation, only 20% of families were concerned about the manager and/or owner getting back at them for complaints or requests. Of those families, all except one identified as Hispanic.

On the other hand, 63% of families would file an anonymous complaint if that was available, signaling that retaliation may be a larger concern than the original data would suggest.

One resident told the following story:

“We complained about the potholes in the road for a long time. Finally, our manager bought gravel and filled in the holes. However, a few months later, rent went up a lot for everyone. We could never prove that it was because of gravel, but now we’re afraid to complain about anything.”

Additional Observations by the Survey Team

During survey administration, many families discussed the following concern with the survey team:

Documentation Status: Although not collected in the survey, many families expressed that documentation status can be a significant obstacle, even for those families who have “mixed status” (the children are citizens, but the parents are not). The lack of legal status for parents can restrict the services that they are eligible to receive and can complicate other issues. For example, some mobile home residents have the signed title from the previous owner, but in order to put the title in their name they need a North Carolina driver’s license, which they can’t get if they’re undocumented. Families are very interested in programs where they could put in work to buy a home and the land it sits on, but are concerned they may not qualify because of their documentation status. They are afraid that there may be similar limitations on alternatives offered through other government programs because of their status. There are also fears about benefitting from governmental housing support more generally, even if they qualify, because of the potential implications of publically recognizing their status.

Appendix A: Letter to Residents

[Date]

[address line 1]

[city, state zip]

Dear Orange County Resident:

I am writing to invite you to participate in the 2017 Survey of Mobile Home Residents, a process that is being conducted by Orange County. This assessment is part of an effort to increase housing that is affordable for Orange County mobile home park residents.

In Orange County we are aware of the challenges of having good housing that is affordable. Housing costs continue to rise and some residents struggle to make ends meet. The County is involved in efforts to increase housing that is affordable and to respond to the priorities of residents living in mobile home parks.

We need the voices of mobile home residents in this process. To do this, we are conducting a survey to learn more about your experiences. Members of the Family Success Alliance, an Orange County Health Department initiative, will visit various mobile home parks in the coming weeks to conduct a survey and will share the results of this survey with the County to help determine what actions can be taken to support our mobile home park communities.

The survey is completely voluntary, and it should take no more than 30 minutes to complete. There are no right or wrong answers. You may refuse to answer any question you don't feel comfortable with. Your answers will be completely confidential. The information you give us will not be linked to you in any way. Thanks in advance for your participation.

In the upcoming weeks someone may come to your door and ask you to complete this survey with us. If you have any questions or comments about this assessment we would be happy to talk with you. You can call Meredith McMonigle at 919-245-2071 or email mmcmonigle@orangecountync.gov.

Thank you very much for helping with this assessment.
Sincerely,

Bonnie Hammersley
County Manager

Appendix B: Final Survey in English

Mobile Home Park _____ - _____ - E01
(park ID) (nav ID) (survey ID)

Date: _____ Time: _____

1. Where is your mobile home park located?
 - A. In the Town of Chapel Hill
 - B. In the Town of Carrboro
 - C. In the Town of Hillsborough
 - D. In Orange County, outside of town limits
2. What do you like most about your current home? (Please select up to five)
 - A. Own your own unit
 - B. Cost/affordability
 - C. Comfortable living space/size of the unit
 - D. Safety
 - E. Neighbors
 - F. Mobile home park
 - G. Close to work
 - H. Close to schools
 - I. Close to family and friends
 - J. Close to public transportation
 - K. Close to shopping and services
 - L. Other (Specify) _____
3. How satisfied are you with your current mobile home?
 - A. Very satisfied
 - B. Satisfied
 - C. Dissatisfied
 - D. Very dissatisfied
4. Please provide the total number adults, seniors, and/or children in your household below:
 # of adults (18 and older) _____ # of seniors (62 and older) _____ # of children (17 and under) _____
5. If you have children in the public school system, which school district do your children attend?
 - A. Orange County Schools
 - B. Chapel Hill – Carrboro City Schools
 - C. N/A
6. What is your total annual household income? (select one)
 - A. Less than \$14,999
 - B. \$15,000 to \$29,999
 - C. \$30,000 to \$44,999
 - D. \$45,000 to \$59,999
 - E. \$60,000 to \$74,999
 - F. \$75,000 to \$89,999
 - G. \$90,000 to \$104,999
 - H. \$105,000 to \$124,999
 - I. \$125,000 to \$149,999
 - J. \$150,000 or more
7. How many members of your household contribute to housing costs (mortgage and/or rent)?
 - A. 1
 - B. 2
 - C. 3
 - D. 4
 - E. 5 or more
8. What race(s) or ethnicities do you identify yourself with? (select all that apply)
 - A. American Indian or Alaska Native
 - B. Asian
 - C. Black or African American
 - D. Hispanic, Latino, or Spanish Origin
 - E. Native Hawaiian or Other Pacific Islander
 - F. White
 - G. Other _____
9. How long have you lived in your mobile home?
 - A. Less than 1 year
 - B. 1 to 4 years
 - C. 5 to 9 years
 - D. 10 to 14 years
 - E. 15 to 19 years
 - F. 20 or more (Please specify: _____ years)
10. Do you own or rent your mobile home?
 - A. Own
 - B. Rent

11. Do you own or rent your mobile home park space?
 A. Own B. Rent
12. What is the approximate monthly cost for your mobile home and mobile home park space?
 Home \$ _____ Space \$ _____
13. How many rental increases have you experienced in the last 12 months?
 A. None D. 5 – 6
 B. 1 – 2 E. 7 or more
 C. 3 – 4

In total, how much has your rent increased in the last 12 months? \$ _____

Please provide additional monthly costs. If these are included in your monthly rental fee please indicate that.

	Included in monthly rental fee?
Water \$ _____	Yes/No
Sewer/Waste Water \$ _____	Yes/No
Electrical \$ _____	Yes/No
Trash \$ _____	Yes/No
Other Costs (Specify below) \$ _____	Yes/No

14. Would you prefer to own or rent your home in the future? (select one)
 A. Own B. Rent
15. Would you prefer to own or rent your land in the future?
 A. Own B. Rent
16. If you own your mobile home and could sell it, would you?
 A. Yes B. No
17. If your preference is to own, what keeps you from buying a home? (Select all that apply)
 A. Not enough income D. Lack of a down payment
 B. Poor credit E. Legal issues
 C. Lack of affordable housing options F. Other (Please specify) _____

Services

18. Do you regularly use public transportation (i.e. Chapel Hill Transit, Orange Public Transportation)?
 A. Yes B. No
- If yes, where to? (Select all that apply)
 C. Work F. Medical Appointments/Health Services
 D. School G. Personal
 E. Shopping H. Other (Please specify) _____
- If no, how do you get around?
 A. I have a car and drive myself D. I bike
 B. Someone in my household drives a personal car E. I walk
 C. I get rides from neighbors or family members F. Other (Please specify) _____

19. When you are in need of or require the services listed below, do you most frequently ask your neighbors in the mobile home park or service providers outside of the mobile home park? (select all that apply)

- | | | |
|-------------------------------|--------------|------------|
| 1. Carpenter | A. Neighbors | B. Outside |
| 2. Child Care | A. Neighbors | B. Outside |
| 3. Computer/Technology Repair | A. Neighbors | B. Outside |
| 4. Electrician | A. Neighbors | B. Outside |
| 5. Lawn Care/Landscaping | A. Neighbors | B. Outside |
| 6. Mechanic | A. Neighbors | B. Outside |
| 7. Medical/Health Care | A. Neighbors | B. Outside |
| 8. Produce/Food Sales | A. Neighbors | B. Outside |
| 9. Transportation | A. Neighbors | B. Outside |

20. Does your mobile home park have access to internet?

- A. Yes B. No

If yes, is your home connected to internet?

- A. Yes B. No

If no, how do you access the internet when you need to? (Please specify)

Relocation

21. Please rank which housing type would be your ideal living situation, regardless of potential costs. (1 being the option you prefer the most, 4 being the option you prefer the least)

- ____ Detached single family home (i.e. a standalone house that is a free-standing residential building)
- ____ Mobile home
- ____ Attached single family home (i.e. townhouse, duplex)
- ____ Multi-family (i.e. apartment)

22. For Chapel Hill and Carrboro residents: If you were to relocate, would you be happy relocating to a community outside of the Chapel Hill and Carrboro area?

- A. Yes B. No

If no, please specify why? _____

23. What potential relocation options would you consider if your mobile home park was to close and residents had to leave? (Please select up to four)

- | | |
|---|---------------------------|
| A. Move to a different park in town | F. Move in with family |
| B. Move to a different park in the county | G. Have no option |
| C. Move to an affordable apartment or house in town | H. Don't know |
| D. Move to an affordable apartment or house in the county | I. Other (Please specify) |
| E. Move to a different county | J. _____ |

24. Do you prefer to move from your existing mobile home and park?

- A. Yes B. No

If you prefer to move, what priorities influence your decisions about where to live? (Please select up to four)

- | | |
|---------------------------------------|-----------------------------|
| A. School system | G. Pedestrian/bike friendly |
| B. Proximity to public transportation | H. Affordability |

- C. Proximity to family and friends
- D. Proximity to shopping and services
- E. Proximity to jobs
- F. Safety
- I. Home ownership options
- J. Rental options
- K. Other (Please specify) _____

25. If funding was available to move your household and your existing mobile home, if it can be moved, would you apply?

- A. Yes B. No

Mobile Home Conditions

26. What year was your mobile home manufactured/built? _____

27. Is your mobile home a single wide or double wide?

- A. Single B. Double

28. Have modifications been made to your mobile home? (i.e. additions, porches, decks, ramps)

- A. Yes B. No

29. Does your mobile home have issues with any of the following? (Please select all that apply and provide any additional comments or details on the next page.)

- | | |
|-------------------------------------|----------------------------------|
| A. Water (well/public water) | K. Heating systems |
| B. Wastewater (septic/public sewer) | L. Cooling systems |
| C. Electrical | M. Plumbing |
| D. Roof | N. Flooring |
| E. Windows (including leaks) | O. Installation/weather proofing |
| F. Doors (including leaks) | P. Appliances |
| G. Flooring/carpeting | Q. Other (Please specify) _____ |
| H. Structural | |
| I. Foundation/insulation/set up | |
| J. Mold | |

Additional Comments or Details: _____

30. Greatest concerns related to your home? (Please select up to three)

- | | |
|---|--------------------------------------|
| A. Housing costs (including home and space) | D. Feeling safe |
| B. Home repairs | E. Lack of convenient transportation |
| C. Paying for utilities | F. Other (Please specify) _____ |

31. Would your mobile home be able to relocate or move to another location without resulting in significant damage?

- A. Yes B. No

32. If funding was available for repair and maintenance to your existing home, would you apply?

- A. Yes B. No

Park Management

33. How satisfied are you with current park management?

- | | |
|-------------------|----------------------|
| A. Very satisfied | C. Dissatisfied |
| B. Satisfied | D. Very dissatisfied |

34. What are your greatest concerns related to your mobile home park? (Please select all that apply and provide any additional comments)

- A. Fire hazards (abandoned homes, inoperable vehicles) _____
- B. Landscaping (grass, overgrown vegetation, weeds) _____
- C. Traffic (busy streets, lack of access points, speeding) _____
- D. Solid waste collection (trash, junk, recycling) _____
- E. Crime and safety _____
- F. Park infrastructure (roads, lighting, fencing, stormwater, flooding) _____
- G. Common area maintenance (playgrounds, laundry, swimming pools) _____
- H. Park management _____
- I. Other (Please specify) _____

35. If you could improve one thing within your mobile home park, what would it be?

36. How have living conditions in the park changed in the last three years?

- A. They have worsened
- B. They have stayed the same
- C. That have improved

37. In the past, have you attempted to contact management regarding a problem?

- A. Yes B. No

If yes, how satisfied are you with management's responsiveness?

- A. Very satisfied
B. Satisfied
C. Dissatisfied
D. Very dissatisfied

Did management resolve the problem and how? (Please specify)

38. Are you concerned with issues of retaliation from the mobile home park manager and/or owner?

- A. Yes B. No

39. If there was a resource to file an anonymous complaint on a mobile home park manager and/or owner, would you?

- A. Yes B. No

Please provide any additional comments:

[illegible]

FOR OFFICIAL USE ONLY:

Navigator Notes (if notes relate to a specific question, please indicate the question number.):

Appendix C: Final Survey in Spanish

Mobile Home Park _____ - _____ - _____
(park ID) (nav ID) (survey ID)

Date: _____ Time: _____

40. ¿Dónde se encuentra ubicado el parque de casas móviles donde usted vive?

- | | |
|--------------------------------|---|
| A. En la ciudad de Chapel Hill | C. En la ciudad de Hillsborough |
| B. En la ciudad de Carrboro | D. En el Condado de Orange, fuera de los límites de la ciudad |

41. ¿Qué es lo que más le gusta de su vivienda actual? (Seleccione hasta cinco)

- | | |
|--|---|
| A. Es dueño de su propia unidad | G. Cerca del trabajo |
| B. El costo/la accesibilidad | H. Cerca de las escuelas |
| C. El espacio es cómodo/el tamaño de la unidad | I. Cerca de familiares y amigos |
| D. La seguridad | J. Cerca del transporte público |
| E. Los vecinos | K. Cerca de las tiendas y otros servicios |
| F. El parque de casas móviles | L. Otro (especifique) _____ |

42. ¿Qué tan satisfecho está con su casa móvil actual?

- | | |
|-------------------|---------------------|
| A. Muy satisfecho | C. Insatisfecho |
| B. Satisfecho | D. Muy insatisfecho |

43. Por favor a continuación escriba el número total de adultos, adultos mayores y niños en su hogar:

de adultos (18 a 61 años) _____ personas de 62 años o más _____ niños (17 años o menos) _____

44. Si tiene niños en el sistema escolar público, ¿a qué distrito escolar asisten sus niños?

- | | | |
|---|--|--------------------|
| A. Orange County Schools | B. Chapel Hill – Carrboro City Schools | C. N/A (No Aplica) |
| <i>Escuelas del Condado de Orange Escuelas de las ciudades de Chapel Hill- Carrboro</i> | | |

45. ¿Cuál es el ingreso anual total de su hogar? (selecta uno)

- | | |
|------------------------|--------------------------|
| A. Menos de \$14,999 | F. \$75,000 a \$89,999 |
| B. \$15,000 a \$29,999 | G. \$90,000 a \$104,999 |
| C. \$30,000 a \$44,999 | H. \$105,000 a \$124,999 |
| D. \$45,000 a \$59,999 | I. \$125,000 a \$149,999 |
| E. \$60,000 a \$74,999 | J. \$150,000 o más |

46. ¿Cuántos miembros de su hogar contribuyen a los costos de la vivienda (hipoteca y/o alquiler)?

- | | |
|------|------------|
| a. 1 | B. 4 |
| b. 2 | C. 5 o más |
| c. 3 | |

47. ¿A qué grupo racial o étnico se identifica más? (Seleccione todas las que apliquen)

- | | |
|--|---|
| A. Nativo Americano o Nativo de Alaska | E. Nativo de Hawái u otra Isla del Pacífico |
| B. Asiático | F. Blanco |
| C. Negro o Afroamericano | G. Otro _____ |
| D. Origen Hispano, Latino, o Español | |

48. ¿Cuánto tiempo ha vivido en su casa móvil?

- | | | |
|--------------------|-----------------|---|
| A. Menos de un año | C. 5 a 9 años | E. 15 a 19 años |
| B. 1 a 4 años | D. 10 a 14 años | F. 20 o más (Por favor especifique: _____ años) |

49. Su casa móvil ¿es propia (es el dueño) o es alquilada?

- | | |
|-----------|--------------|
| A. Propia | B. Alquilada |
|-----------|--------------|

50. ¿Posee (es el dueño) o alquila el espacio de aparcamiento de su casa móvil?
 A. Es propio B. Lo alquilo
51. ¿Cuál es el costo mensual aproximado de su casa móvil y el espacio de aparcamiento?
 Casa \$ _____ Espacio de aparcamiento \$ _____
52. ¿Cuántos aumentos del alquiler ha experimentado en los últimos 12 meses?
 A. Ninguno D. 5 – 6
 B. 1 – 2 E. 7 o más
 C. 3 – 4
- En total, ¿cuánto ha aumentado su renta en los últimos 12 meses? \$ _____

Por favor proporcione los costos mensuales adicionales. Si estos costos están incluidos en su cuota de alquiler mensual, solo marque poniendo un ganchito (✓) de verificación.

		Esta incluído en la renta?
Agua (water)	\$ _____	Si/No
Alcantarillado y Aguas Residuales (Sewer/Waste Water)	\$ _____	Si/No
Electricidad (Electrical/Electricity)	\$ _____	Si/No
Basura (Trash)	\$ _____	Si/No
Otros costos (por favor especifíquelos a continuación)	\$ _____	Si/No

53. Si actualmente alquila, ¿en el futuro preferiría ser dueño o alquilar? (selecta uno)
 A. Dueño B. Alquilar
54. Si actualmente es dueño, ¿en el futuro preferiría ser dueño o alquilar?
 A. Dueño B. Alquilar
55. Si es dueño de su casa móvil y pudiera venderla, ¿la vendería?
 A. Sí B. No
56. Si usted prefiere tener vivienda propia, ¿qué le impide comprar una casa?
 (Seleccione todas las que apliquen)
- | | |
|--|--|
| A. No tengo ingresos suficientes | D. Falta del pago inicial (down payment) |
| B. Mal crédito | E. Asuntos legales |
| C. Falta de opciones de vivienda asequible | F. Otro (por favor especifique) |
- _____
- _____
- _____

Servicios

57. ¿Utiliza el transporte público? (por ejemplo, Chapel Hill Transit, Orange Public Transportation)
 A. Sí B. No *Los autobuses de Chapel Hill El transporte público de Orange*
- ¿Si contestó sí, para ir a dónde? (Seleccione todas las que correspondan)
- | | |
|---------------|---------------------------------------|
| A. Trabajo | D. Citas médicas/Servicios de Salud |
| B. Escuela | E. Asuntos personales |
| C. De compras | F. Otro (Por favor especifique) _____ |
58. Cuando necesita o requiere los servicios listados a continuación, ¿con mayor frecuencia los pide a sus vecinos en el parque de casas móviles o a proveedores de servicios fuera del parque de casas móviles?
 (Seleccione todas las que apliquen)
- | | | |
|---|------------|----------------------|
| 1. Carpintería | A. Vecinos | B. Persona de afuera |
| 2. Cuidado de niños | A. Vecinos | B. Persona de afuera |
| 3. Reparación de computadora/tecnología | A. Vecinos | B. Persona de afuera |

- | | | |
|---|------------|----------------------|
| 4. Electricista | A. Vecinos | B. Persona de afuera |
| 5. Cuidado del césped/arreglo del patio | A. Vecinos | B. Persona de afuera |
| 6. Mecánico | A. Vecinos | B. Persona de afuera |
| 7. Servicios médicos o de salud | A. Vecinos | B. Persona de afuera |

8. Venta de productos o alimentos A. Vecinos B. Persona de afuera

9. Transporte A. Vecinos B. Persona de afuera

59. ¿Su parque de casas móviles tiene acceso a servicios de Internet?

- A. Sí B. No

Si contestó sí, ¿está su casa conectado a los servicios de internet?

- A. Sí B. No

Si contestó no, ¿cómo obtiene acceso /se conecta a Internet cuando lo necesita?

(Por favor especifique) _____

Reubicación

60. Por favor clasifique qué tipo de vivienda sería su situación de vivienda ideal, sin tomar en cuenta los costos potenciales. (1 sería la opción que más prefiere, 4 la opción que usted menos prefiere)

- ____ Casa unifamiliar separada (es decir: una casa independiente que es una residencia individual)
- ____ Casa móvil
- ____ Casa unifamiliar unida (es decir, casa adosada/unida, dúplex)
- ____ Edificio de múltiples -familias (por ejemplo, un apartamento)

61. Para los residentes de Chapel Hill y Carrboro: Si fuera a reubicarse/mudarse, ¿sería feliz reubicándose a una comunidad fuera de la zona de Chapel Hill y Carrboro?

- A. Sí B. No

Si contestó no, por favor especifique ¿por qué? _____

62. ¿Qué opciones potenciales de reubicación consideraría si su parque de casas móviles cerrara y los residentes tuvieran que mudarse? (Por favor, seleccione hasta cuatro)

- | | |
|--|---------------------------------|
| A. Moverme a un parque diferente en la ciudad | F. Irme a vivir con familiares |
| B. Moverme a un parque diferente en el condado | G. No tengo opción |
| C. Moverme a un apartamento o casa asequible en la ciudad | H. No lo sé |
| D. Moverme a un apartamento o casa asequible en el condado | I. Otro (Por favor especifique) |
| E. Moverme a otro condado | J. _____ |

63. ¿Prefiere mudarse de su actual casa móvil y parque?

- A. Sí B. No

Si prefiere mudarse, ¿qué prioridades influyen su decisión sobre dónde vivir?

(Por favor, seleccione hasta cuatro)

- | | |
|---|--------------------------------------|
| a. Sistema escolar | g. Apto para peatones y bicicletas |
| b. Proximidad al transporte público | h. Asequibilidad (costo razonable) |
| c. Cercanía a familiares y amistades | i. Opciones para tener casa propia |
| d. Cercanía a servicios y centro de compras | j. Opciones para alquiler |
| e. Cercanía a trabajos | k. Otro (Por favor especifique)_____ |
| f. Seguridad | B. _____ |

64. Si hubiera financiamiento disponible para mover a los miembros de su hogar y su casa móvil actual, si la casa móvil puede moverse, ¿aplicaría usted para ese financiamiento?

- A. Sí B. No

Condiciones de la Casa Móvil

65. ¿En qué año fue fabricada/construida su casa móvil? _____
66. ¿Es su casa móvil de anchura sencilla (single wide) o doble (double wide)?
A. Sencilla (Single) B. Doble (Double)
67. ¿Se han hecho modificaciones a su casa móvil? (adiciones, porches, terrazas/plataformas, rampas)
A. Sí B. No
68. ¿Su casa móvil tiene problemas con algo de lo siguiente? (Seleccione todo lo que aplique y proporcione comentarios adicionales o detalles en la página siguiente).
- | | |
|---|--|
| A. Agua (pozo/servicio de agua pública) | K. Sistemas de calefacción |
| B. Aguas residuales (tanque séptico/alcantarillado público) | L. Sistemas de refrigeración(aire acondicionado) |
| C. Electricidad | M. Plomería |
| D. Techo | N. Suelos/pisos |
| E. Ventanas (incluyendo filtraciones o fugas) | O. Instalación/impermeabilización |
| F. Puertas (incluyendo filtraciones o fugas) | P. Electrodomésticos |
| G. Pisos/alfombras (moquetas) | Q. Otro (por favor especifique) _____ |
| H. Estructura | |
| I. Fundación/aislamiento(insulation)/montaje (set-up) | |
| J. Moho | |
- Comentarios o Detalles Adicionales: _____
- _____
- _____

69. ¿Cuáles son las mayores preocupaciones relacionadas con su casa? (Por favor, seleccione hasta tres)
- | | |
|---|---------------------------------------|
| A. Precio de vivienda (incluyendo casa y espacio) | D. Sentir seguridad |
| B. Reparaciones de la casa | E. Falta de transporte conveniente |
| C. El pago de las utilidades | F. Otro (por favor especifique) _____ |
70. ¿Podría su casa móvil ser trasladada o movida a otra ubicación sin que sufra daños significativos?
A. Sí B. No
71. Si hubiera fondos disponibles para reparación y mantenimiento de su casa, ¿aplicaría usted?
A. Sí B. No

La Administración del Parque

72. ¿Qué tan satisfecho está con la gerencia/administración actual del parque?
A. Muy satisfecho C. Insatisfecho
B. Satisfecho D. Muy insatisfecho
73. ¿Cuáles son sus mayores preocupaciones relacionadas con su parque de casas móviles? (Por favor seleccione todas las que apliquen y proporcione comentarios adicionales)
- A. Riesgos de incendio (casas abandonadas, vehículos inoperables) _____
 - B. Las áreas verdes (césped, vegetación frondosa, malezas) _____
 - C. El tráfico (calles muy frecuentadas, falta de vías de acceso, exceso de velocidad) _____
 - D. Recolección de residuos sólidos (basura, chatarra, reciclaje) _____
 - E. El crimen y la

SUMMARY OF TOOLS UTILIZED IN OTHER JURISDICTIONS

The rise of mobile home park closures and subsequent eviction of residents has become a growing concern for the affordable housing arena across the United States in recent years. The newly recovered real estate market is likely to put a significant number of mobile home parks in jeopardy. Mobile home parks are the largest segment of non-subsidized affordable housing in the country. Like Orange County, many jurisdictions, including those in Texas, Florida, Louisiana, California and even New York, Cleveland and Seattle have seen a rise in mobile home park closures that leave low income individuals and families struggling to find affordable housing in an already strained market where supply of such housing is limited.

The information contained in this summary looks at a few of the tools being utilized by other communities, in North Carolina and across the United States.

North Carolina Communities		
Locale	Practice (s)	Additional Comments/Notes
Alamance County/Burlington/Graham	The City of Burlington administers the HOME Program for the Consortium in the County and provides low-interest loan assistance but all participants must own the land and the MH must be on a permanent foundation. The City uses HOME funds to undertake this program and it is conducted only in the County.	No replacement assistance is offered. In addition, the Piedmont Triad COG provides a Weatherization Program. Eligible properties include mobile homes and assistance is provided to the elderly, disable persons and low income families with children. Renters may apply for assistance but the property owner must agree in writing to have the repairs completed.
	Piedmont Triad COG, through a grant from the NC Housing Finance Authority (NCHFA), administers a Single-Family Rehab Program. Mobile homes are not	

	addressed under this program. The assistance is in the form of a forgivable loan.	
Caswell County	Piedmont Triad COG administers an Essential Rehab Program funded by the NCHFA. Mobile homes may be addressed under this program. However, the applicant must own the land and the home. In addition, the mobile home must be on a permanent foundation. Assistance is in the form of a forgivable loan.	
Chatham County	<p>Rebuilding Together of the Triangle provides a Limited Rehab Program, which does address mobile homes. The assistance is in the form of a grant. The Council on Aging also provides a minor repair program for the elderly.</p> <p>The Joint Orange-Chatham County Community Action Agency (JOCCA) provides a HVAC Repair & Replacement Program through funding from the NC Dept. of Health & Human Services. In addition, JOCCA provides a Weatherization Program that addresses mobile homes. Assistance is available to persons at or below 200% of poverty and receives either SSI or TANF.</p>	Chatham County recently, through consultant services provided by the Triangle J COG, completed a study on affordable rental housing and developed a plan of action. The cities of Goldston, Pittsboro, and Siler City collaborated with Chatham County on the initiative.
Durham County/City of Durham	At the present time, the City of Durham is revising its Minor Repair Program and no	

	<p>assistance is available. The City-wide program was open to elderly and disabled persons and was in the form of a grant.</p> <p>Rebuilding Together of the Triangle provides housing rehabilitation assistance in the County. Mobile homes can be addressed under their program.</p>	
Guilford County/City of Greensboro	<p>Piedmont Triad COG administers, through a grant from the NCHFA, an Essential Rehab Program. Mobile homes may be addressed under this program. However, the applicant must own the land and the home. In addition, the mobile home must be on a permanent foundation. Assistance is in the form of a forgivable loan.</p> <p>The City of Greensboro does not provide assistance for mobile homes.</p>	
Person County	<p>The Kerr Tarr COG provides a Single-family Housing Rehab Program funded by the NCHFA. The program does not address mobile homes.</p>	
Wake County	<p>Rebuilding Together of the Triangle provides a housing rehabilitation program in the County and mobile homes can be addressed. Wake County also provides several housing resources in the County.</p>	

SUMMARY OF TOOLS UTILIZED IN OTHER JURISDICTIONS CONT'D

<i>Communities Across The US</i>		
State	Practice(s)	Additional Comments/Notes
California	Various municipalities provide a wide-range of assistance programs.	Several protections for mobile home residents are afforded by the state. Mobile Home Park owners must provide residents with notice of at least one year in advance of closure plans and financial assistance in relocating.
Colorado	A nonprofit entity, as well as a County government purchased mobile home parks in an effort to maintain an adequate affordable housing supply in their respective locales.	Thistle Communities purchased the Boulder's Mapleton MH Park. Pitkin County Commissioners approved the purchase of a MH Park in December 2016. Residents at Denver Meadows MH Park sought to buy their Park and create a resident-owned community. However, the Park owner declined their purchase offer.

Florida	<p>■ Brevard County</p> <p>■ Delray Beach</p> <p>■ Martin County</p> <p>■ Orange County</p>	<p>The County gave persons living in mobile homes or manufactured homes priority in assistance under its First-time Home Buyer and Affordable Housing Trust Fund programs. In addition, the County worked with the local Community Land Trust to also provide assistance for low income individuals and those persons living in mobile homes or manufactured housing.</p> <p>The City and the Delray Beach Community Redevelopment Area provides direct subsidy assistance for affordable housing developments; worked with developers to ensure affordable housing set-asides, provides down-payment assistance and maintains an aggressive property acquisition program, as well as fostered the Delray Beach Community Land Trust.</p> <p>The County used funds from the Hurricane Housing Recovery (HHRP) to assist eligible individuals with replacing their destroyed mobile or manufactured homes or to repair damage.</p> <p>The County developed a homebuyer assistance program for mobile home/manufactured home residents, which would provide up to \$20,000 down</p>	<p>The County also enacted an Affordable Housing Ordinance that addressed voluntary affordable housing incentives (impact and permit fee deferrals, density bonuses, transfer of development rights, and mandatory policies governing affordable housing lost to development).</p> <p>In 2007, the County Commissioners approved an 18-month moratorium on the rezoning of mobile home parks. In addition, they also voted on an emergency comprehensive plan amendment that would allow people who own their own mobile home and lot to replace it with a permanent home.</p>
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<p>■ Pinellas County</p>	<p>payment and closing cost assistance to qualified homebuyers purchasing a new or existing post 1994- mobile home. The program was funded under the Hurricane Housing Recovery Program.</p>	
	<p>The County created a Park Saver Loan Program available to mobile home residents who have organized and want to convert the park to resident ownership. The Park Saver Program offers a 10 year, interest free loan up to \$10,000 for all eligible residents and properties.</p>	
<p>New Hampshire</p>	<p>In 1983 the New Hampshire Community Loan Fund was created to assist low income persons build their assets and create long-term economic stability. The Loan's eligible applicants include manufactured and mobile home residents who want to purchase their MH park and form cooperatives. The Fund also provides home improvement loans and mortgage products that are not available through traditional financing channels.</p>	<p>Today, in New Hampshire, there are 120+ mobile parks that have been converted into resident-owned communities.</p>

Other National Resources Providers:

- ✓ *ROC USA* -- Launched in 2008 by national and regional nonprofits with a mission of making quality resident ownership viable nationwide. A variety of assistance, including mortgages, as it relates to creating successful resident ownership is available.
- ✓ *Prosperity Now* (formerly CFED) – Serves to build financial security, stability and mobility for all Americans by working with service providers to develop, test and scale proven approaches to building wealth; advancing policies that enable mobility;

conducting research and collaborating with national partners to provide opportunities for economic mobility. Created the I'M HOME (Innovations in Manufactured Homes) Initiative for nonprofits and other entities working in the manufactured/mobile home arena. Since 2005, Prosperity Now has made more than 25 investments in new development, community conversion programs, development of mortgage products and advocacy as it relates to mobile and manufactured homes as a viable affordable housing strategy.

- ✓ *The Opportunity Finance Network* – A national network of community development financial institutions (CDFIs), OFN provides capital solutions for mobile home conversions that facilitate resident ownership, enhanced livability, quality of life and the preservation of affordability.

MOBILE HOME PARK RECOMMENDATIONS

1. Mobile Home Park Improvement and Expansion Program (Short Term)

[Not in County's ownership] [Partner with existing owners] [County management]

Background

- Information collected on existing mobile home parks identified several issues with aging park infrastructure and mobile homes. Many mobile home park owners are faced with expensive infrastructure improvements and ongoing repair issues that they are unable to address. In some cases, mobile home parks owners may be forced to permanently vacate a space and/or mobile home due to a failed septic system or maintenance issue that may be too costly to repair or residents are living in unsafe conditions. Due to maintenance issues, deteriorated infrastructure, and aging homes, families are displaced, owners experience a loss of income, and Orange County residents lose an affordable housing unit.

Recommendations

- **In order to address these issues, one recommendation is to establish a loan program for mobile home park owners to improve and/or expand their existing parks. This strategy would be part of an overall Rental Rehabilitation Initiative for investor-owners with 25 or less properties. In addition, it is also recommended that up to \$500,000 from the Affordable Housing/Land Bank Set-aside in the approved Capital Investment Plan be used to initially fund this Initiative.**
 - One function of this program would offer low-interest loans and other types of assistance to mobile home park owners wanting to improve or enhance their existing park. In return, this program would require an agreement between the mobile home park owner and Orange County to maintain a specific set of standards related to maintenance and upkeep and require the mobile home park owner to keep the park in operation for an established period of time. Funds may be used to invest in infrastructure maintenance or upgrades for water systems, waste water systems, drainage, or other improvements (i.e. roadways, internet access, etc.) that would improve and prolong the life of the mobile home park. In addition, the County may explore the logistics and opportunity to lease mobile home park spaces from owners requesting loan funds.

Outcome

- Orange County develops a loan program for mobile home park owners for necessary improvements and/or expansions, including infrastructure. The funds would strive to improve and expand the available supply of affordable housing in Orange County, as well mitigate the displacement of low income residents due to the sale and redevelopment of mobile home parks.

If the Board of County Commissioners endorses the recommendations, staff will proceed with the design and implementation of a loan program for mobile home park owners to improve and/or expand their existing parks with the proposed initial funding source.

✓	Mitigate Displacement	✓	Preserve Existing Stock	✓	Increase Supply
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MOBILE HOME PARK RECOMMENDATIONS

2. Repair and/or Replacement Program Component (Short Term)

[Not in County's ownership] [Partner with existing owners/residents] [County management]

Background

- As the recent mobile home park survey indicates, many of the mobile homes were built in the 1990s and are in need of repair. An overwhelming number of the low income residents occupying these units do not have the funds necessary to repair their mobile homes. In addition, some mobile homes given their condition cannot be repaired. Therefore, due to the condition of the aging mobile homes and cost of needed repairs, low income individuals and families are in threat of displacement.

Recommendation

- **The second recommendation from the Working Group is to establish a repair and/or replacement program component for mobile home residents within the County's existing Single-Family Rehabilitation and Urgent Repair Programs capitalized with local funds only. Presently, assistance for mobile home repair is only available under the County's Urgent Repair Program for persons who own their homes, as well as the land. In addition, there is no provision for the replacement of a substandard mobile home under the Single-Family Housing Rehabilitation Program. This program does not address mobile homes at all. The proposed assistance would be available to individuals occupying a mobile home, whether rental or owner-occupied.**
 - This recommendation focuses on providing assistance to address maintenance and repairs specifically for low income individuals and families owning and/or occupying a mobile home. Assistance would be in the form of grants, forgivable loans, as well as low-interest loans. The registered owner of the mobile home must enter into an agreement with the County. Replacement activities would be undertaken when the unit cannot be repaired or the cost of repair exceeds the after-rehab value of the unit.

Outcome

- Displacement would be mitigated and the preservation of affordable housing units would be achieved. The quality of life for low income individuals and families would be enhanced.

If the Board of County Commissioners endorses the recommendations, staff will proceed with revising the programmatic guidelines and implementing a repair and/or replacement program component for residents occupying a mobile home within the County's existing Single-Family Rehabilitation and Urgent Repair Programs.

✓	Mitigate Displacement	✓	Preserve Existing Stock		Increase Supply
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3. Mobile Home Park Development (Long Term)

[County or third party/non-profit ownership] [County or third party/non-profit management]

Background

- Throughout the process, the Work Group examined the need to provide for safe and long-term affordable housing in areas of the County with access to public transit, employment, goods and services, and public water and wastewater infrastructure.

Recommendation

- **Due to a lack of existing available mobile homes and spaces and increasing housing costs in the Towns, the Work Group recommends Orange County use designated funds to pursue the development of a mobile home park and/or mixed housing development on an undeveloped parcel with access to transportation, employment, goods, services, and public water and wastewater infrastructure in the County.**
 - A new mobile home park would increase the number of mobile home sites in the County and provide affordable housing units for residents facing potential displacement as a result of development. A mixed housing development would act as a viable source for affordable housing, increase the number of affordable housing units in the County, and provide affordable and sustainable housing units for all low-income residents facing potential displacement as a result of redevelopment. The recommendation may also incorporate additional affordable housing goals and objectives and allow for a mix of housing types including multifamily, townhomes, cottage homes, mobile homes, modular units, and stick built construction. This would then provide for viable, long-term housing that would appreciate over time.
 - Due to financial constraints and development pressure in the Towns, the Work Group examined long-term solutions that may be pursued in the northern portion of the County, specifically the Eno and Efland areas. These areas of the Orange County may provide for access to employment centers, education, and everyday goods and services via public transit. In addition, these areas may have the capacity to connect to public water and wastewater infrastructure, compared to other areas of the county. This would allow for greater density and additional affordable housing units.
 - This recommendation may allow for the County to work with an existing mobile home park owner to expand their existing mobile home park with the County's purchase of an adjacent, undeveloped parcel.
 - If this recommendation is pursued, the County shall explore opportunities for non-profit or third party ownership, development, and management in the immediate future. This may require the County to initiate a Request for Proposal (RFP) process, similar to the RFPs initiated for the 2016 Affordable Housing Bond Funds.

Potential Funding Source: Funds allocated by the BOCC for land banking opportunities.

Outcome

- Orange County would purchase and pursue the development of a mobile home park and/or mixed housing development on an undeveloped parcel in Orange County. This would allow for safe and long-term affordable housing for displaced mobile home park residents in the future.

If the Board of County Commissioners endorses the recommendations, staff will proceed with identifying and evaluating parcels in Orange County for future mobile home park and/or affordable mixed housing development.

	Mitigate Displacement		Preserve Existing Stock	✓	Increase Supply
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4. Greene Tract (Long Term)

[County or third party/non-profit ownership] [County or third party/non-profit management]

Background

- Throughout the process the Mobile Home Work Group discussed the need to locate displaced mobile home park residents close to their existing communities in Chapel Hill and Carrboro. Based on results from the survey, existing mobile home park residents prefer to stay within their existing communities and the Chapel Hill - Carrboro City Schools District. The Work Group identified the need and significance of locating affordable housing opportunities in Chapel Hill and Carrboro, but was aware of the financial constraints and costs of purchasing land for development in the Towns.

Recommendation

- **With the goal of retaining displaced mobile home park residents in their community, the Work Group recommends Orange County, the Town of Chapel Hill, and the Town of Carrboro elected officials and staff continue to explore affordable housing opportunities on the Greene Tract, with a focus on displaced mobile home park residents.**
 - This recommendation would include at least the 18.1 acres previously set aside for affordable housing in the resolution and concept plan approved by the Chapel Hill Town Council in 2002.
 - The recommendation may incorporate additional affordable housing goals and objectives and allow for a mix of housing types including multifamily, townhomes, cottage homes, modular units, mobile homes, and stick built construction.
 - If this process is pursued, County funds allocated for mobile home parks may be put towards infrastructure improvements, site preparation, construction, and/or housing. This recommendation would result in permanent affordable housing in a key location with access to public transit, education, employment, and goods and services.
 - The county shall explore opportunities for non-profit or third party ownership, development, and management in the immediate future. This may require the County to initiate a Request for Proposal (RFP) process, similar to the RFPs initiated for the 2016 Affordable Housing Bond Funds.

Potential Funding Source: Funds allocated by the BOCC for land banking opportunities.

Outcome

- Orange County, Chapel Hill, and Carrboro elected officials and staff continue efforts currently underway regarding the development of affordable housing on the Greene Tract, with a focus on displaced mobile home park residents. Pursuing this recommendation would allow for potentially displaced residents to remain in their community.

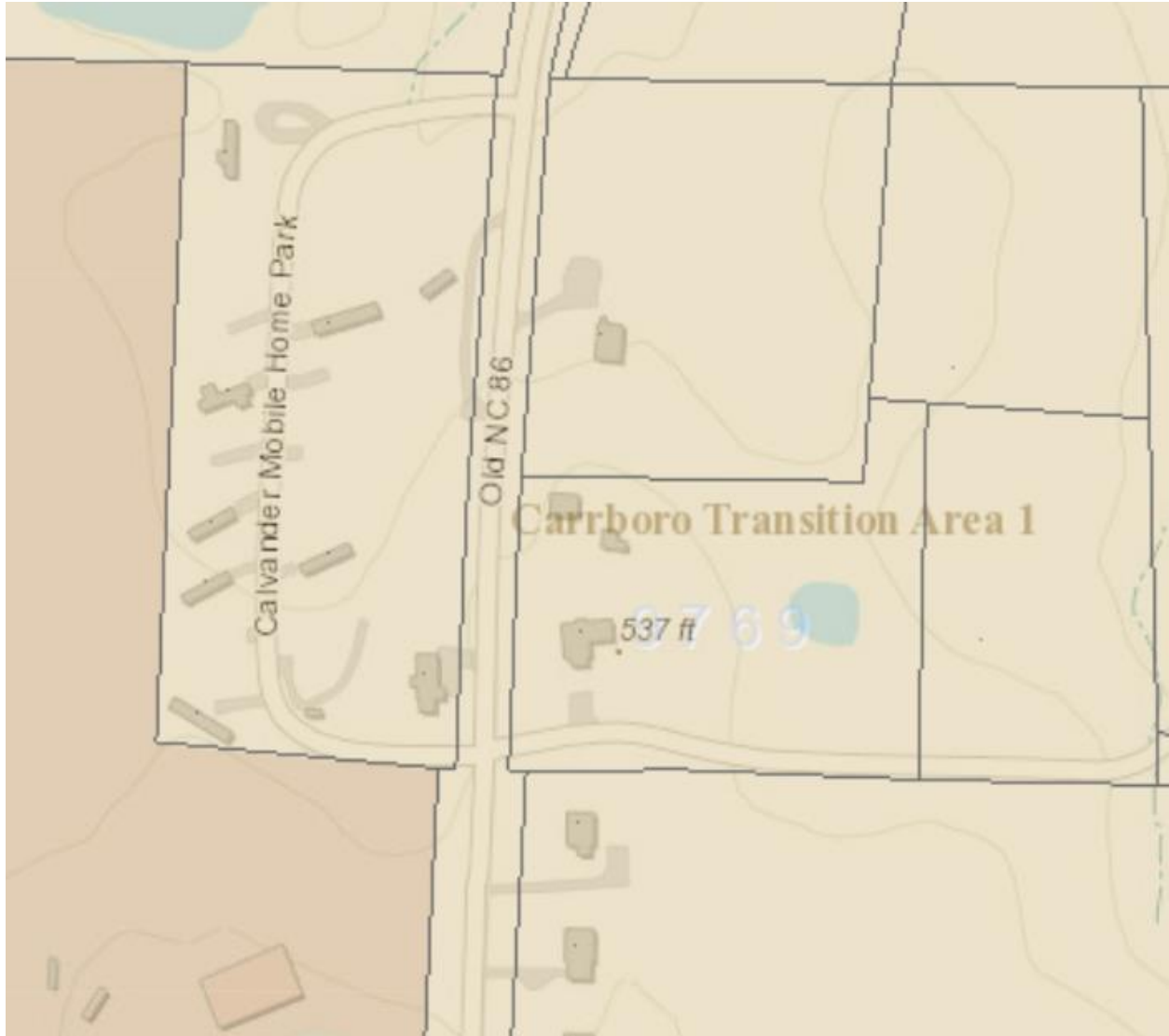
If the Board of County Commissioners endorses the recommendations, staff will proceed with planning discussions and efforts for the Greene Tract with a focus on providing affordable housing options for mobile home park residents facing displacement in Chapel Hill and Carrboro.

	Mitigate Displacement		Preserve Existing Stock	✓	Increase Supply
--	-----------------------	--	-------------------------	---	-----------------

Community Name	Address/Site Info.	Community Owner	Number of Sites	Notes
Calvander	8717 Old NC 86 Joint Planning Area Carrboro Transition Area 1 RR Rural Residential (1 unit per acre) 6.2 Acres	Mulberry Ridge, LLC	8	In FY19-20, this parcel was listed for sale. The Town of Carrboro, Orange County and EmPOWERment explored a partnership to preserve this property as a mobile home community and possible parcel for future mobile home relocation. The idea was put on hold due to needed infrastructure costs and the pandemic. The property was sold to a private owner in 2020 and continues operate as a manufactured home park.
Homestead Acres	222 Homestead Rd. Joint Planning Area Carrboro Transition Area 1 R-15 (1 unit per 15,000 sq/ft) 3.5 Acres	Family Owned	7	This property has been owned by the same owners since 1985.
Pine Grove	810 Old Fayetteville Rd. Carrboro Jurisdiction Carrboro City Limits	Sustainable Properties, LLC	38	Conditional Use Rezoning/Permit was extended in 2020 until 2022. The owner of the property originally had plans to build 39 stick-built, single family homes. However, the plan has not proved financially feasible. Their intention is to continue to operate as a manufactured home park while entertaining offers from manufactured home park operators and private developers over the

	<p>R-2 CU (1 unit per 2,000 sq/ft subject to conditional use permit)</p> <p>2 lots: 1.9, 2.8 acres</p>			<p>mid to long term that carve out protections against displacement for existing tenants, especially long terms residents, as a part of that deal.</p> <p>In 2020, Town staff connected the owner with members of the Orange County Affordable Housing Coalition to explore a public/private partnership to build affordable housing on the parcel without resident displacement. Initial talks determined that financial feasibility is an issue. However, there is interest to reengage; Town staff is scheduling a future meeting.</p> <p>A Community Information Center is scheduled to be installed by the Town at the end of April.</p>
Rocky Brook	<p>500 S Greensboro St.</p> <p>Carrboro Jurisdiction Carrboro City Limits</p> <p>R-7.5 (1 unit per 7,500 sq/ft)</p> <p>2 lots: 4.9, 1.9 acres</p>	<p>Affordable Communities Group (ACG) Rockybrook LLC</p>	41	<p>Park is owned by an LLC committed to affordable housing. The owner has no plans to redevelop.</p> <p>Residents own their homes and rent the lots. They have no vacancies and most are long term residents (over 15 years). Lot rent is \$410 a month.</p> <p>Town staff has engaged the property manager over the past year. The Property Manager has said Rocky Brook and the residents feel supported by the Town and County and noted that the residents have a lot of pride in their homes.</p> <p>A Community Information Center was installed by the Town in December 2020.</p>

Calvander



Homestead Acres



Pine Grove



Rocky Brook



MANUFACTURED HOME STRATEGY DISCUSSION

DRAFT

Council Work Session Presentation
January 6, 2021



Agenda

1. Background

2. Strategy Overview and Implementation Progress

3. Guiding Questions and Discussion

DRAFT

Background

- **Manufactured housing** (commonly known as mobile homes) is a type of prefabricated housing that is largely assembled in factories and then transported to sites
- **Mobile home** is the term used for manufactured homes produced prior to 1976
- **Trailers** are designed to be moved frequently and are typically used for traveling



Development Sites Near Manufactured Home Communities

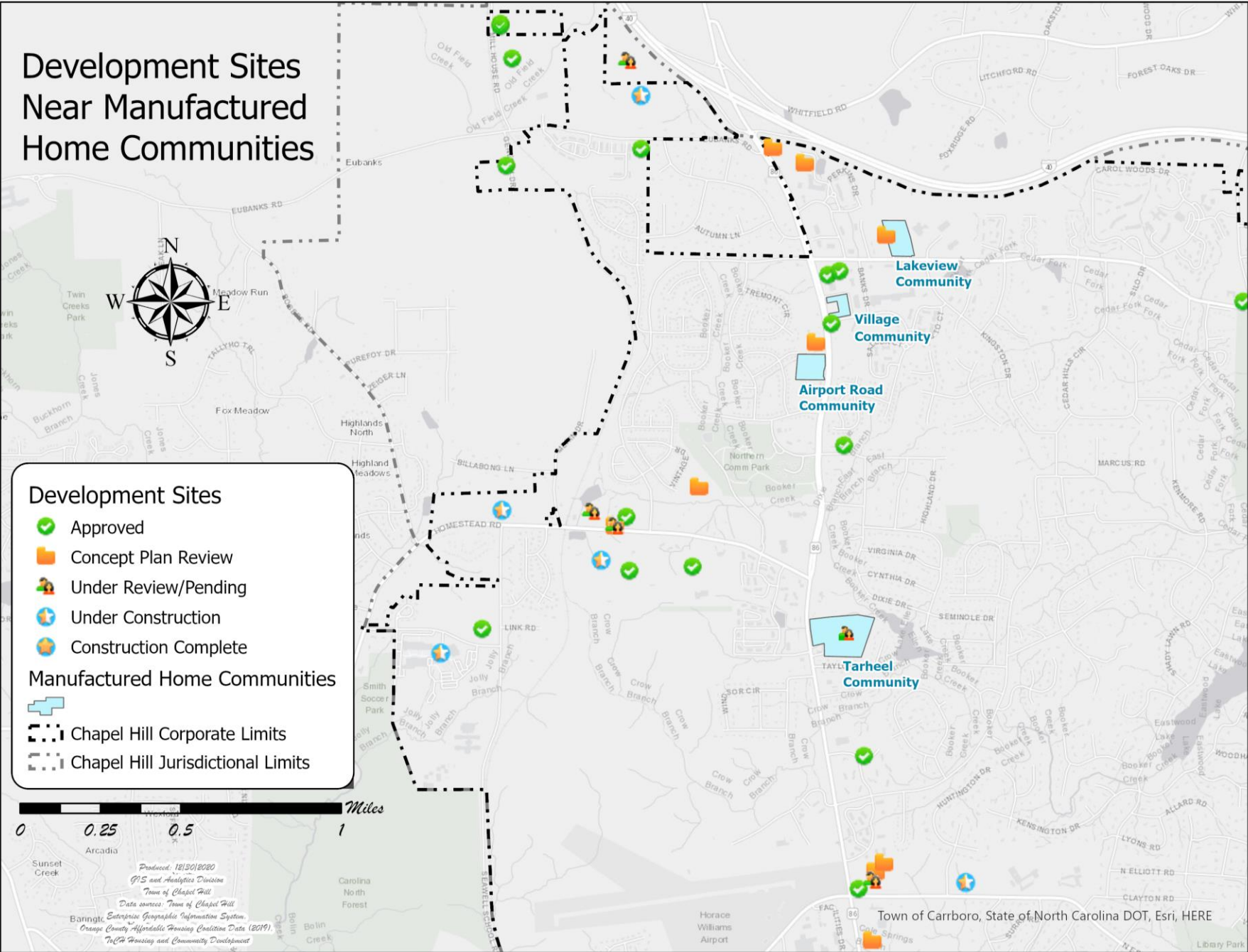
Development Sites

- Approved
- Concept Plan Review
- Under Review/Pending
- Under Construction
- Construction Complete

Manufactured Home Communities

- Lakeview Community
- Village Community
- Airport Road Community
- Tarheel Community

Chapel Hill Corporate Limits
 Chapel Hill Jurisdictional Limits



Produced: 12/30/2020
 GIS and Analytics Division
 Town of Chapel Hill
 Data sources: Town of Chapel Hill
 Esri, Esri Geographic Information System
 Orange County Affordable Housing Coalition Data (2019)
 NCH Housing and Community Development

Manufactured Home Strategy Overview



Engagement



Housing
Options



Site Analysis

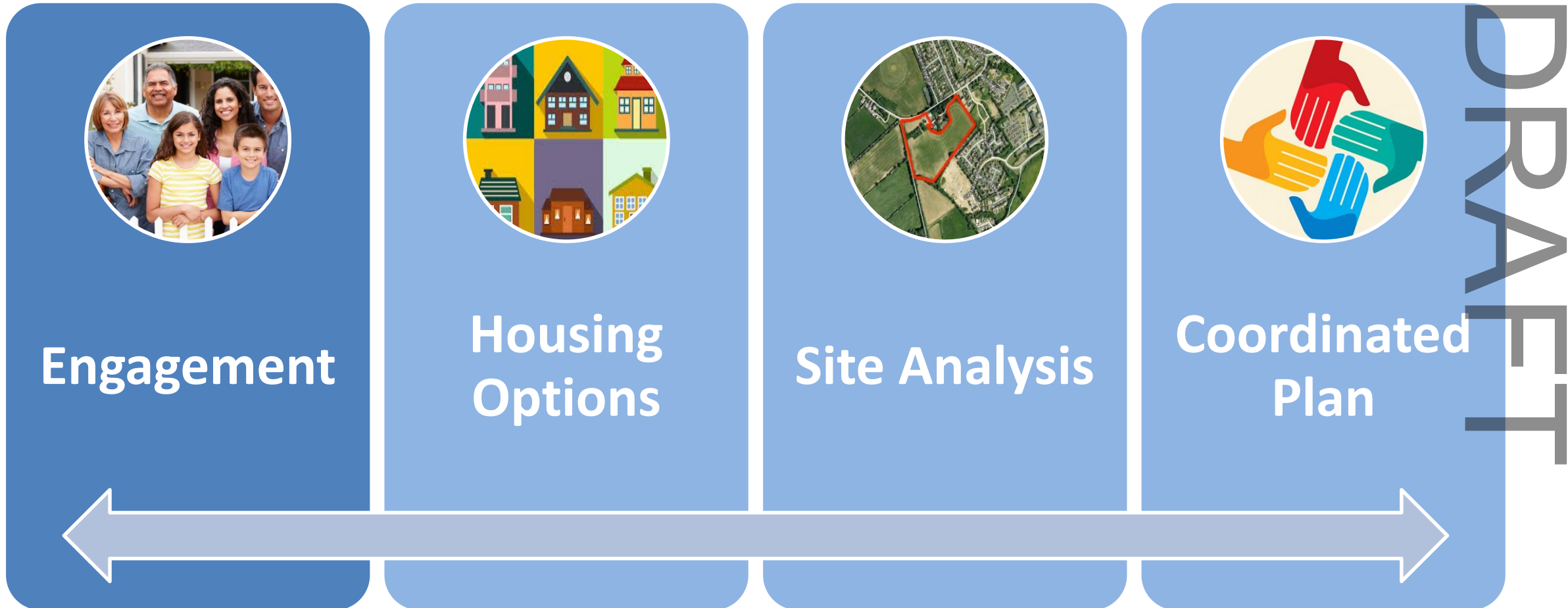


Coordinated
Plan



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1. Engage manufactured home park residents, owners, and developers



Manufactured Home Resident Engagement Highlights

- Approximately 650 residents live in manufactured homes
- 40% of manufactured home households responded to our surveys
- 4 community meetings



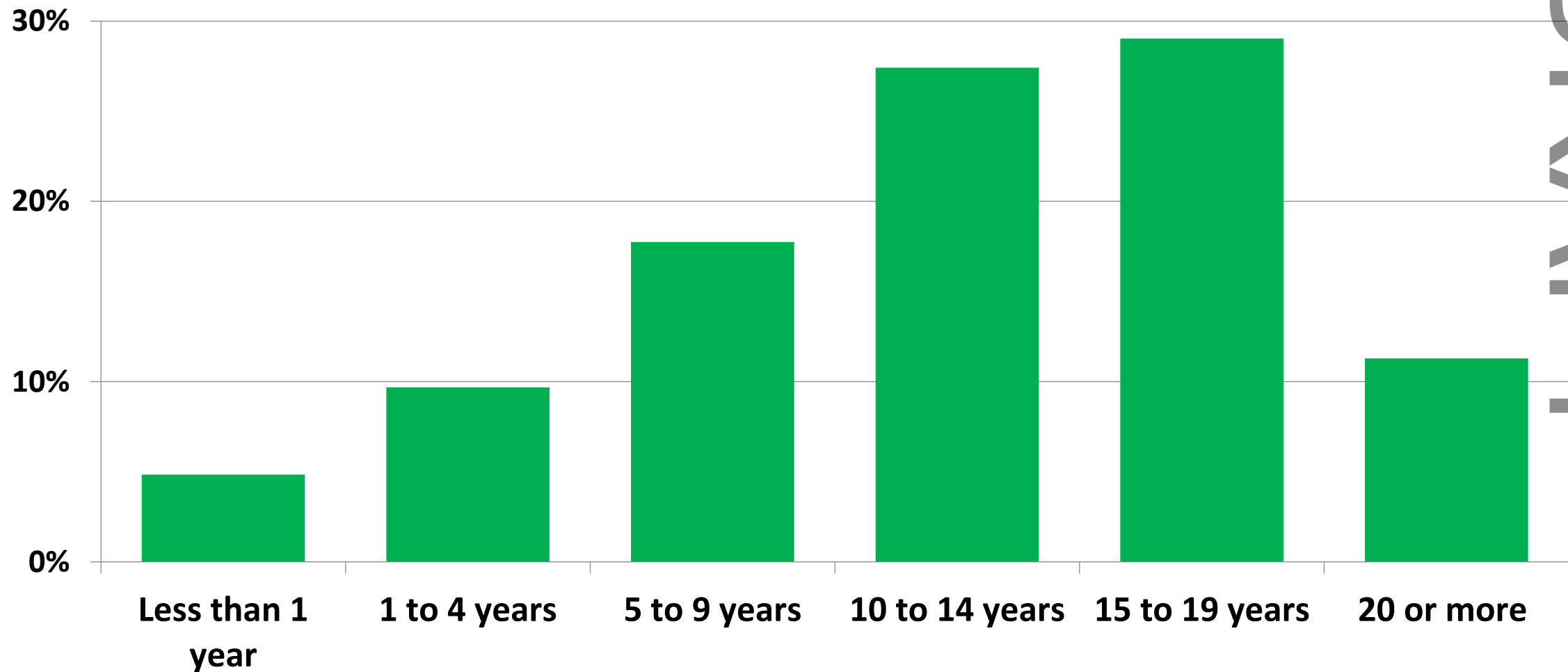
Resident Survey Key Findings

- Average household size is 4
- Average annual income is \$31,418
- Average monthly housing cost is \$604
- 90% own their home



Most Manufactured Home Residents are Long-Time Community Members

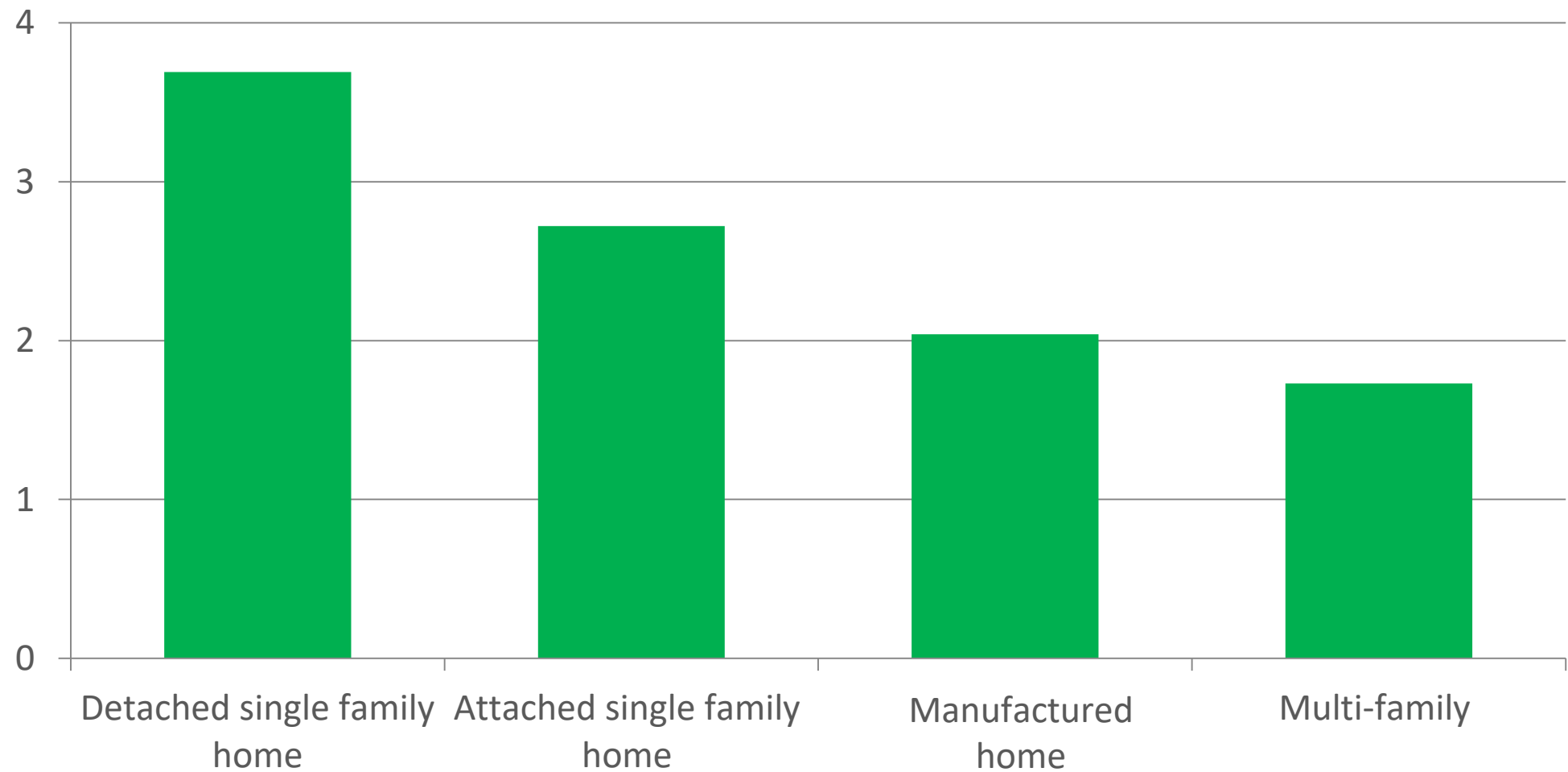
How long have you lived in your home?



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Residents Prefer Single-Family Attached and Detached Homes

Rank which housing type would be your ideal living situation, regardless of costs.



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Additional Engagement Efforts



Tar Heel Community

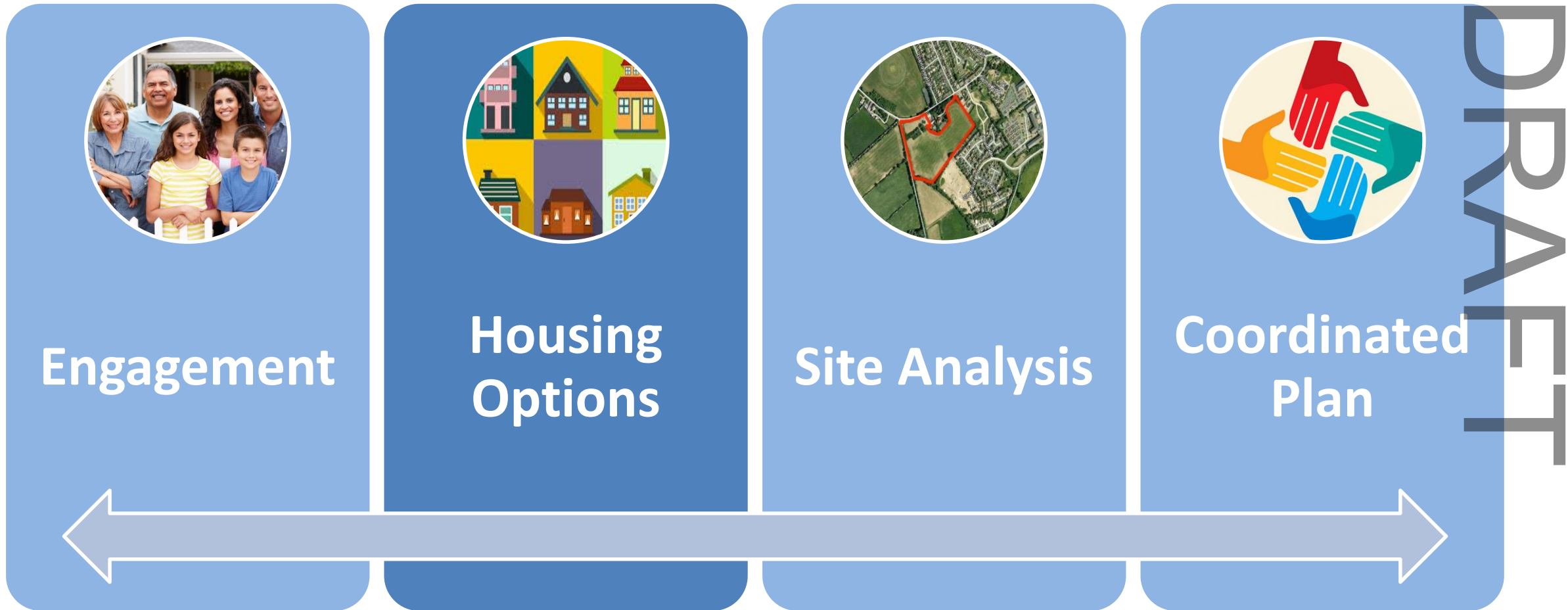
- Staff have held several community meetings with residents
 - Ensure residents have opportunity to participate in review process
 - Incorporate their thoughts and concerns into the project discussion

Developers

- Multiple meetings with Tar Heel applicant
- Shared finding from resident engagement report to incorporate into their relocation plan

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2. Develop a Menu of Housing Options



Menu of Housing Options

- Financial assistance for relocation
- Land purchase
- Onsite unit construction as part of redevelopment
- Off-site unit construction



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Menu of Housing Options – Relocation Assistance

- Relocation Assistance Options
 - One-time grant to relocate
 - Assistance relocating a manufactured home
 - Subsidy to move to another manufactured home neighborhood
- Work with developers to contribute to any relocation strategy
 - Tar Heel applicant created proactive relocation strategy to keep residents onsite



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Menu of Housing Options – Land Purchase

- Town pursued possibility of purchasing Lakeview Community
- Researched other options for gaining site control and redeveloping
- Land Purchase Report – 3 models to consider



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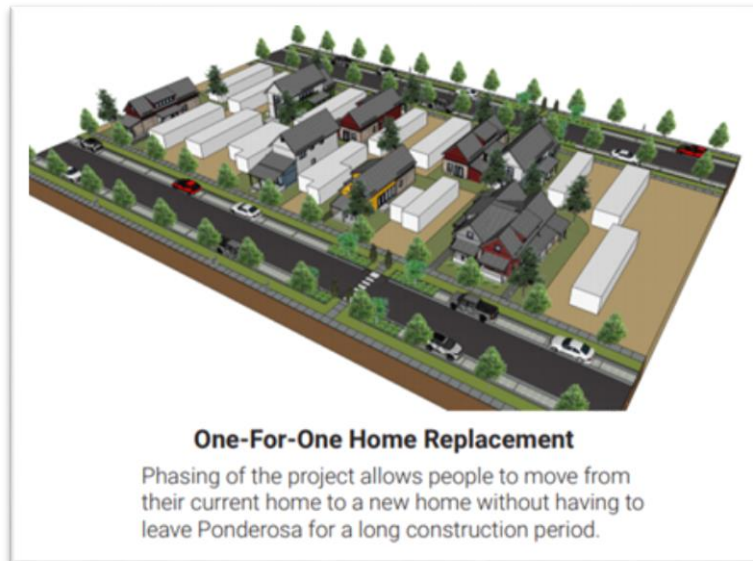


Menu of Housing Options – Land Purchase



1. Town-Led Model – Boulder, CO

- City purchased the 68 home Ponderosa Mobile Home Park
- Used resident engagement as foundation for development of project solutions
- Plan to develop a mix of housing types allowing residents housing choices
- Phased development approach with Habitat for Humanity to ensure no resident displacement

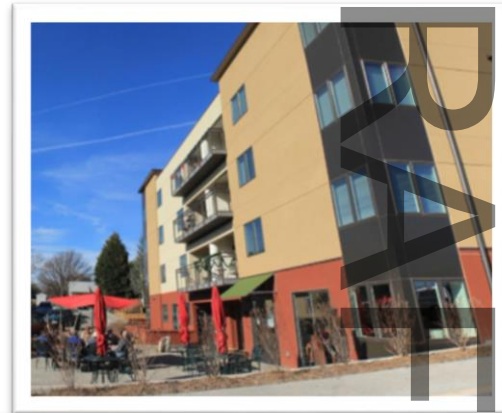


Menu of Housing Options – Land Purchase



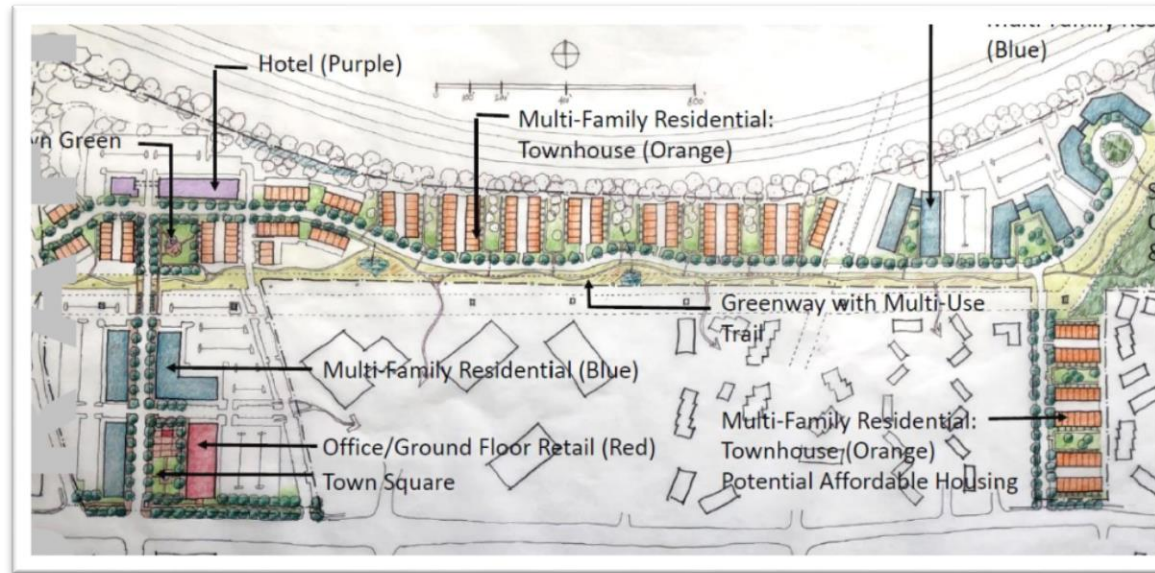
2. Nonprofit-Led Model – Charlottesville, VA

- In 2012, Habitat for Humanity successfully redeveloped the 16 home Sunrise Park community without resident displacement
- Phased development of a mixed-income, mixed-use community
- Building on this model with the Southwood community
 - 800 residential units
 - 200,000 sq. ft. of commercial space



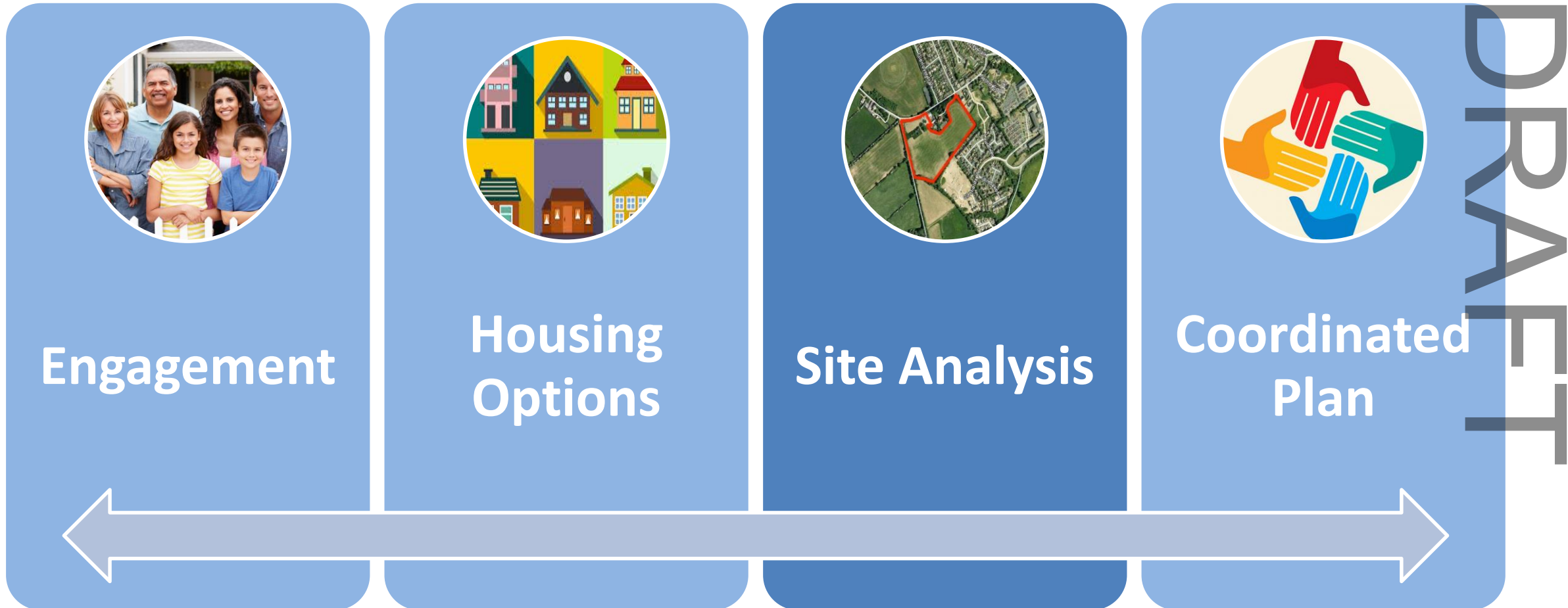
Menu of Housing Options - Construction as Part of Redevelopment

- Chapel Hill North
 - Process to proactively create opportunities for affordable housing construction as part of any redevelopment for area on Weaver Dairy
- Option to discuss with potential developer of other communities



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3. Identify Sites for Development of New Housing

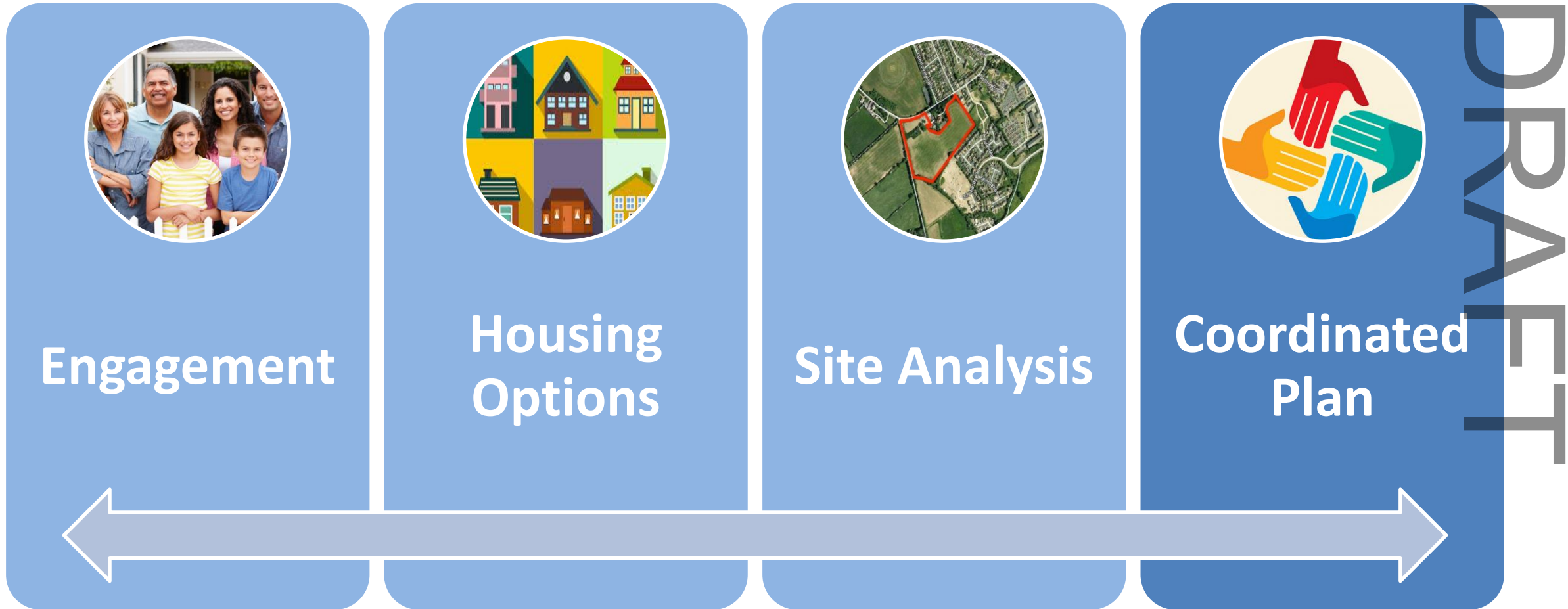


Site Analysis

- Goal –increase affordable housing supply to create additional relocation options if residents are displaced
- Evaluate Town-owned sites
 - Three sites prioritized for affordable housing
 - Jay Street, Bennett Road, Dogwood Acres Drive
 - 2200 Homestead Road
 - Public Housing redevelopment
 - Other potential options
 - Legion Road property
 - Greene Tract



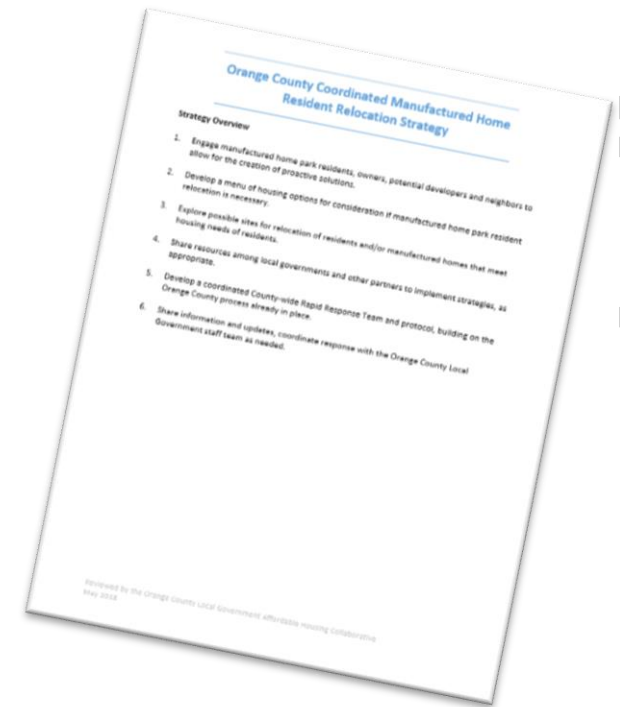
4. Develop Coordinated Plan



Coordinated Plan Highlights



- Local Government Affordable Housing Collaborative has developed a coordinated strategy
- Town staff continue to work closely with partners in engagement efforts:
 - Family Success Alliance
 - EmPOWERment, Inc.
 - School System



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Questions for Council

1. What does a successful solution to the redevelopment threats look like to you?
2. Which strategies should staff focus more time and resources on going forward?
3. What's missing or could be changed within our existing Strategy?

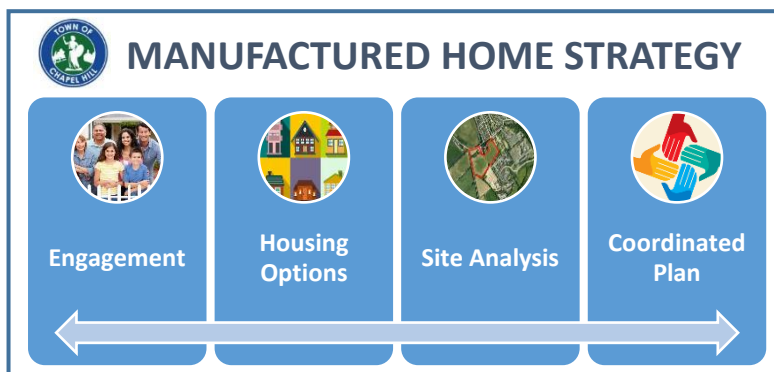


MANUFACTURED HOME STRATEGY DISCUSSION

DRAFT

Council Work Session Presentation
January 6, 2021





STAFF REPORT – JUNE 2018

Background

The Town initiated efforts in the winter of 2017 to develop a Strategy for proactively engaging residents and owners of the Town's four manufactured home communities (see map attached) and developing a relocation plan should future redevelopment occur on any of these sites. The purpose of this report is to provide an overview of our strategy and the current status of our efforts.

Strategy Overview and Update



1. Engage manufactured home park residents, owners, potential developers and neighbors to create proactive solutions.

Current Status:

- Resident engagement efforts:
 - Our Housing and Community staff, in collaboration with Family Success Alliance and Empowerment Inc., held three community meetings with manufactured home park residents – two with Lakeview residents, as well as one open to residents of all manufactured home communities in Chapel Hill. Approximately 50-70 residents attended each of the meetings.
 - The resident meetings were designed to share the Town's goals and interests in developing housing options rooted in residents' preferences and needs. This also facilitated the development of relationships with residents so that they would have a voice from the beginning in the process should redevelopment plans proceed for their communities. At the community meetings, residents completed a brief survey on household demographics and housing preferences.
 - Forty-percent of manufactured home park residents have completed the survey. Please see the Resident Survey Report attached for additional details.
- Owner engagement efforts:
 - Housing and Community staff have reached out to owners of all manufactured home communities in Chapel Hill to learn more about their current challenges, as well as future plans for their properties. We conveyed our interest in being available as a resource should they be interested in selling or redeveloping their properties. Additionally, in collaboration with Orange County, Carrboro, Hillsborough, and the Mobile Home Park Work Group, we convened a meeting for all manufactured home park owners in Orange County in April of 2018.

- Developer engagement efforts:
 - Town staff have met with the Hanover developer regarding their concept plan submission for the Lakeview Manufactured Home community to share what we have learned from our meetings with residents and explore opportunities for developing a relocation plan for existing residents on this site. Staff are prepared to replicate and build on our developer engagement efforts initiated with the Hanover developer if development proposals are pursued for the other manufactured home communities in Chapel Hill.



2. Develop a menu of housing options for the Council to consider as manufactured home residents face displacement, including but not limited to:

- *Financial assistance for relocation*
- *Land purchase*
- *Onsite unit construction as part of redevelopment*
- *Off-site unit construction*

Current Status:

- Based on what we have learned from residents, as well as best practices from other communities staff have focused our efforts on:
 - identifying potential affordable housing partners for construction of homes for displaced residents
 - developing cost models for different housing options based on the demographics of manufactured home park residents
 - continuing to research creative policy and partnership options
- Planning and Housing and Community staff have evaluated potential housing options based on the household composition and housing preference data we collected from manufactured home residents. We reviewed that information in the light of proven strategies from other communities and innovative opportunities that we may be positioned to explore with a willing partner. Key findings that will inform our recommendations going forward include:
 - A majority of manufactured home residents are not interested in being relocated to another manufactured home community, nor are they interested in a one-time payment should relocation be required, as they believe that neither of these options represents a sustainable long-term housing solution that would meet their family's needs.
 - A majority of residents prefer a detached or attached single-family home within Chapel Hill that is close to employment, amenities, public transit and schools.
 - Potential options under consideration should be suitable for families with children, affordable to low-income households, and accessible to those with barriers to many traditional housing options (those without a substantial credit history or documentation status).



3. Identify potential sites for development of new housing.

- *Evaluate Town-owned sites*
- *Work with Orange County to identify sites*
- *Determine if existing manufactured home communities have additional capacity*

Current Status:

- An interdepartmental staff team has conducted a thorough evaluation of Town-owned land utilizing a multi-layered evaluation process. See the Site Analysis Report attached for additional details on the evaluation methodology. This analysis identified three sites of Town owned land that appear to be suitable for development for this purpose, one near Jay Street, one on Bennett Road, and one on Dogwood Acres Drive near the Southern Community Park.
- Staff continue to explore additional property options for potential relocation throughout Orange County.
- Empowerment, Inc. has conducted extensive research of manufactured home community capacity, and found a scarcity of vacant lot spaces throughout Orange County. As such, staff does not believe this strategy is a viable option for a significant number of households unless conditions change significantly.



4. Develop a coordinated plan to apply to any manufactured home community faced with redevelopment. Partners include:

- *Internal partners*
- *Housing Advisory Board*
- *Government partners*
- *Nonprofit organizations*
- *Resident associations*

Current Status:

- The Orange County Local Government Affordable Housing Collaborative partners (Chapel Hill, Carrboro, Hillsborough and Orange County) have developed the Coordinated Manufactured Home Resident Relocation Strategy (attached) for collaboratively responding to manufactured home communities that may face displacement due to redevelopment. See the attached Strategy.
- Housing and Community staff continue to work closely with Family Success Alliance, Empowerment, Inc., and Chicle Language Services, and the school system to coordinate outreach and communication efforts with manufactured home park residents.
- Housing and Community staff have shared the draft strategy and updates on our efforts with manufactured home residents with the Housing Advisory Board, and will continue to do so going forward.

Recommendations

We recommend that the Town Council dedicate three Town-owned sites for affordable housing development on Bennett Road, Jay Street, and Dogwood Acres Drive (see map attached).



Department of Housing and Community Development

THE RISK MITIGATION AND HOUSING DISPLACEMENT FUND

OVERVIEW

In an effort to encourage landlord participation in Orange County rental assistance and other subsidy programs, assist with housing stabilization and mitigate displacement of low- and very low-income residents, and prevent homelessness, the Orange County Board of County Commissioners (BOCC) created the pilot Risk Mitigation and Housing Displacement Fund. The Fund, which is administered by the Orange County Department of Housing and Community Development Department (OCHCD), provides assistance in three (3) activity areas:

- **Risk Mitigation** (for landlords)
- **Emergency Housing Assistance** (assistance for security deposits, utility connections, and rental payments)
- **Displacement Mitigation** (due to an urgent community need such as manufactured home park closures and natural disasters)

The Fund was initially capitalized with \$67,778 in the FY 2017-18 budget. In FY 2018-2019, the BOCC allocated \$75,000 to the Fund. In FY 2019-2020 and in subsequent years, the BOCC will replenish the fund to maintain the \$75,000 level, based on availability of funds. OCHCD reserves the right, based on need and without prior notice, to shift funds from one activity area to another.

Financial assistance under the Risk Mitigation and Housing Stabilization activity areas is based on availability of funds and are provided on a first come, first served basis. To be eligible for assistance under the Displacement Mitigation activity area, an individual or family must be participating in the Displacement Mitigation Assistance Program (D-MAP) or be referred based on another urgent community need, such as natural disaster or closure of naturally occurring affordable housing complexes. The following paragraphs provide additional information on each activity areas.

RISK MITIGATION

Assistance under this area is available to landlords participating in the following voucher programs:

- Housing Choice Voucher Program (HCV)
- Permanent Supportive Housing Voucher (PSHV)
- Supportive Services for Veterans and their Families (SSVF)
- HUD-VA Supportive Housing (HUD-VASH)
- Housing Opportunities for Persons with AIDS (HOPWA)
- Key Rental Assistance (Key)
- Transitions to Community Living Voucher (TLCV)
- Any Rapid Re-Housing program

Mailing Address
P.O. Box 8181
Hillsborough, NC 27278

Main Office
300 W. Tryon Street
Hillsborough, NC 27278

Satellite Office
2501 Homestead Road
Chapel Hill, NC 27516



OCHCD reserves the right, based on need and without prior notice, to provide assistance to landlords participating in other subsidy programs.

For damages less than \$10,000, assistance may cover costs over and above any insurance proceeds the landlord may receive. The landlord requesting assistance must inform the County of any insurance proceeds received prior to receiving funds from the County. For damages above \$10,000, assistance may be granted for those items not covered by insurance.

Assistance should only be requested when repair costs are more than the security deposit and cannot be related to general maintenance items. Landlords must submit the attached application to be considered for funding. The maximum amount of assistance will not exceed the lesser of \$3,500 or 50% of the total repair cost.

The landlord must allow OCHCD's Rehabilitation Specialists to document the damage, provide specifications for completion of repairs, and inspect the completed work before the funds are disbursed. If the repairs necessitate involvement of the County's Permitting and Inspections Division, all work must pass the required inspections according to Building Code and a Certificate of Occupancy must be issued, as applicable. A copy of the passed inspection reports and the Certificate of Occupancy, as applicable, must be forwarded to OCHCD.

Should the landlord also seek relief for damages through the judicial system and recoup any monies, OCHCD should be reimbursed for the monies paid by the Fund.

EMERGENCY HOUSING ASSISTANCE

Assistance under this activity area is available to households in Orange County that (1) earn no more than 60% of the area median income (AMI), (2) can demonstrate urgent need for housing assistance, and (3) do not have adequate savings to cover their housing costs.

To be referred for assistance, households must either:

- Be assessed through Coordinated Entry as at risk of or currently experiencing homelessness and who have identified safe, decent, and affordable housing
- OR**
- Referred by various Orange County Departments and local service providers (e.g., Aging, Health/Family Success Alliance, Criminal Justice Resource and Social Services, Community Empowerment Fund, Interfaith Council, Compass Center, etc.)

** Preference will be given to applicants earning under 50% of AMI*

The most current income limits for Orange County are below:

	Household Size							
	1	2	3	4	5	6	7	8
30% AMI	19,100	21,800	24,550	27,250	30,680	35,160	39,640	44,120
50% AMI	31,850	36,400	40,950	45,450	49,100	52,750	56,400	60,000
60% AMI	38,220	43,680	49,140	54,540	58,920	63,084	67,680	72,000

Source: 2020 HUD Income Limits

Eligible Costs and Maximum Assistance

Emergency Housing Assistance may pay for security deposits, utility connections and arrears, rental payments and arrears, and, in certain emergency situations and upon OCHCD approval, other urgent housing-related costs (e.g., short-term stays in hotels, moving costs), especially for hard-to-house individuals and families, such as large families with children, seniors, people with disabilities, veterans, and people with justice system involvement. Emergency Housing Assistance may not duplicate any assistance provided by any other program.

Emergency Housing Assistance grants are one-time assistance and are capped at \$2,000 per household.

Applying for Emergency Housing Assistance

Referrals and individual applications for assistance should include:

- A written request describing:
 - The urgent need for assistance;
 - Pertinent background information on the client and other household members;
 - Information on the identified housing unit or complex (name of the complex, if applicable, and address); and
 - Name and address of the landlord or property manager to whom the check for assistance should be made payable (whenever possible, a W-9 for the landlord or property manager should be included), as applicable.
- Documentation verifying total gross household income and savings (see the Emergency Housing Assistance Application for a checklist of the acceptable source documentation).
- Copy of the lease or other documentation from the landlord showing the client has been approved to live at the identified unit and amount of funds needed, as applicable.
- Statement or invoice from utility provider, as applicable.

Reimbursement to Referring Agencies

In situations when assistance is required urgently, referring agencies may use their own funds assist clients, and OCHCD may reimburse referring agencies for these expenses. Applicants must first be approved for assistance by OCHCD and referring agencies must receive prior approval from OCHCD in order to receive reimbursement. Only eligible costs for clients approved for assistance by OCHCD will be eligible for reimbursement.

DISPLACEMENT MITIGATION

Assistance under this activity area is only available when an urgent community housing need and displacement of residents occurs, such as a manufactured home park closure or natural disaster. Funds may be used to provide direct assistance to affected individuals and families at or below eighty percent (80%) of the Area Median Income for Orange County. If the urgent community need relates to manufactured home park closures, persons requesting assistance must be participating in the County's Displacement Mitigation Assistance Program (D-MAP). Available assistance includes payment of security deposits, utility connections, etc.

This document is an overview of the Risk Mitigation and Housing Displacement Fund. Interested persons and entities should contact OCHCD for more information. Orange County reserves the right to amend, revise, and/or waive the program requirements, specified assistance, and activity areas based on community needs and budgetary and personnel constraints.

ORANGE COUNTY PROPOSED RAPID RESPONSE PROTOCOL

(To Be Utilized During the Redevelopment Process of Mobile Home Parks)

The proposed protocols will be implemented when a proposed closure and/or redevelopment of a mobile home park occurs, whether within the incorporated jurisdictions or unincorporated areas of Orange County. The protocols offer a coordinated approach to assisting mobile home park residents to mitigate the challenges of relocation and displacement while working with mobile home park owners and developers in a collaborative way. This approach helps ensure the continued availability of affordable housing and economic opportunity for Orange County residents, as well fosters a sustained relationship with the private sector.

As the County and its community partners proceed to implement the prescribed protocols, note that they may be revised and refined, periodically, to ensure that the needs of residents are being met effectively and efficiently.

When Mobile Home Park Redevelopment Occurs Within an Incorporated Area:

- The local jurisdiction serves as the lead entity (LE)
- The LE, along with the developer and mobile home park owner, is responsible for coordinating all community engagement activities
 - *Resident meetings*
 - *Communication strategy for notification of assistance*
 - *Translation services, as applicable*
- Orange County will assist the LE in the following manner:
 - *Provide information on available County resources and assistance, as applicable. Upon invitation from the LE, County staff in the Housing and Community Development Department will attend community meetings to share information on available resources and assistance, as well as participate in activities where applications for assistance are taken.*

When Mobile Home Park Redevelopment Occurs Within Unincorporated Areas:

Given the proposed mobile home park redevelopment efforts taking place in Chapel Hill currently, Orange County Planning Department has already begun the process of determining which mobile home parks may have spaces available for rent. The Housing and Community Development (H&CD) Department will assist the Planning Department by maintaining and keeping the list updated.

- Once the County has received the redevelopment request and at the direction of the County Manager, the Housing and Community Development (H&CD) Department serves as the “lead” on all community engagement activities but works closely with the Planning Department throughout the re-zoning and development process.

- Working with the Planning Department, mobile home park owner and developer, H&CD will create a timeline for the proposed redevelopment and the required community engagement process.
- H&CD, working with the County Manager's office, will facilitate a meeting with other applicable County departments to form the **Rapid Response Team**, including:
 - *Department of Social Services*
 - *Department of Health*
 - *Department of Human Rights & Relations*
 - *Department of Community Relations*
 - *Department of Aging*
- H&CD will work with the applicable school district and ask that it provide a representative to be a part of the Rapid Response Team.
- H&CD will facilitate periodic meetings with applicable service providers throughout the process as it relates to needed services and resources.
- The Rapid Response Team will meet at least twice monthly throughout the process or more often as needed.
- H&CD and the Rapid Response Team will develop a communications strategy, including social media and Website notification, as a part of its outreach and marketing efforts during the process. Translation services will be available at all community meetings, as applicable.
- Meeting notification should take place at least 15 days in advance of all community meetings, unless a different timeframe is required given the re-zoning process or other occurrence.
- H&CD will utilize its Departmental Interns and the services of the Family Success Alliance's Navigators and/or other applicable community partners, as well as work with the mobile home park owner, to survey the applicable mobile home park residents to determine the community demographics and resident needs. Inspectors from H&CD will do cursory inspections to determine which mobile homes may be in a condition to be relocated. Depending on the number of mobile homes, H&CD may seek assistance from the Planning & Inspections Department on this activity.
- H&CD will provide extended hours (evenings and Saturdays) during the phase where applications for assistance will be taken.
- H&CD will work with the County Attorney's Office to facilitate the creation of a simple template for all applicable Agreements based on County policy and the type of assistance provided.
- H&CD will conduct 30, 90 and 180-day follow-up for all families relocated. However, relocated families do not have to wait for the follow-up but may simply contact the H&CD office if they have issues or questions.



Resident-Owned Communities – ROC USA



Overview: [ROC USA](#), is national organization with regional affiliates providing lending and technical assistance to residents to purchase and manage their manufactured home communities. ROC and its affiliate members have created over 250 resident owned manufactured home communities in 17 states.

Benefits:

- Control lot rent price, community repairs and improvements
- Lifetime security against unfair eviction
- Liability protection (members are not personally liable)
- Building a strong sense of community
- Higher home values



How it Works: In a resident-owned community, homeowners form and join a non-profit cooperative association. The cooperative borrows the money for purchase from ROC USA Capital, whose sole mission is lending to resident-owned communities. Each cooperative member contributes a maximum \$1,000 joining fee while their lot fees go toward paying off the mortgage and running the new business that is their community. ROC USA Capital's average loan amount is around \$2.67 million.

Each household is a member of the cooperative, which owns the land and manages the community. Members own their homes individually and an equal share of the land beneath the neighborhood.

Residents make major decisions by democratic vote. Members elect a board of directors, which appoints committees to manage the day-to-day operations of the organization.

Local Context: [Carolina Common Enterprise](#) (CCE), based in Durham, is finishing the process to become a ROC USA affiliate member. In 2020, CCE and ROC worked with residents of a manufactured home community in Asheboro to provide the technical assistance and financing to successfully purchase the community from the owner. This was the first ROC community in North Carolina.



Staff Involvement: Staff attended a [Prosperity Now](#) Manufactured Home Conference to learn more about manufactured home preservation strategies in December 2018. At this conference staff met with ROC and learned more about their model. ROC staff put us in touch with CCE and we have remained in communication as they have gone through the process to become a ROC affiliate. Staff has discussed the four manufactured home communities in Chapel Hill and the general dynamics of each community with CCE.

At our last meeting in February, staff from the Town of Chapel Hill, Orange County, CCE, and ROC discussed in greater detail the opportunities and challenges for using the ROC model in Chapel Hill, including additional subsidy gap that would need to be filled beyond ROC financing to make the model work in this community. Consistent with their established outreach process, CCE and ROC plan to reach out to owners of one or more of the Chapel Hill communities to gauge their interest in selling the property.



Town of Carrboro

Town Hall
301 W. Main St.
Carrboro, NC 27510

Agenda Item Abstract

File Number:21-144

Agenda Date: 5/4/2021

File Type:Agendas

In Control: Board of Aldermen

Version: 1

TITLE:

Facilities Rehabilitation - Town Hall & Century Center Concept Plans

PURPOSE: The purpose of this agenda item is for the Public Works Department and consulting architect, Jim Spencer Architects (JSA), to present concept plans for Town Hall and Century Center and receive feedback from the Council.

DEPARTMENT: Public Works

CONTACT INFORMATION: Ben Schmadeke, 919-918-7424, bschmadeke@townofcarrboro.org
<<mailto:bschmadeke@townofcarrboro.org>>; Joe Guckavan, 919-918-7427, jguckavan@townofcarrboro.org
<<mailto:jguckavan@townofcarrboro.org>>

INFORMATION: The Town Council has previously received information on the existing condition of Town Hall, Century Center and the Public Works facility including an energy analysis. JSA has collaborated with Town Staff to develop architectural concept plans for the Town Hall and Century Center buildings, which can be found, with associated information, in Attachment A: Town of Carrboro Renewed Facilities Project Report. The plans address factors including, but not limited to, accessibility, current and future space needs, departmental relocation, and historical preservation.

The Public Works facility is being further evaluated by civil engineers to provide a site analysis and site plan. The Engineer's findings will be presented to the Town Council at a subsequent meeting.

Additionally, a more in-depth report on the facilities' energy systems and Net Zero strategies is scheduled to be presented at the May 11th Town Council meeting.

FISCAL & STAFF IMPACT: Staff have worked diligently with JSA on these plans. Individuals from every department have been involved in decision making and have attended more than nine work session meetings. There is currently no fiscal impact associated with this item.

RECOMMENDATION: It is recommended that the Council receive the report and offer feedback on the information presented.



TOWN OF CARRBORO FACILITIES RENEWAL PROJECT

Town Hall // Century Center // Public Works





JIM SPENCER ARCHITECTS, PA
109A Brewer Lane | PO Box 385
Carrboro, NC 27510
919.960.6680

April 27, 2021

Town of Carrboro Renewed Facilities Project Report Contents

- **Summary of Project Work and Recommendations**
- **Exhibit A-1 – JSA – Town Hall Drawing Set – Existing and Proposed Drawings and Diagrams**
- **Exhibit A-1A – JSA – Updated Town Hall Square Footages**
- **Exhibit A-2 – JSA – Century Center Drawing Set – Existing and Proposed Drawings and Diagrams**
- **Exhibit A-3 – JSA – Public Works Drawing Set – Existing and Proposed Drawings and Diagrams**
- **Exhibit E-1 – Sud Associates – Town of Carrboro Net Zero Energy Modelling Report 11-23-20**
- **Exhibit E-2 – Sud Associates – Town of Carrboro Net Zero Definitions – 11-13-20**
- **Exhibit E-3 – Sud Associates – Town of Carrboro Energy Modelling and Net Zero Presentation – 12-1-20**
- **Exhibit E-4 – Sud Associates – Town of Carrboro – Council Action on Net Zero – 2-19-21**
- **Exhibit E-5 – Sud Associates – Town of Carrboro Upgrade Concepts – 3-31-21**



JIM SPENCER ARCHITECTS, PA
109A Brewer Lane | PO Box 385
Carrboro, NC 27510
919.960.6680

April 27, 2021

Town of Carrboro Renewed Facilities Project Summary of Project Work and Recommendations

Project Background

Jim Spencer Architects, PA and Sud Associates, PA were hired by the Town of Carrboro to undertake a facilities renewal study in June of 2020. Our team has spent the last year documenting and studying three of the Town's existing facilities – Town Hall, the Century Center, and Public Works. We have met with staff members and a committee of representatives over twenty times and with Ben Schmadeke on multiple other occasions. The attached report includes information regarding both the existing and proposed conditions for these buildings/sites, as well as the energy analysis and preliminary recommendations regarding moving these facilities toward net zero. We hope that this report and the accompanying presentations on May 4 (architectural) and May 11 (energy systems) will assist the Council in making some general decisions about the future of their facilities. We ask that the Council receive this information and then provide feedback which our team will use to revise and present the final report after the summer break.

Project Process

The team has undergone the following steps in analyzing the Town of Carrboro facilities:

- Research Building History and Usage
- Perform Site Visits (JSA + Sud Associates)
- Document Existing Conditions (Plans + Photos)
- Create Existing Conditions Base Plans + Models
- Analyze Existing Conditions for Code and Life Safety (ADA, Fire and Exiting, Historical Character, Hazardous Materials, Program and Plan Efficiency, Sustainability)
- Coordinate with Energy Analysis
- Explore and Present Options for Defining and Using Net Zero Technologies

- Propose Programming and Building Renovations/Additions to address energy and other issues listed above
- Explore and Present Options for Defining and Using Net Zero Technologies
- Propose Programming and Building Renovations/Additions to address energy and other issues listed above (this work will be ongoing while Council considers net zero technologies and options, but Council feedback will inform final presentation.
- Present facilities renewal options to Staff and Town Council

Next Steps

- Prepare final reports based on feedback and input from Staff and Council
- Provide Construction Documents for Immediate Needs Projects (Windows, CC Chiller, etc. - These may also be influenced by decisions of Council on direction for the buildings' program and usage in the future)

Findings and Recommendations

Based on our work, we are attaching plan sets for each facility here (listed in the contents as Exhibits). We have included work on the Public Works facility in this report. However, due to the complexity of that site due to stormwater and other issues, public works has asked Sungate Engineers to assist in further site study to determine the best long-term solutions.

Plans for the proposed renovations and additions to the Century Center and Town Hall are attached. These plans are based on extensive feedback and collaboration with Town staff and other stakeholders. Please find below further information regarding each facility.

Town of Carrboro Town Hall

301 West Main Street
Carrboro, NC 27510

Primary Considerations:

- A: Energy – Retrofit solutions to meet energy sustainability goals
- B: Accessibility – Bring facility up to current accessibility standards
- C: Life Safety – Fire and Life Safety analysis and recommendations
- D: History – Preservation/return of historic character
- E: Program – Current vs. Future Usage – short and long-term goals
- F: Other – Hazardous Materials/Indoor Air Quality

Building Considerations Summaries

A: Energy & Sustainability Goals

See Sud Associates Energy Analysis and Recommendations

Note: Town Council is weighing in on Net-Zero energy metrics and boundaries for the proposed projects.

Proposals for renewed or replaced energy systems should incorporate this feedback as well as lessons learned from Town staff and facilities past and recent usage.

B: Accessibility

Accessibility is a primarily issue for the existing building. There is not full accessibility for many spaces in the building, due to lack of an elevator and proper clearances/space requirements. Most of the facilities, including restrooms and other public spaces, have deficiencies in accessibility. The basement and second level, both used extensively by the public, do not meet ANSI 117.1 or the ADA. More information will be provided in the proposed renovations/renewals phase, but priority must be given to both staff and public accessibility. This will include vertical circulation, as well as renovation and addition of toilet and other rooms.

C: Life Safety and Building Codes

The 1922 building would probably be categorized as a type III-B building under current building codes. This essentially means the exterior walls are masonry or non-combustible, and the interior structure and roof assemblies are of wood or other permitted materials.

The building is not sprinklered, but has a partial fire alarm system. Adding sprinklers to the building would be difficult, but would also protect a valuable town asset and provide enhanced life safety for its users. Exiting appears to meet existing codes generally, but could be upgraded slightly depending on future programming and accessibility improvements made.

D: Historic Character

“The materials, configuration and ornamentation of this building are typical of public schools built in the 1920s and 1930s. Built in 1922 as the Carrboro Graded School, this blocky two-story brick building with banks of large double-hung sash windows exhibits restrained ornamentation consisting primarily of shallow, stone-capped parapets and large recessed panels framed in narrow bands of corbelling. Naturally, decoration is concentrated at the main façade where box posts support a porch and a heavy molded and parapeted cornice resting on carved brackets marks

the recessed entrance. Flanking the porch, walls of solid brick are discretely ornamented with embedded squares of contrasting stone. It appears that a cornice, probably identical to the cornice above the entrance, originally accented the building's most prominent façades. According to local tradition, this school was erected on the site of a brick yard. One of the most well-known school figures was Mrs. Josie Sturdivant, who was principal until about 1947. After the present Carrboro Elementary School was built at the end of Ash Street in 1959, this building was converted into Carrboro Town Hall."

From *Carrboro, N.C. – An Architectural & Historical Inventory* by Claudia Roberts Brown, Burgess McSwain, and John Florin with photography by Jane Hamborsky

The building has obviously changed over many years, though the existing historic form is still extant. The restrained brickwork is still a feature of the building, but the interiors have largely been modified to meet office standards from the period of each renovation. One notable exception is the large former auditorium space on the upper level, which retains its wood floors and open trussed ceiling. This space is currently used for storage for the town's recreation and parks department.

Town Hall is obviously one of the most important buildings in Carrboro, and retaining its character as future modifications are made will be important. Strategies for energy conservation and generation on this site need to consider the building's aesthetic and character as well. The context and site itself have been modified greatly already, so the campus-like feel may allow modifications to be made with some subtlety but still achieve the Town's other goals.

E: Program – Current and Long-Term Usage and Goals

Current Use and Features

Town Hall has undergone renovations over the years which have affected its historic character some as well as its spaces and energy usage. The current use is largely administrative, though there is also assembly space (Council Chambers) and storage space. Original double-hung windows were replaced with aluminum windows (though in similar pattern and size). Original cornices and other wood features were largely removed, and a large porch and ramp added at the front entry.

Other reports regarding the structure and use of the building have been done, most notably in 1982 (Design Works), 1990 (LPA Group), and 2017 (Creech Associates). These reports noted Town Hall's lack of full accessibility, program use and existing structure and renovation potential.

The site itself is an approximately 3.96-acre lot which features a large open space which houses the Carrboro farmer's market pavilions, parking, and play space. On the opposite side of the site, Carrboro Fire Station #1 sits along with an enclosed service court containing electrical and telecommunications equipment.

A prominent site feature is the large historic American Elm tree in the front lawn. A truth plaque added to the building recently describes the town's history and goals for justice and equity in the future.

Future Program and Use

There is certain to be a ripple effect in the Town's space programming from the new 203 project. Earlier studies have anticipated much of recreation and parks program moving to the new building. This would not only free space at the Century Center, but also potentially move some things away from the Town Hall to allow for new programmed space. There is a lot of storage on the upper levels of town hall now, much of it planning and recreation and parks files and equipment. These spaces will be considered for other uses should the space become available. There is also significant space allotted to the existing shop and repair area to the west of the original town hall. This is valuable space, but could be considered for re-programming or use to solve other site and building issues.

In the end, the council and staff will need to make some decisions – both financial and planning – in order to decide how best to marry the Town's goals for energy use and optimal programming for their facilities. We will present some options for the proposed renovations in the next phase of this project.

Note: The 2020 pandemic has exposed issues surrounding use of office space and potential changes to work patterns. Consideration should be given to these issues and whether more flexible uses and systems should be used to minimize energy use and maximize building efficiencies.

Existing Uses and Space Allotment

TOC Government and Staff	12,414 SF
Administration	
Conference	558 SF
Lobby	165 SF
Offices	642 SF
Reception	167 SF
Storage	37 SF

Building Support	
Break Room	272 SF
Bathrooms (Public)	74 SF
Bathrooms (Staff)	287 SF
Copy	130 SF
Electrical	86 SF
Mechanical	732 SF
Shop/Shop Office	1,112 SF
Safe	117 SF
Town Council	
Council Chamber	1,021 SF
Mayor	162 SF
Town Manager	336 SF
Town Clerk	161 SF
Economic Development	421 SF
Finance	290 SF
Housing and Community Services	298 SF
Human Relations	
Basement Level Offices	105 SF
Main Level Offices	339 SF
Information Technology	
Offices	870 SF
Storage	68 SF
Planning, Zoning and Inspections	
Reception	125 SF
Planning Offices	1,332 SF
Copy	166 SF
Plan Room	202 SF
Inspections/Zoning Offices	734 SF
Storage	1,405 SF
Police Department	270 SF
Evidence Storage	270 SF
Recreation and Parks	2,877 SF
Basement Storage	915 SF

Proposed Uses and Space Allotment

TBD – see attached drawings for more information

F: Other: Hazardous Materials/Indoor Air Quality

The year 2020 has made focus on hazardous materials and indoor air quality much more common. Meetings with Town staff during the energy analysis have brought questions about the balance between energy efficiency and indoor environmental quality.

It is not known if the Town has undergone a building-wide hazardous materials study for Town Hall. It seems likely this was done during one of the earlier renovation projects, but may need to be revisited during the next project. We have not observed likely asbestos sources like pipe-wrap or older 9" vinyl tile, but the building should probably have an assessment for lead paint and other potential airborne hazardous materials if renovations are planned. Future mechanical systems and building materials should be carefully considered as well.

Town Hall – Summarized Recommendations

- Add full accessibility – new ADA toilet rooms, staff break rooms, and vertical circulation. This work should be highest priority.
- Add other life safety and property value improvements such as sprinklers, fire alarm, and security upgrades
- Renovate existing building to accommodate departmental needs once the 203 project is complete. The floor plans attached reflect a relative consensus among the building's staff. This renovation includes added additional space on the rear of the building, as well as internal program space modifications. The main big moves of the building's renovation are:
 1. Move council chambers to old auditorium
 2. Add ADA toilet rooms and new staff areas (break/locker rooms) downstairs
 3. Revise main level to accommodate more public interaction and give staff added security. Add new public toilets and information portals.
 4. Rework upstairs to allow for planning department expansion and move Town Manager, Clerk, Mayor and Council to upper level.
 5. Add all accessibility – elevators, hallways, breakout spaces
- Return building to closer to historic look, with new windows (full-height) and removing drop ceilings, etc. This would happen in conjunction with:

- Revised building's mechanical systems to move toward Net Zero. Go with all electric systems and perhaps add VRF systems to pinpoint space usage and maximize efficiency.
- Other additional site strategies might be implemented to gain additional energy efficiency – on or off-site solar (ideas of covering parking to reduce heat-island effect and add solar arrays), water capture or addition of other sustainable measures on the Commons
- Discuss future of this site as a whole – it may make sense to consider a rebuild of Fire Station 1. The station needs upgrades and better equal facilities and might be best to consider in conjunction with Town Hall project. Future use of the cell tower and the land/space it uses might also be considered.

Town of Carrboro Century Center

100 North Greensboro Street
Carrboro, NC 27510

Primary Considerations:

- A: Energy – Retrofit solutions to meet energy sustainability goals
- B: Accessibility – Bring facility up to current accessibility standards
- C: Life Safety – Fire and Life Safety analysis and recommendations
- D: History – Preservation/return of historic character
- E: Program – Current vs. Future Usage – short and long-term goals
- F: Other – Hazardous Materials/Indoor Air Quality

Building Considerations Summaries

A: Energy & Sustainability Goals

See Sud Associates Energy Analysis and Recommendations
Proposals for renewed or replaced energy systems should incorporate this feedback as well as lessons learned from Town staff and facilities past and recent usage.

B: Accessibility

Accessibility is not as critical for the Century Center as for Town Hall, but it must still be considered. Better access to the public spaces should be implemented. The current lift is remote and difficult to access. An elevator core into public space should be installed. Other renovations to spaces should incorporate good accessibility as well. Since clear and physical separation of the police and public areas is desired, clear circulation and access should be a priority in renovations. New kitchen and bathrooms facilities should also be fully accessible.

C: Life Safety and Building Codes

The original portion of the 1920's building would probably be categorized as a type III-B building under current building codes. It has load bearing brick walls and heavy timber or wood roof and floor structures. Later additions are fully non-combustible concrete frame with brick veneers.

The building was sprinklered in a previous renovation, but sprinkler and fire alarm would need to be reworked in some areas during renovation. Signage, exiting and dimensions of circulation should be assessed during renovations as well.

D: Historic Character

CARRBORO CENTURY CENTER (FORMER CARRBORO BAPTIST CHURCH)
HISTORIC INFORMATION
100 North Greensboro Street

"The history of the Carrboro Baptist Church dates to the turn of this century when Thomas F. Lloyd's Alberta Cotton Mill was in its first years of operation. As the adjacent small village of mill workers grew, Lloyd responded to the religious needs of the community by donating to the four denominations in Chapel Hill a lot on Weaver St., facing the mill. The Chapel Hill Presbyterians and Episcopalians, who did not want to build another church, quickly assigned their rights to the property to the Chapel Hill Baptists and Methodists, who erected the Union Chapel on the site in 1901 or 1902. According to the seventy-fifth anniversary publication of the Carrboro Baptist Church, this one-story frame building shared by the Methodists and Baptists initially measured twenty feet by thirty feet and was soon doubled in size. Nevertheless, sharing the building presented problems, and around 1910 the Methodists began to hold their services in the Carrboro Public School on W. Main St.

The first pastor to serve the Carrboro Baptists was the Rev. J.C. Hocutt, who conducted services at Union Chapel every fourth Sunday from 1902 to 1906. After the Methodists stopped using Union Chapel, the building became known as Union Baptist Church. In 1912 the church was renamed Venable Baptist Church in accordance with the new name of the town, and in 1914 it received its present name when the community changed its name to Carrboro. In 1921, plans for a new church building were begun after the Rev. J.B. Davis called for full-time services. The Baptists exchanged their property for the larger adjacent lot along N. Greensboro St. owned by the Durham Hosiery Mills. The congregation hired brick masons Toney and William Strayhorn who built the foundation and ground floor walls in 1921. Due to lack of funds, construction was suspended until 1924, when the

building was completed; the two building phases are reflected in the different shades of brick for the ground floor and the rest of the building.

The core of the building is a rectangular gable-roofed sanctuary supported by exterior buttresses to which a one-story hipped roofed wing is appended along the east elevation. On the main, west elevation, flat-roofed towers with recessed window planes topped with corbelling distinguish each corner; the southwest tower marking the major intersection of Main and Weaver streets is taller due to the addition of a belfry. Originally, the tower windows were larger, in the form of pointed arches. When this church was completed, Union Chapel was dismantled and its materials were used for the construction of McDuffie Baptist Church, named for one of Carrboro Baptist Church's well-known early ministers, on N.C. 86 north of Chapel Hill. During the 1960s, brick additions were made to Carrboro Baptist Church between the two towers and along the north elevation."

From *Carrboro, N.C. – An Architectural & Historical Inventory* by Claudia Roberts Brown, Burgess McSwain, and John Florin with photography by Jane Hamborsky

Current Use and Features

The Carrboro Century Center has undergone several renovations and additions over its history. The original structure is visible and mostly intact in its original church form on the south side of the site. 1960s additions which added classroom and other public spaces are still evident as well. The Town purchased the building from Carrboro Baptist Church in 1997. A major 1999 renovation modified the building into its primary current Town of Carrboro programs and uses. The main level north side is currently Town of Carrboro police department, along with portions of the bottom floor and other spaces. The bulk of the lowest level on the north is Town of Carrboro Recreation and Parks administrative space. Some of the lower level south side is also Rec and Parks, and the Carrboro Cybrary has occupied a large center area in the lower south portion of the building. The old auditorium is used as a multi-purpose assembly space. The town is able to use this space and its accessory spaces itself, as well as rent it to the public (in non-pandemic times).

JSA and Creech Associates have both done programming work for the Town to investigate the potential uses of the building assuming some or all of Recreation and Parks department's move to the new 203 building. (See separate reports on this). There is potential and expectation to expand the Town's police department into much of the building, while maintaining the building's ability to house a public assembly space. This may involve some additional accessibility and other upgrades.

The site itself is an approximately .7-acre lot with the building occupying the entirety of the western side (facing North Greensboro) of the site from south to north. There is a small parking lot and access drives connecting the property to East Main and East Weaver Streets. A small courtyard lies central between the northern additions and the old church building.

The northern portion of the site (facing East Weaver Street) contains the Carrboro Millennium fountain.

E: Program – Current and Long-Term Usage and Goals

Current Use and Features

The Century Center has undergone renovations over the years which have affected its historic character some as well as its spaces and energy usage. The current use includes the Carrboro Police department on the upper level, as well as the main administrative offices for the Town's Recreation and Parks department on the lower level. The former original church portion to the south contain Century Hall, a large assembly space, as well as ancillary spaces for the hall. Below the hall has been the Carrboro Cybrary space along with some classrooms, a kitchen and other storage and ancillary spaces.

Future Program and Use

There is certain to be a ripple effect in the Town's space programming from the new 203 project. Earlier studies have anticipated much of recreation and parks program moving to the new building. This would free space for expansion and reconfiguration of the Police department, which is in need of upgrades and large spaces for much of its program.

The town would like to maintain the flexibility and public use of the Century Hall. It is both a versatile space and a source of revenue for the Town. Upgrades to its ancillary spaces – a better catering kitchen, breakout rooms and toilets might improve the functionality and marketability. Accessibility and ease of use will be important.

Note: The 2020 pandemic has exposed issues surrounding use of office space and potential changes to work patterns. Consideration should be given to these issues and whether more flexible uses and systems should be used to minimize energy use and maximize building efficiencies.

Existing Uses and Space Allotment

<u>TOC Police</u>	<u>4,561 SF</u>
Administration	943 SF
Admin Assistant	95 SF
Captain	132 SF
Chief	152 SF
Conference	146 SF
Copy	114 SF
Reception (Records?)	208 SF
Waiting	96 SF
Building Support	1,184 SF
Ammo	58 SF
Bathroom	62 SF
Break Room	51 SF
Locker – Men	485 SF
Locker – Women	311 SF
Office Supplies	48 SF
Storage	169 SF
Community Services	303 SF
Community Police	96 SF
Community Service	93 SF
Lieutenant	114 SF
Criminal Investigations	1,177 SF
Booking	210 SF
Evidence	299 SF
Interview Rooms	182 SF
Investigators	486 SF
Field Operations	954 SF
Shift Supervisor	126 SF
Squad Room	289 SF
Training Room	539 SF

Proposed Space Allotment – Police Department

<u>TOC Police</u>	<u>11,100 SF</u>
Administration Total	2,880 SF
Reception/Waiting	502 SF
Private Interview Area	266 SF
Public Restroom	101 SF

Admin Assistant (2)	271 SF
Conference Room	511 SF
Captain	170 SF
Chief	189 SF
Assistant Chief	145 SF
Copy/Print	95 SF
Records	153 SF
Bathroom – Men's	153 SF
Bathroom – Women's	158 SF
Storage	166 SF
Building Support Total	3,298 SF
Ammo	65 SF
Bathrooms – Gender Neutral	207 SF
Bathroom – Prisoner	44 SF
Break Room	316 SF
Locker – Mens'	485 SF
Locker – Womens'	311 SF
Storage – Conditioned	681 SF
POPAT Storage	161 SF
Uniform & Equipment Storage	152 SF
K9 Equipment and CIU Equipment	216 SF
Mechanical	535 SF
Server	125 SF
Community Services Total	334 SF
Community Police	334 SF
Criminal Investigations Total	3,208 SF
Booking	352 SF
Evidence Storage	978 SF
Bulk Evidence Property Storage	77 SF
Evidence Blood Drying Room	120 SF
Evidence Processing	180 SF
Interview Rooms	294 SF
Latent Room	97 SF
Investigators	735 SF
Investigator Supervisor	153 SF
Investigators Storage	93 SF
Patrol Storage	129 SF
Field Operations Total	1,380 SF
Shift Supervisor/Sergeants	118 SF
Squad Room	303 SF
FATS Training, Control & Storage	959 SF

See drawings for revised Century Hall existing and proposed square footage totals

F: Other: Hazardous Materials/Indoor Air Quality

The year 2020 has made focus on hazardous materials and indoor air quality much more common. Meetings with Town staff during the energy analysis have brought questions about the balance between energy efficiency and indoor environmental quality.

It is not known if the Town has undergone a building-wide hazardous materials study for Century Center. It seems likely this was done during one of the earlier renovation projects, but may need to be revisited during the next project. We have not observed likely asbestos sources like pipe-wrap or older 9" vinyl tile, but the building should probably have an assessment for lead paint and other potential airborne hazardous materials if renovations are planned. Future mechanical systems and building materials should be carefully considered as well.

Century Center – Summarized Recommendations

- Replace existing chiller – Sud Associates will advise on more efficient system on May 11
- Renovate existing building after Recreation and Parks moves their primary function to the new 203 building. This project involves renovating existing interiors to expand police headquarters. We have worked several years with the former and current chiefs and staff to get a general plan together. The main goals of the plan would be to have better public access to central administration and reception, more security and safety for other police uses, bigger and better training rooms and break room and toilets, etc.
- Add extra support spaces for Century Hall to include renovated toilet rooms, more storage, a new and larger catering and teaching kitchen, and a lift for stage access.

Town of Carrboro Public Works

100 Public Works Drive
Carrboro, NC 27510

Primary Considerations:

- A: Energy – Retrofit solutions to meet energy sustainability goals
- B: Accessibility – Bring facility up to current accessibility standards
- C: Life Safety – Fire and Life Safety analysis and recommendations
- D: History – Preservation/return of historic character

E: Program – Current vs. Future Usage – short and long-term goals
F: Other – Hazardous Materials/Indoor Air Quality

Building Considerations Summaries

A: Energy & Sustainability Goals

See Sud Associates Energy Analysis and Recommendations
Proposals for renewed or replaced energy systems should incorporate this feedback as well as lessons learned from Town staff and facilities past and recent usage.

B: Accessibility

Accessibility is an issue for the existing administrative building. There is not full accessibility for many spaces in the building, due to lack of proper clearances/space requirements. Most of the facility's spaces, including restrooms and other public spaces, have deficiencies in accessibility. The second level is not accessible. More information will be provided in the proposed renovations/renewals phase, but priority must be given to both staff and public accessibility. This will include vertical circulation, as well as renovation and addition of toilet and other rooms.

C: Life Safety and Building Codes

The main administrative building would probably be categorized as a type II-B or III-B building under current building codes. The exterior walls are non-combustible, and the interior structure and roof assemblies are of wood or other permitted materials. The other buildings on site are a combination of V-B and III-B, but are primarily storage buildings.

The building is not sprinklered, but has a partial fire alarm system. Exiting appears to meet existing codes generally, but could be upgraded slightly depending on future programming and accessibility improvements made.

D: Historic Character

CARRBORO PUBLIC WORKS
HISTORIC INFORMATION
100 Public Works Drive

The Town of Carrboro bought this parcel for Public Works in about 1991 and the buildings are all from the 1990s and 2000s. Most are pre-engineered metal buildings, with a couple of masonry buildings and post and beam structures for storage.

The site itself is an approximately 2.944-acre lot with the building occupying 128,226 gross square feet of land to the southwest of the intersections of NC Highway 54 and Smith Level Road. Morgan Creek abuts the property on the south and causes flooding in extreme rain events. The floodplain does extend into the property and should be considered for future use.

E: Program – Current and Long-Term Usage and Goals

Current Use and Features

The current public works facility contains many different storage, maintenance and administrative uses. The Town's public works and storm water staffs both are housed in the existing building on the north of the site. Additionally, there are extra bays attached to this building which serves as a maintenance garage for town vehicles. The administrative portion of this building contains multiple offices, a break room, and conference facilities. It has a couple of non-accessible compliant toilet rooms and other ancillary spaces.

Other buildings on site include a sign shop, a gas depot, vehicle and material storage sheds. There are approximately 11 buildings on site in addition to the primary building. There are also material and vehicular storage areas (paved and unpaved) spread around the site.

Note: There have been recent stream reclamation projects done near the site, but the threat of flooding on the site (particularly the lower, south side) continues and should influence future use and renovations.

Future Program and Use

There is need for additional office space, due to the consolidation of the Town's stormwater staff on this site. The administrative building also needs accessibility upgrades for its toilet and other rooms. Relocation of the car wash area (and its discharge) is needed, along with new storage areas for town vehicles (newly acquired garage trucks for example).

There may be simple additions or re-allocations which could achieve the Town's goals on this site. However, there may be need to reconsider location of vehicular parking and future growth of staff.

In the end, the council and staff will need to make some decisions – both financial and planning – in order to decide how best to marry the Town's goals for energy use and optimal programming for their facilities. We will present some options for the proposed renovations in the next phase of this project.

Note: The 2020 pandemic has exposed issues surrounding use of office space and potential changes to work patterns. Consideration should be given to these issues and whether more flexible uses and systems should be used to minimize energy use and maximize building efficiencies.

Existing Uses and Space Allotment

Administration

Director	160 SF
Administrative Assistant	243 SF
Landscape Supervisor	70 SF
Street Supervisor	63 SF
Solid Waste Supervisor	137 SF
Offices	553 SF
Copy	27 SF

Building Support

Bathrooms	242 SF
Break Room	415 SF
Conference Room	309 SF
IT	23 SF
Mechanical	529 SF
Storage	1,336 SF
Tool Storage	184 SF

Shop

Mechanic Bays	2,646 SF
Tool Storage	148 SF

Accessory Buildings

Fleet Maintenance Storage	334 SF
Landscaping and Ground Storage	1,322 SF
Pumping Station	969 SF
Streets Storage	476 SF
Storage	1,573
Tire	193 SF
Vehicle Storage	3,146 SF
Wash Pit	67 SF

F: Other: Hazardous Materials/Indoor Air Quality

The year 2020 has made focus on hazardous materials and indoor air quality much more common. Meetings with Town staff during the energy analysis have brought questions about the balance between energy efficiency and indoor environmental quality.

It is not known if the Town has undergone a building-wide hazardous materials study for Public Works. The age of these buildings limits the likelihood of hazardous materials in the buildings. However, there are many issues on the site with runoff and building/landscaping/maintenance materials and car wash discharge. These should be addressed in renovation project. Future mechanical systems and building materials should be carefully considered as well.

Public Works – Summarized Recommendations

- As noted above, we have discussed the Public Works site and buildings with staff and various stakeholders. We have included drawings and backgrounds here, but Public Works staff have also asked Sungate Engineering to look at the site further (particularly with regard to its storm water and other environmental issues).
- Most notably, the existing building needs accessibility upgrades, particularly the locker and toilet rooms.
- There is immediate need for the gas tanks to be relocated above ground, and for the car wash to be covered.
- There is future need for more potential office space, but also for better vehicular circulation on site. We have recommended to Sungate that more pervious surface and directional drive aisles be considered to reduce the amount of paving and gravel on site. This would help with both the traffic patterns and with the storm water issues on site.
- Consolidation of the buildings and their use would greatly help on the limited amount of high ground available at 100 Public Works Drive. Therefore, it may make good long-term sense to construct new, more energy efficient buildings on site (a campus approach) vs. simply repairing/adding to existing buildings and using so many outbuildings.

Estimated Costs and Schedule

Estimated budgets are being developed and will be shared with the Council in June or after the summer break, depending on the feedback we get at our May 4 and May 11 meetings.

Priorities for the various work described is completely up to the Town staff and the Council. However, we recommend the Town Hall accessibility and other upgrades are prioritized.



Vintage Photo of Carrboro Graded School
photo: carrboro.com



Current Photo of Carrboro Town Hall
photo: david jessie



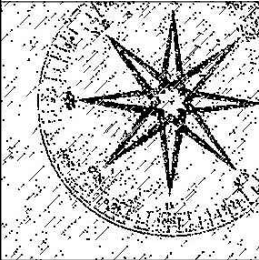
Carrboro Town Hall - Old Auditorium
photo: jsa



Carrboro Town Hall - Rear facade
photo: jsa



Carrboro Town Hall Southeast facade
photo: jsa



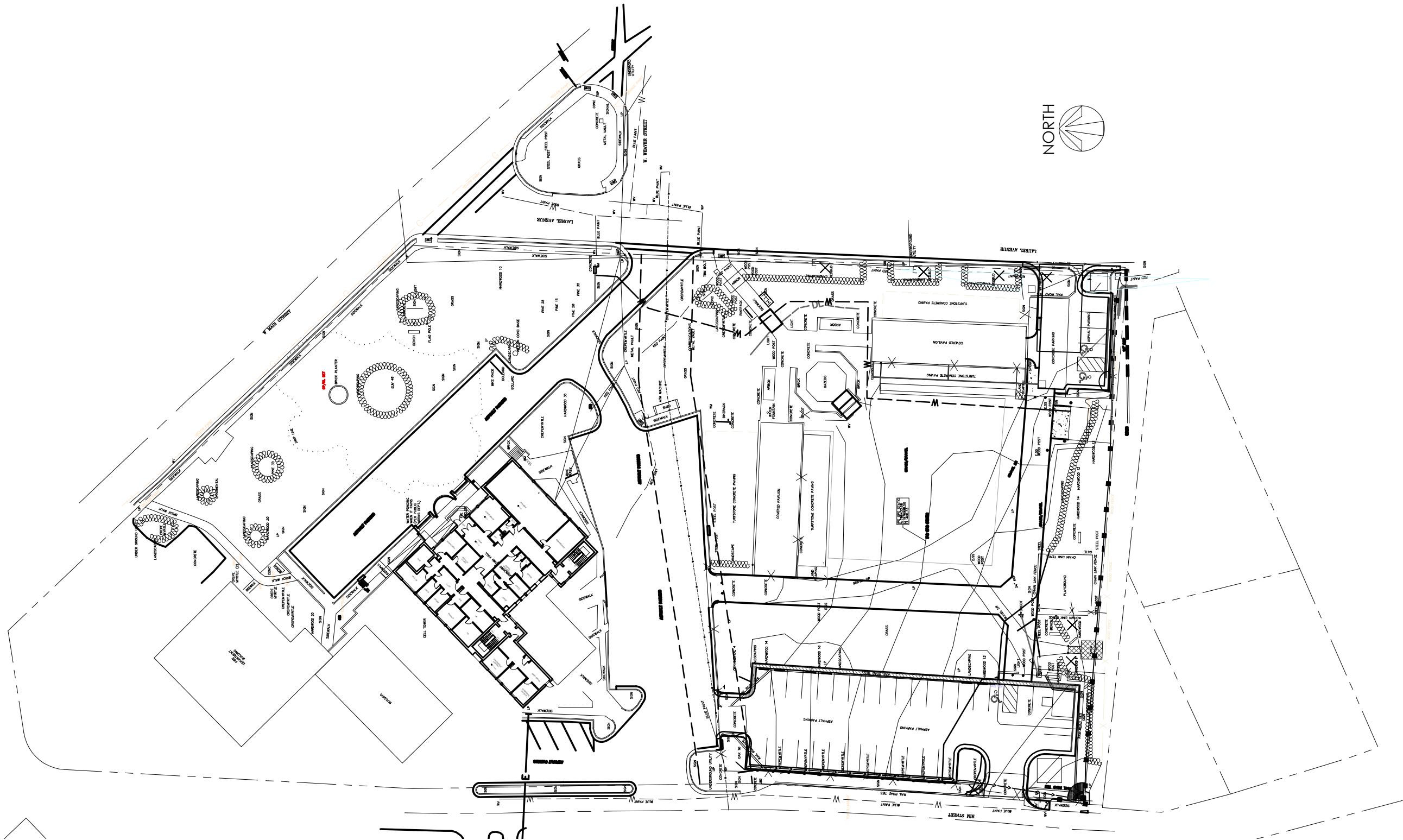
Jim Spencer Architects, PA
109-A Brewer Lane
Carrboro, NC 27510

jimspencerarchitects.com
919.960.6680

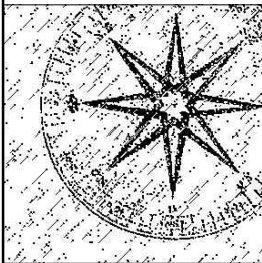
Town of Carrboro Renewed Facilities // Town Hall
Existing Conditions - Photographs // February 10, 2021

Town of Carrboro
301 West Main Street
Carrboro, NC 27510





1
EC1 Existing Conditions – Site Plan – Town Commons
SCALE: 1" = 60'



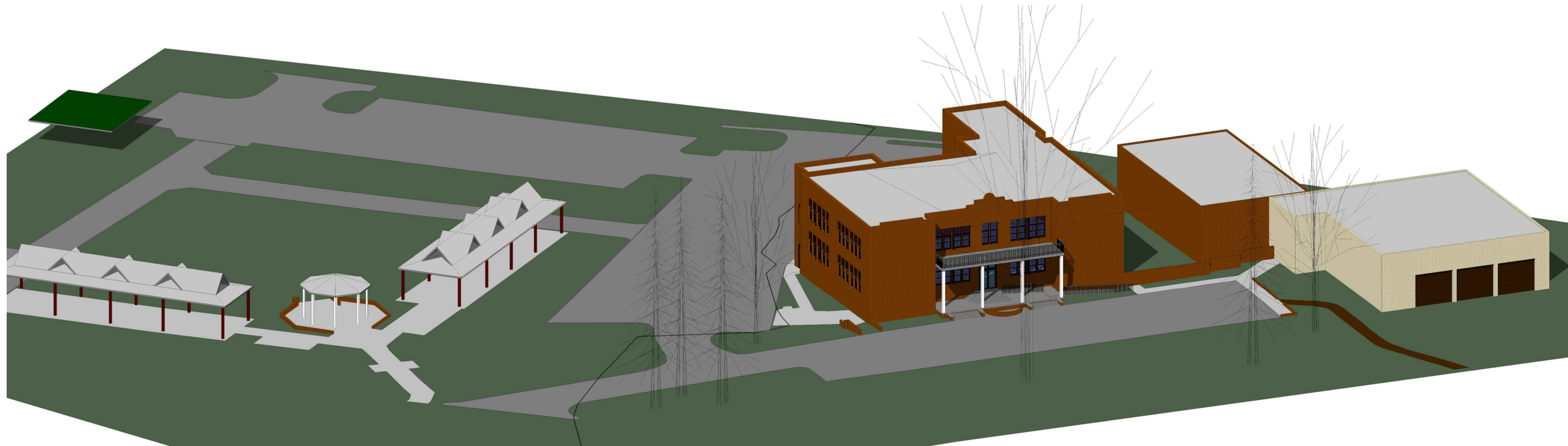
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Town of Carrboro Renewed Facilities // Town Hall
Existing Conditions - Site Plan // February 10, 2021

Town of Carrboro
301 West Main Street
Carrboro, NC 27510





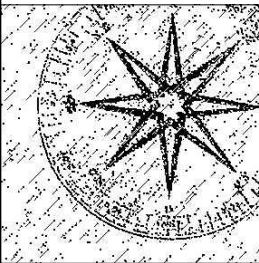
Aerial View of Town Commons from the Northeast



Aerial View of Town Commons from the Northeast



Perspective View from Entry Drive to Town Hall



Jim Spencer Architects, PA
109-A Brewer Lane
Carrboro, NC 27510

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919.960.6680

Town of Carrboro Renewed Facilities // Town Hall
Existing Conditions - Model Shots // March 10, 2021

Town of Carrboro
301 West Main Street
Carrboro, NC 27510



CARRBORO TOWN HALL
301 West Main Street

The materials, configuration and ornamentation of this building are typical of public schools built in the 1920s and 1930s. Built in 1922 as the Carrboro Graded School, this blocky two-story brick building with banks of large double-hung sash windows exhibits restrained ornamentation consisting primarily of shallow, stone-capped parapets and large recessed panels framed in narrow bands of corbelling. Naturally, decoration is concentrated at the main façade where box posts support a porch and a heavy molded and parapeted cornice resting on carved brackets marks the recessed entrance. Flanking the porch, walls of solid brick are discretely ornamented with embedded squares of contrasting stone. It appears that a cornice, probably identical to the cornice above the entrance, originally accented the building's most prominent façades. According to local tradition, this school was erected on the site of a brick yard. One of the most well-known school figures was Mrs. Josie Sturdivant, who was principal until about 1947. After the present Carrboro Elementary School was built at the end of Ash Street in 1959, this building was converted into Carrboro Town Hall.

From *Carrboro, N.C. – An Architectural & Historical Inventory* by Claudia Roberts Brown, Burgess McSwain, and John Florin with photography by Jane Hamborsky

Current Use and Features

Town Hall has undergone renovations over the years which have affected its historic character some as well as its spaces and energy usage. The current use is largely administrative, though there is also assembly space (Council Chambers) and storage space. Original double-hung windows were replaced with aluminum windows (though in similar pattern and size). Original cornices and other wood features were largely removed, and a large porch and ramp added at the front entry.

The site features a large open space which houses the Carrboro farmer's market pavilions, parking, and play space. On the opposite side of the site, Carrboro Fire Station #1 sits along with an enclosed service court containing electrical and telecommunications equipment.

A prominent site feature is the large historic American Elm tree in the front lawn. A truth plaque added to the building recently describes the town's history and goals for justice and equity in the future.

CARRBORO TOWN HALL
BUILDING FEATURES

A: Energy Systems

See energy analysis by Sud Associates attached

B: Building Code/Accessibility/Life Safety

The 1922 building would probably be categorized as a type III-B building under current building codes. This essentially means the exterior walls are masonry or non-combustible, and the interior structure and roof assemblies are of wood or other permitted materials.

The building is not sprinklered, but has a partial fire alarm system. Exiting appears to meet existing codes, but could be upgraded slightly depending on future programming.

Accessibility is a primarily issue for the existing building. There is not full accessibility for many spaces in the building, due to lack of an elevator and proper clearances/space requirements.

C: Historic Character

The building has obviously changed over many years, though the existing historic form is still extant. The restrained brickwork is still a feature of the building, but the interiors have largely been modified to meet office standards from the period of each renovation. One notable exception is the large former auditorium space on the upper level, which retains its wood floors and open trussed ceiling. This space is currently used for storage for the town's recreation and parks department.

D: Indoor Air Quality/Hazardous Materials

placeholder

E: Site Program – Short Term vs. Long Term programs

placeholder

Town of Carrboro Renewed Facilities Project

TOC Town Hall
301 West Main Street
Carrboro, NC 27510

Considerations

- 1) Retrofit solutions to meet energy sustainability goals
- 2) Solution to bring facility up to current accessibility standards
- 3) Fire and Life Safety analysis and recommendation
- 4) Preservation of historic character
- 5) Consolidation of storage
- 6) Other: Short term needs vs. long term goals

Existing Uses and Space Allotment

TOC Government and Staff 12,414 SF

Administration

Conference	558 SF
Lobby	165 SF
Offices	642 SF
Reception	167 SF
Storage	37 SF

Building Support

Break Room	272 SF
Bathrooms (Public)	74 SF
Bathrooms (Staff)	287 SF
Copy	130 SF
Electrical	86 SF
Mechanical	732 SF
Shop/Shop Office	1,112 SF
Safe	117 SF

Town Council

Council Chamber	1,021 SF
Mayor	162 SF

Town Manager

336 SF

Town Clerk

161 SF

Economic Development

421 SF

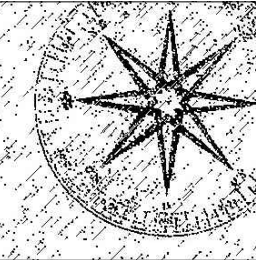
Finance

290 SF

Housing and Community Services

298 SF

Human Relations



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Town of Carrboro Renewed Facilities // Town Hall
Existing Conditions - History // February 10, 2021

Town of Carrboro
301 West Main Street
Carrboro, NC 27510





EXISTING BASEMENT LEVEL



PROPOSED BASEMENT LEVEL

SCALE : $\frac{1}{16}'' = 1'$

LEGEND

 TOC Government & Staff	 Human Resources	 Inspections / Zoning	 Building Support
 Finance / Reception	 Community, Housing and Economic Development	 Public / Flex Space	 Other
 Information Technology	 Planning	 Staff Amenities	 PZI Storage

KEY IMPROVEMENTS

1. ENERGY EFFICIENCY/SYSTEMS
2. NEW ELEVATOR
3. NEW ADA BATHROOMS FOR PUBLIC USE DURING MARKET AND OTHER EVENTS AT TOWN COMMONS.
4. NEW ADDITION FOR STAFF BREAKROOM AND BATHROOMS.
5. INCREASED STORAGE FOR IT AND OTHER TOC GOVERNMENT/STAFF.
6. NEW SPRINKLER SYSTEM AND LIFE SAFETY IMPROVEMENTS.



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Town of Carrboro Renewed Facilities // Town Hall // April 2021

Town of Carrboro
301 West Main Street
Carrboro, NC 27510





EXISTING MAIN LEVEL



PROPOSED MAIN LEVEL

SCALE : $\frac{1}{16}'' = 1'$

LEGEND

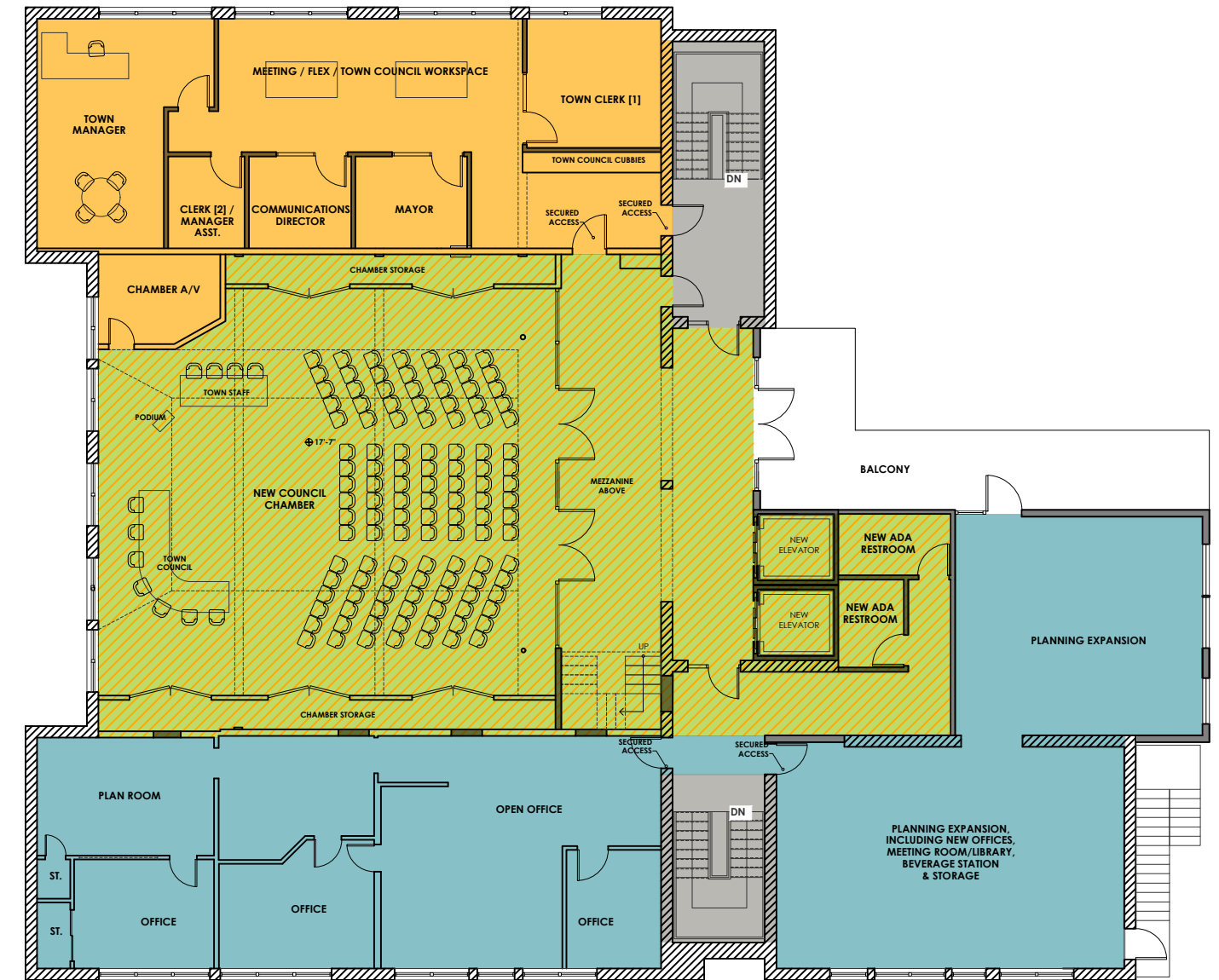
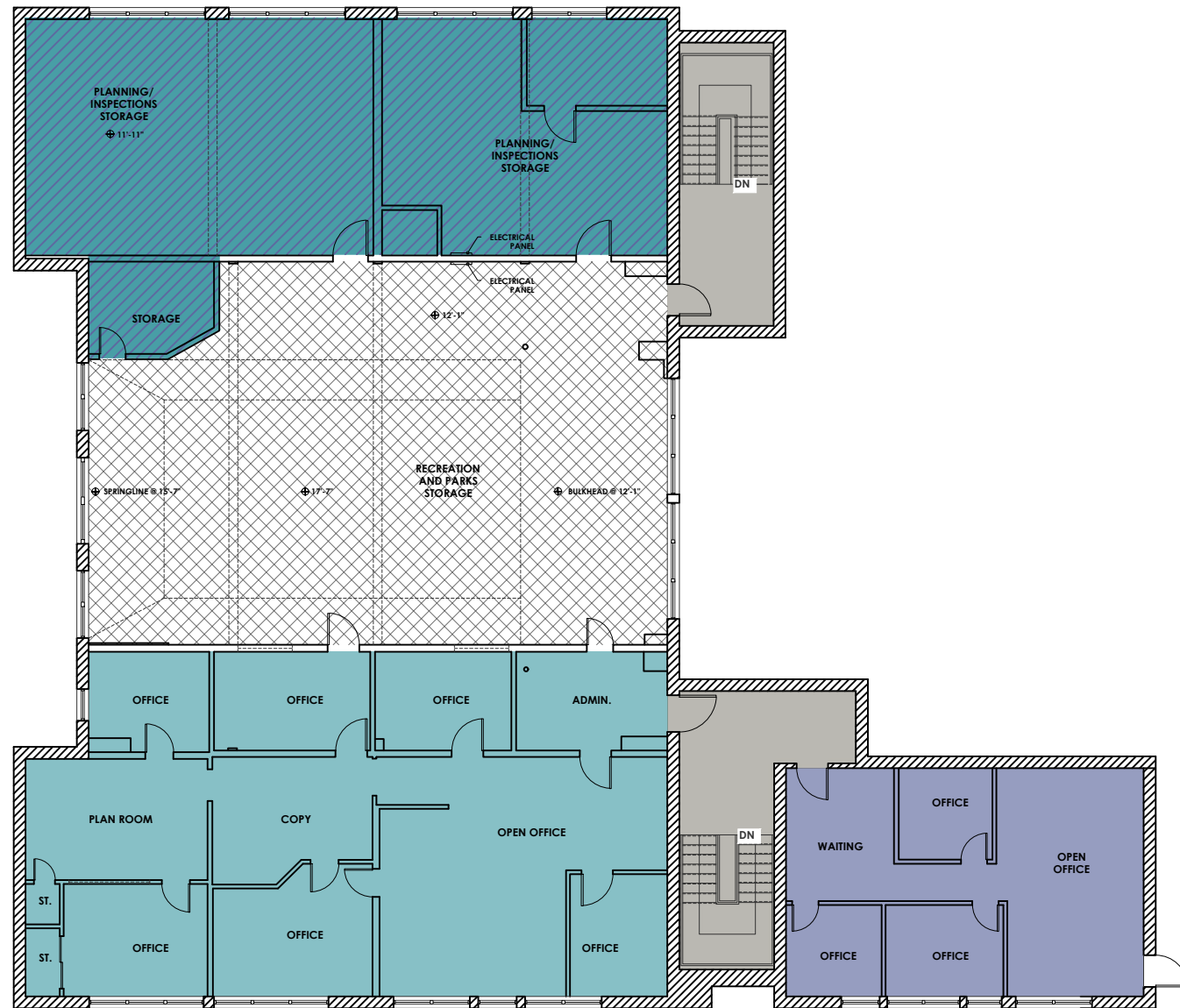
 TOC Government & Staff	 Human Resources	 Inspections / Zoning	 Building Support
 Finance / Reception	 Community, Housing and Economic Development	 Public / Flex Space	 Other
 Information Technology	 Planning	 Staff Amenities	 PZI Storage

KEY IMPROVEMENTS

1. ENERGY EFFICIENCY/SYSTEMS
2. ADD NEW CORRIDOR AND ELEVATOR.
3. RENOVATE AND RECONFIGURE LOBBY TO INCORPORATE ADA RESTROOMS, ACCESS TO ELEVATOR AND INCREASE LOBBY/GALLERY SPACE.
4. RELOCATE COUNCIL CHAMBER AND REALLOCATE ROOM TO CONFERENCE/FLEX SPACE.
5. NEW ADDITION FOR STAFF OFFICES.
6. NEW SPRINKLER SYSTEM AND LIFE SAFETY IMPROVEMENTS.



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SCALE : $\frac{1}{16}'' = 1'$

LEGEND

 TOC Government & Staff	 Human Resources	 Inspections / Zoning	 Building Support
 Finance / Reception	 Community, Housing and Economic Development	 Public / Flex Space	 Other
 Information Technology	 Planning	 Staff Amenities	 PZI Storage

KEY IMPROVEMENTS

1. ENERGY EFFICIENCY/SYSTEMS
2. ADD NEW CORRIDOR AND ELEVATOR.
3. RENOVATE AUDITORIUM SPACE AND REALLOCATE TO COUNCIL CHAMBER.
4. RENOVATE EXISTING STORAGE SPACES AND REALLOCATE TO TOC GOVERNMENT & STAFF.
5. NEW ADDITION FOR PUBLIC RESTROOMS AND STAFF WELLNESS ROOM.
6. PLANNING EXPANSION
7. TOWN MANAGER OFFICE RELOCATION
8. NEW SPRINKLER SYSTEM AND LIFE SAFETY IMPROVEMENTS.



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Town of Carrboro Renewed Facilities // Town Hall // April 2021

Town of Carrboro
301 West Main Street
Carrboro, NC 27510

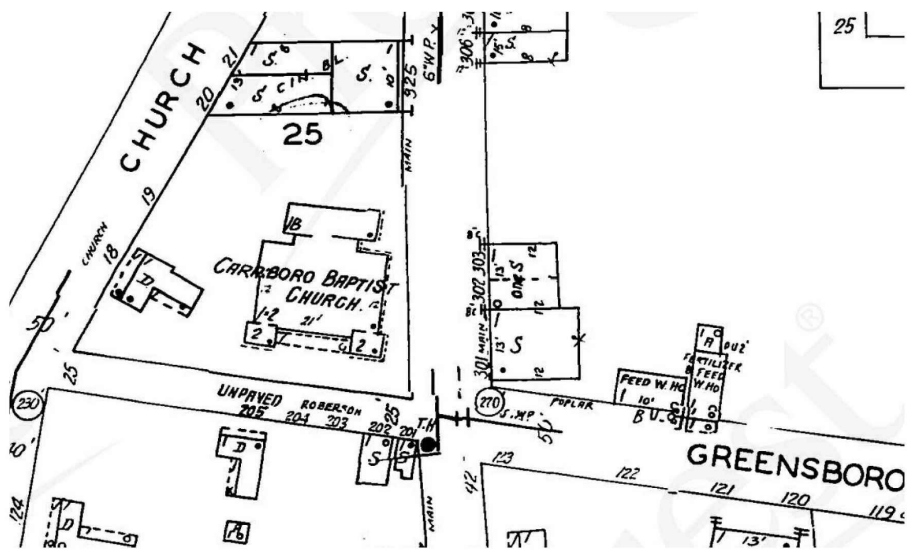


Town Hall Square Footage

	EXISTING	PROPOSED
TOC Government & Staff	2,856 sf	3,490 sf
Finance / Reception	1,084 sf	1,321 sf
Information Technology	1,678 sf	2,002 sf
Human Resources Offices	469 sf	612 sf
Community, Housing & Economic Development	801 sf	801 sf
Planning Offices	1,685 sf	2,717 sf
Inspections / Zoning Offices	875 sf	970 sf
Public / Flex Space	2,840 sf	7,450 sf
Staff Amenities	633 sf	1,502 sf
Recreation & Parks Storage	2,925 sf	218 sf
PZI Storage	?*	756 sf
HR Storage	?*	300 sf
Police Department Storage	278 sf	0
Other	1,835 sf (shop, unconditioned basement)	302 sf (unconditioned basement)

Notes:

- Proposed TOC Gov't & Staff square footage includes Meeting Room/Library, Town Council workspace, both of which can also be utilized by other departments as space for meetings, mobile workstations, plan reviews, large mailings.
- Flex space included in Public/Flex square footage will serve all departments for meeting space, mobile work stations, etc and will allow room for future expansion.
- Verify square footage of existing HR & PZI storage spaces.



Sanborn Fire Map showing Carrboro Baptist Church
photo: openorangenc.org



Vintage Photo of Carrboro Baptist Church
photo: openorangenc.org



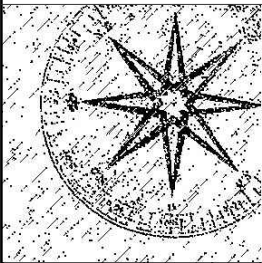
Vintage Photo of Carrboro Baptist Church with 1960s Additions
photo: openorangenc.org



Current Carrboro Century Center - Southwest Corner
photo: matt barrett



Current Carrboro Century Center - West Facade
photo: unknown



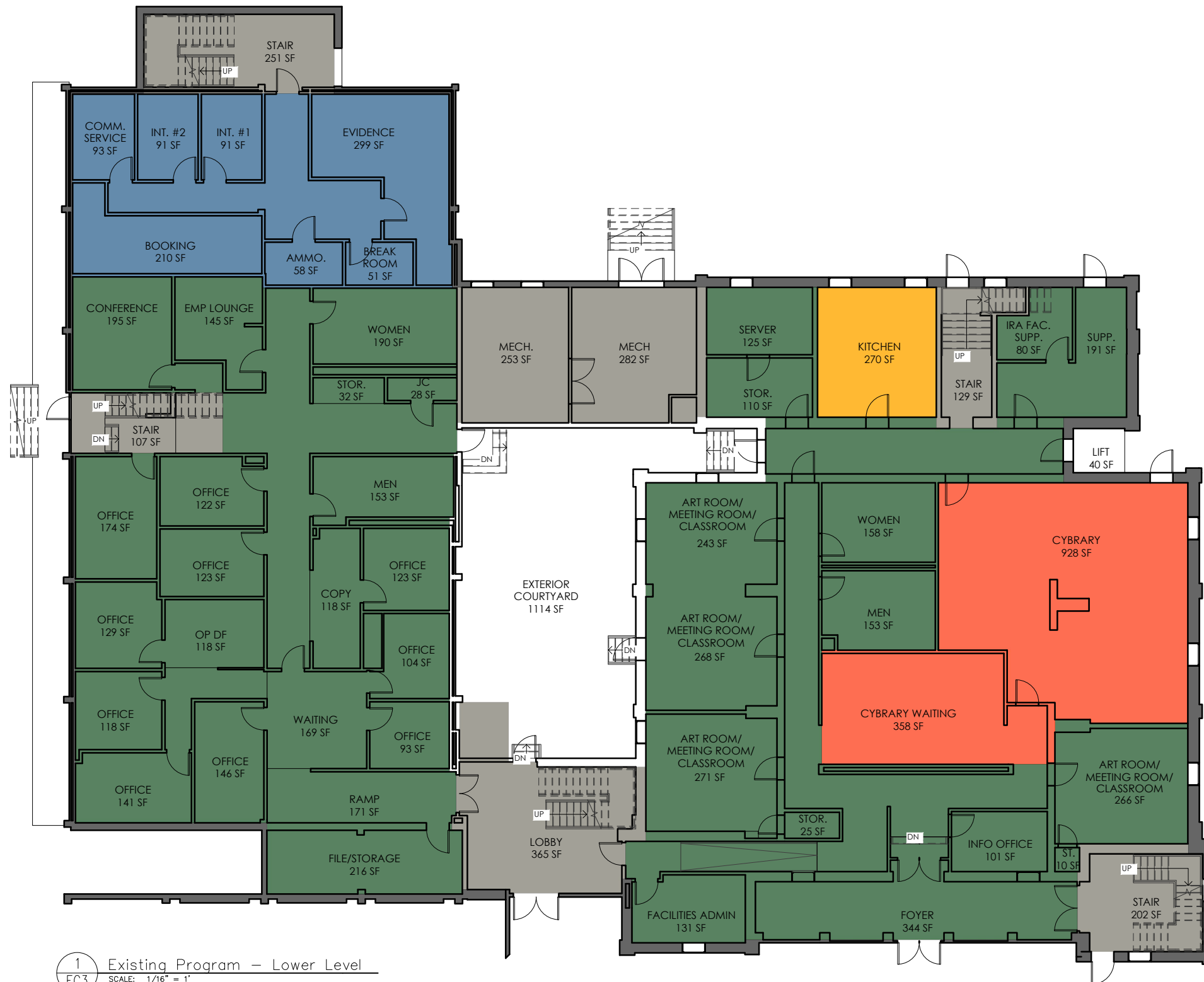
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Town of Carrboro Renewed Facilities // Century Center
Existing Conditions - Photographs // February 2021

Town of Carrboro
301 West Main Street
Carrboro, NC 27510





Existing Space Allotment – Police Department

TOC Police	4,561 SF
Administration	943 SF
Admin Assistant	95 SF
Captain	132 SF
Chief	152 SF
Conference	146 SF
Copy	114 SF
Reception (Records?)	208 SF
Waiting	96 SF
Building Support	1,184 SF
Ammo	58 SF
Bathroom	62 SF
Break Room	51 SF
Locker – Mens'	485 SF
Locker – Womens'	311 SF
Office Supplies	48 SF
Storage	169 SF
Community Services	303 SF
Community Police	96 SF
Community Service	93 SF
Lieutenant	114 SF
Criminal Investigations	1,177 SF
Booking	210 SF
Evidence	299 SF
Interview Rooms	182 SF
Investigators	486 SF
Field Operations	954 SF
Shift Supervisor	126 SF
Squad Room	289 SF
Training Room	539 SF

Existing Space Allotment – Other

Century Hall	5,683 SF
Facilities	3,723 SF
Supporting Spaces	1,960 SF
Cybrary	1,286 SF
Recreation & Parks	6,255 SF
Administration	431 SF
Building Support	1,599 SF
Facilities	2,388 SF
Programs	1,837 SF

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Town of Carrboro Renewed Facilities // Century Center
EC3 - Existing Program, Lower Level // February 2021

Carrboro Century Center
100 N Greensboro St.
Carrboro, NC 27510

919.918.7385





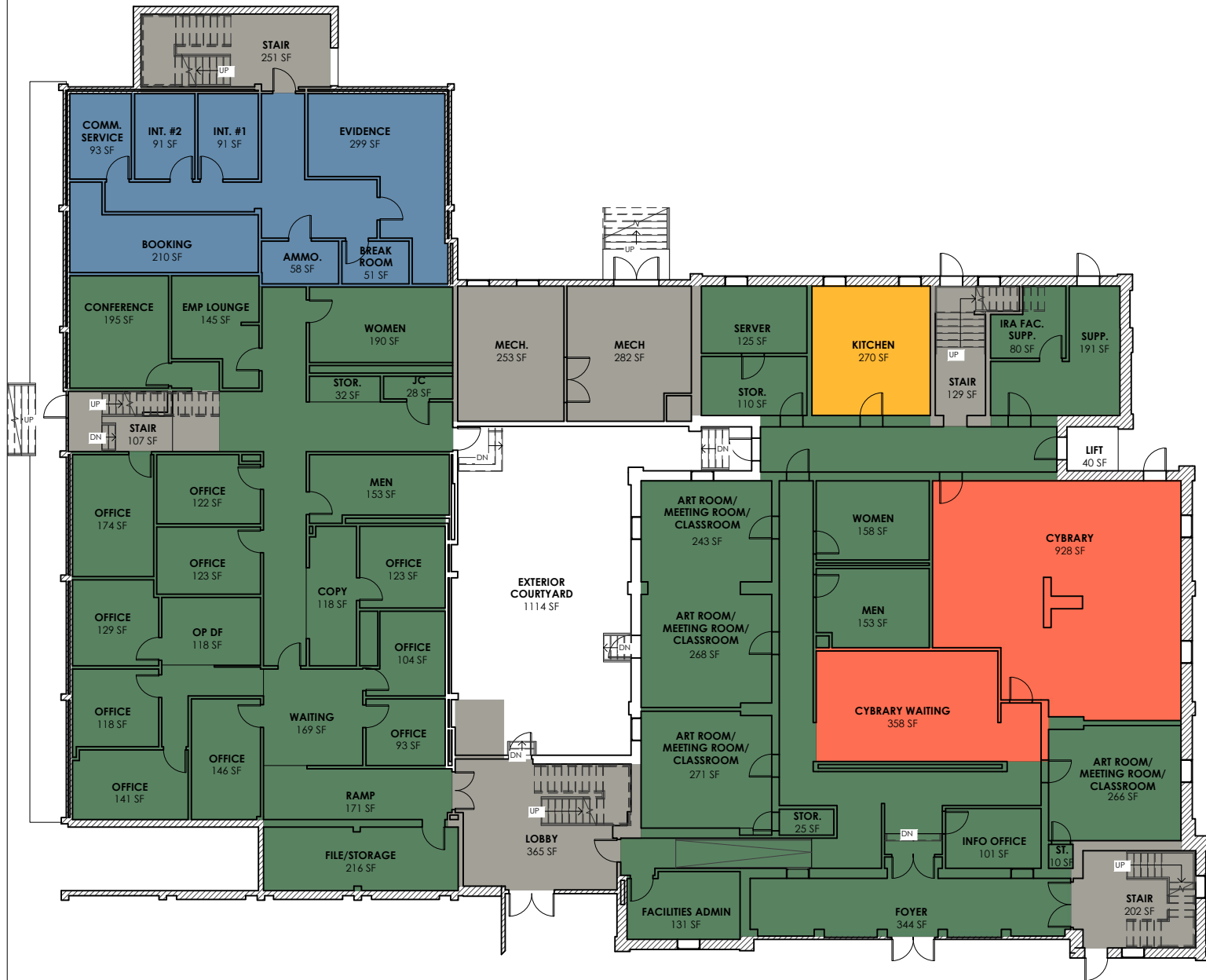
1 Existing Program – Upper Level
EC4 SCALE: 1/16" = 1'

Existing Space Allotment – Police Department

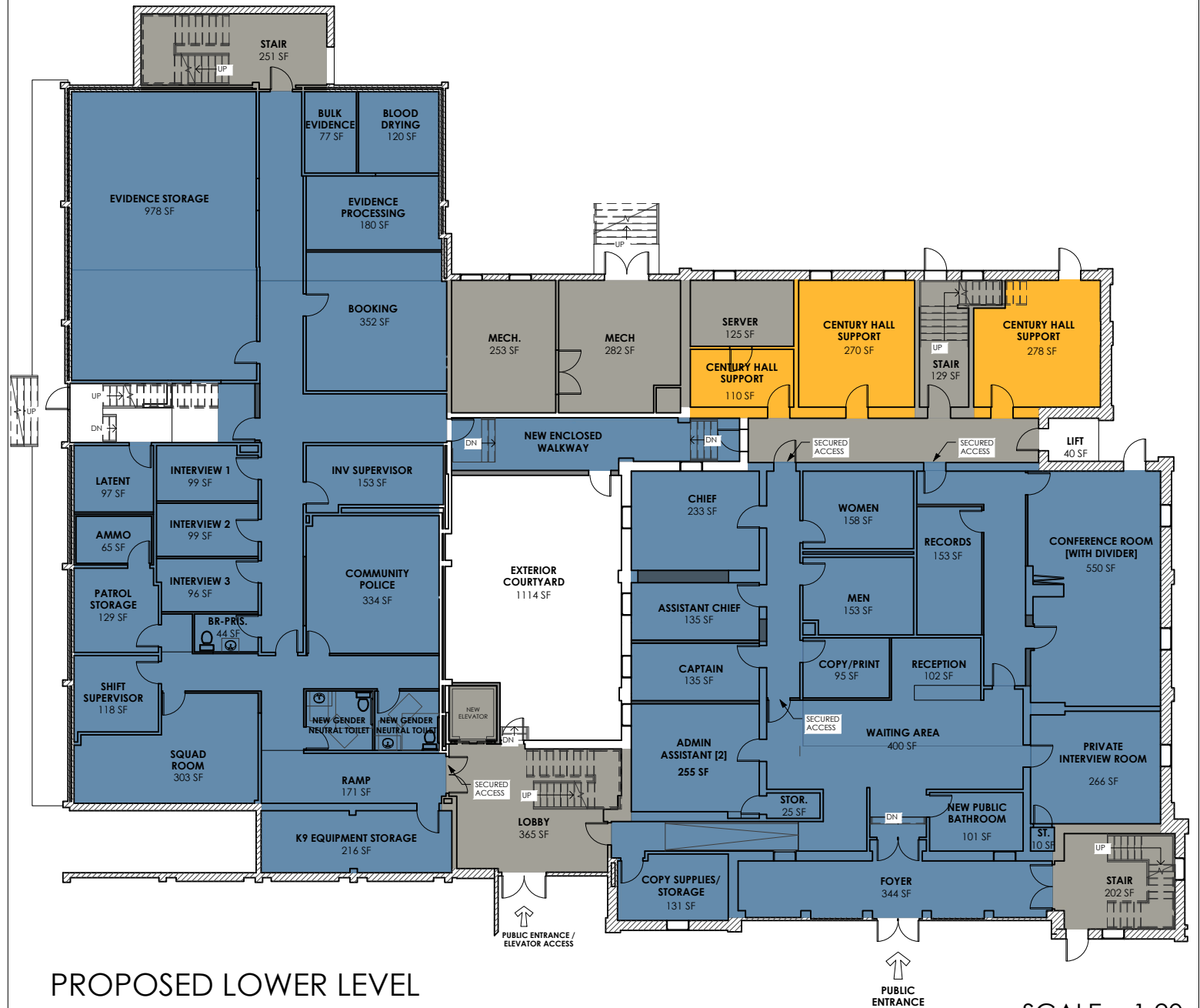
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Facilities	2,388 SF
Programs	1,837 SF



EXISTING LOWER LEVEL



PROPOSED LOWER LEVEL

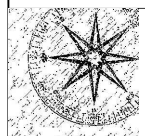
SCALE = 1:20

LEGEND



KEY IMPROVEMENTS

- A. ENERGY
- B. ACCESSIBILITY
 - 1. NEW ELEVATOR
 - 2. PUBLIC ENTRANCE ON GROUND FLOOR
- C. PROGRAM IMPROVEMENTS
 - POLICE DEPARTMENT:
 - 1. 6,539 NEW SF
 - 2. IMPROVED CIRCULATION AND SECURITY
 - 3. BETTER ACCESS FOR PUBLIC
 - 4. IMPROVED FACILITIES, E.G. TRAINING, BREAK ROOM, LOCKER ROOMS, CONFERENCE ROOMS
 - CENTURY HALL:
 - 1. NEW CATERING KITCHEN
 - 2. 660 NEW SF FOR STORAGE AND OFFICE
 - 3. IMPROVED BATHROOM FACILITIES

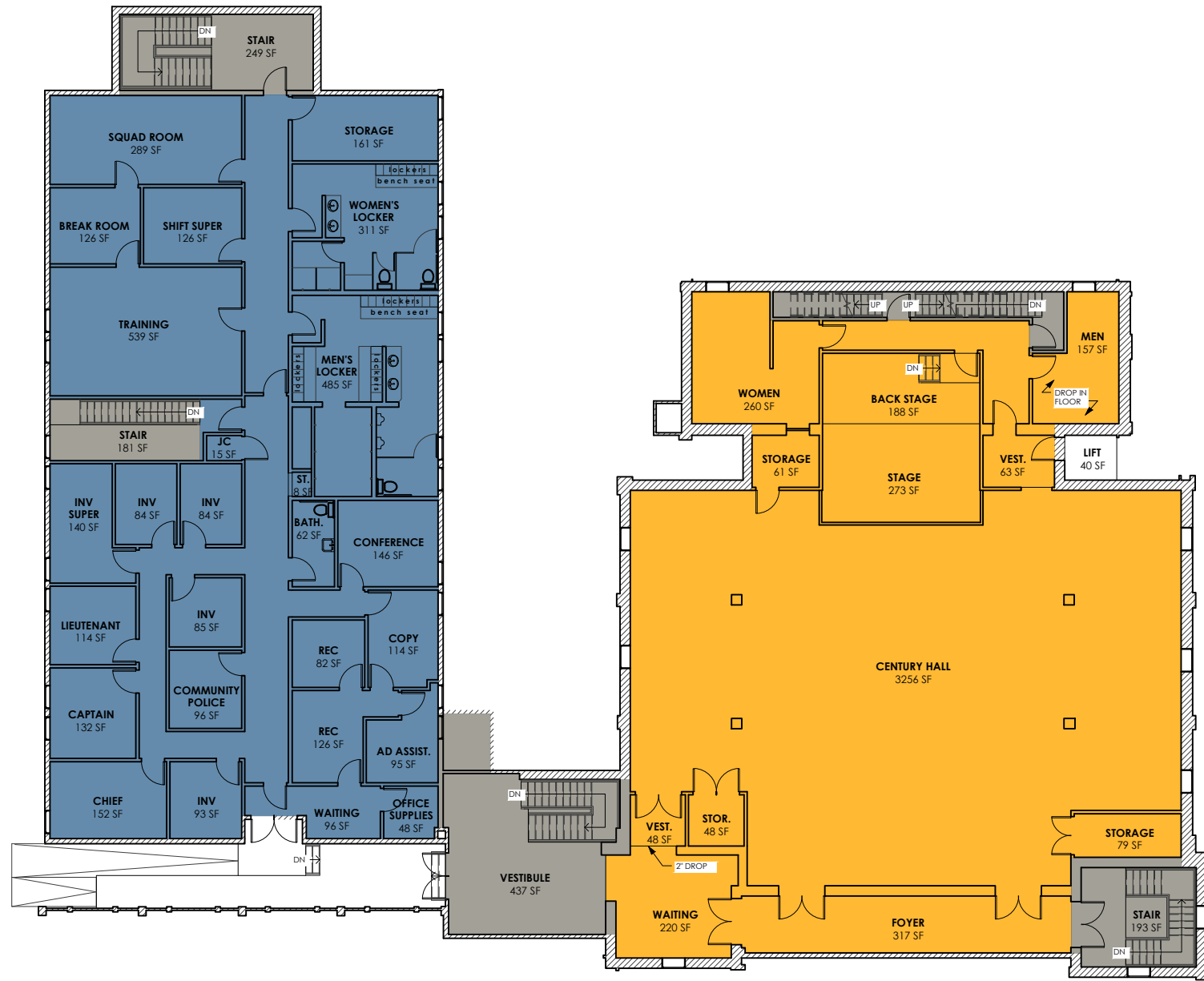


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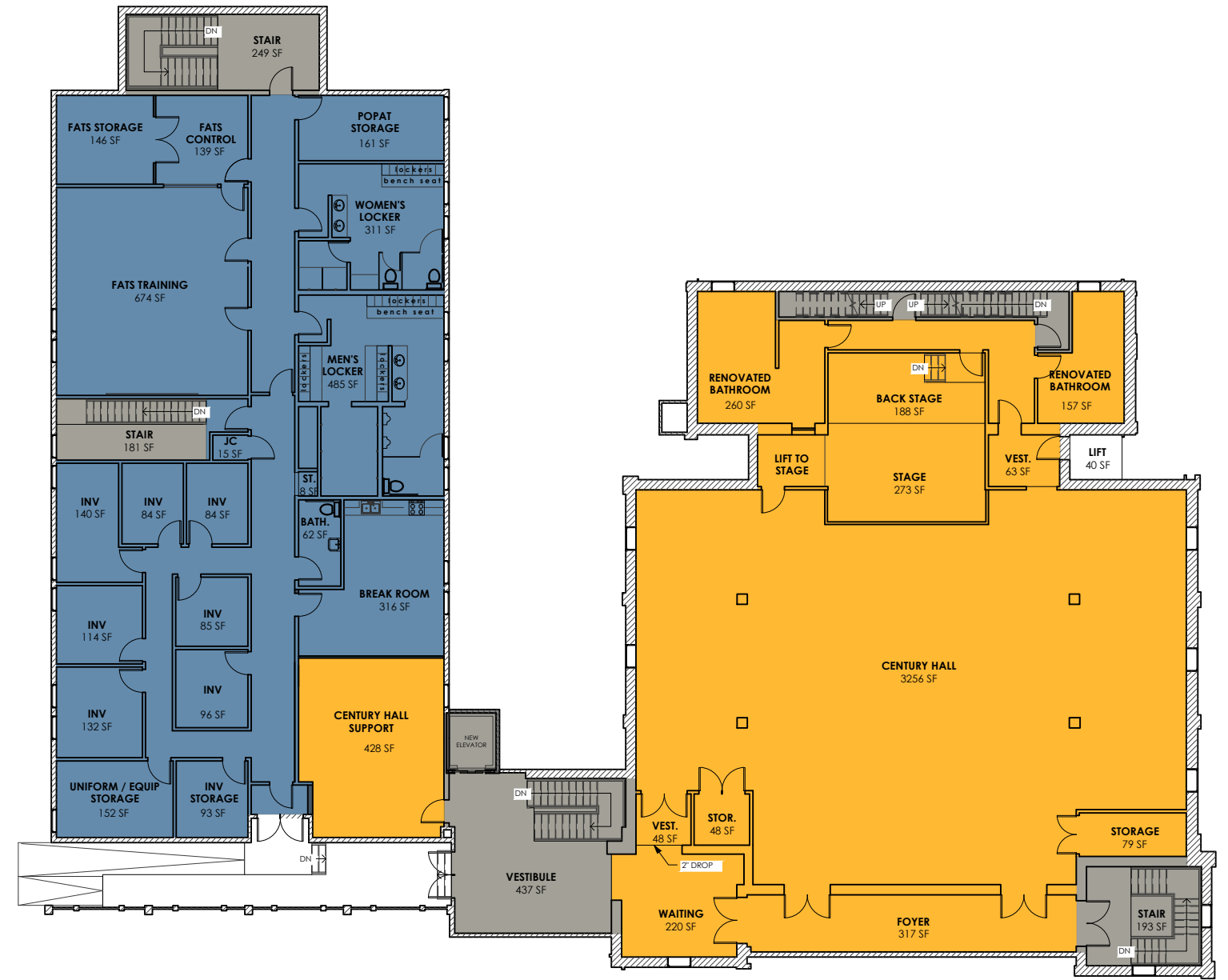
Town of Carrboro Renewed Facilities // Century Center // April 2021

Carrboro Century Center
100 N Greensboro St.
Carrboro, NC 27510





EXISTING UPPER LEVEL



PROPOSED UPPER LEVEL

SCALE = 1:20

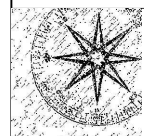
LEGEND

	TOC Police Department		Recreation & Parks
	Century Hall		Cybrary

KEY IMPROVEMENTS

- A. ENERGY
- B. ACCESSIBILITY
 - 1. NEW ELEVATOR
 - 2. PUBLIC ENTRANCE ON GROUND FLOOR
- C. PROGRAM IMPROVEMENTS
 - POLICE DEPARTMENT:
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 - 4. IMPROVED FACILITIES, E.G. TRAINING, BREAK ROOM, LOCKER ROOMS, CONFERENCE ROOMS

- CENTURY HALL:
- 1. NEW CATERING KITCHEN
 - 2. 660 NEW SF FOR STORAGE AND OFFICE
 - 3. IMPROVED BATHROOM FACILITIES



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Town of Carrboro Renewed Facilities // Century Center // April 2021

Carrboro Century Center
 100 N Greensboro St.
 Carrboro, NC 27510



BROADER CONSIDERATIONS:

A. Install Solar PV on current roof of Century Center addition. Add partial covering to parking area with Solar PV.

9,800 SF of PV = Approximately 98kW
Assuming 5 hrs/day = 178,850 kWh/year

B. Establish public - private partnership for Solar PV initiative. Install PV on roofs of Century Center and Carr Mill Mall.

50,000 SF of PV = Approximately 500kW
Assuming 5 hrs/day = 912,500 kWh/year

C. Other town properties to consider:

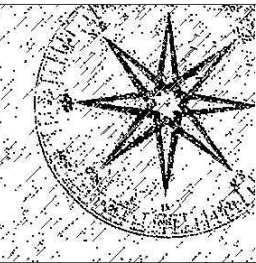
- 300 E. Main Buildings and Parking Deck
- Proposed Building at 203 S. Greensboro
- Carrboro Plaza



SCALE = 1:60



SCALE = 1:60



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Town of Carrboro Renewed Facilities // Century Center

Broader Considerations // February 2021

Carrboro Century Center
100 N Greensboro St.
Carrboro, NC 27510

919.918.7385





Existing Conditions - Site Plan // February 24, 2021

Carrboro Public Works
100 Public Works Drive
Carrboro, NC 27510



Carrboro Public Works - Administration/Repair Bays photo: jsa



Carrboro Public Works - View Toward Morgan Creek photo: jsa



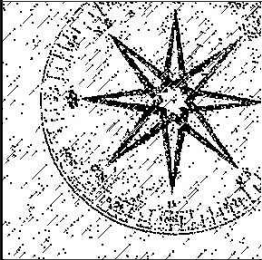
Carrboro Public Works - Vehicle Storage photo: jsa



Carrboro Public Works - Fuel Station photo: jsa



Carrboro Public Works - Sign Shop photo: jsa



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Town of Carrboro Renewed Facilities // Public Works
 Existing Conditions - Photographs // February 24, 2021

Carrboro Public Works
 100 Public Works Drive
 Carrboro, NC 27510

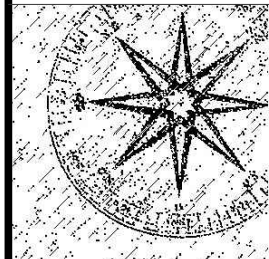




1 Existing Conditions— Site Plan — Public Works
SCALE: 1" = 50'

- Public Works & Stormwater Administrative
- Storage
- Maintenance / Vehicle Storage
- Fuel

EXISTING CONDITIONS
O/A ZONING; 15' STREET SETBACK (ROW); 45' STREET SETBACK (CL); 15' BOUNDARY SETBACK
FLOOD ZONES - SEE MAPS
ISSUES TO RESOLVE: <ol style="list-style-type: none"> 1. VEHICULAR STORAGE AND CIRCULATION 2. LACK OF OFFICE SPACE/ACCESS. TOILETS 3. VEHICLE WASH AND DRAINAGE FROM IT 4. FLOODING/MOVE VEHICLES FROM LOW 5. PUBLIC VS. STAFF ACCESS
LONG TERM CONSIDERATIONS: <ol style="list-style-type: none"> 1. NEW OFFICE/STAFF SPACE, USE EXISTING BUILDING FOR MAINTENANCE 2. ENVIRONMENTAL ISSUES/TRAILHEAD 3. PLAN FOR NEW/ELECTRIC VEHICLES 4. OTHER



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Town of Carrboro Renewed Facilities // Public Works Existing Conditions - Site Plan // March 31, 2021

Carrboro Public Works
100 Public Works Drive
Carrboro, NC 27510





- Public Works & Stormwater Administrative
- Storage
- Maintenance / Vehicle Storage
- Fuel

- 1 RENOVATE EXISTING BUILDING, ADD ACCESSIBLE BATHROOMS.
- 2 ADD PUBLIC PARKING FOR FUTURE TRAILHEAD.
- 3 EXPAND POLE BARN TO ACCOMMODATE PW FLEET.
- 4 RELOCATE FUEL PUMP WITH ABOVE GROUND TANKS.
- 5 RELOCATE CAR WASH.
- 6A CONSOLIDATE STORAGE, SMALL EQUIPMENT AND TOOLS.
- 6B RELOCATE SALT, BRINERY, SAND, GRAVEL.
- 7 FUTURE ADMINISTRATIVE BUILDING.

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Town of Carrboro Renewed Facilities // Public Works

Proposed Conditions - Site Plan // March 29, 2021

Carrboro Public Works
100 Public Works Drive
Carrboro, NC 27510



**Town of Carrboro
Town Hall Building; Century Center Building; Public Works Complex
Energy Modeling for Net Zero Energy Study**

November 23, 2020

Background

The Town of Carrboro is considering options for renovating the Town Hall, Century Center, and the Public Works complex. The Town is seeking to develop a long-term renovation strategy while at the same time addressing immediate needs which have been identified by Town Staff. As part of the renovation effort, the Town would like to work towards the energy sustainability goals set forth in the Town's adopted Strategic Energy and Climate Action plan, which includes working toward net zero energy use.

Energy and water consumption models have been created for each of these facilities to inform decisions in the renovation planning and design process. These models are used to help understand how energy is consumed in each building, and where the most substantial opportunities for potential savings lie. They also provide valuable information in assessing the feasibility of modifying the buildings to achieve net zero carbon emissions. Further, the models create a benchmark for each building, establishing existing consumption characteristics and allowing a metric for assessing improvements.

Existing Systems

Town Hall

The Town Hall is a three-story building which houses office areas, a chamber room, a town server room, and a connected facilities maintenance shop. The exterior walls are uninsulated brick having mostly clear, double pane, operable windows. Most of the roof area is flat with recently installed rigid foam insulation above the deck.

The building is heated and cooled by 9 independent heat pump systems of varying ages. These systems are zoned to serve the basement offices, the server room, the chamber room, the north offices on the 1st floor, the south offices on the 1st floor, the 2nd floor offices, the 1st floor of the west wing, the 2nd floor of the west wing, and the shop. None of these systems supply outdoor air for ventilation.

The lighting in the building is a mix of new LED fixtures, T-8 fluorescent fixtures, and T-12 fluorescent fixtures. The plug loads are mostly typical for office areas other than the facilities shop which sees typical shop usage. Hot water is provided by a tank-type electric water heater.

Century Center

Carrboro's Century Center is a two-story historic structure which houses office areas, community activity areas, a public computer resource area, a kitchen, and a large event hall. Part of the building serves the police department, which operates 24/7. Built in 1924, the Century Center has 18" thick uninsulated masonry walls with clear, double pane, operable windows. The roof is insulated at the attic floor by 9" of blown-in fiberglass insulation.

The building is conditioned by 3 variable air volume AHUs. Two of the AHUs utilize VAV boxes with hot water reheat, while the third AHU is a single-zone VAV unit serving the large event hall. Heating is provided by a 750 MBH natural gas-fired hot water boiler, and cooling is provided by a 70 ton air-cooled packaged chiller. The AHUs and chiller are controlled by a central control system, while the boiler operates on stand-alone controls.

The majority of the lighting throughout the building is T8 tube linear tube fluorescent fixtures. Most of the plug-in equipment is typical for an office building, though the computer resource area has a higher density of computers, and the all-electric kitchen contains heavy duty commercial cooking, refrigerating, and ice making equipment. Domestic hot water is provided by two tank-type natural gas-fired hot water heaters (75 gallon and 100 gallon).

Public Works

The public works complex is collection of buildings including office areas, an auto shop, sign shop, vehicle, equipment, and materials storage areas, a fuel station, and a carwash station. The primary energy consuming building is a 6,100 square foot pre-engineered metal building with an additional 2,400 square feet of unconditioned loft storage and mechanical space. This building houses public works administration offices, a small server room, and the fleet maintenance shop.

The office areas are divided into 3 separate HVAC zones, each of which is conditioned by a natural gas furnace with split system A/C. The shop area is conditioned by a 156 MBH natural gas unit heater. The sign shop utilizes a small heat pump window unit.

Lighting is provided by a mix of LED and fluorescent fixtures. The miscellaneous electrical loads in the complex are significant and highly variable in usage. Other than standard office equipment, these include air compressors, auto lifts, car vacuums, fuel pumps, garage doors, and various shop equipment. Domestic hot water is provided by natural gas-fired instantaneous water heaters.

Historical Utility Consumption

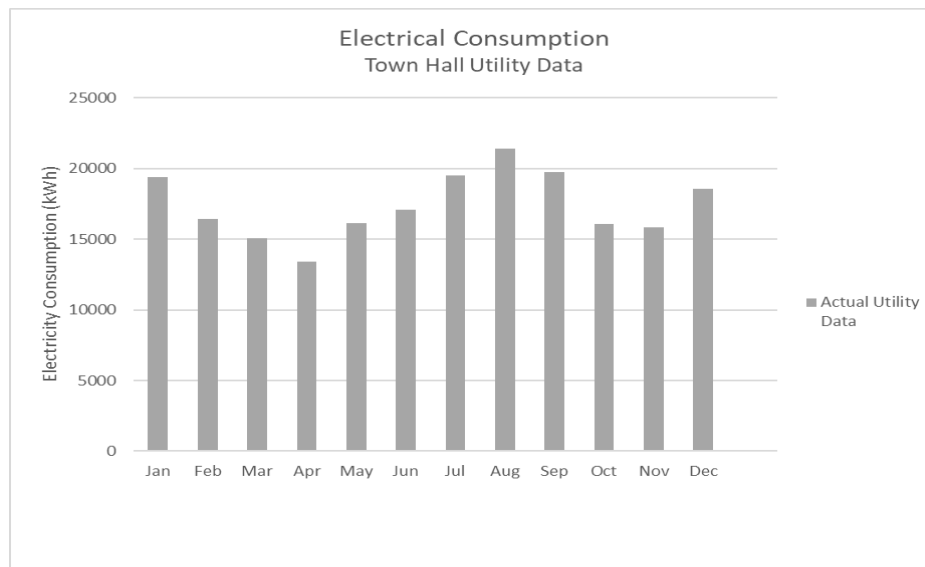
An analysis of the historical utility data was performed as a first step in creating energy and water consumption models of the facilities. 12 months for electricity, natural gas, and water utility data were obtained for the analyses. The data used were from the 2019 calendar year to eliminate any effect from the 2020 COVID-19 pandemic shutdowns. Usage by each facility was analyzed separately.

Town Hall

The town hall does not use natural gas, as all heating, water heating, and cooking use electricity.

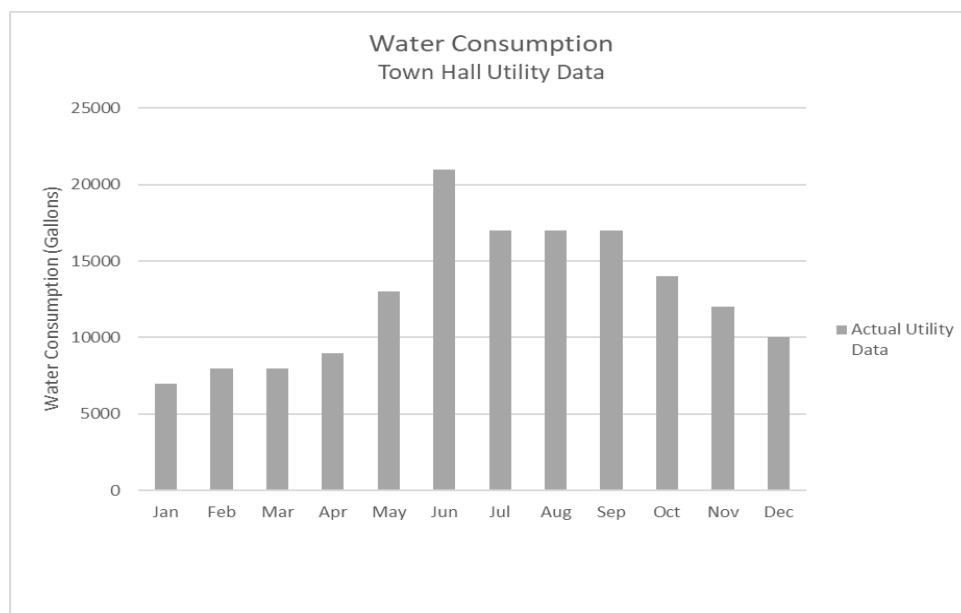
Electricity

The building is served by three separate electric meters. One meter serves the majority of the building, one meter serves the shop, and the server room is served from the meter serving Fire Station 1. Onsite power readings, in conjunction with Fire Station 1 utility data, allowed the annual energy consumption of the server room (servers plus HVAC) to be estimated and extracted from the Fire Station data. This estimate was added to the data from the main building meter and the shop meter to obtain a monthly set of consumption data for the entire building. This combined usage is presented below.



Water

A single water meter serves the building. Data from this meter are presented below.

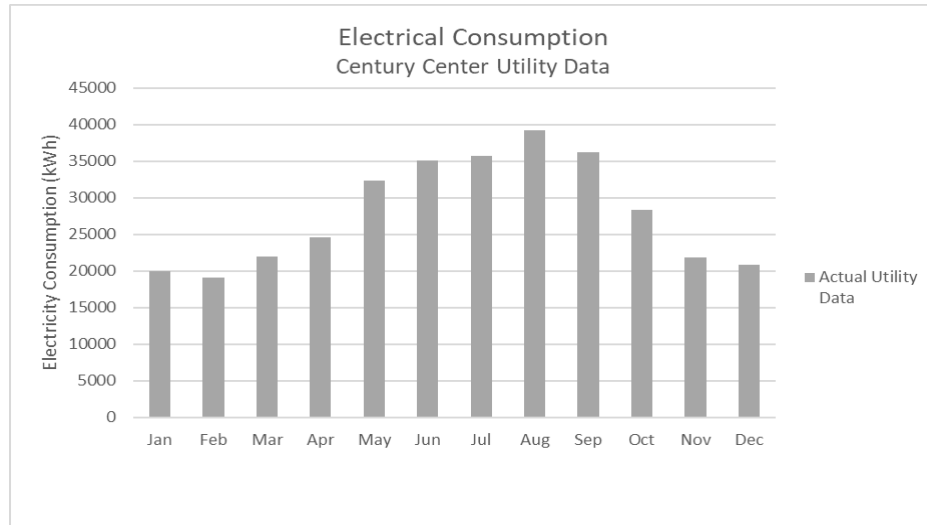


Century Center

The Century Center uses electricity, natural gas, and water.

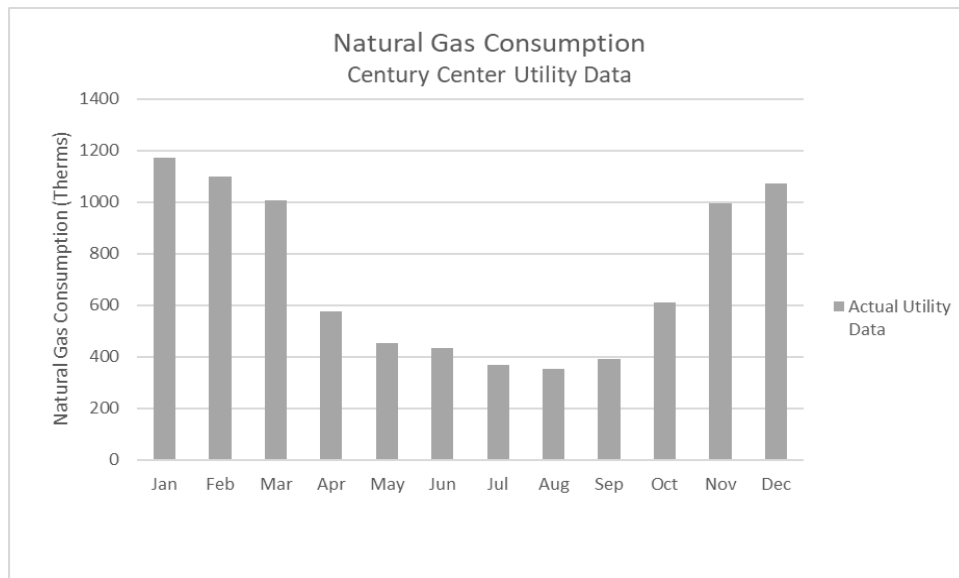
Electricity

A single electric service entrance serves the entire building. Data from this meter are presented below.



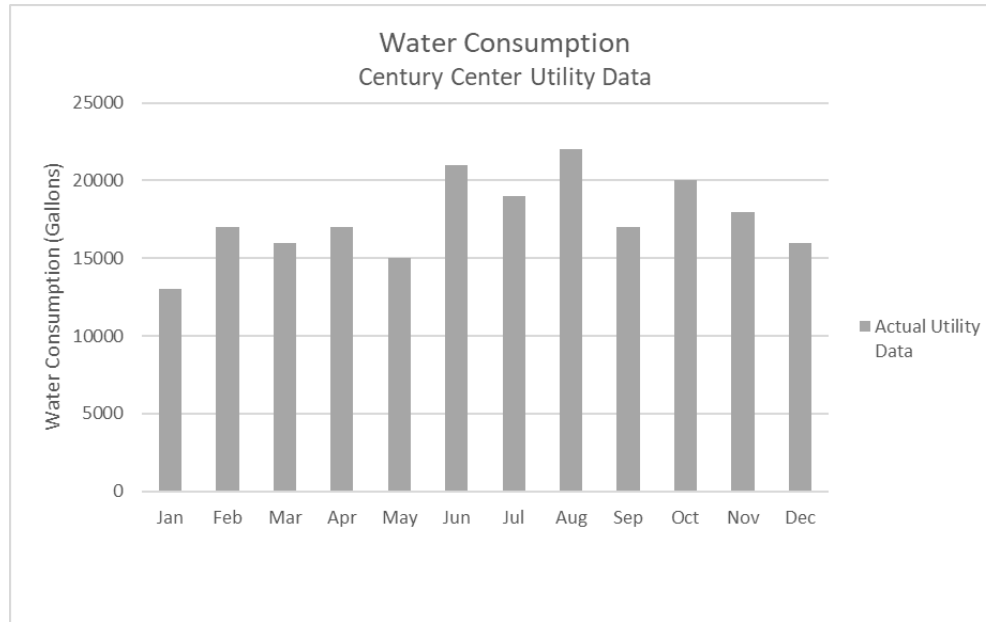
Natural Gas

A single natural gas service entrance serves the entire building. Data from this meter are presented below.



Water

A single water service entrance serves the entire building. Data from this meter are presented below.

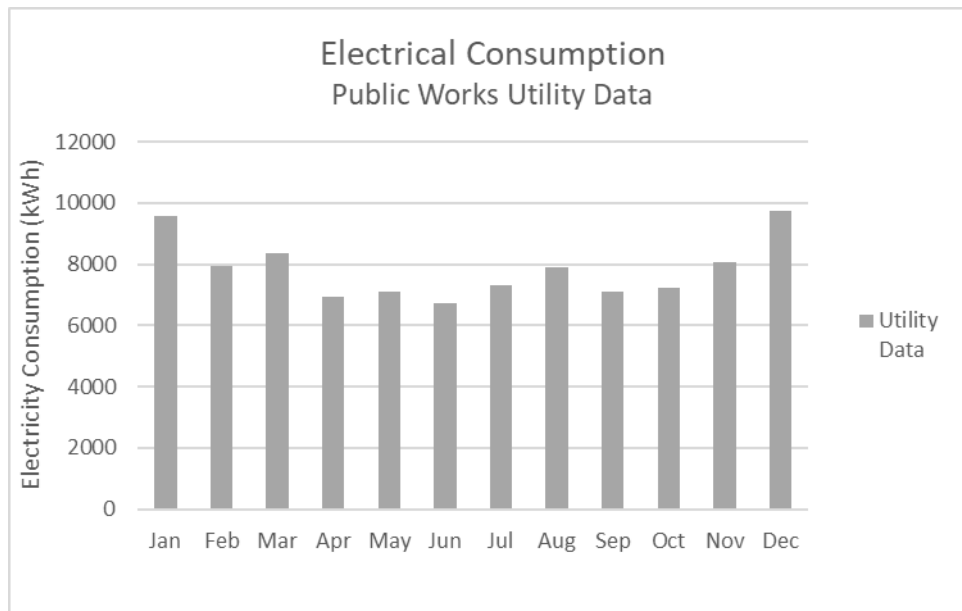


Public Works

The Public Works complex utilizes electricity, natural gas, and water.

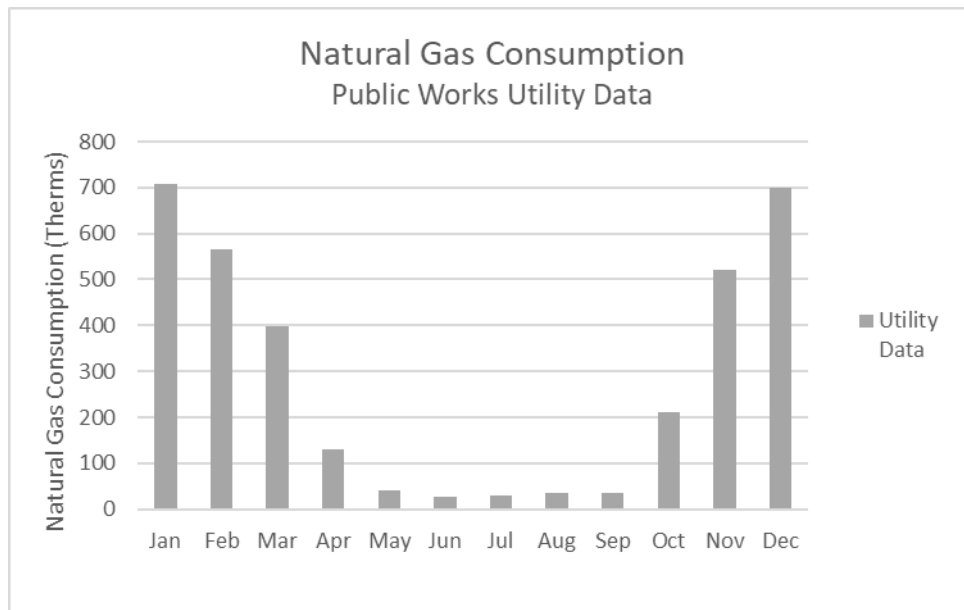
Electricity

Public Works is served by three electric service entrances. One meter currently has no load connected to it, one meter serves the server room and its A/C unit, and one meter serves the rest of the complex. The data presented below show the combined metered usage for the complex.



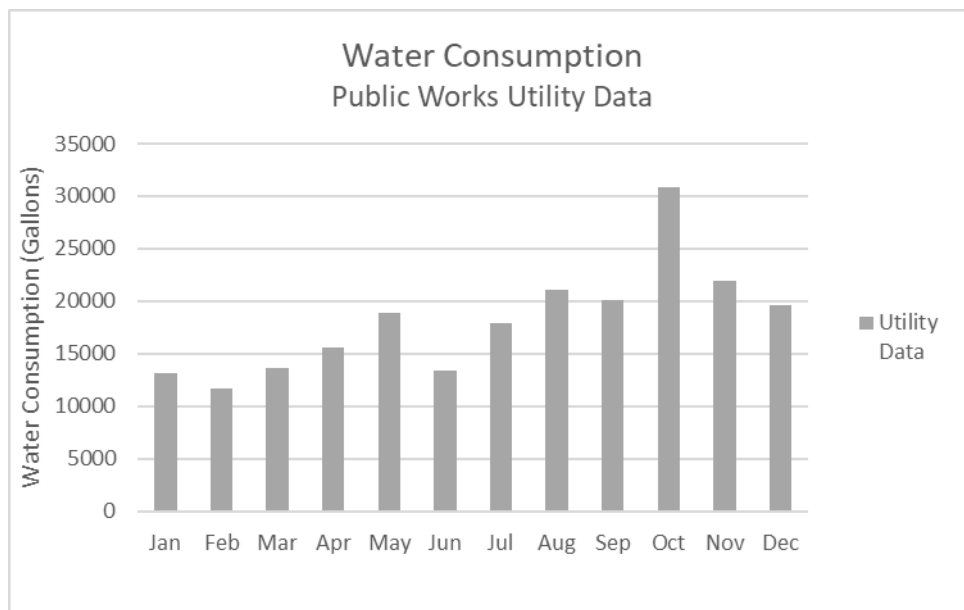
Natural Gas

Two natural gas meters serve the facility. One meter serves the generator and the instantaneous hot water heaters, and one meter serves the rest of the facility. The combined usage is shown below.



Water

A single water service serves the entire complex. Data from this meter are presented below.



Simulation Methodology

Energy and water consumption simulations were created for each building. The energy models for the Century Center and the Town Hall were generated using the Trane TRACE software. TRACE uses a comprehensive set of environmental and building characteristics to simulate the energy consumption

for the entire building each hour of a full typical year. TRACE excels at simulating the complex interactions among various end uses, schedules, and control strategies as are found at the Century Center and Town Hall.

Due to the nature of the Public Works complex, in-house spreadsheet tools were used in lieu of TRACE to simulate annual energy usage. The usage of this facility is highly dependent on inconsistent variables such as the amount of time garage doors are open, frequency of shop equipment use, frequency and duration of car washes, etc. This type of facility is best modeled using versatile, transparent, independent calculations in conjunction with known historical utility data. Through this approach a more reliable and understandable breakdown of how the facility uses energy can be obtained.

Hourly energy simulations require detailed weather data for the specific location of the buildings. TMY3 (Typical Meteorological Year) weather files for the Durham area were utilized for the Carrboro models. Building inputs include the constructions of the walls, windows, roofs, and floor systems, HVAC equipment and control strategies, room-by-room lighting systems, plug-in equipment, and occupancy, domestic hot water systems, and schedules of usage for occupants and each energy end use. The values utilized in the Carrboro models were obtained via building drawings, site visits, measurements, and conversations with Carrboro staff.

Water models are generally much less complex than energy simulations. These are usually analyzed on an annual basis, as hourly calculations would provide little additional value to understanding the facility. In-house spreadsheet tools were used for these models. The primary inputs for these models are occupancy types, general occupancy schedules, and the various water-using fixture data.

Energy and Water Model Results and Calibration

Each energy and water model was calibrated to match the historical utility consumption to within an acceptable error tolerance based on industry standard practice. The Carrboro energy models were calibrated such that the modeled electricity and natural gas consumption is within 10% of the actual consumption for each month of the year, and within 5% of the total annual consumption. The water models were calibrated to within 5% of the annual consumption.

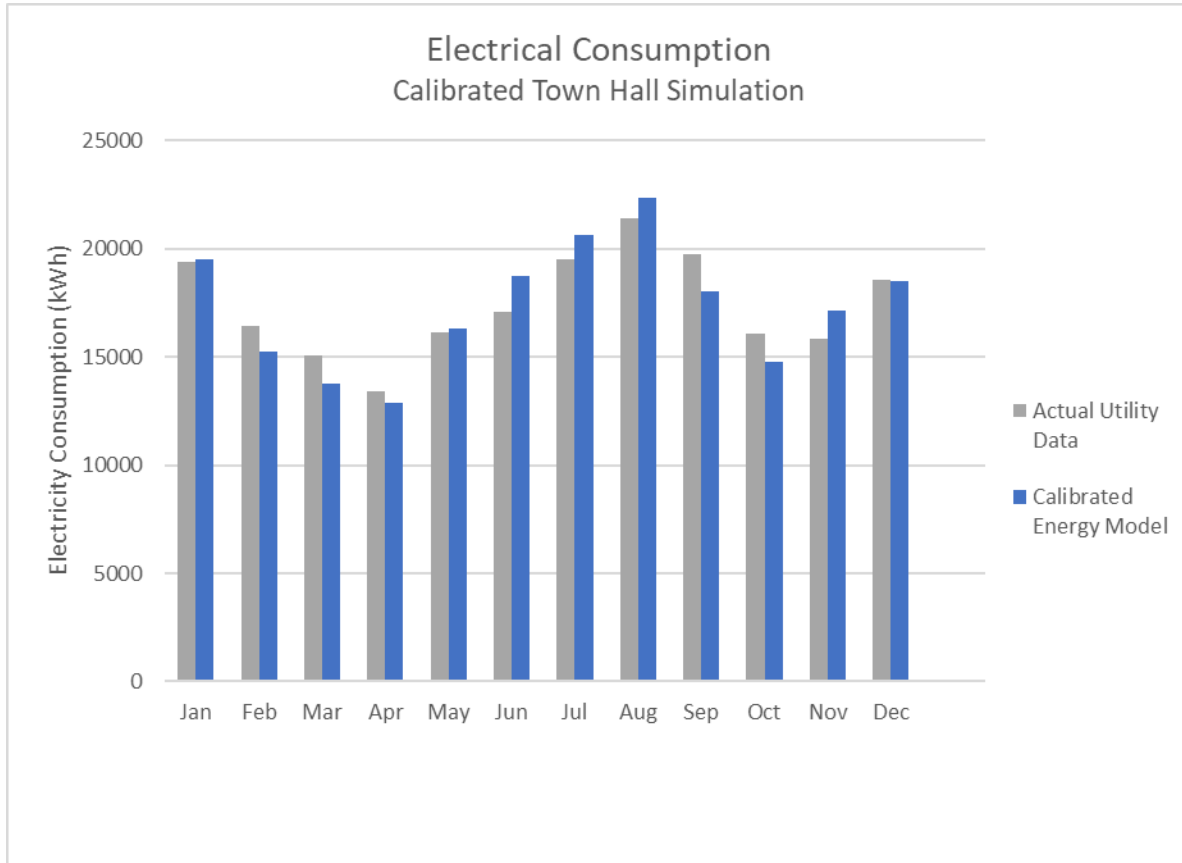
Town Hall

The energy consumption results for the Town Hall are presented below, along with its energy use intensity.

Town Hall Energy Consumption Profile		
End Use	Energy Consumption (kBTU/yr)	Percent of Total
Heating	83,044	11.7%
Cooling	169,247	23.9%
Fans/Pumps	99,651	14.1%
Lighting	119,697	16.9%
DHW	9,687	1.4%
Plug Loads / Other	228,125	32.2%
Total	709,451	100%
Conditioned Area (sf)	12,235	
Energy Use Intensity (kBTU/sf/yr)	57.99	

The calibrated results for the Town Hall building are presented below. A breakdown of the energy model results is provided in Appendix I.

Electricity (Town Hall)



Town Hall Electricity Consumption (kWh)			
Month	Actual Utility Data	Calibrated Model	% Error
Jan	19376	19511	1%
Feb	16401	15249	-7%
Mar	15073	13769	-9%
Apr	13404	12849	-4%
May	16112	16328	1%
Jun	17091	18748	10%
Jul	19536	20641	6%
Aug	21386	22342	4%
Sep	19764	18056	-9%
Oct	16086	14755	-8%
Nov	15835	17120	8%
Dec	18583	18499	0%
Total	208646	207867	0%

Water (Town Hall)

Town Hall Water Consumption (gal)			
Period	Actual Utility Data	Calibrated Model	% Error
Annual	155734	155731	0%

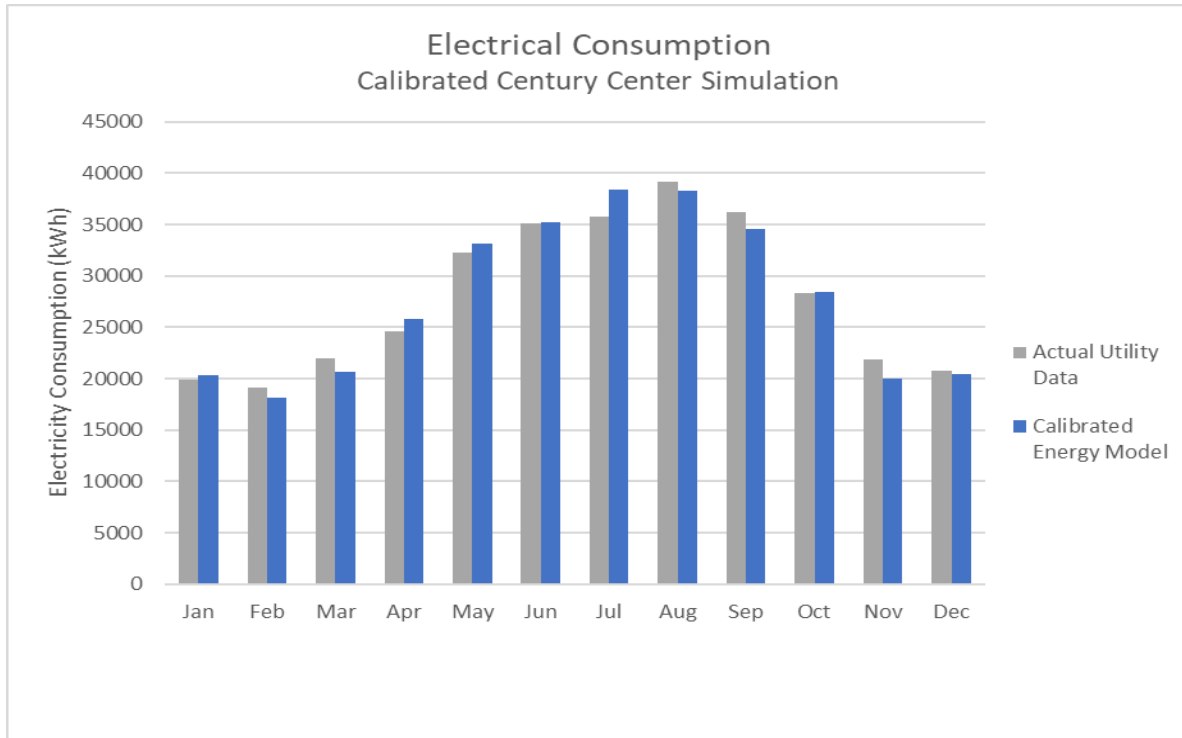
Century Center

The energy consumption results for the Century Center are presented below, along with its energy use intensity.

Century Center Energy Consumption Profile		
End Use	Energy Consumption (kBtu/yr)	Percent of Total
Heating	848,026	42.7%
Cooling	224,216	11.3%
Fans/Pumps	548,968	27.6%
Lighting	203,910	10.3%
DHW	13,420	0.7%
Plug Loads / Other	147,747	7.4%
Total	1,986,287	100%
Conditioned Area (sf)	19,912	
Energy Use Intensity (kBtu/sf/yr)	99.75	

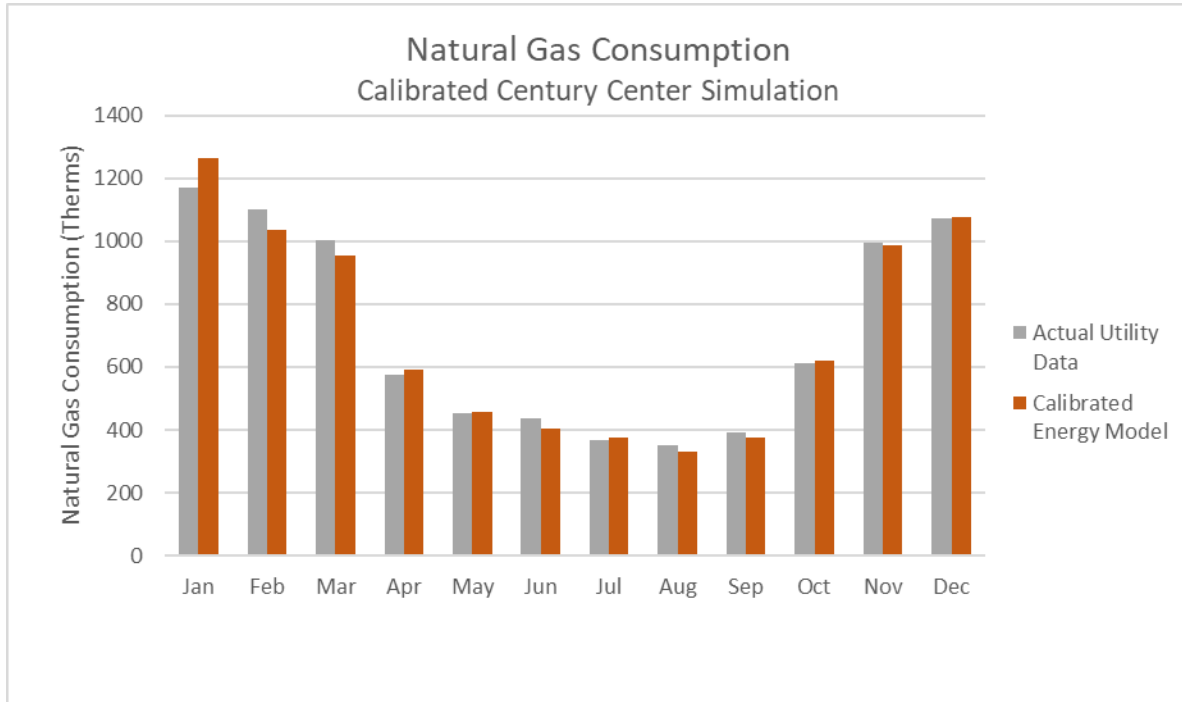
The calibrated results for the Century Center are presented below. A breakdown of the energy model results is provided in Appendix II

Electricity (Century Center)



Century Center Electricity Consumption (kWh)			
Month	Actual Utility Data	Calibrated Model	% Error
Jan	19932	20377	2%
Feb	19082	18203	-5%
Mar	21936	20665	-6%
Apr	24586	25760	5%
May	32315	33172	3%
Jun	35082	35268	1%
Jul	35727	38364	7%
Aug	39209	38241	-2%
Sep	36198	34531	-5%
Oct	28286	28423	0%
Nov	21833	19996	-8%
Dec	20796	20465	-2%
Total	334982	333463	0%

Natural Gas (Century Center)



Century Center Natural Gas Consumption (therms)			
Month	Actual Utility Data	Calibrated Model	% Error
Jan	1170	1263	8%
Feb	1100	1035	-6%
Mar	1005	955	-5%
Apr	574	592	3%
May	451	458	2%
Jun	435	406	-7%
Jul	366	377	3%
Aug	351	331	-6%
Sep	390	377	-3%
Oct	611	622	2%
Nov	995	987	-1%
Dec	1073	1078	0%
Total	8522	8482	0%

Water (Century Center)

Century Center Water Consumption (gal)			
Period	Actual Utility Data	Calibrated Model	% Error
Annual	219416	219264	0%

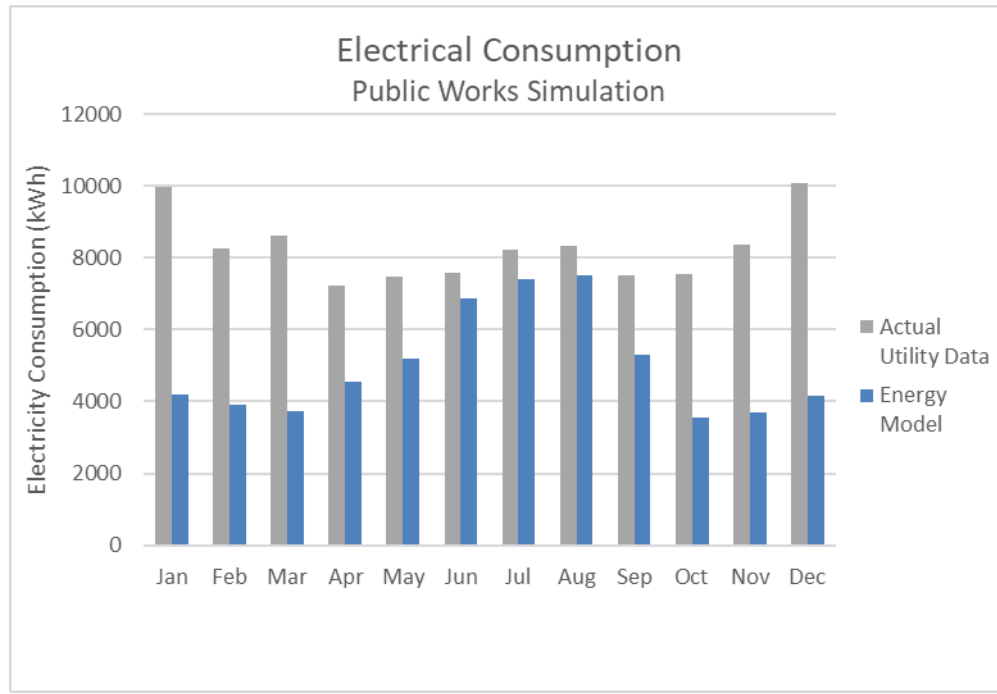
Public Works

The energy consumption results for the Town Hall are presented below, along with its energy use intensity.

Public Works Energy Consumption Profile		
End Use	Energy Consumption (kBTU/yr)	Percent of Total
Heating	306,672	44.3%
Cooling	62,858	9.1%
Fans	36,683	5.3%
Lighting	54,922	7.9%
DHW/Carwash/Generator	30,900	4.5%
Office Equipment	15,861	2.3%
Server	15,040	2.2%
Air Compressor	24,088	3.5%
Shop/Site Equipment	11,495	1.7%
Currently Unaccounted	133,601	19.3%
Total	692,120	100%
Conditioned Area (sf)	6,300	
Energy Use Intensity (kBTU/sf/yr)	109.9	

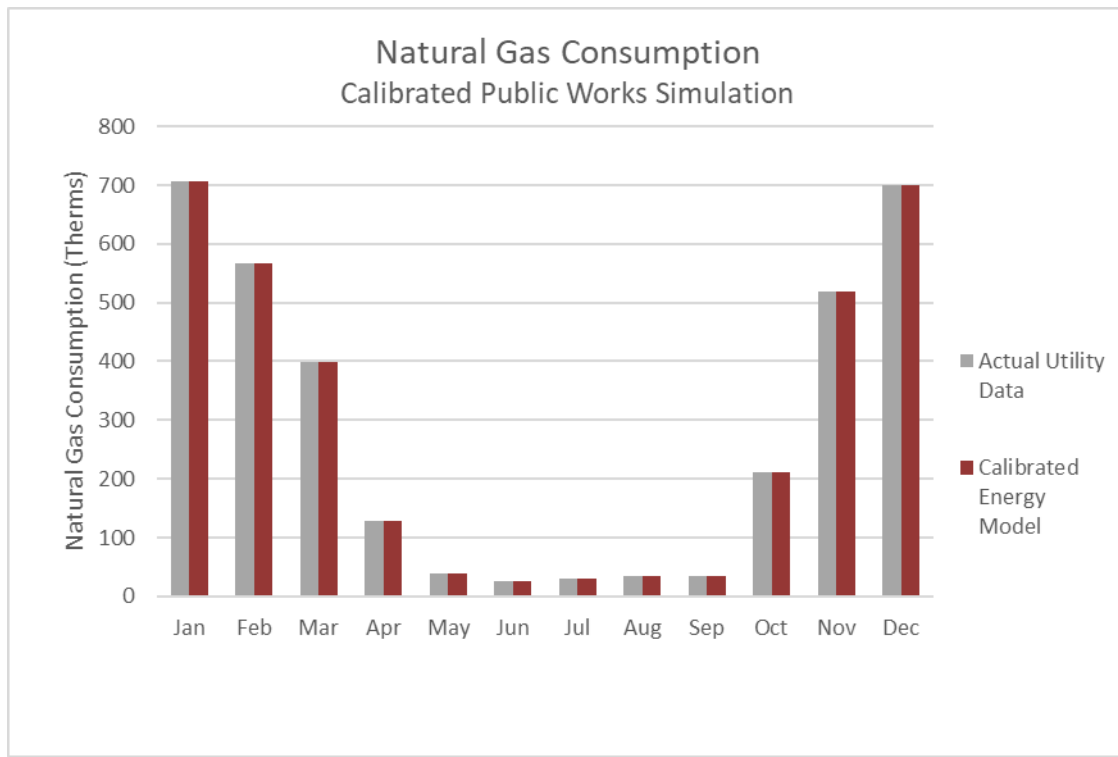
Note that the model is unable to account for a large percentage of the electrical consumption in the facility. This is shown in the table above as “Currently Unaccounted”, and in the electricity chart and table below as the percent error between the model and the utility data. The tables below show the energy model results as compared to the utility data. See Appendix III for a breakdown of modeled end uses.

Electricity (Public Works Complex)



Public Works Electricity Consumption (kWh)			
Month	Actual Utility Data	Calibrated Model	% Error
Jan	9965	4193	58%
Feb	8277	3919	53%
Mar	8606	3726	57%
Apr	7229	4549	37%
May	7472	5190	31%
Jun	7600	6868	10%
Jul	8231	7419	10%
Aug	8330	7522	10%
Sep	7511	5288	30%
Oct	7553	3535	53%
Nov	8355	3710	56%
Dec	10079	4143	59%
Total	99208	60063	39%

Natural Gas (Public Works Complex)



Public Works Natural Gas Consumption (therms)			
Month	Actual Utility Data	Calibrated Model	% Error
Jan	707	707	0%
Feb	566	566	0%
Mar	399	399	0%
Apr	129	129	0%
May	40	40	0%
Jun	26	26	0%
Jul	31	31	0%
Aug	35	35	0%
Sep	35	35	0%
Oct	210	210	0%
Nov	520	520	0%
Dec	699	699	0%
Total	3397	3397	0%

Water (Public Works Complex)

Public Works Water Consumption (Gallons)			
Period	Actual Utility Data	Calibrated Model	% Error
Annual	217948	216000	1%

Conclusions

The creation of energy models allows a better understanding of how resources are used within a facility, and can offer insight as to what opportunities there may be to save energy and water. These results will be used to guide design decisions moving forward in the process of upgrading these three facilities. The energy and water simulations for the Century Center and the Town Hall reconcile cleanly with the utility data. The natural gas and water models for the Public Works facility also match the utility data. Currently, however, there are unknown factors resulting in discrepancies between simulations and utility data for the electricity consumption at Public Works. This should be further investigated, as the large discrepancy could point to energy saving opportunities.

Appendix I

TRACE Energy Consumption Summary (Town Hall)

ENERGY CONSUMPTION SUMMARY

By Sud Associates, P.A.

	Elect Cons. (kWh)	% of Total Building Energy	Total Building Energy (kBtu/yr)	Total Source Energy* (kBtu/yr)
Alternative 1				
Primary heating				
Primary heating	24,332	11.7 %	83,044	249,156
Other Htg Accessories		0.0 %	0	0
Heating Subtotal	24,332	11.7 %	83,044	249,156
Primary cooling				
Cooling Compressor	39,897	19.2 %	136,167	408,541
Tower/Cond Fans	4,758	2.3 %	16,239	48,721
Condenser Pump		0.0 %	0	0
Other Clg Accessories	4,935	2.4 %	16,842	50,530
Cooling Subtotal....	49,589	23.9 %	169,247	507,792
Auxiliary				
Supply Fans	29,198	14.1 %	99,651	298,984
Pumps		0.0 %	0	0
Stand-alone Base Utilities	2,838	1.4 %	9,687	29,064
Aux Subtotal....	32,036	15.4 %	109,338	328,048
Lighting				
Lighting	35,071	16.9 %	119,697	359,128
Receptacle				
Receptacles	66,840	32.2 %	228,125	684,443
Cogeneration				
Cogeneration		0.0 %	0	0
Totals				
Totals**	207,867	100.0 %	709,451	2,128,567

* Note: Resource Utilization factors are included in the Total Source Energy value .

** Note: This report can display a maximum of 7 utilities. If additional utilities are used, they will be included in the total.

Project Name:
Dataset Name: CARBROTWNHLL2.TRC

TRACE® 700 v6.3.5 calculated at 08:28 PM on 09/28/2020
Alternative - 1 Energy Consumption Summary report page 4

Appendix II

TRACE Energy Consumption Summary (Century Center)

ENERGY CONSUMPTION SUMMARY

By Sud Associates, P.A.

	Elect Cons. (kWh)	Gas Cons. (kBtu)	Water Cons. (1000 gals)	% of Total Building Energy	Total Building Energy (kBtu/yr)	Total Source Energy* (kBtu/yr)
Alternative 1						
Primary heating						
Primary heating		833,181		42.0 %	833,181	877,032
Other Htg Accessories	4,350		27	0.8 %	14,845	44,539
Heating Subtotal	4,350	833,181	27	42.7 %	848,026	921,571
Primary cooling						
Cooling Compressor	58,800			10.1 %	200,685	602,115
Tower/Cond Fans	6,315			1.1 %	21,553	64,667
Condenser Pump				0.0 %	0	0
Other Clg Accessories	580			0.1 %	1,978	5,934
Cooling Subtotal....	65,695			11.3 %	224,216	672,716
Auxiliary						
Supply Fans	72,367			12.4 %	246,990	741,045
Pumps	73,385			12.6 %	250,463	751,463
Stand-alone Base Utilities	14,632	14,997		3.3 %	64,935	165,615
Aux Subtotal....	160,384	14,997		28.3 %	562,388	1,658,123
Lighting						
Lighting	59,745			10.3 %	203,910	611,791
Receptacle						
Receptacles	43,290			7.4 %	147,747	443,287
Cogeneration						
Cogeneration				0.0 %	0	0
Totals						
Totals**	333,463	848,178	27	100.0 %	1,986,287	4,307,489

* Note: Resource Utilization factors are included in the Total Source Energy value .

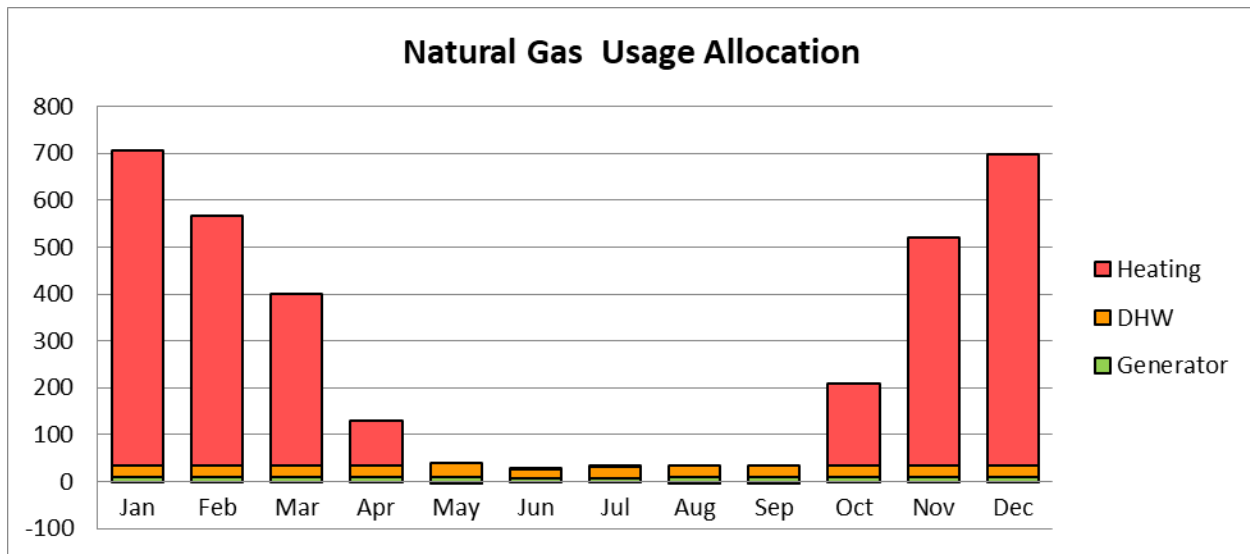
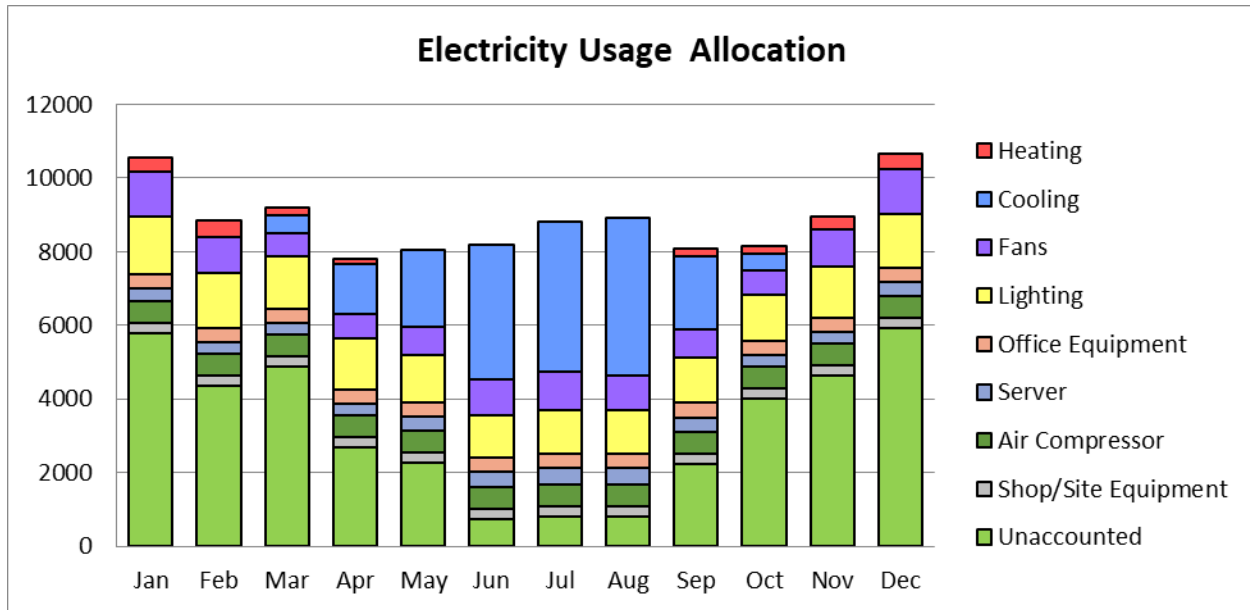
** Note: This report can display a maximum of 7 utilities. If additional utilities are used, they will be included in the total.

Project Name:
Dataset Name: CARBROCENTCTR24.TRC

TRACE® 700 v6.3.5 calculated at 02:17 PM on 10/14/2020
Alternative - 1 Energy Consumption Summary report page 4

Appendix III

Energy Consumption Summary Charts (Public Works)



**Town of Carrboro
Town Hall Building; Century Center Building; Public Works Complex
Defining Net Zero Metrics and Boundaries**

November 13, 2020

DRAFT REPORT

Background

The Town of Carrboro is considering options for renovating the Town Hall, Century Center, and the Public Works complex. The Town is seeking to develop a long-term renovation strategy while at the same time addressing immediate needs which have been identified by Town Staff. As part of the renovation effort, the Town would like to work towards the energy sustainability goals set forth in the Town's adopted Strategic Energy and Climate Action plan, which includes working toward net zero energy use.

A first step in the process of achieving a net zero energy building is to define the term "net zero" and to establish the criteria for a net zero energy building. This is more than an exercise in semantics, as the definition and criteria chosen can have significant effects on design decisions and project costs.

Defining "Net Zero"

The basic idea of a net zero energy building is that, over the course of a year, it has completely offset its energy usage by renewable energy production. Beyond this general concept, there is no single, universally accepted definition for a net zero energy building. The exact definition used for any given project is a choice made by the building owners and project team based on motivations, priorities, budget, building and site characteristics, and other constraints. The US DOE and the National Renewable Energy Laboratory (NREL) have developed a clear framework and guidance to aid owners and designers in choosing the defining criteria for their specific project.

In short, there are two decisions to be made: what metric will be used to evaluate the building's performance (i.e. net zero what?), and what is the boundary within which renewable energy may be generated? Each of these questions is addressed below.

Defining the Metric

NREL has presented 4 options for defining the metric by which a net zero building can be evaluated: Site energy consumption, source energy consumption, greenhouse gas (GHG) emissions, and energy cost.

Option 1: Net Zero Site Energy: A net zero site energy building will offset the energy it uses on site with renewable energy. The energy consumed is seen directly on the building's utility bills. Some owners see net zero site energy as an attractive metric primarily because it is easy to understand and its calculation does not depend on complex factors outside the boundary of the building. This metric steers designers away from natural gas as a heat or domestic hot water fuel in favor of heat pumps or even electric resistance heating. Solar hot water is often a more attractive renewable energy source than photovoltaics under this metric.

Option 2: Net Zero Source Energy: The source energy metric considers the source of the energy used in the building. For instance, the source energy metric would account not for the electricity used in the building, but for the coal used at the power plant to produce the electricity used in the building. This metric is favored by owners whose primary motivation is to conserve the Earth’s fossil-based energy sources and to reduce the environmental damage associated with the extraction of these fuels. Using this approach largely levels the field when comparing natural gas heating versus electric heat pumps.

Option 3: Net Zero GHG Emissions: This metric is based on the GHG emissions associated with the energy used in the building rather than the energy itself. For instance, the GHG emissions metric would account not for the electricity used in the building, but rather for the airborne pollution generated by the power plant as it produces the electricity used in the building. A net zero GHG building might also be called a “carbon neutral” building. Net zero GHG emissions is chosen by owners whose primary motivation is to mitigate climate change. This metric favors the use of natural gas over electricity use, and places high value on producing renewable electricity (e.g. photovoltaic panels).

Option 4: Net Zero Energy Cost: A net zero energy cost building will offset the building’s energy cost over the course of a year with renewable energy sold to the grid or other users. This metric is perhaps the simplest to understand, but it may not fit with the Town’s Climate Action Plan. The most attractive systems and fuel types under this metric are variable, depending on the comparative market rates of the different fuels.

Defining the Boundary

Any net zero building will require renewable energy either to power the building directly or (more likely) to offset the building’s consumption of non-renewable energy. Where this renewable energy can be generated in order to count towards this offset is determined by the building owners and project team. NREL has presented 4 options, in order of decreasing constraint: building footprint generation, building site generation, imported renewables, and purchased generation.

Option A: Building Footprint Generation: This option applies the constraint that all renewable energy must be generated within the footprint of the building itself. A common example of this would be PV panels installed on the building’s roof.

Option B: Building Site Generation: Renewable energy may be generated anywhere within the property lines of the net zero building. Under this option, for example, a building may have PV panels on its roof as well as on the ground or on an on-site parking canopy.

Option C: Imported Renewables: Under this option, renewable energy may be imported from off-site and used on-site. A typical example would be biomass or biofuels used for heating. This option simply expands options for renewable generation, it does not exclude the possibility that some energy may still be generated on the building or the building site.

Option D: Purchased Generation: This option allows renewable energy to be generated by others and purchased by the building. This is often done in the form of Renewable Energy Credits (RECs). In this case the renewable energy itself is not necessarily used in the building, but the offsets created by the renewable energy are purchased and claimed by the building owners. Under this option, each of the previous three options may be included in the total mix of generation possibilities.

BUILDING ENERGY ANALYSIS TOWN OF CARRBORO

Town Hall
Century Center
Public Works

Presented to Town Council, 12/1/2020



PROCESS

- Study Facility Documents
- Analyze Utility Data
- Perform Site Visits
- Research Building Use and Schedules
- Research Building Equipment
- Create Energy Simulations
- Create Water Usage Spreadsheet Models
- Calibrate Energy Simulations and Water Models



TOWN HALL

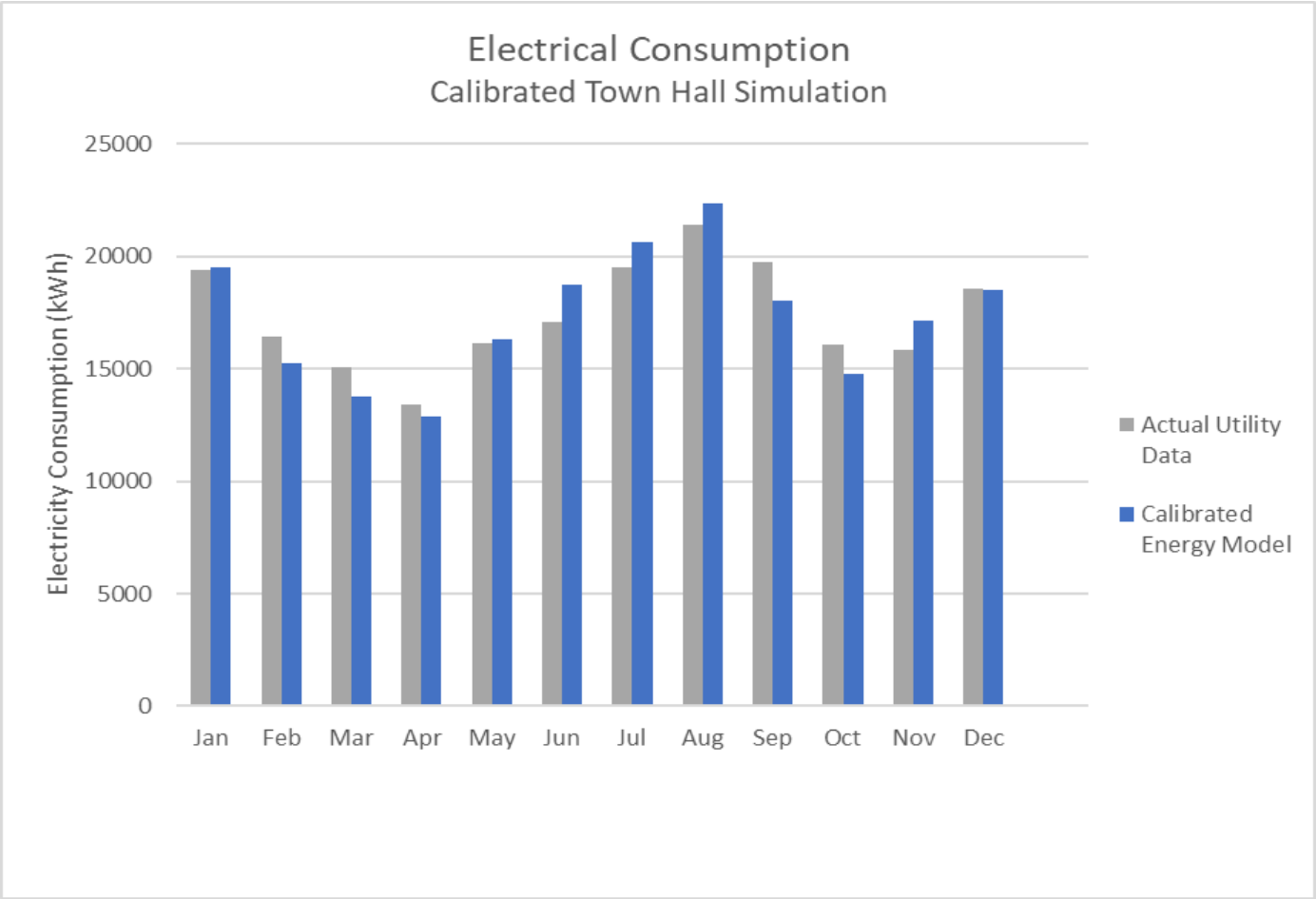


SIMULATED ENERGY SUMMARY

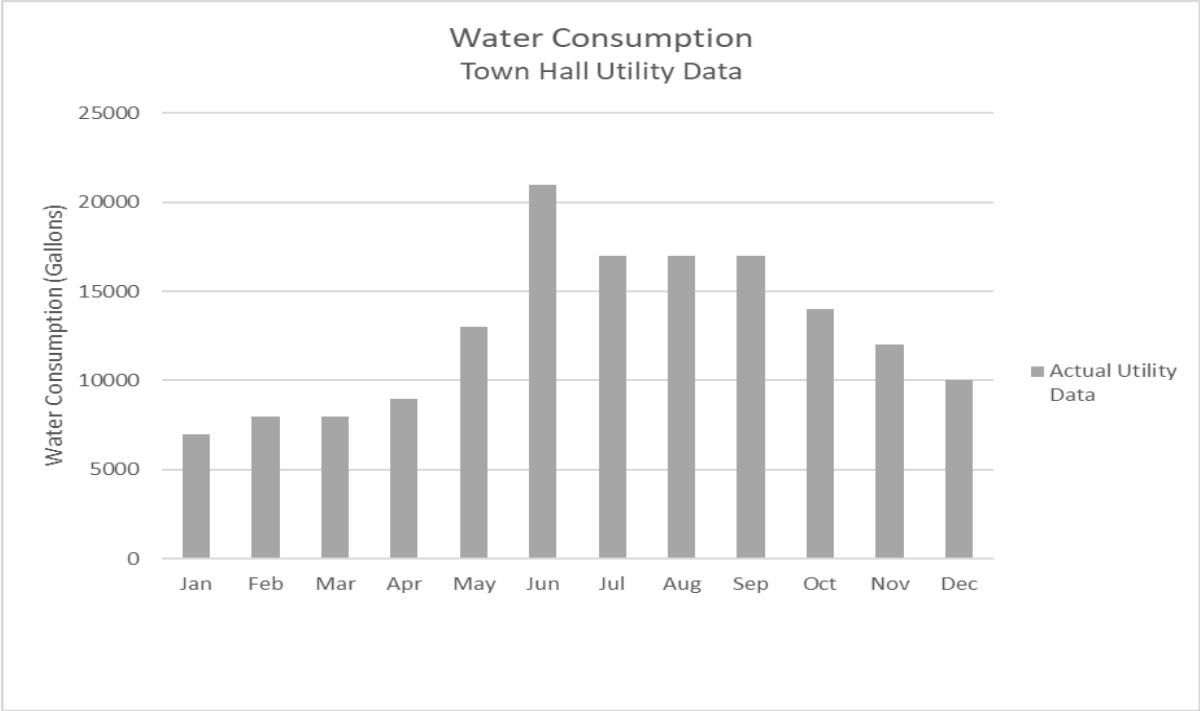
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Plug Loads / Other	228,125	32.2%
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Conditioned Area (sf)	12,235	
Energy Use Intensity (kBTU/sf/yr)	57.99	



ELECTRICITY



WATER



Town Hall Water Consumption (gal)			
	Actual Utility Data	Calibrated Model	% Error
Annual	155734	155731	0%



CENTURY CENTER

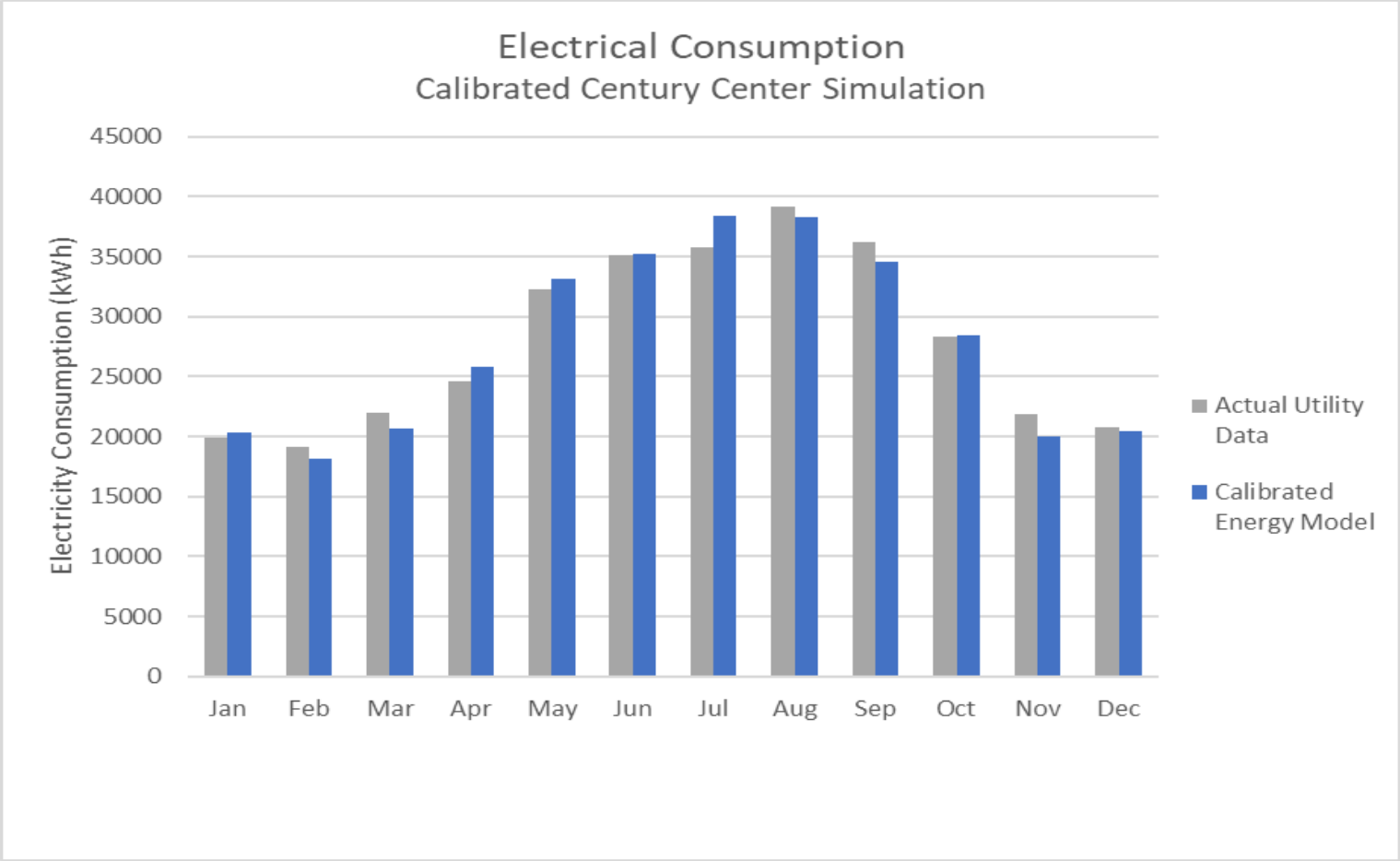


SIMULATED ENERGY SUMMARY

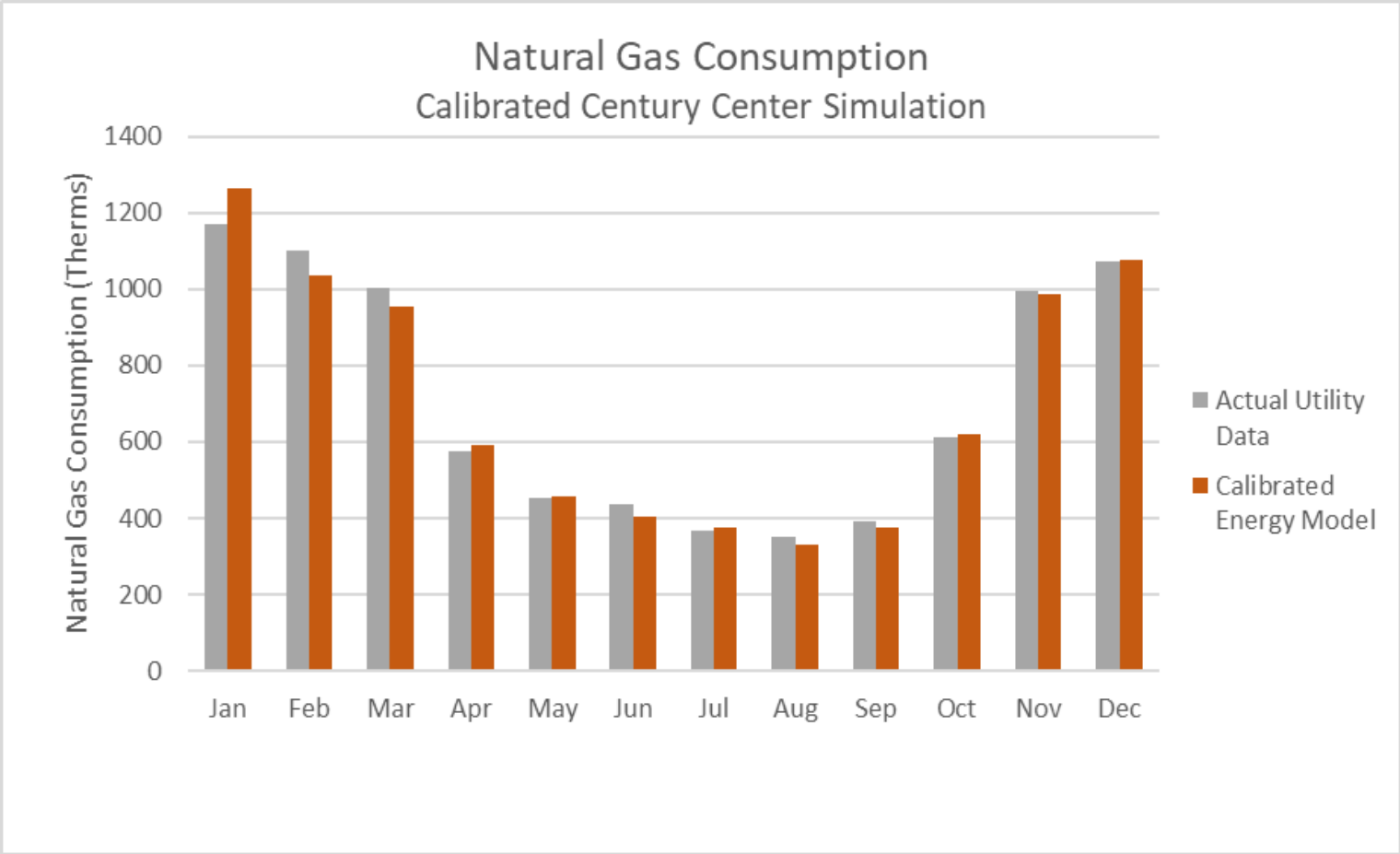
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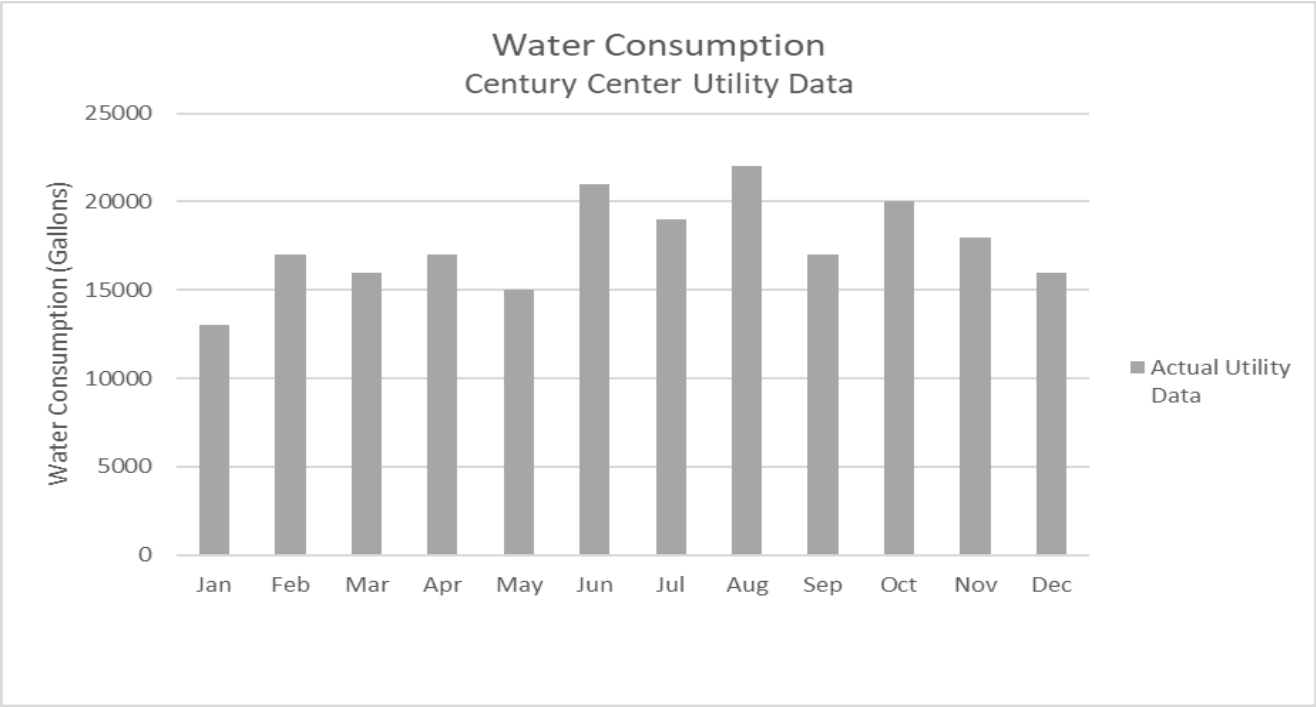
ELECTRICITY



NATURAL GAS



WATER



Century Center Water Consumption (gal)			
	Actual Utility Data	Calibrated Model	% Error
Annual	219416	219264	0%



PUBLIC WORKS

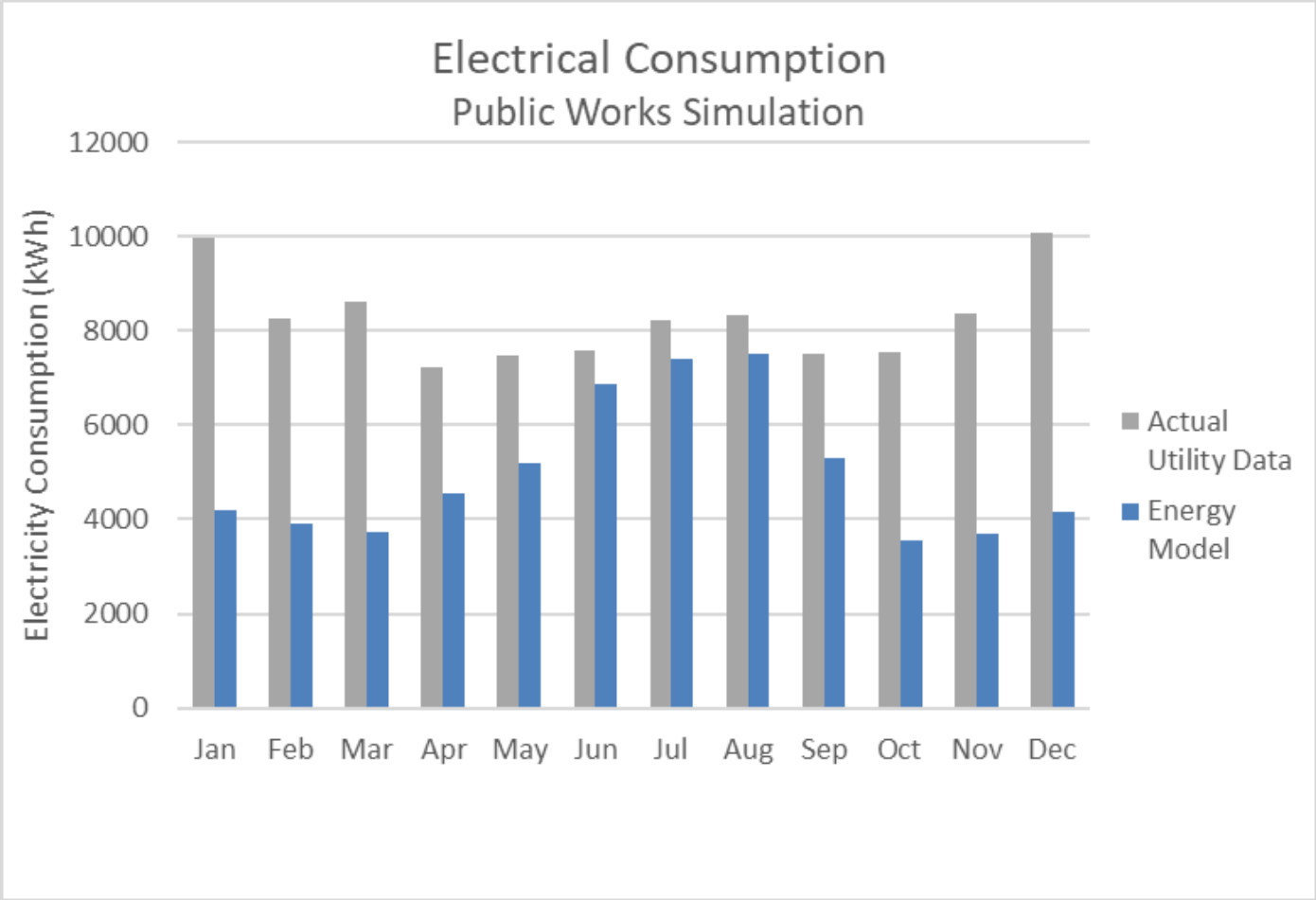


SIMULATED ENERGY SUMMARY

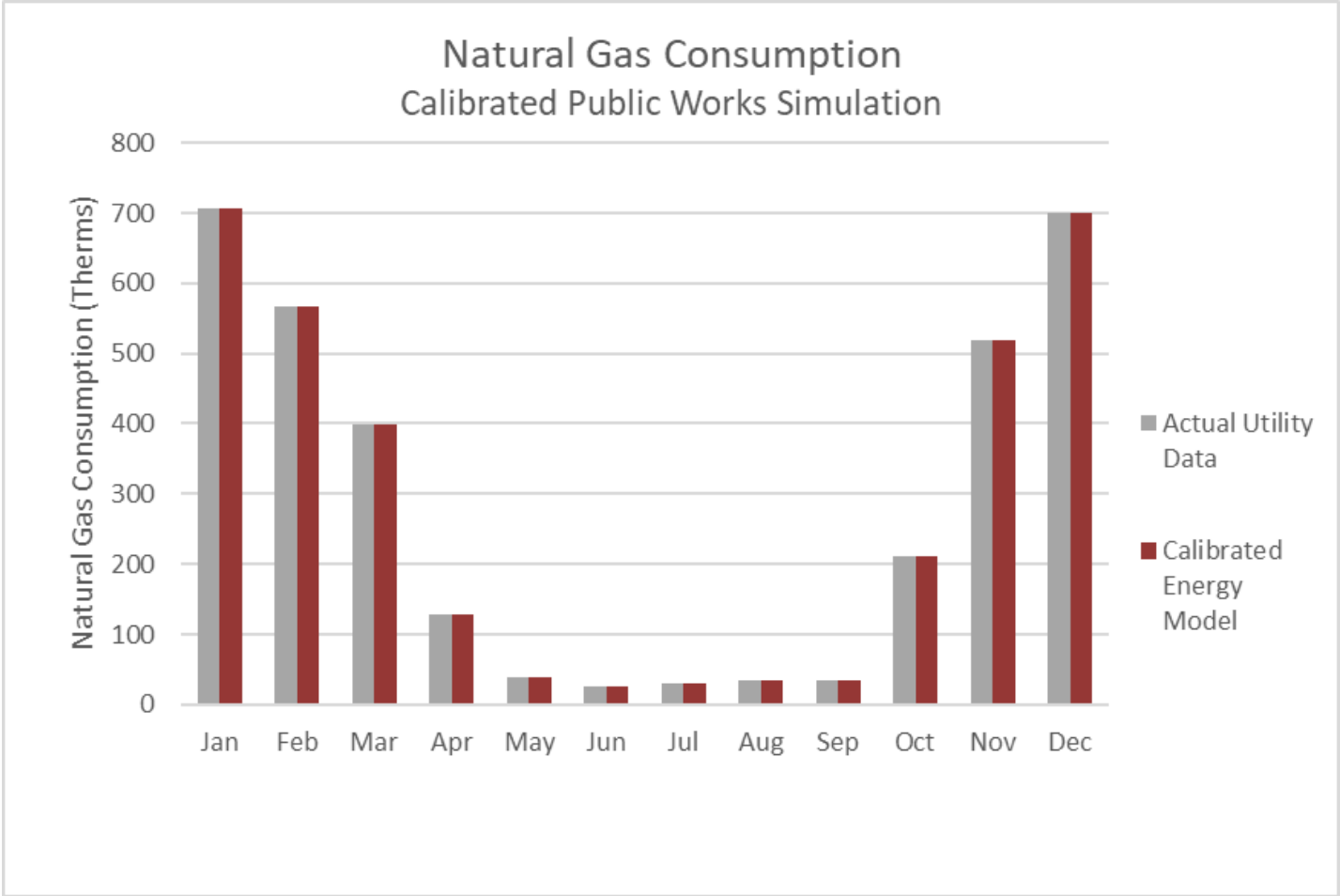
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Lighting	54,922	7.9%
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Server	15,040	2.2%
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Shop/Site Equipment	11,495	1.7%
Currently Unaccounted	133,601	19.3%
Total	692,120	100%
Conditioned Area (sf)	6,300	
Energy Use Intensity (kBTU/sf/yr)	109.9	



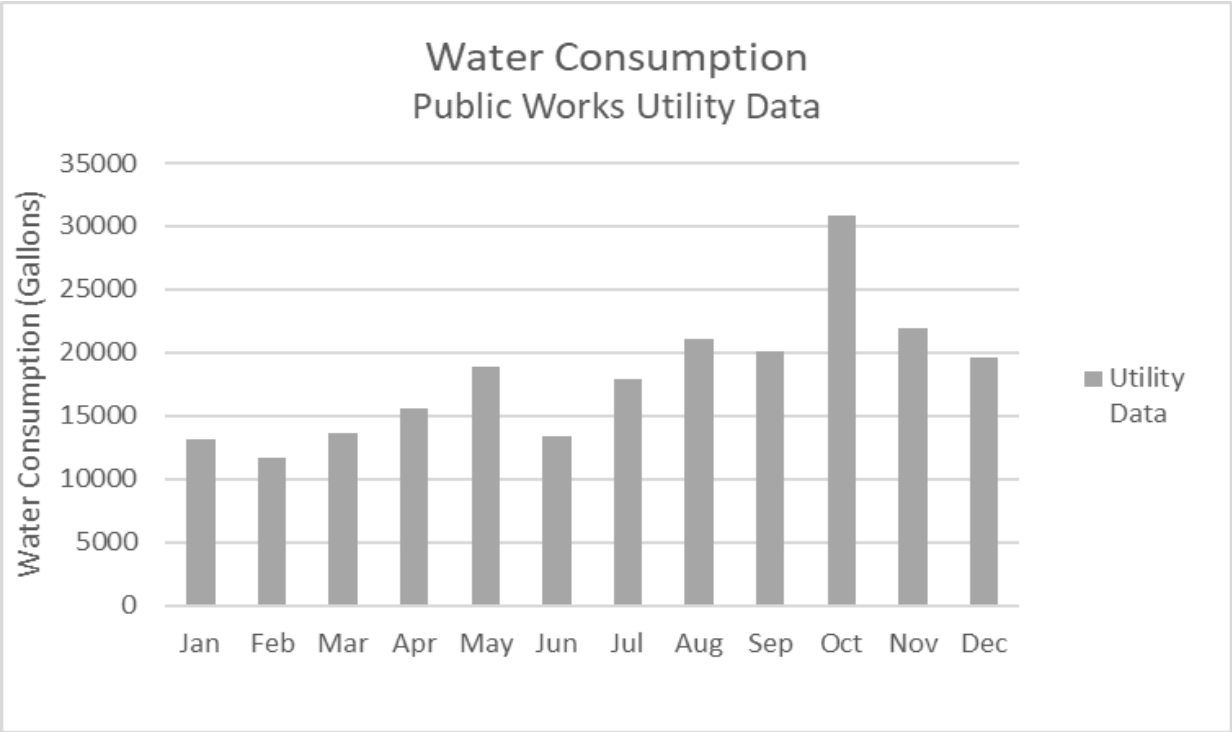
ELECTRICITY



NATURAL GAS



WATER



Public Works Water Consumption (Gallons)			
Period	Actual Utility Data	Calibrated Model	% Error
Annual	217948	216000	1%

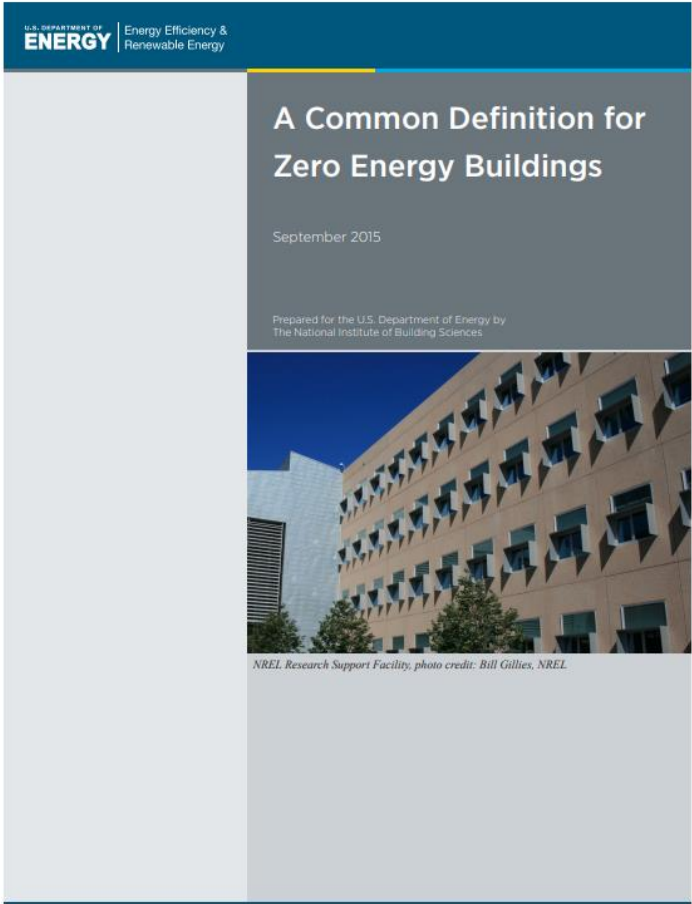
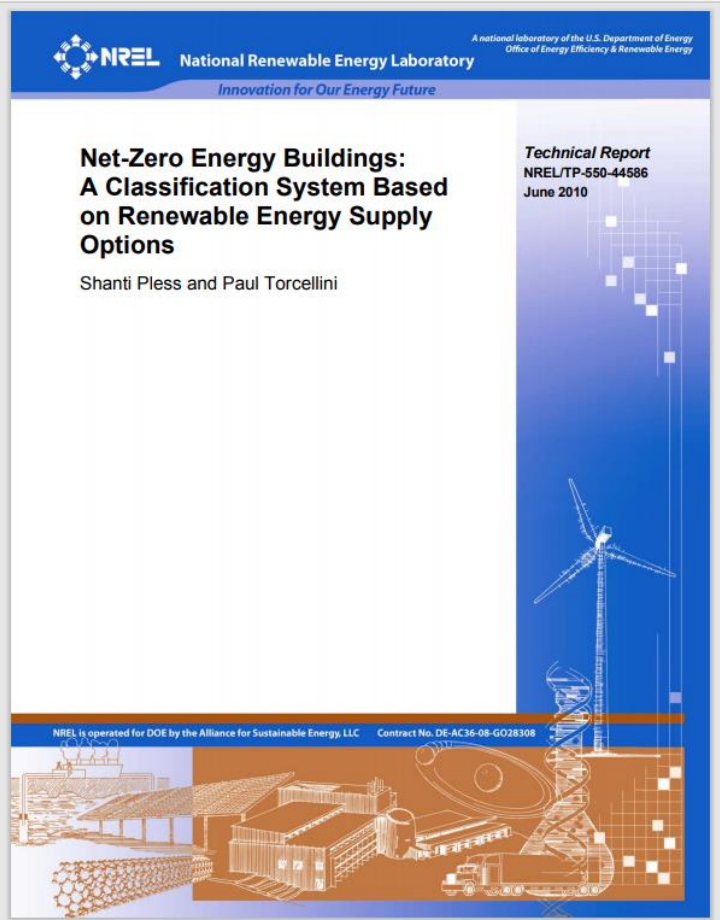


DEFINING NET ZERO TOWN OF CARRBORO

Town Hall
Century Center
Public Works



DEFINING “NET-ZERO”



DEFINING THE METRIC

- Net-Zero...
- Option 1: Site Energy
 - Energy usage as seen on utility bills offset by renewables
- Option 2: Source Energy
 - Considers inefficiencies introduced by power plants and transmission
- Option 3: Greenhouse Gas Emissions
 - Focuses on atmospheric pollutants rather than fossil fuels themselves
- Option 4: Energy Cost
 - Based on utility costs. May not apply to the Climate Action Plan



DEFINING THE BOUNDARY

- Renewable Energy is Generated...
- Option A: Within the Building Footprint
 - e.g. solar panels on the building's roof
- Option B: Within the Property Boundary
 - e.g. panels on the building's roof and on a separate parking canopy
- Option C: Off Site
 - Imported to site, e.g. wood chips shipped to the site for building heat
 - Generated off site, e.g. PV panels on Town-owned Property
- Option D: By Others (RECs)
 - Carbon offsets can be purchased to supplement other strategies



IMPLICATIONS

- Option 1: Net-Zero Site Energy
 - Favors using electricity over natural gas
- Option 2: Net-Zero Source Energy
 - Natural gas vs electricity comparison requires analysis
- Option 3: Net-Zero GHG Emissions
 - Favors using natural gas over electricity
- Option 4: Net-Zero Energy Cost
 - Natural gas vs electricity comparison requires analysis



NEXT STEPS

- Settle on Net Zero Definition
- Design Building Improvements
 - Must first meet basic safety, health, and comfort needs
 - Incorporate changes in space usage
 - Preserve historic quality
 - Pursue efficiency upgrades toward the Net Zero goal
 - Minimize energy consumption
 - Provide the balance with renewable generation

QUESTIONS?

A RESOLUTION FOR ADOPTING A NET ZERO DEFINITION FOR THE TOWN OF
CARRBORO BUILDINGS

WHEREAS, the Town Council received a Net Zero Buildings report and presentation at the December 1, 2020 Town Council Meeting by the Town's consultant, Sud Associates, P.A., and subsequently discussed the Net Zero Buildings metric and boundary options presented; and

WHEREAS, the Environmental Advisory Board (EAB) received the same presentation on January 11, 2021 and have submitted the attached hereto comments; and

WHEREAS, the Town Council and the EAB are in agreement with which Net Zero Buildings definition to adopt for the Town of Carrboro; and

WHEREAS, the Town Council and the EAB agree that the approach to any Net Zero Buildings project will be to first conserve as much as possible through energy efficiency measures, then to make up the balance through renewable energy generation; and

NOW, THEREFORE, BE IT RESOLVED by the Carrboro Town Council that the following Net Zero Buildings definition be adopted for the Town of Carrboro:

Net Zero Buildings shall be evaluated using greenhouse gas emissions (GHG) as the accounting metric. Renewable energy can be generated off-site to offset GHG emissions from non-renewable energy consumption.

This definition conforms to Option 3C of the attached report.

This the 19th day of February in 2021.



TOWN OF CARRBORO

Environmental Advisory Board

301 West Main Street, Carrboro, North Carolina 27510

RECOMMENDATION

January 11, 2020

Net Zero Discussion

Motion was made by Echart and seconded by Brandon that the EAB recommends:

Defining Net Zero

- Option 3: Greenhouse Gas Emissions
- The Town will need timely and defensible data to back up greenhouse gas emissions calculations
 - Search for more granular data (Duke Energy vs. NREL)
 - Published emissions data can be out-of-date so the Town will need to make some assumptions
 - Need to capture life cycle emissions from the production and transportation of the energy, especially natural gas

Defining the Boundary

- Option C: Off Site
- Develop solar energy anywhere on the grid, provided that it is owned by the Town
- Does not need to be Town property or within Town boundaries
- Look into Town parks, covered parking lots
- At some point the Town may need to examine creative yet feasible opportunities
 - Community solar
 - Buy a stake in a larger operation in another location; invest in solar farms
- The entire Carrboro community is a system, the location of the renewables is not as important
- However, on-site solar will minimize distribution losses

Additional Comments

Energy Sources

- The EAB recommends not locking the Town into natural gas usage
 - If the Town relies on electrification, it has more control and flexibility
- The makeup of the Town's energy sources is a moving target
 - The Town will need to take future trends into account

RECs

- Some EAB members are skeptical of RECs due to the fact that some renewable projects may already be in place and would not represent new emissions reductions

Overall

- The Town needs to work towards a goal of reducing fossil fuel use
- The Town should first pursue maximizing the energy efficiency of its buildings
- Next, the energy usage of the buildings must be offset completely by renewables in order for the Town to reach its goals of 80% reduction of 2010 greenhouse gas emissions levels by 2030
- The building analysis is a great first step towards evaluating all municipal energy usage and ultimately, the community's energy usage

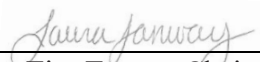
VOTE:

AYES: (5) Kaufman, Turner, Brandon, Schalkoff, Echart

ABSENT/EXCUSED: (1) Blanco

NOES: (0)

ABSTENTIONS: (0)


For Tim Turner, Chair

1-11-21
(Date)

Town of Carrboro
Town Hall Building; Century Center Building; Public Works Complex
Defining Net Zero Metrics and Boundaries

November 23, 2020

Background

The Town of Carrboro is considering options for renovating the Town Hall, Century Center, and the Public Works complex. The Town is seeking to develop a long-term renovation strategy while at the same time addressing immediate needs which have been identified by Town Staff. As part of the renovation effort, the Town would like to work towards the energy sustainability goals set forth in the Town's adopted Strategic Energy and Climate Action plan, which includes working toward net zero energy use.

A first step in the process of achieving a net zero energy building is to define the term "net zero" and to establish the criteria for a net zero energy building. This is more than an exercise in semantics, as the definition and criteria chosen can have significant effects on design decisions and project costs. Regardless of the definition chosen, the general approach to achieving net zero is to first conserve as much energy as is feasible, then use renewable energy to offset the remaining usage.

Defining "Net Zero"

The basic idea of a net zero energy building is that, over the course of a year, it has completely offset its energy usage by renewable energy production. Beyond this general concept, there is no single, universally accepted definition for a net zero energy building. The exact definition used for any given project is a choice made by the building owners and project team based on motivations, priorities, budget, building and site characteristics, and other constraints. The US DOE and the National Renewable Energy Laboratory (NREL) have developed a clear framework and guidance to aid owners and designers in choosing the defining criteria for their specific project.

In short, there are two decisions to be made: what metric will be used to evaluate the building's performance (i.e. net zero what?), and what is the boundary within which renewable energy may be generated? Each of these questions is addressed below.

Defining the Metric

NREL has presented 4 options for defining the metric by which a net zero building can be evaluated: Site energy consumption, source energy consumption, greenhouse gas (GHG) emissions, and energy cost.

Option 1: Net Zero Site Energy: A net zero site energy building will offset the energy it uses on site with renewable energy. The energy consumed is seen directly on the building's utility bills. Some owners see net zero site energy as an attractive metric primarily because it is easy to understand and its calculation does not depend on complex factors outside the boundary of the building. This metric steers designers away from natural gas as a heat or domestic hot water fuel in favor of heat pumps or even electric resistance heating.

Solar hot water is often a more attractive renewable energy source than photovoltaics under this metric.

Option 2: Net Zero Source Energy: The source energy metric considers the source of the energy used in the building. For instance, the source energy metric would account not for the electricity used in the building, but for the coal used at the power plant to produce the electricity used in the building. This metric is favored by owners whose primary motivation is to conserve the Earth's fossil-based energy sources and to reduce the environmental damage associated with the extraction of these fuels. Using this approach largely levels the field when comparing natural gas heating versus electric heat pumps.

Option 3: Net Zero GHG Emissions: This metric is based on the GHG emissions associated with the energy used in the building rather than the energy itself. For instance, the GHG emissions metric would account not for the electricity used in the building, but rather for the airborne pollution generated by the power plant as it produces the electricity used in the building. A net zero GHG building might also be called a "carbon neutral" building. Net zero GHG emissions is chosen by owners whose primary motivation is to mitigate climate change. This metric favors the use of natural gas over electricity use, and places high value on producing renewable electricity (e.g. photovoltaic panels).

Option 4: Net Zero Energy Cost: A net zero energy cost building will offset the building's energy cost over the course of a year with renewable energy sold to the grid or other users. This metric is perhaps the simplest to understand, but it may not fit with the Town's Climate Action Plan. The most attractive systems and fuel types under this metric are variable, depending on the comparative market rates of the different fuels.

Defining the Boundary

Any net zero building will require renewable energy either to power the building directly or (more likely) to offset the building's consumption of non-renewable energy. Where this renewable energy can be generated in order to count towards this offset is determined by the building owners and project team. NREL has presented 4 options, in order of decreasing constraint: building footprint generation, building site generation, imported renewables, and purchased generation.

Option A: Building Footprint Generation: This option applies the constraint that all renewable energy must be generated within the footprint of the building itself. A common example of this would be PV panels installed on the building's roof.

Option B: Building Site Generation: Renewable energy may be generated anywhere within the property lines of the net zero building. Under this option, for example, a building may have PV panels on its roof as well as on the ground or on an on-site parking canopy.

Option C: Off Site Renewables: Under this option, renewable energy may be imported from off-site and used on-site. A typical example would be biomass or biofuels used for heating. While not explicitly stated by NREL, it is our opinion that renewable energy generated by a system owned by the building owner and located on land which is owned by the building owner (though not on the building site) would qualify under Option C. An example would be PV panels located on a Town-owned park. This option simply expands options for renewable generation, it does not exclude the possibility that some energy may still be generated on the building or the building site.

Option D: Purchased Generation: This option allows renewable energy to be generated by others and

purchased by the building. This is often done in the form of Renewable Energy Credits (RECs). In this case the renewable energy itself is not necessarily used in the building, but the offsets created by the renewable energy are purchased and claimed by the building owners. Under this option, each of the previous three options may be included in the total mix of generation possibilities.

HVAC UPGRADE CONCEPTS TOWN OF CARRBORO

Town Hall
Century Center
Public Works



CENTURY CENTER

- Keep existing system types (HW, CHW)
 - Allows reuse of existing piping and ducting
 - Boiler is new, highly efficient
 - HW and CHW enables flexibility, effectiveness, and efficiency
 - Use of natural gas boiler does not aid goal of electrification
- Improve Operation
 - Apply strategies to save natural gas and electricity
 - Address extended hours areas separately
- Equipment upgrades
 - E.G. Replace chiller w/ heat recovery chiller
 - Aids goal of electrification by displacing some gas heat with electrical “waste heat”



TOWN HALL

- Complete redesign of systems
 - Electricity based systems
 - Consider new occupancy types and schedules
 - State of the art efficiency in equipment and strategies
 - VRF AHUs w/ VAV boxes one possible option



PUBLIC WORKS

- Focus first on system operation
 - Make the most of existing systems
- Upgrade equipment as appropriate
 - Select system types tailored to space needs
 - Continue goal of electrification
 - State of the art efficiency in equipment for new spaces





Town of Carrboro

Town Hall
301 W. Main St.
Carrboro, NC 27510

Agenda Item Abstract

File Number:21-150

Agenda Date: 5/4/2021

File Type:Agendas

In Control: Board of Aldermen

Version: 1

TITLE:

Update on Bike Share and Consideration of Town Code Amendments Relating to Bike Share, E-Bikes, E-Scooters and other Micromobility Devices, and Bikeways

PURPOSE: The purpose of this agenda item is to provide the Town Council with an update on a proposed bike share pilot and to consider amendments to the Town Code that would add new definitions and establish standards relating to bikeways, shared use systems, e-bikes and other micromobility devices.

DEPARTMENT: Planning Department

CONTACT INFORMATION: Christina Moon, 919-918-7325, cmoon@townofcarrboro.org <<mailto:cmoon@townofcarrboro.org>>; Zachary Hallock, 919-918-7329, zhallock@townofcarrboro.org <<mailto:zhallock@townofcarrboro.org>>;

Patricia McGuire, 919-918-7327, pmcguire@townofcarrboro.org <<mailto:pmcguire@townofcarrboro.org>>

INFORMATION: Over the last several years, interest in bike shares and micromobility has increased as popular alternatives to vehicles or options for first/last miles of transit trips. At the October 13, 2020 Town Council meeting, staff provided an overview of a possible bike share pilot using e-bikes in collaboration with the Town of Chapel Hill, UNC and Gotcha ([Town of Carrboro - Meeting of Town Council on 10/13/2020 at 7:00 PM \(legistar.com\)](https://carrboro.legistar.com/MeetingDetail.aspx?ID=802043&GUID=B231F771-7774-436A-8004-307550C17F31&Options=&Search=>) <<https://carrboro.legistar.com/MeetingDetail.aspx?ID=802043&GUID=B231F771-7774-436A-8004-307550C17F31&Options=&Search=>>>). UNC contracted with Gotcha to operate its pedal bike share program, which extends into the eastern end of Carrboro with a docking station at the end of the Libba Cotten bikeway (*Attachment B*).

BOLT purchased Gotcha, in 2020 and will continue to operate UNC's bike share until the end of the original contract in May 2022. Staff has met regularly with Chapel Hill, UNC and Gotcha to develop the framework for the e-bike pilot which would provide a larger service area for Carrboro residents. In initial discussions with BOLT, representatives have expressed an interest in pursuing the pilot, but additional conversations will be needed to review the specifics in the proposal and associated draft contract developed with Gotcha. Staff is seeking Council direction on whether to continue these negotiations, with the interest of setting up the pilot this summer to last for about a year. Information from the pilot, such as ridership and hub locations could help inform a potential longer-term program in the future.

Before moving forward with any bike share program, amendments to the Town Code are needed to establish standards for e-bikes, e-scooters and other micromobility devices already being used in Carrboro. A draft ordinance has been prepared (*Attachment A*). If adopted, new provisions added to Chapter 6 of the Town Code would:

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Version: 1

- add new definitions for e-bikes, e-scooters, micromobility and related terms using industry standards (*Attachment C*),
- add the Homestead Road-Chapel Hill High School Multi-Use Path to the list of bikeways,
- establish standards for how and where micromobility devices can be used, and
- provide a framework of bike share programs (shared active transportation systems).

FISCAL & STAFF IMPACT: There are no fiscal impacts associated with this item.

RECOMMENDATION: Staff recommends that the Council : 1) authorize staff to continue negotiations with BOLT regarding a possible pilot program with e-bikes, and 2) adopt the draft ordinance (*Attachment A*) amending the Town Code to add new definitions and establish standards relating to micromobility, shared active transportation systems and bikeways.

AN ORDINANCE TO AMEND THE CARRBORO TOWN CODE TO RELATING
ELECTRIC BICYCLES, ELECTRIC SCOOTERS, MICROMOBILITY DEVICES, SHARED
ACTIVE TRANSPORTATION SYSTEMS AND BIKEWAYS

DRAFT 04-29-2021

BE IT ORDAINED BY THE CARRBORO TOWN COUNCIL THE FOLLOWING:

Section 1. Article I of Chapter 6 of the Town Code, Definitions and Interpretations is amended by adding six new definitions, “electric bicycle,” electric scooter,” “micromobility,” shared active transportation systems,” and “shared device,” as listed below, and by renumbering the remaining definitions in alphabetical order.

(7) *Electric Bicycle (E-Bike)*. A bicycle, usually designed for a single rider, with a small electric helper motor with less than 750W and a maximum speed of 28 mph on flat surfaces. Riders must be at least 16 years of age. There are three classes of electric bicycles:

Class 1 –Pedal Assist (pedalec). An electric assist bike that provides power only when pedaled, capable of a maximum operating speed of 20 mph. (Class 1 e-bikes are the most common type of e-bikes used for shared active transportation systems.

Class 2—Throttle Assist. A throttle assist electric bicycle provides power without pedaling and is capable of a maximum operating speed for 20 mph.

Class 3—Pedal assist (pedalec) at higher speeds. An electric assist bike that provides power only when pedaled and can reach an operating speed of 28 mph.

(8) *Electric Scooter (E-scooter)*. A vehicle that is steered by a steering handle, designed to be stood upon by the operator while the vehicle is in operation, and powered by a motor capable of propelling the vehicle at a speed no greater than 20 miles per hour on a level surface; and whose wheels have diameters of ten inches or less. Riders must be at least 16 years of age.

(12) *Micromobility*. Any small, low-speed, human- electric-powered transportation device, including bicycles, scooters, electric-assist bicycles, electric scooters (e-scooters), and other small, lightweight, wheeled conveyances.

(19) *Shared Active Transportation System (SATS)*. A business or service that provides one or more shared devices, for rent where, by design of the business, the shared devices are intended to be used within a defined service area and stored or parked within a designated area, or hub, or docking station, when not rented by a customer.

(20) *Shared Device*. A bicycle (defined in subdivision (2)), electric bicycle (defined in subdivision (7)), or electric scooter (defined in subdivision (8)), or other micromobility device that is rented by a business or service to customers through a SATS (defined in subdivision (19)).

Section 2. Subsection 6-34(2), Establishment of Bikeways, is amended by adding a new subdivision (h) to read as follows:

- h. The Homestead Road-Chapel Hill High School Multi-Use Path beginning at the Claremont neighborhood and extending south east, under Homestead Road, and across Bolin Creek by way of a pedestrian bridge to Chapel Hill High School.

Section 3. Section 6-37, Shared Usage By Bicyclists and Pedestrians is rewritten to read as follows:

Section 6-37 Shared Usage By Bicyclists, Pedestrians and others using Micromobility Devices

While roadways are provided primarily for the safety and convenience of motor vehicles, sidewalks are provided primarily for the safety and convenience of pedestrians, and bikeways are provided primarily for the safety and convenience of bicycles, it is recognized that in many instances such facilities may be shared. Where these facilities are shared, pedestrians and bicyclists shall exercise extreme caution and the following regulations shall apply:

- (1) When using bikepaths where there is no designated pedestrian area, pedestrians shall walk as far to the right as practicable, shall walk no more than two abreast, and shall exercise due care. Bicyclists shall give an audible signal before passing a pedestrian on a bikepath where there is no designated pedestrian area.
- (2) Class 1 and class 2 electric bicycles, electric scooters and other types of micromobility devices may be operated on bikepaths subject to the provisions of subsection (1) above; travel speeds shall not exceed fifteen miles per hour. When the micromobility device is a shared device and the speed limit can be controlled by the shared active transportation system, the speed limit shall be functionally capped to fifteen miles per hours on bikepaths.
- (3) When using those sidewalks where bicycle traffic is permitted, bicyclists shall not exceed seven miles per hour; shall yield the right-of-way to pedestrians; and, when passing pedestrians from the rear, shall pass only on the left and only after giving an audible warning to such pedestrians; and shall not ride on any sidewalk in such a way as to endanger pedestrians.
- ~~(3) Except on a street or portion thereof designated with a shared lane marking, bicyclists using a roadway shall ride as far to the right as practicable, exercising due care when passing a standing vehicle or one proceeding in the same direction. On a street or portion thereof designated with a shared lane marking, bicyclists must ride in the direction of traffic, upon the right half of the roadway, and may travel in any lateral position within the right half of the roadway. (Amend. 9/21/2010)-(Deleted 2/18/14)~~
- ~~(4) Persons riding bicycles upon a roadway, sidewalk, or bikeway shall ride single file, when to do otherwise would obstruct traffic or create a hazard. In no case should there be more than two bicycles riding abreast. (Deleted 2/18/14)~~
- (4) The area along the north side of East Poplar Avenue shall be a pedestrian lane, and no person may ride, drive or park any vehicle (including a bicycle) upon such pedestrian lane.

Section 4. Section 6-39, “Bicycles Subject to General Statutes” is renamed “Bicycles, including Electric Bicycles, Electric Scooters and other Micromobility Devices Subject to General Statutes”

Section 5. Subsections 6-39(1) and (2) are amended by adding the words “electric bicycles, electric scooters and other micromobility devices,” to the first clause of the first sentence.

Section 6. Article VIII, Bicycles, is amended by adding a new section 6-40.2, Shared Active Transportation Systems for Bicycles, Electric Bicycles, Electric Scooters and other Micromobility Devices, to read as follows:

Section 6-40.2 Shared Active Transportation Systems for Bicycles, Electric Bicycles, Electric Scooters and other Micromobility Devices

The Town may allow, by permit or contractual agreement allow for the establishment of one or more shared active transportation systems subject to the following provisions.

(1) The shared active transportation system shall identify a service area where, subject to the standards in this chapter, shared devices may be operated without penalty and locations where such devices may be stored when not in use. Such storage locations may include formal docking stations or racks, or informal areas or hubs designated by pavement markings, textured pavement treatments, signage or some combination.

(2) Placement of shared devices when not in use by a customer shall be within these designated storage areas.

(3) If a storage area is not available, the operator of the shared device may place the device along the sidewalk or other public right-of-way so long as such placement shall not impede movement to such an extent that a person with a motorized wheelchair (or similar device designed principally to convey a person with limited mobility) cannot safely navigate the sidewalk.

- a. If a shared device is found obstructing the sidewalk, it shall be the responsibility of the shared active transportation system, when notified, to retrieve the device and return it to an allowed parking location.
- b. If a shared device is found outside the public right-of-way it shall be the responsibility of the Shared Active Transportation System to retrieve the device and return it to an allowed parking location.
- c. If a shared device is found in a location where it is inaccessible to customers, it shall be the responsibility of the Shared Active Transportation System to retrieve the device and return it to use.

- d. If a shared device is found to be inoperable, it shall be the responsibility of the Shared Active Transportation System to retrieve the device and remove it from use.

(4) The Shared Active Transportation System shall provide the Town with anonymized data from the usage of the system in the form of the General Bikeshare Specification Feed (GBSF).

(5) The Shared Active Transportation System shall provide a method by which people can access the system without needing a smartphone or bank account in addition to a payment system using a smart phone application.

(6) The Shared Active Transportation System shall provide safety information and inform users of the need to wear helmets while operating their shared devices.

(7) Any other provisions as included in the permit or contractual agreement with Town.

Section 7. All provisions of any Town ordinance or resolution in conflict with this ordinance are repealed, and this ordinance is effective upon adoption.

INFO BRIEF

The basics of micromobility and related motorized devices for personal transport



Pedestrian and Bicycle
Information Center
www.pedbikeinfo.org

Introduction

With a surge of new personal transportation devices coming to market, some integrated into shared ride systems (such as bikeshare programs), there is a need to establish a common vocabulary for these options, and provide basic information about how these devices are classified and regulated. This info brief provides an overview of powered forms of micromobility and compares features of micromobility with a spectrum of other traditional and emerging forms of transportation. It references and builds upon micromobility definitions created by the Society of Automotive Engineers (SAE), a standards-developing organization and professional association.

Powered micromobility devices, sometimes called personal e-mobility devices, share three common characteristics:

- **Motorized:** They can either be fully motorized (capable of movement without human power) or motor-assisted, in which the rider provides some human-powered propulsion (such as by pedaling or kicking). They usually involve a battery-powered electric motor but may also be capable of using another energy source, such as gasoline.
- **Low speed:** Most micromobility devices are designed to travel at or below 20 miles per hour (MPH), and some devices may operate at or be regulated to even lower speeds, such as 8 MPH or less, to be compatible with sidewalk use. According to SAE definitions, the top travel speed for micromobility devices is 30 MPH or less.
- **Small size:** The weight, width, height, and length of a device all contribute to defining size. For most micromobility devices, a standard width is three feet or less, fitting within the standard bike lane or sidewalk width, and the weight is typically less than 100 pounds. By SAE's definition, all micromobility devices weigh less than 500 pounds and fall within one of four

weight categories. Cities or other jurisdictions can define the weight and width limitations for different types of roadway facilities.

This info brief specifically focuses on micromobility devices used for personal transportation on paved roads, sidewalks, and paths, and does not cover devices used for vocational purposes and commercial goods/services delivery or for off-road or air-based travel. While pedestrians and bicyclists—including those using nonmotorized bikeshare bikes—might share similar characteristics (such as small size and low travel speed) as well as use the same facilities where micromobility devices are operated, they are already well-defined by most regulatory, roadway design, and injury reporting frameworks and are therefore not included in this info brief. Similarly, motorized wheelchairs and personal mobility devices used by people with disabilities already have a standard legal definition and injury reporting mechanism and are therefore not considered “micromobility,” though they are shown in Table 2 as a related device.

Related Terms

Dockless

Dockless devices are those that do not require a parking station in order to pick up or return the device.

Shared-use

Shared-use devices are those that are part of a rental system, rather than personally owned.




Electric-assist

This term is often used interchangeably with the terms “power assist,” “pedal assist” or “pedelec” to indicate that an electric powered motor is providing power to supplement human propulsion of a device; it can also be used to define throttle-assisted devices (such as Class 2 e-bikes). See Table 1 for more detail.

Categories of Micromobility Devices

The following table provides examples and key characteristics of common micromobility devices.





Table 1: Common micromobility devices

Device	Electric standing or sitting scooters (e scooters)	Electric bicycles (e-bikes)			Other ¹
		Class 1 Pedal assist (pedalec)	Class 2 Throttle assist	Class 3 Pedal assist (pedalec) at higher speed	
					
Example brands	Shared: Bird, Lime, and many others Owned: Inboard Glider, Segway 9Bot	Shared: Lime, Mobike, Ofo, Pace, Spin, and many others Owned: Most major bike brands; multiple passenger versions include Organic Transit (ELF) and Yuba	Owned: Several bike brands (less common than Class 1 and 3)	Owned: Several major brands; multiple passenger versions include Better Bike (PEBL), and Podride	Owned: Boosted, Inboard, Mellow Boards, Metroboard
Weight	Typically < 50 lbs	Typically < 100 lbs; multiple passenger versions near 200 lbs	Typically < 100 lbs	Typically < 100 lbs; multiple passenger versions near 200 lbs	< 50 lbs
Occupants	Single rider	Usually a single rider; some cargo e-bikes or bike cars designed for multiple riders	Typically designed for single riders	Usually a single rider; some designed for multiple riders	Single rider
Power supply	Electric motor typically < 750 watts	Electric motor typically < 750 watts	Electric motor typically < 750 watts	Electric motor typically < 750 watts	Electric motor typically < 750 watts
Product speed ²	20 MPH or less; some cities apply additional speed restrictions	20 MPH or less	20 MPH or less	28 MPH or less	Most are 20 MPH or less though some can go up to 30 MPH
Operating space	Varies by place; ³ some cities restrict in crowded places	Varies by place; ³ usually allowed on bike transportation facilities and paths	Varies by place; ³ usually allowed on bike transportation facilities and paths	Varies by place; ³ some States restrict access on bike paths	Varies by place ³
Regulated by	Consumer Product Safety Commission (CPSC), for personally owned devices ⁴	CPSC (only for personally owned devices)	CPSC (only for personally owned devices)	CPSC (only for personally owned devices)	CPSC (only for personally owned devices)

Other Related Transportation Modes

Table 2 shows other forms of travel that may share similar features or operating space with micromobility but do not technically meet the definition of micromobility and may be subject to different regulatory standards.

Table 2: Devices that may be related to, but outside of, the micromobility classification.

Device	Mobility scooter 	Golf cart 	Moped / Scooter, < 50 cc ⁵ 	Motorcycle / Scooter, > 50 cc 
Example brands	Drive, Pride Medical, Rascal	Polaris, Yamaha	Tomos, Vespa	Harley, Honda, Yamaha
Weight	200-400 lbs	500-1100 lbs	200-250 lbs	250-500 lbs
Occupants	Single rider	Multiple riders	1-2 riders	1-2 riders
Power supply	Battery powered motor	36 or 48-volt batteries or gas powered (2 or 4 stroke engine)	Electric or gas (50cc or less) producing under 2 HP; may require pedal start	Electric or gas powered
Product speed ²	4-12 MPH	20 MPH or less	30 MPH or less	Regulated by posted speed limit only
Operating space	Sidewalks and trails; allowed on recreational trails for nonmotorized use for people who have mobility impairments	Golf courses, and in-street and on trails in some communities; usually not allowed on recreational trails for nonmotorized use	In-street only; usually not allowed on recreational trails for nonmotorized use	In-street only; usually not allowed on recreational trails for nonmotorized use
Regulated by	Food and Drug Administration (as a medical device) and the Americans with Disabilities Act (ADA)	CPSC (considered sports equipment)	DMV; some require license, registration, or insurance	DMV; most require license, registration, and insurance

Additional Resources

PBIC Micromobility Resource Collection contains a curated and regularly updated set of links to key research, resources, case studies, policy briefs, and webinars on the topic of micromobility.

Powered Micromobility Committee of the SAE, Standard J3194, A Taxonomy and Classification of Powered Micromobility Vehicles, provides a set of definitions and a classification that can be used by regulators to standardize descriptions of micromobility devices (for either shared or personal use).

How and Where Should I Ride This Thing? "Rules of The Road" for Personal Transportation Devices summarizes and evaluates existing personal transportation device regulations across hundreds of jurisdictions and provides recommendations for State-level regulations.

Framework for Considering Motorized Use on Nonmotorized Trails and Pedestrian Walkways provides guidance for permitting e-bikes on nonmotorized paths. Note: this framework does not apply to trails funded under the Recreational Trails Program (RTP). Under the current RTP, any device with a motor, except for a motorized wheelchair, is defined as motorized.

PeopleForBikes shares up-to-date information on Federal and local e-bike policies as well as resources for e-bike retailers and people interested in electric mountain bikes.

State Electric Bicycle Laws - A Legislative Primer offers in-depth discussion of the legal regulations that pertain to e-bikes.

The American Society for Testing and Materials (ASTM) **F2641 - 15 Standard Consumer Safety Specification for Recreational Powered Scooters and Pocket Bikes** and **ASTM F2642 - 15 Standard Consumer Safety Specification for Safety Instructions and Labeling for Recreational Powered** provide voluntary standards for micromobility products, including scooters and pocket bikes. Underwriters Laboratory (UL) often develops "Outline of Investigations" prior to the development of a voluntary standard, which typically serve as the initial draft of any subsequent voluntary standard. Please see the **UL 2272 Standard for Electrical Systems for Personal E-Mobility Devices** and the **UL 2849 Outline of Investigation for Electric Bicycles, Electrically Power Assisted Cycles, Electric Scooters, and Electric Motorcycles**.

Notations

- ¹ This category includes e-skateboards; e-skates; e-boards or other self-balancing devices (sometimes called hoverboards or balance wheels).
- ² Speed intended for usage by manufacturer; this may be regulated by State or local ordinances and may differ from actual operating speeds or modifications made by the device user.
- ³ In some circumstances, paths may have restrictions based on the Federal or State regulations, or the source of funding. These restrictions are often marked at the entrance to the facility, but not always.
- ⁴ CPSC is a regulatory body that identifies if a product is safe to sell in the U.S. under the Consumer Product Safety Act. It does not regulate who can purchase a device or where or when devices can be legally ridden.
- ⁵ Moped/scooter/motorcycle definitions are highly variable by State. For example, in North Carolina, there is no separate category for scooter; "scooters" may be mopeds or motorcycles depending on engine capacity. These devices and motorcycles are often regulated at the Federal level through the Consumer Product Safety Commission, although they are not regulated by the Federal Motor Vehicle Safety Standards (FMVSS). Still, States may define and regulate them at the State level and enforce regulations through the Department of Motor Vehicles (DMV) or other mechanism.

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