



Welcome to the Northampton Community  
Resilience Hub

# Agenda

Tour of 298 Main Street (5:30 – 6pm)

Introduction

MAYOR GINA-LOUISE SCIARRA, City of Northampton

Overview of the Northampton Resilience Hub Project

DORRIE BROOKS, Principal, Jones Whitsett Architects

The HUB in the context of City Planning

CAROLYN MISCH, Director of Planning & Sustainability

The HUB in the context of Public Health

MICHELE FARRY, Asst. Commissioner of Health & Human Services

The HUB in the context of Resilience & Preparedness

BEN WEIL, Director of Climate Action & Project Administration

ANDREW PELIS, Fire/Rescue Chief

Questions & Answers/Small Group Discussions



# Discussion Series

## March 25, 2024: "Blueprints & Beginnings: Mapping Our Hub"

A look into the initial plans, the building history, and the architectural vision of the Community Resilience Hub, inviting feedback on the foundational concepts.

## May 1, 2024 , 6pm : "Resilience & Relationships: Strengthening Downtown Together"

Focusing on how the Hub will enhance downtown resilience, public health, and the interconnected role of the community in this endeavor.

## June 5, 2024, 6pm : "Connections & Collaborations: Envisioning Comprehensive Care"

Discussing the integration of services and the role of partnerships in shaping a Hub that's more than the sum of its parts, focusing on holistic community support.





- 360 VR of 298 Main Building History
- Design Updates
- Spanish Language PPTs
- Copy of Previous Presentations
- Current Floor Plans
- Links to older documents
- Links to Climate Data
- Draft Project Schedule






To follow the Hub design process, visit  
[www.northamptoncommunityresiliencehub.org](http://www.northamptoncommunityresiliencehub.org)



RESILIENCE HUBS use a physical space, a building, and its surrounding infrastructure, as an opportunity to efficiently improve emergency management, reduce climate pollution and enhance community resilience.

<https://www.usdn.org/resilience-hubs.html>



- **Resilient Programing and Services**  
Offering additional services and programs that build relationships, promote community preparedness, and improve residents' health and well-being.
- **Resilient Structure**  
Strengthening the resilience of the facility to ensure that it meets operational goals in all conditions.
- **Resilient Power**  
Ensuring reliable backup power to the facility during a hazard while also improving the cost-effectiveness and sustainability of operations in all three operating modes.
- **Resilient Communications**  
Ensuring the ability to communicate within and outside the service area during disruptions and throughout recovery.
- **Resilient Operations**  
Ensuring personnel and processes are in place to operate the facility in all conditions.

# What is a Resilience Hub?

# Our Hub has three goals:

1

Coordinated Access

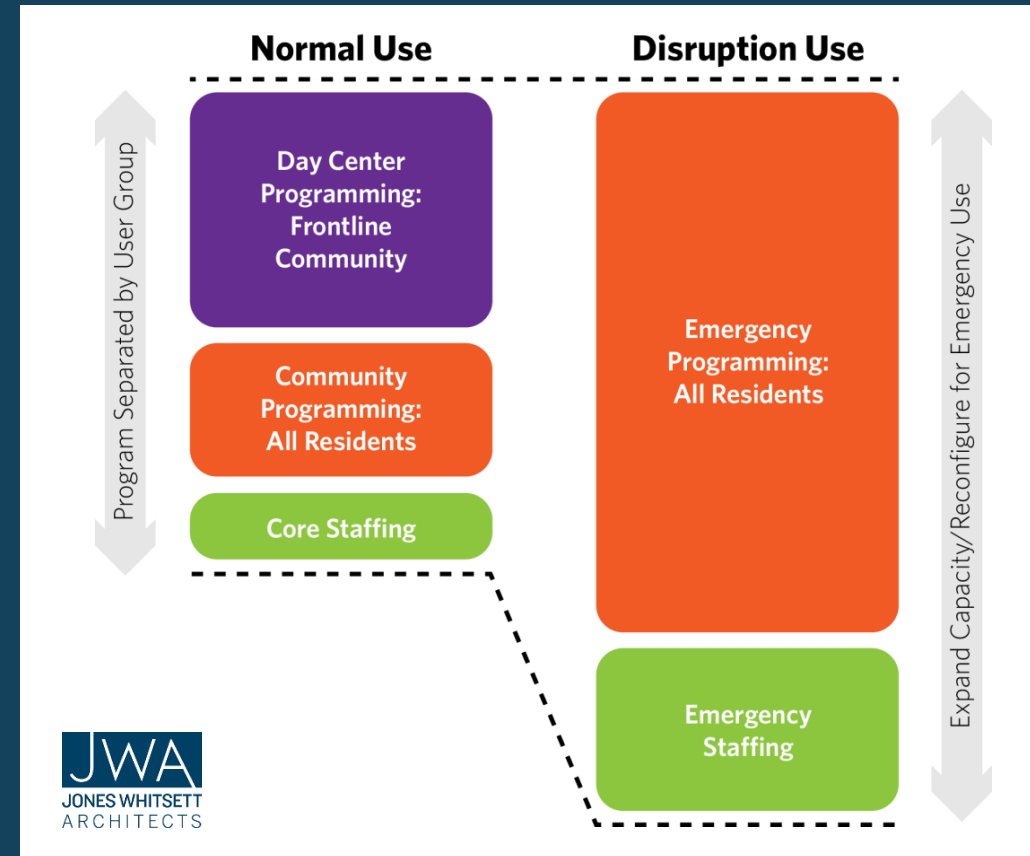
2

Climate Resilience

3

Community + Equity

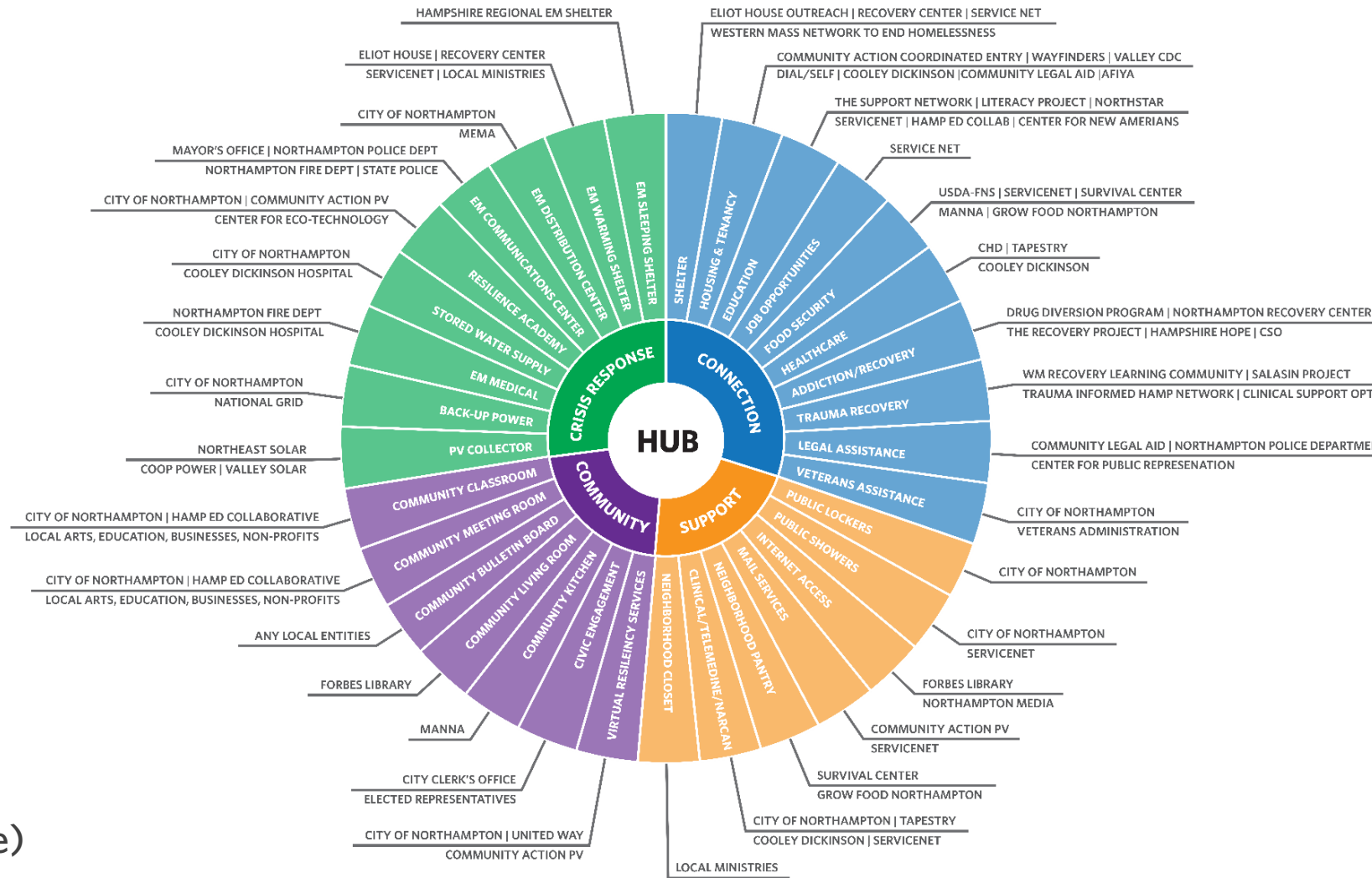
Our HUB is being designed to enable it to FLIP from it's EVERYDAY USE to EMERGENCY USE to support City residents during a disruption event.



# Coalition Approach

## ANCHOR PARTNERS

- Community Action Pioneer Valley
- Manna
- Department of Community Care
- Hilltown Health
- Emergency Management (Fire/Rescue)



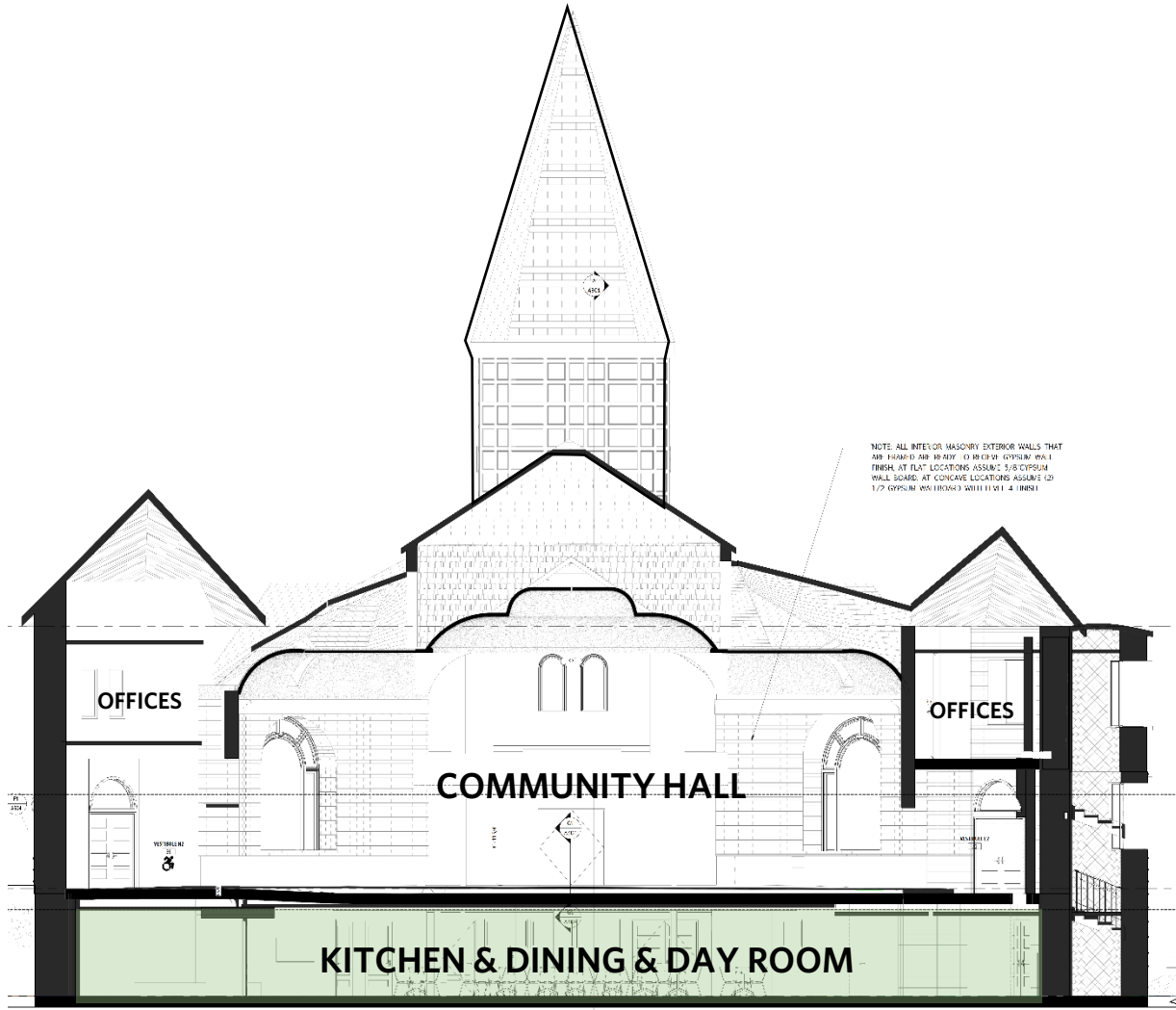
# Reporting back from last session:

- Deep consideration and interest in the Day Center plans and needs
- Interest in knowing more about the City's Climate Action Planning
- Traffic and Access Concerns from abutters
- Questions about reliability of hot water supply and emergency sheltering capacity
- A desire to see inside 298 Main Street
- Interest in the geothermal well district proposal for the Hub
- Program Ideas for Community Use of the Hub

## What we heard



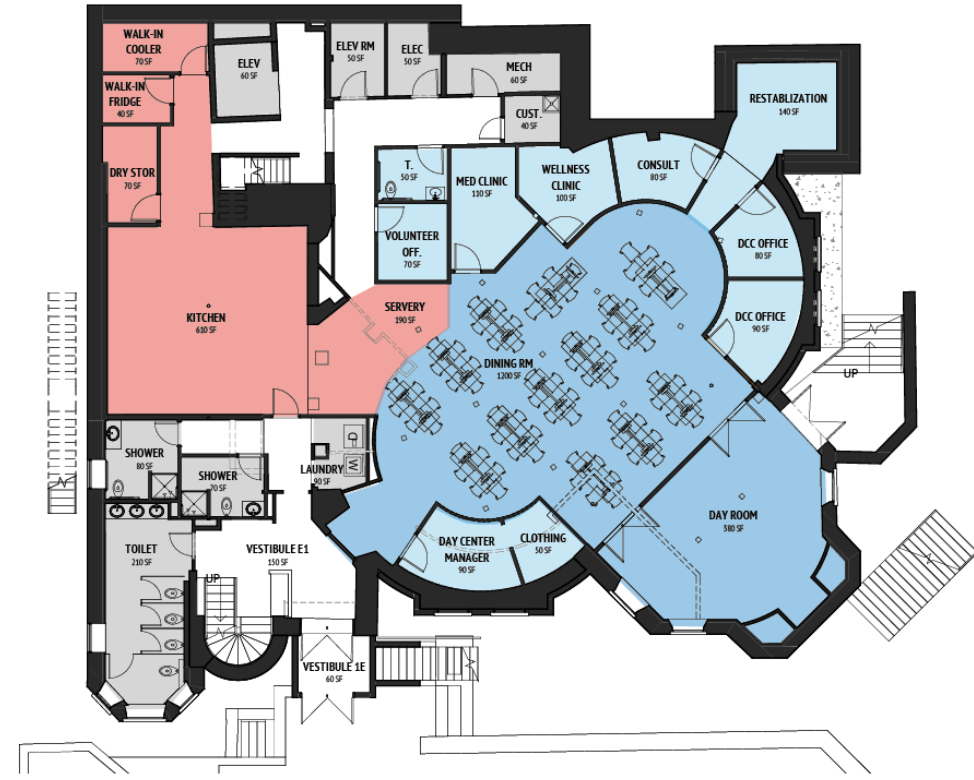
# Schematic Design | Northampton Resilience Hub - Level 1



Section centered on Bell Tower Section

16,450 GSF

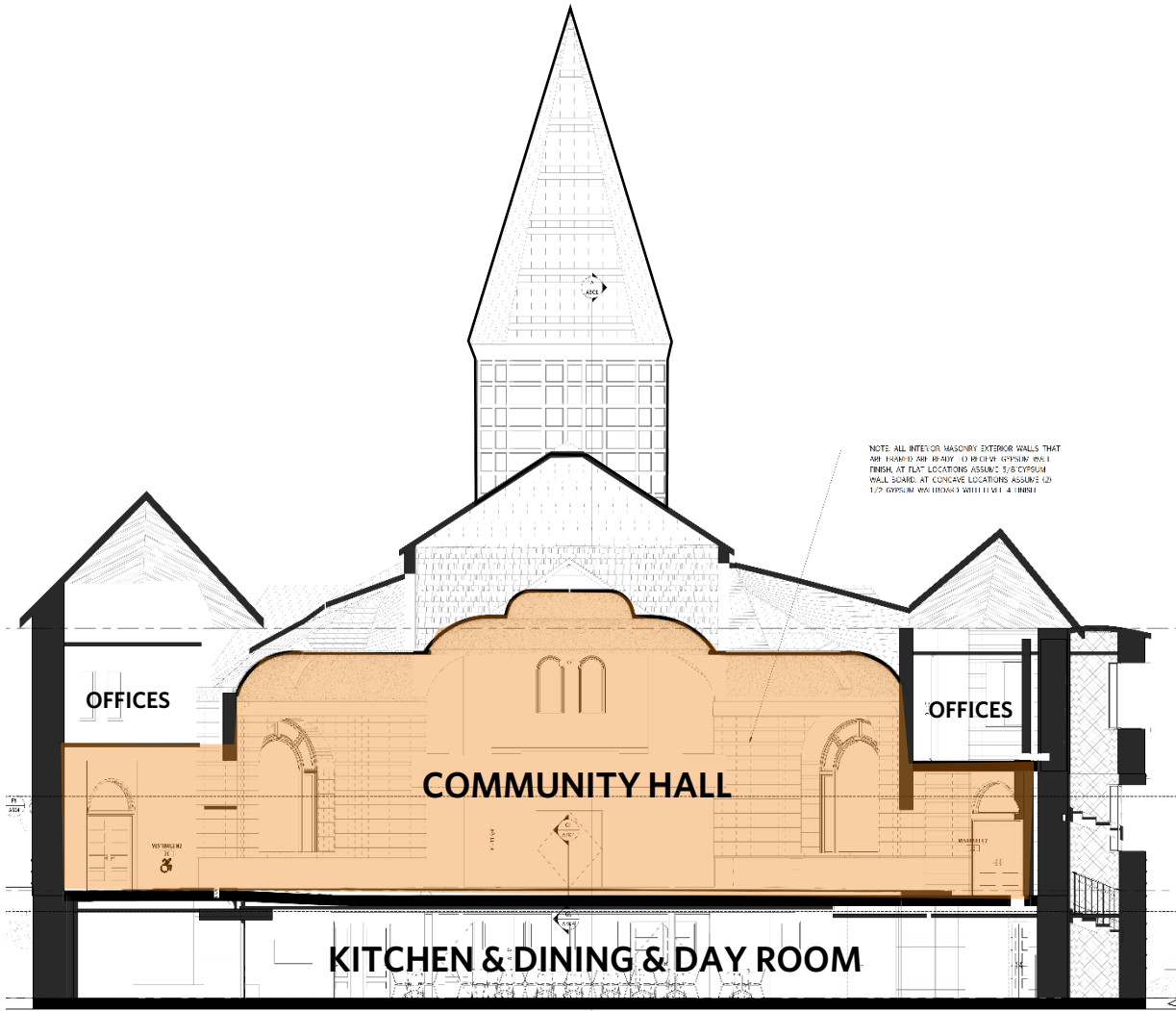
reception, showers, toilets, laundry, day room, kitchen, dining room, clinics, offices



6,330 sf First Floor



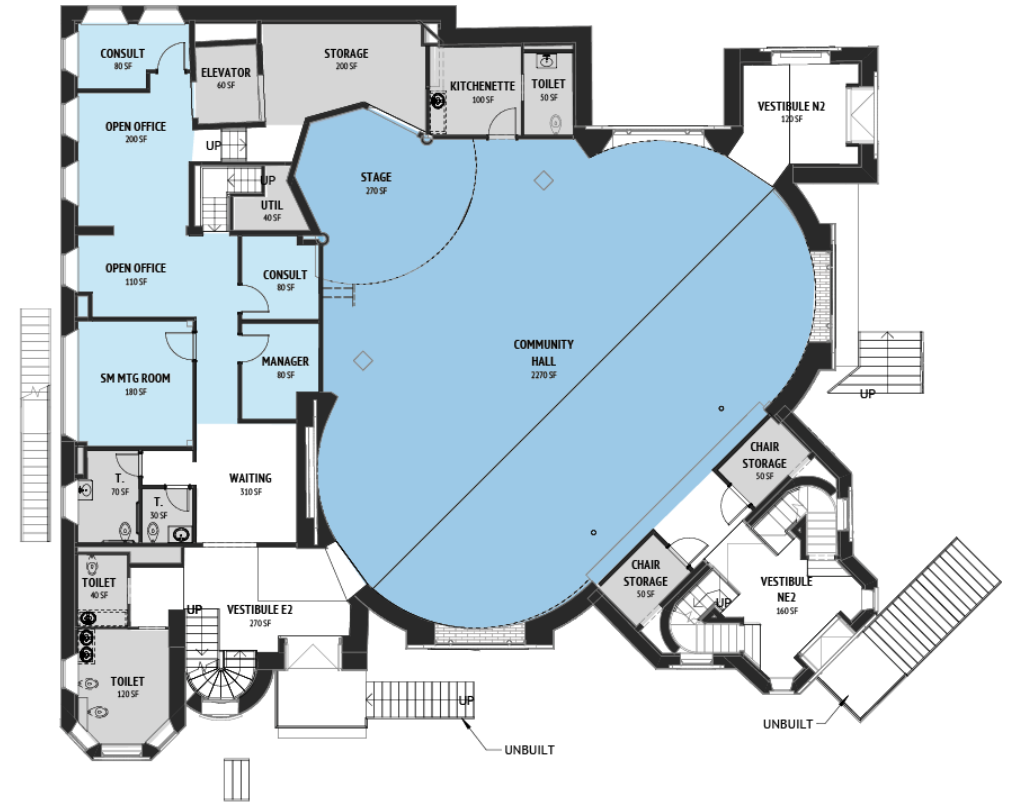
# Schematic Design | Northampton Resilience Hub - Level 2



Section centered on Bell Tower Section

16,450 GSF

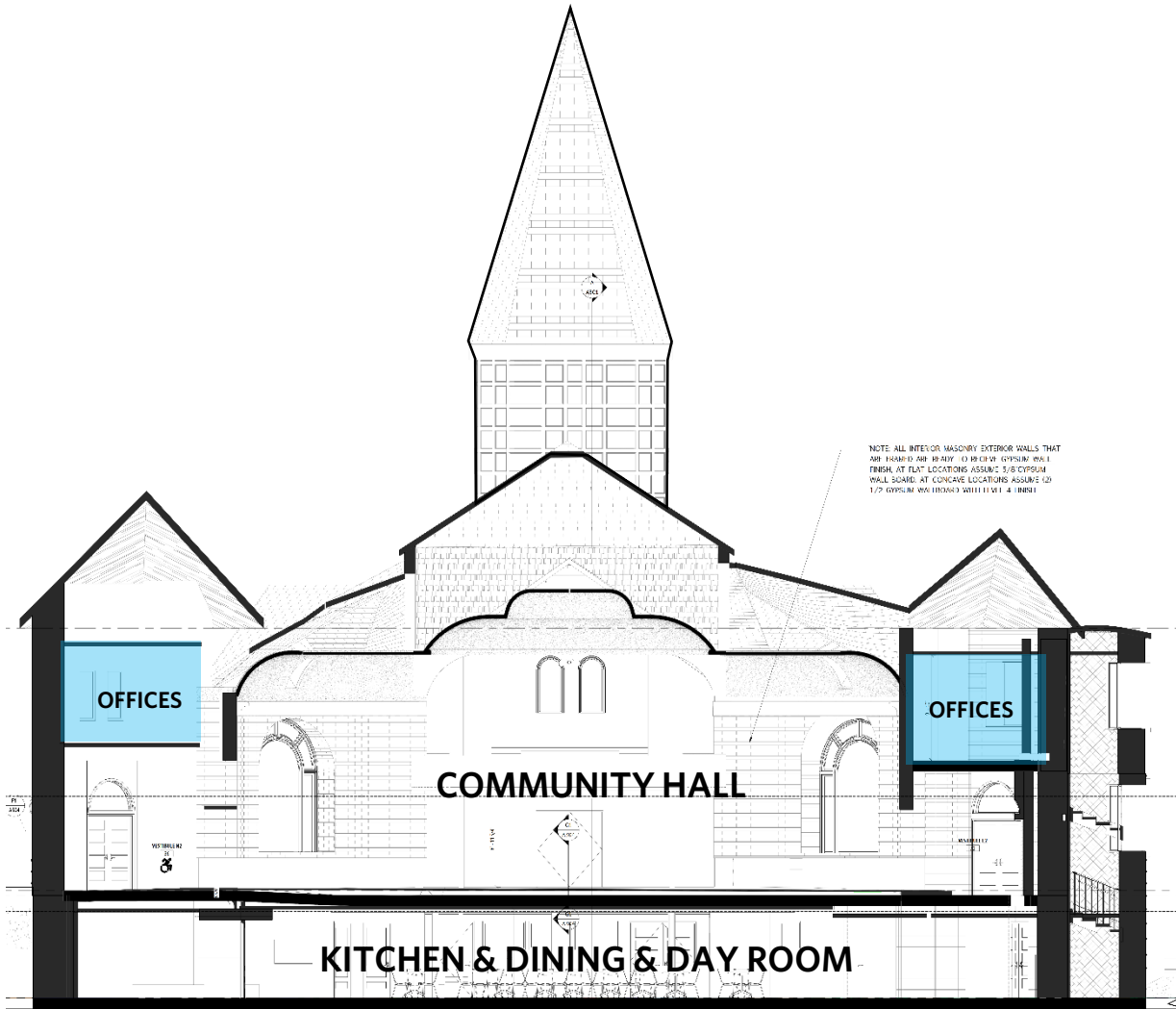
Community hall, flex offices, meeting room, storage, toilets, access to balcony, EM Support



6,330 sf Second Floor



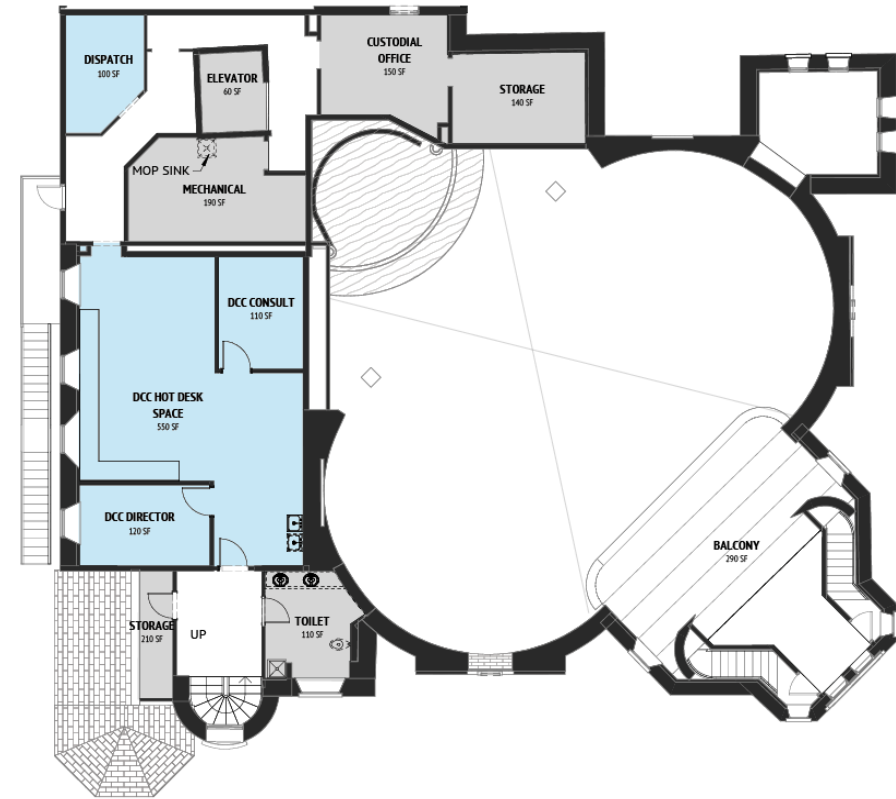
# Schematic Design | Northampton Resilience Hub - Level 3



Section centered on Bell Tower Section

16,450 GSF

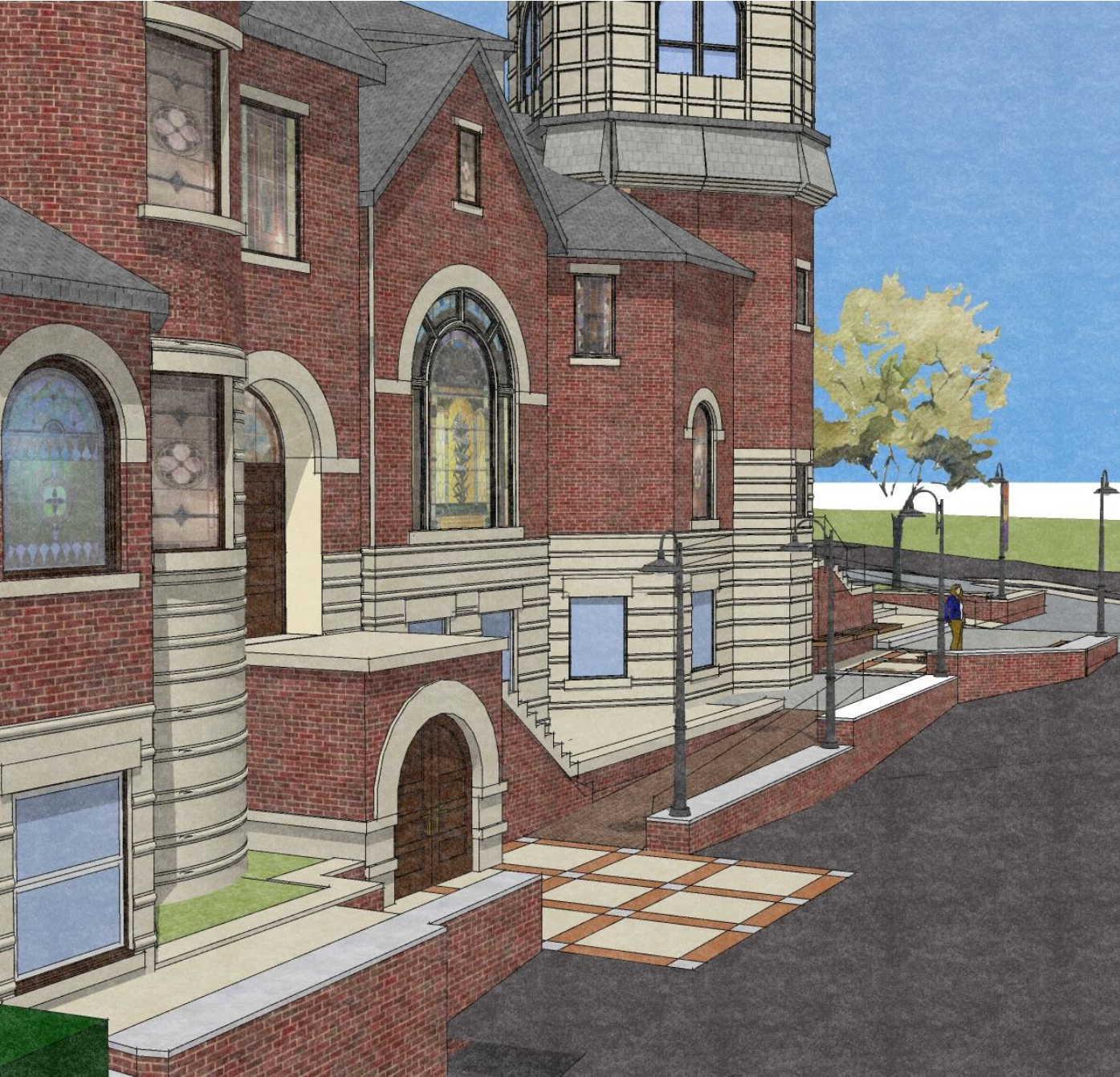
## Division of Community Care offices, MEP Spaces, EM Storage, DCC Dispatch



3,790 sf Third Floor









# Questions + Answers



# Planning Context for the Hub

Carolyn Misch

DIRECTOR OF PLANNING & SUSTAINABILITY



# Sustainable Northampton & Resilience/Regeneration Plan

- Goals & Objectives for a Sustainable Future
- Guiding Principles
- How do we get there?
- What does it look like?



Social  
Equity

# Social Equity

- Support & Invest in Diverse and Integrated community
- Address Environmental Justice
- Build Resilience and Regeneration
- Support wide variety of housing types
- Connect municipal capital improvements directly to sustainability goals



Economic  
Development

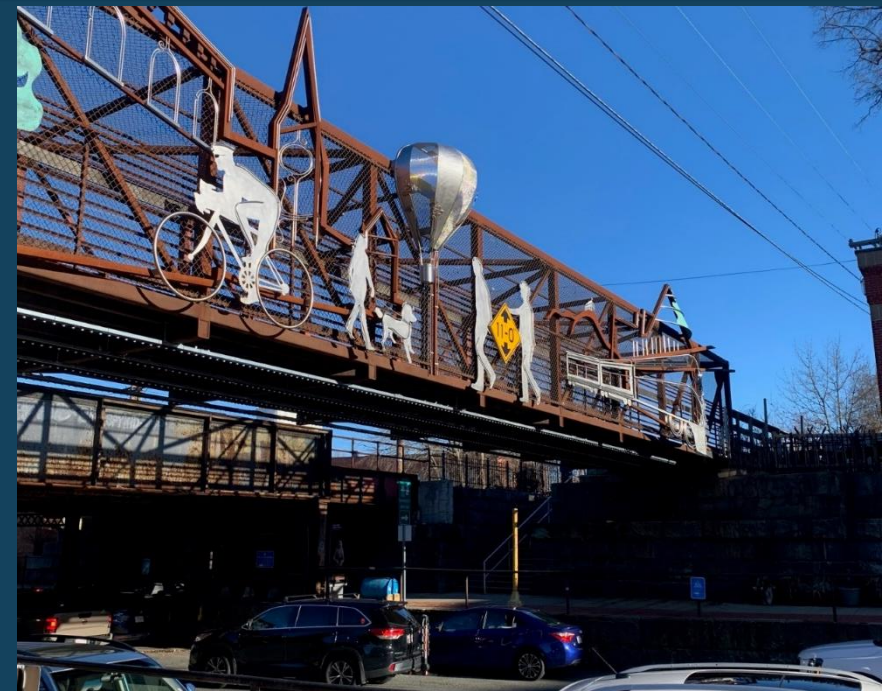
# Economic & Cultural Vitality

- Recognize and foster our unique history
- Support Arts and Artists
- Recognize that a diverse and vibrant economy is integral to a successful community



# Environmental Security & Sustainability

- Increase walkable and bikeable transit options
- Adopt more sustainable land-use patterns to support alternative transportation options
- Protect agricultural and sensitive, ecologically diverse landscapes



# How do we implement?

## Incentives through Regulations

Develop Regulations based on Community Values  
What do we want to look like and how do we address needs?

## Projects/Physical Improvement

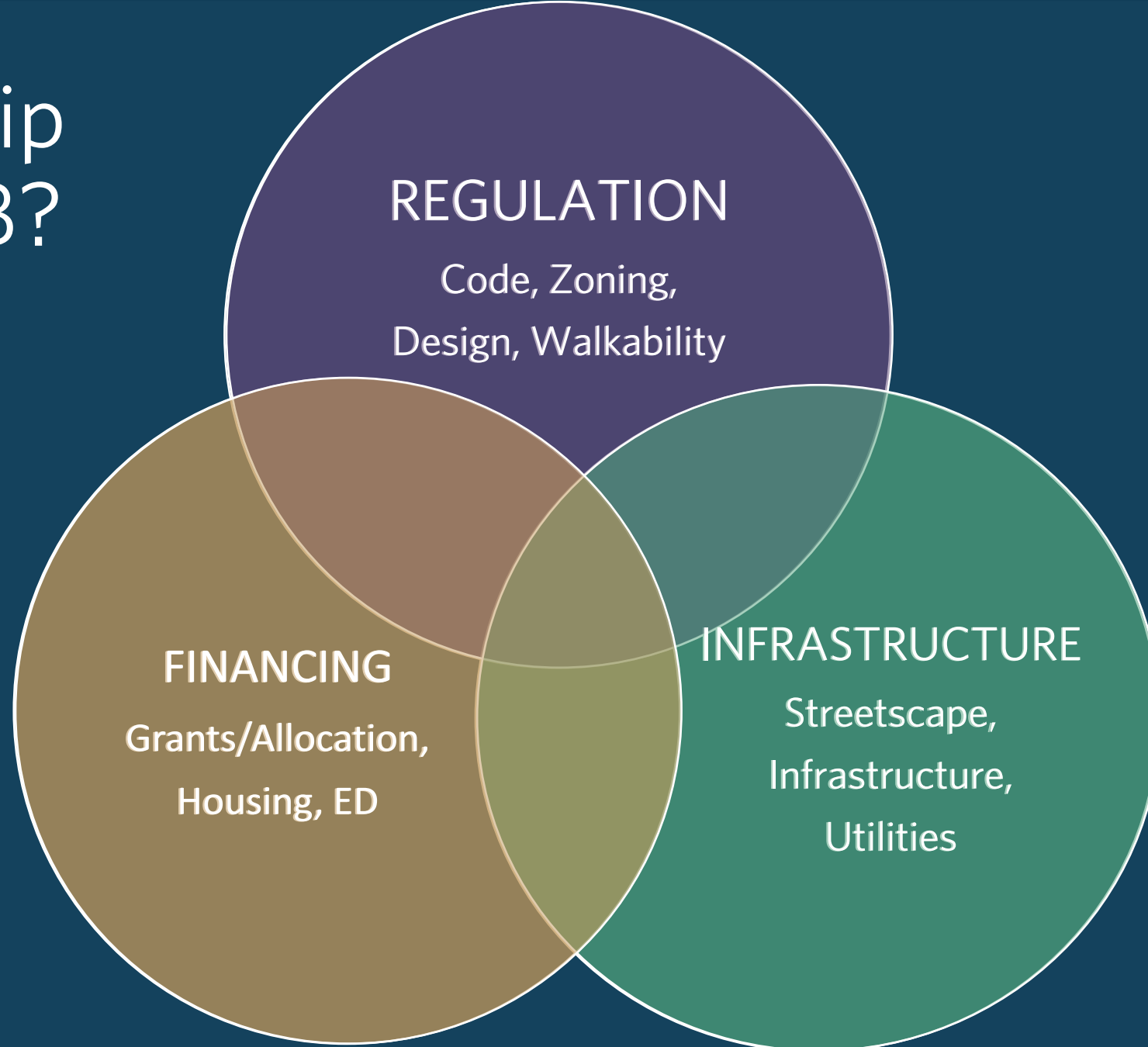
Accessible Bicycle/Ped Infrastructure  
MVP Grant  
Picture Main Street

## Acquisition

27 Crafts  
33 King  
298 Main  
Open Space



# Relationship to the HUB?



# Public Health Context of the Hub

---

Meredith O'Leary  
HEALTH COMMISSIONER  
Michele Farry  
DEPUTY COMMISSIONER  
DEPT. OF HEALTH & HUMAN SERVICES



**Public Health**  
Prevent. Promote. Protect.

**Northampton Department of  
Health & Human Services**

# City of Northampton DHHS

## Serves Local and Regional Public Health Needs



- DIVISION OF COMMUNITY CARE
- DIVISION OF EMERGENCY PREPAREDNESS & RESPONSE
- DIVISION OF PUBLIC HEALTH NURSING
- DIVISION OF ENVIRONMENTAL HEALTH
- DIVISION OF PUBLIC HEALTH EXCELLENCE
- DIVISION OF SUD (SUBSTANCE USE DISORDER) PREVENTION  
HAMPSHIRE HOPE, DART,  
NORTHAMPTON YOUTH HEALTH COALITION

# DHHS Resilience HUB Collaborative Partnerships



## Academic Public Health Corps (APHC)

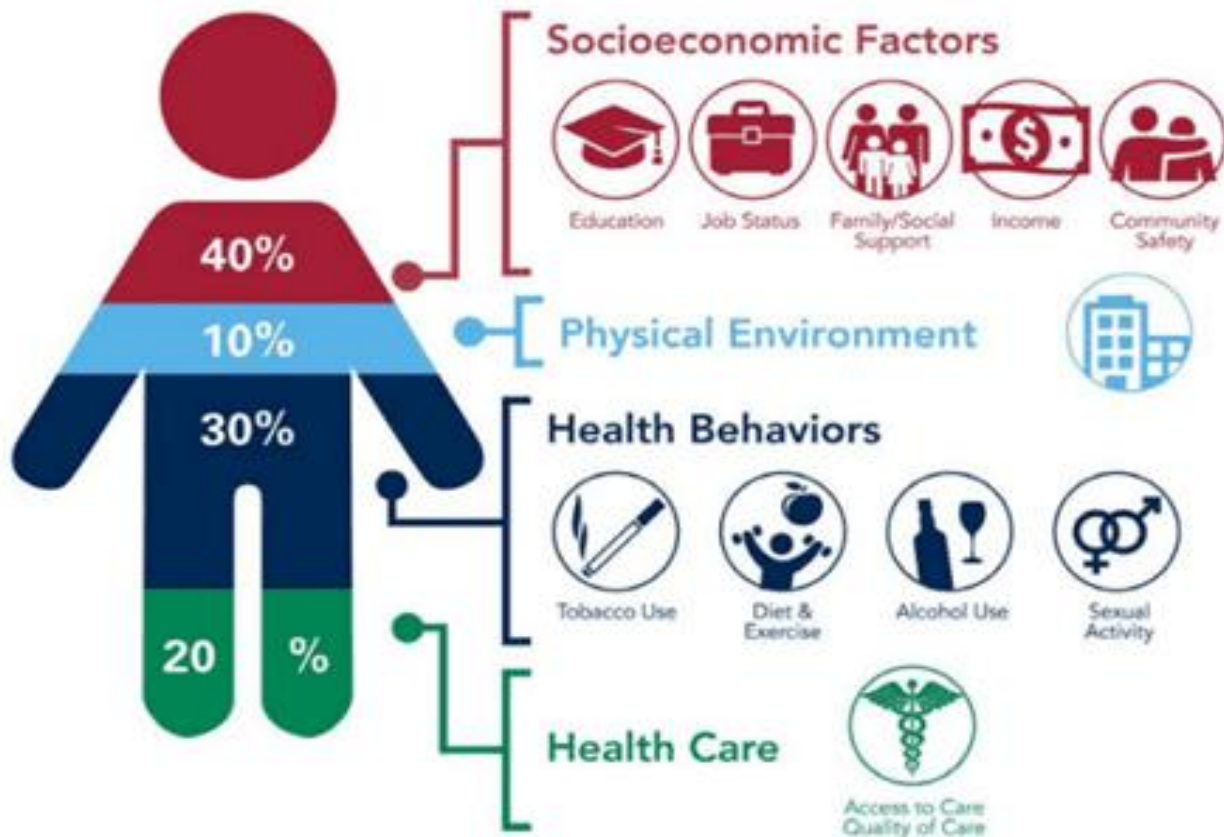
- Long term internship focusing on developing the Resilience Hub
- Focus on research on issues, develop fact sheets, and background reports, support outreach and communication



## Population-based Urban and Rural Community Health (PURCH)

- 4 students planning to be community healthcare physicians
- 4 year academic internship program with DHHS student experiences and Resiliency Hub

# Social Drivers of Health - The Resilience HUB and the DHHS DCC are a Public Health Model



Using clear terms to advance health equity  
- “social drivers” vs “social determinants”  
Social needs. Social risks. Social barriers. Social  
determinants of health (sdoh).

Source: 2023 National Association of Community Health Centers, Inc.

## What does public health do?

- DHHS takes a multi-disciplinary, multi-division collaborative approach to address individual and community-level social drivers of health.

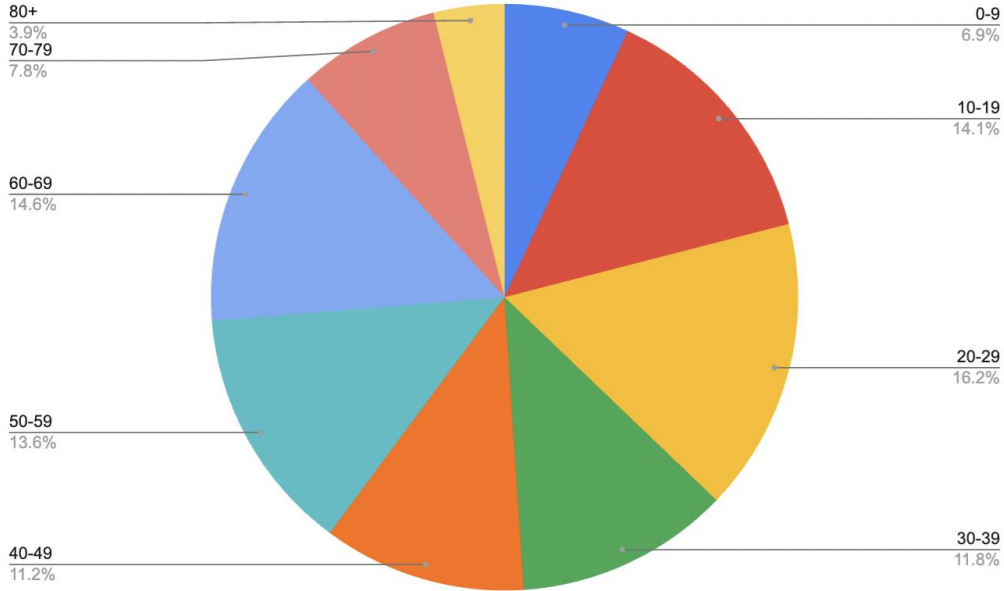
# DHHS Northampton Community Needs Assessment

## Northampton Demographics - Population 29,373 (2022)

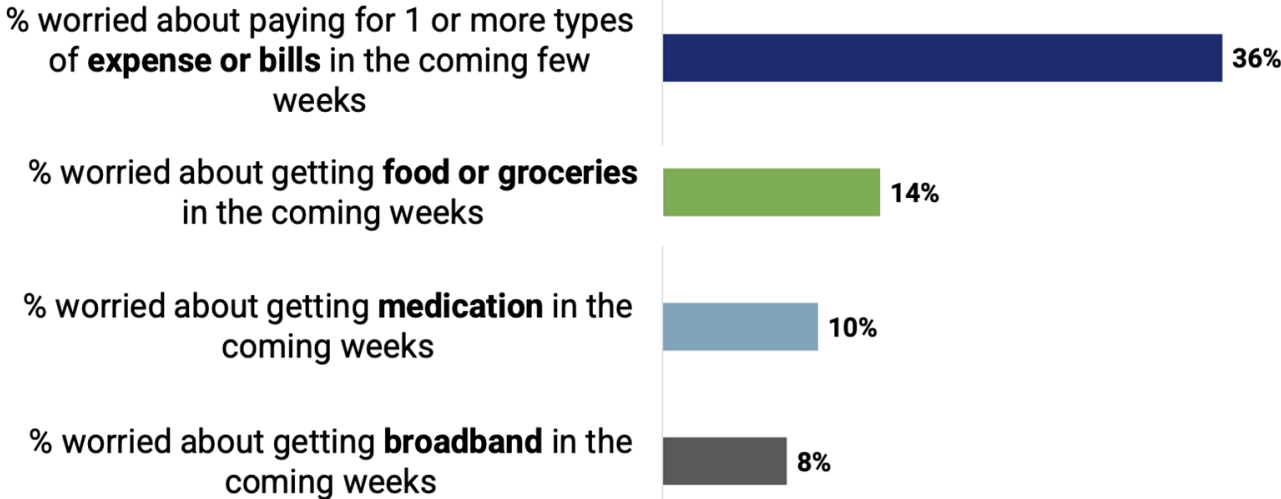
Household Income in Northampton, MA		
	Percent	No. of Individuals
Under \$50,000	37.80%	4,511

Housing in Northampton, MA	
Median Home Value	\$341,000
Homeowner cost w/mortgage	\$2,096
Median Rent	\$1,254

### Age



### Worried about Basic Need Expenses (N=452)

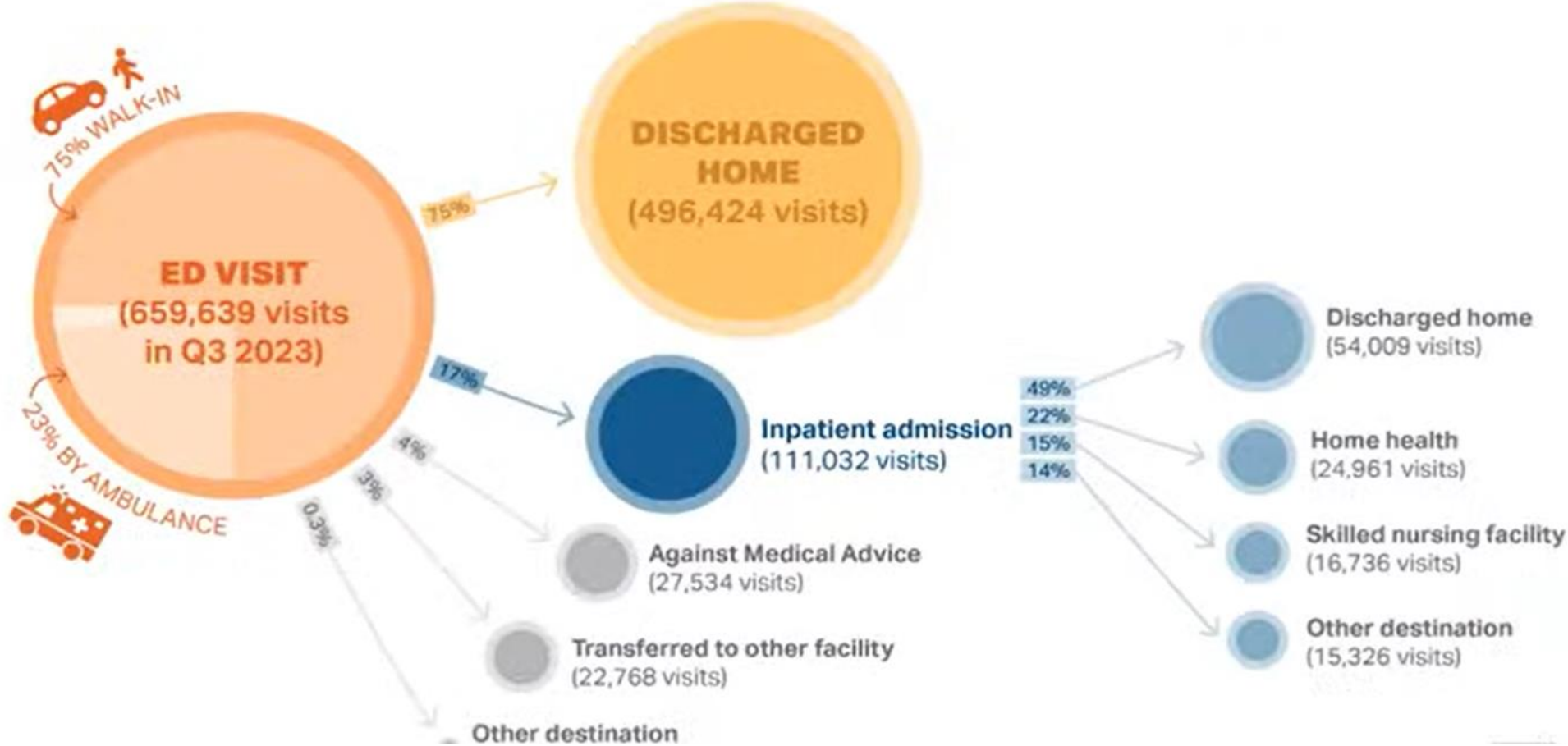


Source: Public Health Institute of Western Massachusetts chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.publichealthwm.org/application/files/5416/8373/9338/Northampton\_Municipal\_Report\_Jan\_2023.pdf

# The Massachusetts Health Care Policy Commission

## Care Access at the Emergency Department Statistics

Origin and destinations of ED visits, July to September 2023



\*Source: MA Health Care Policy Commission AC Meeting February 29, 2024 AC Meeting February 29, 2024 YouTube Link: <https://www.youtube.com/watch?v=JBrvjfLb5bI>

# Planning for the Resilience HUB

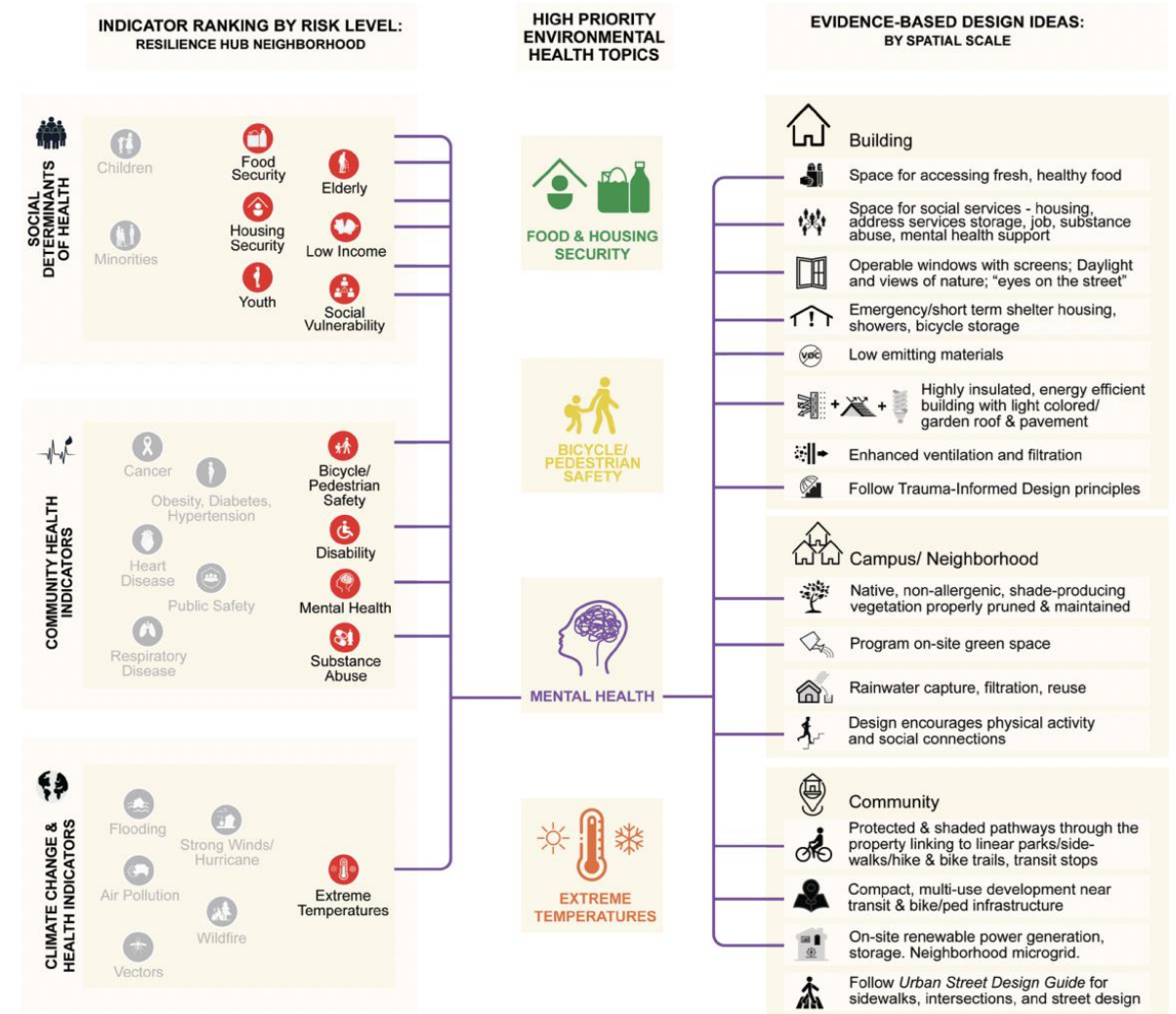
## Alignment Process and ArchEpi Tool & JWA

Primary focus = Public Health and the needs of our community

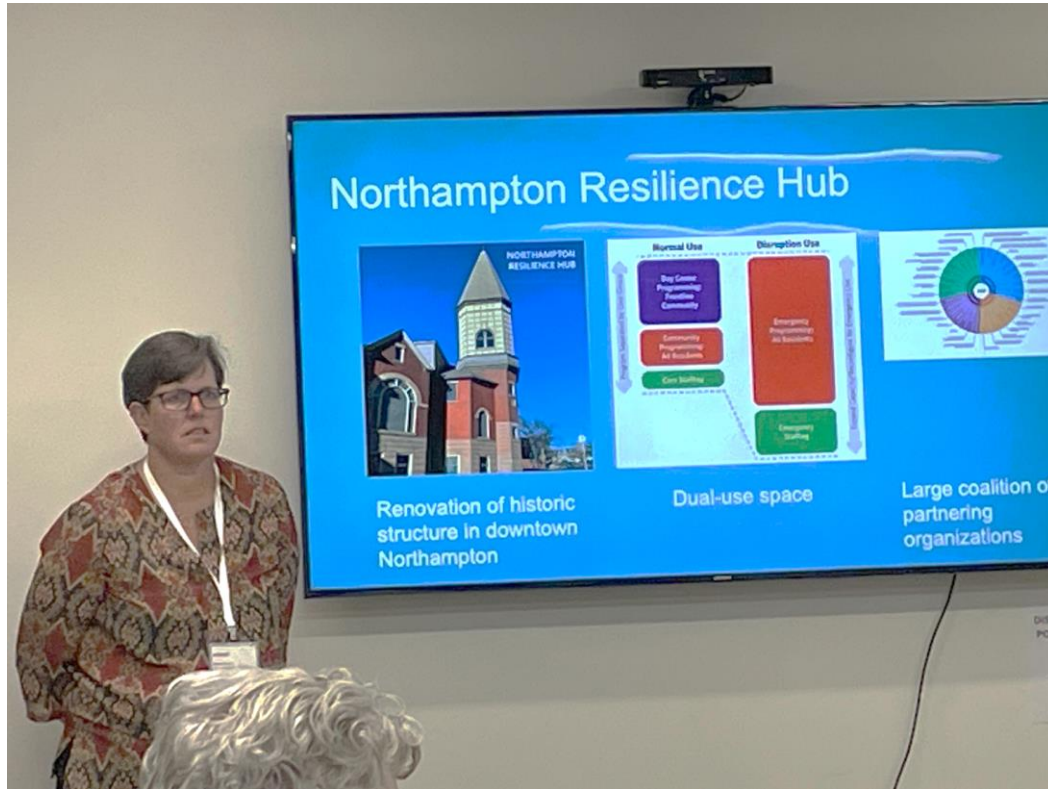
- Using **Architectural Epidemiology** to understand how environmental health issues affect residents
- Looking at data to suggest changes to the building that **address these health concerns**
- **Supporting** the health and well-being of our local community and **preparing** for future changes

Prepared by Adele Houghton (Biositu, LLC and Harvard T.H. Chan School of Public Health) and Xiaolin (Elle) Li (Harvard Graduate School of Design).

<https://www.alignmentprocess.org/project-25015821903>



# Northampton Climate and Environmental Vulnerabilities



Dorrie Brooks (Architect)

<https://www.joneswhitsett.com/jwa-team/dorrie-brooks-aia-ncarb>

- Communities face spatial inequalities in their vulnerability to **climate change impacts**
- Neighborhoods are susceptible to **heatwaves and flooding**
- Researchers examined the spatial correlation between **vulnerability to climate risks** and the **presence of green building strategies**
- Vulnerable areas did not show a spatial correlation with the implementation of protective green building strategies.

# Evaluation of Northampton's Division of Community Care (DCC)



**UMass Amherst  
Center for Program  
Evaluation (CPE)**

*University of  
Massachusetts  
Amherst*

# Mixed-Methods Evaluation

## What is a mixed-methods approach?

- Data is collected, analyzed, and reported using both quantitative and qualitative research methods

**Quantitative research:** Data collection through counting and/or asking targeted, precise questions then using statistical analysis

- Community Survey
- Records review

**Qualitative research:** Data collection through open-ended questions to gather contextual and perceptions from individuals and identify themes

- Key informant interviews
- Coding open-ended text in records



# Northampton Community Survey

## Purpose:

Identify community priorities relevant to the DCC's work and assess baseline awareness of the DCC before the official launch

## Survey Launch & Modes:

Online survey platform and street-intercept recruitment for comprehensive coverage.

## Data Collection:

June thru September 2023.  
Survey available in both English & Spanish.

## Participant Eligibility:

Must live, work, or receive services in Northampton, self-reported



The **UMass Center for Program Evaluation** is conducting an anonymous survey to measure community awareness & perceptions of the new **Northampton Division of Community Care**

### Eligibility

Participants must:  
**Live, Work, or**  
**Receive Services**  
in Northampton



### Time

This survey will  
take approx.  
**10 minutes** to  
complete

[www.bit.ly/dccnorthampton](http://www.bit.ly/dccnorthampton)

Help inform the development of this community program! If you have questions you can email researchers at [dcc-eval@umass.edu](mailto:dcc-eval@umass.edu)

# Northampton Community Survey

## Sampling Method:

Quasi-random sampling was used for selecting participants on the street and the online version utilized convenience sampling.

## Street-Intercept Survey Details:

- **Goal:** Engage populations less likely to participate online.
- **Method:** Surveys conducted on tablets, completion time ~5 minutes.
- **Incentive:** \$5 gift card (*Shelburne Falls Coffee Roasters or Dunkin Donuts*).

## Street-Intercept Data Collection:

- Main Street, Northampton: 5 days, 6-8 hour shifts with two data collectors.
- Northampton Stop & Shop: 2 days, 5-hour shifts with two data collectors.



# Results from the Community Survey

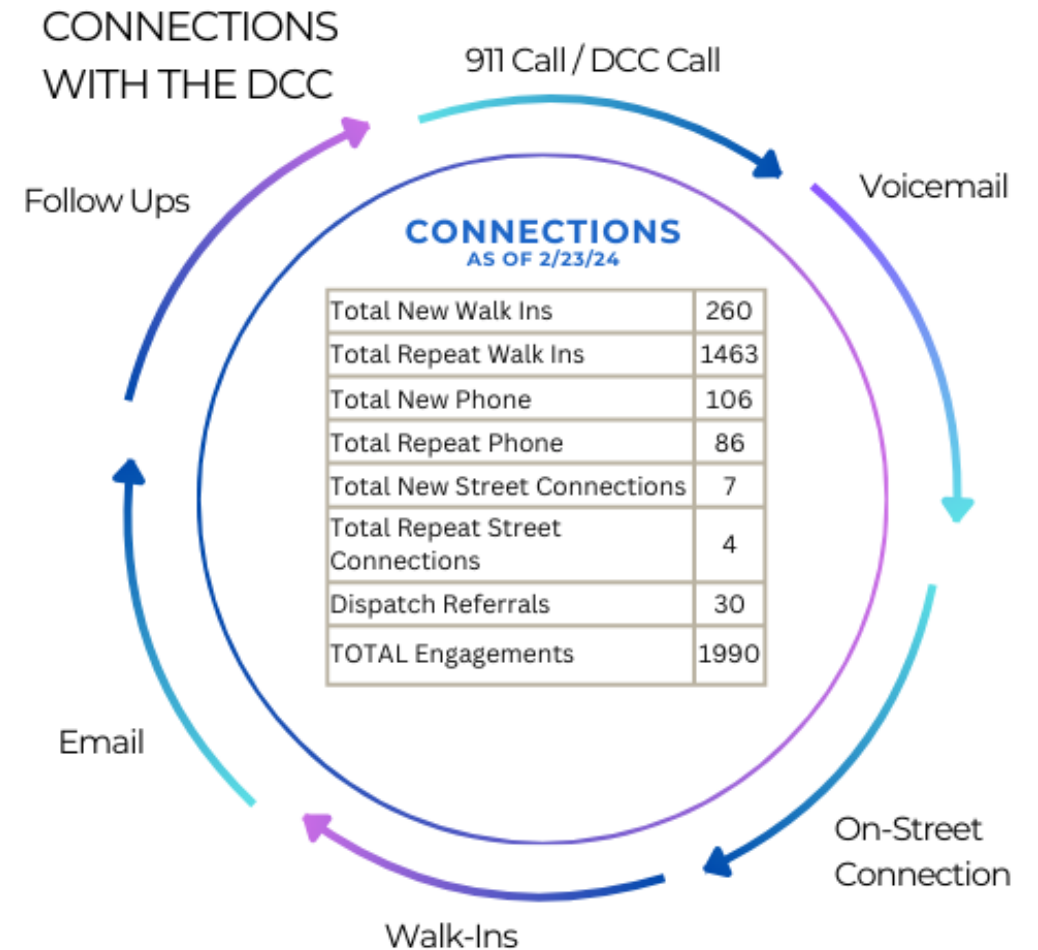
- **Collected 475 Responses**
  - Street-Intercept (45%) and Online (55%)
- 56% of survey participants were previously aware of the DCC
- The sample was diverse in terms of gender identity, race/ethnicity, and age
- Notable response from younger people through street-intercept, older age groups online.
- Results suggested an **increased likelihood of respondents calling the DCC** in various scenarios, including:
  - Individual(s) causing a public disturbance
  - Persons living in an abandoned building
  - Bathing in a public restroom or fountain
  - Sleeping on the sidewalk or public outdoor space
  - The use of illegal substances in a public place



# DHHS DCC Populations Being Served

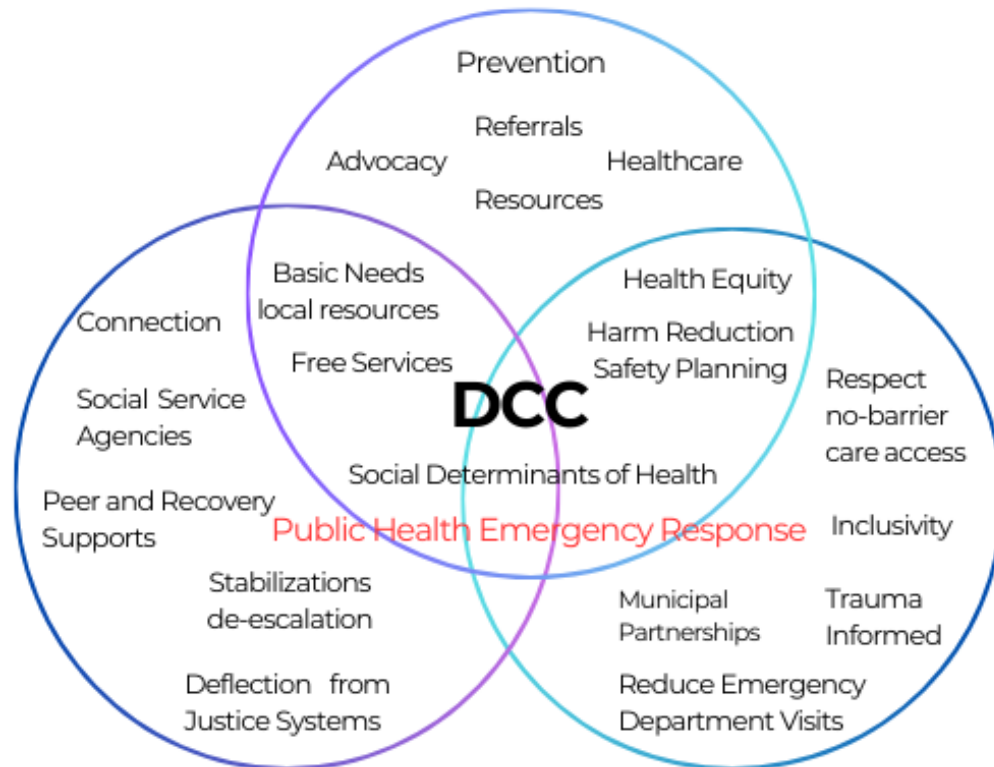
## Some of the Populations served by the DCC serves:

- Individuals with serious mental health conditions, Heavy alcohol use, Illegal drug use, History of violence
- Living in a shelter, Unstable housing (couch surfing, staying with friends), Street homelessness/living in encampments
- Black, Indigenous, or People of Color, LGBTQIA+, Veterans, People living with disabilities, At-risk Youth
- Not having enough money for basic needs like food, clothes, and housing costs, Traumatic experiences, Struggling to navigate conflicts with others
- Family members with challenges



# DHHS - Division of Community Care

## CROSS SECTOR COLLABORATION

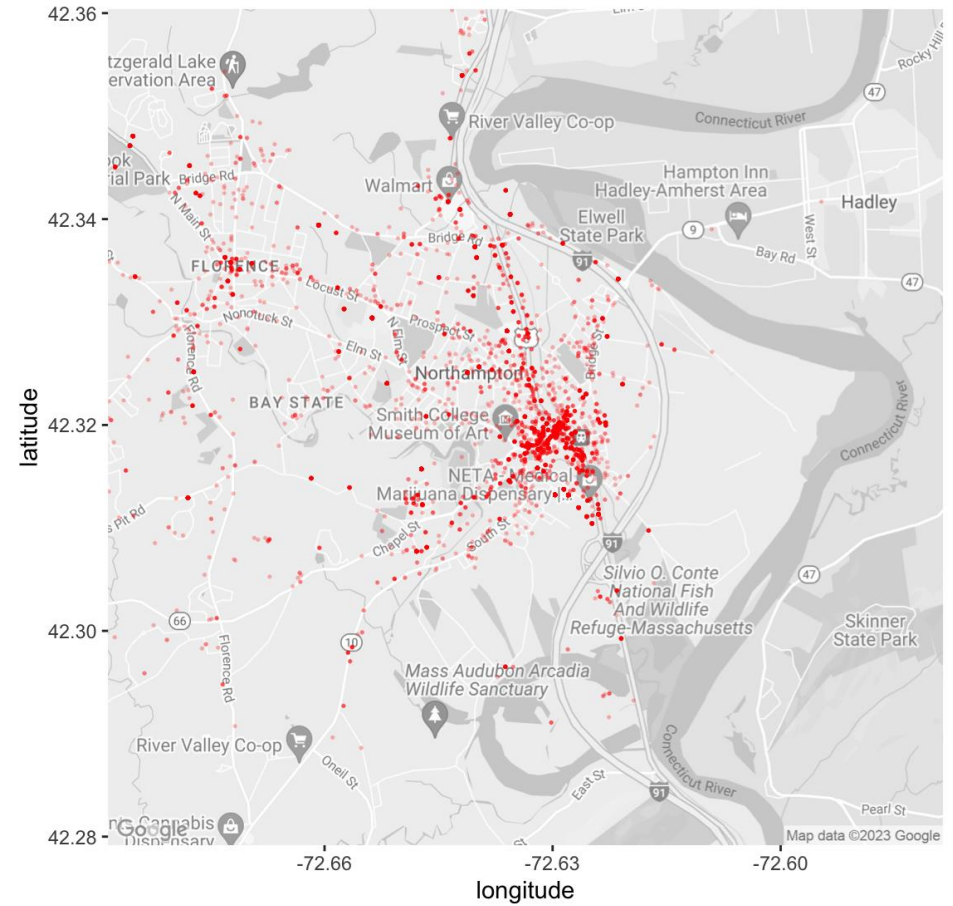
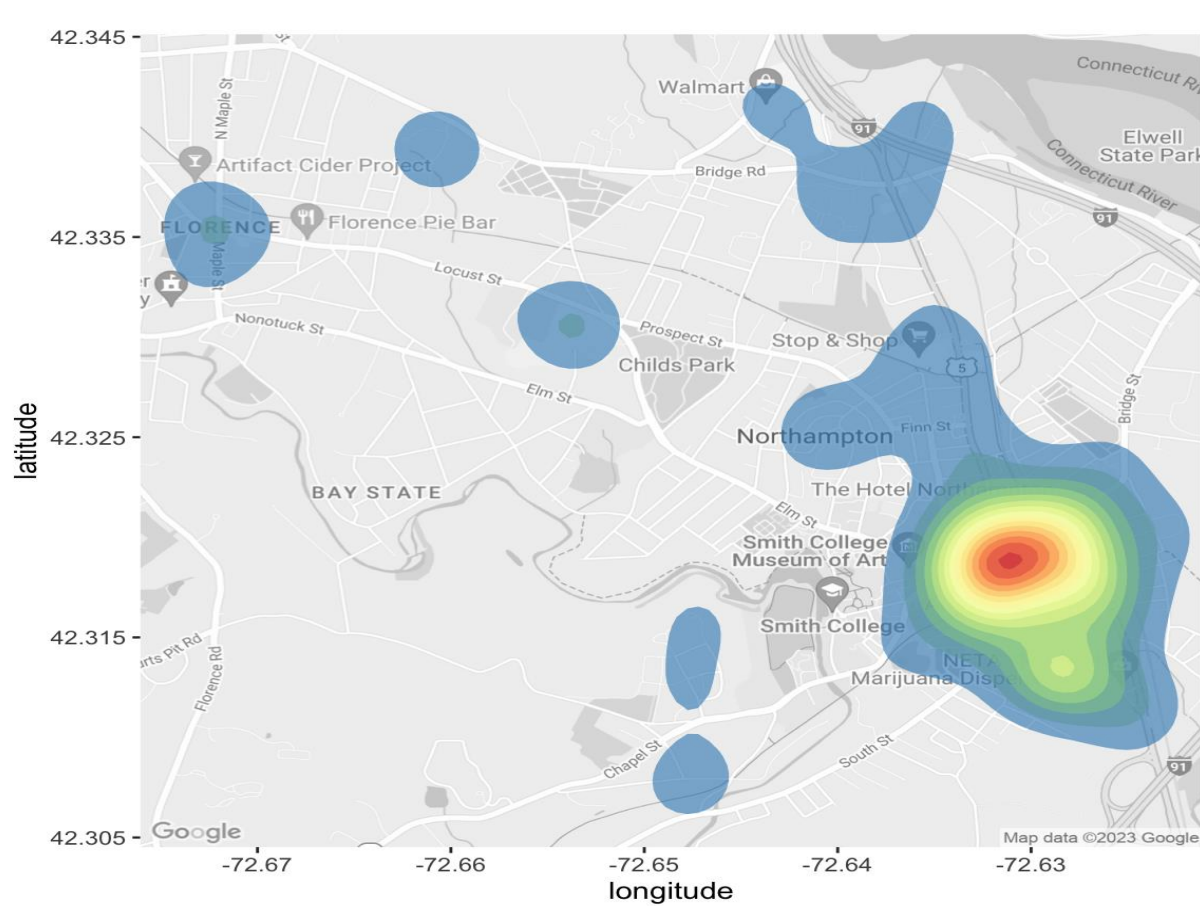


The DCC is working across sectors to transform the way in which our community supports those most in need.

## Top 6 DCC Services Provided

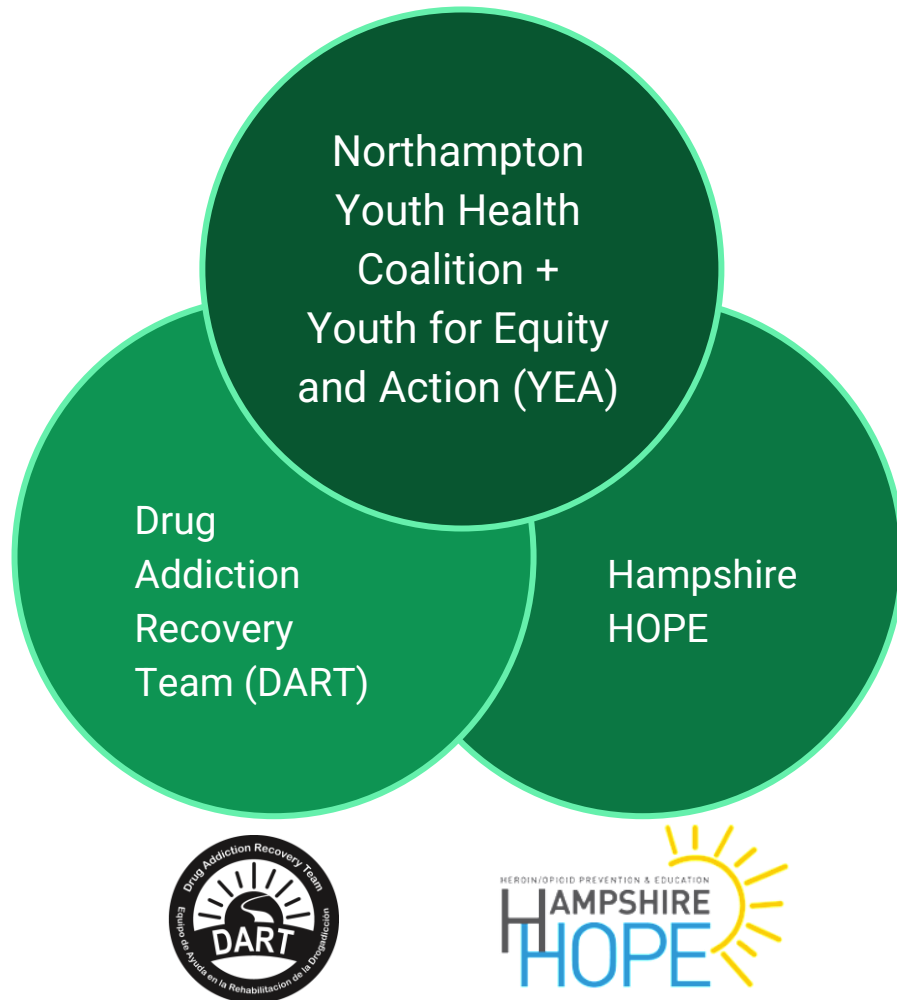
- Housing/Shelter Navigation
- Wellness Checks
- Community Resource Navigation
- Interpersonal Conflict Support
- Mental Health Support
- Emergency Public Safety Needs

# DHHS DCC Emergency Services Calls Spatial Analysis



\*Maps provided by the Law Enforcement Action Partnership, LEAP based on 2022 Northampton DCC emergency services data analysis for potential locations Community Responder anticipated calls

# DHHS - Division of Substance Use Prevention



Supporting the health and wellness of the greater Northampton community through the lens of health equity and substance addiction prevention.

- Work in tandem with the Division of Community Care to promote harm reduction and create connections to care

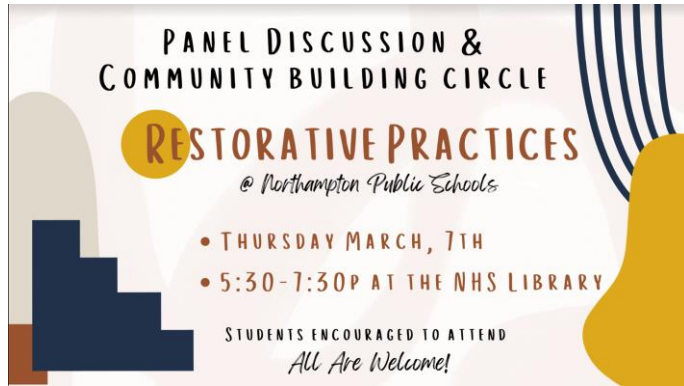
**Examples of outreach and engagement opportunities in 2023:**

- Eight Narcan/Overdose Response trainings for community members
- 60 Naloxboxes distributed across the county

**Since January 2024:**

- 555 kits of Narcan distributed to community members and made available via new Naloxboxes with the Northampton Housing Authority
- 1,100 Fentanyl test strips distributed

# DHHS - Division of Substance Use Prevention Youth for Equity and Action (YEA)



Youth for Equity and Action YEA researched their own health and created demands for health, wellness, for changes related to their school and community and have successfully conducted two photo exhibits

# DHHS - Division of Environmental Health

<b>Housing Inspections and Landlord/Tenant Issues</b>	When the Health Department receives a complaint, it will conduct a housing inspection. Any violations will be cited in writing and given to the owner and/or occupant. Contact the Health Department to file a complaint.
---	---



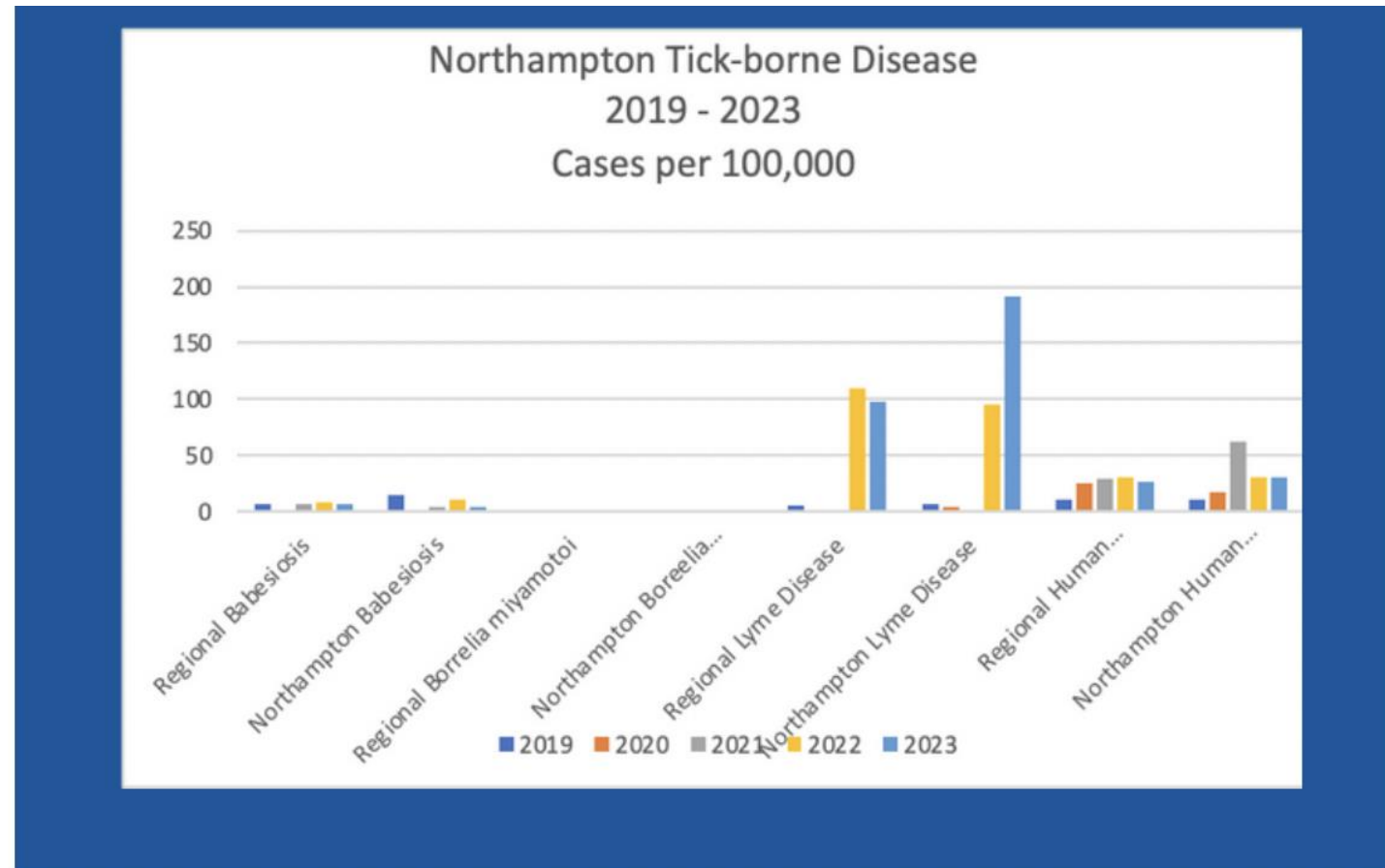
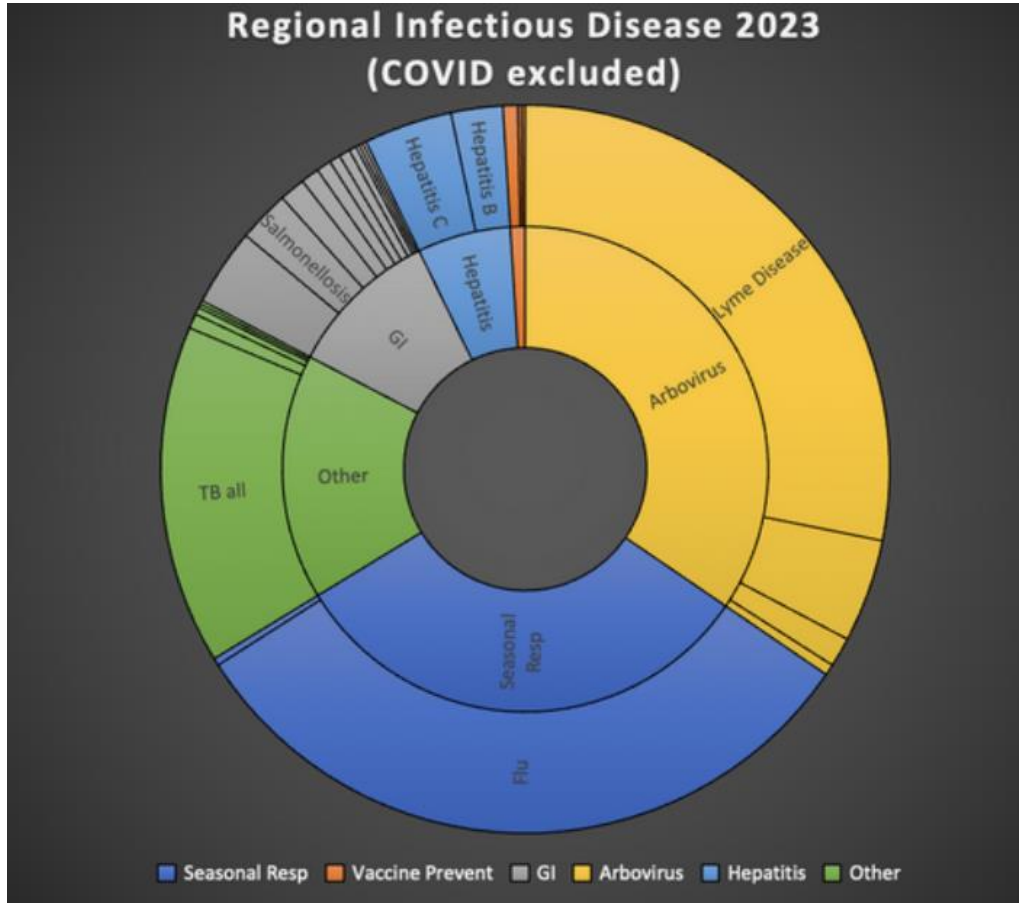
**Public Health**  
Prevent. Promote. Protect.

Northampton Department of  
Health & Human Services

## Risks and Vulnerabilities Identified Housing Inspections

- **In 2023: 210 housing complaints DHHS**
  - Mold and active leaks, pest infestations, insufficient heat or hot water.
- **In 2024: 67 housing complaints so far**
- **10 of the 67 complaints this year have been referred to DCC for their assistance.**
- **DCC often provides resources and support for renters rights and evictions**

# DHHS - Division of Public Health Nursing



\*Courtesy of Hampshire Public Health Shared Services Collaborative\*\*

Please note change in DPH Lyme Disease reporting in 2021 resulting in increased reported cases that may lead to perceived higher numbers.

# DHHS - Division of Emergency Preparedness

Assist the DHHS and regional health departments in constructing resilient communities to adeptly address various public health challenges, including infectious diseases and natural disasters.

## HOW CAN WE ENSURE THE SAFE AND EFFICIENT MANAGEMENT OF OUR COMMUNITY IN TIMES OF CRISIS?

1. Strategic preparation.
2. Cultivation of partnerships within the community.
3. Utilization of skilled and committed community volunteers.
4. Emphasis on communication methods to reach all community and especially vulnerable populations.



# DHHS - Division of Emergency Preparedness

Normal Function	During Disruption	After Disruption
<ul style="list-style-type: none"> <li>-Meeting Spaces</li> <li>-Risk Awareness Education</li> <li>-Support workforce development</li> <li>-Recreation amenities</li> <li>-Restrooms and showers facilities</li> <li>-Emergency power supply</li> <li>-Temporary heating and cooling solutions</li> <li>-After school activities</li> </ul>	<ul style="list-style-type: none"> <li>-Mental Health Support</li> <li>-Provision of Medical Supplies</li> <li>-Food and Meal preparation resources</li> <li>-Distribution of Potable Water + Water Bottle</li> <li>-Childcare services for electronic devices</li> <li>-Charging Stations</li> <li>-Collaboration with Police and Fire Dept</li> <li>-Provision of Cots / Blankets / Bassinets</li> </ul>	<ul style="list-style-type: none"> <li>-Mental Health Assistance</li> <li>-Childcare services for post-event (especially if school(s) are closed)</li> <li>-Management of Supply and Tool Storage Check-out</li> </ul> <p><u>Education:</u></p> <ul style="list-style-type: none"> <li>-Introduction to Mold</li> <li>-Guidance on Completing Insurance Claims and Providing Information</li> </ul>

Based on the survey data from the 3/35/24 Resilience HUB community meeting our we learned people are concerned about climate when related to flooding, and increased temperatures or situational responses due to weather related emergencies. The HUB is focused on creating interventions that minimize the health effects related to those disasters. It will provide cooling centers which are critical during heat waves, as well as water, charging stations, during normal operation but especially during extreme weather situations such as flooding.

# Environmental Resilience Aspects of the Hub

Dr. Ben Weil

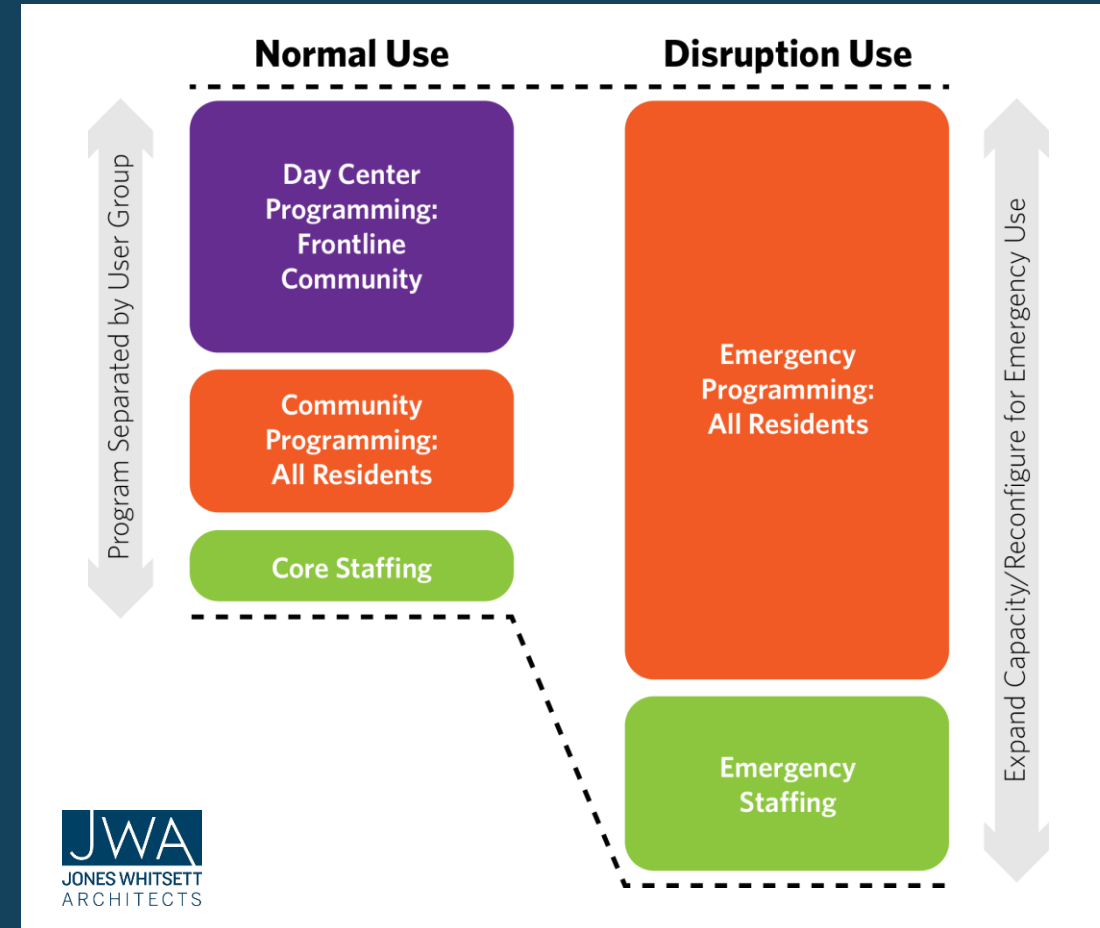
INTERIM DIRECTOR

CLIMATE ACTION & PROJECT ADMINISTRATION



# Climate Driven Emergencies

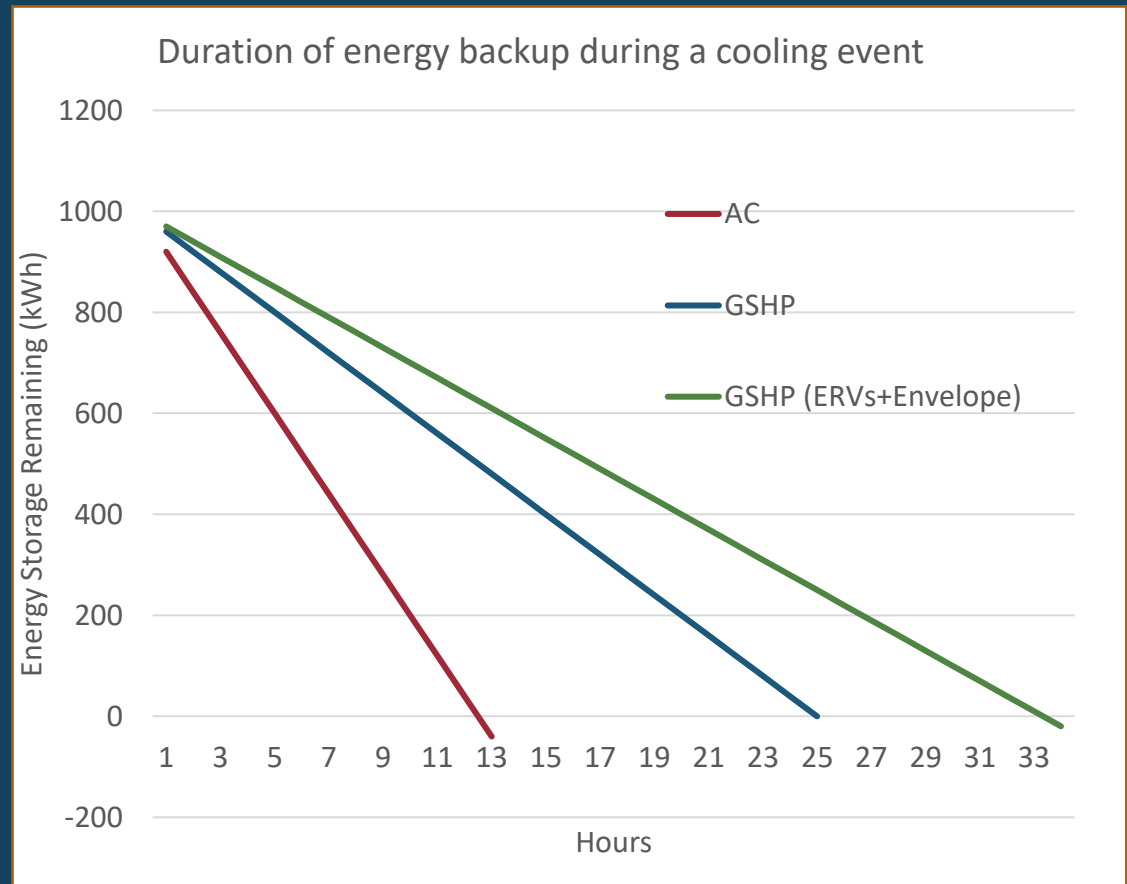
- floods
- heat-waves
- destructive storms
- power-outages
- Hub capabilities: a safe place for people to go in emergencies
  - resource distribution
  - clean air, heat, cooling
  - access to water and power
  - laundry
  - kitchen
  - showers



# Power outage: energy efficiency increases duration of stored energy capacity

## Cooling Example:

- 1000 kWh battery (or a generator with 125 gal diesel stored onsite)
- Basic envelope and ventilation: 114 ton cooling load
- Air cooled VRF cooling: 12 hours
- Ground Source Heat Pump cooling: 24 hours
- Better envelope + Enthalpy recovery ventilation: 86 ton cooling load
- With GSHP: 33 hours

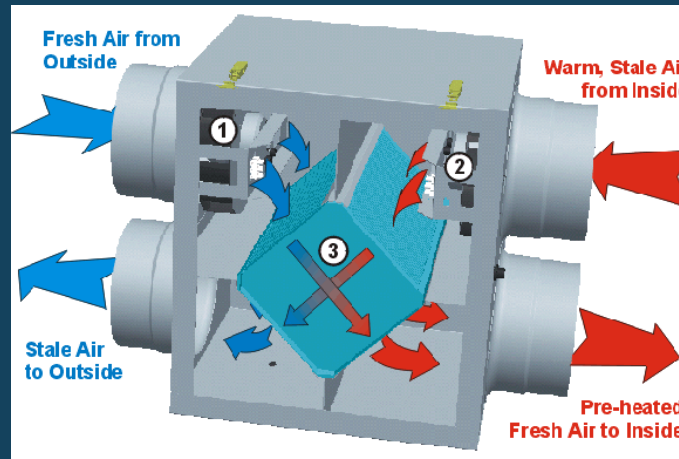


# SCENARIO: 2011 Halloween Snowstorm

*Power not restored for 9 days in some places = 216 hours*

- Average outdoor temp during outage: 25°F
- Human metabolic thermal output: 356 Btu/h per person
- Ventilation requirement: 10 ft<sup>3</sup>/min results in 464 Btu/h required to heat ventilation air.
- Vent heat requirement: 464-356= 108 Btu/h per person
- Assume 200 people. Allocate 30 kWh of storage to heating ventilation air: 18 hours

- With 75% efficient ERV, 348 Btu/h is recovered to fresh air.
- 356-116=240 Btu/ per person.
- Each person contributes to heating the building



# Transportation and Walkability

- Hub location enables access when roads are blocked or for people with no access to cars
- 40% population is within 1 mile

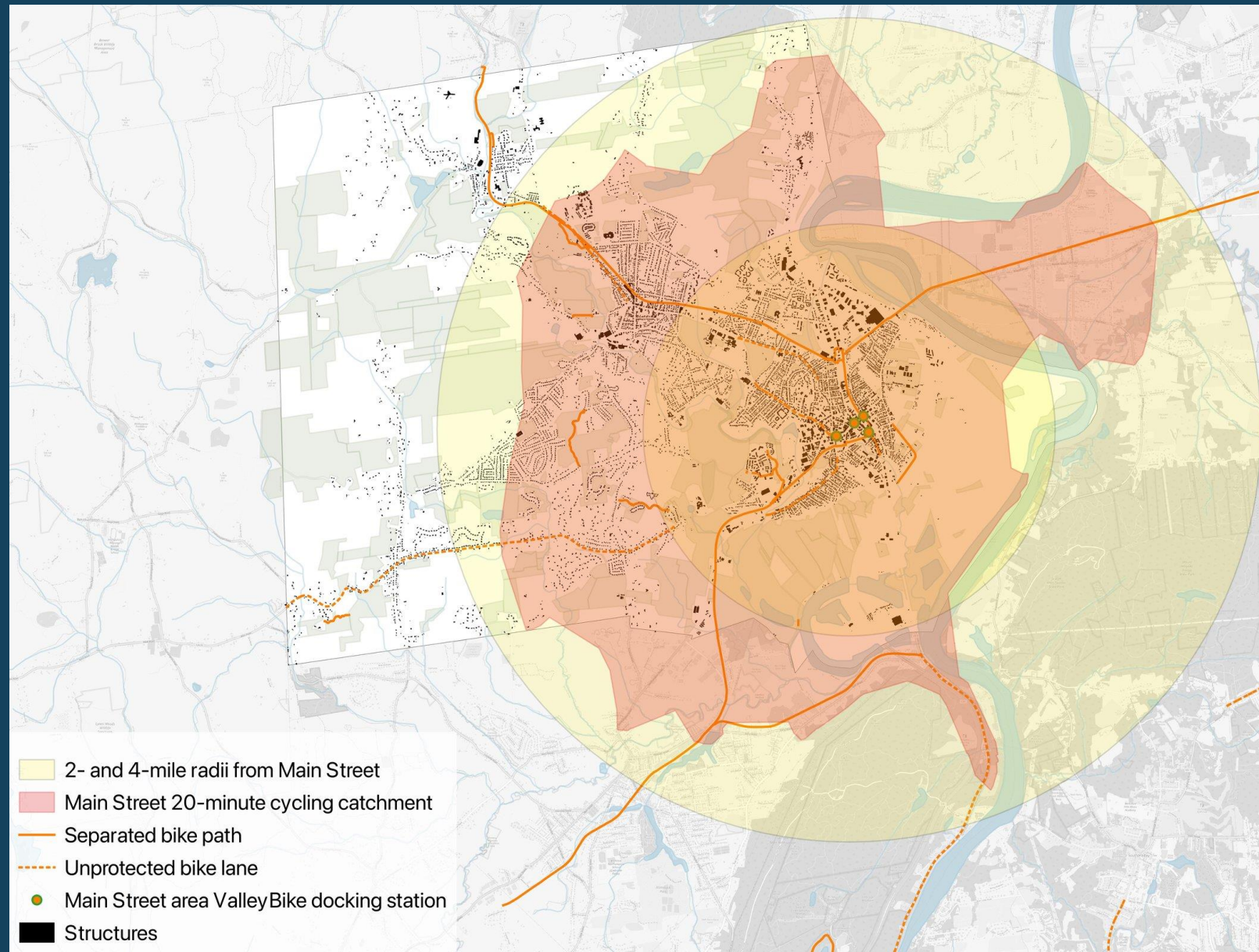


Image Credit: Mathew Muspratt. <https://www.mmuspratt.com/code-portfolio/northampton-main-st-bike-lanes>

# Upcoming Discussions

**June 5, 2024, 6pm : "Connections & Collaborations: Envisioning Comprehensive Care"**

Discussing the integration of services and the role of partnerships in shaping a Hub that's more than the sum of its parts, focusing on holistic community support.



# Questions + Answers



# Thank you!



To follow the Hub design process, visit  
[www.northamptoncommunityresiliencehub.org](http://www.northamptoncommunityresiliencehub.org)