

# Blight to Bright

## Pioneering Post-Industrial Cities as Sustainability Hubs

## PAST

### Background

This research centres the city of Binghamton, NY as a model for post-industrial cities with dilapidation across the United States. As such, it's imperative to make note of past context of both the U.S and Binghamton, their respective impact on present context, and its culmination in setting precedent for future context.

In the 20th century, many American policies were enacted that impacted the facade of cities. Given high demographics of immigrants and low income Americans, cities were looked down upon following the roaring 20s, with loans planned to be withheld from urban areas in 1934. In the 50s, national security concerns brought on by the Cold War led to industries being urged to relocate from urban areas, and further investment into highways through the U.S Defense Highway Act. Consequently, city growth slowed, and the outskirts grew more rapidly, with this becoming known as suburbanization. Vacant lots and abandoned infrastructure arise from suburbanization, thus their presence in cities following this. Many also moved to the South due to better climate, cheaper costs for land, and research opportunities.

During the 20th Century, the city of Endicott headquartered IBM, and the Endicott-Johnson Shoe Company, bringing in continued population growth into the city of Binghamton. Both companies gradually scaled down their services, ultimately ceasing operations. Originally Triple Cities College, Binghamton University (BU) is a school that has grown into an R1 Research institution, and as such, is the largest employer for Binghamton residents. In the late 20th century, Broome County's population increased while the city of Binghamton decreased; likely attributed to BU pulling people out of the cities (Endicott, Johnson City, Binghamton) into the suburbs to be closer to work. Currently, only 400 vacant lots in Binghamton are owned by the city, while the rest are privately owned. The city is particularly susceptible to negligent ownership, suggesting that many of these lots aren't well maintained, and don't have any plans of investment.

## Methodology

This study calls for a multipronged approach of:

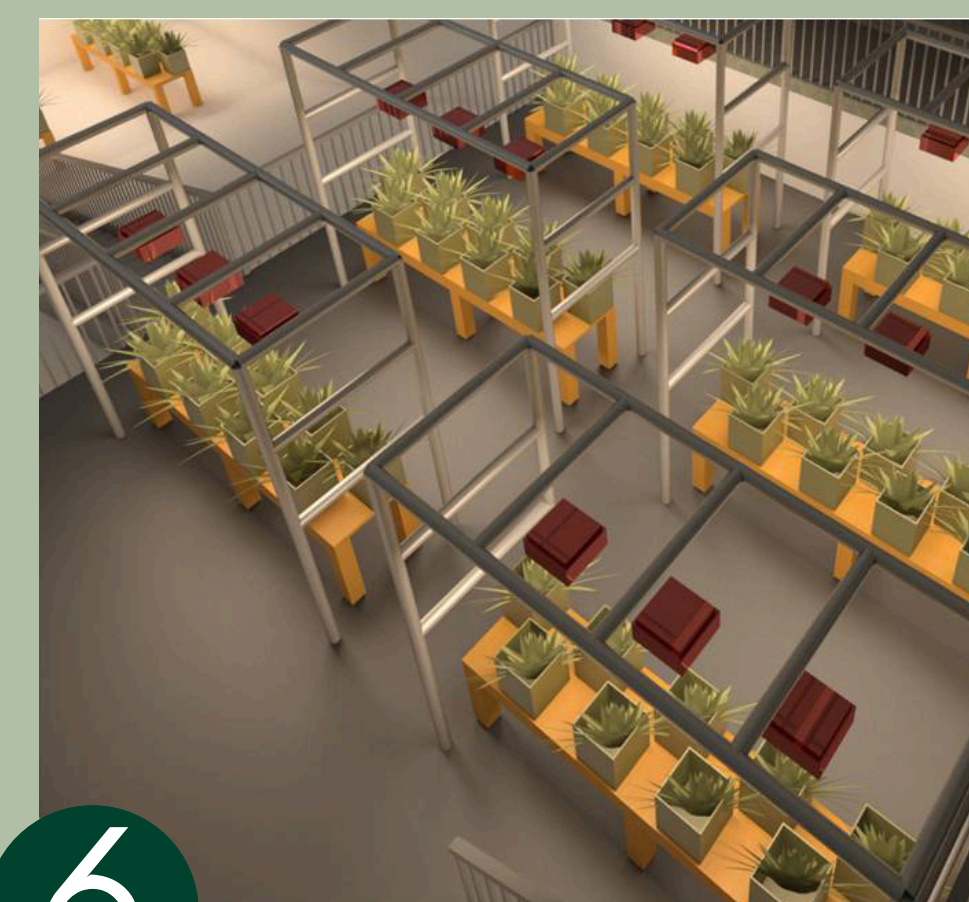
- Analysing theses of similar work previously done by students @ BU
- Reading Binghamton-based news stories on sustainable initiative and history of city events
- Listening to professionals in sustainable-driven organisations in a panel/lecture/summit setting
- Looking at Broome County and City of Binghamton Climate Action Plans
- Interactions with Binghamton locals for authentic feedback/input
- Referencing a case study concerning hydroponics and their effectiveness
- Exploring green technologies and their practical applications in Binghamton/Broome County

## WE ARE LEFT WITH LOTS AND DESPAIR. WHAT NOW?



## PRESENT

### Sites of Interest



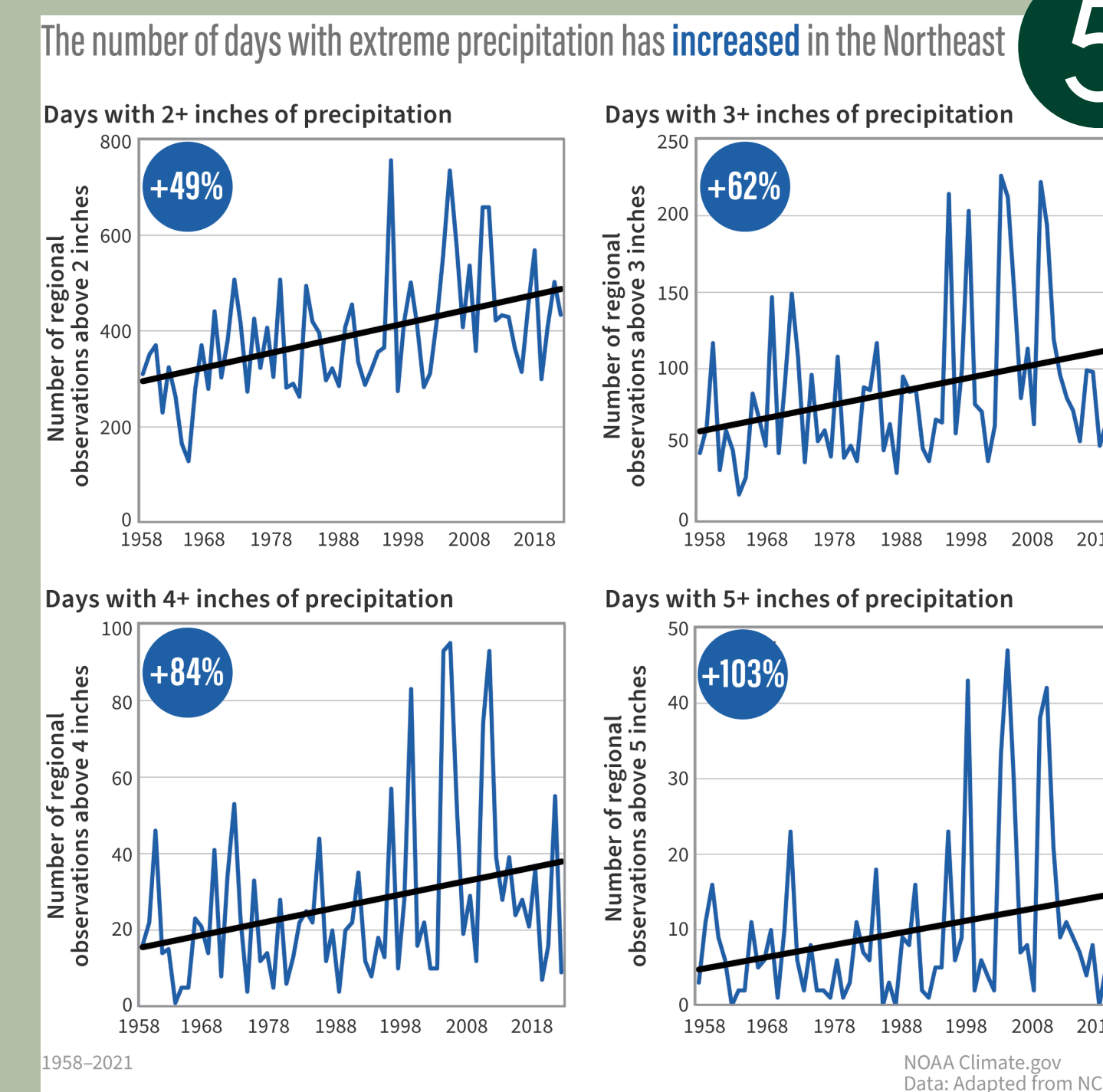
## REAL IMPACTS. REAL PLACES. REAL PEOPLE.

- 1 - 4-8 Charlotte Street
- 2 - Masonic Building on Main St
- 3 - 263 Washington St
- 4 - 2011 Downtown Binghamton Flooding
- 5 - NOAA report on increased precipitation in Northeast U.S
- 6 - 2016 Watson School of Engineering Hydroponics Garden Proposal for YWCA pool
- 7 - VINES Urban Farm

### Findings

With the present context, there are several institutions and organizations alike involved in ensuring a green and sustainable future for Binghamton and Broome County Alike. The City of Binghamton is a key stakeholder in ensuring this, since they're the ones that have jurisdiction over the city and county as the capital. Upon attending the 2025 Climate Change Summit, I became aware that the city does have a Climate Change Action Plan that integrates non profits and other organizations. It addresses the broad subject of climate change into working groups of Energy, Food, Housing, Health, Housing, Infrastructure, Transportation, and Refugees/Social Services. Organisations like VINES, NEST (Network for a Sustainable Tomorrow), New Energy New York, and Hidden Pearls Healing Centre all are doing sustainability-centred work in the area.

Most notably, VINES has done work to ensure locally grown food actually lands on people's tables, and that they're willing to embrace consuming food grown from an urban farming setting. My research report further discusses people's willingness to consume and purchase food sources from non-traditional farming methods. The chart (Figure 1) on this poster shows the mean scales of people's ratings from a 1 to 5 scale, 1 being strongly disagree, and 5 being strongly agree, on their willingness to accept, consume, pay a premium, and overall behavioural intentions with urban, hydroponic, and robotic farming methods.



Furthermore, the funding does exist, albeit in jeopardy with the current federal administration, New York State historically has had state regulations firmly protecting the environment. Commercial PACE (Property Assessed Clean Energy) empowers property owners to implement clean energy to their establishments without worrying about an upfront cost, and can be on a repayment plan anywhere from 20-30 years long. It is presently on hold, but serves as a matter to put more pressure on representatives as the general public to ensure this type of green financing

## FUTURE

### Conclusion

This goes to show that initiatives and passion for the environment is something that the public and government care about. This is extremely important as almost a third of Greenhouse Gas Emissions (GHG) are sourced from Industry and commercialism. For individuals, this mostly means buying less things. However, governments play a more significant role, and need to nurture clean energy initiatives, internally and externally. These 400 vacant lots that the cities own, along with abandoned properties throughout the city, have a future that greatly depends on public-government collaboration.

Hydroponics are an excellent example of a different and unique direction Binghamton could take in ensuring a more sustainable future. Unlike the current urban farming initiatives in place, a hydroponics environment will allow for year round production. With rehabilitating infrastructure like the ones highlighted in my poster, hydroponic farming can become an interactive experience with the public, possibly attracting more tourism into the City and County to further boost its economy.

Wind farming and fog farming could also be of potential use in Binghamton. The mountainous terrain in the area may both serve the area. Having lived in a sea adjacent climate, now studying at BU in a different climate, I have definitely observed higher winds and fog presence in Binghamton. Overall, more weather based research needs to be conducted to evaluate the logistics of the latter two infrastructure. However, Binghamton is in an excellent position socially, politically, and economically to do much more in the sustainability realm. With BU's increased reputation, and increased selectivity, there is only progress to be made to be the poster child for a sustainable rust belt city.

## WE CAN TAKE ACTION.

Figure 1	Willingness to Accept		Willingness to consume		Willingness to pay a premium		Behavioral intentions	
	Mean	SE	Mean	SE	Mean	SE	Mean	SE
Urban	4.26 <sup>A</sup>	0.06	4.32 <sup>A</sup>	0.06	3.18 <sup>A</sup>	0.09	3.92 <sup>A</sup>	0.05
Hydroponic	3.61 <sup>B</sup>	0.08	4.05 <sup>B</sup>	0.07	2.62 <sup>B</sup>	0.09	3.43 <sup>B</sup>	0.06
Robotic	3.45 <sup>B</sup>	0.07	4.01 <sup>B</sup>	0.07	2.32 <sup>C</sup>	0.09	3.26 <sup>C</sup>	0.06

LEARN & GROW FROM OTHERS.

SCAN ME!

