

# **PIXELS**

**PORTFOLIO**

M.S. Architecture and Urban Design

**ANTONIA MEDINA ABELL**



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## PIXEL

pix·el \ noun

any of the small discrete elements that together constitute an image (as on a television or digital screen)  
[Merriam-Webster Dictionary]

SHORT DOCUMENTARY:  
**SUNSET PARK**  
**LIVE – WORK – PLAY**

Sunset Park, NY.

**READING NEW YORK URBANISMS**

(RNYU)

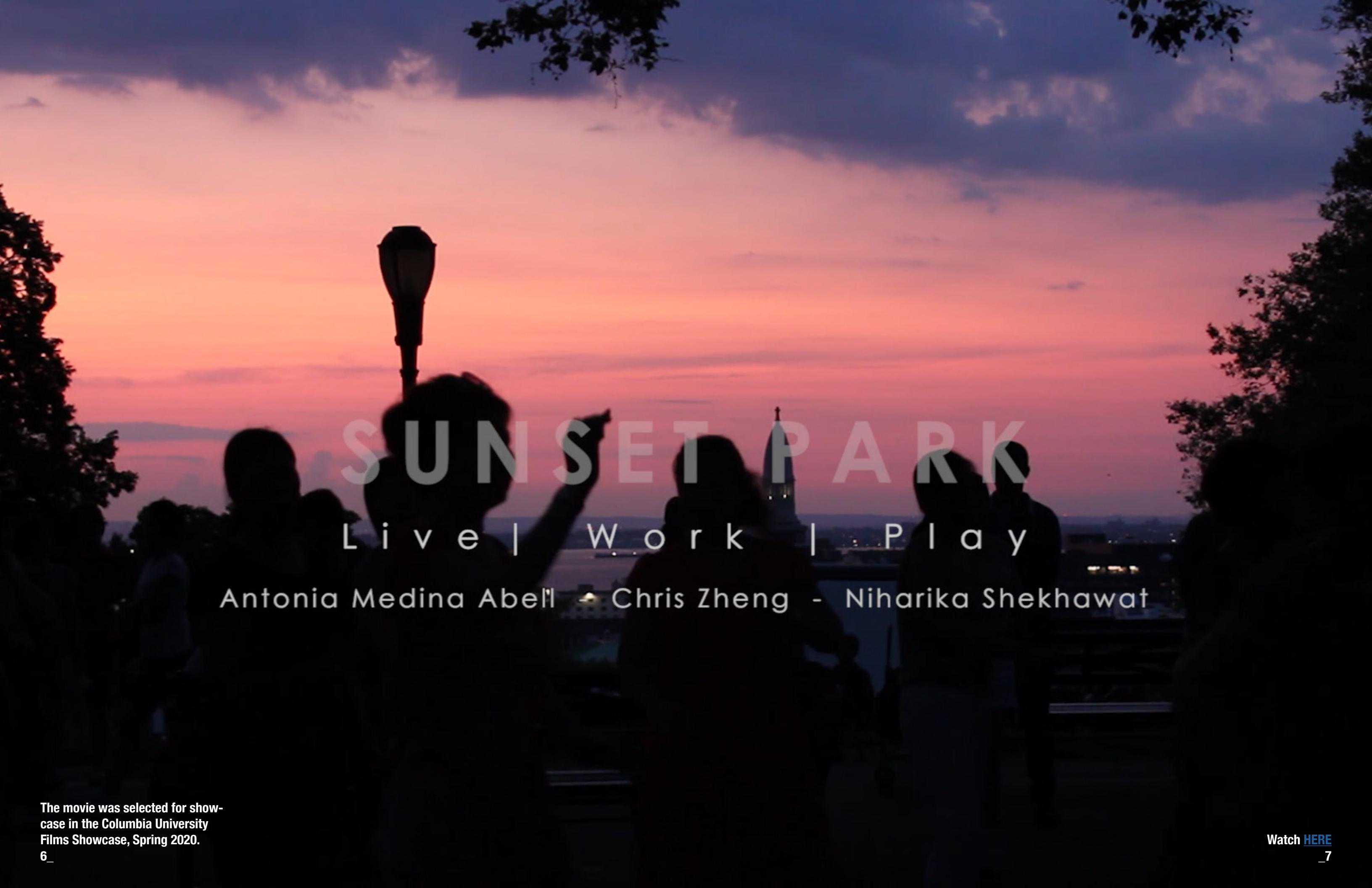
Antonia Medina Abell,  
Niharika Shekhwat,  
Chris Zheng.

This film focuses on Sunset Park through the lens of the activities and identities that allow for this heterogeneous neighborhood to stay vibrant and special: to be a resident, a business, a community during an afternoon summer or a visitor in the park that gives the neighborhood its name. It also addresses some of the current challenges of the place, such as rising rents, competition with big business chains and stores closing. It includes interviews to people with these perspectives and clips about the overall neighborhood feel.

The movie was the final project for Reading New York Urbanism, dictated by Cassim Shepard during the Summer Semester of the GSAPP AUD program.

My role included conducting interviews, filming b-roll, assembling the storyboard and crafting the narrative, editing videos in AdobeAfter Effects and Premiere and adding subtitles.



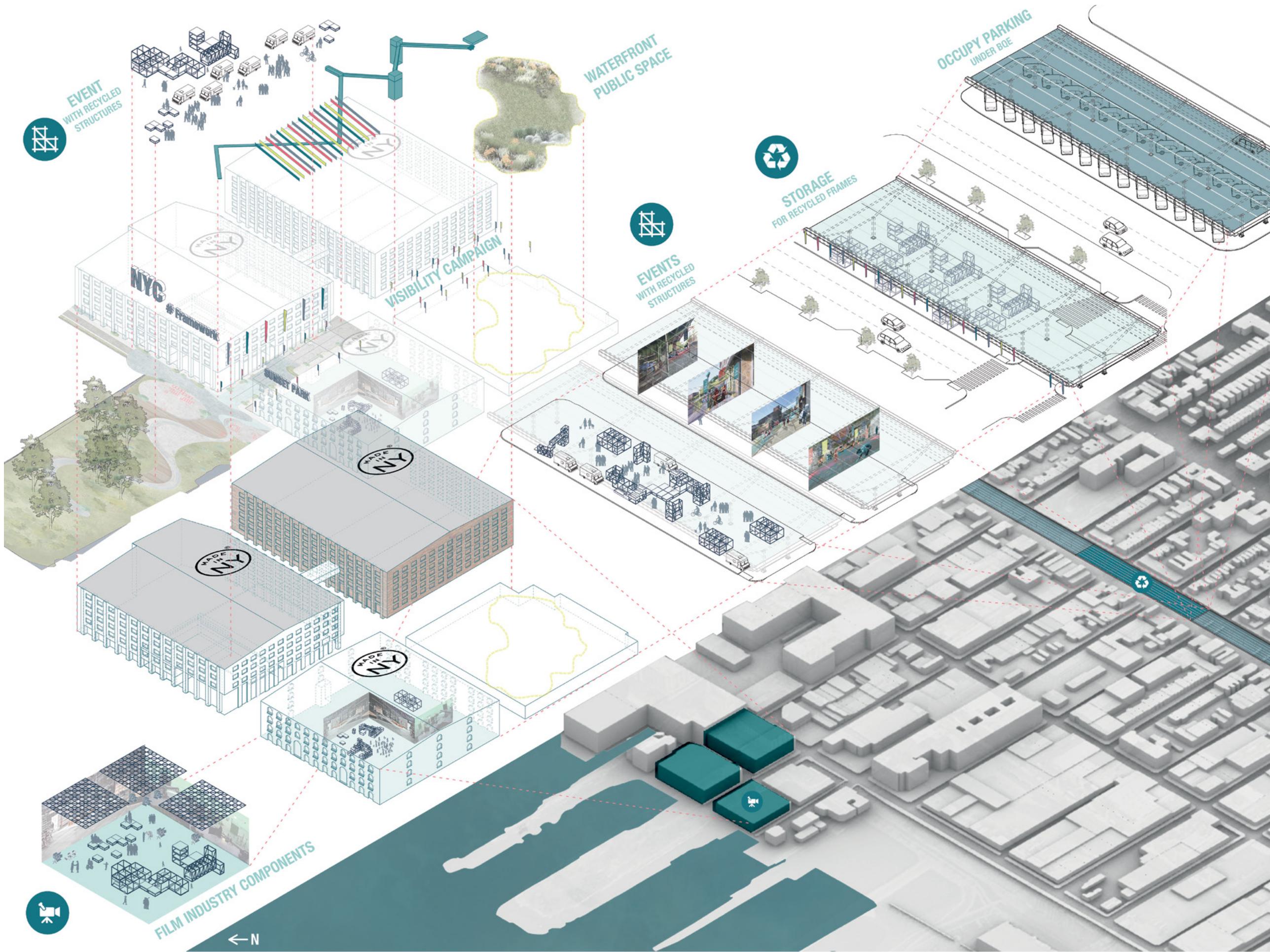
A photograph of a sunset over a park. In the foreground, several people are silhouetted against the bright sky. A tall, thin signpost stands prominently on the left. The sky is a vibrant mix of orange, yellow, and blue. In the center, large, semi-transparent white letters spell out "SUNSET PARK".

# SUNSET PARK

Live | Work | Play

Antonia Medina Abell • Chris Zheng - Niharika Shekhawat

The movie was selected for show-case in the Columbia University Films Showcase, Spring 2020.



COMBINATORY DRAWING:  
STAGES TIMEFRAME  
Sunset Park, NY.

**DIGITAL TECHNIQUES  
(DTEQ)**  
Antonia Medina Abell

DTEQ introduced representational techniques, skills, and softwares for urban designers. In conjunction with the UD studio, we learned to use digital media as part of the design process, weaving together software platforms, research agendas, and design strategies in smooth, interoperable, and collaborative workflow [from the course description].

The course was structured through a series of lectures, labs, and workshops.

This drawing collects in one place all the moments and processes we designed for our Studio project, combining them into one diagrammatic approach that signals how all of them interact and depend on one another. The software used included Rhino, Illustrator, Photoshop and After Effects.



## FRAMEWORK

BALANCING GROWTH  
AND OPPORTUNITY  
Sunset Park, NY.

### THE FIVE BOROUGH STUDIO (SUMMER)

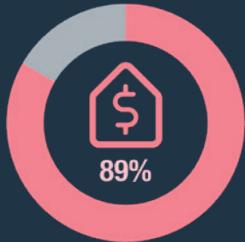
Antonia Medina Abell,  
Mary Allen. You-Chiao (Joy) Wu.

With the recent resurgence of the industrial waterfront in Sunset Park, there is a growing unbalance between the residents and industry. Residents resist the new industry, and in some cases, their educational attainment excludes them from taking advantage of these changes.

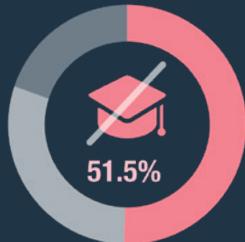
Our proposal aims to make Sunset Park residents a vital part of the new development. Using streetscape intervention and underused educational and community spaces, Framework will offer programs that give people new tools to thrive in these upcoming industries. Additionally, Framework will create temporal spaces that will bring more visibility to the educational programs, while offering new and changing open spaces in the neighborhood.



Live Below the  
Poverty Line  
— Brooklyn 19.8%  
— NYC 18%



Rents Increase  
from 2002-2017  
from Avg. \$775 to \$1470 .

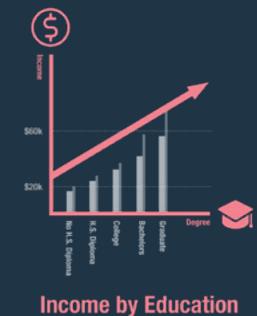


Have less than a  
High School Degree.

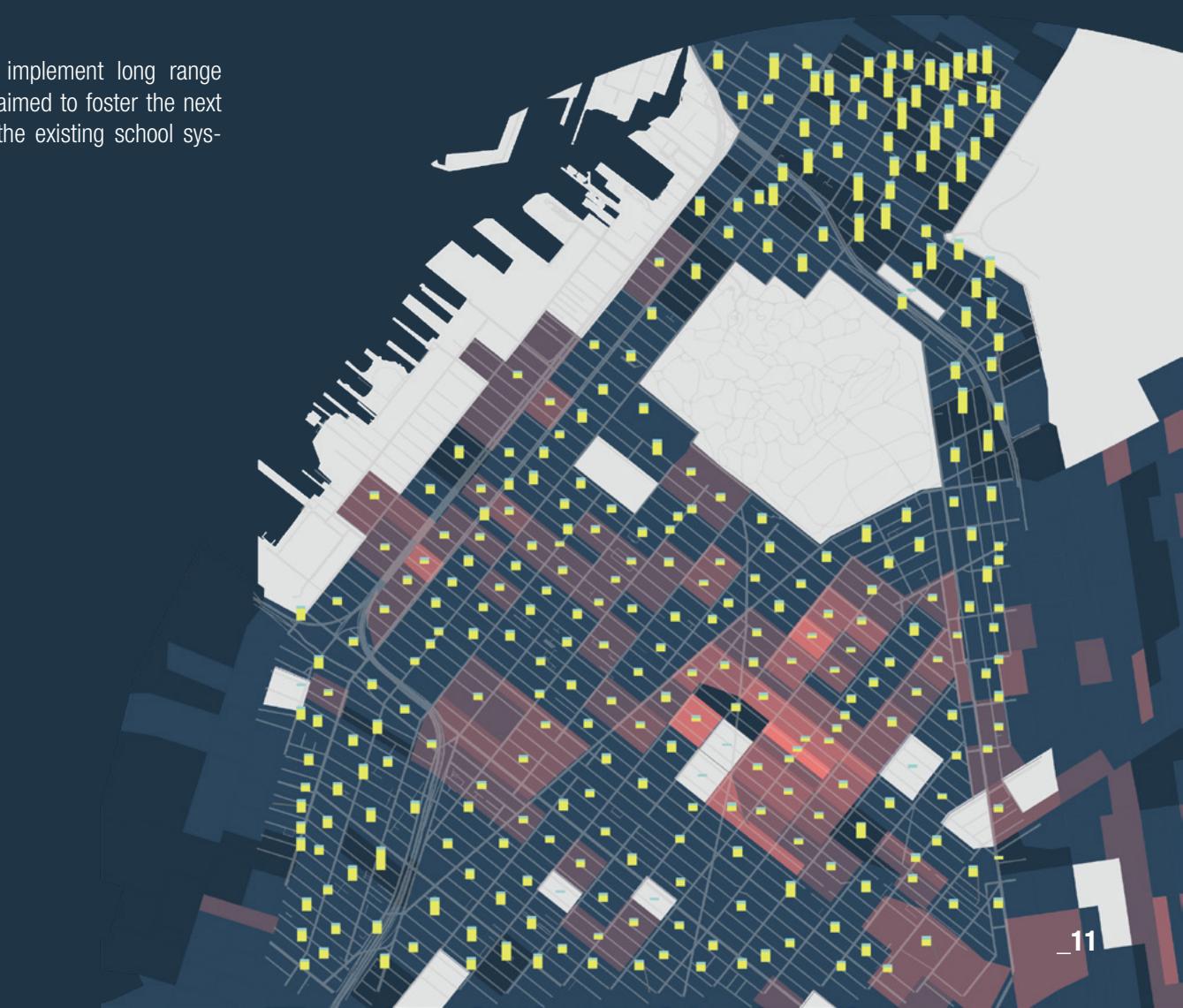
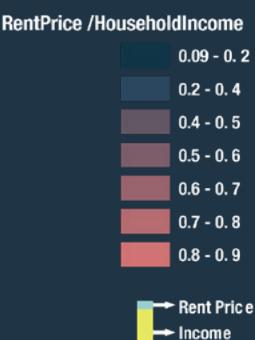
## THE PROJECT

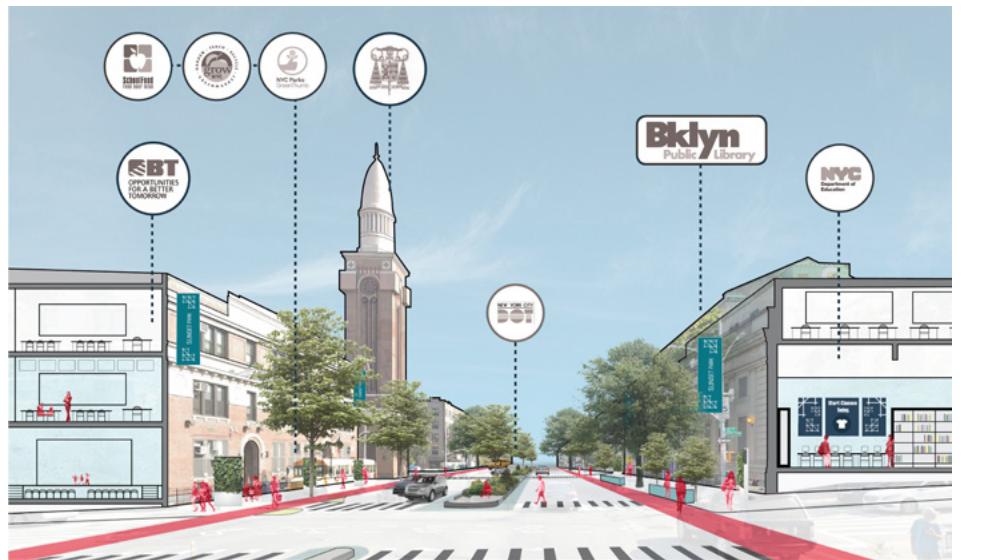
To connect the industrial and residential areas and make them support each other, this education program will be exposed to the neighborhood through the use of a public social campaign. This campaign includes hard infrastructure changes and improvements in public spaces and streetscapes, as well as the utilization of existing community spaces.

The program will implement long range educational goals aimed to foster the next generation within the existing school system.

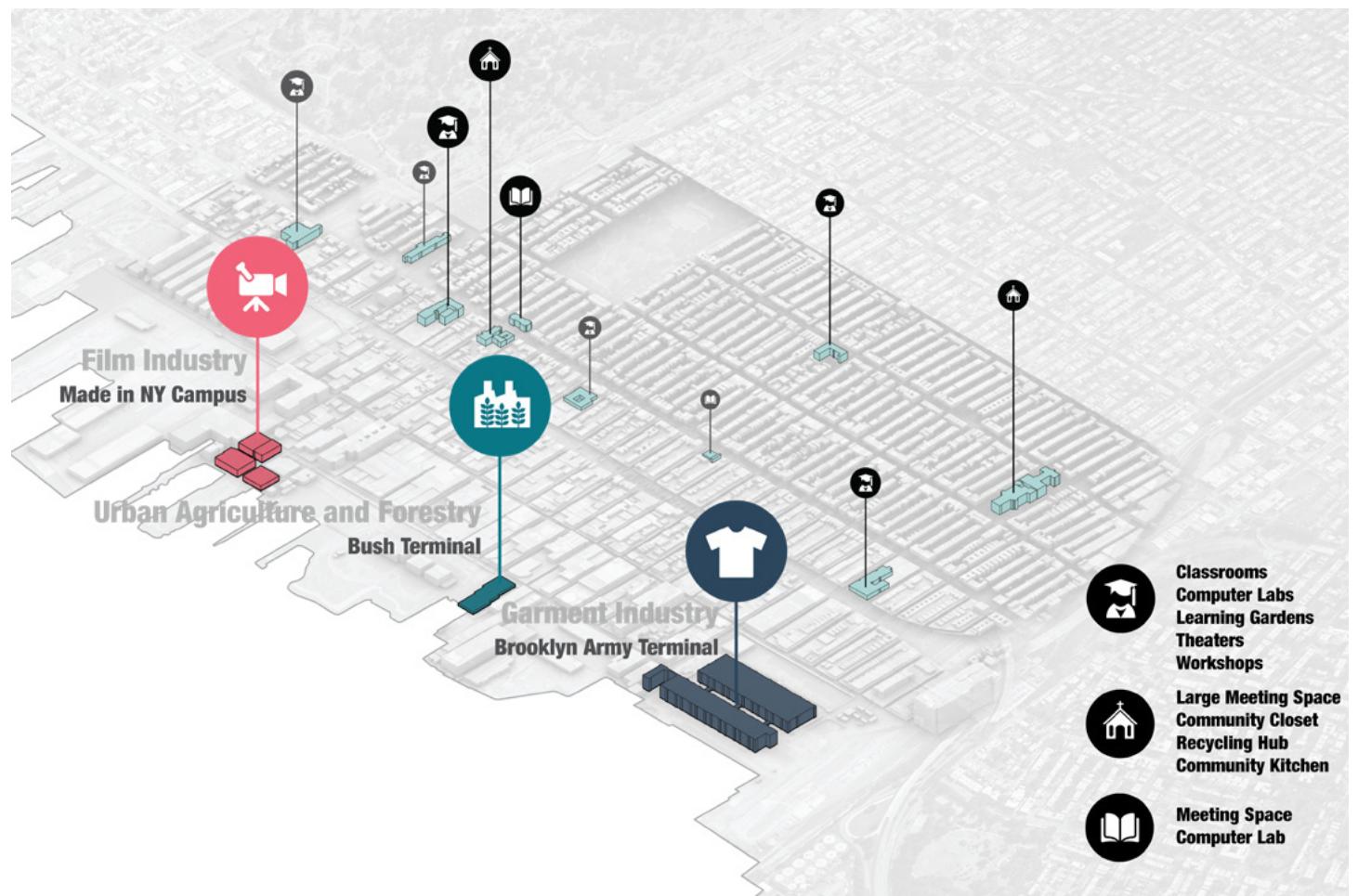


Income by Education





Using streetscape design elements such as learning gardens, recycling hubs, bus stop signage (and later connecting certain bus stops), parking space can be reclaimed for neighborhood activities and reunion spaces, strengthening the bicycle network, and creating an industrial waterfront park that connects all the industries involved in this partnership.



### JOB



Production Management

### TRAINING

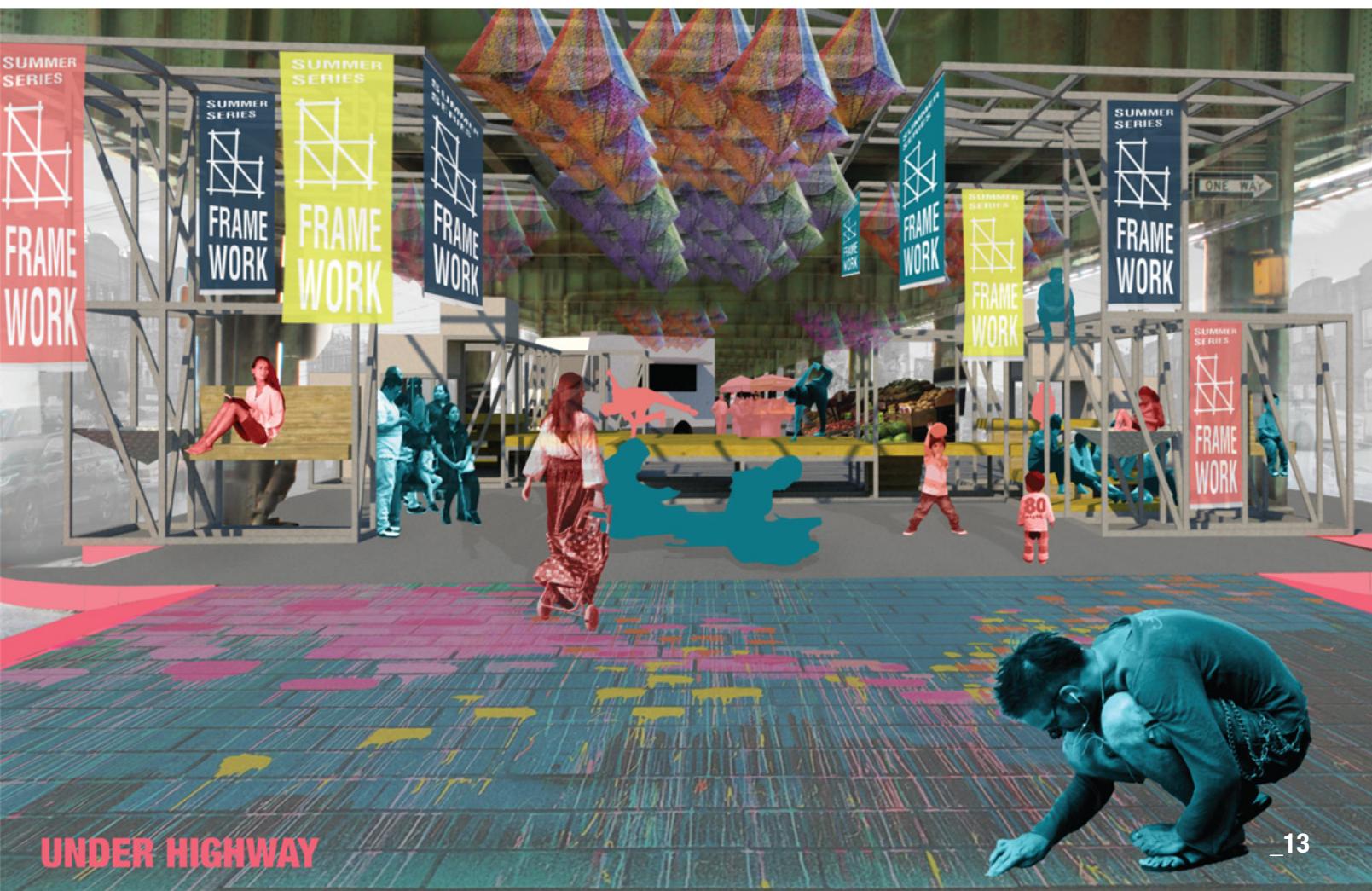


Basic Growing Techniques  
Thermal Conditions  
Equipment Training

### SPACES

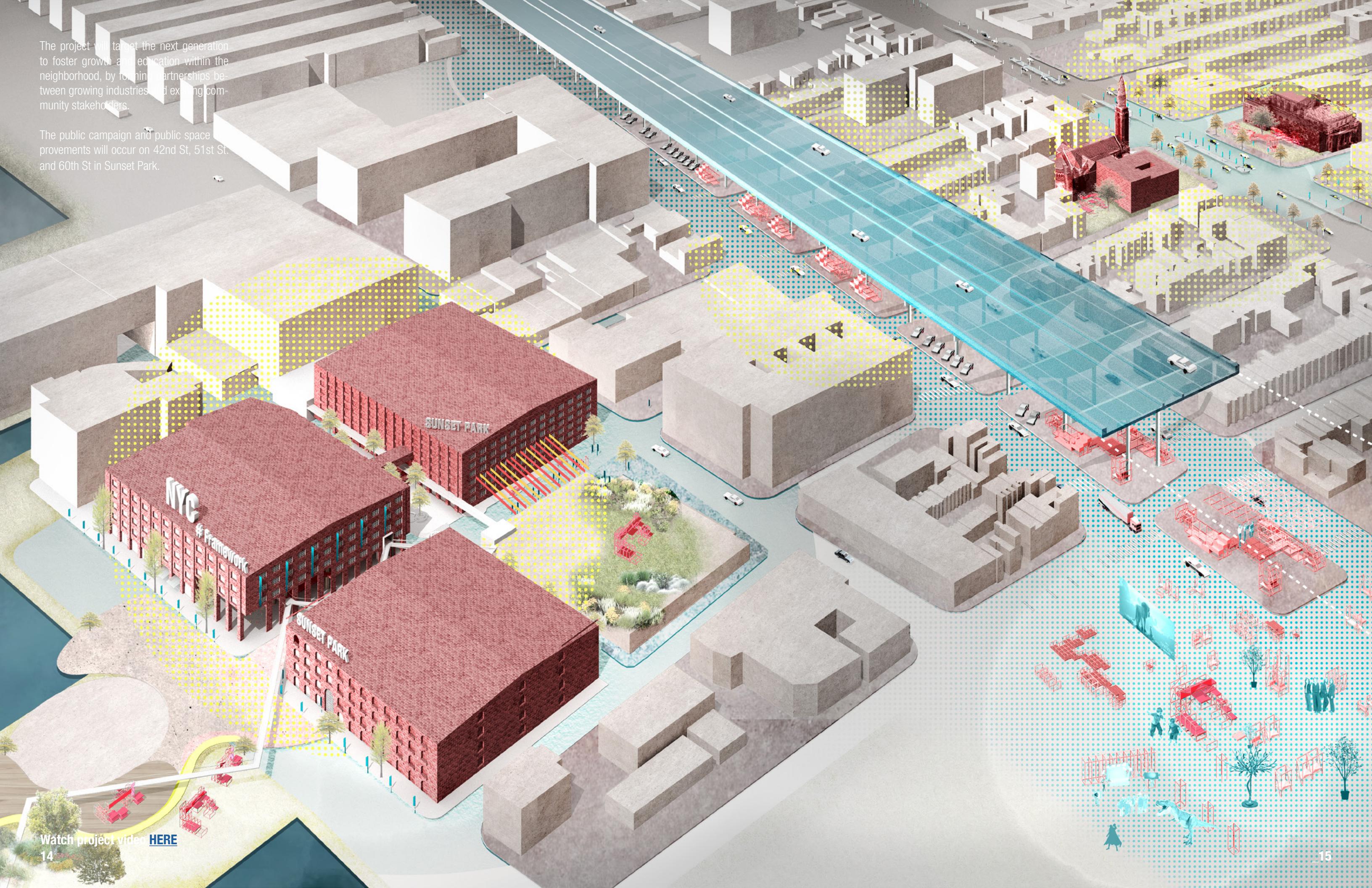


Classrooms  
Large Meeting Space  
Learning Gardens



The project will target the next generation to foster growth and education within the neighborhood, by forming partnerships between growing industries and existing community stakeholders.

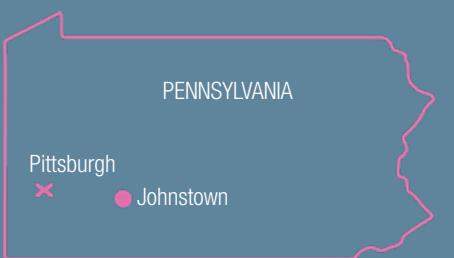
The public campaign and public space improvements will occur on 42nd St, 51st St, and 60th St in Sunset Park.



Watch project video [HERE](#)

14

15



## WORKSHOPPING THE GND

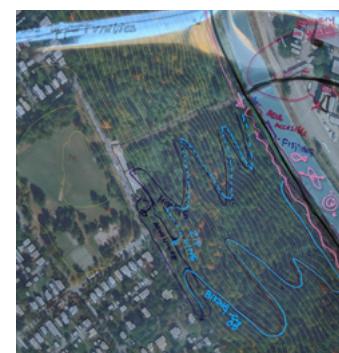
IN APPALACHIA

### TOWARD RESILIENT CITIES AND LANDSCAPES

Kate Orff - Thad Pawlowski

This course focused on the idea of resilience in an urban context, understanding that it must involve many stakeholders in order to be successful. For this, we tested the approach by preparing and conducting a resilience workshop in Johnstown, PA, that would showcase environmental, economic and social transformations already in place in other cities to propose scenarios for this town. To prepare for the workshop, we engaged in a series of lectures, site-specific research and different exercises that we would conduct later on site.

After gathering materials and experience for a few weeks, the entire class traveled to Johnstown, PA., a small industrial town that is now part of the Rust Belt in Appalachia. This town had also been traumatized by two major flood events that were still part of its collective memory, and by economical decline. The workshop, in the context of the resiliency plan Vision 2025, focused on gathering different community members and stakeholders that didn't traditionally engage with one another, drafting together their needs so we could propose design-based opportunities for the town. This was done in collaboration with the CRCL.

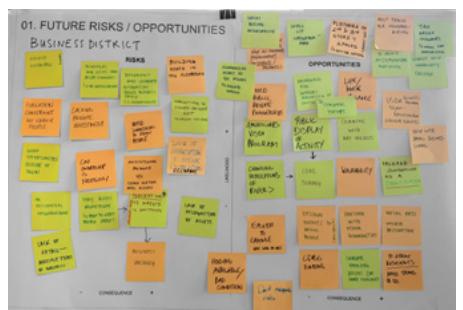


During the workshop, each team was in charge of two tiles. My role included taking visual notes and steering the conversation towards a recognition of the assets and challenges of Johnstown.

### DOWNTOWN – COMMERCE TILE



RIGHT: Sketch elaborating on some discussion points for downtown Johnstown (Business Development tile)  
ABOVE: Photograph of current conditions



RIGHT: Students and communitymembers highlighting town assets during the workshop.  
ABOVE: Post-it board of risks and opportunities done in collaboration between students and local stakeholders.



**VIEW FROM MARKET STREET**  
The green belt connects downtown Johnstown with the regional trail and the river.  
New signage highlights amenities downtown.

## GOOD(S) SHIFT:

REVITALIZING THE PORT  
OF NEWBURGH  
Newburgh, NY.

## THE HUDSON VALLEY REGIONAL STUDIO (FALL)

Hugo Bovea, Antonia Medina Abell,  
Tal Fuerst, Sharvari Raje.

**Trucks** are one of the largest contributors to air pollution in the Hudson Valley, and function within an unbalanced system.

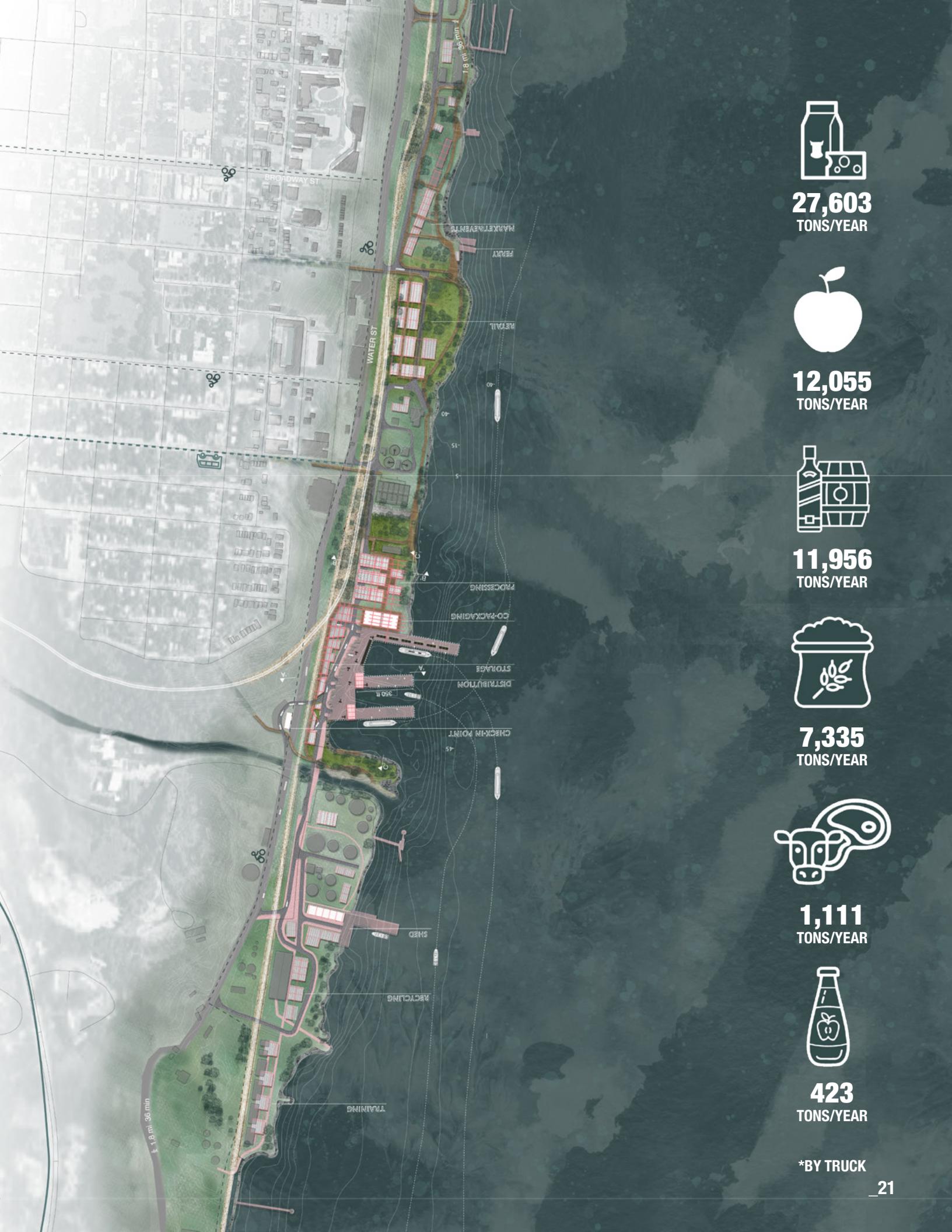
**84% of the freight** transported in New York State is moved by truck while other modes of transportation such as railways and **waterways are underutilized**.

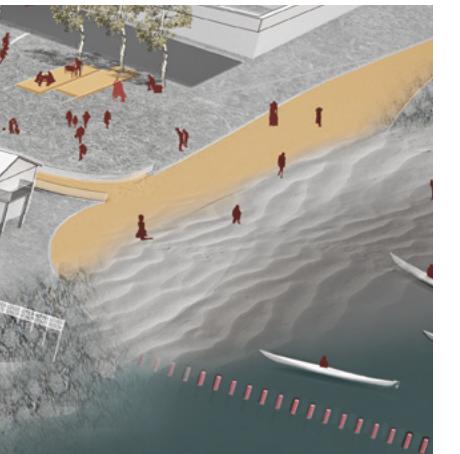
Among the goods transported in the region, food is a top carbon emitter. Yet, many small and medium-sized farmers lack processing infrastructure and cannot reach production capacities.

We are proposing an **industrial working waterfront** that will agglomerate two vital segments of the Hudson Valley's agricultural operations: processing and distribution. This will become one of a series of **hubs** that integrates diverse and **intermodal operations**, modeling the transition towards a less carbon-intensive transportation infrastructure for the Hudson Valley.

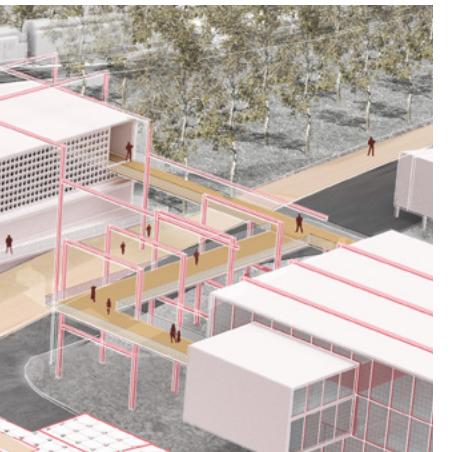
We are also proposing a network of **ports along the Hudson River** that consolidate all the intermediary processes and mark a return to using waterways as the primary mode of transportation.

This would **reduce the carbon emissions** of agricultural transportation by **about 60%** while also providing jobs, increasing production and reducing transportation costs.

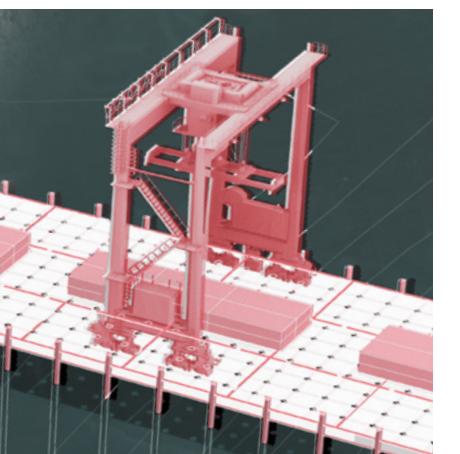




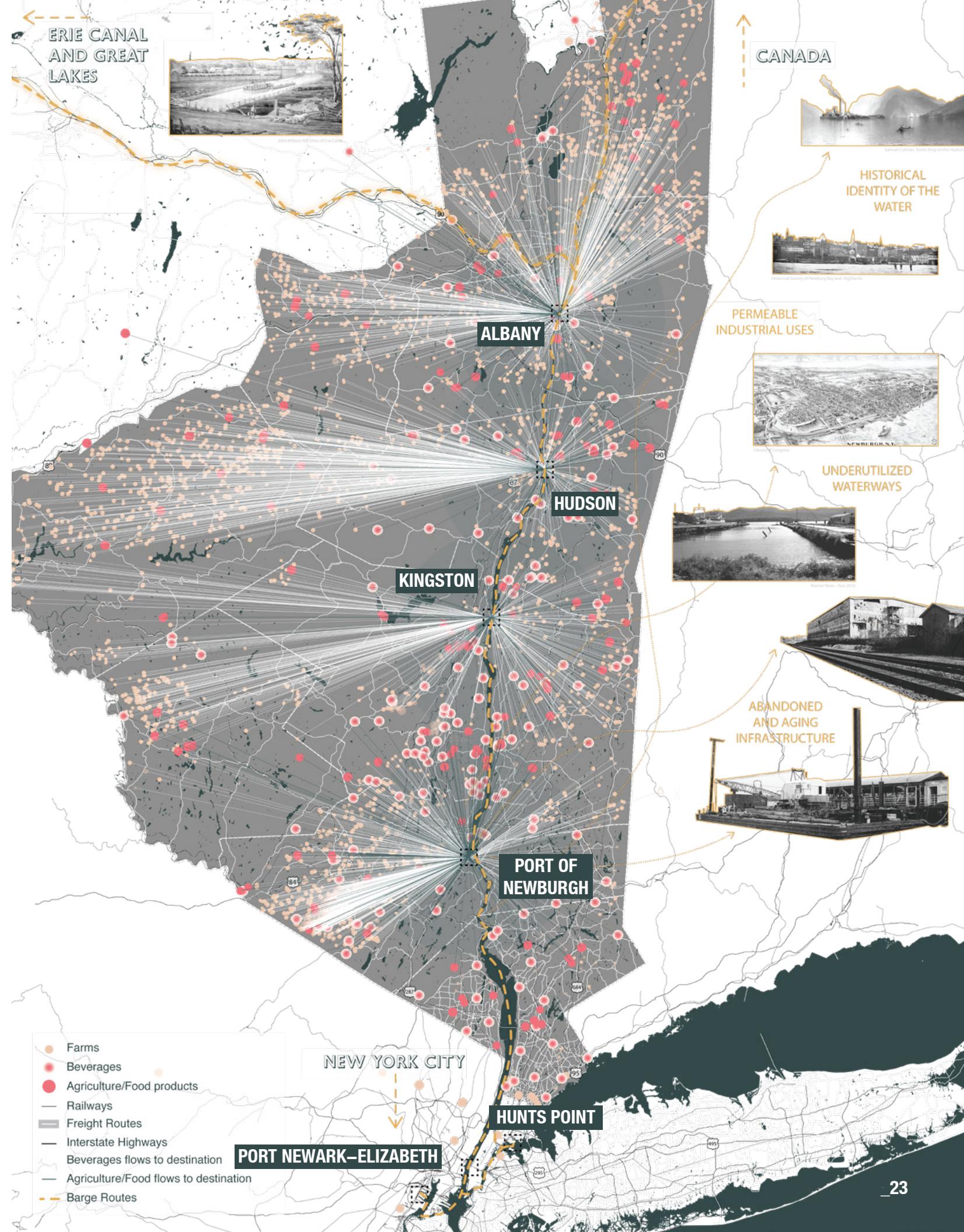
Our project reimagines a processing and distribution hub, creating an industrial and publicly accessible waterfront in the cities of Newburgh and New Windsor.



We are also proposing more connections to the city in the form of bus and pedestrian routes.



Newburgh and New Windsor used to be a landscape of waterway usage and port activity that is now forgotten. This is an opportunity to uplift the depressed economy of Newburgh and foster the equitable participation of small and medium scale production.



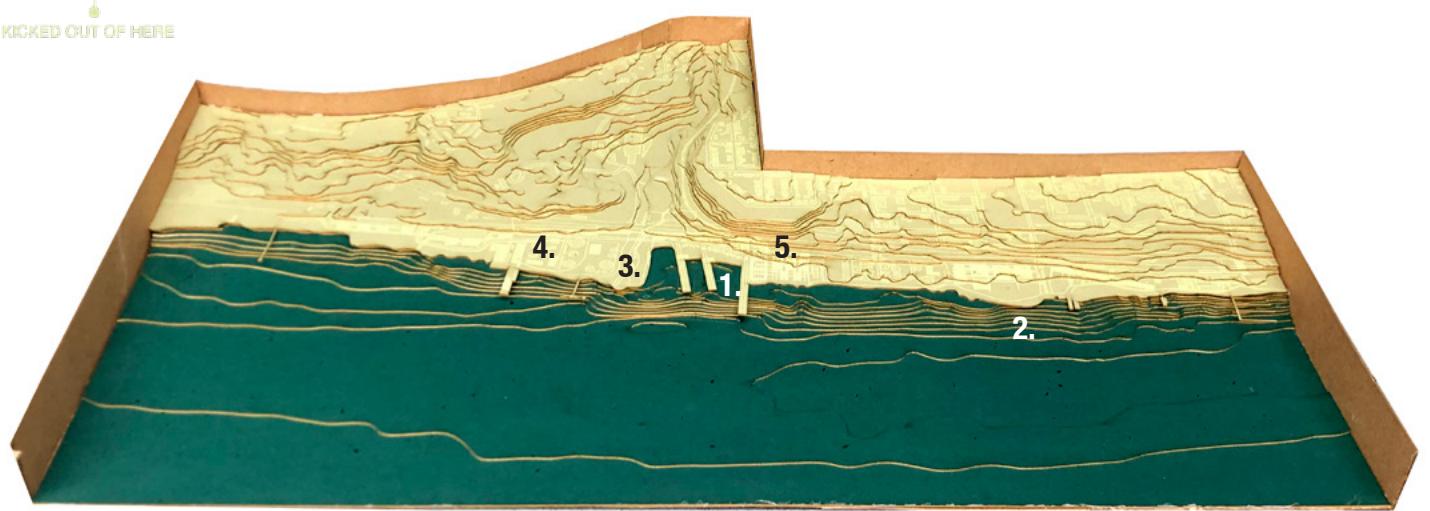
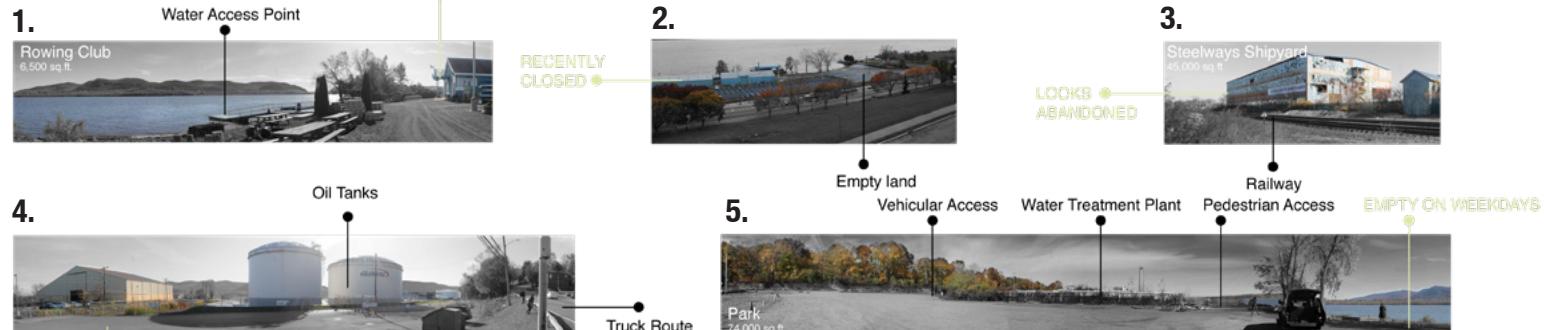
Looking at Newburgh and New Windsor, we discovered this forgotten, historical landscape of waterway usage and port activity.

Library of Congress



This is the current landscape of the port, with abandoned infrastructure along the waterfront, a wastewater treatment plant and where processing and distribution facilities are located next to highways.

Google Earth



The proposal will be structured in three phases:

The first one sets up packaging, processing and distribution through the water.



The second concentrates on retail and recreation.



The third phase focuses on employee training and waste management. In this phase, the former shipyard of the city is reused and becomes a part of the project.

**REVIVING** abandoned infrastructure in the **WATERFRONT** is key to Newburgh's role in **FREIGHT DECARBONIZATION**.

An opportunity to **UPLIFT THE ECONOMY** of Newburgh and foster **EQUITABLE PARTICIPATION** of small and medium size producers.

VIEW FROM DOCKS



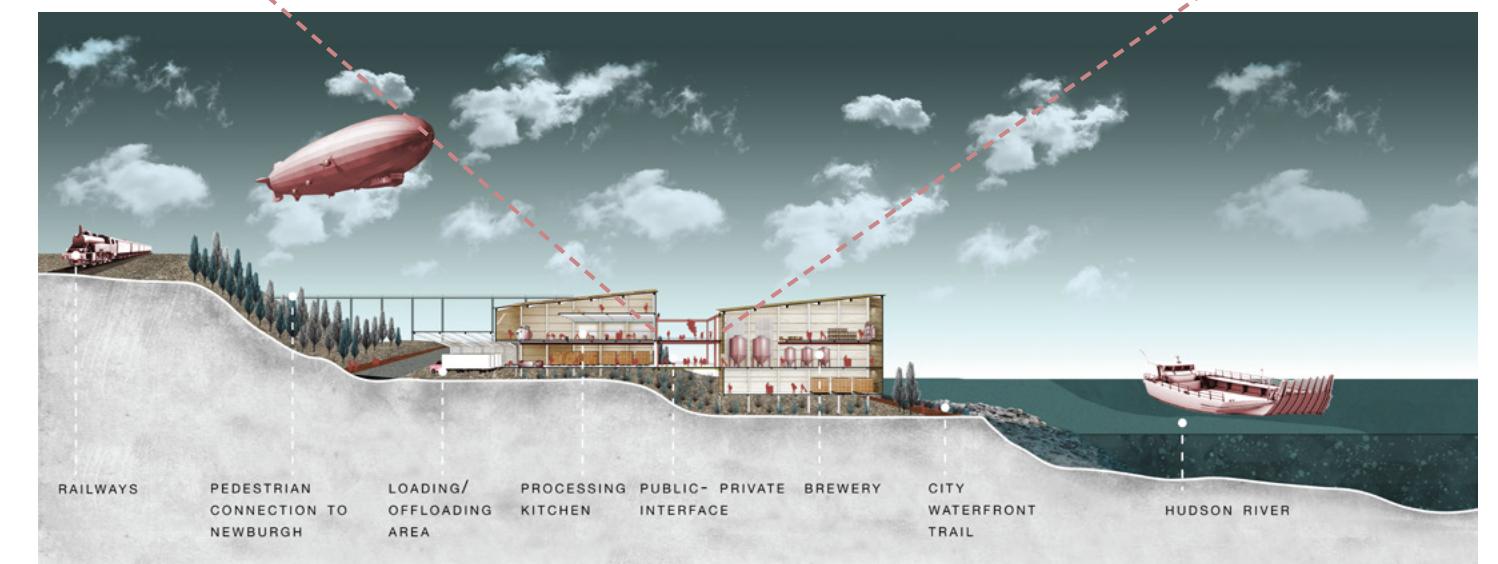
SECTION A-A'



VIEW FROM WALKWAY IN PROCESSING BUILDINGS



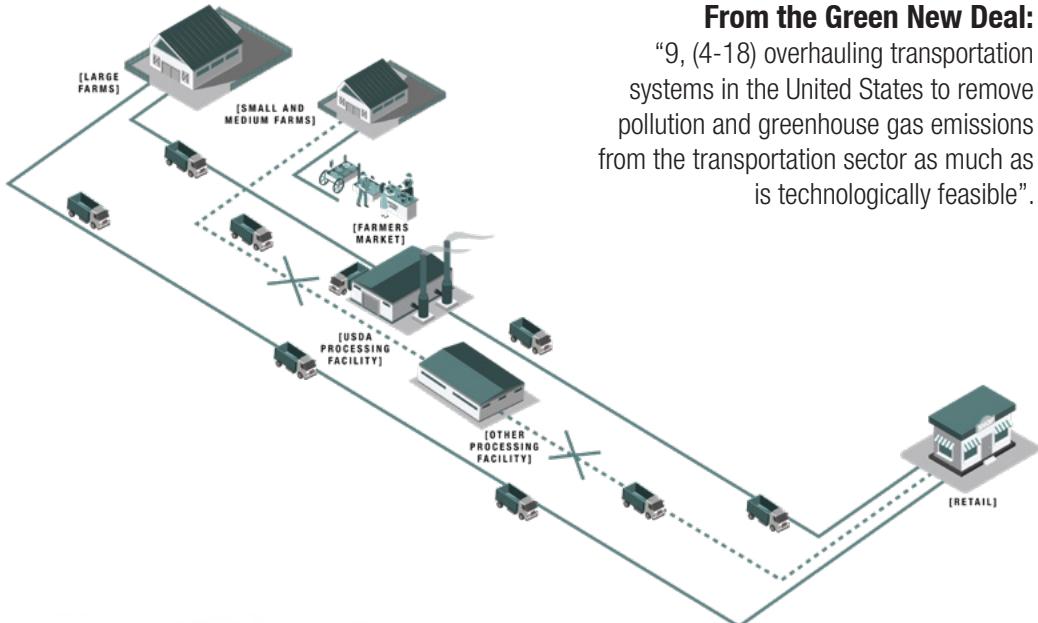
SECTION B-B'



## EXISTING FREIGHT SYSTEM



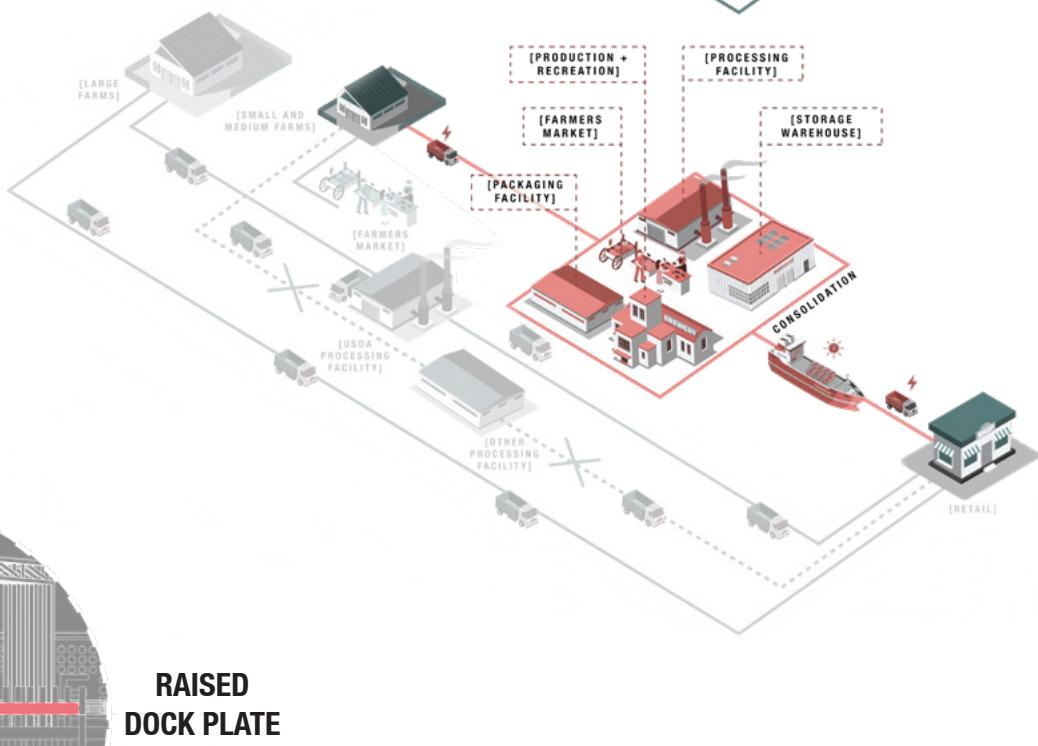
**95.90%** are small and mid-size farmers producing at **75%** of their capacity



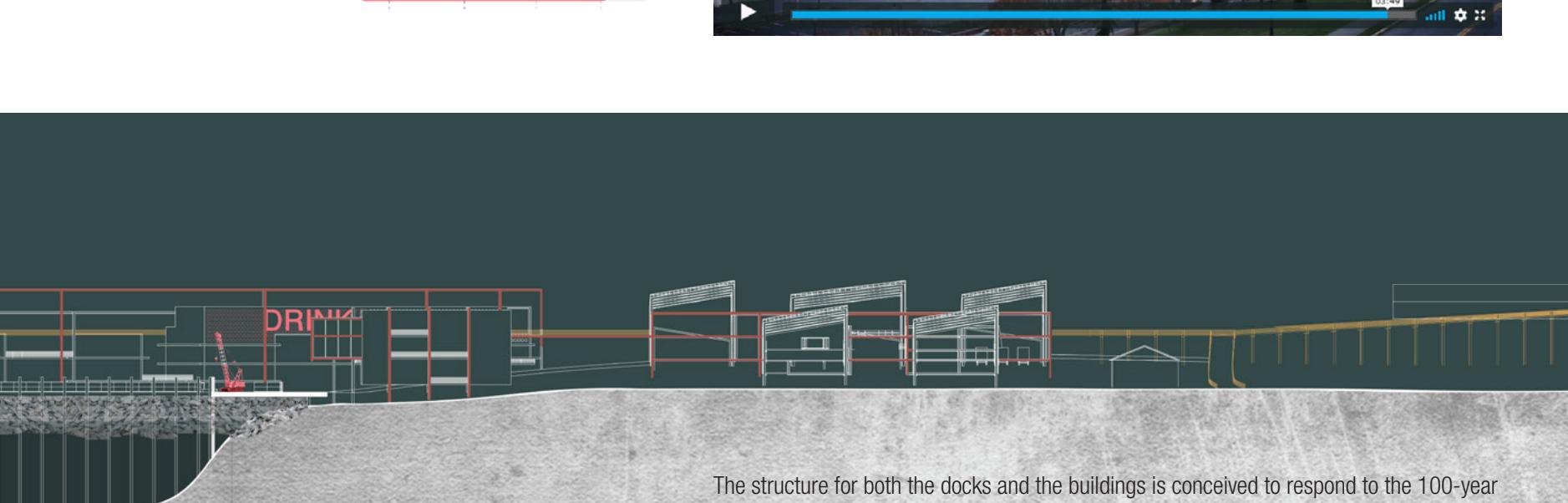
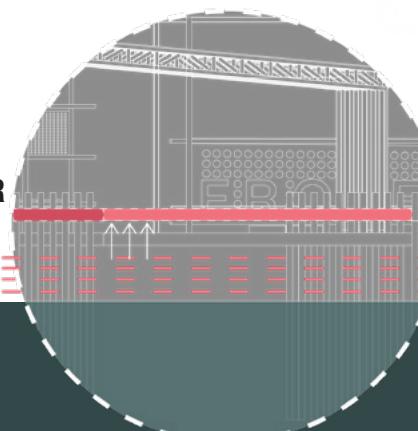
## PROPOSED SYSTEM



**25%** increase in production and reduced transportation costs  
**1,000** new jobs for the county.



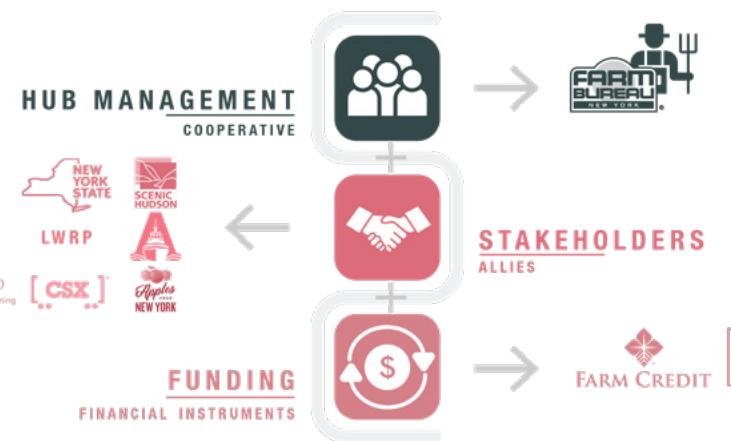
**100 YEAR FLOOD**



The structure for both the docks and the buildings is conceived to respond to the 100-year flood by creating a structural grid that supports the lifting of the ground plane.

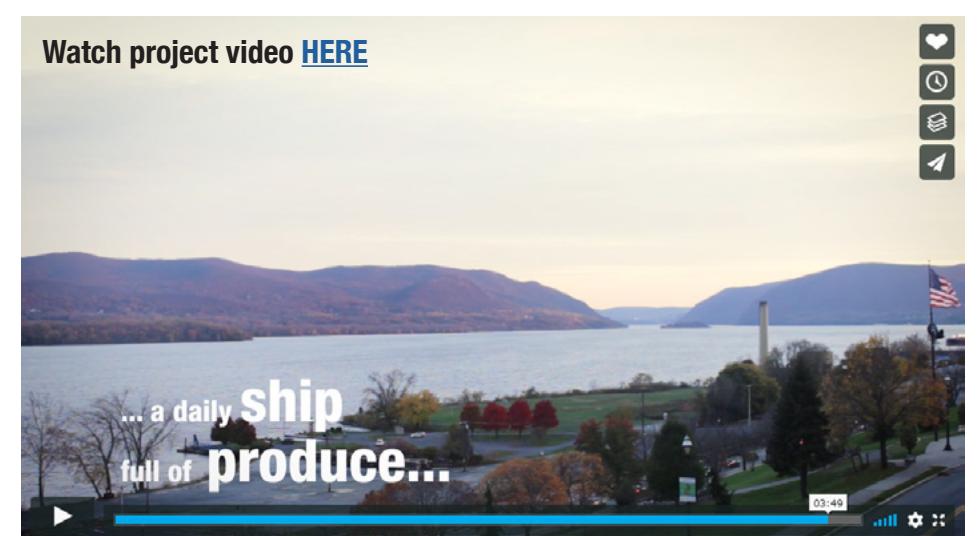
## From the Green New Deal:

12, (16) “(E) directing investments to spur economic development, deepen and diversify industry in local and regional economies.”



The abandoned Steelways Shipyard 45,000 sq. ft.

Watch project video [HERE](#)



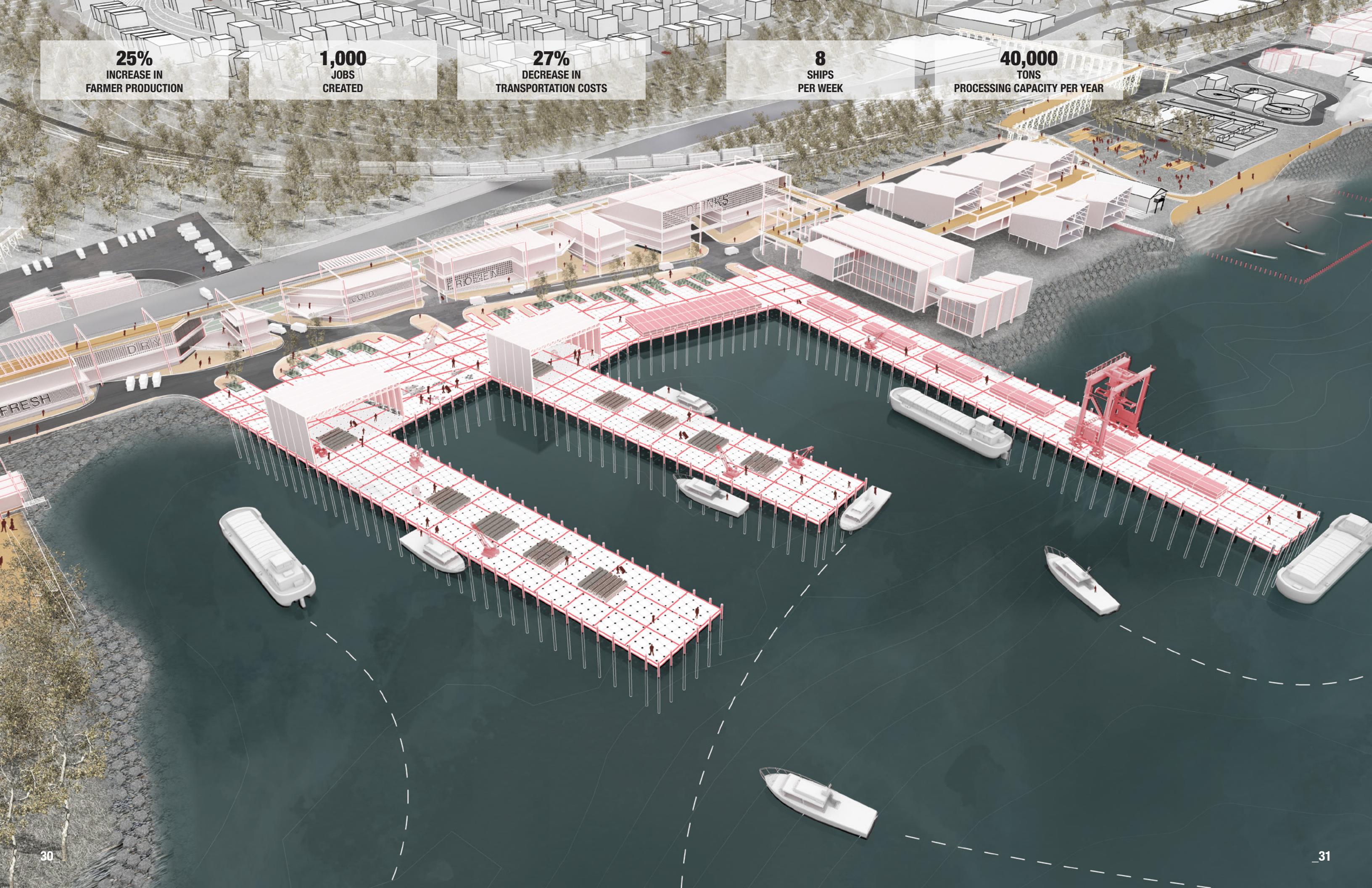
**25%**  
INCREASE IN  
FARMER PRODUCTION

**1,000**  
JOBS  
CREATED

**27%**  
DECREASE IN  
TRANSPORTATION COSTS

**8**  
SHIPS  
PER WEEK

**40,000**  
TONS  
PROCESSING CAPACITY PER YEAR



## ESSAY

### THE TIME FRAME OF PUBLIC SPACE

Antonia Medina Abell.

## PUBLIC SPACE:

### RHETORICS OF THE PEDESTRIAN

David Smiley

"Public space" is among the most widely used tropes in the spatial disciplines and it shapes discussions about control, freedom, status, and identity in the spaces of the city – indoor and out, and in the suburb, territory, or region. The term suffuses our drawings, images, and propositions yet typically remains abstract. For the term to be helpful, we must ask harder questions: How is public space experienced and regulated? How is public space entangled with the processes and discourses of urbanization? Are there multiple publics and different kinds of public spaces?

[from the course description].

For my essay, I researched the concept of time in design. What is the most important asset of projects that construct public space? I argue that it is not the space they occupy, create, or transform, but time. Time can be used to create and engage communities, develop design as a series of iterations rather than finished product, to reflect on the role of new construction, or even to recycle materials traditionally considered waste, or infrastructures that have failed the city, giving them a whole new set of possibilities. Looking through the lens of time can hint at a different measurement of success of pedestrian spaces in the city: do they engage people, establish a sense of belonging, are they activated and if not, can this change? The examples for discussion will be analyzed using two categories: pre-occupancy and post-occupancy.



"The long poem of walking manipulates spatial organizations, no matter how pan-optic they may be..."  
Michel de Certeau, 1984.

# The Time Frame of Public Space

# **Antonia Medina Abell**

## **BASIC FACTS:**

**NAME:** Los Almendros Hill  
**LOCATION:** Huechuraba,  
Santiago, Chile  
**AREA:** 6.5 hectares.  
**STAKEHOLDERS:** Fondacio, Ciudad y  
Sociedad, Ecomabi, Fundación Cerros Isla,  
Municipality of Huechuraba, community  
members of Huechuraba.

Fig. 1



Fig. 2



Pedestrian projects have a unique place in city-making, whether historical or contemporary. Some of these become so distinctive that they achieve an iconic status, others are more modest. However, they all construct a collective imagination that signals who intervenes the cityscape. The following projects have many common threads. Among them is the fact that their most important asset is not space, but time. Time is used to create and engage communities, develop design as iterative rather than finished product, to reflect on the role of new construction in relation to public space, or even to recycle materials traditionally considered waste, or infrastructures that have failed the city, giving them a whole new set of possibilities.

Looking at these case studies as they unravel through a time frame rather than the space they occupy can be a lens to measure their success through outcomes different than the initial designed project. Moreover, the lens of time can hint at a different measurement of success for pedestrian spaces in the city: do they engage people, establish a sense of identity and belonging, are they activated and if not, can this change?

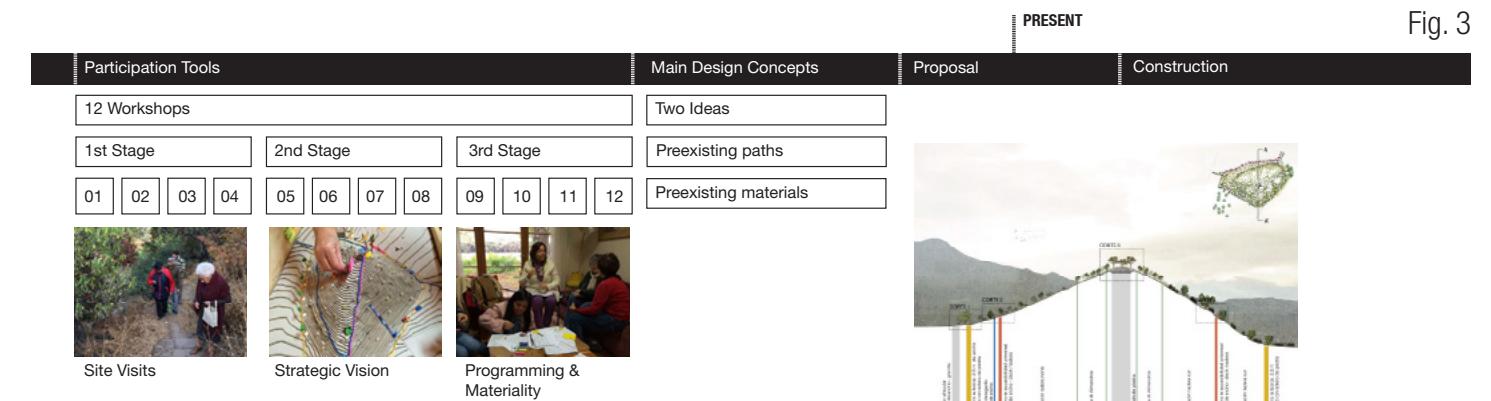
To show different aspects and relationships that can be developed through the time frame of a project, the following examples will be analyzed using two categories: pre-occupancy and post-occupancy. Pre-occupancy refers to the conceptualization stages, which include the development of design concepts, pedestrianization strategies, participation tools, proposals and construction. Post-occupancy invokes the moment when these examples stop being “projects” and become embedded in the city fabric, where their uses are expanded and tested in innovative but contested ways.

PRE- OCCUPANCY #1 - LOS ALMENDROS HILL

Located in the borough of Huechuraba, Santiago de Chile, this 33-meter tall (108 ft) and therefore small<sup>1</sup> hill was zoned as a park by the metropolitan authority (PRMS) in a borough that had been threatened by development pressures and many hectares of agricultural land were rezoned for residential development without accompanying green areas. In this situation, the development of parkland as such provided the borough with a unique opportunity. The land was owned by a non-profit called Fondacio, which insisted that the developers set up a process of participatory design – an unusually successful demand in Santiago. The neighboring community was invited to a series of twelve workshops to explore the hill, create a list of priorities, themes of identity, and generally, iterations of design.

By expanding this project into a year of participatory workshops which included community members, residents of neighboring gated communities, non-profit affiliates and the multi-disciplinary team that led the meetings (from Fundación Cerros Isla, Ecomabi and Ciudad y Sociedad), the design of this park was established as a collaborative process rather than an institutionally-heavy or government-mandated fix. Disaggregating the components of the project into workshop activities was a key factor in establishing rapport with the communities and fostering a sense of identity and belonging even before construction of the park started. As such, people were engaged with the tangible aspects of the site in earlier stages, advocating for ecological restoration, helping to decide on the best allocation of certain funds – such as improving the conditions of trails instead of retrofitting an existing picnic area – or even settling on the summit as a place of encounter with the rest of the city via panoramic views.

But some questions remain. What becomes of participatory processes if and when the city changes? How are former community-based decisions honored if the city needs change, and should they be at all? There is also the issue of ownership: This was privately-owned land, raising the question: why does the city allow parkland to be owned? Shouldn't it be public and easily accessible?



34

35

**BASIC FACTS:****NAME:** Northala Fields**LOCATION:** Ealing, London, UK**AREA:** 27 hectares.

**STAKEHOLDERS:** Borough of Ealing, Marko and Placemakers, Studio Fink, community members, development sites, Northolt and Greenford Countryside Park Society, Greater London Authority.

Fig. 4



Fig. 5

**PRE-OCCUPANCY #2 - NORTHALA FIELDS**

Northala Fields is a former wasteland site in northwest London [Fig.4], turned into a park via competition by Marko and Placemakers between 2000 and 2008. Located between the noisy A40 highway and Ealing, a suburban neighborhood, the site had become "a magnet for crime and antisocial behavior."<sup>2</sup>

Self-funding, upcycling of materials and participatory design are some of the tools that were used here, approaching a waste site in a playful manner that created land art, noise protection, community identity. The project elegantly engages with multiple scales and connections at the same time. In Northala Fields, design was not approached as a final result, but rather a loose framework where the community could imprint their own activities and identities in this new park.

Addressing issues of waste, financial constraints, noise pollution and crime in a derelict site, the design by Marko and Placemakers proposed one big, bold move that crystallized the relationships between scales and stakeholders not only in the park, but in the Greater London area as well. The team did not just design a park but created a circular system in which the neighborhood agreed to accept a waste harnessing facility which in turn raised the budget the local council needed for the park. The designers' understanding of the project having a reach beyond its boundaries was key in how several themes were addressed at once. By buying rubble from several construction sites around London, including Heathrow Terminal, the neighborhood council was able to charge developers for waste disposal, build a recycling facility on site, gather ma-

terials to raise the topography of the formerly flat area and assemble gabions as seats or walls for the park [Fig.5-6]. The move also decreased the carbon footprint of several construction sites in London, as the rubble was now transported for 10 miles rather than a hundred.<sup>3</sup>

The project was successful because it blurred boundaries, including between designers and users, and was understood as necessarily part of the socio-economic continuum of the city. "Marko strongly recommends engaging with the public very early on and being honest about intentions, which is most likely to encourage people to be part of the process."<sup>4</sup> Neighborhoods residents and the Greenford Countryside Park Society were consulted for key aspects of the project for over two years, which helped the park become part of their identity as much as part of the landscape. The time aspect is highlight-

2000

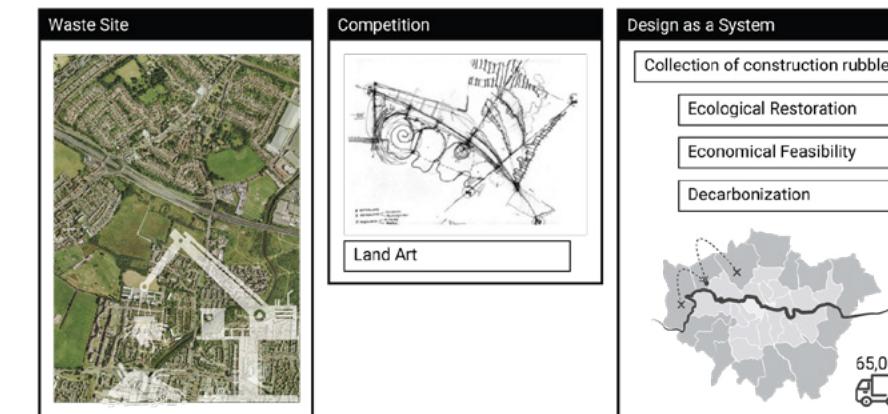


Fig. 6



Fig. 7



**BASIC FACTS:****NAME:** Garden Library**LOCATION:** Neve Sha'anana, Tel Aviv-Yafo, Israel**AREA:** 50 m<sup>2</sup>**STAKEHOLDERS:** Arteam, Mesila, Municipality of Tel Aviv-Yafo, residents of Neve Sha'anana.

Fig. 8



Fig. 9



ed here by the successful incorporation of different communities during design and planning stages, not via one large townhall meeting but with several workshops.<sup>5</sup>

However, some of the aspects that made this project succeed also made it significantly, if not prohibitively rigid – and thus stuck in a moment of time rather than adapting and changing. [Fig. 7] The original design included a visitor center that would produce its own energy via ground coils; but this did not happen, and a retrofit would be prohibitively expensive. Examples like this reveal that even a robust participatory process may not be fully comprehensive when large-scale interventions are considered. In effect, a circular system has limits and the project belongs in the “pre-occupancy” category.

**POST-OCCUPANCY #1 - GARDEN LIBRARY**

The Garden Library is a small and humble project with a large audience; it engages and celebrates its users and communities, a success owed to the creation of a legal, non-profit entity to manage both the place and its curriculum of activities. *“It was founded in 2009 by ARTEAM, an interdisciplinary art NGO, in collaboration with Mesila, an aid and information center for the foreign communities operated by Tel Aviv municipality. The Garden Library was established based upon the belief that culture and education are basic human rights that bridge differences between communities and individuals, and that can affect lasting social change.”*<sup>6</sup> The Library responds to a broader set of urban conditions, including a fraught and vulnera-

ble community and, as such, it did not have community input before its implementation. For this reason, it belongs in the post-occupancy category.

Located in the heart of Neve Sha'anana, an immigrant neighborhood in southern Tel Aviv-Yafo [Fig.8], the Garden Library is an open, outdoor structure that rests against the wall of the only public bomb shelter in the area.<sup>7</sup> Designed by Yoav Meiri Architects, the structure is composed of two volumes that play with the notion of a bookcase and expand into a roof or a stool, respectively. The bookcase is lighted from the inside at night, glowing softly as a beacon in the park. The horizontal stripes of the roof and the opening mechanism of the doors are a subtle reminder of the distinctly Telavivian window shutters. According to the architects, the library was designed as a “book machine”, which speaks of the fragility of the community, and low construction and maintenance costs were essential for the implementation of this project.

Along with the bookcases, which contain books in more than 14 languages, the project of the library encompassed the creation of a center for arts and education, which acts as one of the few community centers for children in the area. It also offers adult programming as varied as a Sudanese Theater Group<sup>8</sup>, web design, guitar classes, concerts, English or Hebrew classes, and tours of the neighborhood (to fund activities).

The Garden Library is not a static book storage device but is instead a catalyst for varied and flexible programming serving a precarious community. [Fig.11] Placing it in the heart of Levinsky Park (1,8 hectares), where migrant workers and asylum seekers congregate on weekends, responds to the neighborhood’s need of placemaking while maintaining a sense of safety for people, since the design doesn’t have doors or walls that would make migrant workers anxious (for fear of authorities waiting for them inside).<sup>10</sup> Levinsky Park has become a contested space in its own right, since it is the only green open area in Neve Sha'anana but is heavily built –it contains a synagogue and a kindergarten as well—and will be even more in the future, since the Municipality’s planning committee approved a plan to build a school (5,700 square meters). This action drew protests from residents, who raised in defense of their only outdoor space in the heavily polluted area that surrounds Tel Aviv’s Central Bus Station, an architectural monster that destroyed the fabric of Neve Sha'anana.



Fig. 11

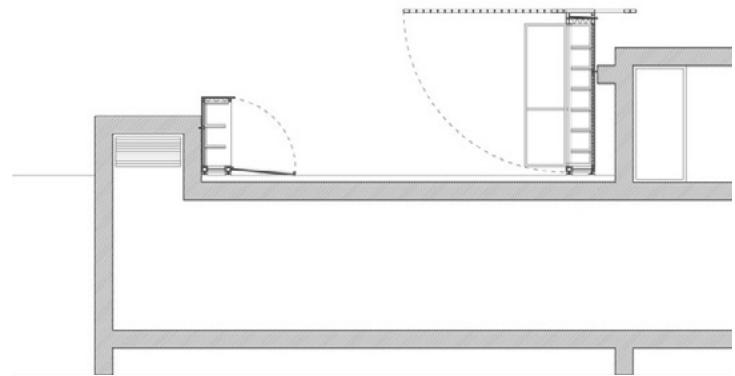
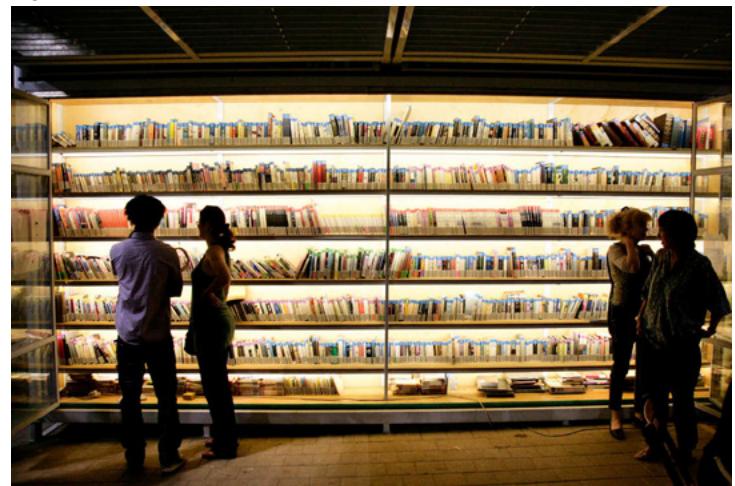


Fig. 12



Fig. 13



Protestors were also concerned with the school primarily serving children from other neighborhoods rather than Neve Sha'anana and other light-rail related works that would finish destroying the park.<sup>11</sup>

How could a small library empower a community and improve their opportunities in a city that is not equipped to accommodate them? If one looks at the project as just a building – or even as just outdoor furniture (of which it is an elegant example) – for the storage of books, it succeeds in a limited sort of way. [Fig.12] When shuttered it has little presence. If, however, we unravel the actions and programming of the Library, understanding it as a series of moments, (captured in the most diagrammatic way in the schedule of Fig.10) the place becomes a site of encounter and connection, a fledgling institution for struggling groups [Fig.13]. However, no matter how organized, the Garden Library project cannot transcend many of the difficulties that migrant workers and asylum seekers face in Neve Sha'anana (or in Israel). Nevertheless, it can provide tools for the community, even a social investment in the future.

#### POST-OCCUPANCY #3 - TOWER OF DAVID

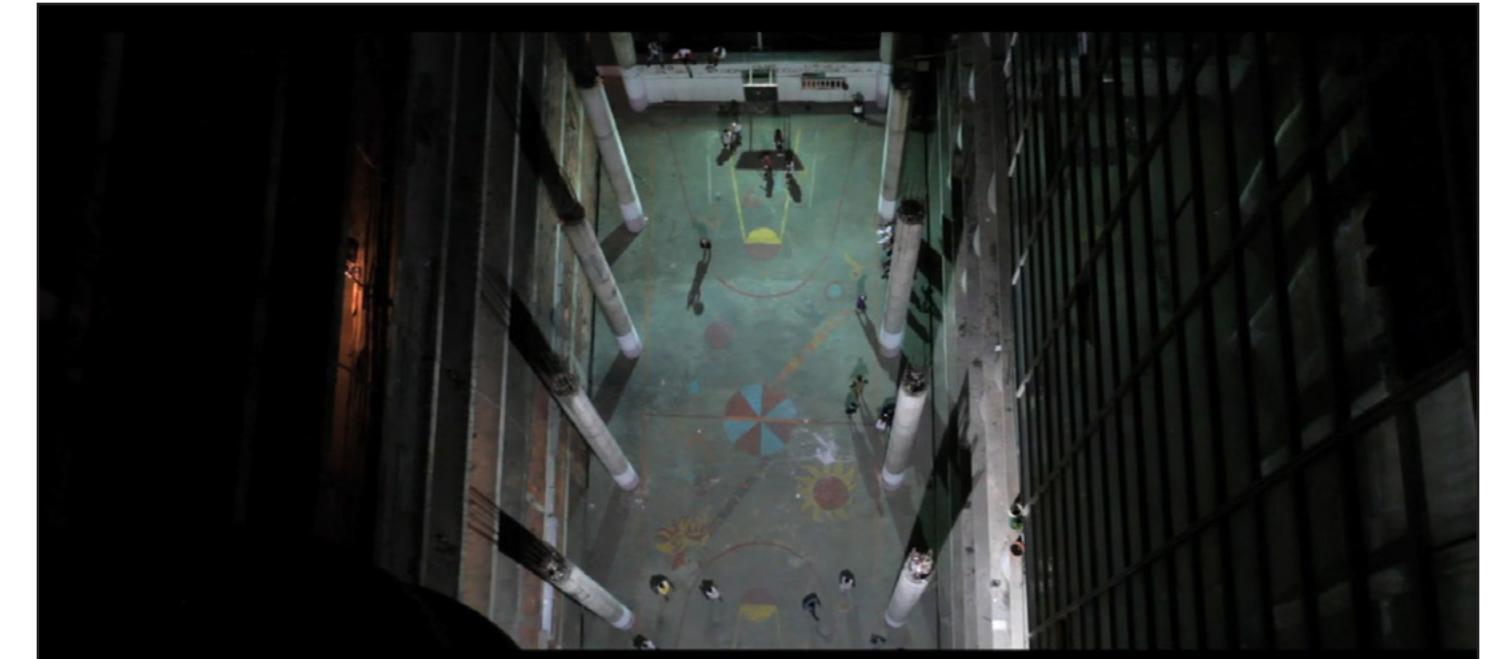
Originally designed as the *Centro Financiero Confinanzas* by Venezuelan architect Enrique Gómez, this abandoned-office-tower-turned-housing has both perplexed and enchanted urbanists, architects and filmmakers, becoming the background of television series like *Homeland* (Showtime, 2011-) or the star of documentaries like *Torre David* by Urban-Think Tank [Fig.14]. The building was to be the third tallest tower

in Caracas [Fig.15] but the financial crisis of 1994 halted construction, and it stood for over a decade as a half-built, silent and accusing ghost on the skyline. In 2007, the building was occupied by squatters, and it has become the stuff of urban legend.<sup>12</sup>

A long thread of miseries followed the inception of the tower: the sudden death of David Brillembourg, the developer, in 1993; the collapse of Venezuelan banks the following year, the mid-construction abandonment and decay that haunted it for over a decade. As such, this was a deeply failed project, one of the white elephants that stand as remnants of “better times” in many Latin American cities. Ironically, the Tower did not become famous as a successful urban development project, but instead it became an iconic, innovative, and troublesome example of “the world’s tallest tallest squat”, created by the 750 families that occupied the site almost overnight.<sup>13</sup> Thus began the occupation of the first vertical neighborhood.

In the *Torre David* there was no running water, so residents had to carry 5-gallon water containers up 30+ stories, since the elevator shafts were empty. [Fig. 16] However, they paid for utilities such as electricity, signaling a tacit arrangement with the government. Staircases became the streets in the tower, with people going up, down, or sitting for a quick chat. Small stores and bodegas run by the residents spread around the tower as well, offering canned food and produce, among other things. Many squatters used the parking spots available; others grew tired of the staircases and used their motorcycles to move up and down, “ferrying supplies up to a distribution center on the tenth floor”<sup>14</sup> (circulation as streets, indeed!). The tower was also customized: apartment expansions, a basketball court and gym equipment on the tallest

Fig. 14



**BASIC FACTS:**

**NAME:** Tower of David  
**LOCATION:** Caracas, Venezuela  
**AREA:** 45 stories, 1,300,000 sq. ft.  
**STAKEHOLDERS:** David Brillembourgh (investor), occupying families, Venezuelan government.

Fig. 15



Fig. 16



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story. By virtue of its occupation, the *Torre David* was temporarily rescued from ruin and decay by an organized and cohesive group of squatters, rendering it a profound and strange experiment into the effects of inequality and opportunity in the city.

Two realities were superimposed in the occupation of the *Torre David*: the “planet as a building site” collided with the “planet of slums.”<sup>15</sup> The origins of the tower were in financial and capital machinations which collapsed in 1994, creating the ghostly figure of ruin and decay that haunted the city for years, even as the slums also continued to grow in the ravines of the city. The second life of the tower sprouted from the social, not geological, cracks and failures, resulting in a troubling but distinctly entrepreneurial project. The *Torre David* cannot be called a “project” in the typical sense of a complete and unified construct and it raises many questions about the role and lifespan of urban projects and megaprojects in the city, and the responsibilities and effects they entail. How far should a project aim in its post-occupancy goals? Should we think about adaptive reuse buildings during construction? Moreover, the *Torre David* becomes an unintended commentary on ruin and our status as city dwellers, signaling that the timeline of a building transcends its status as a “project”.

**CONCLUSIONS**

Through these examples, we have tested the concept of time as the determinant aspect of projects that involve pedestrians in the city, even when contrasted with the much more widely explored aspect of their conse-

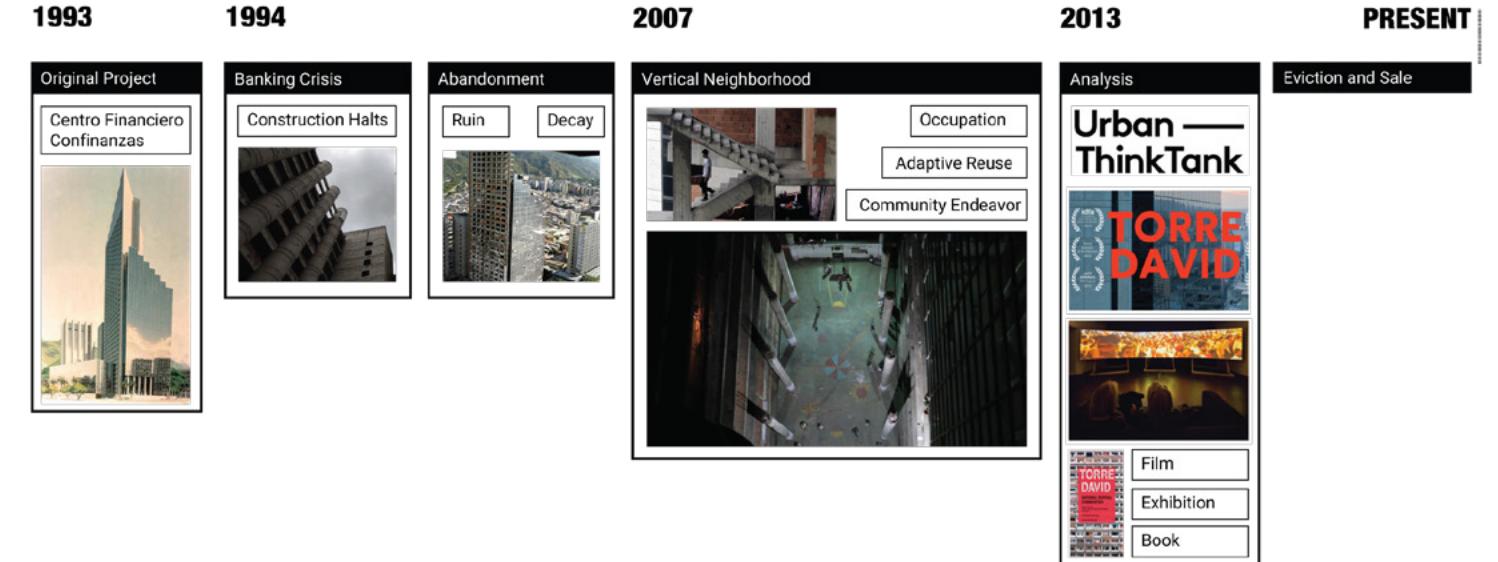
quences in space.

Using this lens, Los Almendros Hill and Northala Fields reveal the importance and possibilities of setting up projects as processes, because doing so can give way for community participation in ways that are not just statistics, but create a sense of belonging and identification with the place being intervened. These two projects also included parkland as a central part of their development, signaling opportunities in approaching the sites as a much larger unit, becoming part of the system of the city rather than a small project with defined boundaries. This way, their effects are much larger and can allow participation of other communities.

The Garden Library and the Tower of David brought up themes of activation, occupation, the need to support the built environment with management structures as well (NGOs, artist collectives, etc) and the future of projects whose lifespan transcends traditional stages of development. These hint at innovative adaptations of the city fabric, which can change in order to harness new modes of living, also hinting at the scarcity and displacement of diversity in many cities today. “The crisis of place, in which the land of the public realm is sold as a commodity in the interests of untrammelled ‘growth’, is not a new phenomenon, but as urbanization increases pace, the pressures to adopt new methods become stronger”.<sup>16</sup>

Overall, considering time as the asset to analyze in these projects intends to establish a dialogue between each project’s internal goals and the city fabric in which they are rooted and expanded, revealing the tensions and limitations of “getting things done”. Is there a way for us to guide the lifespan of the city fabric, project by project? How are these examples positioned for the future? Can they mutate, change or adapt, and should they?

Fig. 17



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## GEOGRAPHICAL INFORMATION SYSTEMS: HIGH CARBON JOBS IN NEW YORK STATE

New York.

Antonia Medina Abell,  
Claudia Kleffmann, Mary Allen.

For Leah Mesterlin's class Geographical Information Systems, we delved into the context of the Green New Deal (GND) and questions of its implementation. The GND (passed in 2019 in the House of Representatives) proposed decarbonizing the economy, bringing overdue justice to the most vulnerable people. We asked: who are these vulnerable people?

We identified the GND's frontline communities as largely undefined, and does not include people who hold what are now called "high-carbon jobs".

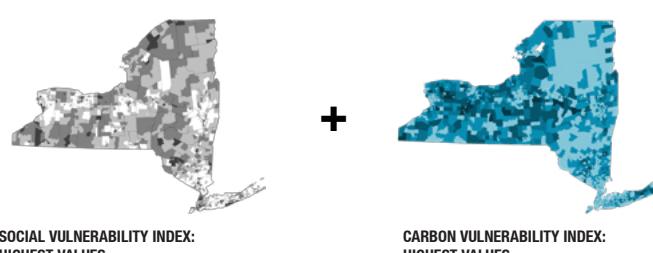
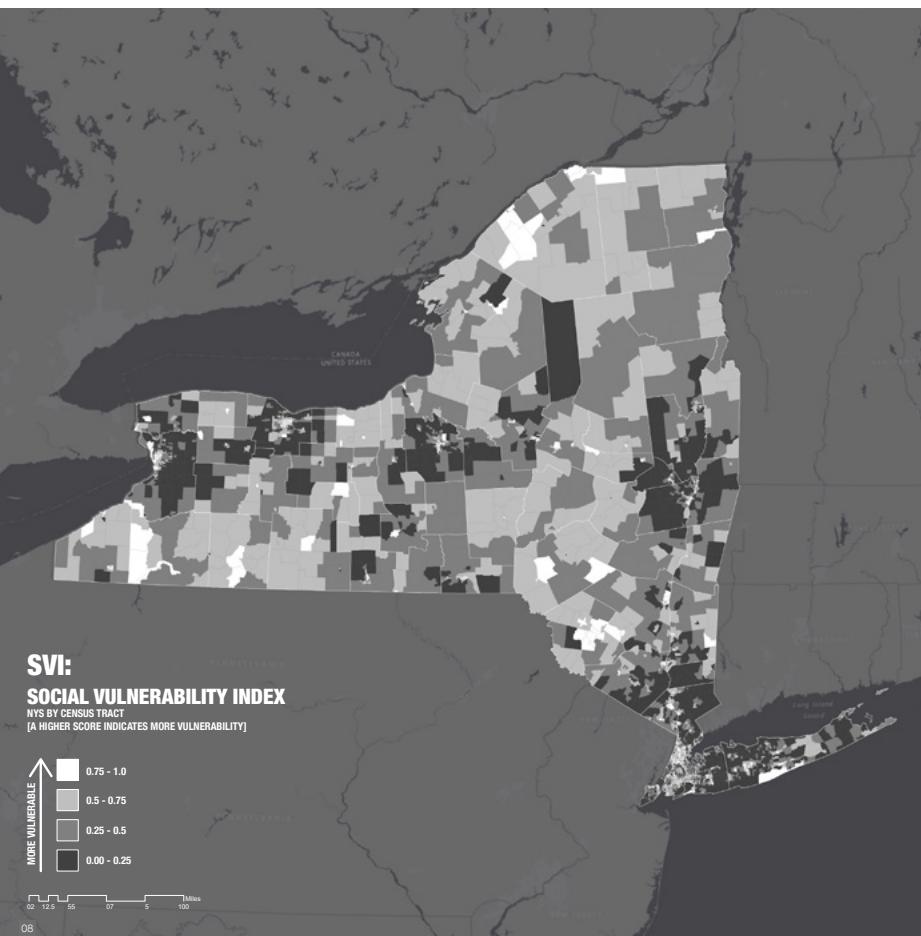
However, the emphasis on decarbonizing and creating a "just transition" implies that some jobs will be lost in this process, as we move, for example, from fossil fuel sourced energy to cleaner, renewable

sources. This made us wonder, are these jobs located and measured? Who are the people holding them and are they vulnerable in other aspects as well? And finally, does there need to be a new index to measure socio-economic vulnerability for communities that depend on high carbon industries, as we transition to a carbonless economy?

To conduct our research, we used ArcMap, existing databases and created our own, cleaning CSV tables and geocoding addresses too. Finally, we developed our own "Carbon Vulnerability Index" and compared it to the existing Social Vulnerability Index. Our findings indicated a 4% overlap in the categories for New York State, indicating that high carbon jobs are not currently thought of as vulnerable.

### THE QUESTION

- [1] WHERE ARE THERE CONCENTRATIONS OF HIGH CARBON JOBS WITHIN NEW YORK STATE?
- [2] ADDITIONALLY, HOW VULNERABLE ARE COMMUNITIES DUE TO THEIR CONCENTRATION OF HIGH CARBON JOBS IN COMPARISON TO THE CURRENT SOCIAL VULNERABILITY INDEX?



### SOCIAL VULNERABILITY INDEX (SVI)

#### WHAT IS IT?

The SVI is an index that weights a variety of subjects with the objective of predicting how self-reliant these communities will be in case of disaster, natural or man-made.

#### WHAT DOES IT MEASURE?

OVERALL VULNERABILITY	SOCIOECONOMIC STATUS		HOUSEHOLD COMPOSITION & DISABILITY		MINORITY STATUS & LANGUAGE		HOUSING & TRANSPORTATION							
	below poverty	unemployed	income	no high school diploma	aged 65 or older	aged 17 or younger	civilian with a disability	single-parent households	minority	speak English "less than well"	multi-unit structures	mobile homes	crowding	no vehicle

Source: SVI 2016 Documentation, page 3. Available in: <https://svi.cdc.gov/data-and-tools-download.html>. Accessed on November 19, 2019.

#### WHY DOES IT MATTER?

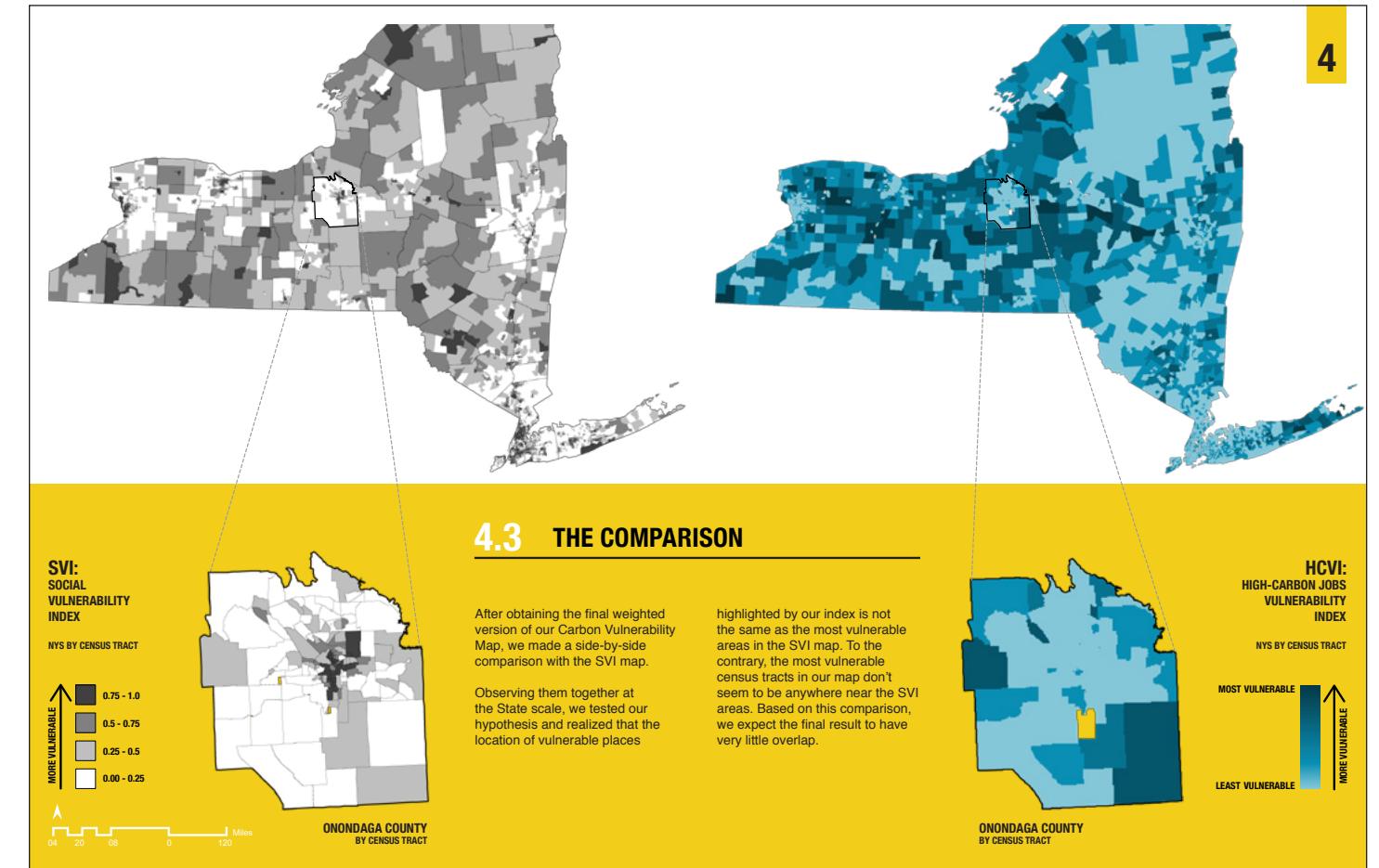
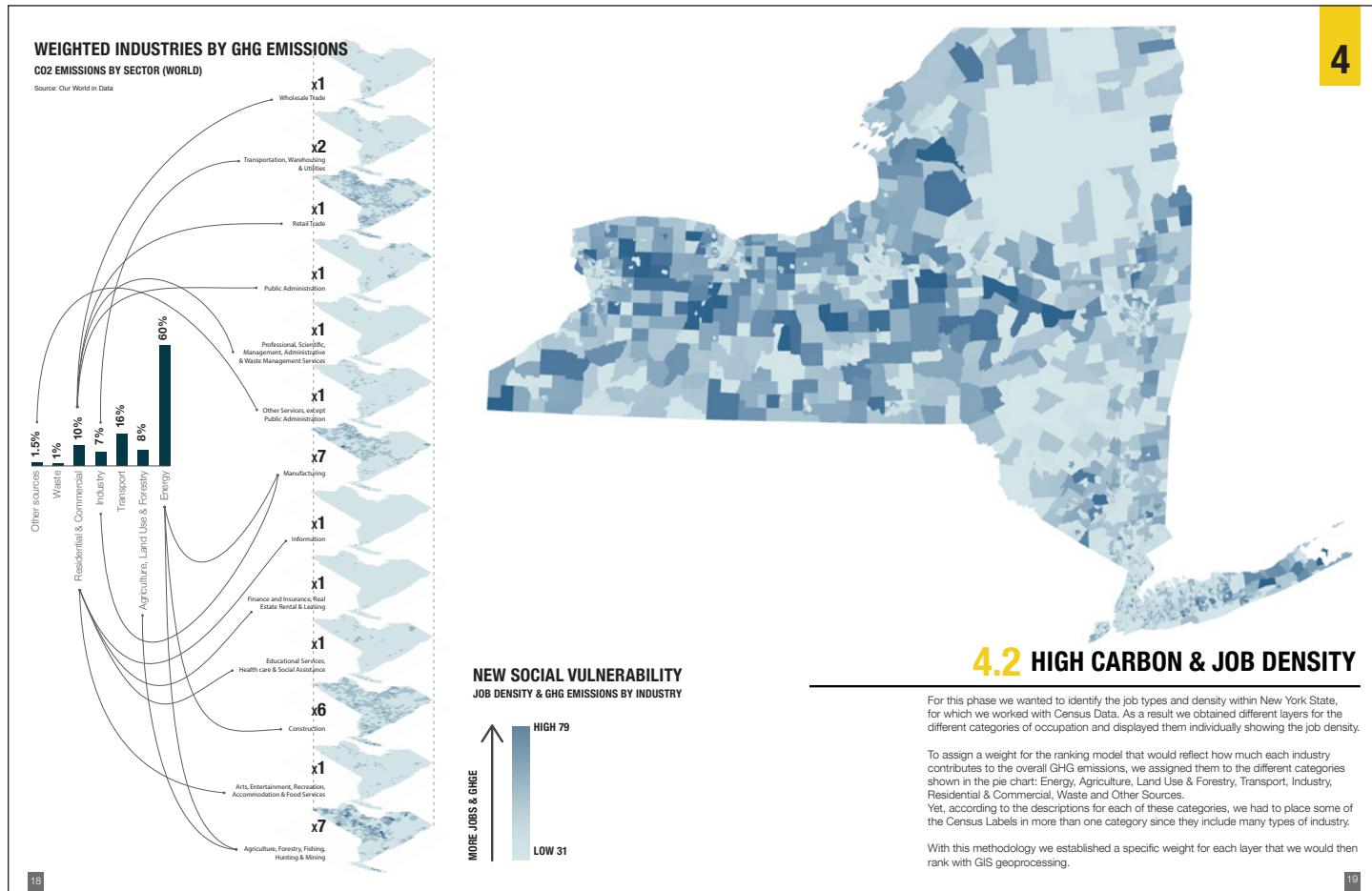
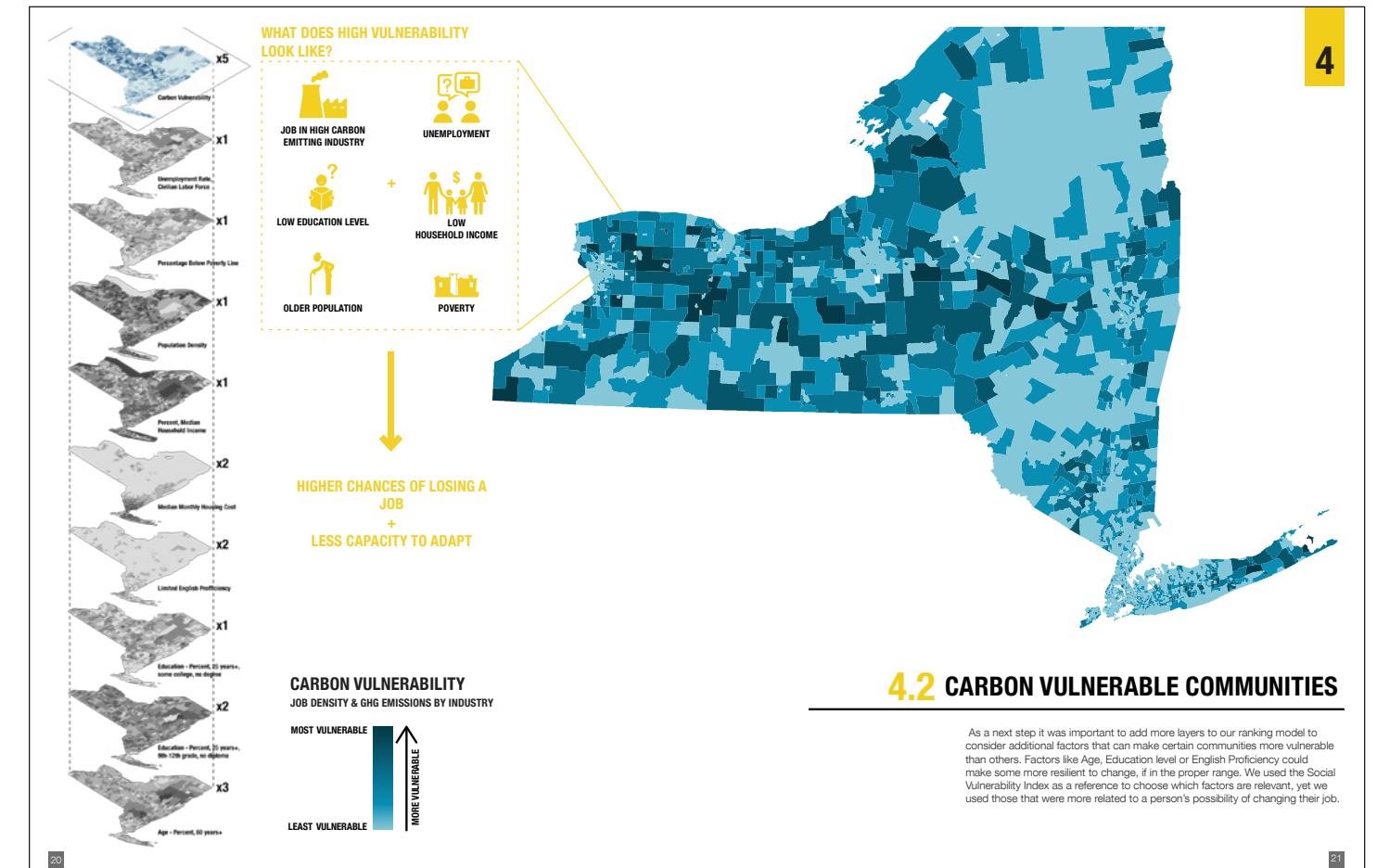
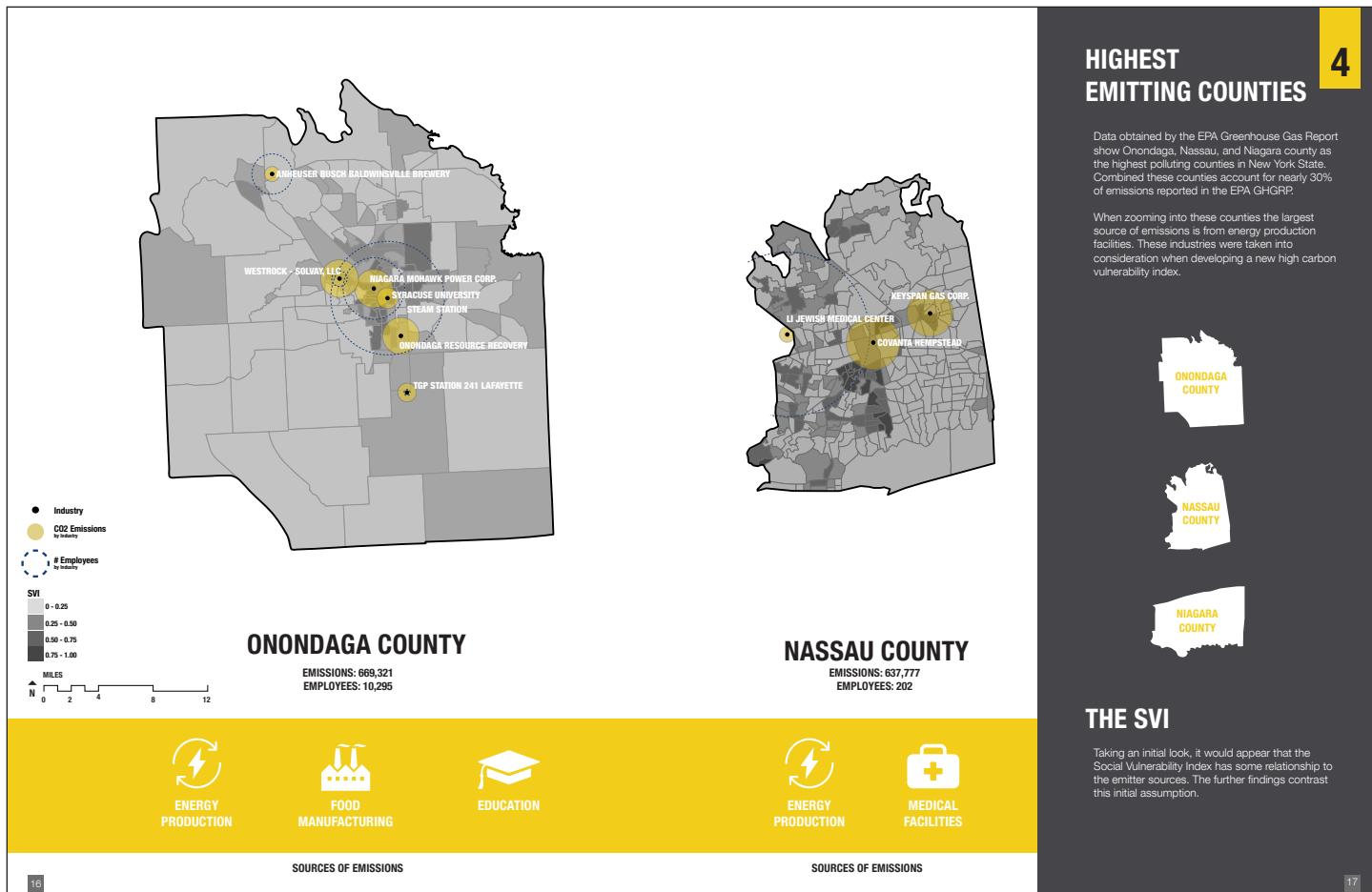
Planners and officials often use the SVI as a base to begin identifying vulnerable communities, this report asks if the SVI is the best starting point towards determining the frontline vulnerable communities that the Green New Deal asks to define.

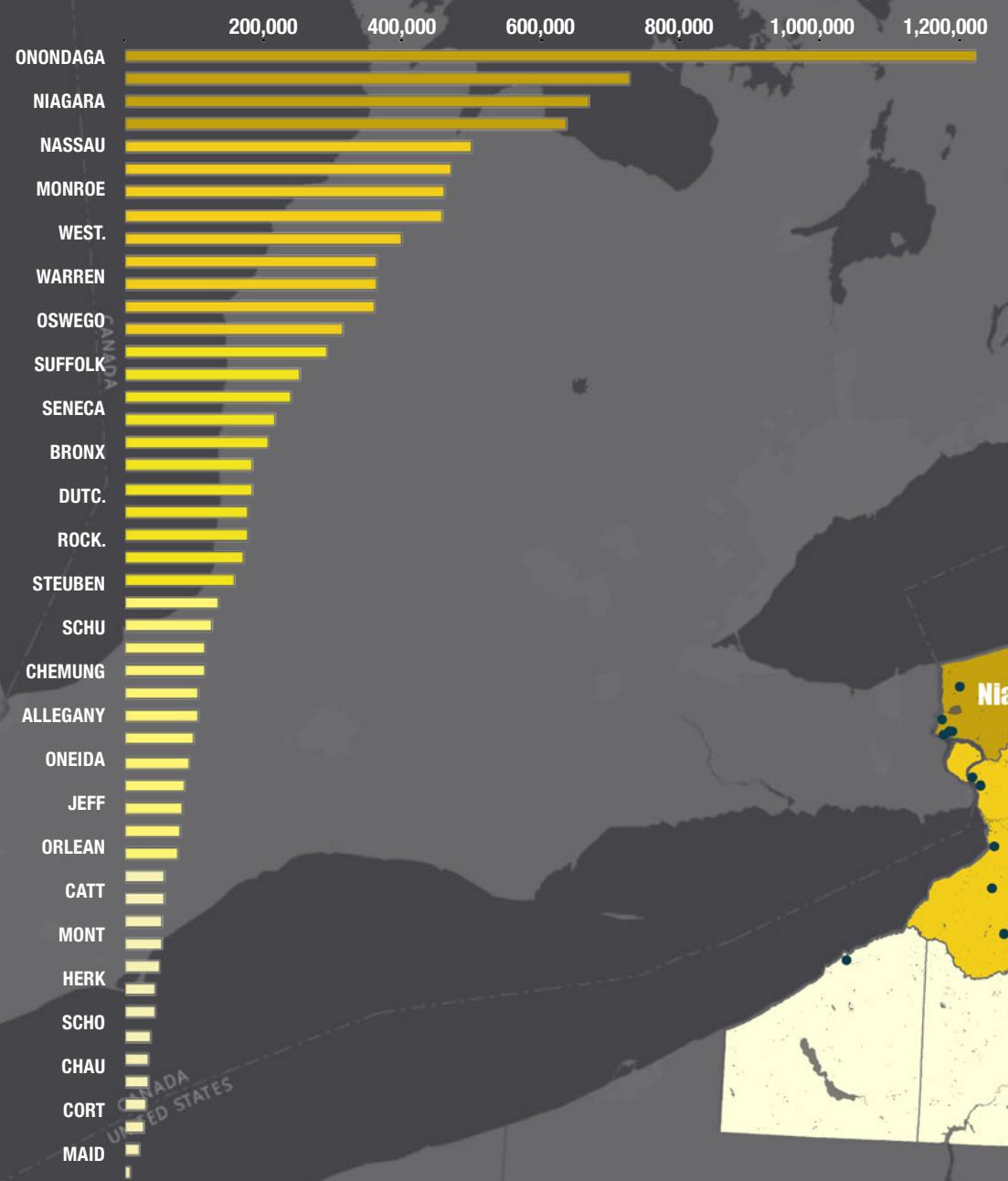
#### HYPOTHESIS:

THE SOCIAL VULNERABILITY INDEX CAN SHOW AN ACCURATE DESCRIPTION OF HIGH-CARBON VULNERABILITY.

#### CONCLUSIONS

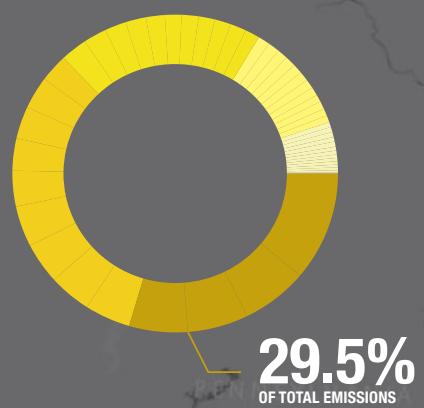
The New York State analysis did not produce overlapping results of the Social Vulnerability Index and the High Carbon Vulnerability Index. The resulting HCVI and the SVI only intersected high vulnerability in 4% of the area of study. Therefore the Social Vulnerability Index cannot be used to reliably predict areas vulnerable to high carbon job loss. This finding suggests a need for further investigation towards defining frontline communities as outlined in the Green New Deal.





## 4.1 NEW YORK STATE HIGHEST POLLUTERS

The Greenhouse Gas Reporting Program, requires annual reporting of greenhouse gas data from the highest emitters per county. This representation was used as a decision layer to determine New York States highest emitting counties - Onondaga, Nassau, and Niagara. Combined these counties account for nearly 30% of emissions reported in the EPA GHGRP.



N 0 20 40 MILES 49 80



## DAYLIGHTING NEVE SHA'ANAN

AN ACTION LAB FOR RESILIENCY  
Tel Aviv-Yafo, Israel.

### THE GREAT RIFT VALLEY:

URBAN DESIGN AND CLIMATE RESILIENCE ALONG A GLOBAL TRANSECT  
**(SPRING)**

Candelaria Mas Pohmajevic,  
Antonia Medina Abell,  
Niharika Shekhwat,  
Shailee Shaa.

Daylighting Neve Sha'anana builds on the efforts of its community to propose a path to residency and civic participation through a Neve Sha'anana Action Lab that will mediate between the Municipality and the neighborhood for future development, to empower its community and celebrate ecology.

Neve Sha'anana is a liminal neighborhood located between the ancient city of Jaffa and the wealthier north Tel Aviv. It is home to migrant workers and asylum seekers from Eritrea and Sudan, who reside in a transitional state. Their "in-betweenness" is deemed as negative by the city that is unable to meet their needs. Our project aims to empower the neighborhood by daylighting its marginalized community and its buried assets, such as the neighboring Ayalon River, which was concretized to build a highway.

Neve Sha'anana Action Lab connects residents and municipal stakeholders to create empowering public spaces. This public-private partnership supports the migrant workers and asylum seekers of Neve Sha'anana to actively participate as stewards in their neighborhood, gaining social credits and serving as an operational and maintenance workforce for the entire city.

## EMPOWERING TWO MIGRANTS OF TEL AVIV-YAFO



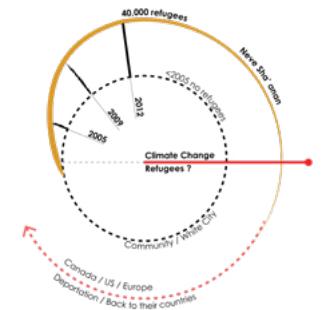
[Watch introduction video HERE](#)



### PEOPLE

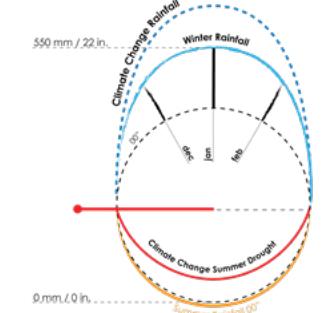
The migrant workers, asylum seekers and the Ayalon are perceived as the migrants of Tel Aviv-Yafo.

In 2012, there was an immigration surge which resulted in 40,000 refugees residing in Neve Sha'anana.



### WATER

The river is hidden behind the walls of the Ayalon Highway. Tel Aviv experiences extreme fluctuations of drought and flood conditions throughout the year.



## NEVE SHA'ANAN ACTION LAB

Neve Sha'anen Action Lab is an incremental initiative that builds on the existing efforts of the community. It connects residents and municipal stakeholders to create empowering public spaces.

By participating in this Lab, the migrant community members receive a Resident ID Card.

Neve Sha'anen Action Lab initiative incrementally builds community-driven projects at three scales utilizing the pod toolkit. It includes interventions in between spaces, vacant/parking lots and a shelter in Levinsky Park that empower the residents through social and economic integration.



## NEVE SHA'ANAN ACTION LAB AS AN AGENT OF CHANGE

Inspired by Israeli PVC shutters, we propose modular structures that provide shade, program and shelter to the community.





## COOLING HUB



## DAYLIGHTING PEOPLE

In-between space intervention on Yesud-ha Ma'ala St.

It includes community built pods and seating areas for neighborhood gatherings, small business expansions and gardens. Through this proposal, the activities behind the facade will have an opportunity to be showcased into the daily street life of Neve Sha'anana.

## MARKETPLACE

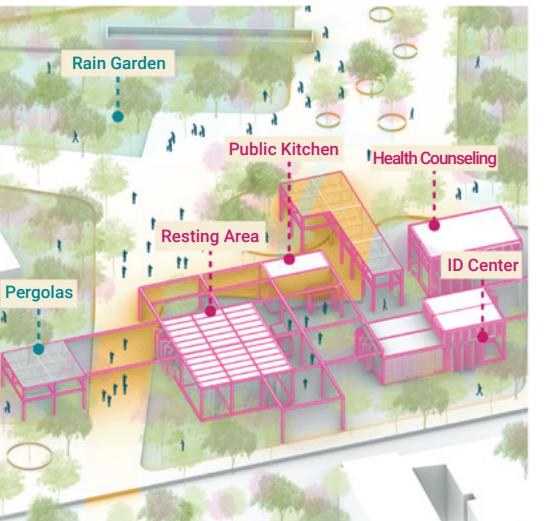


## DAYLIGHTING NEIGHBOURHOOD

Neve Sha'anan market intervention on HaGdud Hairvi St.

Through this marketplace, the migrant workers and asylum seekers will be able to capitalize on their skill and market local "Made in Neve Sha'anan" products, in turn, promising a path to recognition and stability.

## COMMUNITY SHELTER



## DAYLIGHTING ECOLOGY

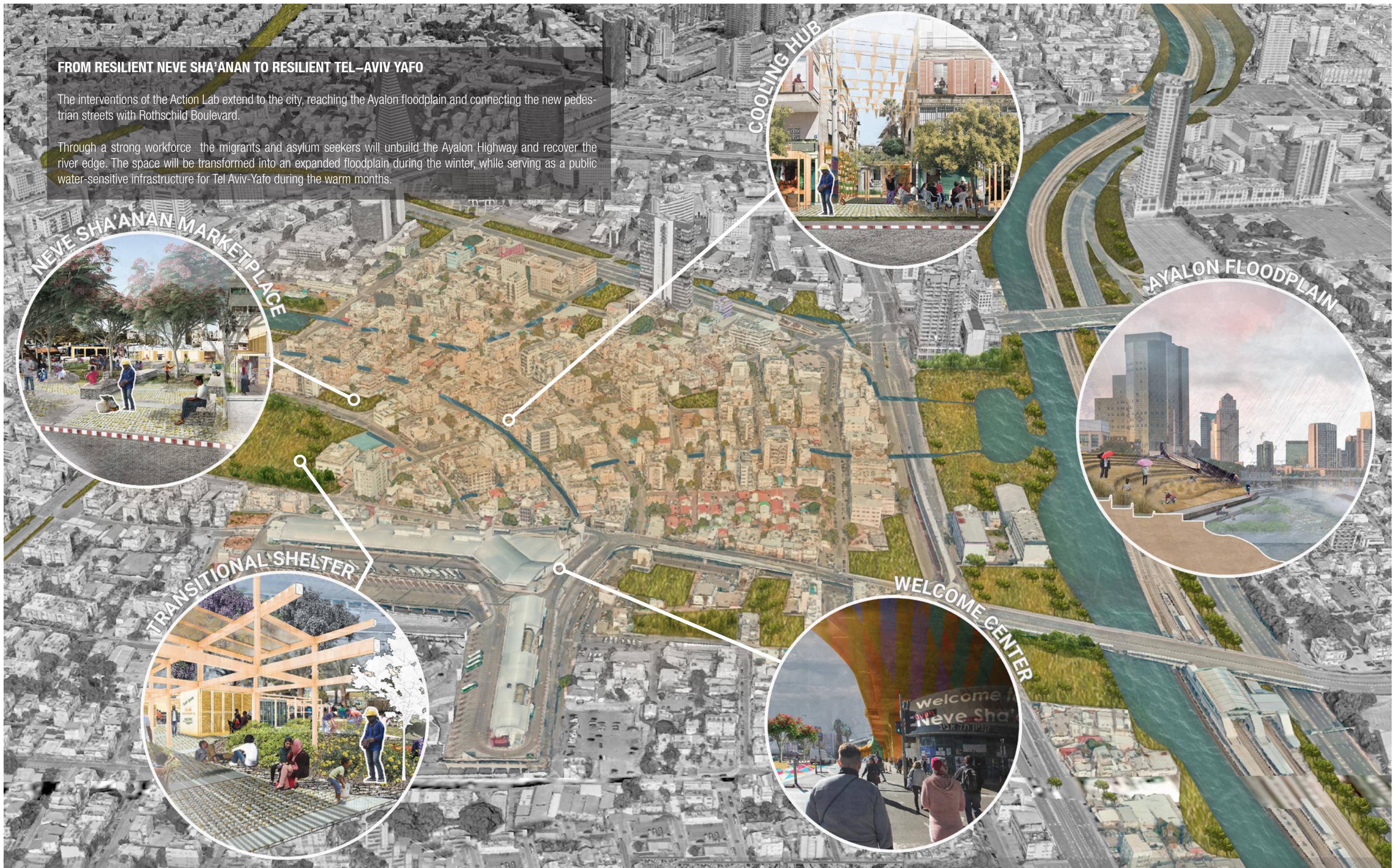
A transitional shelter is built by the community in Levinsky Park.

The shelter park holds soft landscape for harvesting water. The community will build the shelter, providing shade and fair jobs to the migrant workers. It includes facilities such as public kitchens, restrooms, spaces for mental health counseling, job training and an identification center.

## FROM RESILIENT NEVE SHA'ANAN TO RESILIENT TEL-AVIV YAFO

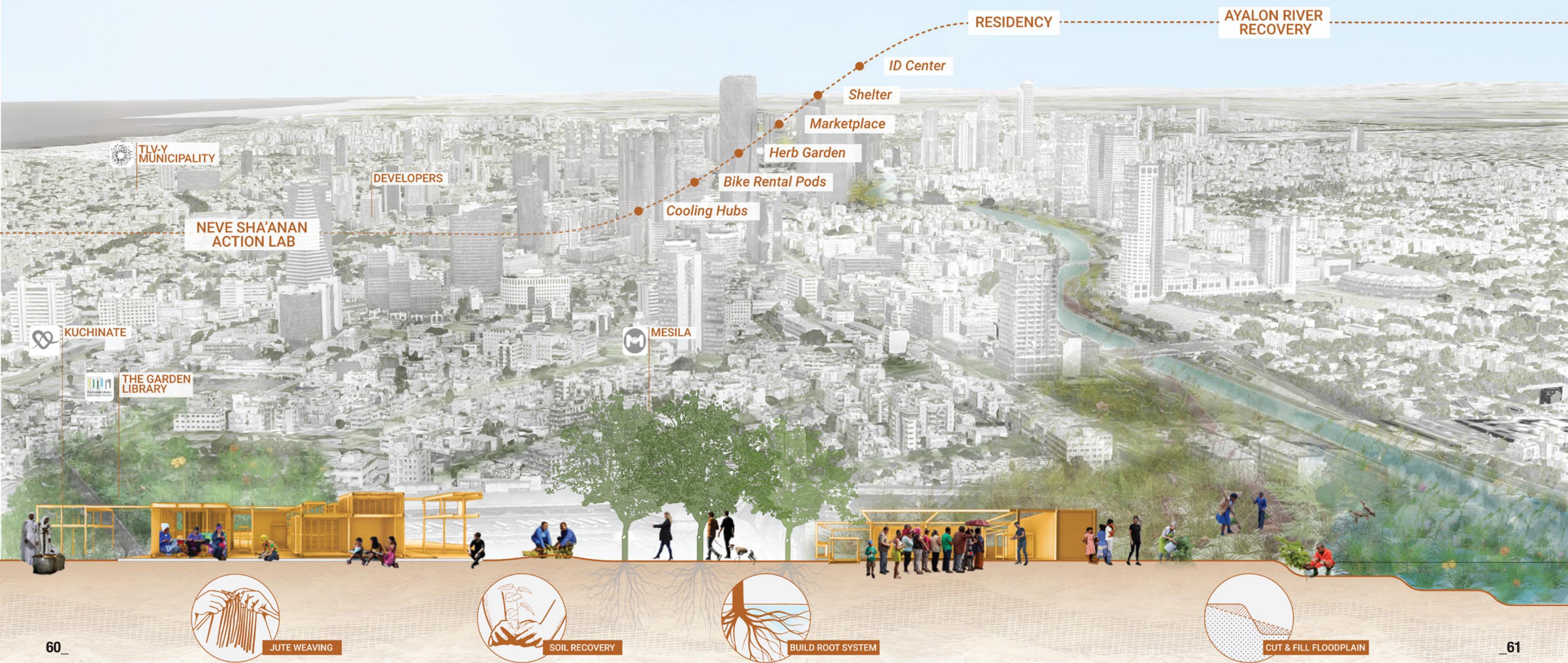
The interventions of the Action Lab extend to the city, reaching the Ayalon floodplain and connecting the new pedestrian streets with Rothschild Boulevard.

Through a strong workforce the migrants and asylum seekers will unbuild the Ayalon Highway and recover the river edge. The space will be transformed into an expanded floodplain during the winter, while serving as a public water-sensitive infrastructure for Tel Aviv-Yafo during the warm months.



## EMPOWERING SOUTH TEL AVIV–YAFO THROUGH COLLABORATIVE DESIGN

The public-private partnership will enable Neve Sha'anana Action Lab to train migrant workers and asylum seekers, becoming the neighborhood's agents of change. The Action Lab will foster the community's social capital and incentivize stewardship while improving quality of life of the residents of Neve Sha'anana. It empowers migrants to climb the ladder of permanence while celebrating their identity.



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 Fig. 7 Marko and Placemakers, Northala Fields Park, London, UK. In: <http://markoandplacemakers.com/projects/northala-fields-park-london-uk>  
 Fig. 8 Google Earth  
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 Fig. 10 By author.  
 Fig. 11 Yoav Meiri Architects, The Garden Library for Refugees and Migrant Workers – 2011, ArchDaily accessed May 03, 2020.  
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 Fig. 13 Yoav Meiri Architects, The Garden Library for Refugees and Migrant Workers – 2011, ArchDaily accessed May 03, 2020.  
 Fig. 14 Still from Torre David (2013). Urban Think Tank, <https://torredavid.com/> Also available at: <http://u-tt.com/project/torre-david/>  
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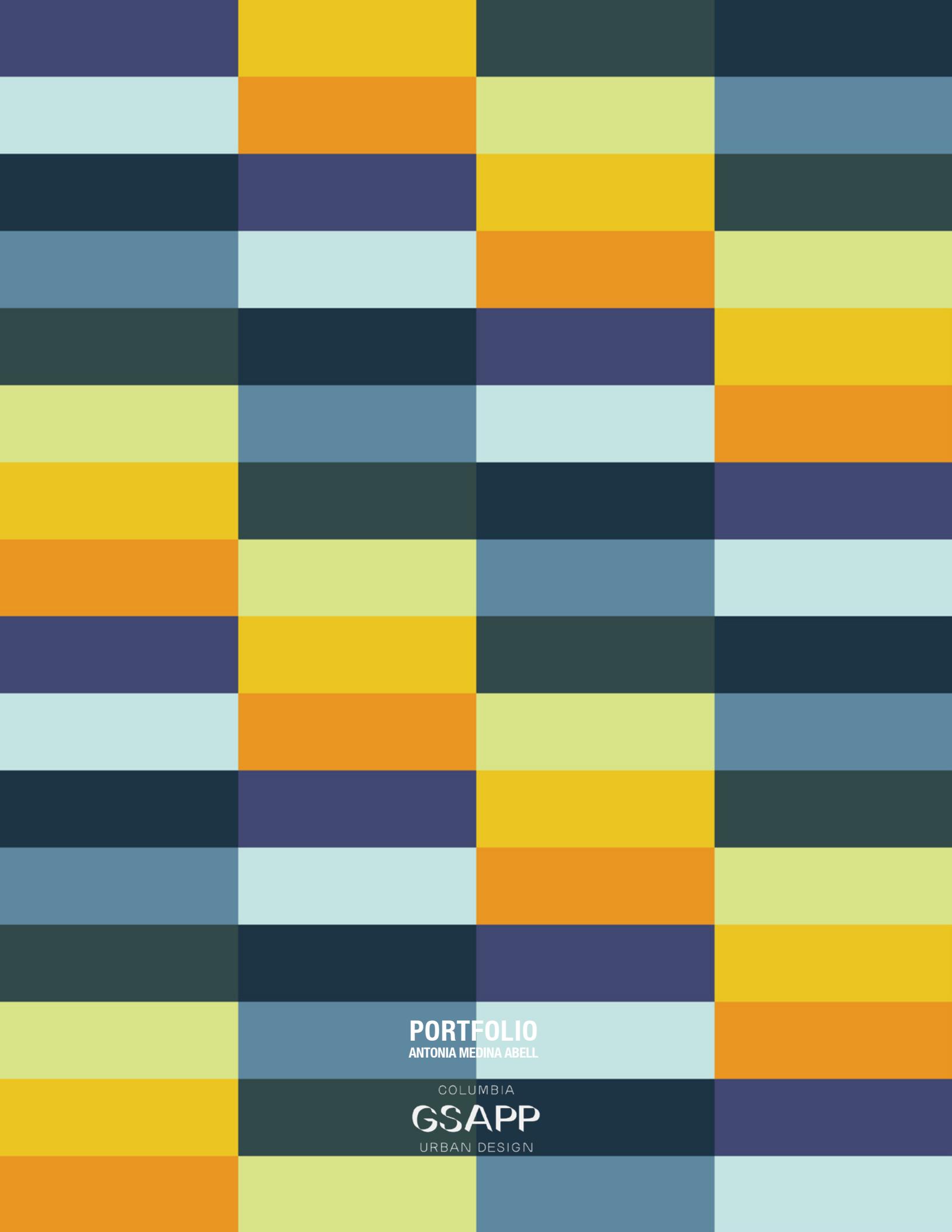
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