

JUSTICE IN PLACE

DESIGN FOR EQUITY
IN THE HUDSON VALLEY

Fall 2014 - 2018

COLUMBIA
GSAPP
URBAN DESIGN

Justice in Place: Design for Equity in the Hudson Valley is a compilation of select student work from Columbia University's Graduate School of Architecture, Planning, and Preservation, M.S. Architecture and Urban Design Program, fall semester studios in the years 2014-2018.

Program Director: Kate Orff

Assistant Director: David Smiley

Faculty: Lee Altman, Skye Duncan, Justin G. Moore, Michael Murphy (coordinators), Wendy Andringa, Pippa Brashear, James Carse, Phu Duong, Jerome Haferd, Christopher Kroner, Christo Logan, Sanrdo Marpillero, Liz McEnaney, David Smiley, Jin Taira, Caitlin Taylor, Nans Voron

Research Associates: Jimena Gonzalez Sicilia Ibarrola, Juliana Azem Ribeiro de Almeida, Abhimanyu Prakash, Katherine Marine Flores, Eleni Gklinou, Nishant Mehta, Evelina Knodel, Niharika Kannan, Sofia Valdivieso

Publication Editor: Lee Altman

Graphic Design: Alexandra Burkhardt

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Special thanks to Dean Amale Andraos and former Dean Mark Wigley, former director of the urban design program Richard Plunz, and former coordinator of the fall semester studio Mojdeh Baratloo

Our studios rely heavily on partnerships we build with local residents, organizations, and municipalities, who contribute their time, energy, and local knowledge to benefit our students. This publication is dedicated to them.

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FALL SEMESTER
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FORWARD DESIGN JUSTICE

KATE ORFF, PROFESSOR AND DIRECTOR, URBAN DESIGN PROGRAM

This publication represents a snapshot of the cumulative work by Columbia Urban Design faculty and students over several years. What binds this work together is a shared commitment to social justice, and to the frame and scale of urban design as a means to address inequality.

Moreover, this publication represents a deep affection for the towns, cities, people and landscapes of the Hudson Valley. Over many years, the Fall semester faculty have become deeply tied to the places we have worked in and to the non-profits, community groups and individuals we have learned from, in Poughkeepsie, Beacon, Newburgh, Kingston, Hudson, and surrounding towns and counties. What has emerged from all this work is a regional portrait of design and justice that transcends the historical political and geographical boundaries that sometimes fragment decision-making processes, leaving the most vulnerable people subject to stresses such as escalating housing prices, poor access to education or employment, or living in polluted environments. The Columbia Urban Design studio, led by Lee Altman and Justin Moore and a multi-disciplinary faculty team, has brought expertise, grit, commitment and design excellence to expand both the public imaginary and professional

practices that might change the social life of the Valley. It is our belief that exploring these questions through spatial design and urban activism will ensure long-term benefits to a greater cross-section of the population.

Whether considering mental health, incarceration, the right to healthy food and education, improved transportation, ecosystem damage, or access to the water's edge, the pedagogical statements and student work herein are a testament to the power of design to explore and test the ways to heal the legacy of top-down planning and design, "urban renewal," and displacement, and to set an agenda for design justice and urban design practice for the coming decades.

With deep appreciation for all involved, especially the support of Dean Amale Andraos and former Dean Mark Wigley, this publication represents a way to engage the challenges of justice and the city, and to re-charge urban design with the ideals of equality. In the Hudson Valley and in other regions around the United States, this is the only way forward for landscapes of democracy.



THE HUDSON VALLEY INITIATIVE

KAJA KÜHL, DIRECTOR, HVI

The Hudson Valley Initiative, based at Columbia University's Graduate School of Architecture, Planning and Preservation (GSAPP) facilitates research and design into the complex spatial, ecological, and economic opportunities of this vast region.

After several years of engaging with communities and residents in the region through graduate urban design studios, the results of which are illustrated in this publication, the Hudson Valley Initiative was established in 2017 as a platform to sustain this dialogue beyond semester-based timeframes, provide continuing resources and support to communities and organizations and coordinate a body of research and design knowledge on the built and natural environment of the Hudson Valley. The initiative is the GSAPP's commitment to contribute sustained architecture and urban design research to the urbanized region that delivers energy, water and food to New York City, in other words, to the region that it calls home. It is also a commitment to an expanded understanding of urban design, recognizing the rural hinterlands, the small cities, towns and villages, the watersheds, forests and farms, the infrastructure systems that connect and divide places as part of an urban geography to explore new spatial solutions for collective uses and for the common good.

The initiative connects students and faculty within GSAPP across disciplinary silos of architecture, preservation, urban design and urban planning through the joint focus on this geography and it facilitates the exchange and interaction of students and faculty with communities and residents in the Hudson Valley. Where student projects start conversations and open new ways of thinking about the future of Hudson Valley communities, the initiative continues those conversations to advance the communities' goals and engage in place-specific collaborations with organizations and municipalities. This work includes workshops, public visioning sessions, conceptual design, research and technical assistance. Students or recent graduates participate as (paid) research

assistants to enhance their educational experience through real-world collaborations beyond the classroom. Co-creation is an integral part of this collaboration with communities. The initiative does not design for community-based collaborators, but with them. It is a core belief that the inherent expertise each collaborator can bring to a project is invaluable, both for the educational experience of students as well as the project results and its long-term sustainability.

Two core issues inform the initiative's independent research and curriculum, guide the approach to co-creative work and provide significance of the work beyond the region. Underlying all work is a recognition of climate change as an unevenly experienced crisis. As climate stresses and new weather patterns become more visible and global protests mount, it has also become increasingly visible that the impacts of this crisis are disproportionately experienced by low-income communities and communities of color. The work of the HVI links equity, the environment, and the economy to visualize scenarios for a just transition to a net zero region. Building on a growing movement for economic democracy in the region, a second issue explores the region as a network to envision cooperative spaces to work, live and learn. The initiative examines frameworks for collaboration in spatially dispersed, yet networked rural areas and proposes new and innovative spaces and networks for economic development, public health, social innovation and regional governance. These recurring issues thread through publications, exhibitions, lectures and workshops. A core mission of the HVI is to act as a platform for the production and exchange of knowledge in order to support further research, advocacy, planning and design across disciplines, and geographic and political boundaries, actively contributing to the future of the region.



DESIGN JUSTICE IN PEDAGOGY AND PRACTICE

LEE ALTMAN AND JUSTIN G. MOORE

Architectural and urban design education is in a constant state of change, responding to and sometimes contributing to the structural, social, and environmental change in cities. Working in the spaces that form between the built legacies of twentieth century planning and the social and environmental imprints those legacies left behind, urban designers must calibrate their acquired tools to engage the pressing threats of climate change, and the ingrained and increasing challenges of systemic injustice.

Urban neighborhoods, like those found in Newburgh, Poughkeepsie, and other cities in the Hudson Valley, were once labeled as blighted, ready for demolition and “renewal”. Carved through with arterial highways shuttling suburban vehicles to job centers or razed with the promise of investment that never came, many of the valley’s cities still carry the regional burden of supporting residents and communities repeatedly failed by a disintegrating social safety net. These planning maneuvers are now understood as enabling the injurious denial of access to greater economic opportunity, health, and wellbeing.

In this context, the urban design program works with communities and residents through research, exchange, ideation, and interactive transformations of spaces. These experiences are as essential and as integrated into the studios’ pedagogy as the more typical conceptual, research, and design processes. As professionals and academics, we bring with us an assumption of knowledge as well as an embedded privilege, often imposing a point of view informed by literature and experience, but we often lack a thorough understanding of local social assets, ingrained challenges, and cultural constructs. To address this, the studio strives to build multiple lasting partnerships and develop a diverse and broad understanding of place. This understanding is a skill, a responsibility, and a necessary ‘state of the art’ for the study and practice of urban design.

It is the goal of the studio to create the conditions for collaboration and communication among varied stakeholders. Our work grows from the multi-scalar relationships between design and the lived and built environment, from community concerns to infrastructural planning, from public policy and economics to the very nature of public space. Projects are tasked with starting conversations and opening new ways of thinking about the future of Hudson Valley communities. Working with communities, organizations, and governments in the Hudson Valley, teams of graduate students have developed urban design proposals that draw on a range of topics, challenging various aspects of Justice in Place to provide and illustrate visions for improved spaces, places, services, and opportunities for residents, economy, and environment.

Justice in Place: Design for Equity in the Hudson Valley introduces concepts, tools, and strategies developed by urban design students to practice effectively in this complex context. At a time when urban discourse has become ever-present, the projects in this volume offer a range of examples, from the concrete and immediately actionable to the ambitious and paradigm-changing, provoking design practice to enact change.

As this new generation of designers continues to learn and develop their skills and agency, there are new ways of thinking and practicing that can emerge to advance both environmental responsibility and social justice. Design practice now comes with a better-understood responsibility, if not a more profound sense of ethics and care, through engaging with and learning from the environment, people, and place.



Student-led interaction, Newburgh 2014



Stakeholder workshop, Newburgh 2014



Student-led interaction, Newburgh 2014



Student-led interaction, Newburgh 2014



Site visit, Beacon 2015



Student-led interaction, Newburgh 2015



Student-led interaction, Beacon 2015



Student-led interaction, Newburgh 2015



Student-led interaction, Beacon 2015



Student-led interaction, Beacon 2015



Stakeholder workshop, Hudson 2018



Student-led interaction, Poughkeepsie 2016



Site visit, Poughkeepsie 2016



Site visit, Poughkeepsie 2016



Site visit, Hudson 2018



Student-led interaction, Poughkeepsie 2016



Site visit, Poughkeepsie 2016



Student-led interaction, Poughkeepsie 2016



Stakeholder workshop, Poughkeepsie 2016



Student-led interaction, Hudson 2018

REGIONAL GEOGRAPHIES
AND LOCAL SITES

FOOD + AGRICULTURE

- 1 Agritopia
- 2 Room to Grow
- 3 Dairyscape

ECOLOGY + HEALTH

- 4 Seeds of Change
- 5 Human Nature
- 6 Co-Habitat
- 7 Energy Bloom

CULTURE + ART

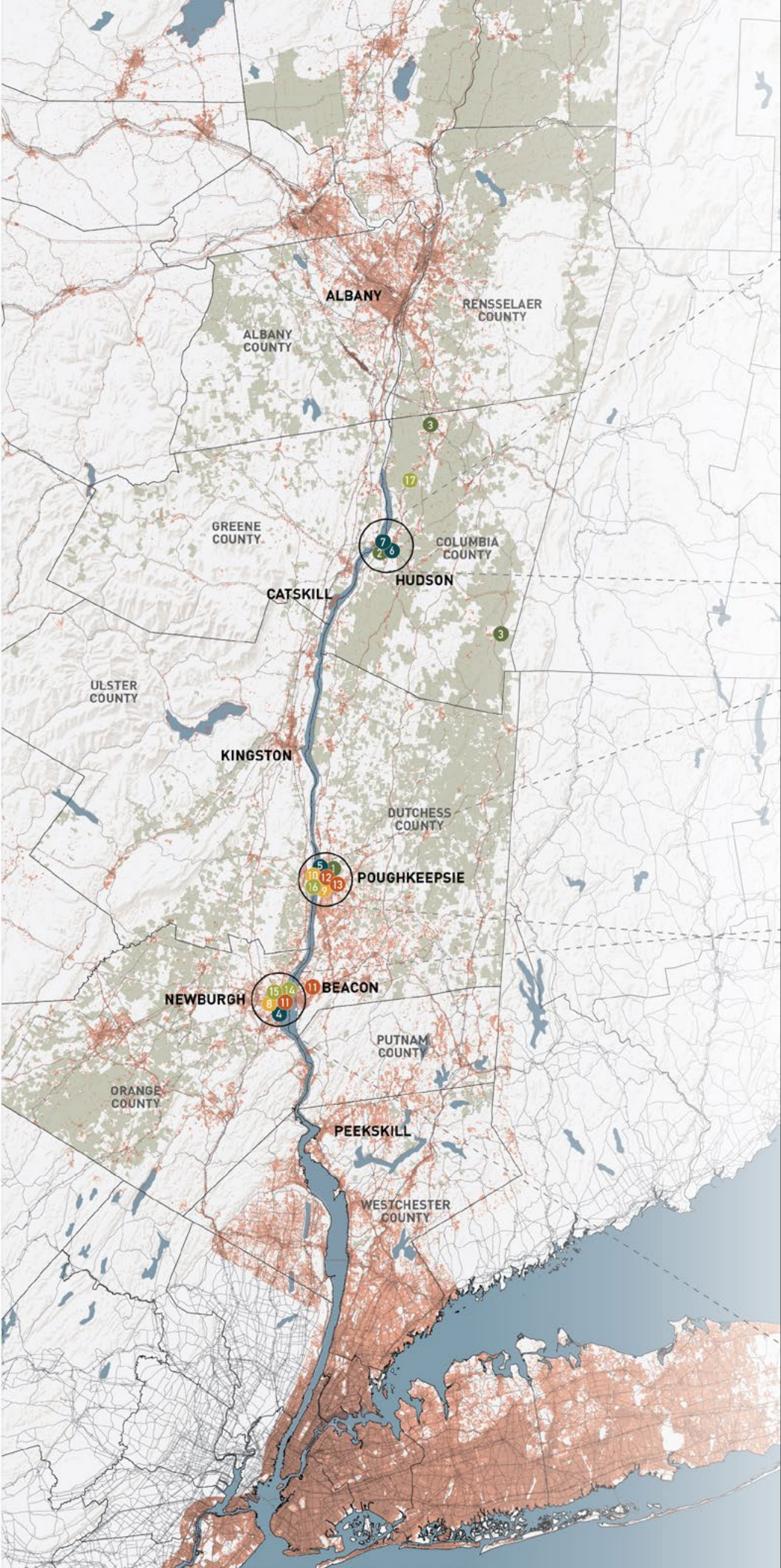
- 8 Lights Camera Newburgh
- 9 Oaxakeepsie
- 10 The CO[re]-LA BOR-A[c]TIVE Project

INCARCERATION + EDUCATION

- 11 The Newburgh Path
- 12 De-Marginalize
- 13 Beyond School

JOBS + ECONOMY

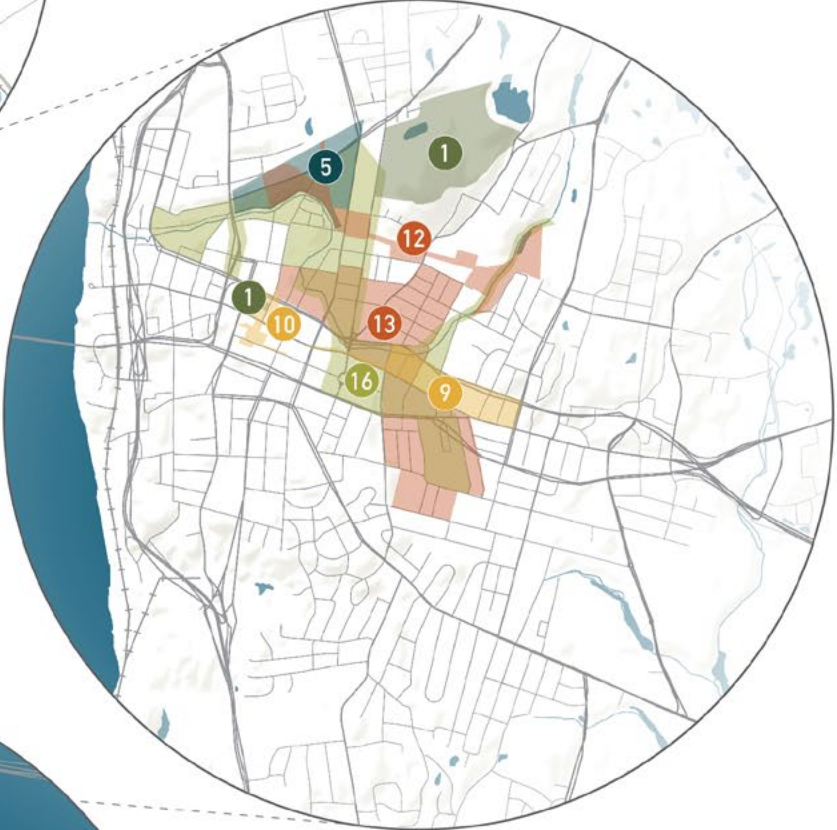
- 14 To the Core
- 15 Local Matters
- 16 Cannabis Archaeology
- 17 Albany-Hudson Growth Corridor



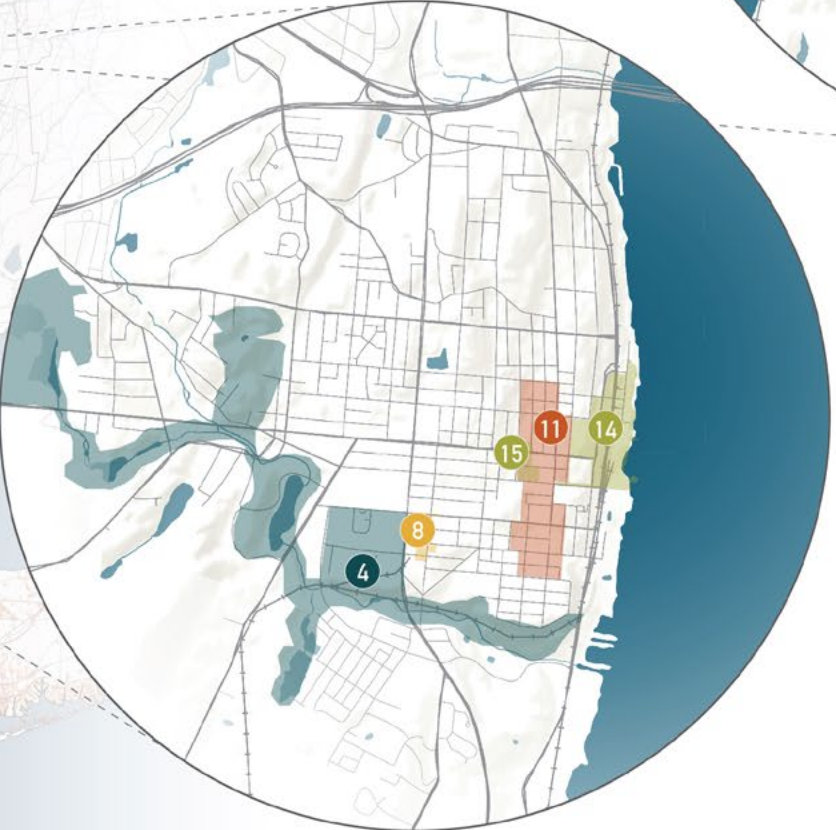
HUDSON



POUGHKEEPSIE



NEWBURGH



FOOD & AGRICULTURE

WENDY ANDRINGA

Although eating is a relatively simple activity, the production of food can be extraordinarily complex. Historically, the development of agriculture was the first step towards creating a complex society – the domestication of flora and fauna meant few could labor to feed many, and agricultural communities thrived as a result of this efficiency. There is logic in agricultural efficiency; in addition to providing food it creates expertise and opportunity that should be of benefit to the many. This is the basis of food justice. A downside of agricultural efficiency is that it creates a disconnect between individuals and food production. This disconnect, coupled with an inexhaustible drive for more efficient food production, has paved the way for industrial farming and agribusiness. One result of industrial farming is that most consumers have lost sight of food production methods that are healthy for individuals, communities, and the environment. This is a contributing factor to food injustice.

In the Hudson Valley this disconnect is particularly acute. With more than 5,500 farms producing a market value of over \$650 billion (USDA Agriculture Census, 2012), produce is distributed to the New York City metropolitan region and other strong markets, bypassing the Valley’s small cities and towns. The growing farm-to-table movement creates an even more stark contrast between the valley’s more affluent residents and those living in food deserts. At the same time, family farms are struggling to compete with industrial complexes, aging farmers are in want of a next generation, and new farmers face high land prices and startup costs. The drive for efficiency has also led industrial agricultural practices to the use of synthetic petrochemicals to extend seasons, produce bigger yields, and maximize space. Heirloom species were

cast aside in favor of seeds engineered for maximum productivity and minimum biodiversity. These and other practices have taken a toll on the health of our soil and water quality. Closed loop agriculture is based on the farming principle that all nutrients should be recycled to the soil in which they grew. There is logic in the idea that agricultural systems should mimic the cycles of nature that are without human intervention, it builds a diverse system that can sustain wildlife in addition to crops and livestock – wildlife such a pollinators that are an essential part of the food system.

The student projects featured in this section have enlisted alternatives to petrochemical efficiency that help close the agricultural loop. Strategies such as silvopasture, regenerative grazing, seed biodiversity, and waste re-use are employed for a healthier agricultural ecology. A common theme throughout these practices is that what benefits the environment will in turn be of benefit to people. Repairing the disconnect is also fundamental to each of the featured projects. From community participatory practices to agritourism, they propose a range of design strategies to reconnect local populations with agricultural practices and to reinvigorate local agricultural economies. To this end, what benefits local populations can be of benefit to the greater Hudson Valley as well.

Wendy Andringa is a landscape architect and urban design studio instructor

AGRITOPIA

Hyper-Localized Agricultural Urbanism

ROOM TO GROW

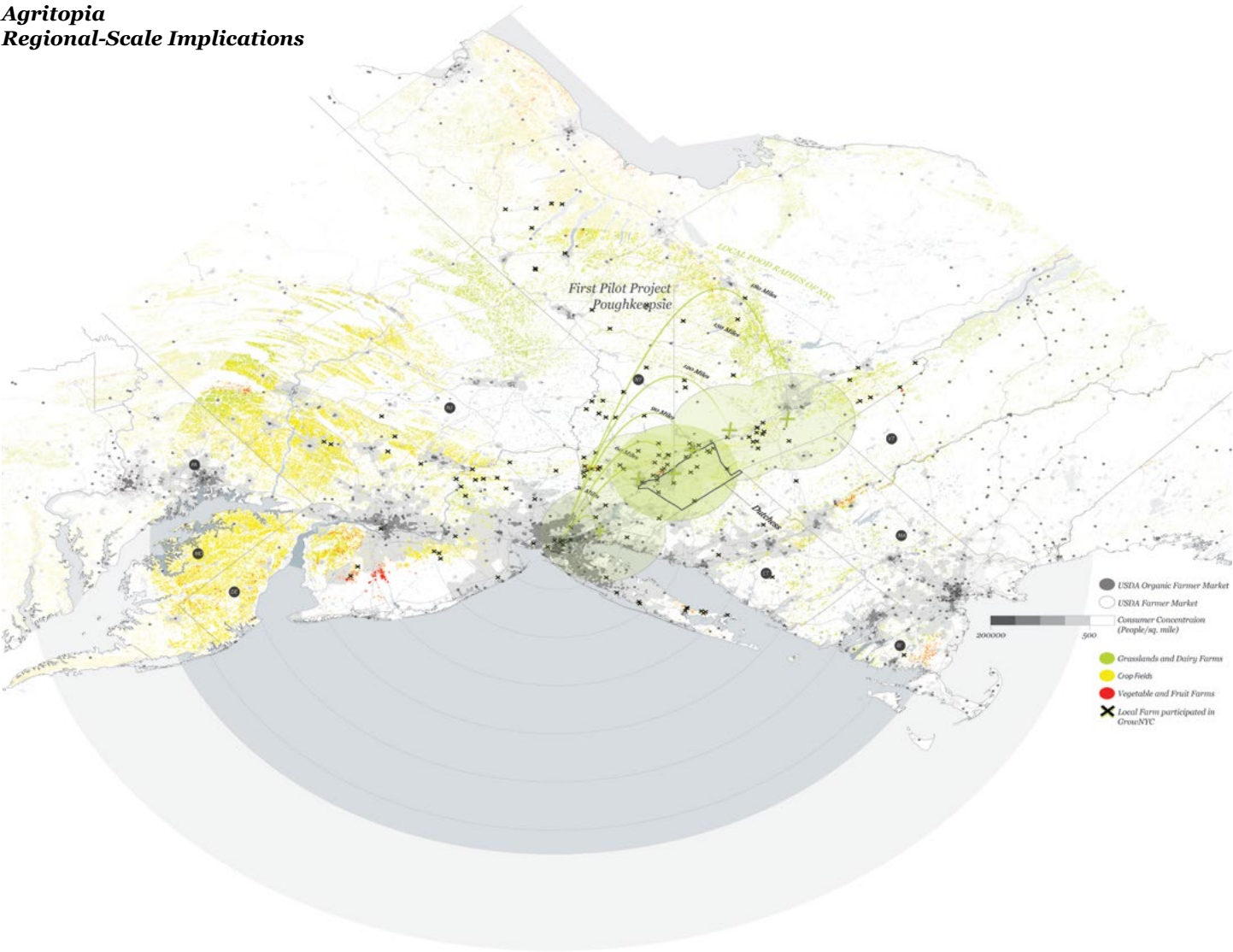
A Model for Affordable Urban & Agricultural Development in Hudson

DAIRYSCAPE

Reversing the Net Negative Environmental Impact of the Dairy Industry

BEYOND THE STUDIO:

Alumni essay by Crystal Eksi



Is there an opportunity to produce locally?

Reversing the Traditional Food System

More than 90% of residents in City of Poughkeepsie rely on wholesale system and distant foods rather than fresher food from local production. Local farms mainly produce for market outside Poughkeepsie.

- Difficulties
1. No space
 2. No knowledge to grow
 3. No economic support



AGRITOPIA

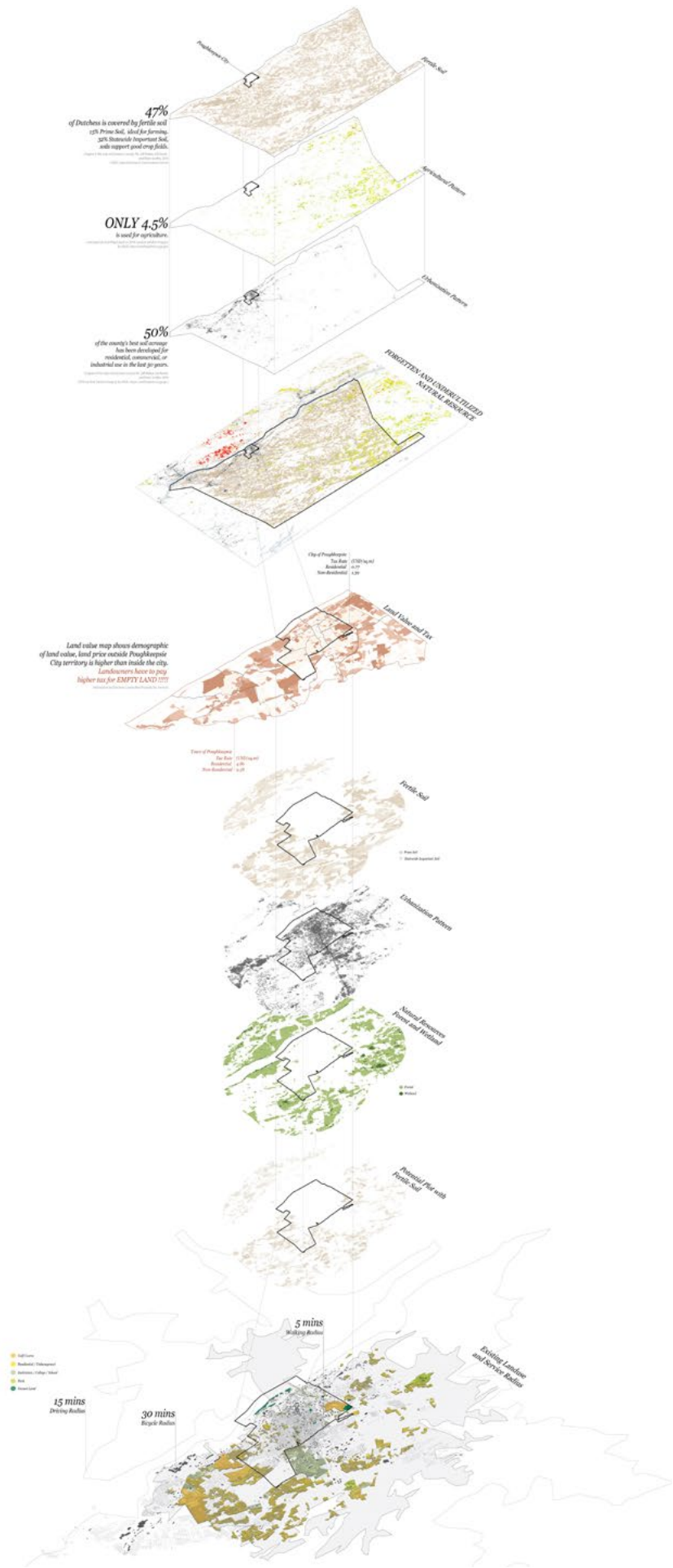
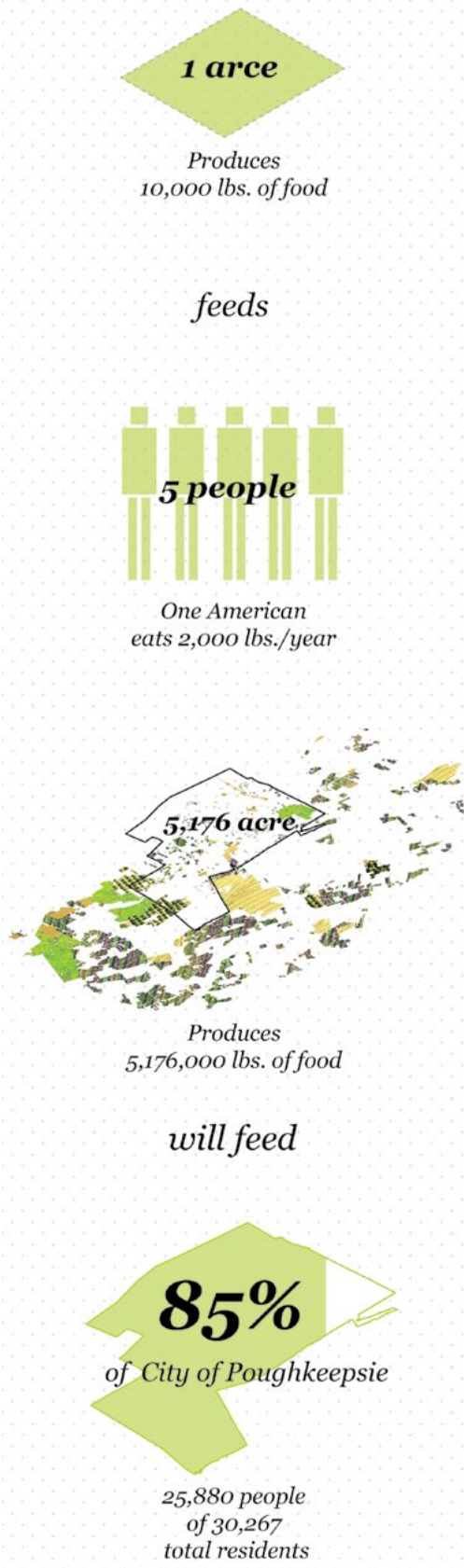
HYPER-LOCALIZED AGRICULTURAL URBANISM

Yue He, Piyawut Koomsiripithuck, Jianwei Li, Janki Shah
Poughkeepsie, Fall 2017

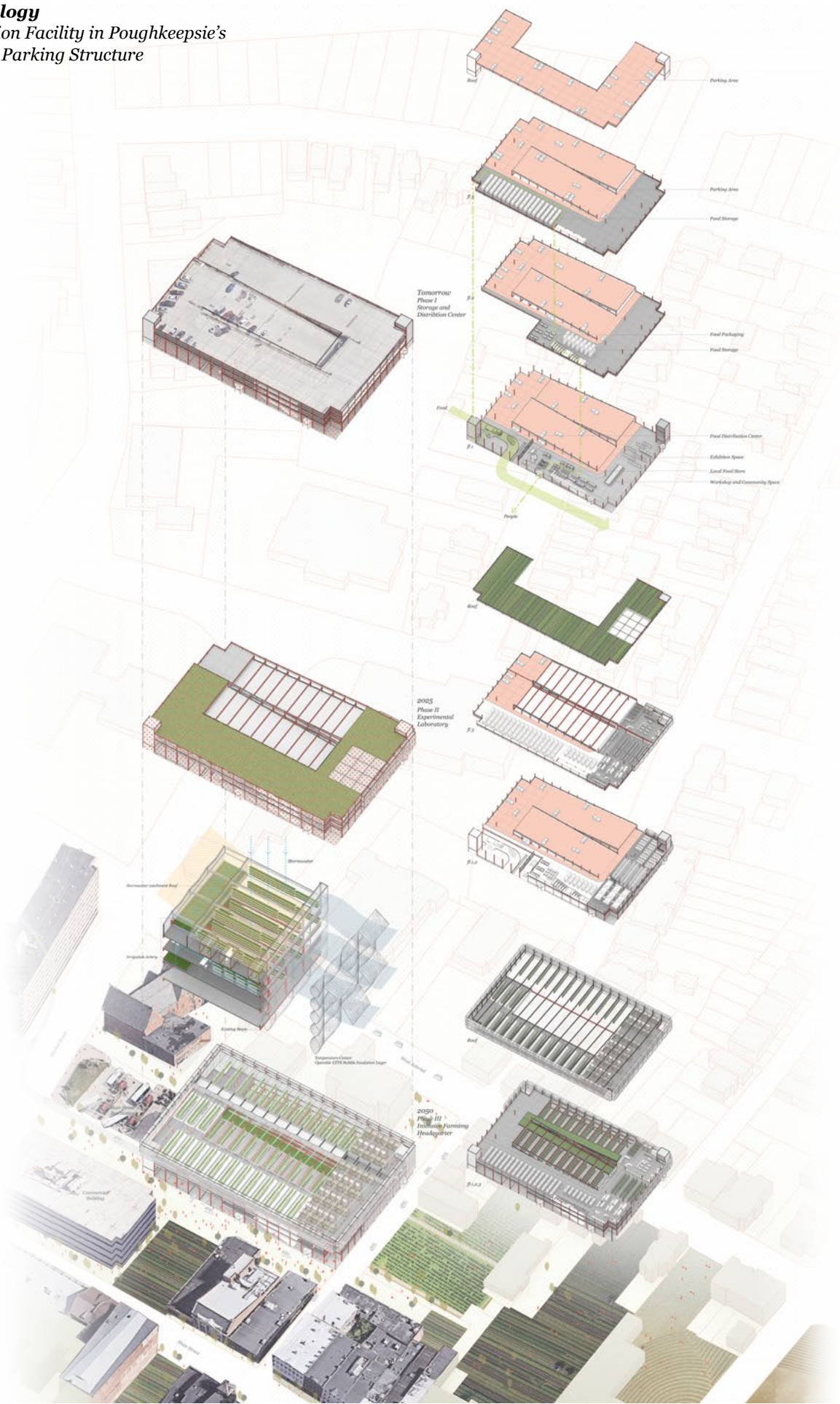
Global warming and climate change pose increasing challenges to the food system. GHG emissions caused by the food industry and related transportation are one of the main contributing factors to climate change. With an estimated rise in population by 2050, food production needs to be increased by 70%. Although agriculture is an important economic and cultural component of the Hudson River Valley, only 4.5% of the 47% suitable agricultural land is used to grow food in Dutchess County. All the while, in Poughkeepsie, one in every four households experiences food insecurity.

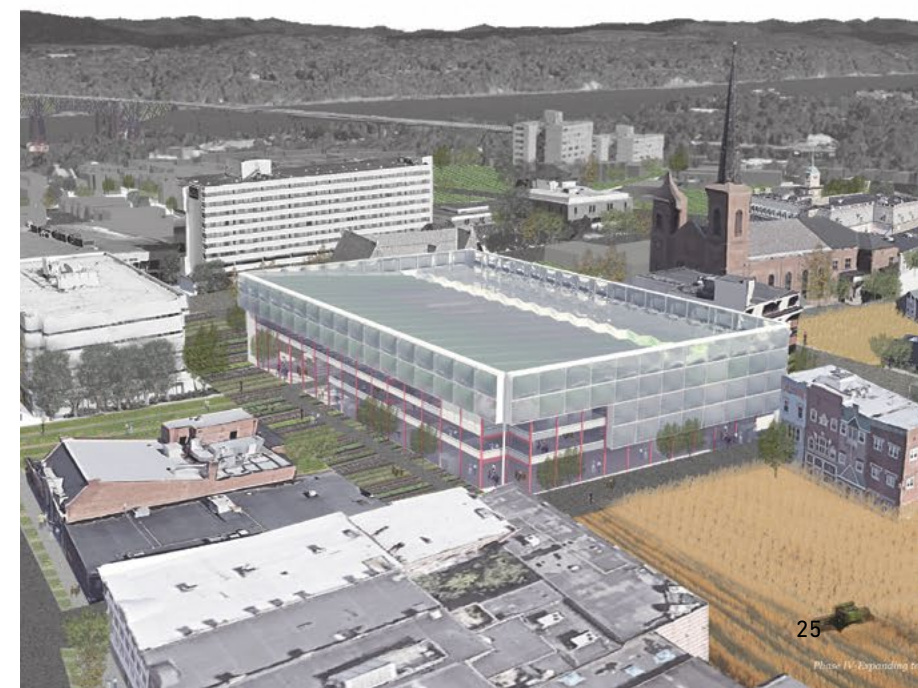
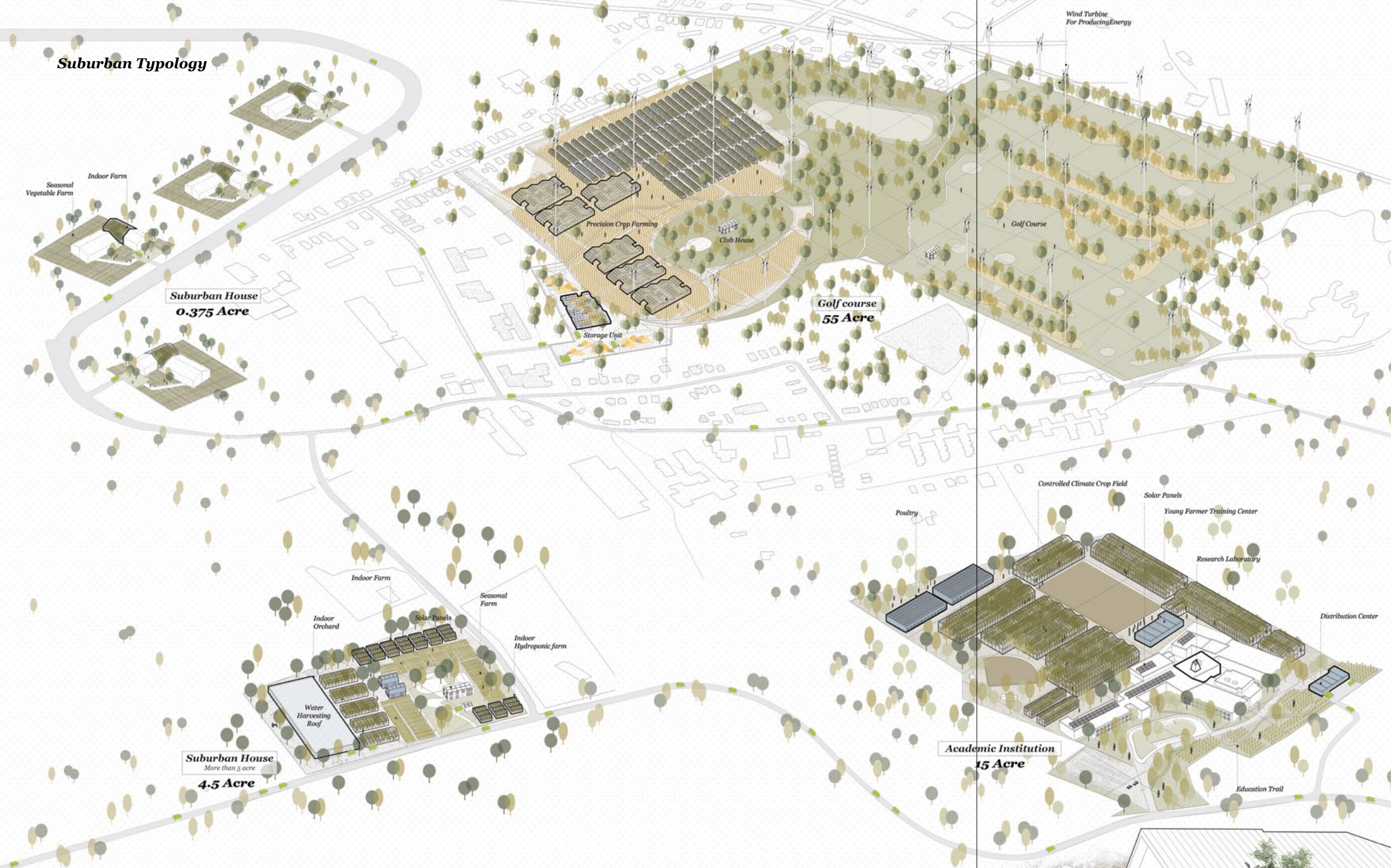
To address these challenges, Agritopia proposes a hyper-localized, decentralized food production system to reduce GHG emissions and help create self-sustaining agricultural units. The model consists of a network of decentralized farms, a local distribution network, and research facilities designed to reduce carbon footprint, increase food production, and meet the increasing consumption demand of 2050. The project identifies and designates spaces for productive landscapes in suburban areas, while establishing a space for experimentation and awareness within the City of Poughkeepsie. The urban facility will research innovative food production technologies and help plan the production landscapes of the future. The suburban-urban relationship forms a prototypical model to address food insecurity challenges that can be applied to cities across the Hudson Valley. Cooperating with both public and private sectors, the model increases access and availability of local food sources, supports research and educational benefits, and creates job opportunities and income for residents, while creating a new culture of place based on agriculture.

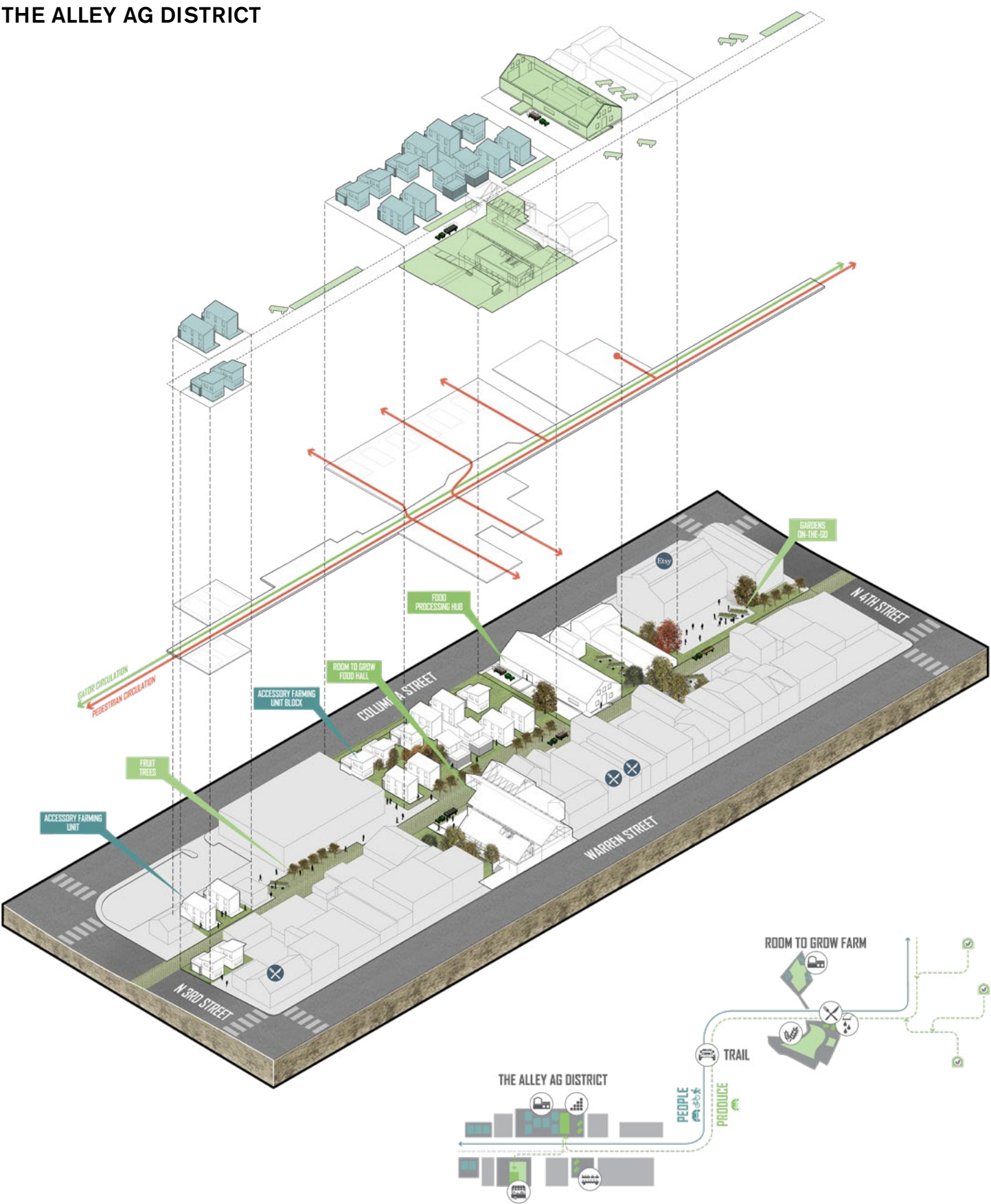
How much food can we produce in Poughkeepsie?



Urban Typology
Food Innovation Facility in Poughkeepsie's
Underutilized Parking Structure







ROOM TO GROW

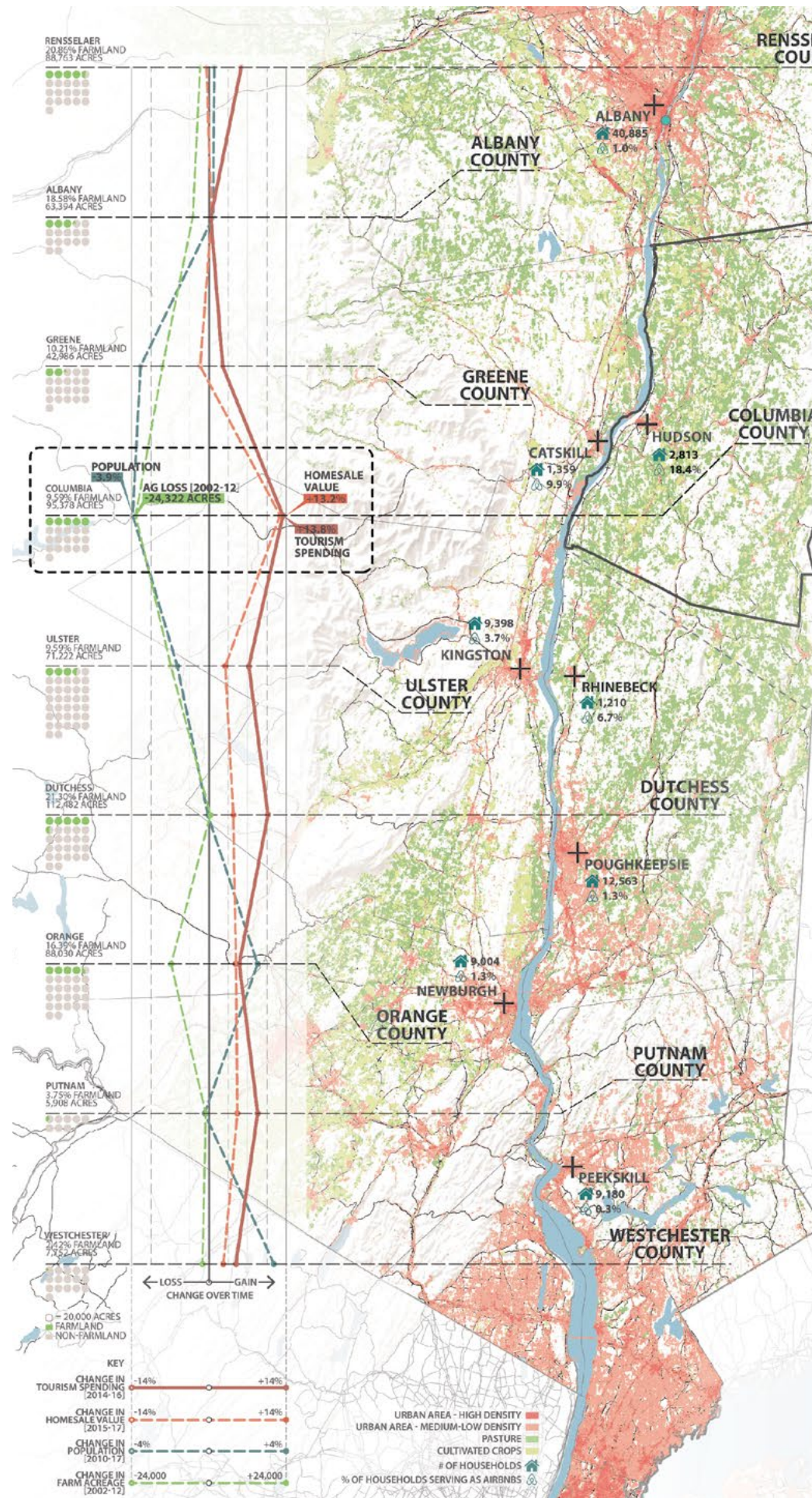
A MODEL FOR AFFORDABLE URBAN AND AGRICULTURAL DEVELOPMENT IN HUDSON

Alexandra Burkhardt, Greg LeMaire, Bohong Zhang, Wenjun Zhang | Hudson, Fall 2018

Room to Grow questions traditional land value models and proposes an alternative that values land based on affordability and access for local residents.

In Columbia County and the City of Hudson, rising land value and increased tourism have put economic and social pressures on local farmers and residents. As a result, farmers are struggling to access high-quality, affordable land while residents are being priced out of the city and surrounding area.

Room to Grow addresses issues of displacement and access by establishing a symbiotic ecosystem between farmers and locals that strengthens the agricultural economy and improves access to food and housing. As the catalyst for a new urban-rural development model, the project utilizes two initial sites—a one block span along Prison Alley in Downtown Hudson, and a 75-acre farm two miles outside of the city—physically connected by an existing underutilized rail line. By activating underutilized spaces at the urban, rural, and corridor scales and establishing a direct connection between them, Room to Grow creates new spaces for housing, farming, and food access, and improves the connection between the City of Hudson and Columbia County.



HUDSON VALLEY

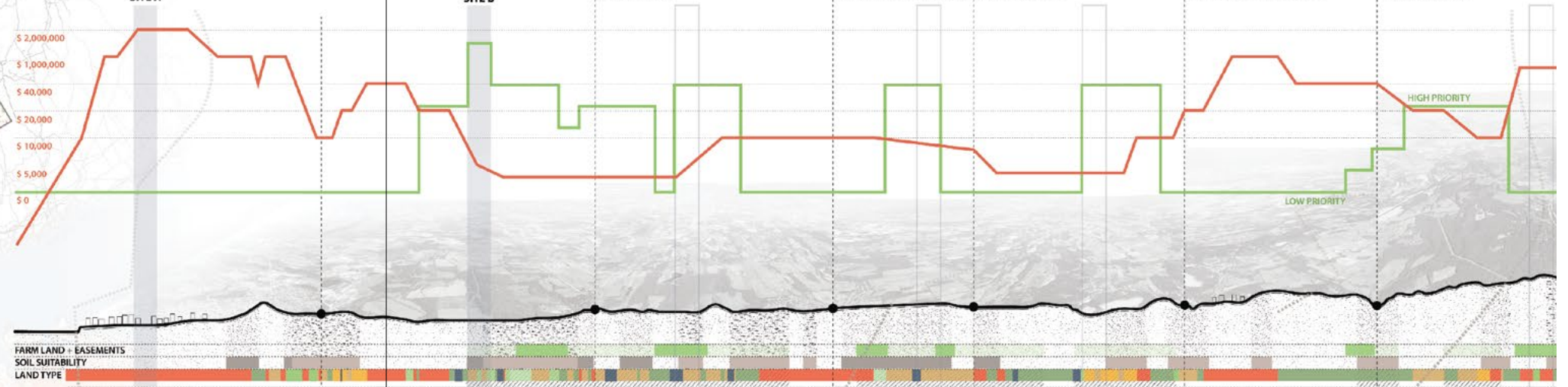
Land Value, Tourism Spending, Population and Farmland

COLUMBIA COUNTY

Land Preservation and Development

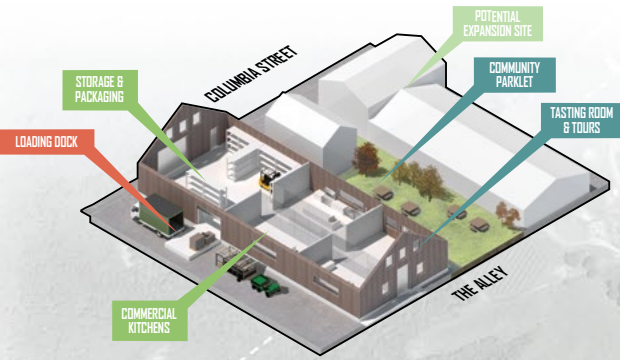
COLUMBIA COUNTY TRANSECT

Land Value and Conservation Priority

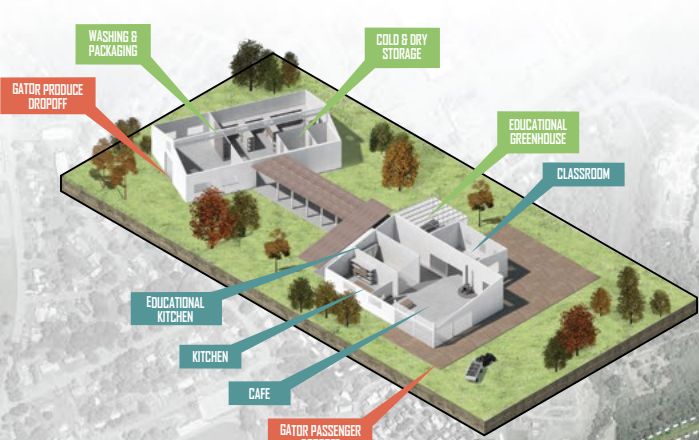


THE ALLEY AG DISTRICT

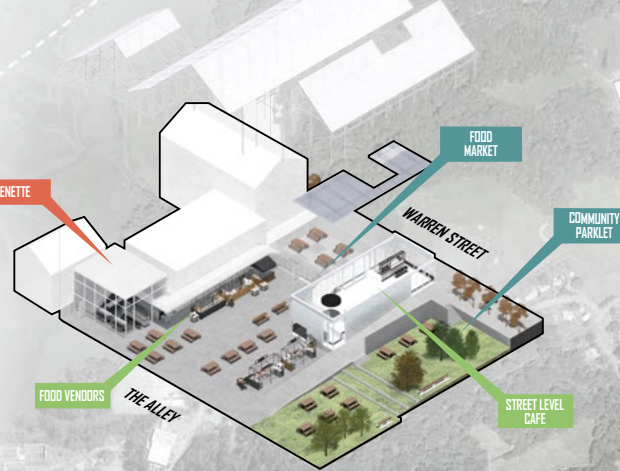
FOOD PROCESSING HUB



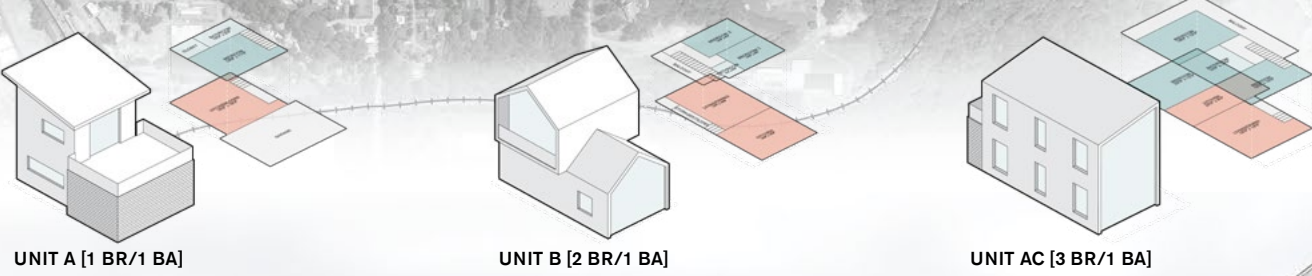
EDUCATION CENTER, RESTAURANT, PRODUCE PREPARATION + STORAGE



HUDSON FOOD HALL AND MARKET



ACCESSORY FARMING UNITS HOUSING TYPOLOGIES



THE ALLEY AG DISTRICT
[200 NEW DWELLING UNITS: 200-600 BEDS]

ACCESSORY FARMING UNITS

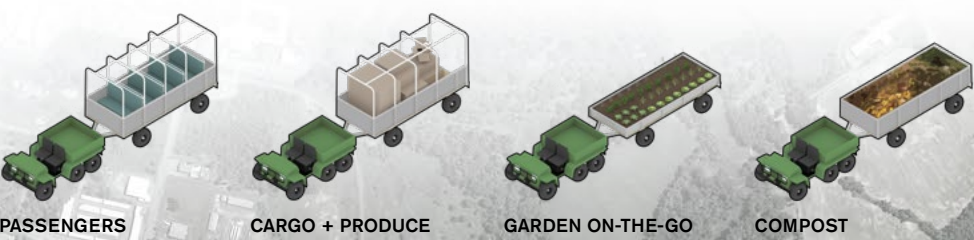


HUDSON FOOD HALL & MARKET



ROOM TO GROW FARM

THE "ALLEY GATOR"
MODULE TYPOLOGIES + ATTACHMENTS





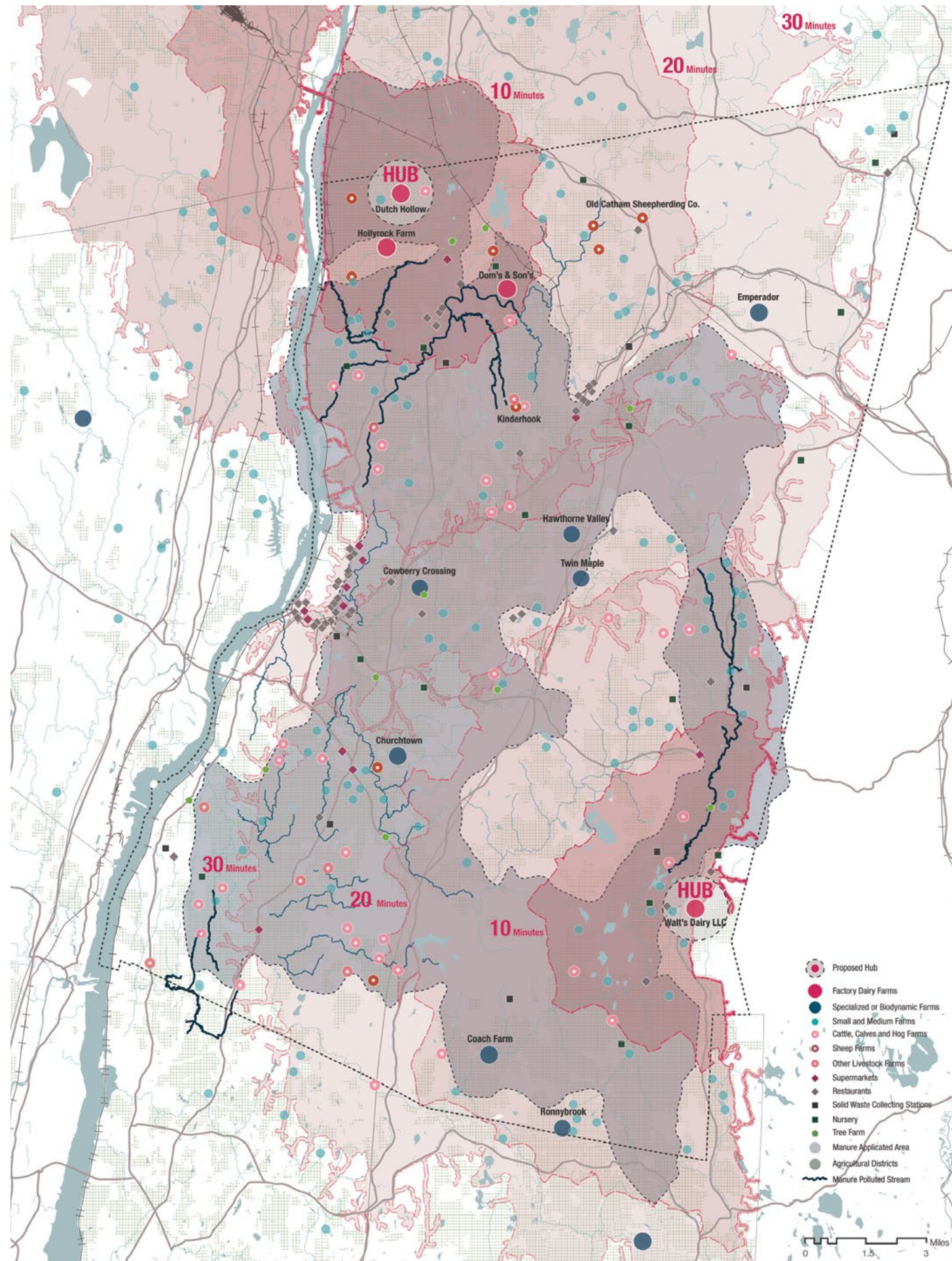
DAIRYSCAPE

REVERSING THE NET NEGATIVE ENVIRONMENTAL IMPACT OF THE DAIRY INDUSTRY

Shivani Agarwal, Huang Qiu, Hsin Yi Chao, Shouta Kanehira
Hudson & Columbia County, Fall 2018

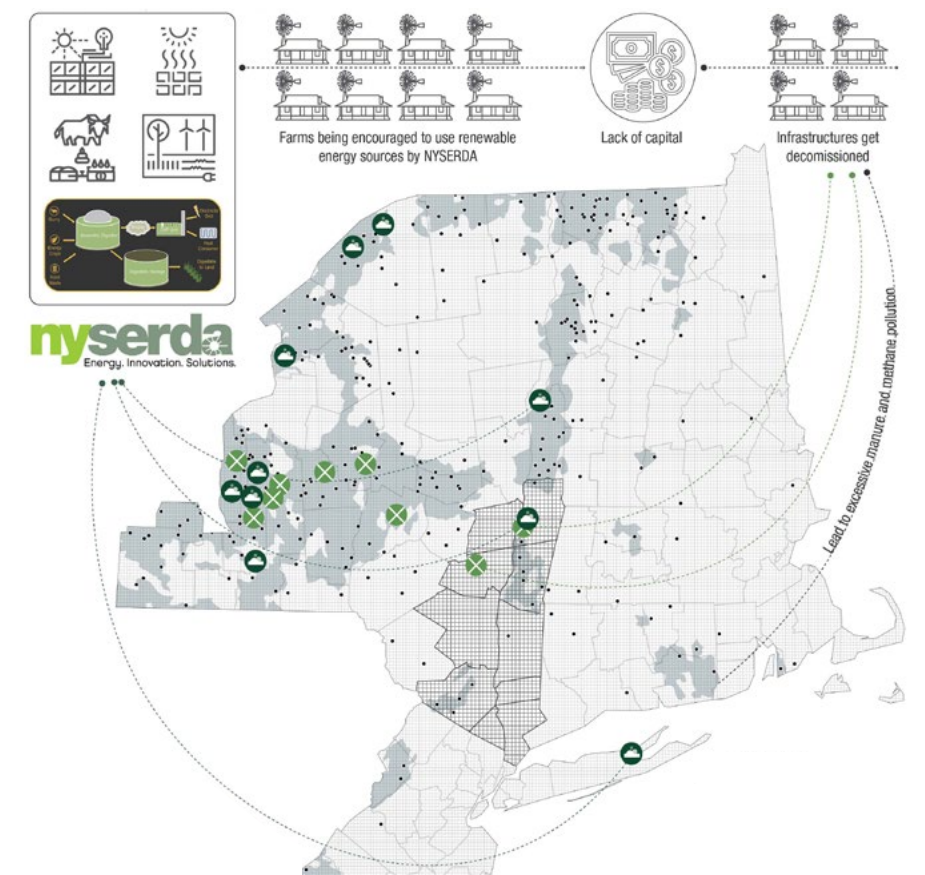
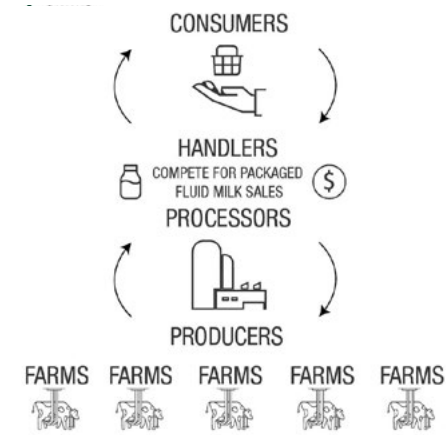
Dairyscape envisions a new dairy industry in the Hudson Valley that manages livestock, land, processing, waste, and distribution in healthy, equitable, and sustainable ways. Dairy has historically been a key industry in the Hudson Valley; however, for the past several decades, dairy farms have been in steep decline. Many of the family-owned small and medium sized dairy farms cannot remain profitable due to land development and urbanization. In addition, the industry must meet low milk prices set by the federal government through the Northeastern Milk Shed. Equally problematic, the industry contributes to environmental pollution from manure and methane.

Dairyscape is centered on a new system of hubs that join farms, processing facilities, and distributors. The system manages dairy operations, processes waste for re-use, and enables marketing that up- and cross-sells products. The infrastructure uses methane and manure as the basis for new industries such as biogas, fertilizer, and cow pots, while developing new landscape management methods. Through the revised organization, Dairyscape reverses the net negative environmental impact of the industry and improves the long-term viability of dairy in the Hudson Valley.



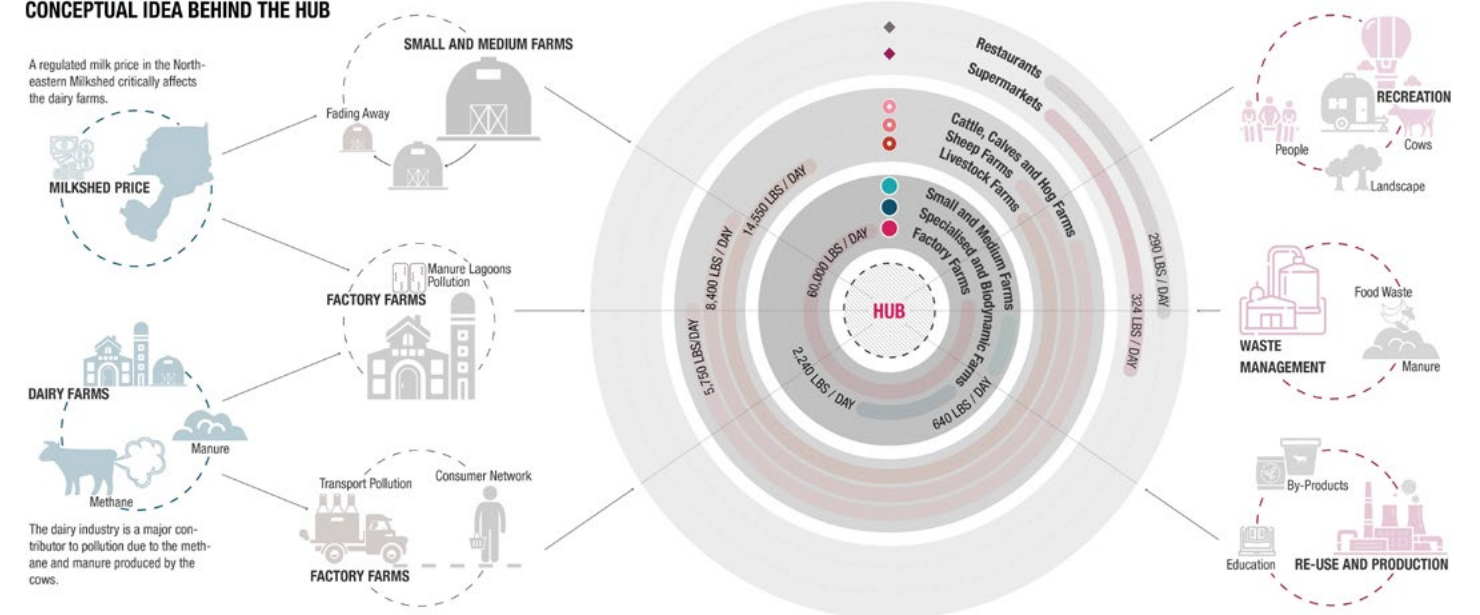
THE NORTH-EASTERN MILKSHED

- Decommissioned Anaerobic Digesters
- Active Anaerobic Digesters
- 1 Dot = 2,000 Milk Cows

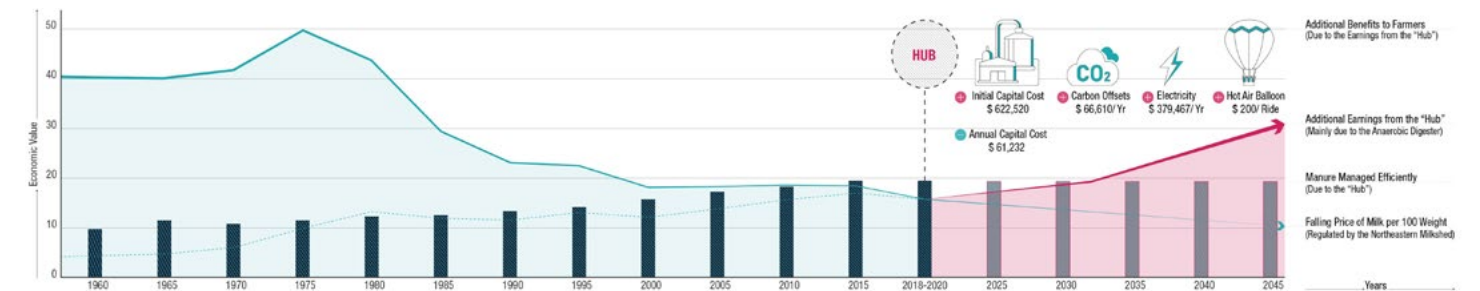


CONCEPTUAL IDEA BEHIND THE HUB

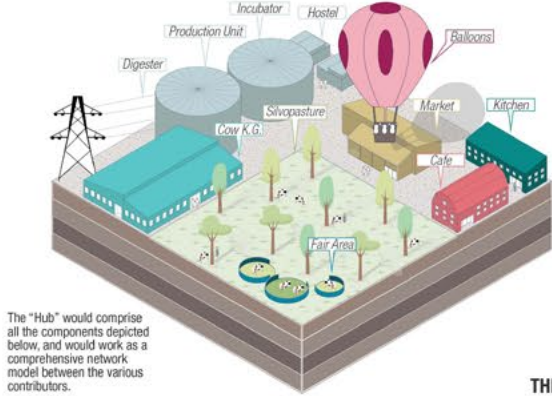
A regulated milk price in the North-eastern Milkshed critically affects the dairy farms.



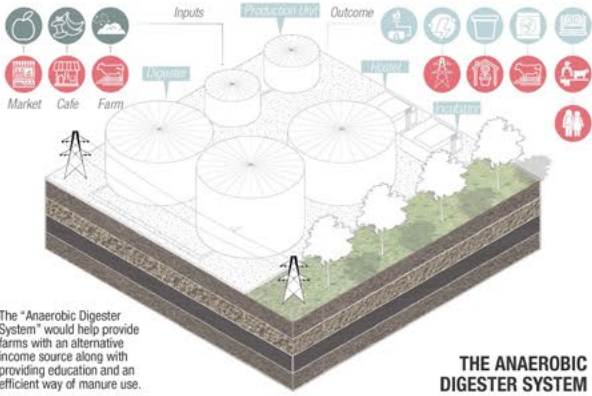
ECONOMIC AND ENVIRONMENTAL BENEFITS FROM THE HUB



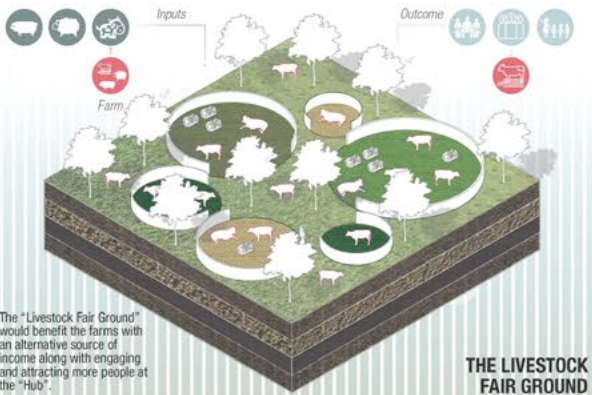
COMPONENTS OF THE HUB



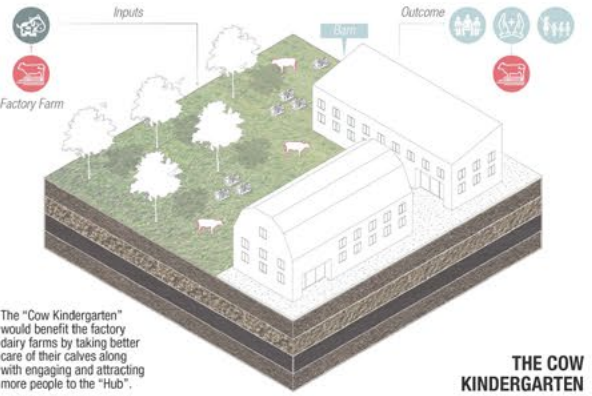
THE HUB



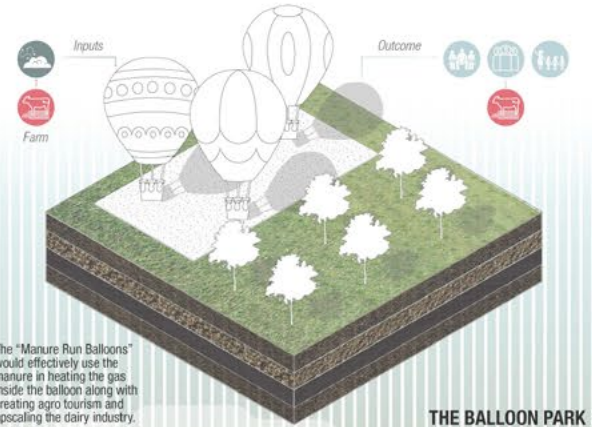
THE ANAEROBIC DIGESTER SYSTEM



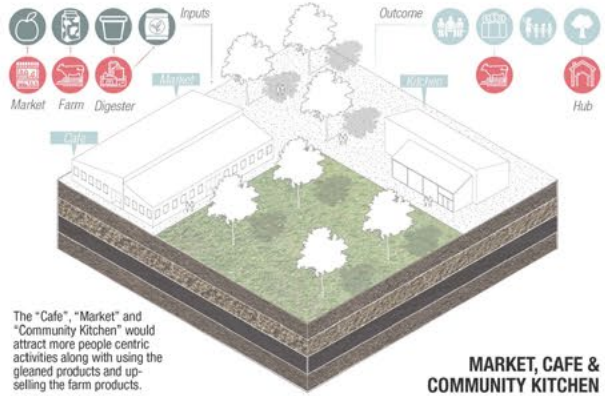
THE LIVESTOCK FAIR GROUND



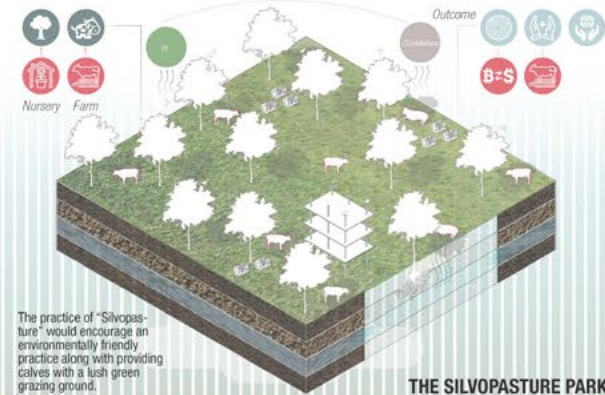
THE COW KINDERGARTEN



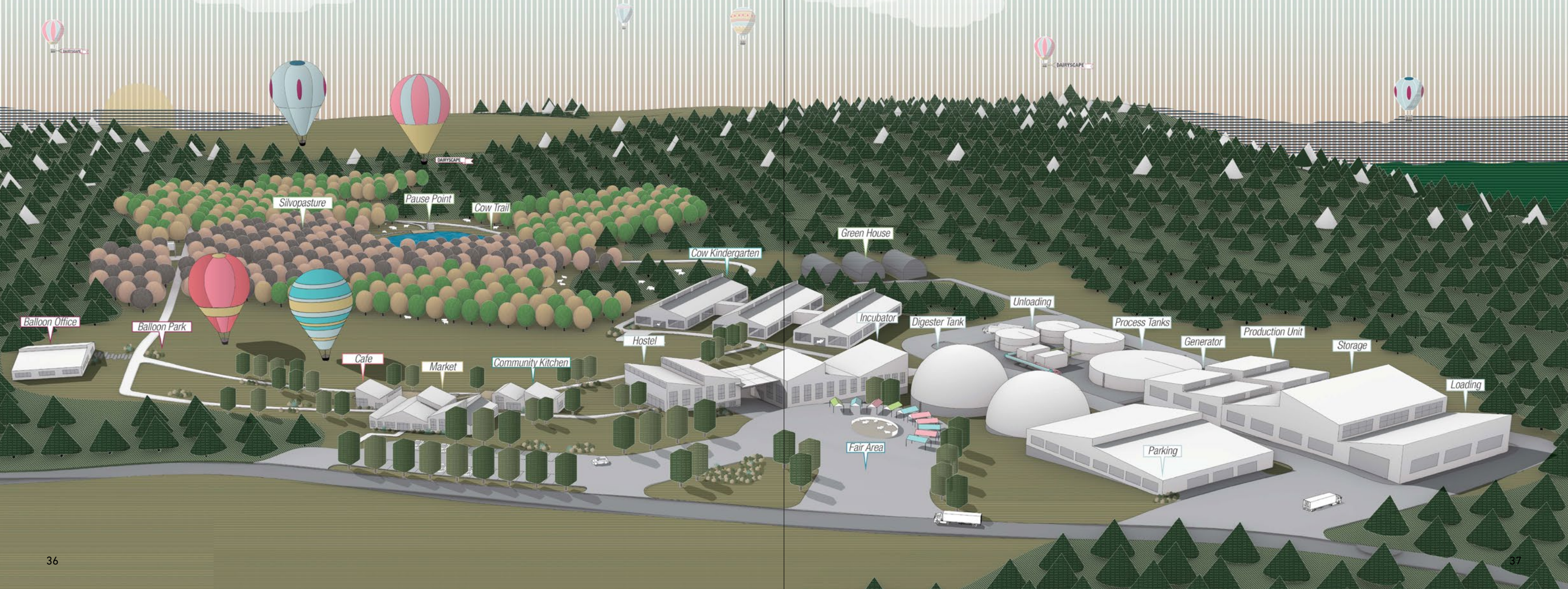
THE BALLOON PARK



MARKET, CAFE & COMMUNITY KITCHEN



THE SILVOPASTURE PARK



BEYOND THE STUDIO:

URBAN AGRICULTURE IN NYC

CRYSTAL EKSI, GSAPP MSAUD 2015

Agriculture is often perceived as a land use found only outside the urban environment. However, prior to urban development much of New York City’s land was used for agriculture. During the 1970’s, when the city’s economy was struggling, and vacant lots were abundant, urban gardens began to appear throughout the city’s neighborhoods, becoming a key community asset of open space and education that continues to exist today.

Cities across the globe are beginning to see typologies of agriculture that did not exist before: indoor farms both with and without soil have sprung up around neighborhoods using new technologies and advancements in food production to sustain demand. Rooftops are being designed or retrofitted for soil-bearing loads to incorporate green uses. In the past, these spaces would have otherwise been under-utilized, adding to the urban heat island and water runoff from impervious surfaces.

In my role working for the New York City Department of City Planning as an Urban Designer, I was given the opportunity to make an impact on the city’s agricultural community. Under an Urban Agriculture policy introduced in 2017, our agency worked with the Department of Small Business Services and the Department of Parks and Recreation to develop an Urban Agriculture website, bringing clarity to the rules and regulations that govern urban agriculture and provide communities with guidance on how to become involved in urban farming. As a member of a multi-disciplinary team in collaboration with the city’s urban agriculture community, I was able to explore my personal passion for agriculture and consider how the city’s built context could provide a more sustainable urban model. We researched existing farms and explored future agricultural typologies and uses. My goals and objectives were to identify every possible type of agriculture that we know today while projecting

what the future of food systems and agriculture may look like in our city and region in the long term. As a part of my research, I lead our team on visits to multiple types of urban farms and gardens around the city to understand the contexts of urban agriculture and how it impacts daily life for city dwellers.

Prior to my urban design education, my studies in architecture at the urban scale began with relating housing design and preserving historical agricultural land. During my urban design education, I explored how design would be used to address communities’ needs at different scales and through different systems. Observing issues such as food deserts, non-sustainable development models, vulnerable ecosystems, unlinked community assets, and the impacts of such on a community’s quality of life led me to discover opportunities to improve the New York City’s agricultural system.

Design must think at the small scale – question how a farm works, functions, and sustains itself, understand who the farmers are, and how design could lead to a sustainable model for their livelihood and the community it impacts. Design must also exist at the large scale – policies that promote and encourage agriculture to co-exist and expand as development does will ultimately improve quality of life beyond a single farm. My work in agriculture continues to evolve, currently exploring civic institutions and the opportunities to incorporate agriculture into the policies that impact the sustainable development of these institutions, effecting communities at a large scale.



Top: ‘Oko Farms’, Manager and co-founder Yemi Amu showing NYC DCP and HPD planners and designers their outdoor aquaponic farm located in Bushwick, Brooklyn. They grow locally using fish to sustain their nutrient system for the growth of plants, while providing their produce to the community and hosting educational programs (2017)

Bottom: COOKFOX architects and landscape designers showing NYC DCP Urban Design team their office’s rooftop farm located in Manhattan. Their farm is designed and operated by their employees to explore the growth of different plant species that sustain well together and improve the local ecosystem (2019)

ENVIRONMENT & HEALTH

LEE ALTMAN

Consolidated Edison’s 1962 proposal for a pumped-storage power facility requiring the removal of a substantial part of Storm King Mountain resulted in what is known as the nation’s first battle to be won by the nascent environmental movement. The right to clean water and clean air have since been anchored in federal legislation, and the impact of pesticides, fertilizers, and other chemical industry products has been thoroughly documented in the years since Rachel Carson’s Silent Spring brought their dangers to light. Yet the age-long conflict between development and environment continues, with the landscape impacts ranging from Poughkeepsie arterials slicing through what was once a vibrant urban fabric, to the proposed Pilgrim Pipeline set to carry crude oil from the shale fields of North Dakota to New Jersey refineries through the Hudson Valley. Former industrial sites left behind contaminated lands and endless concrete slabs, while the agro-industrial complex continues to pollute soils and waterways. The climate crisis has brought these challenges into acute focus, while actions and policies at the federal level seems to be walking back achievements won over decades.

In the Valley’s cities and towns, as in many across the country, vulnerable communities bear the brunt of the public health implications that result from these conditions. The City of Newburgh, with one of the highest poverty rates in the valley, has been facing a drinking water crisis since toxic chemicals were detected in the city’s water in 2016, while brownfield sites continue to leach contaminants into adjacent lands and ground water in Poughkeepsie and Newburgh. Organizations like Riverkeeper and Scenic Hudson, among others, work to advocate and promote cleanup and restoration projects while preserving

existing open spaces for generations to come. Meanwhile, the Valley’s health system is struggling to provide adequate services, especially in low-income communities and rural areas. Mental health services are especially lacking, having seen years of cuts and limited investment resulting in few options for individuals coping with mental illness. A growing body of research is revealing the value of exposure to nature for mental health, let alone the direct and immediate impact of clean air and water on physical health. The projects included in this section recognize the complex connection between environmental health and human health and develop proposals that challenge our way of constructing the world around us.

Lee Altman is an architect and urban designer and an urban design studio coordinator

SEED OF CHANGE

A Seed-focused Approach to Environmental Restoration through Community Building

HUMAN NATURE

Supportive Community through a Restorative Landscape

CO-HABITAT

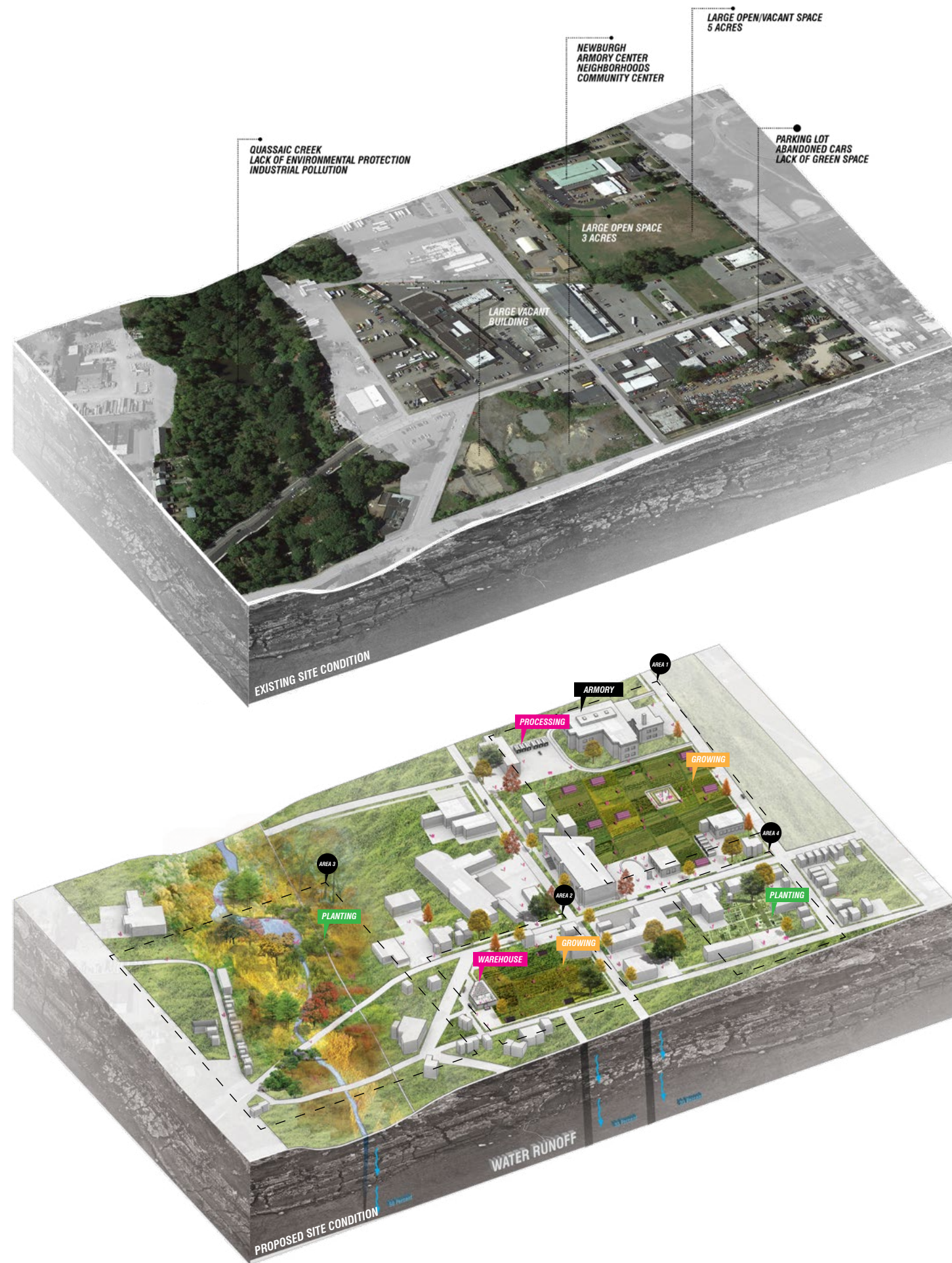
A Biodiversity Toolkit for Community Intervention

ENERGY BLOOM

Algae: A New Local Renewable Infrastructure

BEYOND THE STUDIO:

Alumni essay by Evelina Knodel



SEED OF CHANGE

A SEED-FOCUSED APPROACH TO ENVIRONMENTAL RESTORATION THROUGH COMMUNITY BUILDING

Hannah Beall, Mahima Pandya, Aminata Seck, Fei Xiong
Newburgh, Fall 2015

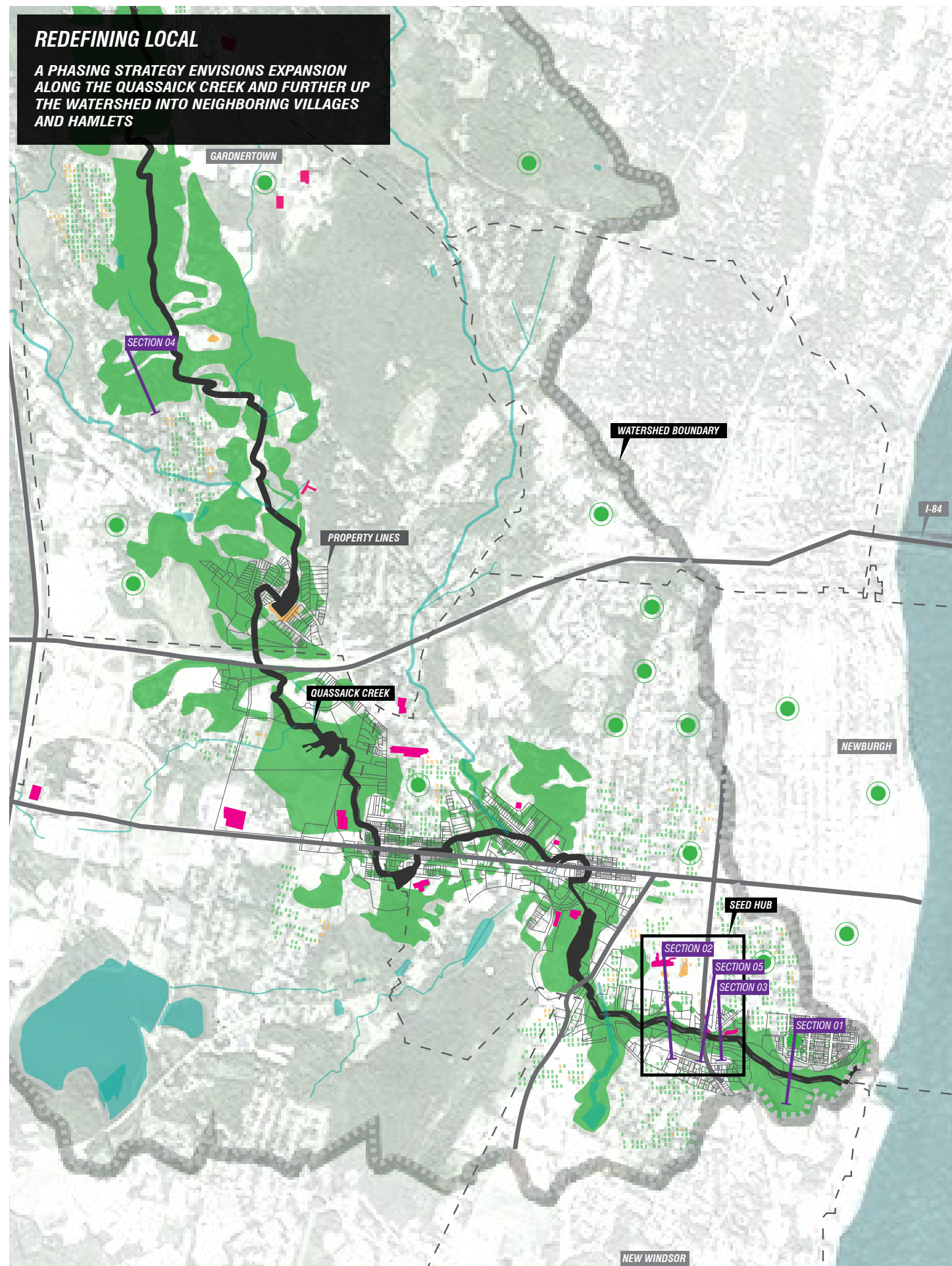
Seed of Change acts as a catalyst for social and environmental change in the Hudson Valley. Monoculture farming has dominated the agriculture industry worldwide, resulting in fragile ecosystems that are extremely vulnerable to pests, disease, and climate change. Biodiverse Hudson Valley seeds can reintroduce native and heirloom species to combat the global challenges brought on by monoculture farming. Through farmed propagation and a series of land management measures, Seed of Change re-establishes localized, biodiverse ecology along creek-based cities adjacent to the Hudson River. In conjunction, social and economic programming creates jobs, connects communities, and establishes a new base for economic activity.

The Seed Program reaches out to schools, home gardeners, community gardens and small local farms in Newburgh and includes a four-step Seed Cycle: identify potential consumers, propagate and grow seeds, process seeds, and distribute the product via a sustainable form of transportation. The Newburgh Armory Unity Center, adjacent to the Quassaick Creek, acts as a pilot site for gardening plots and wildflower fields planted to create a buffer between development and water. A neighboring vacant building serves as a warehouse and distribution center.

Many cities along the Hudson River have a similar condition of creek tributaries in close proximity to residential and formerly industrial development. Seed of Change offers a replicable model of stewardship-based ecological restoration, establishing stronger and healthier environments and communities.

REDEFINING LOCAL

A PHASING STRATEGY ENVISIONS EXPANSION ALONG THE QUASSAICK CREEK AND FURTHER UP THE WATERSHED INTO NEIGHBORING VILLAGES AND HAMLETS



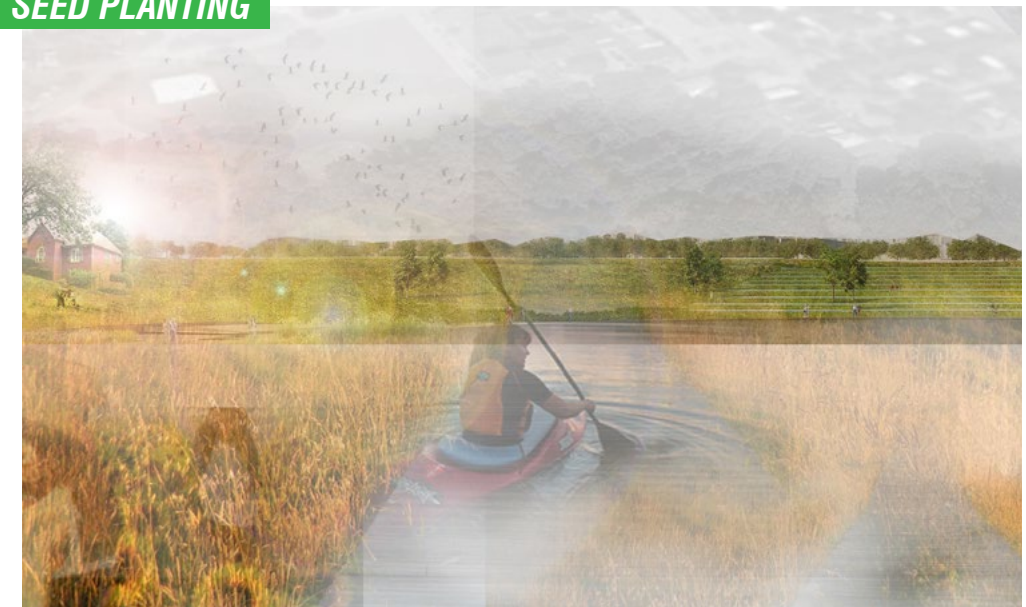
SEED GROWING



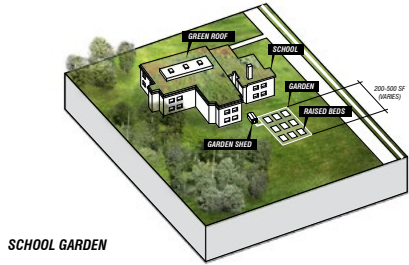
SEED PROCESSING



SEED PLANTING

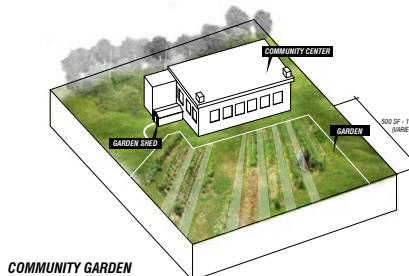


PLANTING USER TYPOLOGIES



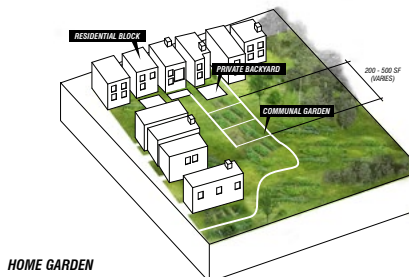
SCHOOL GARDEN

LOCAL SCHOOLS
TYPICAL GARDEN SIZE:
200 - 500 SF
SEED NEEDS:
1 - 2 PACKAGES PER SEASON
PROGRAMS OF INTEREST:
- SEED EDUCATION
- POLLINATOR EDUCATION
- FARM FIELD TRIPS
- COMPOST EDUCATION
- WILDFLOWER FIELD TENDING



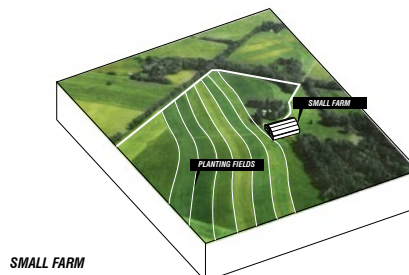
COMMUNITY GARDEN

COMMUNITY GARDENS
TYPICAL GARDEN SIZE:
500 SF - 1 ACRE
SEED NEEDS:
1 - 64 PACKAGES PER SEASON
PROGRAMS OF INTEREST:
- HEIRLOOM SEED COLLECTING
- PROCESSING EDUCATION
- GERMINATION LAB WORK
- COMPOST EDUCATION
- WILDFLOWER FIELD TENDING



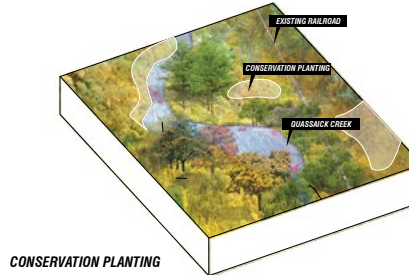
HOME GARDEN

HOME GARDENERS
TYPICAL GARDEN SIZE:
200 - 500 SF
SEED NEEDS:
1 - 2 PACKAGES PER SEASON
PROGRAMS OF INTEREST:
- HEIRLOOM SEED COLLECTING
- SOUP KITCHEN VOLUNTEERING
- LOCAL ART EXHIBITIONS
- COMPOST EDUCATION
- WILDFLOWER FIELD TENDING



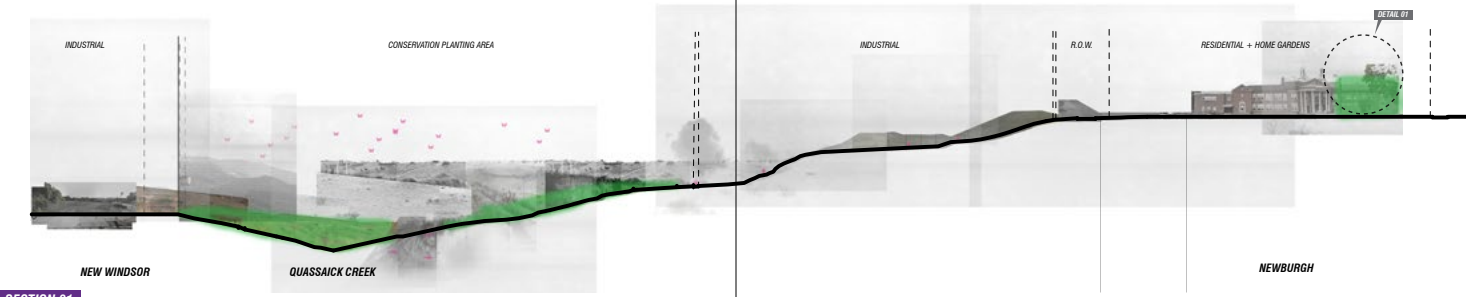
SMALL FARM

SMALL FARMS
TYPICAL GARDEN SIZE:
1 - 5 ACRES
SEED NEEDS:
32 - 160 PACKAGES PER SEASON
PROGRAMS OF INTEREST:
- COMPOST EDUCATION
- DONATION OF REFUSE
- COMMUNITY WORKSHOPS
- HEIRLOOM CSA PROGRAMS
- FIELD MANAGEMENT EDUCATION

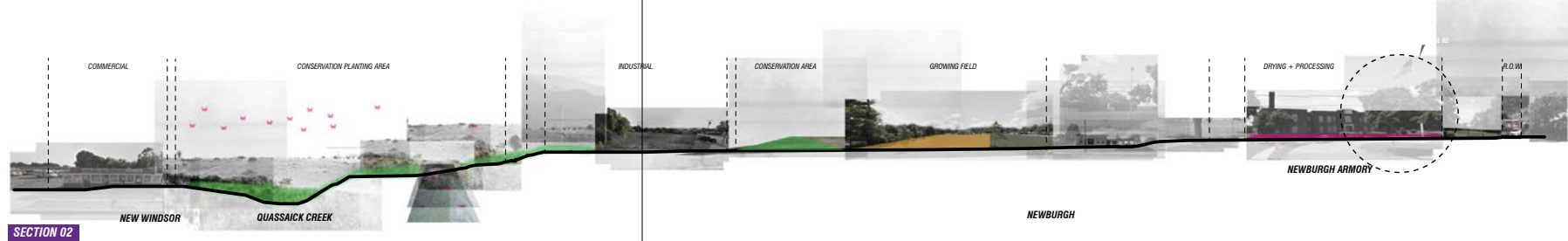


CONSERVATION PLANTING

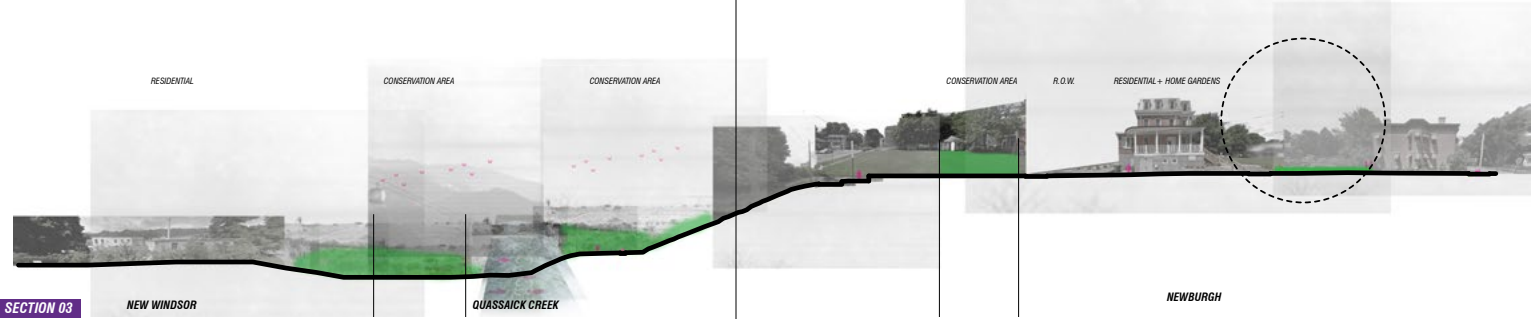
CONSERVATION PLANTING
TYPICAL PLANTING AREA SIZE:
200 SF - 5 ACRES
SEED NEEDS:
2 - 160 PACKAGES PER SEASON
PROGRAMS OF INTEREST:
- BIOREMEDIATION EDUCATION
- FIELD MANAGEMENT EDUCATION
- ENVIRONMENTAL STEWARDSHIP



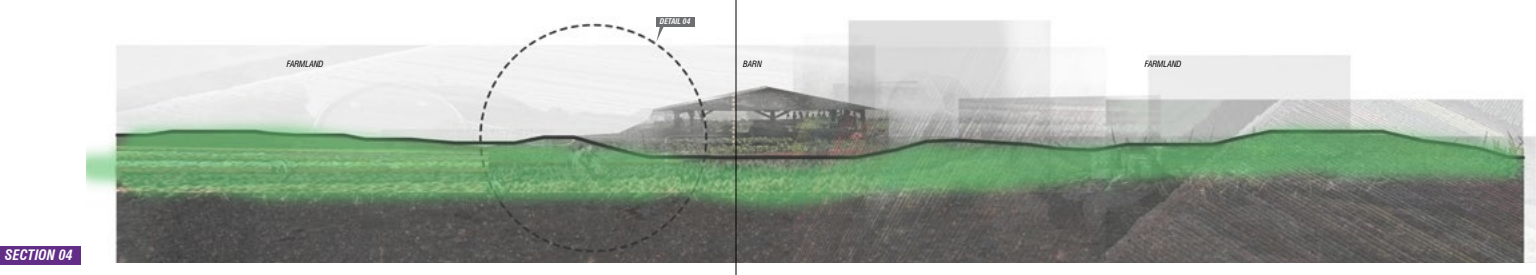
SECTION 01



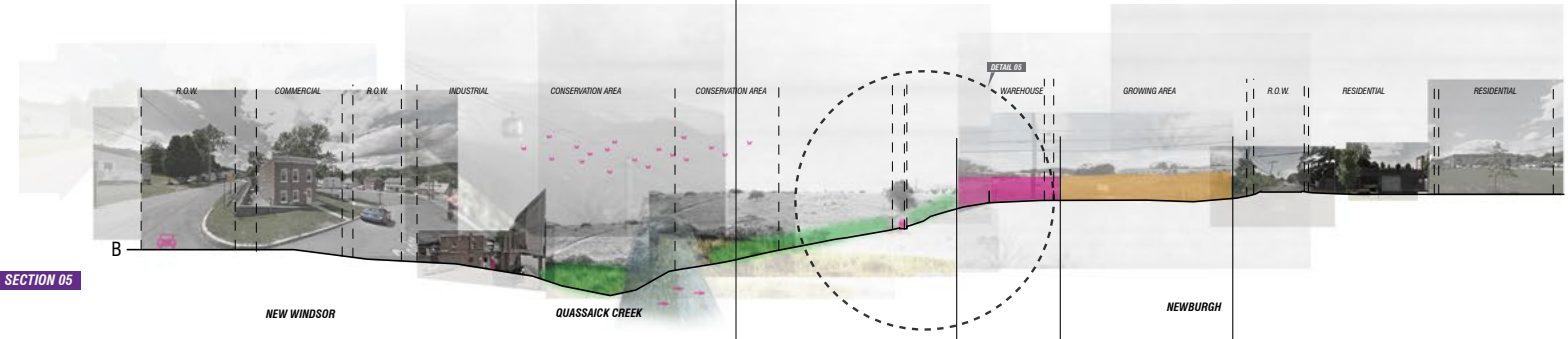
SECTION 02



SECTION 03



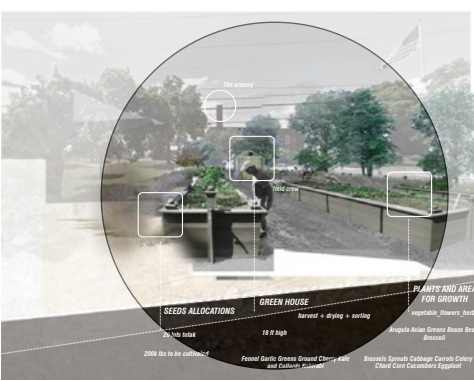
SECTION 04



SECTION 05



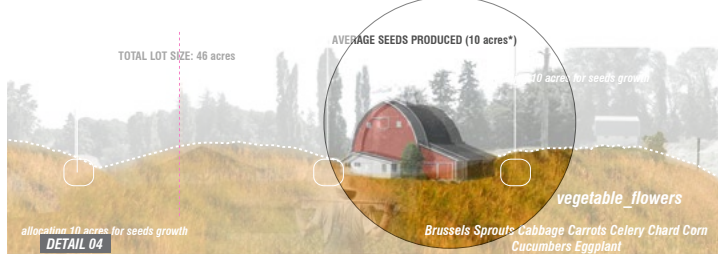
DETAIL 01



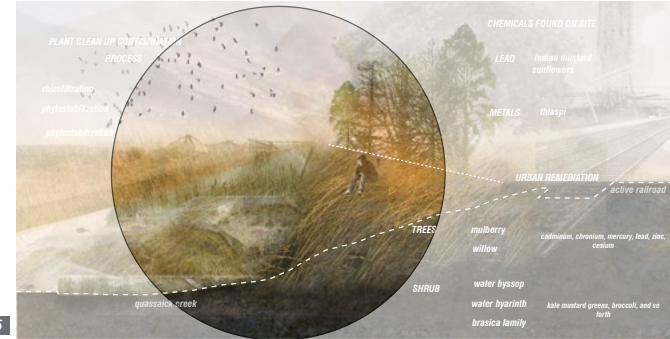
DETAIL 02



DETAIL 03



DETAIL 04

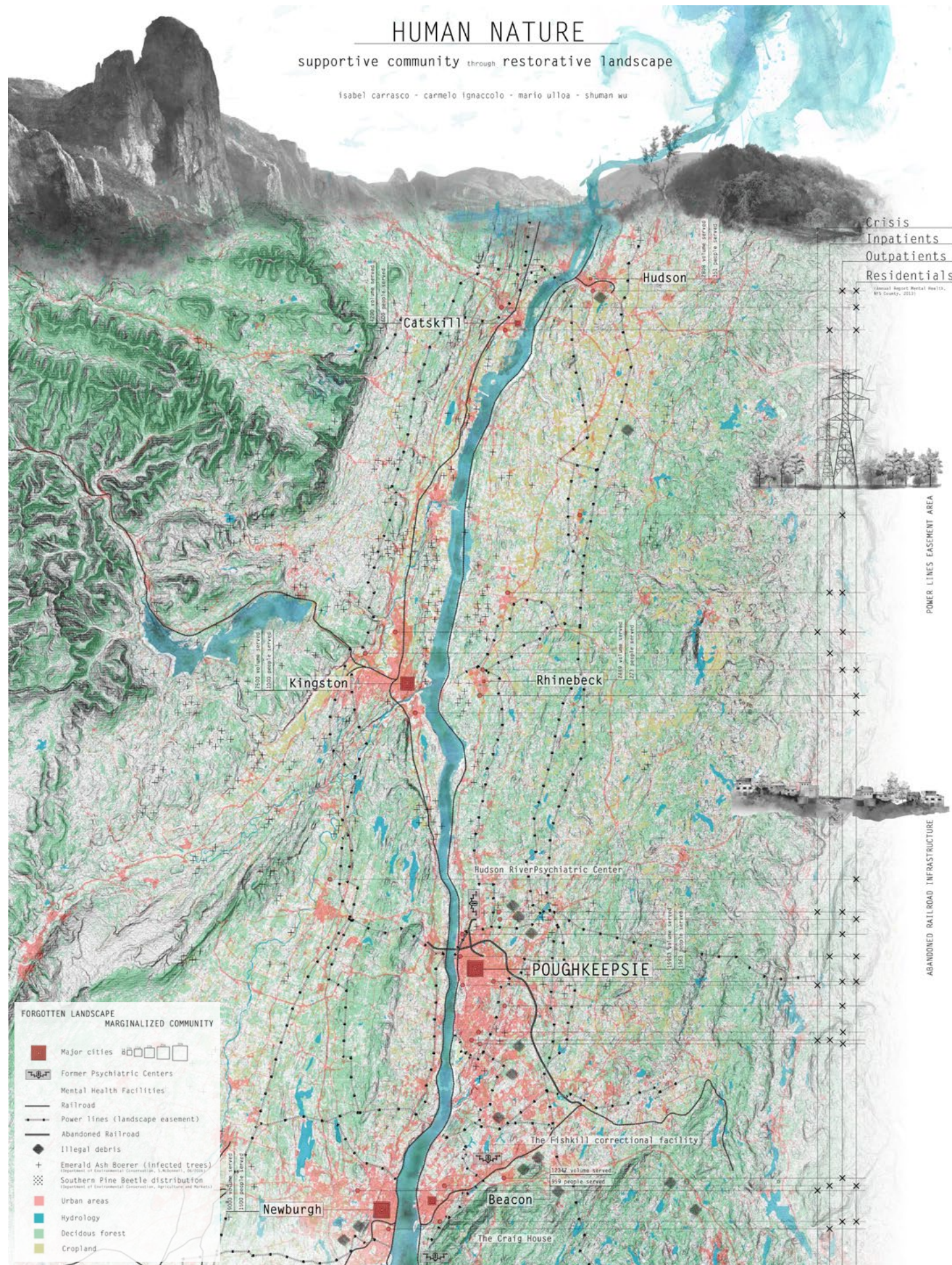


DETAIL 05

HUMAN NATURE

supportive community through restorative landscape

isabel carrasco - carmelo ignaccolo - mario ulloa - shuman wu



HUMAN NATURE

SUPPORTIVE COMMUNITY THROUGH A RESTORATIVE LANDSCAPE

Isabel Carrasco, Carmelo Ignaccolo, Mario Ulloa, Shuman Wu
Poughkeepsie & Dutchess County, Fall 2016

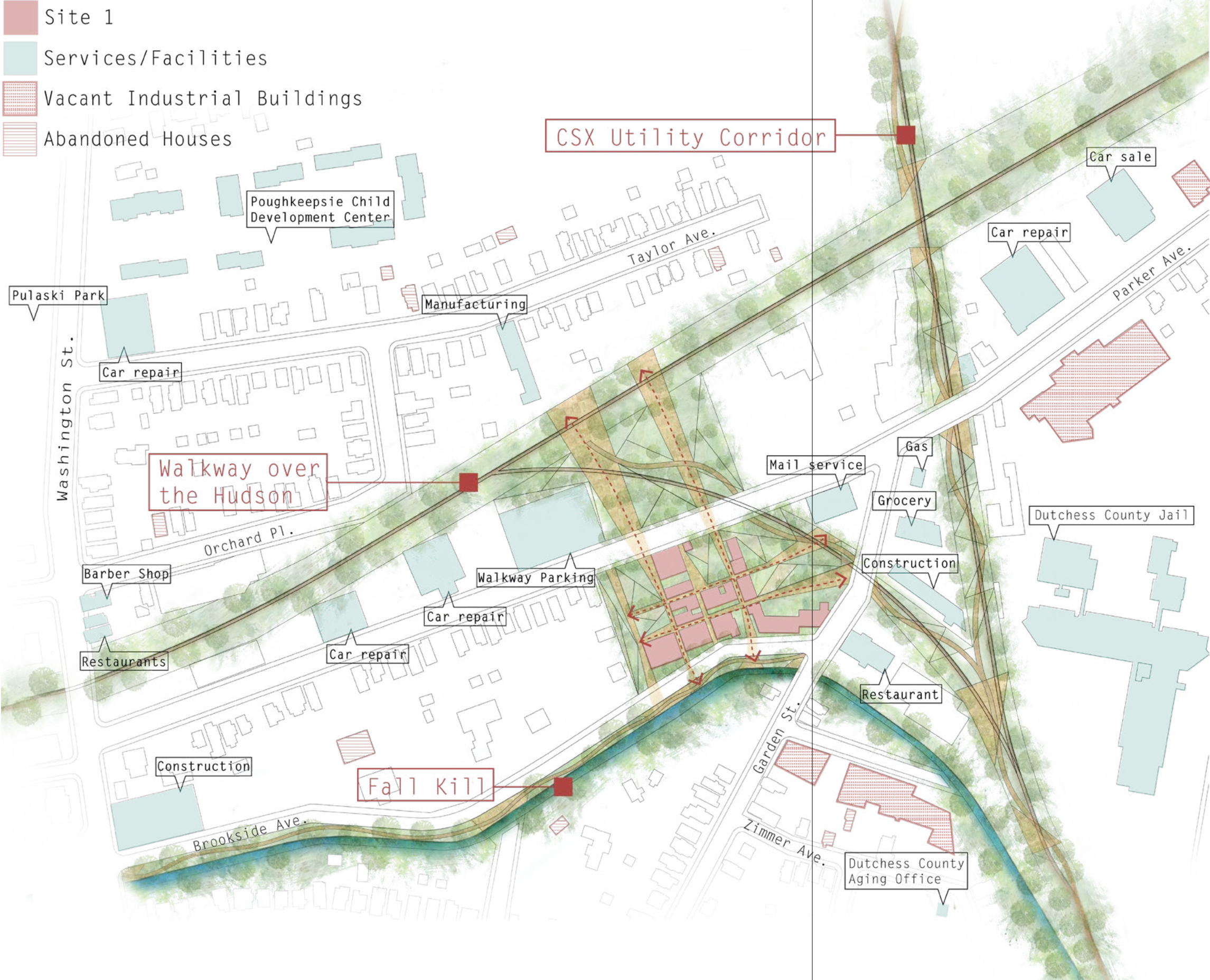
For over a century, the Hudson River Valley was populated by a variety of psychiatric institutions based on the model of isolation. Beginning in the 1950s and accelerating in the 1980s, many facilities were closed and smaller facilities appeared on the outskirts of cities, providing limited therapy without addressing housing or employment needs. Today, 46% of homeless adults in Poughkeepsie live with severe mental illness, and the current shelter and transitional housing systems offer little support.

Human Nature works at several scales. The project addresses the lack of social awareness about mental illness and homelessness by deploying specially designed urban furniture that encourages users to understand the homeless as a part of the community. At the same time, a new, cooperative organization provides services in an abandoned commercial building renovated for this purpose. The building, located at a local intersection of underused infrastructural corridors, is transformed into a new complex providing a robust set of programs to assist transition into society, including counseling, skill development, and other needed support.

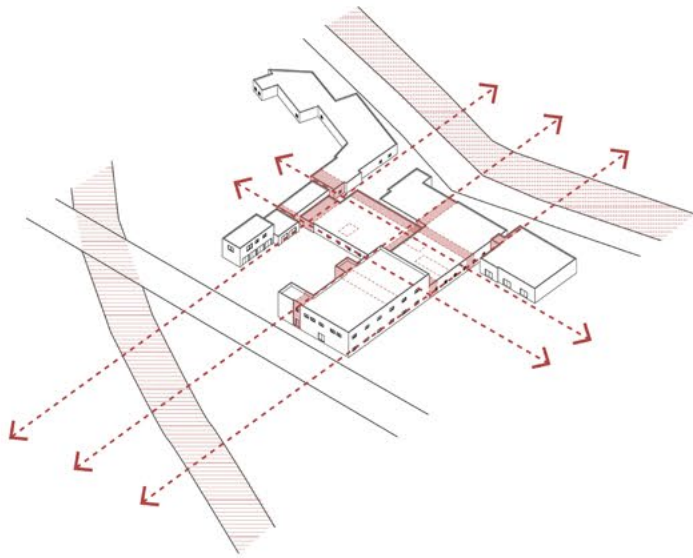
Thoroughly integrated into the Hudson Valley's ecosystem, training and skill building revolve around environmental stewardship and maintenance of the Valley's natural assets, from identifying and treating Ash trees infected by the Emerald Ash Borer to repairing landscapes marred by infrastructures of industry. Together, these strategies weave the prosaic details of urban life with the wooded landscapes by which the Hudson was once portrayed, helping to erase the stigma associated with mental illness and alleviate the segregation and isolation of affected individuals and communities.

PHASE 1 / 45 people

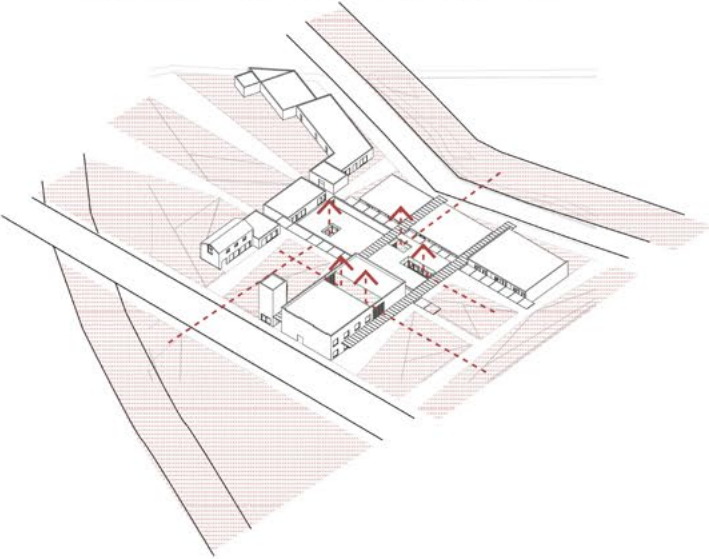
- Site 1
- Services/Facilities
- Vacant Industrial Buildings
- Abandoned Houses



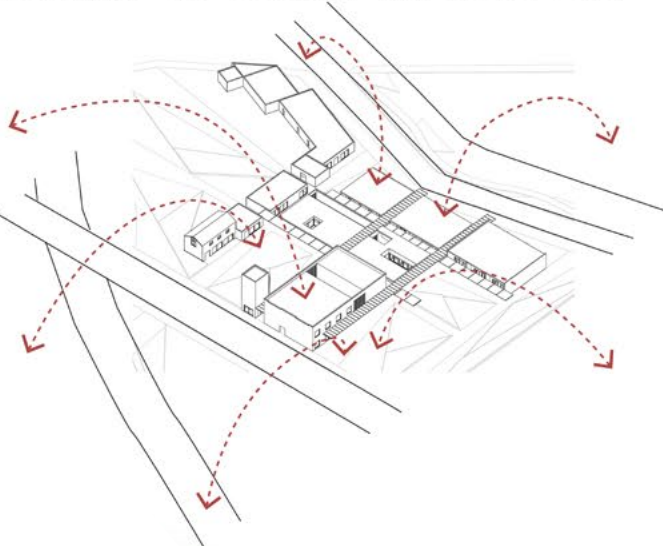
PATHS as CONNECTIONS

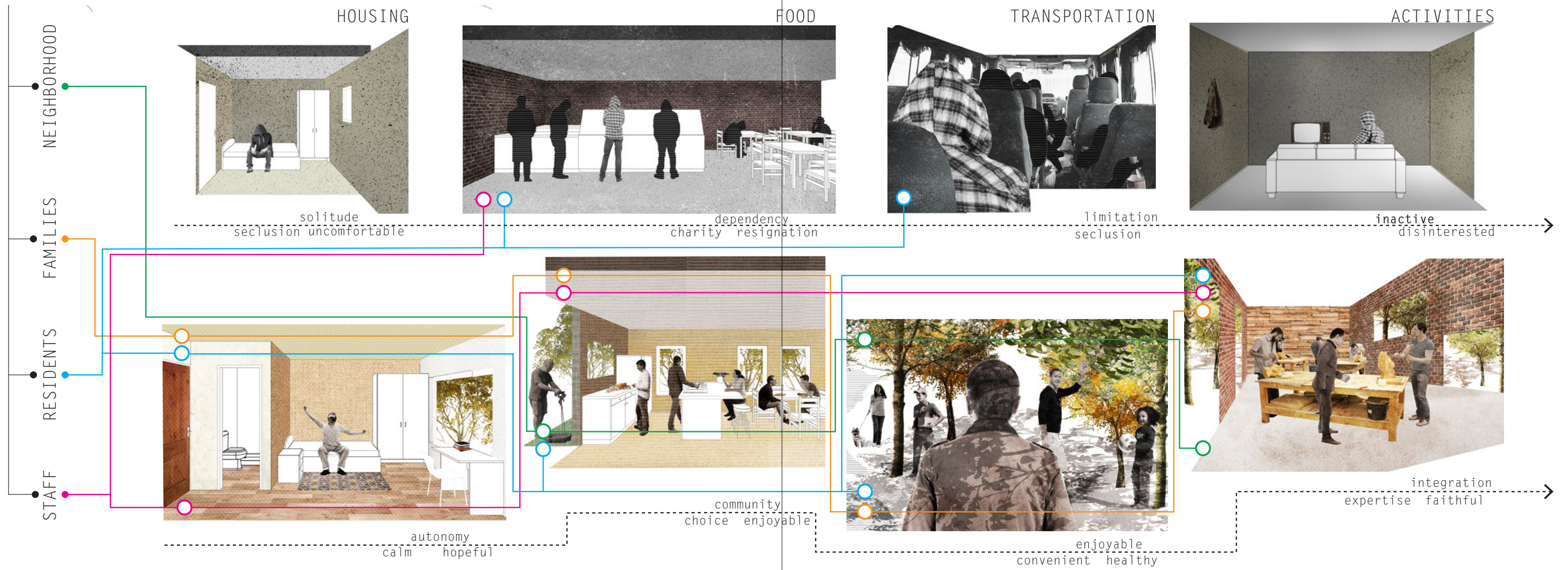


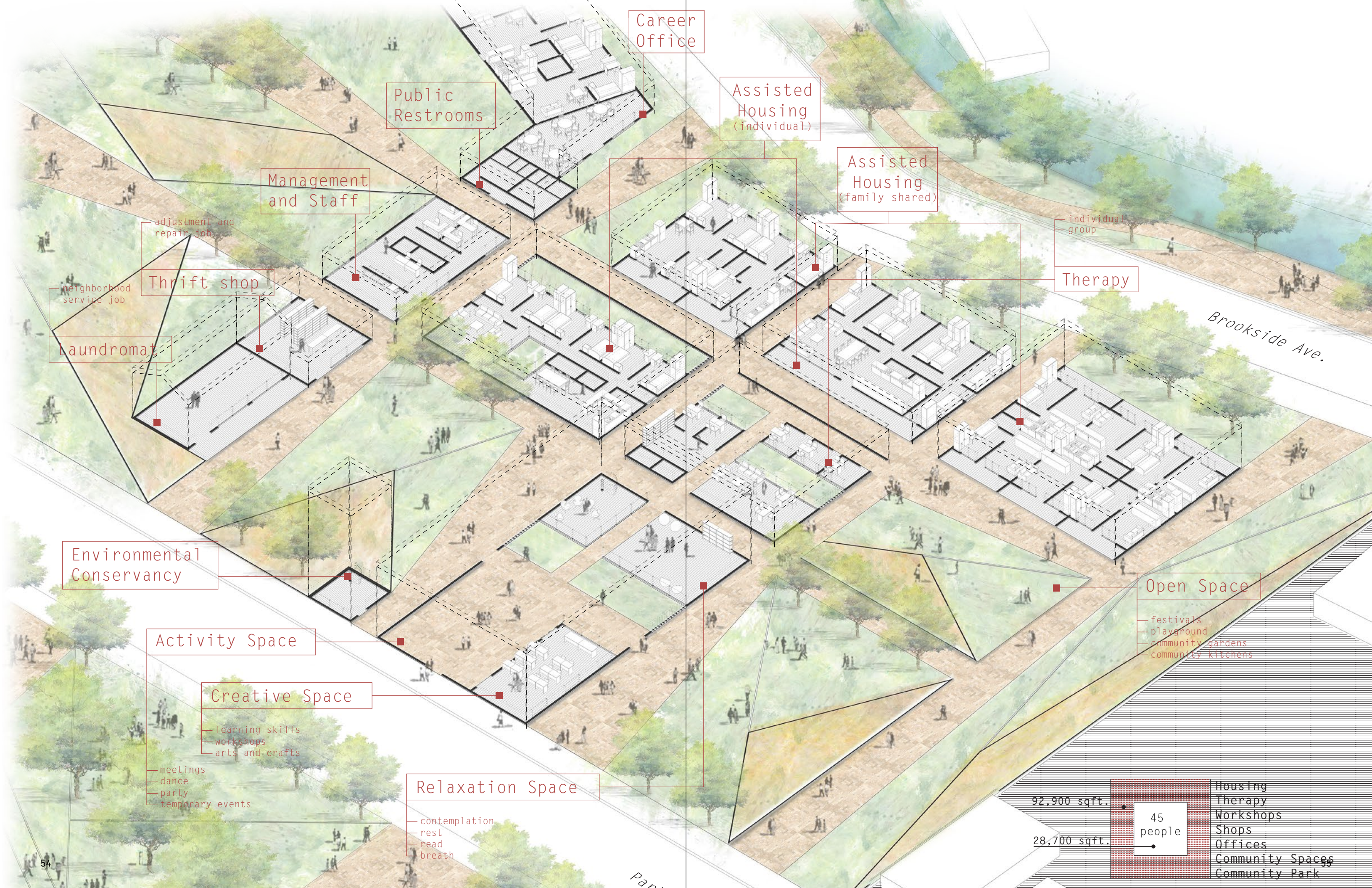
NATURE as COMMON GROUND



PROGRAMS as SOCIAL INTERACTIONS







Career Office

Public Restrooms

Assisted Housing (individual)

Assisted Housing (family-shared)

individual group

Therapy

Brookside Ave.

Management and Staff

adjustment and repair job

Thrift shop

neighborhood service job

Laundromat

Environmental Conservancy

Open Space

festivals
playground
community gardens
community kitchens

Activity Space

Creative Space

learning skills
workshops
arts and crafts

meetings
dance
party
temporary events

Relaxation Space

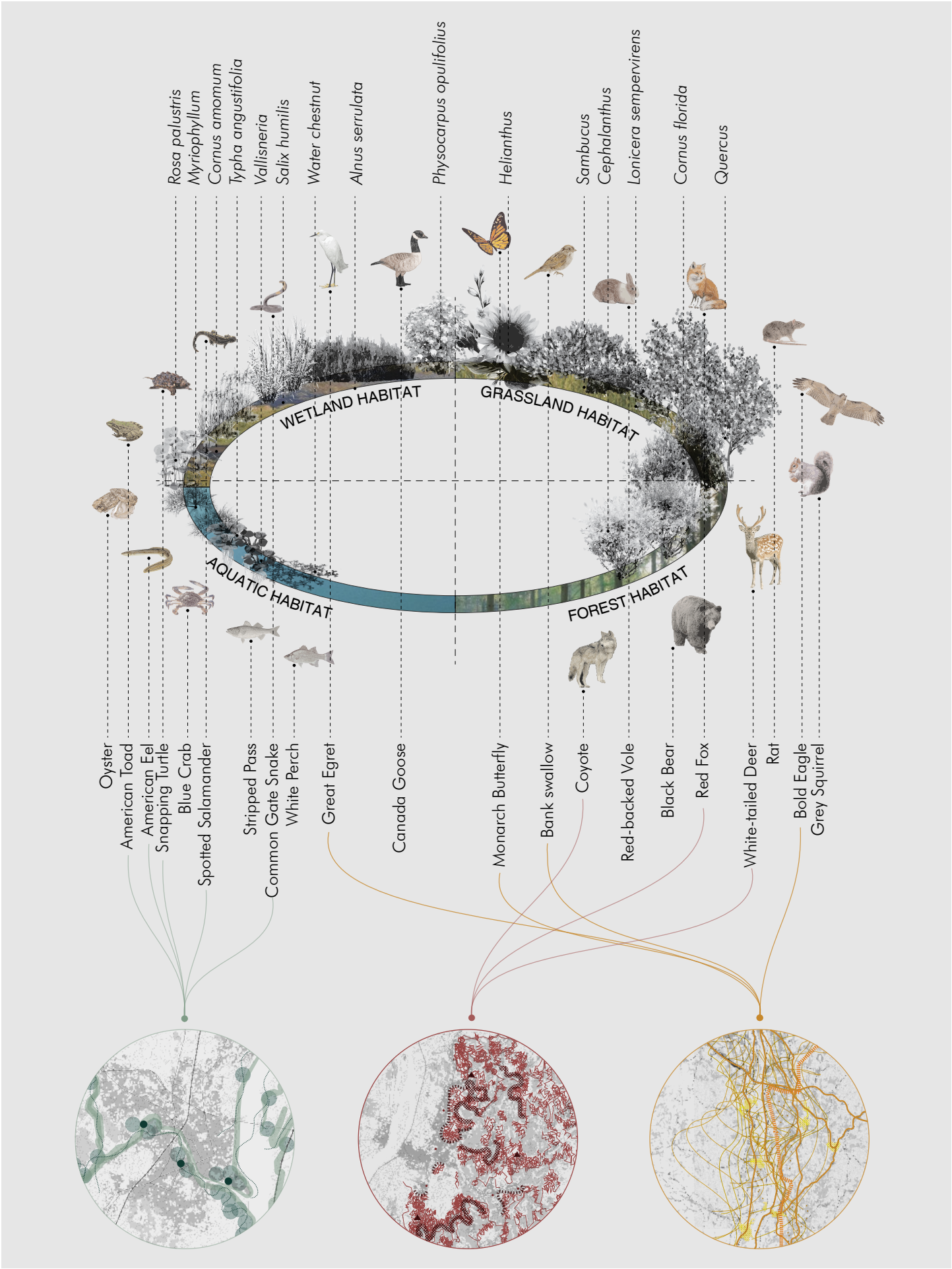
contemplation
rest
read
breath

92,900 sqft.

28,700 sqft.

45 people

Housing
Therapy
Workshops
Shops
Offices
Community Spaces
Community Park



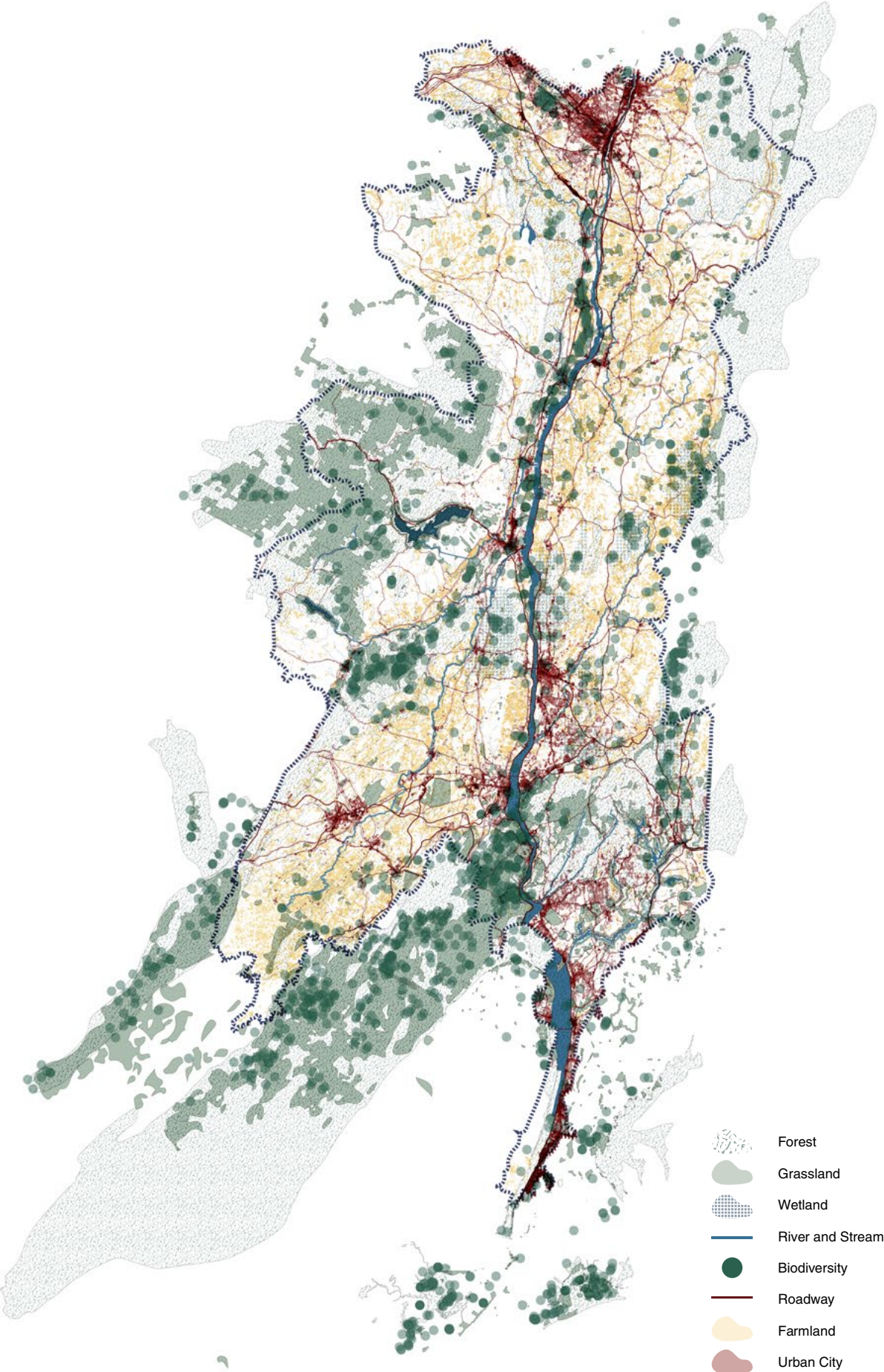
CO-HABITAT

A BIODIVERSITY TOOLKIT FOR COMMUNITY INTERVENTION

Angela Crisostomo, Junyu Cao, Shuo Yang, Yanli Zhao
Hudson, Fall 2018

Co-Habitat explores biodiversity as a means of developing ecosystem resilience. According to the 2018 WWF Living Planet Report, the population of known living species has declined 60% over the past 50 years, threatening vital ecosystem services including food security, medical treatments, coastal flooding, and sea level rise mitigation. The greatest threats to biodiversity are land conversion and habitat fragmentation. At current rates, almost 120,000 square miles of habitat will be lost globally by 2030. In addition to various global initiatives, issues of land conversion and habitat fragmentation must be addressed at regional and local scales in order to achieve real impact. How can urban design accommodate human and non-human life and encourage cohabitation?

The project addresses a global condition of destructive urbanization by providing locally applicable tools. Co-Habitat includes a planning and design toolkit called Biodiversity [+], designed to help local communities understand these conditions and take action. The toolkit consists of an array of design interventions deployable at various scales, conditions, and contexts, and serves as a resource for local governments, civic groups, and individuals to create change in their communities. As the City of Hudson is an important migration and habitat corridor for many species, Co-Habitat deploys design interventions across the city to envision a more biodiverse habitat by 2030. While design interventions are tested as tactical solutions to address site specific conditions, the greater strategies of corridor and habitat integration can be deployed to create a larger, more resilient network of healthy ecosystems.



Soft Edge
and Living Shoreline

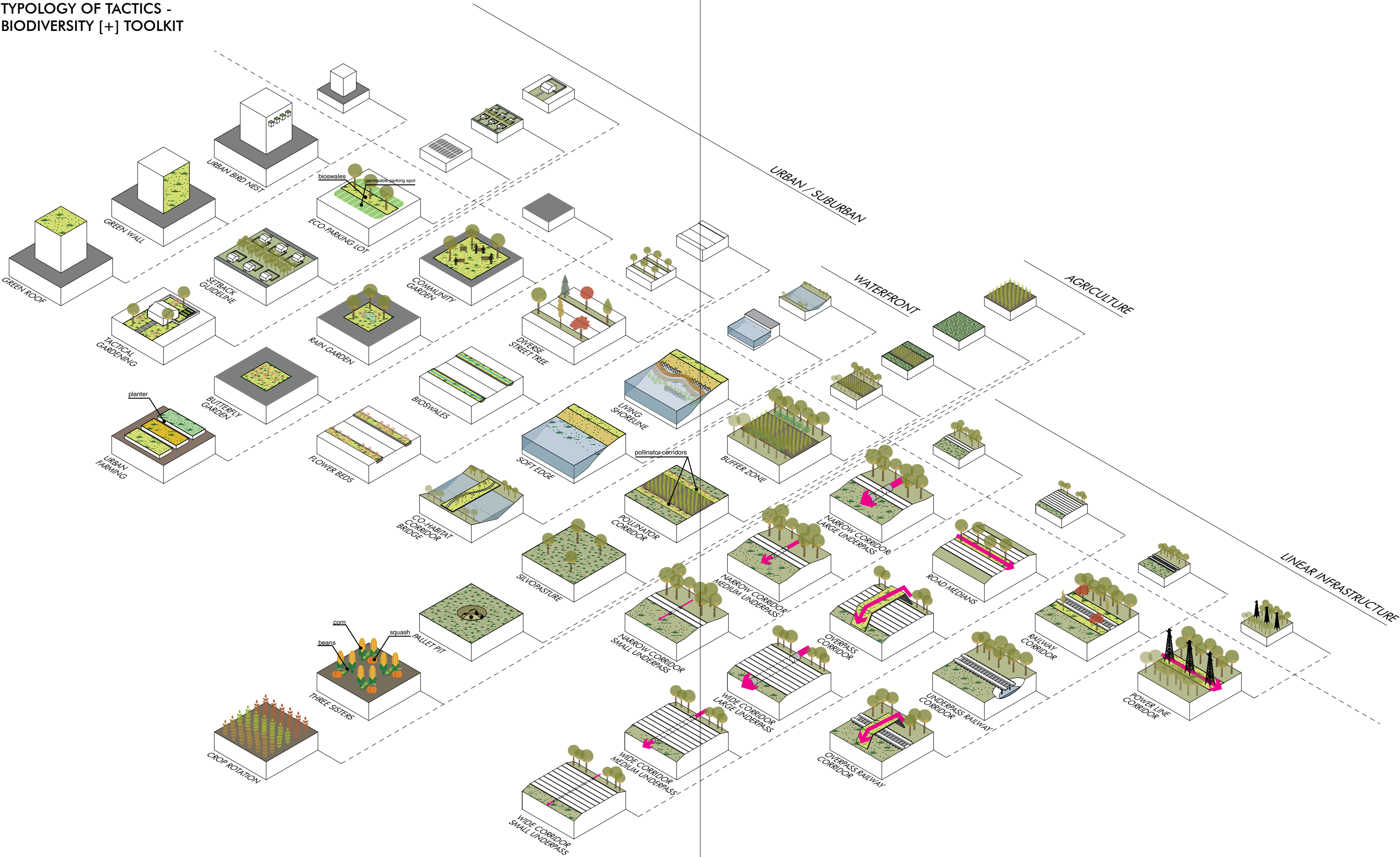


Urban Bird Nests
and Rain Garden

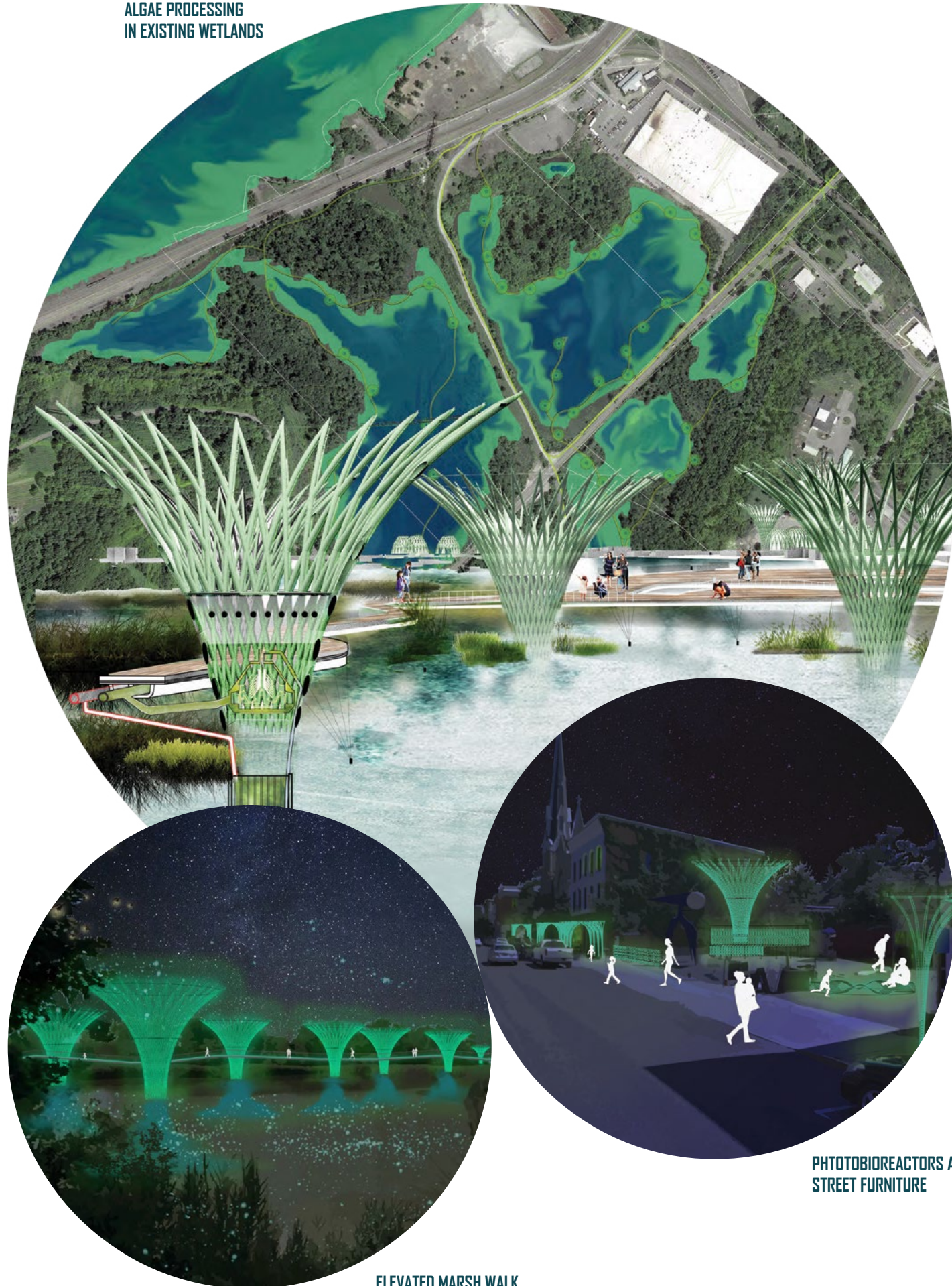


Pollinator Corridor
and Three Sisters Planting

TYPOLOGY OF TACTICS -
 BIODIVERSITY [+] TOOLKIT



ALGAE PROCESSING
IN EXISTING WETLANDS



ELEVATED MARSH WALK

PHOTOBIOREACTORS AS
STREET FURNITURE

ENERGY BLOOM

ALGAE: A NEW LOCAL RENEWABLE INFRASTRUCTURE

Carolina Godinho, Adi Laho, Keju Liu, Maria Palomares
Samper | Hudson, Fall 2018

Every year, thousands of New York State Residents experience electricity outages due to obsolete infrastructure, distant management, predatory pricing and the pressures of climate change. Meanwhile, the central Hudson Valley Region is home to some of the nation's highest electricity bills, creating further challenges for low and moderate income residents struggling to keep their homes. While some of New York's electricity is produced in-state, most is purchased from Canada's vast hydro power network.

Energy Bloom envisions the potential of algae as an alternative, renewable, and free energy source for the Hudson Valley. While algae blooms are typically considered a problem, new technologies of algae cultivation and processing offer new possibilities for energy production.

Through industrial sites, new infrastructure, wetland conservation, and public space integration, Energy Bloom develops an independent infrastructural energy grid that reconnects the people of Hudson to their energy production network. An Algae Trail links waterfront wetlands to cultivation and handling stations across the city, creating new public spaces for the community. Photo-bioreactor structures transform seasonally for a range of new uses, from playgrounds to street lights across Hudson. In time, the Energy Bloom network nurtures local action, self-reliance, and social infrastructure. By directly reconnecting people to their vital resources, the energy industry becomes part of a vibrant, local, community power culture.

ENERGY CONSUMPTION / PRODUCTION

CITY OF HUDSON



6,200 People



Estimated 3,657 Residential Households



Residential Consumption 27,000 KWh [27 MWh]

CULTIVATORS

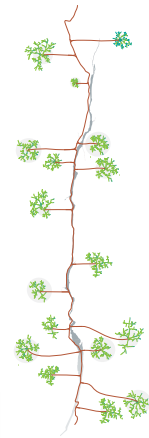


1 TON Of Algae = 334.6 KWh
90 TON Of Algae = 27,000 KWh

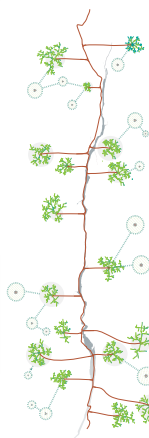


1 TON Of Algae Per Structure
90 Structures

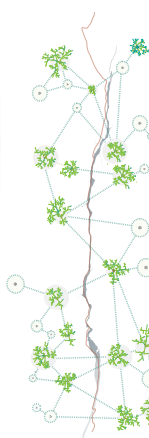
MICRO-GRID PHASING



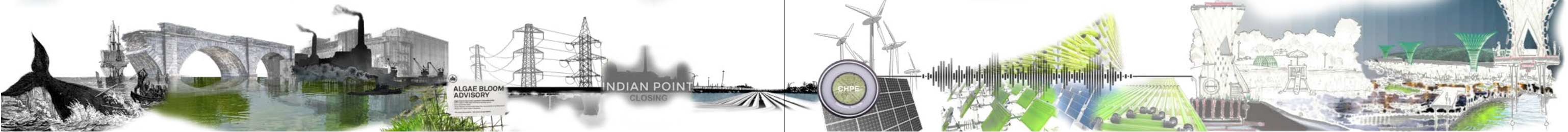
10 YEARS
Renewable Sources supplied by CHPE

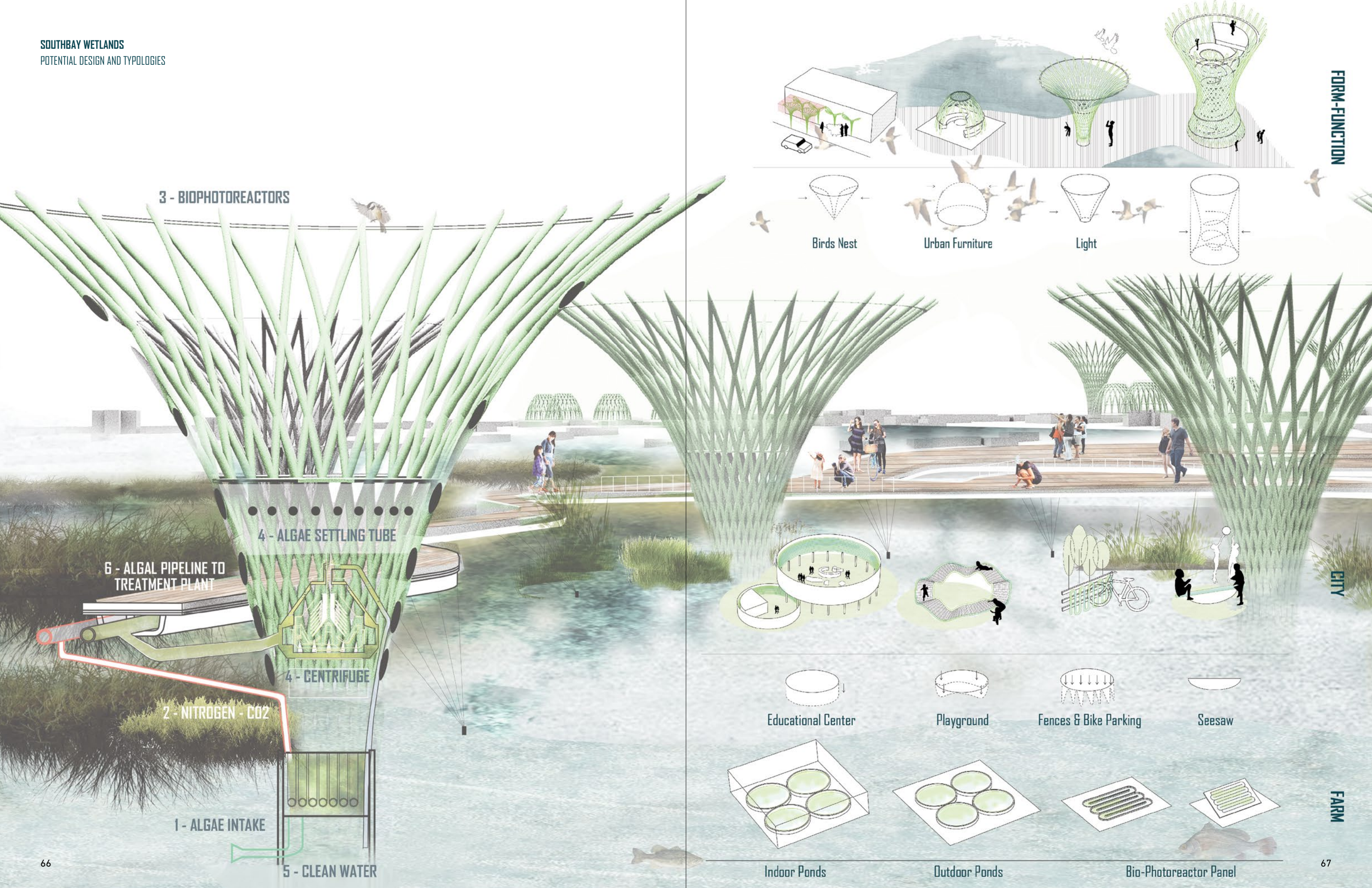


20 YEARS
Other Renewable Sources integrated into the Micro-Grid



40 YEARS
CHPE is discharged
Renewable Micro-Grid functions independently





3 - BIOPHOTOREACTORS

4 - ALGAE SETTLING TUBE

6 - ALGAL PIPELINE TO
TREATMENT PLANT

4 - CENTRIFUGE

2 - NITROGEN - CO₂

1 - ALGAE INTAKE

5 - CLEAN WATER



Birds Nest

Urban Furniture

Light

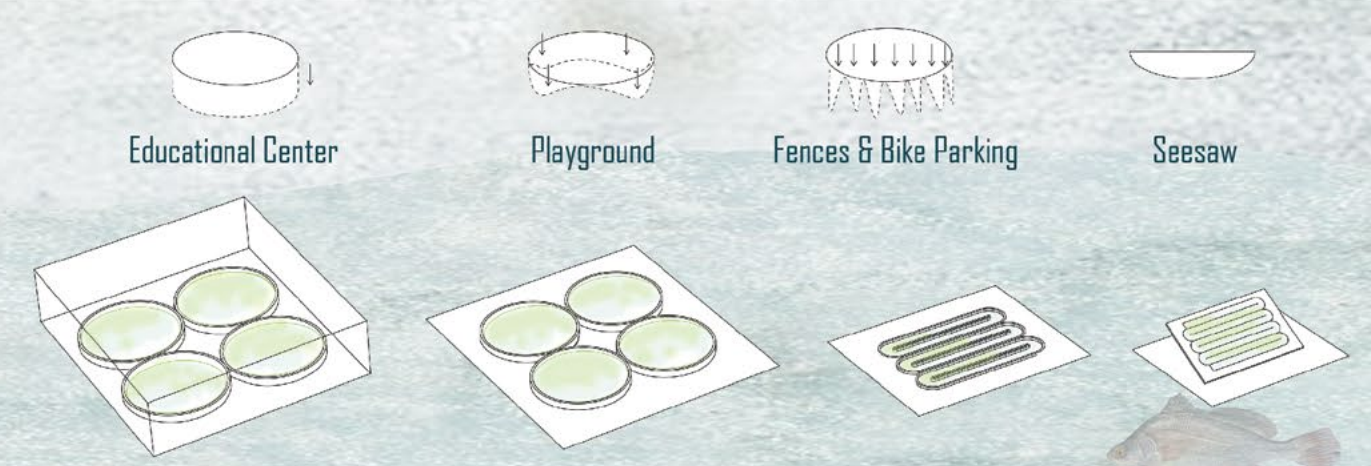


Educational Center

Playground

Fences & Bike Parking

Seesaw



Indoor Ponds

Outdoor Ponds

Bio-Photoreactor Panel

FORM-FUNCTION

CITY

FARM

BEYOND THE STUDIO:

GLEAN HUDSON VALLEY

EVELINA KNODEL, GSAPP MSAUD 2017

“Doesn’t it make sense to connect the dots; to collect the food that is wasted at the farm to feed those who don’t have access to fresh fruits and vegetables?”

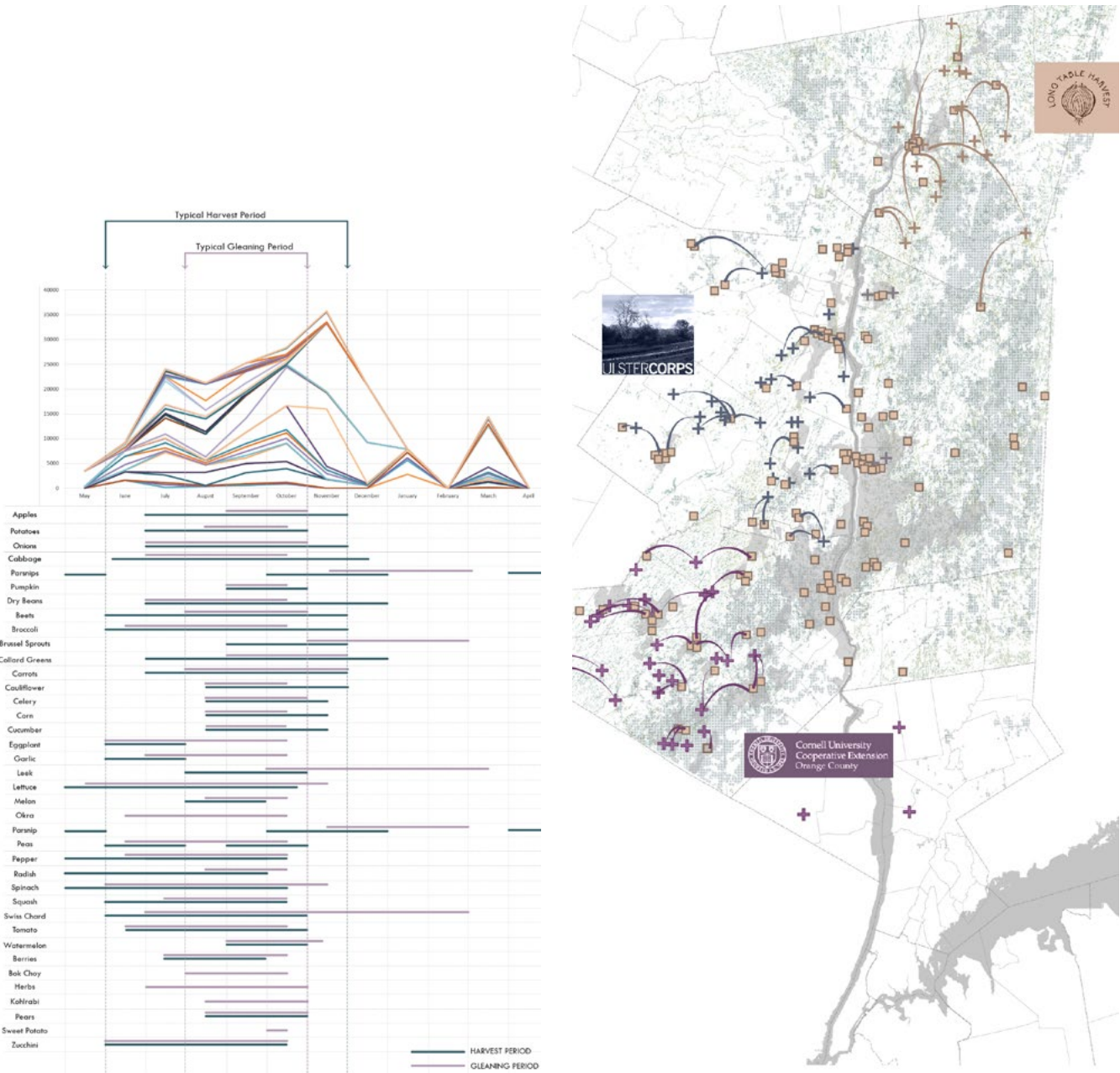
Stiles Najak,
Orange County Food Recovery Program Director

Glean Hudson Valley began as a research and design project that seeks to address specific bottlenecks in the food system that hinder the ability to transform surplus food into nutritious food products for those in need. Analysis and visualization of data about food production, waste, processing, and distribution in the Hudson Valley that began in an Urban Design studio at Columbia University has morphed into a component of a broader MASS Design Group research and development initiative specifically focused on the role of architecture in the radical redesign of regional, just, and equitable food systems.

MASS Design Group’s mission is to create architecture that promotes justice and human dignity. With global reach, MASS’s expertise includes research and publications, community engagement and advocacy, and architectural project delivery. We position ourselves at the forefront of pressing global challenges, approaching every project with the mission to achieve meaningful impact and to challenge the underlying systems that support inequity and injustice. Since 2017, MASS has been working in the heart of the Hudson Valley in Poughkeepsie, New York, evaluating challenges that resonate nationwide while taking into consideration the particular local dynamics and characteristics of this region.

One of the biggest bottlenecks in the US food system is the lack of agile, mid-scale processing facilities. In between large corporate operations and small-scale or at-home businesses there is a major infrastructure gap that keeps large-scale corporations in control of the majority of markets, effectively constricting growth and limiting opportunities for small to mid-scale farmers in this region. Additionally, vast amounts of food are going to waste, not for lack of committed recovery networks, but due to a lack of storage and processing facilities where the food can go. This void reinforces vast systematic inefficiencies and inequities, of which food waste and food insecurity are symptoms.

As part of a new initiative, MASS hopes to use the Hudson Valley as a pilot region to develop multi-scalar concepts for processing and co-packing facilities that are responsive to and deeply embedded in their local context. The proposed facilities would act as intermediary nodes, strengthening local and regional collaboration, employing and training local residents, and expanding opportunities to recover, process, and distribute regional produce and surplus. We are partnering with an organization called Matriark Foods’ whose mission is to turn large volumes of farm surplus and fresh-cut food waste products into delicious and cost effective added-value products for schools, hospitals, and food banks. Our goal is to disrupt the status quo through the design of systemically transformative solutions around economic, environmental, and social justice, and we believe that rethinking aggregation and processing infrastructure will be a catalyzing force in incentivizing market diversity, addressing issues of food waste and insecurity, and reorienting the food system towards regional values.



CULTURE & ART

LIZ MCENANEY

The Hudson Valley has long celebrated its national significance – commemorating the people and places of the Revolutionary War, the artists who birthed the Hudson River School depicting sublime river views that reflected distinctly American attitudes towards nature and the landscape, and, later, the activists who launched the modern-day environmental movement.

This master narrative of historical significance is connected to the culture of the Hudson Valley today, yet it is both consciously and unconsciously being reinvented by those who now call the region home. Culture manifests itself visually through the work of artists, makers, chefs, entrepreneurs, and other creative professionals, as well as through the everyday practices and ideas put forth by various communities.

Traditional forms of art and culture are finding new spaces in abandoned industrial and commercial structures such as the Basilica in Hudson and Dia Beacon, while artisans bring back to life long-lost crafts like Thornwillow Press in Newburgh. Culinary traditions brought by new Hudson Valley residents, particularly Latino and Hispanic immigrants, are changing not only the restaurant scene in places like Poughkeepsie, but also the agricultural products grown in the region. Efforts are being made to create new historic sites commemorating once overlooked narratives, like the African Burial Ground in Kingston. Film production is moving into Newburgh, and shots of the Hudson Valley’s natural beauty, as well as still stagnated post-industrial urban centers appear on screen. Culture, art and ideas have the power to define a place, give voice to a local community, and also drive an economy. Yet, not everyone living in the Hudson Valley is represented in this new narrative, nor are

they benefiting from it socially or economically. As the Hudson Valley’s demographics continue to change – with some cities and towns losing population and aging, while others growing with new immigrant populations – it is our role as urban designers, to work with communities and ensure that culture, art, and ideas are used to address challenges of design justice and spatial inequity, while helping to sustain and amplify existing cultural capital.

Liz McEnaney is an historic preservationist and urban design studio instructor

OAXAKEEPSIE

Development through Cultural Diversity

The CO[re]-LABOR-A[c]TIVE PROJECT

Providing New Opportunities Around Poughkeepsie’s Main Street

LIGHTS CAMERA NEWBURGH

Film as an Equalizer of Local Urban Narratives

BEYOND THE STUDIO:

Alumni essay by Amy Shell and Razvan Voroneanu



OAXAKEEPSIE

DEVELOPMENT THROUGH CULTURAL DIVERSITY

Jorge Espinosa, Saritza Martinez, Niomi Shah, EJ Woo
Poughkeepsie, Fall 2017

Immigration patterns differ across the United States. In Poughkeepsie, the largest immigrant population comes from the state of Oaxaca in Mexico. The Oaxacans bring traditions and knowledge that can be leveraged for cultural exchange and economic growth. Their presence, among others, has stabilized Poughkeepsie's population and over the past two decades, entrepreneurial immigrants have been revitalizing Main Street by opening new businesses, primarily offering traditional cuisines. In order to maintain and increase this economic stability, and develop robust social and economic networks, immigrants need better access to institutional support, services, and incentives. As a sanctuary city, Poughkeepsie is uniquely positioned to offer both documented and undocumented immigrants opportunities for stability and growth, while avoiding challenges of similar cities with a shrinking population.

Oaxakeepsie envisions Poughkeepsie's Main Street as a vibrant hub of Oaxacan Cuisine, specializing in the authenticity of its most iconic dish, mole, while offering learning, production, and tasting experiences for locals and visitors. Resources along Main Street will include a community kitchen, spice market, and culinary school, as well as small business incentives meant to support the expansion of the network over time. A new, community-based organization will use revenue from the spice market and other sources to pay for infrastructure and basic services for undocumented immigrants. Services will focus on entrepreneurial needs including English classes, legal advice, loan assistance, affordable commercial retail, and cooking classes. In turn, Oaxakeepsie will serve as a new model for Hudson Valley Cultural Districts that can catalyze economic growth through strategic investment in cultural and social assets.



Live Feed from Zócalo Oaxaca at Poughkeepsie Reservoir Square Park



Spice and Food Market on Main Street

Retos / Challenges



Indocumented immigrants don't have access to basic services due to their lack of citizenship.

Los inmigrantes indocumentados no tienen acceso a servicios básicos debido a su falta de ciudadanía.

Oportunidades / Oportunidades

Cultural District? /
¿Distrito Cultural?

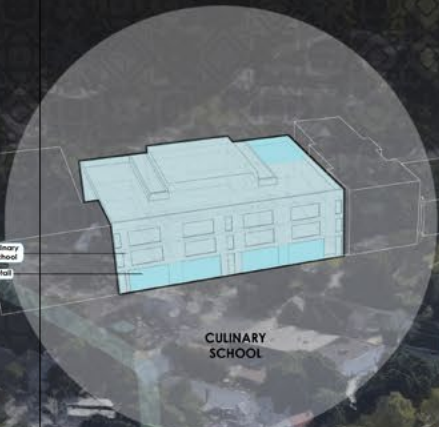
CULTURAL EXCHANGE /
INTERCAMBIO CULTURAL

ECONOMICAL DEVELOPMENT /
DESARROLLO ECONOMICO

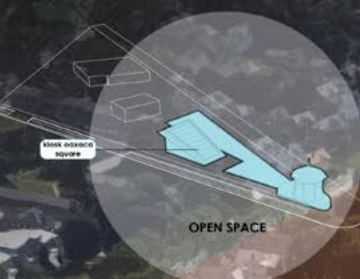




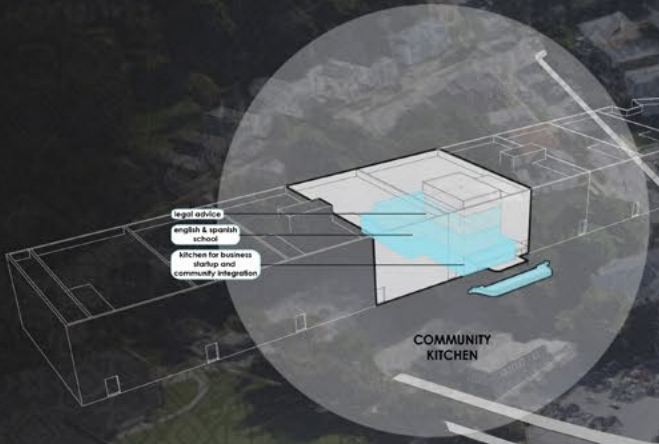
SPICE MARKET



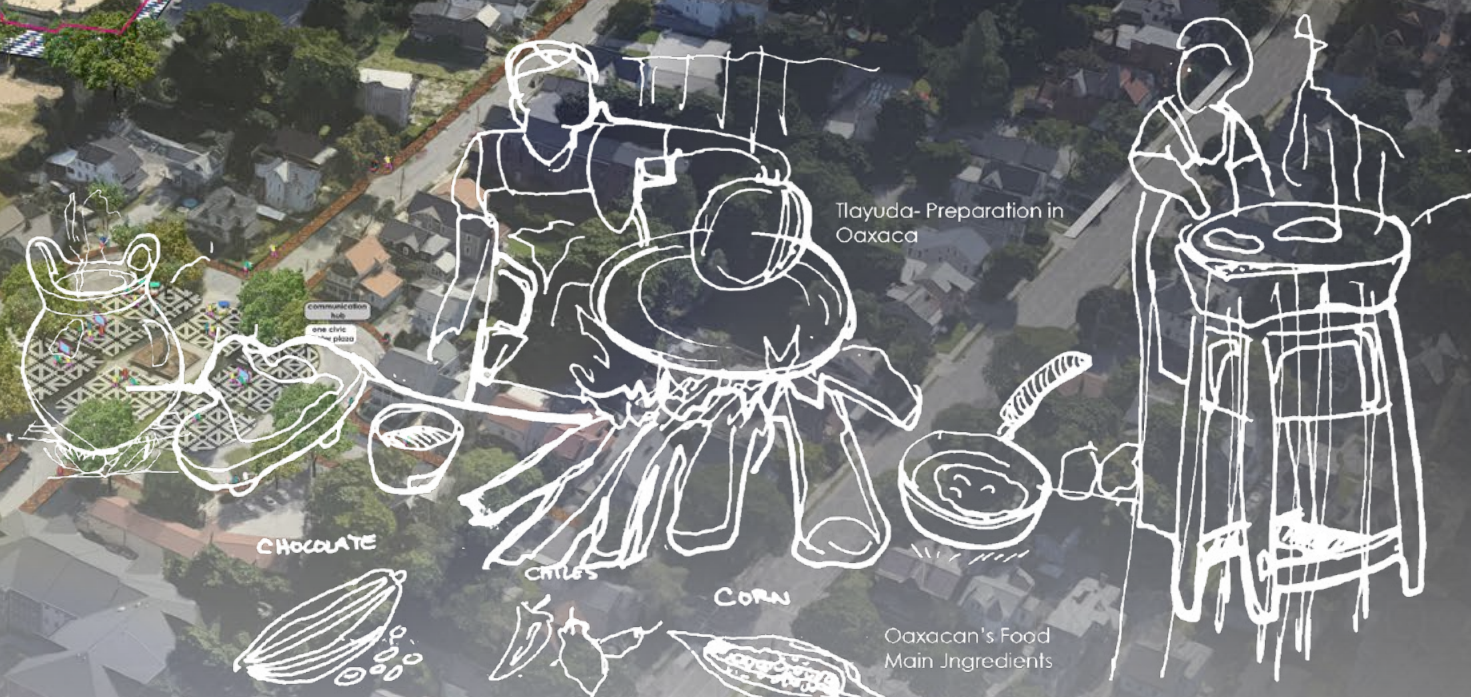
CULINARY SCHOOL



OPEN SPACE



COMMUNITY KITCHEN



Tlayuda- Preparation in Oaxaca

CHOCOLATE

CHILES

CORN

Oaxacan's Food Main Ingredients

STAKEHOLDERS
POTENTIAL FEDERAL FUNDS

Culture

Cultural District

National Endowment for the Arts

For the People

Individuals and communities

Significant economic impact on cities, attracting businesses, tourists, and local residents to a central part of the city.

For the People

Individuals and communities

For the People

Individuals and communities

For the People

Individuals and communities

For the People

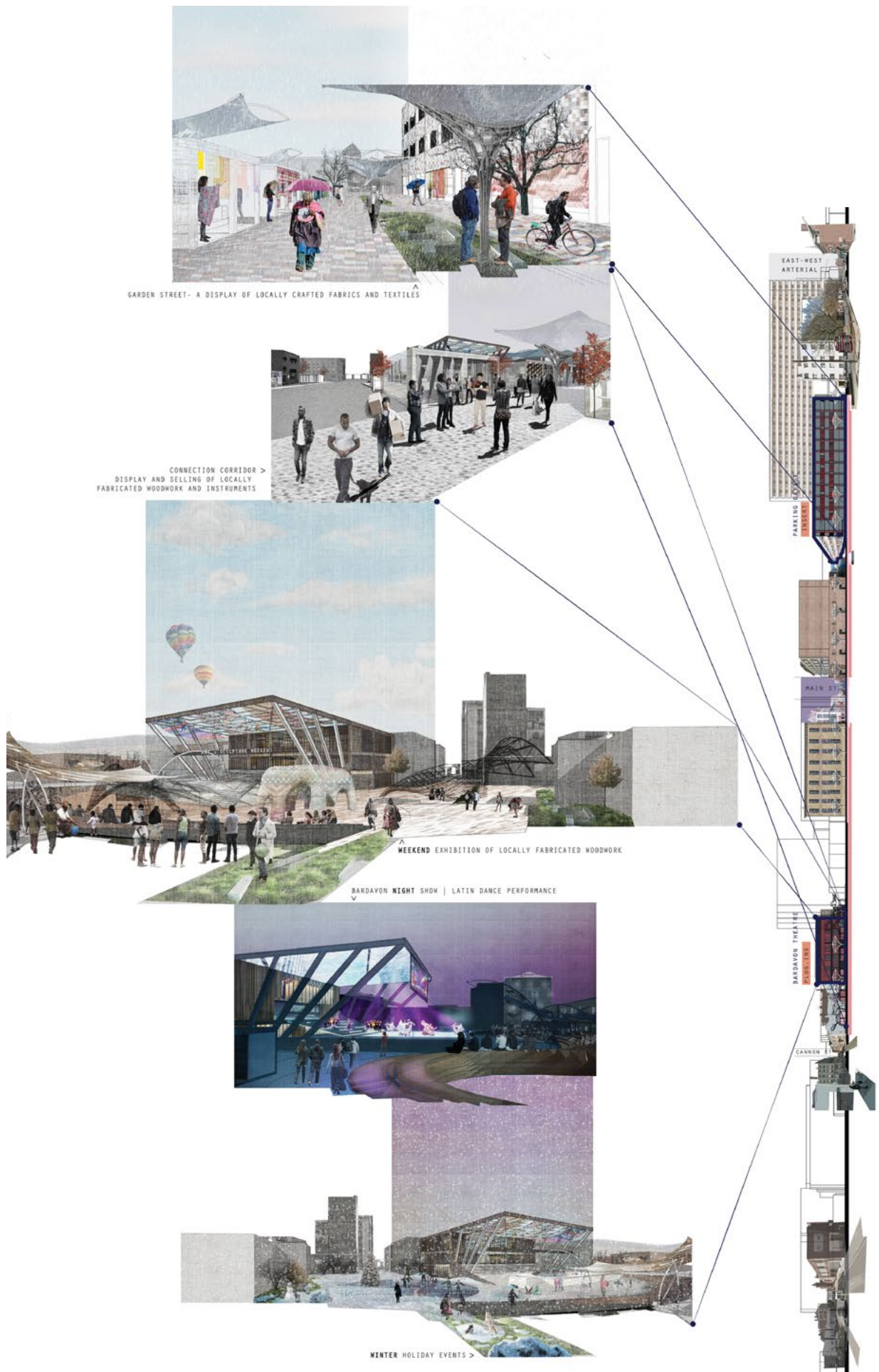
Individuals and communities

For the People

Individuals and communities

For the People

Individuals and communities



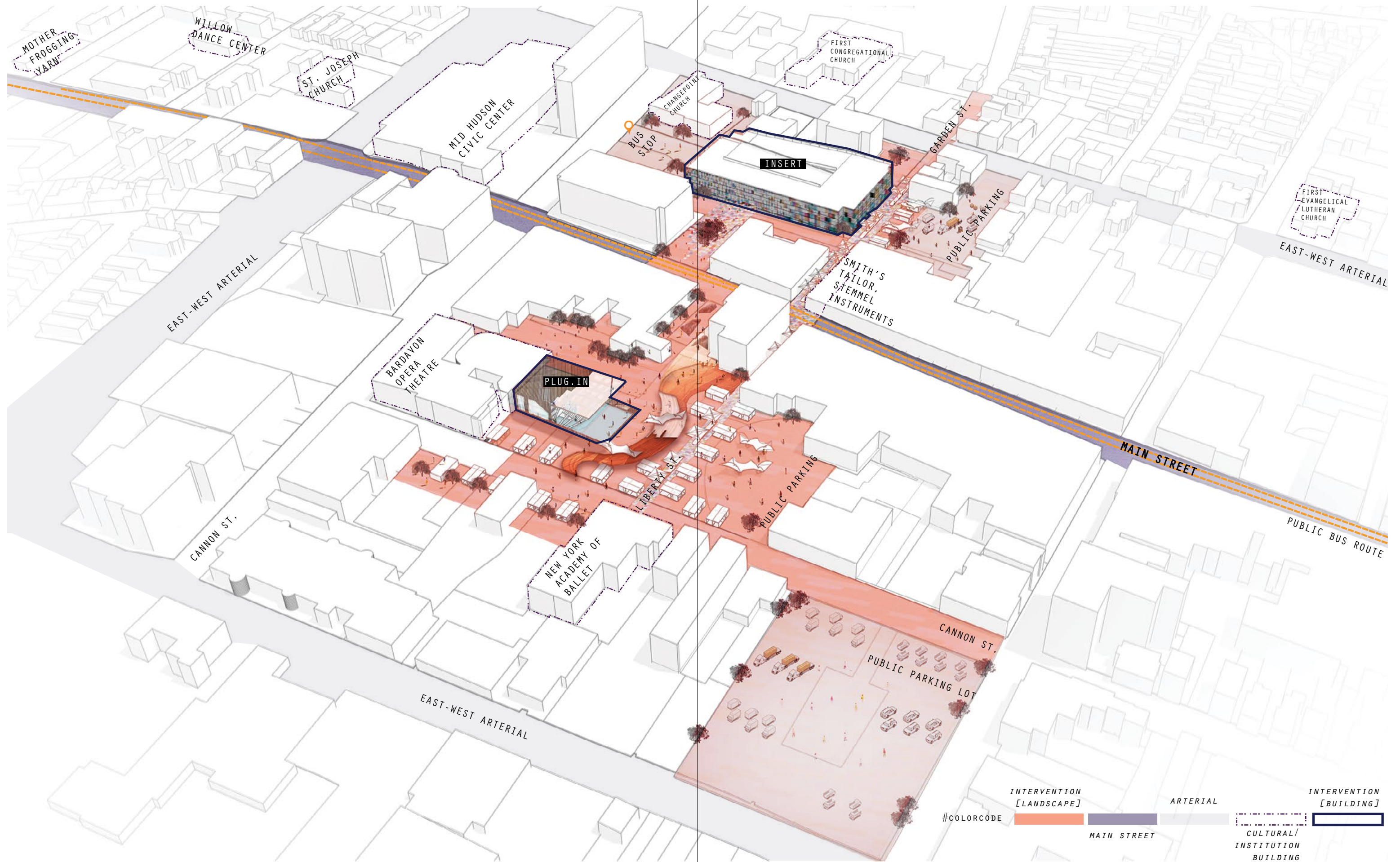
The CO[re]-LABOR-A[c]TIVE Project

PROVIDING NEW CO-SPATIAL AND PROGRAMMATIC OPPORTUNITIES FOR THE COMMUNITY LIVING AROUND POUGHKEEPSIE'S MAIN STREET

Sreyash Dasgupta, Ahmed Saeed Jawdat, Dissa Pidanti Raras, Vrinda Sharma | Poughkeepsie, Fall 2016

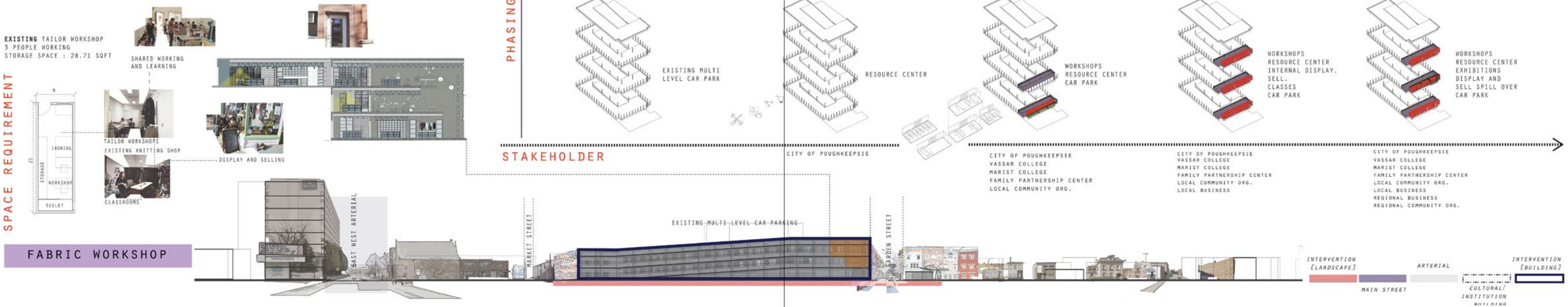
Downtown Poughkeepsie is among the Hudson Valley's most culturally and socially diverse communities. Yet, many of the city's assets are untapped resources for equitable growth and change. In particular, the many existing crafts, arts, and small industries could contribute to the revitalization of the city and the region.

The Co-labor-a-tive Project nurtures this pool of skills by creating a new spatial network: a cultural corridor between the East-West arterials that runs behind buildings, through parking lots, and most importantly, adds new public spaces and market sites while connecting various cultural and arts institutions. Along the route, shared, community-organized spaces house small and large scale programs, shops, and industries. Spaces are made of a modular system of stalls built by local fabrication shops and interior partitions built by the users according to their needs, with the capability of modules being added. This system acts in short, medium, or long term capacities depending on the pace of change and the needs of the users. A micro-credit system run by the Co-labor-a-tive organizers lowers the barrier to entry for people with skills and talents to offer who have no access to credit. The Co-labor-a-tive Project creates a shared interest among the region's different constituents, offering opportunities for economic growth, social mobility, and local governance.



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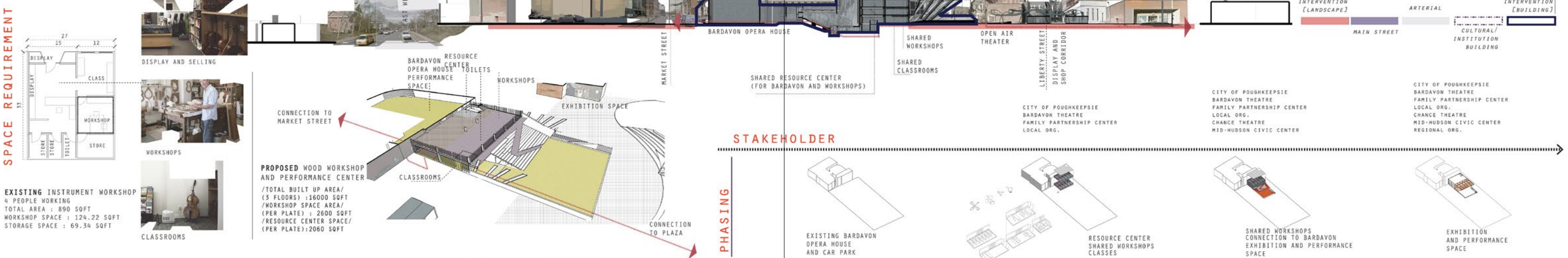
TEXTILE | KNITTING | TAILORING

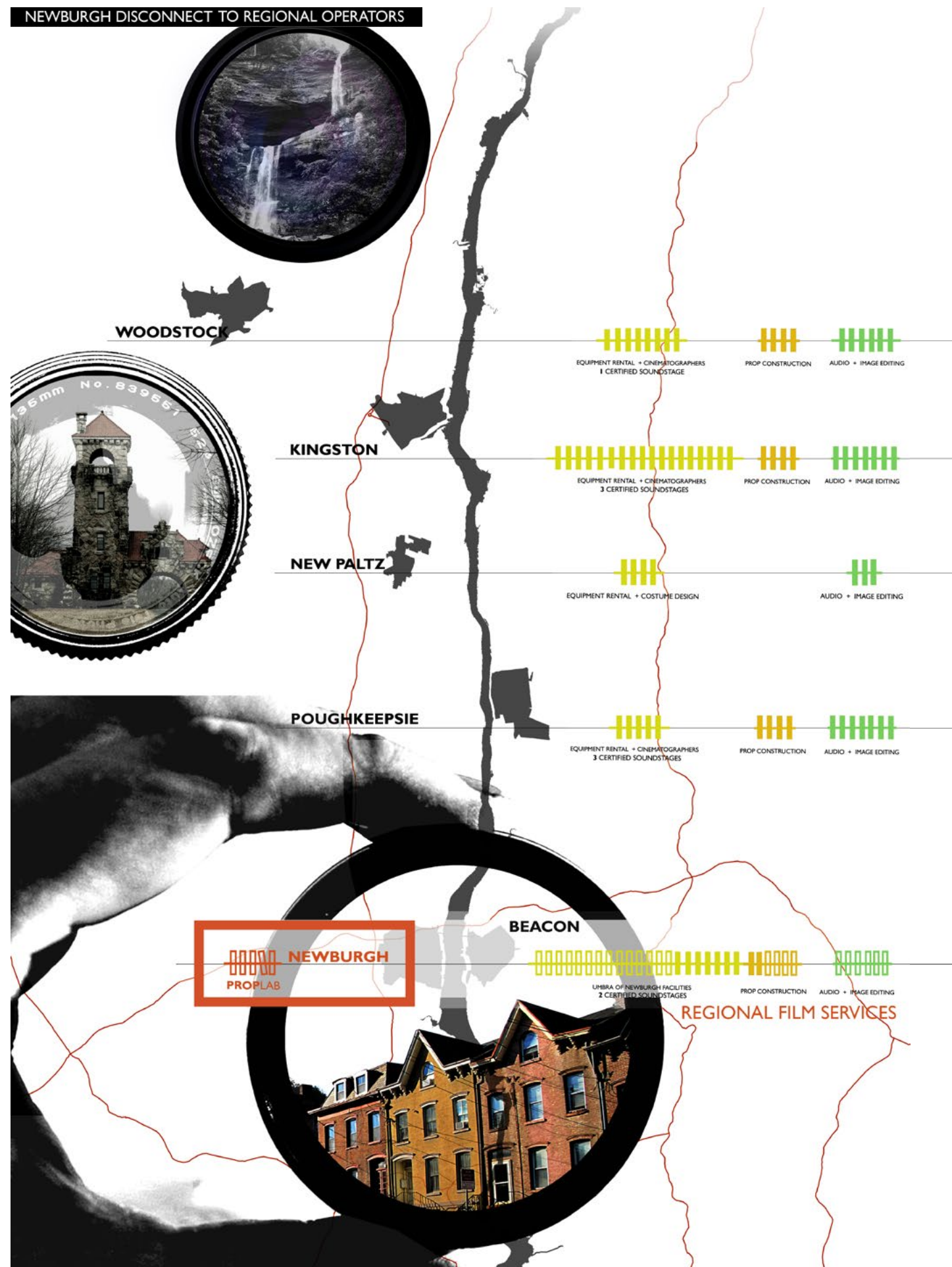


PLUG.IN

WOOD | STRING | SOUND | INSTRUMENT

PERFORMANCE & WOOD WORKSHOP





LIGHTS CAMERA NEWBURGH

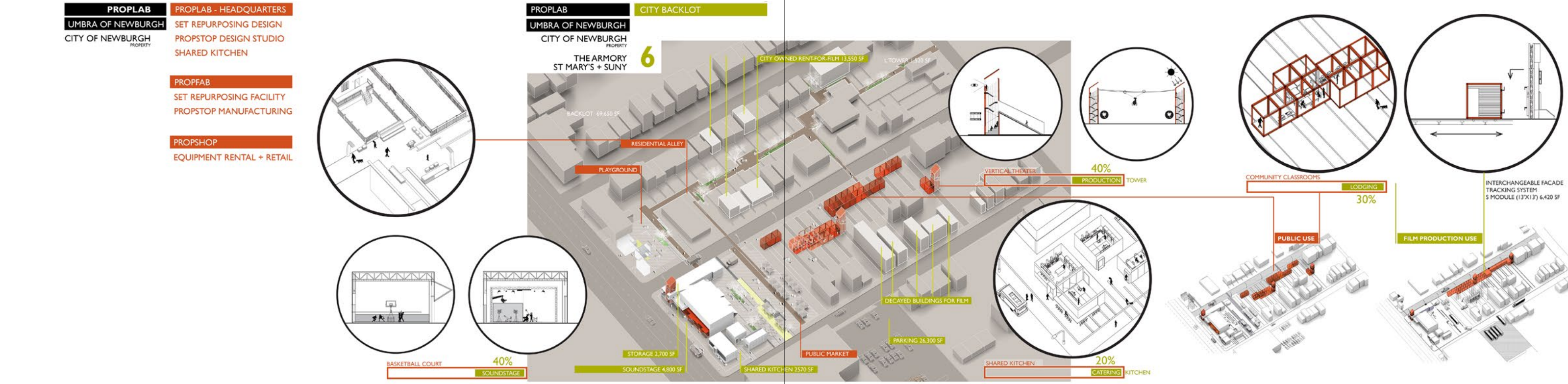
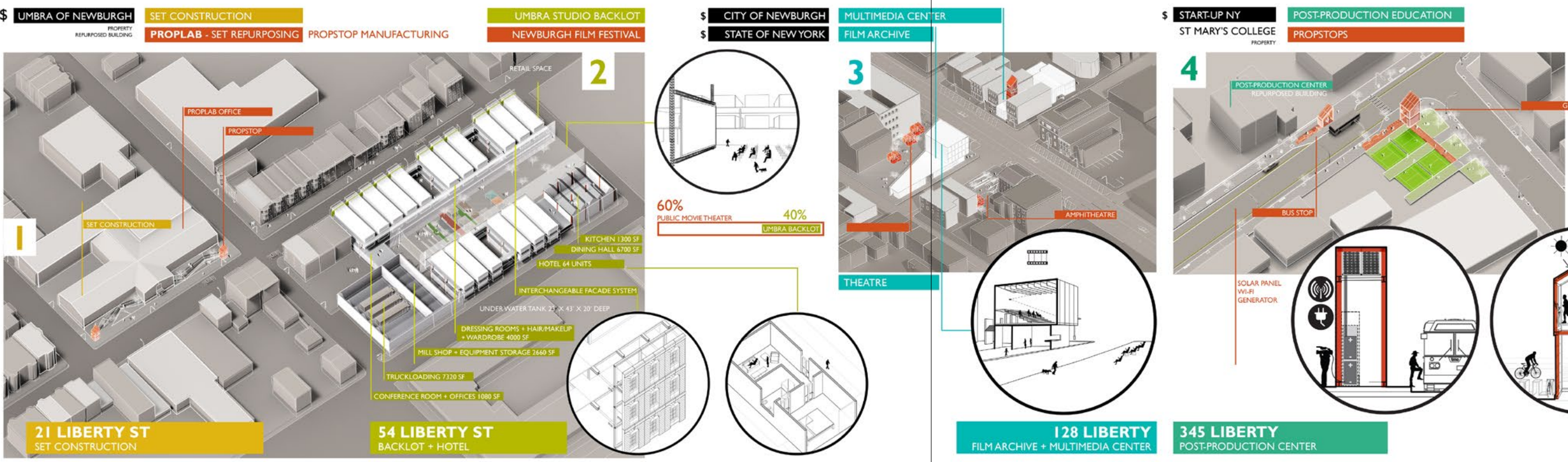
FILM AS AN EQUALIZER OF LOCAL URBAN NARRATIVES

Tin Yan Cheung, Hanqing Kuang, Guillermo Ramirez, Razvan Voroneanu, Amy Shell | Newburgh, Fall 2014

Newburgh is uniquely positioned to become a regional and national leader in the film industry. Known for its high crime rates and drug-related FBI stings, investing in film allows the city to rewrite its own story, and empower local youth in crating their own narratives. The city is home to existing film services, such as two certified soundstages and the independent film company, Umbra of Newburgh, in addition to an extensive variety of shooting locations and its breathtaking views of the Hudson Valley. At a local scale, the City of Newburgh has generous policies in place that streamline filmmaking in the city, and at a regional scale, New York State provides abundant Film Tax Credits to incentivize filmmaking.

Lights Camera Newburgh proposes the establishment of PROPLAB, a nonprofit which partners with local entities and educational institutions to tap into existing resources and transform Newburgh into a thriving film hub. By introducing a way of re-purposing film sets, PROPLAB adds a new step to the traditional film production cycle that generates a dual purpose infrastructure. Working with local educational and community organizations, PROPLAB establishes an employment pipeline for local youth interested in film and media.

The project builds on the momentum generated by emerging small businesses and trends occurring along Liberty Street to create supporting programs for all phases of filmmaking. PROPLAB deploys re-purposed sets and film towers to serve both the community and film crews. While Newburgh becomes specialized in the pre-production and production of film, PROPLAB becomes a vehicle to connect cities and existing film services within the Mid-Hudson Valley, forming a competitive film region that attracts business from New York City and provides economic opportunities in struggling urban centers.



BEYOND THE STUDIO:

COMMON PROJECTS NEWBURGH

AMY SHELL AND RAZVAN VORONEANU, GSAPP MSAUD 2015

We founded Common Projects Newburgh as a research and design initiative to advance an equitable and sustainable future for the City and the Hudson Valley region. We work with both private and public organizations to initiate common projects that leverage underutilized local resources to breathe new life into neglected spaces and underserved communities. Our aim is to create an inclusive platform for spatial interventions that catalyzes local and regional momentum to amplify cultural and social opportunities.

At the core of our methodology lies the concept of multipurpose infrastructure: dynamic interventions in the public realm that perform a functional necessity while simultaneously enriching the social and cultural fabric of the city. We view the tactical nature of our projects as a tool to empower communities and inspire novel modes of using public space.

Recognizing the need for expanding access to arts and culture within Newburgh’s historically underserved communities, we initiated the design of the Cinemabox. Pavilion by day and cinema by night, the Cinemabox will host public screenings, performances, exhibitions, and workshops to amplify the voices of underrepresented artists and to expand equitable access to and representation within arts and culture. The Cinemabox turns the arts venue model inside out by (1) transforming vacant sites into year-round cultural timeshares redefined by day to night, programmed or impromptu events, and (2) creating an all-in-one multimedia platform that empowers stakeholders, storytellers, and daily users to generate new initiatives and expand the experience of cultural programs to a wider range of public spaces that tie communities together.

To address socio-geographical barriers inhibiting equitable access to cultural resources, the

Cinemabox overcomes the remote nature of existing venues through its mobility and strategic site selection within marginalized neighborhoods, providing direct engagement with the arts and building intra-community relationships.

Aiming to create enduring change through a collective sense of ownership from day one, we have partnered with a local sculptor to design the Cinemabox’s fabrication process as a design-build workshop where local students will be introduced to potential careers in the fields of sculpture, design, and manufacturing. The Cinemabox is currently scheduled to open next year at the Thornwillow Institute with future sites provided annually through a partnership with the Newburgh Community Land Bank, and programming supported by local art and film organizations.

The development of the Cinemabox is the result of a long-term research and design engagement in the City of Newburgh that started in the Fall of 2014 with Lights Camera Newburgh, a comprehensive urban design proposal to transform the City into a film-machine; and has continued with a series of initiatives to implement its various components, including public screening infrastructure and a film festival. Newburgh Narratives was developed during an independent study to test the concept of dual-purpose film infrastructure on the ground in the form of a public installation acting as a gathering place during the day and an outdoor theatre at night. Made in partnership with the local soundstage, Umbra Studios, and constructed with twenty miles of yarn, the structure opened in May 2015 with a public screening featuring stories told by people from the community about places within the city that hold a special significance in their life. In 2017, we joined the board of the East Northeast International Film Festival to expand the reach of film

by leveraging underutilized resources and bringing community-focused design to the forefront. The festival debuted with a five-day Green Tech Conference, where experts, educators, planners, and activists shared their ideas for the city’s and region’s potential for resilient design and green jobs. With selections from over 3,000 entries from 150 countries, the inaugural film festival debuted in October 2019 and included five days of screening across three Newburgh venues - the Ritz Theater, the Downing Film Center, and St. George’s Church - and the Story Screen Theater in Beacon.

Grounded in the process of amplifying hyper-local momentum to bridge the gaps, Common Projects Newburgh is an experimental agency for promoting equitability and civic engagement through the power of design across the Hudson Valley.



INCARCERATION & EDUCATION

URBAN JUSTICE AND THE DESIGN CONTINUUM | IFEOMA EBO

There is a continuum in the criminal justice system that includes the physical environments of court houses and detention centers and the quality of public spaces in and around marginalized communities. The majority of people who must engage with the criminal justice system are coming from areas with high crime and a history of disinvestment, marginalization, and neglect of the public realm. Each of those touch points where people engage with the physical spaces of the criminal justice system has an impact on how they perceive their government, their trust in government and their respect for the process.

Researchers have coined the term “placial justice”, or “place-based justice” to describe this symbiotic relationship between the physical environments of lower income Black communities including their spatial distribution of services and the process’ of the criminal justice system¹. Furthermore, the ability for individuals and their communities to heal from interaction with the criminal justice system is directly connected to their “spatial access to social services and welfare resources supporting the rehabilitative efforts” including the communities in proximity to correctional facilities². Critical analysis on this topic including exploratory urban design approaches can begin to unveil the root causes and arrive at potential solutions

1 Victor J. St.John and Kwan-Lamar Blount-Hill “Place, Space, Race, And Life During And After Incarceration: Dismantling Mass Incarceration Through Spatial And Placial Justic” ; Harvard Kennedy School Journal of African American Policy; 2018—19 Volume

2 Ibid

to addressing the spatial injustice associated with crime and recidivism. As a part of the Justice in Place: design studio many students used line and form to explore a place-based approach to tackling this challenge.

For a subject so poignant as the intersection of criminal justice and urban design in the pedagogy of design justice it is imperative to establish metrics and indicators for success. How does one know if their design solutions are truly having an impact on the social fabric of communities and people who have been incarcerated? Measuring the impact of design strategies on participation in community life, transformative use of community space, perceptions of belonging and agency, trust in the community and social change should be a critical component of this process of designing for justice if we are truly striving for authentic societal transformation.

Ifeoma Ebo is an urban design and planning strategist. She is the Director of Strategic Design Initiatives at the New York City Mayor’s Office of Criminal Justice

The views expressed in this article are not the views of the NYC Mayors Office

THE NEWBURGH PATH

Designing Alternative Paths to Incarceration

DE-MARGINALIZE

Challenging the Cycle of Recidivism

BEYOND SCHOOL

An Expanded Education System Grounded in Local Assets

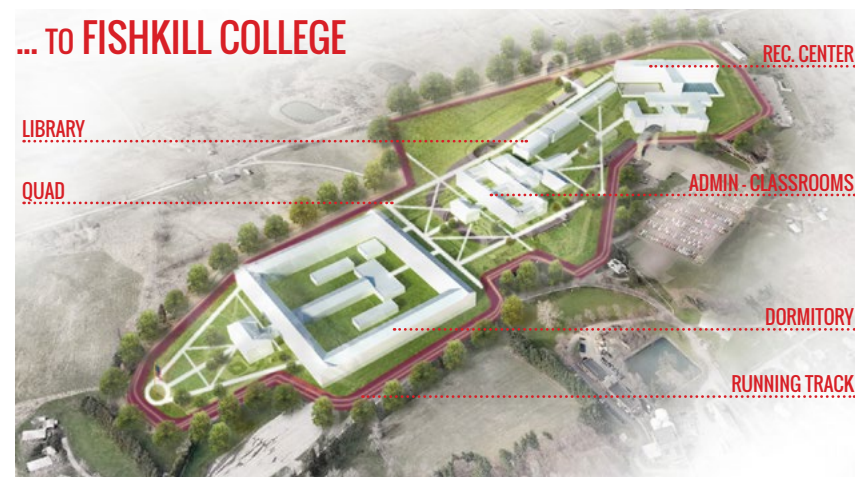
BEYOND THE STUDIO:

Alumni essay by Besty Daniel and Sofia Valdivieso

FROM FISHKILL PRISON ...



... TO FISHKILL COLLEGE



THE NEWBURGH PATH

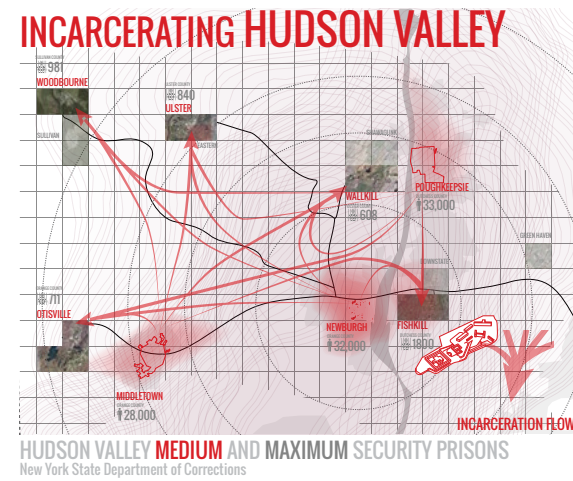
DESIGNING ALTERNATIVE PATHS TO INCARCERATION

Ross Brady, Anais Niembro Garcia, Nans Voron, Ye Zhang
Newburgh, Fall 2014

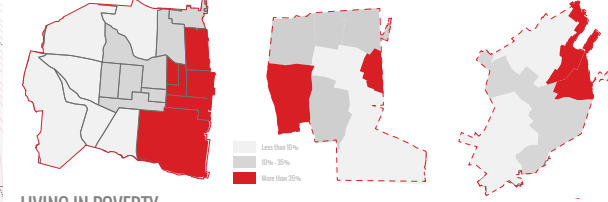
The prison system in the United States is locking up more people than any other nation on earth. New York State spends \$60,000 per year on each inmate it houses. In the Hudson Valley, the city of Newburgh is a community in distress: a high rate of unemployment, poverty and high-school dropouts mar its image. Social services are seen as placing their unwanted clients in Newburgh and offer little support for the rest of the city, effectively abandoning it. The project proposes to reallocate certain resources from the prison system into Newburgh and other regional cities such as Middletown and Poughkeepsie, facing similar circumstances.

The Newburgh Path allows offenders of non-violent crimes with sentences of three years or less to be diverted from traditional imprisonment and instead be housed under various levels of observation and engagement within Newburgh. Participants in the program are reintegrated into society incrementally through job training, adult education, and other initiatives. The infrastructure used to facilitate this process is shared with and available to the public in the form of vocational workspace, recreation, and meeting space. Such efforts, if successful, could help eradicate the region's problem with cyclical incarceration by shifting the focus from addressing its symptoms to addressing its causes.

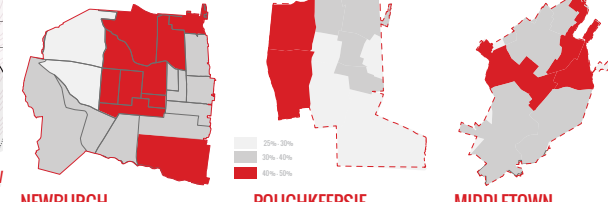
INCARCERATING HUDSON VALLEY



POPULATION UNDER 25



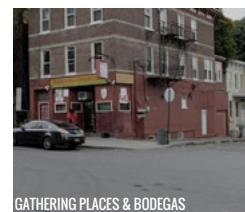
LIVING IN POVERTY



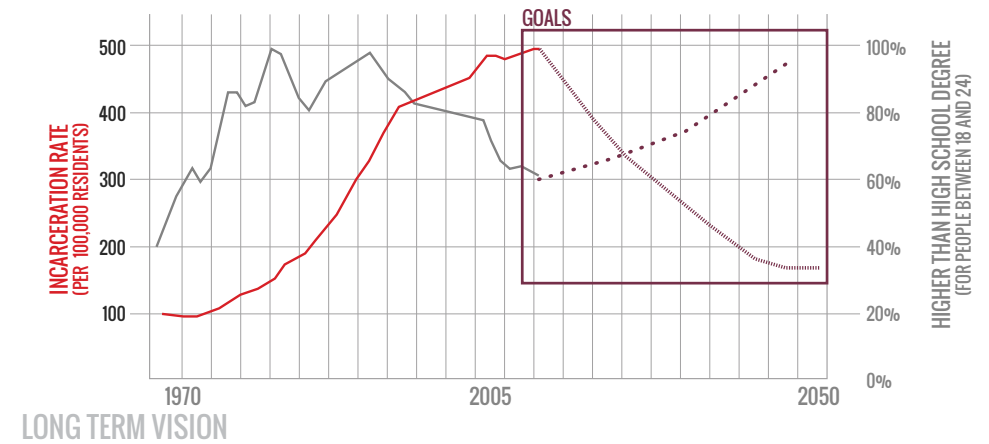
NEWBURGH

POUGHKEEPSIE

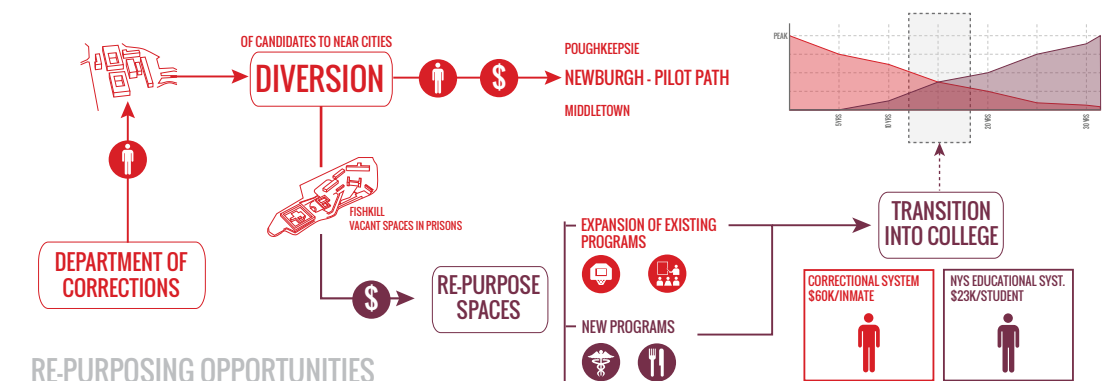
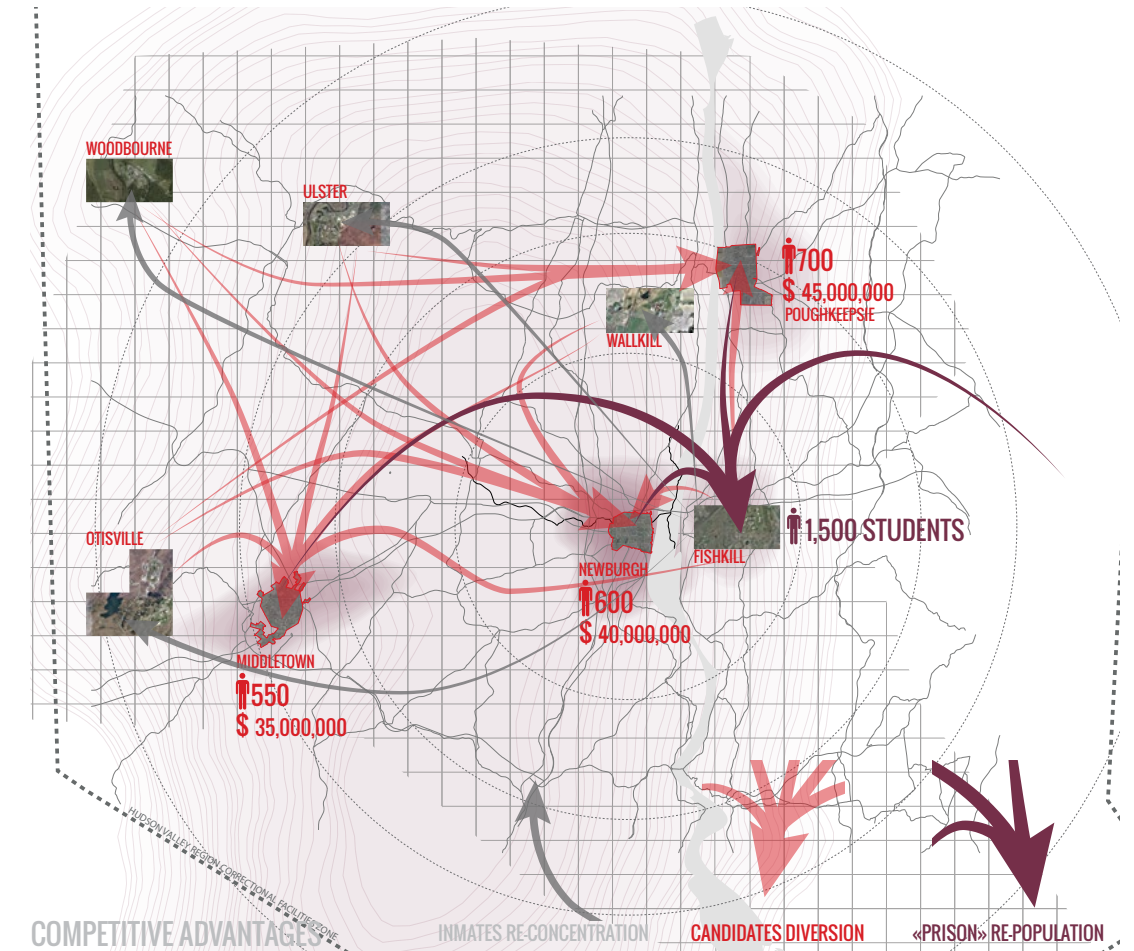
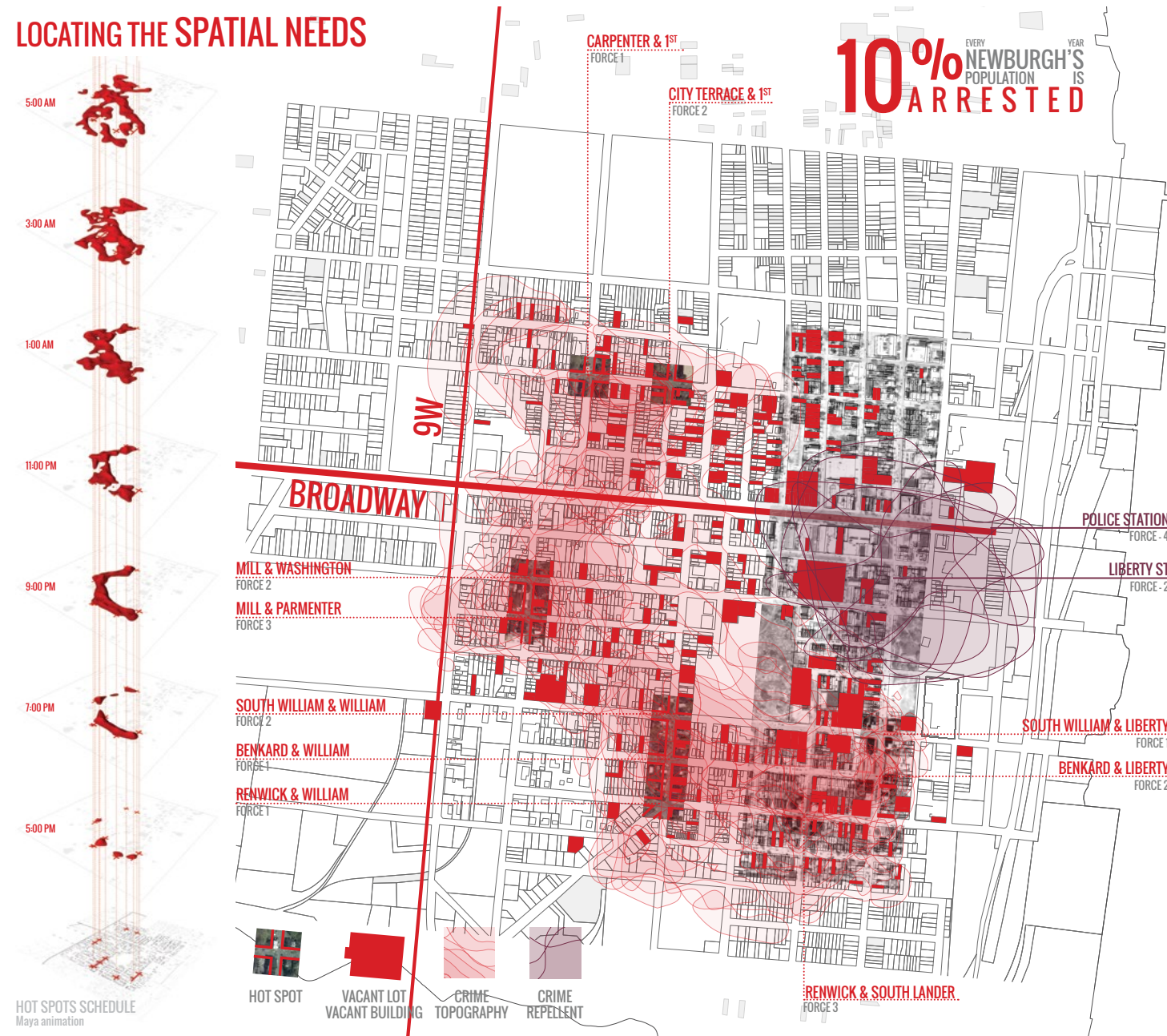
MIDDLETOWN



EDUCATING HUDSON VALLEY



LOCATING THE SPATIAL NEEDS



DEFINING TRESHOLD FOR PUBLIC INTERFACE
RESTARTING TOGETHER



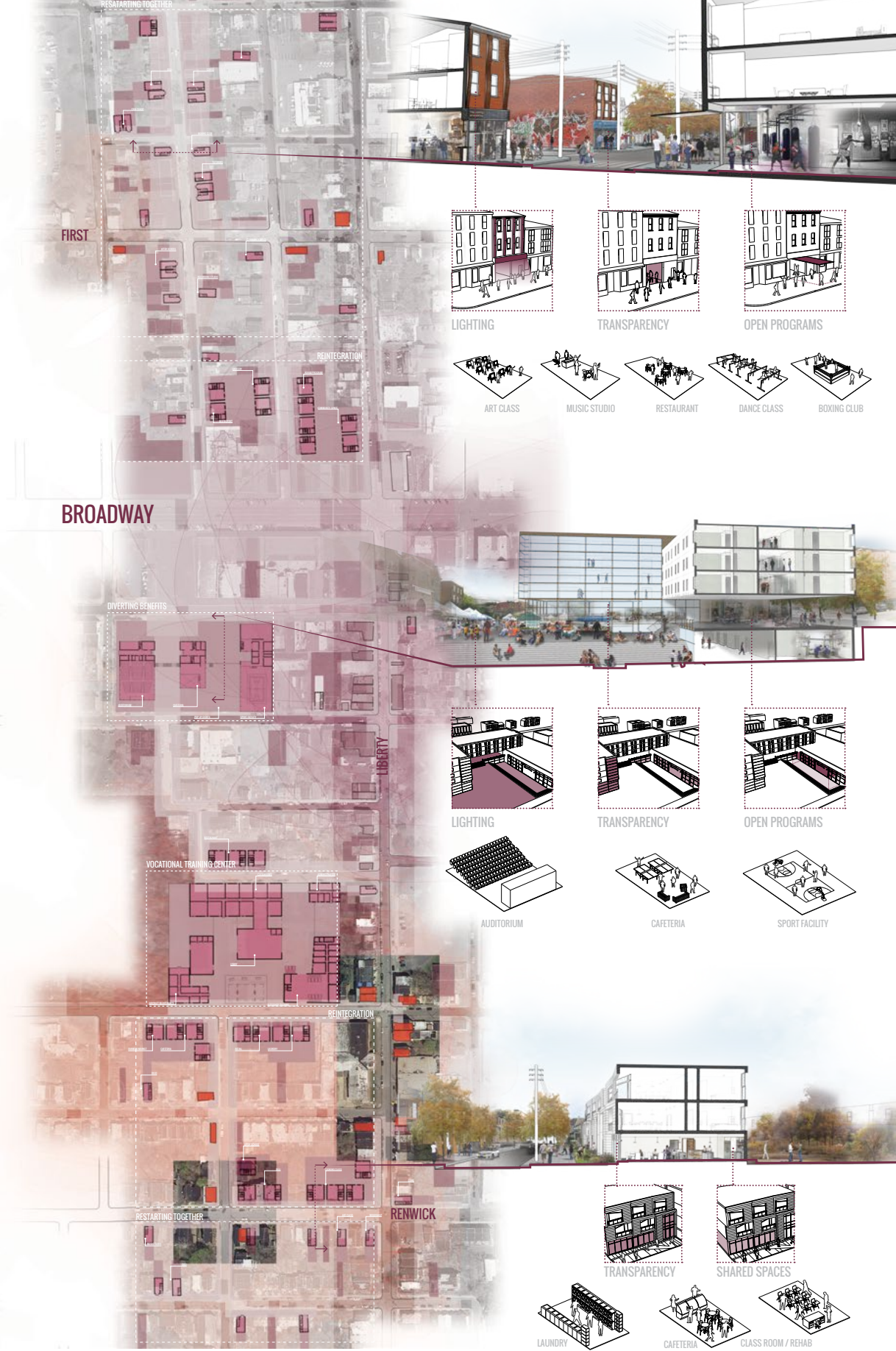
DIRECTING REINTEGRATION



DIVERTING BENEFITS



CREATING SPACES FOR SOCIAL INTERACTION





DE-MARGINALIZE

CHALLENGING THE CYCLE OF RECIDIVISM

Jesse Hirakawa, Xiaofei Huang, Marnfah Kanjanavanit, Shih Hao Liao | Poughkeepsie, Fall 2017

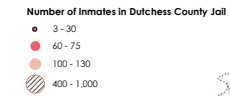
The United States has 2.3 million incarcerated individuals—more than any country in the world. In the Hudson Valley, the Dutchess County Jail, located in the City of Poughkeepsie, is the only overcrowded jail in the region. Poughkeepsie is also home to a disproportionately high population of formerly incarcerated individuals, compared to the State of New York. Once released, 51% of inmates fall into a cycle of recidivism and 80% need regular medication or counseling to prevent relapse. Resources are disconnected, shelters cannot provide stability, and employment is challenging due to social stigma. Poughkeepsie is home to one of four parole offices in the Hudson Valley Region, and challenges of accessibility and distance traveled often result in parolees’ re-arrest.

De-Marginalize aims to reduce the cycle of recidivism by creating a special support network; a hybridized community for the formerly-incarcerated and general public. Along an abandoned CSX infrastructure corridor, a fabric of new, flexible building typologies provides spaces for transitional housing, rehabilitation, and correctional services, while connecting with existing food warehouses, auto garages, and manufacturing companies for local job training. A new parole office alongside day-to-day public amenities makes necessary visits easier. A community center includes rock-climbing, counseling, a cafe, and a day-care center, while rehabilitation and mental health facilities will be integrated into the existing landscape. Additionally, creek and landscape adjacency encourages stewardship while enhancing mental well-being. By connecting necessary services to existing neighborhoods, new facilities will encourage community interaction, reduce stigma, and build trust. Poughkeepsie’s new typology of urban infill will become a pilot that will help reduce recidivism nationally.

Centralized Regional Parole Network

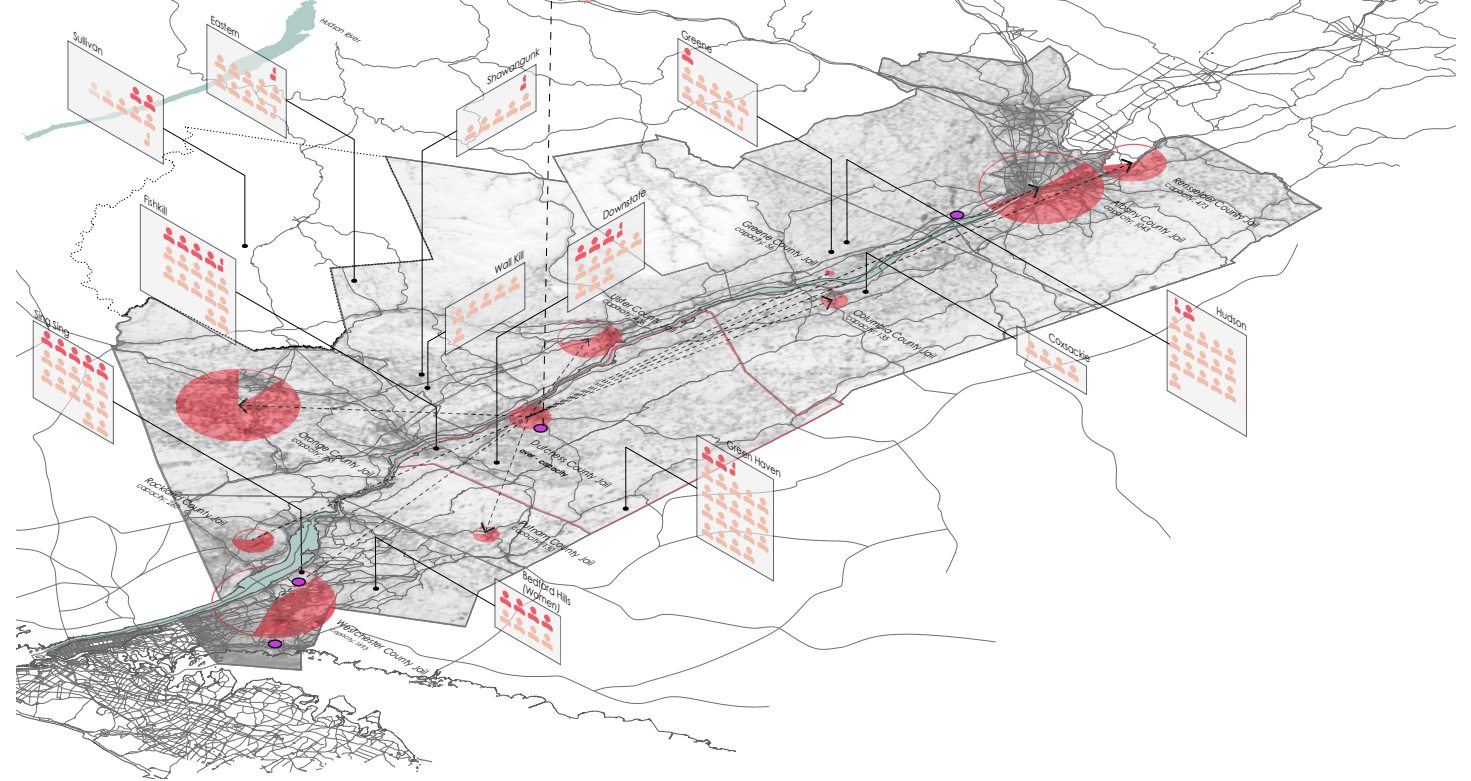
Dutchess County / Ulster County / Sullivan County

- Regional Parole Office**
- Parole Office
 - City of high individuals on parole
 - Quickest Highway to Parole Office



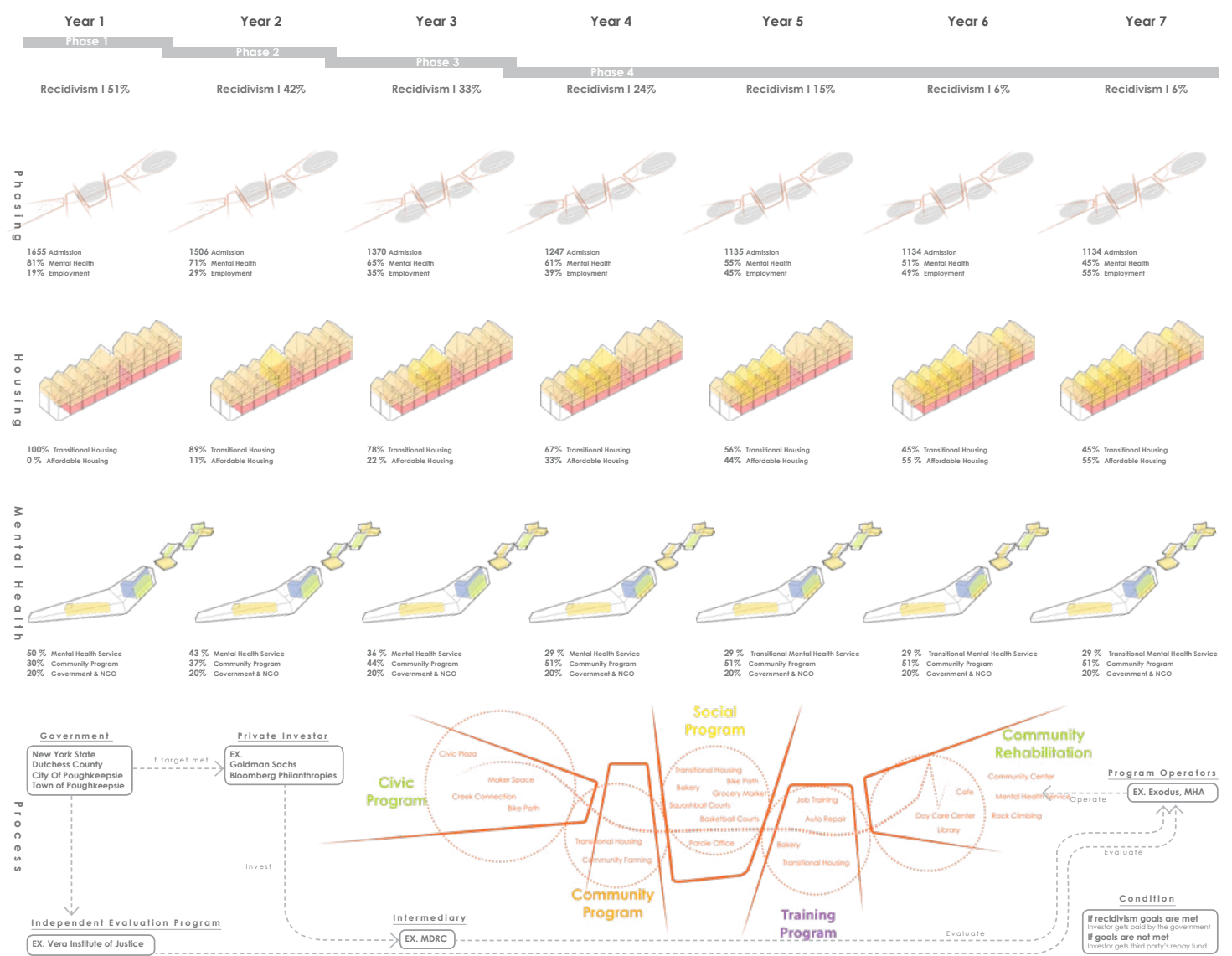
Unbalanced & Overcrowded Incarceration Facilities in the Hudson Valley

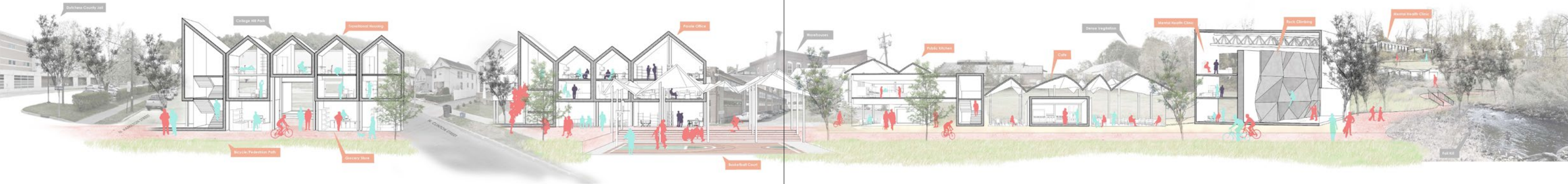
- Hudson Valley Prison Inmates**
(Correctional Association of New York Report)
- prisons
 - 100 inmates (mental health case)
 - 100 inmates (boarding-out of inmates over-capacity)
 - Parole Office
- County Jails Population / Capacity (2016)**
- inmate population
 - boarding-out of inmates (over-capacity)



Social Impact Bonds as Funding for Phasing

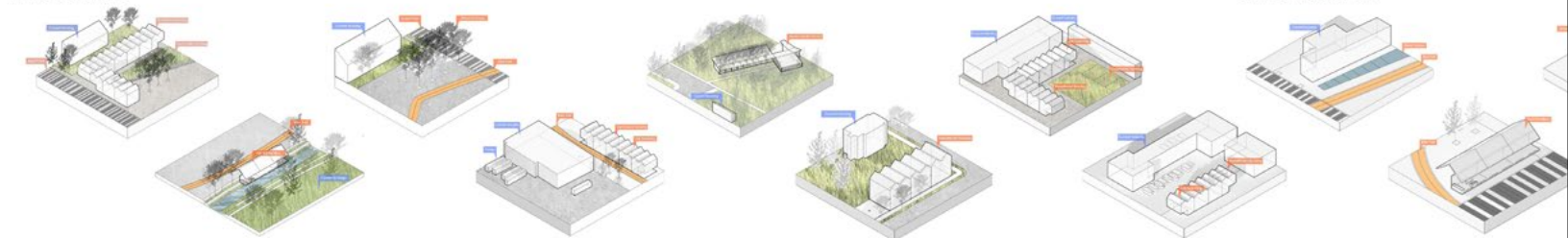
Using Peterborough's statistic model as future prediction





Neighborhood Typology

Fit into the community

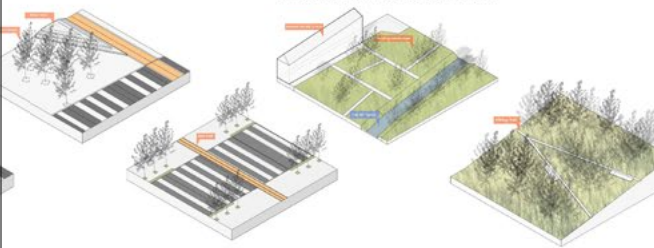


Streetscape Typology

Connecting Streetscape

Landscape Typology

Landscape respond to local landscape



Support Program

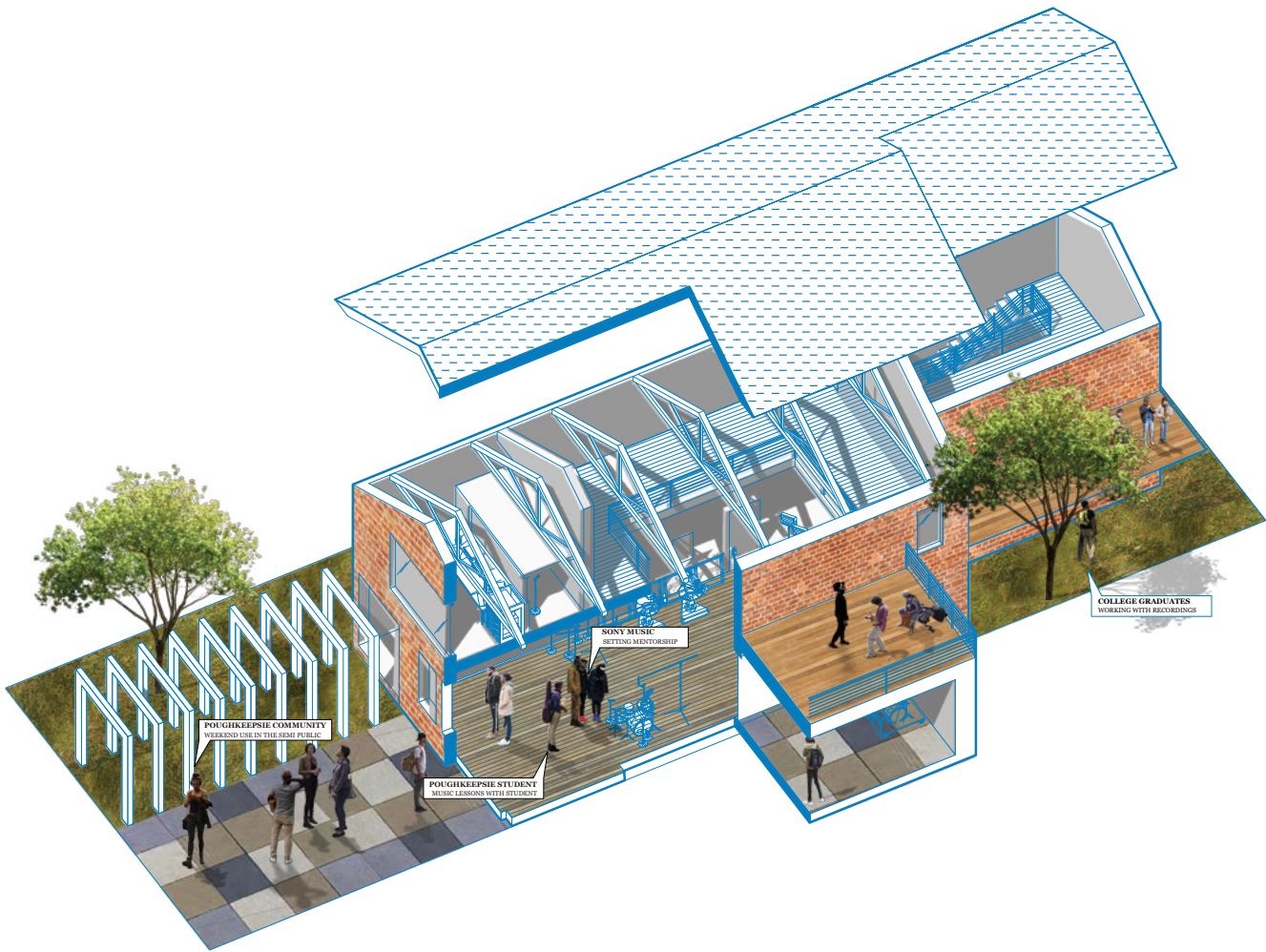
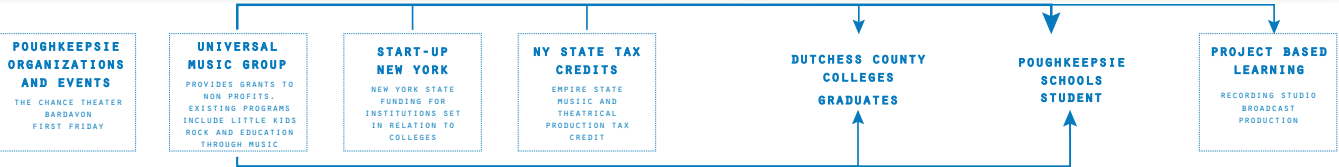
- A Parole Office
- B Transitional Housing + Retail
- C Transitional Housing + Job Training
- D Individual Mental Health Service
- E Group Mental Health Service
- F Healing Landscape
- G Community Farming

Public Program

- H Community Center
- I Basketball Stadium
- J Outdoor Auditorium
- K Civic Plaza
- L Bike Trail & Bike Stop
- M Fall Kill Observatory
- N Playground
- O Bakery & Market

Organization / Government Agency

- P Government
- Q NGO
- S Church



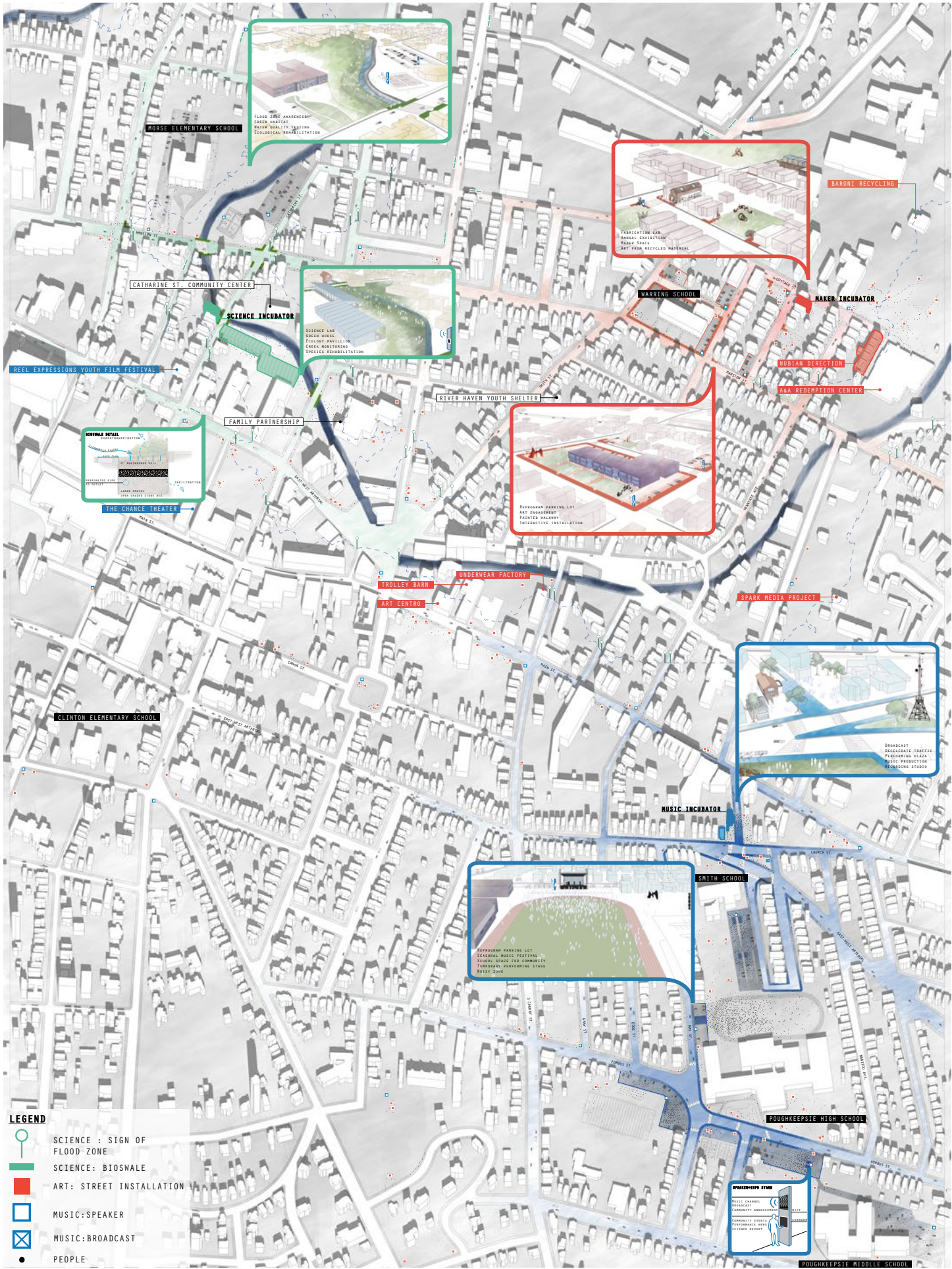
BEYOND SCHOOL

AN EXPANDED EDUCATION SYSTEM GROUNDED IN LOCAL ASSETS

Leslie Chuang, Betsy Daniel, Ting Tsai, Sofia Valdivieso
Poughkeepsie, Fall 2017

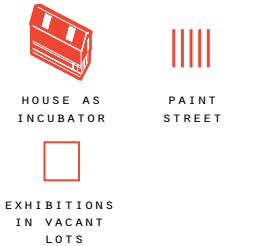
The public education system in Poughkeepsie is broken. With per student spending among the lowest in New York State, facilities, staff, materials, and programming are at a bare minimum. Schools are failing their students, many of which rely on their schools for their primary meal of the day, and have few opportunities and resources outside of the public system. To address this crisis, Beyond School proposes an expanded education system that builds on local and regional assets to create neighborhood learning incubators. Incubators begin operation in vacant houses near local schools, and utilize adjacent properties for program expansion. Each incubator specializes in a different field, starting with environmental science, music, and art. Incubators establish partnerships with local industries, universities, and community groups, and are staffed by college graduates, using project-based learning that draws upon local context and resources.

Incubator houses are designed to include a semi-public corridor on the ground floor with flexible social space, and private spaces where college graduates share professional work experience with middle-and high-school students. By starting with incubators and program-specific street strategies, the project envisions a domestic-scale civic environment for Poughkeepsie's at risk students, while establishing stronger connections within the community at large. The program will eventually extend beyond city limits and offer activities that expose students to the opportunities of the Hudson Valley. Incubators developed in other cities will focus on specialized areas driven by the various local institutions and resources available. Beyond School will enrich students' learning experience and open doors to greater social and economic mobility in the future.



MAKER INCUBATOR

PHASE ONE

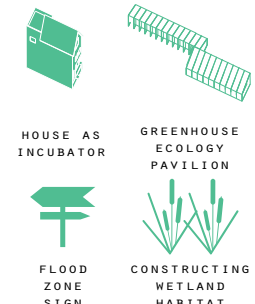


PHASE TWO

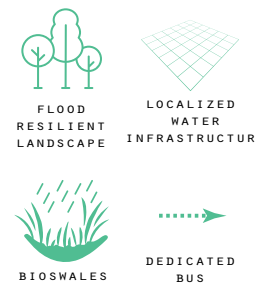


SCIENCE INCUBATOR

PHASE ONE

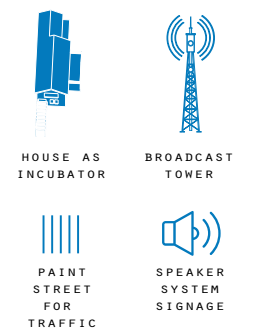


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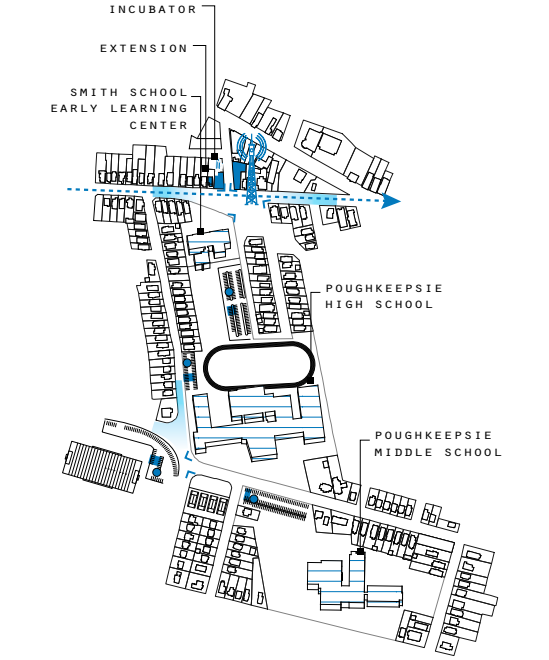
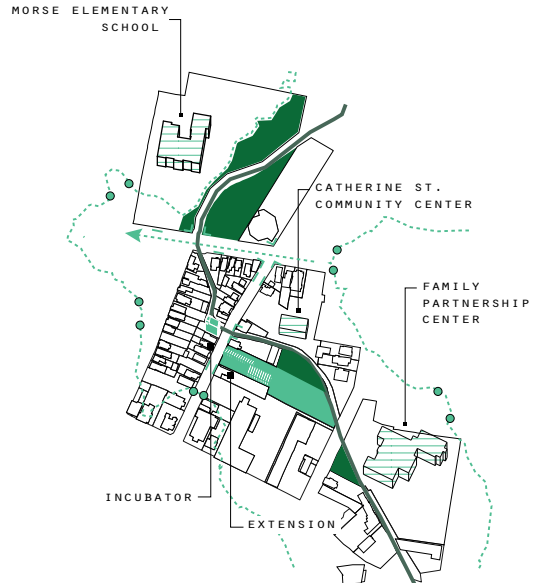
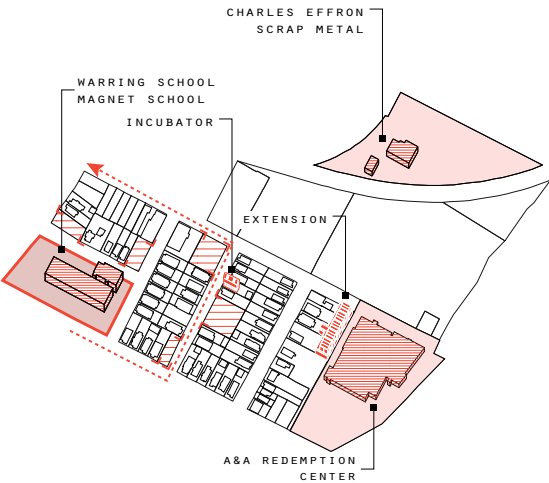
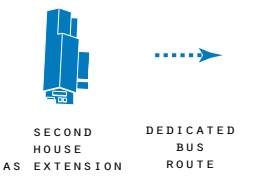


MUSIC INCUBATOR

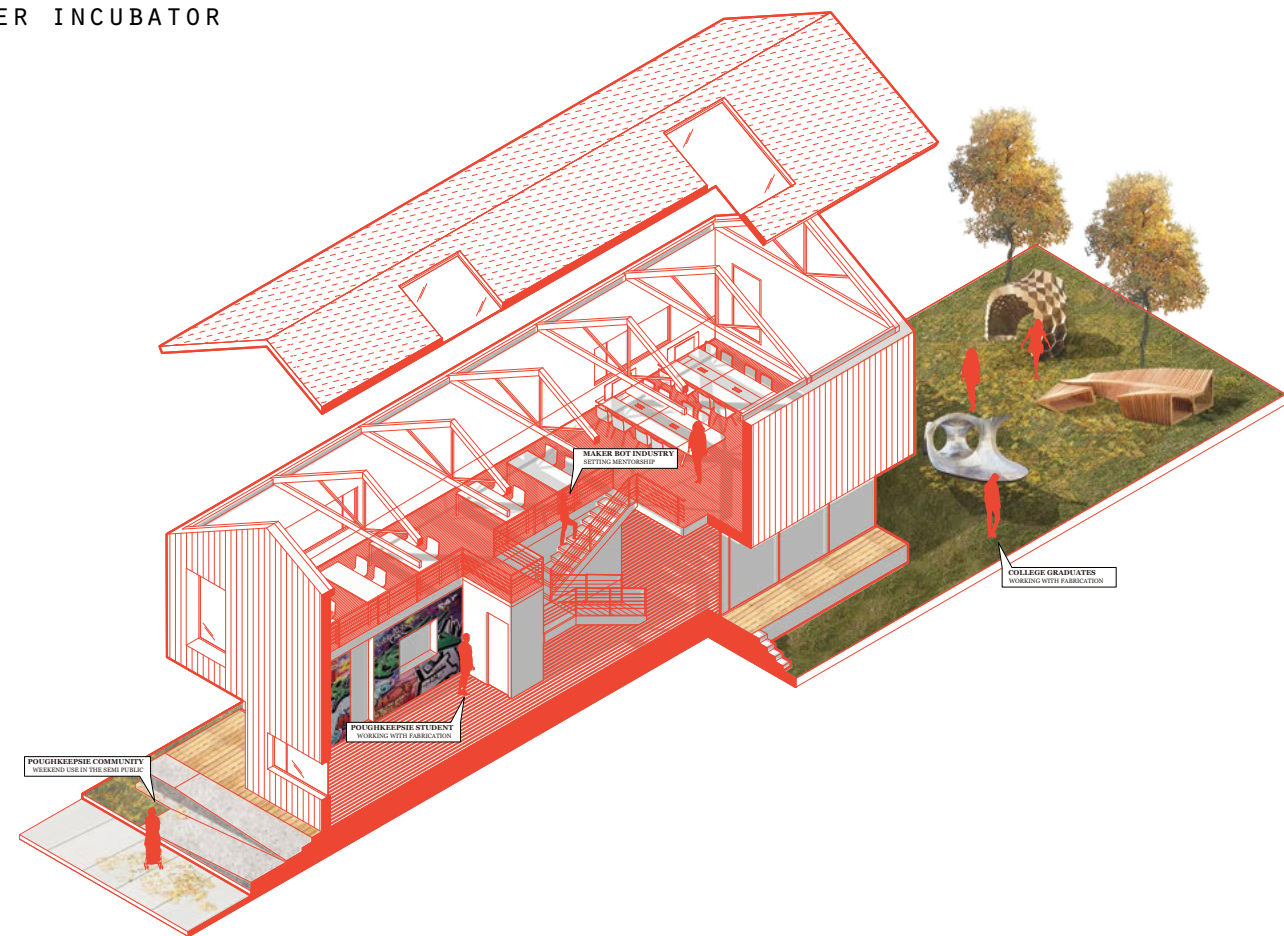
PHASE ONE



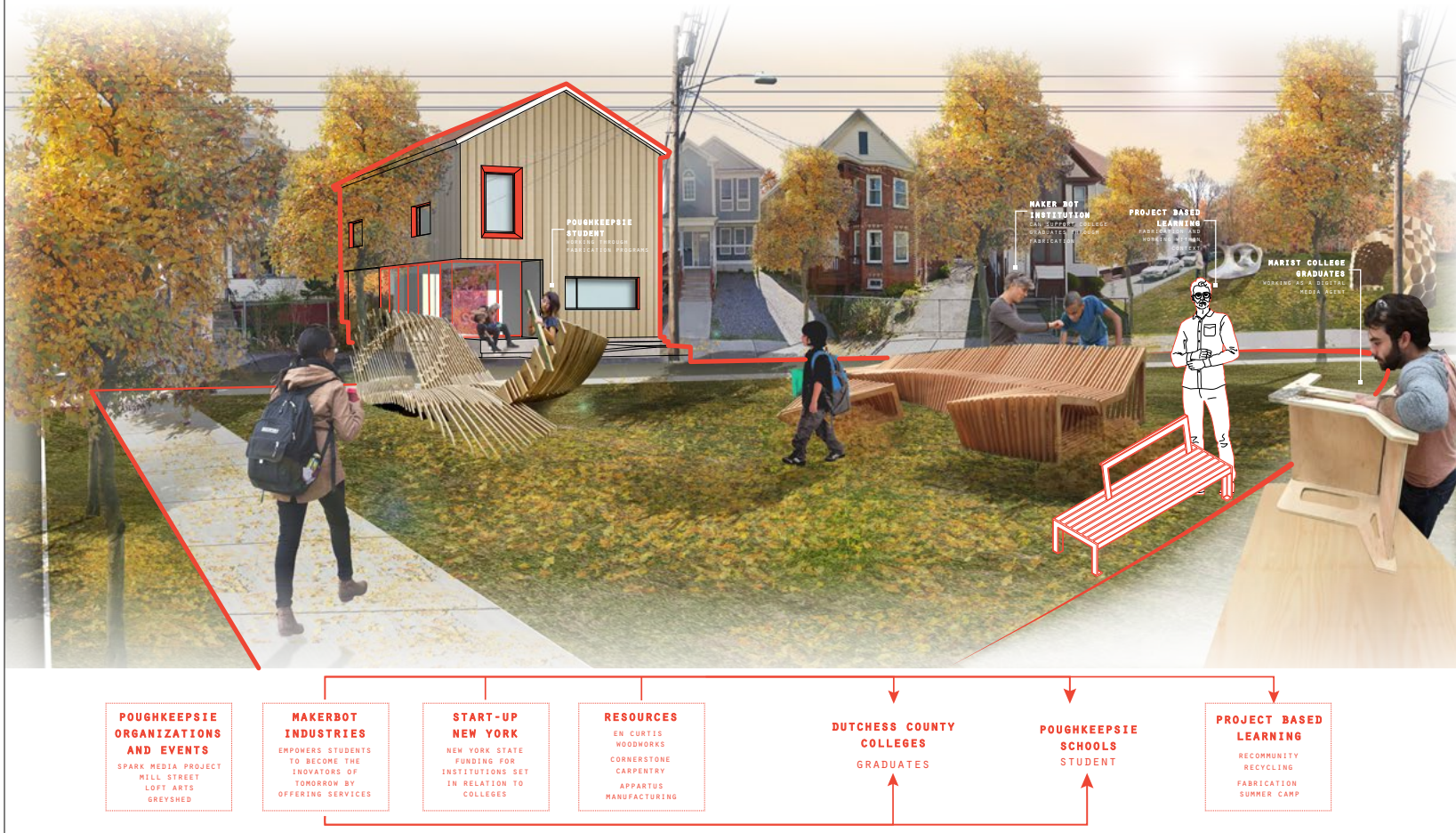
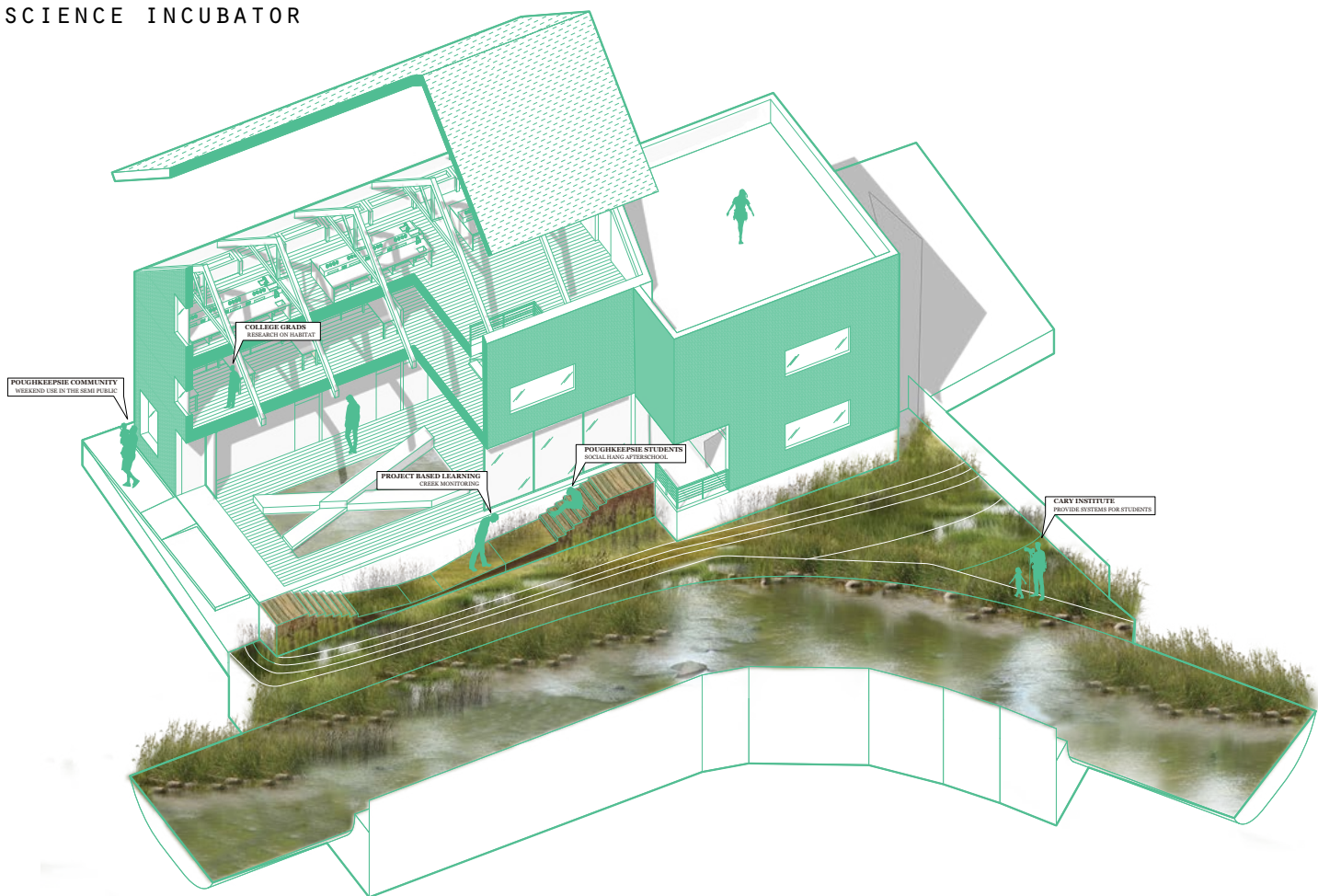
PHASE TWO



MAKER INCUBATOR



SCIENCE INCUBATOR



BEYOND THE STUDIO:

THE WHISPER WALL

BETSY DANIEL AND SOFIA VALDIVIESO, MSAUD 2018
PROJECT WITH TING TSAI AND LESLIE CHUANG

The Whisper Wall was created out of a semester-long research and design project that focused on the broken educational system in the Hudson Valley, and the city of Poughkeepsie in particular. Poughkeepsie’s school facilities, staff, materials, and programming are at a bare minimum – with poor spending, attendance and graduation rates among the lowest in the state. The design project, titled Beyond School, extended the education network into the student’s neighborhoods through incubator spaces within vacant homes; whilst partnering with local institutions, industries, universities, and community groups in order to enrich students’ learning experience and provide greater social and economic mobility.

Given this effort, we, a team of four students, looked to see how we can take these bold and big ideas to bring systematic change within a student’s life, down to tangible and immediate action. This was how the Whisper Wall was born. The Whisper Wall is a temporary sound installation aimed to engage community members through the recording, playing and listening to the stories of the youth of Poughkeepsie. Working with The Art Effect, a non-profit organization that helps students excel in the arts and media, and their students, we recorded students who talked candidly about their hopes for themselves and their community, and how they wished outsiders would recognize Poughkeepsie as a city full of potential. These recordings played in a loop within the installation and could be heard by placing one’s ears against the listening devices. These recordings ranged from simple stories and anecdotes about students’ childhoods to powerful visions of how they could change their community. These recordings in a larger sense reflected the student’s hope for the future and what their own

personal role is in the future of Poughkeepsie. The Whisper Wall was featured at The Art Effect Film Festival, where local officials, teachers and members of the community had the opportunity to listen to these student recordings in an open and unbiased way.

The Whisper Wall was a platform for opinions to be shared and listened to from the most often overlooked, downtrodden, and less valued section of the population. It was exciting and humbling as designers to do our part to advocate for students through the medium of installation. The Whisper Wall could be seen as a prototype of how active inputs from citizens into a design, whether an installation to the design of a city, can create equitable and just spaces. By taking our semester’s work and turning it into an installation we could see how a design intervention can start small and grow locally to create a more equal society.



JOBS & THE ECONOMY

MARGARET TOBIN

“The failure of India’s public institutions to keep pace with the dramatic political, economic and social transformations under way has led to severe gaps in governance. The end result of this disjuncture has been a proliferation of grand corruption – a malaise made up of a diverse array of regulatory, extractive, and political rent-seeking activities.”

Milan Vaishnav, When Crime Pays: Money and Muscle in Indian Politics

Jobs and the economy aren’t easy topics. The dismal science, as economics is called, is hard to fully understand, with technical analysis devolving into jargon. We also don’t see exactly how government policies affect our day to day lives, and our towns, cities and regions. Milan Vaishnav’s quote about India is as accurate for the U.S. and our collective failure to understand, design and implement government policies to harness the power of technological change while protecting our people and our physical world. We live surrounded by the results of our failure.

The urban design studios address the results of economic changes wrought by rapid technological changes, ongoing climate change, declining population and government response, or lack of response. The studios study and propose solutions to what we see around us - the decaying historic fabric, downtowns ruined by car culture, industries gutted and moved elsewhere, erased natural and historic resources.

These impacts on the physical surroundings are manifestations of choices made in both Washington and Albany, as well as a regional economy originally based

on extraction of the region’s vast natural resources now struggling to find a sustainable economic basis.

The shift from extraction and manufacturing, which deeply influenced the region’s built environment, to a service economy has already occurred. The official regional economic development strategy is “eds and meds” - higher education and medical treatment, along with tourism and potentially agricultural products as growth sectors. Over 40% of employed residents commute out of the region, with others shut out of the jobs market based on skill deficit, transportation challenges, or other factors.

The studios propose several inventive solutions such as a new industry addressing the energy/climate change nexus by growing algae, providing local employment opportunities and positive economic, environmental and social improvement. The lack of social and cultural cohesion leads to political division and is one element of regional decline and limited opportunities.

A shared understanding which recognizes the impacts that global economic and environmental changes have created in the region will enable effective planning interventions that improve the social, cultural, economic and physical environment of the region for all citizens.

Margaret Tobin is an economic and real estate development executive

TO THE CORE

Apples Local Economic Opportunities in a Regional Apple Industry

LOCAL MATTERS

Restore Choices in the Hudson Valley Region

CANNABIS ARCHAEOLOGY

Spatial Injustice

ALBANY-HUDSON GROWTH CORRIDOR

A New Pattern of Regional Development

BEYOND THE STUDIO:

Alumni Essay by Zarith Pineda



TO THE CORE

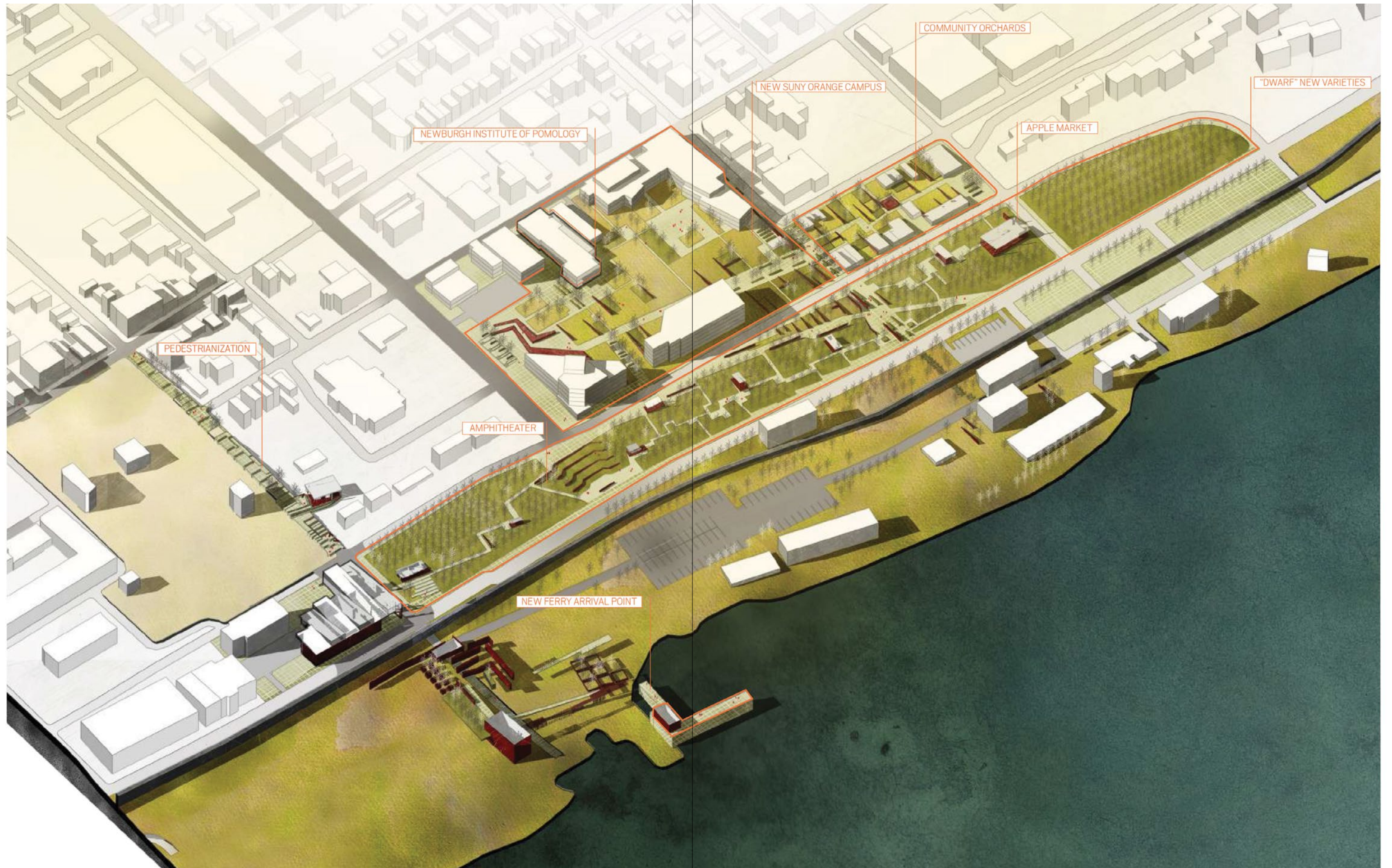
LOCAL ECONOMIC OPPORTUNITIES IN A REGIONAL APPLE INDUSTRY

Marshall Allen, Eleni Gklinou, Chenxing Li, Nishant Mehta
Newburgh, Fall 2015

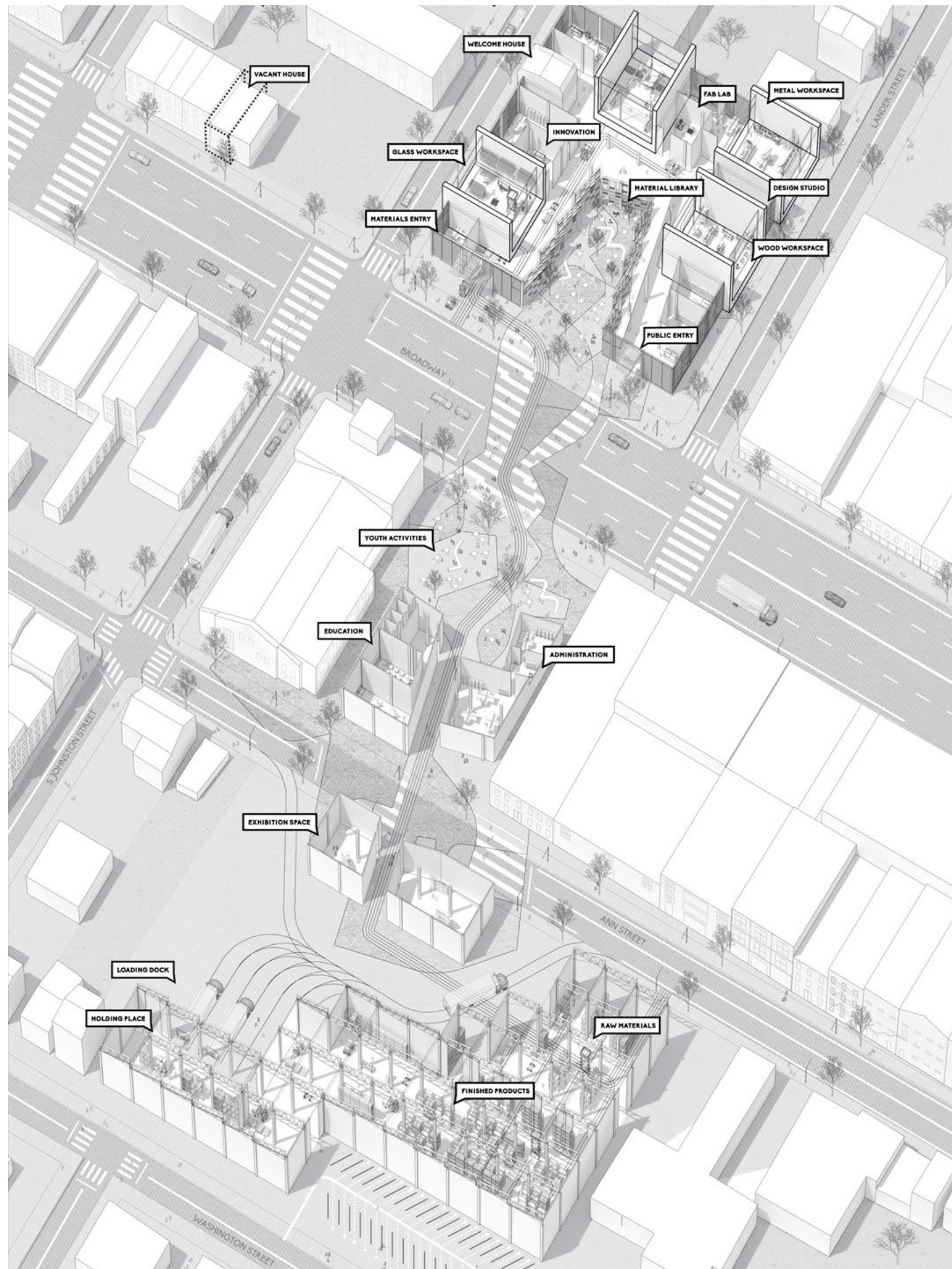
Newburgh, like many post-industrial urban centers in Upstate New York State, is plagued with high unemployment, disinvestment, poverty. To the Core identifies an opportunity for the City of Newburgh to use the Hudson Valley region's well-established and prolific production of apples to provide much needed investment, education, and jobs. New York State is second in the nation for apple production, yet its six apple processing facilities are located in the Great Lakes region. With the Hudson Valley being central to apple growing, Newburgh has an opportunity to establish an apple processing industry that will provide production facilities and local jobs.

To establish this industry, To the Core proposes two anchor products, Appleitos chips and The Newburgh Cider Company hard cider, which would have vastly different scales of distribution and consumption. The first phase of the project consists of the establishment of production facilities, including immediate outreach, job training, and the establishment of a new orchard located along the hillside between downtown Newburgh and the Hudson River waterfront where an incomplete urban renewal project left a scarred landscape. Phase Two incorporates an agricultural extension at the SUNY-Orange campus, including a vocational school, to provide training and skills for the apple and food production economy. The third and final phase develops a consolidated ferry arrival point to connect people with the orchards, cidery, and historic Newburgh.

The strategy, implemented in collaboration with the State of New York and the Hudson Valley Economic Development Council, would produce an estimated 350 jobs initially, as well as continued investment and job creation, getting to the core of Newburgh's challenges.







LOCAL MATTER[S]

RESTORE CHOICES IN THE HUDSON VALLEY REGION

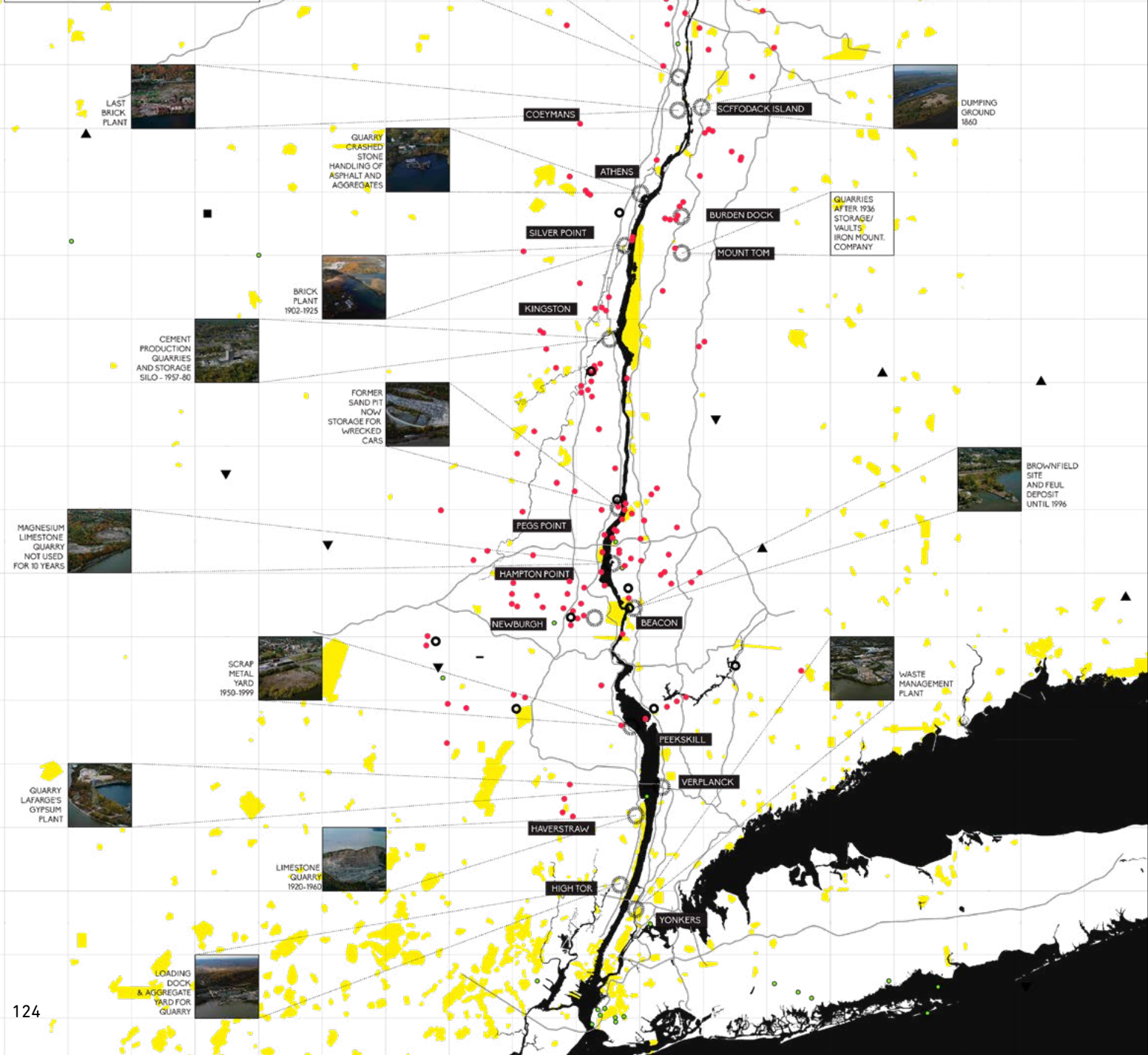
Nicki Gitlin, Shiwani Pol, Despo Thoma, Zhouran Zhao
Newburgh, Fall 2015

Local Matter[s] aims to revive the local economy of materials in the Hudson Valley and provide social mobility through job training for people affected by disparities in the region. The process is jump-started in Newburgh, a destination for innovation and technology of materials, benefiting from its under-invested historic fabric and its place in the construction and materials trades in past centuries.

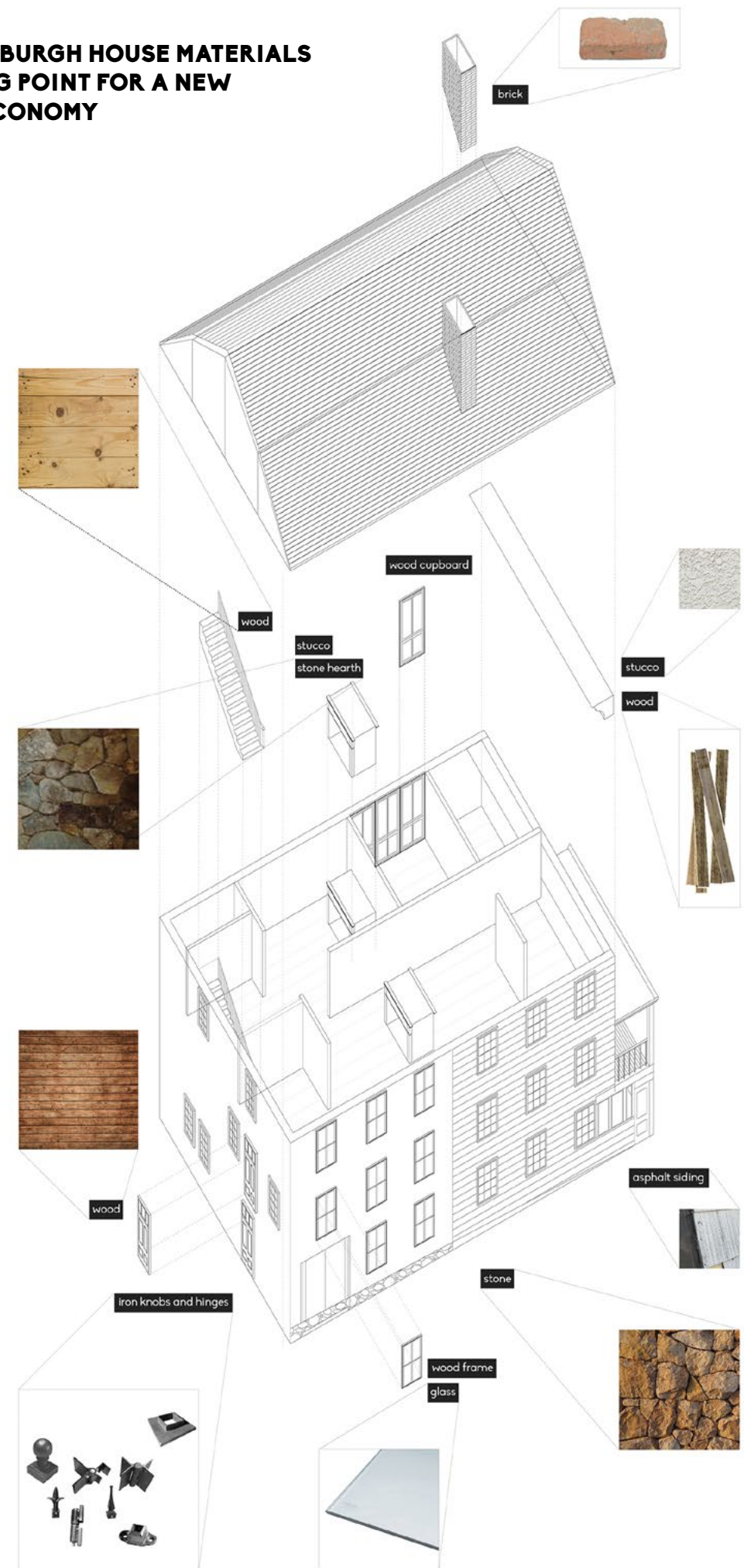
Local Matter[s] will provide jobs and skills using research, innovation, and education. This new system will link material sources, processing sites, historic districts, and building supply stores with educational and training workshops in the form a new Materials Lab. The Materials Lab operates regionally as a resource of knowledge, and locally as the place where locals become experts on materials. Located across Newburgh's Broadway, the Lab consists of a complex of new structures housing a material library, research and innovation workshops, youth and educational facilities, as well as material and product storage and loading areas. An exhibition space along Ann Street and public plazas on both sides of Broadway integrate the Lab into the city and invite visitors and residents to come in.

A VALLEY OF MATERIALS AND RESOURCES

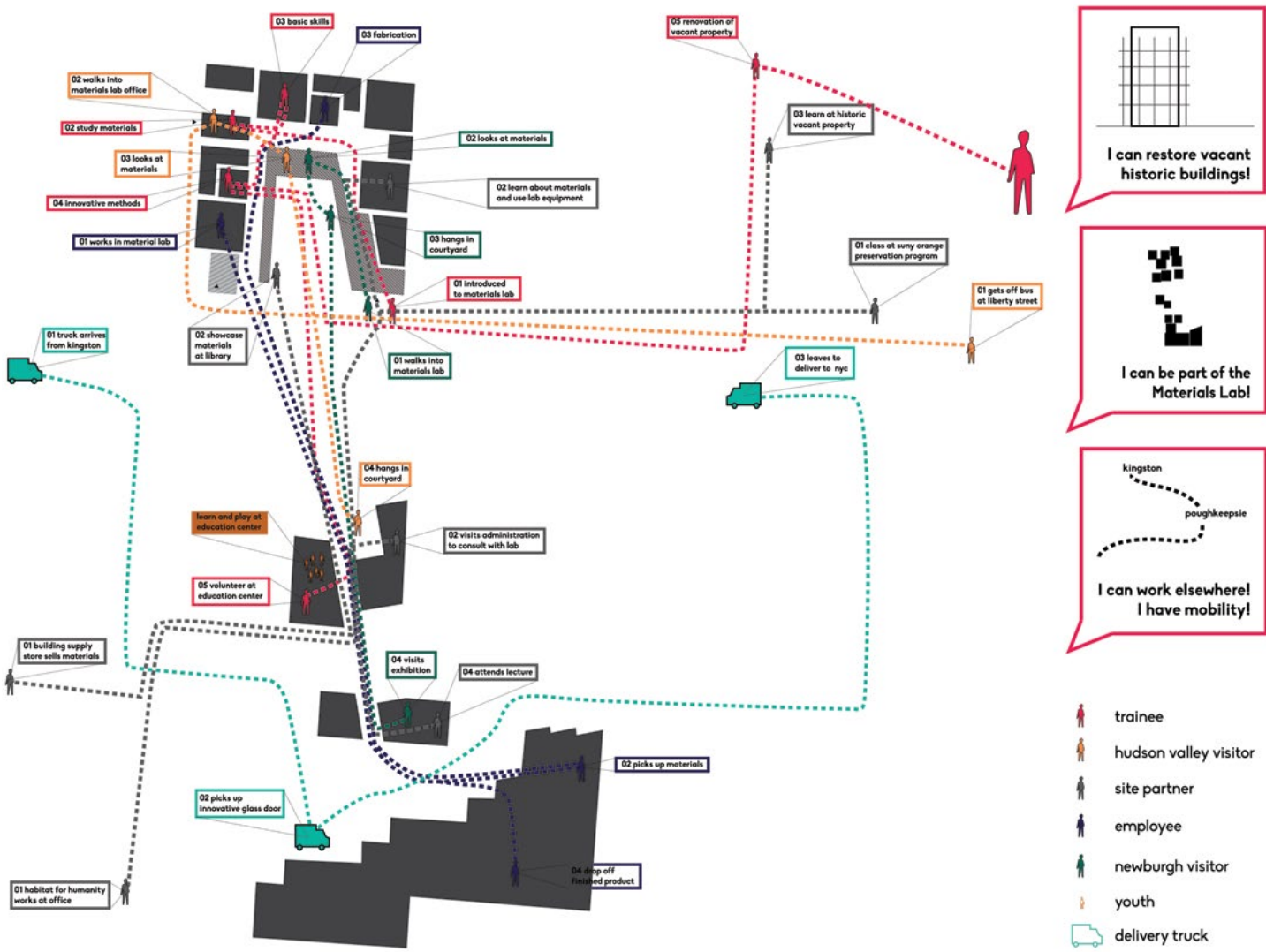
- watershed
- historic site
- railroad
- truck route
- major road
- resources
- nys landfill
- private landfill
- construction and demolition debris
- building supply store
- asbestos training center
- large building supply store



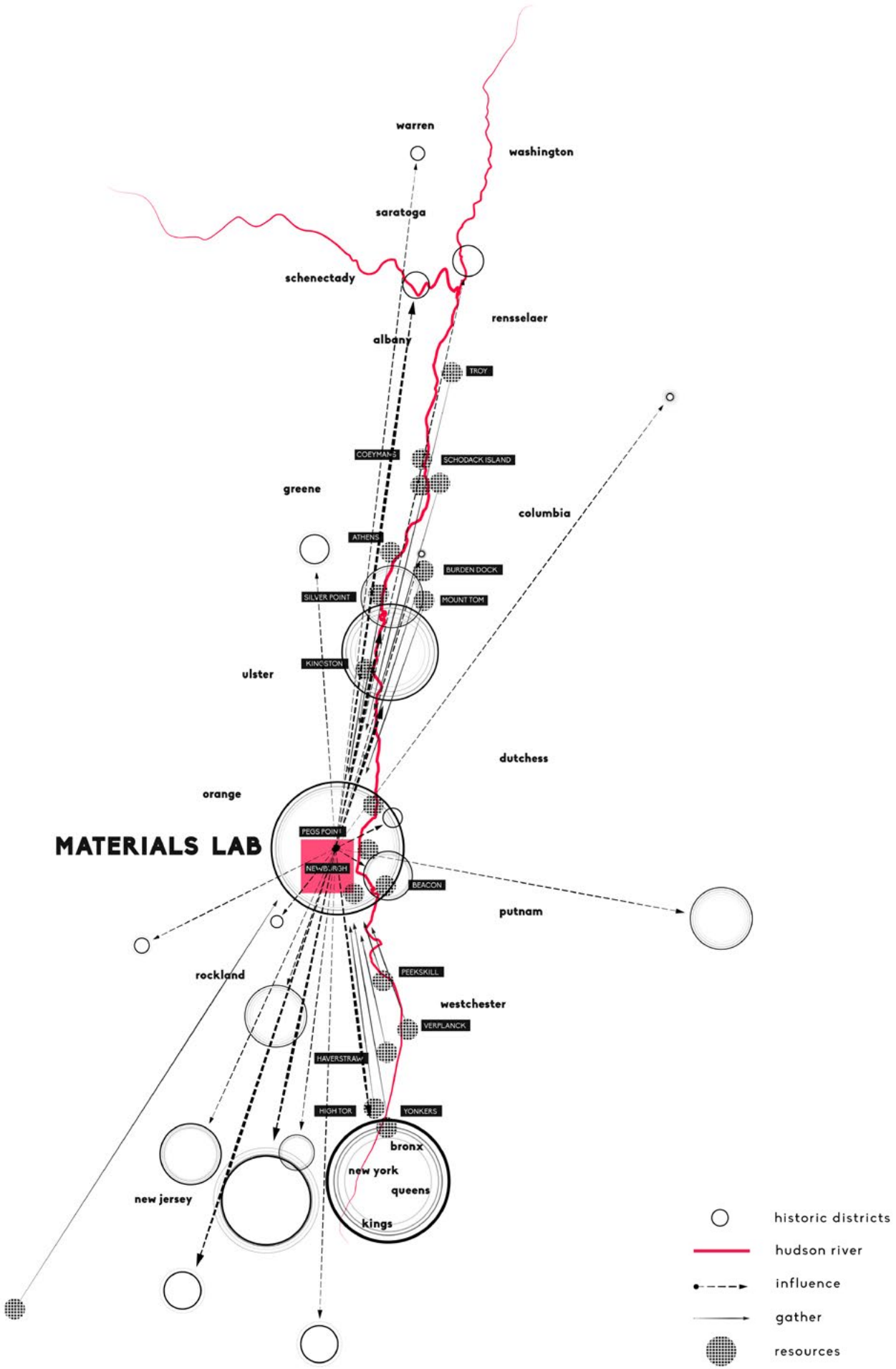
TYPICAL NEWBURGH HOUSE MATERIALS AS A STARTING POINT FOR A NEW MATERIALS ECONOMY

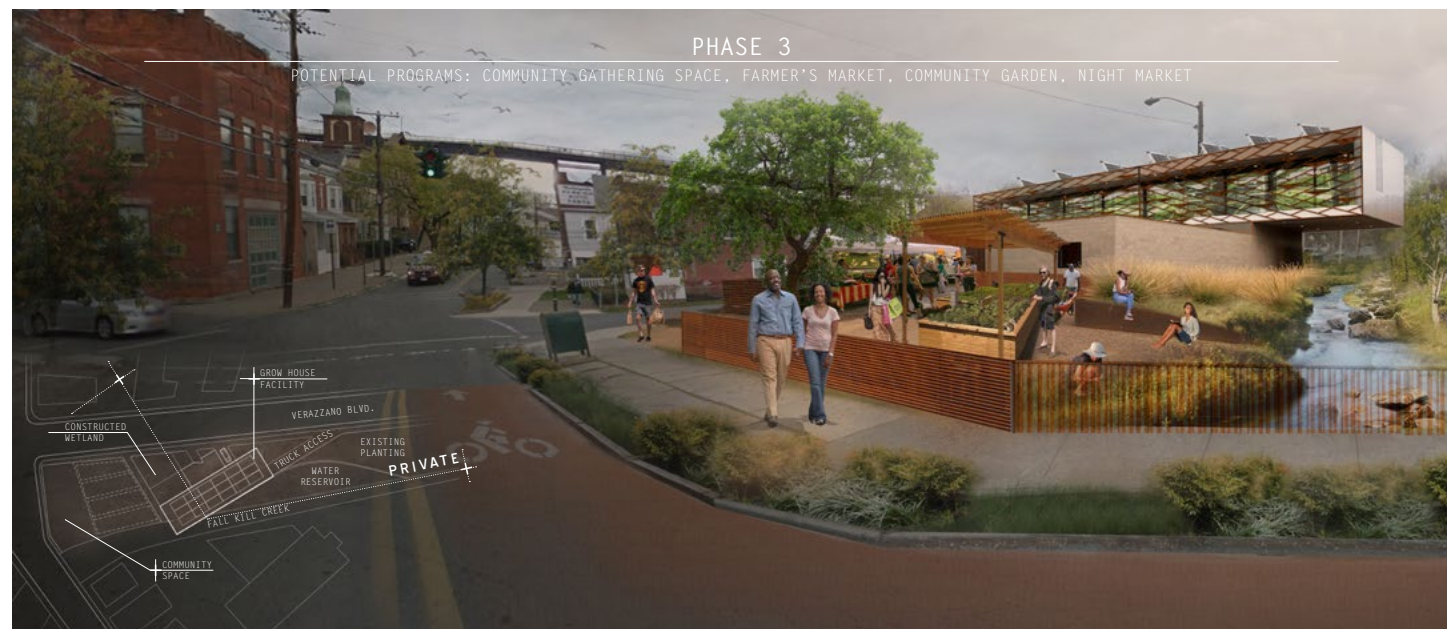
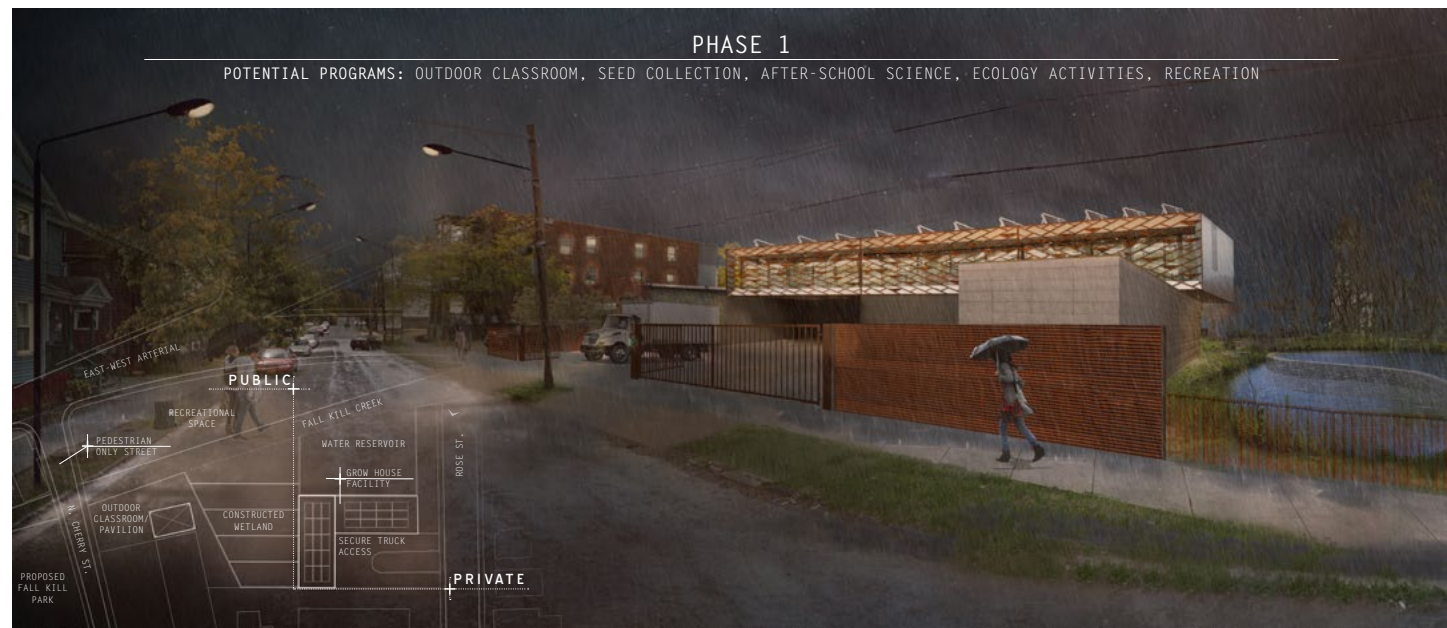


LIVES OF THE LAB



IMPACT





CANNABIS ARCHAEOLOGY

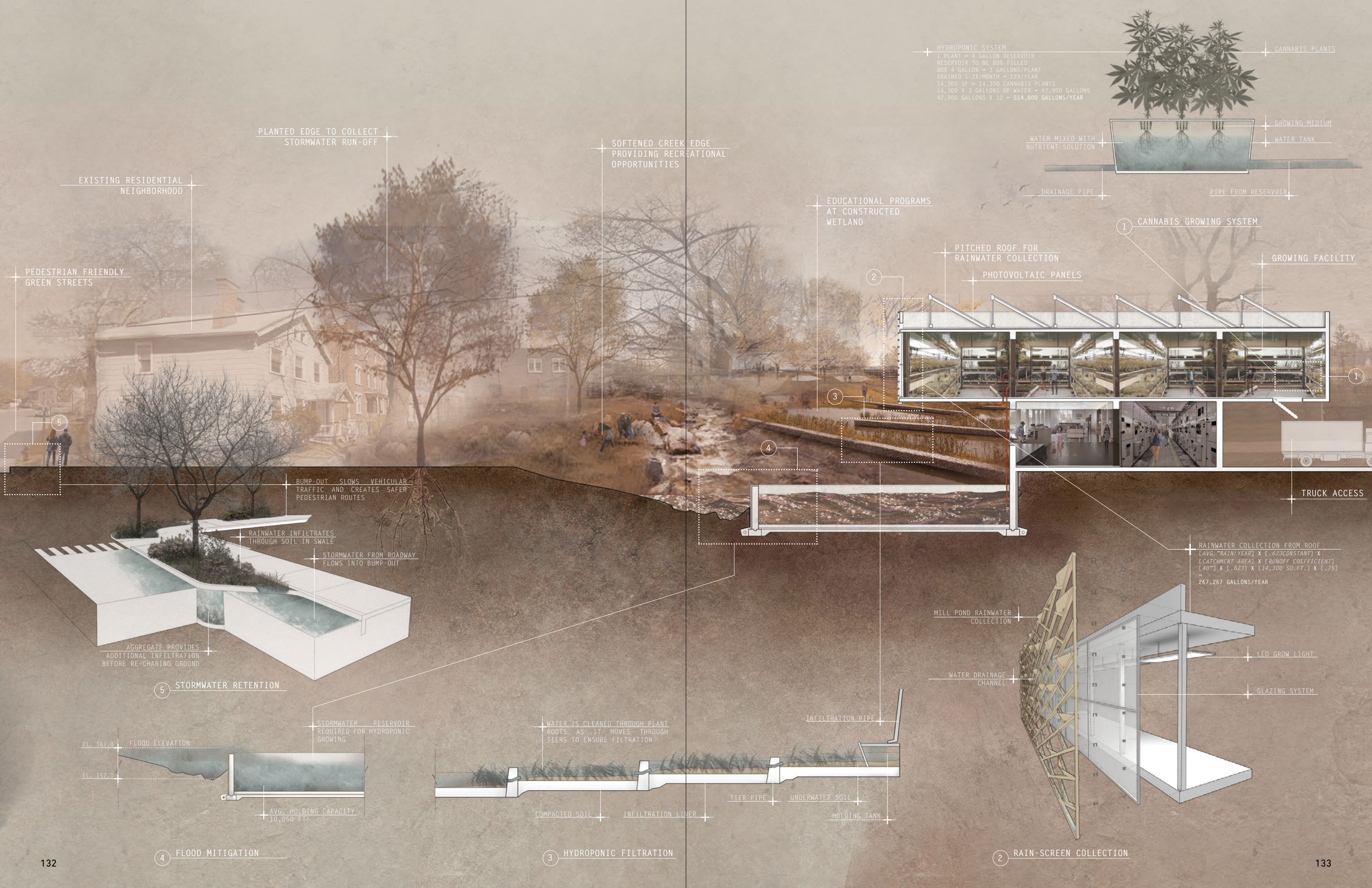
UTILIZING NEW INDUSTRY TO REMEDY SPATIAL INJUSTICE

Nishchal Agarwal, Andrea Benavides Ward, Zarith Pineda, Kristen Reardon | Poughkeepsie, Fall 2016

Poughkeepsie is an all-too-common example of urban spatial injustice in the United States. The city's municipal, educational, and congressional district boundaries have cut it off from the resources of adjacent cities and towns. The city's tax base has been eroding for decades and its budget structures prevent financing of worthwhile initiatives. Poughkeepsie has also been a victim of historic urban renewal strategies, which divided and erased natural and historic resources.

To address some of these challenges, Cannabis Archeology leverages the Compassionate Care Act, a program which legalized medicinal marijuana in New York State, by utilizing this lucrative industry to remedy spatial injustice. As marijuana requires water for processing, Cannabis Archaeology reveals and reconstructs Poughkeepsie's forgotten bodies of water by accessing its historic and underutilized water courses currently covered by impermeable hardscapes. By reconnecting a community to its resources and creating a new local industry, the project hopes to bridge over some of the city's spatial and social divides and create new economic opportunity, thus starting to remedy the spatial injustices to which the city, and its residents, have been subject.





HYDROPONIC SYSTEM

1 PLANT = 4 GALLON RESERVOIR
RESERVOIR TO BE 80% FILLED
80% 4 GALLON = 3 GALLONS/PLANT
DRAINED 1-2X/MONTH = 12X/YEAR
14,300 SF = 14,300 CANNABIS PLANTS
14,300 X 3 GALLONS OF WATER = 42,900 GALLONS
42,900 GALLONS X 12 = 514,800 GALLONS/YEAR

CANNABIS PLANTS

GROWING MEDIUM

WATER TANK

WATER MIXED WITH
NUTRIENT SOLUTION

DRAINAGE PIPE

PIPE FROM RESERVOIR

EDUCATIONAL PROGRAMS
AT CONSTRUCTED
WETLAND

1 CANNABIS GROWING SYSTEM

GROWING FACILITY

PITCHED ROOF FOR
RAINWATER COLLECTION

PHOTOVOLTAIC PANELS

2

1

TRUCK ACCESS

RAINWATER COLLECTION FROM ROOF
[AVG. "RAIN/YEAR" X [.623CONSTANT]] X
[CATCHMENT AREA] X [RUNOFF COEFFICIENT]
[40"] X [.623] X [14,300 SQ.FT.] X [.75]
= 267,267 GALLONS/YEAR

MILL POND RAINWATER
COLLECTION

LED GROW LIGHT

WATER DRAINAGE
CHANNEL

GLAZING SYSTEM

INFILTRATION PIPE

WATER IS CLEANED THROUGH PLANT
ROOTS AS IT MOVES THROUGH
TIERS TO ENSURE FILTRATION

TIER PIPE

UNDERWATER SOIL

HOLDING TANK

COMPACTED SOIL

INFILTRATION LINER

3 HYDROPONIC FILTRATION

PLANTED EDGE TO COLLECT
STORMWATER RUN-OFF

EXISTING RESIDENTIAL
NEIGHBORHOOD

PEDESTRIAN FRIENDLY
GREEN STREETS

5

BUMP-OUT SLOWS VEHICULAR
TRAFFIC AND CREATES SAFER
PEDESTRIAN ROUTES

RAINWATER INFILTRATES
THROUGH SOIL IN SWALE

STORMWATER FROM ROADWAY
FLOWS INTO BUMP-OUT

AGGREGATE PROVIDES
ADDITIONAL INFILTRATION
BEFORE RE-CHARGING GROUND

5 STORMWATER RETENTION

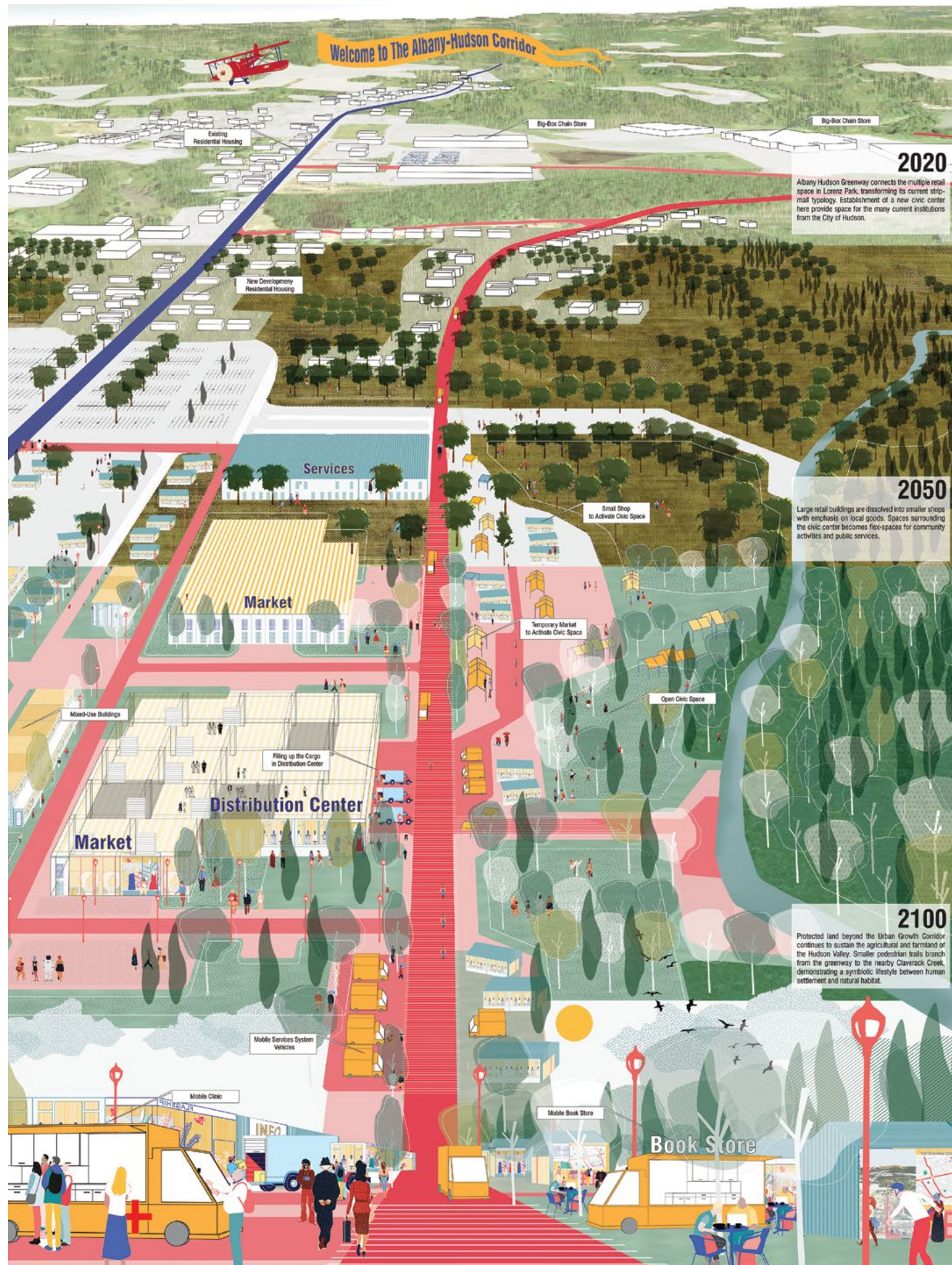
EL. 161.0 FLOOD ELEVATION

EL. 157.0

AVG. HOLDING CAPACITY
10,050 FT³

4 FLOOD MITIGATION

2 RAIN-SCREEN COLLECTION



ALBANY-HUDSON GROWTH CORRIDOR

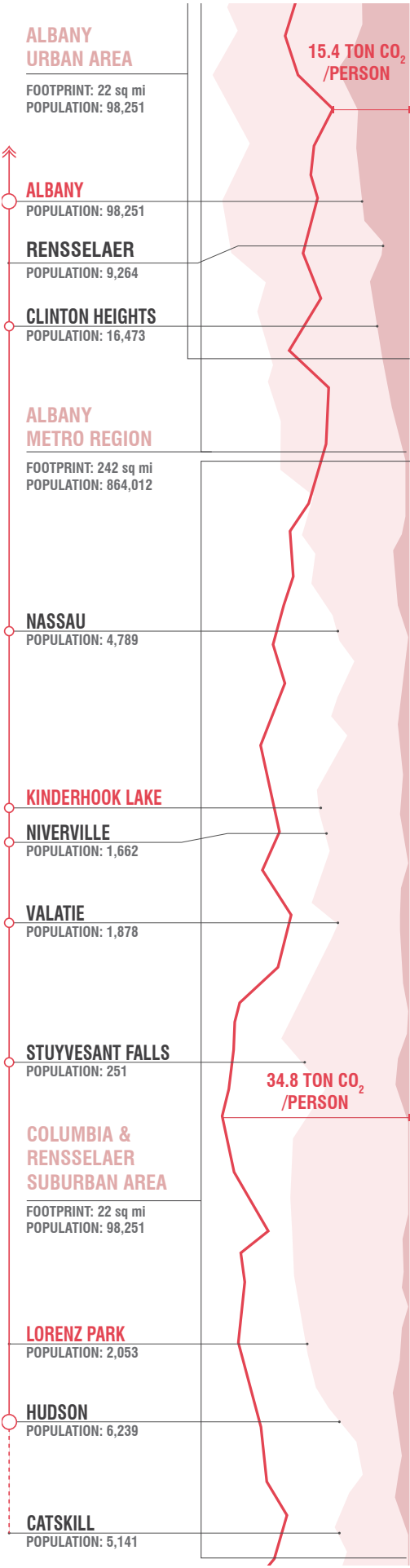
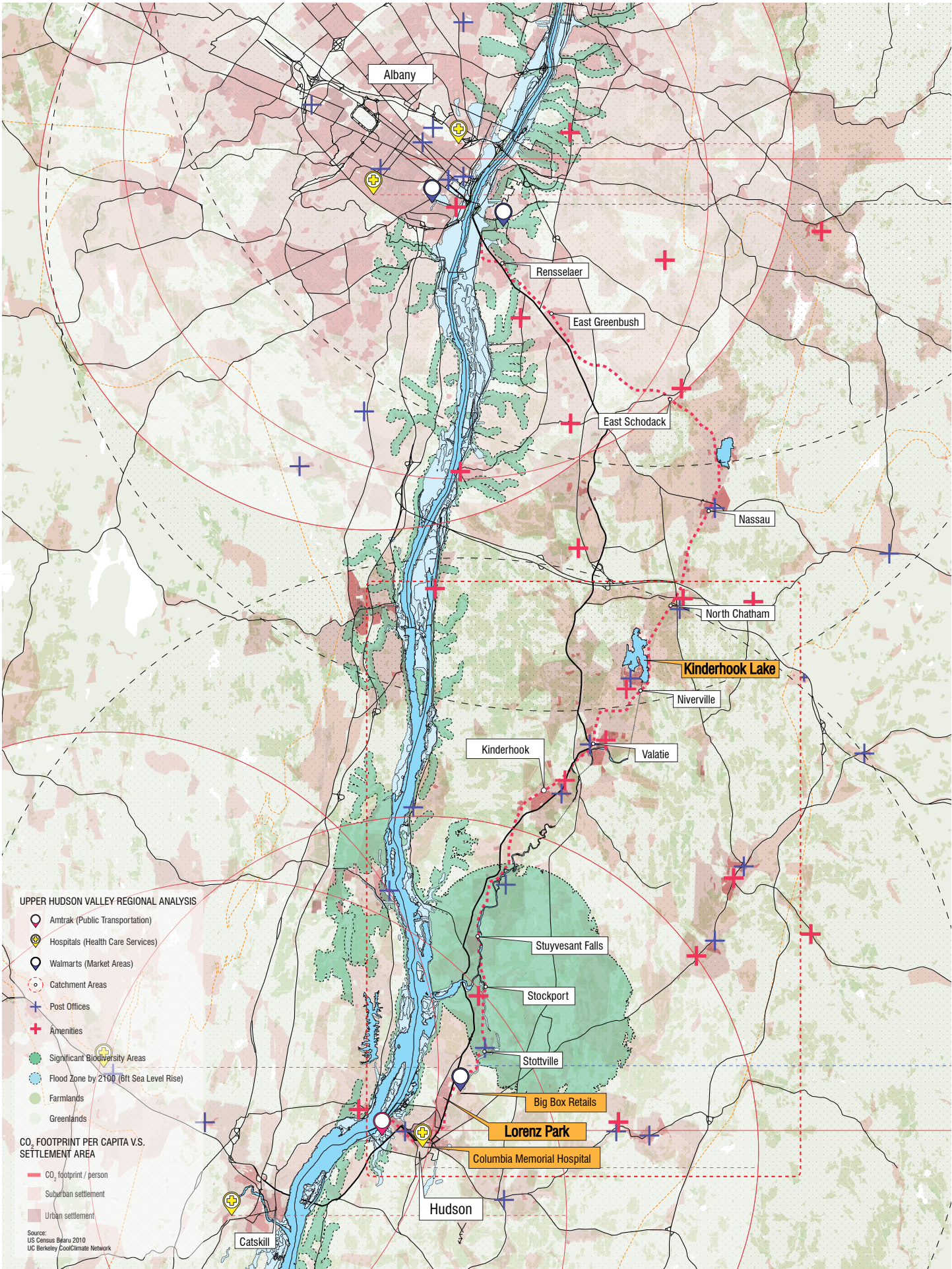
A NEW PATTERN OF REGIONAL DEVELOPMENT

Richard Chou, Lorena Galvao, Jinsook Lee, Pei-jou Shih
Hudson & Columbia County, Fall 2018

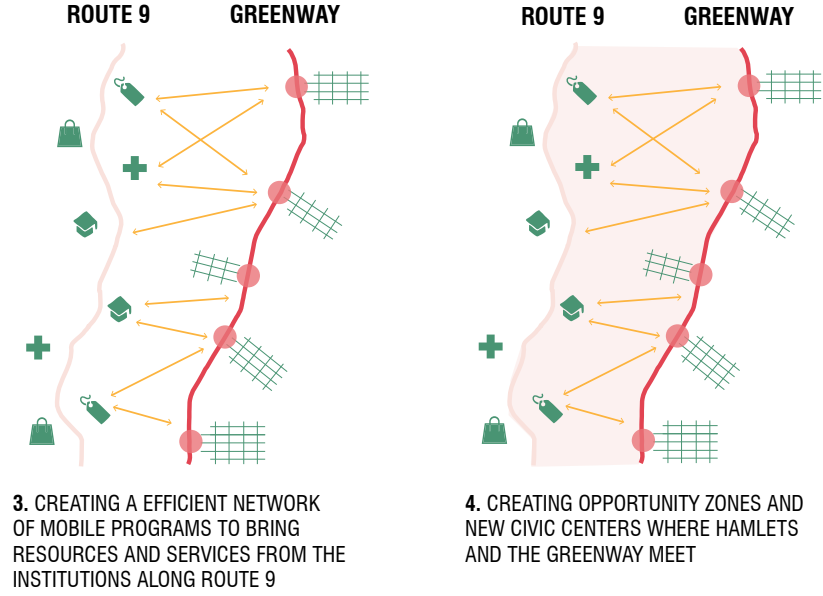
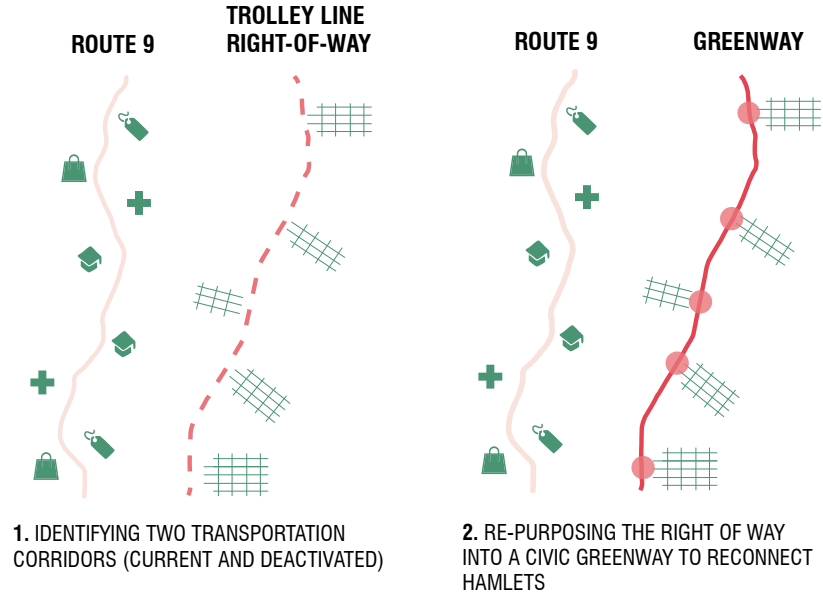
As a result of suburban development, the Hudson Valley is losing farmland, forests, and open spaces that support regional food systems as well as its identity as a rural and pastoral landscape. Such sprawl creates substantial challenges for public amenities, services, and transportation, thus increasing reliance on private cars and creating barriers for those with no private vehicle to access basic services.

The Albany-Hudson Growth Corridor concentrates the future and currently dispersed growth in the Upper Hudson Valley to create focused and flexible sustainable development over the next 100 years. The corridor consists of two armatures to connect transportation and services and increase access to recreation and open space: Route 9, a regional commercial route, and the historic, abandoned Albany Hudson Rail line right-of-way. Route 9 addresses emerging shopping patterns of smaller, diverse stores and the Albany-Hudson Growth Corridor transforms the rail right-of-way into a new civic greenway programmed as both a recreational connector and a mobile service delivery route. This strategy is demonstrated through the two largest and narrowest stretches of the corridors: Lorenz Park and Kinderhook Lake.

With the Growth Corridor in place, the Upper Hudson Valley region will grow sustainably throughout the next few decades, concentrating new housing and social life along the corridors while preserving open space and farmland outside the Corridor. The Albany-Hudson Growth Corridor enables better connections to the Albany metropolitan region, focusing development and maintaining the rural character of the region.

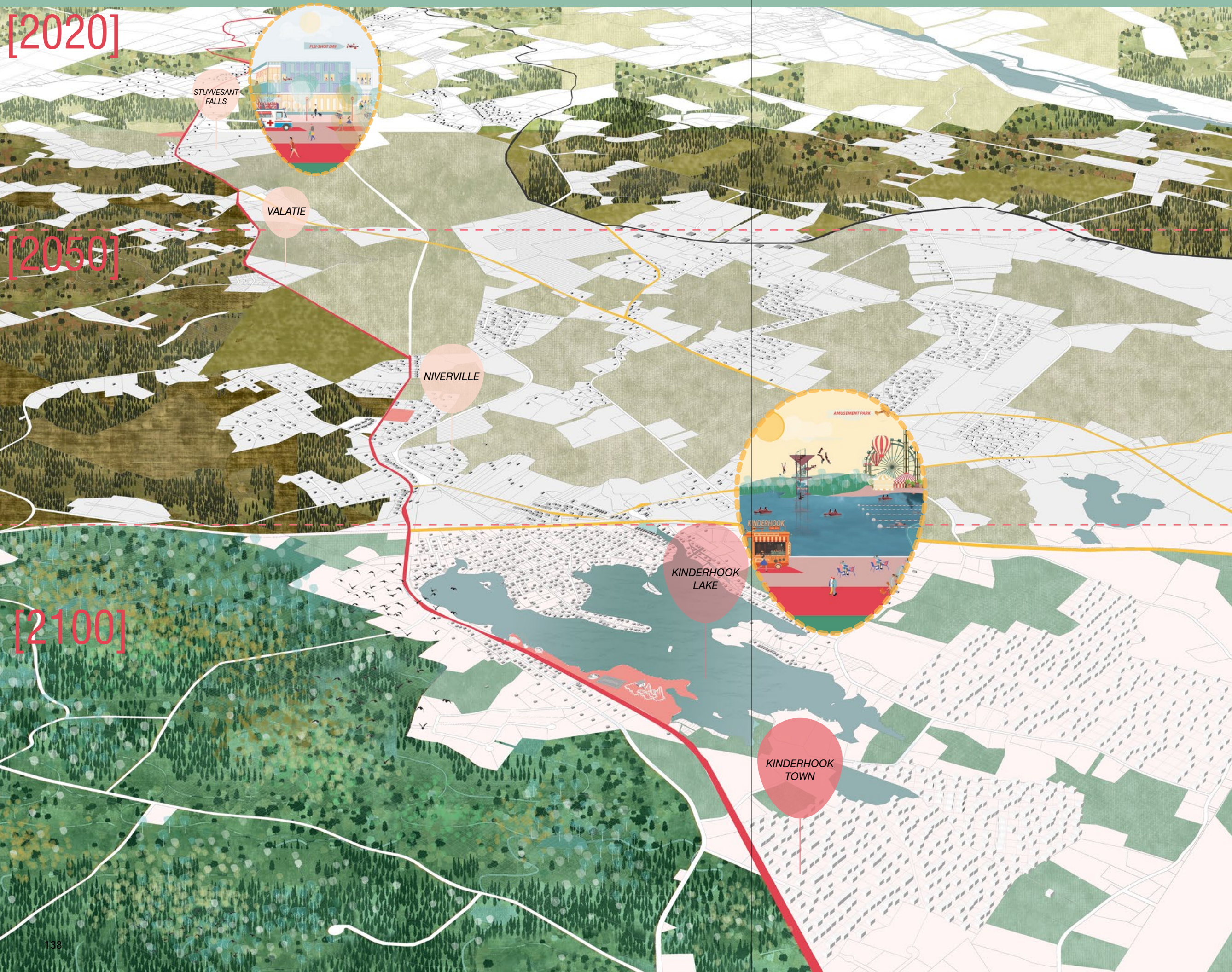


CORRIDOR SYSTEM AND GROWTH

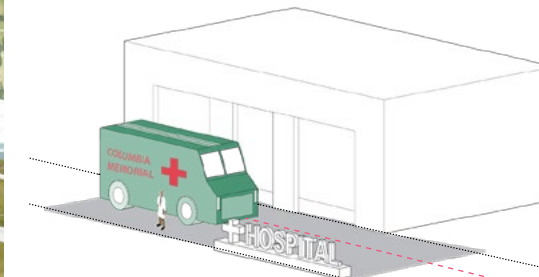


KINDERHOOK LANE



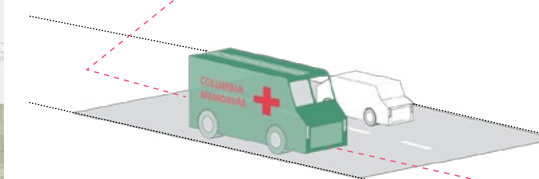


KINDERHOOK LANE



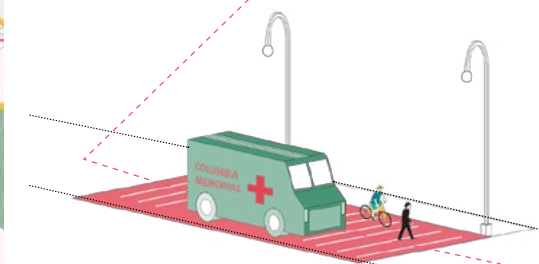
ROUTE 9

1. leaving institutions with resources and professionals.



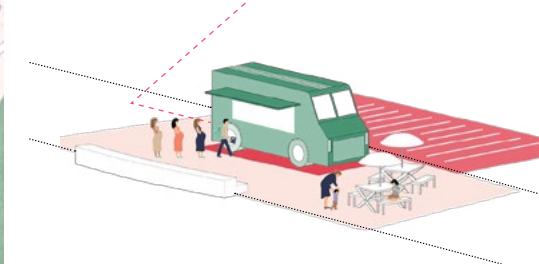
SECONDARY ROADS

2. commuting through the urban growth corridor.



CIVIC GREENWAY

3. moving along the greenway



NEW CIVIC CENTERS

4. stopping at new civic centers to provide services

BEYOND THE STUDIO:

APPLIED EMPATHY

ZARITH PINEDA, GSAPP MSAUD 2017

Design justice. What can it possibly mean in today’s political climate? It seems everywhere we turn injustice is staring us down asking, “how could you let this happen?” followed by the rhetorical accusation, “when did you all fall asleep at the wheel?” Surely, these questions are impossible to answer but ignoring them seems unreasonably complacent.

Within the context of our field, I have some intuitions about the origins of our collective malfeasance. Perhaps it began with the God-complex permissible to architect/master-planner who, unbeknownst to the rest of us peons, was anointed by a holy design deity. These enlightened beings are supposed to single-handedly show us how to live, work, and play successfully... But really, what else can we expect when these roles have been historically occupied by a single intimidating archetype. According to Dezeen, “one in 10 of top-level roles, including CEOs, COOs, presidents, and senior partners, at the biggest 100 international firms are female.” The statistics regarding people of color in the field, are even more disturbing, according to NCARB 75% of record holders identify as white. This reality creates a monumental blind spot that translates to the design of our buildings, cities, and infrastructure. Would inaccessible public infrastructure, red lining, and urban renewal have happened if the decision makers had been more diverse?

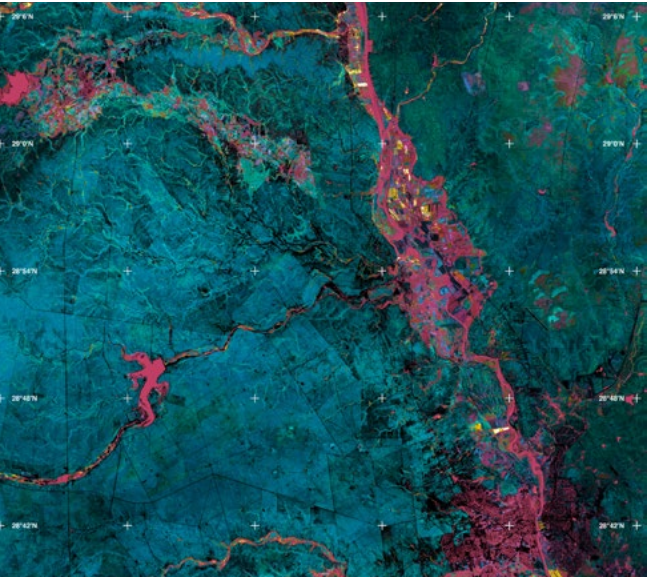
For the past six years, I have studied urban conflict throughout the world from the Balkans, to Jordan, Israel, Palestine, Colombia, Venezuela, and to the Northern Triangle. Regardless of the site, the common denominator seems to be a nefarious sectarianism that disguises itself with behind nationalism, racism, religion, and misogyny to name a few. I’ve witnessed

the pervasive degradation imposed by walls, fences, checkpoints, panopticons, and divisive infrastructure. In 2013, I saw a 6-year old girl go through five checkpoints to get to school somewhere in the West Bank. At every single one, she opened her little pink backpack, took out her notebooks and patiently waited for an IDF soldier to rummage through a plastic bag with filled with crayons and colored pencils. Independent of the security and political implications around this observation, you cannot help but question the wisdom of the decision-making process that lead to such a reality. Moments like these can suspend disbelief and compel us to interrogate our humanity in a profound way.

It seems to me that the thread that connects these experiences is a deliberate ignorance of a shared humanity – a magnificent lack of empathy. If apathy is the engine behind spatial injustice, then applied empathy must be the design methodology that advocates for equity. This realization lead to the creation of Territorial Empathy. Founded in June of 2018, Territorial Empathy is a 501©3 nonprofit organization dedicated to exploring how design can advance urban equity around race, migration, and climate change through the spatialization of empathy. Comprised of intersectional, designers, advocates, and volunteers – we leverage our interdisciplinary skills to work on issues that are often overlooked. So far, we have created spatial applications to expose systematic racism in New York City public school admissions and infrastructure. We have partnered with the World Bank to visualize the relationship between drought in Honduras, Guatemala and El Salvador with the increased regional migration to the U.S. And most recently, through a collaboration with Rep. Ted Deutch’s Office (FL) we collected data on the sexual assault epidemic facing migrant children in

detention throughout the U.S., then through machine learning, spatial science, and data visualization we created a web application detailing every reported incident by facility and investigative outcome in both Spanish and English. These tools are born out of a human centered design process and are created to compel empathy, spark advocacy and policy change.

Our projects span different issues and territories but at their core have a single goal: to expose the blind spots. We believe it’s time for independently funded, diverse and collaborative design thinking that focuses on the humanity that unites us. The alternative is no longer acceptable.



Top: Going North - World Bank - US-Mexico Border Crossing Study



Bottom: Hebron

M.S. AUD STUDENTS

[2014] Jeronimo Aguilar Gutierrez, Karla Gabriela Aguilar, Abdulrahman Ahmad Al-Ishaq, Noella Boutros Aoun, Bina Bhatia, Ross Brady, Maria Cristina Bustamante, Jenny Carolina Cadena, Molina, Susanna Castiello, Julio Alberto Cedano, Arshia Chaudhri, Tin Yan Cheung, Tzu-Yi Chuang, Crystal Jane Eksi, Katherine Marina Flores, Manuel Alejandro Galarraga-Carrillo, Andrew Hatcher Hite, Yuxiang Jiang, Hanqing Kuang, Yeeun Kwon, Daniel Laimer, Akil Mutema Matthews, Tatiana Merheb, Cezar Nicolescu , Anais Niembro Garcia, Jun-hyung Park, Manuela Powidayko Alberici Souza, Ekarat Punsupol, Qian Qi, Zeyuan Qian, Guillermo Ramirez Gallego, Tipayachat Sanghiran, Maria Agustina Santana, Preetal Shah, Parul Sharma, Amy Shell, Natasha Trice, Filiberto Jose Viteri Chavez, Nans Voron, Razvan Voroneanu , Che Wang, Qian Wang, Zhengyang Wang, Long Xu , Xiaobei Yang, Ye Zhang, Zhimin Zhang, Huiwen Zhu, Nour Zoghbyv

[2015] Marshall Stuart Allen, Dhruv Batra, Hannah Marie Beall, Adrinee Bodakian, Guangyue Cao, Jiajing Cao, Amanda Lee Chan, Xi Chen, Cameron Dean Cortez, Karan Manoj Daisaria, Nicolas Fernando Del Valle Russell, Sebastian Delpino, Serena Ceada Fernandes, Nicolle Rebecca Gitlin, Eleni Gklinou, Anubha Madhav Joshi, Francisco Jung, Surbhi Kamboj, Ashwini Karanth, Jee Sung Kim, Vinh Tuan Le, Yan Shun Lee, Chenxing Li, Xinye Li, Nishant Samir Mehta, Grace Helen Salisbury Mills, Mahima Dushyant Pandya, Shiwani Pol, Aminata Seck, Despo Thoma, Yi-Yen Wang, Zhou Wu, Fei Xiong, Ziyang Zeng, Zhuoran Zhao

[2016] Majed Abdulsamad, Jessica Adiwijaya, Nishchal Agarwal, Nabi Agzamov, Jun Seong Ahn Andrea Benavides Ward, Maria Isabel Carrasco Vintimilla, Christopher Chiou, Huai-Kuan Chung, Bridgett Ivanova Cruz, Sreyash Dasgupta, Gabriela Angelissa Fiorentino Cedeno, Marwah Atef Labib Garib, Yiran Hu, Linshu Huang, Carmelo Ignaccolo, Ahmed Saeed Jawdat, Jesfae Mariam John, Evelina Shih Knodel, Chu Li, Yang Liao, Jinbao Liu, Jiahong Lu, Zhengyin Lu, Daiyue Lyu, Mayra I Mahmood, Grace Ning Sing Ng, Deniz Onder, Yuting Pan, Dongfang Pang, Yan Pang, Zarith Itzel Pineda, Kun Qian, Zhen Quan, Dissa Pidanti Raras, Kristen Elizabeth Reardon, Vrinda Sharma, Jiaqi Sun, Mario Andres Ulloa-Leon, Elif Merve Unsal, Fu Wang, Xiaopu Wang, Huaxia Wu, Mengke Wu, Shuman Wu, Tianyang Xie, Yanyan Xu, Zichang Yan, Haochen Yang, Ping Yin, Xuanchen Zhang, Ge Zhao, Lavin Zhao, Zhaoyu Zhu, Daniel Ziss, Wanpeng Zu

[2017] Faisal Alzakari, Jack Bai, Yanmin Bao, Huanyu Chen, David Ernesto Chonillo-Breilh, Leslie Chu, Yin Chuang, Tzu-ying Chuang, Yuqi CUI, Betsy Daniel, Donovan Anthony Dunkley, Ban Edilbi, Jorge Espinosa Gonzalez, Tian Guo, Zenan Guo, Shuting Han, Yue Hilary He, Jesse Hiro Hirakawa, Yijie Hu, Xiaofei Huang, Caroline Jeon, Ruilan Jia, Deeksha Sagar Kalra, Marnfah Kanjanavanit, Niharika Kannan, Duolin Kong, Piyawut Ken Koomsiripithuck, One Jea Lee, Jianwei Li, Meng Li, Shih Hao Liao, Noor Mohammad Malik, Saritza Martinez Rodriguez, Yiqi Mei, Fatma Mhmood, Yeonkyu Park, Jose Gerardo Ponte Neto, Ke Ren, Linda Cristina Schilling Cuellar, Janki Dipeshkumar Shah, Niomi Sandip Shah, Sonu Rakesh Sharma, Yinzhu Shen, Gigi Singh, Wan-Ting Tsai, Sofia Valdivieso Fluxa, Guan Wang, Keli Wang, Xiaohan Wang, Xing Wang, Xianyao Xia, Chenyu Xu, Yicheng Richard Xu, Stanley Zhang

[2018] Shivani Ajaykumar Agarwal, Donghanyu An, Alexandra Burkhardt, Junyu Cao, Hsin Yi Chao, Richard Chou, Angela Marie Delfin Crisostomo, Aniket Dikshit, Amanpreet Duggal, Lorena Barreto Galvao Santos, Carolina Godinho, Alexandros Hadjistyllis, Devaki Handa, Mariam Samim Hattab, Zilu He, Huiwon Hong, Sharvi Jain, Zeyi Jiang, Tanaya Ravindra Kadam, Berke Kalemoglu, Shouta Kanehira, Adi Laho, Jinsook Lee, Greg LeMaire, Jianqi Li, Shuyuan Li, Keju Liu, Ashley Christine Louie, Alaa Marrawi, David Mauricio, Maria Palomares Samper, Haoting Pang, Ryan Biswan Pryandana, Huang Qiu, Noah Michael Shaye, Pei-Jou Shih, Gabriel Vergara, Peiqing Wang, Shuo Yang, Dian Yu, Bohong Zhang, Wenjun Zhang, Yinzhe Zhang, Yanli Zhao

PROJECT LIST

2014 Banking on Trust
Agri Shed
A Trail of Two Cities
Additive Enterprize
Rebuilding Newburgh by Pieces
Light Up Newburgh
The Newburgh Path
Re-Imagining Waste
Resourceful Cities
Cooperative Growth
Patching Urban Ecosystems
Lights Camera Newburgh

2016 The CO[re]-LABOR-A[c]TIVE Project
Poughkeepseed
Human Nature
Community T.O.D.
Poughkeepsie Food Network
Just Beer
Cannabis Archaeology
HealWay
ArtTrek
PoughkeepsieGo
Learning City
Full STEAM
FoodEX
Shifting Gears
Alternative City

2018 Amplify Hudson
sCRUDE
Food Bay
Dairyscape
Albany-Hudson Growth Corridor
Combining Stewrdship & Overflows
Co-Habitat
Room To Grow
Post-Box Urbanism
Appletopia
Energy Bloom

2015 A Mid-Hudson Join
Seeds of Change
Agri-Venture
Local Matters
Get Real-Estate
To the Core
Rejuvenate Broadway
Urban Polaroid
Moving On

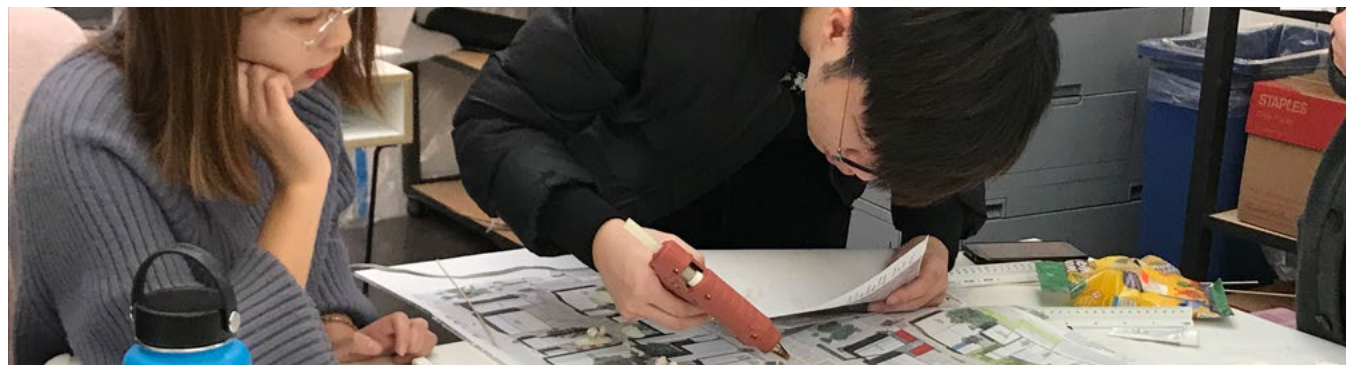
2017 Saving Place
Park Lines
Oaxakeepsie
De-Marginalize
Rights of Way
Beyond School
The Heart Trail
Root Cellar
Agritopia
Land and Time Bank
Open Health Network
Energy Bank
Queen City Art Link



In-studio charrette, 2018



Final review, 2017



In-studio charrette, 2018



Site visit, Newburgh 2014



In-studio charrette, 2018



Final review, 2017



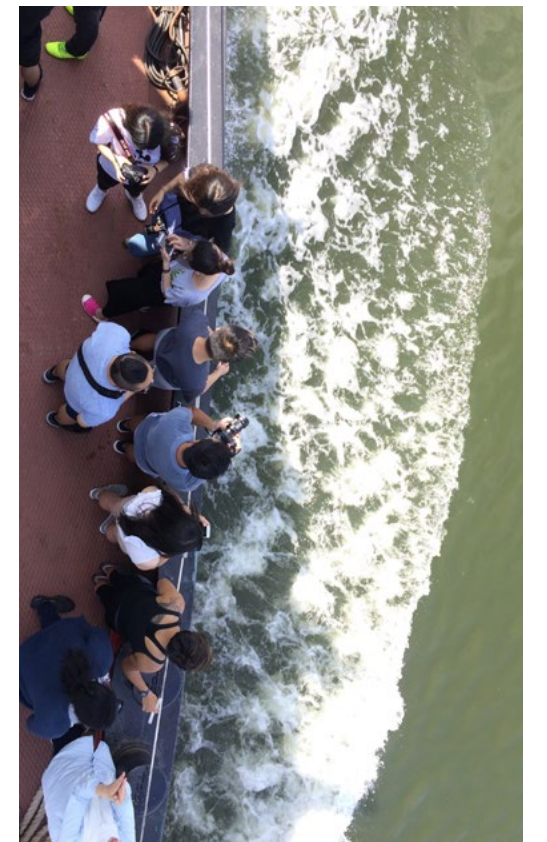
Final review, 2017



Site visit, Hudson 2018



Final review, 2015



Boat trip up the Hudson, 2016



