

**B I A N C A
B R Y A N T**

c o l u m b i a
u n i v e r s i t y

u r b a n d e s i g n
p o r t f o l i o

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infrastructure



waste to feedstock

feedstock to products

products to consumers



SERVICE ALLEY SECTION

UPCYCLED FABRIC

Circular waste systemized neighborhood in Newark, NJ

Urban Design Studio I

Summer 2021 Design Studio
Professors Nans Voron and Sagi Golan
Columbia University

Collaboration with Cesar Delgado,
Lamisa Haque, and Changbin Kim

Individual responsibilities: Conceptual ideas, narrative, diagrams, zoning amendment and specifications, textual documentation, and post-production.

The city of Newark, NJ is an industrial legacy city that has failed to prioritize the health of its inhabitants. Newark's current waste strategy is incineration. Covanta Essex, Newark's main incinerator, is inefficient and guilty of over 300 EPA violations. Furthermore, landfills and incinerators like Covanta leach toxic air pollution and greenhouse gases into the atmosphere, creating a myriad of health concerns and contributing to rising global temperatures. **Upcycled Fabric** reclaims the waste industry as an agent of change for social and environmental justice. The proposal replaces Covanta Essex with a new closed-loop waste processing district that simultaneously stimulates Newark's local economy. **Recycling technologies** will reactivate existing manufacturers in the area and ignite new demand for the recycling of industrial byproducts. The re-activation of the industry will then diffuse into the adjacent parcels to design, manufacture and commercialize recycled products, creating jobs and triggering housing development. **Lastly, the project explores the concept of industry-oriented development, where industrial uses can integrate seamlessly with residential and commercial spaces in order to improve efficiency and reduce waste.**

UPCYCLED FABRIC

*Circular waste systemized
neighborhood in Newark, NJ*

The service alley, while an industry transport corridor during the day, beomes a community gathering space at night for social functions. These forklift storage areas also double as residential waste drop off points, where residents receive discounts at local shops if they reduce the amount of waste they produce week by week.



SERVICE ALLEY - NIGHT VS DAY



UPCYCLED FABRIC

Circular waste systemized neighborhood in Newark, NJ
PASSAIC RIVER



SITE PLAN

- WASTEMANAGEMENT FACILITY
- LARGE FACTORIES
- WASTE CONTAINER
- LIGHT RAIL
- CONVEYOR BELT

ENCLAVE OF RESISTANCE

Collective living land trust system in Kirkwood, Atlanta

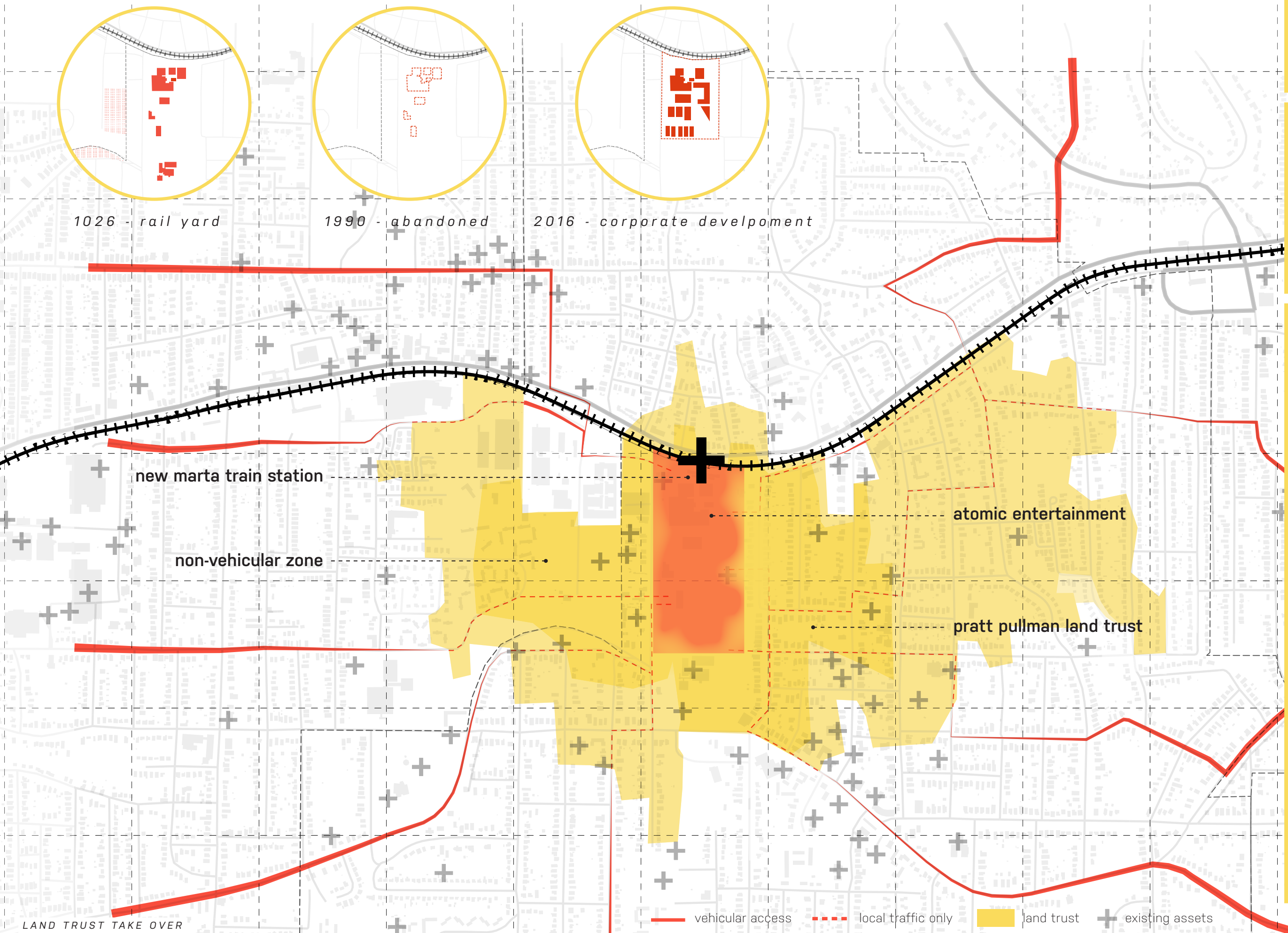
Urban Design Studio II

Fall 2021 Design Studio
Professor Emanuel Admassu
Columbia University

Collaboration with Avani Agarwal, Riya Chadha, and Gloria Mah

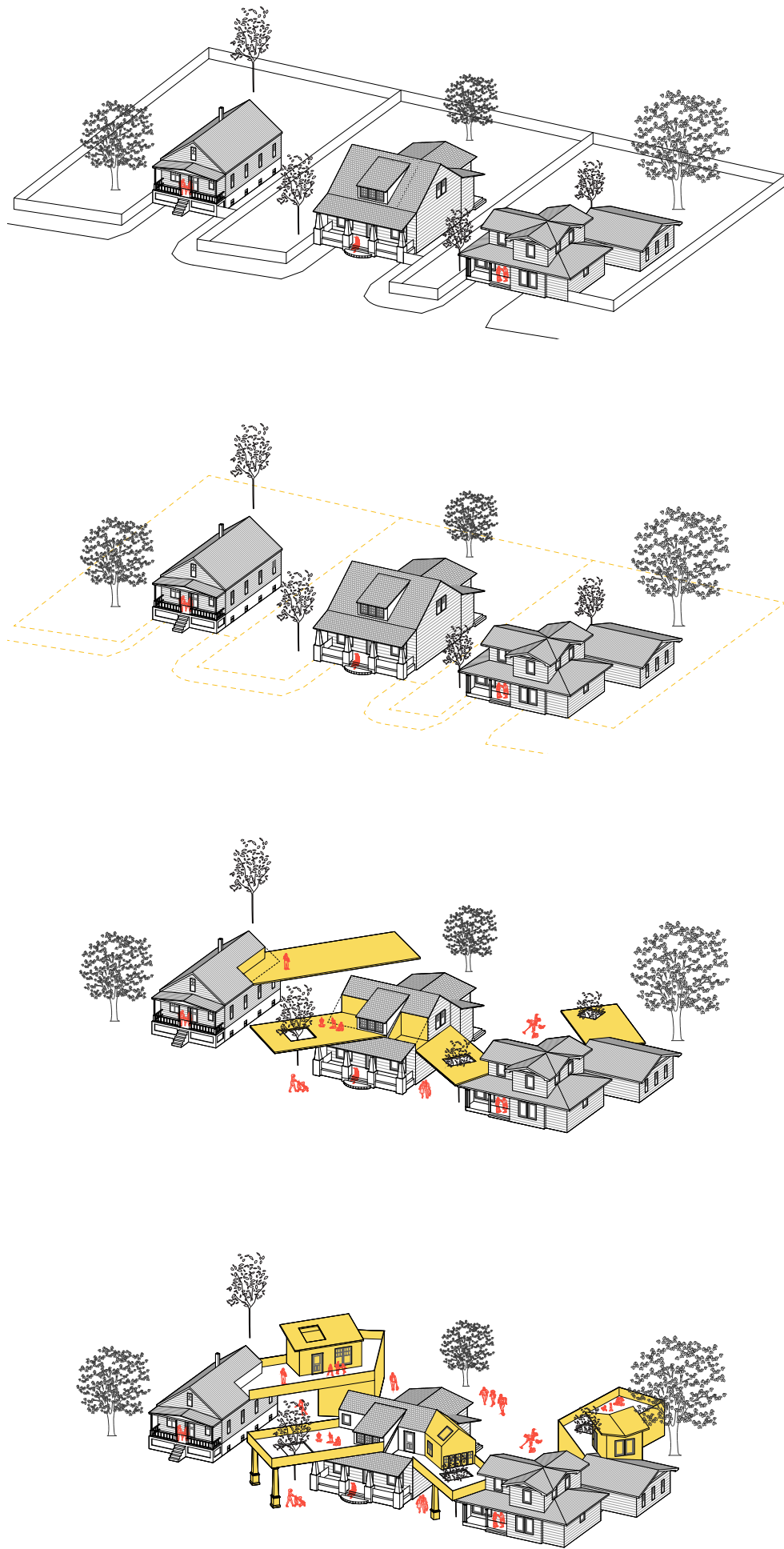
Individual responsibilities: Conceptual ideas, research, narrative, diagrams, 3D modeling, section drawings, and textual documentation.

In 2016, Atomic Entertainment bought Kirkwood, Atlanta's beloved Pratt Pullman Yard property with plans to develop a "creative city" - a new film production district. This development proposal threatens the existing community by gentrifying the city at an alarming rate. **The Enclave of Resistance creates an antagonistic relationship with developer-owned land through a community land trust while simultaneously dissolving property lines, removing vehicular roads and deconstructing the single family home.** The provocation is a multi-phase strategy that begins with the local community taking collective ownership of the land surrounding Pratt Pullman. The trust implements a regulation stating that only local traffic can drive through their collective land, putting pressure on Atomic Entertainment's external access and revenues. Once the trust grows large enough, they will co-opt the strategy of eminent domain to reclaim Pratt-Pullman Yard as a mobility hub and drive out Atomic Entertainment. In a world after property, enclave spaces dissolve these borders in defiance of their external manipulators. **The act of divorcing wealth from property allows for a new social capital system to form, encouraging a sense of belonging and equity for both humans and nature.**

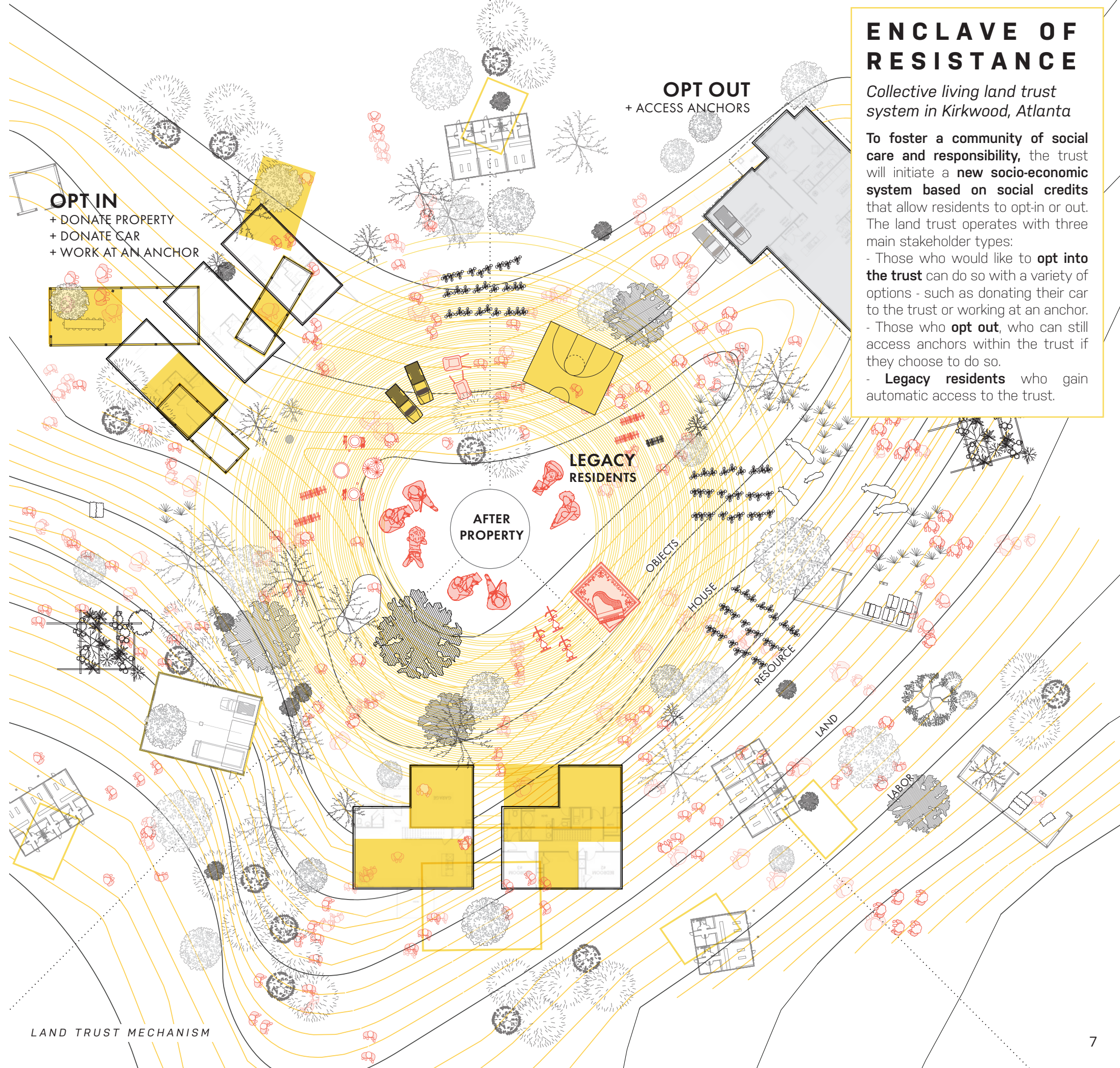


LAND TRUST TAKE OVER

— vehicular access - - - local traffic only ■ land trust + existing assets



INCREMENTAL GROWTH



LAND TRUST MECHANISM

ENCLAVE OF RESISTANCE

Collective living land trust system in Kirkwood, Atlanta

To foster a community of social care and responsibility, the trust will initiate a new socio-economic system based on social credits that allow residents to opt-in or out. The land trust operates with three main stakeholder types:

- Those who would like to **opt into the trust** can do so with a variety of options - such as donating their car to the trust or working at an anchor.
- Those who **opt out**, who can still access anchors within the trust if they choose to do so.
- **Legacy residents** who gain automatic access to the trust.

1 edge condition



2 community anchor



3 collective living



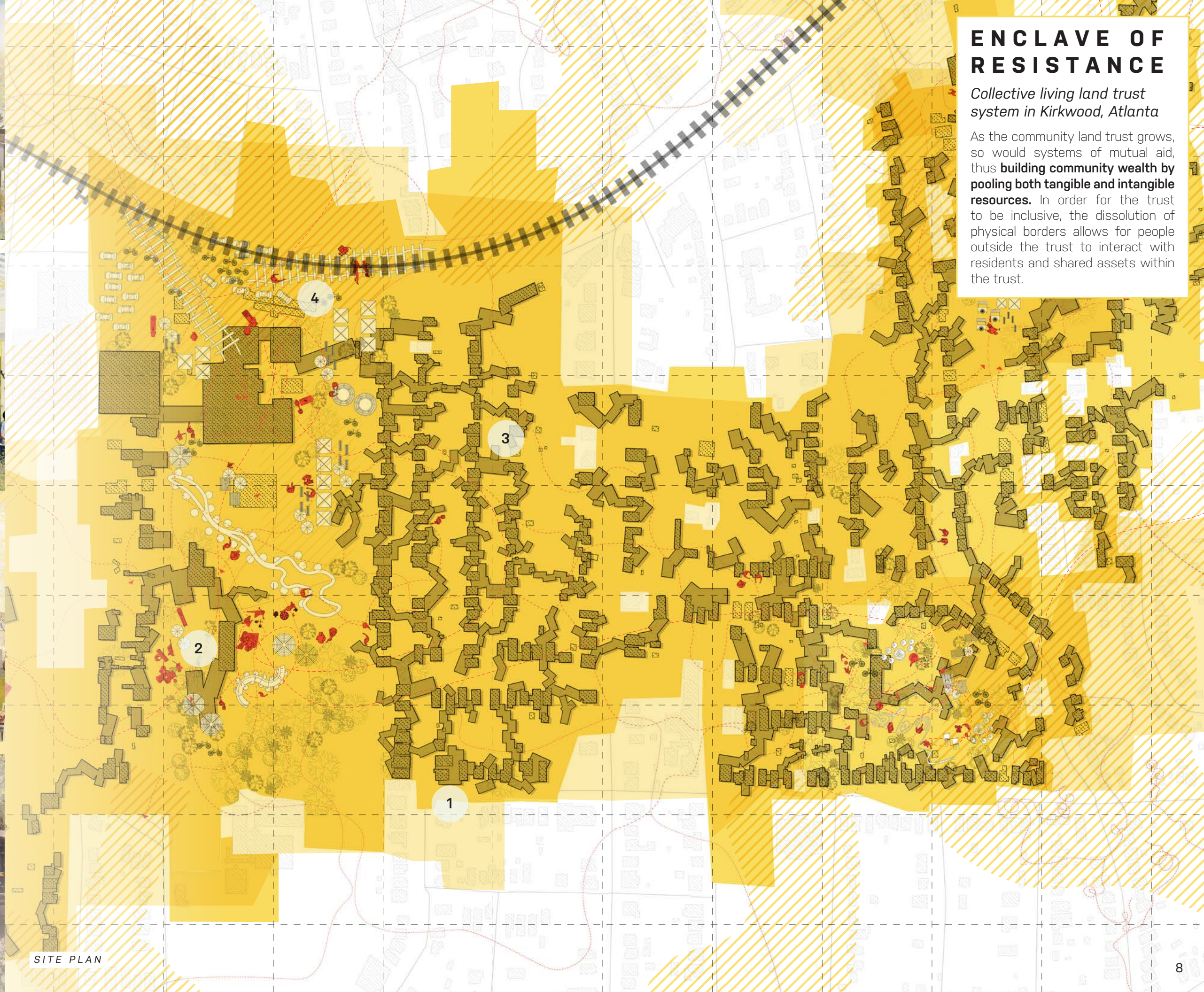
4 pratt pullman yard reimagined



ENCLAVE OF RESISTANCE

Collective living land trust system in Kirkwood, Atlanta

As the community land trust grows, so would systems of mutual aid, thus **building community wealth by pooling both tangible and intangible resources**. In order for the trust to be inclusive, the dissolution of physical borders allows for people outside the trust to interact with residents and shared assets within the trust.



SITE PLAN

ENCLAVE OF RESISTANCE

Collective living land trust system in Kirkwood, Atlanta

-6 TAKE A GYM CLASS

+10 BABYSIT NEIGHBOR'S CHILDREN

+8 TEND TO ATRIUM PLANTS



UNFOLDED PLAN - SECTION

EXISTING STRUCTURES

ENCLAVE OF RESISTANCE

Collective living land trust system in Kirkwood, Atlanta

The edge condition is characterized by the **intersection of enclosures of driveways, lawns, fences and the open conditions of the enclave**. The physical form of the land trust emerges through the **deconstruction of the single family home**. By expanding and merging, dissolving boundaries and morphing into a rhizomatic structure it creates fluid, multi-generational relationships between the individual and the collective.



+9 PERFORM FOR AN EVENT

FRESH PEACHES
-6 COLLECT PRODUCE

+15 TEND COMMUNITY GARDEN

RIVER CONTINUUM

Reef-friendly agricultural logistics chain in south Belize

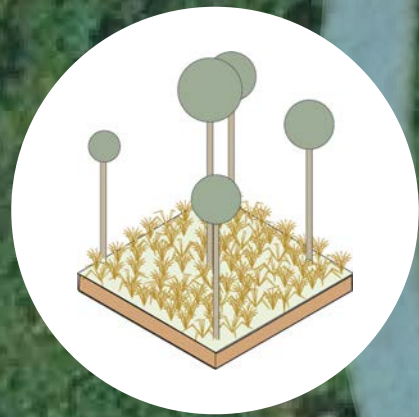
Urban Design Studio III

Spring 2022 Design Studio
Professor Kate Orff
Columbia University

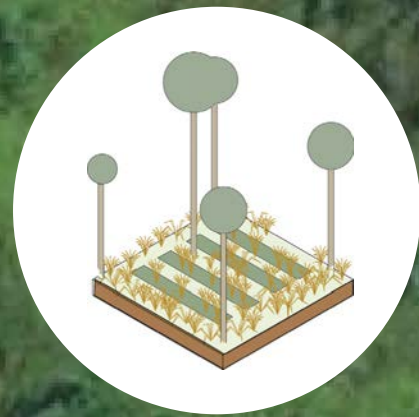
Collaboration with Surabhi Dahivalkar, Cesar Delgado, and Jake Tiernan

Individual responsibilities: Research, conceptual ideas, narrative, policies, local stakeholders, maps, diagrams, plans, and post-production.

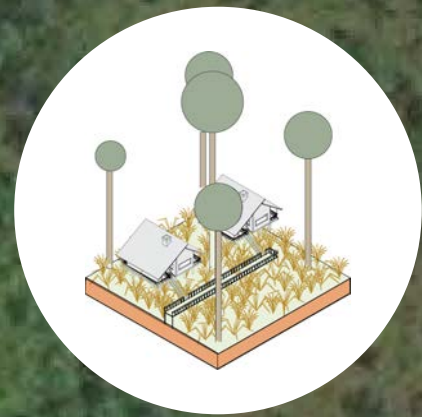
Southern Belize is home to many large-scale corporate agricultural farms. With corporate agriculture comes the use of nitrogen fertilizer and widespread agricultural plots of land. To make matters worse, international conglomerates control much of the production land, enriching themselves while underpaying local workers in the industry. As a result, southern Belize is affected by deforestation, chemical soil and water contamination, poor working conditions and salaries; all of which affect the river continuum, accumulating into stony coral tissue loss and the subsequent destruction of the barrier reef. The proposal is a framework that diversifies the agricultural economy and localizes wealth through a remediative agriculture logistics chain. The proposed River Continuum Alliance connects existing Belizean groups to manage a toolkit of riparian, carbon sink, conservation agriculture, and urban scale blocks. The block system aims to shift corporate, chemical-reliant agriculture into an high-tech, all-natural yet profitable agricultural system. Healing the soil from extractive, harmful monocropping through conservation agriculture will remove poisonous chemicals and excess nutrients from the waterways, thus mending the river continuum and protecting the Belize Barrier Reef.



carbon sink



conservation agriculture



agri-tourism

local resident leases 4 acres from the alliance employs co-op laborers

local farmer leases 10 acres from the alliance 10% of profits invested into the alliance



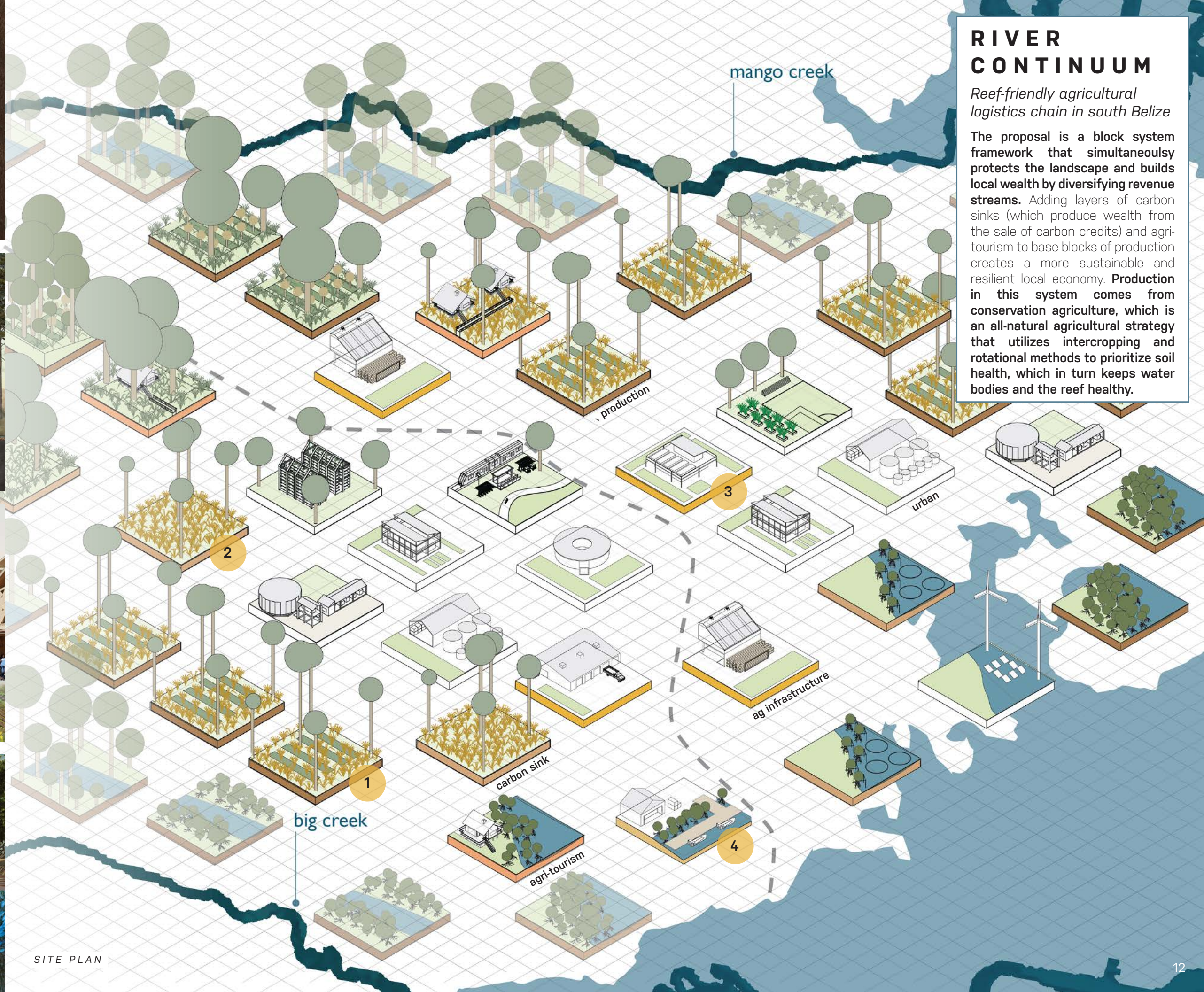
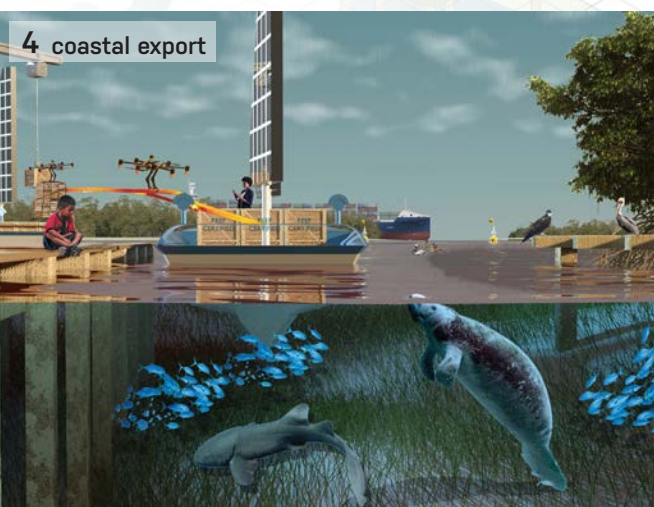
riparian corridor block

agricultural land acquired through government concession

conservation agriculture block

carbon sink block

boardwalk



RIVER CONTINUUM

Reef-friendly agricultural logistics chain in south Belize

The proposal is a block system framework that simultaneously protects the landscape and builds local wealth by diversifying revenue streams. Adding layers of carbon sinks (which produce wealth from the sale of carbon credits) and agri-tourism to base blocks of production creates a more sustainable and resilient local economy. **Production in this system comes from conservation agriculture, which is an all-natural agricultural strategy that utilizes intercropping and rotational methods to prioritize soil health, which in turn keeps water bodies and the reef healthy.**

SITE PLAN



- 236,000 acres of protected land under the partnership between various Belize ministries, TNC, and dozens of other organizations
- Other organizations such as the Global Environment Facility, UNDP-Belize, the Oak Foundation, World Wildlife Fund, etc. will aid with financing and technical assistance



- Rio Bravo Reserve
- TNC's first carbon projects, and one of the first worldwide
- In 2012, 1.6 million tons of carbon offsets purchased for \$1.5 million
- Local partner Programme for Belize manages 100,000 hectares of land



- "Harmony between nature and human development for the benefit of both"
- Community Outreach and Livelihoods program
- 151,000+ acres of Maya forest protected through Belize's first government land concession
- Technical assistance provided to 80 farmers



- 40 parcels of land available for individual purchase in 2019
- Purchasers must meet certain criteria:
 - First time land owner
 - Independence Village resident of minimum 2 years

RIVER CONTINUUM
 Reef-friendly agricultural logistics chain in south Belize

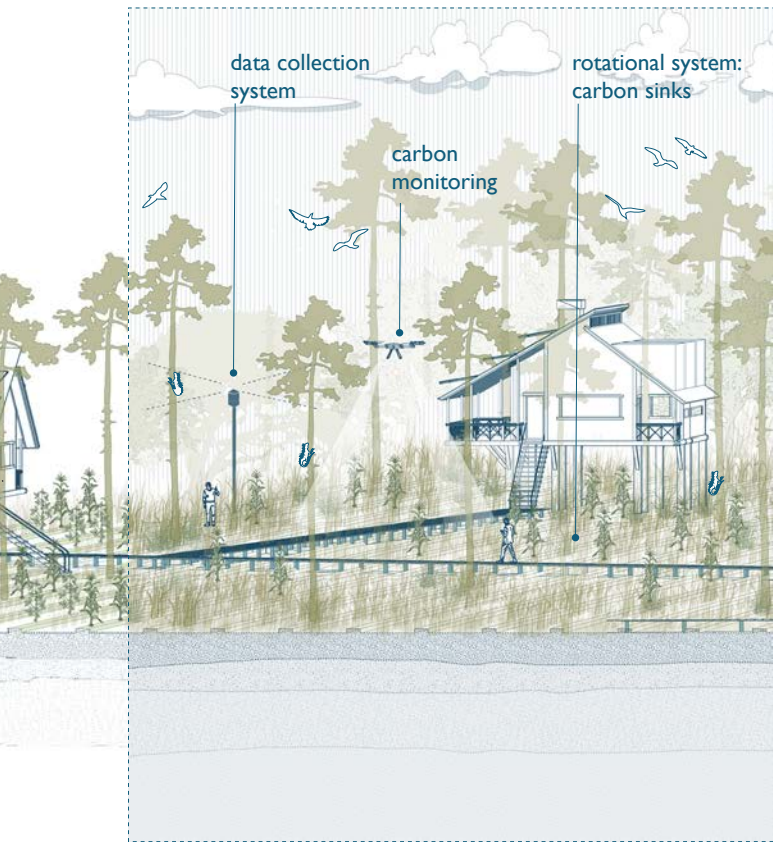


RIVER CONTINUUM

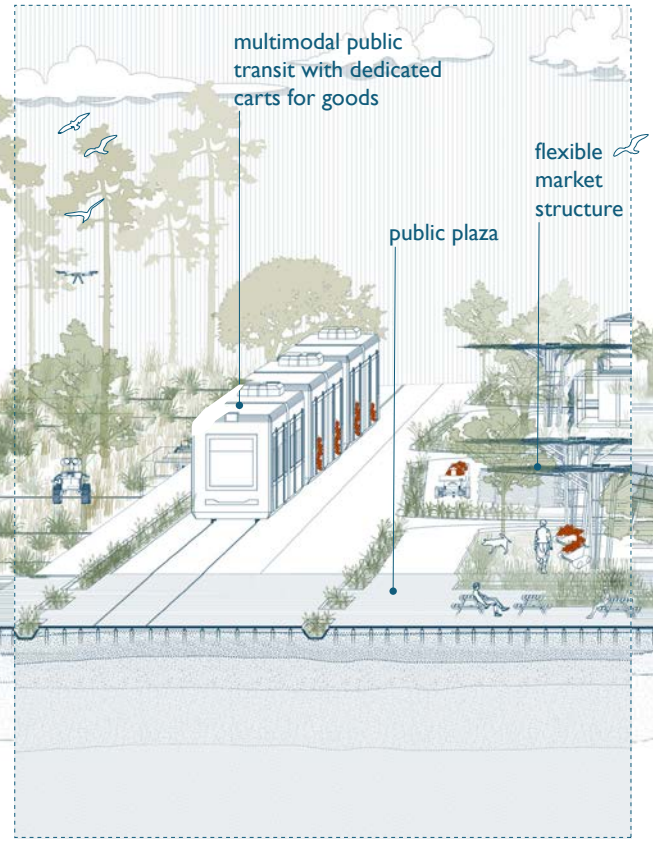
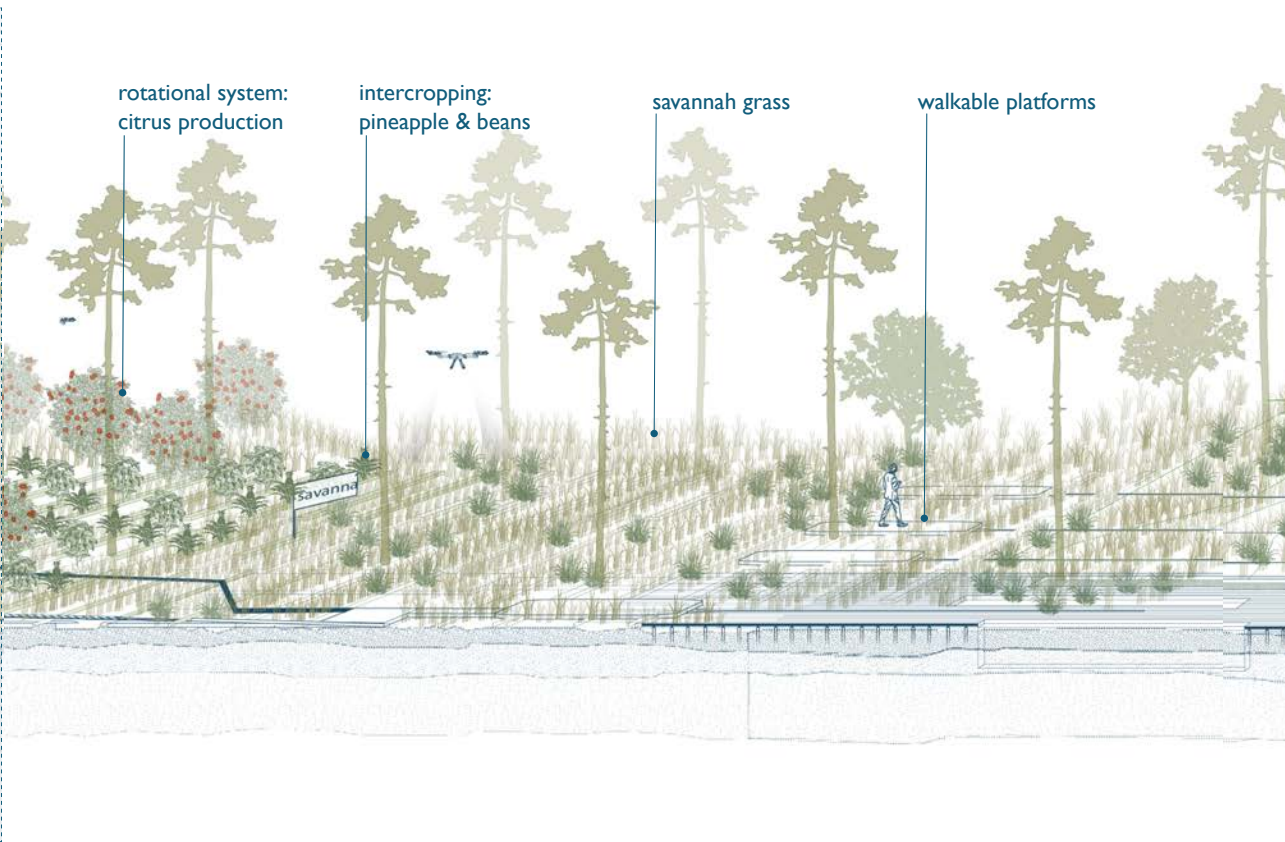
Reef-friendly agricultural logistics chain in south Belize

Following citrus from production to export along the remediative agricultural logistics chain:

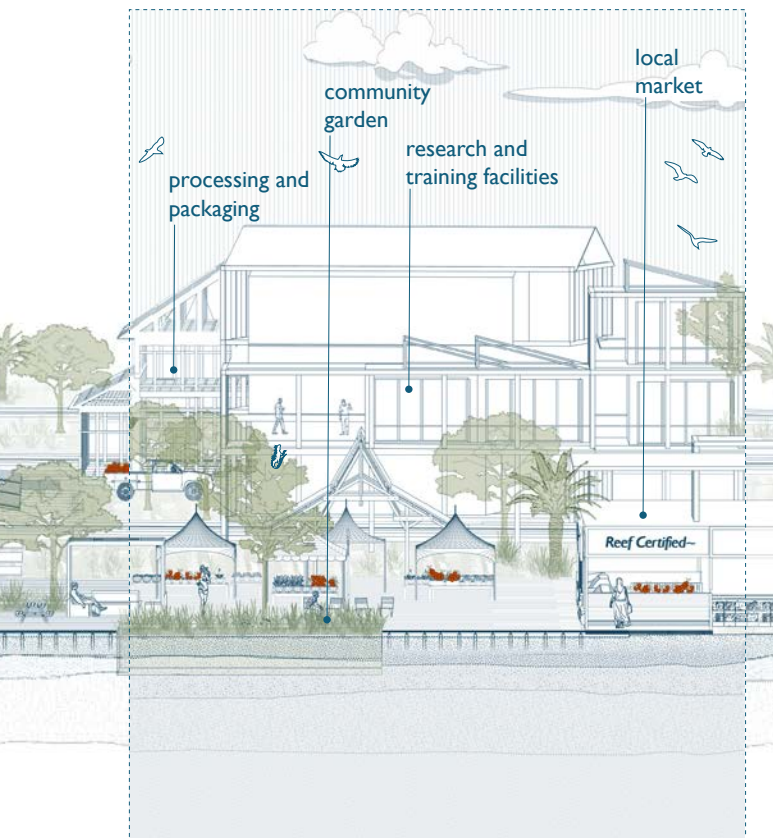
- Local farmers grow citrus utilizing conservation and precision agricultural methods.
- Once workers harvest the citrus, they prepare the field to become a carbon sink, maximizing the health of the soil while preserving its economic value.
- Cooperative laborers process and package the citrus as "reef-certified," a competitive brand that is sold both locally and regionally.
- Local exporters who are Alliance members use modular shipping practices to transport the citrus in small scale boats to large cargo ships in shipping lanes removed from the coast.



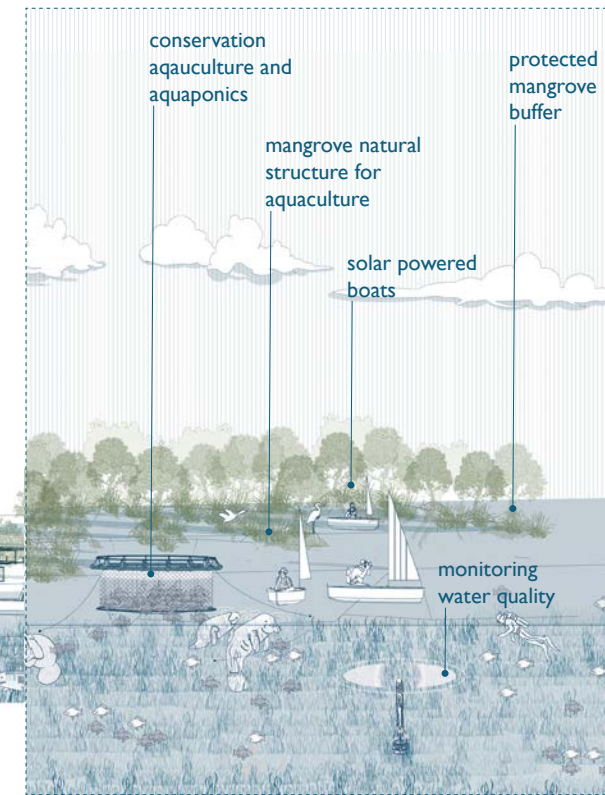
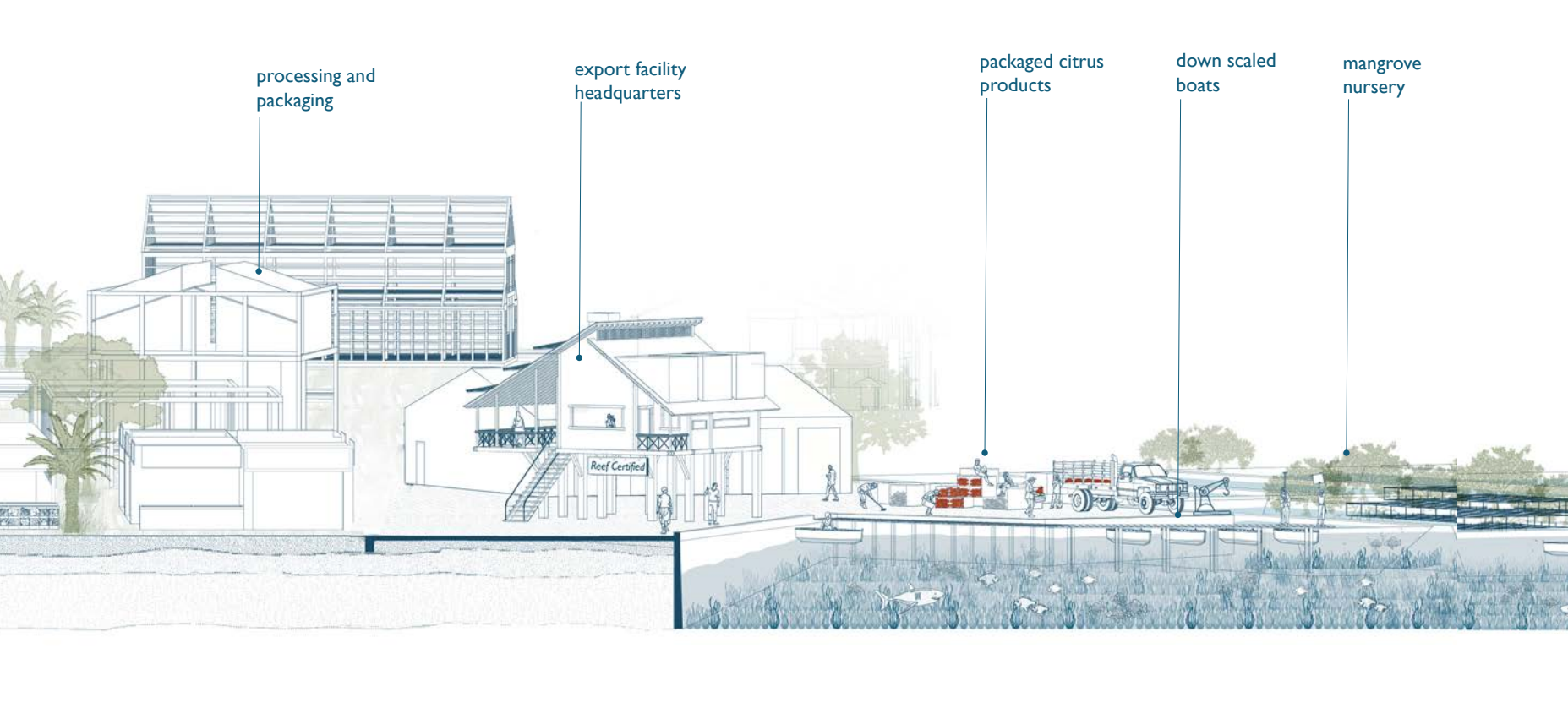
2080
rotational system: carbon sinks



2080
improved infrastructure for transportation



2080
social amenities for community



2080
coast: regenerated ecosystem

RIVER CONTINUUM

*Reef-friendly agricultural
logistics chain in south Belize*

The inland fields are part of a rotational system that enables community wealth building through returning profits generated by intercrop production and leasing carbon credit. Another layer of low impact tourism ensures a steady stream of revenue into the local economy.



INLAND PRODUCTION

RIVER CONTINUUM

Reef-friendly agricultural logistics chain in south Belize

road from production to processing to dock



trader joe's american grocery store chain imports reef-certified alliance products



transplanted mangroves

sustainable fish farms

floating crops

dock extension

small boat transport to cargo ships

local fisherman donates boats and nets to alliance receives a monthly alliance dividend





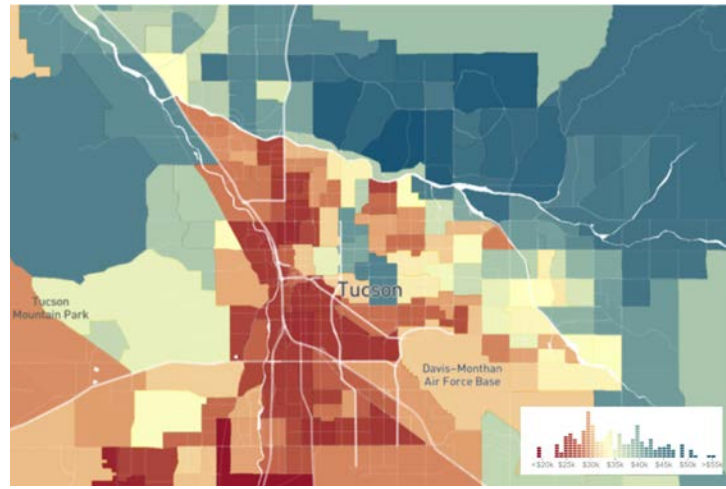
Tucson, AZ Landscape; Dove Mountain

In the article "Social Infrastructure and the Public Life of Cities," authors Alan Latham and Jack Layton describe social infrastructure as "sites where strangers can meet and mix with others with whom they share their neighborhoods and cities." Sites like libraries, public pools, markets, and others are prime examples of social infrastructure as they are publicly accessible and interactive. Latham and Layton state that public infrastructure is essential for combating isolation and is reliant on a sense of trust. This chapter will investigate the roles and capacity of public space as social infrastructure.

Public space is a crucial aspect of a city's social infrastructure as it has great potential to foster human connection. However, with the increasing commodification and privatization of public space, can all public space be considered social infrastructure? As such, has the concept of public space grown to now encompass different subcategories of itself? The following analysis of a public space located in Tucson, Arizona, aims to explore how public space fits into the discourse of social infrastructure. The discussion compares and contrasts the site with Latham and Layton's social infrastructure criteria—abundant (easily found), diverse (multi-functional), maintained (upkept), accessible (non-discriminatory), responsive (flexible), and democratic (equal). Historical context demonstrates that public space and social infrastructure are not mutually inclusive, suggesting that both are malleable descriptors of space rather than strict definers.

TUCSON, AZ

Tucson, Arizona is located in the hot and dry desert climate of the southwest United States, just an hour's drive from the US-Mexico border. Located in Pima County, Tucson is the second largest city in Arizona, with a metro population of just over a million people. It is also one of the more sizable college



Map of Household Income in Tucson, AZ; Tucson Sentinel

towns in the country with a student population of nearly 50,000. Due to its proximity to the Mexico border, Tucson is a city rich with heritage and cultural diversity especially evident within its culinary scene. Tucson is also known for its unique Sonoran desert landscapes, beautiful sunsets, and dry weather, making it a popular biking destination for residents and tourists alike.

However, while Tucson boasts many attractive characteristics, the city is also suffering economically. In 2020, the city's poverty rate was 15.9%, three percentage points higher than the national average. Pre-Covid, poverty rates were even higher at 19% in 2015. Economic growth over the last decade has been slow, and what growth there is appears to be inequitably distributed among residents in different parts of the city. According to a Brookings report, Tucson ranked 89th out of 100 of the largest metropolitan US cities for inclusive economic growth, an indicator of "when all segments of society share in the benefits of economic growth." A prime example of Tucson's failure to achieve inclusive economic growth is the fact that in 2017, 20% of wealthier households accumulated more than 50% of Pima County's income, while the poorest bracket of households only acquired 3%. Furthermore, when overlaying the economic data onto a map of Tucson, there is a stark geographic divide between the wealthier north Tucson—dubbed "The Foothills" by Tucsonans—and the poorer south. Additionally, when comparing the income map to Tucson's racial distribution, there is a strong correlation between lower income areas and Hispanic/Native American communities and richer areas with non-Hispanic white populations.

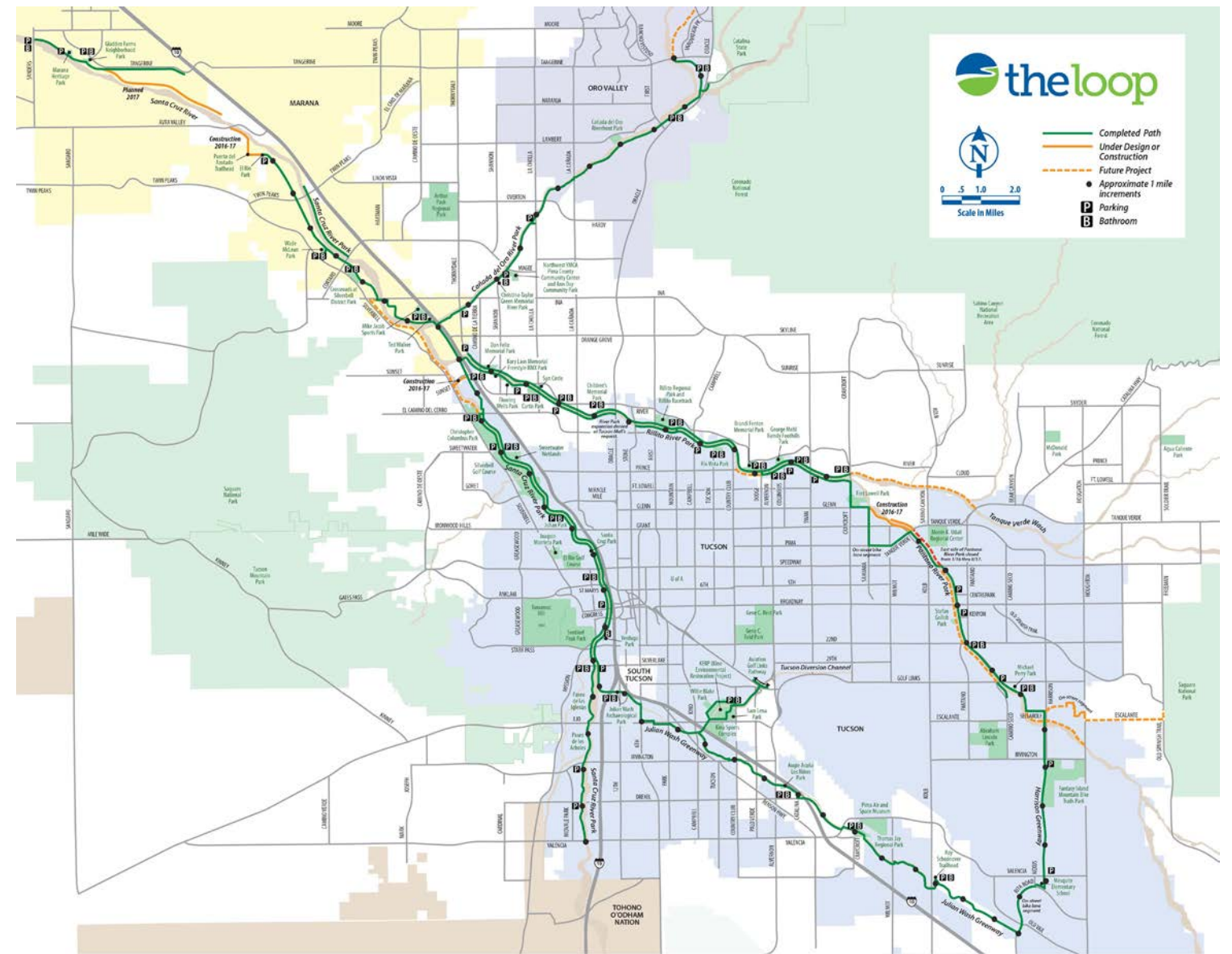
When it comes to public space as social infrastructure and vice versa, widespread and equitable accessibility is essential. Do the following examples of public space overcome, or have the potential to overcome,

THE LOOP, TUCSON, AZ

Investigation into public space as social infrastructure

Public Space: Rhetorics and Practices

Spring 2022 Urban Design Seminar
Professor David Smiley
Columbia University



Map of the Loop; Pima County Arizona

Tucson's striking economic and racial divide to become truly democratic public spaces for all?

THE LOOP

The Chuck Huckelberry Loop, affectionately known as "the Loop," is an award-winning 137 mile "urban" trail that encircles the city of Tucson, Arizona. The

Loop is a continuous, paved pathway suitable for walkers, runners, cyclists, horseback riders, dog walkers, strollers, and more. Native Tucsonans and visitors alike traverse the path daily for exercise, transportation, and outdoor leisure. More than just an urban trail, the Loop is also an important connector of various parks, national parks and trails, local

businesses, farmers markets, and other beloved outdoor public spaces.

The Loop offers various backdrops to users, whether they are exploring farmers markets, splashing in water parks, admiring art installations, or completing an exercise routine. At times, Tucson's majestic mountains appear whenever the path opens up to the sky. Other times, the pathway is immersed by lush desert vegetation, like palo verde trees and creosote bushes. The sectional quality of the Loop can be described as functional at best: a two-lane, paved path occasionally bordered by rusted metal railings when crossing or moving along a wash. The rest of the experience relies on the user's mode of transportation and the surrounding scenery, which is oftentimes natural landscape, but other times urban infrastructure such as highways, hotels, recreational facilities, and local businesses. The minimal built infrastructure allows the Loop experience to focus on community gathering, for the path is always occupied by individuals, couples, families, and groups of friends.

However, when evaluating public spaces with Latham and Layton's social infrastructure criteria of accessibility and democracy, it is crucial to examine both on a more granular level. Fortunately, Pima County has recently begun releasing comprehensive monthly Loop usage reports which can provide insight into the trail's users. The reports rely on data gathered from ten digital counters distributed along the Loop in various neighborhoods. Combining data from the usage reports with geographic analysis

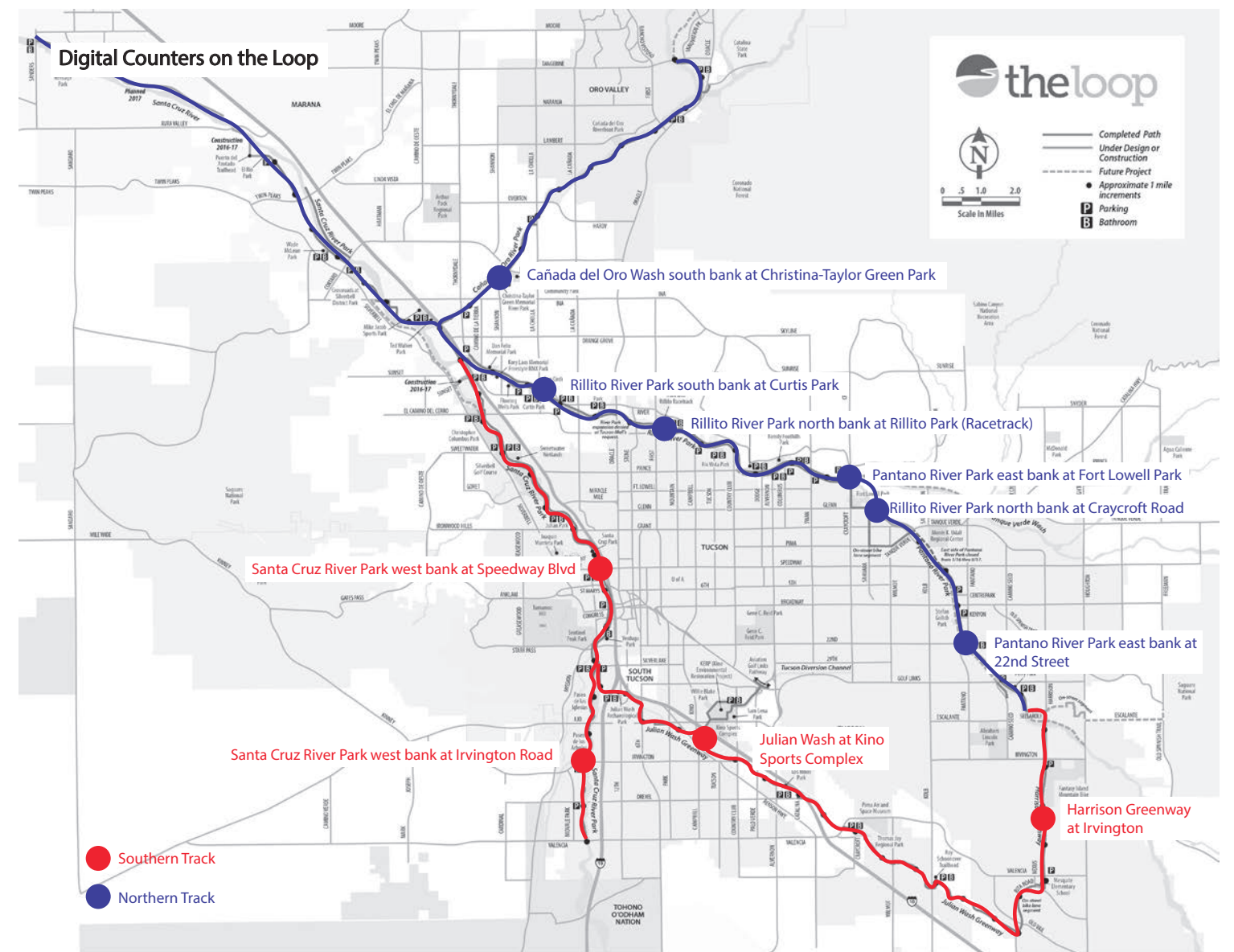


Users Enjoying the Loop; Tucsoptopia

of demographics can offer analysis of access and use of the Loop, under the assumption that most people counted on the path live relatively near whichever digital counter tallies them. Considering many users only travel along segments of the Loop in a given day instead of "looping the loop" – due to its massive scale – this is arguably a reasonable assumption.

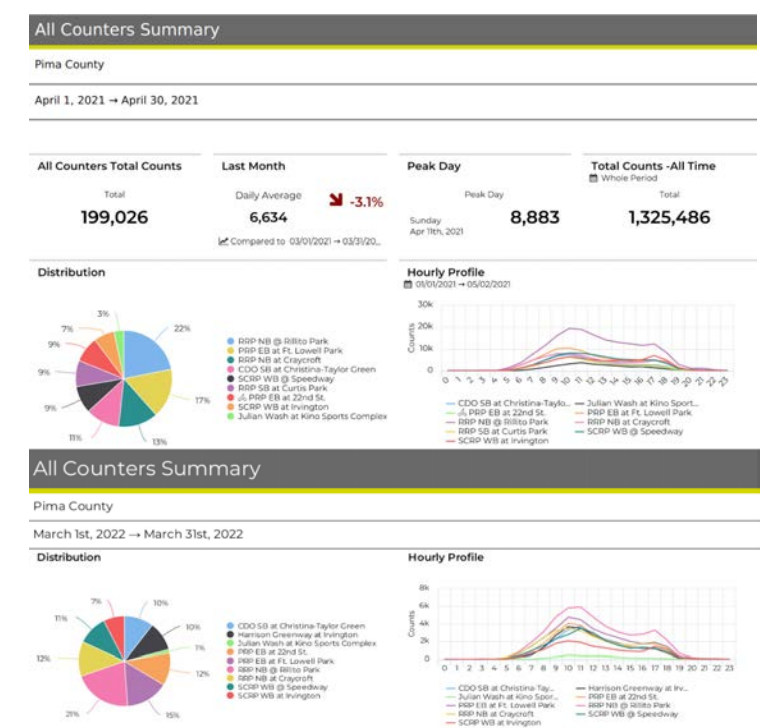
The basic analysis assigns each digital counter a region within the Loop - either the northern track which is geographically closer to primarily wealthy white neighborhoods, or the southern track, which is closer in proximity to lower-income neighborhoods. In April 2021, the counters tallied 81% of total Loop users within the northern track. The southern track accounts for the remaining 19% of users. In March 2022, nearly a year later, the numbers remained practically unchanged, with the northern track registering 70% of users and the southern track hosting 30%. Even though the analysis is rudimentary at best and fails to account for many contributing factors, the difference in number of users between the northern and southern tracks is significant, indicating there is a disparity between accessibility and geographic location, that is, between class and race.

There are many explanations for the disparity in usage levels between geographic areas, one of which could be the distribution of amenities and workplaces along the Loop. Even though the Loop was originally intended to be recreational,

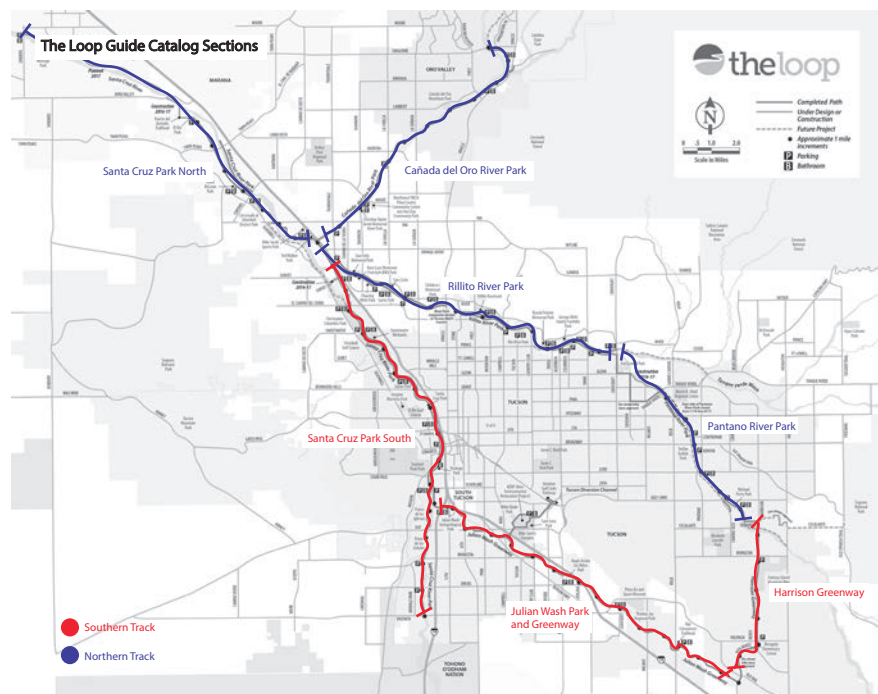


Digital Counter Location and their Respective Tracks; Author

its popularity has driven much economic growth in its vicinity. According to the county, the Loop generates a return of \$9.40 for every dollar invested in the form of job creation, recreation spending, and in the long run, healthcare cost savings. Indeed, the Loop has proved alluring to various companies, attracting large scale businesses such as Raytheon and Caterpillar who see the trail as a desirable commute option for workers. The Loop has increased economic activity for many existing businesses adjacent to it, such as increasing Caffe Luce's customer traffic by 20%, encouraging the Loop Bicycle Shop to double its square footage and triple its inventory, and doubling the number of Rillito Farmers Market's visitors within two years. The Loop has also inspired new businesses to pop up, such as Jaime Arrieta's Peddler on the Path food truck. However, despite its economic success, again the question becomes economic growth for which communities?



Loop User Reports Apr 2021 and Mar 2022, Pima County Arizona



The Loop Guide Catalog Sections, Author

Tucson author Randy Ford spent five months traveling and documenting the amenities and resources accessible from the Loop. His project resulted in the book "The Loop - America's #1 Recreational Trail," which is an atlas and guidebook mapping such landmarks according to different sections of the urban trail. The Loop guide, while meant to inform locals and tourists, is also useful in the analysis of who uses the trail and why. Applying the same methodology of analyzing the Loop Usage reports, Ford's catalog of attractions illuminates further inequity in the distribution of resources and perhaps consequently, the undemocratic accessibility of the Loop. After assigning each section of the inventory to the northern or southern track, the data reveals that the northern track has access to twice as many parks, one and a half times as many restaurants, bars, and cafes, and five times as many resources such as bike shops and farmers markets compared to the southern track. With these amenities come job opportunities and economic growth. An unequal distribution of parks, restaurants, and resources could reflect an unbalanced spread of economic opportunity and therefore incentive (or disincentive) to participate on the Loop on a regular basis, especially if one does not have the luxury of spare time to use the Loop recreationally.

While much more comprehensive data and analysis is necessary to support the claim that the Loop is unevenly accessible to Tucsonans across the

city, these initial numbers demonstrate that some level of inequity is operating along (or built into) this public path, hindering the Loop's potential to be considered "social infrastructure" by Latham and Layton's standards.

To the local government's credit, Pima County has acknowledged that the Loop has catered to certain non-Hispanic white and wealthier groups over lower-income Hispanic and Native American communities. In 2020, specifically in response to Covid-19, Pima County issued a declaration stating that racial and ethnic health inequities and income inequality have become a public health crisis. In response, the Centers for Disease Control (a federal agency) granted the county a \$6.5 million grant to address said health disparities. Pima County allocated a portion of the grant money to its Health Department's Racial and Ethnic Approaches to Community Health (REACH) Program, whose goal is to reduce chronic diseases such as hypertension, heart disease, Type 2 diabetes, and obesity, particularly in the most at-risk populations, which include Native American and Hispanic children and their families." The program is relevant to the Loop because part of its initiative is called "Reach the Loop," which focuses on increasing the trail's accessibility in areas that had fewer users, which tend to correlate with neighborhoods with higher concentrations of communities of color. After forming a coalition of 47 local residents and spearheading six community focus groups, the REACH program learned that unawareness, insufficient benches, and poor accessibility in south

Section	Page	Description	Loop Miles	Parks	Trail Parking	Food	Coffee	Beer/Craft
Santa Cruz Park North	1	Gladden Farms to Tangerine Junct.	2.7	3	-	-	1	1
	2	Tangerine Trail to Santa Cruz Trail Gap	1.5	-	-	-	-	-
	3	Santa Cruz Trail Gap to Avra Valley	0.7	-	1	-	-	-
	4	Avra Valley Rd. to N. Long Creek	2.1	2	1	-	-	-
	5	N. Long Creek Dr. to W. Canebrake Dr.	2.7	2	-	-	-	-
	6	W. Canebrake Dr. To N. Cortaro Rd.	5.8	1	-	3	-	1
	7	N. Cortaro Rd. To W. Ina Rd.	4.3	1	-	1	1	-
	8	W. Ina Rd. to Three Trails Junction	2.5	-	-	3	2	-
Rillito River Park	9	3 Trails Junct. to Camino de la Tierra	6.3	4	3	8	-	1
	10	Camino de la Tierra to Flowing Wells	6	5	1	8	3	-
	11	Flowing Wells to Rillito Regional Park	5.8	2	1	10	1	-
Pantano River Park	12	Rillito Regional Park to Alvernon Way	6.1	3	1	9	3	1
	13	Alvernon Way to Grant / Wilmot	5.4	8	1	5	2	-
Harrison Greenway	14	Grant / Wilmot to E. Speedway Blvd	5.1	1	1	10	1	-
	15	E. Speedway to Kenyon Dr.	2.1	-	-	9	1	1
Julian Wash Trail and Greenway	16	Kenyon Dr. to E. Golf Links Rd.	1.9	-	1	-	-	-
	17	E. Golf Links Rd. to S. Harrison Rd.	2.3	1	-	-	-	-
Julian Wash Park and Greenway	18	E. Sellarole to Fantasy Island MTB Park	1.7	1	-	-	-	-
	19	Fantasy Island MTB Park to E. Bilby Rd.	1.5	1	-	-	-	-
Julian Wash Park and Greenway	20	E. Bilby to E. Valencia Rd	1.5	1	-	-	-	-
	21	E. Valencia Rd. to Julian Greenway	2.5	-	-	7	1	-
Julian Wash Park and Greenway	22	Rita Rd. to South End of Loop	3.7	-	-	6	-	-
	23	UA Tech Park and S Rita Rd.	2.2	-	-	-	-	-
Julian Wash Park and Greenway	24	S. Kolb Rd. to UA Tech Park	2.4	-	1	-	-	-
	25	S. Wilmot Rd. to S. Kolb Rd.	1.9	-	1	1	-	-
Julian Wash Park and Greenway	26	Valencia Underpass to S. Wilmot Rd.	2.1	1	-	5	1	-
	27	Los Niños Park to Valencia Underpass	2.4	1	-	-	-	-
Julian Wash Park and Greenway	28	E. Irvington to Los Niños Park	2.0	1	-	6	1	1
	29	Ajo / Benson to E. Irvington Rd.	1.8	-	-	5	-	-
Julian Wash Park and Greenway	30	S. 12th Ave. to Park/Ajo	2.6	1	-	9	-	-
	31	29th to Ajo / Junction Julian Wash	3.9	1	-	5	-	1
Julian Wash Park and Greenway	32	Ajo Way to Irvington Rd.	3.8	1	1	12	1	2
	33	Irvington Rd. to Valencia Rd.	3.5	-	2	6	-	-
Julian Wash Park and Greenway	34	Congress to Silverlake (29th St.)	4.0	2	1	9	2	2

Catalog of Amenities Along the Loop; Randolph Ford



Reach the Loop Program Poster; Pima County Arizona

and southwestern neighborhoods were among the many reasons why nearby populations were not using the Loop. The feedback along with the grant funding spurred the Pima County Resources, Park and Recreation department to install 44 benches, 12 bike racks, and five new paths (with three more in the works), all in the southern Loop track, which serves large populations of Mexican American and Native American families. According to the collected data between August and September of 2020, the number of Loop users increased 62% and 24% at Julian Wash and Santa Cruz, respectively – both southern track areas – indicating a successful start to the REACH Program initiative.

CONCLUSION

The Loop is an incredible asset to the Tucson community both socially and economically. Its scale and popularity makes the Loop an excellent candidate for social infrastructure under Latham and Layton's terms. However, the Loop as it stands today does not meet all six criteria of abundant (easily found), diverse (multi-functional), maintained (upkept), accessible (non-discriminatory), responsive (flexible), and democratic (equal). As noted in the analysis, the weakest Loop point is its accessibility due to inequities in resource dispersal and perhaps consequently, usage along the route. However, should Pima County continue to target the Loop improvements according to usage data paired with demographics, there is great potential for the massive urban trail to evolve its trajectory even

further, from flood infrastructure to public space to social infrastructure. Even better, if Pima County could wield the Loop as an anchor in uprooting racial and economic disparities at their source by equitably distributing necessary resources - including schools and healthcare - the Loop would be well on its way to becoming a true force of social infrastructure.

SOURCES

- Allen, Lee. "Businesses Take Root on the Path." Inside Tucson Business.
- "The Chuck Huckelberry Loop." The Chuck Huckelberry Loop - Pima County.
- Ford, Randolph. The Loop - America's #1 Recreational Trail. Tucson, AZ: Randolph Ford, 2021.
- Huckelberry, C H. Letter to Pima County Board of Supervisors. "Resolution Declaring Racial and Ethnic Health Inequities and Health Inequality in Pima County to Be a Public Health Crisis."
- Kiser, Jim. "Economic Inequality Limits Opportunity." Tucson Sentinel. December 17, 2020.
- Latham, Alan, and Jack Layton. "Social Infrastructure and the Public Life of Cities: Studying Urban Sociality and Public Spaces."
- "Loop Usage Reports." Loop Usage Reports - Pima County Arizona
- McKisson, Michael. "County Working on Car-Free Loop around Tucson." Bicycle Tucson. "Poverty Rate." MAP AZ Dashboard.
- "Reach Program Providing Increased Access to the Loop." REACH Program providing increased access to The Loop - Pima County.
- Shearer, Richard, Alec Friedhoff, Isha Shah, and Alan Berube. Rep. Metro Monitor An Index of Inclusive Economic Growth in the 100 Largest U.S. Metropolitan Areas. Brookings Institute,



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