



GREEN NEW DEAL SUPERSTUDIO

PROJECT TITLE: Localized Future for Delray

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STATEMENT:

Our globalized economy is based on a fundamental lie - that perpetual growth is not only possible, but inherently good. Not only does this growth have severe consequences for the planet, but it is ultimately not possible long-term. We are limited by biophysical constraints, including the finite availability of fossil fuels, materials, and space for waste, as well as the diminishing returns of technological advancement. Therefore, a transition away from our current globalized economy and way of life is inevitable.

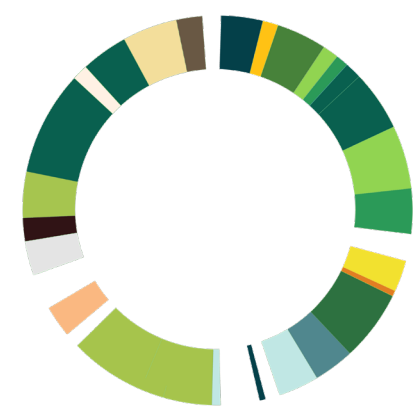
Is there a way we could transition to a future that is better than the world we live in now? That is exactly what localization, a sustainable design philosophy developed by Dr. DeYoung and Dr. Princen, spells out for us. In a localized future, authority and leadership is widely distributed, increasing equity and community self-reliance. Humanity lives in harmony with nature, using natural energy sources and materials in a sustainable way that can be maintained indefinitely, and personal proficiency reigns over hyper-specialization.

This design explores the application of localization principles in Delray, a neighborhood in Detroit that has been plagued by industry for decades. Community members in Delray know what they need to thrive, but they have historically lacked the resources and agency to drive change. A Community Resiliency Hub could be the catalyst for community lead change now and through any future transitions. This design illustrates what this hub could look like and how it could allow Delray to adapt and thrive in a sustainable future.

WEB LINKS:

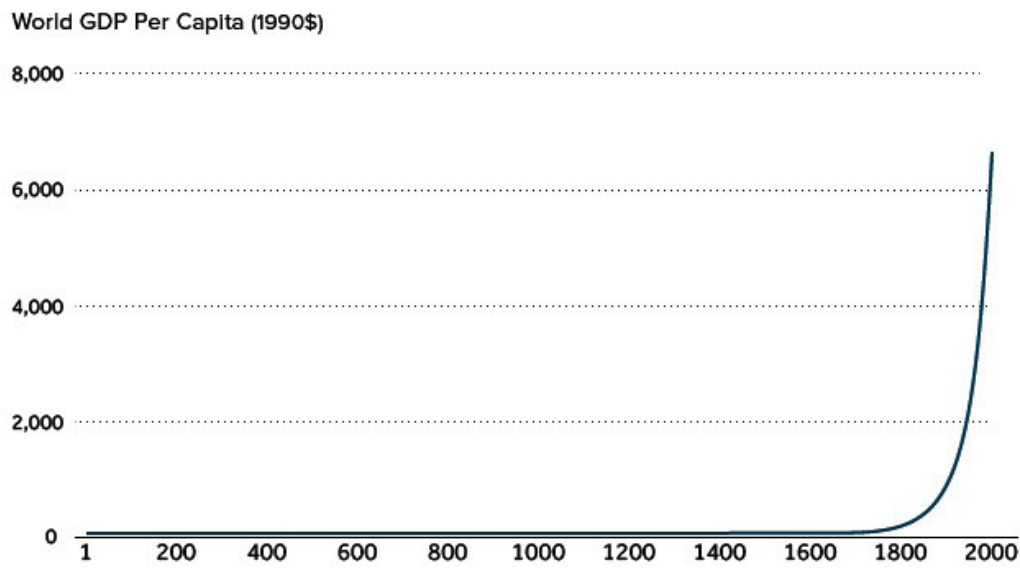
Supplemental Video: <https://www.youtube.com/watch?v=mjQf45Dhc-s>

All SmithGroup Submissions: <https://www.smithgroup.com/tackling-climate-justice-and-jobs-smithgroups-superstudio>



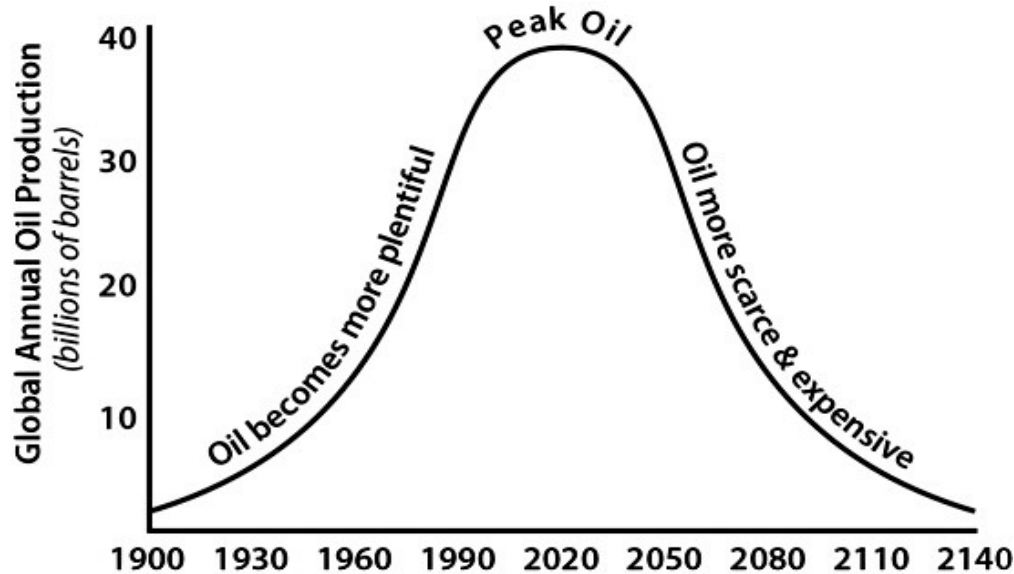
PERPETUAL ECONOMIC GROWTH IS IMPOSSIBLE AND UNSUSTAINABLE

FOUR FOUNDATIONAL LIMITS:



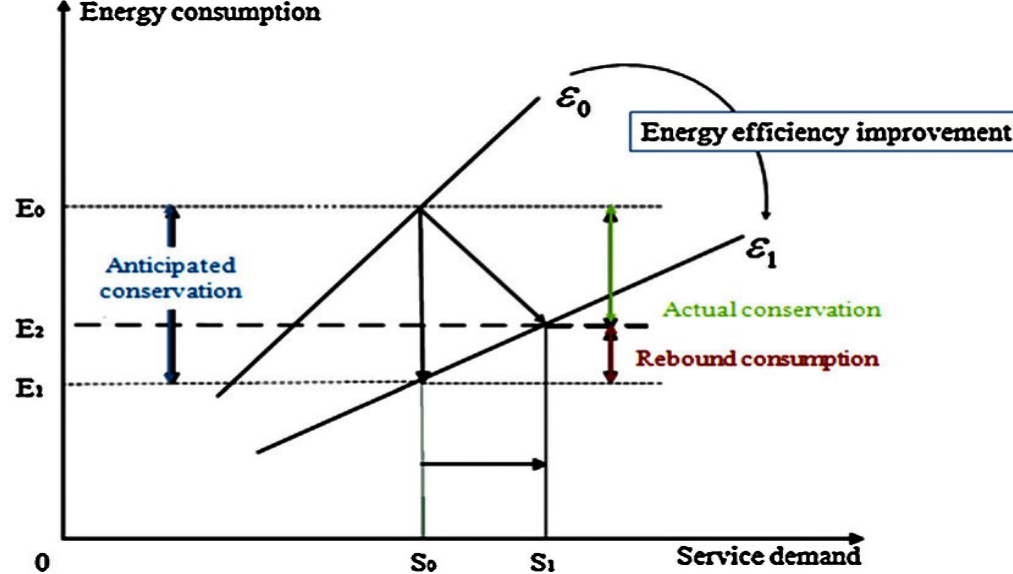
1. CONTINUOUS GROWTH

Most of the world's infrastructure and economies are designed for and require continuous growth, which is dependent on the widespread availability of cheap energy and materials.



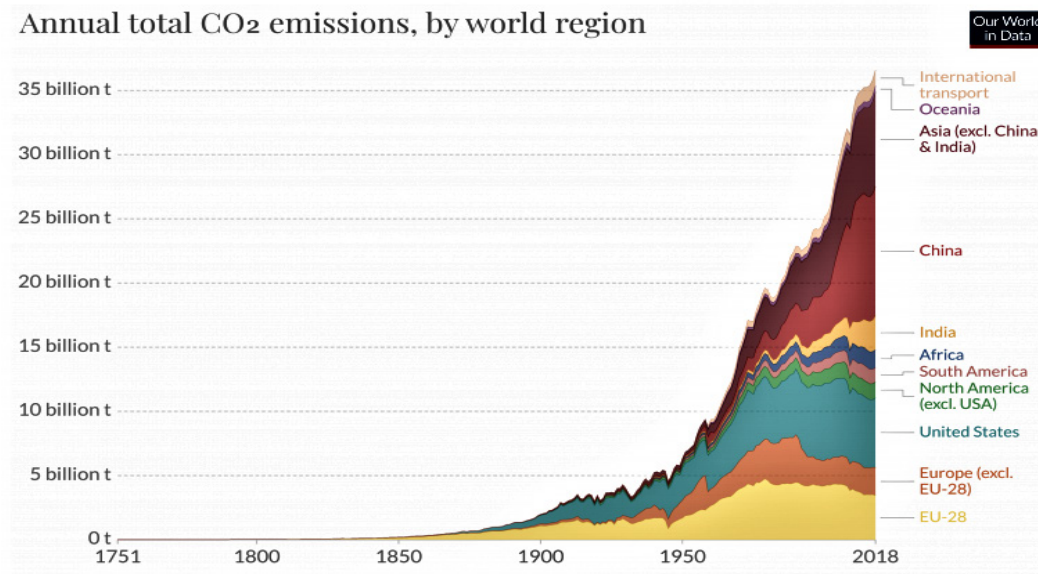
2. FINITE RESOURCES

Fossil fuels, the world's resources, and the space to cheaply dispose of waste are inherently finite.



3. DIMINISHING RETURNS

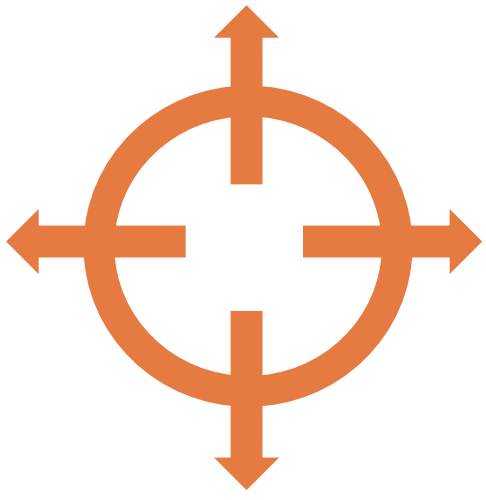
Technological solutions are subject to the rebound effect (increased efficiency only leads to more, cheaper consumption) and to diminishing returns.



4. RISING EMISSIONS

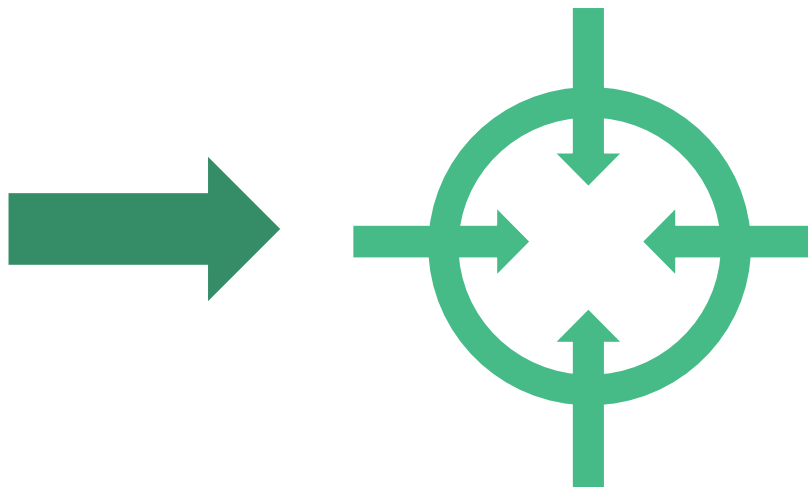
Despite the development of sustainable technology, global carbon emissions continue to rise yearly, indicating we will not avoid the most severe impacts of climate change.

TRANSITION IS INEVITABLE, BUT WITH PREPARATION IT CAN BE A POSITIVE CHANGE



GLOBALIZATION

- Concentrated wealth and political power
- Cheap and abundant raw materials and energy
- Intensive commercialization
- Displaced wastes
- Abstract forms of communication



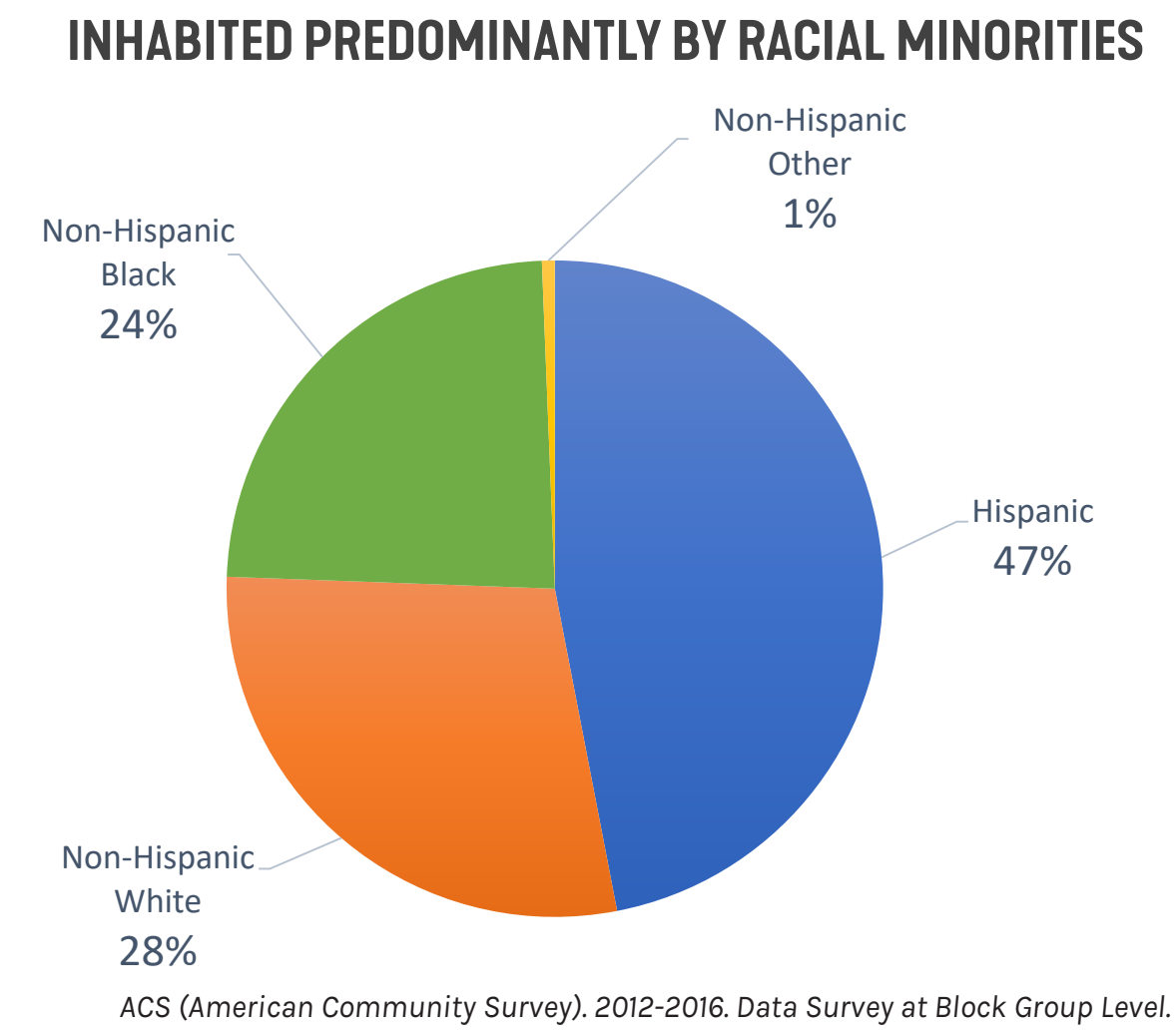
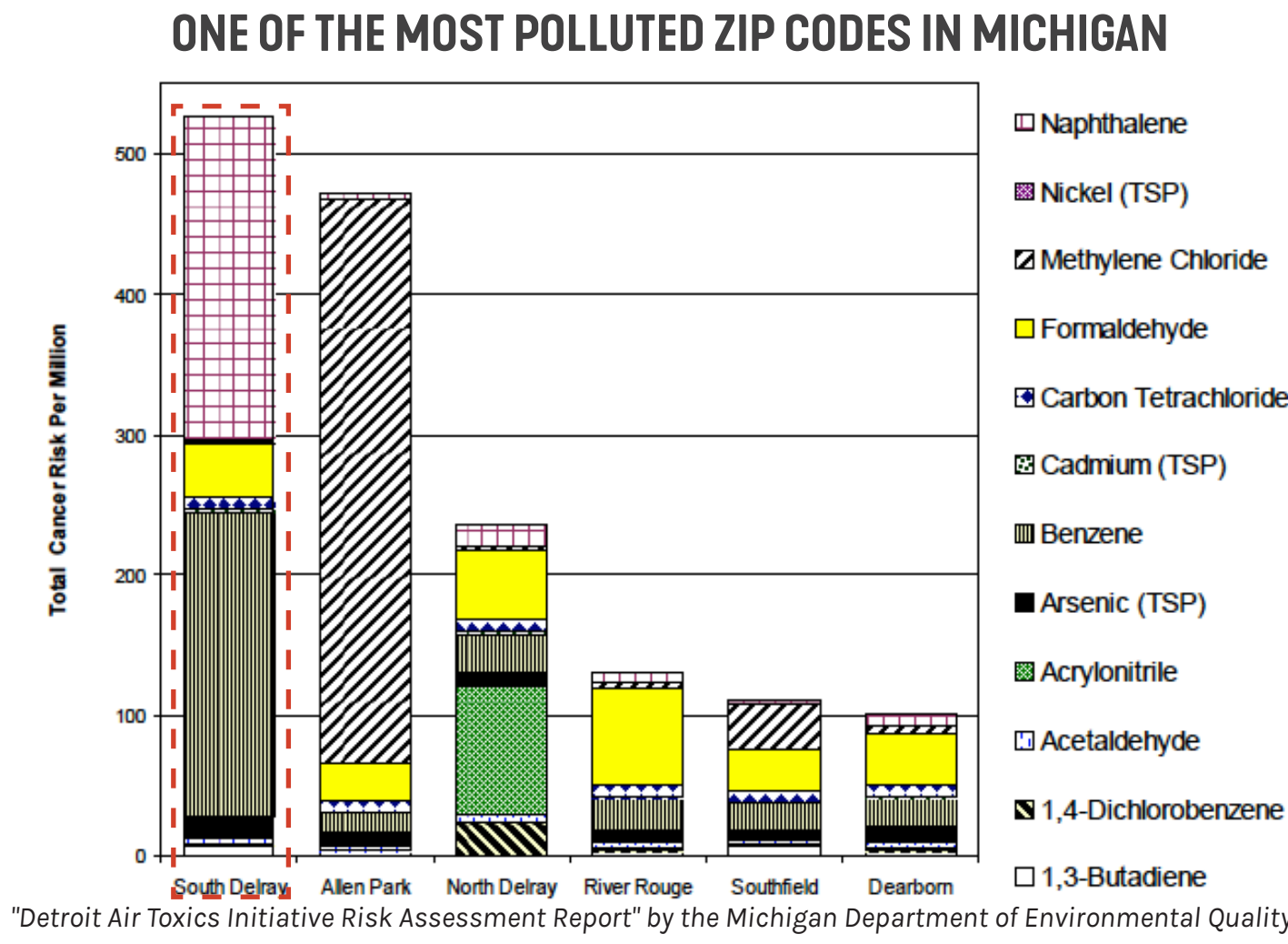
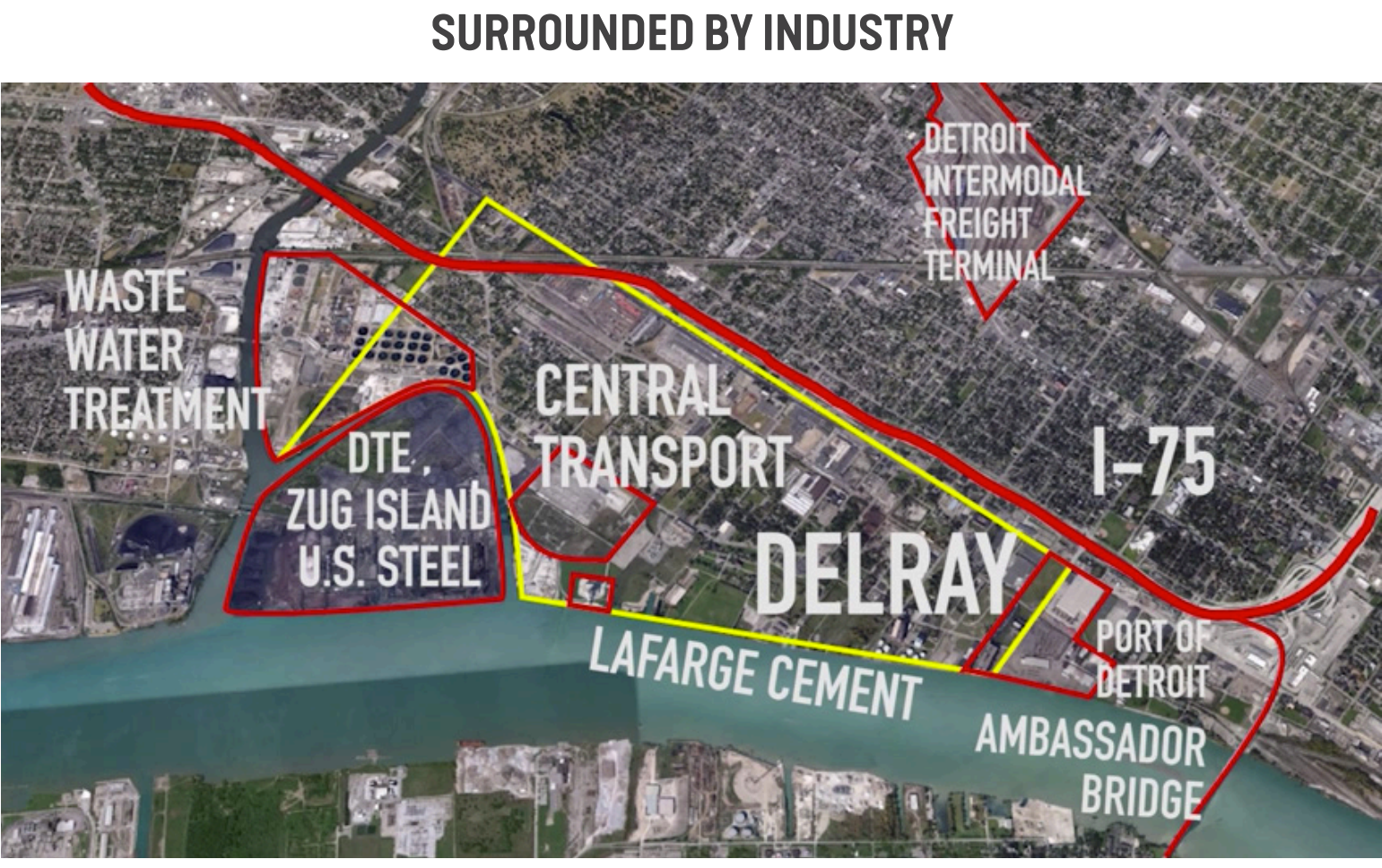
LOCALIZATION

- Widely distributed authority and leadership
- More sustainable use of natural energy sources and materials
- Personal proficiency
- Community self-reliance

The Localization Reader: Adapting to the Coming Downshift (De Young, Princen, 2012)

DELRAY NEIGHBORHOOD (DETROIT, MI)

HOW CAN THIS PHILOSOPHY HELP ONE OF THE NATION'S MOST DISENFRANCHIZED COMMUNITIES TRANSITION TO A SUSTAINABLE FUTURE?



MEDIAN HOUSEHOLD INCOME

~\$22,500

POPULATION

~1,800

LANGUAGE (% WITH LIMITED ENGLISH)

~4%

EDUCATION (% WITH A BACHELOR'S DEGREE OR HIGHER)

~2%

2020 Census Block Groups 5249 & 5250

"The smell, the trucks, the fumes, it does kind of bother you once you really look at it. When I stand at the bus stop and look at the [industrial] plants and stuff, I'm like, wow, this is really dangerous to the environment and to the animals and the plants that are around me and my family."

-Taron S.

"It's like a ghost town compared to what it was. It was alive, this is dead. They let us go to ruin. There's a lot of good people still around. I wouldn't want to be nowhere else."

-Doug K. (above)

"I have been here in Delray for 20 years. The surrounding area [industry] doesn't define us. I think what defines us is community and sticking together, and we'd like to keep it that way."

-Selina C. (above with her 6 daughters)

"We are faced with the most chemicals and smoke and everything in this community that affects us. As a matter of fact, our kids have the highest rate of asthma in any part of the city and it's because of so many of the businesses and industries that have affected our quality of life."

-Reverend Jeffrey B.

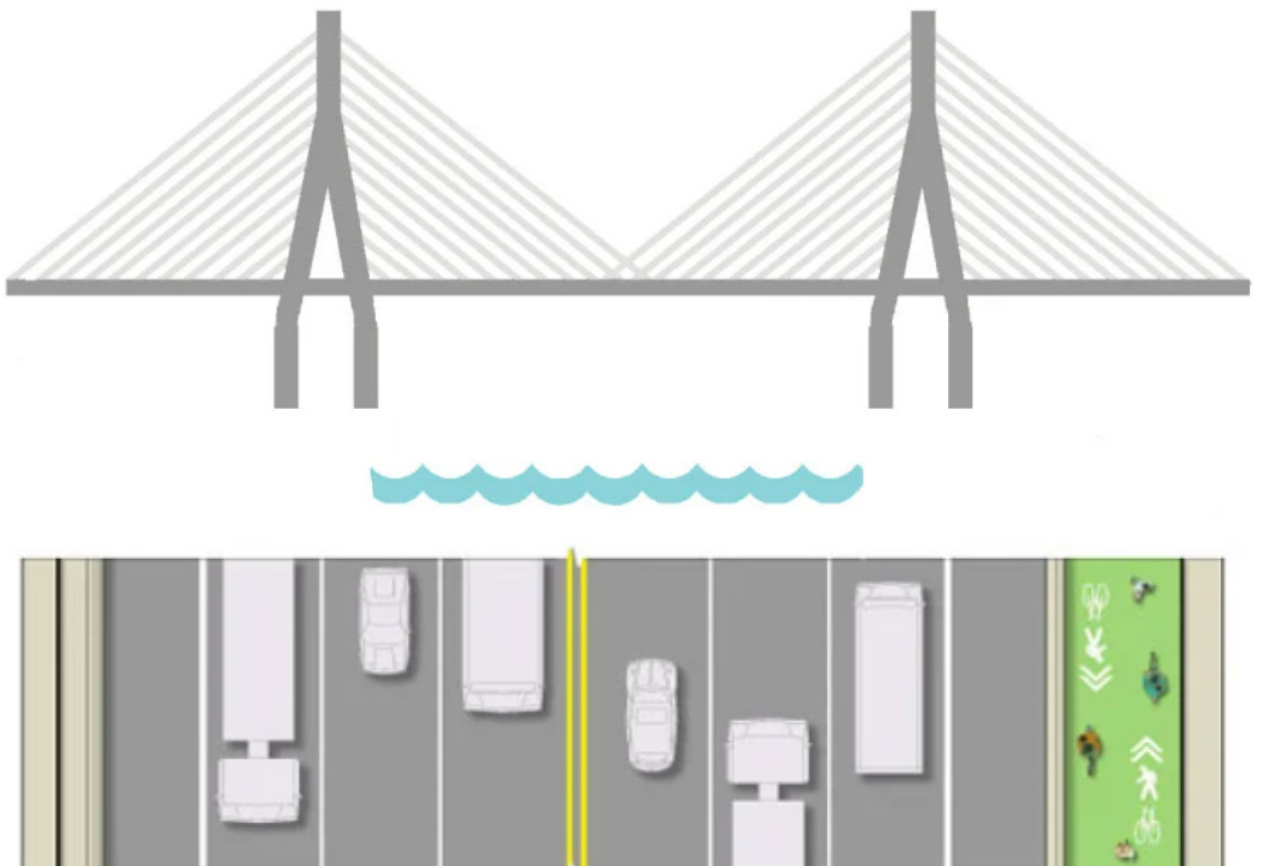
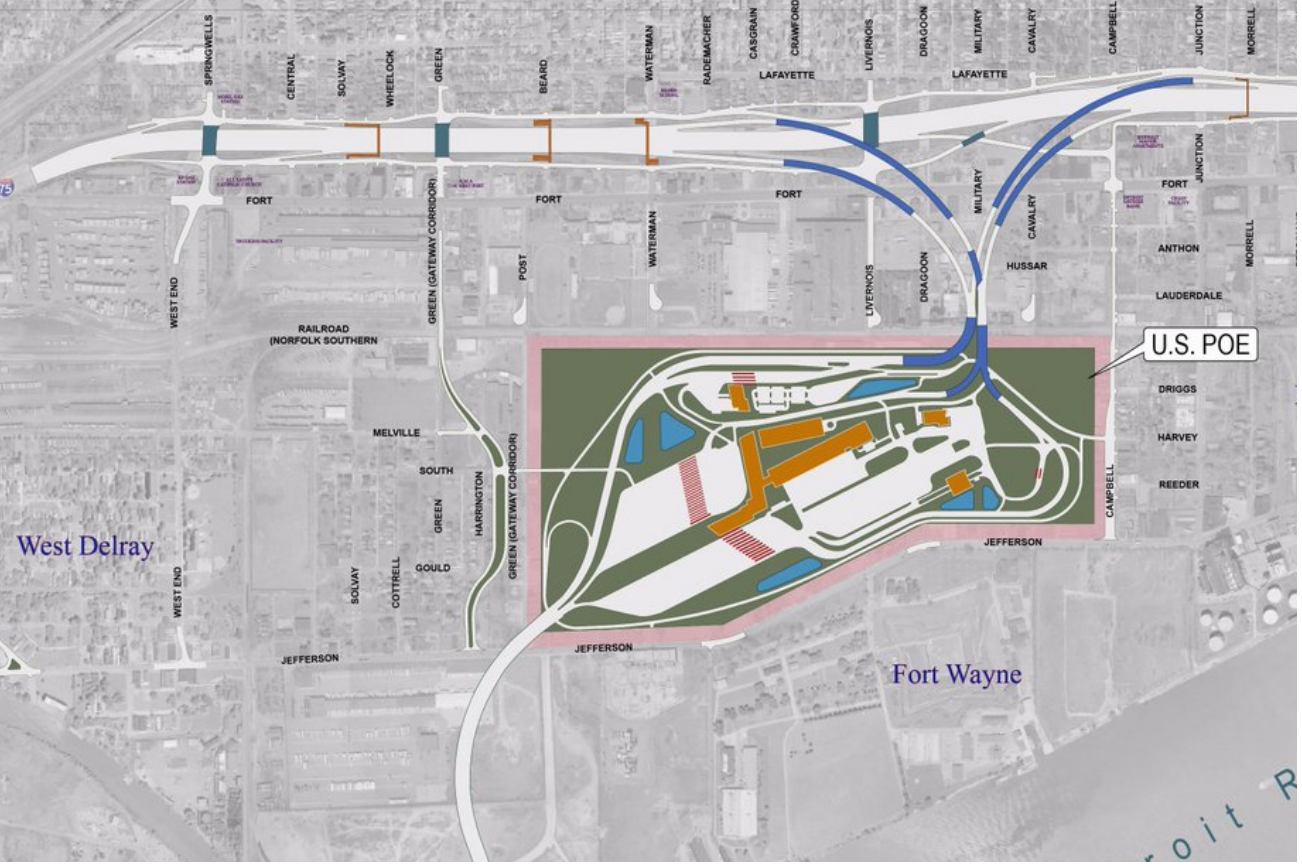
"My daughter drew this because she imagines that the bridges and the smog are eating up her house. This is my home. Those are my friends. We just have to see a little more quality of life."

-Patricia R. (above, translated from Spanish)

TRANSITION IS ALREADY OCCURING IN DELRAY, BUT THE COMMUNITY SHOULD BE DRIVING THE CHANGE



PORT OF ENTRY FOR NEW GORDIE HOWE INTERNATIONAL BRIDGE IS CURRENTLY UNDER CONSTRUCTION IN DELRAY, BRINGING INCREASED TRUCK TRAFFIC AND ECONOMIC ACTIVITY



"Bridge By The Numbers" by gordiehoweinternational.com

A LOCALIZED FUTURE FOR DELRAY



COMMUNITY RESILIENCY HUB

HOW CAN COMMUNITY MEMBERS BE EMPOWERED TO MEET THEIR NEEDS NOW AND THROUGH ANY FUTURE TRANSITIONS?

Adapted from Urban Sustainability Directors Network Resiliency Hub concept

POTENTIAL LOCATION:
REPURPOSE RECENTLY CLOSED COMMUNITY CENTER



POTENTIAL FUNDING SOURCES:
OPPORTUNITY FOR BIG BUSINESS TO REPAIR DAMAGE DONE BY THEIR INDUSTRY



HUB FOCUS AREAS
COMMUNITY WILL DETERMINE PRIORITIES



NEAR TERM: Provide support during hazard events
LONG TERM: Reclaim and redevelop adjacent industrial areas to be resilient natural spaces



NEAR TERM: Provide access to energy saving home consultation, build out small scale renewables
LONG TERM: Transition community to be fully off-grid with renewables



NEAR TERM: Distribute home composters, community recycling
LONG TERM: Develop waste to energy systems (biogas), utilize composting toilets



NEAR TERM: Distribute home air and water filters, advocate for pollution reduction from industry, utilize rainwater catchment
LONG TERM: Utilize home drinking water treatment



NEAR TERM: Host community meals, provide education for home gardening
LONG TERM: Build out community scale subsistence farming



NEAR TERM: Provide bike sharing and public transit passes
LONG TERM: Build out bike infrastructure and regional transit



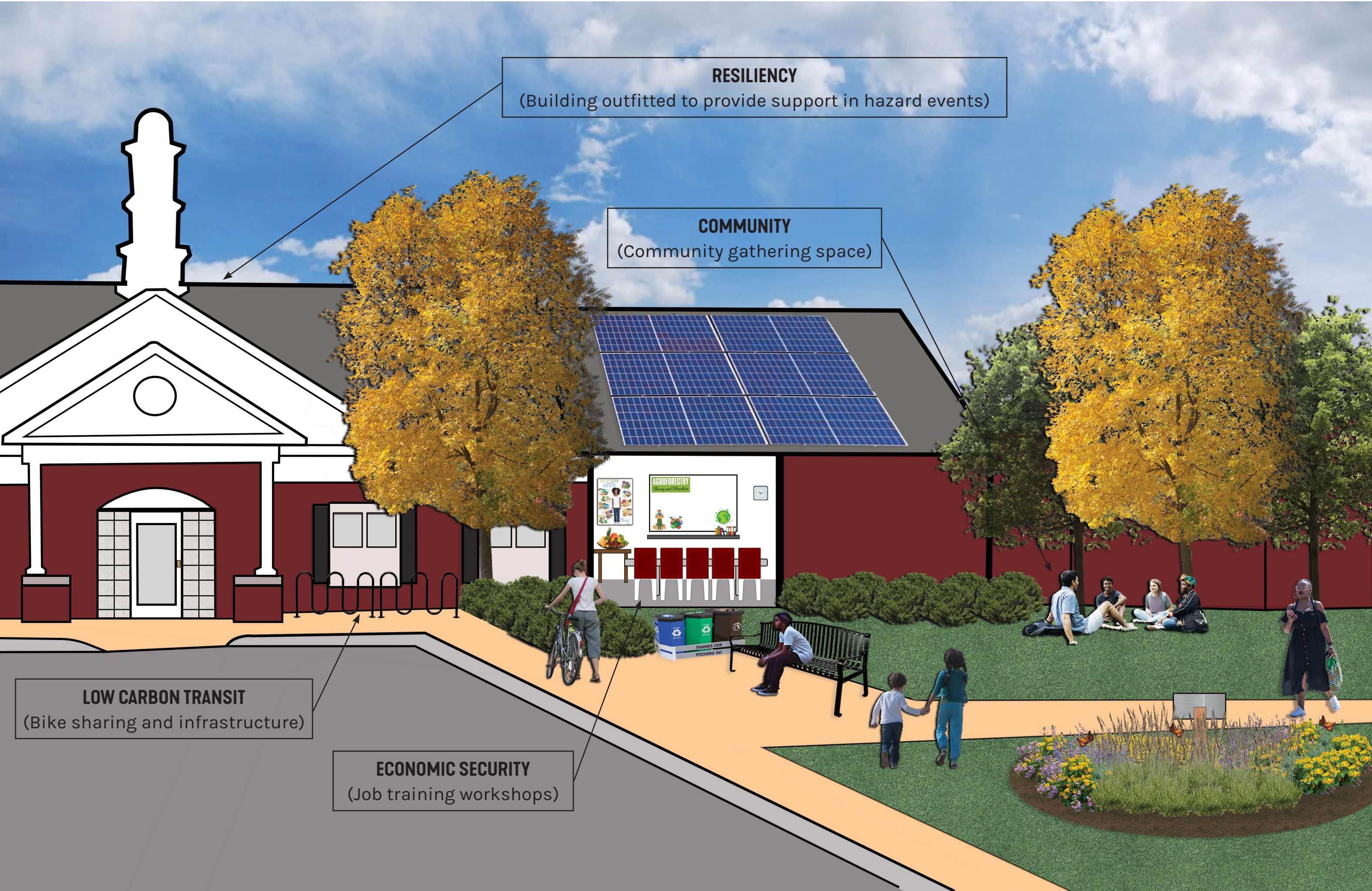
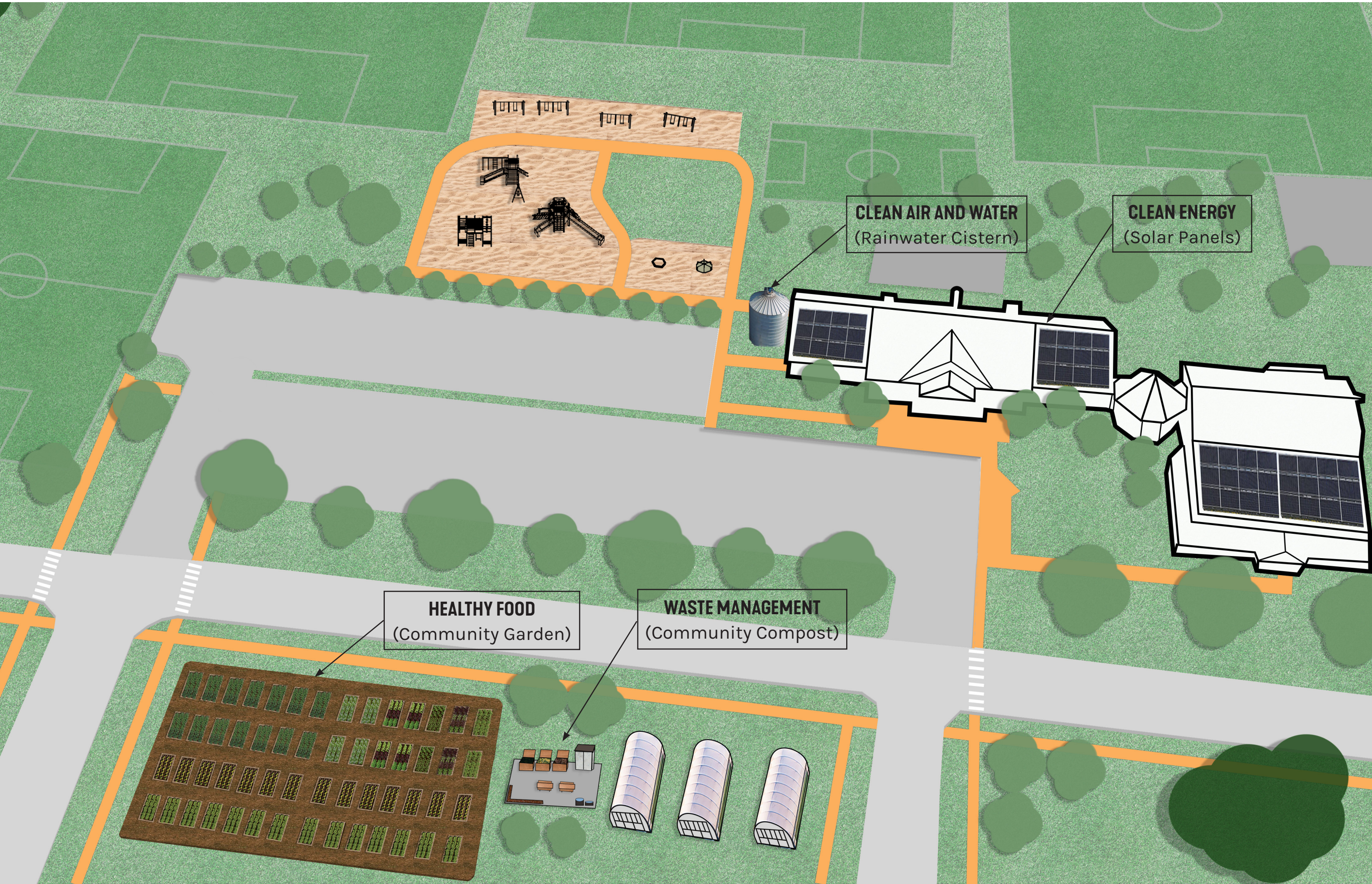
NEAR TERM: Host community events and childcare
LONG TERM: Establish community leadership body



NEAR TERM: Provide job and skills training and tool sharing
LONG TERM: Develop local artisan economy

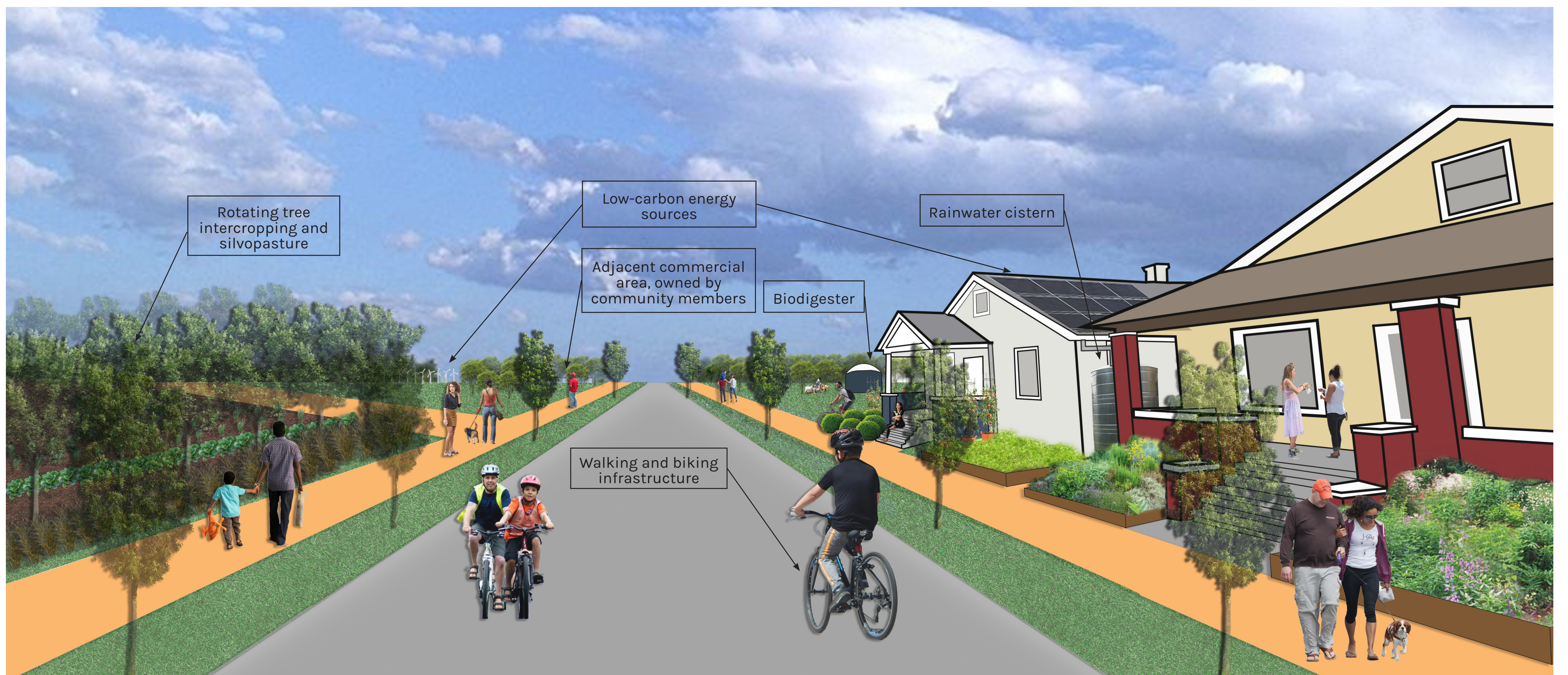
HUB DESIGN VISION

RENDERINGS SHOW WHAT COULD BE POSSIBLE, BUT COMMUNITY WILL BUILD OUT HOW THEY SEE FIT



A LOCALIZED FUTURE FOR DELRAY

WHAT COULD DELRAY LOOK LIKE IN A LOCALIZED, POST-FOSSIL FUEL FUTURE WITH THE RESOURCES TO REINVENT THEIR SPACE?



TREE INTERCROPPING
Planting crops between food producing trees creates habitat, improves production, and resiliency to extreme weather.

SILVOPASTURE
Integrating trees and pasture improves land health, increases carbon sequestration, increases productivity of the land, and increases resiliency.

BIOSAND WATER FILTRATION
Water filtered on site is not dependent on fossil fuels or pipe infrastructure.

RAINWATER HARVESTING
Collect rainwater to reduce flooding and reduce or eliminate dependence on centralized water systems.

WIND TURBINES
Wind turbines provide low-carbon energy and can be intermingled with agricultural or conservation land.

SOLAR PANELS
Local solar panels generate clean electricity without the need for a centralized distribution.

PASSIVE REFRIGERATION
Passive refrigeration methods eliminate the need for electricity and refrigerants, potent greenhouse gasses.

BIKE AND PEDESTRIAN INFRASTRUCTURE
Walking and biking is carbon-free, good for your body and mind, and does not contribute to air pollution.

COMPOSTING TOILET
Composting toilets do not use water, allow for the waste to be converted into fertilizer, and do not require the piping infrastructure.

BIODIGESTER
By composting in an anaerobic environment, a biodigester transforms organic waste into fertilizer and methane.

COMMUNITY

Rotate land to maximize production and land health

Whole food diet

Animal and plant waste

Drinking water

Water for washing

Fertilizer

Methane fuel

Human waste

Human waste

Carbon-free, healthy transit

Safely stored food

Low-carbon electricity

Sell excess production

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