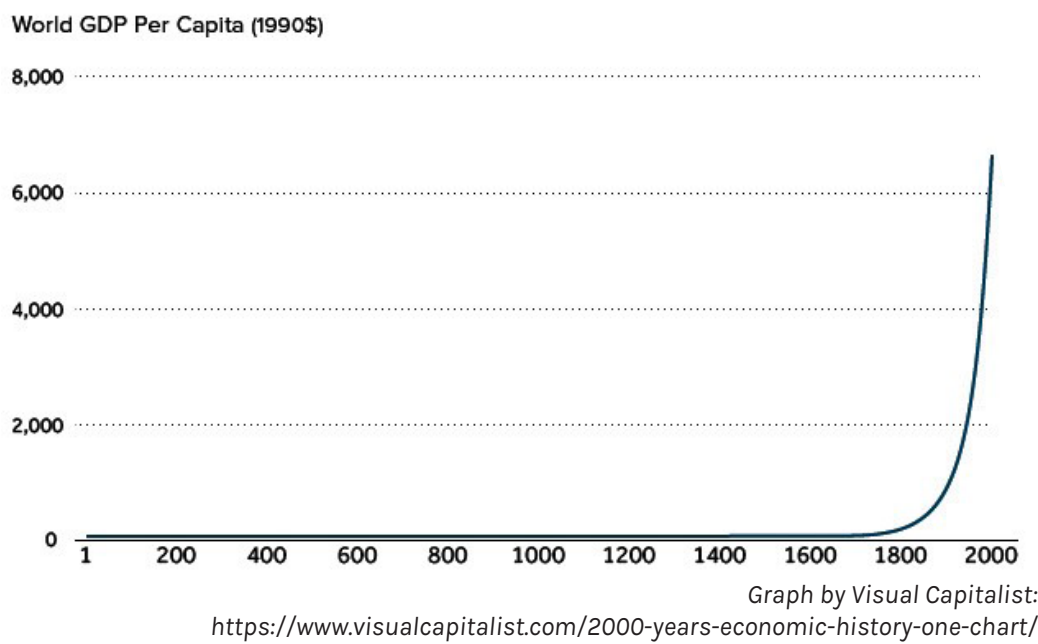




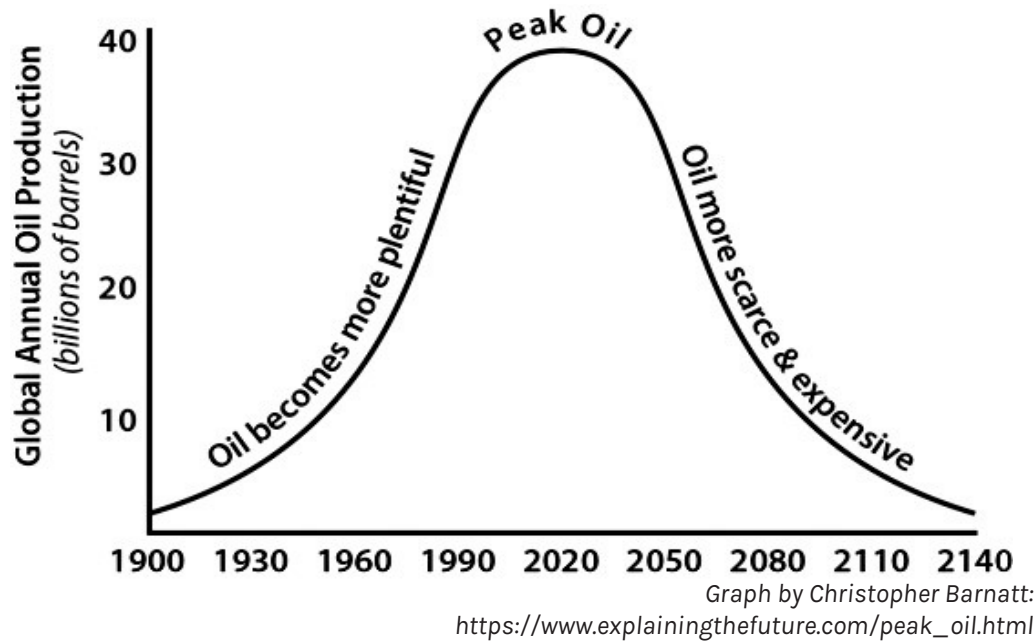
PERPETUAL ECONOMIC GROWTH IS IMPOSSIBLE AND UNSUSTAINABLE

FOUR FOUNDATIONAL LIMITS:



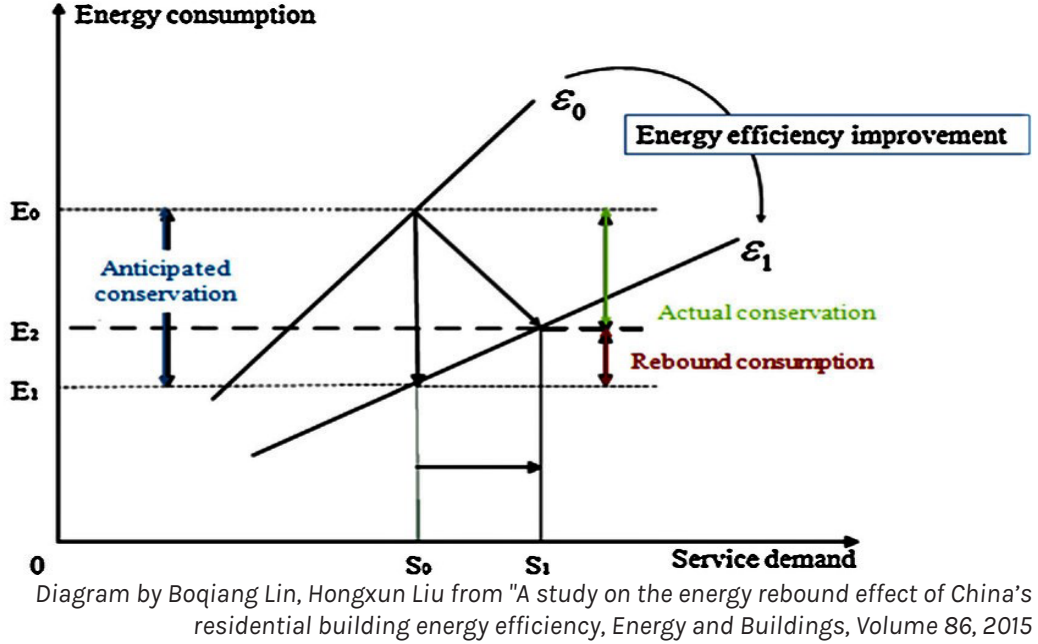
1. CONTINUOUS GROWTH

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.



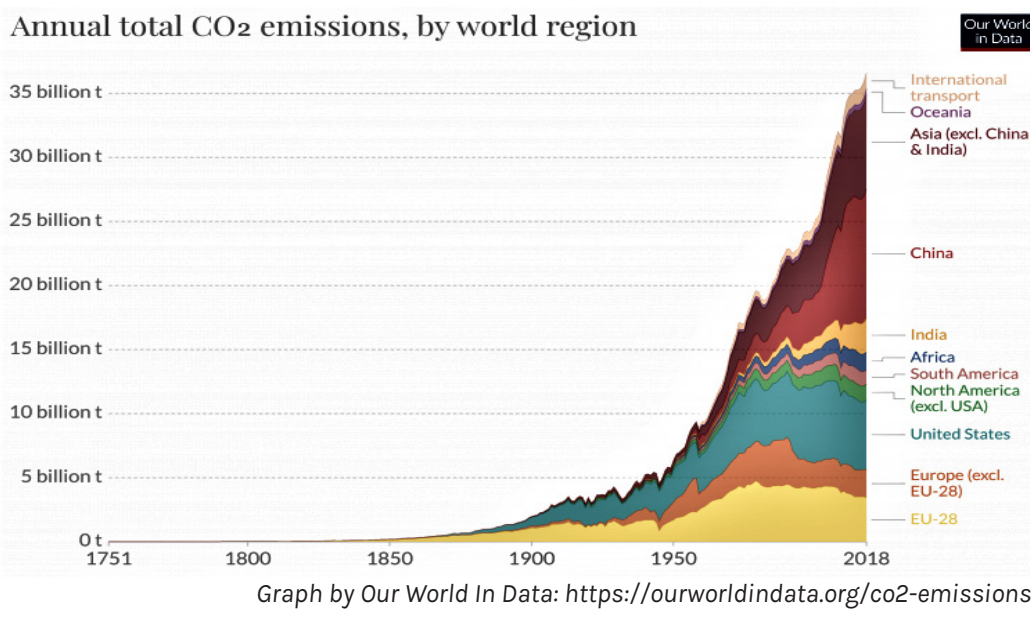
2. FINITE RESOURCES

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



3. DIMINISHING RETURNS

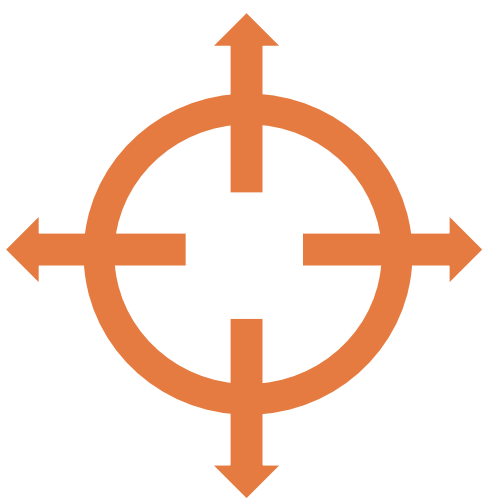
Technological solutions are subject to the rebound effect (increased efficiency only leads to more, cheaper consumption) and to diminishing returns.



4. RISING EMISSIONS

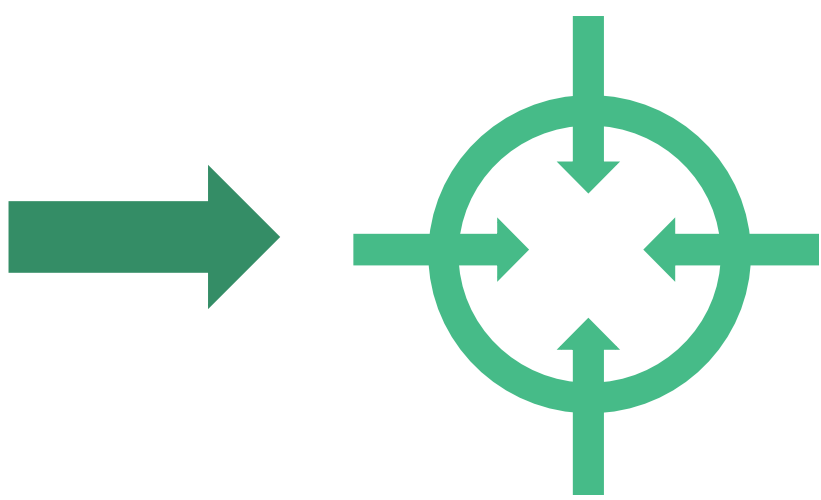
Despite the development of sustainable technology, global carbon emissions continue to rise yearly, indicating we will not avoid the most severe impacts of climate change.

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?

SURROUNDED BY INDUSTRY

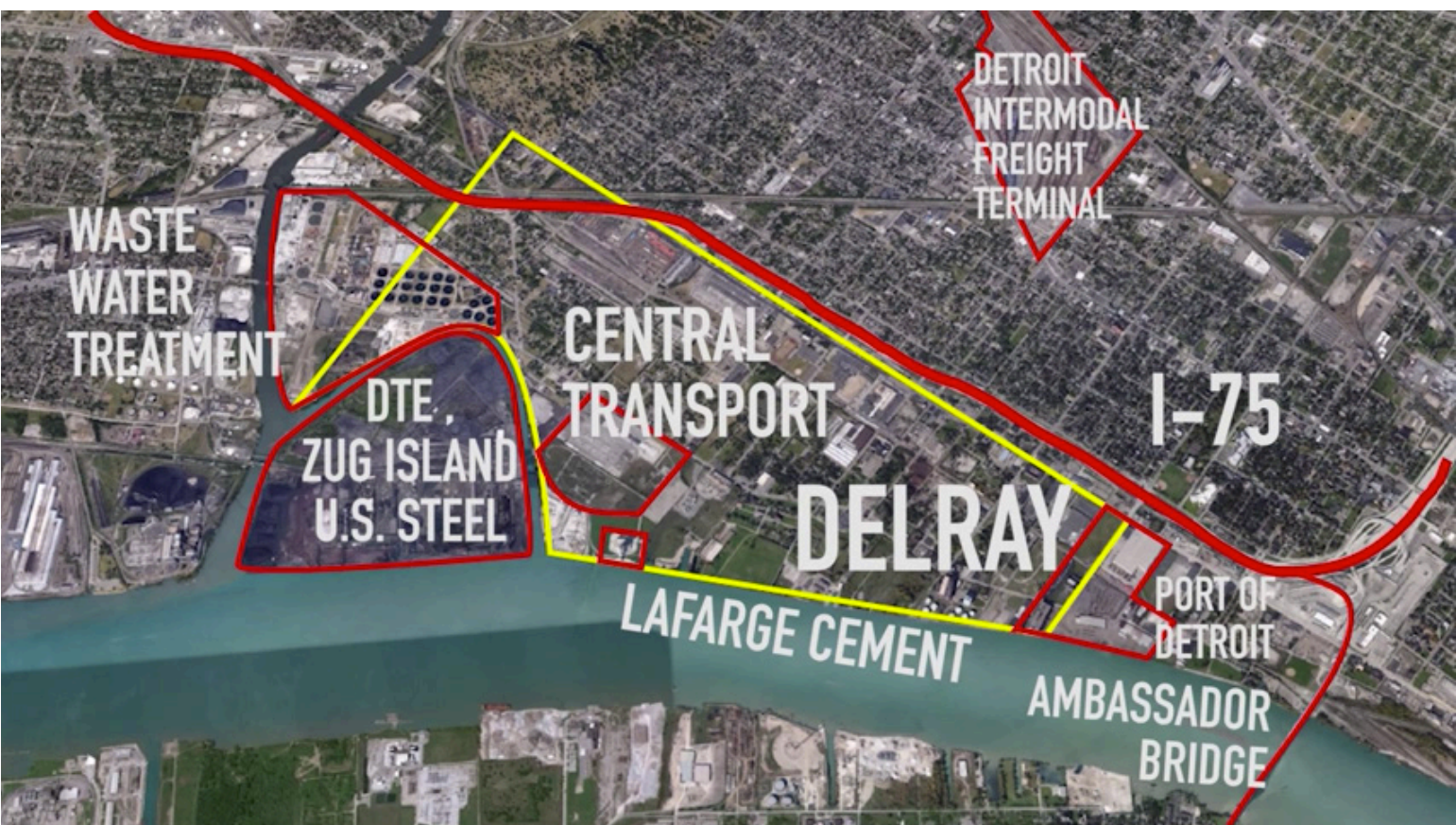
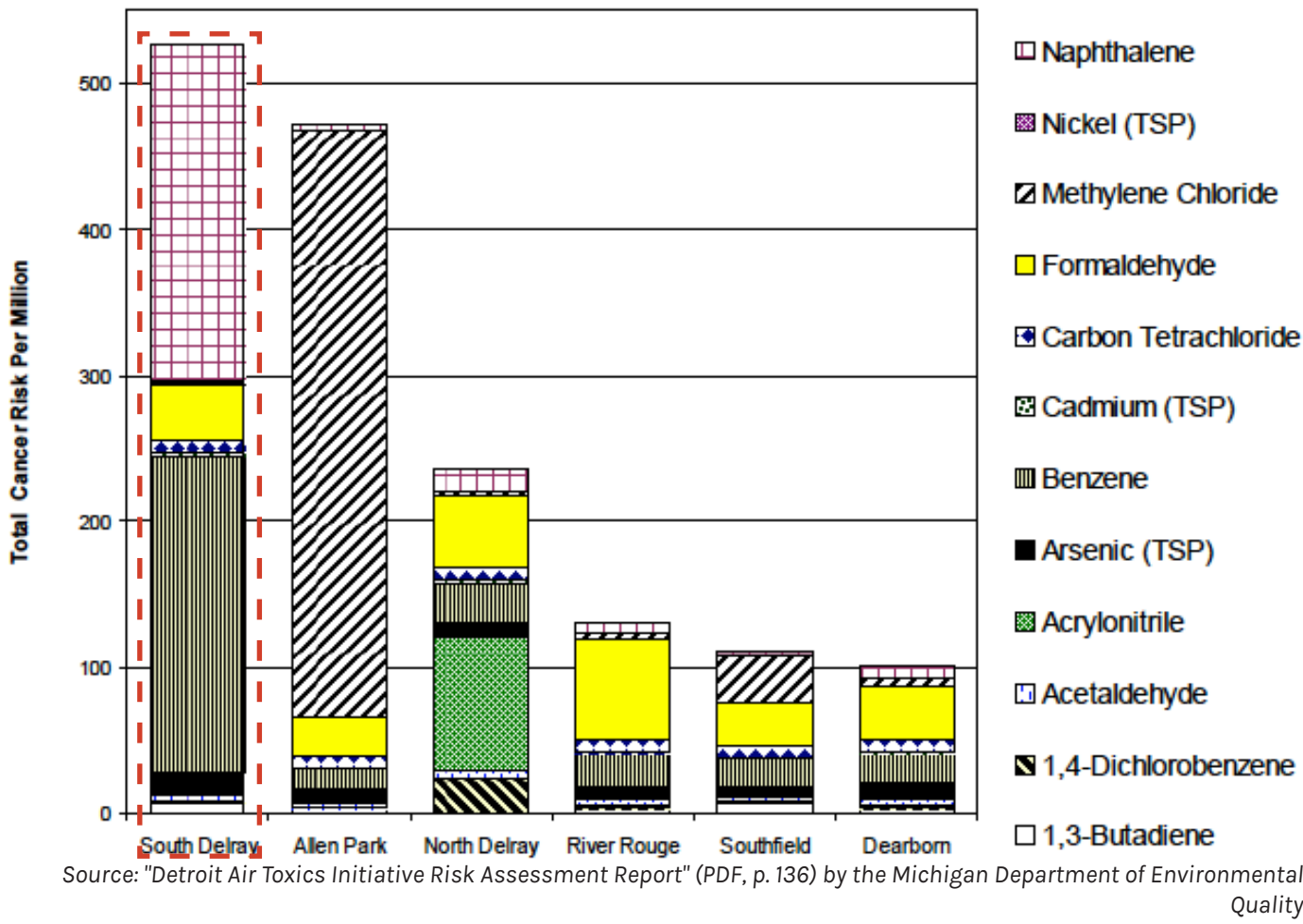
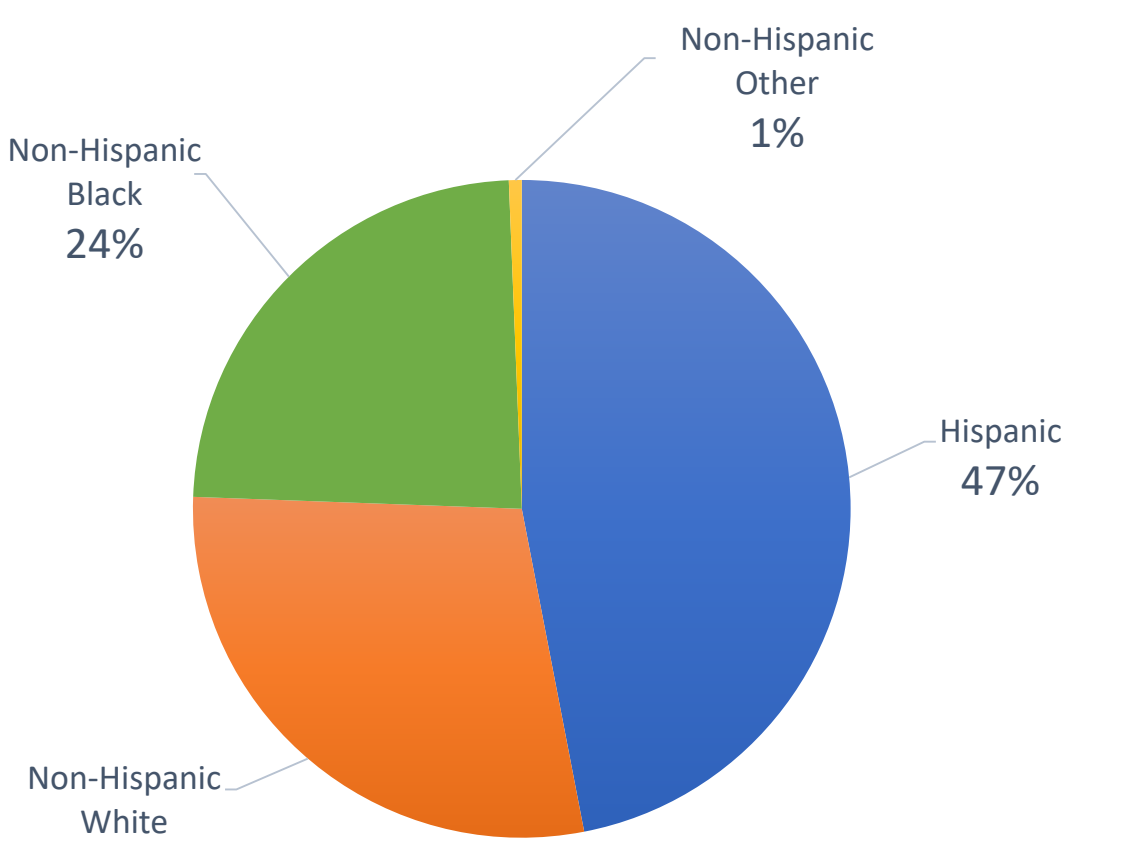


Image Snip from "Living with Industry: Detroit, Michigan" by Community Development Advocates of Detroit: https://www.youtube.com/watch?v=912_5Fjc0IE&t=401s

ONE OF THE MOST POLLUTED ZIP CODES IN MICHIGAN



INHABITED PREDOMINANTLY BY RACIAL MINORITIES



ACS (American Community Survey). 2012-2016. Data Survey at Block Group Level.

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



Photo by Christine Ferretti, The Detroit News

"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)



Image Snip from "Living with Industry: Detroit, Michigan" by Community Development Advocates of Detroit: https://www.youtube.com/watch?v=912_5Fjc0IE&t=401s

"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)

"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.



Image from <http://holycrosshungarian.com/>



Photo by Donna Terek, AP / The Detroit News

"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.



Image Snip from "Living with Industry: Detroit, Michigan" by Community Development Advocates of Detroit: https://www.youtube.com/watch?v=912_5Fjc0IE&t=401s

"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)



Photo by Lester Graham, Michigan Radio.

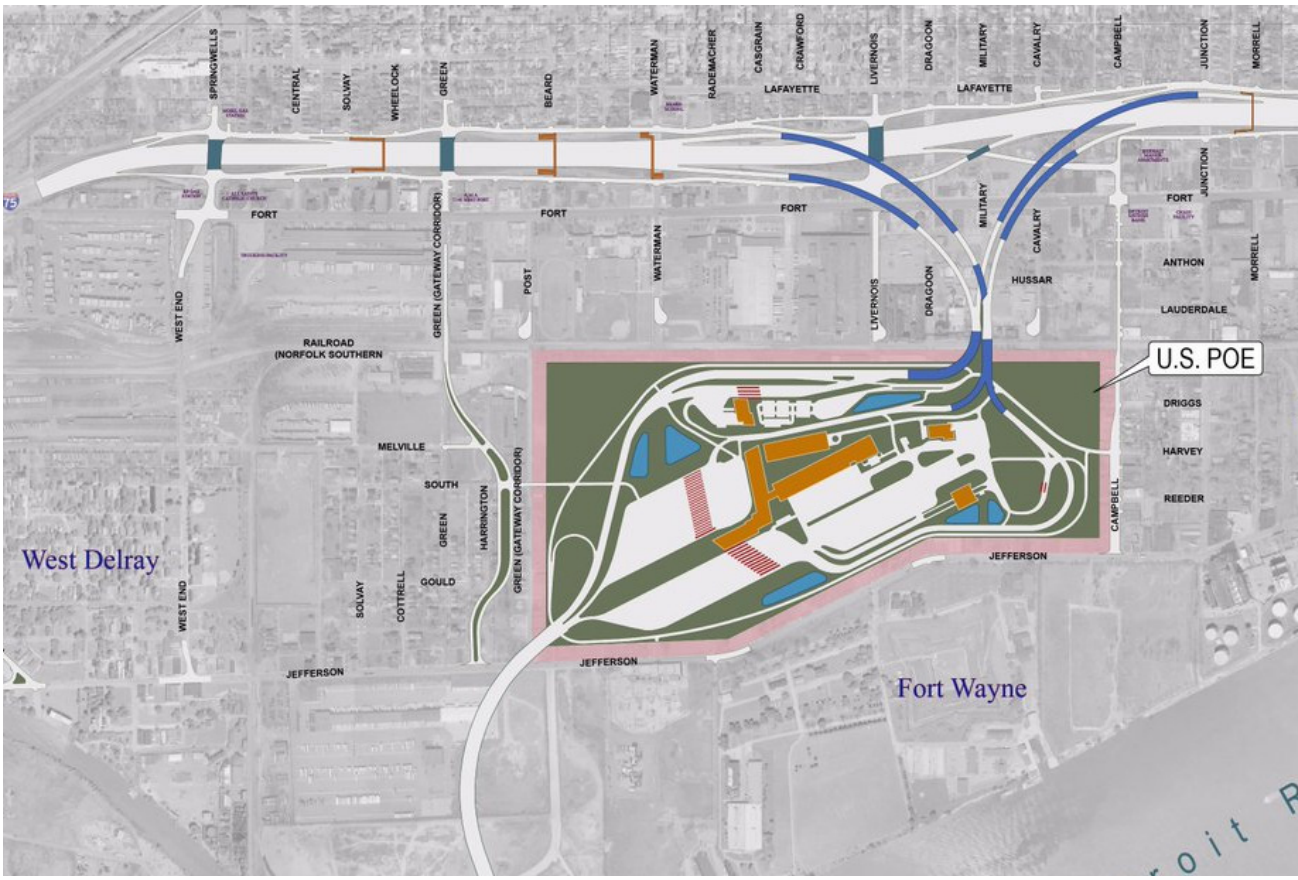
TRANSITION IS ALREADY OCCURING IN DELRAY, BUT THE COMMUNITY SHOULD BE DRIVING THE CHANGE

STEEL PLANT AND POWER PLANT ADJACENT TO COMMUNITY WERE RECENTLY RETIRED

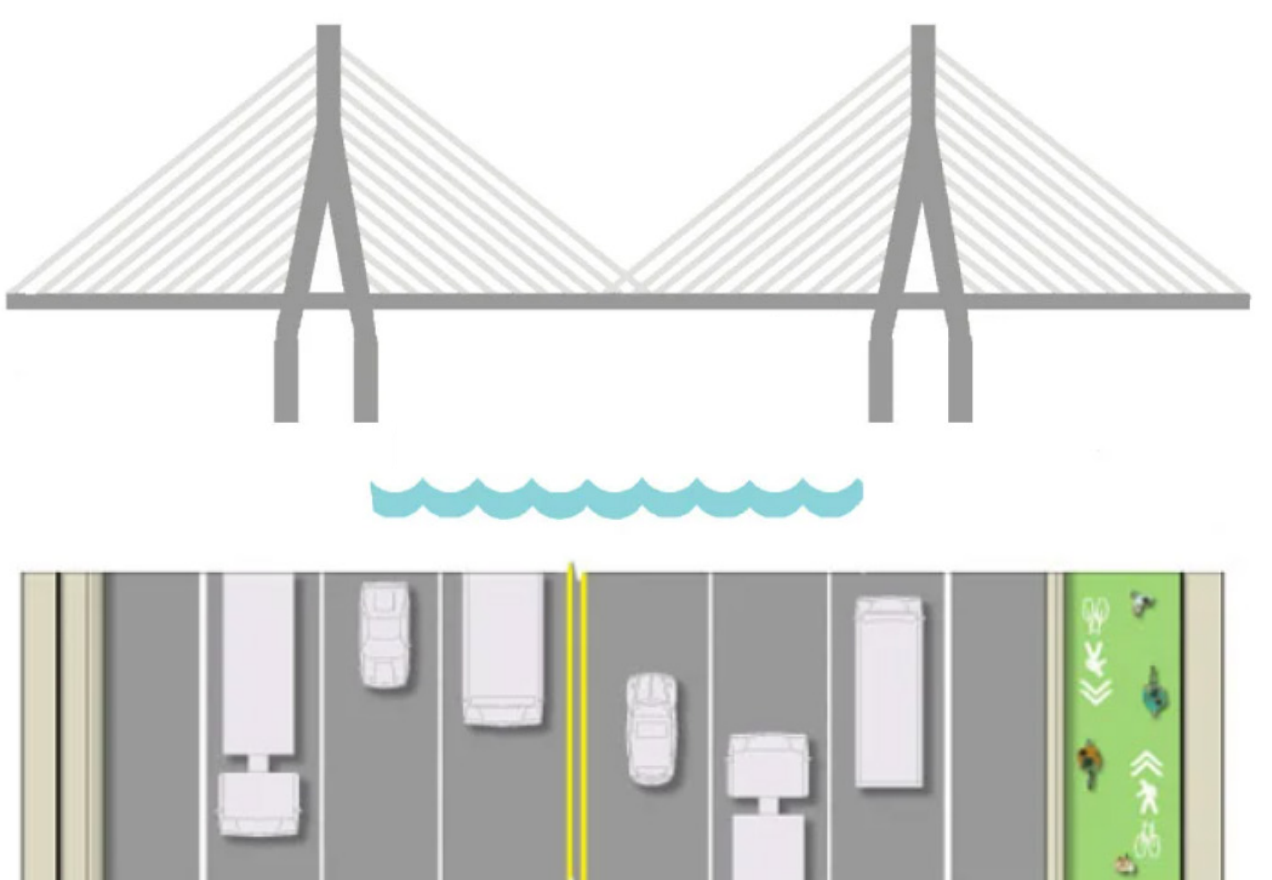


Photo by Ted Auch, FracTracker: <https://www.fractracker.org/tag/michigan/#mi-smap>

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



Graphic courtesy of GordieHoweInternationalBridge.com



"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



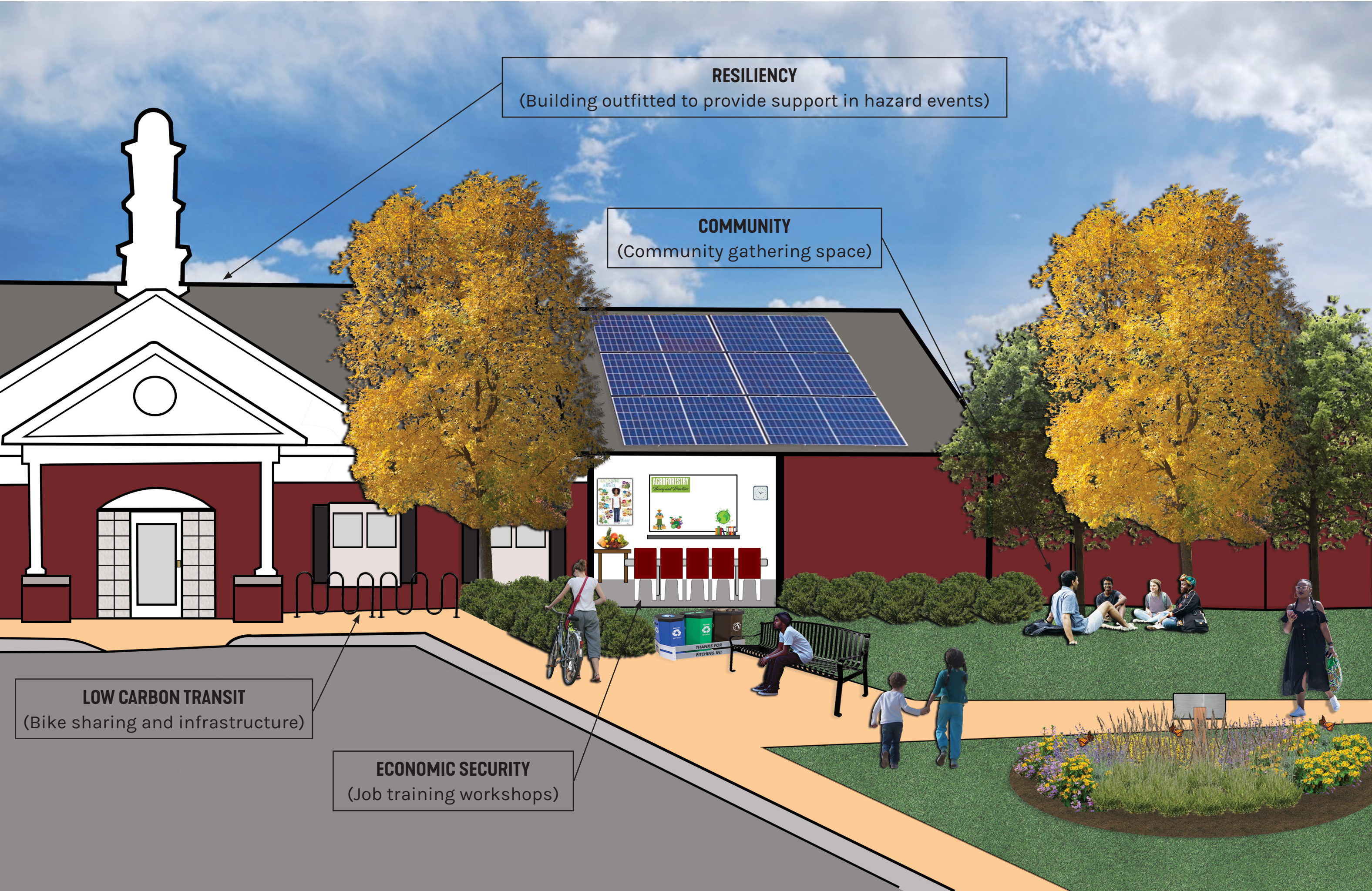
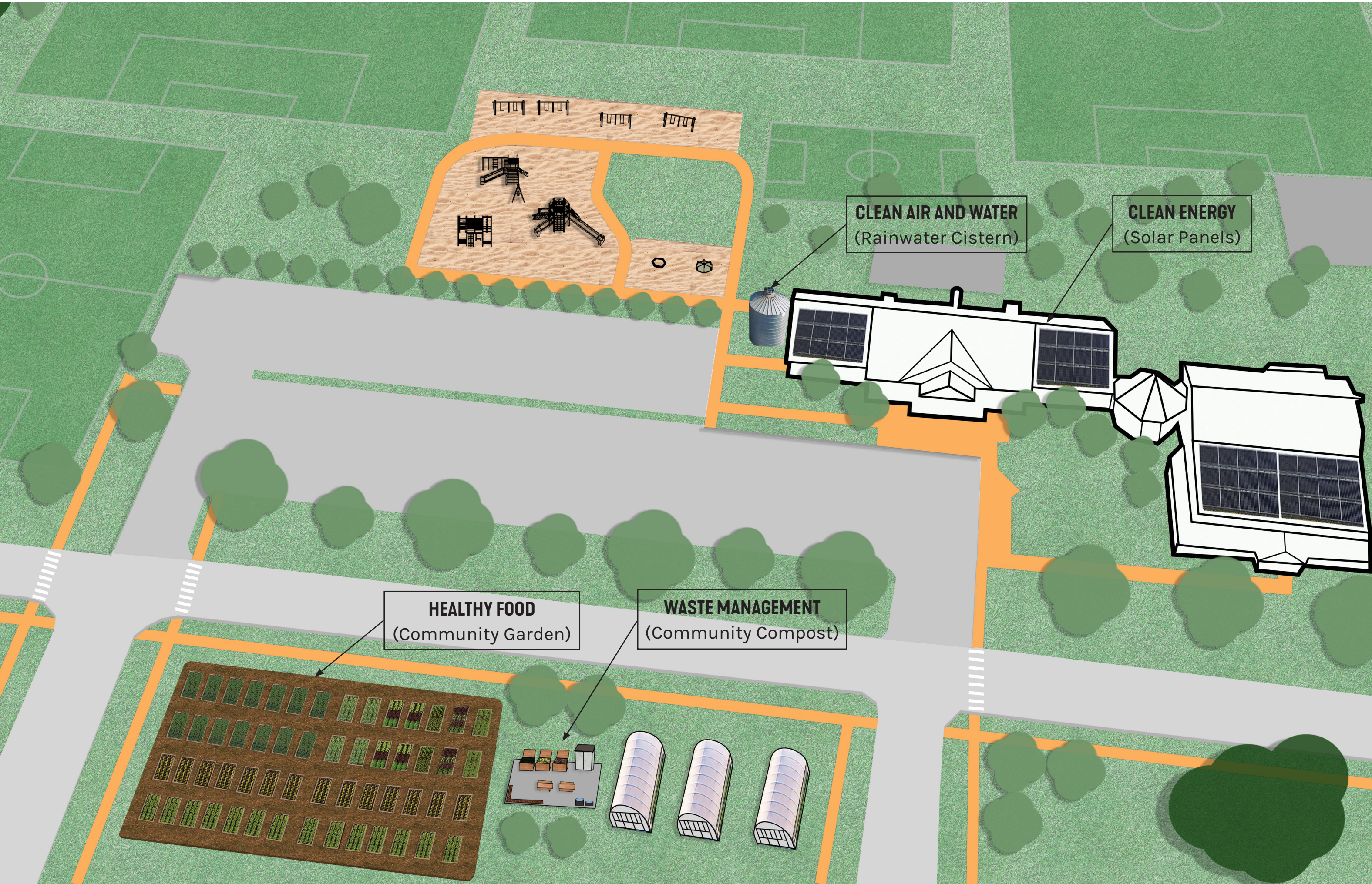
Image from People's Community Services of Metropolitan Detroit

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



HUB DESIGN VISION

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



HUB FOCUS AREAS

COMMUNITY WILL DETERMINE PRIORITIES



Image from stock.adobe.com

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



Image from stock.adobe.com

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



Photo by Noah Buscher, upsplash.com

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



Image from stock.adobe.com

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



Image from stock.adobe.com

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



Image from stock.adobe.com

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



Image from stock.adobe.com

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



Image from stock.adobe.com

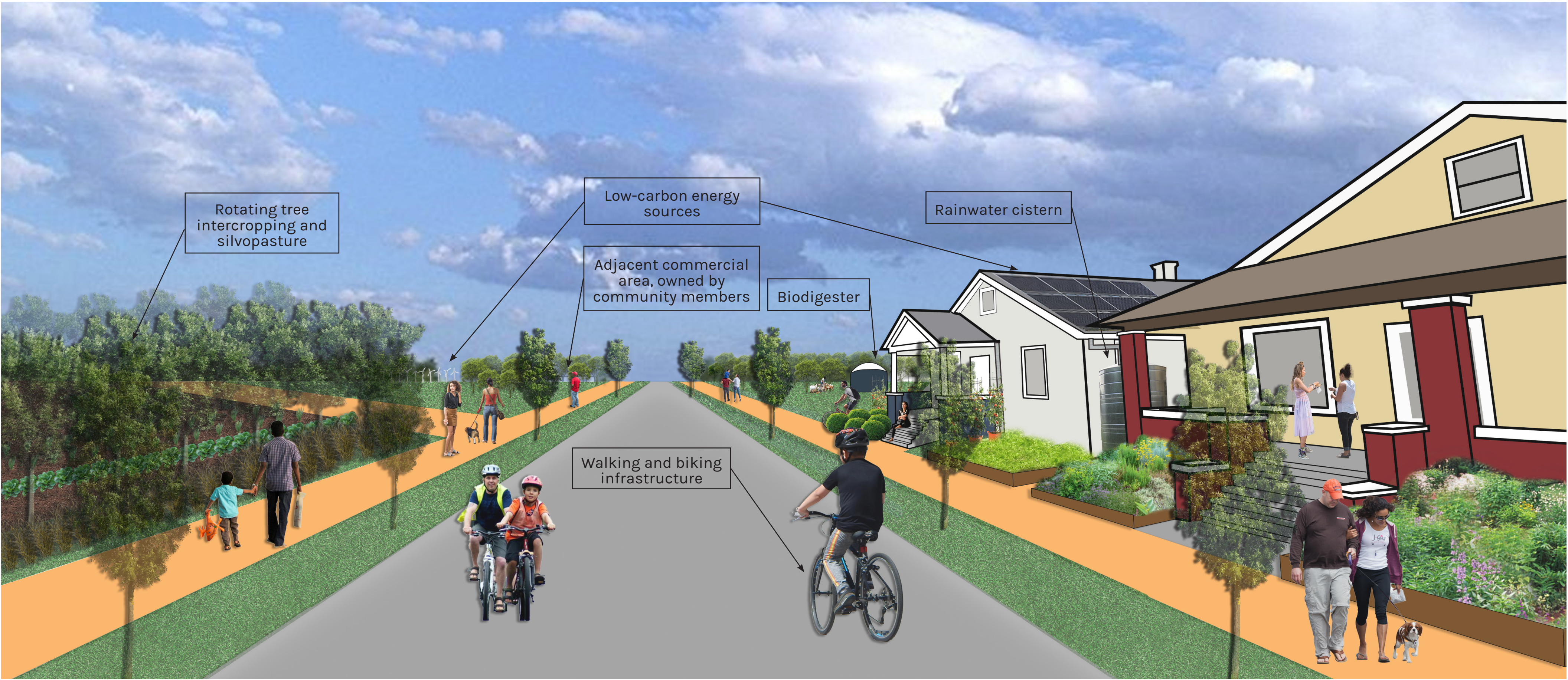
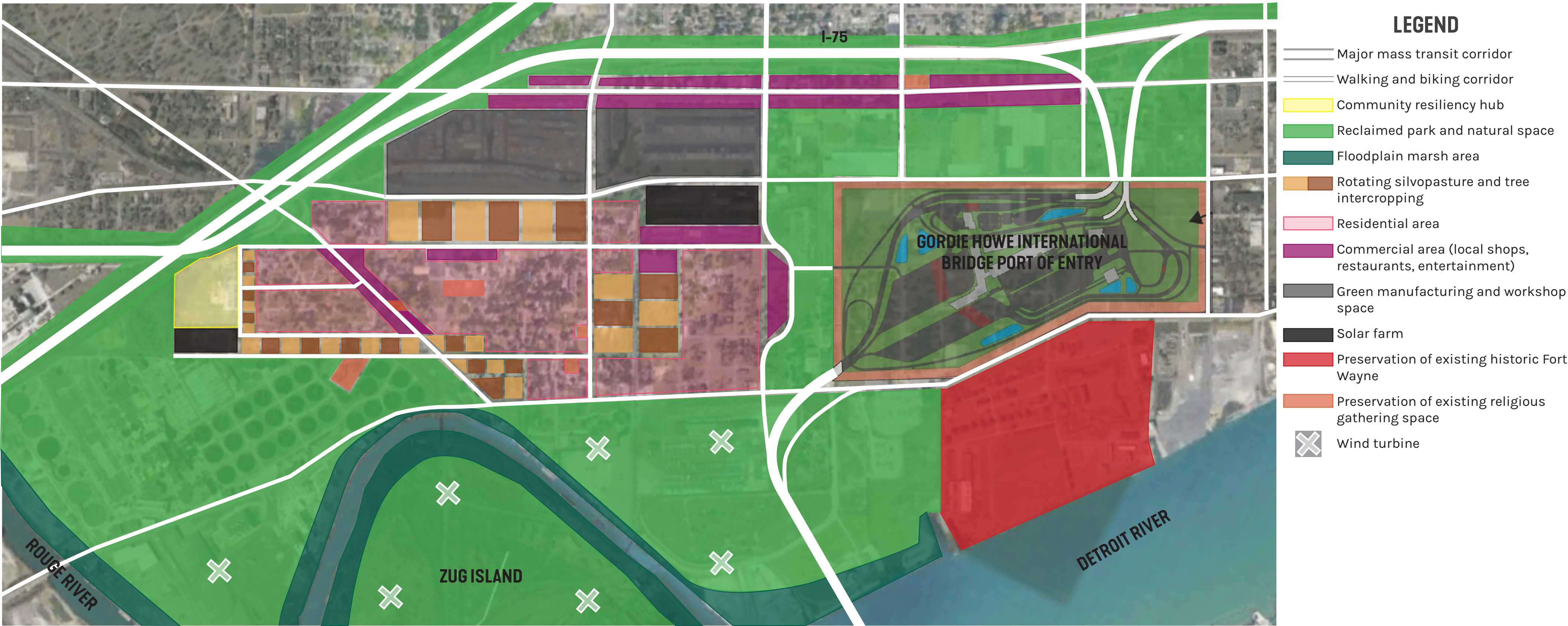
NEAR TERM: Provide job and skills training and tool sharing
LONG TERM: Develop local artisan economy

A LOCALIZED FUTURE FOR DELRAY

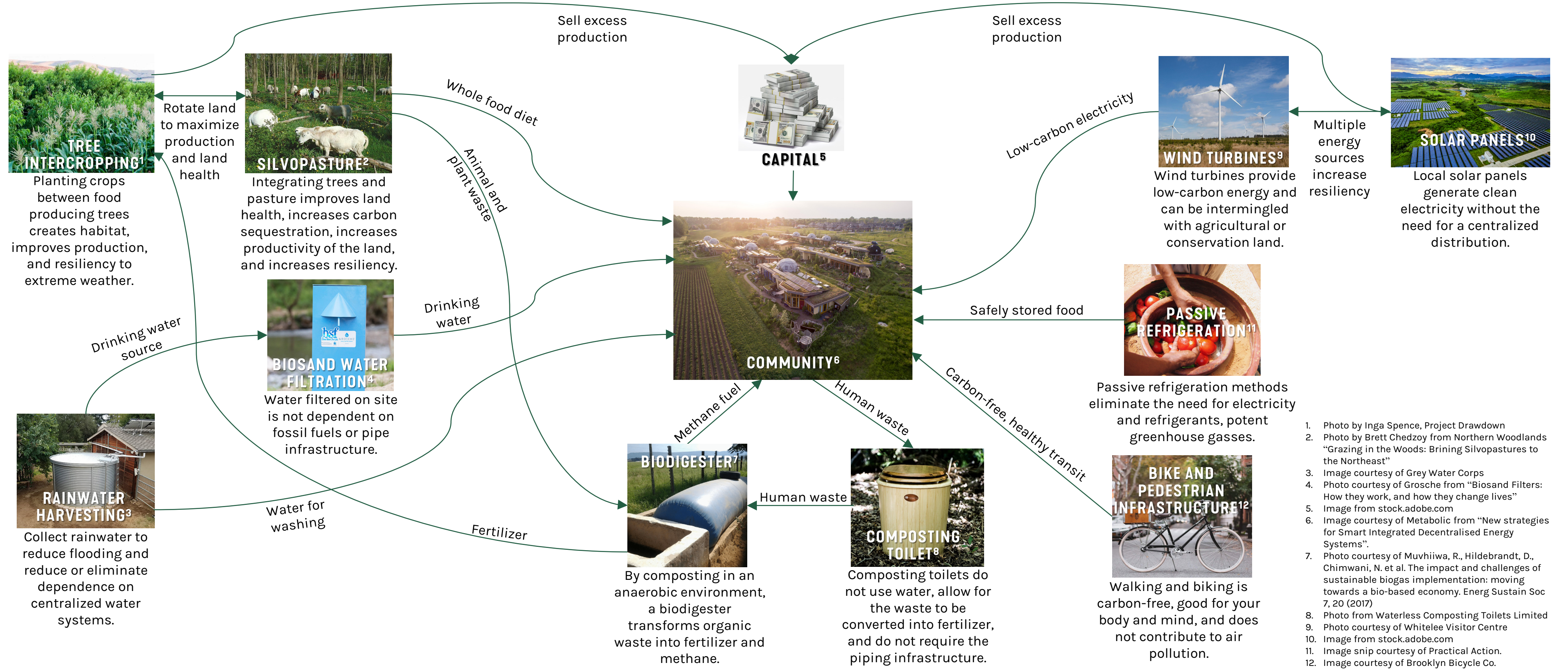


LOCALIZED VISION FOR THE FUTURE

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



HOW DO THE ELEMENTS OF THE DESIGN WORK TOGETHER TO MEET THE COMMUNITY'S NEEDS IN A SUSTAINABLE WAY?



A LOCALIZED FUTURE FOR DELRAY