



SESSION 1B:

Repurposing Vacant Land for Long-term Resiliency

3:50 - 4:50

SPEAKERS

Maria Galarza: City of Detroit Office of Sustainability

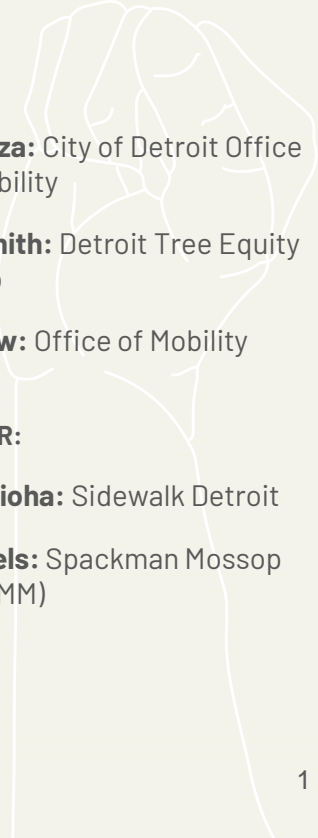
Whitney Smith: Detroit Tree Equity Partnership

Kristin Shaw: Office of Mobility Innovation

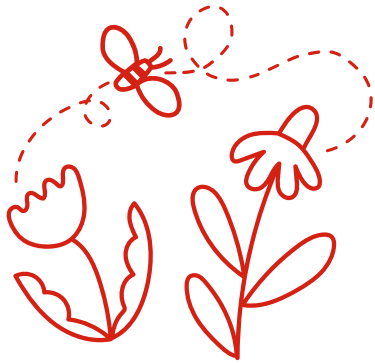
FACILITATOR:

Tommie Obioha: Sidewalk Detroit

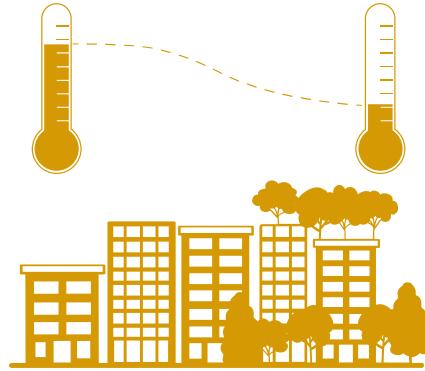
Wes Michaels: Spackman Mossop Michaels (SMM)



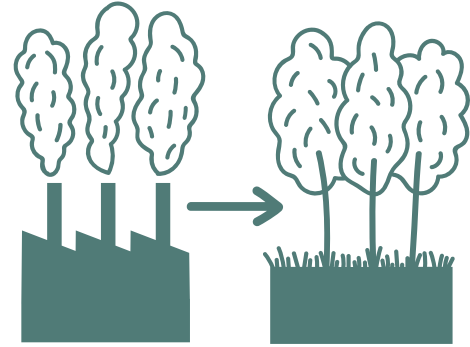
HOW CAN VACANT LAND SUPPORT RESILIENCY?



SUPPORT POLLINATORS



LOWER TEMPERATURES



CLEAN THE AIR

TYPES OF INTERVENTIONS FOR LONG TERM RESILIENCY



Image Source: [Callahan Meadow project, Detroit](#)

HABITAT RESTORATION

- Meadows
- Reforestation
- Flood/stormwater green infrastructure



Image Source: [Westmill Solar Cooperative](#)

RENEWABLE ENERGY

- Solar fields



Image Source: [Washington University in St. Louis](#)

CONNECTIVITY INFRASTRUCTURE

- Off street parking
- EV charging
- Mogo station
- Connector

WHICH SITES ARE GOOD FOR LONG TERM STRATEGIES?

- Sites **without** near term development opportunities
- **Larger sites** that with solar potential
- Areas that can **buffer** industrial sites or highways



RESIDENTIAL



PROPERTIES AMERICA



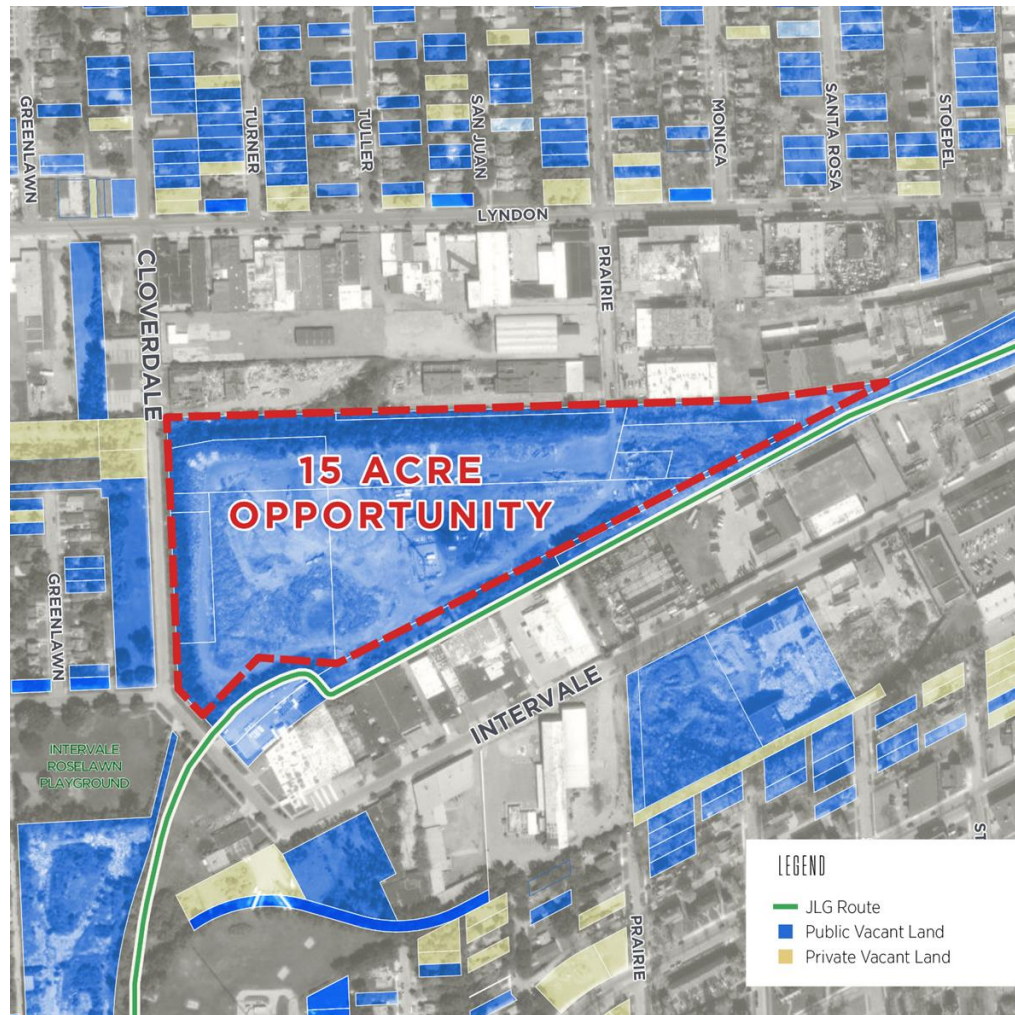
DEQUINDRE CUT BUFFER

EXAMPLE OF REPURPOSING VACANT LAND FOR CONNECTIVE INFRASTRUCTURE



The **Meade Cut-Thru** is a pathway that connects East Davison Village, Campau/Banglatown, and the Joe Louis Greenway on former vacant parcels.

Completed this Fall!



EXAMPLE SITE: LARGE GREENWAY ADJACENT INDUSTRIAL SITE

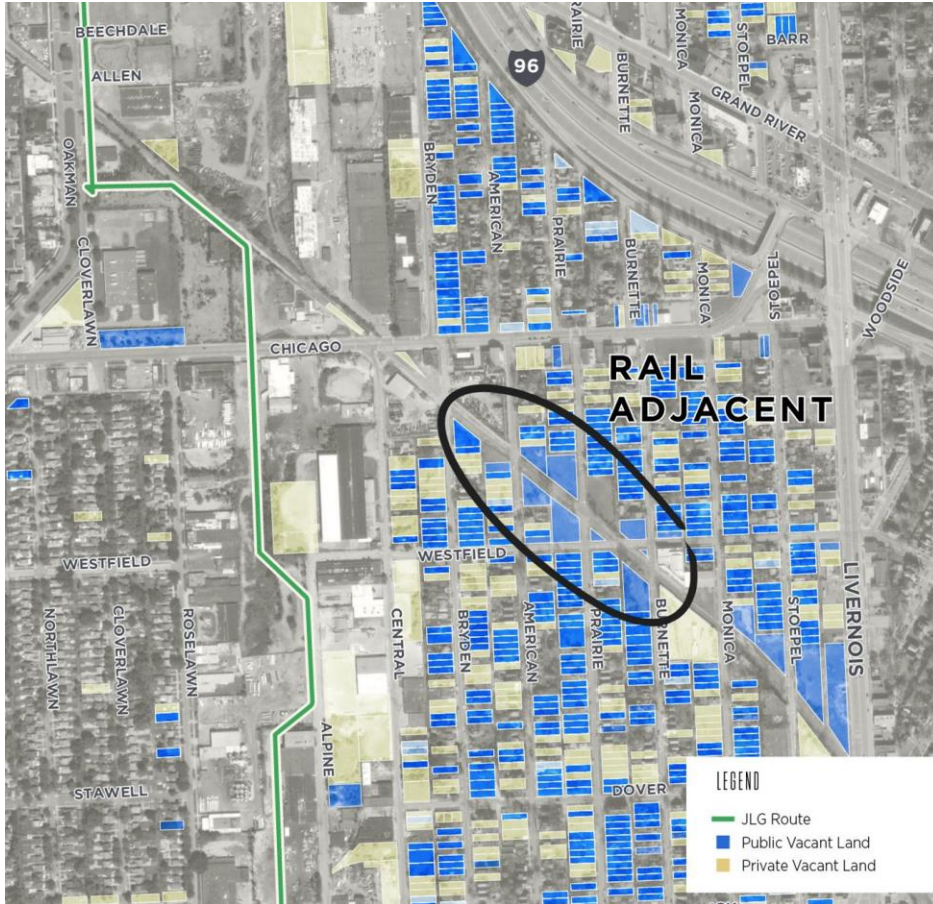
Properties America

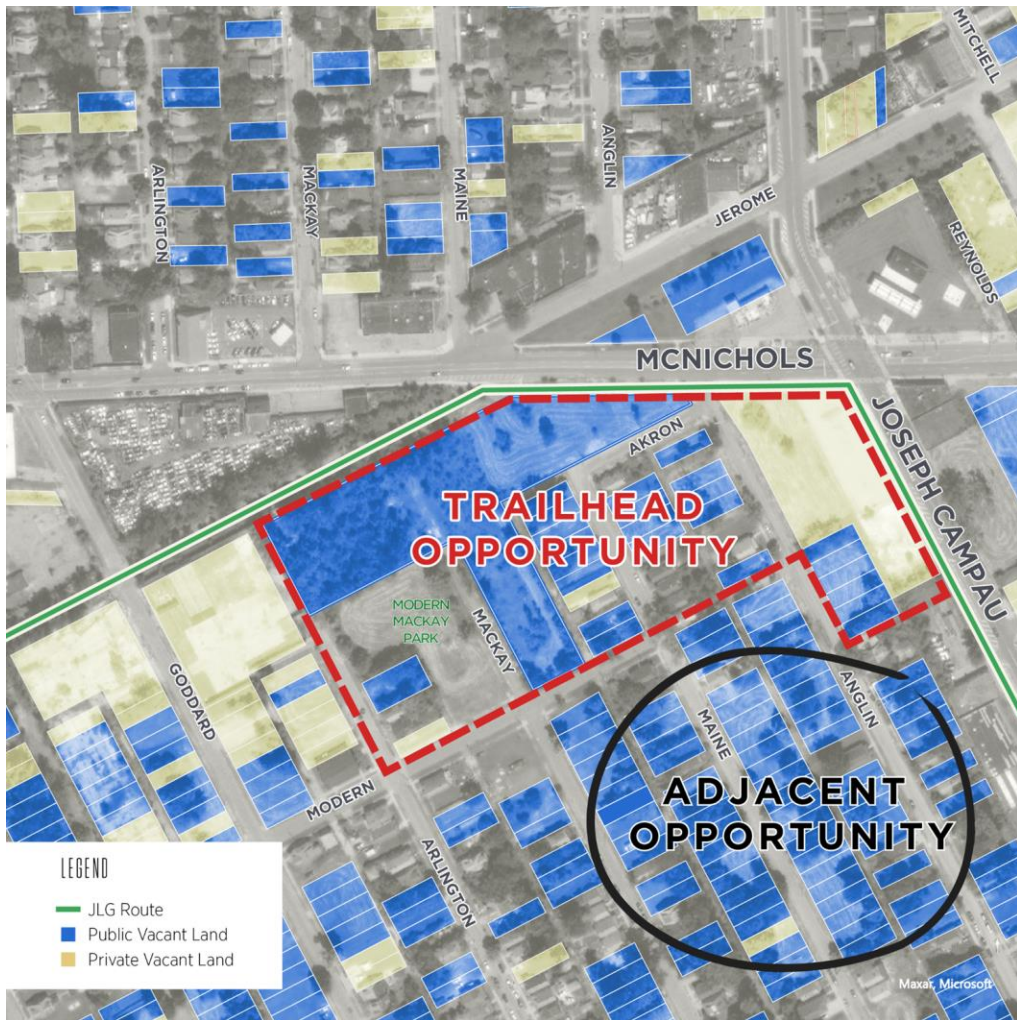


EXAMPLE SITE: Industrial site, no truck access, adjacent to residential

4200 Sharon Ave

EXAMPLE SITES: Public land adjacent to active Rail or Highway





EXAMPLE SITE: Public land adjacent to a trailhead



Addressing Climate Change in Detroit

Detroit Climate Strategy
Coming soon!



Understanding Climate Change

Our collective activities (driving, heating and cooling buildings and homes, over consumption of resources, etc) rely heavily on fossil fuels.

these activities plus heavy unsustainable industries release gases like carbon dioxide, methane, nitrous oxide and others...

together they are referred as:

GREENHOUSE GAS EMISSIONS (GHG)



- **Mitigation**
actions we can take to reduce GHG emissions.
REDUCING OUR IMPACT
- **Resilience**
efforts to increase our ability to recover through preparedness and adaptation.
ADAPTING TO CHANGE

Impacts of a warmer climate in Detroit

- Extreme heat (high indoor / outdoor temperatures)
- Heat leading to fires which leads to poor air quality

- Intense rainstorms which lead to flooding and back-ups.
- Warmer winters or erratic weather patterns



Detroit Climate Strategy

The Detroit Climate Strategy (DCS) is a framework for municipal operations, residents, businesses and industry to achieve the city's emissions reduction targets and resiliency goals as climate change impacts our daily lives.

The strategy was collaboratively developed between the City, technical partners and informed by the Climate Equity Advisory Council (CEAC).

Four Strategies:

- 1 Transitioning to Clean Energy
- 2 Increasing Sustainable Mobility
- 3 Accelerating Energy Efficiency and Reducing Waste
- 4 Prioritizing Vulnerable Residents and Adapting to Change
 - a. Reducing Flood Risk
 - b. Protecting from Extreme Heat
 - c. Improving Air Quality

**Detroit's land is an asset
that can help us cut
emissions and increase
resilience**

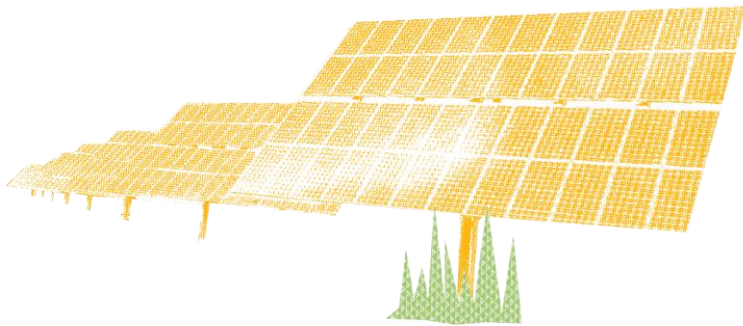


1 Transitioning to Clean Energy

Generating our electricity from clean sources is critical to meet our GHG reduction goals, improve air quality, and lower energy costs for residents and businesses.

Solar Arrays

- Utility Scale
- Ground Mounted (on your side lot)
- ~~Community Solar~~



Rooftop Solar

- the roof of your home
- commercial building roofs



2

Increasing Sustainable Mobility

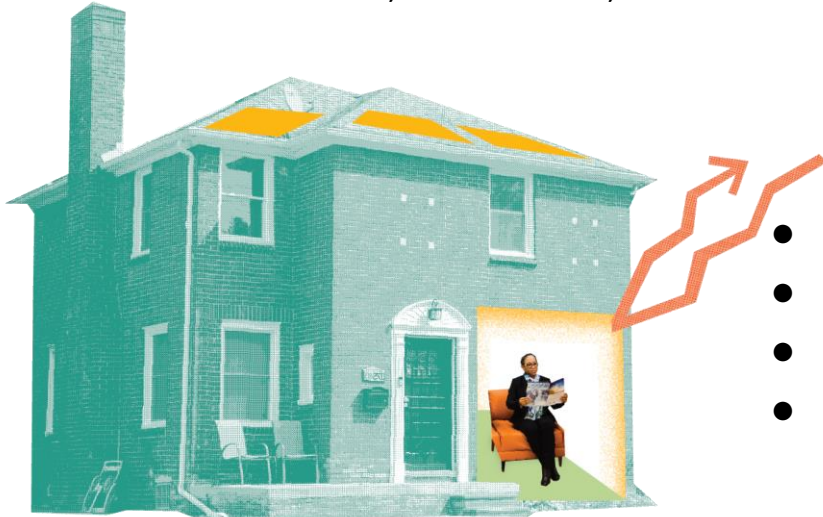
Sustainable mobility plays a significant role in improving our environment. Increasing mobility options will help ensure that **all Detroiters** can access to clean, safe, affordable, and efficient ways to get around.

- **Increase use of public transit**
- **Reduce need to drive a car**
- **Increase use of electric cars**
- **Improve ways to get around**



3 Accelerating Energy Efficiency and Reducing Waste

Reducing electricity and gas use in homes and buildings will help reduce emissions, lower energy bills, and improve indoor and outdoor air quality. In addition, reducing the amount of solid waste we produce and send to landfills is critical, as this contributes to GHG emissions, truck traffic, and other environmental impacts.



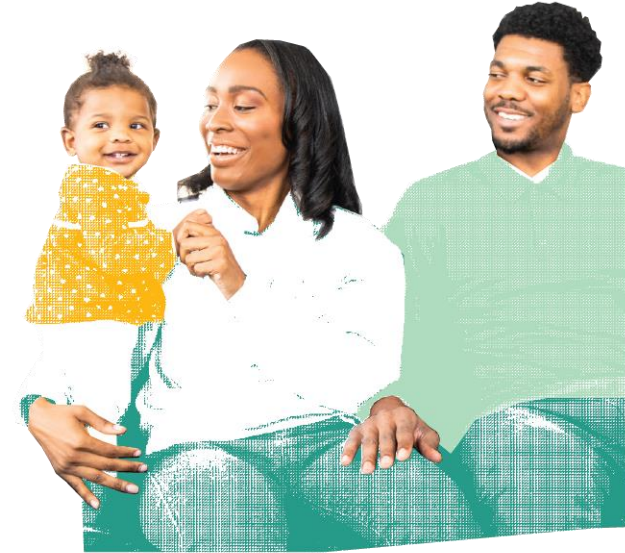
- Insulate homes and bldgs.
- Switch to energy efficient appliances
- Switch to electric options if possible
- Recycle, Compost, buy quality not quantity and extend the use of things

4

Prioritizing Vulnerable Residents and Adapting to Change

- Children and Seniors
- People with Health Challenges and Chronic Illness
- Historically Marginalized Communities

What do we mean when we say:
Vulnerable Residents



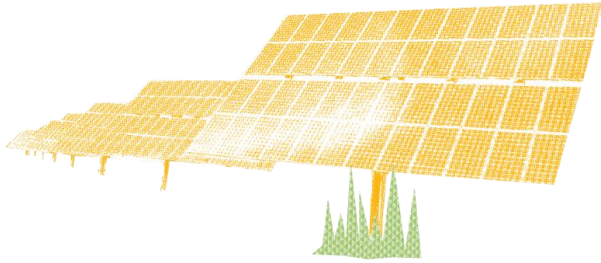
4 Prioritizing Vulnerable Residents and Adapting to Change



- Reducing Flood Risk
- Protecting from Extreme Heat
- Improving Air Quality

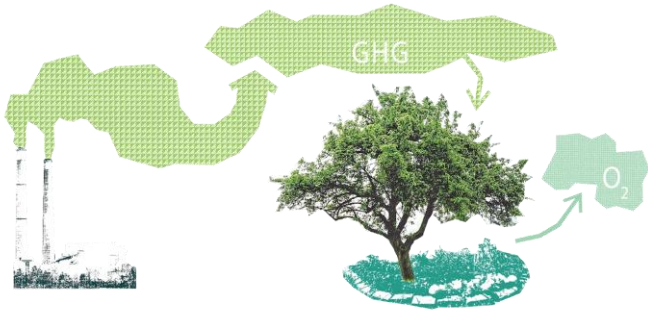
What do we mean when we say
Adapting to Change

Immediate Opportunities



Solar Energy:

- + Sustainable, abundant and clean (improves our air)
- + Reduces our dependency of fossil fuels
- + Resilient - when paired with batteries (backup power during outages)
- + Widely adopted and proven to work



Trees and Natural Habitats:

- + Trees have a cooling effect in our neighborhoods
- + Habitats help bees and birds stay alive
- + Naturalized areas & gardens help absorb more RAIN
- + Nature is good for our mental health

Taking Action!

Powering the City with Solar

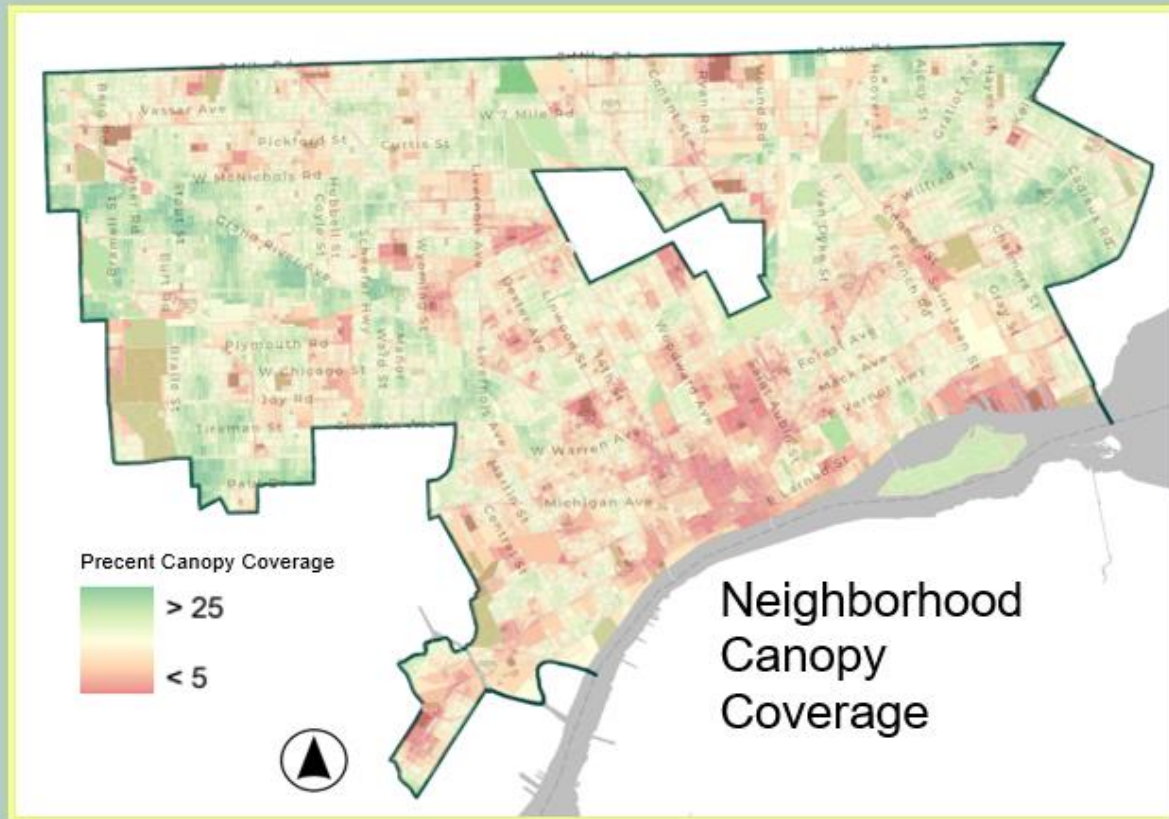
1. **Talk to your neighbors about land in your community.**
[needs to be more than 10 acres]
 2. **Submit an area to be considered for solar**
www.detroitmi.gov/sustainability
1. **Stay tuned for future solar opportunities and information**
 2. **Consider changing at least one activity to a more planet friendly one.**

TREES GROW DETROIT as GREEN INFRASTRUCTURE:

- **IMPROVE HEALTH**
- **REDUCE POLLUTION**
- **INCREASE ENERGY SAVINGS**
- **REDUCE CRIME**
- **REDUCE FLOODING**
- **IMPROVE QUALITY OF LIFE**

DETROIT'S TREE CANOPY IS UNDER 24% COVERAGE

- 1.3 MILLION TREE PLANTING POTENTIAL
- 38% DETROIT'S CANOPY INCLUDES "BAD ACTOR" TREES, LEAVING 15% QUALITY CANOPY FOR DETROIT
- 30-40% QUALITY TREE CANOPY IS THE GOAL



RESTORING DETROIT'S TREE CANOPY & ADVANCING TREE EQUITY

- PLANT 75,000 TREES BY 2028 RESULTING IN A 1.2% INCREASE IN OVERALL CANOPY
- INCREASE TREE MAINTENANCE TO IMPROVE THE OVERALL HEALTH OF DETROIT'S CANOPY



ARCHDALE ST., LOOKING NORTH
FROM SCHOOLCRAFT 1957 & 2019



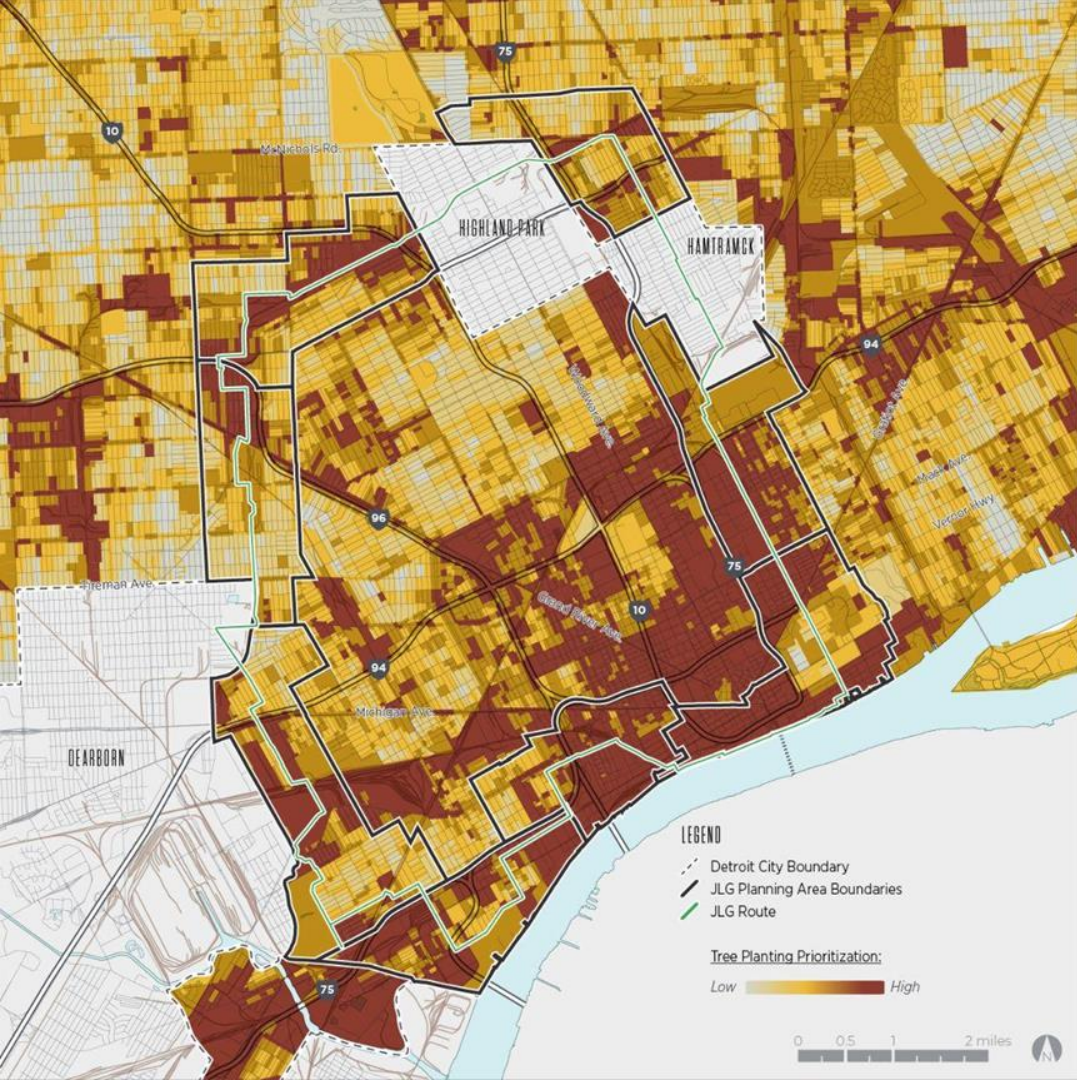
TRAIN AND PLACE DETROIT RESIDENTS INTO FULL TIME, TREE CARE INDUSTRY CAREERS



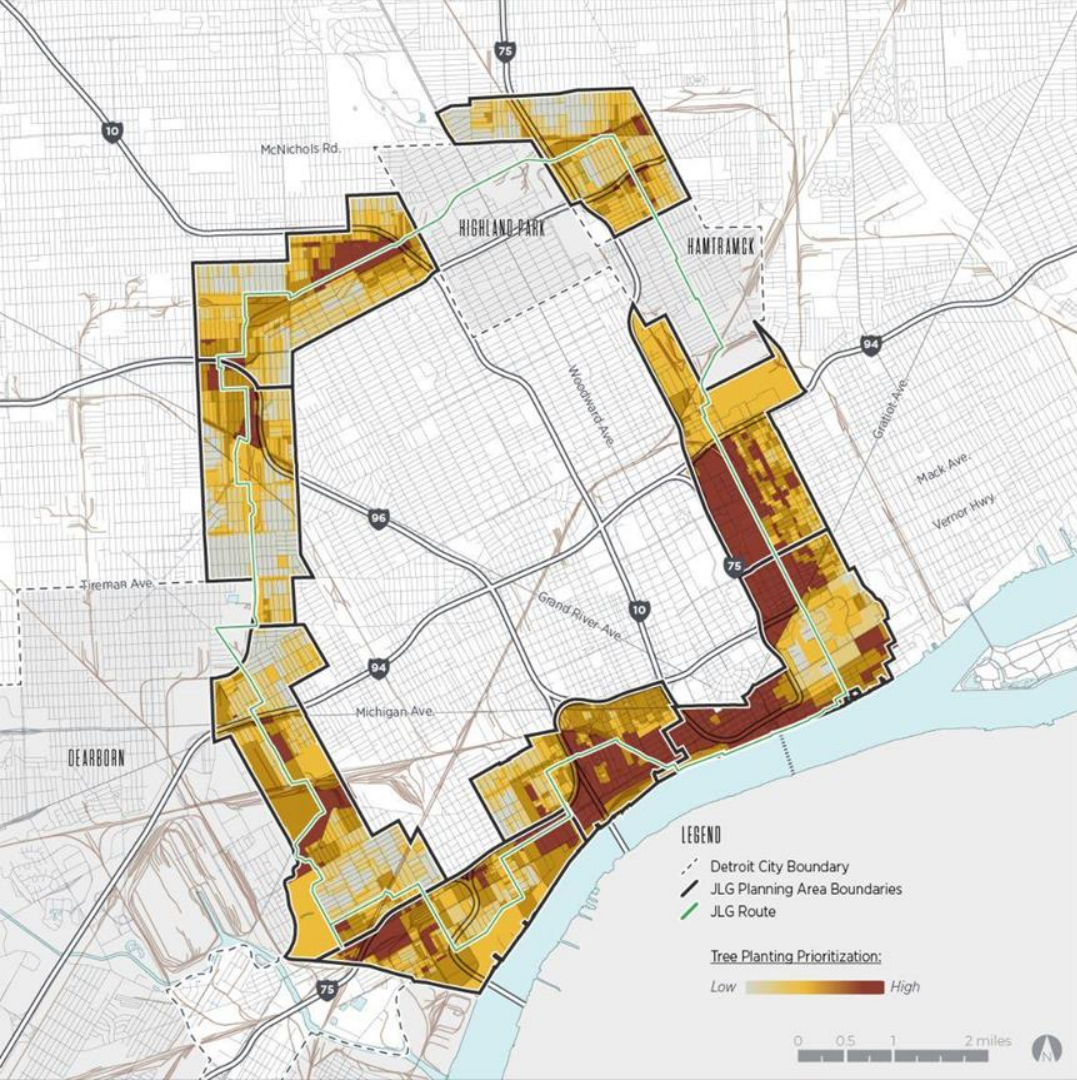
ENGAGE DETROIT RESIDENTS AS ACTIVE CHAMPIONS OF DETROIT'S TREE CANOPY









TREE PLANTING INDEX DTEP



TREE PLANTING INDEX DTEP



| PLANTING STRATEGY | | KEY GOALS | IDEAL SITE CRITERIA |
|-------------------------------|---|---|--|
| NEIGHBORHOOD TREE CANOPY |  | LOW CANOPY NEIGHBORHOODS, CITY PLANNING LOCATIONS, HIGH POPULATION DENSITY, VULNERABLE POPULATIONS | LOW TREE CANOPY, HIGH POPULATION DENSITY, VULNERABLE POPULATIONS, PROXIMITY TO PARKS AND OR SCHOOLS |
| VEGETATIVE BUFFERS |  | RESIDENTIAL OR SCHOOL PROXIMITY TO HEAVY TRAFFIC CORRIDORS, VULNERABLE POPULATIONS | LOW TREE CANOPY, MEDIUM TO HIGH POPULATION DENSITY, VULNERABLE POPULATIONS, PROXIMITY TO SCHOOLS, PROXIMITY TO HIGH TRAFFIC VOLUME, HIGH ASTHMA RATES |
| LAND-BASED VENTURES |  | CONTIGUOUS VACANT LOTS WITH LOWER HOUSING STOCK, PROXIMITY TO SCHOOLS OR TRAINING CENTERS, ZONING | LOW TO MEDIUM POPULATION DENSITY, BUNDLES OF VACANT LANDS > 0.5 ACRES, PROXIMITY TO EXISTING LAND-BASED VENTURES, PARCELS ZONED BY RIGHT, NON-CONTAMINATED SITES |
| PARKS & GREENWAYS |  | PROXIMITY TO OR IN PARKS AND GREENWAYS WITH LOW TREE CANOPY COVER, CITY PLANNING LOCATIONS | LOW TREE CANOPY, IN OR NEAR A PARK, MEDIUM TO HIGH POPULATION DENSITY, VULNERABLE POPULATION, PROXIMITY TO HIGH TRAFFIC VOLUME |
| COMMERCIAL CORRIDOR PLANTINGS |  | TARGETTED COMMERCIAL, CULTURAL, OR ROADWAY IMPROVEMENT LOCATIONS, "HEAT ISLAND" SITES | LOW TREE CANOPY, HIGH POPULATION DENSITY, VULNERABLE POPULATIONS, COMMERCIAL THOROUGHFARE, HEAT ISLAND LOCATIONS, TRAFFIC CALMING LOCATIONS |
| LOW POPULATION AREAS |  | LOW FUTURE DEVELOPMENT POTENTIAL AREAS, PROXIMITY TO AREAS OF CONCERN, FLOOD AREAS, PROXIMITY TO OUTDOOR RECREATION AREAS | LOW TREE CANOPY, LOW POPULATION DENSITY, VULNERABLE POPULATIONS, HEAT ISLAND LOCATIONS |

Past Plantings



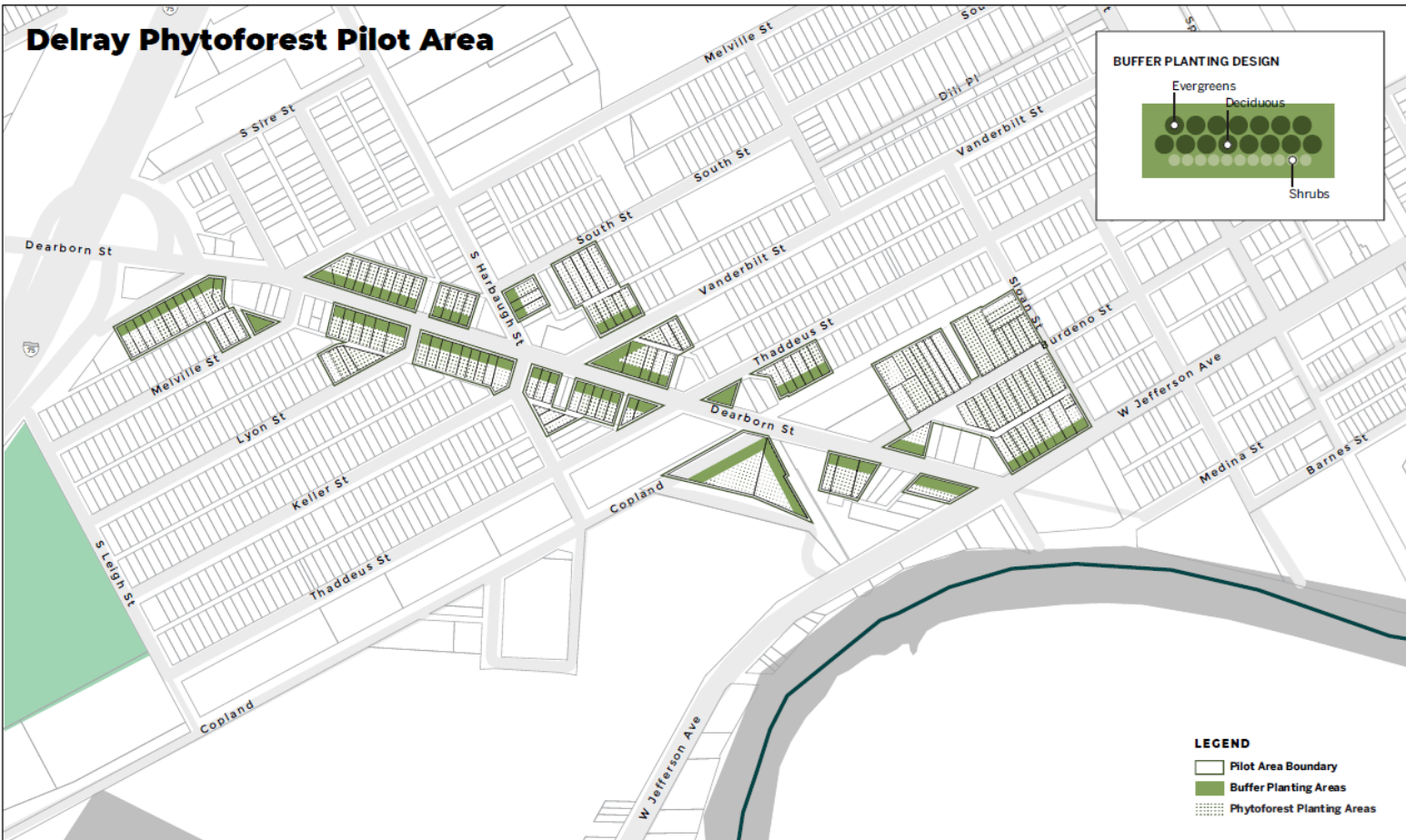
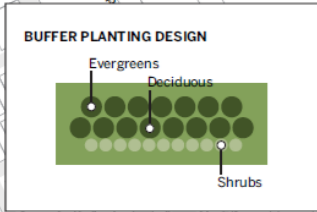
Board Up – Tree Up Event



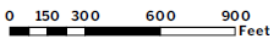
Past Plantings



Delray Phytoforest Pilot Area



- LEGEND**
- Pilot Area Boundary
 - Buffer Planting Areas
 - ▨ Phytoforest Planting Areas



TREES **GROW** DETROIT





People & Places: Designing Equitable Connections

Office of Mobility Innovation



Mobility as a pathway to opportunity.



- The Office of Mobility Innovation (OMI) exists to help the City of Detroit navigate the rapidly changing transportation and mobility industries.
- Transportation and mobility are essential for both people and businesses and Detroit's automotive heritage provides an unparalleled opportunity to work with industry to innovate and define their future.

Transportation describes the act of moving something or someone, whereas mobility describes the ability of a person to move or be moved.

Mobility isn't just having access to one mode of transportation. Mobility is having transportation options, and the quality of those options.

FIRST MILE



WALK & WHEEL



CAR & RIDE SHARE



PARKING

TRANSIT



Q-LINE



FIXED-ROUTE
(DDOT)



DETROIT PEOPLE
MOVER

LAST MILE



WALK & WHEEL



CAR & RIDE SHARE



PARKING





FIRST MILE



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FIXED-ROUTE
(DDOT)



DETROIT PEOPLE
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PARKING



← PLANNING & COMPLETETING A DOOR-TO-DOOR JOURNEY →





FIRST MILE



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FIXED-ROUTE
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DETROIT PEOPLE
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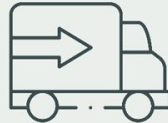
CAR & RIDE SHARE



PARKING



← PLANNING & COMPLETETING A DOOR-TO-DOOR JOURNEY →





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WALK & WHEEL



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(DDOT)



DETROIT PEOPLE
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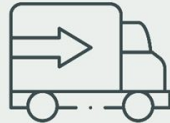
CAR & RIDE SHARE



PARKING



← PLANNING & COMPLETETING A DOOR-TO-DOOR JOURNEY →





FIRST MILE



WALK & WHEEL



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Q-LINE



FIXED-ROUTE
(DDOT)



DETROIT PEOPLE
MOVER

LAST MILE



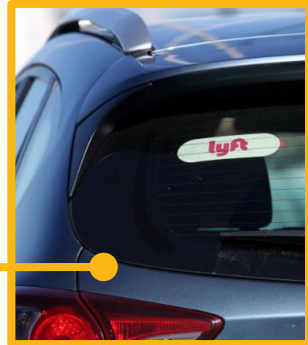
WALK & WHEEL



CAR & RIDE SHARE



PARKING



← PLANNING & COMPLETETING A DOOR-TO-DOOR JOURNEY →



CONNECTING PEOPLE & PLACE

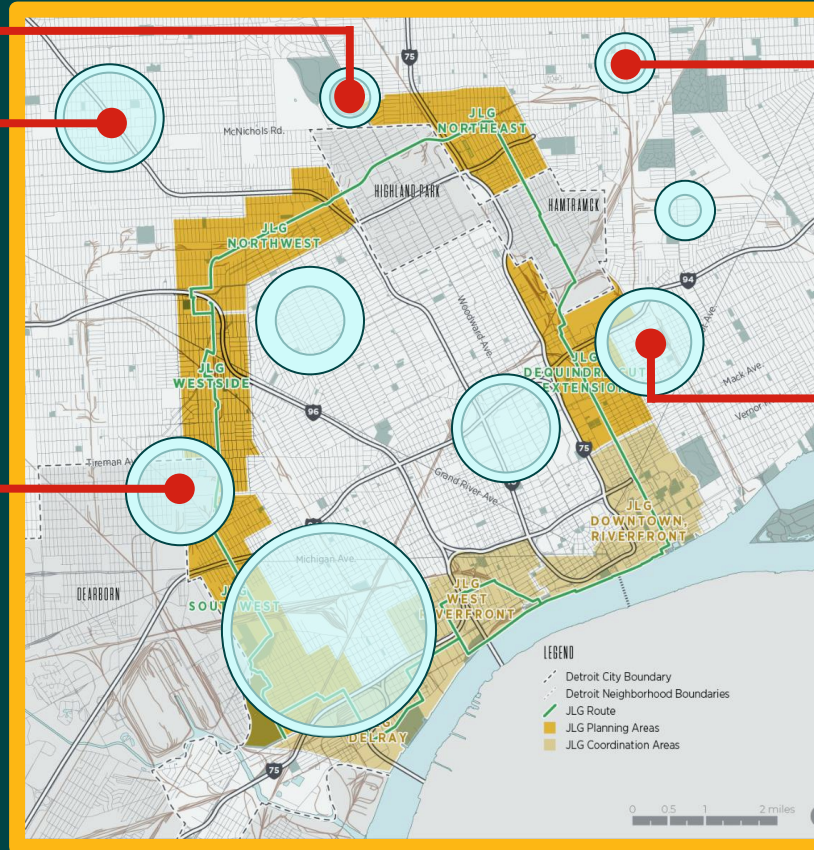
BIKESHARE STATION

FUTURE EV CHARGING SITES

FUTURE EV CHARGING SITES

DESTINATION

- ROUTE**
- COMMUTE TO WORK
 - MULTIMODAL TRIP
 - INCREASED ACCESS TO AMENITIES & NEIGHBORHOODS



- EVENTS (HARVEST FEST, CAMPING IN THE CUT, CONCERTS, ETC.)
- FITNESS & RECREATION
- DINING & RETAIL