



Climate change mitigation: The agenda for City of Grand Rapids

How to make mitigation accessible and applicable for local communities



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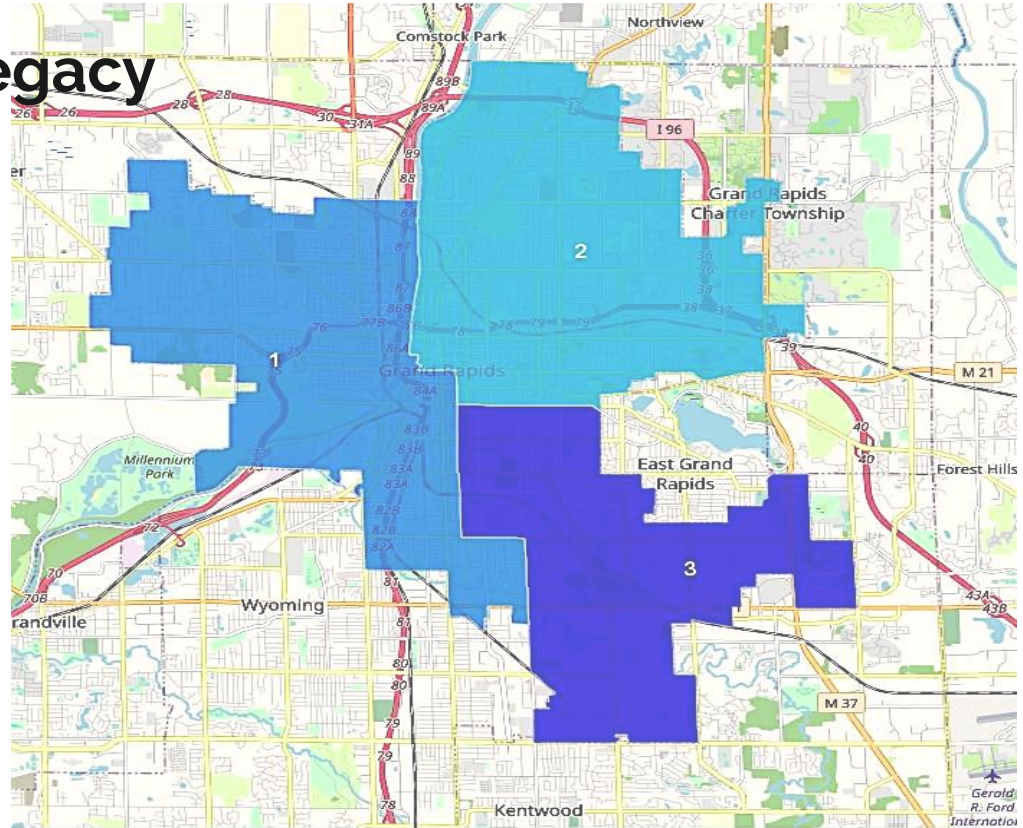
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Grand Rapids' legacy

- **2005** – One of the first cities in the US to adopt sustainability as priority.
- **2006** –GR's early commitments to mitigate climate change, makes it the 2nd city in the US as Regional Centre for Expertise and Sustainability (recognized by UN).
- **2013** – in the aftermath of the floods, \$15 million invested in improving flood walls; first climate resiliency report brought out in association with West Michigan Environmental Action Council (WMEAC).
- **2015**: one of the first cities again to separate storm water and wastewater systems.
- **2019**: The City adopts Strategic Plan (FY 2020 – 23) with sustainability as one of the core values



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Project Team

Core team

- Annabelle Wilkinson –Environmental and Climate Justice Specialist
- Henry Love - Director of Midwest Strategy and Business Development (Elevate)
- Aritra Chakrabarty – PhD Scholar, Environment and Energy Policy (EEP), Michigan Technological University (MTU)

Additional Support

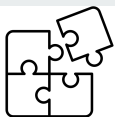
- Alison Sutter – Sustainability & Performance Management Officer
- Jennifer Spiller – Healthy and Sustainable Buildings Policy Specialist



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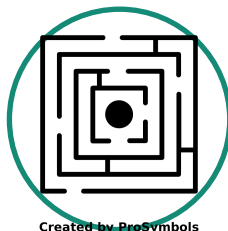
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Climate change mitigation problem



The Objective

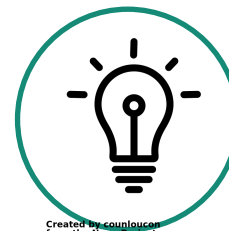
- Assist the City in their efforts to create climate change mitigation strategies under the larger Climate Action and Adaptation Plan (CAAP). The core component of this fellowship was to place the local community (citizens) at the centre of any climate action strategy.



Created by ProSymbols

The Challenge

- The main barrier to mitigation activities is the lack of participation from BIPOC community.
- How to deconstruct the concept of mitigation and contextualize for the communities



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The Solution

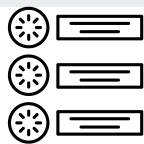
- Create menu – list of mitigation activities that are accessible, inclusive, participatory, and relatable in their present.
- Integrate engagement within the activities that focuses on BIPOC community neighborhood



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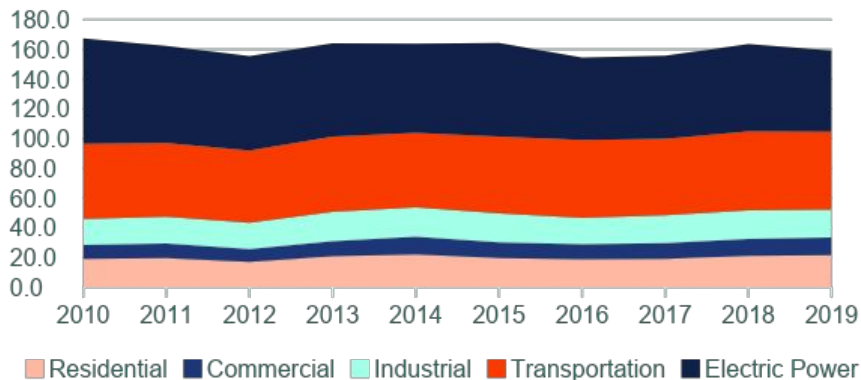


The mitigation activities

Based on the major emission buckets of GR, the following Three sectors – energy, transport and waste have been considered for the proposed activities. These are:

- Residential composting;
- Bulk purchase solar; and
- Incentivizing public transport

Statewide GHG emissions (MMTCO₂e)¹



Source: Author's photo documentation of GR



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Approach methodology

- The approach uses scientific methodology with the purpose of generating empirical observations to solve critical problems in society⁴.
- In order to create climate mitigation strategies the research design developed is based on inductive reasoning – a bottom – up approach that prioritizes involvement of the local community in planning, processing and implementation.
- The proposed mitigation activities have been derived based on-
 - Principles of racial and environmental justice
 - Review of climate action and/or adaptation plans of other cities;
 - Review of the work undertaken by grassroot organizations in the human – environment nexus
 - Interviews and consultations – Public Works Department, Mobile GR, Eco-works (Detroit), Solarize (Ann Arbor), Wormies composting (GR), Neighborhood Associations (GR), Green Home Institute (GR), GLREA (Madison)



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Residential Composting



Objective

Business model that rewards households for segregation of food waste and reduces of non-food waste in long run

Process

Aggregating individual demand for composting,
Cross-subsidize through engagement with businesses,
monetize food waste generated by community

Challenge

Making it affordable, accessible to LMI and BIPOC households;
Initiating habit of segregation to reduce contamination

Outcome

Reducing trash generation and landfill use for the city;
Sustainable food to waste ecosystem at the local level

Source: MPR
www.dcf



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Bulk Purchase Solar



Objective

Generate community level interest in solar, obtain solar energy at ease, reduce energy cost burden

Process

Aggregate household demand through education;
Weatherization → electrification → solarization
Linkage with contractor and financial institution

Challenge

Policy bottlenecks regarding distributed solar;
Competitive costs of grid solar;
Cost of home improvements

Outcome

Energy efficient behavior at the community level;
Build advocacy around distributed solar programs



Public transport incentive



Objective

Persuade commuters to use public transport and at the same time deter them from using private vehicles through persuasion/incentives

Process

Provide data on benefits of public transit,
Persuasive messaging to nudge behavioural choices,
Create event for active use of transport

Challenge

Current communications and social media outreach,
Limited control of municipality over transportation

Outcome

Make public transport as preferred choice for commute, Increased connectivity,
Promoting micro mobility

The Climate Mitigation Strategy

These mitigation activities are part of the larger strategies outlined in the City's Strategic Plan. The activities are linked to 2 out of the 6 core values identified in the Plan -

Health and Environment

- Objective 1: Reduce carbon emissions and increase climate resiliency
- *Strategy 4: Create programs and policies to reduce carbon emissions from building and transportation sectors*
- Objective 4: Minimize waste generation and promote waste diversion practices
- *Strategy 3: Enhance composting operations for the community*

Mobility

- Objective 1: Reduce single occupant vehicle travel
- *Strategy 1: Improve ridership and explore options of fare free transit*

The current scope of activities is part of the intent to make climate change mitigation an adaptable discourse in the community and to create space for resilience strategies in nature.



Source: Author's photo documentation of GR



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Moving ahead

Climate change in GR can cause both immediate threats to health, environment, and economy as well long lasting impacts.

The work undertaken through this Fellowship highlights two main challenges: the equity and inclusivity of communities in the climate change agenda.

These activities are small steps to make racial and environmental justice central elements in climate action and adaptation planning, as well as ensuring that environmental protection is a bottom – up approach.



Source: Author's photo documentation of GR
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