Where we are in the Climate Action Process?

Milestone 3.5

Support Development of Local Climate Action Plans

2022 Work Plan

Form a Stakeholder Working Group	Mar - May
Stakeholder Engagement	May +
Forecast “Business-as-usual” emissions	May-June
Develop Regional GHG Emission Targets	May-July
Develop Community Types & Strategies	June - September
Regional Performance Metrics	August-Sept
Draft Regional Climate Action Framework	October
Develop Local CAP Support Plan	November
Release for Public Comment	December
Adopt NWI Regional Climate Action Framework	Early 2023

David Clifford

NIRPC CAP Meeting: 8/11 Update

NIRPC CAP Sections: Regional Framework

- What Regional CAPs provide
  - Common objectives
  - GHG Inventories and BAU emissions models
  - Wide range of policy proposals
  - Regional Climate Hazard Assessment

NIRPC CAP Sections: Regional Framework

- Establishing Regional Framework
  - Advantages of Regional CAP
    - *Communities are connected by shared infrastructure, transportation, and energy systems fundamental to our ability to respond to climate change.*
    - *overarching climate plan for the region realizes economies of scale, providing guidance and benefits to all municipalities in the region.*
    - *Climate change is going to affect communities of all kinds, not just large cities and fast-growing suburbs*
      - *We provide recommendations and plans for communities of all kinds; city, town, and unincorporated*
    - *This plan aims to leverage the strengths of municipal government and proposes a coordinated approach to align resources and share expertise to move our region toward a sustainable future.*

NIRPC CAP Sections: Regional Framework

- What Regional CAPs provide (cont'd)
  - Policy proposal rubric:
  - ***Lead***
    - by demonstrating low-carbon operations and choices within own operations
  - ***Enact***
    - policies, like streamlining solar codes
  - ***Encourage***
    - others to reduce GHG emissions with investments and behaviors, like creating paths and infrastructure.

NIRPC CAP Sections: Regional Framework

What Municipalities should still lead on:

- Rank priorities for reduction policy action
- Conduct its own Social Vulnerability Index to identify high-value infrastructure and buildings
- Rank priorities and areas of concern before taking adaptation actions

How Regional CAP Relates to Local CAPs:

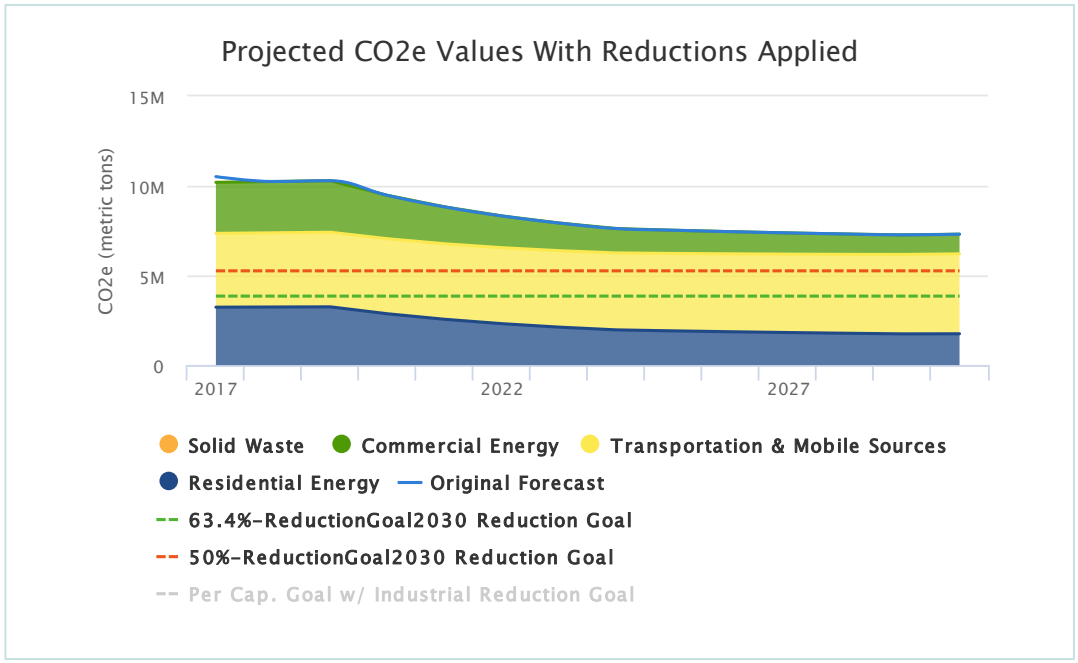
NIRPC CAP is a considered outline and resource provider

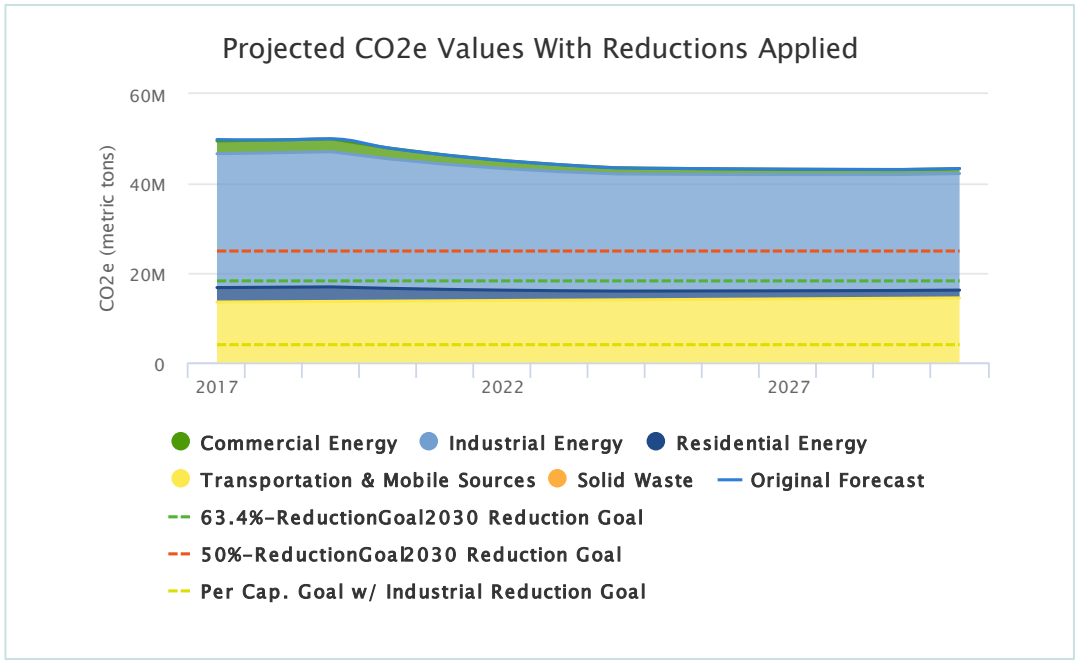
Communities can use NIRPC CAP as starting point to structure their own plans

Factors like land development, budget, existing infrastructure will greatly affect what policies are used

Template and Regional CAP

- What we are adding to the CAP plan:
  - **Regional Framework**
  - **Industrial Section**
  - Modifying Planning Section:
    - recommending multitude policy options, scaled for municipal action
    - **Menus based on City Type**
  - SVI modified for regional scale
  - Federal Financing and Policy Options

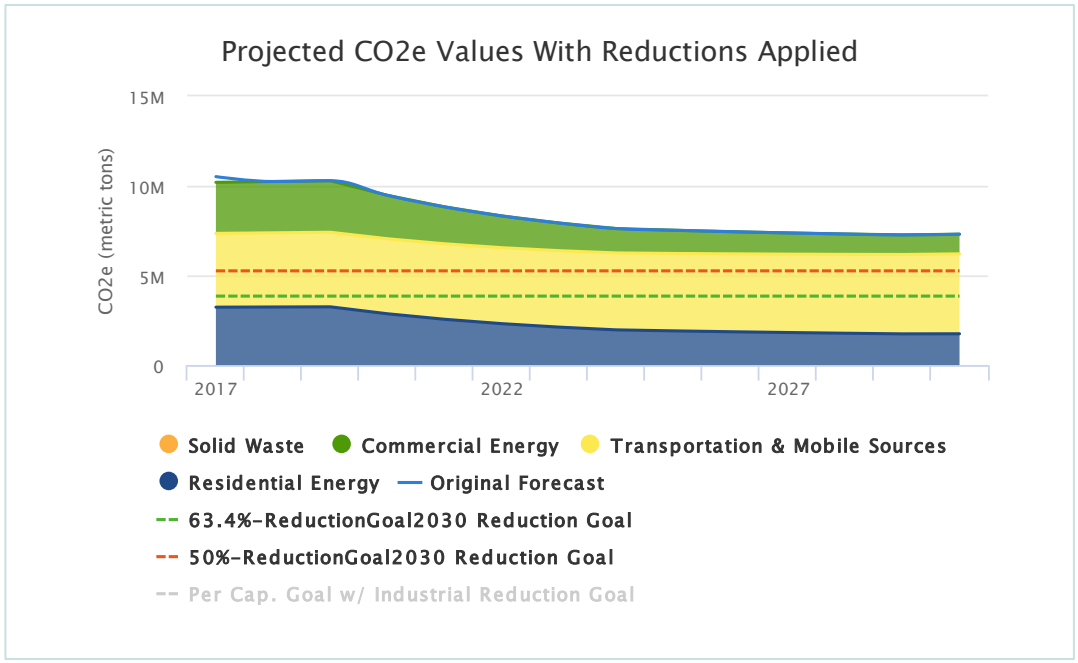


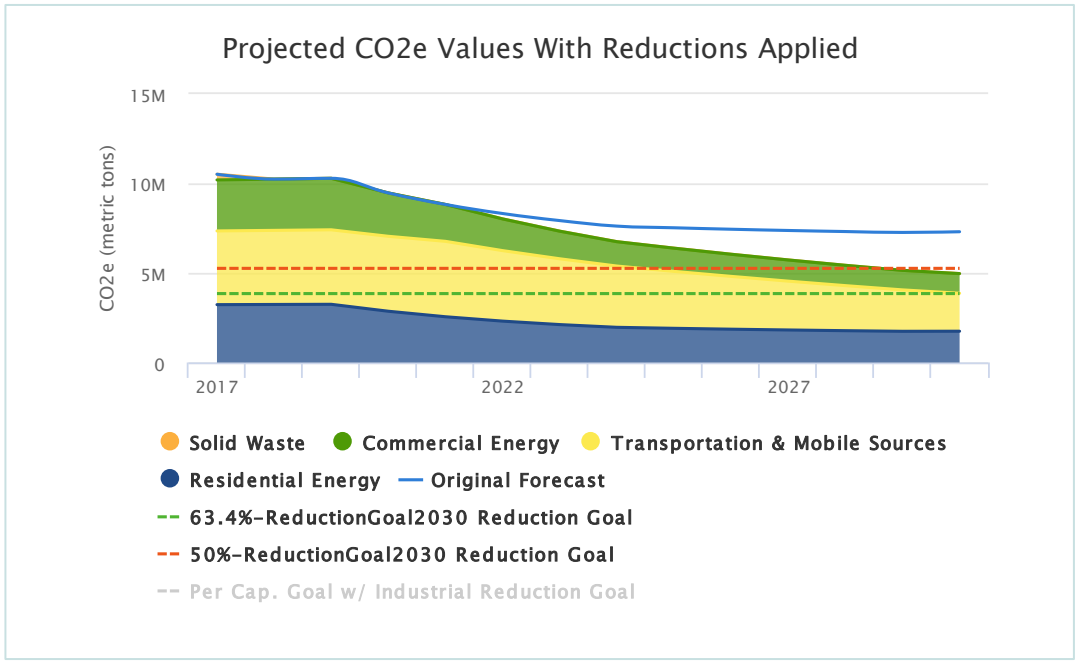


Summer Progress:

Completing Business-As-Usual Forecasts

- From June:
- 2030 Forecast without Industrial and rail:
  - 7,303,758 Metric Tons
- 2030 Forecast with Industrial and rail:
  - 43,341,917 Metric Tons



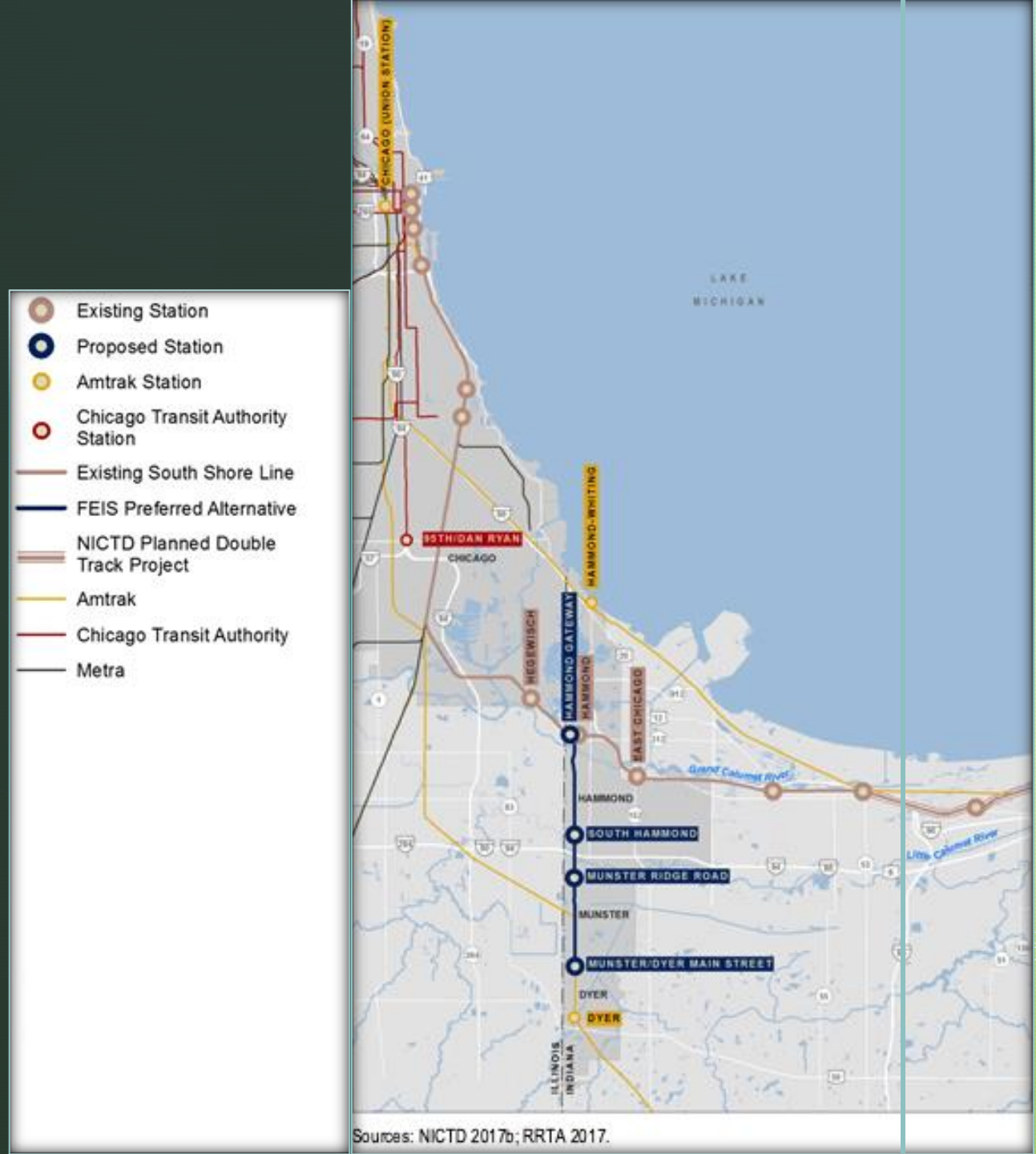


Summer Progress: Reduction Strategies: High Level

- Working with our partners at ICLEI, we have developed high-level strategies that if achieved would lead to NWI hitting it's decarbonization target
- Example: Transportation and Mobile Sources Reduced by ___ amount.

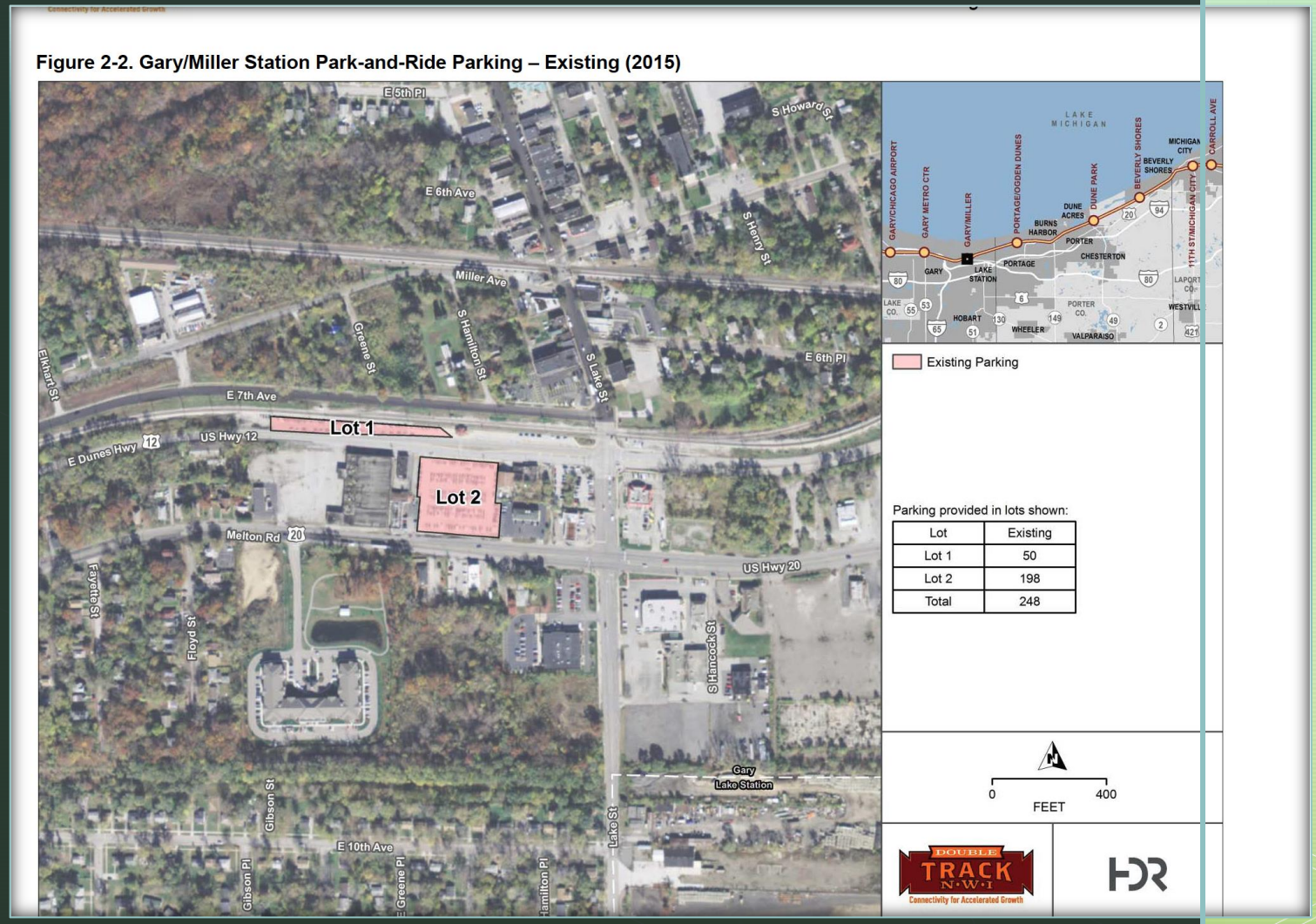
Summer Progress: Reduction Strategies: Pre-existing plans

- West Lake Corridor Expansion
  - By 2037 projected to reduce daily VMT by 163,050
  - 3,750 riders per day
  - Pictured: Passenger Rail Expansion



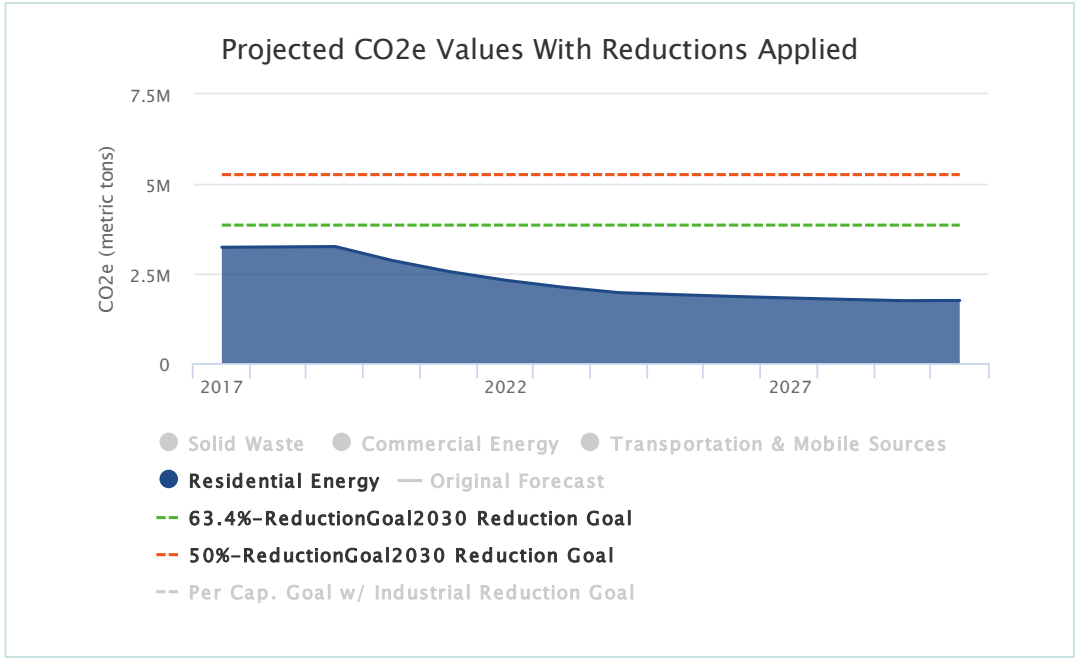
Summer Progress: Reduction Strategies: Pre-existing plans

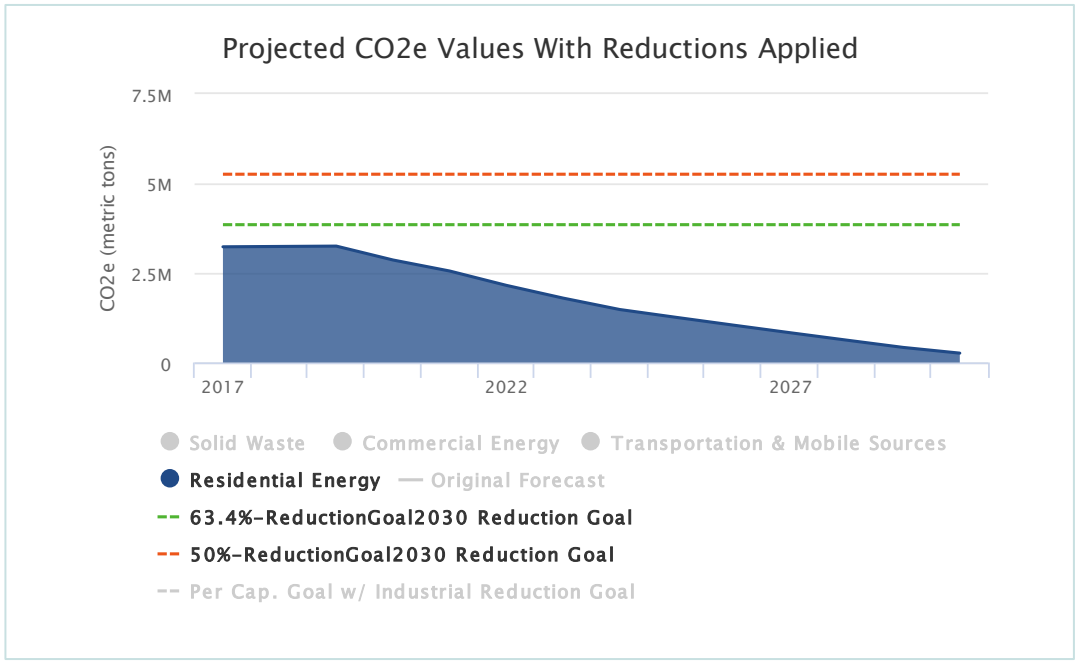
- Double Track Transit Increase
  - 2040 Plan to more than double peak hour trains in both directions, from 9 to 20
  - Total projected ridership increase: 1,461 passengers
  - Example: Gary/Miller Station Expansion



Summer Progress:
Reduction Strategies: Pre-existing plans

- Greenways+Blueways 2020 Regional Plan
  - Provided context for Bike Infrastructure reduction strategy—a priority policy for reducing VMT





Summer Progress: Additional Reduction Strategy Examples

- Residential Heat Pumps
- Residential Energy Education Program
- Low Income Weatherization Programs
- Increased Residential Solar Photovoltaic
- LED Lightbulb Giveaway

Summer Progress: Google EIE Data

Provides Rooftop solar potential for residential buildings

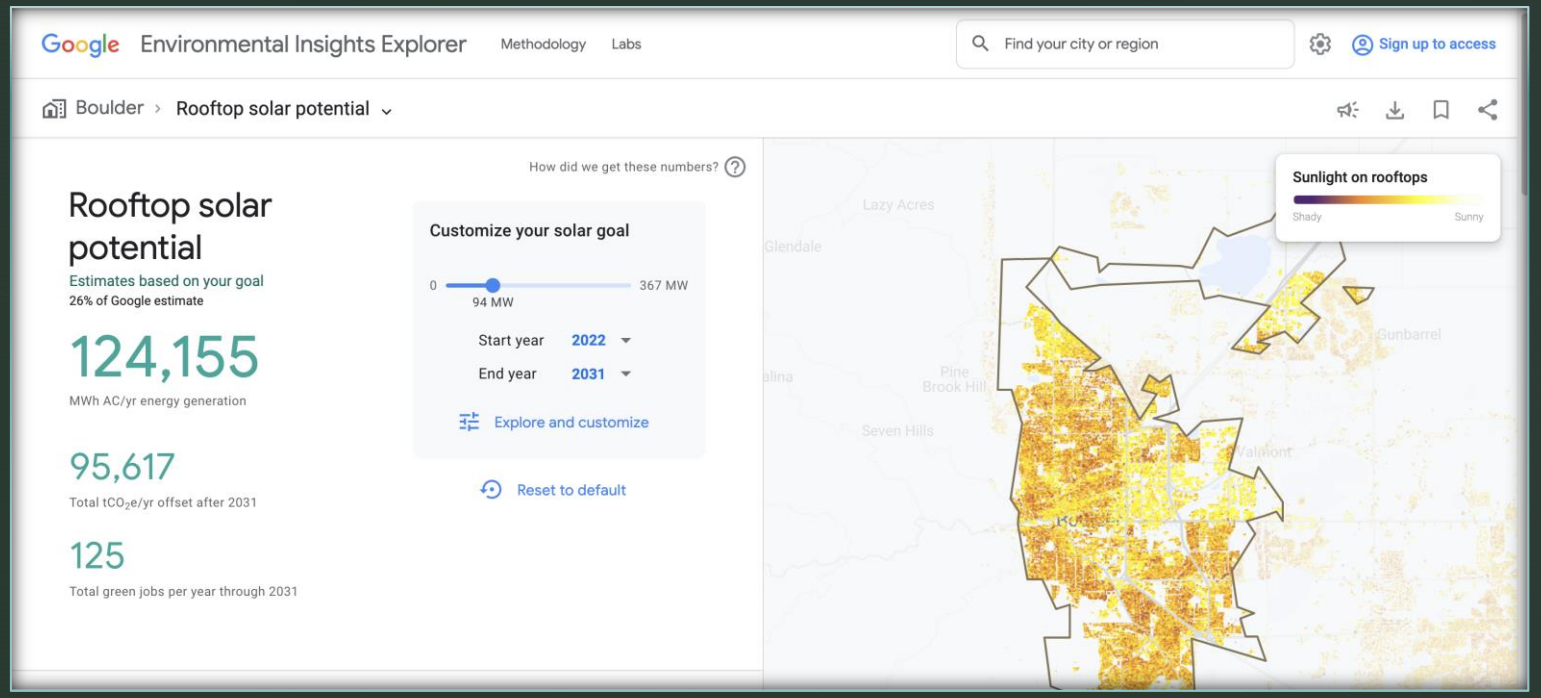
- estimated annual generation
- estimated jobs impacts (other comparison metrics)
- Solar goals
- Current capacity

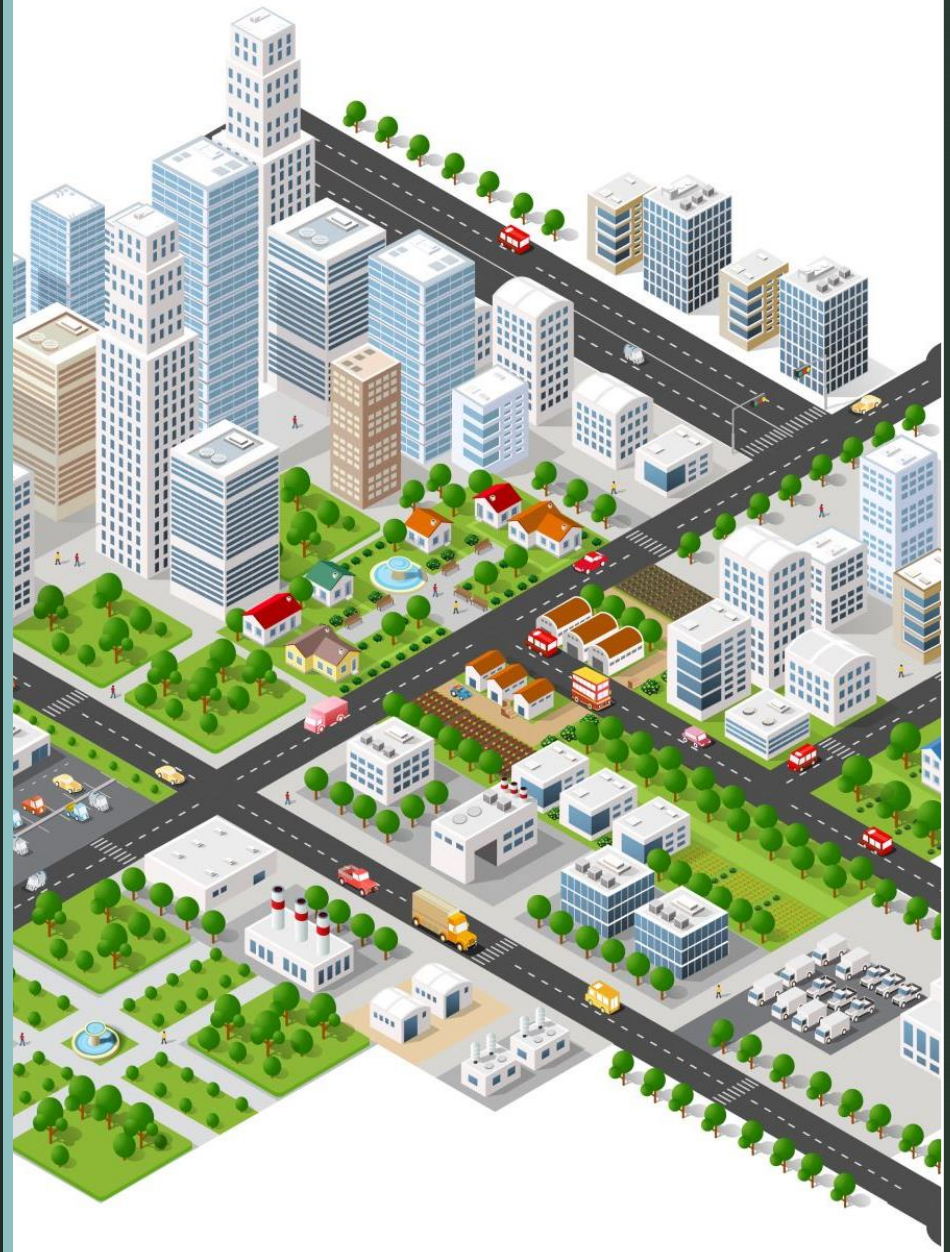
Provides trip data for:

- Automobile
- Biking
- Walking Trips

Summer Progress: Google EIE Data

- Example:





Summer Progress

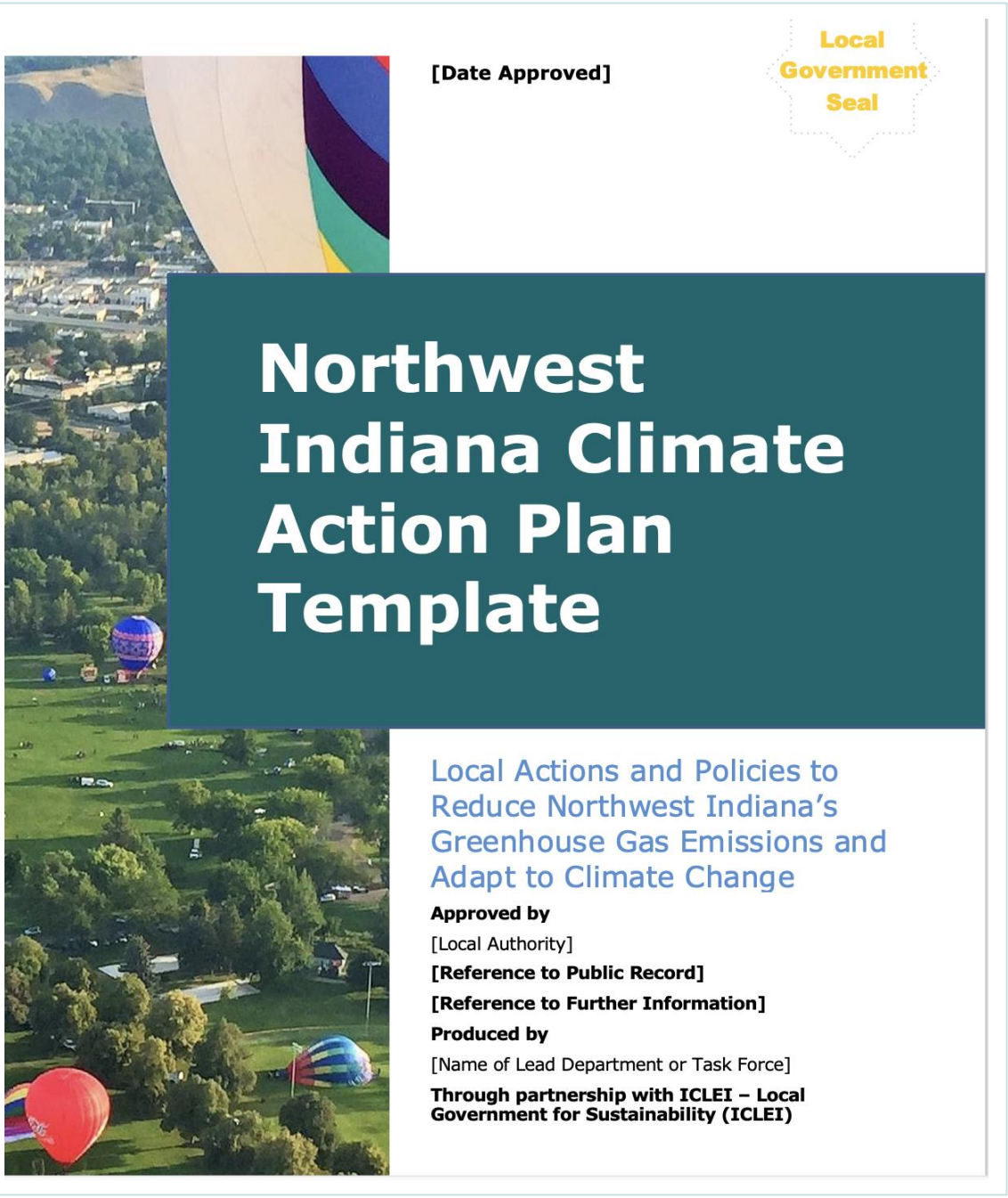
- Reduction Strategies (ie: Policy Recommendations) Update:
  - Most time-consuming aspect of CAP, and has taken longer than anticipated for NIRPC, but we are making progress.
  - Regional plans provide a wider range of options than City plans.
  - Large amount of data and research to track down.

Summer Progress

- Begun drafting the NIRPC CAP plan with a template provided by our partners ICLEI.
  - The template is made for city-scale, but outline and structure for:
    - GHG Emissions Inventory
    - Reduction Strategies by Sector
    - Vulnerability Report and Adaptation Plan
    - Monitoring Plan

Summer Progress

- Begun drafting the NIRPC CAP plan with a template provided by our partners ICLEI.



Summer Progress

- Example from Emissions Reduction Section.

Transportation & Land Use

Provide a summary of the overall vision, types of actions included in the focus area, and its importance to the overall Plan.

Emissions from transportation and land use are a common sight to nearly everyone in Northwest Indiana. Besides emitting greenhouse gases, transportation fossil fuels also produce a host of criteria air pollutants when combusted, reducing local air quality and affecting our health. Transportation accounts for [X]% of Northwest Indiana's total GHG emissions. This chapter focuses on programs and policies to reduce emissions from transportation and includes design-oriented approaches as well as expansion of alternate modes such as walking, biking, or public transportation to and from the most common destinations in Northwest Indiana.

Objective	Supporting Strategies	Supports Adaptation	Benefits	Reduction Potential
WW1 – Upgrade the energy efficiency of water delivery and treatment systems by 15%	[X]	Y		
[Other Objective]	[X]	Y		
[Other Objective]	[X]			

NIRPC CAP Sections: Industrial Emissions

An overview of the benefits and pollution to NWI:

- Pollution Sources
  - Steel
  - Industrial Rail
- Importance of steel and rail
  - Everything is built out of it
  - Regional identity and employment base

Pre-existing plans:

- Roadmap to 2050 - US Steel
  - 2030 Goal: 20% Reduction in GHG Emissions Intensity
  - 2050 Goal: Net-Zero GHG Emissions Across all Operations

Pathways to decarbonize steel

- Federal Investments in new technology
  - Green Steel
  - Carbon Capture
  - Hydrogen
  - Direct Electrification

NIRPC CAP Sections: Menus for Community type

Built-out stable population bedroom Community	low growth, existing energy systems/transportation main priority
Urban Core/decreasing population Community	Slow growth, existing energy systems/transportation main priority
High growth exurban suburb	Fast growth, new building energy usage is a priority along with existing buildings/transportation
Coastal vacation home community	most likely existing energy strategies
Small Rural town	minimal growth, most likely existing energy strategies/transportation
Unincorporated agriculture centric area	minimal growth, most likely existing energy strategies/transportation

NIRPC CAP Sections: Regional-Scale SVI

NIRPC CAP Sections: Federal Financing and Programming Options

- With the IRA nearing passage(!!!), and with our CAP planned for publication in early 2023, we will endeavor to include resources passed in the legislation, as well as federal programs and funding made available in the American Recovery Act and Bipartisan Infrastructure Bill
- An overview of programs and resources for accessing them.

ACTION: Green Building Standards for New Buildings or Major Renovations

Green buildings are designed and constructed to minimize the overall impact of buildings on human health and the natural environment through improved energy and water efficiency, use of sustainably sourced materials, and consideration of building location. Local governments can take action to support green building standards, such as the U.S. Green Building Council's LEED standards, WELL Building Standard, Living Building Challenge certification from the international Living Future Institute, or to ensure buildings are designed to have net-zero carbon emissions.

Local Government Role(s): ■ Lead by Example ■ Encourage Action ■ Enact Policy

Lead: *Construct new municipal buildings to meet a green building standard (Kansas City, Missouri; St. Louis).*

Encourage: *Offer financial (Middletown, Connecticut; Longmont, Colorado) or non-financial (Jacksonville, Florida) incentives for buildings that achieve a green building standard. Require green building for public-private partnership projects (St. Paul, Minnesota).*

Enact: *Require large new commercial or multi-family buildings to be built to meet a green building standard (San Francisco). Require buildings in certain zoning categories to meet a green building standard (Clayton, Missouri).*

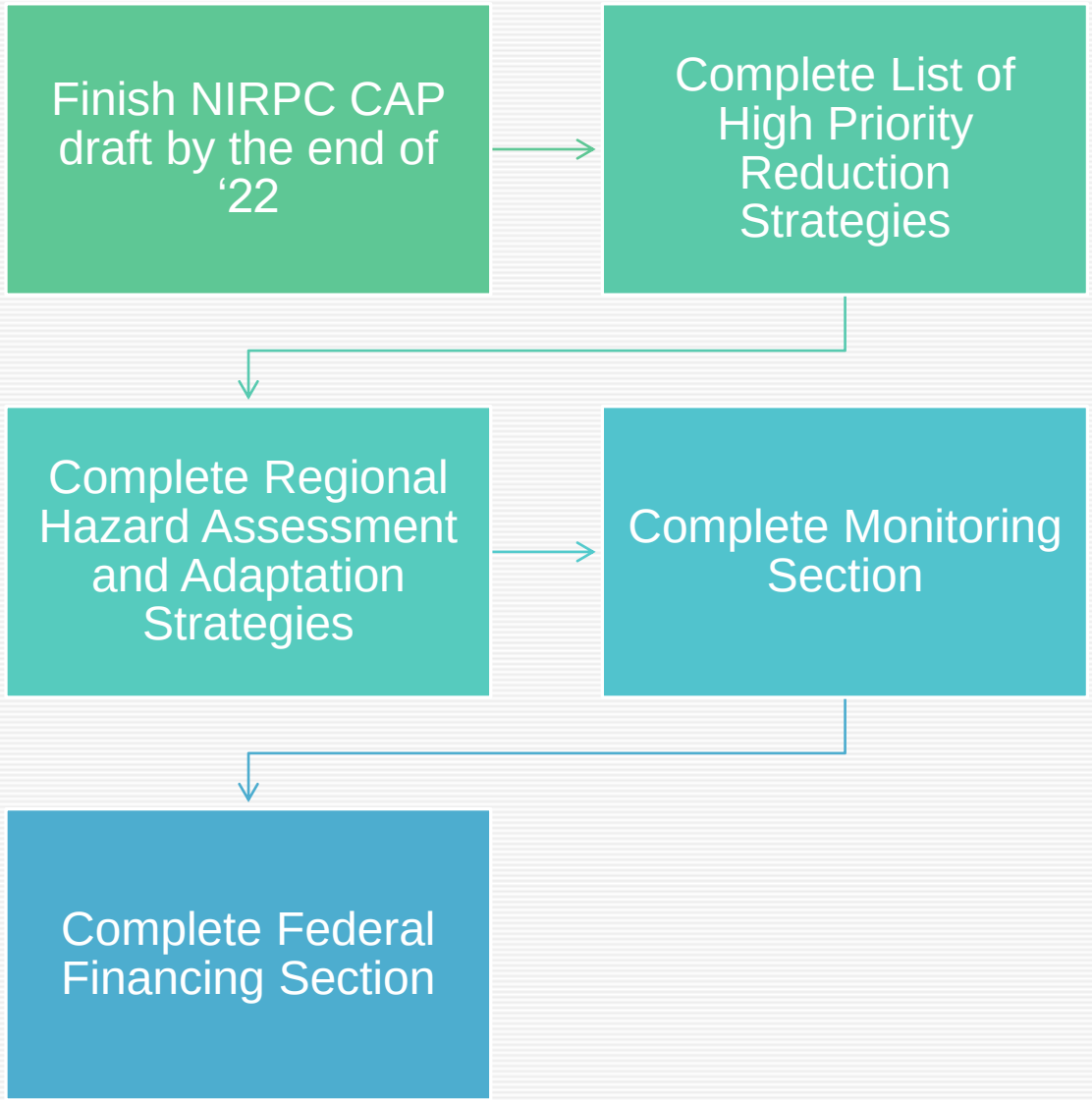
Additional Resources:

- U.S. Green Building Council for Cool Cities
- Energy Star, State and Local Governments
- NAIOP Research Foundation
- International Living Future Institute
- International WELL Building Institute

Regional CAP Example: Kansas City

Summary

Next Steps


Finish NIRPC CAP draft by the end of ‘22
Complete List of High Priority Reduction Strategies
Complete Regional Hazard Assessment and Adaptation Strategies
Complete Monitoring Section
Complete Federal Financing Section

Questions?