BREATHE

Reducing Emissions For A Resilient Region

Climate Action Panel

JUNE 16, 2025

Session Goals

1. Hear from other regions how climate projects makes it from plan to implementation
2. Ask questions about implementation considerations

Agenda

2:30-2:40 Welcome

2:40-3:20 Presentation

3:20-3:45 Panel Questions

3:45-3:55 Audience Q+A

3:55-4:00 Close

Meet your panelists

Jeff Meek

Consultant, Climate Resilience

Kaitlyn Cyr

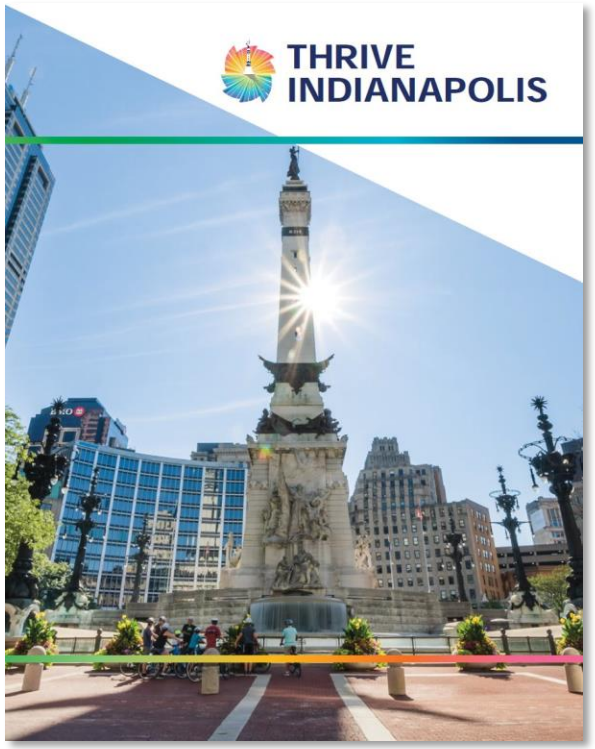
Managing Consultant, Climate Planning

Sam Pournazeri, PhD

Senior Director, Transportation and Energy

Action Implementation

Focus on actions that were implementable and had a clear target completion date



ACTION PLAN
SUMMARY MATRIX

OVERARCHING GOALS

1. Increase community resilience by prioritizing equity in policy, planning and project implementation.
2. Achieve net zero GHG emissions by 2050.

Thrive Indianapolis is organized with two objectives for each plan element and three to five actions under each objective. This matrix includes all the actions by plan element and objective with their initial cost information and the benefits to the overarching goals. More details can be found in the respective plan element sections of this document.

ACTIONS		Initial Costs to Implementers	GHG Reduction Potential	Increased Resilience for Socially Vulnerable Area Populations	Other Thrive Plan Elements Impacted
BUILT ENVIRONMENT					
BE:1	All new buildings meet basic green building standards,* and programs to increase energy and water efficiency are actively pursued in existing buildings.				
BE:1A	Develop an energy benchmarking and disclosure policy for municipal and commercial buildings with the first-year disclosure completed by the end of 2020.	$	●	●	
BE:1B	Require all new commercial construction to meet electric vehicle (EV) readiness requirements for 20% of parking spaces by 2020, with the goal of significantly increasing charging infrastructure at businesses and workplaces.	$	●	●	
BE:1C	Establish low-interest loans for energy efficiency and renewable energy improvements in new and existing buildings, sustained by a revolving loan fund from a combination of financing sources.	$$$	●	●	
BE:2	All new infrastructure is designed, built and maintained to be resilient to the anticipated impacts of climate change, and investments are prioritized based on the 2018 Vulnerability Assessment.				
BE:2A	Systematically integrate climate change projections into all future capital projects by 2020, ensuring new infrastructure can withstand current and projected impacts.	$$	●	●	
BE:2B	Improve onsite stormwater retention programs by incentivizing rain barrels, rain gardens and green roofs. Register 500 residential and nonresidential properties in the stormwater credit program by 2022.	$$	●	●	
BE:2C	Evaluate the effectiveness of the 2016 Green Factor score-based zoning requirement to determine opportunities for improvement.	$	●	●	
BE:2D	Increase street sweeping operations throughout the county to improve stormwater drainage.	$$	●	●	

LEGEND
$ = capital cost (<$1m) / program implementation (<$100k)
$$ = capital cost ($1-5m) / program implementation ($100-500k)
$$$ = capital cost (>$5m) / program implementation (>$500k)
● FAVORABLE ● NEUTRAL ● UNFAVORABLE

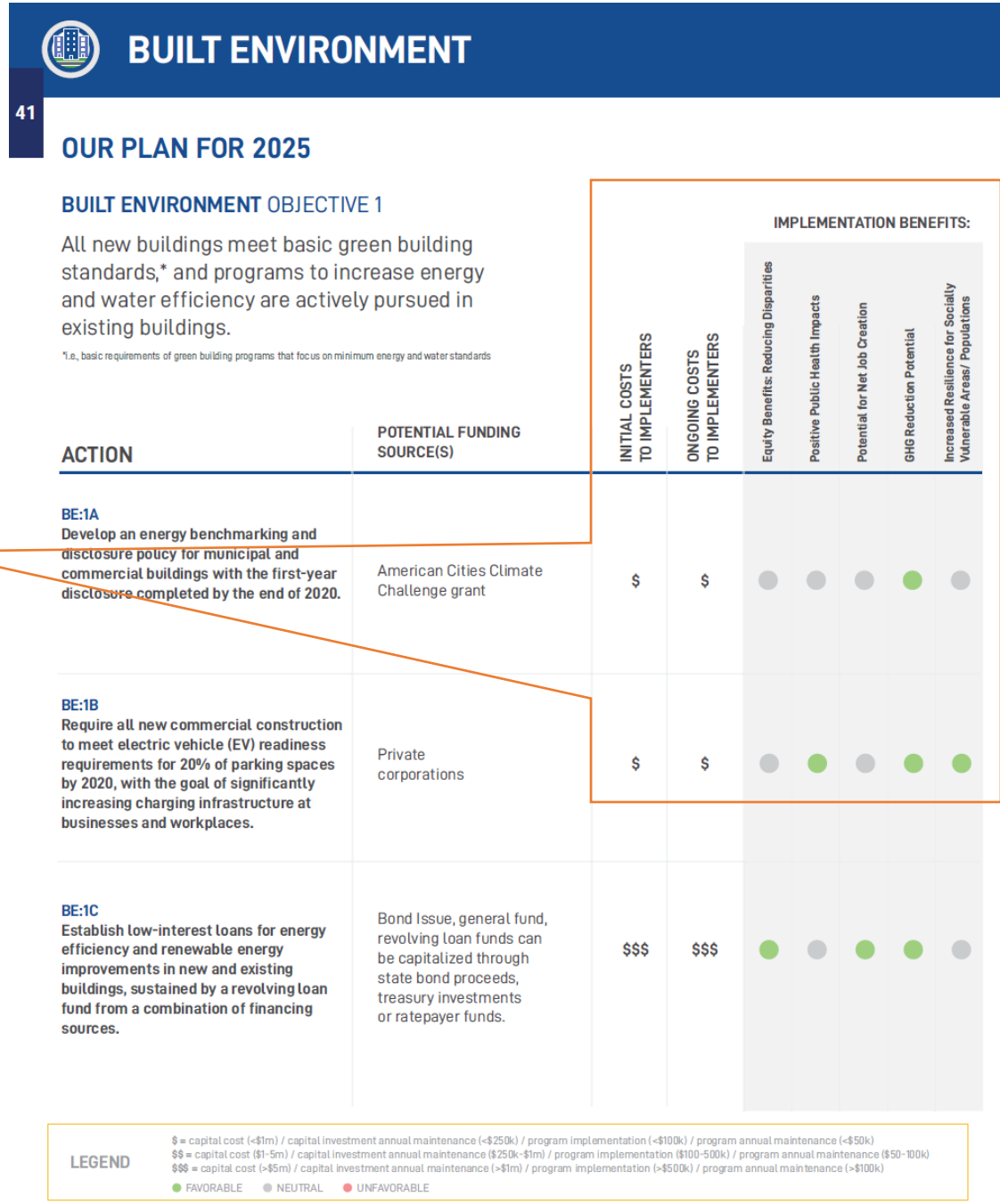
*i.e., basic requirements of green building programs that focus on minimum energy and water standards

Action Implementation

Ensured the actions advanced community goals and have a lead agency identified (ideally even the specific person)

$$$	$	$	INITIAL COSTS TO IMPLEMENTERS
$$$	$	$	ONGOING COSTS TO IMPLEMENTERS
●	●	●	Equity Benefits: Reducing Disparities
●	●	●	Positive Public Health Impacts
●	●	●	Potential for Net Job Creation
●	●	●	GHG Reduction Potential
●	●	●	Increased Resilience for Socially Vulnerable Areas/ Populations

IMPLEMENTATION BENEFITS:



BUILT ENVIRONMENT

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OUR PLAN FOR 2025

BUILT ENVIRONMENT OBJECTIVE 1

All new buildings meet basic green building standards,* and programs to increase energy and water efficiency are actively pursued in existing buildings.

*i.e., basic requirements of green building programs that focus on minimum energy and water standards

ACTION	POTENTIAL FUNDING SOURCE(S)	INITIAL COSTS TO IMPLEMENTERS	ONGOING COSTS TO IMPLEMENTERS	IMPLEMENTATION BENEFITS: Equity Benefits: Reducing Disparities	Positive Public Health Impacts	Potential for Net Job Creation	GHG Reduction Potential	Increased Resilience for Socially Vulnerable Areas/ Populations
BE:1A Develop an energy benchmarking and disclosure policy for municipal and commercial buildings with the first-year disclosure completed by the end of 2020.	American Cities Climate Challenge grant	$	$	●	●	●	●	●
BE:1B Require all new commercial construction to meet electric vehicle (EV) readiness requirements for 20% of parking spaces by 2020, with the goal of significantly increasing charging infrastructure at businesses and workplaces.	Private corporations	$	$	●	●	●	●	●
BE:1C Establish low-interest loans for energy efficiency and renewable energy improvements in new and existing buildings, sustained by a revolving loan fund from a combination of financing sources.	Bond Issue, general fund, revolving loan funds can be capitalized through state bond proceeds, treasury investments or ratepayer funds.	$$$	$$$	●	●	●	●	●

LEGEND

$ = capital cost (<$1m) / capital investment annual maintenance (<$250k) / program implementation (<$100k) / program annual maintenance (<$50k)
$$ = capital cost ($1-5m) / capital investment annual maintenance ($250k-$1m) / program implementation ($100-500k) / program annual maintenance ($50-100k)
$$$ = capital cost (>$5m) / capital investment annual maintenance (>$1m) / program implementation (>$500k) / program annual maintenance (>$100k)

● FAVORABLE ● NEUTRAL ● UNFAVORABLE

Action Implementation

Established a tracking system with annual reporting

TRACKING OUR PROGRESS

To ensure we are on a path to achieve our goals, a number of metrics and associated targets have been identified for the Built Environment plan element. Below are a sample of these metrics. We anticipate these metrics will be updated as more data becomes available. The performance metrics will be reported every three years, and the output metrics will be reported annually.

	BASELINE DATA	BASELINE YEAR	2025 TARGET
PERFORMANCE METRICS (reported every three years)			
GHG emissions from buildings[30]	9,638,165* $mtCO_2e$	2016	7,710,532 $mtCO_2e$
Total building energy use[31]	88,509,707 MMBTU	2016	70,807,766 MMBTU
% Impervious Area[32]	22.6%	2013	20.3%
OUTPUT METRICS (reported annually)			
# of green buildings (i.e., LEED certified or Energy Star Rated)*[33]	249	2018	498
# of buildings disclosing energy use annually	-	-	1,000
# of publicly available EV charging stations[34]	170	2018	300

*Indianapolis was able to make a 17% reduction in its GHG emissions from buildings from 2010 to 2016, primarily due to the conversion of two coal plants and a coal-powered steam plant to natural gas and implementation of energy efficiency measures.

[30] City of Indianapolis & Marion County, 2018
[31] Ibid
[32] City of Indianapolis Department of Public Works, 2013
[33] U.S. EPA & U.S. DOE, 2018; U.S. Green Buildings Council, 2018
[34] ChargeHub, 2018

Action Implementation

Build on the relationships developed to continue advancing this work on

BE A PART OF THE SOLUTION

Our ability to thrive and reach a sustainable, resilient future is in all our hands. The City has helped lead the way by driving this planning process. Now we need everyone's help to take actions and keep us moving forward. Here are some easy things you can do today!

Built Environment

- ☐ Plant a rain garden with native plantings to absorb storm water and replenish our aquifers.
- ☐ Plant trees in our community by volunteering for Keep Indianapolis Beautiful.
- ☐ Become a KIB Adopt-a-Block captain by committing to keep your street clean of litter.
- ☐ Support your local community gardens - or even better, grow your own.
- ☐ Replace your shingles with a "cool roof" that is lighter in color, reflecting away light in the summer time and reducing your cooling loads.
- ☐ Take advantage of rebates offered by IPL and weatherize your home to protect the interior from the elements (as well as reducing your energy bills!).

Energy

- ☐ Turn off lights and electronics when not in use - or even better, unplug them. Some electronics continue to use power, even when turned off.
- ☐ Switch your lightbulbs to more energy efficient LED lights.
- ☐ Turn your heat down and A/C up by two degrees, especially if you are not home or away on a trip.
- ☐ Reduce your water heater temperature to 130° F to save energy and money on heating water.
- ☐ Schedule a free Home Energy Assessment through IPL to learn of opportunities for energy efficiency and weatherization.
- ☐ Enroll in IPL's Green Power Option to support renewable energy for an additional $2.50 in your electric bill on average.
- ☐ Seal air leaks and properly insulate windows to save up to 20% on heating and cooling bills, while also increasing the comfort of your home.

Economy

- ☐ Shop at small, locally owned businesses.
- ☐ Support businesses that have transparent and sustainable practices.
- ☐ Mentor a young person to support them in their studies and careers.
- ☐ Talk to your children about sustainability and how we can all be more sustainable in our daily lives.
- ☐ Encourage the young people in your life to gain job experience and skills development through EmployIndy's initiatives and programs including Project Indy and Job Ready Indy.
- ☐ Access entrepreneurship resources through the Indy Chamber to learn how to start a small business.

Food & Urban Agriculture

- ☐ Eat more plants, which have been proven to be less carbon and resource intensive than eating animal products. A great place to start is with "Meatless Mondays" or one meat-free meal a day.
- ☐ Purchase locally-grown food, supporting local agriculture and minimizing energy spent transporting products.
- ☐ Support restaurants and grocery stores that use and sell locally-grown food.
- ☐ Buy food that is in season, minimizing the distance food must travel.
- ☐ Support your local farmers markets.
- ☐ Buy ethically grown and harvested food, like coffee and chocolate.

Municipal Organics Diversion Program

HOW TO GUIDE

Every pound counts in the fight against climate change

1 Collect food scraps and food-soiled paper in kitchen pail and keep lid closed. Line pail using a compostable bag only. **Please no plastic bags–** they do not decompose.

2 **When 2/3rds full, twist the bag closed and knot the top.** Take to MVRC weekly. 935 Terra Bella Av. Tues-Sat 9am-4pm

3 Recology turns your food scraps into organic compost. **No kleenix or bathroom waste please!**

TIPS FOR PAILS

- Please use only a compostable bag and knot it closed before taking it to the MVRC. No twist ties, bands or plastic.
- Keep your kitchen pail in a convenient location on the counter, under the sink, or in the freezer.
- Place food scraps and food-soiled paper in the pail while cooking or cleaning up after meals. The paper helps to absorb moisture.
- Use the garbage disposal only for liquids such as soups and sauces. (See FAQ, pg. 3)
- Freeze spoiled foods until collection day. Remove packaging first.
- Empty your compost pail at least once a week, more often if necessary.
- Rinse kitchen pail with soap and water weekly. Pail is dishwasher safe and the lid is removable. Sponge lid with a little vinegar to sanitize and discourage any pests.
- Stores sell compost pails that might fit your style better.
- Please do **not** use ice cream or milk cartons for pails because they are made to withstand moisture and do not break down in the 12 week composting process.

BAGS:
No plastic or vegetable bags. Use only bags certified by the Biodegradable Products Insitute with the BPI symbol on the package.

BPI

Bags are available in 3 and 13 gallon sizes at many local grocery stores and retailers. They cost a few cents more than plastic trash bags (which do not decompose). See list of local retailers at www.mountainview.gov/foodscraps, and support your local economy and jobs.

Questions?
Contact us at recycle@mountainview.gov or (650) 903-6311.

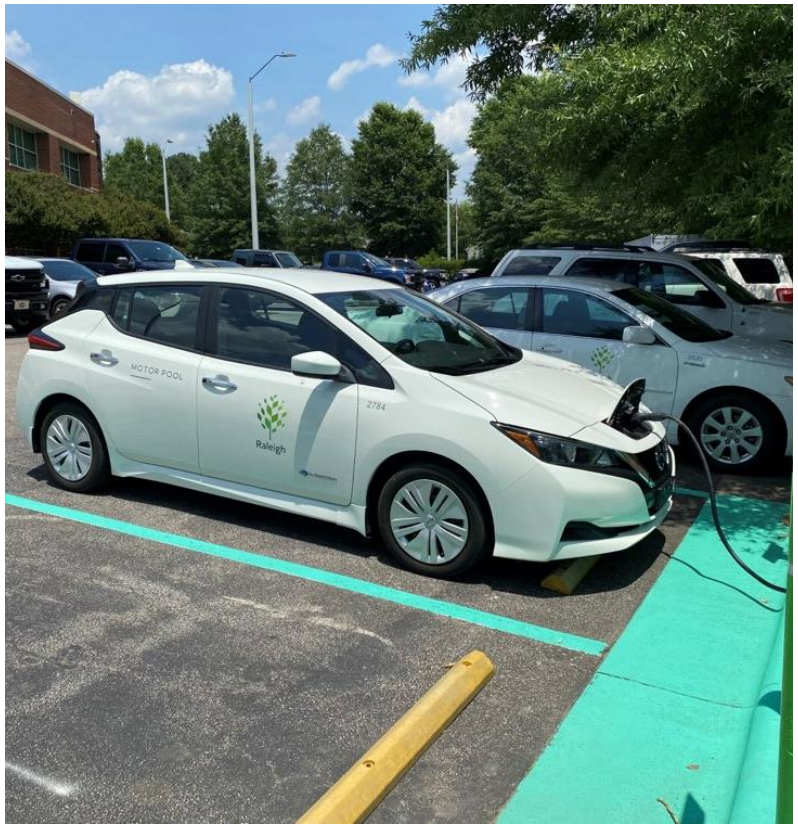
City of Mountain View "How to Guide"

- Key program design considerations
  - **Hauler and facility capacity:** Work with haulers and local facilities to determine capacity for and costs of organics diversion
  - **Curbside service vs. Drop-off locations:** Where curbside service may be limited (e.g., multifamily or commercial properties), evaluate community hub drop-off locations
  - **Public education and outreach:** Identify key methods for information sharing through City channels and at locations such as farmers markets, public libraries and community centers
  - **Pilot programs for varied residential and commercial building types:** Engaged participants = high effort and clean compost stream

Municipal Organics Diversion Program

- Implementation partners:
  - Haulers
  - Community groups
  - Facility operators (compost facilities AND landfill, recycling center, and other sites for drop-off locations)
- Leading by example at city facilities
- Additional opportunities:
  - Food waste reduction messaging
  - Community gardens and local landscapers or agri-businesses
  - Recycling effectiveness

EV Infrastructure Deployment



Considerations for Implementation

Develop an EV Implementation Plan

Form an EV Fleet Transition Team

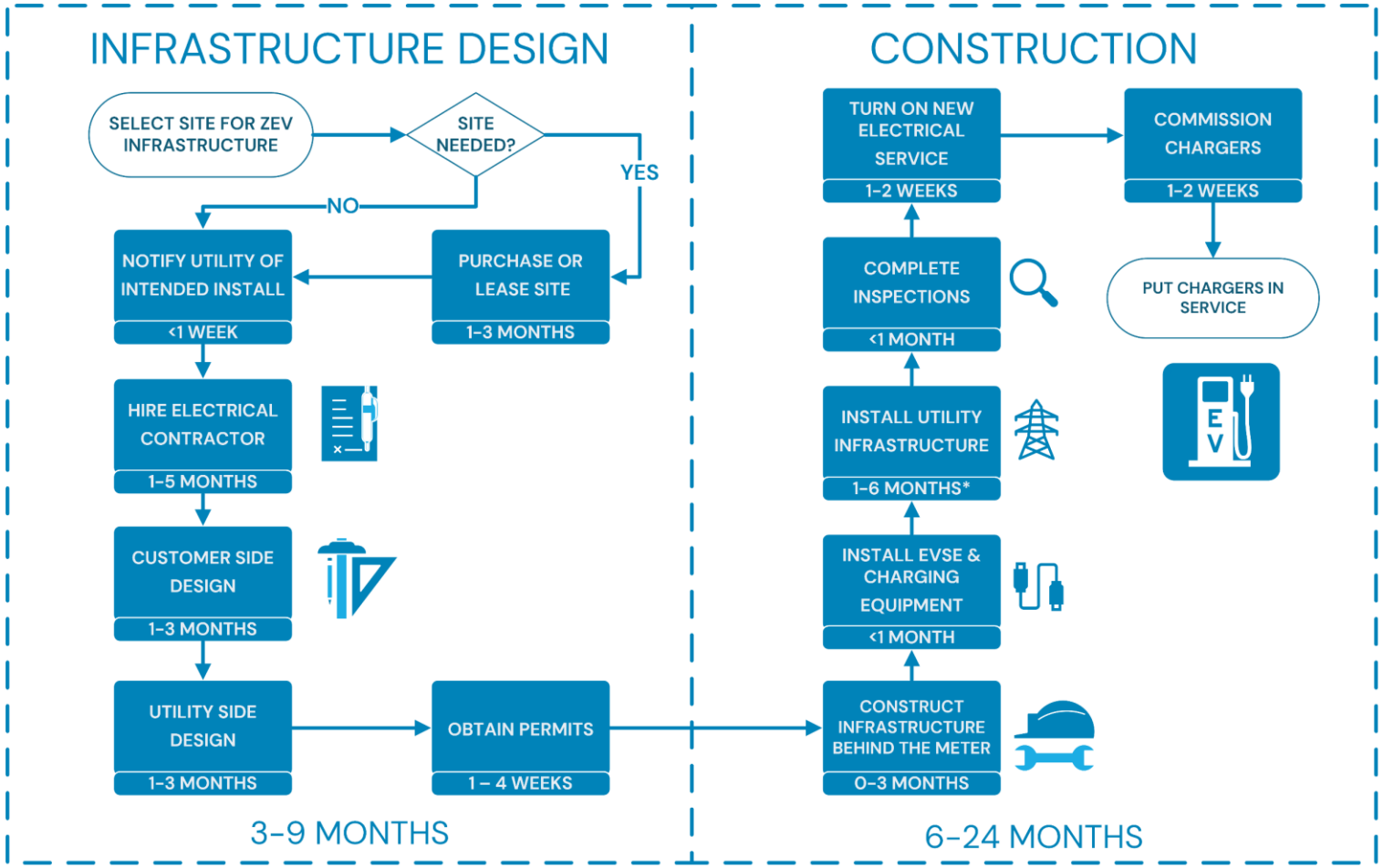
Start the Conversation with your Utilities

Have a Funding Strategy in Place

Start with Pilot Programs

Utility Coordination

- **Engage utilities early** – Initiate discussions with utilities early to assess grid capacity.
- **Plan for load growth** – Work with utilities to project future electricity demand.
- **Permitting & Interconnection Coordination** – Align with utility and local requirements.
- **Incentives & Rate Optimization** – Leverage incentives and smart charging rates.



* Utility installation time can take 1-7 years if substation upgrades or replacement is needed

Permitting & Construction

Site Selection & Zoning – Ensure the site complies with local zoning laws, has sufficient space for truck maneuverability, and is close to existing power infrastructure.

Permitting Requirements – Work closely with local authorities and utilities to navigate environmental, electrical, and construction permitting processes to avoid delays.

Construction Planning & Timelines – Factor in lead times for equipment procurement, labor availability, and seasonal construction constraints.

Scalability and Future Expansion – Design infrastructure with the flexibility to accommodate future charging demand, additional vehicles, and emerging technologies like megawatt charging.

BREATHE

Reducing Emissions For A Resilient Region

Get Involved With Next Steps!

- August/September: CCAP draft released to working groups for comment
- October/November: CCAP publication

For more information, contact us at **contact@knoxbreathe.org**

Be on the lookout for
Public Engagement Events in Summer 2025!