

Office of Sustainability
Presentation to Planning Commission
April 5, 2021

City of Richmond
RVAgreen
2050

Equitable climate action for a healthy and resilient Richmond

What is Climate Change?



Climate change is
a shift in the
long-term, average
weather pattern



Human-caused
emissions—especially
from burning fossil
fuels—are driving
climate change

Climate Change is Already Impacting Richmond

April 19, 2017

This year brought Richmond fourth-highest tree pollen in 30 years

By JOHN BOYER Richmond Times-Dispatch Apr 19, 2017

February 13, 2017

The warm weather is gone for now, but Sunday left a mark on Richmond's records

By JOHN BOYER Richmond Times-Dispatch Feb 13, 2017

May 10, 2017

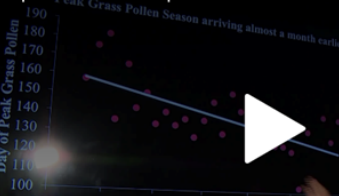
Science shows Richmond pollen season more intense than in past

POSTED 1:22 PM, MAY 10, 2017, BY TOM PATTON, UPDATED AT 02:31PM, MAY 10, 2017

FACEBOOK TWITTER EMAIL PINTEREST

This is an archived article and the information in the article may be outdated. Please look when it was last updated.

Experts talk about extreme pollen



May 26, 2017

Two water rescues for James, which is under warning much of the

Remnants of Hurricane gave the Richmond deadly tornado in 2

By JOHN BOYER Richmond Times-Dispatch Sep 17, 2018

FACEBOOK TWITTER

The river level time the river

Michael, Florence and deadliest hurricane since

By JOHN BOYER Richmond Times-Dispatch Oct 19, 2018

FACEBOOK TWITTER

Storm clouds ripped open

An enhanced satellite image from NOAA shows Hurricane Florence

THE ASSOCIATED PRESS

by: Nick Conigliaro

Posted: Aug 5, 2019 / 10:22 PM EDT / Updated: Aug 5, 2019 / 11:09 PM EDT

February 25, 2019

James River hits highest level

POSTED 4:08 PM, FEBRUARY 25, 2019, BY WEB STAFF AND BRENDAN KING, UPDATED AT 10:45AM

FACEBOOK TWITTER

Parts of city under water

Excessive Heat Warning in some parts of Central

By JOHN BOYER Richmond Times-Dispatch Jul 20, 2019

FACEBOOK TWITTER

The river level time the river

We haven't really seen anything like this in Richmond

Richmond couple comes across flood during walk

By JOHN BOYER Richmond Times-Dispatch Aug 5, 2019

FACEBOOK TWITTER

Richmond, Va. -- The latest update from the U.S. Virginia in a moderate drought. This is an increase

by: Nick Conigliaro

Posted: Aug 5, 2019 / 10:22 PM EDT / Updated: Aug 5, 2019 / 11:09 PM EDT

September 27, 2019

Richmond's September weather is going to rank high for heat and low

By JOHN BOYER Richmond Times-Dispatch Sep 27, 2019

FACEBOOK TWITTER

Wednesday was the hottest October recorded in Richmond — and 1 over

From Staff Reports Oct 2, 2019

FACEBOOK TWITTER

October 2, 2019

Wednesday was the hottest October recorded in Richmond — and 1 over

From Staff Reports Oct 2, 2019

FACEBOOK TWITTER

October 10, 2019

Drought expands across Virginia

POSTED 1:17 PM, OCTOBER 10, 2019, BY MIKE STONE, UPDATED AT 05:58PM, OCTOBER 10, 2019

FACEBOOK TWITTER

January 2020 was Earth's warmest on record

The long-term trend of above-average

Climate Satellites | climate analyses and statistics

February 1 warmer than

Environment

After Richmond months, the Jar

November 30, 2020

The 2020 h for the A s

November 12, 2020

UPDATE: James River in Richmond could rise to its highest levels since 1996 following downpours

John Boyer 9 min ago 4 min to read

February 18, 2021

Brace yourself for more deadly storms, forecasters warn

May 24, 2020

Summer weather outlook: extra warmth and rainfall favored across Va.

John Boyer May 24, 2020 2 min to read

FACEBOOK TWITTER

Richmond's heat wave continues after hottest day of the summer on Sunday

By ELIZABETH BELL Richmond Times-Dispatch Jul 20, 2020 1

FACEBOOK TWITTER

July 20, 2020

Richmond's heat wave continues after hottest day of the summer on Sunday

By ELIZABETH BELL Richmond Times-Dispatch Jul 20, 2020 1

FACEBOOK TWITTER

February 3, 2020

Early spring-like weather could tracking chance of sprinkle

Rain becomes more likely Wednesday.

Posted: 12:51 PM, Feb 03, 2020 Updated: 9:19 AM, Feb 04, 2020

By: Zach Daniel

February 18, 2020

Henrico storm spotter compares to prior years - the difference is

Temperatures this winter have been well above average in Virginia

John Boyer Jul 29, 2020 3 min to read

FACEBOOK TWITTER

July 29, 2020

Richmond hasn't seen 20 straight days of high

in the 90s since 'Waterworld' was in theater

John Boyer Jul 29, 2020 3 min to read

FACEBOOK TWITTER

October 15, 2020

U.S. Winter Outlook: Cooler North, warmer South with ongoing La Nina

John Boyer 9 min ago 4 min to read

FACEBOOK TWITTER

November 12, 2020

UPDATE: James River in Richmond could rise to its highest levels since 1996 following downpours

Climate Action and Resilience Goals

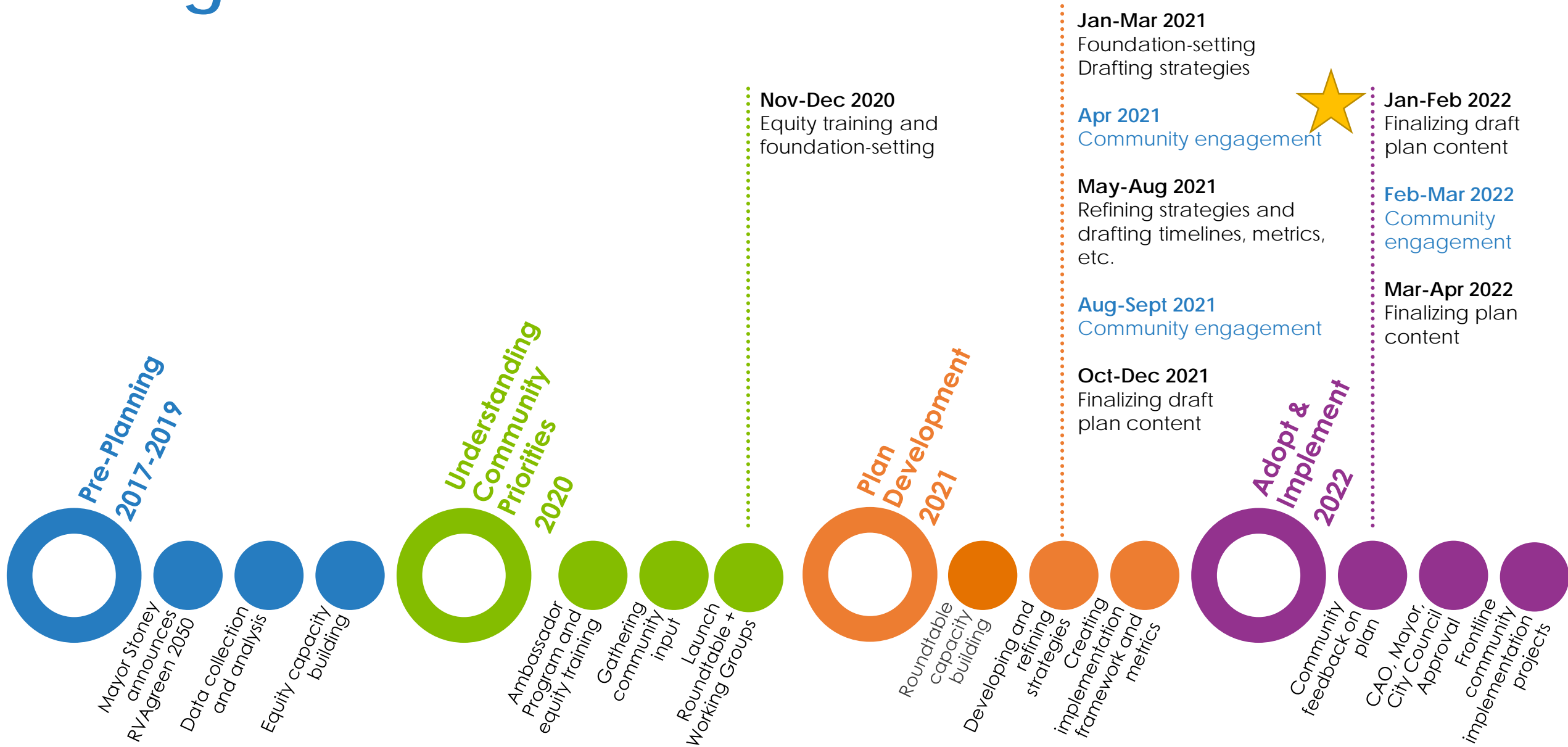
City Council Resolution 2020-R024 (Adopted Jun. 8, 2020)

45% reduction in greenhouse gas emissions by 2030 (from 2008 baseline) and net zero emissions by 2050

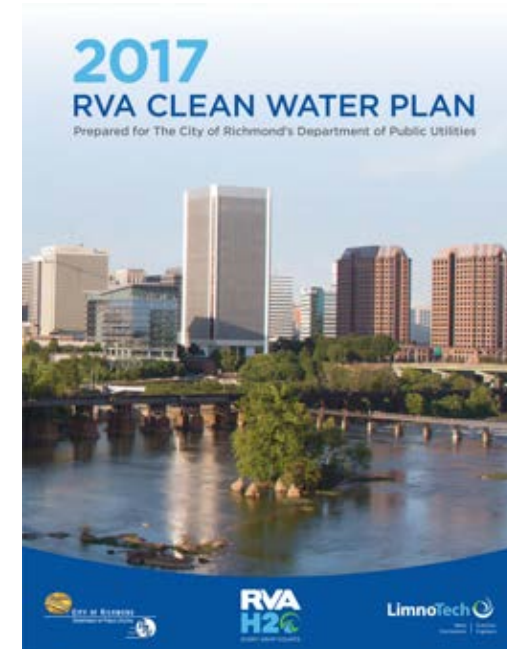
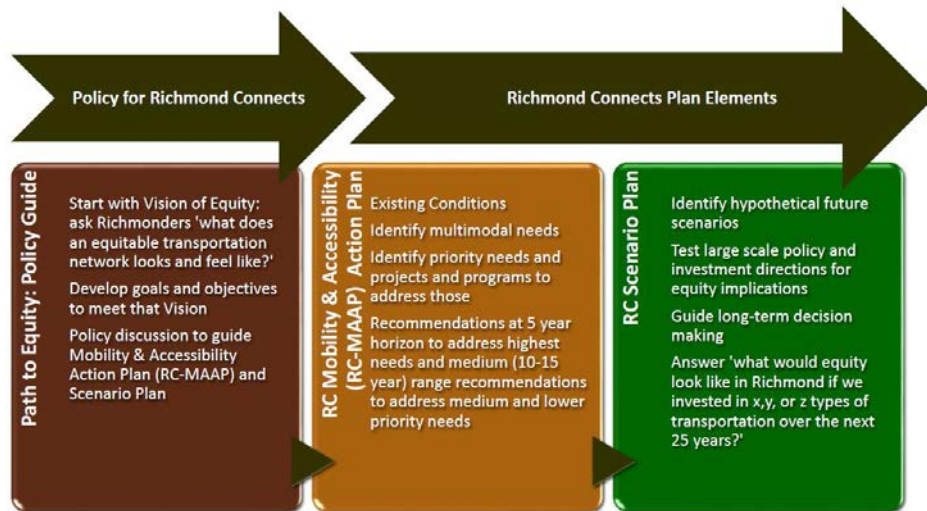
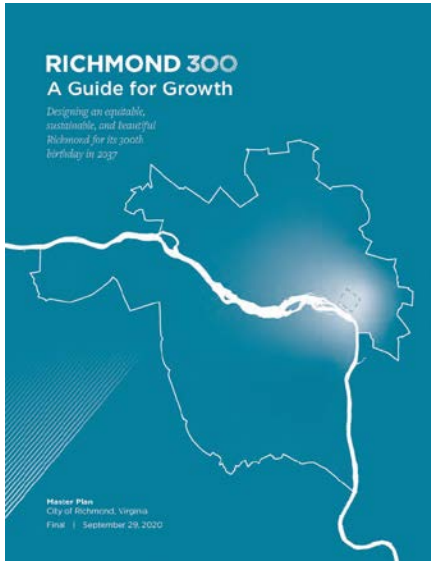
Prepare, adapt, and improve resilience to local impacts of climate change

Develop and implement an equity-centered, integrated climate action and resilience plan

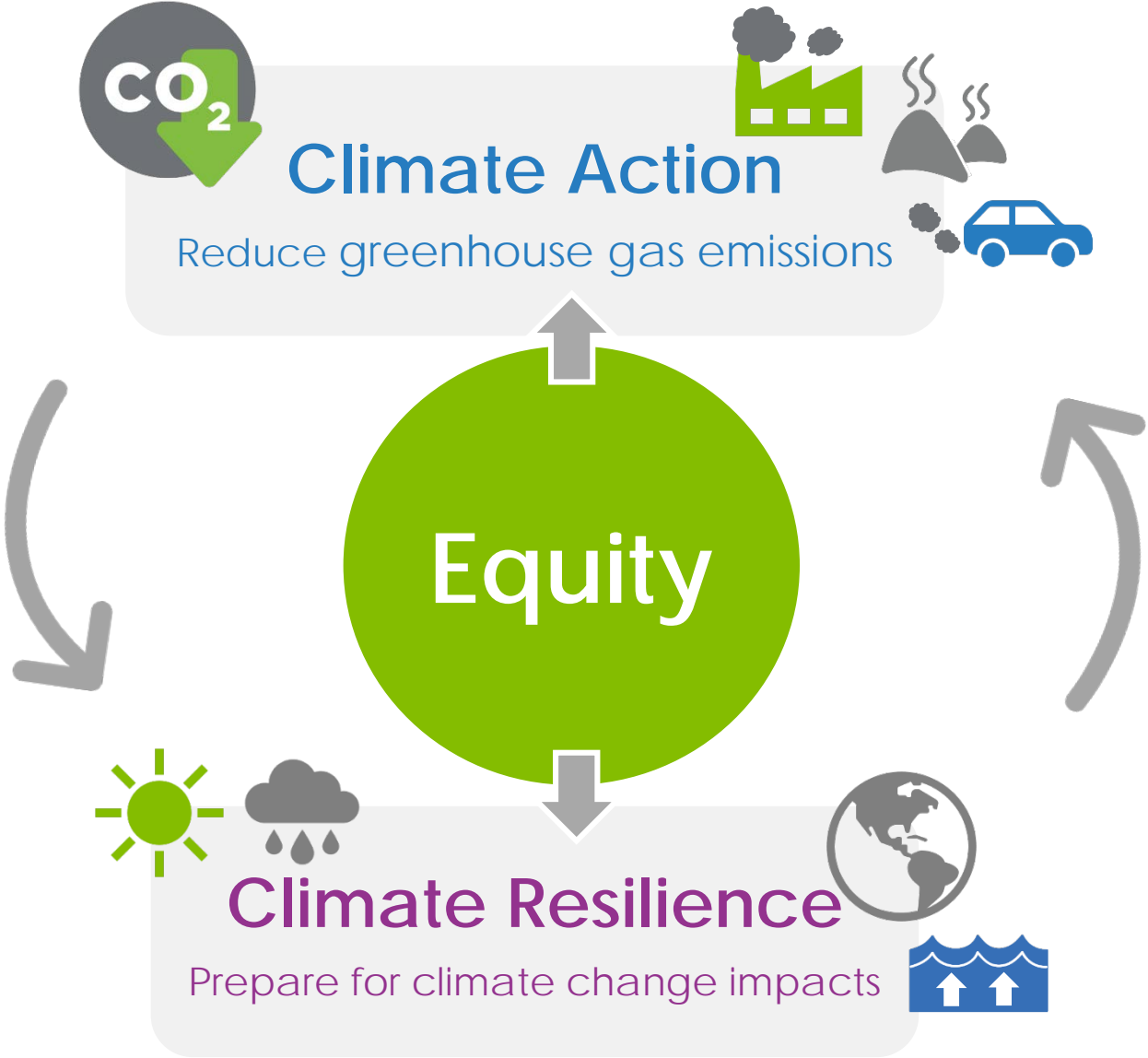
RVAgreen 2050 Process



RVAgreen 2050 = Coordinated Planning



RVAgreen 2050 = Equity Centered Planning



Race, Income & Disproportionate Climate Impacts

Communities of color and low-income residents and are more likely to...



live in areas with less greenspace and are more vulnerable to respiratory and heat related illnesses



lack access to energy efficient housing and often are disproportionately impacted by high energy bills



be impacted by extreme weather events as a result of climate change



live in neighborhoods that lack convenient access to transit, or safe walking and biking options



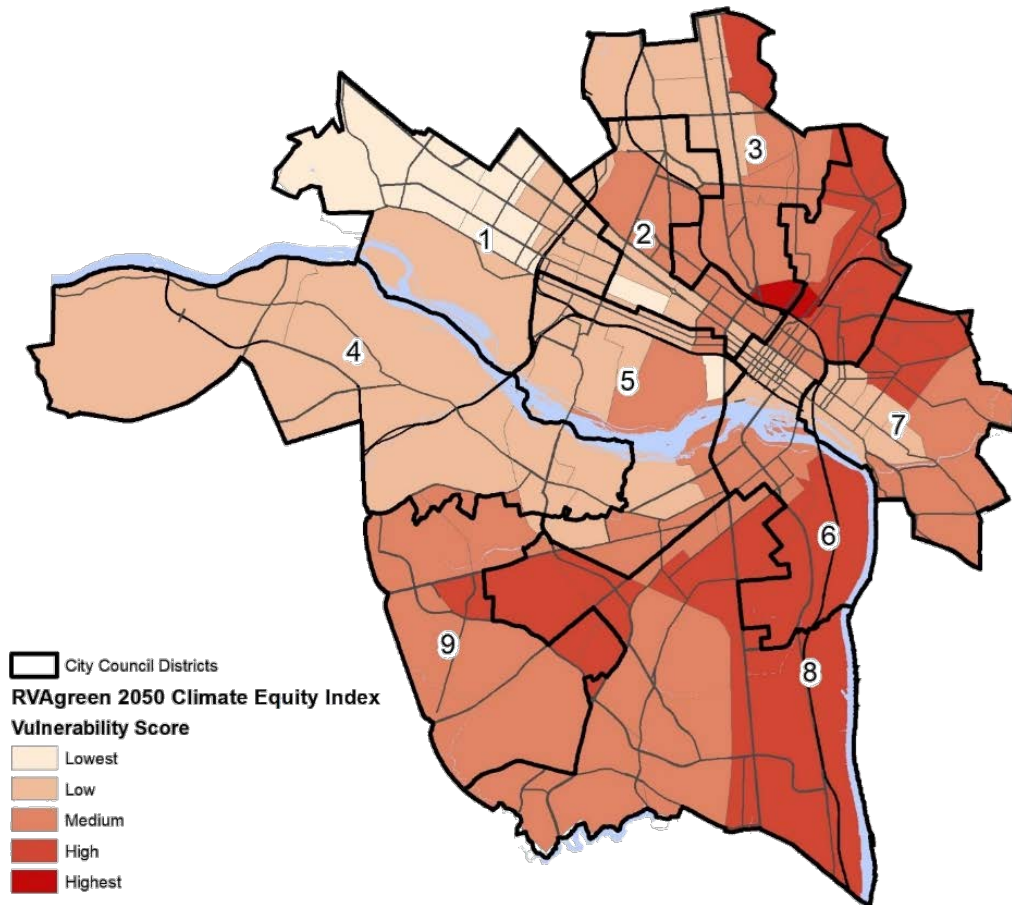
live in housing without air conditioning and are more vulnerable to heat related and respiratory illnesses and death



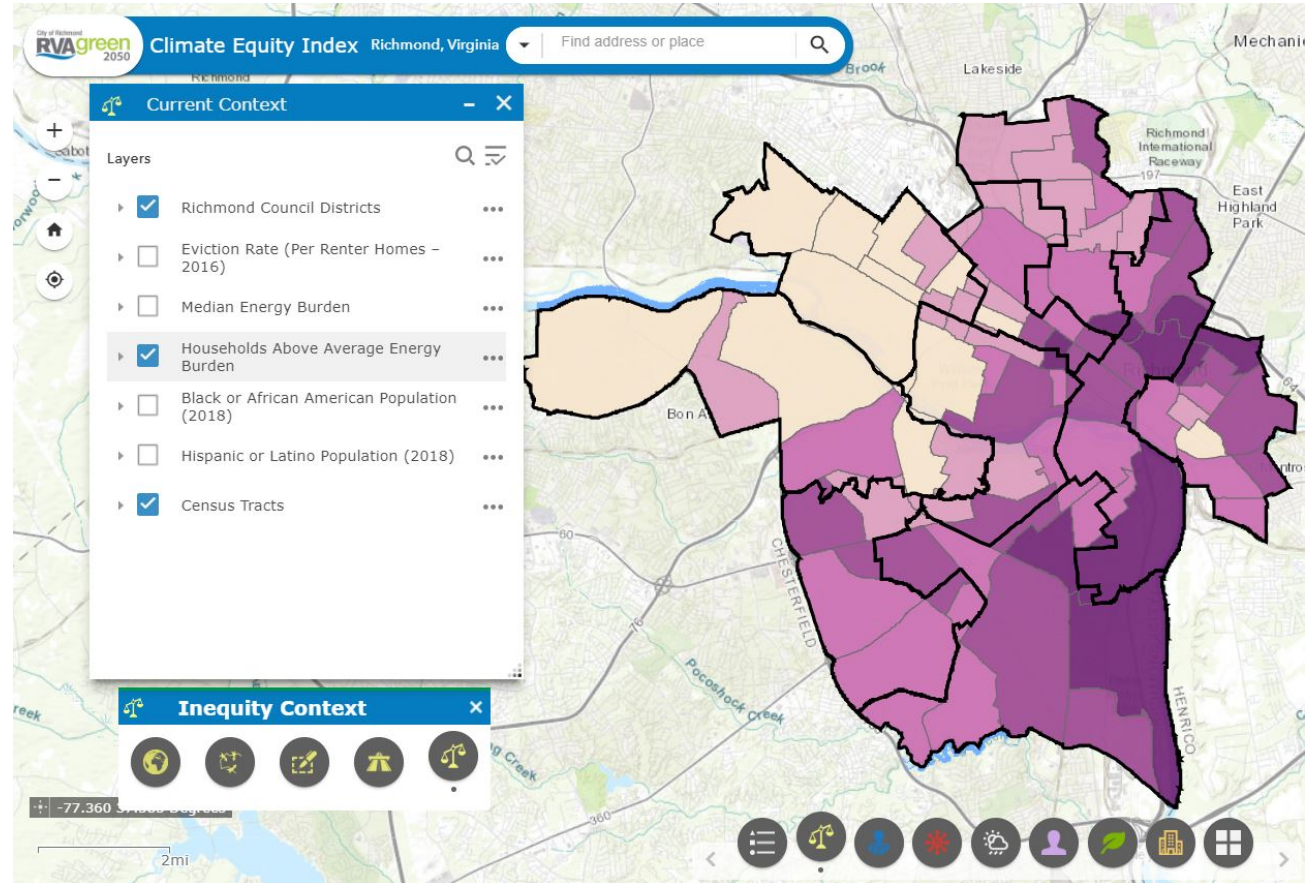
be exposed to pollution and airborne allergens and are more vulnerable to asthma and other respiratory illnesses

Climate Equity Index-Interactive Tool

Climate Vulnerability

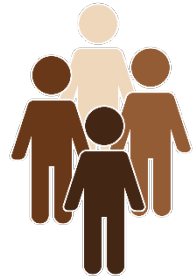


Energy Burden

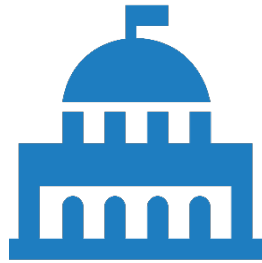


Understanding Community Priorities

The RVAgreen 2050 planning process is centered in equity and the priorities of the Richmond community which are:



Engagement



**Government
Accountability**



Community Wealth



Neighborhoods



Health & Well Being



Housing & Buildings



**Racial Equity &
Environmental Justice**

Community Priorities & Inequity

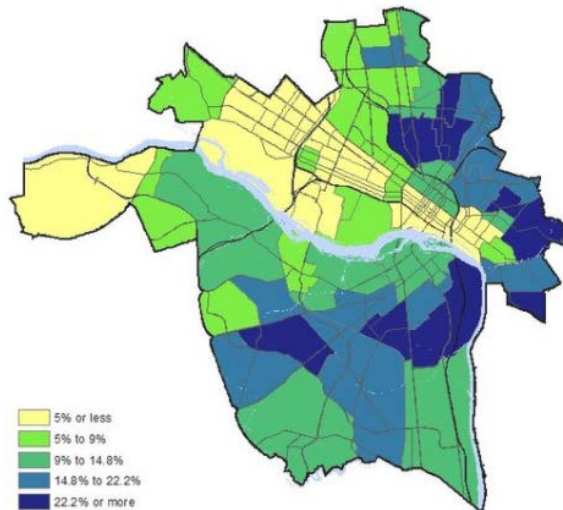
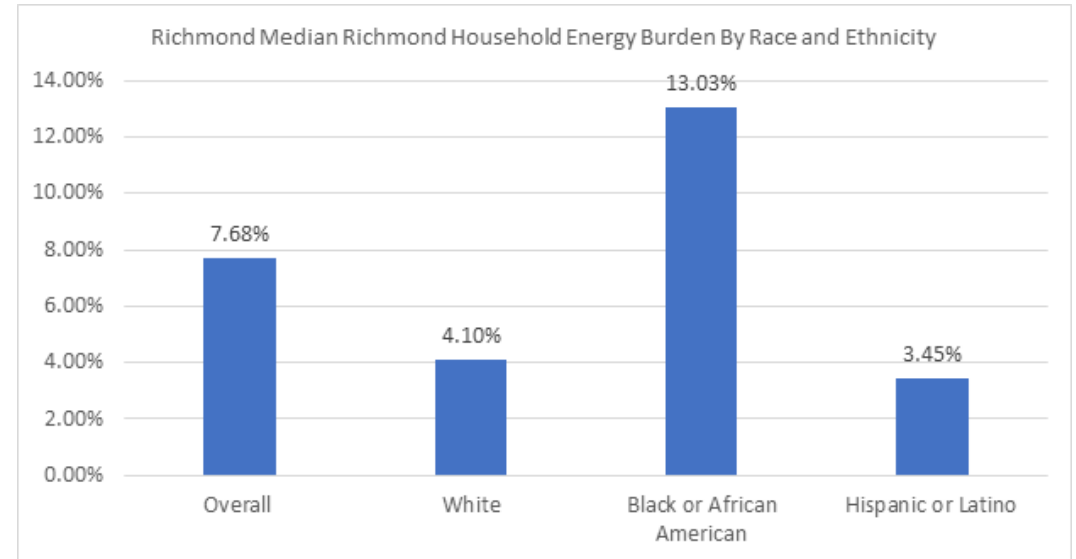


Housing & Buildings

Affordable Housing, Energy Burden, and Race/Ethnicity

Energy burden is a known contributing factor to evictions

- US median household energy burden across 48 largest cities = 3.5%; Richmond = 7.7%
- Low-income, Black, and Hispanic or Latino households pay a much larger share of their income on energy bills



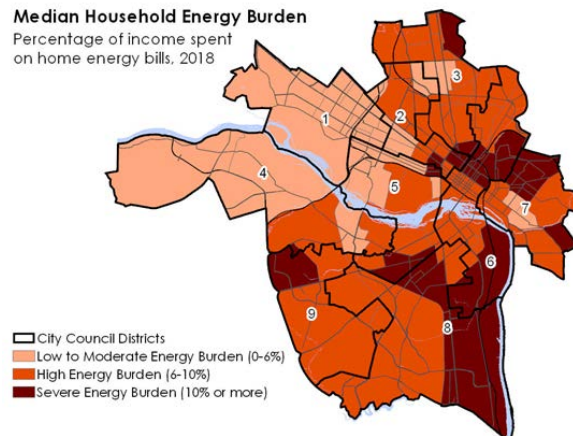
Median household energy burden:

All households

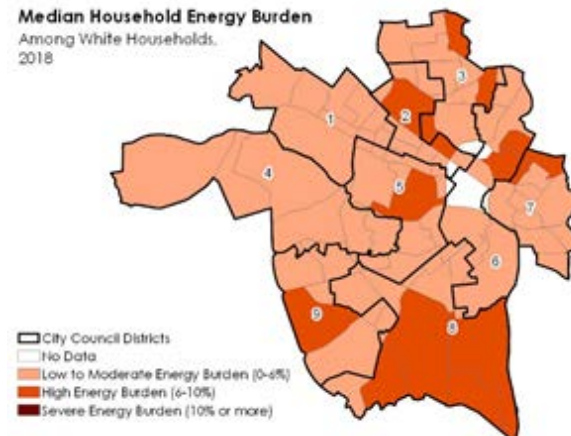
White Households

Black/African American Households

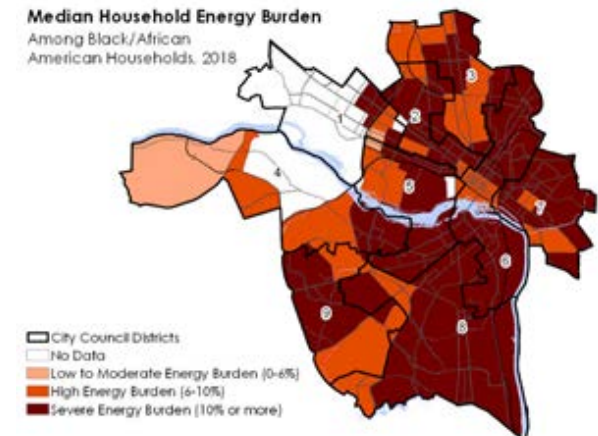
Median Household Energy Burden
Percentage of income spent on home energy bills, 2018



Median Household Energy Burden
Among White Households, 2018



Median Household Energy Burden
Among Black/African American Households, 2018



Eviction Rate (Per Renter Households)

Community Priorities & Inequity

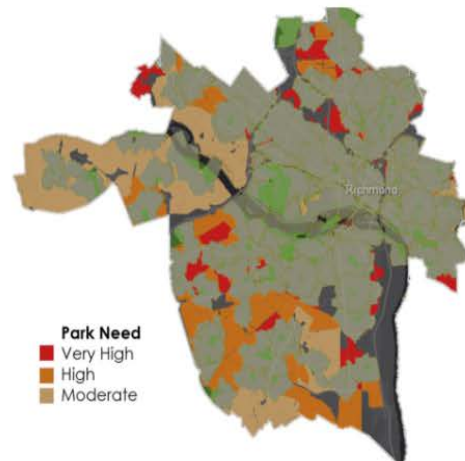
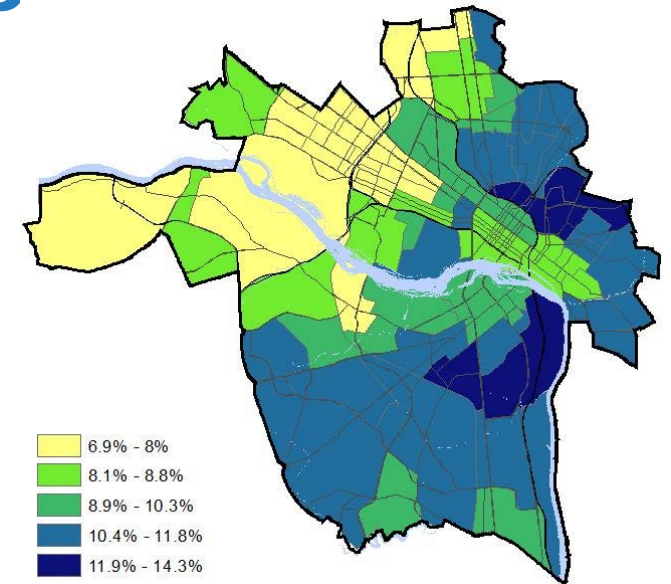


Neighborhoods, Natural Environment & Health

Richmonders want safe, beautiful, and healthy neighborhoods

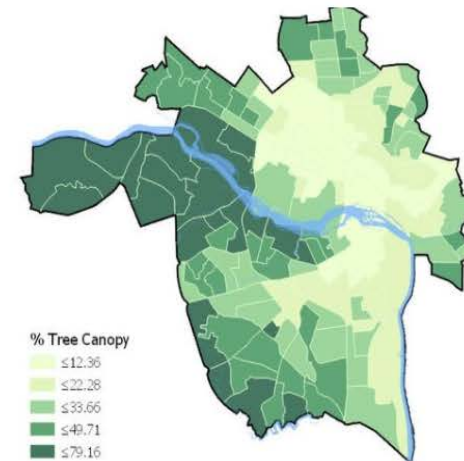
- Specific concerns included green space and parks access, physical and mental health, and flooding
- Due to historic and institutional racism, people of color are more likely to live in hotter neighborhoods where vulnerability to heat-related illnesses is higher

Adults with Asthma 2016 American Community Survey



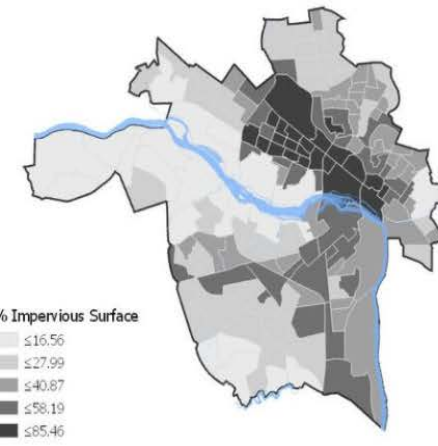
Areas Not Within 10-Minute Walk to a Park

Source: Trust for Public Land



Tree Canopy

Source: Jeremy Hoffman, Science Museum of Virginia

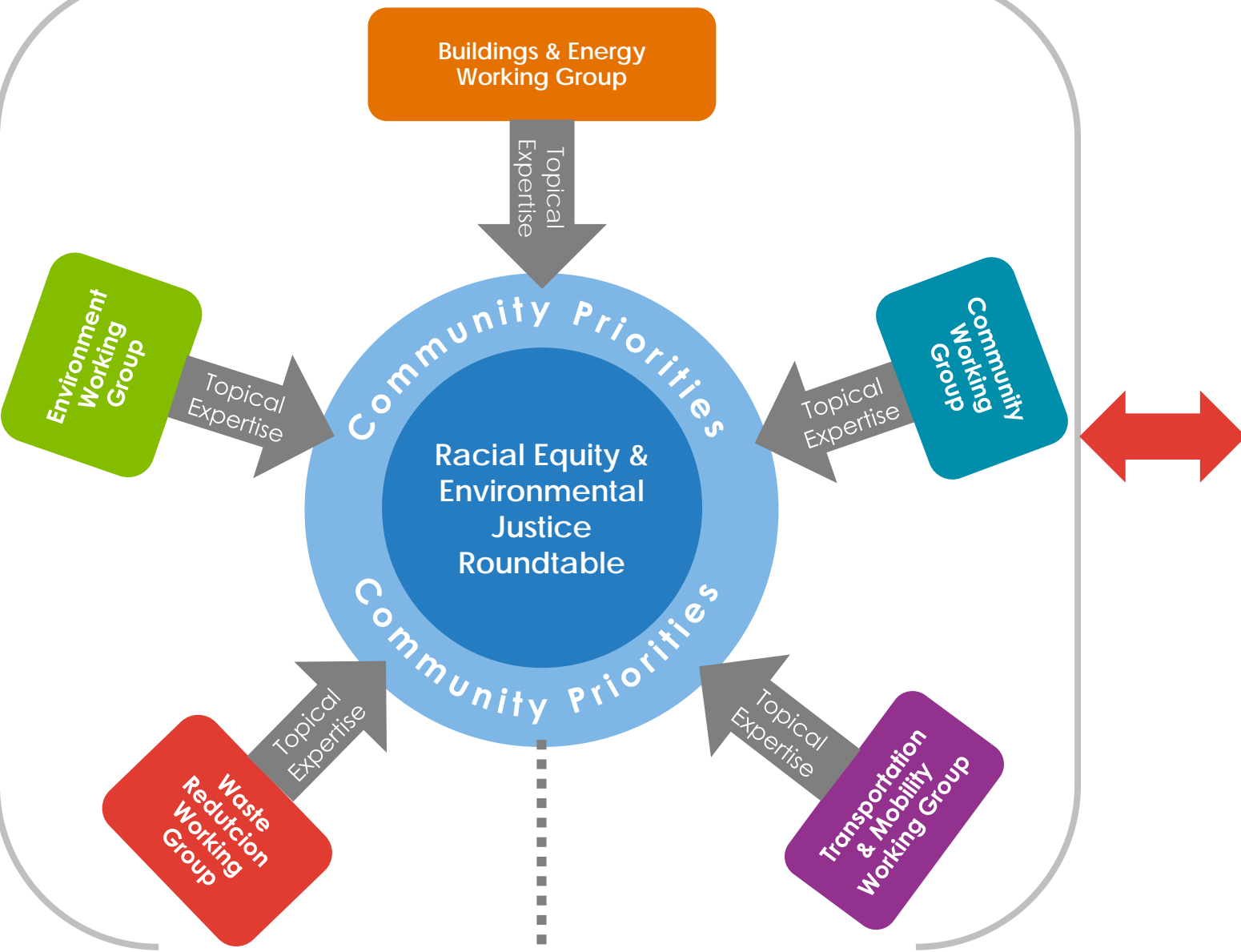


Impervious (Paved) Surface

Source: Jeremy Hoffman, Science Museum of Virginia

Roundtable = shaping planning process and content

Community Engagement



Phase 1: Understanding Community Priorities

- ★ Listening sessions w/ frontline organizations (virtual)
- Virtual Ambassador Program
- Community survey

Phase 2: Developing Strategies

- ★ Frontline community workshops
- Communitywide Input Sessions #1

Phase 3: Refining Strategies

- ★ Frontline community workshops
- Communitywide Input Sessions #2

- ★ Neighborhood-Level Engagement
- Broader Community Engagement

Office of Sustainability/City government responsibilities throughout:
■ Engagement & Communication ★
■ Government Accountability ★

★ Community priorities from listening process

Equity Screening Tool

The tool is organized by the 7 community priorities gathered during the summer 2020 listening process

Community Priority

Priority Considerations	Suggested Data & Metrics
<ul style="list-style-type: none">Use these questions to evaluate how a proposed action addresses equity	Consider these data and metrics to help answer the questions and/or assess a proposed action
Additional Considerations <ul style="list-style-type: none">	

**see glossary for additional information about this term*

An asterisk (*) indicates that a concept or term is listed in the glossary at the end of the tool

Housing & Buildings

Priority Considerations

- Will this reduce the number of families that are cost-burdened by housing and transportation?
- Does this reduce inequities in housing/building quality related to health and safety, such as issues related to lead, mold, air quality, etc.?
- Could this increase access to housing in general, and to homeownership?

Neighborhoods

Priority Considerations

- Could this expand access to healthy, clean, and accessible transportation?
- Could this increase access to quality green space in historically disenfranchised communities?
- Could this increase and ensure long-term access to amenities* in historically disenfranchised communities?

Government Accountability

Priority Considerations

- Has the community asked for this? Is there a mechanism in place to change the action as needed based on indicators and community feedback?
- Is it clear who is accountable to whom and for what?
- What is the current data related to the proposed action, where does it come from, and what does this data tell us?

1 vision

All Richmonders, regardless of their identity or neighborhood, thrive in a climate-resilient and climate-neutral community

2 main goals to achieve

*45% reduction in greenhouse gas emissions by 2030 and net zero emissions by 2050
Prepare for, adapt, and improve the community's resilience to local climate impacts*

5 pathways to get us there



Buildings & Energy, Community, Environment, Transportation & Mobility, Waste Reduction & Recovery

7 community priorities to honor



Racial Equity & Environmental Justice, Government Accountability, Community Wealth, Affordable Housing, Beautiful & Safe Neighborhoods, Health, Equitable Engagement & Communications



April Community Engagement

DATES: April 7-30

GOAL: seeking input on draft vision, objectives, and strategies from the entire community

KEY ELEMENTS:

- April 7 Mayor's announcement during weekly press briefing

- Roundtable Engagement Activities

- Online PDF document for public comment

- Online and paper survey for input

- Engagement Toolkit for partners (social media graphics, content, materials, etc.)

- Weekly RVAgreen Gab events - Thursdays 5-6:30 p.m.

- Weekly newsletters as well as social media and website



We need your input by April 30!
RVAgreen2050.com/participate

   @RVAgreen2050

 rvagreen@richmondgov.com