



Extreme Heat in Gresham

CITY OF GRESHAM

 **GRESHAM**
Climate Action

Overview

Motivation for Gresham's Heat Plan

- Heat Data, 2021 Heat Dome, and Community Experiences

Tools for Planning Ahead

- Rockwood Heat Study and Tree Canopy Mapping

Building Gresham's Heat Action Plan

- Phase 1 (code & plan audit)
- Phase 2 (internal city prioritization)

Next Steps

- Funding

It's Heating Up

 Multnomah County - Average Daily Maximum Temp (°F)

Average Daily Maximum Temperature (°F)

Graph

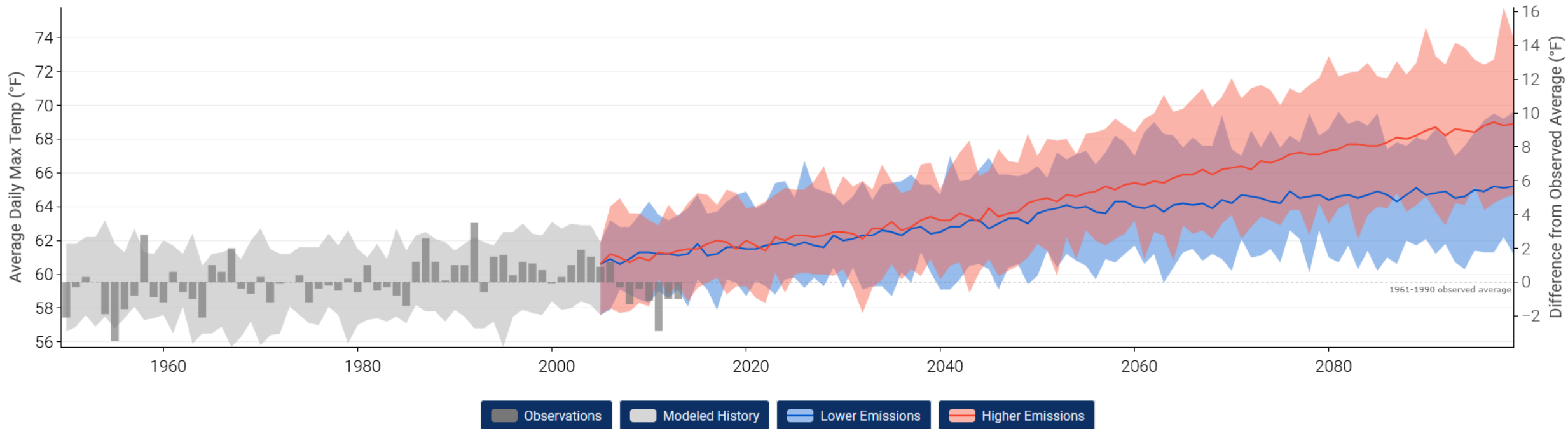
Map

Annual

Monthly

 Downloads

 About



Projections of Average Daily Maximum Temperature (°F) for Multnomah County, from the National Environmental Modeling & Analysis Center (NEMAC) Climate Explorer



2021 Heat Dome



Catalyst for the Heat Plan

- Record breaking temps resulted in **72** heat-related deaths and **250** emergency hospitalizations across the County

Community Experiences

Gresham's Population

- 45% are renters (higher than average compared to Portland)
- Working class community
- Large immigrant communities

Cooling Infrastructure

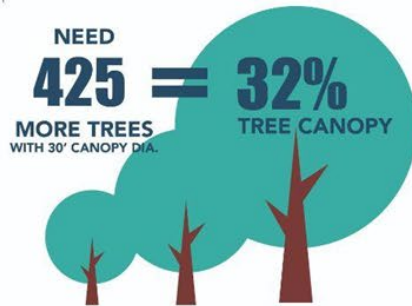
- Buildings are not equipped for heat
- City staff have heard people need AC to stay safe, better access to info, and public spaces to cool down



Rockwood Heat Island Analysis

A CLIMATE RESILIENT ROCKWOOD URBAN HEAT ISLAND MITIGATION INTERVENTIONS

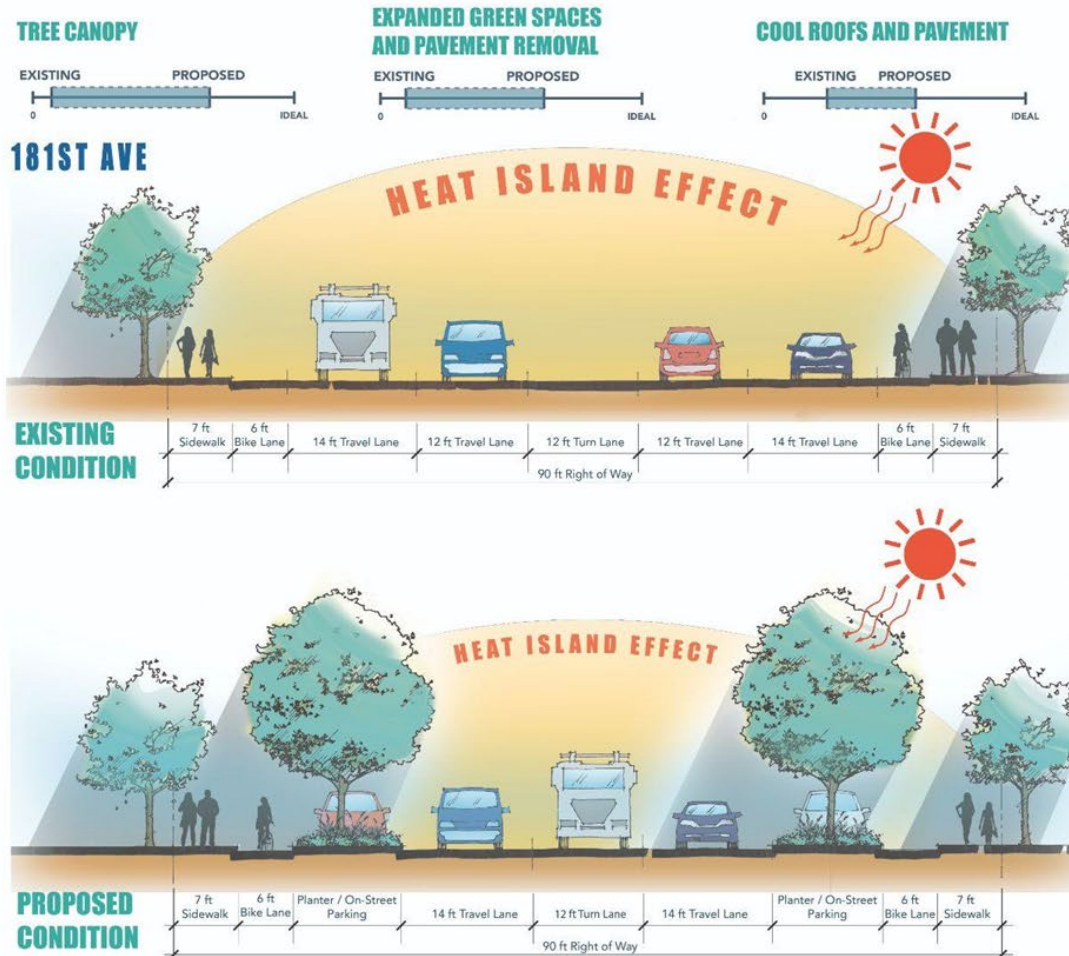
December 2021



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County
Office of Sustainability

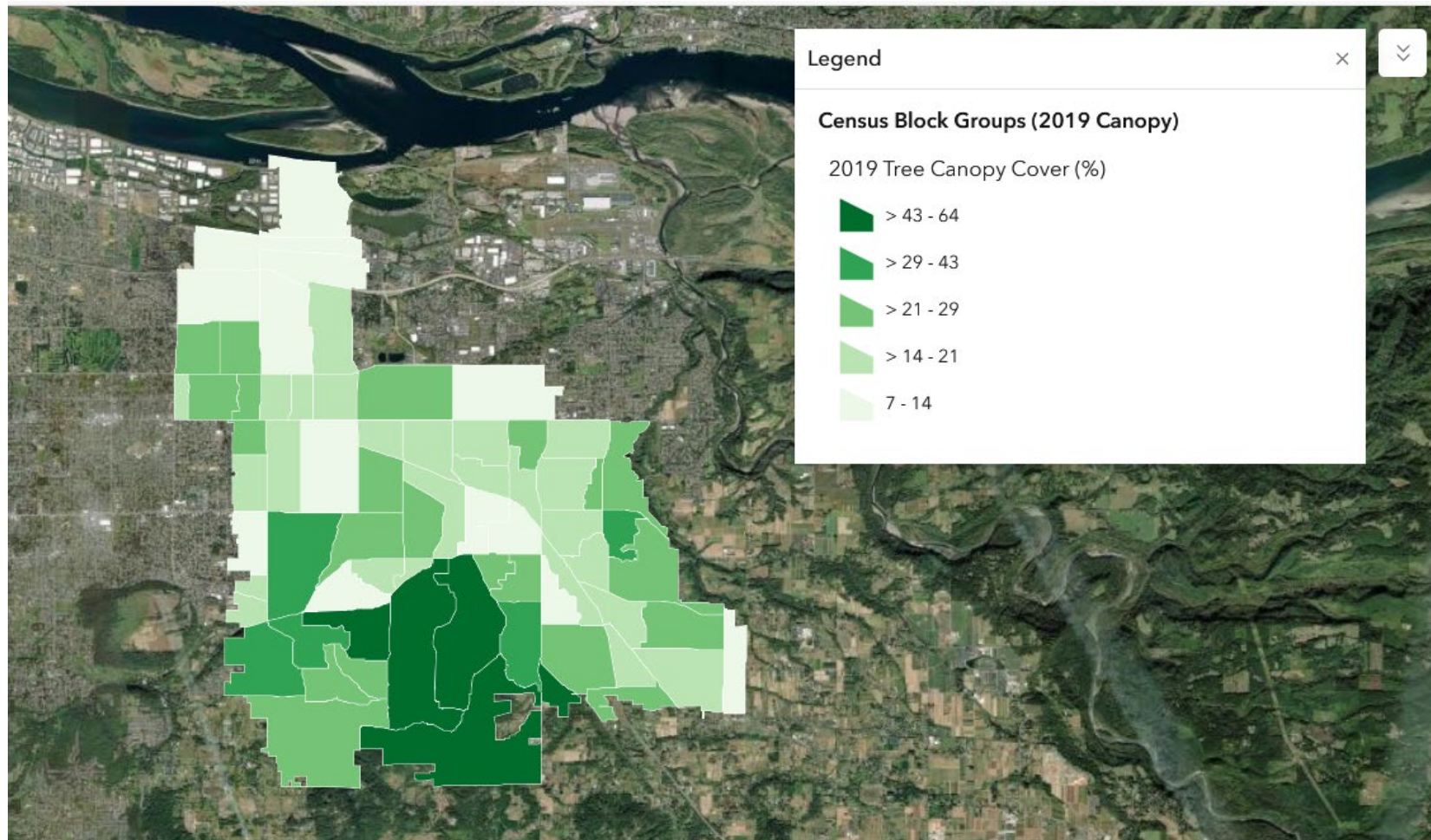
JUNCUS
STUDIO



Rockwood Heat Island Mitigation



Mapping out Tree Canopy + Evening Temps



Connecting to Gresham's Climate Action Plan



**REDUCED
POLLUTION BURDEN**



**ECONOMIC INCLUSION
AND COST SAVINGS**



**COMMUNITY HEALTH
AND SAFETY**



**EQUITABLE ACCESS TO
CRITICAL INFRASTRUCTURE**

Building the Heat Action Plan – Phase 1

Plan & Code Audit

- 56 heat-related action items were identified

Outcomes

1. This showed how a heat strategy can fit into existing city plans and code
2. And gave guidance on how to move forward by identifying and ranking different ways to reduce heat impacts

Source	Year	Type
Gresham Strategic Plan	2022	Plan
Gresham Comprehensive Plan Volumes 1 + 2	2023 (revised)	
Gresham Comprehensive Plan Appendix 48 - Urban Forestry Management Plan	2023 (revised)	
Multnomah County Multi-Jurisdictional Natural Hazard Mitigation Plan (NHMP)	2023	
Gresham Climate Action Plan	2024	
Gresham Climate Action Strategies	2024	Guidance
Gresham Tree Equity Lens Worksheet	2024	
Gresham Development Code	2024 (current at time of review)	Municipal Code
Gresham Revised Code	2024 (current at time of review)	

Building the Heat Action Plan – Phase 2

Department Interviews

Urban Design & Planning	Parks	Building
Transportation	Watershed	Emergency Management & Fire

Goals

- Shared understanding of heat impacts and initiatives
- Identify current practices and perceptions to inform heat strategy
- Co-develop preferred intervention and implementation options

City & County Heat Workshop

Plan & Code Audit

- 7 City Teams + 2 County Depts

Key Discussions

- Increasing green infrastructure in public spaces (cool corridors)
- Increasing tree canopy through the tree code
- Heat emergency response for the general public and vulnerable populations



June's Heat Workshop

The 3 P's: People, Planning, & Partnerships

People

- Eager collaboration between teams

Planning

- Focus on feasible, cost-effective actions
- Adapting larger cities models to a local scale

Partnerships

- Improved interagency coordination
- Strong relationships with community partners
= more resilient during emergencies



CAP Community Workshop - 2023

Funding for Tree Canopy



EPA G2G - \$1M, 300 trees



FEMA Rockwood Heat Island Mitigation Grant - \$400K, 50 trees

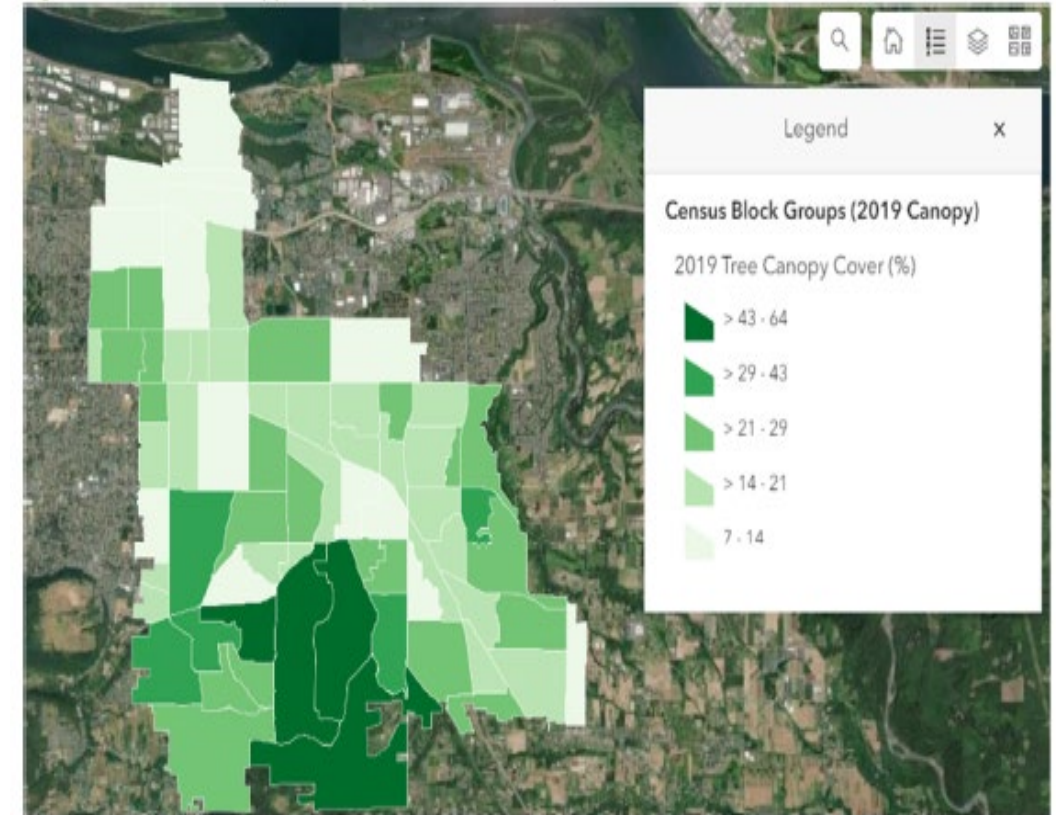


EMSWCD Partners in Conservation Grant
Award to Friends of Trees



Inflation Reduction Act (IRA) Urban Forestry grant \$12M (~\$4M Gresham portion)

Figure 2: 2019 Tree Canopy Cover by Census Block Group



Source: Gresham Growing Shade Tool

Framing the Economic Benefits of Heat Mitigation

Benefit Area	Quantified Impact
Health & Productivity	Prevents heat-related illness, up to \$4B per year in social benefits (example: Philadelphia)
Energy Savings	↓ Electricity use by 10–30% , up to 47% for some homes
Property Values	↑ Home values by 6–15% , rental rates up by 7%
Business Districts	↑ Shoppers spend 9–12% more in tree-covered areas or cool corridors
Investment ROI	Returns of \$1.5–\$3 per \$1 spent on urban forestry

Incorporating Heat Mitigation

CAP has accelerated ability to coordinate heat mitigation as a city

Examples:

- Added heat island mitigation to Transportation System Plan update
- Added heat island mitigation as part of stormwater management
- Planning is updating tree code and design standard
- Parks has long-term planning to be cooling centers
- Fire is exploring how a heat strategy can reduce response calls

Questions?



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