

Cambridge Urban Forest Master Plan Public Meeting #1

5 Year Update

November 19, 2025

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Cambridge Urban Forest Master Plan Public Meeting #1

Agenda:

- Background
- Timeline & Goals
- Recent Efforts to Grow Canopy and Curb Loss
- Progress Towards Goals
- Questions / Comments

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Cambridge Urban Forest Master Plan Public Meeting #1

Agenda:

- Background

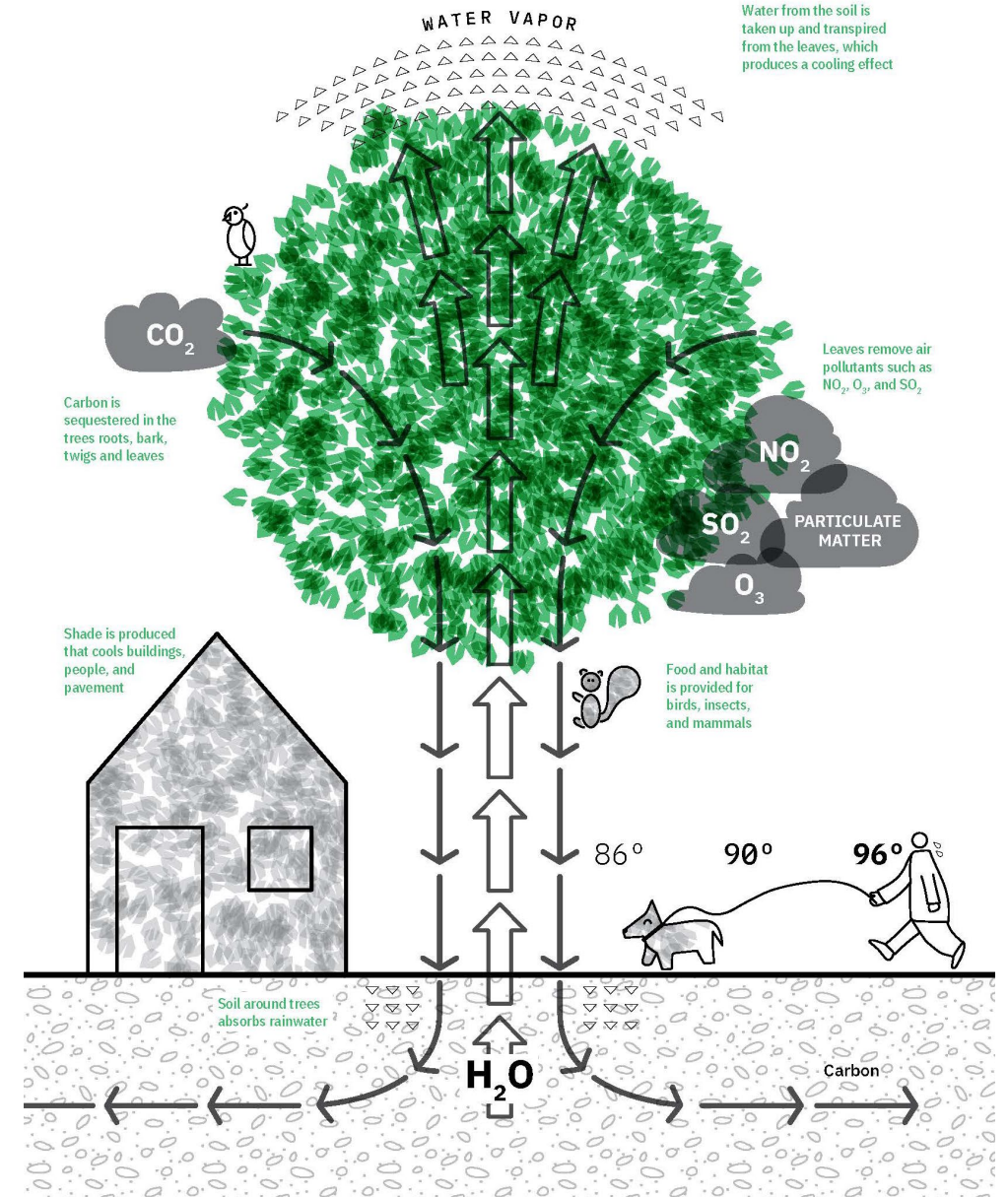
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Cambridge Urban Forest Master Plan

A health forest is a vital part of a healthy city

We all share responsibility to care for our urban forest



Cambridge Urban Forest Master Plan

Background & Process Overview

- Builds on the findings of the Cambridge Climate Change Vulnerability Assessment (CCVA) and supports the goals of the Climate Change Preparedness and Resilience (CCPR) study
- Support the Core Values of Envision Cambridge
 - Livability & Diversity
 - Equity
 - Economic Opportunity
 - Sustainability & Resilience
 - Community Health and Wellbeing
 - Learning



Cambridge Urban Forest Master Plan

Background & Process Overview

- 2018-2019
- 18-person task force of private citizens representing residents, subject experts, institutions, and business groups met 11 times
- Documented the State of the Urban Forest
- Evaluated Risks to the Urban Forest, including factors contributing to canopy loss
- Set Targets, Priorities, and Actions
- Developed a Technical Report



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2020 Findings

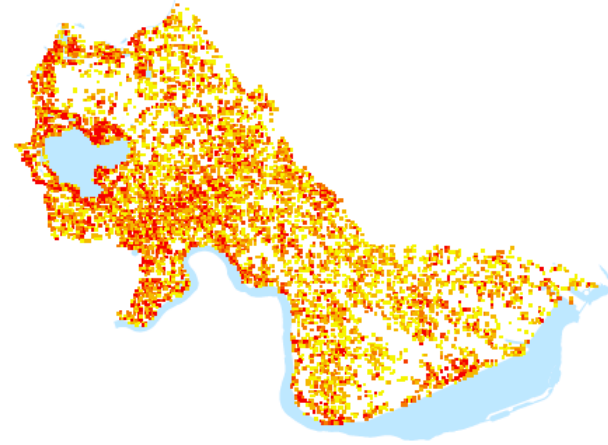
Without change, canopy coverage could be 10-15% by 2050



The forest is not equitable



Focus efforts in low canopy communities



The forest is susceptible to risk



Diversify species & Reduce heat island



More loss happens on private property



Share responsibility

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2020 Goals

EQUITY

- 25% minimum canopy by neighborhood

RESILIENCY

- 60% canopy over sidewalks
- 50% reduction of heat island hotspots
- Species diversification

SHARED RESPONSIBILITY

- 10% to 25% increase in canopy cover by across all landowner types



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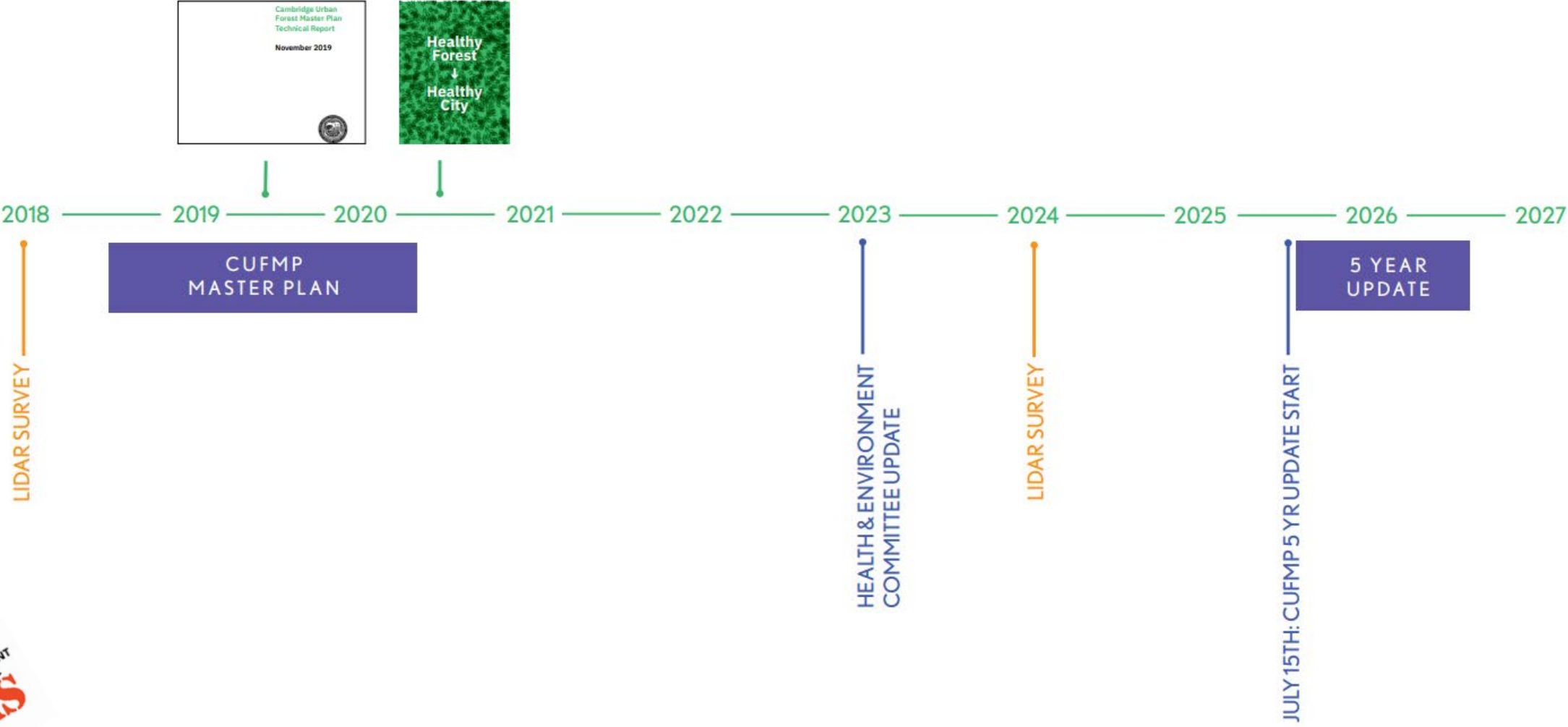
Agenda:

- Timeline & Goals

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Timeline



Goals of the 5- Year Update

- 1. Evaluate progress since the 2019 Urban Forest Master Plan, focused on the goals and priorities set forth in the UFMP**
- 2. Evaluate and recommend new strategies or modifications to existing strategies, across policy, City practices and design, and outreach and engagement**
- 3. Set priorities for the next 5 years, identifying the actions that will be most impactful and feasible**



Phase A Analysis and Evaluation



- Q: What is the current status of the urban forest?
- Q: What progress was made?
- Q: What are new risks?

Tasks:

- Mapping Analysis
- Interviews
- City Data Analysis
- Tree Survey
- Best practices review



Phase B Recommendations

2025
SUMMER

2025
FALL

2026
WINTER

2026
SPRING

PHASE A
**ANALYSIS AND
EVALUATION**

PHASE B
RECOMMENDATIONS

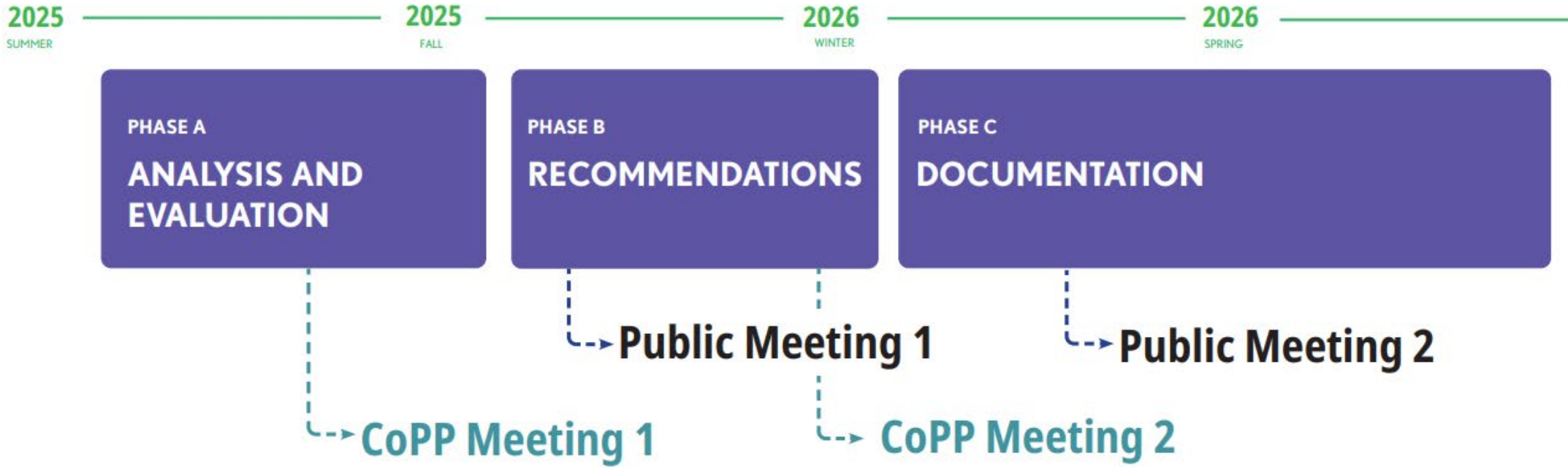
PHASE C
DOCUMENTATION

- **Q: What strategies should be revised?**
- **Q: What new strategies should be implemented?**
- **Q: What and how should the City prioritize?**

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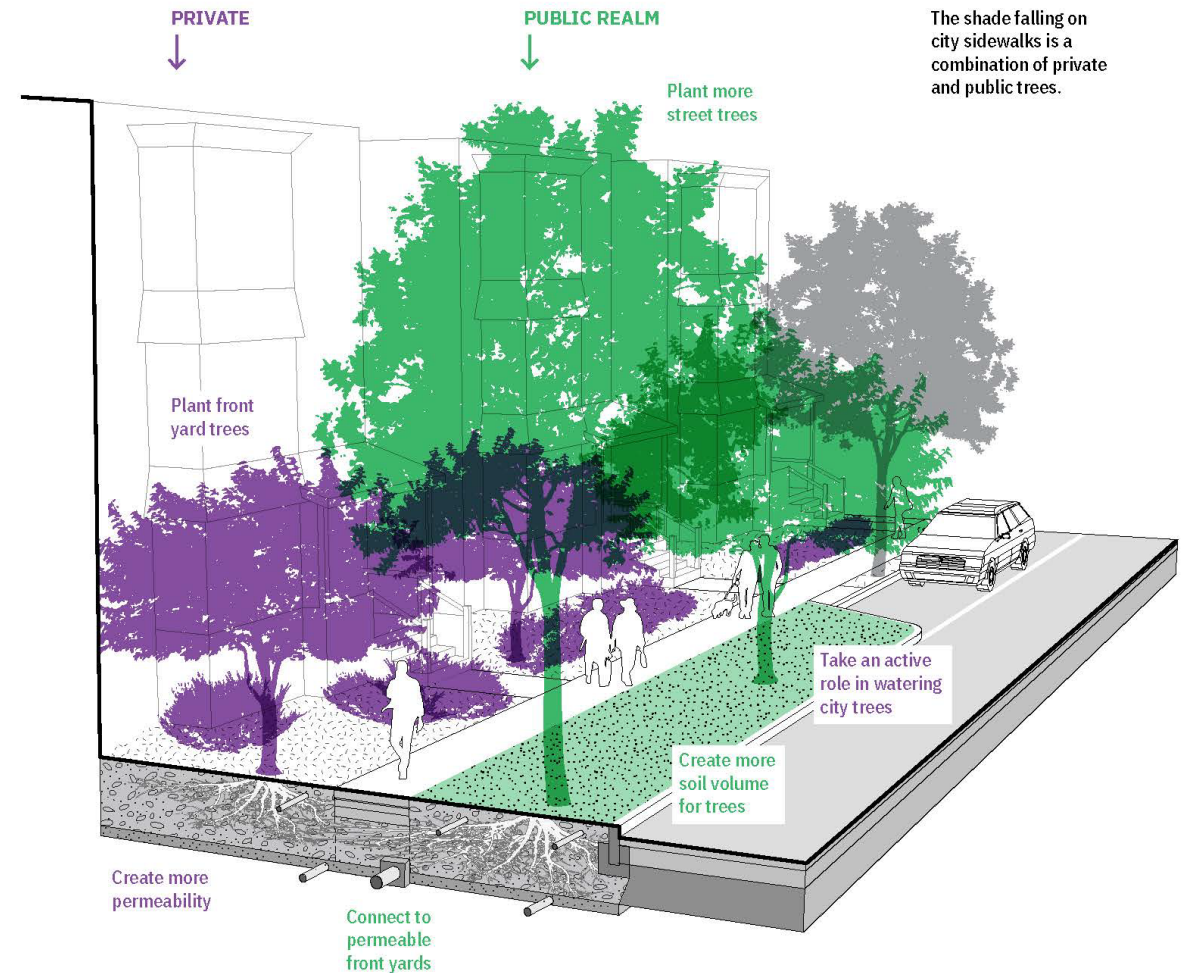


Public Engagement



Cambridge Urban Forest City Goals

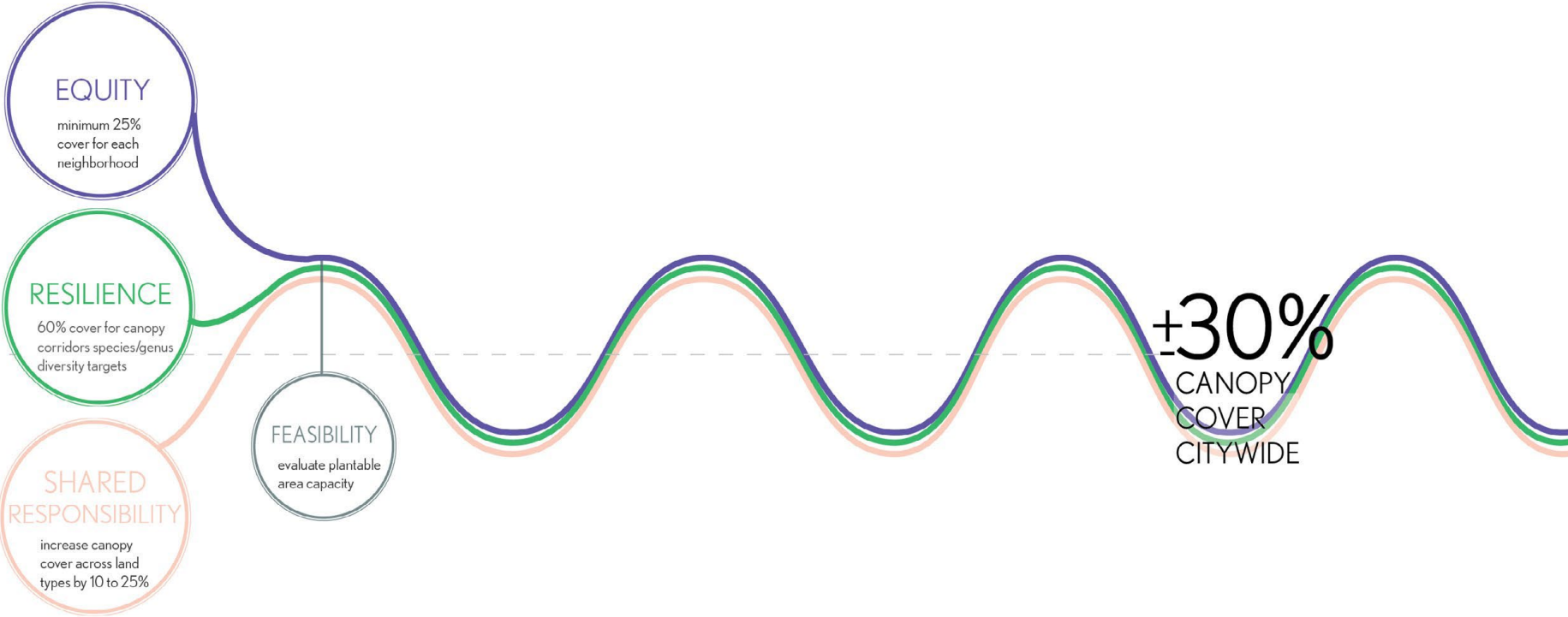
Grow canopy to maintain and improve the livability, resiliency, and well-being of Cambridge and its residents.



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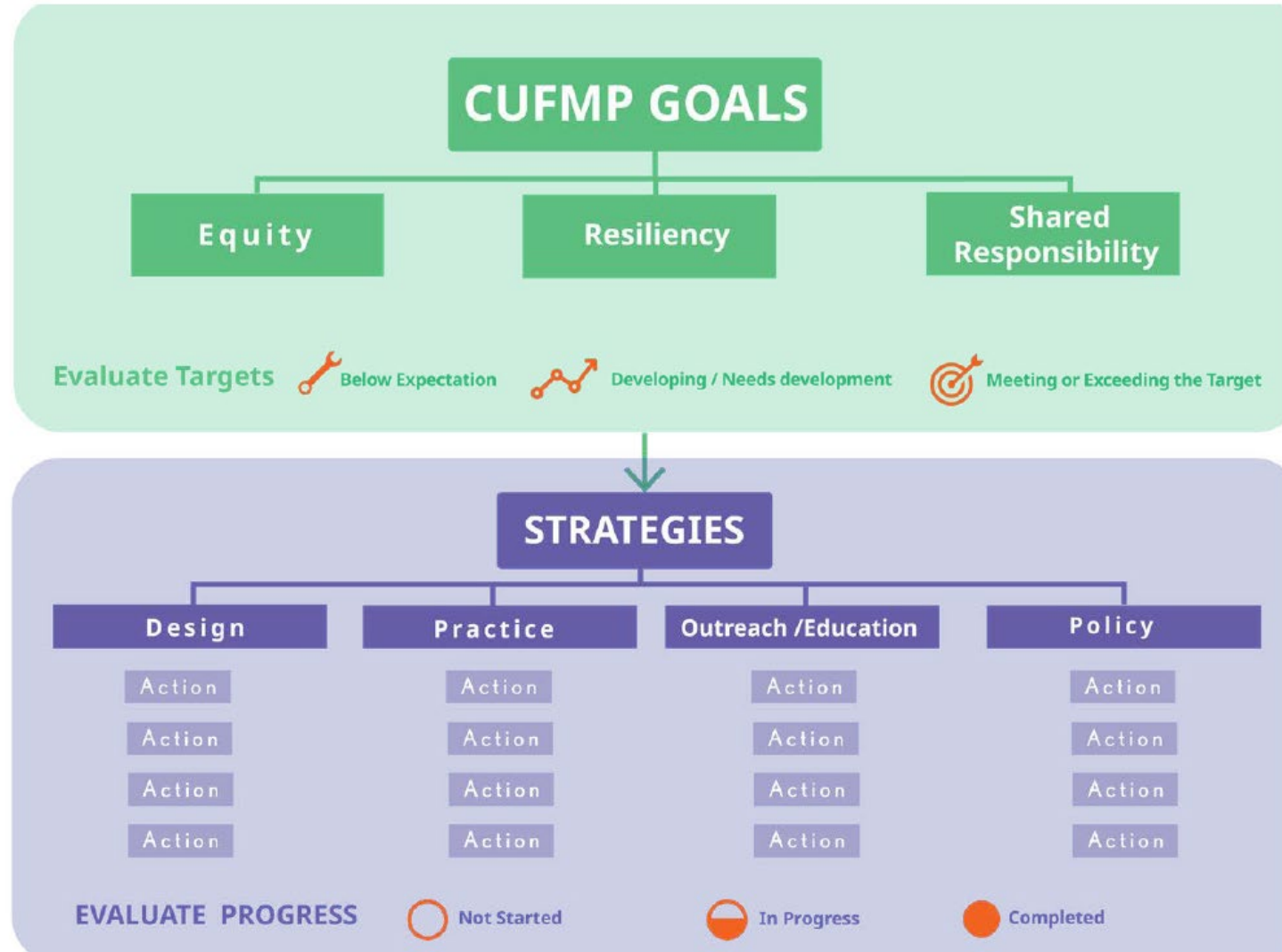
Goals and Strategy Matrix



1	Enhance and Expand the Tree Protection Ordinance	Policy
2	Formalize Practices for Planting and Inspection	
3	Leverage Land Use Requirements	
4	Leverage Public-Private Partnerships	
5	Institutionalize Tree Priorities	
6	Plant Resilient Species	Design
7	Street Tree Planting Strategies	
8	Site New Parks and Open Space Strategically	
9	Improve Monitoring	Practices
10	Expand Maintenance	
11	Expand Planting Practices	
12	Invest in Educational Programs	Outreach
13	Build Community Partnerships	
14	Seek Alternative Green Strategies	Other
15	Integrate UFMP into Complementary Planning Studies	



Cambridge Urban Forest City Goals



Cambridge Urban Forest Master Plan Public Meeting #1

Agenda:

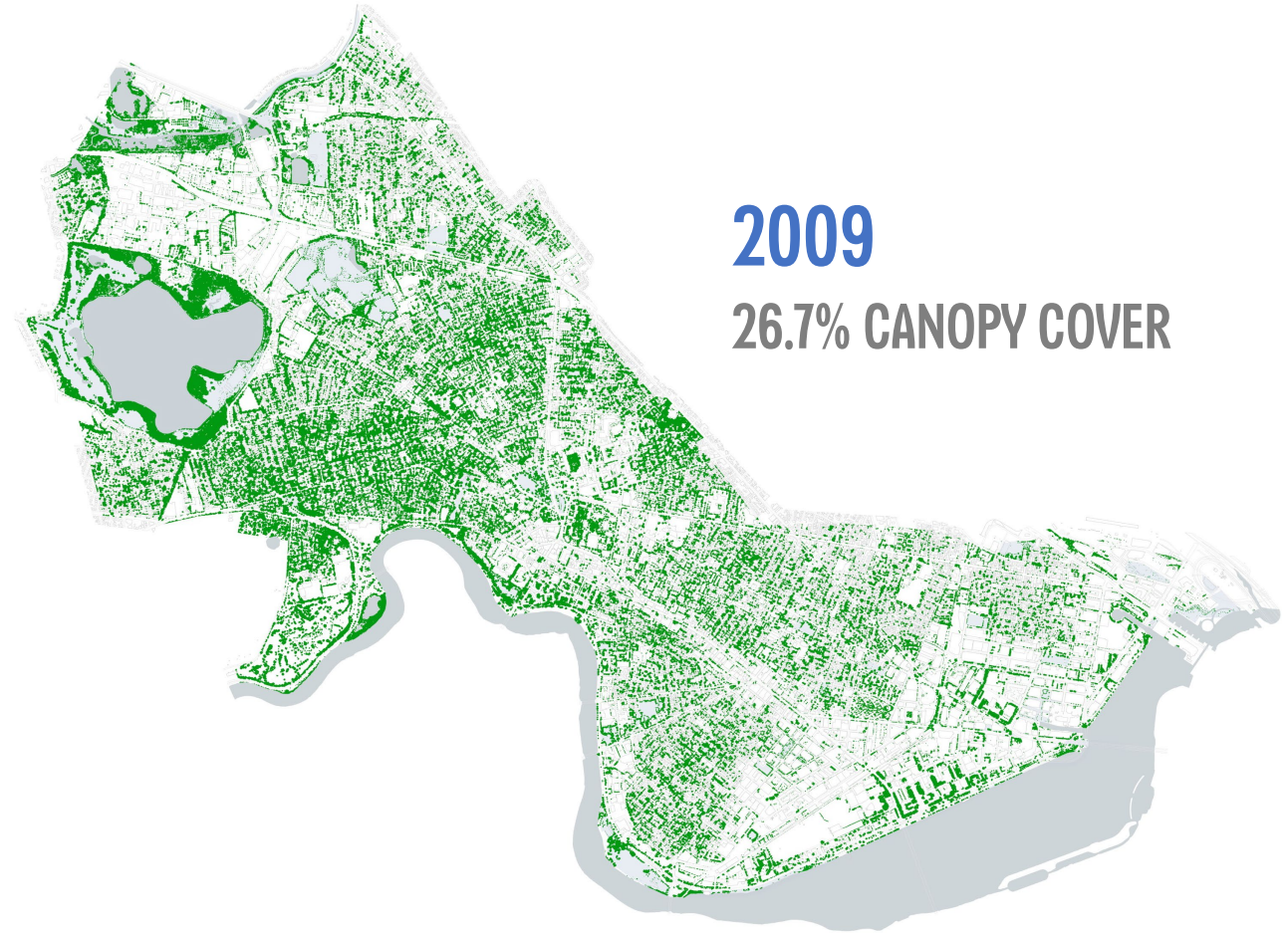
- Recent Efforts to Grow Canopy and Curb Loss

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Good News

We have more canopy cover today than we did in 2009.



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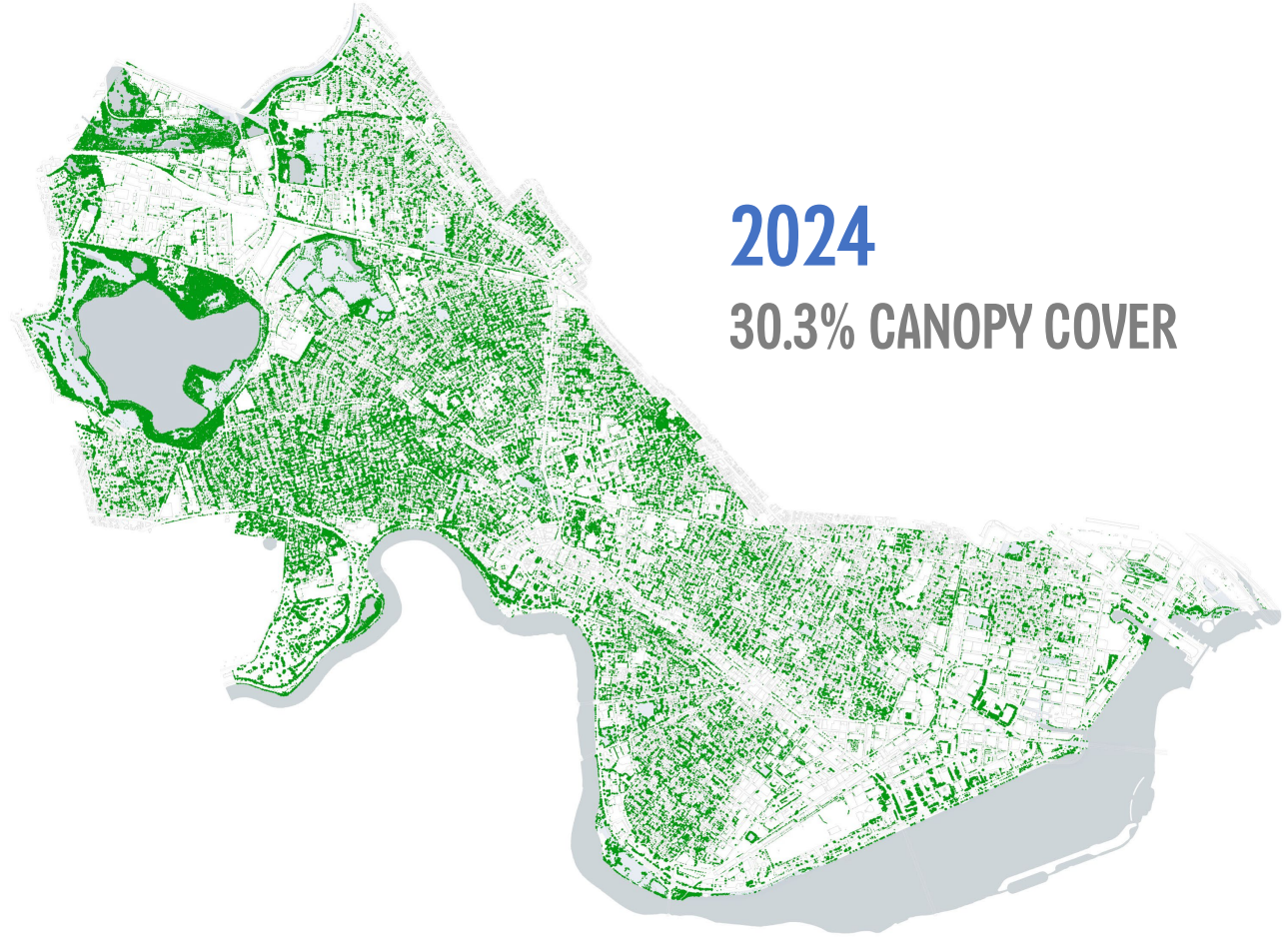


Good News

We have more canopy cover today than we did in 2009.

The rate of loss has slowed.

The rate of gain has increased.



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Behind The Numbers

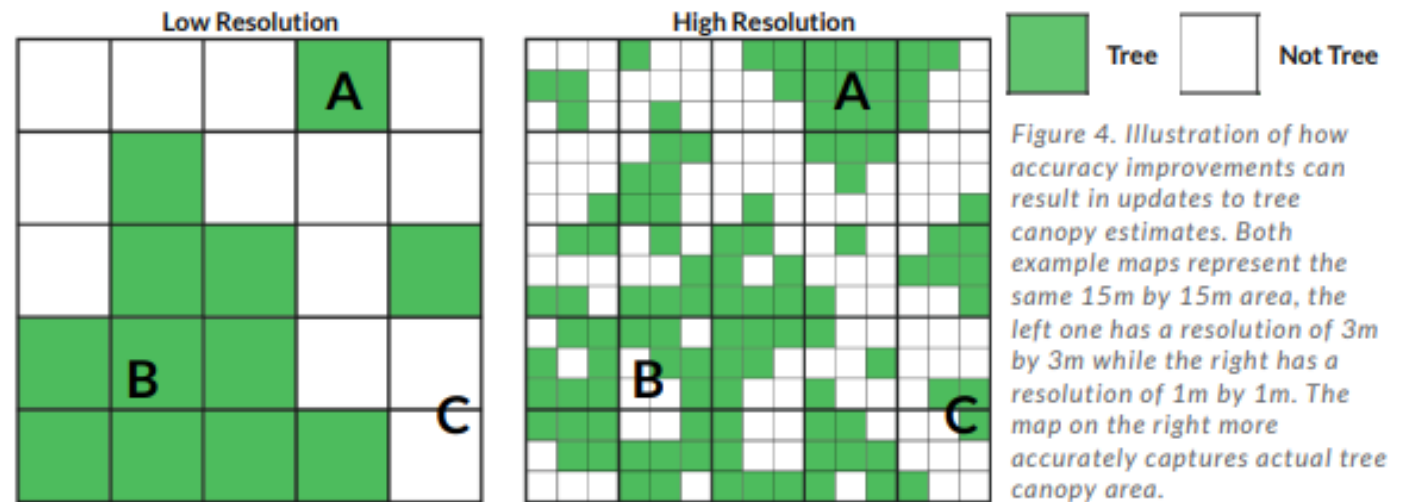
Improved Techniques, More Resolution

- LiDAR imaging, processing techniques and resolution continue to improve
- Harmonized flyover data provides accurate results for tracking change in canopy coverage



Accuracy Improvements

Due to improved accuracy achieved through the harmonization process, tree canopy numbers in this assessment may differ from previous analyses. Original tree canopy outputs for 2009 and 2014 were much coarser in resolution and required smoothing prior to harmonization.



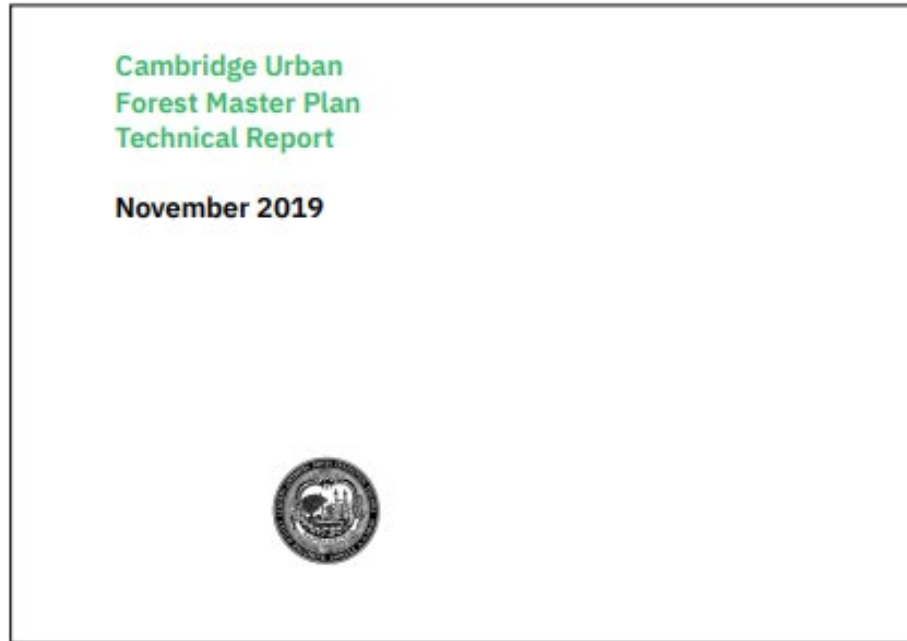
New techniques better capture:

- A** Edge Growth. Better detection of edge growth may add tree cover that was not previously mapped.
- B** Forest Gaps. Previous assessments may include overestimates of tree cover where tree canopy gaps were not detected.
- C** Small Patches. Tree patches that were previously too small for detection can now be mapped.

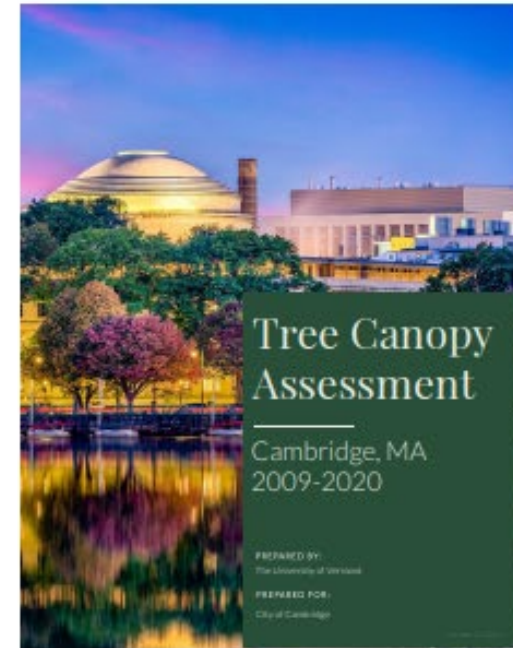


Behind The Numbers

Note: 2019 UFMP data was further processed in 2020 and 2025, resulting in revised canopy cover percentages



**2019 CUFMP:
2009 canopy cover: 30%**

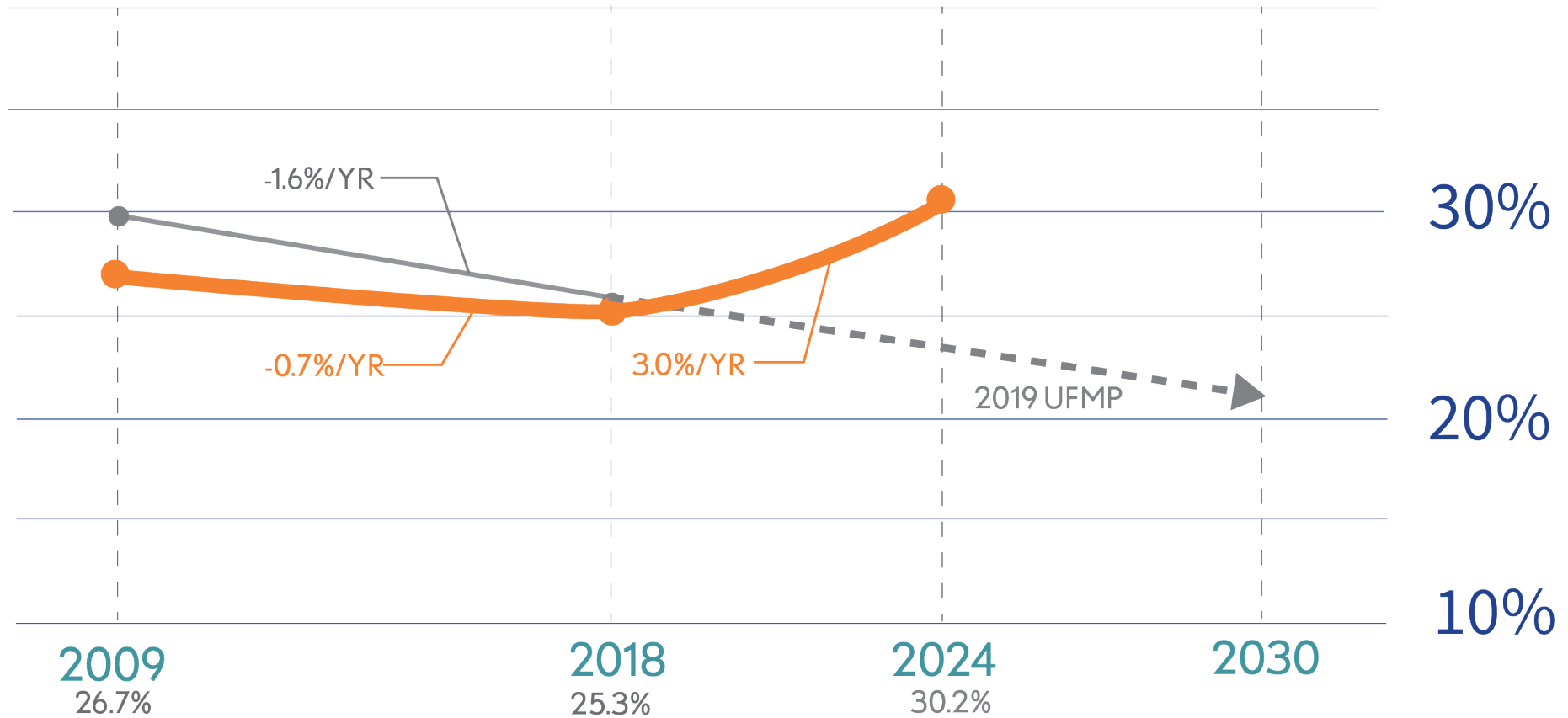


**2020 UVM Report
2009 canopy cover: 26%**



Canopy Change

2019 projection and 2025 actual data

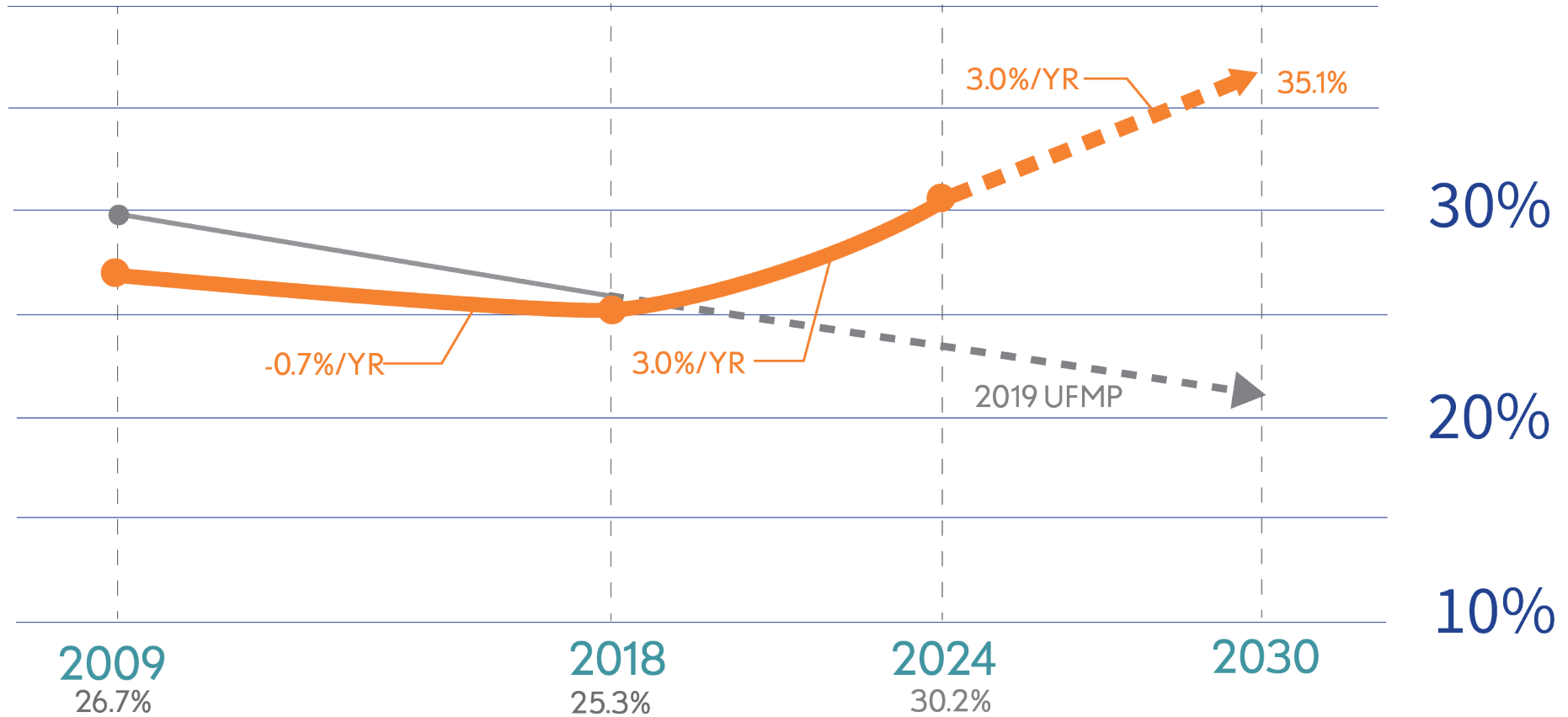


*ANNUALIZED RATE OF CHANGE



Canopy Change

Projecting into the future

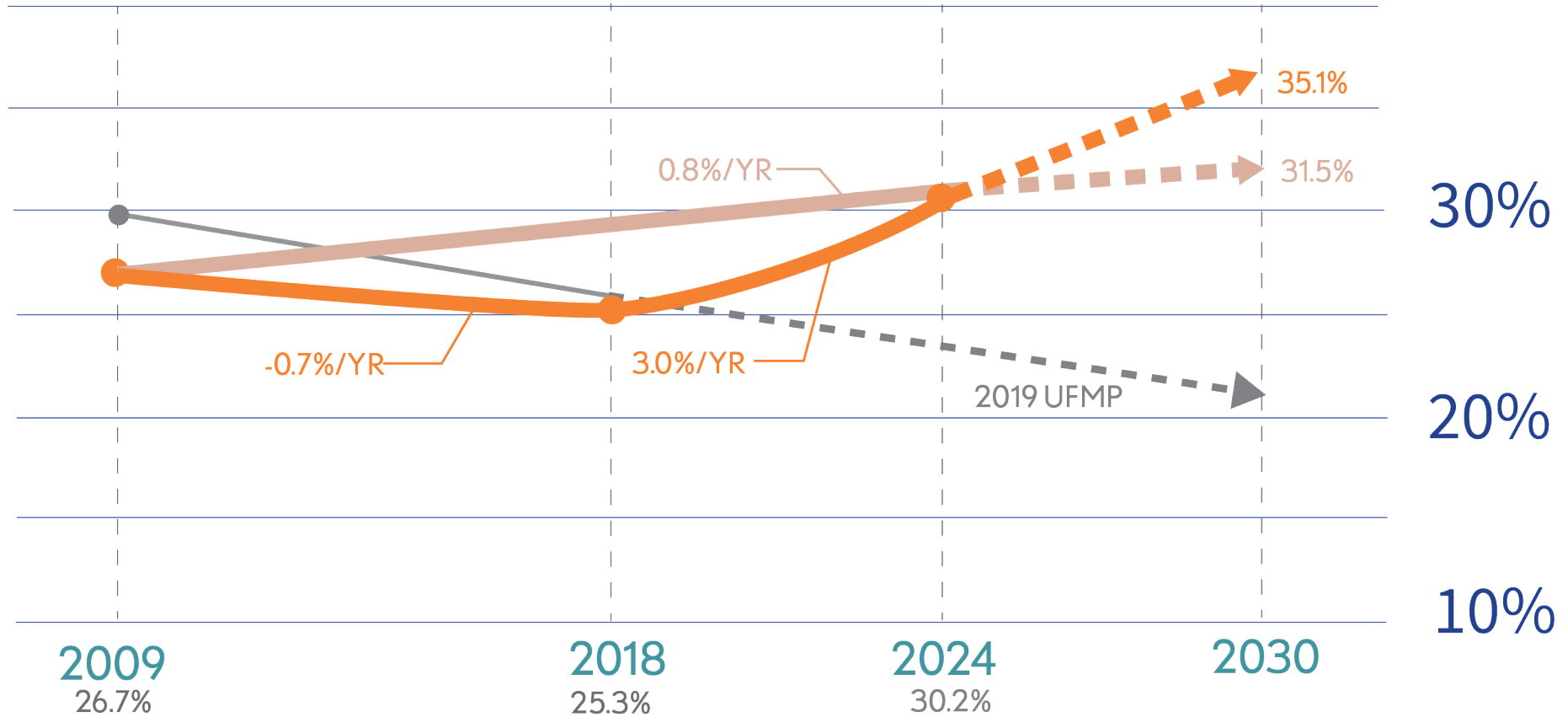


*ANNUALIZED RATE OF CHANGE



Canopy Change

Projecting into the future



*ANNUALIZED RATE OF CHANGE



Policy Success

Tree Protection Ordinance

\$2,416,244

Mitigation paid into Tree Fund since the TPO amendment in 2019 (through July 1, 2025)

Permit Type	Total	
Mitigate completely with money	50	6%
Mitigate completely with trees	86	11%
Mitigate with combination of tree planting and n	54	7%
Tree(s) meet the requirement of one of the special circumstances and do not require mitigation.	599	76%
Grand Total	789	100%



More trees have been replanted on residential properties since the new Tree Protection Ordinance

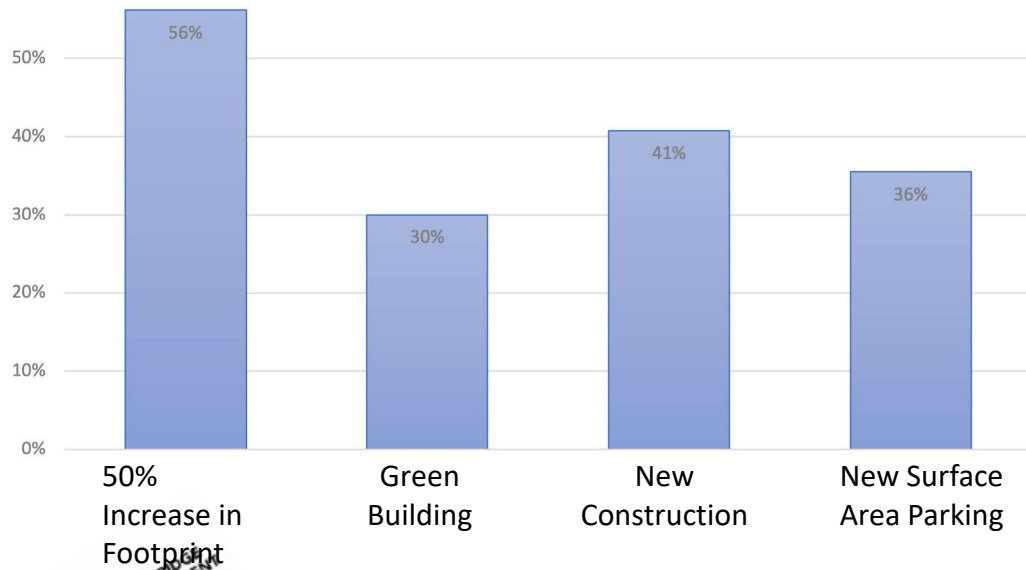


Policy Success

Green Factor Standard

Projected canopy cover

On average, projects will have 35% canopy cover at maturity



**858 existing trees preserved and
1,080 new trees proposed**



Design Success

Diversification of planting strategies



More Planting Density



Miyawaki Forest Planting

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Planting Practices Success

Expanded Planting Practices



*1,200 trees per year
Planted by the City*



Bareroot nursery

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Outreach Success

Urban Forest Newsletter

1,167 Subscribers

The Forest Friends monthly newsletter was recommended at the 2023 Health & Environment Subcommittee.



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Cambridge Urban Forest Master Plan Public Meeting #1

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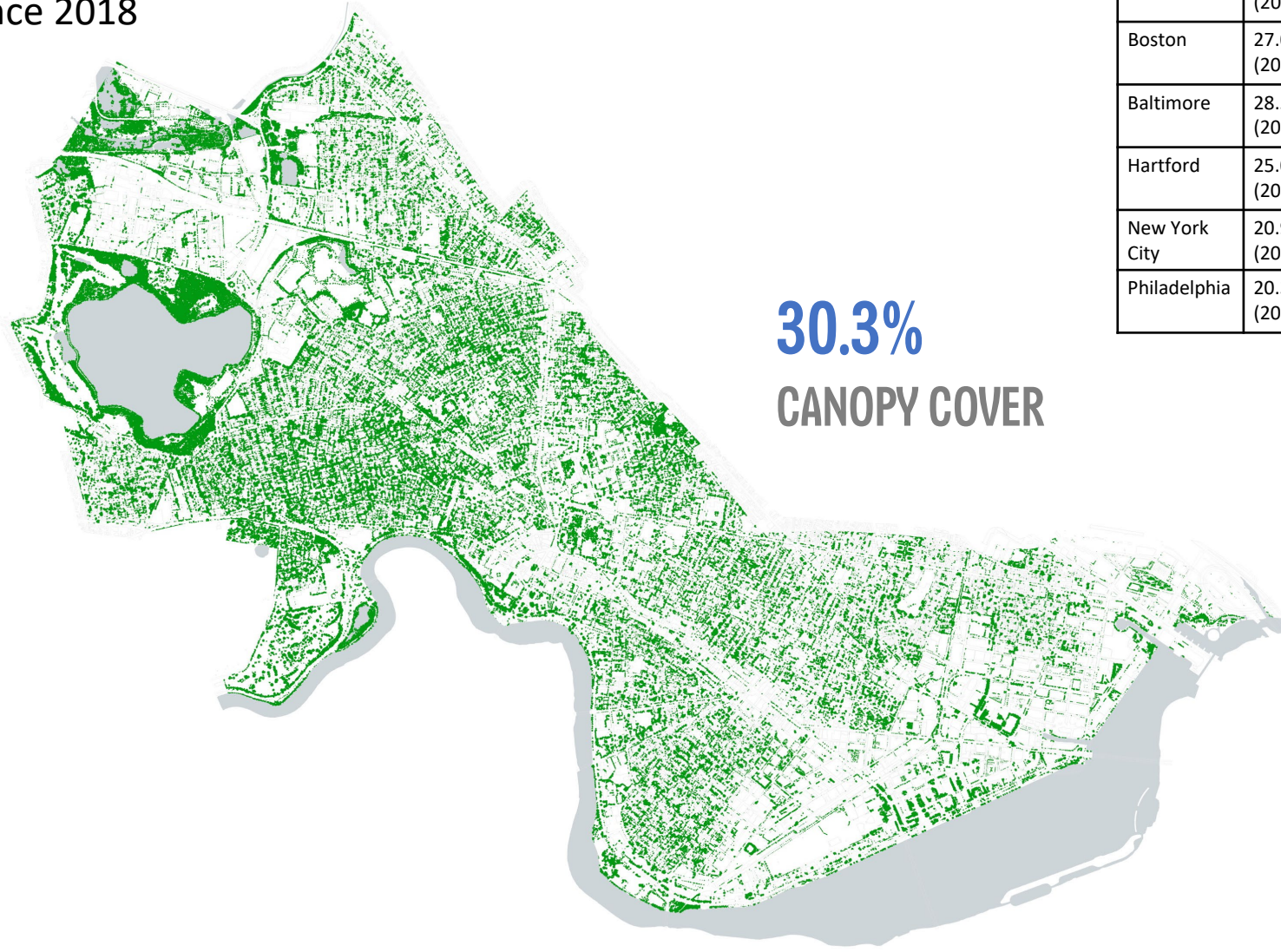
- Progress Towards Goals

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2024 Canopy Cover

A 5% increase citywide since 2018

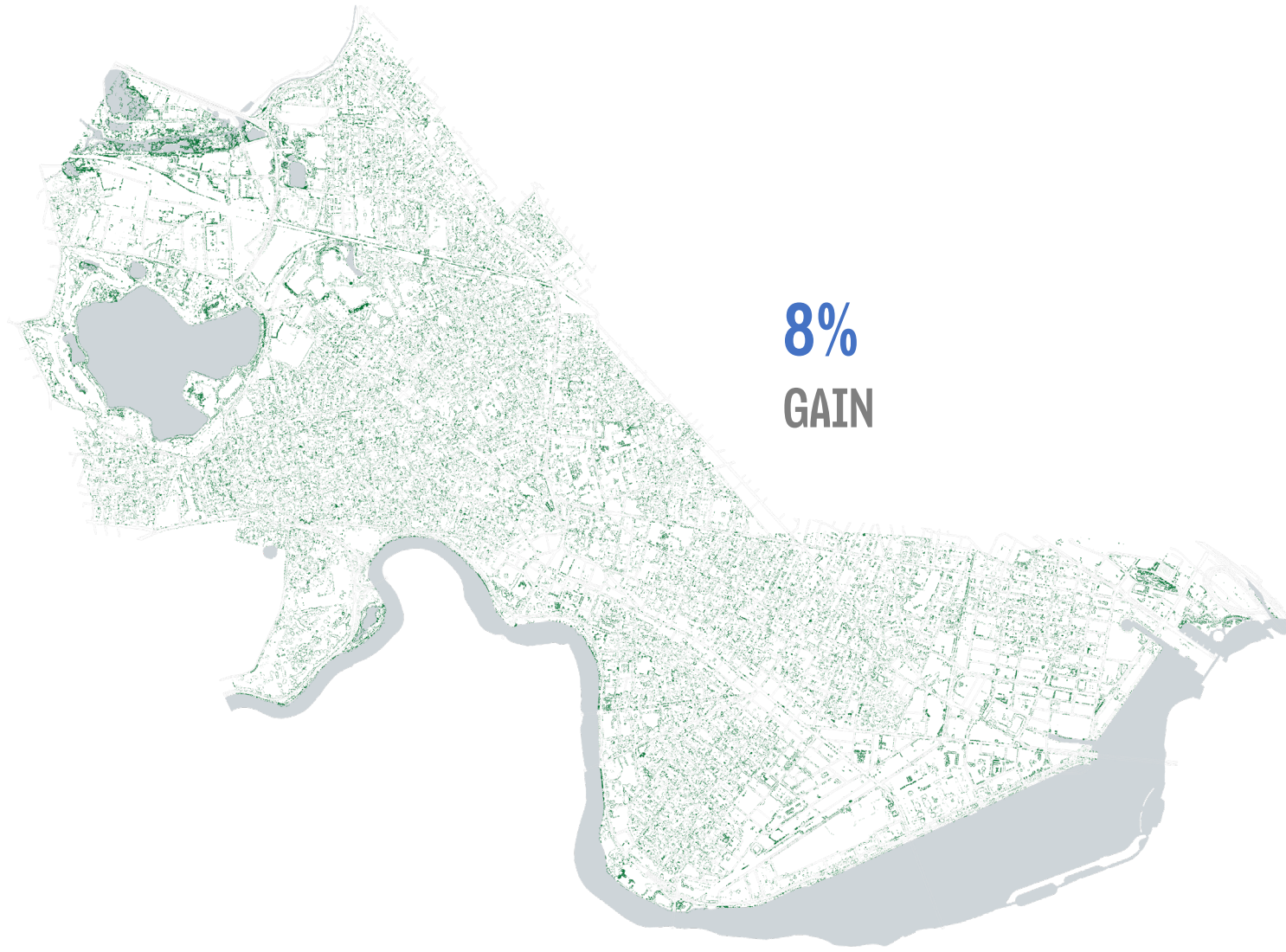


City	Canopy Cover			Goal
Cambridge	26.7% (2009)	25.3% (2018)	30.3% (2024)	30%
Boston	27.0% (2017)	22.3% (2019)	Pending (2025)	35% by 2030
Baltimore	28.5% (2013)	21.0% (2019)	27.4% (2025)	40% by 2037
Hartford	25.0% (2013)	25.9% (2019)	n/a	35% by 2070
New York City	20.9% (2013)	21% (2019)	22% (2025)	35% by 2035
Philadelphia	20.3% (2013)	15.7% (2019)	n/a	No specific goal



Canopy Gain

Total (gross) gain was 8%
(2018 to 2024)

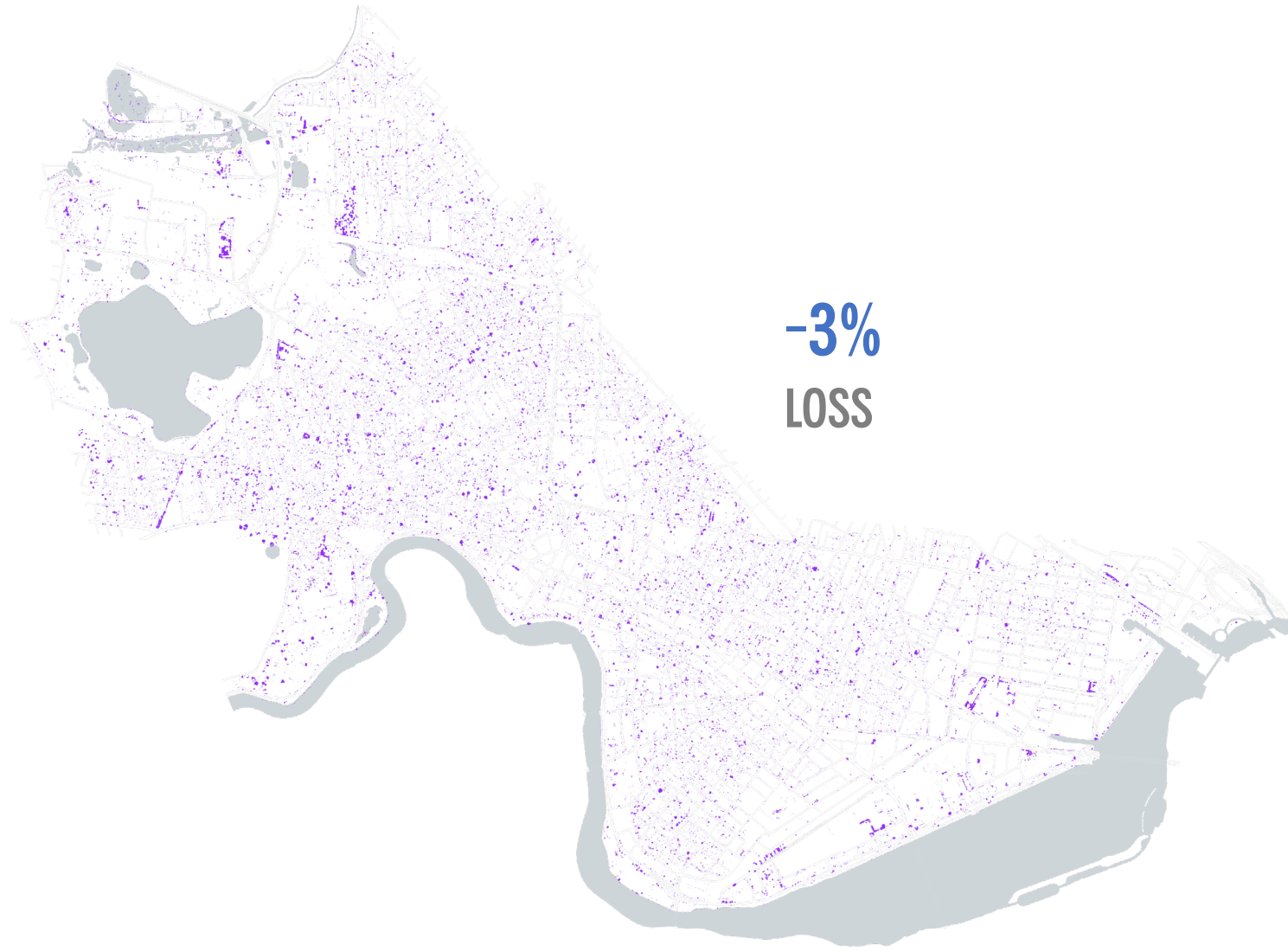


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Canopy Loss

Total (gross) loss was 3%
(2018 to 2024)

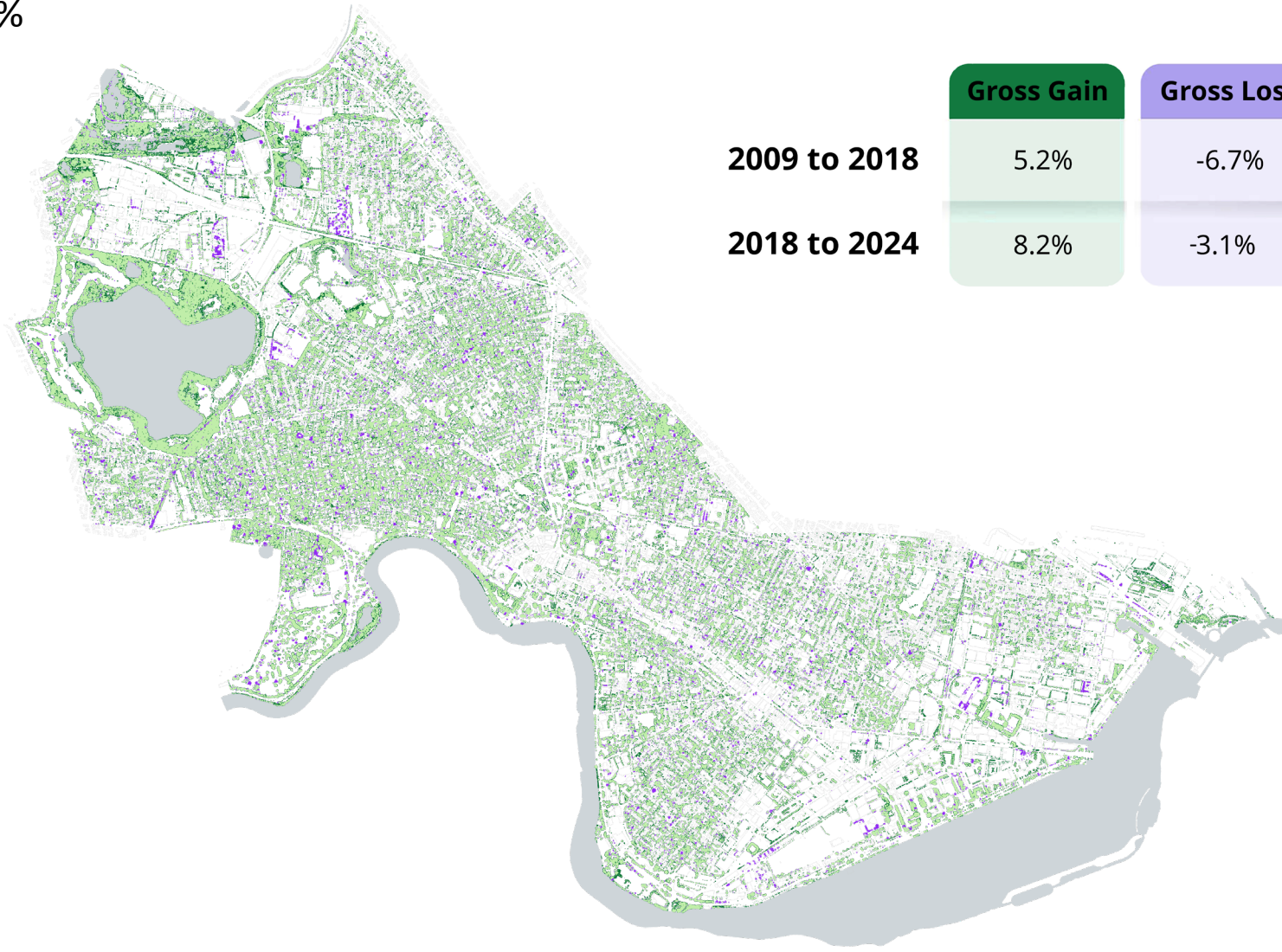


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Canopy Change

Overall (net) gain was 5.1%
(2018 to 2024)



	Gross Gain	Gross Loss	Net Change
2009 to 2018	5.2%	-6.7%	-1.5%
2018 to 2024	8.2%	-3.1%	5.1%

- NO CHANGE
- GAIN
- LOSS

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2019 Goals

EQUITY

- 25% minimum canopy by neighborhood

RESILIENCY

- 60% canopy over sidewalks
- 50% reduction of heat island hotspots
- Species diversification

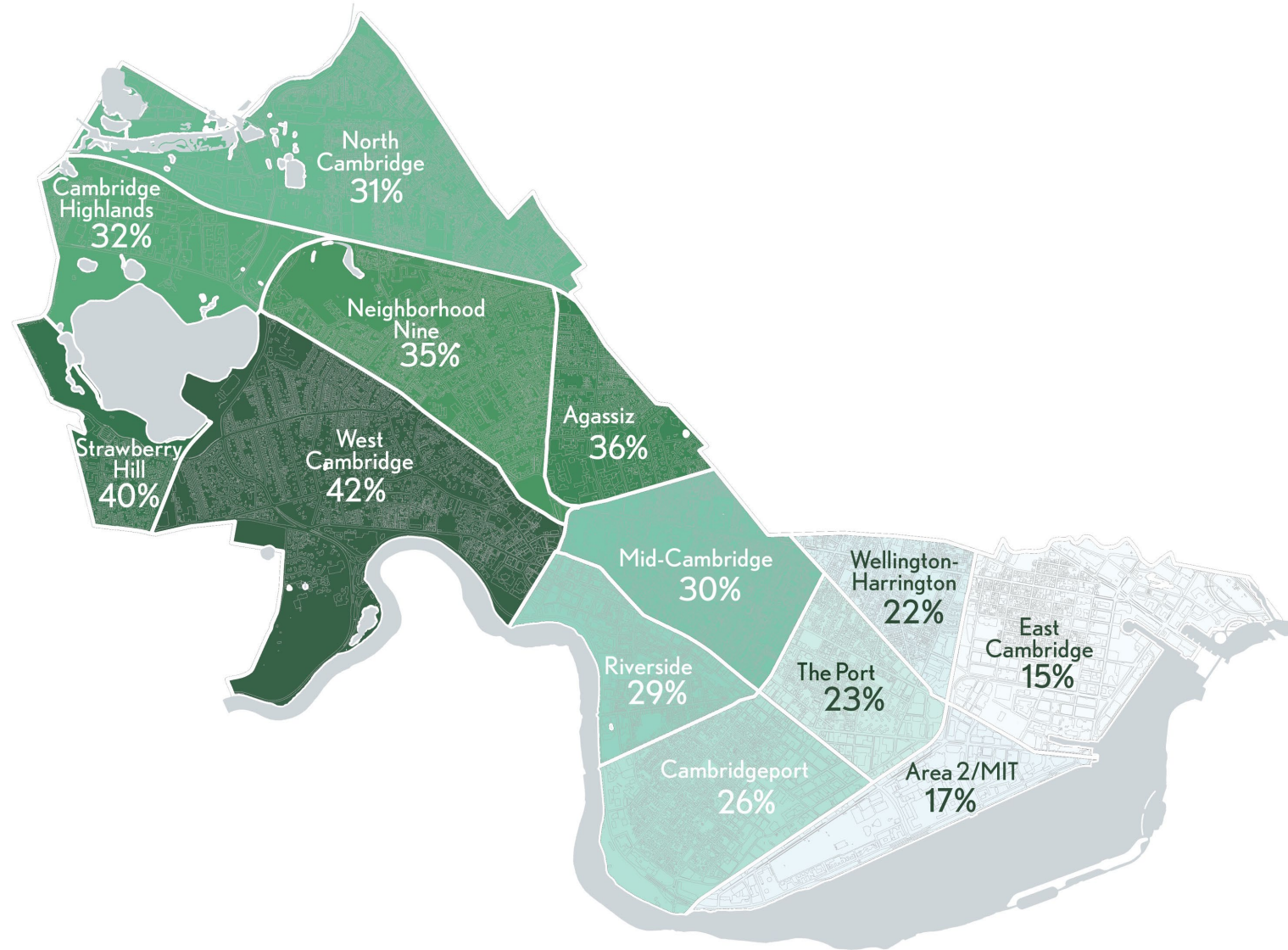
SHARED RESPONSIBILITY

- 10% to 25% increase in canopy cover by across all landowner types



Equity: Canopy Cover By Neighborhood

Canopy Cover ranges between 15% and 42%

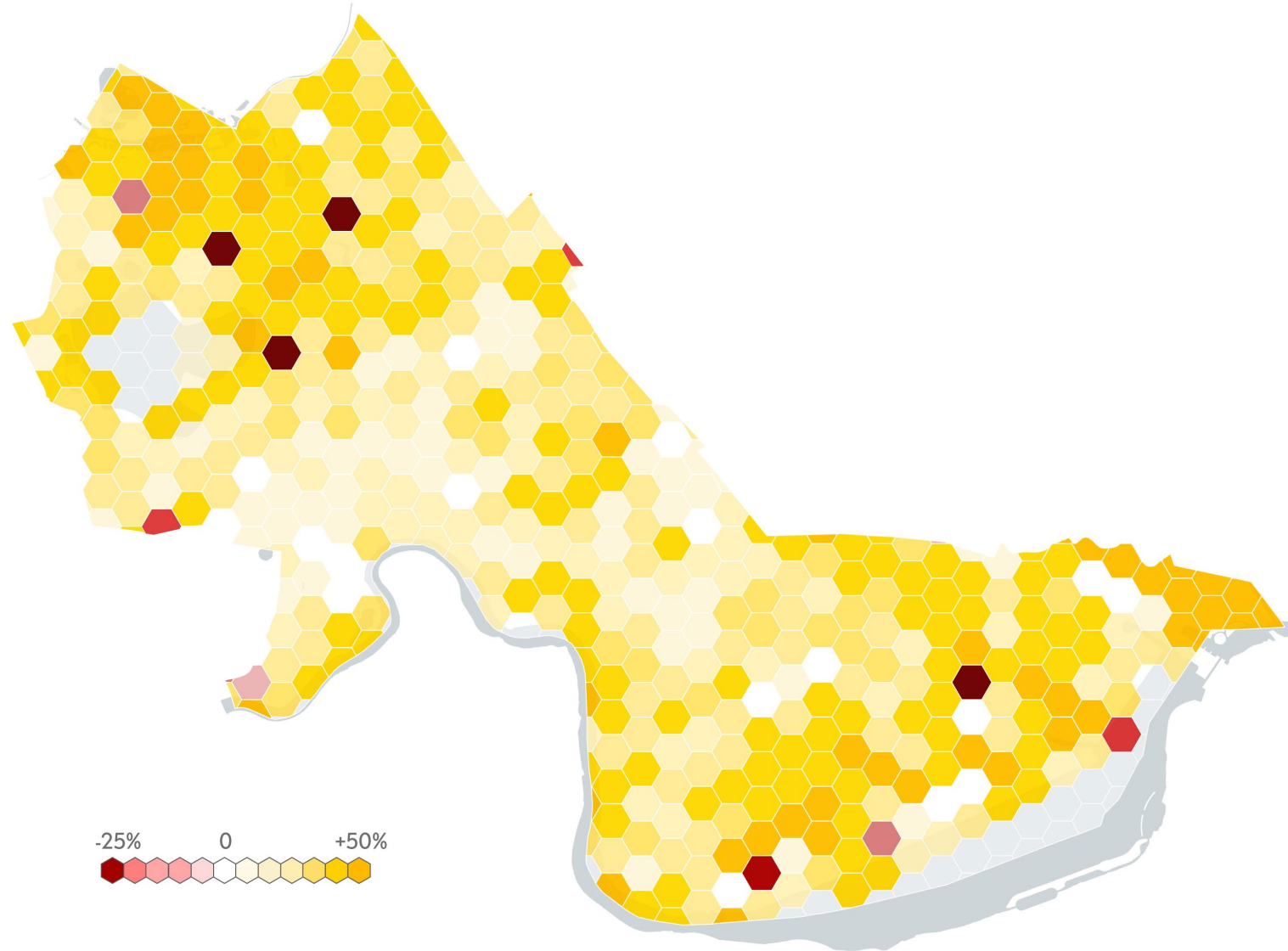


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Equity: Canopy Cover By Neighborhood

Most of Cambridge saw canopy increase

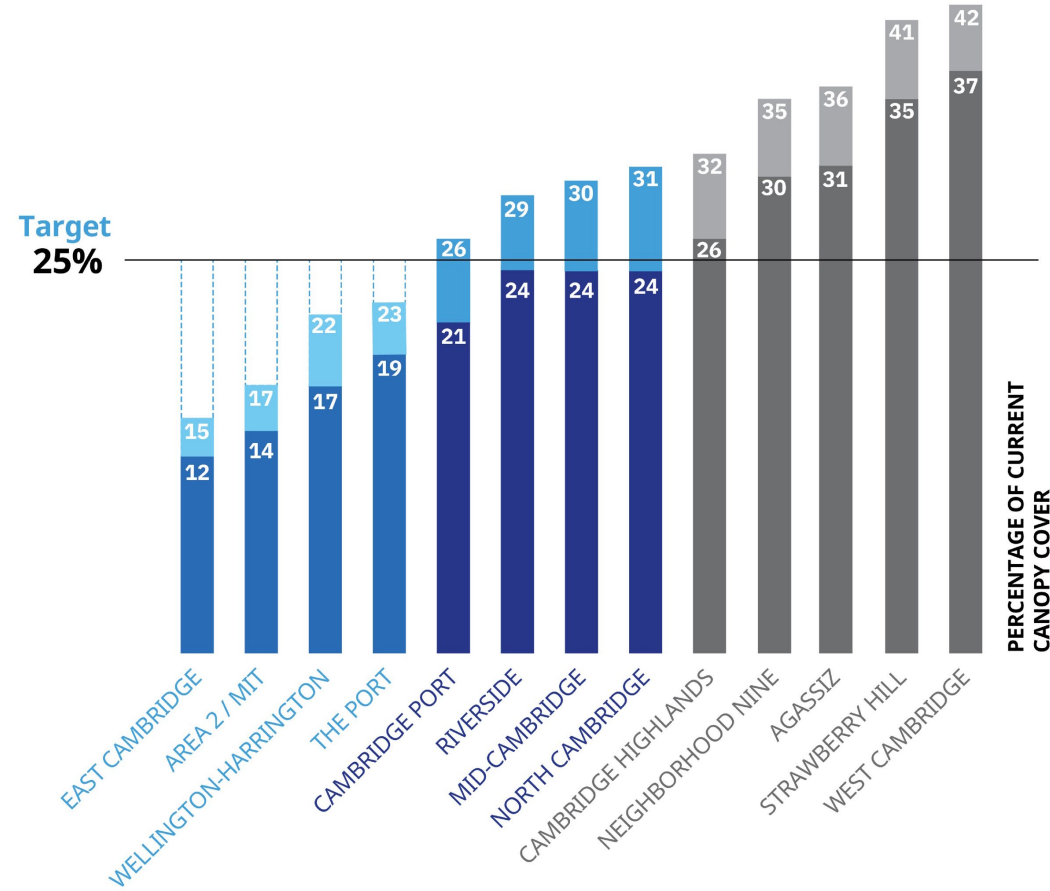


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Equity: Canopy Cover By Neighborhood

All neighborhoods are growing canopy



4 NEIGHBORHOODS REACHED TARGET

4 NEIGHBORHOODS MADE PROGRESS



Equity: Canopy Cover By Neighborhood - Projected

Projecting newly planted trees to maturity



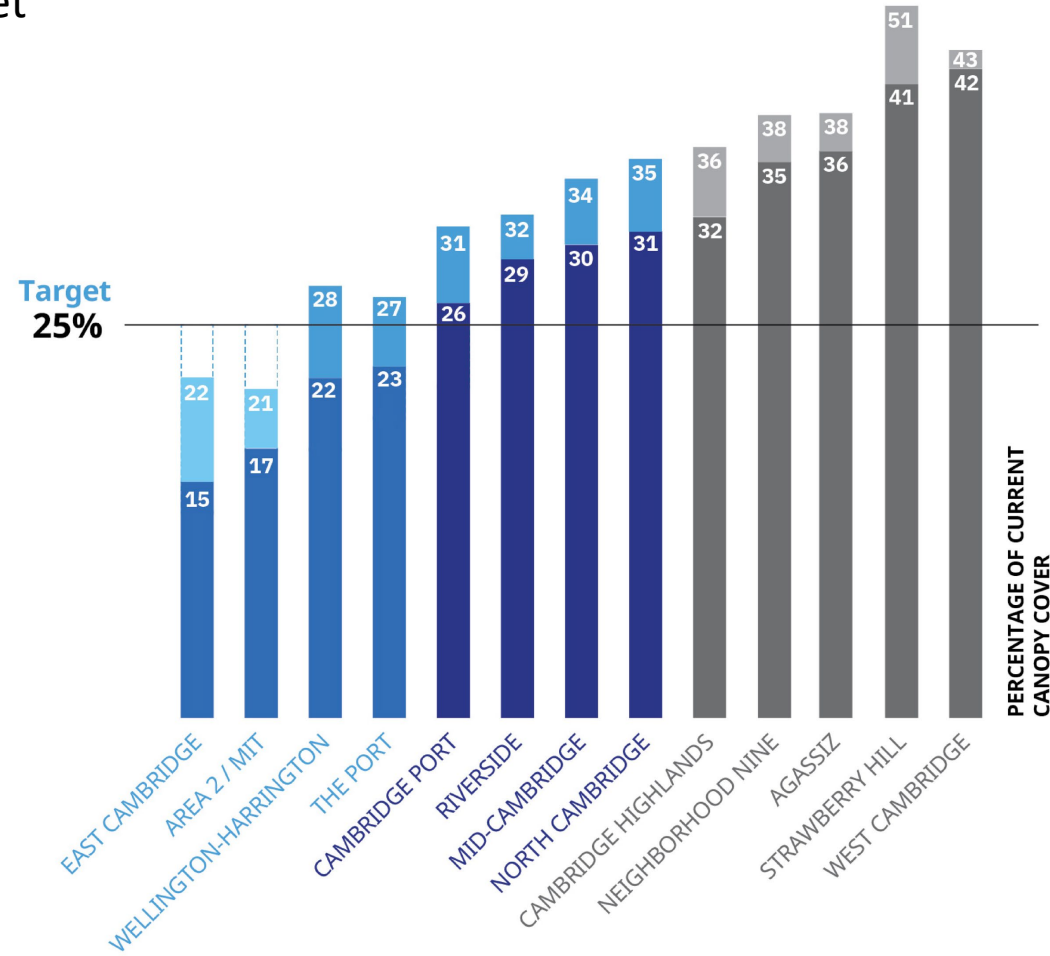
- NEWLY PLANTED CITY TREES PROJECTED
- NEWLY PLANTED PRIVATE TREES PROJECTED
- 2024 CANOPY

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Equity: Canopy Cover By Neighborhood - Projected

Projecting newly planted trees to maturity, all but two neighborhoods meet the target

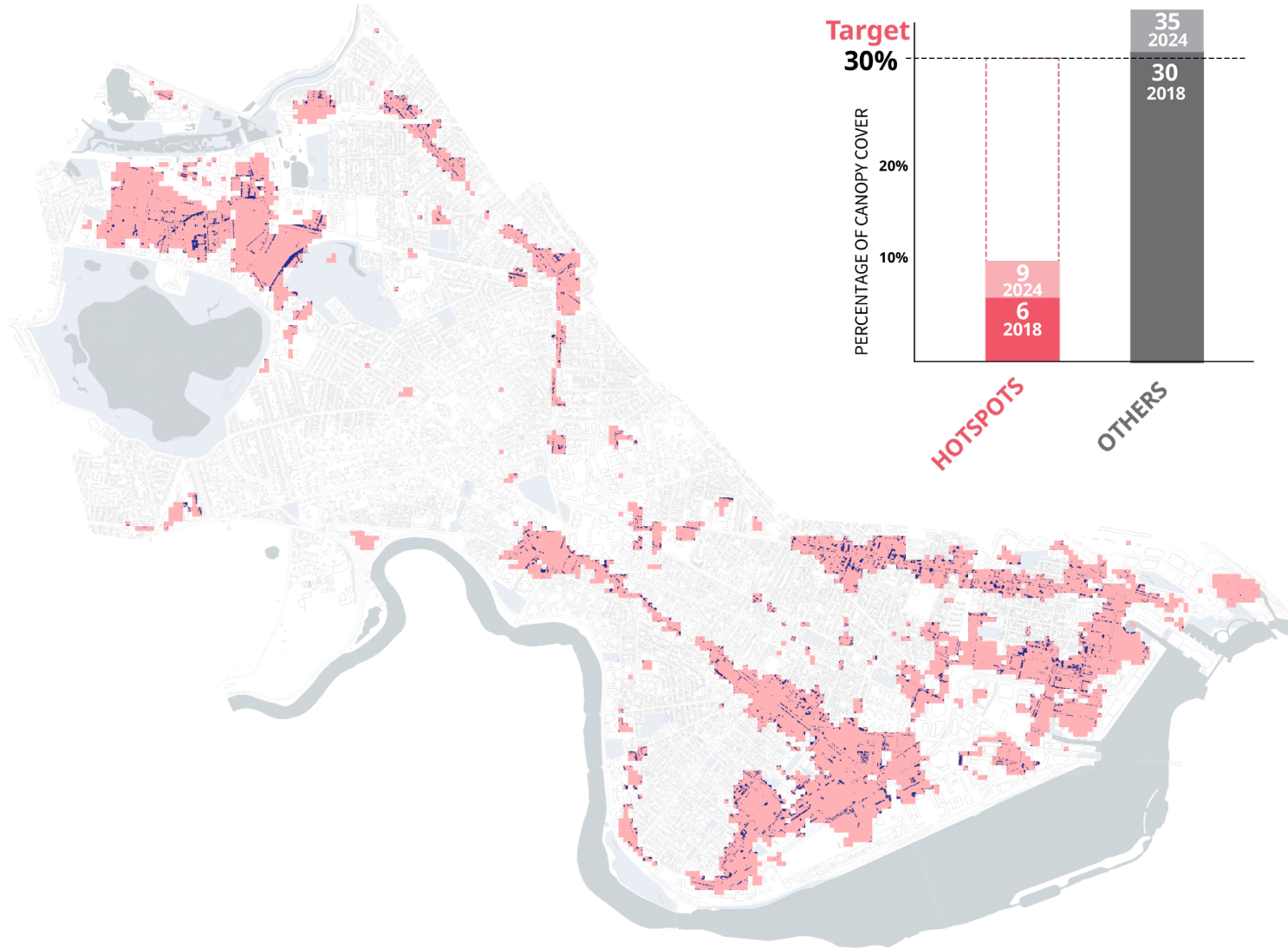


2 NEIGHBORHOODS REACHED TARGET



Resiliency

Canopy is growing in heat island hotspot areas

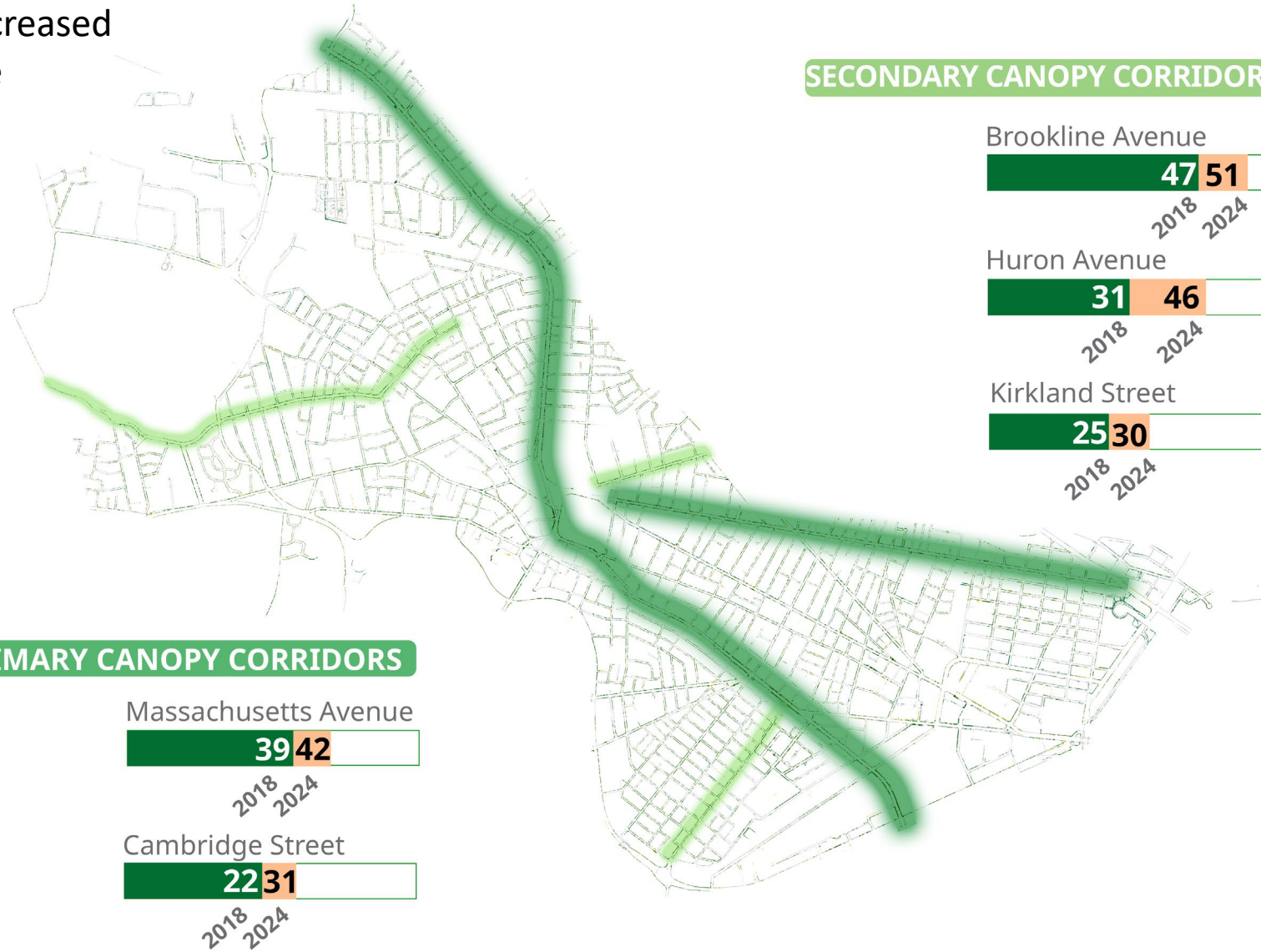


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Resiliency

Canopy over sidewalks increased from 31% to 39% citywide



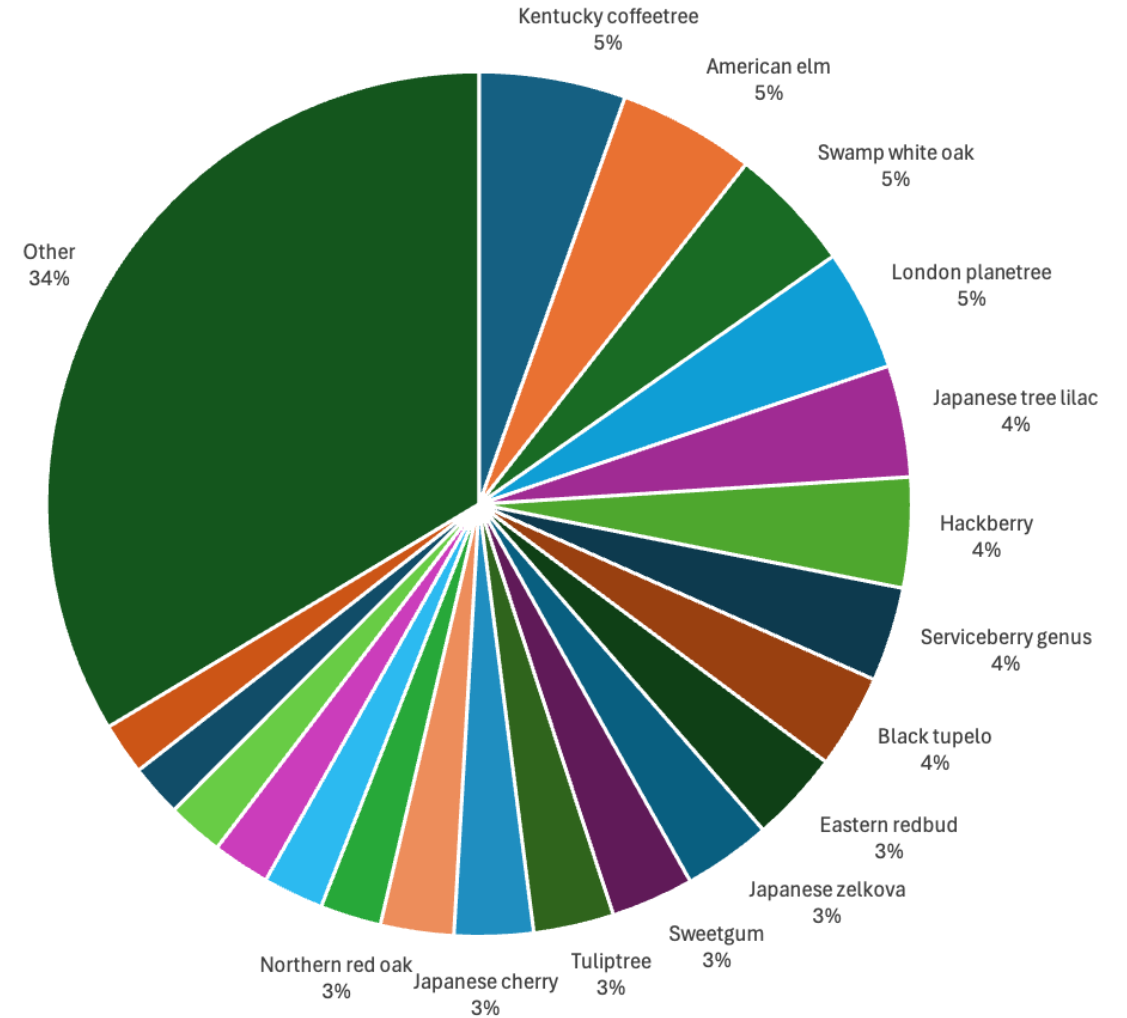
Resiliency

New planting diversity is increasing resiliency

Species target:

No more than: 10% species
20% genus 30% family

Honey locust and Norway maple
are above threshold

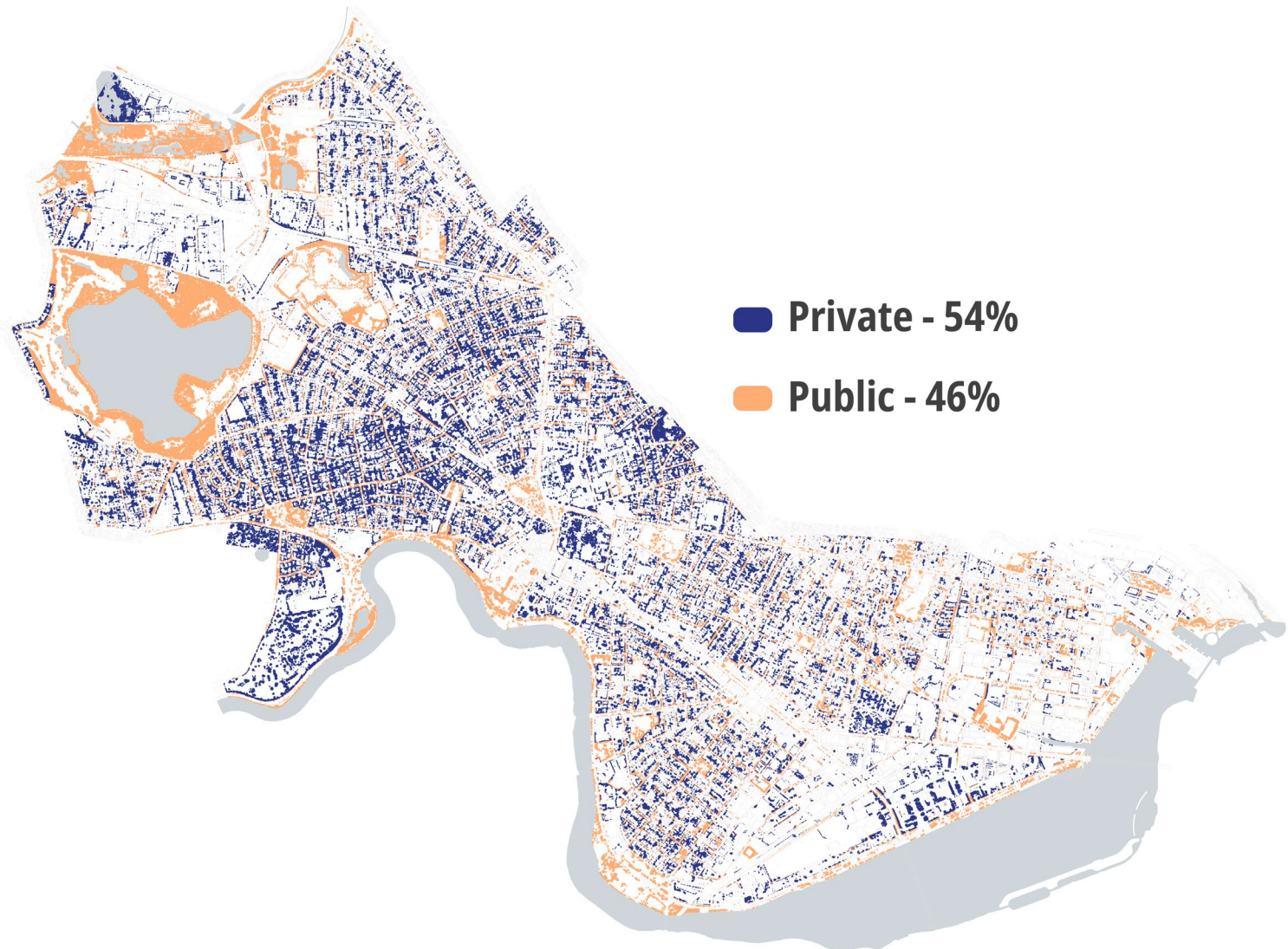


City has planted over 110 unique species in the last 5 years



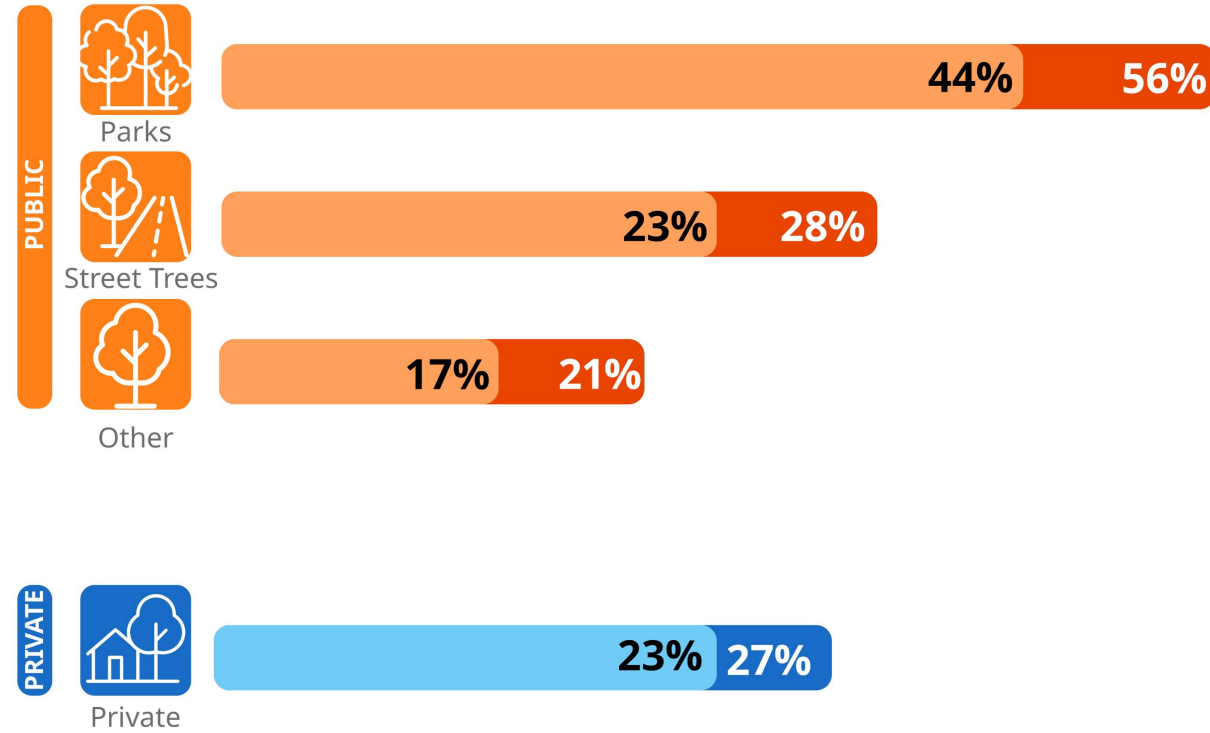
Shared Responsibility: Stakeholder Goals

More canopy exists on private property



Shared Responsibility: Stakeholder Goals

More canopy gain took place on public property, particularly parks

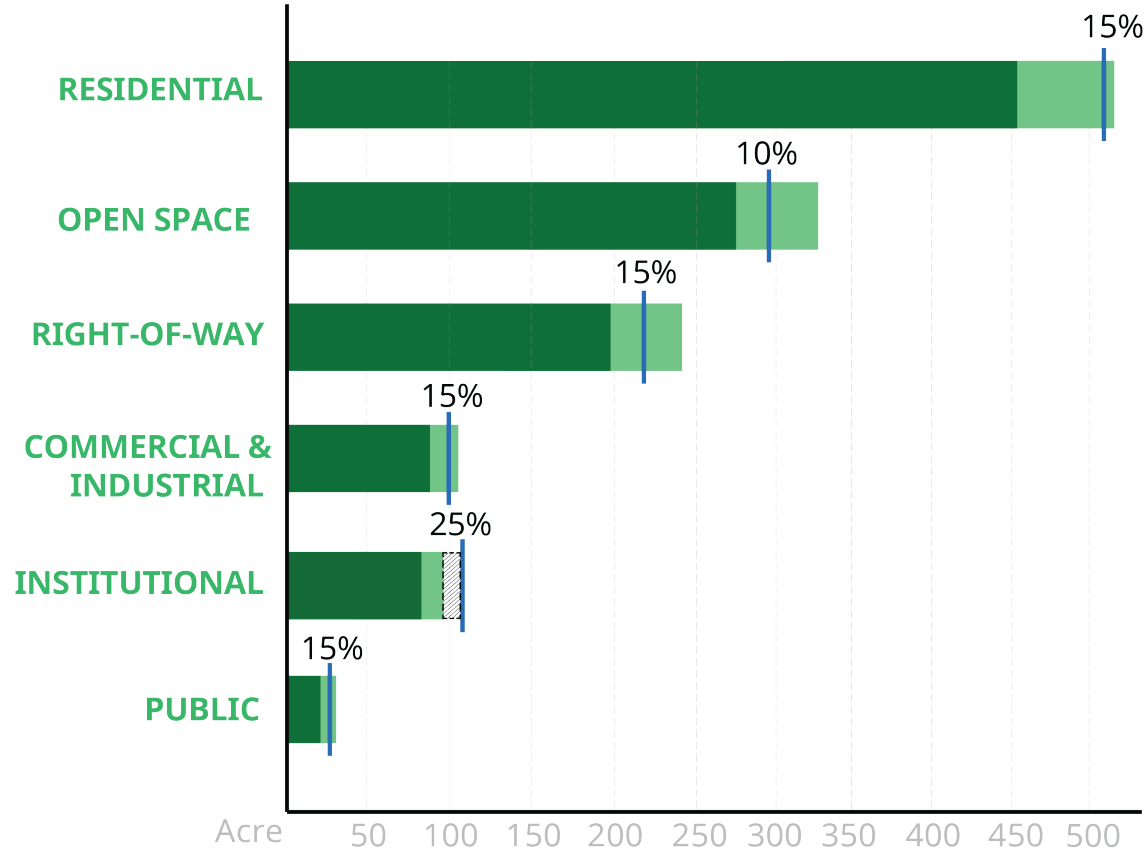





% CANOPY COVER IN 2024



Shared Responsibility: Stakeholder Goals

Most stakeholders are contributing to increased canopy cover

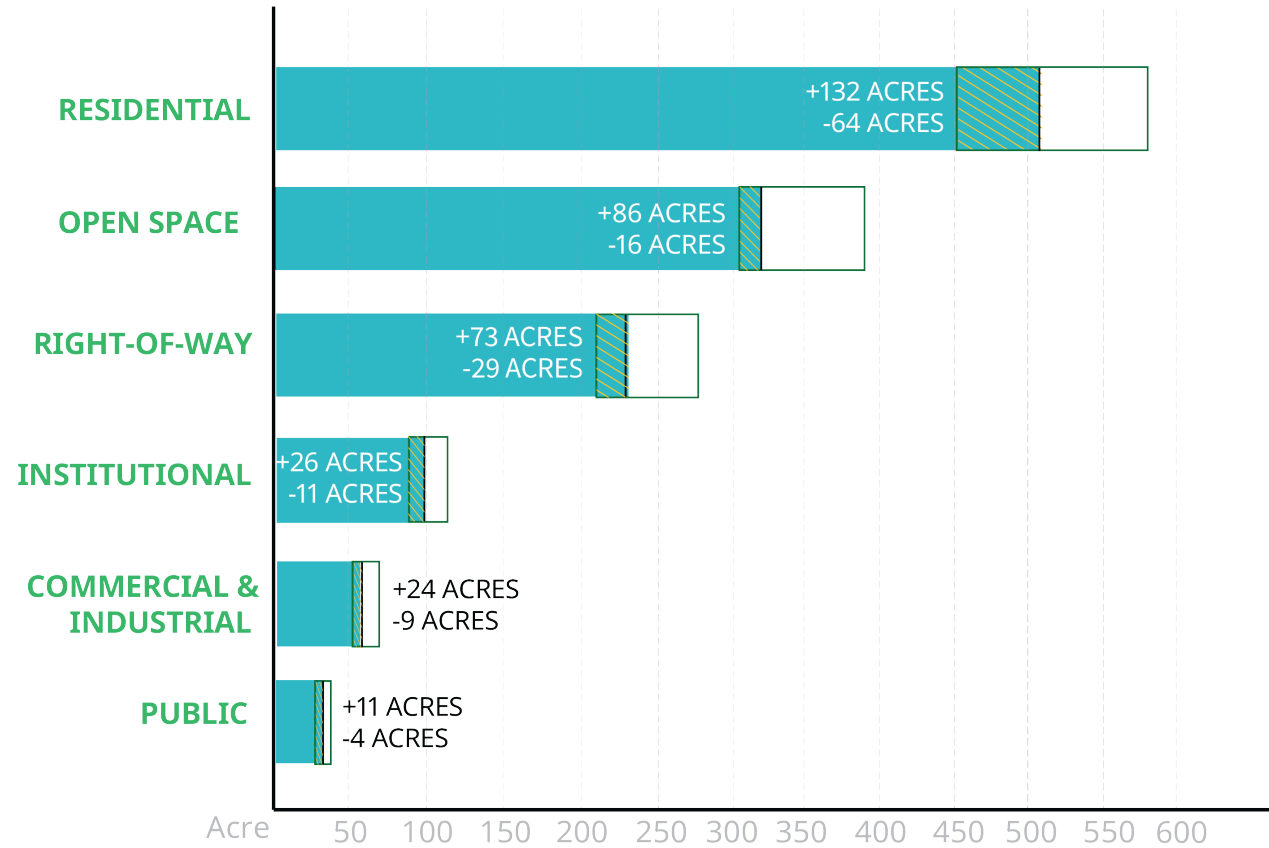


2018 CANOPY 
2024 CANOPY 
2019 UFMP GOAL 



Shared Responsibility: Stakeholder Goals

More loss is still occurring on private land



2024 CANOPY
2018 TO 2024 ACRES GAINED
2018 TO 2024 ACRES LOST



Phase B Recommendations

2025
SUMMER

2025
FALL

2026
WINTER

2026
SPRING

PHASE A
**ANALYSIS AND
EVALUATION**

PHASE B
RECOMMENDATIONS

PHASE C
DOCUMENTATION


We are here

 **Public Meeting 2**



Cambridge Urban Forest Master Plan Public Meeting #1

5 Year Update

November 19, 2025

Questions & Comments

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