

Recycling Advisory Committee (RAC) Meeting Minutes
February 14, 8:00am – 9:30am

Virtual - Zoom

Minute Taker: Scott MacGrath

Members present: Audrey Ng, Dailey Brannin, Dave Demme, Dawn Quirk, Debby Knight, Deborah Galef, Diane Roseman, Elka Kuhlman, Emily Lee, Helen Snively, Meera Singh, Quinten Steenhuis, Richard Nurse, Rob Vandenabeele, Sakiko Isomichi, Scott MacGrath, Carlie Peters, Stephanie Wasiuk, Tracie Gordon.

Members absent: Alex Toupal, Julia Tsang, Laura Nichols, Lee Elliot

Staff Present: Mike Orr, David Lefcourt, John Fitzgerald, Camilla Elvis

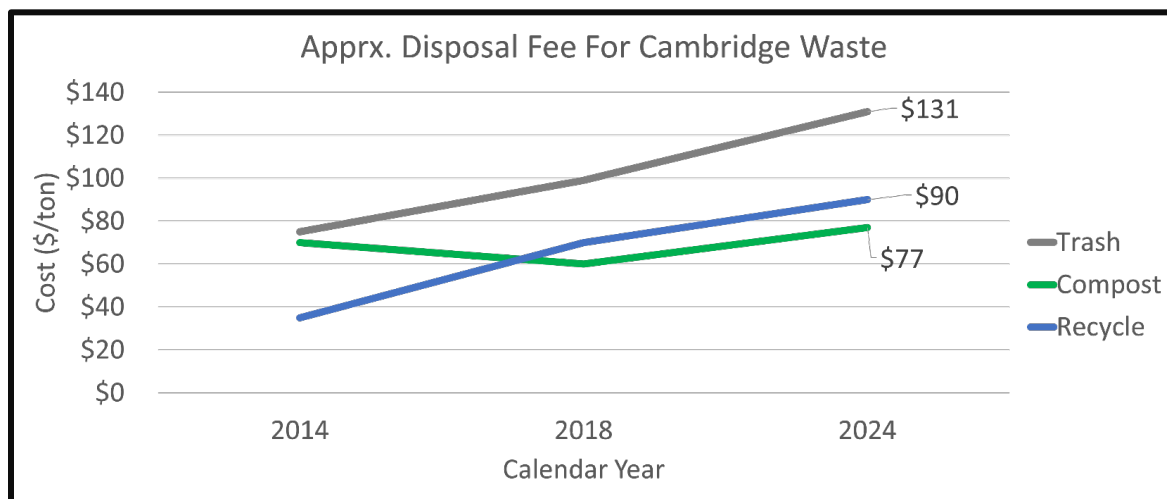
Public present: Tamene Tedla, Amy Waltz.

1. Housekeeping

- Vote on January Minutes - Approved

2. City Updates

- 124 attendees to Webinar on Cambridge's compost and recycling program
 - Request to use language from newsletter for MIT food waste program approved by Mike.
- Tip Fees, Commodity prices:
 - Trash/Compost/Recycling Tip Fees have gone up substantially, from \$77/\$76/<\$40 to \$131/\$90/\$77, respectively, except for compost, which has stayed the same, over the past 10 years (2014 to 2024).
 - Suggestion to make this chart public.



- Discussion on the problem with glass, the cost of trash hauling, where our trash goes.
- How does the quality of the recycling we collect impact the cost?
 - Could marginally benefit if only collected higher value. Aluminum is highest value, glass is lowest value.
 - If participants could exclude glass in favor deposit system, that would add a lot of value.

- What about non-deposit bottles?
 - Could have glass-only collection – challenge in MA having to store 30 cubic yards at a time
 - Could modify the bottle bill deposit, but unclear where this stands in legislature
 - Microplastics concern is raising glass bottle usage?
 - Some local vendors are offering reusable wine bottles (e.g., Formaggio Kitchen)
 - Collection/hauling costs (staff/trucks/maintenance/fuel) haven't been analyzed since pre-Covid, but the City may look into this.
 - Where does our trash go? 1/3 NH, 1/3 Waste to Energy, 1/3 to out of state disposal via rail.
 - Long term outlook?
 - Protected under interstate commerce clause
 - Maine has banned out of state trash, there is potential for other states to do this
 - 2 commodities excluded:
 - Yard Waste (very inexpensive)
 - Clothing (considered a revenue stream as the City gets paid for this)
- Earth Day
 - Fix it clinic/finished compost give a way: April 13th at Main Library
 - RAC Seeking volunteers

3. Move-Out Waste Poll Results and Presentation

- Poll results:

Results from RAC poll

1. Please prioritize the following goals for the potential 2024 move-out program (Weighted ranking of importance; highest number is most important)
 - a. Reduce landfill-bound trash collected around September 1st: **17 points**
 - b. Increase awareness and usage of established DPW programs (ie recycling center, electronics and mattress pickup, etc) and donation centers: **19 points**
 - c. Pilot new City-led approaches for disposal of items DPW doesn't currently recycle (i.e. lamps, kitchenware, other hard goods): **15 points**
 - d. Collect select reusable items around September 1st for donation to nonprofits: **13 points**
2. Rank the Top 7 items you've seen on the curb during move-out season that were destined for the trash (showing top 5 items)
 - a. Kitchenware
 - b. Small/light furniture (coffee table, chairs)
 - c. large furniture (sofas, dressers, etc)
 - d. Textiles
 - e. Books
3. On a scale of 1-10, how reusable are items that you see at the curb during move-out period?
 - a. 6.5 is average rate (10 being mostly reusable)

- Conversations with Furnishing Hope and Household Goods

- 5 item minimum
- Suggest getting awareness out as soon as possible
- How to get landlords more involved
 - Property managers are not highly motivated to get involved
- Discussing with consultants on ZWMP. RAC will have opportunity for comments, likely in April meeting
- Boxes to organize drop offs for people?
- One thought is full-size shipping containers
 - Where do you put them? High rent, low parking areas
 - If unattended, will end up with a lot of actual trash
 - Volunteers?
- Could the DPW produce a single page flyer to help inform residents, that could be posted throughout the city / all apartment buildings?
- Timing concern: Most items of quality get picked up by someone quickly
- Mike to review notes from call

4. Presentation from Forestry Friends by David Lefcourt (see end of Minutes for PPT)

5. Closing

- Public Comment – N/A
- Action Plan/Decisions – Mike to review notes from Move-out waste, RAC to work on flyer in advance of move-out.
 - Volunteer for April 13th Earth Day event at Main Library
- Announcements

Zoom Chat:

08:02:45 From Dawn Quirk to Everyone:

Mike is still here! woahhh

08:06:16 From Emily Lee to Everyone:

Reacted to "Mike is still here! ..." with 😄

08:07:55 From Meera Singh to Everyone:

I was happy that there were 100+ attendees!

08:15:06 From Rob Vandenabeele to Everyone:

Returnable beer bottles are practically non existent in the U.S.

08:15:51 From Rob Vandenabeele to Everyone:

There is interest, but mostly from environmental groups.

08:16:11 From Tracie Gordon to Everyone:

Should be mandated.

08:16:13 From Rob Vandenabeele to Everyone:

Reusable wine bottles are actually on rise.

08:16:54 From Rob Vandenabeele to Everyone:

Reacted to "Should be mandated." with 👍

08:17:53 From Amy Waltz to Everyone:

In sharing the disposal fee with the public, perhaps we can also share something about climate/environmental & hauling or other costs for these waste streams.

08:18:38 From Rob Vandenabeele to Everyone:

Replying to "Should be mandated."

Would need infrastructure funding, and unfortunately would be a significant shift/cost for craft breweries. Macro brands like Bud/Miller/Coors should be the targets.

08:22:20 From Rob Vandenabeele to Everyone:

Seems like the fairest way to handle waste costs is a pay-to-throw scheme for consumers and EPR legislation for manufacturers/retailers.

08:23:08 From Tracie Gordon to Everyone:

The milk bottles from Whole foods are also recyclable.

08:23:08 From Stephanie Wasiuk to Everyone:

I think Formaggio (at least the one on Hampshire) actually stopped that returnable wine bottle program. I used it a couple of times but was sad to see they didn't have them probably about a year ago

08:27:09 From Diane Roseman (she/hers) to Everyone:

It will go in front of the supreme court soon because of the abortion issue. Interstate commerce

08:37:17 From Amy Waltz to Everyone:

Echoing need for early planning (ongoing education, property manager participation, and coordinating with universities on move out waste.

08:38:09 From Debby Knight to Everyone:

Reacted to "In sharing the dispo..." with 👍

08:38:17 From Meera Singh to Everyone:

Do you think making fridge magnets to distribute to property managers and rental Cos. to give incoming residents with our move out message would be one small reminder through the year?

08:52:43 From Dawn Quirk to Everyone:

Brb

08:54:00 From Dawn Quirk to Everyone:

back

08:55:24 From Meera Singh to Everyone:

Would there be interest in forming a group of RAC volunteers in late April/early May who drop of fliers (Debby G's info on paper + Helen's move-out coach role) to multi-fam buildings.

08:55:40 From Stephanie Wasiuk to Everyone:

Reacted to "Would there be inter..." with 👍

08:56:08 From Tracie Gordon to Everyone:

Reacted to "Would there be int..." with 👍

08:58:00 From Helen Snively to Everyone:

i'd be happy to help with that, Meera!

08:58:13 From Emily Lee to Everyone:

Reacted to "Would there be inter..." with 👍

09:20:28 From Meera Singh to Everyone:

I save the water I wash veg fruit lentil rice in and water the tree in front of my house.

09:20:36 From Mike Orr to Everyone:

Reacted to "I save the water I w..." with ❤️

09:20:53 From Dawn Quirk to Everyone:

I am absolutely blown away by the trees on York Street near Donnelly Field. Could you tell us about them and their health?

09:21:06 From Tracie Gordon to Everyone:

Replying to "Would there be int..."

I'm available to assist.

09:21:16 From Stephanie Wasiuk to Everyone:

Reacted to "I save the water I w..." with ❤️

09:21:24 From Tracie Gordon to Everyone:

Reacted to "I save the water I..." with ❤️

09:21:29 From Mike Orr to Everyone:

Replying to "I save the water I w..."

When we run the shower, we capture the cold water as we wait for it to heat up. And we use the water for plants and trees

09:21:43 From Emily Lee to Everyone:

Reacted to "When we run the show..." with ❤️

09:21:52 From Emily Lee to Everyone:

Reacted to "I save the water I w..." with ❤️

09:22:03 From Meera Singh to Everyone:

Reacted to "When we run the show..." with ❤️

09:22:08 From Tracie Gordon to Everyone:

Reacted to "When we run the sh..." with ❤️

09:25:16 From Diane Roseman (she/hers) to Everyone:

Reacted to Would there be inter... with "👍"

09:29:41 From Meera Singh to Everyone:

What was the app you mentioned to report tree stuff?

09:29:55 From David Lefcourt to Everyone:

SeeClickFix

09:29:57 From Mike Orr to Everyone:

Replying to "What was the app you..."

SeeClickFix; www.CambridgeMA.Gov/311 is direct link

09:30:06 From Meera Singh to Everyone:

Thanks

09:31:04 From Diane Roseman (she/hers) to Everyone:

Bye Mike

09:31:29 From Audrey Ng - Boston Public Schools to Everyone:

Thanks everyone and congratulations again Mike!!!

09:31:57 From Mike Orr to Everyone:

Reacted to "Thanks everyone and ..." with ❤️

09:32:02 From Mike Orr to Everyone:

Reacted to "Bye Mike " with 👍

Cambridge Urban Forestry

Introduction to Public Works Urban Forestry Challenges and Opportunities

February 14th, 2024



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Public Works Urban Forestry Department Snapshot

- 7 Certified Arborists of 11 filled full-time positions and 4 vacancies
- 5-10 Summer interns
- Care for almost 22,000 public trees
 - Utilize a proactive and reactive tree maintenance program
- Help institutionalize tree preservation across various city departments

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Urban Forestry Data Challenges

- Monitoring Health of Urban Forest
- Increasing Canopy



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Tree Planting and Removal Data for FY 2023

Planted 1,469 trees

2,419 DBH

Removed 937 trees

7,500 DBH



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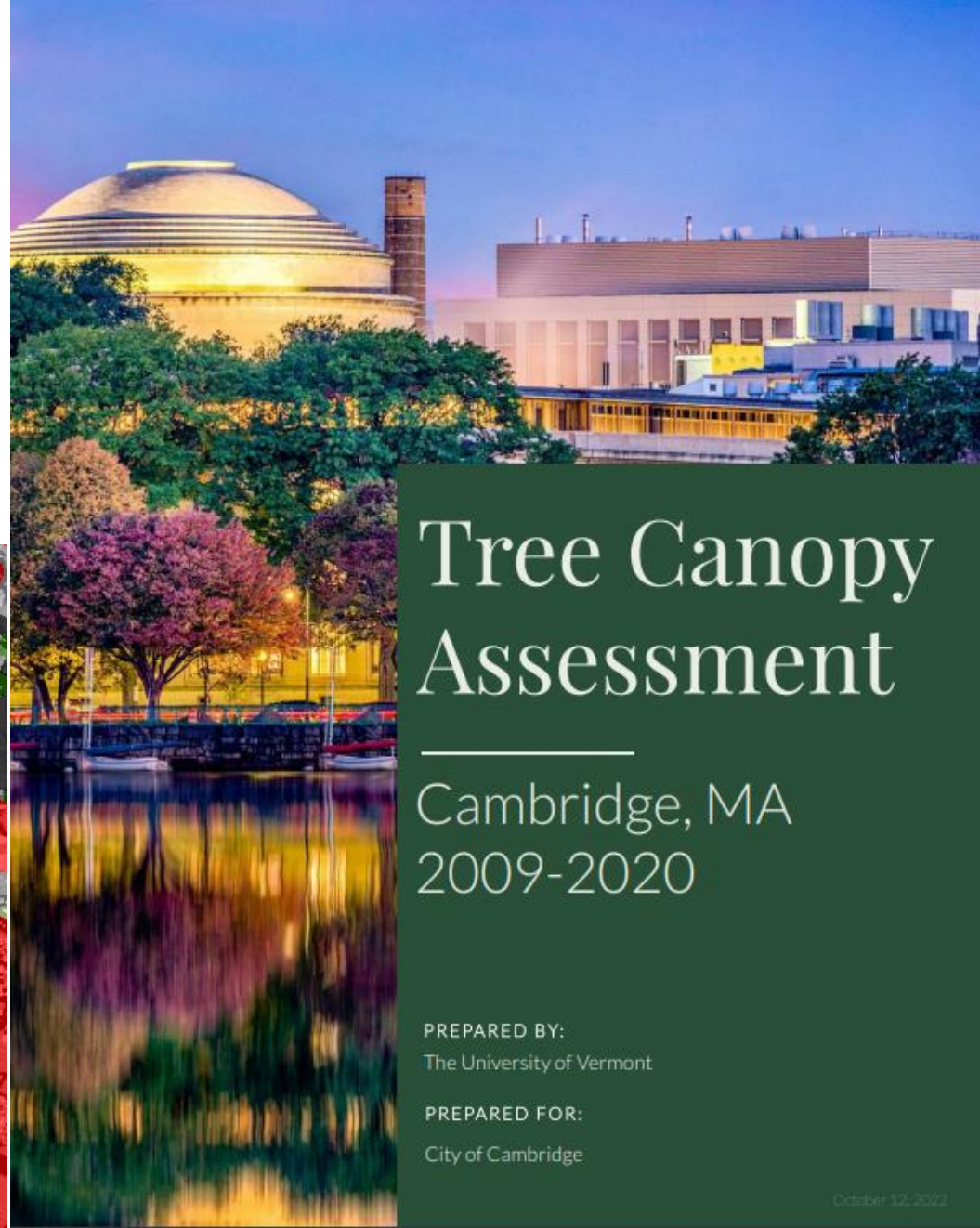


Tree Canopy Report

- 4th Canopy Assessment from UVM
- LiDAR data from 2009, 2014, 2018 and 2020

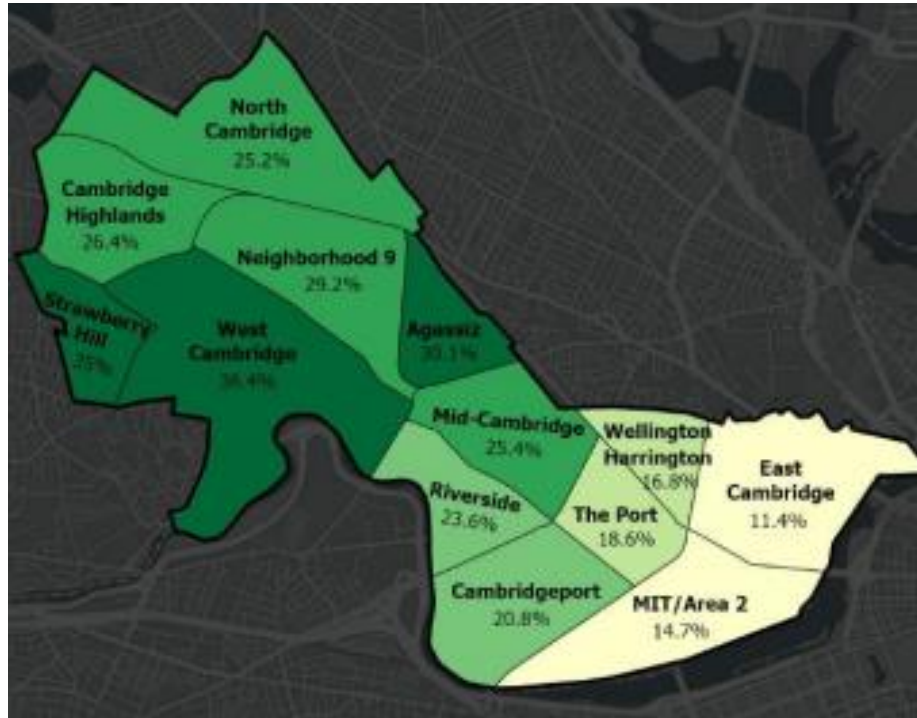


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Tree Canopy Report

LIDAR Analysis



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TREE CANOPY BY THE NUMBERS

Overall tree canopy change from 2009-2020

427

Acres of Gain

474

Acres of Loss

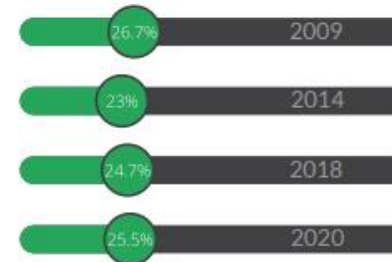
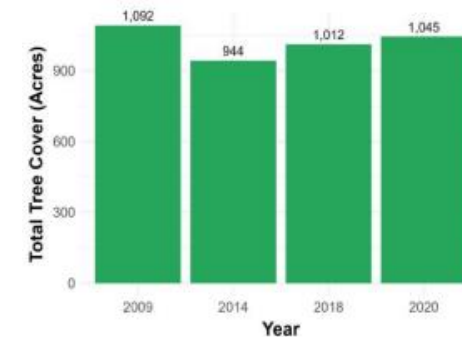
47

Acres net Loss

-1.2%

Absolute Change

Tree canopy by time period



Percent tree canopy coverage at each time period between 2009 and 2020

2009-2014

149

acres of net loss in tree canopy coverage.

2014-2018

69

acres of net gain tree canopy coverage.

2018-2020

33

acres of net gain tree canopy coverage.



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Tree Protection Ordinance

- Beginning in 2019, **City Council updated the Tree Protection Ordinance** to cover the removal of Significant Trees, defined as 6 inches in diameter, and Exceptional Trees, defined as 30" in diameter, on private property.
- Permits are required to remove a Significant Tree on private property and mitigation is required to help offset canopy loss.
- Mitigation can be replanting, payment into the Tree Fund or a combination of both.



VALUE #3

Shared Responsibility

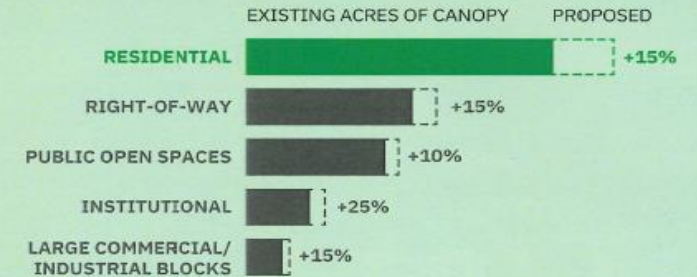
A healthy city benefits from knowledgeable and engaged citizens who contribute to the care of the urban forest.

GOALS

Incentivize each landowner to increase canopy cover — a thriving forest requires mutual care by many parties

→ Increase canopy cover by 10 to 25% across landowner types

City of Cambridge Healthy Forest → Healthy City



Urban Forest Master Plan

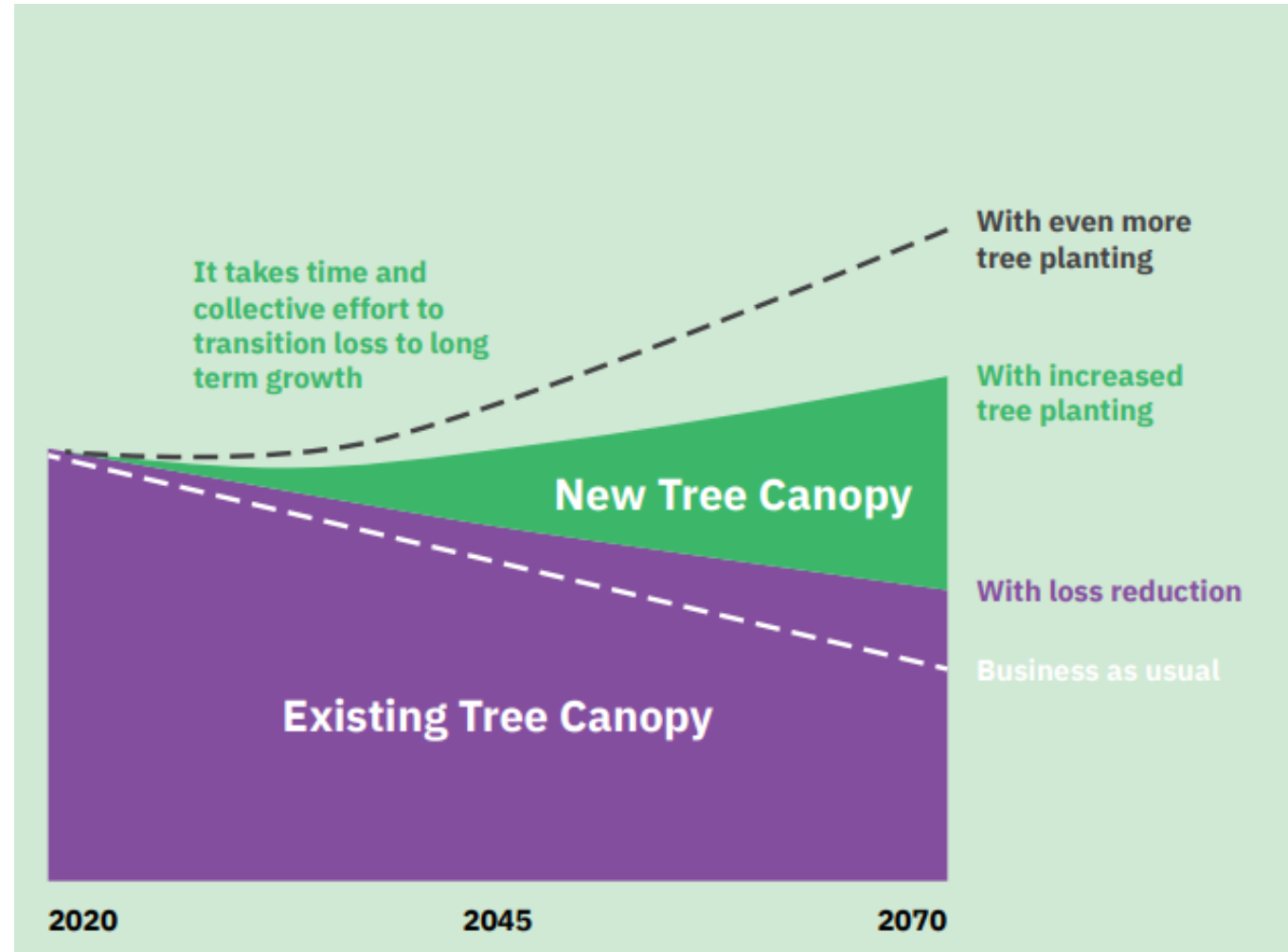
- Task Force of 18 private citizens representing residents of Cambridge, subject experts, local institutions, and business groups
- Documented the State of the Urban Forest
- Evaluated Risks to the Urban Forest
- Set Targets, Prioritization, and Action Steps

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Growing Canopy

Growing canopy is a slow and steady race, but we are seeing substantive progress. The investments in tree plantings and maintenance combined with tree preservation initiatives are reversing the loss of tree canopy. The city is committed to building on this work and continuing hopes to engage more community groups & organizations on how best to implement the UFMP



Cambridge Tree Inventory

All urban forestry information is tracked in Cambridge's work order system, Cartegraph

Work order system contains details on the following information

- Planting date
- Species
- Cultivar
- Inspection Information
- Pest Treatments
- Pruning
- Watering



Map Filter

Search by address

+

-

	ID	Site Type	Diameter	Inspected ...	Inspection Date	Entry Date	Scientific Name
<input type="checkbox"/>	11029	Tree	2.6 in	97.97	10/17/2014	10/12/2016 5:22:50 PM	Prunus x yedoensis
<input type="checkbox"/>	149056	Tree	2.7 in	100	8/19/2022	8/11/2017 12:44:19 PM	Prunus x yedoensis
<input type="checkbox"/>	149121	Tree	3 in	100	6/15/2021	8/22/2017 3:31:32 PM	Prunus x yedoensis
<input type="checkbox"/>	150577	Tree	3.5 in	100	6/17/2022	11/1/2018 8:13:56 AM	Prunus x yedoensis
<input type="checkbox"/>	11030	Tree	4.9 in	94.28	10/17/2014	10/12/2016 5:22:50 PM	Prunus x yedoensis
<input type="checkbox"/>	1501669	Tree	2.4 in	100	6/14/2022	7/9/2019 2:37:30 PM	Prunus x yedoensis



Cambridge Tree Inventory

Ash tree inspection record

Inspections					
Inspection Date	Status	Diameter	Inspected OCI		Inspected OCR
12/14/2013	Complete	12 in			
7/14/2017	Complete	14 in			
6/26/2019	Complete	15 in	100	Excellent	
6/21/2021	Complete	16 in	100	Excellent	
7/31/2023	Complete	18 in	88.33	Excellent	



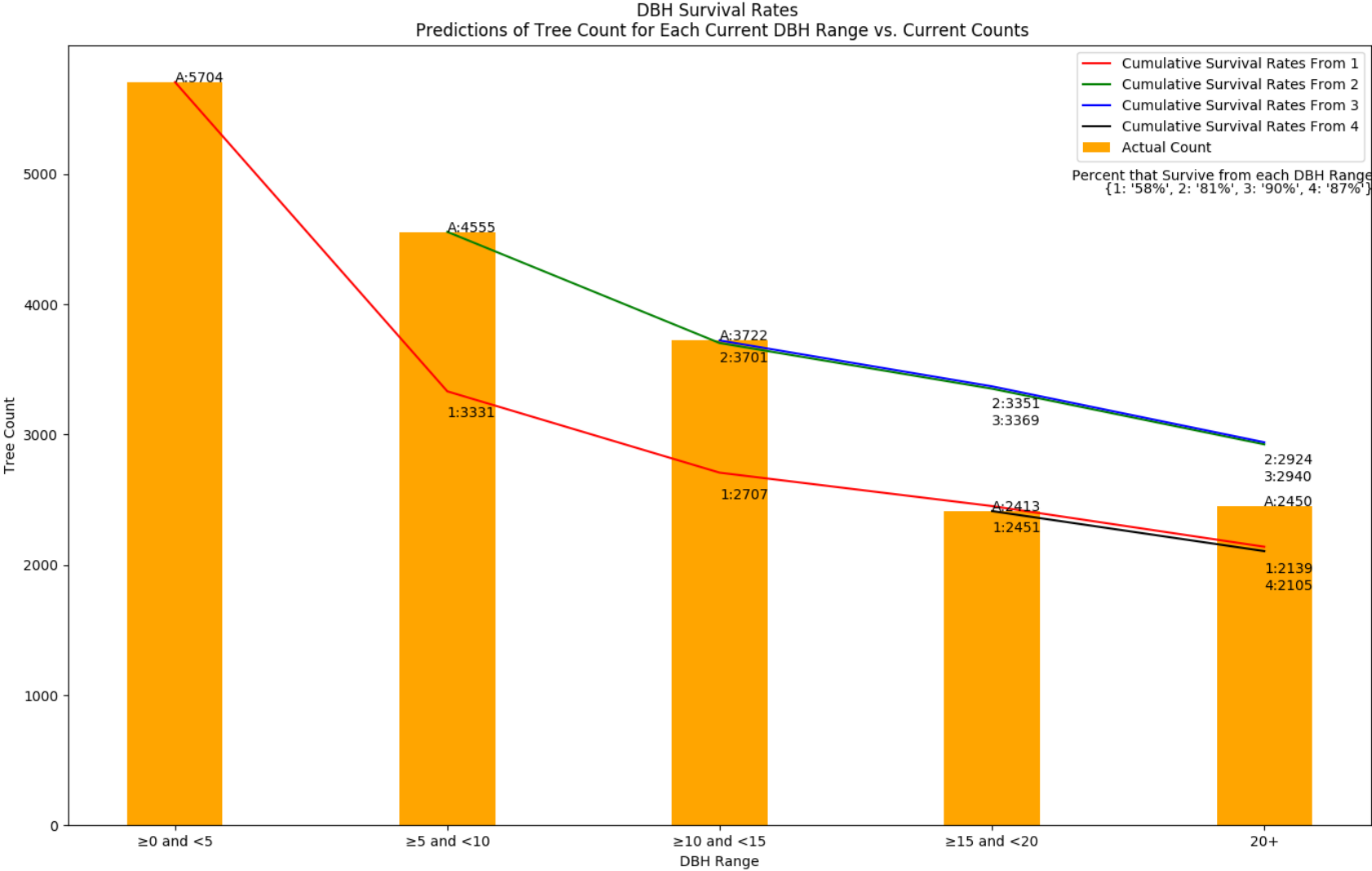
Ash Tree Health

Cambridge has been treating ash trees and monitoring their condition since 2015. The condition of the ash trees is trending downward.

- 4.3% of ash trees show signs of improvement
- 19.2% show no change in condition
- 41.7% declined by 20%
- 38.4% declined by more than 20%



Urban Forest Master Plan



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Plant Diverse and Resilient Species

- Over 150 unique tree species planted in Cambridge
- Cambridge is planting more trees from mid-Atlantic region in response to climate change



Sweetbay Magnolia



Yellowwood

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Plant Diverse and Resilient Species

- Bare root nursery at Fresh Pond
- Holds 700 trees
- Built in partnership with Human Services & DPW



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Urban Forest Master Plan

Action Steps

Expand the ways the Tree Fund can be used.

Take action to allow for flexibility in how the existing City Tree Fund is dispersed. Explicitly allow for funding of outreach and education programs and for planting trees outside of City property.

Establish a Tree Trust.

Establish a Tree Trust where funds can be gathered and then distributed to support planting on private property. Clarify that funds may be received outside of those required by mitigation as required in the Tree Protection Ordinance. Establish a Board of Trustees to oversee the administration of the fund.

- Green Cambridge's Canopy Crew of Public Works will continue planting trees on private property.
- Goal to plant 300 trees annually



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Manage Soils

- Compost tea
- Biochar
- Enlarged tree pits



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Watering Trees

- Commitment to watering trees
- 2 years of watering in the planting contract
- Supplement with Water-by-Bike and Forestry staff for additional 3 years

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Urban Forest Master Plan

Action Plan

Prune proactively.

Undertake structural pruning for young shade and ornamental trees. Identify trees planted within the last 4 to 8 years. Contract to prune for form and structure to reduce potential future damage during ice and wind storms. Pruning now can reduce risks and costs later in a tree's life.

Young Tree Training Program

- Structural Pruning of 1400 newly planted trees annually
- Cycle pruning for street & park trees



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Miyawaki Forest

A Miyawaki Forest is a dense, multilayered forest comprised of native flora. The planting replicates the forests native to the Northeast.

In the Fall of 2021 Public Works partnered with Natural Urban Forests and Biodiversity for a Livable Climate to install the first Miyawaki Forests in Northeast

Located at Danehy Park, the forest is 4,000 sq feet and has over 40 different species





Green & Rose Miyawaki Forest the day of install and almost a year later



Forest Friends

Join Arbor Adventure



Stroll, walk or skip from stop to stop to discover the secrets of our amazing urban forest



Cambridge


Cambridge Urban

ForestFriends

Tree Care Guide

Thank you for being a Forest Friend and nurturing your tree. By watering and caring for your tree, you help to sustain our urban forest.

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Questions?

David Lefcourt, City Arborist
dlefcourt@cambridgema.gov

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