MEETING NOTES

Introduction
Opening remarks from Owen O'Riordan, noting that the format would be a discussion around four topics: Canopy Cover, Species Diversity, Canopy Equity, and Human Experience followed as a public comment period.

2. Design Team Presentation
Reed Hilderbrand (RH) informed the Task Force of the design team's Parking Day activities publicizing the Urban Forest Master Plan process.

Preliminary canopy loss findings:
   Average net loss of 31 acres each year since 2009.
   Showed data from UVM 2009-2014 canopy loss study
   Showed preliminary 2014-2018 loss data

RH introduced three topics around canopy loss for discussion:
1. What are the primary causes of canopy loss?
2. What will it take to reverse the trend?
3. Where are the most opportune places to act?

RH noted canopy loss by land use and highlighted greatest loss was in residential areas.

RH reviewed several areas of large loss to note likely causes:
  -City wetland project in Alewife. RH pointed out that loss of trees likely offset by benefits of improved stormwater function. Example of compromises required when urban space is limited.
  -North Point development
  -West Cambridge residential neighborhood
  -Central Square area

RH noted tree ages in inventory roughly evenly divided between Young, Semi-mature, and Mature. Over 60% of City trees in Good condition and over 25% in Fair condition.

TF question: How often do LiDAR flyovers?
Owen: Anticipate doing flyovers every 3 years.

TF question: Where is loss map by Land Use?
RH: Map is not legible at the City scale. Will revisit at neighborhood scales.

RH noted other cities' canopy goals for comparison.

RH noted that 4,300 3" caliper trees would, after 20 years, equal 31 acres of canopy

 RH noted that 5,633 3" caliper trees would, after 20 years, equal 1% canopy increase for the City

RH reviewed potential plantable area by land use for each neighborhood.

Task Force comments on discussion topics [preceding number indicates topic being referred to]:

1. Possibly due to maturing trees in residential areas, referring to UVM study findings.
1. Likely multiple causes of loss. Re: wetland construction in Alewife: what was the % canopy loss created by this project? Maybe remove that as a cause because it's an outlier.
1.Is there a relationship between new house sales/building permits and canopy loss? Should be investigated.
1. Zoom in to one area and look at human scale – go door to door? Google Earth shows canopy history.
1. Overlay other data to determine causality? Front yard vs. backyard? What are the data points? Post storm, downed power lines, power company pruning areas (anecdotal information)
1. Compare gain/loss maps with 2009-2014 information
2. How often would LIDAR be taken? Shorter increments may yield more information
1. How to visualize land use/canopy? Very difficult to be legible
2. How do you engage landowners?
1. Data covers the drought in 2015 which would have had an indiscernible pattern
2. Focus on existing trees
-3. What are the variables in the model that determine tree health... tree canopy
-3. Parking spaces in the street?
-3. Collaboration with DCR
-3. Brainstorm about gains-
-3. How does plantable areas correspond to equity/heat island areas?
-3. Is there a way we could correlate health with canopy cover percentage?

Equity question
-3. Plantable area per neighborhood/total plantable area calculation
-3. Could the top species the hardiest/toughest survivors?
-3. Could we assess canopy growth by species using AES layer?

RH noted potential species diversity targets and what species are above those metrics.

Species diversity topics for discussion:
1. What diversity targets should Cambridge set?
2. And how can the city best achieve that goal?

2. Could species recommendations be provided in special permits
1. Could have unintended consequences for canopy by diverting from common species such as oaks
1. Could we be more broad in our species recommendations – Robinia, Catalpa
1. Southern species – sweetgums
2. Species diversity limited by nursery availability so takes a lot of planning in advance. Contract growing? City work with nurseries?
2. Species recommendations may differ amongst neighborhoods (East Cambridge vs. Alewife)
1. Clumping trees and different forms that provide canopy cover beyond typical street tree
2. Understory trees under shade trees
1. 80 species from state (TF member may be able to share)
1.NYC tree list – compare with their list. What lessons to be learned?

RH discussed vulnerable populations generally living in denser neighborhoods that tend to have less canopy

Equity topic for discussion:
1. What can Cambridge do to reverse the canopy deficit in vulnerable communities?

-Urban heat island studies that look at extent of cooling from parks
-Creation of parks?
-Incentive open space area ratios?
-Would like to look at owner/renter and canopy cover ratios
-Difficulties in zoning changes – real estate values
-Incentives for connecting areas

-Traffic calming and canopy cover synergies
-Human scale – looking at City mapped public trees

RH pointed out heat island areas and CCPR cool corridor strategy as one starting point to address these areas.

Planting strategy topics for discussion:
1. Where should the city focus resources in order to most effectively enhance human comfort?
2. Where street trees can't be planted in ideal conditions, are there alternative strategies?

1. Overlay bike routes with heat island map
1. Mass Ave is a unique environment – relationship between commercial businesses, lack of residents to care for trees, conversation with the businesses? True opportunity requiring investment. Sponsorship/signage of trees. What would it take to create a plan?
1. Corporation strategy
2. Utility constraints on many of the major streets
1. Above ground plantings?
1. Tree in a median on Mass Ave (like Broadway)? Competing uses for that space
1. Binney St – looking to remove median, place bike path and place row of trees
1. Placing spigots on Mass Ave? Availability of water

RH showed updated draft decision support framework and asked Task Force members to provide any feedback on this guiding framework.

4. Public Comment Period:

Attendee: Largest cause of loss is removals in my observation. You're not addressing this.
Owen: We can certainly look at that.

Attendee: loss on slide 13 due to microburst in 2017.