3. PLANT MORE – ON PRIVATE LANDS

2017 (already underway)	Support planting and continual care of food-bearing trees.
2017 (already underway)	Continue and expand tree planting initiatives by or for persons with a disability.
2017 onwards	Collaborate with community partners to identify new, and support existing, programs.
2018 onwards	Create a tool lending library; donate tree care equipment.
2020 onwards	Plant City trees in private yards if there is insufficient space on nearby City land.
2020 onwards	Enter into partnerships to plant and manage trees on institutional lands to benefit the wider community.

4. PLANT BETTER – IMPLEMENT BEST PRACTICES

2017 onwards	Start the process to improve species diversity. Prioritise species origin & provenance (1) native to Ontario (2) Native to North America (3) non-native. Implement assisted migration where appropriate. Avoid any species that is invasive.
2018 - 2020	Amend by-laws and tree planting guidelines to require more trees be planted, with low mortality in establishment.
2018	Revise planting standards to optimise soil volume, soil quality and other factors for success.
2018 onwards	Implement better physical tree protection measures.
2019 - 2022	Monitor success of reducing mortality and adjust Planting Strategy as needed.
2020 onwards	Prioritise species origin & provenance (1) native to Ontario (2) Native to North America (3) non-native. Avoid any species that is invasive.
2020 onwards	Apply maximum parking requirements, to support 30% canopy cover with shade tree planting.

TREES & FORESTS ADVISORY COMMITTEE
DRAFT TREE PLANTING STRATEGY – WORKING GROUP COMMENTS & RECOMMENDATIONS

Working Group: Amber Cantell, Craig Linton, Roberto Manella
Original Date: May 23, 2017
Updated: May 25, 2017

TFAC is broadly supportive of the draft Tree Planting Strategy, and happy to see progress being made on this essential plank of the overall Urban Forest Strategy. Having reviewed the draft strategy, we believe it would benefit from:

- A clear sense of what size and species of trees are being considered: TFAC has consistently advocated for the use of smaller potted stock over more expensive caliper stock, but stock size is not discussed in the draft strategy.

- A clear sense of what "planting styles" (naturalization vs. standalone shade trees) are being considered, and a link being made to the need for woodland targets identified in the Urban Forest Strategy (i.e., you get a very different urban forest if you focus on creating new woodlands vs. well-treed streetscapes)

- A strong mandate to integrate climate change adaptation into all planting efforts, which, in order to ensure the survival of trees planted under this strategy, should begin immediately

- A reporting mechanism, which should be clearly outlined within the Tree Planting Strategy itself, rather than in an accompanying staff report

- A means to evaluate relative benefits of different planting projects and associated spending (ideally, a system should be in place to assess "bang for the buck" in terms of canopy cover impact)

- A discussion of how the plan (and especially targets) might need to be revisited in light of (at this point, probable) disasters, such as the potential expansion of Asian Longhorn Beetle into our area (or if these are already considered in the targets)

- More discussion on how mortality will be assessed and monitored over time, and how planting numbers may need to be revised as a result. In particular, we would recommend that any trees the City pays to cut down have their age recorded so as to enable staff to assess how survival has changed over time (and, as a result, the impact of "plant better" activities such as adding compost or watering). Furthermore, it should be explicitly recognized that if canopy cover does improve, it could be because of increased planting *or* less cutting. In order to determine what is the case (and what sort of actions would have the greatest canopy cover benefit), the City should aim to collect good data on cutting of individual trees and large-scale clearing of land.

Without this data, we won't understand the underlying drivers of canopy and what the best strategies will be for increasing canopy cover.

- Baseline data (possibly in the form of an appendix) showing how many trees are currently being planted in London, and where (in terms of land use) they are most often being planted. ReForest London currently maintains this dataset (thanks to the Million Tree Challenge) and is readily available to the City should it wish to use it.

- Definitions section to expand upon what is meant by "shade tree" and other terms as needed

The strategy should also make it clear that it only applies to lands within the Urban Growth Boundary (if that is to be the case), which limits the amount of plantings on agricultural land that could count towards it.

With regards to the document as written, we recommend the following revisions for the existing content:

Cover: Should make it clear that this is the 5-year strategy, not the full 20-year strategy.

Inside Cover: City has added some explanatory text. Expecting to do annual reporting (but not stated explicitly)

Page 1 – Why Plant More: Use estimated number of trees lost rather than percentages. (1% doesn't sound like much).

(Now done; lost 236 hectares and extrapolated from there)

Page 2 – Benefits of an Urban Forest: Should explicitly mention mitigating climate change (not just "assists in carbon trading").

(Climate change is still not in there: was a long discussion among staff)

Page 3 – Context: No comments.

Page 4 – Explaining Canopy Cover: This section should:
- Include a sentence to define what canopy cover is, rather than just depending on pictures.
- *(Added, but language may be over-technical? "The birds-eye view looking down" used during presentation – might be better)*
- State that it deals with width/area, not height (picture seems to deal with height; showing shaded area in the air beneath leaves, rather than just on the ground, might help).
- State that not all species of trees produce the same canopy, and that trees grown in forests may not (individually) produce as much canopy as trees grown in open spaces

Page 5 – Exponential Growth:
- This page could likely be removed: it doesn't seem to make any particular point that is not made elsewhere in the document. (If kept, the takeaway message should be made clearer). *(Graph changed out with two others; but now it looks (at a glance) like "mortality goes down" for bottom graph. Sara noted "we are assuming average lifespan of a tree = 50 years" is what they are assuming, though not explicitly stated)*

Page 6 – Goal:
- The conclusion regarding 2.44 million trees being the number needed requires a lot more explanation. Are these mature trees? Seedlings? How many planted in a spaced out fashion, vs. how many in naturalizations? What species is being used, as size of tree at maturity affects how much cover it could potentially produce? Does this factor in mortality?

  (Changed to include "medium shade trees")

- Ideally, it would also provide information on a few different ways the canopy cover target could be hit, and why this particular "2.44 million" option has been selected. (For example: maybe the target could be 1 million more expensive caliper trees OR 2 million potted trees, etc.)

Page 7: No comments.

Page 8 – City Targets: It would be worth noting how much of the land within the UGB is City-owned, for context (i.e., how does that compare to the 11% public vs. 89% private planting targets?)

(Not done)

Page 9 – City Planting:
- The argument being made here – that "Trees planted from 2028 – 2040 have the best rate of return to meet the tree canopy target in 2065" – delays planting now so as to minimize cost and maximize benefits for residents in 2065. We would suggest there is no reason to prioritize London's 2065 residents over our current ones (or those in 2025, 2035, etc.) and so a planting approach that provides a steady rate of planting over time is likely preferable and will generate benefits for residents sooner (rather than optimizing them for those residents in 2065).

(This reference now removed, but now no obvious justification for the size/placement of the graphs; staff noted that the main reason for the smaller bars upfront is to account for scale up – TFAC members seemed to agree that just identifying that these are as they are for scale-up purposes would likely help. Later bars are shorter to provide more funding for maintenance, but the graph as it stands unfortunately does not make that clear)

- To justify the proposed budget and provide greater clarity as to the plan, this page needs to explain size of trees (i.e., potted, caliper, bareroot, etc.), the cost per tree planted on City land, how they will be planted (staff, contractor, volunteer), and what species.

- We would again stress that when it comes to a planting strategy, the ability to compare options is vital.

Page 10 – Private Tree Incentives:
- Although page 8 indicates that 89% of the new plantings needed will occur on private land, this page shows that only 8% of the tree planting budget in the last cycle was put towards private projects. If, ultimately, so much depends on the success of planting on private land, and if private land trees contribute to the overall public good (we would argue they do), it would make sense to proportion out the budget along these lines. (I.e., that more of the proposed funding should be allocated towards planting on private land).

    However, it's probably also fair to say trees on public land provide greater overall amenity to residents than those on private land (e.g., they provide not only cleaner air and water, but also shade to park users, etc.), and so we would recommend some factor being adopted to help reflect the added benefits public trees offer (at the moment, with 8% of the budget for private trees on 89% of the land, public trees are being valued at 11x that of private trees within the urban forest). Since it is easier to plant potted stock on public land, and since the public then assumes any subsequent maintenance cost, planting on private land is also much cheaper for the City over the long run.

    This page should also provide information on how many trees were planted as a result of the City's $130,000 in this period to help provide a point of comparison with the public land data on page 9.

    (None of this incorporated as of yet; $800,000/year assumes worst case scenario where we'd have to grow and give away ~44,000 trees)

Page 11 – Key Strategies: No comments.

Page 12 – Actions:
- Reference be made back to any individual Urban Forest Strategy tasklist (UFS, p. 25 – 40) items these actions are meant to address.

(Not done)

- With regards to reducing tree mortality in year 1 – TFAC has previously recommended the adoption of a watering strategy for newly planted City-owned trees. We would like to see it explicitly included in this section if possible.

(Done)

- "Plant more conifers": should specify climate-appropriate, as some genera (such as spruce) are on their way out of our area

Page 13 – Actions (continued):

- The first section here is called "Plant More – Through Community Partners", but as it stands, despite the title, this section does not really discuss how the City will, as an organization, collaborate with large planting organizations to achieve the goals set out in the TPS. Ultimately, the bulk of trees being planted within the UGB will likely be planted through programs delivered by a small handful of organizations, and so how they can be fully engaged should be fundamental to the TPS.

- Similarly, there is little in here about working with volunteers or schools, two areas that may be of interest.

- The Million Tree Challenge, and how it will fit in with the overall strategy, could also be referenced.

- Since it is likely to be a focus of the next 5-year period, we would like to see mention in here of plans to investigate large-scale, collaborative propagation programs with schools and/or volunteers in the spirit of Wellington County's Green Legacy programme. (Current phrasing of "contract growing" would seem to exclude the Wellington model).

- If the TPS envisions a greater amount of collaboration with planting partners, we would recommend that the City seek to fill the (currently vacant) Community Projects Coordinator position to help facilitate that work.

- Under the "Plant Better" section, we would again like to see a plan for regularly watering newly planted trees (and especially the more costly caliper trees) mentioned explicitly

- Planting the largest-growing and longest-lived species for a location should be effective immediately, not 2020 onwards, and should speak about native species and invasives. (We understand from discussions with staff that the "2020" date was set to accommodate existing planting contracts which may include smaller trees, however, we believe there is no reason a broad policy could be enacted now so as to be used if any additional opportunities for planting arise prior to 2020, with the understanding that any existing contracts would simply be "grandfathered in").

(Done: moved up to 2017 onwards)

- With regards to the statement about "avoiding invasives", TFAC has previously recommended a "Non-Invasive Plants First" policy, wherein an invasive would only ever be considered if a non-invasive species had failed first in a giving planting location. We would recommend revising this statement to explicitly reference such a policy.