what did you find most eye opening?

what is your largest remaining question?
which 5 strategies do you think should be highest priority?

what strategies are still missing?

what steps should we take to further advance the goals of the MP?
what is your impression of the ordinance approach?

what are the largest hurdles to getting it approved and accepted by city residents / owners?
Trees are a shared resource
Everyone is subject to the Tree Ordinance

Trees provide tangible benefits to the City
Voluntary removals necessitate a fee that reflects the value of the lost resource

Large trees provide greater benefits and take longer to regrow
Mitigation requirements are proportionately higher for larger trees, and
The City’s largest trees receive special protection

The process should be simple and objective
Homeowners can use a streamlined replacement formula, and
All other projects use an industry standard valuation formula
INTENTIONS OF THE ORDINANCE

Not all trees are equal
Fees are computed based on health, location, and species of tree

The process should be equitable
Owner-occupied properties have reduced mitigation requirements, Those on financial assistance have all fees waived, and Mitigation requirements should not be overly onerous.

Replanting in kind is preferred, but not all sites and project types are equal
The Ordinance encourages on-site replacement, Allows off-site mitigation planting, and Makes fees paid to the Tree Fund the most expensive option
EVERYONE SHOULD BE SUBJECT TO THE ORDINANCE

Canopy loss has been largely on residential and institutional properties.

<table>
<thead>
<tr>
<th>Area of the City</th>
<th>Land Area of Cambridge City: 4066 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canopy (2009)</td>
<td>1207 acres</td>
</tr>
<tr>
<td>Canopy (2018)</td>
<td>1056 acres</td>
</tr>
</tbody>
</table>

- Residential: 529 - 229, -29%
- Commercial: 232 - 83, -23%
- Industrial: 241 - 46, -5%
- Public: 227 - 223
- Open Space: 51 - 27, -2%
- ROW: 103

Land area of Cambridge City: 4066 acres

Canopy (2018): 1056 acres

- Residential: 410 - 229, -29%
- Commercial: 227 - 83, -23%
- Industrial: 241 - 46, -5%
- Public: 227 - 223
- Open Space: 51 - 27, -2%
- ROW: 103
EVERYONE SHOULD BE SUBJECT TO THE ORDINANCE
Special permits for large projects only account for 4.7% percent of canopy loss over the last 10 years

- **207 acres** (148 projects)
- **20.1 acres** of canopy in 2009
- **12.9 acres** (~1,484 trees) removed 2009-2018
- **7.8 acres** of net canopy loss after replanting/growth

Source: CUFMP 2018 canopy analysis and City GIS data.
PROTECT MORE TREES
If the city were to redefine **Significant Trees** to 6” dbh, it would expand the number of trees captured by the ordinance by approximately 49%.

For Example:
Atlanta; Seattle; Oakland, FL.
Concord, Lexington, and Brookline (Massachusetts)
PROTECT THE LARGEST TREES
If the city were to add an Exceptional Trees category that received additional scrutiny, this could reduce removals of very large, old, or special tree.
PROTECT THE LARGEST TREES

If the city were to add an Exceptional Trees category that received additional scrutiny, this could reduce removals of very large, old, or special tree

Based on field survey extrapolation, an estimated 2,400 trees in Cambridge would be considered Exceptional Trees

These trees consist of 3% of the tree population, but more than 8% of the total canopy

On average, it takes about 80 years to grow a 30” dbh tree
VALUE TREES MORE ACCURATELY
Current approach — Trunk diameter formula

40” diameter = (8) 5” Trees

Replacing trees by “caliper inch”
VALUE TREES MORE ACCURATELY
Current approach — Trunk diameter formula for a 36” Pin Oak

**TYPICAL CALIPER REPLACEMENT VALUE**

\[
\text{VALUE} = \frac{\text{TYP. REPLACEMENT FOR 2 IN TREE} \times \text{TOTAL CALIPER INCHES OF TREE}}{\text{2 IN (TYPICAL REPLACEMENT)}}
\]

$1,700 (COST, PLANTING, & 3 YRS OF WATERING)
VALUE TREES MORE ACCURATELY
Current approach — Trunk diameter formula for a 36” Pin Oak

TYPICAL CALIPER REPLACEMENT VALUE

\[
\text{VALUE} = \frac{\text{TYP. REPLACEMENT FOR 2 IN TREE} \times \text{TOTAL CALIPER INCHES OF TREE}}{\text{2 IN (TYPICAL REPLACEMENT)}}
\]

- \$1,700 (COST, PLANTING, & 3 YRS OF WATERING)
- 36 IN Ø / 2 IN

\[
\frac{\$30,600}{\$1,700} = \frac{36}{2}
\]
Replacing trees by
“caliper inch”

Replacing trees by
“trunk area”*

*total area to be multiplied by the factors which would reduce mitigation
VALUE TREES MORE ACCURATELY

Proposed approach — Trunk Area Formula using a 36” Pin Oak in good condition with a good location rating as an example

TYPICAL CALIPER REPLACEMENT VALUE

\[
\text{VALUE} = \frac{\text{TYP. REPLACEMENT FOR 2 IN TREE} \times \text{TOTAL CALIPER INCHES OF TREE}}{2 \text{ IN (TYPICAL REPLACEMENT)}}
\]

\[
\text{VALUE} = \frac{\$1,700 \text{ (COST, PLANTING, & 3 YRS OF WATERING)}}{36 \text{ IN } \pi \times r^2}
\]

\[
\text{VALUE} = \frac{\$1,700 \times \text{36 IN } \pi \times r^2}{2 \text{ IN}}
\]

\[
\text{VALUE} = \frac{\$30,600}{2 \text{ IN}}
\]

WEIGHTED TRUNK AREA REPLACEMENT VALUE

\[
\text{VALUE} = \text{REPLACEMENT $^\ast} \times \text{TRUNK AREA TO MITIGATE} \times \text{SPECIES RATING**} \times \text{CONDITION RATING***} \times \text{LOCATION RATING****}
\]

\[
2'' \times \frac{\$1,700}{3.14} = \frac{3.14 \text{ SQ. IN}}{1017.36 \text{ SQ. IN}}
\]

\*
This value is still under discussion as to whether it is appropriate


*** ISA Trunk Formula Method from Guide for Plant Appraisal, 10th Edition, Council of Tree and Landscape Appraisers

**** Adapted from Urban Tree Health - A Practical and Precise Estimation Method, Jerry Bond, 2012.
**VALUE TREES MORE ACCURATELY**

Proposed approach — Trunk Area Formula using a 36” Pin Oak in good condition with a good location rating as an example

### TYPICAL CALIPER REPLACEMENT VALUE

\[
\text{VALUE} = \frac{\text{TYP. REPLACEMENT FOR 2 IN TREE} \times \text{TOTAL CALIPER INCHES OF TREE}}{\text{2 IN (TYPICAL REPLACEMENT)}}
\]

\[
\$30,600 = \frac{\$1,700 \times 36 \text{ IN} \text{Ø}}{2 \text{ IN}}
\]

### WEIGHTED TRUNK AREA REPLACEMENT VALUE

\[
\text{VALUE} = \frac{\text{REPLACEMENT $} \times \text{TRUNK AREA TO MITIGATE} \times \text{SPECIES RATING} \times \text{CONDITION RATING} \times \text{LOCATION RATING}}{	ext{TOTAL CALIPER INCHES OF TREE}}
\]

\[
\$247,676 = \frac{\$541 / \text{SQ. IN} \times 1017.36 \text{ SQ. IN} \times .80 \times .75 \times .75}{1017.36 \text{ SQ. IN}}
\]

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORWAY MAPLE</td>
<td>.60</td>
</tr>
<tr>
<td>HONEY LOCUST</td>
<td>.60</td>
</tr>
<tr>
<td>PIN OAK</td>
<td>.80</td>
</tr>
<tr>
<td>WHITE ASH</td>
<td>.50</td>
</tr>
<tr>
<td>AILANTHUS</td>
<td>.10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>EX</td>
<td>1.0 - .90</td>
</tr>
<tr>
<td>GOOD</td>
<td>.90 - .75</td>
</tr>
<tr>
<td>FAIR</td>
<td>.75 - .50</td>
</tr>
<tr>
<td>POOR</td>
<td>.50 - .30</td>
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<table>
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</tr>
<tr>
<td>POOR</td>
<td>.50 - .30</td>
</tr>
</tbody>
</table>

DRAFT FOR DISCUSSION
ENSURE EQUITABLE APPLICATION

Tree protection measures should not disproportionately impact low-income residents. To ensure costs of tree removal are equitable:

— Maintain a residential exemption (fee reduction) for tree removal on private properties that are owner-occupied

— Waive fees for those on Federal assistance

— Provide replacement trees at no cost for those on Federal assistance
REED HILDERBRAND CAMBRIDGE URBAN FOREST MASTER PLAN TASK FORCE TECHNICAL REPORT REVIEW | DECEMBER 5, 2019

ENCOURAGE REPLANTING

Forests are dynamic ecosystems and loss and growth are part of their natural processes. To take the long view of forests and to encourage new tree planting:

For general voluntary removals:  
— Encourage replanting on site by making tree planting much less costly than paying fees  
— Create a Tree Trust to support the City’s tree canopy operations including planting and maintenance programs

For special permits:  
— Encourage replanting on site by making tree planting much less costly than paying fees  
— Allow mitigation through tree planting offsite
ENCOURAGE REPLANTING ON PRIVATE PROPERTY
Develop strategies to direct Tree Fund to additional uses

PLANTABLE AREAS BY STAKEHOLDERS

- 26% CITY OF CAMBRIDGE
- 14% INSTITUTIONS
- 5.7% BUSINESSES
- 4.3% INDUSTRY
- 49% RESIDENTS
I WANT TO REMOVE A TREE 6” DBH OR MORE

- I AM DOING A LARGE PROJECT
  - SUBMIT A SPECIAL PERMIT
  - EVALUATE AND VALUE THE TREES TO BE REMOVED
  - SUBMIT TREE REMOVAL AND PLANTING PLANS WITH SPECIAL PERMIT
  - REVIEW BY DPW
  - RECEIVE PERMIT
    - CITY CONDUCTS A FOLLOW UP VISIT

- I AM A HOMEOWNER LIVING IN MY HOUSE
  - FILE A PERMIT WITH THE CITY
  - THE TREE IS HAZARDOUS* OR DEAD
  - ARBORIST REPORT ($150-$300 est.)
  - I WANT TO REMOVE THE TREE FOR OTHER REASONS
  - I WILL REPLANT USING THE TREE REPLACEMENT TABLE
  - THE CITY DETERMINES MITIGATION (PLANTINGS AND/OR FEE)**
  - RECEIVE PERMIT
    - CITY CONDUCTS A FOLLOW UP VISIT

- I AM NEITHER OF THE ABOVE...
  - FILE A PERMIT WITH THE CITY
  - ARBORIST REPORT ($150-$300 est.)
  - THE TREE IS HAZARDOUS* OR DEAD
  - I WANT TO REMOVE THE TREE FOR OTHER REASONS
  - THE CITY DETERMINES MITIGATION (PLANTINGS AND/OR FEE)**
  - SUBMIT TREE PLANTING PLAN AND/OR FEE
  - RECEIVE PERMIT
    - CITY CONDUCTS A FOLLOW UP VISIT

* HAZARDOUS TREES INCLUDE TREES THAT POSE A DANGER TO PEOPLE OR ADJACENT STRUCTURE OR NEED TO BE REMOVED DUE TO EMERGENCY CIRCUMSTANCES.

** THOSE ON FEDERAL ASSISTANCE ARE OFFERED FREE REPLACEMENT TREES THROUGH THE TREE TRUST AND/OR DO NOT NEED TO PAY A FEE
CREATE A SIMPLE PROCESS: HOMEOWNER

<table>
<thead>
<tr>
<th>I AM A HOMEOWNER LIVING IN MY HOUSE</th>
<th>FILE A PERMIT WITH THE CITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>THE TREE IS HAZARDOUS* OR DEAD</td>
<td>ARBORIST REPORT ($150-$300 est.)</td>
</tr>
<tr>
<td>I WANT TO REMOVE THE TREE FOR OTHER REASONS</td>
<td>I WILL REPLANT USING THE TREE REPLACEMENT TABLE</td>
</tr>
<tr>
<td>THE CITY DETERMINES MITIGATION (PLANTINGS AND/OR FEE)**</td>
<td>PERMIT GRANTED, NO MITIGATION REQUIRED</td>
</tr>
<tr>
<td>CITY OFFERS FREE TREE REPLACEMENT</td>
<td>RECEIVE PERMIT</td>
</tr>
<tr>
<td>CITY CONDUCTS A FOLLOW UP VISIT</td>
<td>RECEIVE PERMIT</td>
</tr>
<tr>
<td>CITY CONDUCTS A FOLLOW UP VISIT</td>
<td></td>
</tr>
</tbody>
</table>

* HAZARDOUS TREES INCLUDE TREES THAT POSE A DANGER TO PEOPLE OR ADJACENT STRUCTURE OR NEED TO BE REMOVED DUE TO EMERGENCY CIRCUMSTANCES.
** THOSE ON FEDERAL ASSISTANCE ARE OFFERED FREE REPLACEMENT TREES THROUGH THE TREE TRUST AND/OR DO NOT NEED TO PAY A FEE

<table>
<thead>
<tr>
<th>Exemption Credits</th>
<th>Owner Occupied Residence</th>
<th>For Fee: 0.3 for exceptional trees and 0.15 for all other trees For Planting: 0.2 for exceptional trees and 0.1 for all other trees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Assistance</td>
<td>No fee applied</td>
<td></td>
</tr>
</tbody>
</table>

** ARBORIST REPORT (PLANTINGS AND/OR FEE)**

** MITIGATION THE CITY DETERMINES**

** THE CITY DETERMINES MITIGATION (PLANTINGS AND/OR FEE)**

** PERMIT GRANTED, NO MITIGATION REQUIRED**

** CITY OFFERS FREE TREE REPLACEMENT**

** RECEIVE PERMIT**

** CITY CONDUCTS A FOLLOW UP VISIT**
HOMEOWNER EXAMPLE
Remove <30” tree and replant on site

DRAFT VERSION OF A SIMPLIFIED TREE REPLACEMENT TABLE

<table>
<thead>
<tr>
<th>DBH of Voluntarily Removed Tree</th>
<th># of 2” trees to be replanted</th>
</tr>
</thead>
<tbody>
<tr>
<td>6” to &lt;14”</td>
<td>1</td>
</tr>
<tr>
<td>14” to &lt;18”</td>
<td>2</td>
</tr>
<tr>
<td>18” to &lt;21”</td>
<td>3</td>
</tr>
<tr>
<td>21” to &lt;23”</td>
<td>4</td>
</tr>
<tr>
<td>23” to &lt;26”</td>
<td>5</td>
</tr>
<tr>
<td>26” to &lt;28”</td>
<td>6</td>
</tr>
<tr>
<td>28” to &lt;30”</td>
<td>7</td>
</tr>
<tr>
<td>30” or greater</td>
<td>Use Trunk Area Formula with Residential Exception</td>
</tr>
</tbody>
</table>

CONCERNS:
Overvalues low rated species, e.g. Ailanthus
Potentially penalizes small lots with less plantable space
HOMEOWNER EXAMPLE
Remove a 8” Red Maple in good condition with a good location rating.

\[
\text{MITIGATION TRUNK AREA} = \text{AREA OF 8” TREE} \times \text{SPECIES RATING} \times \text{CONDITION RATING} \times \text{LOCATION RATING}
\]

\[
\text{AREA OF 8” TREE} = 8 \text{ IN} \, \phi \\
(A = \pi \times r^2) \quad 50.2 \text{ SQ. IN}
\]

\[
\text{SPECIES RATING} = \text{RED MAPLE} = 0.80
\]

\[
\text{CONDITION RATING} = \text{EX} = 1.0 \text{ - .90}
\]

\[
\text{LOCATION RATING} = \text{EX} = 1.0 \text{ - .90}
\]
HOMEOWNER EXAMPLE
Remove a 8” Red Maple in good condition with a good location rating

<table>
<thead>
<tr>
<th>HOMEOWNER EXEMPTIONS*</th>
<th>TRUNK AREA MITIGATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAY INTO TREE FUND 20% OF TRUNK AREA</td>
<td>22.6 SQ IN x 20% x $541 SQ / IN = $2,445</td>
</tr>
<tr>
<td>PLANT ON SITE 10% OF TRUNK AREA</td>
<td>22.6 SQ IN x 10% / 3.14 SQ IN = 1</td>
</tr>
</tbody>
</table>

*Homeowner exemption percentages are still under discussion
Those on federal assistance do not need to pay a fee
HOMEOWNER EXAMPLE
Remove a 18” Ailanthus in fair condition with a fair location rating

\[
\text{MITIGATION TRUNK AREA} = \text{AREA OF 18” TREE} \times \text{SPECIES RATING} \times \text{CONDITION RATING} \times \text{LOCATION RATING}
\]

\[
\begin{align*}
\text{18 IN } \Phi \\
(A = \pi \times r^2) \\
254.3 \text{ SQ. IN}
\end{align*}
\]

\[
\begin{align*}
\text{AILANTHUS} & : 0.10 \\
\text{EX} & : 1.0 - 0.90 \\
\text{GOOD} & : 0.90 - 0.75 \\
\text{FAIR} & : 0.75 - 0.50 \\
\text{POOR} & : 0.50 - 0.30
\end{align*}
\]

\[
\begin{align*}
\text{6.4 SQ IN} = \text{254.3 SQ. IN} \times 0.10 \times 0.50 \times 0.50
\end{align*}
\]
**Homeowner Example**

Remove a 18” Ailanthus in fair condition with a fair location rating

---

**Homeowner Exemptions**

- **Pay Into Tree Fund**
  - 20% of Trunk Area

- **Plant on Site**
  - 10% of Trunk Area

**Trunk Area Mitigation**

- **6.4 Q IN**
  - $541 SQ / IN
  - 20% of Trunk Area

- **6.4 SQ IN**
  - 3.14 SQ IN
  - 10% of Area

\[ \text{Area of a 2" Tree} \times \text{Number of 2" Trees} = \frac{\text{Trunk Area Value of 2" Replacement Trees @ $1700 Each}}{1} = \text{$693}} \]

---

*Homeowner exemption percentages are still under discussion. Those on federal assistance do not need to pay a fee.*
HOMEOWNER EXAMPLE - EXCEPTIONAL TREE
Remove a 30” Red Oak in good condition with a good location rating

MITIGATION TRUNK AREA = AREA OF 30” TREE \times SPECIES RATING \times CONDITION RATING \times LOCATION RATING

\begin{align*}
30 \text{ IN} \, \varnothing \\
(A = \pi r^2) \\
706.5 \text{ SQ. IN}
\end{align*}

\begin{align*}
\text{RED OAK} & \quad 0.90 \\
\text{EX} & \quad 1.0 - 0.90 \\
\text{GOOD} & \quad 0.90 - 0.75 \\
\text{FAIR} & \quad 0.75 - 0.50 \\
\text{POOR} & \quad 0.50 - 0.30
\end{align*}

\begin{align*}
\text{LOCATION RATING} & \quad 0.75
\end{align*}

\begin{align*}
\text{MITIGATION TRUNK AREA} & = 357.7 \text{ SQ IN} = 706.5 \text{ SQ. IN} \times 0.90 \times 0.75 \times 0.75
\end{align*}
HOMEOWNER EXAMPLE - EXCEPTIONAL TREE
Remove a 30” Red Oak in good condition with a good location rating

HOMEOWNER EXEMPTIONS FOR EXCEPTIONAL TREE*

<table>
<thead>
<tr>
<th>PAY INTO TREE FUND</th>
<th>30% OF TRUNK AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>357.7 SQ IN</td>
<td>30%</td>
</tr>
<tr>
<td>$541 SQ / IN</td>
<td></td>
</tr>
<tr>
<td>= $58,054</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PLANT ON SITE</th>
<th>15% OF TRUNK AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>357.7 SQ IN</td>
<td>15%</td>
</tr>
<tr>
<td>/ 3.14 SQ IN</td>
<td></td>
</tr>
<tr>
<td>= 17</td>
<td></td>
</tr>
</tbody>
</table>

(TRUNK AREA VALUE OF 2” REPLACEMENT TREES @ $1700 EACH)

*Homeowner exemption percentages are still under discussion
Those on federal assistance do not need to pay a fee
HOMEOWNER EXAMPLE - EXCEPTIONAL TREE
Remove a 30” Red Oak in good condition with a good location rating

What is the tree fund payment if THREE 2” trees are planted on site?

- TRUNK AREA FOR MITIGATION
- TRUNK AREA (2 @ 3’)
- ON SITE INCENTIVE
- 14.1 SQ IN
- 0.15
- $541 SQ / IN
- 30%
- $42,799

- PAY INTO TREE FUND
- 30% OF TRUNK AREA
- 357.7 SQ IN
- TRUNK AREA MITIGATION

- PLANT ON SITE
- 15% OF TRUNK AREA
- 357.7 SQ IN
- TRUNK AREA VALUE
- OF 2” REPLACEMENT TREES @ $1700 EACH

- AREA OF A 2” TREE
- 3.14 SQ IN
- NUMBER OF 2” TREES

- $58,054
- 17

DRAFT FOR DISCUSSION
**CREATE A SIMPLE PROCESS: NON-HOMEOWNER**

*HAZARDOUS TREES INCLUDE TREES THAT POSE A DANGER TO PEOPLE OR ADJACENT STRUCTURE OR NEED TO BE REMOVED DUE TO EMERGENCY CIRCUMSTANCES.*

<table>
<thead>
<tr>
<th>Mitigation Credits</th>
<th>On site</th>
<th>.75</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Off site</td>
<td>.9</td>
</tr>
<tr>
<td></td>
<td>Fee/Tree Fund Payment</td>
<td>$541/SQ IN (typical cost of replacement tree installed)</td>
</tr>
</tbody>
</table>
NON-HOMEOWNER EXAMPLE
Remove a 30” Red Oak in good condition with a good location rating

MITIGATION OPTIONS*

PAY INTO TREE FUND
100% OF TRUNK AREA

PLANT OFF SITE
90% OF TRUNK AREA

PLANT ON SITE
75% OF TRUNK AREA

TRUNK AREA MITIGATION

357.7 SQ IN × 100% × $541 SQ / IN = $193,515

357.7 SQ IN × 90% / 3.14 SQ IN = 103

357.7 SQ IN × 75% / 3.14 SQ IN = 85

(TRUNK AREA VALUE OF 2” REPLACEMENT TREES @ $1700 EACH)

NUMBER OF 2” TREES

TRUNK AREA OF 2” TREE

TRUNK AREA OF 2” TREE

*Non-homeowner mitigation percentages are still under discussion
NON-HOMEOWNER EXAMPLE

Remove a 30” Red Oak in good condition with a good location rating

MITIGATION OPTIONS

<table>
<thead>
<tr>
<th>Option</th>
<th>Trunk Area Mitigation</th>
<th>Trunk Area of 2’ Tree</th>
<th>Number of 2’ Trees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay into Tree Fund 100% of Trunk Area</td>
<td>357.7 SQ IN x 100% $541 SQ / IN = $193,515</td>
<td>3.14 SQ IN / 100 = 3.14 SQ IN</td>
<td>103</td>
</tr>
<tr>
<td>Plant Off Site 90% of Trunk Area</td>
<td>357.7 SQ IN x 90% .75 = $166,336</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant On Site 75% of Trunk Area</td>
<td>357.7 SQ IN x 75% .75 =</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What is the tree fund payment if three 4” trees are planted on site?

TRUNK AREA FOR MITIGATION (3 @ 4’) ON SITE INCENTIVE

<table>
<thead>
<tr>
<th>Trunk Area (3 @ 4’) ON SITE INCENTIVE</th>
<th>Trunk Area of Replacement Trees With On Site Incentive</th>
</tr>
</thead>
<tbody>
<tr>
<td>357.7 SQ IN</td>
<td>37.7 SQ IN / 100 = 37.7 SQ IN</td>
</tr>
</tbody>
</table>

TRUNK AREA FOR MITIGATION MINUS TRUNK AREA OF REPLACEMENT TREES WITH ON SITE INCENTIVE

<table>
<thead>
<tr>
<th>$541 SQ / IN x $166,336</th>
</tr>
</thead>
</table>

CREATE A SIMPLE PROCESS: SPECIAL PERMITS
Mitigation same as the non-homeowner but administered through the special permit process
INTENTIONS OF THE ORDINANCE

Trees are a shared resource
Everyone is subject to the Tree Ordinance

Trees provide tangible benefits to the City
Voluntary removals necessitate a fee that reflects the value of the lost resource

Large trees provide greater benefits and take longer to regrow
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Makes fees paid to the Tree Fund the most expensive option
PUBLIC COMMENT

www.cambridgema.gov/ufmp
www.cambridgema.gov/ufmp