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# Warren Street, Roxbury

— TUTC Participants: —

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# What is Speak for the Trees?

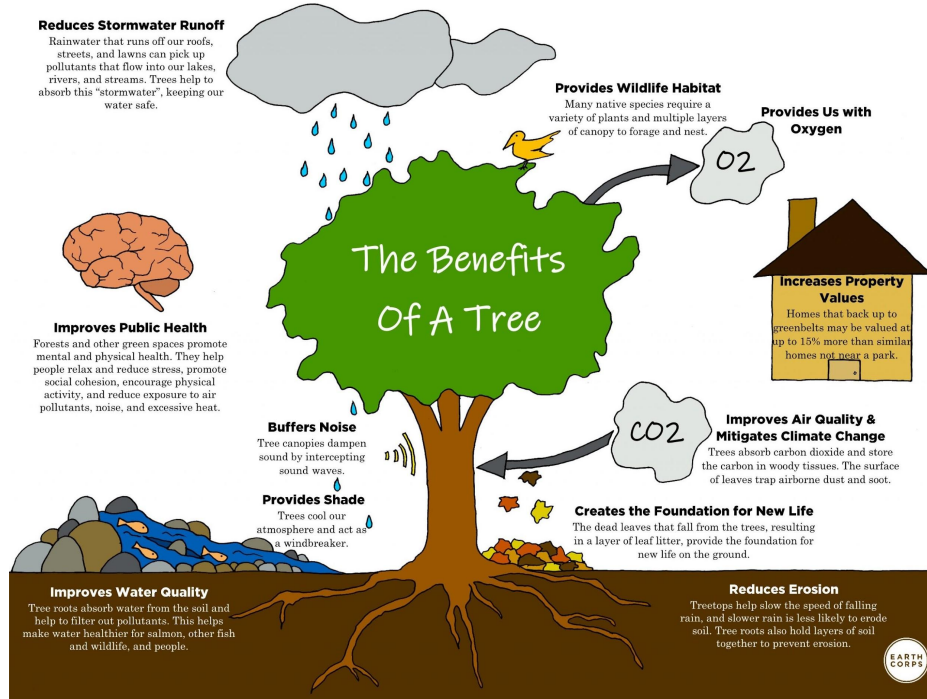
Speak for the Trees is a nonprofit organization whose mission is to improve the size and health of the urban tree canopy in Boston, with a focus on under-resourced and under-canopied neighborhoods.

As Teen Urban Tree Corps participants, we had the opportunity to meet with different speakers from the arborist and legislative industries, as well as visit different green areas in Boston.



**SPEAK FOR THE TREES**  
Boston

# Benefits Of Trees



- Reduces storm water runoff and erosion
- Aesthetics, improving property value
- Mitigates urban heat island effect
- Purifies air, reducing asthma rates
- Cleans water
- Shade

# Tree Struggles

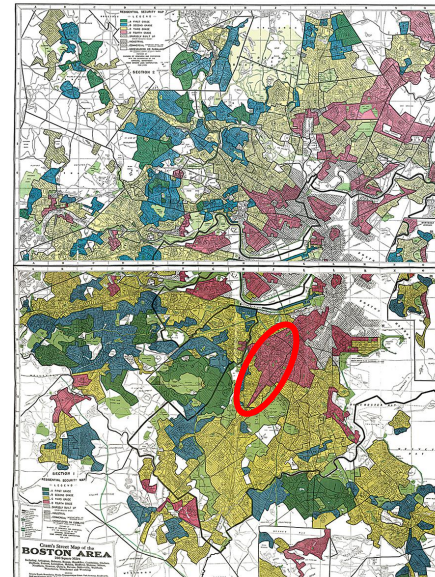
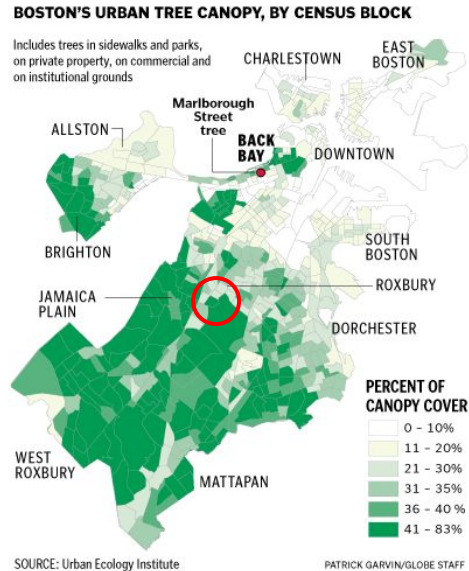
- Our group noticed that there has been a lot of garbage around the trees
- Improper pruning/ not enough watering
- Not enough space for root expansion
- Damage from cars/ other vehicles
  - Trees seal, not heal!



# Tree Equity - Effects of Redlining

- Beginning in 1935, certain areas of the city were classified based on residents' race and ethnicity
- “Less desirable” areas received less resources than other areas
- Redlined communities have less tree canopy coverage today

## Tree equity map



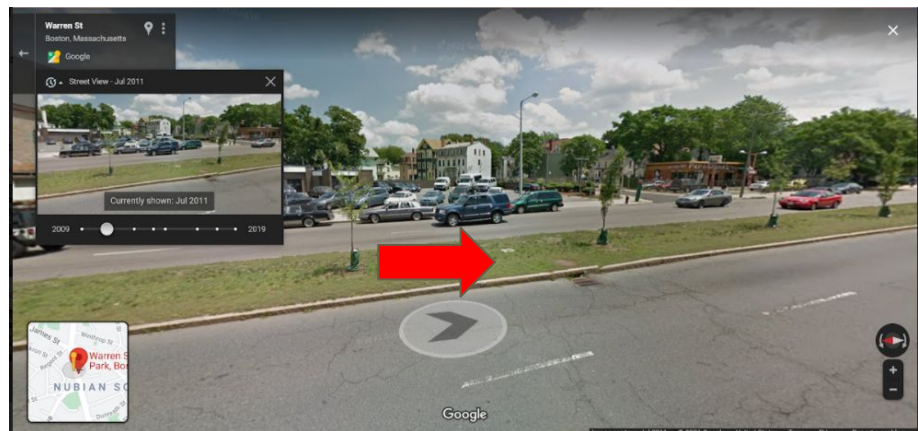
# Existing Trees

# New Location: Warren St. Median in Roxbury

Warren Street is in Roxbury near Nubian Square. We chose Warren Street because:

- The median is bare and lacking in trees.
- This neighborhood has less canopy coverage and we chose the location keeping tree equity in mind.
- We knew it was able to grow trees because it already had one growing and is able to grow grass
- While doing an inventory we realized how hot it was on the street
- Heavy foot and car traffic





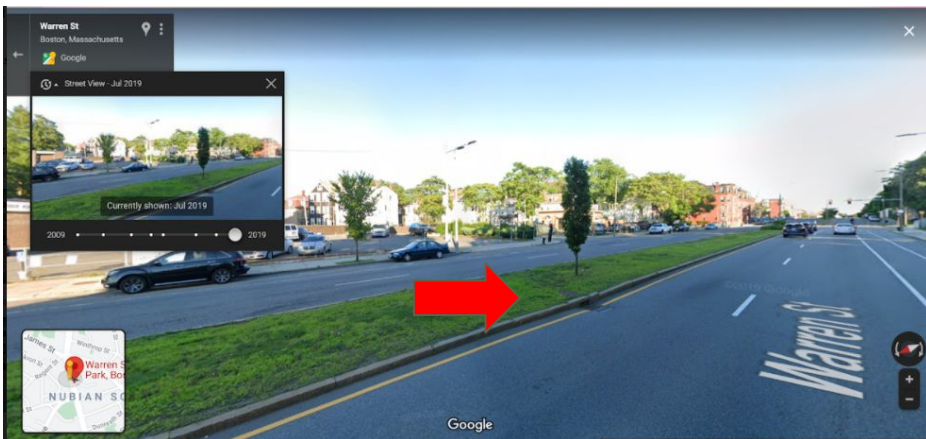
2011



2013



2017



2019

# Existing Trees

In median:



Red Oak



Northbound Side (Pep and Sasha)



Littleleaf Linden



White Oak

# Existing Trees Cont.

Northbound Side Cont.



Elm Tree



Hornbeam

Southbound Side



3 Japanese Zelkovas, 1 elm, 1  
honeylocust

# Existing Trees Cont. Cont.



Overcup Oak

# The Planning and Planting Process

# Original Location: Justice Edward Gourdin Park

- Our original plan was to plant trees in the Edward Gourdin Park.
- However, the city of Boston already had plans with the park (pictured on the lower right).
- After emailing the city and finding out we adapted our plan and chose the Warren Street median.



# Community Outreach

Boys and Girls Club

Madison Park High School

John D O'Bryant

Twelfth Baptist Church

Boston Latin Academy

Roxbury Library



# Our Plan: Warren Street Median

-Budget = \$5,000- \$10,000

-Our goal is to plant five trees of different species in the median, and put a caretaking plan in place so the trees will not die.

We need to account for the cost of:

- Each new tree
  - Planting the trees in the median, which may require shutting down Warren Street for a short period of time
  - Hiring caretakers and planters for the trees
- Volunteers can help take care of the trees and reduce the cost of caretakers.

# Budget

## Average costs:

Ginkgo: ~\$70

Sourwood: \$19.99

Hornbeam: \$19.99

Crepe Myrtle: \$50-100

Littleleaf Linden: \$14.95

Stump Removal: ~\$100

# Budget Cont.

## Tree Pruning:

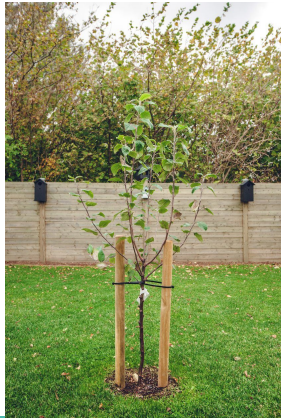
- Average cost to prune a tree once is \$75-400 depending on the height of the tree
- Most need to be pruned every 2-3 years, and the amount of pruning needed decreases as the trees get older.
- Lifespan of street trees is 19-28 years
- If the 5 trees were pruned (for \$75 dollars) once every three years and they lived for 25, the average cost of pruning would be about **3,000 dollars.**

Hire arborist - Can cost ~\$20-45 per hour

# Budget Cont.

## Tree Planting

- Physical Labor Cost (if we don't have volunteers): \$120
- Cost of mulch: \$32 for 8 bags
- Cost of potential stakes: \$32 for 25
- Gator bags: ~\$50



## Watering the Trees

- Notify the City of Boston about the trees, who will water them for free.
- Fire hydrants
- Rain barrels
- Volunteers bring water

## Total Budget Cost:

- \$3,548.93

# Tree Options

## Ginkgo *Ginkgo biloba*



- Native to China
- Unique leaves
- Ornamental shade tree
- Height 25-50', spread 25-35'
- Tolerates urban conditions



## Sourwood *Oxydendrum arboreum*



- Native to eastern US
- Attracts pollinators
- Easy to care for, no known diseases
- Tolerates dry soil, salt, and shade
- Height 33-66', trunk up to 20" diameter



# Hornbeam

*Carpinus*



- Hardwood tree with >30 species across America
- Medium sized tree that can reach heights of up to 32 meters
- Deciduous leaves can be anywhere from 3-10 cm
- Nicknamed “ironwood” and for good reason:
  - strong limbs
  - easily transplantable
  - moderate root flare
  - slow growing

## Crepe Myrtle *Lagerstroemia*



- Height of 15-25', spread 6-15'
  - Flowers can be purple, red, white or pink
  - Low maintenance
  - Drought tolerant
- Suitable for foundations and sidewalks
    - Roots are not strong enough to damage fixed structures
    - Survives well in limited soil volume

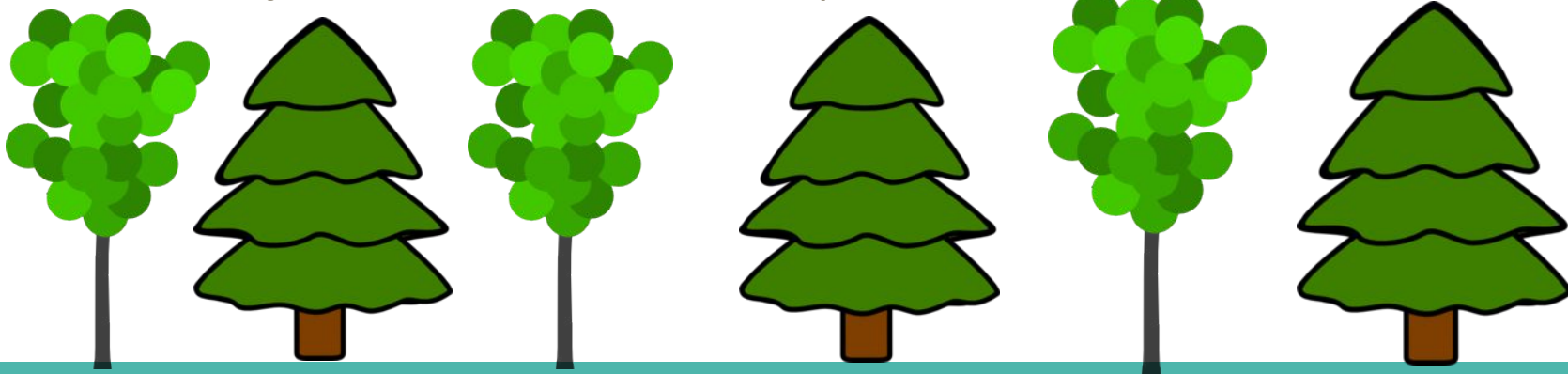
## Littleleaf Linden *Tilia cordata*



- Height 50-60', spread around 40'
- Great shade tree
- Requires minimal pruning
- Tolerant of compact soil, allowing it to grow in small spaces
- Attracts pollinators

# What can you do to help street trees?

- Adopt a Tree Program ([treeboston.org/adopt](http://treeboston.org/adopt))
- Call 311 to request a tree or report issues
- Pick up any litter you see that could harm a tree
- Refill water bags
- Don't allow dogs to pee on street trees
- Take off stakes if a tree doesn't need them anymore/if the rope is starting to grow into bark
- Educate family and friends about their importance



# Questions ?



# Citations

Budget slides:

-<https://www.homeadvisor.com/cost/lawn-and-garden/tree-trimming/#:~:text=The%20cost%20to%20cut%20tree,80%2Dfoot%2Dtall%20oak.>

-<https://www.ronstreeserviceandfirewood.com/how-often-should-i-have-my-trees-trimmed/#:~:text=Most%20mature%20trees%20of%20any,without%20needing%20a%20single%20cut>

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-<https://www.gardeners.com/how-to/mulch-calculator>

-[https://www.fs.fed.us/nrs/pubs/jrnl/2014/nrs\\_2014\\_roman\\_001.pdf](https://www.fs.fed.us/nrs/pubs/jrnl/2014/nrs_2014_roman_001.pdf)

-**2021 Landscaping Installation Cost: Trees, Shrubs & More ...**

<https://www.homeadvisor.com › cost › install-landscaping>

-<https://www.boston.gov/departments/parks-and-recreation/how-get-tree-planted-city-land>

Ginkgo slide: <https://www.arboday.org/trees/treeguide/TreeDetail.cfm?itemID=1092>

Littleleaf Linden slide: <https://www.arboday.org/trees/treeguide/treedetail.cfm?itemID=858>  
<https://nimvo.com/everything-you-need-to-know-about-the-linden-tree/>

Crepe Myrtle Slide: <https://www.arboday.org/trees/treeguide/treedetail.cfm?itemID=824>