

**MINUTES OF THE PUBLIC WORKS COMMITTEE**  
**April 29, 2019**  
**East Conference Room**

**Present:** Councilmembers Rader, Anderson, Bullock

**Also Present:** Councilmember George, Public Works Director Beno, Chris Perry (manager of the Urban Forestry department), Director Butler, members of the Lakewood Tree Task Force, members from Keep Lakewood Beautiful, a couple members of the public, and Deputy Clerk Lascu taking minutes

**Call to Order:** 7:12 p.m

**RESOLUTION 9068-19** - A RESOLUTION establishing a program on certain streets in Lakewood to enable the City to plant street trees on front lawns of private properties, contingent upon a signed contract with the property owner. (Referred to Public Works 4/15/19)

**Communication from Councilmembers Bullock & George regarding Tree Task Force recommendations & tree canopy. (Referred to Public Works 4/15/19)**

Councilman Rader opened the meeting with introductions and deferred to Councilwoman George to discuss the concerns expressed in her communication with Councilman Bullock regarding Lakewood's tree canopy. Councilwoman George expressed a desire to reengage the discussion around tree canopy and increase tree canopy and the Tree Task Force formed in 2014.

Councilman Bullock welcomed the Tree Task Force members back to the committee table and gave some background as to why it was formed. The Task Force was formed as a response to Hurricane Sandy knocking down many tree limbs throughout the community. Bullock highlighted some past efforts of the Task Force, such as working with the Public Works Department to manage the effects of sidewalk replacement on the canopy and successfully advocating for a doubling of the annual tree planting budget. He added that the Public Works Department has provided a great amount of data and thoughtful criteria to the committee which will work to help guide the administration's policy. Lastly, he stated that the City has not really gotten behind the public-private property line in regard to tree canopy solutions and that engagement on the private side is needed to accomplish half of the tree canopy goals that the Task Force has.

Chris Perry, manager of the Urban Forestry Department, gave an overview of the research that he's done on the issue. He also took the 19 goals that the Tree Task Force created in 2014 and responded to each on the status and reality of achieving each one. He stated that the goals started the city down the right path and that its canopy goal is 33.5% by 2035. He said that the city cannot complete a 10% increase by 2035, as recommended by one of the 19 goals, as it would require Urban Forestry to plant on a large amount of baseball fields, backyards, etc. He added that plantings on private property could help increase the tree canopy by 2% however. The City has planted over 400 tree within the past year and needs a larger effort on the private side of the property lines to accomplish the Task Force's canopy goals. Good work from the Urban Forestry

Department has motivated people to start planting on their private property. Mr. Perry said he gets dozens of calls from residents asking for planting suggestions and he's also received positive feedback from the city contractor that manages the city's planting program. Mr. Perry identified that in 2013 there were 2200 vacant tree lawns, which is now down to 900 due to city planting efforts. This has led to another 1% increase in the canopy. He stated that the City has a goal of 95% to maintain a healthy stocked urban canopy, which would lead to another 1% in canopy growth by 2035.

Councilman Anderson inquired as to when the ash borer beetle infestation that led to the death of many tree lawn trees took place. Mr. Perry said that most trees affected by the ash borer were removed between 2013 and 2015. He added that the city removed a lot of cherry trees during that same time period because they could not withstand the cold weather very well. Anderson made a point to highlight that Urban Forestry varies its planting between 12 different tree species. He added that without planting any trees currently, Lakewood will see an increase in its tree canopy over the next 5 years as trees that have already been planted will mature. Mr. Perry stated that his department's goal is to not have to replant a tree within its first initial 12 months.

Councilman Bullock asked how many people are on the city's do not plant list. Mr. Perry stated about 450, which was initially much larger. With the help of an intern from Lakewood Alive, the list was examined to see if those residences on the do not plant list had transferred ownership recently. If so, they were removed from the do not plant list.

A member of Keep Lakewood Beautiful (KLB) complained of the city planting short tree lawn trees. Mr. Perry stated that Urban Forestry has increased the caliper size of the trees it plants and the department does not plant ornamental trees. The same KLB member stated that she wants the big trees to come back (maples, etc.). Mr. Perry stated that there is a strategic plan to replace larger species and to maximize planting sites better moving forward, which will allow half a percent increase in canopy coverage over the next 25 years. He noted that any tree under 15 feet does not register on the countywide canopy assessment and that he wants to plant the largest tree possible for a space. Councilman Bullock asked when the countywide canopy will be reassessed and Mr. Perry stated that it occurs every 10 years.

A member of the Tree Task Force stated that it seems like the premise of Urban Forestry's planting is to plant small trees where small tree lawns are and expressed concerns that the tree canopy on Clifton is coming down. Mr. Perry noted that his department has backed planting sites closer to the sidewalk so as to not have future impact on power lines. The health of trees will no longer be impacted as they will not have to be topped off due to the presence of power lines. The member asked if the private property tree planting program has maintained. Mr. Perry stated that the number of participants have stayed in the mid-20s each year, with more people usually deciding to participate in the fall. He would like the program to be bigger. No other city has this program and the price to participate is \$295.

Councilman Bullock stated that we know we need to make more headway on the private side of property and it seems that the groups want to keep building the private tree program, leading to an opportunity for the Tree Task Force and Keep Lakewood Beautiful to better market the program. He stressed that time equals growth of the tree canopy. If the group could double the

participation rate in the program it would help and that could be done through a word of mouth function.

Councilman Rader stated that the city needs to be mindful of how much planting occurs each year. The city's capacity for care stretches each year with the more trees planted. He asked if the city would be relying on residents to care for the trees through the private program. Mr. Perry stated that an informational flyer regarding tree care is provided to any program participant and added that further information is given if it is planted in an area of the city affected by deer. He said that trees tend to grow faster on the private side of the property line due to the less environmental stressors, such as roadway salt, car emissions, etc.

A member of the Tree Task Force asked what the capacity of the private planting program is. Mr. Perry stated that it is 400 trees a year. Councilman Bullock added that maintenance of trees is crucial within the first 3 years of planting. He also mentioned that it is important to remove the tree at a proper time once it has run its life span to prevent a bottleneck of removals that will hurt the overall canopy for a prolonged period.

Councilman Anderson asked what the city's obligation is for watering tree lawn trees. Mr. Perry responded that it is 2 years. A Tree Task Force member inquired if the watering system being used is adequate. Mr. Perry confirmed that it was, as his staff uses a 1500 gallon tank on a truck.

Director Beno stated that ideally one would want to remove a tree the before it was going to fall over. The challenge is to keep an even removal schedule. The City removes about 150 trees a year. He added that if it was to only remove 10 in a year, that figure will catch up with the community at some point, and that it's important to keep a steady schedule. Mr. Perry said his department is working to be more proactive instead of reactive to avoid having to respond to emergency situations.

Councilman Bullock asked if we collectively came up with a renewed tree education program could the groups at this meeting partner with Council and put out a message to increase the tree canopy. It seems to him that the challenge here is more of a marketing push. David Sangree, a member of the Tree Task Force, stated that would be good, but that Lakewood needs a tree commission just like Cleveland Heights and Shaker Heights. The work of the commission would be done over years and not just in one season. He stated that the establishment of a Tree Commission should be added to the resolution. He referenced #16 of the goals proposed in 23014 by the Task Force and said the city should play a role in ensuring people are not taking down healthy trees and proposed the need for a heritage tree law. Another member of the Tree Task Force agreed with David that a Tree Commission should be established and spoke about her experiencing volunteering for the Task Force. She stated some success was had putting out flyers on blocks and that it is going to take another dedicated group of individuals to regularly market the tree program. She added that the current administration has had good policies supporting trees and she would like to keep those policies in place to help plan guide the life of Lakewood trees over the next 100 years.

Councilman Rader stated that the group should reconvene to come up with guidelines for the Tree Commission. He added that the committee schedule does not allow the group to meet again until July, but proposed meeting on a day other than Monday to be able to meet before then.

Councilman Bullock stated that the Tree Fund could be used to help with the affordability of the private planting program and that Council should pass a resolution memorializing tree policies and the goals of the Tree Task Force. A member of the Tree Task Force stated that Council should pass proposed Resolution 8852-16.

Councilman Rader asked questions in regard to the City's liability under the private planting program. Director Butler stated that the city has been successful working with residents in abating nuisance trees on private property. The proposed legislation Resolution 9068-19 is essentially the reverse of that logic. He added that it is important that the city disclaim ownership of the tree and that the current agreements in place under the program protects the city while still maintaining the tree canopy. It increases the risk of lawsuit, but not liability. The disclaimers in the ordinance protect the city and the tax payers from additional liability.

Councilman Rader asked if changes could be made to Exhibit A in the resolution and Director Butler confirmed that they could be made.\

Councilman Bullock moved to recommend Resolution 9068-19 for passage by full Council, which was seconded by Councilman Anderson. All members of the committee voted in favor of the motion.

A member of Keep Lakewood Beautiful asked about a chart listing potential plantings and the implementation of the planting program. Director Beno stated that all of the plantings would not take place all in one year and that it depends on what streets are being looked at. He proposed doing a direct mailing to streets and gauging interest regarding the private planting program and examining resident responses from that to gauge future program participation. The member asked if these trees in the private program would be in addition to the city's goals and Mr. Perry confirmed that to be true. The member asked if there are any budgetary constraints. Mr. Perry noted that once the private trees were planted, the property owner would be responsible for watering and maintenance. Director Beno added that funding for the program does come out of the tree planting budget for the year and that the owner ultimately makes the decision on whether to plant on his or her private property. Councilman Bullock added that planting on the private side will add a meaningful chunk to the tree canopy. Councilman Anderson stated that we need to bake the private planting program into next year's budget and provide it with more funding. A member of the Tree Task Force stated that the world has changed since the group first originated and that more people are more receptive to tree plantings.

Councilman Rader made a motion to adjourn. The meeting was adjourned at 8:07 p.m.

**Addendum:**

**RESOLUTION NO. 8852-16** – A RESOLUTION to endorse the principles for tree care and the urban forestry management goals recommended by the Lakewood Tree Task Force.  
*(Referred 2/16/16)*

RESOLUTION NO.:

By:

A RESOLUTION to endorse the principles for tree care and the urban forestry management goals recommended by the Lakewood Tree Task Force.

WHEREAS, healthy, mature, and safe trees are beneficial to property values, air quality, storm water management, energy use reduction, and the beautification of the City of Lakewood; and

WHEREAS, attaining success in the City’s urban forestry goals will require, by definition, long-term planning and consistent policies over many decades; and

WHEREAS, the attainment of a lasting mature tree canopy requires prudence, foresight, and many decades of investment which, once lost, cannot be regained for decades; and

WHEREAS, adopting a “right tree, right place” policy to guide City tree plantings will allow the City to minimize tree death and infrastructure impacts while increasing the long-term viability of trees, thereby make efficient use of public dollars and more effectively attaining City urban forestry goals; and

WHEREAS, always planting the largest suitable tree for a given site will maximize the economic and ecological benefits of that site to the community, given the longer lifespan of and greater magnitude of benefits bestowed by larger trees; and

WHEREAS, adopting a policy of varying trees by age and species on any given street, park, or public area will help to mitigate the threat posed to tree survivability by pests, diseases, storms, or old age, thereby reducing the likelihood of large tree losses across the city and resulting in a more consistent tree canopy over time; and

WHEREAS, adopting a policy of consistent watering of newly-planted public trees during the first few years of life, and prioritizing pruning and other tree care techniques during the first ten years of newly-planted public trees’ lives, would greatly aide the survival rate of those trees, thereby making efficient use of public dollars and more effectively attaining City urban forestry goals; and

WHEREAS, a goal of increasing the percentage from 28.5 to 38.5 percent of the City’s surface area sitting under a canopy of trees has been determined as an ambitious yet attainable goal that would significantly aide storm water management; and

WHEREAS, an annual planting of 500 trees across the community on private, school, and municipally owned properties would enable the City to achieve the 38.5% canopy coverage by 2035; and

WHEREAS, an annual planting by the City of at least 200 trees on City-owned land is a crucial element of the aforementioned community-wide 500-tree annual tree planting goal; and

WHEREAS, the interplay of sidewalks and trees has historically had a significant deleterious impact on City trees planted on tree lawns, occasioning the removal of many such trees when their growth resulted in code citations to private property owners for sidewalk repair, but which impact is greatly mitigated when the City adopts a flexible set of procedures that can abate sidewalk quality problems while still preserving tree lawn trees ; and

WHEREAS, many available tree lawn planting sites that are either vacant or not currently accommodating the maximum possible number of trees permitted by the space could greatly contribute to a citywide tree canopy increase if they were planted with the maximum possible number of trees; and

WHEREAS, a master plan for all City Parks and public areas would increase the number of trees and increase the diversity of the tree species, which is known to increase survivability and improve the consistency of the tree canopy; and

WHEREAS, monetary and other donations by private citizens in tree plantings in parks and public areas can improve the number of trees and breadth of the tree canopy, and should be encouraged; and

WHEREAS, City education of residents concerning the availability of complimentary tree planting on tree lawns as well as opportunity to participate in a low-cost purchase of trees for private yards would help to increase private participation in tree planting and help attain the aforementioned community-wide annual tree planting goals; and

WHEREAS, developing standards for tree plantings and canopy maintenance on commercial properties would help to attain the tree canopy goals of the City; and

WHEREAS, providing training on proper mowing, trimming, machinery operation, digging, concrete work, construction work, and similar activities would reduce negative impacts to tree roots, limbs, and other vulnerable tree elements, and should be pursued by the City for all relevant employees; and

WHEREAS, standards for proper mowing, trimming, machinery operation, digging, concrete work, construction work, and similar activities would reduce negative impacts to tree roots, limbs, and other vulnerable tree elements, and should be implemented and required by the City for all contractors seeking permits to work in the City; and

WHEREAS, a sufficient number of licensed arborists to conduct annual pruning and maintenance of trees will aide in attaining the City's tree canopy goals by allowing small and medium trees to successfully grow and mature trees to live for the maximum safe period, and ought to be maintained by the City at all times; and

WHEREAS, resident education about the economic, health, infrastructure, and aesthetic benefits of trees can improve resident motivation to plant private trees and donate and care for public trees on tree lawns, and ought to be pursued by the City; and

WHEREAS, mature trees located on private property are a major contributor to community-wide tree canopy goals, and, if not properly maintained, can pose a significant hazard to health and property, and therefore ought to be appropriately regulated by the City; and

WHEREAS, a healthy and consistently robust urban forest canopy can serve as a "green trademark" for the community, helping to attract and retain residents and to distinguish the City of Lakewood as a leader in sustainability in the region; and

WHEREAS, the City of Lakewood's name implicitly incorporates a healthy urban forest as part of the very identity of our community; now, therefore,

BE IT RESOLVED BY THE CITY OF LAKEWOOD, OHIO:

Section 1. This Council and Mayor of the City of Lakewood hereby indicate support and endorsement of the principles for tree care and the urban forestry management goals recommended by the 2013-14 Lakewood Tree Task Force as set forth in the preamble of this resolution. Each of the recitals listed in the preamble to this resolution shall be the policy of the City, and the principles and goals therein shall guide City budgeting, decision making, and procedures for urban forestry until such time as they might be updated or repealed by this Council.

Section 2. It is found and determined that all formal actions of this Council concerning and relating to this Resolution were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal actions were in meetings open to the public in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.

Section 3. The Clerk of Council is hereby authorized and directed to forward a certified copy of this resolution to the Mayor and a copy of this Resolution shall be spread upon the minutes of this meeting.

Adopted: \_\_\_\_\_

\_\_\_\_\_  
President

\_\_\_\_\_  
Clerk

Approved: \_\_\_\_\_

\_\_\_\_\_  
Mayor

## **Tree Task Force Goals - 19 Goals as presented to Lakewood City Council, December 2014:**

By: David Sangree, Chair; John Palmer, Vice Chair; Sheila Belgian-Riley, Marianne Quasebarth Usiak, and Bob Rensel

### **1. Increase the percentage of Lakewood that sits under a canopy of trees from 28.5% to 38.5%.**

An analysis of Lakewood's tree canopy based on land cover data derived from high-resolution aerial imagery and other sources found that nearly 1,003.1 acres of the city's 3,522.40 total land acres are covered by existing tree canopy, representing 28.5% of all land in the city. As of November 2013, the City of Lakewood public tree inventory consists of 12,639 trees. Currently, the County has an average of 37.5% tree canopy while many neighboring suburbs have higher percentages including Fairview Park at 43.6% and Cleveland Heights at 44.4%. The increase in the number of trees would benefit the city's attempt to reduce storm water runoff into Lake Erie.

**A couple of key factors exist that will not allow us to plant/grow our canopy from 28.5% cover as measured in 2013 to 38.5%.**

- **The City of Lakewood is the most densely populated city in the State of Ohio.**
- **Lack of planting space – Existing impervious surface as a percentage of total land area is 47.0% which is the 6<sup>th</sup> highest out of the 59 Cuyahoga County municipalities.**
- **Tree canopy modeling software that was available as part of the countywide tree canopy assessment done in 2013/2014 showed that in order to increase canopy cover by 10% in Lakewood, it would require that nearly all the open spaces in the city be planted with larger tree species – i.e. most athletic fields, open spaces in city parks and over 65% of Lakewood backyards – not accounting for overhead utilities. NOTE: We can now utilize i-Tree Design, a free, web-based tool that can model canopy cover for specific locations.**

**A more realistic goal - one that is obtainable - is to increase Lakewood tree canopy cover by 5% from 28.5% to 33.5% by 2035.**

**Canopy increase is the over-arching goal of our Tree Action Plan. The city's goal of 33.5% by 2035 also meets and exceeds the recognized national municipal urban tree canopy average of 33%.**

### **2. The city should set a goal of planting 500 trees per year on private, school, and municipally owned properties in order to achieve the 38.5% canopy coverage by 2035.**

In order to achieve the higher tree canopy goal, increased numbers of trees will need to be planted on tree lawns, park areas, school properties, and private properties. A future tree commission will need to come up with education and incentives for private tree planting. The Tree Task Force estimates that the city of Lakewood requires at least 9,000 additional trees to achieve the 38.5% canopy coverage.

**Again – the goal is to increase Lakewood tree canopy cover by 5% from 28.5% to 33.5% by 2035.**

**The city has planted over 400 trees per year since 2015.**

**Lakewood City Schools have planted 190 trees the past three years.**

**Planting totals since 2013:**

### Net gain of trees planted versus trees removed:

2013 net gain 75 trees = 273 planted - 198 removed

2014 net gain 139 trees = 394 planted - 255 removed

2015 net gain 186 trees = 415 planted - 229 removed

2016 net gain 232 trees = 424 planted - 192 removed

2017 net gain 284 trees = 483 planted - 199 removed

2018 net gain 210 trees = 422 planted - 212 removed

2019 – Spring Plantings 192 trees; 220 (approx.) in the Fall Planting Season (Removals as of 4/25/19 – 46 removed)

### Private Property tree planting program:

2014 - 13 trees planted (Fall only)

2015 - 21 trees planted (Spring 8; Fall 13)

2016 - 27 trees planted (Spring 9; Fall 18)

2017 - 24 trees planted (Spring 9; Fall 15)

2018 - 24 trees planted (Spring 12; Fall 12)

2019 – 7 trees planted in Spring in private property

### **3. The city planted over 200 trees in 2013 and should set a goal of planting at least a similar number annually in future years on city-owned land.**

Because some trees die each year, the city needs to plant more trees than replacements to grow the infrastructure. The city has to remove potentially more than 100 ash trees due to the emerald ash borer. The city should replace these trees within a couple of weeks after removal.

See above in #2.

### **4. The city should be more flexible concerning all sidewalks in order to save larger trees.**

The sidewalk issue was discussed extensively by the commission as trees may cause cracking sidewalks, which when they are repaved need to either be moved around the tree or the tree has to be removed. The committee discussed policies by other cities and decided that it would be better for the city to have some flexibility in deciding this issue on a case-by-case basis. The city should consider additional options to prevent the problems such as root barriers, silva cells, avoiding shallow rooted trees, etc. Additional discussion is required concerning homeowners concerns about cracking sidewalks caused by tree roots and whether the city should assist in paying for repaving sidewalks. The best practices and ordinances should be reviewed by a future tree task force commission.

**Simply put - The city does not remove healthy trees for sidewalk replacement.**

**As part of the annual sidewalk program – trees within the sidewalk program zones for that year are inspected and if a certain tree's root(s) has created a trip hazard and/or other sidewalk defect and that particular tree is in poor or declining health, we will remove that tree and grind out the stumps/surface roots as a proactive measure in advance of the that sidewalk getting replaced and replant the site within one year with a more appropriate tree species moving forward.**

**The city no longer plants tree species that are known to have surface root issues – i.e. Linden trees, Red Maples (only if tree lawn is more than 8’ wide), Locust trees – with the exception of Detroit or Madison since it is one of the few tree species that can survive in those locations.**

**Per data presented the past couple years by both the International Society of Arboriculture and the Ohio Department of Natural Resources – the average cost per tree for an underground root growth trench/silva cell installation is \$3,500.**

**5. The city should plan to increase the number of trees planted per tree lawn where adequate room exists.**

Many of the larger tree lawns would allow multiple trees on them but current policy only allows for one tree.

**We will plant more than one tree on a tree lawn if the space can accommodate more trees. However, most Lakewood tree lawn sites can only host a single tree due to root space restrictions and/or conflicts with overhead or underground utilities.**

**6. The city should develop a master plan for all park areas in order to increase the number of trees and increase the diversity of the tree species.** City residents should be encouraged to help pay for and participate in planting trees within the park areas.

For example, the Tree Task Force sponsored a special tree planting event on October 26 at 9 AM at Lakewood Park; nearly one year after Hurricane Sandy struck the North Coast. 14 trees were planted near the baseball diamond by more than 35 volunteers. Articles were included in The Observer and flyers were handed out promoting both events. This event should be held annually.

**Species diversity is one of our primary urban forest goals. We follow the 30-20-10 model that provides a useful guide and suggests that the total city of Lakewood tree inventory contain no more than 30% of a single family, 20% of a single genus, and 10% of a single tree species. Street monoculture has proven to be detrimental and should be avoided.**

**In general terms, we want every half-mile of street in Lakewood to have a minimum of 10 different tree species and no more than 20% of a single genus. Streets with the most narrow tree lawns may be reduced to 6-8 due to the lack of a variety of species that would work in those sites.**

**Also: in the span of five years, Madison Park went from having just five tree species to 18. We have introduced 13 new tree species to Lakewood Park.**

**7. The city should better educate its residents concerning the availability of complimentary tree planting on tree lawns as well as provide residents a program to plant trees on private yards at a discount.**

The Tree Task Force put together flyers in 2013 which were issued throughout the city and in various publications telling residents that they were eligible for a tree on their tree lawn. Over 3,000 flyers were distributed by Task Force members and through the schools. The City of Lakewood, at the recommendation of the Tree Task Force, established a special program with Bruner Landscape of Sheffield Village to plant trees in private yards at a discounted price. Both of these programs should be continued on an annual basis.

**Our tree programs are well established and residents seem to be familiar with them. We use all the city's social media platforms to announce our planting programs in advance of the spring and fall planting seasons.**

**8. The city should develop standards for commercial areas requiring trees to be planted along major streets** such as Detroit and Madison either in the ground or in large pots. Where sufficient space for larger trees does not exist, plans and design standards should be amended to incorporate infrastructure improvements to provide sufficient space for larger trees through features such as curb bump-outs, Silva cells, tree pits combined with pervious pavement, etc.

The Tree Task Force has had extensive discussions concerning the loss of trees in commercial areas and the challenges of helping newly planted trees grow to maturity. The task force would like to see trees included within all plans for new developments, improvements to roads and sidewalks, repairs to parking lots, etc. as they add to the quality of life of living in Lakewood. The addition of more trees planted in the commercial areas will improve the “walkability” of Lakewood.”

**Within the past six years – I have a rough estimate that there has been a net gain in trees planted by about a 3-1 margin (that is a conservative estimate) over any trees that have had to be removed for commercial developments around the city and this does not count the schools. The Rockwood Development on Detroit Avenue added 32 trees to a site that had only 6 locust trees in decline at that location for a net gain of 26 trees.**

**Every year, we have added a couple more Ginkgo trees and a couple other tree species to the mix of what was, up until six years ago, only Locust trees along Madison and Detroit. Very few tree species can survive the harsh urban conditions that persist in our commercial tree sites, but we have had success with adding a couple other species to help increase the commercial districts tree species diversity.**

**Some of the trees planted along Madison and Detroit never should have been planted – some of the tree pits are only 18-24” wide and have caused some extensive damage to sidewalks and curbs that we have had to repair/replace over the years. We no longer plant any sites along Detroit or Madison that are less than three feet wide.**

**9. Groundskeepers should use better care in mowing and trimming around park trees due to obvious mechanical damage, and the City should explore guards for better trunk protection.** Written standards based on best practices for tree care (planting, maintenance, trimming, and protection) should be developed and formally incorporated into Public Works employee training. Written standards should also be developed and incorporated into employee training to govern Public Works employee tree root care when digging for sidewalk, utility, street, or curb work and repair.

The task force would like to see better care taken by groundskeepers and lawn maintenance people of newly planted trees throughout the city to ensure that the trees have a better chance of making it to maturity. Mr. Chris Perry organized purchasing tree trunk protection guards and plans to place these around many trees in Lakewood Park in 2013/2014.

All City of Lakewood groundskeeper staff have been trained to adhere to property tree protection protocols. Failure to comply may result in discipline procedures. There have been no issues the past five years. Today, our groundskeeper staff help take care of our trees and we mulch all younger trees in all parks and on public property every spring on an annual basis – both for optimum tree health and for tree protection. They have also been trained to properly prune broken or damaged limbs on smaller trees if they come across them.

**10. The Tree Task Force recommends that the City of Lakewood appoint a permanent tree commission to encourage and monitor tree planting efforts within the City of Lakewood.** The tree infrastructure is too important to have only a task force every 15 years and instead it should be a permanent commission.

A healthier urban forest will require more attention, maintenance, and knowledge that a permanent tree commission can help a city staff better implement. Creating a permanent tree commission can be a part of a strategic plan to educate residents of the city of Lakewood how to care for, maintain, and ensure that arguably our most valuable city infrastructure remains viable for decades and generations to come. A permanent commission can expand City capacity to perform education events not traditionally conducted by Forestry staff to educate residents about how to plant, care, and maintained for trees and explain why trees are beneficial infrastructure. We feel that a tree commission could serve the city by making recommendations for not only residential tree lawns, but also commercial and park master plans. The best urban forestry programs include an active volunteer tree entity that incorporates the public at large into its benefits. A permanent commission can also help raise funds to plant additional trees. The committee feels there is much more to discuss and implement by a tree commission.

Generally speaking, permanent tree commissions only exist in smaller municipalities and/or within those communities with little or no staff to care for or maintain trees. In Northeast Ohio, the only larger communities that have permanent tree commissions are Shaker Heights and Beachwood (limited to a public relations role and not advisory) and the City of Cleveland has the Cleveland Tree Plan that is a working group of government, non-profits and private citizens that act as public outreach volunteers.

Tree commissions can play a role – if the technical/professional background exists in its members – in helping those smaller communities with no tree crews or arborists on staff to develop a planting plan or planting projects, help to complete a tree inventory, fundraising to help boost limited budgets, developing relationships with consulting arborists and/or professional tree service companies to help in the care and maintenance of trees and hazard tree assessments.

**11. The annual budget for planting trees should increase to a minimum of \$100,000 annually to provide additional funds for planting, maintaining, pruning, and taking care of the important tree infrastructure of the City of Lakewood.**

The budget for planting trees in the City of Lakewood has been approximately \$50,000 or less for recent years. However the need is so great as demonstrated by the low existing tree canopy in Lakewood (as compared to overall Cuyahoga County and many area suburbs). Additional funds would allow for more tree planting each year as well as tree maintenance and pruning. It would provide funds for the Ash Tree removal as well as to pay contractors to plant more trees.

The current Reforestation budget is \$125,000 per year, double what it was in 2013. The overall forestry contracting authority is \$225,000 per year.

**12. The city should hire an additional forester or plan to outsource some forestry work such as tree removal, planting, and pruning.**

The city currently has four forestry employees which is down from seven employees in the 1990s. The fewer employees are not able to keep up with the required pruning and tree maintenance that is needed for maintaining the tree infrastructure of the city. By outsourcing dead tree removal and tree planting, the existing forestry staff can do a better job of tree pruning and maintenance which helps to protect our annual investment in new tree plantings and makes our increased canopy goals more attainable. The additional position could be two part-time positions if the city is trying to avoid additional full-time benefits.

**The city does contract out an average of 25 hazardous tree removals each year in addition to nearly all tree lawn plantings. Most of the parks trees are planted by our tree crew and a couple volunteer plantings each year. This does allow us to do more proactive pruning, structural pruning and other care to trees to better extend the life and safety of our urban forest as a whole.**

**The city of divided up into five pruning zones so that regular maintenance pruning is done on every street at least once every five years. We have managed to make it through each zone every years. Certain streets that have certain tree species that produce a lot of downward growth need to be pruned or elevated every three years. Not every single tree is pruned within a zone or on a particular street – only those that need it. Larger oak tree pruning avoid pruning in the summer months unless there was storm damage.**

**13. The city should continue to promote the Gift a Tree Fund to try to let residents and other philanthropy minded people know that the city is actively seeking funds to help plant and care for additional trees.**

Information about the fund should be included on the water bills, on the website, and in an annual letter to previous and potential donors. The committee helped raise \$8,900 for the fund in 2013. The committee feels there is considerable additional potential for fundraising if the commission is made permanent. Additional funds could be used for trees, watering truck, gator bags, education, tree signage and seasonal staffing to care for the trees. Money given to the Gift-A-Tree program should be spent within 12 months. A thank you letter to donors should be sent out within 30 days. A follow up letter shall be sent after planting the trees. The Tree Task Force created generic letters for the City to utilize concerning donations.

**Since 2015, less than a dozen individual donations have come into the Gift-a-Tree program.**

**When the tree task force went back to the same 2013 donor list in 2014, many of those individuals were upset with being asked again – I received most of those phone calls. Only a small number of people donated to the fund again.**

**14. The municipal code for honey locust trees (LCO 565.10) needs to be revised as currently honey locust trees are prohibited within the city. Other city codes should also be reviewed concerning trees.**

Honey locust trees are some of the best trees on a street like Detroit or Madison but current city code does not allow planting of them. A review of the current code for honey locust trees as well as some other prohibited trees should be performed. City Codes should also be reviewed for soil volume and amendment to increase the number and viability of future tree plantings.

**This code was revised accordingly a couple years ago – no specific species are mentioned, just that certain species can be prohibited at the city’s discretion.**

**Our current planting specs – and how we backfill/amend the soil after any stump grindings – have requirements for certain soil amendments added to the planting/backfill/soil mix.**

**15. The city should implement the tree tag program which the Tree Task Force has started to better identify the names and features of the various trees in Lakewood to educate the public.**

The Tree Task Force and the City of Lakewood are generating special tree tags that identify the benefits of trees and the names of various species in highly visible areas for tree lawns and parks.

**To date, over 70 tree tags have been installed in city parks, more to follow to identify a few new species planted and add to overall the collection of tags.**

**16. The city should implement standards for trees on school and private properties to encourage residents to plant trees within city limits and to protect existing trees.** The city should consider a tree protection ordinance to protect larger trees on all properties.

The Tree Task Force would like to see increased numbers of trees on school properties as they rebuild various schools within the city. We would also like to see increased numbers of trees on private properties. Increased plantings on both will be important to increasing Lakewood’s urban forest canopy, since so much of our surface area lies on school- or privately-owned parcels. The city should also consider implementing an ordinance to protect larger trees, for example over nine inches in diameter, from being taken down unless they are diseased or dead.

**On public (city) property I would state that we already have tree laws or protections in place – based on some of our key principals in that we do not remove healthy large trees and that we actually identify large mature trees citywide with structural defects that can be pruned to make safe and retain ecological services citywide on a more consistent basis than removals. We radius away from any healthy large tree for sidewalk replacement work that may need to be done to limit or avoid larger root cutting. Also, the majority of gas main replacement projects in the city are done via boring versus open trenching which would kill a lot of larger trees.**

**The city will invest the time and resources to help prolong the life of our healthiest largest trees. For example, during the new Kids Cove playground construction at Lakewood Park, I had set up around all the large trees a 20-foot perimeter protective fence as to keep any equipment and construction activity away from the trees to help prevent large buttress root compaction within that zone so that the trees will not dieback.**

**I’m not aware of any Ohio communities that have a specific heritage tree or tree protection law. Many cities have historic trees that they have preservation/protection measures in place – on public property. There are a few tree removal ordinances that I am familiar with deal mostly with new construction – in most cases subdivision development in which some forest lands may need to be cleared to make room for a new development and requirements are set in place that so many replacement trees must be planted as part of the new development – such as the Strongsville Ohio**

ordinance below and info from Moreland Hills, Ohio – which requires a permit of more than four trees over 8” in diameter are to be removed from a parcel – links below:

<http://www.strongsville.org/government/architectural-review-board/tree-ordinances>

<http://www.morelandhills.com/en-US/SYN/88319/PageTemplate.aspx>

Also – some additional info below:

<http://www.treeremoval.com/tree-removal-regulations-by-state/#.XJpfcOR8CUI>

Typically, heritage trees or protected trees have to be identified and/or nominated and inventoried to give it that sort of status – much like the below from Oregon:

Oregon Heritage Trees must meet one or more of the following characteristics:

- Specimen: a tree of exceptional size, form or rarity, or horticultural value
- Historic: a tree of exceptional age, and/or associated with or contribution to an historic structure or district or with a noted person or historic event
- Landmark: a tree that is a prominent identifying feature of a community
- Collection: a group of trees in a notable grove, avenue or other planting

I do know of some nice larger/older trees on private property around Lakewood – but it would be difficult to give them a full health assessment without examining the tree up close to determine its actual overall health.

I would not designate any large pin oaks (our primary larger species) in Lakewood as a heritage tree/protected tree due to the fact that pin oaks are considered the most inferior, shortest lived, and poorest structure/form of all the larger oak species. They were probably planted back in the day knowing that that they are the fastest growing oak tree – but it was not widely known then that they are the weakest wooded oak species. We are nursing the oldest ones along as long as possible and continually assessing and monitoring their defects.

The Moses Cleveland tree (White Oak) that we had to take down last year was a de-facto heritage tree for Lakewood – unfortunately, after 250 years its canopy was dying back and the trunk was completely hollow with very little holding wood left to support the tree. There are a couple great White Oaks in Lakewood Park that could be designated a heritage trees – but they are already protected by being in a public park and cared for with long-term preservation measures in place.

Personally, I think the biggest problem Lakewood has with trees on private property – from a safety standpoint - is that there are many hazardous large trees on private property – so much so that First Energy has had its tree trimming contractors in Lakewood every summer to address so many private trees that pose a threat to the power grid. They are not doing removals, just eliminating the many hazardous and/or dead limbs that overhang their power lines in response to the high number of emergency power outages resulting from private tree failures. Many of the hazardous private trees

are close to the public right of way too. Many people just don't have the money set aside to remove some of these hazardous trees. Sometime they become the city's problem and expense to pick-up when they fall into the public right-of-way during storm events.

**Most Ohio cities have no rules in terms of a permit process for tree removal on private property – unless it deals with a new development scenario.**

**17. The city should develop a plan for watering new trees for two years after planting. Use of a watering truck and community service workers should be considered.**

New trees require watering during the hottest summer months. In order to protect the tree infrastructure, a plan should be put in place to water the new trees for a two-year period during the hottest summer months.

The city could also provide a 10% reduction in homeowner water bills for the two summers following a tree lawn planting if the homeowner commits to regular watering.

**The city does water all younger trees during the summer months – We typically water younger trees twice during the summer months with our tanker truck. We have a deep watering probe that can deliver 25 gallons of water in 60 seconds into the root ball/root system.**

**With an average of 1,200 to 1,400 young trees/new plantings, deep watering twice during the summer months is the most we have time to do with so many trees. Any additional watering from residents would always help – especially if it is a hot/dry summer.**

**18. The city should have 10-20 various sized trees be maintained on city grounds (as a mini nursery),**

for opportunistic planting when opportunities arise, saving time for all

By having trees available for planting, when a dead tree is removed a new tree can be planted immediately saving time and money. This would allow for trees to be planted each month instead of only one or two times a year towards an annual goal of at least 200 trees per year on city property.

**This is not at all practical. We only plant in the appropriate spring or fall planting season. We can't plant in the heat of summer – the transplant stress would be too severe and it would void any warranty we would have on any of the new plantings.**

**19. The city should establish a volunteer training program for residents to help maintain young city trees.**

The city should establish a volunteer training program to enable interested residents to help maintain the city trees through watering, pruning, etc. without having to pay additional city staff.

**I don't feel we have a tree maintenance problem. The one item that any resident could help us with is watering their younger tree lawn tree during the summer months.**

# Lakewood Tree Canopy – April 2019

## Mission:

**Maximize the economic, environmental, and social benefits that a well-planned and sustainable Urban Forestry Program can deliver to the residents of the City of Lakewood.**

## Goals:

- Increase Lakewood tree canopy cover by 5% from 28.5% to 33.5% by 2035 – Canopy increase is the over-arching goal.
- Maintain the health and vigor of all trees in the Lakewood Urban Forest – to capture the long-term ecological, economic and social benefits; and for public safety.
- Always plant the largest suitable tree for the site selected. Large trees live longer and provide greater economic and ecological benefits than small trees.
- Achieve a 95% stocked Urban Forest to benefit all locations throughout the City of Lakewood and reach the peak Urban Tree Canopy that we can achieve and sustain.

## A Peek Into The Past:

- GOOD - We planted a lot; BAD – Often, not the appropriate tree size or species for the space.
- Poor tree species diversity. In 1996 it was determined that just ten tree species comprised 82% of the population and that one genus - ACER (Maple) - comprised 39% of the total population.
- In 1996, the City of Lakewood commissioned a complete public tree inventory in which each city tree was counted and identified along all street right of ways, city parks and on city/public property. 11,009 trees were counted, providing to us the foundation of our city tree inventory for which we continue to maintain, utilize and build upon to this day – an invaluable resource.
- In 1996, as part of the city tree by tree inventory process, the total value of the City of Lakewood urban forest was estimated to be \$12,098,891 with an average single tree value of \$1,099.00, using guidelines then established by the International Society of Arboriculture.
- In 1976, the City of Lakewood first achieved Tree City USA status. The City of Lakewood has since been designated a Tree City USA community for consecutive years ever since by the National Arbor Day Foundation – the 2<sup>nd</sup> longest streak in the State of Ohio.

## Here We Are Today:

- As of January 2019, the City of Lakewood public tree inventory consists of 13,102 trees.
- 28.5% of Lakewood is presently covered by the canopies of trees per the 2013/2014 Cuyahoga County Tree Canopy Assessment.
- Good tree species diversity. The top ten tree species comprise 57% of the population and that one genus - ACER (Maple) – comprises 26% of the total population.
- Establish and maintain tree species diversity and optimal age distribution. A Plan for Diversity = High Reward.
- Implementation of the 30-20-10 model provides a useful guide and suggests that the total tree inventory contain no more than 30% of a single family, 20% of a single genus, and 10% of a single tree species. Street monoculture has proven to be detrimental and should be avoided.
  - Current Lakewood Tree Inventory:
    - 25.7% Single Family - Aceraceae
    - 25.7% Single Genus – Acer
    - 11.3% Tilia cordata species (Little Leaf Linden)
    - 10.1% Acer rubrum species (Red Maple)
- The 2019 estimated value of the City of Lakewood urban forest, using tree valuation guidelines developed by the United States Forest Service is estimated to be **\$19,771,760** - **with an average single tree value of \$1,509.**
- Formula in brief: **13,102 total trees; Base Value of 65 (Midwest States) x 78.5 (Cross-sectional average of a 10-inch diameter tree) x .70 (Species) x .65 (Condition) x .65 (Location) = \$1,509.06 Total Value Per Tree x 13,102 = \$19,771,760** – Estimated value of the City of Lakewood Urban Forest. This does not include the value of trees on private property.
- Stresses, both environmental in the form of pests from afar (i.e. Emerald Ash Borer and Asian Longhorn Beetle) and climate change impacts.
- The acknowledgement that trees are public infrastructure and the preservation, care and planting has been recognized as more of a priority rather than an afterthought - that trees play a significant role in storm water mitigation and other important ecological services.
- **No annual net loss of tree planting versus tree removals – Ever!**

## **What are we doing to increase our tree canopy cover:**

### **Net gain of trees planted versus trees removed from 2013 through 2018 = 1,126 Trees**

2013 net gain 75 trees = 273 planted - 198 removed  
2014 net gain 139 trees = 394 planted - 255 removed  
2015 net gain 186 trees = 415 planted - 229 removed  
2016 net gain 232 trees = 424 planted - 192 removed  
2017 net gain 284 trees = 483 planted - 199 removed  
2018 net gain 210 trees = 422 planted - 212 removed

### **Turning a negative into a positive:**

A number of poor plantings took place throughout Lakewood in regard to species selections and from 1990-2005, in particular the planting of over 800 Kwanzan cherry trees across the city.

Many Kwanzan cherry trees (over 330) have died since 2014 on various city tree lawns – they do not handle frequent deep freeze and then warm thaw periods well and are prone to many fungi issues as a result of vertical trunk and/or branch cracking. They are also very short-lived trees - 25 years at most.

Many of these small cherry trees were planted on tree lawns that could support large tree species. We have turned the Kwanzan cherry tree mortality into a positive by correcting the past planting mistakes and replanting those sites with larger tree species that will deliver much more tree canopy cover moving forward.

We have in place the following action:

- **Correct past sins/mistakes and remove a certain percentage of small trees occupying a large tree site and replace with large tree species to increase canopy cover over time (Net result of 0.50% canopy growth in 25 years)**

### **Diversity of species will be our guide:**

#### **The city will not plant**

- **large trees under power lines or other sites too small for the mature tree size**
- **trees in sites in which they will not survive and thrive**
- **small trees in sites appropriate for larger trees**

**The city will take the long view in all planting decisions**

- **Always plant the largest suitable tree for the site selected.**
- **Large trees live longer and provide greater economic and ecological benefits than small trees.**
- **Undersized trees fail to maximize the potential of the site. This failure is lost value for the community.**
- **Never plant small trees in tree lawn sites appropriate for larger trees regardless of resident's preferences.**

**Additional canopy increase actions:**

- **Plan for and plant the next generation of city park and green space trees to contribute an additional 0.50% to canopy growth.**
- **Achieving a 95% stocked urban forest would add approximately 38-40 acres of tree canopy, increasing the city's tree canopy from 28.5% to 29.6%.**
- **RESOLUTION/LEGISLATION PENDING - Consider planting on the private front yard side of the sidewalk (minimum 5' from sidewalk - preferably 6-8' from sidewalk) where tree lawns are too narrow to support a tree to maturity. In locations where tree lawns are too small to support a tree – mutual benefits can be delivered to city and resident and long-term maintenance obligations associated with street right-of-way impacts are eliminated. \*\*\*Minimum tree lawn width required is 32" for root space. (Net result of 0.75% to 1% canopy growth in 25 years if half of the eligible properties get planted.)**
- **Continue to build and enhance/promote our program for private yard tree planting efforts by offering residents better tree price opportunities in conjunction with the annual City Reforestation Planting Program.**
- **Residents are the largest steward of the city's tree canopy and have most of the land to plant trees – Approximately 50% of future growth must take place on private property to achieve a 5% tree canopy increase by 2035.**

**NO NEW TREES WILL BE PLANTED IN TREE LAWNS FOR THESE STREETS -  
POSSIBLE FRONT YARD PLANTING LOCATIONS\*\***

STREET	Comment/Notes	Possible Front Yard Planting minimum of 5-feet from sidewalk	Width of Tree Lawn	Number of Homes
Adeline		Y		6
Athens Ave		Y		48
Baldwin Place		N		
Berea Road		N		
Blossom Park	Front yard planting case-by-case	Y	20" to 28"	86
Cannon Ave		Y		87
Clarence Ave	Detroit north to Hazelwood	N		
Clifton Prado		N		
Clifton Place		N		
Crest Lane		N		
Davis Court		N		
Edgewater Drive	Parkside to Nicholson	N	No Sidewalk ???	
Estill Ave		N		
Ferndale Ave		Y		17
Gold Coast Lane		N		
Hall Ave	Plant only tree lawns with 36"	Y	32" to 36"	109
Hilda Ave		Y		6
Hird Ave	Detroit north to RR tracks	N		
Idlewood Ave		Y		12
Kirtland Lane		N		
Lakewood Ave	Detroit north to RR tracks	Y		16
Lake Point Drive		N		
Lanning Ave		Y		25
Leonard Ave		Y		28
Margaret Ave		N		
Nelson Court		N		
North Clifton Drive		N		
Northwood Ave		Y		38
Olive Ave		Y		99
Olivewood Ave	Trees that are there now will not be replaced due to so many vehicle impacts	N	24" to 30"	
Park Row Ave		Y		41
Phelps Ave		Y		30
Riverside Drive	Detroit Ave South to McKinley	Y		120
Roycroft Ave	Trees that are there now will not be replaced	Y	26" to 28"	47
Rockway	Plant only tree lawns with 32"	Y	30" to 36"	49
Roy Drive		N		
Scenic Ave		N		
Spring Garden	Plant only tree lawns with 32"	Y	30" to 34"	45
Thoreau Ave	Detroit north to RR tracks	Y		20
Westlake Ave	Plant only tree lawns with 36"	Y	34" to 36"	114
Williamson Ave		N		
				<b>Total</b>
				1043
				Total - 726 when subtracting Blue streets****

\*\*Consider planting on the private front yard side of the sidewalk (minimum 5' from sidewalk - preferably 6-8' from sidewalk) where tree lawns are too narrow to support a tree to maturity. In locations where tree lawns are too small to support a tree – mutual benefits can be delivered to city and resident and long-term maintenance obligations associated with street right-of-way impacts are eliminated.  
\*\*\*Minimum tree lawn width required is 32" for root space.

**Streets shaded in Blue may have tree lawn planting sites wide enough on a case-by-case basis - sites are limited to just a couple species or cultivars due to space restrictions.**