Cleveland Tree Plan
Action Sheet

A roadmap for progress.

Action #1:
Establish a Unified Voice, Formalize Partnerships

LEAD AGENCY / OWNER: Mayor's Office of Sustainability

There are many active players in Cleveland and most are working independently on short-term projects. Formation of a coalition of urban forest stakeholders will serve to create a unified voice and direction for all urban forestry efforts.

The city has a substantial backlog in tree maintenance, which can have serious impact on public safety. A formal partnership between the city and the coalition has the potential to reduce some of the city's workload, freeing up time and resources for the city to address the maintenance backlog. Prerequisite: None

Steps		Resources Required	Suggested Participants	Target Completion Date	Progress Tracking
☐	**1. Build an advisory team for the formation of the coalition,** starting with Tree Plan team plus a few additional key stakeholders.	Time	City (Sustainability, Urban Forestry, Planning, Capital Projects), Western Reserve Land Conservancy, Holden Arboretum, Cleveland Neighborhood Progress, LAND Studio, NEORSD, First Energy, Dominion, NOACA, NEORSD, Metroparks	End of 2015	
☐	**2. Define how the coalition is to be set up, funded, and staffed.** The coalition could take many forms, from a collection of organized stakeholders to a brand new non-profit to a municipal tree commission. However it is set up, there needs to be lead agencies from both the public and private sectors that are committed to urban forestry as part of their mission and willing to fundraise.	Time	Same as above	End of 2015	
☐	**3. Map out coalition's program of work**, using the goals and recommendations in this plan as the foundation. Gauge interest of other potential participants.	Time	Same as above	Q1 2016	
☐	**4. Determine interest of city in formal agreement,** start discussions between coalition, city leadership, and/or lead agencies.	Time	Office of Sustainability to start discussion with City leadership. City Legal Department, Public Works/ Urban Forestry, Coalition Members.	Q1 2016	
☐	**5. Define clear responsibilities for each partner, work out particulars of agreement.** Determine what groups are authorized to work on public property on behalf of this plan, and in what ways the city supports them.	Time	Coalition members, as will be defined in Steps 1, 2 & 3.	Q1 2016	
☐	**6. Formalize agreement with city.**	Time, Legal Services	Legal, Coalition members as will be defined in Steps 1, 2 & 3.	Q2 2016	

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Action #2:
Develop an Outreach & Education Strategy

LEAD AGENCY / OWNER: Western Reserve Land Conservancy

Without an effective unified voice, there have been missed opportunities for successful broad outreach, education, and fundraising. Many players are unaware and/or unengaged, and those that are engaged can be misinformed.   An outreach plan run by the coalition will create improvements in performance levels across most of the *25 indicators of a sustainable urban forest* assessed in the Tree Plan and engage a wider range of partners.

Prerequisites: Establishment of Coalition

Steps		Resources Required	Suggested Participants	Target Completion Date	Progress Tracking
☐	**1. Craft Effective Messaging.** Hire professional PR/Marketing firm to assist in the development of urban forestry messaging and creatives to use in all outreach efforts. This is the foundation for a cultural shift and must be done well early on, as it will effect all work pursued in coming years. Learn from similar entities such as Tree Pittsburgh and other established urban forestry focus groups.	Time. Funds for professional PR firm.	Coalition Members, Consultant Firm	Q2 2016	
☐	**2. Develop Targeted Roll-out Strategy for Tree Plan.** One of the first priorities for the new coalition is to roll-out the Tree Plan, its goals, and messaging to all the players in Cleveland. Each audience should be approached in a targeted way. For each audience type, compile list of members, determine the relevant messaging, and assign a coalition member best suited to reach that group. Are there possible partners or coalition members in this group? How can these partners contribute or participate? What is the approach or angle (peer-to-peer individual conversations vs. industry meetings vs. sponsorship)? An outreach plan is need to reach large private landholders, green industry (landscape architects, landscape contractors, nurseries, property management), funders (target to each funder's focus area), utilities, general public, elected officials, City staff (at multiple levels), regional entities (NOACA, NEORSD, etc.), neighborhood groups (CDCs, ward clubs, or active local organizations, etc.) and watershed groups.	Time Funds for outreach materials, events. Advertising costs can only be estimated once a strategy is determined to reach each group.	Coalition members with expanded partners: NOACA, NEORSD, utilities, CDCs	*Strategy Development by* Q3 2016 Roll-Out During 2017 "Year of Vibrant Green Space"	
☐	**3. Host Annual Tree Summit.** Consider partnering with CRR on co-hosting second Forest Summit (CRR initiated first Summit in Fall 2014) and using the event as one platform to launch plan implementation.	Event Funds	Coalition Members, Cuyahoga River Restoration	Q1 2016	

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Action #2:
Develop an Outreach & Education Strategy (cont'd)

LEAD AGENCY / OWNER: Western Reserve Land Conservancy

Steps		Resources Required	Suggested Participants	Target Completion Date	Progress Tracking
☐	**4. Build and Maintain Web Site.** Create a central information hub web site, based on what citizens want or need to know about. Develop content to answer some of the more common questions, with input from all stakeholders. Site would provide answers to questions like: Who do I call about my street tree? Where do I buy trees? Which one should I plant? How do I get a street tree? Where should I plant a tree near my house to get the most energy benefits? How do I plant and care for trees? The street tree is damaging my sidewalk, what can I do? What do I do with my leaves in the fall? What kind of activities are going on in my neighborhood? How do I start a tree project? What is tree canopy? What should ours be? What are canopy levels in other cities? I read somewhere I can get money off my sanitation bill if I plant a tree. Is that true? Can I look up canopy data and tree benefits on my own?	Funds for web domain/hosting fees.

Time for collection of data.

Web design and ongoing maintenance. | Coalition Members, potentially consultant PR firm | By Q3 2016 | |
| ☐ | **5. Landmark Tree Program.** Consider developing a city-wide landmark or historic tree program to increase appreciation of trees. A good place to start may be with the reviving of the Moses Cleaveland Tree Project. Once trees are chosen, be sure to calculate and promote the benefits of each tree publically.   For a city-protected program, see Action #7. | Time
Funds for plaques and outreach. | WRLC, Holden, City Public Works (for trees in parks and treelawns) | End of 2016 | |
☐	**6. Develop a Tree Planting Credit Program.** Work with NEORSD staff to develop and propose incorporation of a tree component into NEORSD's Residential Stormwater Credit Program. Reference case studies: DC's RiverSmart Homes Program, Blue Water Baltimore's Property Owner Credit.	Time	NEORSD, Coalition	By Q4 2015	
☐	**7. Perform iTree Analysis.** Use iTree analysis data to promote the benefits of trees in terms that the general public can understand.	Time	WRLC, Holden	*Post Tree Inventory*	
☐	**8. Make Arbor Day Celebration a Cleveland Institution.** Arbor Day is a unique opportunity to highlight the importance of the urban forest in Clevelander's lives.	Time	WRLC, Holden, City	Ongoing	

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Action #3:
Develop and Implement a Funding Plan

LEAD AGENCY / OWNER: Mayor's Office of Sustainability & Cleveland Neighborhood Progress

Out of the 25 indicators of a sustainable urban forest, Cleveland was assessed in the Low performance category in 19 (over 70%), due in some part from lack of available funding. Tree inventory funding is critical as it serves as the foundation for other crucial work like a management plan, operations review and strategic planting. Additionally, the City will require additional funding to reduce the significant maintenance backlog., and the outreach plan (Action #2) will require monetary support as well. Fundraising will be most effective if tackled through partnerships and strong coordinated grant applications.

Prerequisites: None

Steps		Resources Required	Suggested Participants	Target Completion Date	Progress Tracking
☐	**1. Compile costs** for plan implementation in a "master funding needs" document. This information should be compiled before the roll-out campaign begins. Financial need data is important to have on hand when meeting with potential partners that may ask "how much do you need?" Divide funding needs into short-term and long-term funding.	Time	Coalition Members	Start document in 2015. Complete by end of Q2 2016	
☐	**2. Prioritize required order of funding needs.** First priorities include a tree inventory (for the resulting data and technology) and the outreach/roll-out plan. Second priorities should include development of a management plan and supplemental funding to assist the city in eliminating its maintenance backlog.	Time	Coalition Members	End of Q2 2016	
☐	**3. Convene meeting of stakeholders to gauge interest** (once a clear picture of funding needs is available) of which entities are interested in helping fund which projects.	Time	Coalition Members, Local Funders	End of Q3 2016 and during outreach.	
☐	**4. Start to explore outside funding options** for those projects with no funding options or interested partners. Apply for grants as a coalition (stronger application) for short-term discrete projects. Pursue creative fundraising avenues and establish matching resources.	Time	Coalition Members, Local Funders	Q4 2016 and during outreach.	
☐	**5. Explore reworking of Tree Ordinance to create revenue stream for city.** See Action 8 Policy Changes. Will need a dedicated tree fund (if not already in place).	Time	See Action #8: Institute Policy Changes Supportive of Urban Forestry		
☐	**6. Explore creative new revenue streams for** long-term funding needs, like wood products sales, utility bill donations or potential advertising opportunities.	Time	City Public Works	Q4 2016 and during outreach.	

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Action #4:
Complete a Comprehensive Tree Inventory

LEAD AGENCY / OWNER: City of Cleveland Public Works

There is currently incomplete data on Cleveland's individual public trees (condition, species, size). As a result, almost every indicator in The Trees and Management Approach categories fall into the lowest performance levels. Without this data, public safety is almost impossible to manage effectively, placing city at a high risk of liability. Additionally, inventory data is the foundation for many of the Actions in this plan. It is required for budgeting, development of a management plan, an operational analysis, and more. Note: Because this data collection has a direct impact on public safety, a volunteer-based inventory is not recommended.

Prerequisites: None

Steps		Resources Required	Suggested Participants	Target Completion Date	Progress Tracking
☐	**1. Explore Scope of Inventory.** There are a number of decisions to be made when considering a tree inventory. *What to Inventory.* A decision will be need on what to inventory and in what order, especially if a phase approached to inventory is taken. Street trees should come first (because of their importance in public safety), followed by park trees, other public areas, and private land (through sampling only with iTree Eco). *How to Inventory (Type).* There are multiple ways in which an inventory can be taken, from sampling and drive-by assessments to full tree-by-tree data collection. *Inventory Timeline.* Inventories can be accomplished all at once or in phases.	Time	City: Public Works, Parks and Information Technology	End of 2015	
☐	**2. Plan for Data Storage, Updating and Usage.** Modern GIS-based technology should be used in an inventory, and data stored in a way that is accessible for analysis and everyday maintenance tracking. Determine who will maintain the data and how it will be shared between partners. Comparison of city asset management (City Works, Hansen) vs. urban forestry management software (Tree Tracker, TreeKeeper).	Time	City: Public Works, Parks and Information Technology	End of 2015	
☐	**3. Determine Cost.** Based on above decisions, obtain estimates and potential timelines for a GIS-based professional inventory.	A Street Tree Inventory is estimated to range between $400-$600k	City leading RFP/Bid Process, Mayor's Office of Sustainability	End of 2015	
☐	**4. Submit Needs.** Include fund requirement in master funding needs document.	Time	City Public Works	Q1 2016	
☐	**5. After Completion.** Use data to inform management plan, conduct iTree analysis, and refresh the messaging.	Time	Coalition	*Post Tree Inventory*	

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Action #5:
Develop and Implement a Management Plan for City-Owned Trees

LEAD AGENCY / OWNER: City of Cleveland Public Works

Performance levels are low in public tree maintenance, risk management, and planting because there is no management plan in place. Significant strides in performance level improvement can be made by developing a management plan. An inventory and management plan should facilitate short and long term planning, increase efficiency, and justify budgets.

Prerequisite: Tree Inventory

Steps		Resources Required	Suggested Participants	Target Completion Date	Progress Tracking
☐	**1. Explore Scope and Information Required for Management Plan.** There are a number of decisions to be made when considering a management plan. The following scope is the minimum recommended. *Tree Inventory Data—Results and Analysis.* Estimate: $500,000 *Data Management and Upkeep*—GIS-based tree data, maintenance software *Maintenance Plan*—Should provide 3-5 year plan for day-to-day activity, determine proactive pruning cycle and target cycle length. *Planting Plan*—Determine street tree stocking levels, establish goals and budgets. *Risk Management*—Determined acceptable threshold of risk and mitigation plan for backlog of high-risk work. *Pest Management*—Strategy for Emerald Ash Borer and Other Invasive Pest *Emergency Management*— strategy and plan for handling storm and emergency situations effectively, safely, and in a way that wont exhaust an entire annual budget (which can greatly increase maintenance backlogs).	Maintenance Plan: $5,000 Planting Plan: $3,000 Risk Management: $5,000 Pest Strategy: $3,000 Storm/Emergency Response Management $5,000-$10,000	City: Public Works (Parks & Urban Forestry) and Information Technology, Risk Management, Emergency Management	After tree inventory is completed.	
☐	**2. Explore Optional Cost Benefits Analysis.** Urban forests include expenses for planting, maintenance, and sidewalk repair. However, the benefits often outweigh the costs. Performing a cost-benefits analysis provides valuable data for future funding.	Cost-Benefits Analysis: $3,000-$5,000k	City: Public Works, Finance	After tree inventory is completed.	
☐	**3. Determine Cost.** Based on above decisions, refine estimates and potential timelines for a customized management plan.	Time	City: Public Works, RFP Process	Can determine estimates by end of 2015	
☐	**4. Submit Needs.** Include funding requirement in master funding needs document.	Time	City: Public Works	Submit general estimates by end of 2015	
☐	**5. After Completion.** Use management plan goals and budget to compare to capabilities in operations review.	Time	City: Public Works / Urban Forestry	TBA	

Cleveland Tree Plan **Action Sheet** *A roadmap for progress.*	**Action #6: Undergo an Operational Review** City staffing, equipment, and department funding are currently inadequate for the large backlog of maintenance required to manage public safety, as well as, longevity of mature trees (which bring maximum tree benefits to the community). With an inventory and management plan in place, an operational review will ensure funds and resources are used to the utmost efficiency levels. Prerequisites: Tree Inventory and Management Plan	**LEAD AGENCY / OWNER: City of Cleveland Public Works**

Steps		Resources Required	Suggested Participants	Target Completion Date	Progress Tracking
☐	**1. Gather Data Required for Operational Review.** There are a number of datasets required when considering an operational review. The following scope is the minimum recommended. Productivity Data of Crews Staff Numbers and Qualifications Equipment Inventory Resources Available / Budget—Each department providing services or getting revenue should accurately account for urban forestry-related income and expenses.	Time	City: Public Works (Parks & Urban Forestry) and Sustainability	2016	
☐	**2. Explore Outcomes for Operational Review.** There are a number of outcomes possible in an operational review. Evaluation of personnel, equipment & budget compared to needs defined in management plan. Focus on movement toward proactive maintenance. Review of regulations that impact Urban Forestry section work. Review departmental and interdepartmental coordination.	Time	City: Public Works (Parks & Urban Forestry) and Sustainability	2016	
☐	**3. Determine Cost.** Based on above decisions, refine estimates and potential timelines for a customized management plan.	Time	City: Public Works	End of 2015	
☐	**4. Submit Needs.** Include funding requirement in master funding needs document.	Time	City: Public Works	Q1 2016	
☐	**5. After Completion.** Institute recommended changes, track progress and publicize efficiency victories.	Time	City: Public Works	TBA	

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Action #7:
Establish a Canopy Goal, Plan for Canopy Updates

LEAD AGENCY / OWNER: Mayor's Office of Sustainability

A canopy goal is a tangible and prominent metric to measure the success of the program. Canopy goals have proven to be a solid way to get the public and partners involved in the program.

Prerequisite: Current, high-resolution canopy data.

	Steps	Resources Required	Suggested Participants	Target Completion Date	Progress Tracking
☐	**1. Explore the Scope of a Canopy Goal.** Canopy goals should be targeted based on a combination of actual canopy possible and desired outcomes. Outcomes should include more equitable distribution of benefits across the city. Goals should be set for public and private trees.	Time	Coalition Members to determine goal. City: Sustainability and Urban Forestry/ Parks to gauge city buy-in on proposed canopy goal.	End of 2015	
☐	**2. Setting Local Level Goals.** While an overall city goal is useful, the actual canopy goal should be determined at the neighborhood levels first, then aggregated to reach a city-wide goal for outreach purposes.	Time & Public Meetings	Western Reserve Land Conservancy, Center for Neighborhood Progress, Coalition Members, CDCs, Watershed groups	End of 2015	
☐	**3. Get canopy goal into policy:** adopted by city council and including in a revised tree ordinance.	Time	City: Sustainability, Planning, Public Works	Q1 2016	
☐	**4. Determine benchmarks for canopy progress and incorporate them into multiple city departments,** including engineering, capital improvements and public works.	Time	City: Capital Projects, Public Work / Urban Forestry, Planning	Q2 2016	
☐	**5. Ensure canopy goal is prominently included in next comprehensive plan.**	Time	City: Planning and Sustainability	2020	
☐	**6. Incorporate canopy goal into the roll-out strategy.**	Time	See Action 2: Outreach Strategy		
☐	**7. Plan for UTC Update.** Develop a plan to get the canopy data updated every five years. Next update should be 2018.	Funding for UTC update.	Coalition, Cuyahoga Planning Commission	Get plan in place by end of 2016.	

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Action #8:
Institute Policy Changes Supportive of Urban Forestry

LEAD AGENCY / OWNER: City Planning & Public Works

Canopy cover level is low and operational funds in Cleveland are stretched thin. Policy changes can provide a way to preserve existing canopy while providing a new revenue stream. This is a low-cost, high-impact step that the city can take to demonstrate real leadership in the effort to rebuild the urban forest. Incorporation of the new canopy goal into various adopted policies allows the city to lead by example and at no cost, showing the importance of trees to the city.

Prerequisites: Canopy Goal

Steps		Resources Required	Suggested Participants	Target Completion Date	Progress Tracking
☐	**1. Assess Existing Policy.** A full assessment of all city policy affecting trees is required, being sure to include Chapter 509: Trees, Chapter 163: Tree Commission, Chapter 352: Landscaping, and Development Regulations.	Outside Consultant costs are estimated at $20-50k and/or In-House Review using National Best Practices	Consultant City: Public Works / Urban Forestry, Legal, Sustainability, Planning	Q2 2016	
☐	**2. Explore Key Components of Tree Policies. Effective tree policy includes the following:** *Goals* - Climate change resiliency, canopy no-net-loss, etc. *Responsibility*—Describe who has direct authority and power to enforce policies. *Basic Performance Standards & Technical Specifications*— include tree selection, planting and other important tree specifications in site development plan requirements, referencing ANSI A300 series. *Flexibility*— providing options (often fees) for non-compliance. *Enforcement*—stronger penalties for damage to public trees through fees, fines, governing bodies *Will of Public*—Represents desires of community, most often incorporated via the tree commission. Address the inclusion of Tree Commissioner in the ordinance, revisiting the role and makeup of the formal Tree Commission, possibility considering neighborhood level tree commissions.				
☐	**3. Incorporate Canopy Goal (see Action #7) into Policy.** In order for canopy goals to survive administration changes, they should be incorporated in multiple places. The canopy goal should be adopted by city council, included in the Tree Ordinance, and included in the next city Comprehensive Plan.	Time	City: Sustainability, Planning, Public Works, City Council	2016	
☐	**4. Set the Stage Politically.** Buy-in from city leadership (staff and elected officials) will be needed in advance to institute policy change. Use all available tools and Plan progress to make the case	Time	City: Sustainability, Planning, Public Works, City Council	Q2 2016	

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Action #9:
Plant with a Purpose: Trees for Neighborhood Equity

Players across the board can become more engaged when planting efforts are planned around specific objectives that meet their individual focuses. These can include mitigation of a certain urban challenges through tree benefits or closing the gap of tree canopy inequality between neighborhoods. For each tree planting project, desired outcomes should be defined so that all efforts and expenses will yield desired long-term benefits. As planting projects increase in frequency with clarified focuses, the public will begin to make the connection between trees and the benefits and solutions they provide.

Prerequisites: Canopy Goal

	Steps	Resources Required	Suggested Participants	Target Completion Date	Progress Tracking
☐	**1. Establish tools and data sources (accessible by active players) required for planting campaigns.** Use developed species lists (including species-specific benefits impact information) along with neighborhood analysis from the Plant with a Purpose appendix to guide plantings. Provide access to canopy and benefits data that can be parsed out by project-based boundaries. Use tree inventory data to identify planting sites, assess species diversity, stocking levels, and strategically fil planting sites	Time	Holden, City: Urban Forestry	Q1 2016	
☐	**2. Create planting campaign goals at neighborhood level.** Purposeful planting is driven by the desired outcomes a proposed planting project. Clarify desired outcome / reason for planting. Use GIS data (canopy and boundaries) and tree species selection to plan out installation sites based on desired outcomes.	Time & Public Meetings	WLRC, Holden, CDCs, City Neighborhood Planners	Ongoing, done per project.	
☐	**3. Implement planting campaigns.** Expand tree stewardship program to be the primary means for tree planting and young tree care implementation. The city facilitates and supports this activity through agreements, permits and other administrative support.	Time	WLRC, Holden, City	Ongoing, done per project.	
☐	**4. Track and promote all new tree plantings.** Use a GIS-based system to facilitate tracking, research and program evaluation of goal achievement. See Action #3.	GIS-based Inventory technology/software	WLRC, Holden, City	Ongoing, done per project.	
☐	**5. Determine Cost.** Based on strategies, obtain estimates and potential timelines for a planting campaign.	Time	WRLC, City: Urban Forestry, Planning	Q1 2016	
☐	**6. Submit Needs.** Include funding requirement in master funding needs document.	Time	WRLC, City: Urban Forestry, Planning	Q1 2016	