YourLA2040: L.A.'s Urban Tree Canopy needs a Better Plan. Los Angeles community members have *untapped power* to guide the General Plan Update

By Jill Stewart and Ileana Wachtel, Fall 2017



"To exist as a nation, prosper as a state, we must have trees." — Theodore Roosevelt

Why Now is the Time to Act

In 2016, Mayor Eric Garcetti announced plans to launch the first full update since 1970 of the city's key strategic planning document, the General Plan.

Los Angeles had been hobbled by a General Plan dating from the Vietnam War era, seesawing from one administration to another, fueling a non-strategic approach to changing times that spawned neglect of L.A.'s sewer, water and road infrastructure and a downwardly-spiraling ranking in 2017 as 74th in the nation in providing parks to its 3.96 million residents. (We were ranked at 65th last year.)

With a full update to the General Plan underway, Angelenos have their first chance in nearly two generations to engage in a transparent, robust, public give-and-take — to set the vision and new goals for L.A. As Mayor Garcetti noted in his 2017 State of the City Address: "These Updates won't be written by anonymous bureaucrats in backrooms, they will be written by and with the residents of Los Angeles."

Whose vision drives this first effort in 47 years to choose our overarching dreams, policies, and best practices for Los Angeles? Is it the L.A. City Council's vision? Is it the Mayor's vision? Is it the City Planners' vision?

Interestingly, the answer is none of the above. The State of California is clear in its 2003 and 2017 Guidelines, that the public drives and informs a city's General Plan Update, right from the very start:

"A local General Plan should 1) <u>start with a shared community vision</u> that will 2) <u>help set priorities throughout the planning process</u> and 3) <u>inform decision makers</u> about community values." (California General Plan Guidelines, Chapter 2: A Vision for Long-Range Planning, pg. 11-12)

Of key concern to L.A. residents are issues unknown to the City Fathers of 1970. Climate change, the urban heat-island effect, the importance of urban tree canopies to human and environmental health, the societal and environmental importance of open space, the locations of earthquake faults, the pressing need to capture storm runoff, the impending failure to add neighborhood parks to a growing city.

We now know, 47 years after the last comprehensive Los Angeles General Plan was written, that cities can fight climate change by nurturing an urban tree canopy — a forest of trees that mitigate the urban heat-island effect, consume greenhouse gas emissions, reduce use of carbon-based fuels to cool homes, businesses and cars, absorb storm runoff through their root systems, create habitat for important bird, animal and insect life, and even improve human mental and physical health.

Environmentally progressive cities such as Austin, Cleveland, Pasadena, Portland, Sacramento and Seattle have surged ahead to create extensive urban tree canopies. Pasadena, for example, protects 13 tree species; Los Angeles protects only four. Cleveland has a comprehensive Urban Forest Management Plan, Los Angeles has none.

In fact, in the nationwide push by cities to re-green their tree canopies, Los Angeles has been on pause. While L.A. has an admirable "Sustainable City pLAn," its urban forest goals remain largely unformed and unfulfilled. Budgets for trees and parks have waxed and waned, major development is approved without requiring green belts, open space is rezoned for building, and the siting of parks in congested communities has suffered repeated failures. The Los Angeles Bureau of Engineering has yet to adopt the most fundamental practice in cities, of inventorying L.A. street trees — the first step in saving and expanding them through an Urban Forest Management Plan. Independently of the city, Caltech, in partnership with AEye Labs, is developing a GIS system to detect the species, tree count and location of every L.A. street tree using Google Maps and Google Street Views.

Los Angeles has an Open Space Element in its aging General Plan, an Element that will require robust public voices to shape it during this modern-day Update. But the dire health of L.A.'s tree canopy requires that it be granted its own Element status in the General Plan. To this end, we urge Los Angeles City Planner Vince Bertoni and Mayor Eric Garcetti to include an Urban Forest Element in the Los Angeles General Plan.

This topic must not be relegated to a mere chapter, as is currently being considered at City Hall, but given a full nod as a formal Element of the Plan.

L.A. is well behind dozens of cities, such as Washington D.C., Portland, Glendale, Austin and Sacramento, in rebuilding its urban forest. Researcher E. Gregory McPherson and others found in their 2008 Los Angeles 1-Million Tree Canopy Assessment, that just 21 percent of L.A. is protected by tree canopy. Nine years later, MIT's Treepedia platform, working together with the World Economic Forum's Global Agenda Council on the Future of Cities, studied L.A.'s street trees in 2017, and found a 15.3 percent canopy. Treepedia is now backward-mapping L.A.'s street trees as they existed in 2008, using Google Street View — and expects the data to chronicle a steep tree canopy loss since then.

L.A.'s government is planting only about 15,000 trees annually, about the same as far smaller Charlotte, Sacramento, or Washington D.C.

It isn't for lack of money. Los Angeles had a record \$9.2 billion budget this year. Yet there is little money for the urban forest. About \$5 million to \$8 million per year flows in from city and state sources and is tapped by tree canopy efforts such as the LA Beautification Team, Los Angeles Conservation Corps and North East Trees. Some 10,000 of the 15,000 new trees are planted by residents, and the city has no reliable method for managing their survival. Recreation and Parks alone lost an estimated 14,000 trees by withholding water in L.A. parks during the drought, after Gov. Brown issued a short-sighted "no watering" policy that he rescinded too late. And neither the Urban Forestry Division nor the Department of Building and Safety has the budget to enforce the environmental law requiring developers to replace trees they destroy.

The environmental, health and equity implications of not investing in re-greening our urban tree canopy are serious for L.A., situated in an arid Mediterranean-like climate — not a desert — where trees can flourish and provide immeasurable human and environmental payoffs to rich and poor alike.

Sacramento, by example, has a city-owned water and power utility, SMUD, so committed to expanding Sacramento's urban forest that it issued thermal readers so the public could compare the summertime surface heat of a sidewalk in full sun (115 degrees) to the same sidewalk five feet away, in the full shade of a tree (89 degrees).

L.A.'s vanishing urban tree canopy cries out for a commitment to systemic change. The ebb and flow of election cycles should not affect the future of L.A.'s tree canopy. Its estimated 700,000 street trees and 2 million privately owned trees are infrastructure on par with the water system and the roads. Fighting greenhouse gas emissions, the heat-island effect, polluted storm runoff, the loss of shade, and the destruction of urban habitat, are no longer a debate. They are a must.

Building an Urban Forest Element directly into the General Plan, alongside such increasingly important Elements as Public Safety, Open Space, and Infrastructure, will focus long-term thinking, public debate and citywide talents on the problem unlike any time in the past.

How is the City Addressing L.A.'s Tree Canopy Crisis?

This year, the Department of Planning and the Mayor's Office have held many closed-door "Work Group" and "Task Force" meetings to hammer out the key concepts and Elements for the comprehensive General Plan Update. A small number of members of the public has been invited to weigh in at these private meetings.

A printed outline resulting from these General Plan envisioning sessions, titled "Proposed Elements, Chapters and Topics," was leaked in August by city employees who are concerned that non-transparent meetings *are a poor beginning* to the shaping of major decisions that affect the long-term health of Los Angeles and its residents.

These meetings, save one, ignored State Guidelines that place communities and the public at the forefront of the earliest stages of the General Plan's envisioning and shaping process.

The leaked "Proposed Elements, Chapters and Topics" was dated July 2017 and stamped "Not for public review." In it, the Urban Forest concept is relegated to a General Plan chapter, not an Element. The issue of Open Space is granted Element-level concern in the outline — but even there, the city proposes to include as "Open Space" many forms of developed city land such as city stairways, sidewalks, streets and other paved-over areas — a mission-creep definition of Open Space that is prohibited by California statute.

Residents who support transparent government are worried about the closed proceedings that led to these decisions, and that ignored the State Guidelines that set in place a full public role from the start.

Thus far, about 30 Neighborhood Councils from the Westside, South L.A., Valley, Eastside and central city have sent letters urging Mayor Garcetti, Chief Planner Bertoni and City Council members Bonin, Cedillo, Krekorian, Ryu, Koretz and O'Farrell to hold immediate, inclusive, give-and-take public discussions with residents. The L.A. Tenants Union and the Hillside Federation also sent letters urging full, immediate public participation.

In response, the Los Angeles Department of Planning in June opened a single meeting to the public — the final "Open Space Work Group" at City Hall. A standing-room-only crowd of Angelenos concerned about open space attended. Then, the door shut again. Since early June, only select members of the public have been invited to envision and hammer out the General Plan Element names, Element chapters, and the overall General Plan outline. Now, in late 2017, City Planning will begin presenting its internal plan to community groups, continuing its top-down process that defies the California State Guidelines.

In a city that since 1970 has let most Elements of its General Plan fall into decay, an early and very public exchange that puts the vision of the community and residents first is required.

A General Plan must be based on serious public engagement, not passive online surveys or City Hall presentations — such as the four "Community Conversations" set for October at which the City Planning Department plans to unveil its renamed and reenvisioned Elements and chapters — all of it arrived at behind closed doors, and without notice to the public.

Under California law, cities must regularly update their General Plan. They can add new Elements that align with residents' needs. San Diego, for example, added a Historic Preservation Element to its General Plan Update — an idea that would benefit Los

Angeles as well. Remember, the State Guidelines make clear that planners and leaders must be guided by community desires from the very beginning: "A General Plan should start with a community's vision, but community engagement should continue throughout the process, from visioning to adoption and implementation, depending on the scope and extent of the project."

Why shouldn't L.A. create an Urban Forestry Element? The answer, as L.A. attempts to address urban forest sustainability, seems to be, "We have a handle on this."

How Did Los Angeles Fall Behind?

Eleven years ago, with many cities awakening to the importance of the urban tree canopy, Mayor Antonio Villaraigosa sought to make L.A. a sustainability leader via his Million Trees Initiative, saying, "It's about taking responsibility." In the end, his administration planted an estimated 407,000 trees. But the program earned broad criticism when City Hall siphoned Million Trees money from highly effective planting programs operated by groups such as North East Trees, and the Million Trees Initiative earned further criticism when many trees died due to poor City Hall tree management that failed to assure their survival.

Los Angeles took another hit with the fall of the Urban Forestry Division in City Hall's political hierarchy, which led to Urban Forestry's cultural shift from tree expansion to tree-trimming. According to one City of Los Angeles tree advisor, once Urban Forestry was placed in a position beneath the Bureau of Street Services, it lost its "high profile to qualify for a more substantial budget." Los Angeles has struggled with old-school practices that world-class arborists have advised L.A. to halt, including destructive guesswork in choosing, siting and severely over-pruning L.A.'s public trees.

These practices by the city, such as planting magnolias that were doomed to die, killed off large numbers of L.A. street and parkway trees. Nevertheless, scientists <u>E. Gregory McPherson</u> and Alissa Kendall reported in *The International Journal of Life Cycle Assessment* their 2014 study showing that 91,000 trees planted during the flawed Million Trees effort will still provide major environmental cleansing for the city and its residents.

Beyond budget cuts and poor strategic planning, the pre-Recession housing boom helped wipe out even more of the Los Angeles tree canopy. A sobering new study of single-family neighborhoods by the USC Spatial Sciences Institute shows that trees and other greenery were decimated in L.A. between 2000 and 2009, well before the five-year drought that began in 2012.

Trees and greenery were reduced between 14 and 55 percent in Los Angeles County single-family neighborhoods between 2000 and 2009, *with the city of Los Angeles faring particularly poorly*, according to Spatial Sciences Institute faculty members <u>Su Jin Lee</u>, <u>Travis Longcore</u>, and <u>John P. Wilson</u>, with <u>Catherine Rich</u> of The Urban Wildlands Group.

Even so, Los Angeles City Hall allowed the tree canopy to suffer worse neglect in poor and working-class areas than in wealthier ones. As KCET showed, in an interactive map based on U.S. Forest Service data, the general rule is that the poorer the Los Angeles City Council District, the greater its lack of shade trees. Recently, KCET's drone survey

<u>showed Hancock Park with a 37 percent urban forest cover — while South L.A. has only 7 percent.</u>

When the Great Recession hit L.A. hard in 2009, budget cuts dealt another blow to the Million Trees effort, and about 100 employees were lost from the Bureau of Street Services, which in turn reduced L.A.'s tree management efforts.

Elected in 2013, Mayor Garcetti ended the Million Trees program, replacing it with the non-profit "City Plants" — an effort to achieve less tree die-off, while expanding the urban forest. But L.A.'s tree canopy has fared little better, and it is not clear if the current approach substantially moves L.A. beyond the Million Trees experience. As City Plant's Elizabeth Skrzat explained to the Community Forest Advisory Committee (CFAC) meeting in October 2017, City Plants, with its limited budget, does not generally track the trees it gives out beyond a two-year check, thus it can't verify if the trees are watered or how many live or die (the estimate cited is that up to 20% of these trees die). City Plants' key method to find adopters is to go to events of several hundred people, to assure that they can find enough people to agree to take a tree.

As L.A.'s building boom roared back in 2013, it set off a new round of urban forest destruction created by development: New buildings allowed nearly to the sidewalk, rezoning of open space, scorched-earth demolitions, all took a toll on the urban forest of privately owned trees, estimated at more than 2 million.

By 2014, with the drought wearing on, Los Angeles leaders began encouraging residents to tear out their lawns — and stop watering trees. An anti-drought rebate embraced by Garcetti and the City Council burned through millions of dollars in anti-drought funds, leaving some parts of L.A. with gravel yards that one drought-gardening expert called "inner-city Phoenix." (LA Weekly: Turf Terminators Has Gotten Rich Turning Yards into Gravel.)

Adding to this picture, thousands of trees died, exacerbated by non-native insects and disease that preyed on weakened or water-hungry trees. The Los Angeles Bureau of Street Services estimates there are now 7,000 dead or dying trees in Los Angeles city parkways alone.

Then, in 2015, the city settled a record-breaking \$1.4 billion class-action lawsuit, filed on behalf of the city's disabled, for violating the Americans with Disabilities Act. The suit was aimed at the city's estimated 4,000 miles of broken, uneven sidewalks that presented obstacles for wheelchairs and other disabled access, often caused by the roots of the 700,000 city street trees and parkway trees.

In a November 2015 editorial, the *Los Angeles Times* warned, "The easiest and cheapest solution would be to chop them down, fix the sidewalks and plant some small, decorative species in the parkway.... it would be in line with the settlement, which puts the top priority on sidewalk safety, not preservation of the urban canopy. But it would be shortsighted." (http://www.latimes.com/opinion/editorials/la-ed-1116-sidewalks-20151116-story.html)

But that is where things are heading in Los Angeles in the fall/winter of 2017.

Rather than adopting best practices from Seattle and Portland — cities that know how to save both their sidewalks and the trees — Los Angeles is pursuing a plan in which the Urban Forestry Division and contractors will chop down many thousands of L.A.'s largest and oldest shade trees to even out the sidewalks.

To comply, the city launched "Safe Sidewalks LA" to begin sidewalk repair. In doing so, the city failed to assess the massive tree destruction the program would allow — prompting TreePeople and its partners to demand an Environmental Impact Report. (Public comment for the initial "EIR Scoping Period" ended Sept. 15, 2017).

TreePeople is urging residents to write to their City Council members, advocating for a far more generous tree replacement ratio than 2-to-1; adoption of best practices in choosing and replanting the destroyed trees; on-site individual tree evaluation like Seattle's, conducted by a certified arborist; and sustainable sidewalk designs such as "bioswales" that capture runoff that is then taken up and cleansed by trees.

Tree experts who testified to the city's Community Forest Advisory Committee this year said an initial 4-to-1 tree replacement proposal for the sidewalk program, to make up for the profound shade and environmental benefits lost, was reduced to 2-to-1 — insufficient to address long-term environmental damage the destruction will incur.

According to TreePeople, 216 trees had been cut down as of early September 2017 under the "Safe Sidewalks LA" program that resulted from the sidewalk settlement. A few weeks later, in mid-October, the number had reached about 350 trees destroyed, according to the L.A. Urban Forestry Division. Thousands of trees will be destroyed over several years — any street tree that pushes up a public sidewalk by more than 1/4-inch faces destruction. Communities from working-class Northeast L.A. to upscale Windsor Square have begun calling City Hall as prized heritage shade trees vanish overnight.

To avoid this potentially devastating destruction, **Los Angeles must look to Seattle and Portland**, which since 2015 have each followed a far more sustainable path — <u>in Seattle the "Trees and Sidewalks Operations Plan" requires that an arborist and an engineer perform a joint "field review"</u> of tree-versus-sidewalk conflicts, and then choose the best way to save every possible tree, even as they fix the sidewalks. (http://www.deeproot.com/blog/blog-entries/trees-and-sidewalks-a-strategic-approach-to-conflicts)

Meanwhile, a thousand paper cuts are harming L.A.'s urban forest: Los Angeles City Attorney Mike Feuer rarely prosecutes illegal destruction of protected trees by developers and homeowners; the city generally fails to monitor the progress of its failing "tree replacement" law, which is defied by many builders; a requirement in many Community Plans for a one-acre city park within 1/2 mile of every 1,000 residents is failing; and the City of Los Angeles does not abide by AB 283, the milestone California law pursued by the Hillside Federation and others that mandates the protection of significant native trees threatened by zone changes or construction on setbacks.

Just as with Villaraigosa's political appointees to the Board of Public Works, no current appointees are leaders in environmental sustainability. Under them, the city has failed to approve an Urban Forest Management Plan, leaving Los Angeles far out of step with the many leadership cities. According to Los Angeles tree experts, the California

Department of Forestry has granted Los Angeles funds "to plan for a plan" — with actual implementation of an Urban Forest Management Plan well down the road.

Who Should Los Angeles Emulate, To Save Its Urban Forest?

If Los Angeles chooses to become a leader, other cities with respected urban forestry experts can show L.A. the way, including Melbourne AU, Portland, Austin, and even SMUD of Sacramento, whose officials say, "The best time to plant a shade tree was 20 years ago, the second-best time is now."

Universities across the U.S. stand ready with valuable research to aid lagging cities like Los Angeles. <u>Treepedia</u>, a research program at MIT, uses high-level digital science and Google Street View Panoramas to help city governments understand tree decimation and form policies to revive their urban forests.

MIT's studies of nine cities found that only New York has a worse street-tree canopy than Los Angeles. Treepedia assigns a "Green View Index" of 13.5 percent tree cover to New York, and 15.2 percent to Los Angeles.

By contrast, MIT's Green View Index shows that Sacramento, a city of 460,000 that was hit hard by drought, and which suffers more severe summer temperatures than Los Angeles, has built an urban tree canopy with 64 percent more coverage than L.A. (Yet as Tree People's Edith de Guzman noted on KPCC in June of 2017, L.A.'s San Fernando Valley, which is suffering significant tree loss, experiences 50 extreme heat days per year.)

Sacramento's canopy covers 23.6 percent of the city. The non-profit American Forests says that Sacramento's utility, SMUD, plants 13,000 trees per year — almost as many trees as the entire City of Los Angeles manages to plant annually, about 15,000 or so.

The nine cities that Treepedia has ranked so far look like this: 1. Vancouver: 25.9% tree canopy coverage; 2. Cambridge: 25.3% coverage; 3. Sacramento: 23.6 coverage%, 4. Seattle: 20% coverage; 5. Toronto: 19.5% coverage; 6. Miami: 19.4% coverage; 7. Boston: 18.2% coverage; 8. Los Angeles: 15.2%; 9. New York: 13.5% coverage.

Meanwhile, the U.S. Forest Service is pursuing innovations to help cities digitally document and re-green their urban forests through efforts such as the i-Tree tools to assess and manage urban forests. In 2011, the Forest Service and the New York Restoration Project launched the Vibrant Cities & Urban Forests Task Force, convening an intensive three-day meeting at which 25 experts issued *Vibrant Cities & Urban Forests – A National Call to Action*.

In its call to action, these experts agreed urban forests are "dynamic green infrastructure that provides cities and municipalities with environmental, economic, and social benefits."

The Los Angeles Urban Forestry Division claims on its website that the "urban forest in the City of Los Angeles has matured into one of the largest, most diverse in the world."

But as we compare this claim to other cities, we know this not to be true.

Even immediate next-door neighbors Santa Monica, Beverly Hills, Glendale and Pasadena have more diverse and extensive canopies. Los Angeles lags behind dozens of cities in the U.S. and globally, from Melbourne, which shares L.A.'s aridity and drought challenges, to Toronto, which shares L.A.'s dense urban core and outer neighborhoods undergoing intense development. Melbourne's urban forestry plan and tree imaging program is so advanced, it appears to be from a different era than L.A.'s effort.

L.A.'s failure to plan ahead, especially in the face of climate change, is Exhibit A in explaining why the State of California requires all cities to *regularly* update their General Plans — overarching policies, visions and rules that shape a city's future. Yet among <u>15 key cities in the U.S. West, only Los Angeles has failed to comprehensively update its General Plan during this millennium.</u>

Without a change in course by Los Angeles planners and leaders, to acknowledge and follow these leading cities nationally and globally, Los Angeles is set to become a hotter, less resilient, less sustainable city.

The underlying cause of L.A.'s damaged sidewalks, the \$1.4 billion ADA settlement, the loss of thousands of trees and extensive shade, the years-long mismanagement of tree-pruning and species selection, are all the same: a lack of rigorously applied best practices, infrastructure policies or vision, which would be clearly spelled out in a modern General Plan with strong guidance from the community.

The Encouraging Reports from Urban Forest Leadership Cities

In cities such as Cleveland and Austin, which <u>Green Biz</u> highlighted in a recent article, the dramatic impact trees have on environmental, financial and social health is well-documented.

In 2015, the Cleveland Tree Plan prepared by the Davey Resource Group (a private leader in the urban canopy movement) for the Cleveland Forest Coalition, suggested that Cleveland's canopy provided Clevelanders with more than \$28 million in "ecosystem services" per year.

The U.S. Forest Service's i-Tree modeling program, and EPA's Environmental Benefits Mapping and Analysis Program (BenMAP) show that Cleveland's trees remove 830,000 lbs. of air pollution every year, cut energy costs to residents and business owners by \$3.5 million every year, and over the lifetime of the city's canopy will remove 1.3 million tons of carbon from the atmosphere.

In a strategic response to predicted canopy loss in Cleveland, the city created The_Cleveland to rebuild Cleveland's urban forest.

(http://www.city.cleveland.oh.us/sites/default/files/forms_publications/ClevelandTreePlan.pdf)

<u>Austin's stunning urban forest of 33.8 million publicly and privately owned trees is estimated (PDF)</u> to reduce annual residential energy costs by \$18.9 million per year, store some 1.9 million tons of carbon that would have fed global warming, and reduce storm runoff by 65 million cubic feet annually, according to a report released in 2014

The non-profit American Forest launched <u>Community ReLeaf</u> in 2013 as a three-stage program, useable by any city, that combines assessments, strategic restoration and increased outreach and education. American Forests is working to help dramatically improve the urban forest canopy in avidly interested cities, including Austin, Asbury Park, Atlanta, Chicago, Detroit, Hartford, Miami, Nashville, Oakland, Pasadena, and Washington, DC, and hopes to add 20 more major cities by 2020.

American Forests, in partnership with the U.S. Forest Service, has also named the **10 U.S. cities making the most progress** in rescuing and expanding their tree canopies. They are: Austin, Charlotte, Denver, Milwaukee, Minneapolis, New York, Portland, Sacramento, Seattle and Washington, D.C. All have implemented urban forest management plans — in sharp contrast to Los Angeles.

10 U.S. cities making the most progress in rebuilding their Urban Forests

Austin: Has a detailed Urban Forest Management Plan and an estimated 33.8 million public and privately owned trees that cover 30.8 percent of the city. Each year the urban forest reduces residential energy costs by an estimated \$18.9 million per year.

Charlotte: Has a strong, comprehensive Urban Forest Management Plan, tree ordinances designed to protect both public and private trees and a public-private initiative, TreesCharlotte, to plant trees on private property.

Denver: Requires developers to diversify species during plantings, has developed citywide planting and canopy goals, and keeps records of the age distribution of the tree canopy.

Milwaukee: Its urban forest provides \$15 million in stormwater savings and removes 496 tons of pollution annually. The city keeps a comprehensive inventory of its trees and has implemented a species diversification plan.

Minneapolis: The city has a park every six blocks, a tree canopy with 31 percent coverage — just 6.5 percentage points shy of its potential of 37.5 percent — and was one of the first cities to use the U.S. Forest Service's iTree assessment tool to determine the benefits of its urban forest.

New York City: In 2007, Mayor Michael Bloomberg and Bette Midler launched the New York Restoration Project, a 10-year effort to plant a million trees. The millionth tree was planted in October 2015, two years ahead of schedule.

Portland: The <u>tree canopy covers about 26 percent of this city of 1.4 million trees</u>, including 218,610 street trees. Despite Portland's dramatic population growth, under strong tree management plans species diversification, Portland's canopy has increased slightly over 30 years. Anyone can nominate a "Heritage Tree" — mature trees protected by city code.

Sacramento: Each year, the Sacramento Municipal Utility District (SMUD) and a nonprofit work together to plant 13,000 trees *on private property* to provide shade and reduce energy demand. In 2016 the Sacramento City Council passed an <u>ordinance</u> to protect 25,000 trees and created a long-term plan for preserving 100,000 trees, including a funding source and regulations for planting new trees when older trees are removed.

Seattle: Completed a U.S. Forest Service i-Tree analysis and Interactive Habitat Map, showing where trees can be planted and which species. In the 2016 update of Seattle's Comprehensive Plan (General Plan) the city's 30 percent tree canopy goal was retained, but city leaders, amidst a massive building boom, removed the longstanding "no net loss of canopy" goal. Neighborhood groups fear Seattle may slip backward. According to Trees of Seattle, the city has a 28 percent canopy, based on a LiDAR (light detection and ranging) study. Seattle has exceeded its urban forest targets in parks, natural areas, multi-family neighborhoods, and institutional areas.

Washington, D.C.: Washington is attempting to reverse a historic decline of its forest canopy, planting more than 12,000 trees last year. According to Casey Tree, a Washington, D.C. based nonprofit committed to restoring, enhancing and protecting the tree canopy, the city has increased its canopy from 36 to 38 percent.

<u>Cities with laudable Urban Forest Management programs, not included in the Top 10 (Note: Los Angeles makes neither list)</u>

Pittsburgh: The Forestry Division has been implementing a <u>master plan</u> for trees since late 2012. The 2011 Master Plan documented the structural value of the urban forest at more than \$1 billion. According to <u>My Treekeeper</u>, the city has 40,033 public trees.

(http://apps.pittsburghpa.gov/mayorpeduto/Executive Order Shade Tree.pdf)

Atlanta: The tree canopy covers 47.9 percent of the city according to an assessment released in 2014 by the Atlanta Tree Conservation Commission and Georgia Tech. Atlanta's Tree Conservation Commission supports The Georgia Forestry Commission's urban forestry model which attempts to place trees at the same level as other *critical infrastructure elements* like roads and utility lines.

San Diego: In 2017, the city council adopted an Urban Forestry Program Five-Year Plan to increase its canopy from 13 percent to 35 percent over two decades. The city is creating a tree inventory to determine strengths and weaknesses, where to plant which species, and how to reshape city policies to preserve roughly 1 million existing public and private trees.

Pasadena: In 2015, the city launched its Urban Forestry Plan, one of the most intensive in Southern California. Pasadena protects 13 native trees under its Tree Protection

Ordinance: Arroyo Willow, Black Cottonwood, California Alder, California Bay, California Buckeye, California Sycamore, California Walnut, Canyon Oak, Coast Live Oak, Cottonwood, Engelmann Oak, Scrub Oak and Valley Oak. In addition, the City Council created protections for 108 species including certain varieties of Maple, Pine, Palm, Cedar, Floss Silk, Fig, Gum, Walnut, Elm, Pine and Coral trees.

American Forests assessed Pasadena's tree canopy in 2014 and found that Pasadena's street trees alone had sequestered 65,960 tons of the greenhouse gas CO2. The replacement value of Pasadena's street trees is more than \$308 million.

Statewide: According to a report in 2016 from the U.S. Forest Service's Pacific Southwest Research Station, the canopies lining California streets, avenues and boulevards are worth about \$1 billion in energy savings, carbon storage, removing air pollutants, increased property value and other benefits to cities and their residents.

The majority of California communities surveyed were over-reliant on a single species of tree, making their ecosystems vulnerable. The report found 16 million vacant street tree sites in California where cities could add new trees. Assuming that 50% of these sites are readily plantable, California could nearly double its street tree population.

What Los Angeles Must Do in 2017

Fixing our sidewalks must be done, but not at the expense of our tree canopy. The city's lack of sidewalk maintenance and best practices in tree husbandry are to blame. This failure, combined with weak Los Angeles policies governing mansionization, City Hall's repeated approvals of developments without green belts, and failure to police the required replacement of destroyed trees, are proving hazardous to the tree canopy, as illustrated in the USC study in this report.

Our city has lost time in developing a robust tree canopy, leaving many poorer neighborhoods nearly denuded of trees — and sweltering.

The research is clear, that expanding the Los Angeles urban tree canopy is essential to adapting to climate change and diminishing the urban heat-island effect, thereby reducing energy consumption. Extensive research confirms that trees contribute dramatically to mental and physical health, and to a city's economic and social vitality.

We urge Mayor Garcetti, the City Council and Planning Director Vince Bertoni to adopt these reforms:

- Include an Urban Forest Element in our General Plan Update not as a lesser "chapter" placed under the Open Space Element, Land-Use Element or catch-all Environmental Stewardship Element.
- Create an Urban Forest Management Plan in 2017 that sets quantified urban tree canopy targets, identifies resources to meet those targets, and adopts best urban forestry practices being followed by Glendale, Seattle, Pasadena, Sacramento and other leadership cities.
- Give our urban forest canopy the stature of L.A.'s traditional infrastructure investments, regardless of ever-changing administrations.

- Adopt a heritage tree protection ordinance that provides protections to large trees regardless of species, similar to ordinances in South Pasadena.
- Ensure, via clear policy and specific data in the new Urban Forest Element, that the tree canopy is equitably distributed across city neighborhoods.

Coalition to Preserve LA

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