

# Embracing Big Dreams for Tree Canopy in Three L.A. Communities

USC Urban Trees Initiative Community Conversations



USC Dornsife

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*Spatial Sciences Institute*

USC School  
of Architecture



USC University Relations

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## Summary

Working with Public Matters, the USC Urban Trees Initiative (USC Trees) and project partners at the City of Los Angeles held three “Community Conversations” in November and December, 2022. Having been limited to only online engagements during the pandemic, these Community Conversations were the first in-person opportunity for USC Trees to share its work and test how priorities emerging from the initiative's research align with those of residents and community members. They were designed to be open, interactive and informative exchanges between the local community, community based organizations (CBOs), City and County partners, and the USC Trees team of students, staff and faculty members.



# Conversations were held in three priority communities in L.A.

**November 9**

**First African Methodist Church  
University Park**



*“First A.M.E. Church”* by [Laurie Avocado](#) is licensed under [CC BY 2.0](#)

**November 12**

**City Terrace Park  
City Terrace**



Photo by [Jillian Gorman](#)

**December 1**

**Roosevelt High School  
Boyle Heights**



Photo by [Theodore Roosevelt High School](#)

Each setting was unique, drawing audiences that primarily reflected the partners and hosts. An estimated 95 people attended the Community Conversations.

This report summarizes the approach and methodology used during the Conversations, key outcomes and suggestions for next steps.

# Striving for Authentic Dialogue and Exchange

*"Native people have been caring for this land and taking care of trees for generations. Have we gone backwards in our culture to be at this point of needing workshops stating the need to care for trees? We must ask why we are in this position in the first place and who is responsible for our current state."*

— City Terrace Resident

affiliated with CBOs, often in leadership roles. The hope was to connect with residents who live in some of the focus neighborhoods with the lowest quality urban forest and highest need, people who might not have an official title, yet who are rich in community knowledge and lived experience.

Prior to the sessions the USC Trees team prepared extensive equity data analyses and local site studies related to tree canopies, heat islands, and air quality in the three neighborhoods. Subsequently, the team mapped priority areas for tree plantings based on greatest need and potential benefits. **USC Trees sought input to test if the conclusions they reached based on data, observation and field research, matched the lived experiences and priorities of people from the three neighborhoods.** The desires and priorities of community members were integrated into the team's final recommendations about where to plant trees in priority locations, as explained in the "takeaway" sections of this report. These findings and recommendations were ultimately shared with policymakers, urban forestry organizations, and community leaders who are actively deciding where, how many, and what kinds of trees to plant.

To achieve these goals, USC Trees enlisted the services of [Public Matters](#) to help design and conduct the Community Conversations. Public Matters is a creative studio for civic engagement known for its playful, interdisciplinary methods for working with communities. Public Matters aims to address and bridge the trust gap that often exists between institutions and Los Angeles' communities of color. It has worked in all three communities, most notably through University Park Slow Jams, a project on traffic safety in the areas around USC, and projects about active transportation and pedestrianism with LA County Public Works and the Department of Public Health in East LA.



# Methodology

After collective design conversations between USC Trees, the City of Los Angeles partners, and Public Matters, it was determined that the Community Conversations would consist of 5 interactive stations:

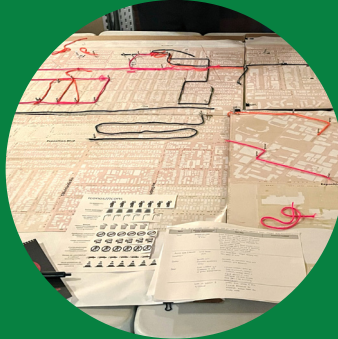
## Station 1



### Wishing Tree Photo Booth

A fun introduction to how trees impact temperatures and provide significant cooling benefits in our warming climate.

## Station 2



### How We Move

A large-scale mapping activity examining where people walk in their neighborhoods, and an opportunity to talk about how heat and shade impact people's choices about their routes.

## Station 3



### Street and Tree Design

An interactive activity to learn about what types and sizes of trees people prefer, while developing an understanding of how infrastructure impacts street design.

## Station 4



### Trees and Air Quality

This station helped attendees learn about how different species of trees impact air quality and what local air quality measurements look like.

## Station 5



### Tree Resources

A station staffed by City, County or CBO representatives to connect participants with existing tree planting projects, learn about tree care practices and meet people who can assist them with any questions.

## Station 1: Wishing Tree Photo Booth



The USC Trees team shared that, despite the record heat and temperatures, residents weren't making the important correlation between trees and cooling. **The photo booth was designed to allow participants to “experience” different temperature zones and scenarios while they donned fun props.** The activity represented a hot L.A. day and what that would feel like if you were under the shade of a tree or not. In the center of the photo booth were large 6' tall balloon trees that had messages about how trees were effective means of reducing heat. If the participant stood underneath the balloon tree canopy, they were in a cool zone and could pose with a pair of giant paper mache sunglasses or an ice cream zone.

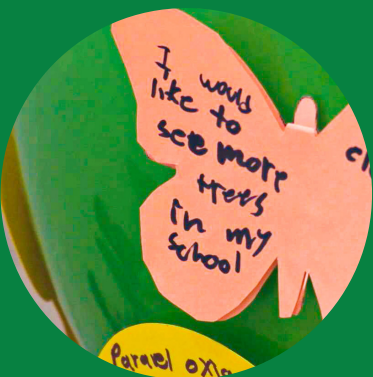


Just outside of the trees' canopy, participants stepped into a zone where the temperature spiked. The sunglasses props were suddenly on fire and the ice cream cone prop was melting. **The final zone represents the predicted rise in temperature in regions of L.A. in the year 2060, where it is anticipated that there will be up to 30 additional days of ninety degree or warmer weather.** When posing for a photo in this zone, participants held a sorry looking melted ice cream cone and sunglasses that had become a giant blob. The station playfully connects temperature and trees, allowing folks to learn about the predicted impacts of climate change and the role that trees can play as cooling islands.



**While getting their photos taken, participants were asked a couple of key questions:**

- How did you deal with the heat this summer and earlier this fall?
- Where do you go to find relief on a hot day in LA?
- What actions would you like to see in your neighborhood to cool it down?
- What will it take to make it happen?



**They were encouraged to write their answers onto leaf-shaped paper cut-outs and then hang their wishes onto the balloon trees, an homage to wishing trees, which are familiar with many different cultures. Answers shared verbally and written on the paper cut-outs were then documented by the station's staff to help record sentiments towards trees in each neighborhood.**

## Station 2: How We Move



### How do you walk around the neighborhood and what influences your mobility?

The goals of this station were to ask participants to map which routes they used to move around the neighborhood and to validate or add to USC Trees' estimation of primary routes used between homes and schools and transit stops. Participants were asked how heat, safety and accessibility influenced their routes. They were encouraged to share stories about their experiences. A large scale map was created for each neighborhood that identified key streets, tree locations and landmarks. Residents could see individual homes, the open space around them and the trees included in public inventories. The station allowed USC Trees the chance to chat with people and learn about neighborhood mobility while “ground truthing” their data driven estimations of where people are walking most frequently.



Participants used different colored yarn and string to map the following:

- What routes do you currently use to get to and from public transit?
- What routes do you currently use to get to and from school?
- Where would you walk if there were more trees and shade?



Public Matters created icons on sticker paper that allowed participants to indicate what factors influenced how they walked around the neighborhood, and where they encountered them.

As they spoke with participants, USC Trees team members were encouraged to share USC Trees' priorities for tree canopies and how the team determined them by looking at tree canopy, heat, and routes to and from schools.





# Station 3: Street & Tree Design



## The Vision We Want

The goals of station three were to learn about people's tree preferences and help them to learn what factors influence tree plantings. The team also hoped to better understand if residents were willing to change the design of their streets to increase the shade from trees.



USC Trees designed an interactive activity that consisted of a perspective view looking down the center of a typical street showing the location of existing trees, parkways, sidewalks and adjacent buildings. Participants were asked to imagine walking down the street on a very hot day and recommend where large, medium and smaller trees could be placed to provide shade. Large cut-out tree silhouettes of fruit, shade and flowering trees could be placed along the street to simulate urban canopy and demonstrate the benefits. This was a springboard to conversations about **how to create the most effective shade possible on our streets.**

### Participants were asked:

- Where would participants prefer trees be planted along their streets?
- How would they select amongst the various types of trees?
- What factors influence their choices?
- Under what circumstances and where do they prefer fruit trees, shade trees and/or flowering trees and why?



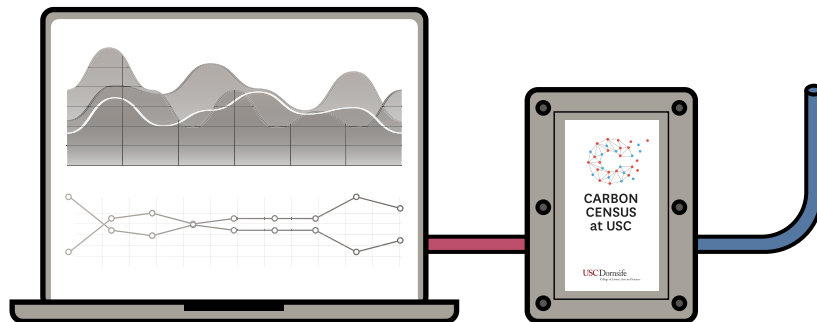
The station was also an opportunity to discuss the obstacles faced by municipalities and urban forestry non-profits when planting trees. The street image illustrated the presence of overhead wires, street lights, driveways and utility lines that are key examples of constraints in the public-right-of-way. Participants faced the practical issues of where trees cannot be planted in our current conditions. They were asked to **re-imagine the street to achieve their tree planting vision.**



## Station 4: Trees & Air Quality



The main feature of the station was information about the air quality studies USC had conducted throughout Los Angeles, including data about how different tree species filter air pollutants. A large scoresheet printout helped visually showcase which trees are “good”, “neutral”, or “bad” at removing particles like carbon monoxide and particulate matter. One visitor commented about this scorecard that it could help guide her decision about what trees to plant on her property. That is the outcome desired by pursuing this work, to inform the public and city officials. Participants could also blow into a small sensor connected to a laptop to demonstrate how much carbon dioxide is produced with our breath. This was a fun way to engage children and adults alike in the science of air quality.



## Station 5: Tree Resources



The goals of station five were to provide participants with information and materials they need to help procure trees and how to care for the trees. The station was staffed in part by representatives from the City and County or local CBOs who assist with tree plantings, leading to direct conversations with those who are in a position to help. The station put friendly, helpful people in a position to share knowledge, a far cry from what often can feel like a faceless bureaucratic maze.





## What We Heard and Learned: Key Takeaways

*"Trees are lungs. They are the antenna that connects life. They are nurturing. We should be more like trees."  
— City Terrace Resident*

# University Park Takeaways

*"I think it's important to have more support for trees on rental properties. I was not able to stop my landlord from removing fruit trees in my yard."*

— University Park Resident

their walking route based on where shade exists; another who is a runner, goes out of his way to run on shaded paths, while another talked about their desire to sit under a big shade tree after a long day's work. Most participants expressed they would take alternate routes if they were more shaded.

**At Station 3**, participants advocated for large trees to provide substantial shade rather than fruit or flowering trees. They also observed that there are substantial opportunities to plant trees on private property but that it is a challenge with rental properties. The relationship between landlords and renters was a recurring theme at this Conversation. Often, participants would place trees on private property in their designs for station 3 while commenting that the onus needs to be on landlords. They want their landlords to support planting more trees, stop overpruning and taking away existing trees cared for by tenants. Approximately 15,000 out of 18,000 residents are renters in this neighborhood.

**Lastly**, the concern for tree preservation was more prevalent in this neighborhood than others. Multiple participants expressed anxiety about new developments removing trees and asked questions about how to support existing older trees. One person mentioned a large project under construction in the West Adams area where they felt they succeeded in convincing the developer to include courtyard trees but had to give up on new street trees in parkways.

**At station 1**, when asked what they did on one of LA's many hot days, none of the attendees said that they would go under a tree for shade or to cool down. All said they would go inside. This is telling for a group that was by and large already invested in tree canopy and bears further exploration.

**At station 2**, several participants spoke about how shade impacts their habits. Some choose

*"I am very concerned about large scale development efforts removing trees in the West Adams District."*

— University Park Resident



[First AME Church Mural](#) by First AME Church

## City Terrace Takeaways

**Across stations, it was clear that residents of City Terrace are hungry for increased tree canopy and access to green spaces.** “Everywhere would be good” was a common answer to questions about where residents wished to have more trees. It also became clear that they envision a more expansive tree canopy that would require intensive street redesign. For instance, some attendees would support reducing traffic lanes and including trees in road reconfigurations. A couple of other attendees said that they’d like to see large shade trees planted in the center median strips. Multiple participants commented about the desire for medium-sized shade trees near bus stops, something that they find greatly lacking.

**At Station 3,** City Terrace residents expressed dissatisfaction with the existing palm trees on Cesar Chavez Avenue. They would like to see fruit trees, but primarily on private property. Most want medium sized trees planted along public right of ways or by bus stops. They mentioned that some of the locations where they experience the greatest heat impacts are when they are waiting to cross intersections, which is a difficult place to provide shade given visibility requirements for traffic and pedestrian safety.

**The question of maintenance came up repeatedly.** L.A. County currently has a policy of supporting watering for new trees for a 90 day period. This is entirely at odds with attendees' perspective, who almost all felt that watering and maintenance were the County’s responsibility. This is an important policy and educational consideration for the County and Public Works. In general, there is a fair amount of work that needs to be done to unpack perceptions of “their trees” versus “our trees.” Attendees felt that trees in public spaces are the County’s responsibility, for plantings, care and maintenance.

*“I take side streets (Ramona Blvd & Roger St) instead of major streets (City Terrace Dr) to go to church because there isn't enough shade. The route crosses a railroad, the freeway, and a Metro overpass. I'm concerned about air quality. I'm interested in using trees to improve air quality.” — City Terrace Resident*

*“I walk uphill for around 20 minutes on Hazard Ave., because there's no bus service. There is no shade along the way.” — City Terrace Resident*

*“The lack of shade prevents people from socializing outdoors, visiting each other, and exercising.” — City Terrace Resident*

*“We need action instead of discussing where to plant trees.” — City Terrace Resident*

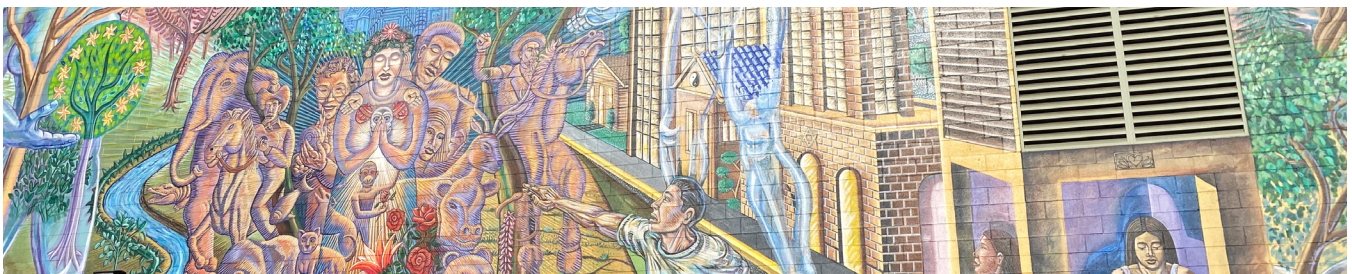


Photo by Jillian Gorman

## Boyle Heights Takeaways

*"Trees are super important in the neighborhood. More are needed. I would like to see more support for environmental education on campus."*

— Roosevelt High School Student

**Station 2** gathered critical information about the real routes to school taken by students and parents. Roosevelt has undergone a significant remodel and expansion that has altered the main entrance and pickup/drop-off locations. As a result of the mapping activity and conversations, USC Trees revised their proposed routes for shading that people use while getting to and from school. These changes help to inform Principal Gertner and L.A. Sanitation's existing plans for tree plantings in the area.

**Station 3** collected ambitious ideas about tree planting from high school students, their principal and families. They all enthusiastically desired more street trees to provide shade. Young participants were open to reducing street widths to incorporate medians with trees. Most participants created designs with a range of tree sizes and qualities. They appreciated the value of large shade trees, medium sized flowering trees and smaller fruit trees.

The presence of USC students, faculty and staff who are willing to interact with Roosevelt's students and faculty is significant. **At station 4**, one student shared she applied for undergraduate study at USC and was interested in taking a class with Professor Will Berelson she met that night. This experience generated many ideas for future partnerships between USC Trees and Roosevelt. These include working with STEM classes, bringing urban forestry to the school as there are no classes that cover the topic, recruitment opportunities for USC, and ways to build mentoring and pathway programs. **Station 5** was also staffed by North East Trees, which is actively planting in areas of Boyle Heights and was recruiting student urban foresters.

*"But street trees can also provide cover for dealers and drive-through customers. I'm thinking North of Cesar Chavez on Cincinnati near Fickett."*

— Roosevelt High School Parent

*"I'm here for the free pizza."*

— Roosevelt High School Student



Photo by [Theodore Roosevelt High School](#)

## Key Takeaway: Building Relationships

*"These workshops humanize the relationships between USC and residents. There's a mystique about research and research institutions. There are a lot of stereotypes. It's important to see how USC people get along and interact with each other and with folks outside the university. We are more casual, informal, and approachable academics than people imagine." — Will Berelson, Professor of Earth Sciences, Environmental Studies and Spatial Sciences, USC Trees Team Member*

with County agencies who are working on the different but related plans in City Terrace and East L.A. This sets a precedent for future exchanges and partnerships, while also allowing team members to have in-person interactions that have been lacking during the pandemic.

All three Conversations enabled USC Trees to build upon existing ties with members of community based organizations and community advocates. While there are many groups working on tree-related issues, there's a communication gap amongst the groups. No convening body brings the groups together to work on common goals.

Attendees at the University Park Conversation largely worked in environmental justice, tree canopy, and quality of life issues. This opportunity to gather and share a meal created valuable dialogue between CBOs and Neighborhood Council representatives. The South L.A. Tree Coalition and USC Trees, as a result of this engagement, are exploring additional ways to collaborate in South L.A.

One of the aims for Station 4 in particular was to create opportunities to speak directly with CBOs and government agency partners in a public context. The City Terrace Conversation brought USC Trees into the same space and dialogue



## Key Takeaway: Station Design

**While each station addressed key questions that USC Trees hoped to learn, they were all designed to be immersive, interactive, and hands-on activities for participants.** Stations were staffed by a combination of USC Trees faculty, staff and students, Public Matters staff, USC student volunteers, along with City and County partners. Each station had at least one Spanish language translator. All told, 29 different people helped staff the stations, providing an invaluable opportunity for direct interaction and conversations while showcasing the breadth of the Initiative. After careful reflection and feedback, those who staffed each station expressed the following:

**Station 1 made great use of the element of play to introduce technical concepts behind heat and shade.** The photobooth served as a fun, warm welcome and was widely enjoyed by children. A suggested improvement is to print out the pictures taken in real time to leave participants with a memento. It would also be ideal to have participants physically feel the difference in temperatures with a cool or heat fan. Lastly, documenting the wishing tree activity with audio recordings might help capture anecdotes and input more effectively. Complimenting the photo visuals with auditory storytelling would be a powerful next step.

**The mapping activity at Station 2 was especially successful at soliciting input as participants were able to physically demonstrate their lived experiences.** This station had the most visitors and offered the greatest actionable feedback to the USC researchers who then transformed participants' stories into geospatial data informing ongoing modelling work. Unfortunately, the yarn and push pins did not anchor onto the cardboard well and using foamcore or other methods to secure the materials should be considered in future iterations. Using tablets instead of clipboards might also help capture and store participants' comments more effectively, especially when there's an influx of participants.

**Station 3 made excellent use of tangible tools and models to help bring to life how trees can significantly improve shade on residential streets.** The relatively simple materials were accessible and easy to arrange in a perspective view. Most participants enjoyed the opportunity to take a photo with their solution, and it was powerful to see them claim ownership of their creative ideas. Going forward, it would be nice to have a gallery of the visions they produced and to make sure they can receive these photos after the event. Another suggestion is to add an accompanying digital rendition. A three-dimensional tree illustration would allow for more layout options with more complex tree formations.

**The sensor and scorecard at Station 4 were useful tools to help illustrate the science behind air quality measurements and how they may be used to help guide tree plantings.** The immediate response of a CO<sub>2</sub> sensor gave children and adults the pleasure of seeing measured quantities due to something they did (exhaled). It made air quality data fun. There were, however, fewer visitors at this station, perhaps because air quality seems less tangible than street and tree design. One potential adaptation would be to set up a mock experiment, such as a transportable greenhouse, with the ability to test different vegetations with a sensor that displayed changes in air quality in real time.

**The design and outcome of Station 5 was largely up to the participating organization.** Going forward, USC Trees should consider providing design and concept planning for these partners as well.

**In general, telling a more unified story that spans across all stations might help participants immerse themselves more fully in the experience.** How each station translates into the next is important to consider going forward. And having an abundance of pizza is imperative!





## Next Steps

*"Sometimes academia and institutions forget that they are seen as unrelatable and inaccessible. It is our job to blur these lines." — Dulce Acosta, Senior Principle Director, USC University Relations*

## Next Steps

**USC Trees considers these Community Conversations as conversation starters, not endings.** The team is committed to ongoing partnership, programming, or other means for repeated engagement in the communities of University Park, Boyle Heights, and City Terrace. USC University Relations is part of USC Trees and has a long-standing commitment to community building and supporting programs that have a positive impact on the surrounding neighborhoods. With the help of University Relations, USC Trees has hired a community engagement lead to further the practice of deep engagement and build upon the connections made during the Conversations. This position will enable USC Trees to engage in more informal learning and for relationships to grow organically, which is different from the one-off “pop-up” mentality of outreach work that is often more extractive than reciprocal. These Community Conversations serve as a catalyst for continued investment in engagement.

**Following the Community Conversations, USC Trees will be releasing recommendations for policymakers, urban forestry organizations, and community leaders who are actively deciding where, how many, and what kinds of trees to plant.** As the team collaborates with decision makers to bring planting projects to fruition, it commits to consistently bringing community voices and designs to the table to ensure representation of local needs and desires. To do so, USC Trees will host additional Conversations with community members and will explore other models of partnership where residents are recognized and fairly compensated for their participation. A schedule for additional Conversations will be shared widely once the team identifies more concrete opportunities for plantings.

**Although the stations may evolve to meet new needs in future Community Conversations, the overall structure was very successful in practice.** The free-flowing organization of stations allowed time for reflection, exchange and enabled participants to interact in a less formal context. It is a very different process from a sit-down workshop, door-knocking, or organizing. The interactive, visual, and playful elements of the station designs create a highly visual, welcoming atmosphere that invites people to provide more nuanced answers. Science and data can be fun, relatable, and tactile. This sets a table that hopefully is comfortable and accessible, where the divide between credentialed experts and local experts blurs. USC Trees will expand upon this format to build community and trust that will help enable a broader vision for tree canopy to come to fruition.



A genuine thank you to each and every community member who shared their hopes, dreams, and stories with us. The team at USC Trees is immensely grateful for your valuable input and time. We have listened and documented your big ideas for enhancing tree canopy, and we are actively collaborating with our partners to turn these visions into tangible actions within the next three years.

A special thanks to the talented team at Public Matters for sharing their valuable expertise to help us design and successfully execute the Conversations. Lastly, we are grateful to The Eli and Edythe Broad Foundation for their generous funding support, which made these Conversations possible.



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