

Teen Urban Tree Corps

Summer 2022 Report



SPEAK FOR THE TREES

Boston

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History of the Teen Urban Tree Corps Program

Speak for the Trees' (SFTT) Teen Urban Tree Corps program (TUTC) is a 6-week hands-on education and training program in urban forestry for Boston youth ages 14-18. Through workshops with professionals, field trips, and hands-on field work, teens learn about the importance of trees and explore opportunities to grow and support the city's urban forest through the lens of environmental justice, social resilience, and community empowerment.

The program first ran in 2019 with twelve teens; in addition to learning, these youth inventoried over 5,000 street trees in the Roxbury and Dorchester neighborhoods of Boston. In 2020, due to the pandemic, the program transitioned to an online format where sixteen teens created stories about their community forests. The results of their work, including videos and reports, can be found online at treeboston.org/teen-urban-tree-corps-2020. In 2021, the program was held in person and 15 teens spent the summer exploring Boston's urban forest and careers in urban forestry. Teens met weekly with urban forestry professionals and used their new forestry knowledge to scope and develop tree planting plans in their neighborhoods. The products of their work and more details on the Summer of 2021 can be found online at <https://treeboston.org/tutc2021/>.

Overview of Summer 2022: The Year of Drought and Watering

In the summer of 2022, SFTT hired fifteen teens for the TUTC program. In addition to learning about the field of urban forestry, arboriculture, and the importance of Boston's urban canopy, these youth spend 2-3 days per week watering over 200 street trees in Dorchester.

SFTT staff, including Eva Paradiso and David Meshoulam, began to scope out and develop the summer program in February 2022. In response to feedback from the 2021 TUTC summer youth who suggested more hands-on activities, the program shifted from developing planting plans to watering street trees. In addition, six youth who participated in the TUTC School Year Program from November through April helped develop the summer curriculum and ultimately decided street tree watering would make for an impactful and meaningful activity.

The summer of 2022 was the perfect year for street tree watering, as Boston saw record high temperatures and a persistent drought. Despite the need for watering, the high temperatures also presented a potential health hazard to the youth which meant that some watering days became inside activity days.

Program staff included Joshua Reed, Program Coordinator, and the three team leaders, An Pham, who joined us as a Team Leader after participating in the program as a youth in 2019 and 2020, Jamila de-Peiza-Kern a recent graduate of Smith College, and Marcella Domiciano, a student at UMass-Amherst. The staff worked daily with the teens, implementing the watering program for the first time. Below is an outline of the program and daily schedules for the Summer TUTC 2022 program.

Program Goals

1. Provide care to the street trees in the Dorchester neighborhood of Boston

The goal of the watering program was to have youth water as many trees as possible over the course of the 6 week program. Specifically, the goal was to have youth water young trees planted from 2016 - 2019. SFTT focused on the 2016 - 2019 plantings instead of the even more recent 2020 - 2022 plantings because 2020 - 2022 trees were still under the City of Boston's two year street tree contract; these trees were being watered by contractors. Trees planted between 2016 - 2019, however, were no longer being watered; trees between the ages of 2 - 7 still benefit from regular watering, especially in the hot days of summer in order to grow to maturity. Max Ford-Diamond, Boston's Tree Warden, provided data for street trees planted from 2016 - 2019, allowing SFTT staff to create a tree watering map of Dorchester. From there, staff developed watering routes for over 200 street trees.

2. Career exploration in urban forestry

Another goal was to create connections between the youth of Boston and professionals in the fields of urban forestry and arboriculture to provide opportunities to foster growth in the field of urban forestry, a field predominantly composed of middle-aged white males. The median age of someone working in the field of urban forestry is 52 years old; 91% are white, and 78% are men.¹ Throughout the program, teens met with guest speakers and presenters who shared their career paths and work experiences. In addition, Education Coordinator Eva Paradiso taught lessons and workshops developed by Eboni Hall of American Forest to do Career Exploration in urban forestry and green job industry.

Curriculum and Schedule

During late spring, SFTT staff developed an outline and framework for the program. The primary focus of the program was watering. Most weeks revolved around the youth watering at least 2 - 3 days. In addition to watering, the program included weekly field trips to provide experiences for youth to explore urban green spaces around the city, meet with professionals in the field of urban forestry and arboriculture, and enjoy time outside without watering.

¹ Wiseman et al. 2020; [URBAN FORESTRY 2020: An Investigation of Student Perceptions, Career Opportunities, and Professional Practice](#)

Week	Dates	Field trips and special events
Week 1	July 5th- July 9th	Arnold Arboretum
Week 2	July 11th- July 15th	Post Office Square Park with <i>Russell Holman</i> Boston Commons tour with <i>Claire Corcoran</i> Public Garden tour with <i>Sherley Gardner-Smith</i> , Docent for the Friends of the Public Garden
Week 3	July 18th- July 22nd	No field trips
Week 4	July 25th- July 29th	Harbor Islands, Spectacle Island Harvard Forest with <i>Clarisse Hart</i> and <i>Katharine Hinkle</i> Conversation with <i>Chief White-Hammond</i>
Week 5	August 1st- August 5th	Tree Climbing with <i>Bear and Melissa LeVangie</i> Heat Island Art Project with <i>Claudia Paraschiv</i> and <i>Azia Gittens-Carle</i> Visit to Mount Auburn Cemetery with <i>Jonathan Webb</i>
Week 6	August 8th- August 12th	TUTC Youth Led Community Tree Mulching Event around Dorchester

Table 1: Weekly field trips for Teen Urban Tree Corps, Summer 2022

The TUTC program met in person on weekdays. The program ran from Tuesday, July 6th through Friday, August 13th. Teens met daily from 9:00 am to 2:30 pm at The Fields Corner Business Lab, in Dorchester, MA, in the event space on the second floor. Most days started with a warm up game or activity and then usually progressed into street tree watering. Given the frequent hot days over 87 degrees F, there were adjustments to the schedule that brought the youth inside in order to ensure that youth were not at risk of heat related illnesses.

Program Preparation

Recruiting for TUTC summer 2022 started during the fall of 2021 at the tree giveaway events. At the tree giveaways, Speak for the Trees advertised the youth positions including the school year program, which started in late November 2021, and the summer program. We wanted to inform neighborhood parents and community members of the job opportunities for Boston youth at Speak for the Trees.

Although we started recruiting in the fall, the bulk of the recruiting started in earnest during February of 2022. Speak for the Trees posted positions for the summer Program Coordinator and Team Leaders on Handshake, various Boston-area college websites, LinkedIn, and social media.

The Education Coordinator and Executive Director went to two different virtual job fairs at Suffolk University and UMass Amherst. During those events, staff were able to speak with interested applicants to provide more information on the positions and program.

Interviews for the Team Leader positions started as soon as we received qualified applications for the position. We conducted the interviews almost as soon as applications came in because in past years we found that college students look to secure jobs in late winter/early spring. The Education Coordinator did the first round interview and then the Executive Director followed up for a second interview and offered qualified candidates the position. For the summer of 2022, we had more applicants for the Team Leader position than the Program Coordinator position. In general, it seems to be easier to find Team Leader candidates, those people still in college, than it is to find Program Coordinator candidates as we are looking for someone more experienced and out of college.

We started the youth hiring process in March, making the youth application live on our website and spreading the word to high school teachers in the area, posting on social media, in our newsletter, and email list, and posting on the SuccessLink website through Boston's Department of Youth Engagement and Employment. The Education Coordinator attended two different tabling events hosted during spring break by DYEE for Boston youth seeking summer jobs. At these events, Speak for the Trees was able to connect with students and share more details about the opportunity.

From April - May, youth applied for the position and the Education Coordinator combed through applications, offering 5 minute phone interviews to all candidates who filled out the application on the Speak for the Trees website. Jobs were generally offered during or just after the phone interview if the candidate seemed like a good fit. If there was uncertainty about a candidate's ability to commit to the job for the summer, sometimes the wait time was longer for them to receive an offer.

We had 20 slots for youth and even though we offered the job to more candidates than we had space for in the program, we still ended up being under enrolled with only 15 youth. This was an important lesson that we continue to learn, youth can't fully control their schedules and summer availability. Thus, it was important to:

1. Be flexible if a student has a planned family vacation or other event that occurs during the program and be open to youth missing 1 or 2 days
2. Offer the job to more candidates than there are slots
3. Have a waiting list in case youth drop out so that all interested youth have the chance or opportunity for a summer job.

Prior to the start of the summer program and tree watering, staff developed watering routes. They used data collected by us from 2016 to 2019 which detailed the locations of street trees planted in Dorchester during that time. That data was then input to Google MyMaps to create a map of street trees in Dorchester. The data on street trees planted during that period was provided by Max Ford-Diamond, the Tree Warden for the City of Boston (Figure 2).

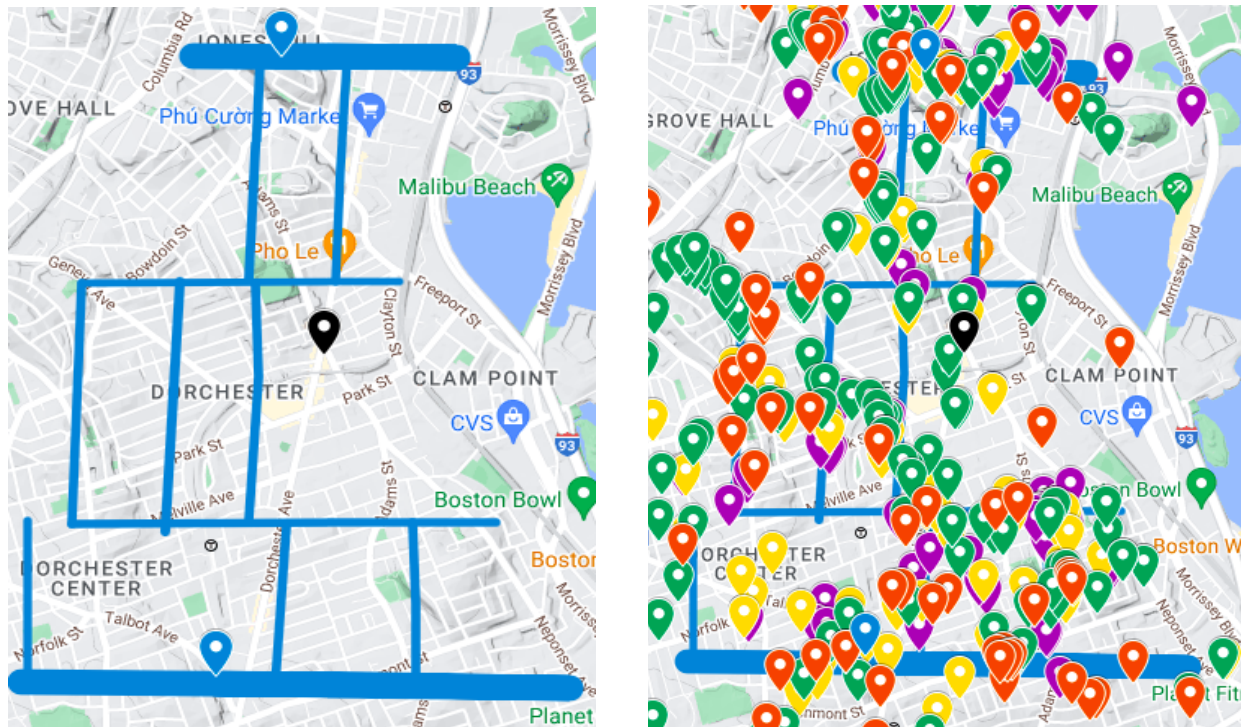


Figure 1 (left), Is a map of Dorchester with the grid showing all 9 sections we had divided the map into. Figure 2 (right), is the same map with all of the street trees in the area.

Staff used this map to then decide which trees we would water and what those routes would look like. The first step in that process was deciding just how far from the office we would ask the teens and team leaders to walk. Eva and Joshua had agreed the farthest points directly north and south of the office would be a maximum of one mile away. This allowed for staff to have a border of sorts to our map while also ensuring the walks would not be too grueling or too far from the office in the event of an emergency.

From there, Josh and Eva decided to divide the map into 9 sections, making 9 separate routes. In designing the routes, the goal was to distribute trees amongst the routes in a way that would have each group watering roughly the same amount of trees in a watering day while avoiding too much walking. In total, there were 236 street trees dispersed across 9 watering routes, averaging out to 26 trees per route, a feasible amount for one day. All but two of the routes were 3 miles long, with those two outliers being 2 miles long.

Quadrant	Number of Trees	Total Walking Distance
1W	25	3 miles
1C	25	3 miles
1E	19	2 miles
2W	28	3 miles
2C	24	2 miles
2E	21	3 miles
3W	31	3 miles
3C	31	3 miles
3E	32	3 miles
Total Trees	236	

Table 2: Number of trees in each route and total distance

To water our trees, staff determined the most efficient process would be retrieving water from fire hydrants. To do so, SFTT rented three hydrant meters - and the appropriate wrenches - from the Boston Water and Sewer Commission that would both allow staff access to the fire hydrants and also track the amount of water used over the summer. Transporting and utilizing the water and hydrant meters required additional materials as well. 5 gallon jugs were filled by a hose that would attach to the hydrant meter. A first aid kit was necessary in the event of an emergency. Sunscreen for protection from the sun and heat. And to carry it all, each group had 1 large cart.

The week prior to the arrival of teens, to verify the efficiency of the routes and accuracy of the data used to create them, team leaders set out on observation walks to look out for any issues or complications along those routes. Over their first week, they walked one route on 3 separate days to record their observations, including issues such as safety concerns, dead trees, fire hydrants, potential bathrooms, and break areas. These walks also allowed the team leaders to familiarize themselves with the routes in a way the other staff members hadn't done until this point. Knowing the route this well meant team leaders were best equipped to edit the walking routes and make the watering days as efficient as possible.

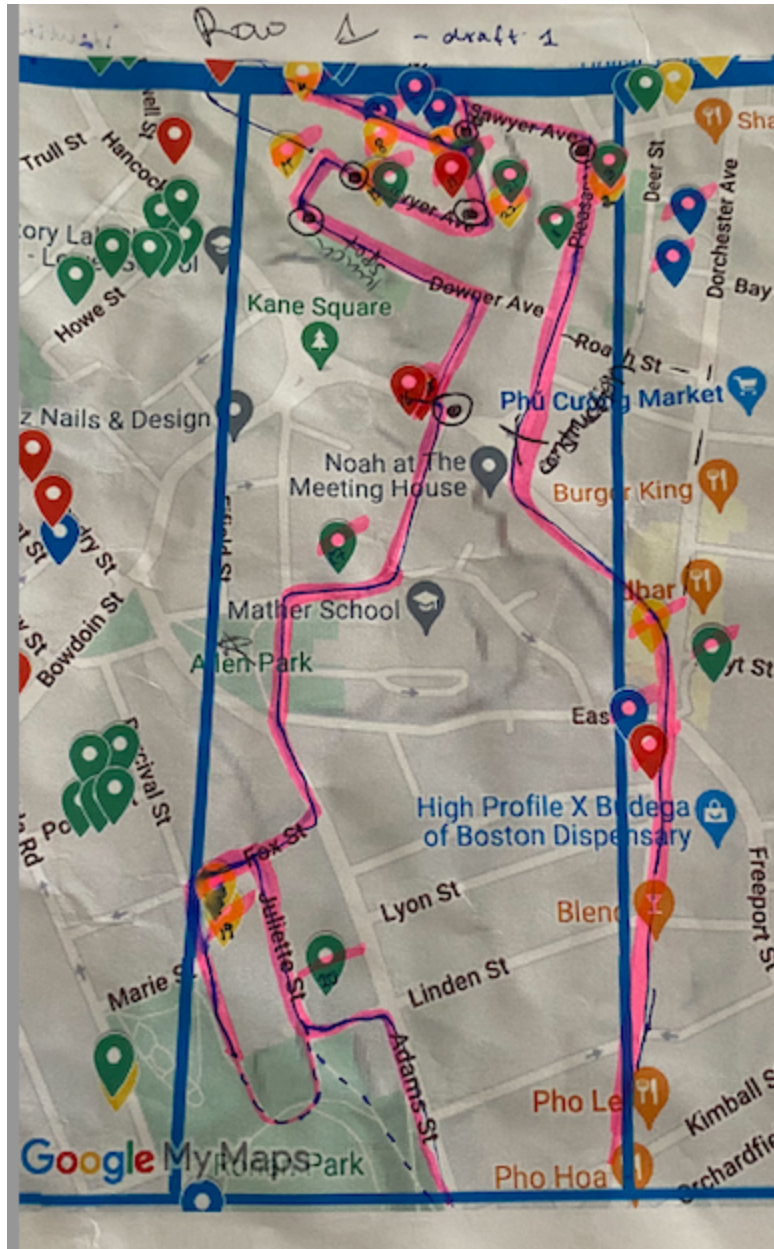


Figure 3: A route created by one of the team leaders, Jamila

Team leaders also received training on the process of watering trees and retrieving water from the fire hydrants. Josh led a training session on the opening of a fire hydrant and the use of the fire hydrant meter to fill our water jugs. This training not only taught team leaders how to properly and safely use the fire hydrant meter, but prepared them for the eventual training of TUTC teens on the process (Figures 4 and 5). One very important part of this training was flushing the hydrant (Figure 6) as this allowed all the minerals in the water to go into the street instead of directly into the tree pit.



HOW TO USE THE FIRE HYDRANT METER

Open a Side of the Hydrant

Using the wrench, you open one of the sides of the hydrant. Once opened, the hydrant is flushed if the water is too dirty.

Attach the Hydrant Meter

The hydrant meter is then attached with the wrench and tightened as tight as possible to ensure the meter is in place. We would also attach the hose to the meter at this point.

Open the Top of the Hydrant

The top of the fire hydrant is then opened with the wrench, which allows the water to then flow to the top side of the hydrant and through the meter. Once we're prepared, we open the hydrant meter to allow the water through.

Fill the 5-Gallon Jugs

Using the hose that is now attached to the meter, the water from the hydrant will fill the 5-gallon water jugs that will be used to water the street trees.

Figure 4 (left): Youth attaching a hydrant meter to a fire hydrant and Figure 5 (right): Hydrant meter instruction manual describing proper use



Figure 6: Teens flushing a fire hydrant to flush out the dirty water before using it to water trees

Teens received training as well on safety protocols that would be important throughout the summer. Not only would staff need to be cautious when using the hydrant meter - a very heavy piece of equipment - but in all situations when out on the routes. This meant preparing for heavy traffic, crossing the street, using fire hydrants properly, and lifting the heavy water jugs among others.

A Typical Watering Day in the Program

- 9:00 am: Meet at office for attendance, morning circle, cart and gear preparation for the day
- 9:15 am: Divide teens into groups
- 9:30 am: Head out for full day of watering
- 2:00 pm: Return to office for cleanup and wrap up

Each watering day, teens would report to the office building with staff for attendance, setup, and to be party to any announcements or discussions related to the program. Then the group would do a morning circle which would include an icebreaker or game. Setting up required teens ensuring their carts were stocked and that they had put on a safety vest before leaving the building. Team leaders would then leave with their group of teens and begin their watering day.

On a full watering day, teens would be on their routes from about 9:30am to 2:00pm, having to meet back at the office to wrap up and end the day by 2:30pm. Each route had its own advantages and disadvantages, but the roughly 4.5 hours allotted to us were usually more than enough time to water each and every tree on a route.

Teens first go to the tree farthest from the office and work their way back towards the office. Once arriving at the location of the first tree, teens would use a nearby hydrant to fill their 5 gallon jugs. Prior to watering the trees, teens needed to decompact the soil around the trees by using hand picks (Figure 7). This loosened the ground to create more porous space in the soil, allowing for water to seep into the roots. Watering of the trees began after this step. Trees were watered with 10 gallons of water, while trees with watering bags were watered with 15 gallons of water.



Figure 7: Eli and Diannie using a hand pick to decompact dry soil

Teens would then refill our jugs and move onto the next trees. If the trees were in close proximity, teens would simply use the same hydrant that had already been opened and fill their jugs. Those jugs would then be transported back and forth between the hydrant and those trees requiring water. Once it was time to move to a farther spot, teens would cooperate on closing the hydrant and ensuring all materials were back on the cart before moving along.



Figure 8: Teens watering one of the street trees

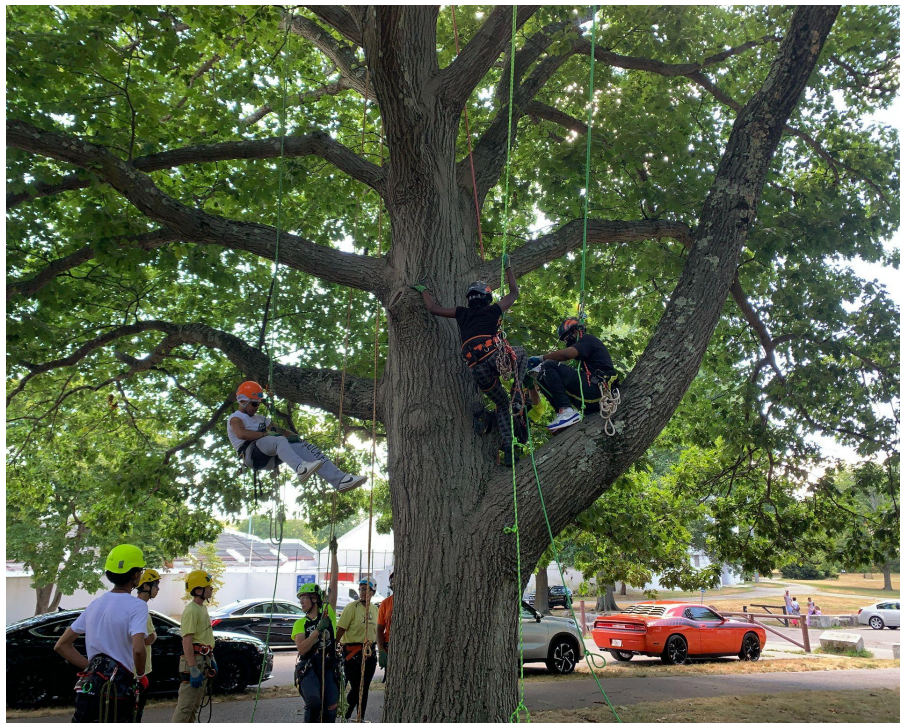


Figure 9: Tree Climbing workshop with Bear and Melissa LaVengie.



Figure 10: Youth working on an art project thinking about the Urban Heat Island Effect.



Figure 11: Youth under the flower arc at the Arnold Arboretum in Jamaica Plain

Successes and Challenges

Successes

1. Number of trees watered in a day, in a week, and over the summer
 - a. In a week where the teens watered for 3 days, they would water an average of 23 trees on their route. With the teens working in three groups, this meant they were watering an average of 69 trees a day. Of course, this was the case when weather permitted for a full week of full watering days. Accounting for those days where heat would only allow for a half day of watering or limited us to two days a week, each of the 237 trees were watered at least 3 times over the summer.
2. Identifying dead trees
 - a. In the early stages of the summer, staff realized we would need to identify dead street trees. These data were provided to the city via 311.
3. Mulching day
 - a. In the final week of the program, the TUTC program organized a tree mulching day with the goal of mulching 60 street trees in one working day. The teens were divided into four groups led by staff. These groups set out to mulch trees along their designated routes. Prior to embarking on the routes, SFTT staff dropped off the bags of mulch at each of the trees. This ensured that teens were able to weed and mulch the trees in the most efficient way possible. All 60 trees were successfully mulched. enough bags were even left over to continue with mulching for future volunteer events.
4. Attendance and engagement of teens (Excused and Unexcused)
 - a. On average, the youth showed up to 90.6% of the scheduled program days. Some absences were excused, though, and are not reflected in the percentage listed here. For instance, in week 1, we had a student who was finishing an early summer course that prevented her from attending. In week 3 and 4, two youth were on a vacation that Josh and Eva were made aware of early on. In the final week, we had one youth miss three days as they left the program early due to behavioral issues. On the final day, a teen missed because of a planned family trip. We had 3 other days throughout the summer where teens missed due to medical appointments. On a whole, we would argue that attendance is better than what is reflected by that 90.6% as that percentage rises to 94% when we account for excused absences.

Challenges

5. Inclement weather days
 - a. In the midst of the ongoing drought, extreme heat days would make going outside unfeasible and potentially dangerous. While these days were expected and planned for, they presented a challenge in reaching our goal of caring for all of the street trees in Dorchester. On those days, the teens met in the office for the day rather than going out to water. Changing the plans always presented

another issue of what we would instead do that day. While the team leaders had developed many activities as options, last-minute planning was a challenge. In hindsight, the staff could have planned farther ahead for inclement weather days. If the extreme heat coincided with a field trip, the program rescheduled the field trip and planned for “inclement weather activities” that could be done in the office building.

6. Mulching day as a community event

- a. In planning for the community mulching day, staff encountered difficulty in trying to organize an event where family members, friends, and community members could join the teens in mulching street trees. The main challenge arose in trying to coordinate with teens on inviting their friends and family. Most teens cited their parents’ work schedules, lack of interested friends, or the short time frame in which they were notified of the event. Because of these issues, staff instead organized a mulching day that was worked by teens and team leaders on what would have been a watering day. From this experience staff learned a few things:
 - i. Planning for this event needs to come farther in advance.
 - ii. Trees should be mulched in the first week or two rather than the last.
 - iii. Mulching the number of trees in the routes was feasible.

7. Issues with Boston Water and Sewer Commission

- a. This Summer brought the first interaction between BWSC and SFTT, which led to some unexpected challenges. In using the fire hydrants in Dorchester, staff had to determine which hydrants were accessible. Hydrants which had a silver cap (referred to as a “custodian”) were inaccessible and required a request to BWSC to have them removed. This process of requesting the removal of custodians took longer than expected.

8. Data Collection

- a. Data collection on trees and tree watering was helpful, but could have been better. For instance, staff and teens did not fully record which trees were not watered during extreme heat events or rain. On half watering days, participants did not track which trees were missed. The mornings before watering days were usually used for planning by the program coordinator and team leaders for that specific day. On those days with extreme heat or unexpected weather, staff become sidetracked by the task of adapting the day’s plans. This led to inaccurate reporting on the average number of gallons of water each individual tree received. Looking to future summers, staff will plan to record data in all instances when watering trees.

Evaluation and Assessment

Assessing program success and shortcomings allow the organization to reflect and adapt programming to meet the needs of the teens, both from their perspective and from the

perspective of outside evaluators. Results from past years, especially from 2021, have provided invaluable insight that have led to improved programming. This summer, with its new watering component, was no different. SFTT surveyed the teens with the same pre and post survey from past years and continued to partner with Boston Beyond through a survey and an observation.

To track the progress made and impact had on this year's group of TUTC teens, teens took an anonymous survey. Questions focused on teens' comfort with and understanding of the topics addressed, their career interests, and whether the program provided a quality experience. The surveys completed by teens were done as a pre- and post-summer survey to track the progress made towards reaching program goals.

One survey question, "Over the past few months how often have you engaged in a conversation about....", gauged how often teens were having conversations about topics related to urban forestry and the environment. The results, shown in Figure 12, demonstrate that teens were having more tree related conversations by the end of the summer.

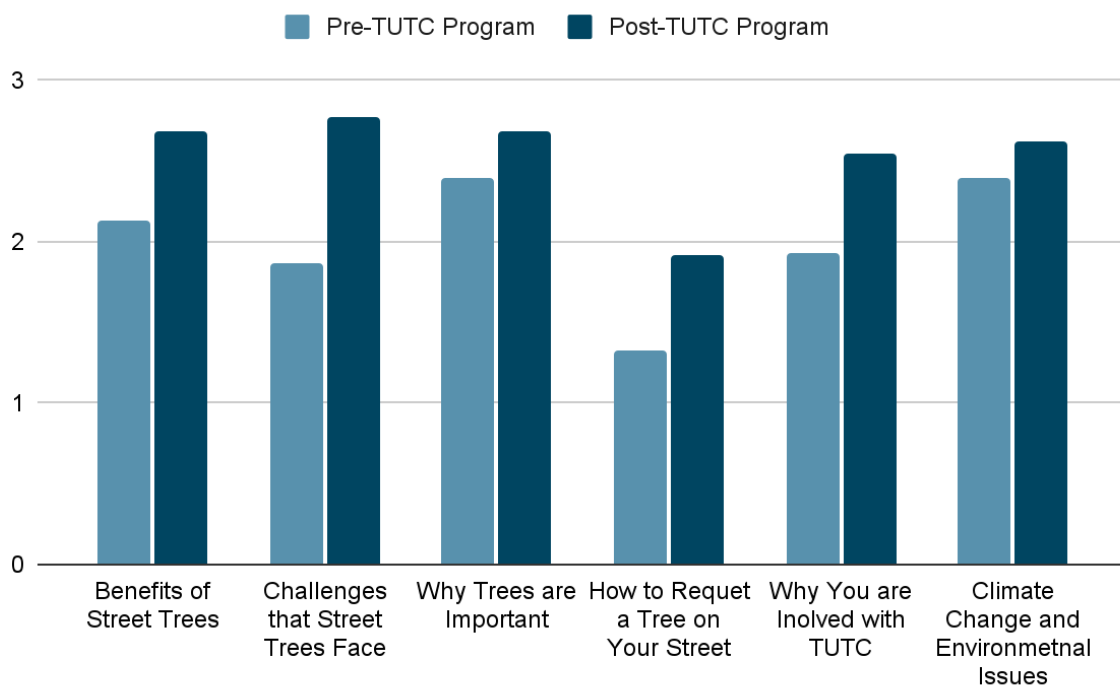


Figure 12: Over the past few months how often have you engaged in a conversation about:

- the benefits of street trees
- the challenges that street trees face
- why trees are important
- how to request a tree on your street
- why you are involved with TUTC
- climate change and current environmental issues

1 is never, 2 is sometimes, and 3 is often

The survey also inquired whether teens felt comfortable having these conversations. At the start of the summer, teens were moderately confident about most of the topics. But by the end of the summer, teens displayed an increase in confidence on environmental topics (see Figure 13). Clearly, the program's involvement of knowledgeable guest speakers, as well as the staff's own efforts, helped engage teens on these topics.

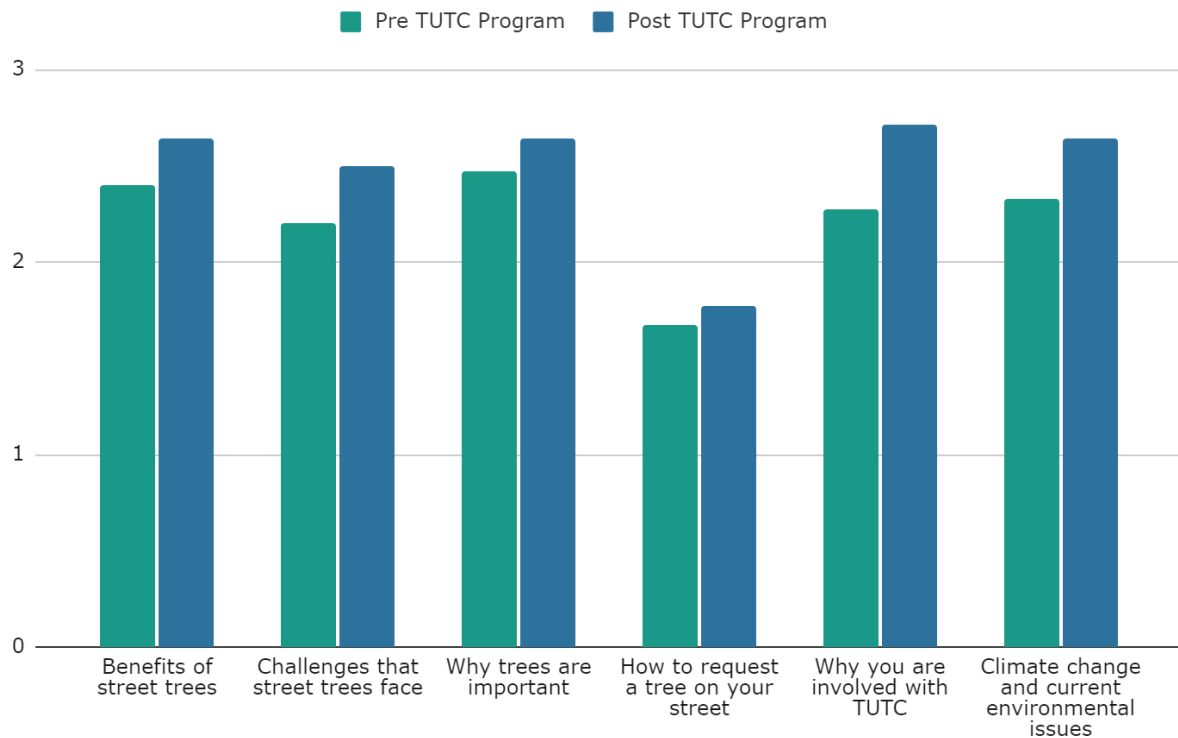


Figure 13: Over the past few months how confident have you felt having a conversation about:

- the benefits of street trees
- the challenges that street trees face
- why trees are important
- how to request a tree on your street
- why you are involved with TUTC
- climate change and current environmental issues

1 is not confident, 2 is somewhat confident, and 3 is very confident

Asking teens about their interest in various careers also provided interesting results, both in their pre- and post-summer responses. Figure 14 shows an increased interest in all but two green-jobs, those being communications and government/nonprofit roles. It's hard to say exactly why, but one likely explanation is that teens aspired to work in a hands-on career.

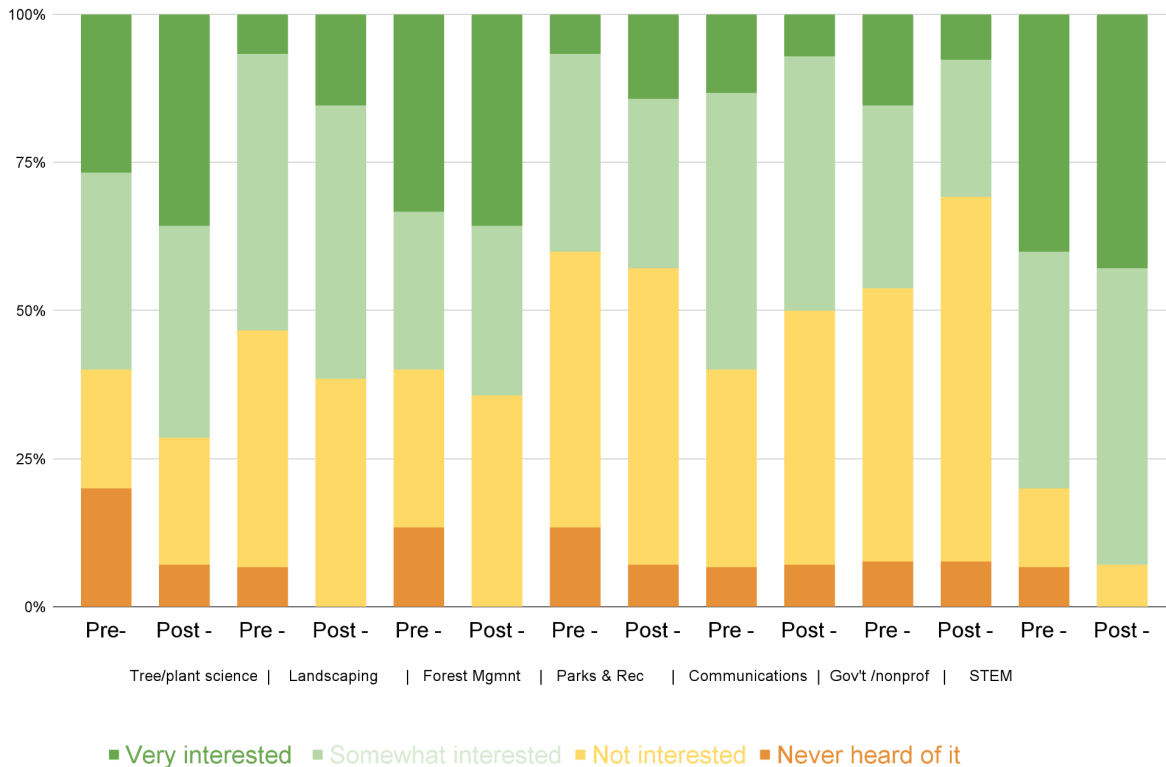


Figure 14: How interested are you in the following career?

- Tree or plant science (Arboriculture, Botany, Forestry, Horticulture)
- Landscaping (design, planning, and maintenance of gardens and parks)
- Forest Management (Planting, managing, and caring for forests and/or street trees)
- Parks and Recreation (programming and protection for a city's parks)
- Communications (media and content creation, graphic art and design)
- Government or nonprofit management
- Science, Technology, Engineering and Math (STEM)

4 is Very interested
 3 is Somewhat interested
 2 is Not interested
 1 is Never heard of it

Using the Place Attachment Scale, TUTC teens were asked to evaluate how the program changed their attachment to the city of Boston (Kudryavtsev et al. 2012). Analyzing pre and post data, there was a decrease in the connection to Boston, though it was not significantly different (Table 3).

	Mean Place Attachment Score	Standard Deviation
Pre-program	3.082	0.449
Post-program	2.9	0.547

Table 3: Place attachment score pre and post program.

How much did teens learn about specific trees? In the pre-survey, teens were able to name only 10 tree species. In the post-survey, teens named a total of 27 unique tree species, showing their growing knowledge. See Table 4.



<u>TUTC Pre-Survey Tree Species Knowledge</u>	<u>TUTC Post-Survey Tree Species Knowledge</u>
	

Table 4: Tree species knowledge pre and post program

Finally, teens were given an opportunity to reflect on what they gained from the program, how they thought Boston would benefit from the TUTC program, and the challenges of the urban forest in Boston. Below are some of their responses.

1. "How did you benefit from our TUTC Program?"
 - "I benefited from the TUTC program because it made me feel like I'm actually a part of a change in our city."
 - "I learned more tree types and how to improve tree conditions so they live healthy. I also learned new spaces to go to for forests. More ideas and new career considerations due to new skills like tree climbing."
2. "How do you expect Boston will benefit from our TUTC Program?"
 - "They will benefit because us teens are learning more about the importance of trees and that's important for our future. Watering trees allows them to be more healthy and grow and that helps our oxygen and helps with climate change keeping the area more clean. "
3. "Describe one or two parts of TUTC that you liked most:"
 - "Overall I liked learning about and caring for the environment/trees around Boston. It felt like a practice for me to have a green job in the future."
4. Recurring themes re: "What challenges is Boston's Urban Forest facing?"
 - Drought/lack of water
 - Cutting down/removal of trees
 - Extreme heat

A survey was also conducted at the end of the summer to solicit feedback from the Team Leaders. The team leaders were asked about their own development, what they learned, and whether they thought their work made a difference in the city and for the teens. A few of their responses are listed below to show what they felt of the program and their work.

1. How did this experience change you or your view of your career or your education?
 - a. "It made me more flexible with my expectations and goals for each day, since we didn't always get to all our trees for example. It made me more interested in a career working with youth."
 - b. "This experience made clear to me that I would like a hands-on conservation based job in the future and I would like to continue working in / with underrepresented groups and areas."
2. What did you learn?
 - a. "I learned a lot about future careers through the guest speaker we had on the field trips we took. I also learned that I bring a lot to the table in terms of critical thinking and brainstorming ideas. "

Along with the open-ended questions, there were also questions asked where the responses given were on a scale from "strongly disagree to strongly agree." One team leader responded "Agree" while the other responded "strongly agree" to each of the following 2 questions:

- "I feel like I made a difference for the teens in the program."

- “I feel like I made a difference in Boston.”

Demographics

It was important to SFTT staff to have a diverse group of team leaders and teens. We were able to accomplish that this year, and the results can be found in tables 5 - 7. The teens ranged from age 14 - 18, with the average age being 16. 8 of the teens identified as male, 6 as female, and 1 as non-binary. The teens were racially diverse as well, with 1 teen identifying as Asian, 3 identifying as White, 7 identifying as Black or African American, and 6 identifying as Hispanic, Latino, or of Spanish origin.

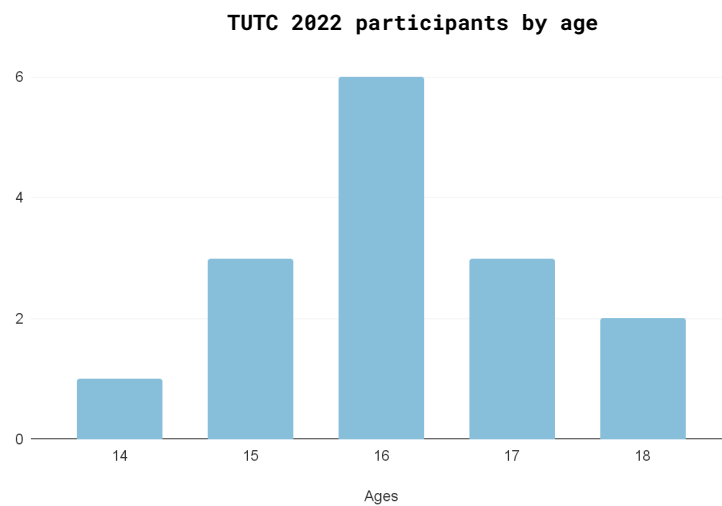


Table 5: Participant ages range from 14 to 18 years with an average age of 16.1 years

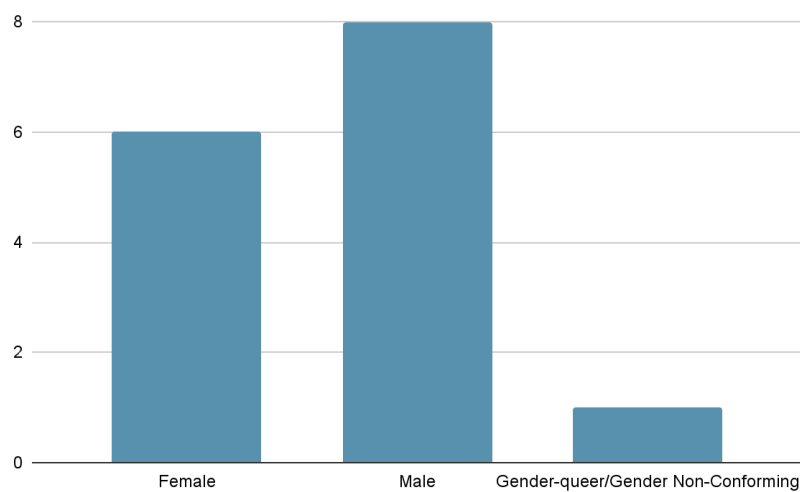


Table 6: TUTC 2022 participants by Gender Identity

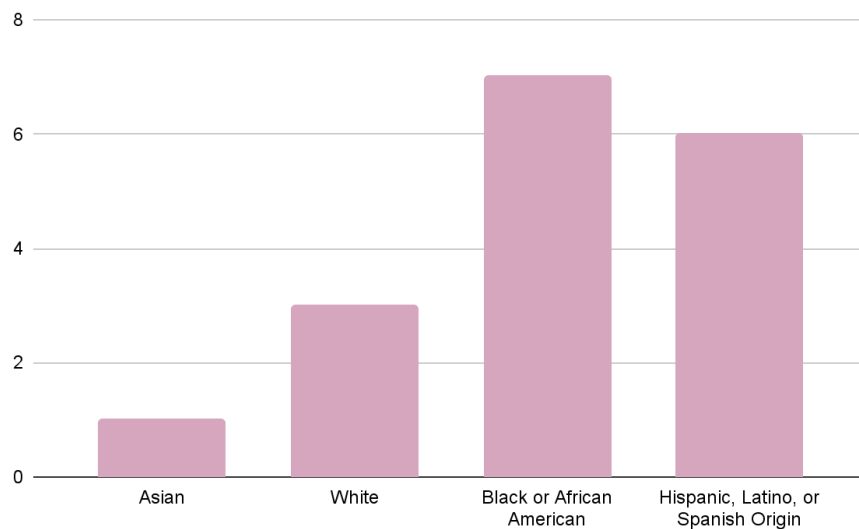


Table 7: TUTC 2022 participants by Race

TUTC in the Media

The TUTC teens were twice featured in media spots during the summer. First, they were featured in video form in NBC10 Boston in a feature titled [“Why Some Trees Are Shedding Leaves Like It’s Fall — and What Kids Are Doing to Help.”](#) Team Leader Jamila dePeiza-Kern was also featured in the interview. An article was also published on Boston.com titled [“Trees are key to address Boston’s heat islands. But it’s more complicated than just planting new ones.”](#) Teens were not featured in this article, but Executive Director David Meshoulam spoke on the TUTC program and its work. You can also find a short clip of Eva Paradiso talking about the role of teens in urban forestry and the TUTC program on [WBUR](#).

Conclusion and Looking Ahead

Each year of the Teen Urban Tree Corps program has presented new opportunities and new challenges. This year was no different. Taking into consideration the teens’ past desire to do more field work, SFTT staff developed a watering program that involved using hydrants. Judging from the teens’ deep engagement during watering days, their responses on the survey, and informal conversations over the summer, watering was their favorite activity.

Yet, like any new effort, watering presented its challenges. Hydrants, or hydrants without caps, were not always available near trees, so transporting filled jugs from the hydrant to trees took some time; carts were often cumbersome and could only hold 3 watering jugs; tracking which trees were watered could be improved; tree pits were often dry with compact soil and had a hard time absorbing water. These lessons provide avenues for improvement for summer 2023. For example, might there be ways to engage residents or teens to assist with mulching in advance of the summer? Could local businesses or residents provide access to spigots for

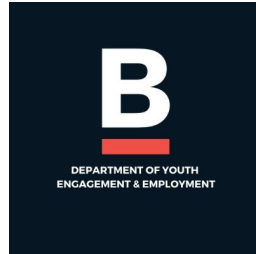
watering, thus reducing the travel time of teens? Would changing the number of teens per group make for more efficient watering?

In addition, with the main focus of the program pivoting towards tree care and watering, teens were left with less time to have face-to-face time with professionals. Among the highlights in 2021, the teens spoke about how much they enjoyed meeting a variety of different individuals representing a range of professions. Considering expanding opportunities in the field of tree care, the program in 2023 should seek alternative methods to introduce youth to professionals. This might include more innovative ways of engaging with professionals, such as through 1 on 1 interviews that teens could share with each other or opportunities for shadowing.

Finally, in the past year the City of Boston has developed two programs that will shape the future work of the Teen Urban Tree Corps. The first is the PowerCorps program that trains adults ages 18 through 30 in the green industry field. As this program grows and develops there will likely be additional opportunities for collaboration and partnership. Second, the city released its Urban Forest Plan in September 2022. The plan includes recommendations for increased community partnerships, education, and engagement. Future TUTC summer programs could complement and support these efforts.

Partners and Supporters

This program was supported by the generous time and resources of many organizations and individuals. We wanted to thank them for their commitment to supporting this program, the group of 15 teens, and Boston's urban tree canopy.



Schumann Foundation

Babson Foundation

Dozens of private donors and supporters

The many guests and visitors who contributed their time and knowledge

Appendix A: APT Observation Write Up and Feedback Form

The following are the results of the Assessment of Program Practices Tool (APT), designed to measure program quality. This was conducted by Boston Beyond for 101 sites. A trained, certified observer visits the program, and observes and rates program practices such as social-emotional environment and engagement.

APT Observation Write Up and Feedback Form

Program Site: Speak for the Trees - Teen Urban Tree Corps Program

Observation Date: 08/05/2022

Brief Description of Activities: In-person observation of community service activities including: watering trees in neighborhoods in Dorchester, and learning how to support health of city trees through mulching process.

1. Generally, what were your findings regarding:

a. Structure of program (e.g., scheduling, transitions, space)

- i. The program meeting space was located on the 4th floor of an office building in Dorchester. There was a kitchen area and meeting space area. The space was attractive and clean, with some soft furniture and some tables and chairs with large windows. Brief meeting started and ended the day. The morning meeting to review the day's agenda, at the end of the day to discuss the following week. The program schedule included a few different activities that were carried out over relatively long blocks of time. The first 'activity' that took place lasted for approximately 3 hours in the morning was comprised of a variety of tasks and included a break; Another activity took place after lunch that lasted for about 1 hour. Youth were assigned to groups at the beginning of the first activity of the day, prior to transition. Each group was responsible for collecting equipment for the morning activity and loading the equipment on to carts they would be using throughout the morning. Transitions were announced beforehand, giving youth about 5-7 minutes' lead-time, and were handled very efficiently.

b. Organization and nature of activities in program

- i. The day's activities involve watering trees in various neighborhoods of Dorchester. This involves walking for 2 miles or more, while youth take turns carrying a long metal wagon filled with equipment, tools and water

containers in and around city blocks within their assigned routes. The tree watering activity also involved using tools and equipment to access City of Dorchester water hydrants, flushing them out, and attaching a faucet/meter to pour water in their containers. Youth then carried water containers from the hydrant to trees down the nearby streets of the neighborhood.

c. Staff and their role in promoting youth engagement, stimulating thinking, and positively guiding youth behavior

- i. Staff were good at asking open-ended questions to enlist the ideas of youth and to engage them in problem solving throughout activities. Staff were supportive and encouraging when guiding youth during various aspects of the watering and mulching activities. Staff used gentle reminders to help youth stay on task after lunch time when youth were getting tired and distracted after the long hot summer day.

d. Relationship between staff and youth

- i. Staff rapport with the teens was very friendly and respectful during meeting times and end of the day and during activity sessions. Staff engaged in friendly conversations with youth, involving some playful joking, telling stories, discussing different topics of interests while walking throughout the morning. Staff and youth worked together to discuss and solve different technical problems with equipment and/or to come up with strategies and plans for carrying out their task of watering the trees efficiently and ways to spread mulch effectively.

e. Youth participation in activity time and peer relations between youth

- i. Youth were cooperative with one another and with staff throughout the day. Teens were attentive, engaged and on task throughout activities, despite the hot weather. Youth got along well, engaged in friendly conversations with peers, helped one another when carrying out various community service tasks. Youth engaged in playful activities during break times such as spraying each other off to cool down, sharing drinking water, and playing catch. It's worth noting, that despite the high temperatures, and tiring work over a long period of time, youth never complained, or acted out in any way. The teens were very engaged, had great attitudes and maintained composure and positive attitudes throughout the day.

2. Overall, what are some strengths of the program?

- a. Age appropriate, meaningful activities that involve community service and life lessons. Wonderful rapport, support and encouragement between staff and youth and between peers. Very good peer relations between male and female participants. Very good teamwork between male and female program leaders.

3. *Overall, in what areas could improvements be made?*

- a. More time to process and debrief lessons learned, feelings and/or reactions to the day at the end of activities, or at the end of the day/week. However, given the warm temps on this particular Friday, it was understandable for staff to move on quickly after the activities and at the end of the day to get youth on their way

Appendix B: Boston Beyond Report

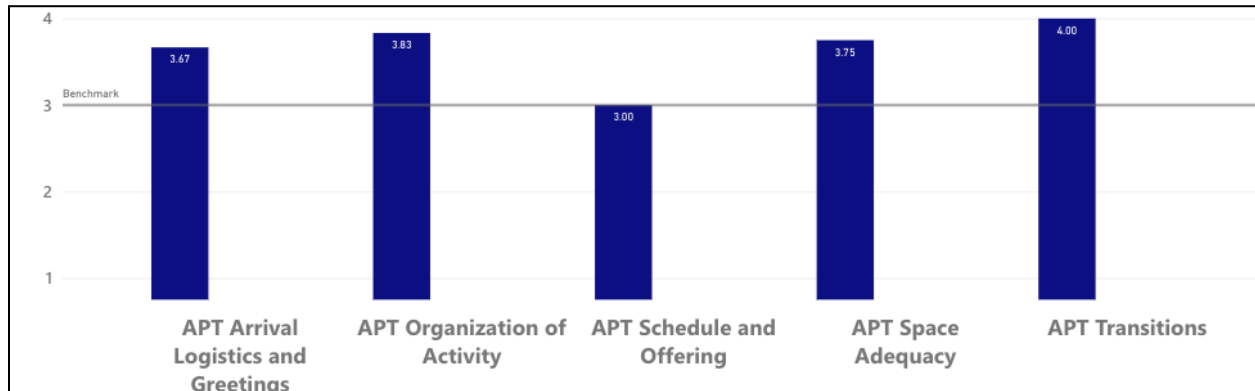


Figure B1. Program Organization and Structure for the 2022 Summer Teen Urban Tree Corps
The program met or exceeded the Benchmark value for all 5 components.

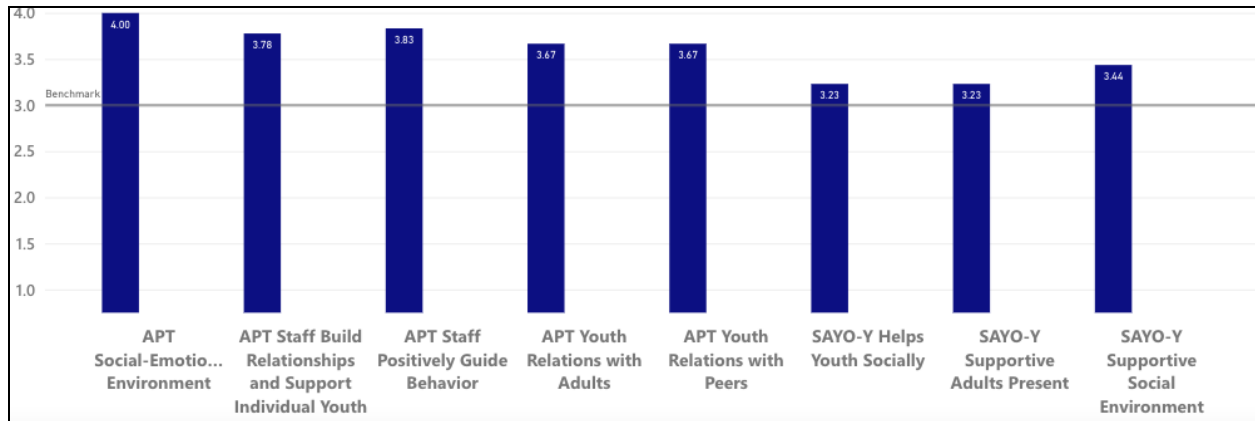


Figure B2. Supportive Environment for the 2022 summer Teen Urban Tree Corps.
The program exceeded the Benchmark value for all 8 components.

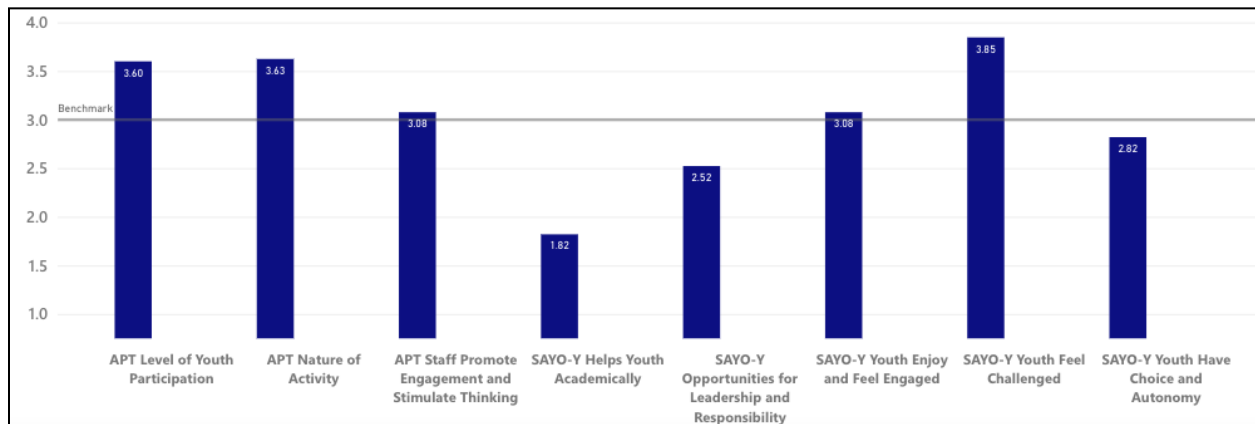


Figure B3. Engagement in learning and activities for the 2021 summer Teen Urban Tree Corps (dark blue).
The program met or exceeded the Benchmark value for 5 of 8 components.

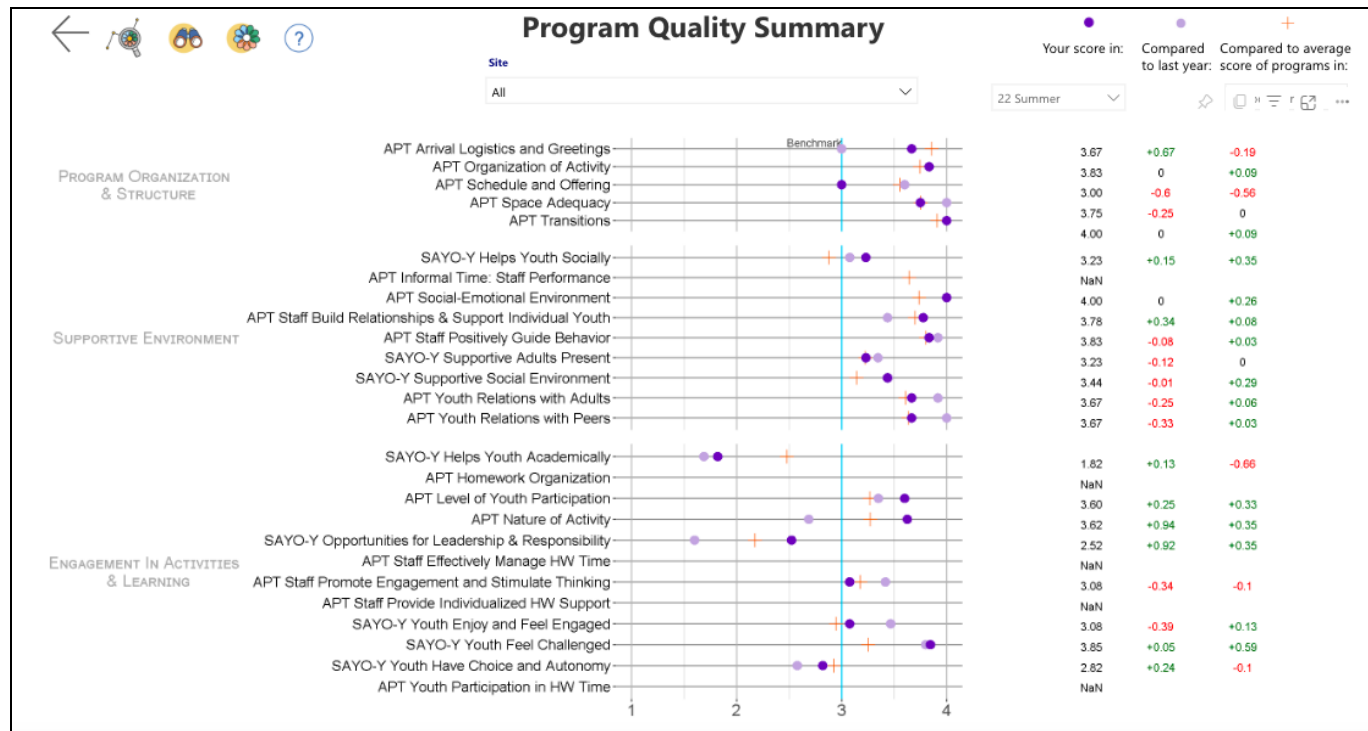


Figure B4. SAYO-Y Program Quality Summary comparing the 2022 summer Teen Urban Tree Corps (dark purple), the 2021 summer Teen Urban Tree Corps (light purple) and the average score of summer programs (orange line).