

City of Bloomington Bicentennial Bond Homeowner Tree Planting Survey- Post-planting

Executive Summary

The City of Bloomington recently finished a large-scale, bond-funded tree planting over four planting areas. The tree planting survey, a partnership between the city and the Bloomington Urban Forestry Research Group (BUFRG), was given to residents in neighborhoods receiving trees, both before and after the trees were planted. This report describes the findings from the second survey that was sent after the plantings were complete. Surveys were sent to 311 houses, with 65 filled out and returned. With this response rate of over 20%, it is reasonable to believe that Bloomington residents are interested in the plantings and in urban forestry in their city.

Overall, respondents are positive about the plantings. 58% said they would support or participate in another planting in their neighborhood. 63% said projects such as the Bicentennial Plantings are a good use of this funding. When asked if their neighborhood could use more trees, answers varied by planting area. The Detailed Report, below, further delineates these differences. With regards to questions related to how the plantings affected their neighborhood, in general, respondents did see an impact. 65% of respondents said the plantings improved their neighborhood. 63% said they learned more about the city's urban forestry program.

When asked about their interests in urban forestry practice and programming, answers were diverse and included topics like planting, pruning, invasive trees, native trees, fruit trees, and questions about how trees can be included in urban green infrastructure (i.e., rain gardens, flooding prevention, and urban heat island reduction). Finally, respondents were given a chance to pass along any comments or questions to the urban forester. These comments cover a variety of topics and are listed in the Detailed Report, below. This survey, in both its pre-planting and post-planting forms, will be repeated in future phases of the planting project. Each iteration will help the city's urban forestry department and BUFRG to be more informed about city residents' attitudes, knowledge, and opinions about urban forestry in Bloomington.

Detailed Report

Intro/history

The City of Bloomington Bicentennial Bond Tree Planting Survey is a partnership between the Bloomington Urban Forestry Department and the Bloomington Urban Forestry Research Group (BUFRG). The survey consists of two phases, a pre-planting survey, and then a follow-up survey sent after the completion of the project. The pre-planting survey began in February and March 2022, with a pre-planting survey sent to all addresses identified as candidates for the City's tree planting scheduled for the Spring and Fall of 2022. Results were analyzed and provided to the Urban Forestry Department. The post-planting survey was sent in October 2023. This report provides descriptive statistics and an analysis of the findings from the post-planting survey.

Methods

The first phase of the Bicentennial Bond Tree Planting Project targeted four areas of the city that could benefit from additional street trees based on environmental and social conditions. Resources used by the city Urban Forestry Department to select the planting areas included the City of Bloomington Canopy Report conducted by Davey Resource Group in 2019, the United States Census American Community Survey, and the American Forests Tree Equity Score (City of Bloomington, 2023). This effort resulted in the selection of 311 addresses to receive a street tree. Surveys were sent to all the addresses chosen for street trees. Planting areas and associated neighborhoods are shown in Figure 1, below.

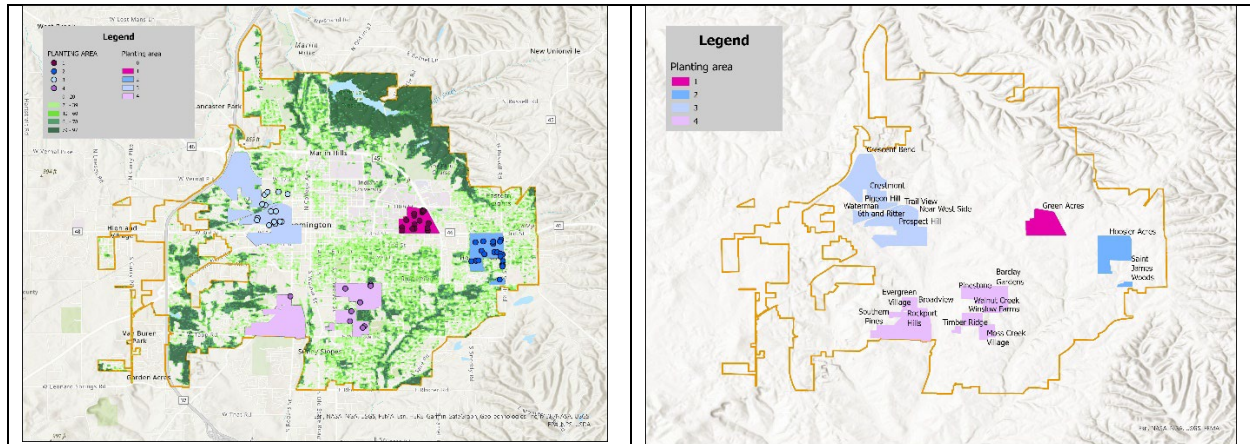


Figure 1- Bloomington canopy cover with planting areas and returned surveys, and planting areas with associated neighborhoods.

For both surveys, BUFRG researchers sent to each address an initial postcard announcing the survey, followed a week later by a paper survey and accompanying letter. One week later, a reminder postcard was sent, followed a week later by a reminder letter and survey. All data was then collected and analyzed using Microsoft Excel.

Results

A total of 65 surveys were returned out of the 311 sent, for a response rate of 21%. The true response rate is likely higher as this does not account for addresses where surveys were undeliverable by mail (vacancies, etc.). The rate of these undeliverable addresses was 12% for the pre-planting survey. If this rate is assumed to be similar for the post-planting survey, the response rate would be closer to 24%. Mapped below (Figure 1) are general locations of homes of respondents that returned surveys. Percent canopy cover (MRLC, 2021) and social vulnerability (CDC, 2020) are included for reference. Note that the social vulnerability data is computed at the census tract level and may not directly reflect the social vulnerability of the actual neighborhoods where the trees were planted. Following the map is a table listing the neighborhoods comprising each planting area, and a breakdown of results by question.

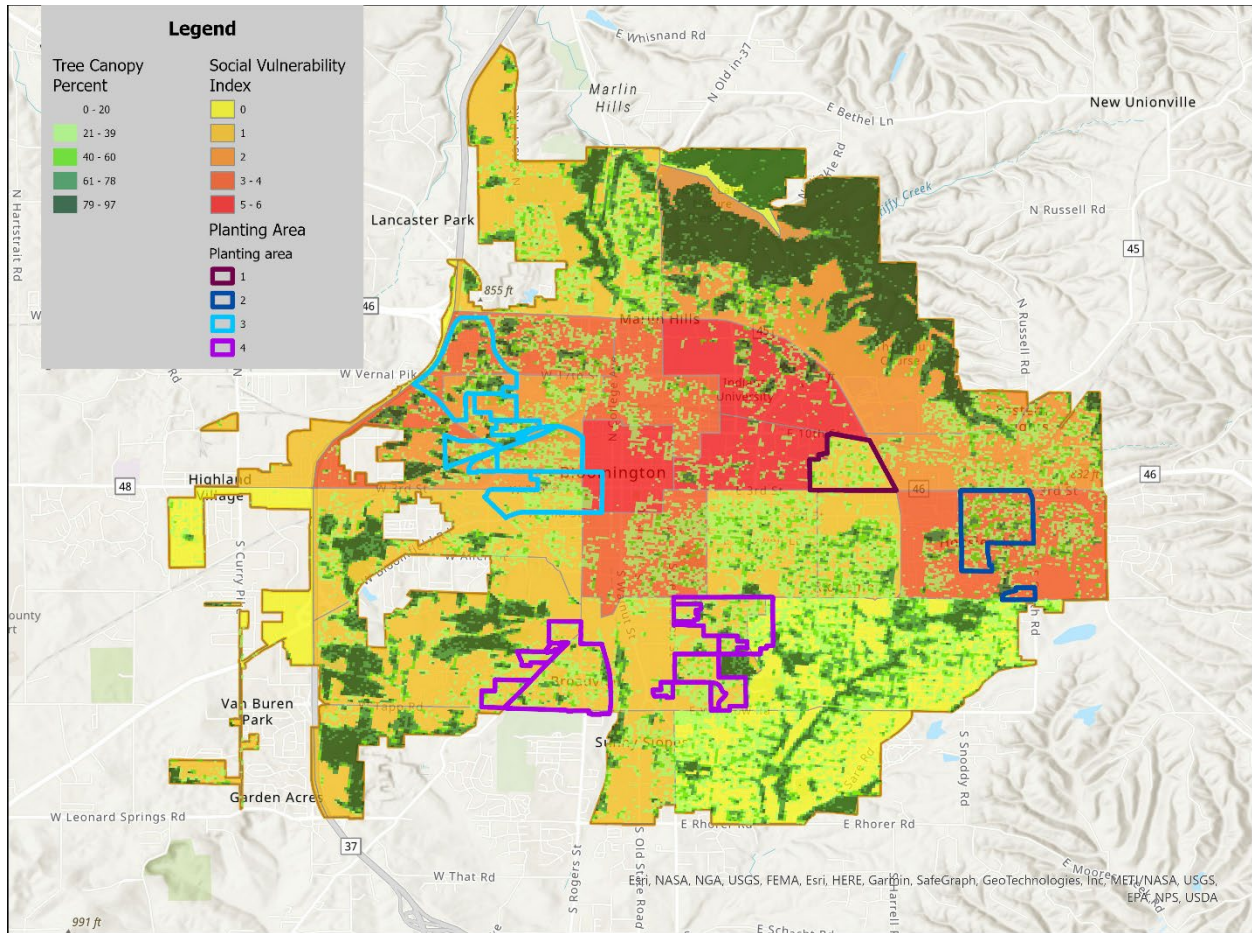


Figure 2- Planting areas, with social vulnerability by census tract, and canopy cover percent at 30m resolution

Table 1- Neighborhoods included in each planting area

Planting Area	Neighborhoods
One	Green Acres
Two	Hoosier Acres, St. James Woods
Three	Crescent Bend, Crestmont, Maple Heights, Near West Side, Pidgeon Hill, Prospect Hill, Trail View, Waterman, 6 th and Ritter
Four	Barclay Gardens, Broadview, Evergreen Village, Moss Creek, Pinestone, Rockport Hills, Southern Pines, Timber Ridge, Walnut Creek, Winslow Farms

Q1: Do you think your neighborhood could use more trees?

Overall, more residents thought their neighborhood could use more trees (45%) than those that did not think so (37%) (Figure 2). 18% of respondents said they were unsure. Differences can be seen among the planting areas. Area One had the highest number of respondents indicating their neighborhood could use more trees (69%), followed by Area Four (56%). 38% of respondents in Area Three said their neighborhood could use more trees, and 29% of respondents in Area Two said this of their neighborhood.

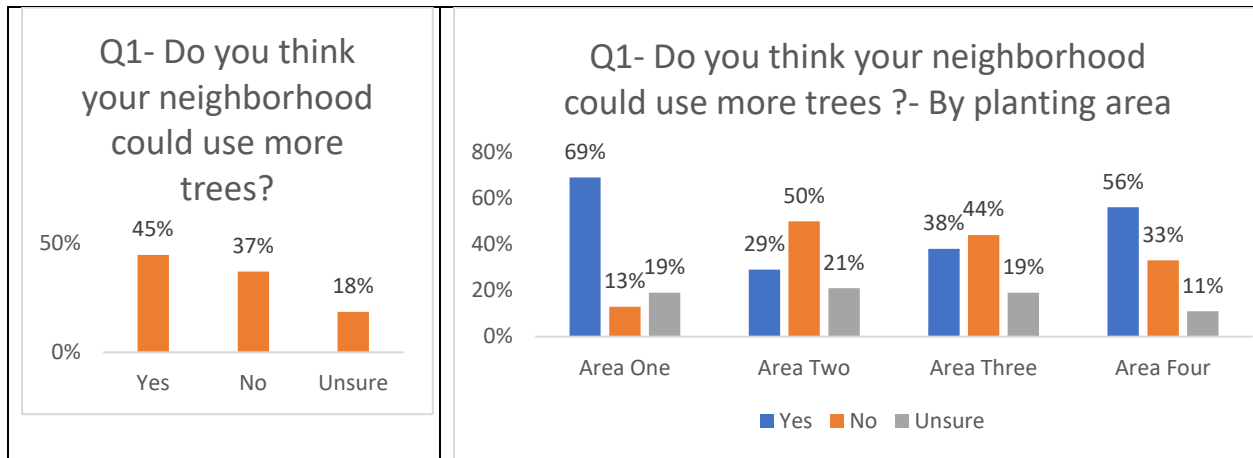


Figure 3

Q2: Would you support or participate in another neighborhood planting?

Respondents are generally supportive of additional neighborhood plantings (Figure 3). Overall, 58% indicated they would support or participate in another planting. 34% respondents said they would not, and 8% were unsure. As seen in Question One, responses show variation by neighborhood. 78% of respondents in Area Four would support another planting, followed by 75% in Area One, 56% in Area Three, and 42% in Area Two.

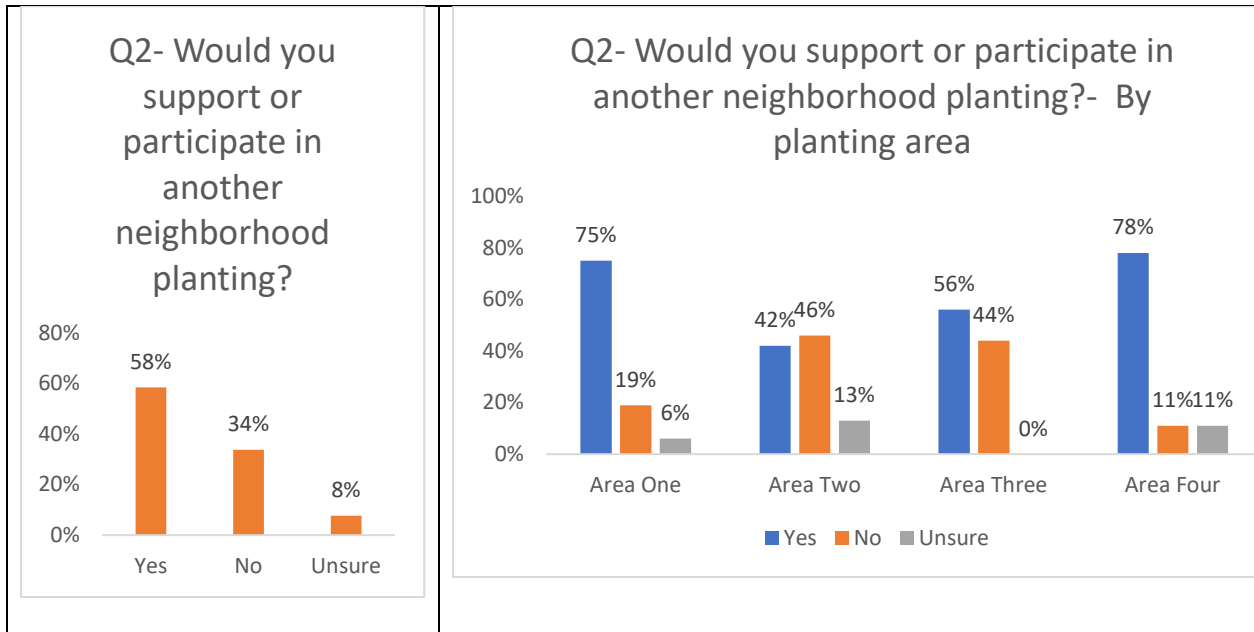


Figure 4

Q3- Do you think another project of this scope is a good use of city funds?

Overall, respondents indicated agreement that this type of project is a good use of city funds, with 63% answering yes, 27% answering no, and 10% unsure (Figure 4). Again, we can see variation by planting area. Area Four was the most supportive with 89% answering yes, followed by Area One (81%), Area Two (52%), and Area Three (47%).

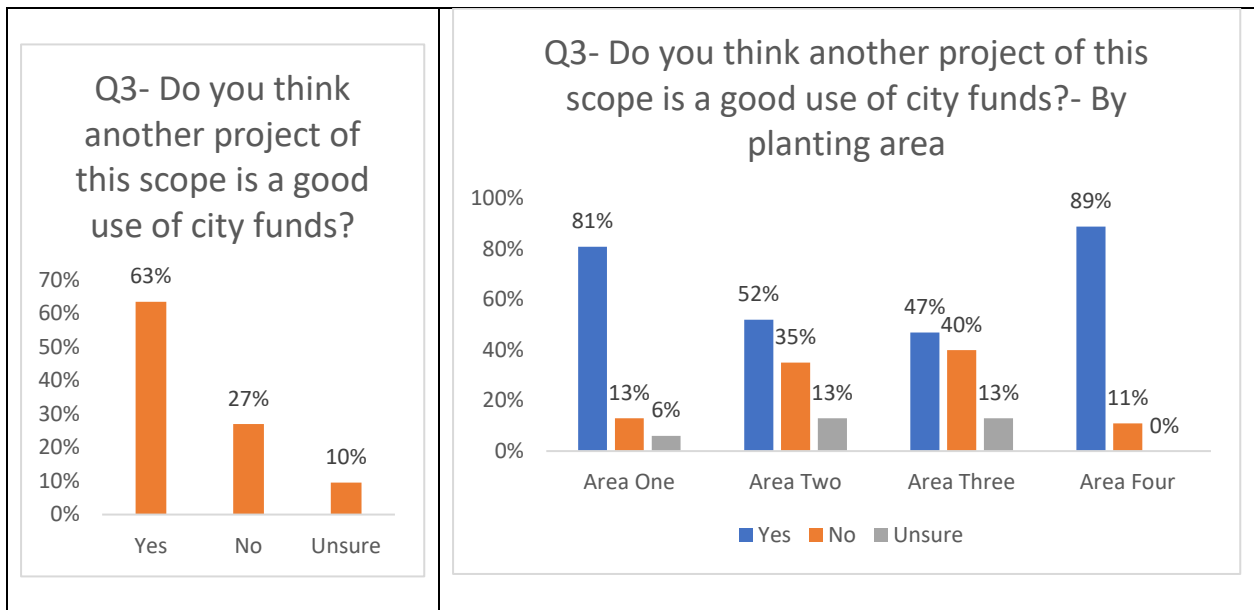


Figure 5

Q4- Has this tree planting project changed your neighborhood for the better?

In general, residents did feel their neighborhood had changed for the better, with the combined total of the answers “yes, a great deal”, and “yes, somewhat” being 65% (Figure 5). Area One had 93% of respondents indicating they had seen improvement, followed by Area Two (65%), Area Four (63%), and Area Three (44%).

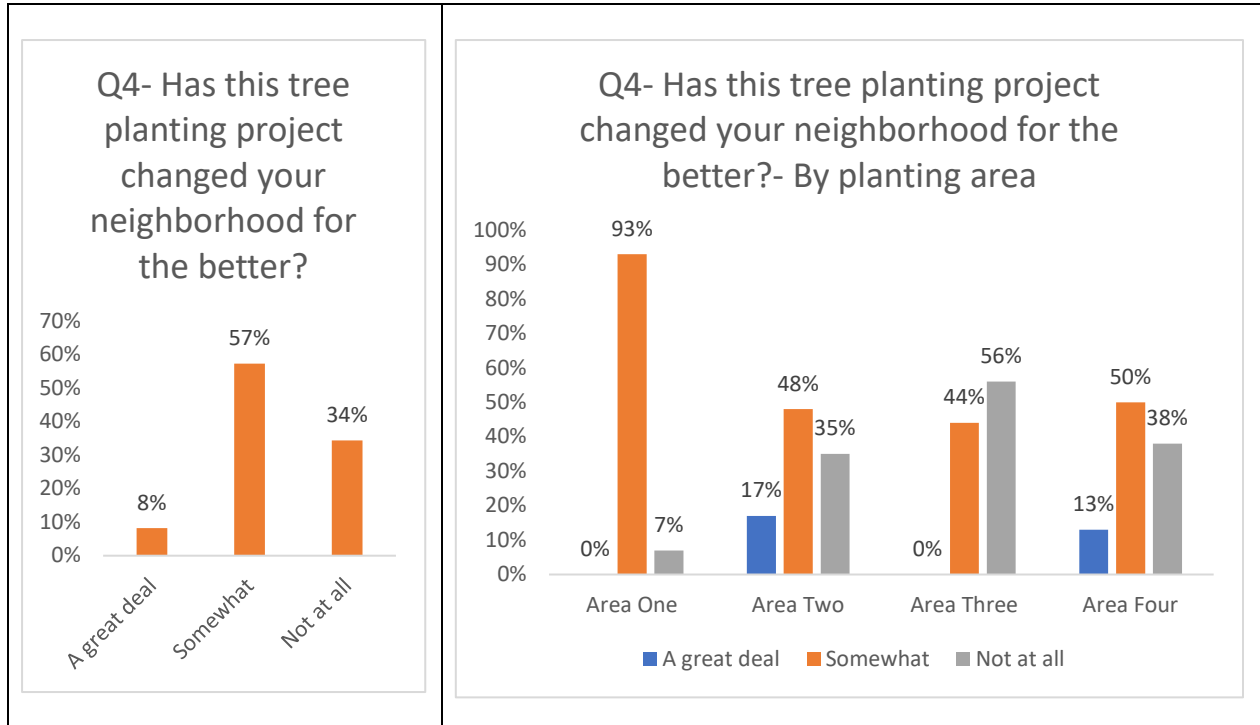


Figure 6

Q5- Has your knowledge of the city urban forestry program increased?

Overall, people did indicate they now know more about the city urban forestry program- 63% of respondents answered this question with either “a great deal” or “somewhat” (Figure 6). The planting areas differed less in their responses to this question than any of the previous questions. Area One had 69% of respondents indicating their knowledge had increased, followed by Area Four (67%), Area Three (66%), and Area Two (62%).

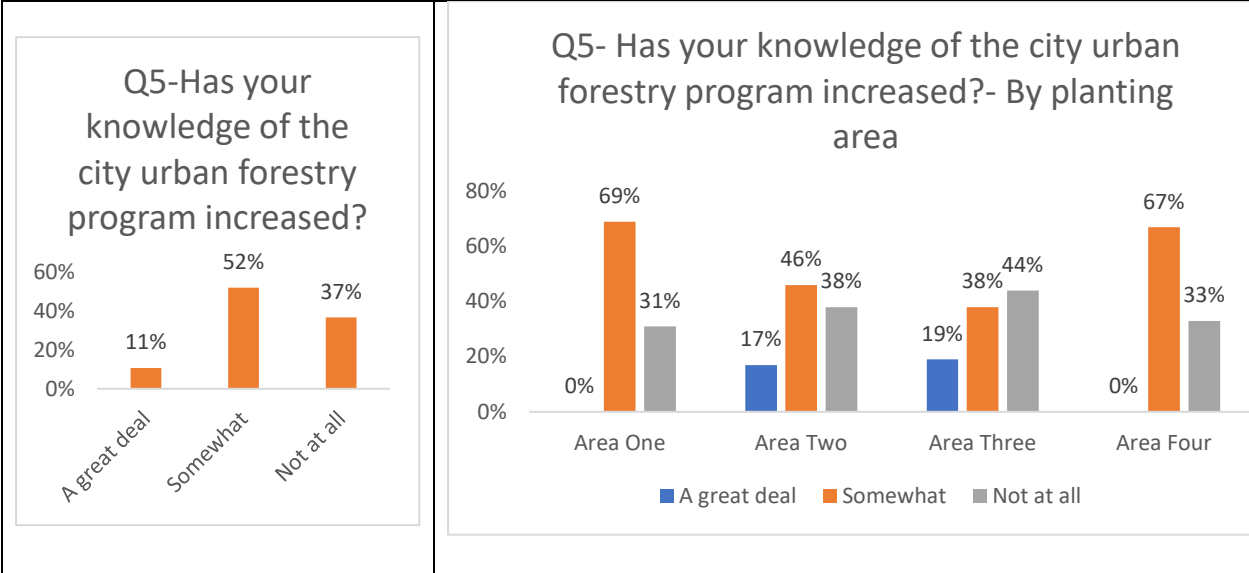


Figure 7

Q6- Are you interested in further information about the city urban forestry program?

26% of respondents answered yes to this question. Most then wrote in what they would like to learn about, but a few left the free text space blank. Table 1 contains all “yes” responses that include a write-in text.

Table 2

- I would like to know what you are doing and where.
- Tree planting
- General
- Plans for trees
- Availability of seedlings to plant on my own
- What type of trees were planted/maybe label each tree
- General info
- Effect on microclimate, urban canopy heat response
- Native trees
- Fruit trees
- Trees to reduce water run-off
- Smaller trees
- IDK?
- Trees?

Q7- Would you be interested in urban forestry programming activities or educational opportunities?

25% of respondents answered this question with a “yes” response. Of those, most then indicated what they would be interested in engaging in. The responses are listed in Table 2.

Table 3

- Pruning

- General
- Items in #8 (planting, pruning, pests/disease)
- Tree succession
- Tree care
- Invasives- Tree of Heaven, etc., vines, etc.
- Pests and disease
- What type of trees were planted/maybe label each tree
- General info
- Native trees
- Fruit trees
- Trees to reduce water run-off
- Historic/tree walks

Q8- What aspects of urban forestry interest you?

Respondents had the opportunity to select as many of the options as they desired to answer this question, and many did (Figure 7). Respondents were most interested in pruning (54%), followed by planting (53%), pests and disease (48%), and tree removal (35%). 11% of respondents chose “other”. Their write-in responses are listed in Table 3.

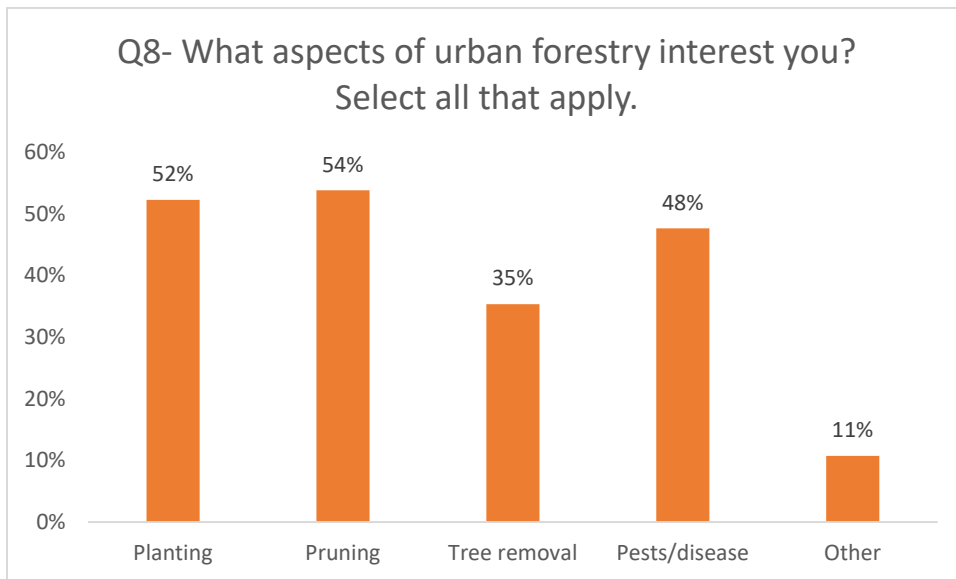


Figure 8

Table 4

- How this impacts people
- I have not seen any plantings in my neighborhood- have they occurred?
- Invasive and “bad” trees
- Not interested
- Better understanding of "how" a tree grows

- Role of trees on urban ecosystems, heat regulation, impact on mental health
- Rain garden trees
- Better tree selection than offered

Q9- Do you have any comments or suggestions to pass along to the urban forester?

For this question 66% wrote in a text answer, though a small number of these were simply “no”, or “n/a”. The responses are listed in Table 4. Topics range from gratitude for the program and suggestions for additional trees, to concerns about placement of trees (i.e., under utility lines or near sidewalks), to updates on the condition of trees planted in their right-of-way or near their home.

If the respondent left contact information, that is in boldface type. Any additional comments listed along the margins, etc. are also included here, in italics.

Table 5

Plant appropriate trees that do not damage sidewalks or private property. If City plants trees, keep up with maintenance and do not cause citizens to have to pay for upkeep. If City trash trucks damage trees, then the City should be responsible for cleanup/removal.
Pick locations that need trees- recent construction or recent tree removal. <i>In response to Q3- Not in this neighborhood- other locations, yes.</i>
We could use a few more trees in our fairways along the street. However, the city is lax in their pruning of ones already there! I see this all around town- overgrown trees not pruned affecting street driving. <i>In response to Q1- if the city will take care of them</i>
I had a tree planted last year that looks to be dead. I don't know what to do for it. The one in my neighbor's yard across the street is thriving.
Thank you for what you are doing!
Tiny detail- we had two serviceberry trees planted by the city (or its contractor) and the stabilization straps w/stakes damaged the bark substantially on one tree. I'm not sure the tree will survive long-term.
Do not plant trees under power lines. Do not plant trees in traffic line of sight areas where they pose traffic dangers or problems for truck deliveries.
I received a tree in my side yard, thank you! Although I really don't care, it would be nice to know why my yard was selected. Again, thank you for the work you are doing in this city. - <i>items to discuss, but not necessary [respondent starred Q8 (planting, pruning, pests/disease) and Q9]</i>
When this last was done, while I was not home, a crew attempted to plant a tree in my front yard without permission. My neighbor stopped it after calling me. Even if I were giving permission, it may have been the worst place (right in the middle of my struggling drainage). We already have an enormous amount of old growth that is too much to maintain. Now with the city stopping leaf collection, more time will be spent by Hoosier Acres residents.
We named our tree Mitch but his nickname is Jitters. He is doing well and getting big. - <i>In response to Q4- eventually a great deal as the trees grow</i>
Hoosier Acres would best be served with a pruning and removal (old trees) plan. The multitude of old trees negatively interact with the utilities, causing outages on a regular basis.
Thank you for this service!- <i>In response to Q4- not yet</i>

Plant as many as possible. Work with other department to prevent loss of existing trees through development.
I live in Moss Creek- our planting of anything is pretty much controlled. All at their discretion.
Since I rent, I don't feel a sense of ownership of my property and yard which makes me feel ambivalent towards this project and influenced my responses.
For the tree planters-read Peter Wohlleben "The Hidden Life of Trees". Learn how to better plant a tree.
1. You don't take care of the trees we have (blocked signs/roads). 2. You planted 2 trees under our power line to our house. 3. You blocked the gate for my yard making it useless. 4. Fix the tree at 9th and Williams. It blocks the intersection and the view when turning.
Great program- please keep it up/expand to give us more trees - <i>In response to Q4- already heavily wooded</i>
Yay for native plants!
While I appreciate additional trees being planted in my neighborhood, I have concerns about where they are being planted. I have noticed that city-planted trees have been planted directly under utility lines and very close to sidewalks. If these trees damage the sidewalks, will the homeowner still be expected to pay for their repair, or will the city foot the bill? The cost of sidewalk repair is a considerable issue in my neighborhood, so please consider the cost to the homeowner more carefully in your siting (unless city maintenance for damages is included).
City doesn't take care of the ones out here now. If you don't think there are plenty now something is wrong.
Could you please label the types of trees you've planted in our neighborhood or maybe attach some kind of information that educates what type of trees they are and how they grow. The tree that was planted near my house has no label and I have no idea what tree it is.
I am not aware of any tree planting(s) on Blair Ave. References to another planting- but I see no evidence of a first planting. More trees needed to screen Tri-North Sports Center from residences on Blair Ave.
Clear or trim trees that block views of stop signs, street names, that overhang on sidewalks so you don't have to step onto the street to get around low hanging limbs
Our waterways might benefit (improved drainage) by allowing marsh plants to exist around drains, creeks, etc. I would also like to see more no-mow zones with native wildflowers/grasses. IU was allowing no-mow space by Tulip Tree apartments but stopped this year = disappointing.
The follow-up on the trees that have been planted could maybe be improved- in my neighborhood some of these trees have died and/or are in very poor shape, probably due to lack of maintenance. Thank you for doing this, it is very important work.
Most trees are doing well in well-selected areas. One tree in front of my house is doing quite poorly and was also placed where a lot of current trees are (odd siting). Nonetheless, I support the objectives as well as find the key principles and policies valuable.
Need more trees to hammock on, also for birds
Some dead trees need to be removed from this area
Green Acres on the western portions of 5th and 7th could use more trees.
I am relatively new to Bloomington and I don't know if our neighborhood has had planting or not. That said, it could definitely use it.
Yes, please. Many properties have bushes and shrubs to 12-15 feet. Allows better management for future maintenance or removal. Expensive to reach canopy into private power lines (owner responsible). Manage storm damage for older neighborhoods with senior population. Choose smaller.
No, not at this time - <i>In response to Q8- I have a stump needing removed, in fact!</i>

This is all interesting timing with the cancellation of the leaf pick up program. More trees = more leaves.

I love our tree! The Green Acres neighborhood has new curbs to slow traffic on 7th street. The city doesn't mow them since they are so small and have become overgrown. A few more trees should be planted in or near them. More shade along 7th would be great, this neighborhood is not as shady as others, and more keep getting cut down.

Conclusion

This report reviews a post-planting survey done after the first phase of plantings funded by the city of Bloomington's Bicentennial Bond. This survey, in both its pre-planting and post-planting forms, will be repeated in future phases of the planting project. Each iteration will help the city's urban forestry department and BUFRG to be more informed about city residents' attitudes, knowledge, and opinions about urban forestry in Bloomington.

References

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