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Missoula Urban Forest Interest Study 2014

Norma Polovitz Nickerson

7/15/2014



A random sample of Missoula residents completed a questionnaire regarding Missoula's public trees. Result show strong support for the urban forest in Missoula.

Missoula Urban Forest Interest Study 2014

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Abstract

This study was conducted for the Urban Forest Division of the Missoula Parks and Recreation Department for use and guidance in the Urban Forest Master Plan. Online and mailback surveys were completed by a random sample of 407 Missoula residents in spring, 2014. Results show that Missoulians are profoundly supportive of public trees. Residents agree that their utilitarian purposes (e.g. shade, helping decrease pollution) are of value to the community. The aesthetic purposes tend to make their neighborhoods more enjoyable and Missoula a nicer place to live. Public trees provide a quality of life that Missoula residents appreciate. The majority of Missoula residents are willing to support the removal of hazardous trees, pruning, planting, and basic maintenance of public trees. While slightly less than half (47%) of Missoula residents would support increasing their taxes, 53% to 56% would support a separate revenue source for maintenance or planting of public trees.

Executive summary

Results of the Missoula urban forest study show that Missoula residents have a high regard for the value of trees, are willing to take personal responsibility for the trees, and possess a strong belief that the city has a responsibility to maintain the public trees.

- The top five aspects of why Missoula residents value the public trees are for their beauty (95%); making neighborhoods more enjoyable (93%); shade (92%); the ability of trees to improve air quality (91%), and; because it makes Missoula a nicer place to live (90%).
- When asked what they would do for Missoula's public trees, residents were in most agreement with watering the trees in front of their house (79%); encouraging adequate funding for maintenance of trees (76%), and; willingness to call the city about problem trees (72%).
- Residents see a need for the city to remove hazardous public trees (93%); prune trees to reduce future hazards (90%); replace dead/dying trees with young trees (88%), and; ensure new trees are planted and cared for properly (87%).
- Personal responsibility toward public trees decreased slightly in regards to funding. The support is high when it is simply requiring one to encourage funding (76%). As it gets more specific as to how to fund public trees, such as separate revenue sources (53%-56%) or higher taxes (47%), the number of residents, while still supportive, decreases.
- All respondents were very supportive of public trees, but those residents with boulevard trees in front of their home showed a slightly higher level of agreement to all but one statement.
- Many Missoulians suggested that the urban forest master plan focus on tree species diversity to discourage an insect or disease plague that could wipe out too many trees at one time and to emphasize native trees as much as possible.

Management Implications

The Missoula Urban Forest Master Plan needs to stress the maintenance of Missoula's public trees - removing hazardous trees, replacing dead and dying trees with young trees, and pruning trees. Focus needs to be on the variety of tree species when planting new trees as well as native species. The city of Missoula should study the implications of requiring all new development (residential and commercial) to build boulevards as well as planting and maintaining trees within the boulevard. Residents want Missoula to fund the maintenance of public trees but are cautious about developing separate revenue sources for the urban forest and even less likely to support a separate tax. This means that education about the physical and emotional benefits of trees as well as the cost of maintaining trees should be a section within the Urban Forest Management Plan. The Urban Forest Division could work with the MSU extension services on an education plan.

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Introduction

The Urban Forestry Division within the Missoula Parks and Recreation Department is in the process of writing a master plan for the urban forest. This report is based on a survey conducted to gauge the interest, attitudes and opinions toward Missoula's public trees – the urban forest. Understanding the opinions of the residents of Missoula is one step in completing the master plan.

Purpose

The purpose of this study was to assess the value held by Missoula residents of public trees in the city.

Methods

The population of study was all residents living within the Missoula, Montana city limits. Two methods of data collection were used:

1. A postcard mailing with instructions to go on-line to complete a survey, and;
2. A postage paid mail-back questionnaire.

The Missoula GIS Department staff randomly selected 2,000 residential addresses from the city's 9-1-1 database. To avoid the potential for duplication, all non-residential addresses were removed from the list prior to selection. The data set was divided into two address lists of 1,000 each.

Survey design

The questionnaire was designed after a literature review of similar studies (Appendix A). The questions were adopted from other studies and were written to represent four categories: value of trees; resident support for trees; community responsibility for public trees, and; the effect of trees on residents. Demographic questions and a few questions regarding what type of set up the respondents had in front of their residence (trees, sidewalk, boulevards) were also asked.

The questionnaire was reviewed by Missoula Parks and Recreation staff and the "Trees for Missoula" volunteer group. Minor additions and deletions were made. A pilot test of the survey was conducted on the "Nature Tourism and Outdoor Recreation" class of about 65 students at the University of Montana. Students were asked to complete the survey, and then a question-by-question discussion was held to validate the question design (making sure each question was interpreted as designed). Additional changes to wording were made before the final survey was ready for disbursement.

Postcard Method

The first method was the postcard mailing and online survey completion. This was an experiment to see if the less expensive method of only paying for postcard postage and encouraging people to get online to complete a survey could produce a valid number of completed questionnaires.

Postcards were mailed on April 18, 2014 to 1,000 residents (Appendix B). Each postcard had a hand written survey ID included on the card for the respondent to enter into the survey once they were online. This code provided a control to avoid duplications and ensure only responses from selected addresses. Only those with valid ID's were counted in the final data analysis. The postcard invitation did not have a cut-off date for participation. There were 106 responses from the on-line survey for a 10.6 percent response rate. This small response rate required the second method to be utilized.

Mail-back Survey Method

The second mailing of 1,000 surveys was sent out in three batches during the week of May 26, 2014. In this mailing, paper surveys were sent out to recipients. Each envelop contained a participation invitation letter from the Mayor (Appendix C), a paper survey and a stamped return envelope. Like the postcard survey, a survey ID was hand-written on each questionnaire. Surveys were returned by 301 respondents for a 30.1 percent response rate.

The mail-back survey asked that completed questionnaires be returned by June 16, 2014. Survey questionnaires were still arriving in the mail on July 9, 2014 therefore the cut-off for survey data entry was July 9, 2014.

In total, 407 completed and valid surveys were received for this study. An overall response rate of 20.3 percent was obtained from the 2,000 postcards and mail-back surveys.

Limitations

As in all studies, this study has some limitations. First, it is assumed that the people who responded are no different than those who did not respond. Second, in terms of the Missoula population, the U.S. Census reports that Missoula is 50.1 percent female and 49.9 percent male. This study had 57 percent female respondents, slightly higher than the Missoula population. Third, the questionnaire was sent to a random sample of 9-1-1 residences in Missoula. It is assumed that it is a complete database of households within the city limits.

Results

Results of the study are presented in three sections. Section 1 provides the descriptions of who completed the survey regarding demographic information as well as their residential description in terms of public trees. Section 2 provides the frequencies, percentages, and averages of:

- residents' value of trees;
- residents' commitment to trees in regards to support;
- the city's responsibility toward trees;
- the effect of trees on residents

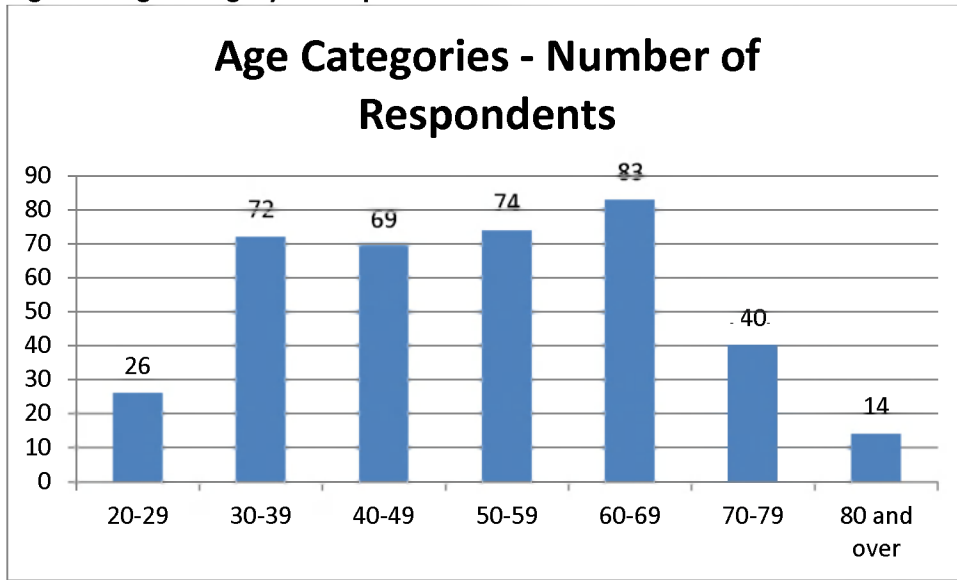
Section 3 summarizes the written comments provided by Missoula residents related to the Urban Forest Master Plan and overall general comments.

Section 1: Demographics

Respondents to the survey were 57 percent female and 43 percent male. Eighty-one percent of respondents own their home. The average age of respondents was 52.25. The number of respondents by age category shows a fairly even distribution for the four decades between 30 and 70 years of age (Figure 1).

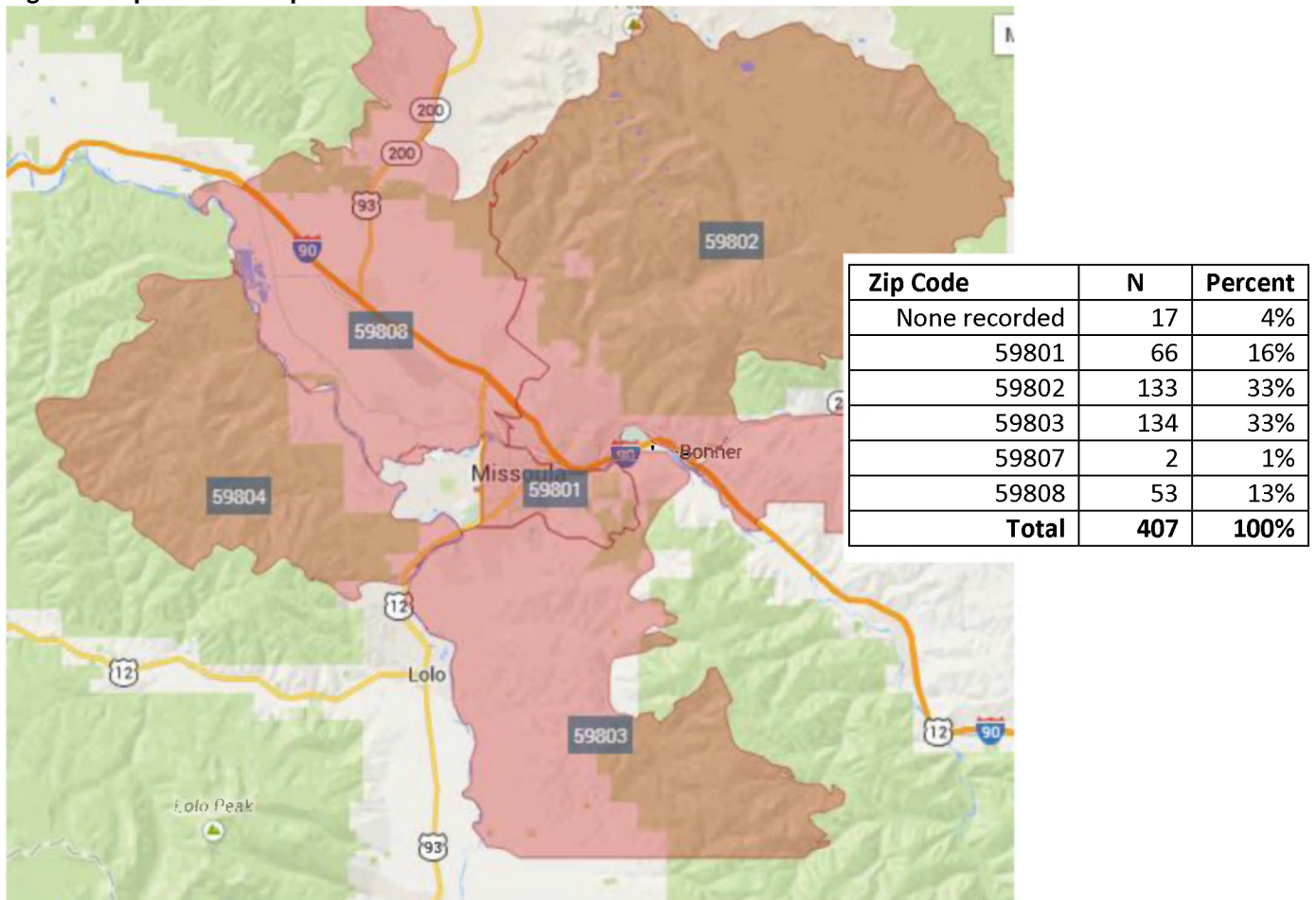
- 7% = 20-29 years old
- 19% = 30-39 years old
- 18% = 40-49 years old
- 20% = 50-59 years old
- 22% = 60-69 years old
- 11% = 70-79 years old
- 4% = 80 year old and over

Figure 1: Age Category of Respondents



Respondents were most likely to live in the zip codes of 59802 or 59803 (Figure 2).

Figure 2: Zip Code of Respondents

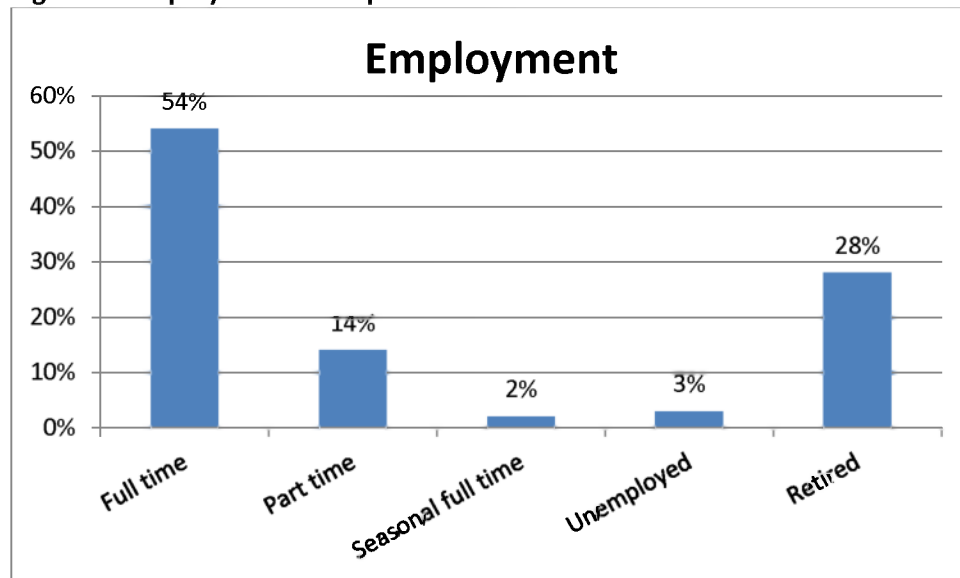


Respondents to the survey are highly educated. Only 20 percent have not graduated with at least a two year degree. Table 1 shows the highest number of respondents have a bachelor’s degree (38%) followed by those with a master’s degree (21%). The majority of respondents work full-time (54%) followed by 28 percent who are retired (Figure 3).

Table 1: Respondent Level of Education

Education Level	Frequency	Percent
Some high school	2	1%
High school diploma or equivalent GED	21	5%
Some college	55	14%
Associates degree	31	8%
Bachelor’s degree	148	38%
Master’s degree	81	21%
Doctorate	23	6%
Professional degree	27	7%
Total	388	100%

Figure 3: Employment of Respondents



Finally, respondents are less likely to have trees in front of their residence. Only 30 percent have public trees while 70 percent do not. The response to the type of public area in front of their home is shown in Table 2.

Table 2: Sidewalks or Trees in Front of Home

In front of my residence, I have...	Yes	No	Don't know
a boulevard strip between my sidewalk and curb	139 (41%)	201 (59%)	3 (1%)
public trees in the boulevard strip between my sidewalk and curb	102 (30%)	233 (68%)	6 (2%)
a sidewalk next to the street (with or without curb)	151 (44%)	189 (55%)	2 (1%)
no sidewalk or public trees next to the street	101 (33%)	199 (65%)	5 (2%)

Section 2: Attitudes and Opinions towards Trees in Missoula

Respondents were asked their level of agreement with 15 value statements about trees (Table 3). On a 5-point scale, with 1 being strongly disagree and 5 being strongly agree, it is clear that residents value trees when all means were above 3.0 on the scale. Missoula residents value the beauty that trees provide above all other statements followed by valuing the shade and making Missoula a nicer place to live.

Table 3: Value Statements of Missoula's Public Trees

I value Missoula's public trees because these trees...	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean
provide beauty	6 (2%)	2 (1%)	14 (4%)	112 (29%)	259 (66%)	4.57
provide shade	7 (2%)	3 (1%)	21 (5%)	141 (36%)	221 (56%)	4.44
make Missoula a nicer place to live	8 (2%)	6 (2%)	27 (7%)	123 (31%)	234 (59%)	4.43
contribute to reducing air pollution	11 (3%)	4 (1%)	33 (8%)	125 (32%)	222 (56%)	4.37
provide oxygen	11 (3%)	1 (<1%)	30 (8%)	156 (40%)	196 (50%)	4.33
make me happy	9 (2%)	12 (3%)	53 (13%)	111 (28%)	211 (53%)	4.27
keep streets and sidewalks cooler	8 (2%)	4 (1%)	44 (11%)	158 (40%)	182 (46%)	4.27
improve my quality of life	12 (3%)	13 (3%)	44 (11%)	122 (31%)	204 (52%)	4.25
encourage birds to live in my neighborhood	9 (2%)	4 (1%)	63 (16%)	125 (32%)	194 (49%)	4.24
help prevent soil erosion	11 (3%)	14 (4%)	46 (12%)	157 (40%)	165 (42%)	4.15
provide a benefit that outweighs their costs	12 (3%)	16 (4%)	67 (17%)	116 (29%)	183 (46%)	4.12
help manage storm water	9 (2%)	19 (5%)	69 (18%)	141 (36%)	157 (40%)	4.06
enhance my property value	12 (3%)	19 (5%)	91 (23%)	114 (29%)	154 (40%)	3.97
mask views I don't want to see	23 (6%)	41 (10%)	136 (34%)	92 (23%)	105 (26%)	3.54
make my neighborhood feel safer	23 (6%)	47 (12%)	162 (41%)	83 (21%)	79 (20%)	3.38

The next set of questions relate to residents' belief in their personal responsibility for public trees. Residents are willing to take care of trees and want them to be funded, but are slightly less enthusiastic about donating to causes for trees, reminding neighbors to water trees, and volunteering for "Trees for Missoula." However, the mean responses on the 5-point scale still show that the majority of residents agree with these responsibilities (Table 4).

Table 4: Resident Responsibility for Public Trees

I would do the following for Missoula's public trees...	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean
Take care of (water) the public trees planted in front of my house	17 (4%)	11 (3%)	51 (13%)	154 (39%)	158 (40%)	4.09
Encourage adequate funding for maintenance of these trees	19 (5%)	22 (6%)	52 (13%)	147 (37%)	154 (39%)	4.00
Call the city when I see a problem with a public tree	10 (3%)	20 (5%)	83 (21%)	182 (46%)	102 (26%)	3.87
Donate to causes that help maintain the public trees	24 (6%)	34 (9%)	127 (32%)	138 (35%)	71 (18%)	3.50
Remind my neighbor to water the public trees in front of their house	30 (8%)	60 (15%)	147 (37%)	94 (24%)	62 (16%)	3.25
Volunteer with "Trees For Missoula" (a local nonprofit organization)	35 (9%)	66 (17%)	174 (45%)	75 (19%)	41 (11%)	3.05

Respondents were asked their level of agreement with various statements regarding the extent to which the city should maintain the public trees. While all statements were agreed with by the vast majority of respondents, removing hazardous trees, replacing trees, and pruning trees had the highest means of all the statements indicating that the public is strongly in favor of the city keeping abreast of safety issues as they relate to public trees (Table 5).

The funding of public trees received some of the lower means within the survey. While respondents would like the city to fund Missoula's public trees, they are less enthusiastic about supporting a separate revenue source for tree maintenance or a separate revenue source for tree planting. With that said, however, the means were all above 3.0 on the 5-point scale indicating that support for funding is there. Looking at the individual agree responses, "providing separate revenue source for tree maintenance" had 56 percent in agreement and "providing separate revenue source for tree planting" had 53 percent in agreement (Table 5). When asked directly if they would support an increase in taxes to fund Missoula's public trees, 47 percent of respondents agreed (Table 5).

Table 6 displays the final set of questions which relate to how trees affect residents of Missoula. It is clear that trees make their life more enjoyable, provide desired shade, improve air quality, and have an aesthetic that encourages walking and shopping. Respondents want trees along city streets and are somewhat in favor of increasing their taxes for these trees (Table 6).

Table 5: Missoula City's Responsibility for Public Trees

It is important to me that the city of Missoula...	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean
Removes hazardous public trees before they fall	4 (1%)	5 (1%)	17 (4%)	171 (43%)	199 (50%)	4.4
Replaces dead/dying public trees with young trees	5 (1%)	7 (2%)	33 (8%)	163 (41%)	186 (47%)	4.31
Prunes the public trees to reduce future hazards	4 (1%)	7 (2%)	27 (7%)	195 (49%)	162 (41%)	4.28
Ensures that new public trees are planted and cared for properly	7 (2%)	8 (2%)	34 (9%)	166 (42%)	177 (45%)	4.27
Requires new developments to plant public street trees	15 (4%)	18 (5%)	50 (13%)	134 (34%)	175 (45%)	4.11
Funds Missoula's public trees	19 (5%)	18 (5%)	53 (14%)	154 (39%)	149 (38%)	4.01
Plants public trees between the sidewalk and street (where applicable)	16 (4%)	13 (3%)	84 (21%)	167 (42%)	114 (29%)	3.89
Provides a separate revenue source for public tree maintenance	33 (9%)	25 (6%)	115 (30%)	136 (35%)	81 (21%)	3.53
Provides a separate revenue source for public tree planting	32 (8%)	31 (8%)	117 (30%)	126 (32%)	83 (21%)	3.51

Table 6: The Effect of Trees on Respondents

To what extent do you agree with the following statements?	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean
Trees make neighborhoods more enjoyable to me	3 (1%)	5 (1%)	18 (5%)	152 (39%)	212 (54%)	4.45
Trees are important because of their ability to improve air quality	6 (2%)	4 (1%)	26 (7%)	168 (43%)	185 (48%)	4.34
Shaded streets make my home cooler	7 (2%)	15 (4%)	61 (16%)	140 (37%)	161 (42%)	4.13
I am more likely to walk on a sidewalk lined with trees	11 (3%)	25 (7%)	98 (26%)	121 (32%)	129 (34%)	3.86
Trees around Missoula businesses make shopping more enjoyable	14 (4%)	25 (7%)	98 (26%)	144 (38%)	103 (27%)	3.77
Missoula's public trees are helpful in reducing my stress levels	20 (5%)	37 (10%)	120 (31%)	123 (32%)	88 (23%)	3.57
I am willing to increase my taxes to fund Missoula's public trees	55 (14%)	47 (12%)	105 (27%)	122 (31%)	62 (16%)	3.23
I would be OK if Missoula did not have trees along city streets	170 (44%)	131 (34%)	55 (14%)	20 (5%)	11 (3%)	1.89

A final analysis of the questions related to Missoula's public trees is provided in Figure 4. The data in this figure is split between respondents with boulevard trees and those without boulevard trees. It was deemed necessary to compare these two groups since one group (those with boulevard trees) might have a closer tie to Missoula's public trees.

One third of the respondents to the survey had boulevard trees, while two thirds did not have public trees in front of their homes. As displayed in Figure 4, it is obvious (means for both groups are above 3.0 on the 5-point scale) that all residents, whether or not they have trees adjacent to their property, are in favor of public trees, enjoy the aesthetics of the trees, and want the city to fund public trees.

A further look at Figure 4 reveals that residents with boulevard trees in front of their property are slightly more supportive on 37 out of the 38 questions. Only the question, "I value Missoula's public trees because these trees mask view I don't want to see" is higher for residents without boulevard trees. This suggests that an increase in appreciation of public trees and support of public trees can be heightened by placing trees in front of homes (if boulevards exist). The converse holds true as well. By reducing the number of public trees, support for public trees may also decrease.

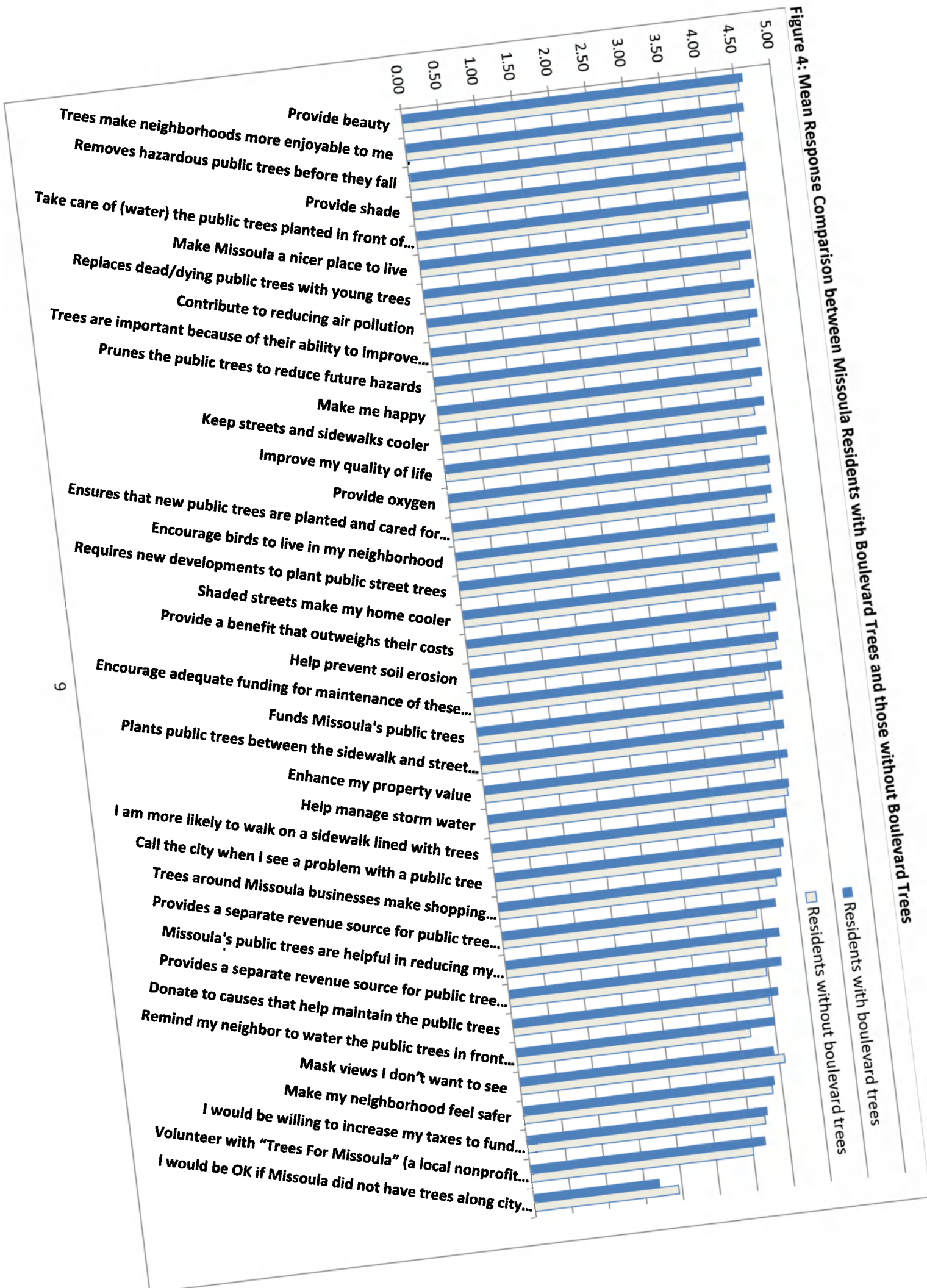


Figure 4: Mean Response Comparison between Missoula Residents with Boulevard Trees and those without Boulevard Trees

Section 3: Open Ended Comments

Two open-ended questions at the end of the survey asked respondents what they would suggest be included in Missoula's master plan for public trees followed by a question asking them to provide any additional comments. Comments about the master plan were provided by 168 (41%) of all respondents. Additional comments were provided by 79 respondents (19%). Each open ended question was read thoroughly, and then assigned categories based on the comment. All comments are provided in full, unedited format in Appendices D and E.

Master Plan Suggestions

Review of the suggestions provided for the master plan lead to six overall themes and a total of fourteen comment categories (Figure 5).

The largest category was 'tree maintenance' with three additional subcategories added to the main theme. Representative quotes from each category are provided.

Tree Maintenance

- "I would include actually removing and replacing trees in some instances. Weeds growing at the base of the trees might also be addressed as well." -
- "Continuous maintenance of all public trees to make sure that they are benefiting all the people living and working in Missoula." -

Tree placement

- "Careful selection of replacement species." -
- "Prioritizing neighborhoods that are in particular need of beautifying - low income neighborhoods also." -

Public Safety

- "Include all aspects- not just downtown. Many untrimmed trees are traffic danger due to visibility." -

Sidewalks

- ""Sidewalks do not need to be linear with a boulevard, because at times it is more appropriate to put the sidewalk with a curb next to the street, or winding around existing trees, particularly on side streets which are rarely if ever plowed anyway." -

Species Diversity/Disease Control

- ""Plant trees that need the least amount of water or lower amounts of water." -
- ""Plant a variety of species to prevent aging trees all at the same time." -
- ""Maintaining + replacing older trees that are becoming a hazard. Spraying trees to prevent unwanted insects. Plant a variety of trees. In my area it's all poplar. UGH!" -
- "It's such a buzz word these days, but... Diversity. Diversity of species should be a priority." -

Native Trees

- ""More native plants and xeriscapes!" -
- ""Plant evergreens- don't have to pick up leaves!" -
- "Include an effort to plant a variety of trees, but focusing on those native to the region." -

Wildlife Habitat

- "Plant more Nature trees + species good for wildlife (berry producers)." -

Funding Concerns

- "Use existing funds to care for public trees/ new developments responsible for their trees. Put trees on private not public land. Property taxes already very high."
- "Adequate pruning. A 'catch up' fund to get up to date with the maintenance. It has been neglected for too long!!"
- "I think donations + fundraisers are good ideas"

No Taxes

- "I will not vote for a separate tax just for trees. City of Missoula is out of control! Love trees but come-on a separate dept +tax."
- "No tax increase! General fund only! Trim fat!"

Yes Taxes

- "Increase taxes or have a special tax for trees. Everyone should contribute, not just those with trees. It is a similar problem we have with sidewalks. I believe we all need to improving our city."

Love Trees - Quality of Life

- "That trees be part of the 'Garden City' and that funds be provided to both purchase and maintain trees that make Missoula the beautiful place it is."
- "Being aware of the different types of trees that may actually cause structural damage to sidewalks. I love the atmosphere of trees and they are vital, however they need to keep year round especially in our urban areas."

Private Land Trees

- "Require new subdivisions to provide for planting trees and put covenants requirements for maintaining trees."

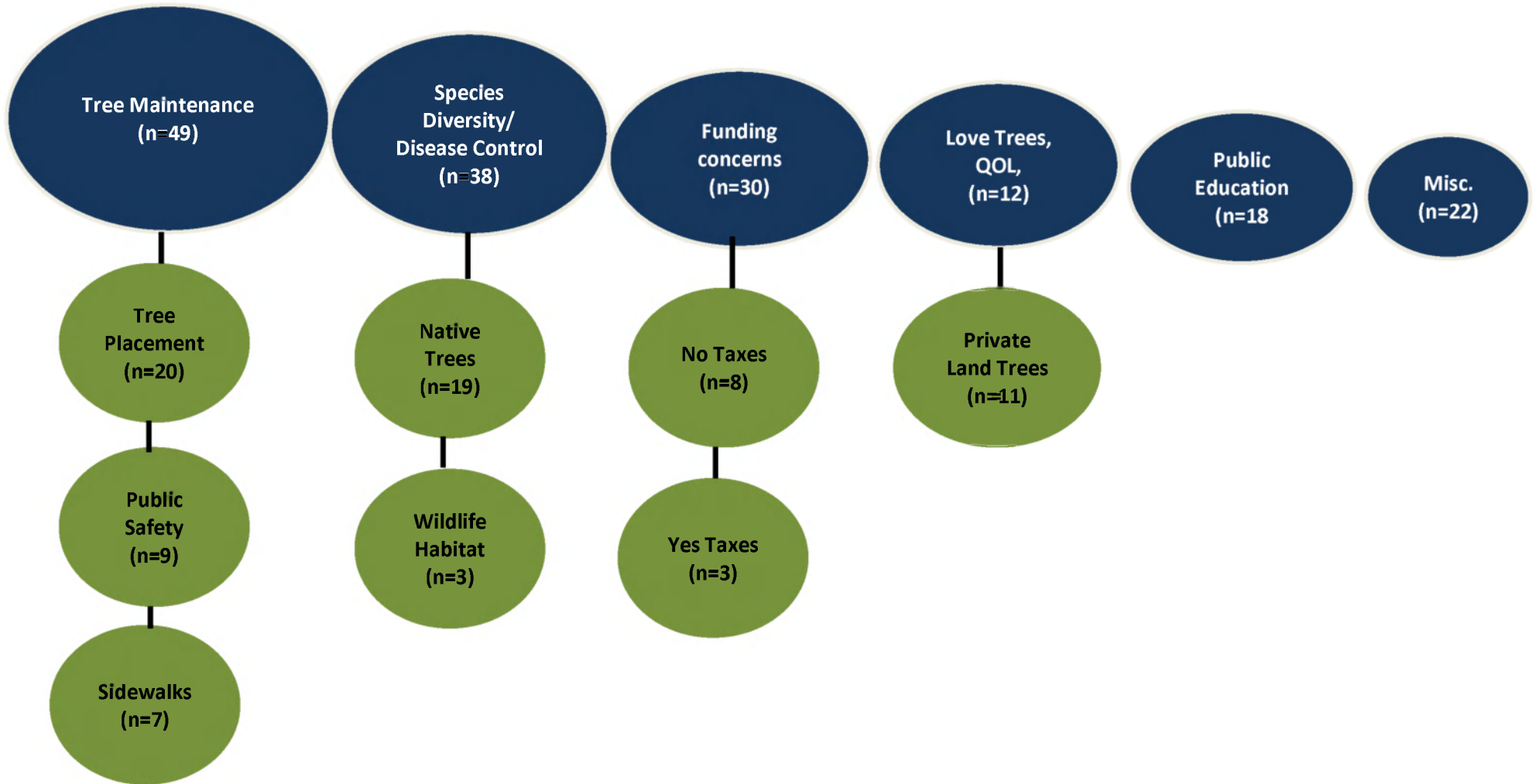
Public Education

- "Multiple sessions for public information sharing, discussion and input by all parties - with advance notice so we can attend!"
- "Education of property owners as to their obligation to water boulevard trees and the benefits of doing so."

Miscellaneous

- "Thank you for doing this survey and please make this happen-- use volunteers a lot!"
- "I think it is important to have a master plan for public trees but it must be reasonable. Funding sources must be included and replacement plans also."
- "The plan should have some specific goal like the total number of trees we'd like to have in the city, or the number of new trees that need to be planted, or the percentage of tree covered public area we'd like to reach in the city limits. Having some sort of goal like this would help gain support from residents and help in efforts to promote the plan and eventually pass tax increases to fund its implementation. The idea is similar to the UM group '1,000 New Gardens'. Having the tangible and measurable goal of planting 1000 new gardens in Missoula is a great mission for people to get behind and support, as well as to measure progress."

Figure 5: Master Plan Comment Categories



Additional Comments

There were 79 respondents who wrote in the ‘additional’ comments section. With this smaller number and the wide variety of responses, it was not beneficial to categorize the comments. A review of the comments seems to fall within the following topics:

- Thanks for the survey.
- Keep the trees. Trees are good for Missoula and our quality of life.
- Maintenance.
- Funding – some say no more taxes, others say let’s have a tax.
- Suggestions on what/how to deal with trees.

The full list of comments from this section can be found in Appendix E.

Conclusions & Recommendations

This study was conducted to get a representative understanding of how Missoula residents value trees and their propensity to support public tree maintenance and upkeep.

The summary statistics show that Missoulians are fundamentally supportive of public trees. Residents agree that their utilitarian purposes (e.g. shade, helping decrease pollution) are of value to the community. The aesthetic purposes tend to make their neighborhoods more enjoyable and Missoula a nicer place to live. Public trees provide a quality of life that Missoula residents appreciate. Because of these reasons, it appears that residents of Missoula are willing to support the removal of trees (for safety reasons), pruning, planting, and basic maintenance of public trees.

It is recommended that the Urban Forest Division continue to put effort into the maintenance of Missoula’s public trees. Removing hazardous trees before they fall received the highest mean score of the questions related to the city’s responsibility in regard to trees. This was followed by replacing dead and dying trees with young trees, then pruning trees. All of these maintenance issues had only 12 people or less disagreeing with them, so the strength in agreement is very high.

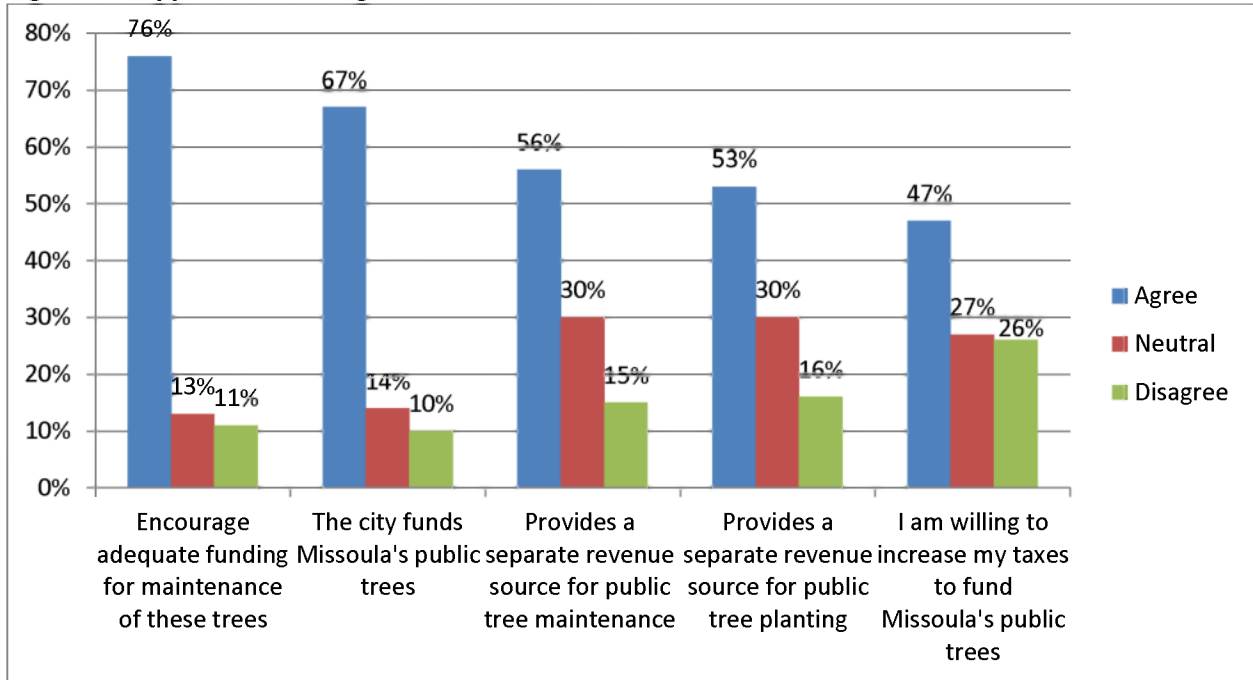
Funding public trees is equally important, but how that funding occurs is less clear. For example, the five statements related to funding show an interesting pattern from 76 percent of residents agreeing that they would encourage adequate funding for maintenance to 47 percent who say they are willing to increase their taxes to fund Missoula’s public trees. The support is high when it is simply requiring one to ‘encourage funding.’ As it gets more specific as to how to fund (e.g. separate revenue sources or higher taxes), the number of residents, while still supportive, decreases. Figure 6 summarizes the ‘agree,’ ‘neutral,’ and ‘disagree’ response levels for each of the five funding related questions.

Finding funding sources for city responsibilities is always a difficult prospect. We all know there are many deserving fingers in the small pot of money. It is recommended that the Urban Forest Division focus on both the utilitarian and aesthetic needs for public trees when discussing funding issues. These include, but are not limited to, the following talking points:

- Trees help moderate the “heat island” effect. With summer temperatures increasing, the forward thinking of planting new trees and maintaining the old trees is needed even more.
- Trees help control our carbon dioxide levels which contribute to ‘greenhouse gas’ pollution. Missoula can work towards offsetting the input we all have when driving our personal automobiles.

- Trees make Missoulians happy and Missoula a nice place to live. These quality of life aspects are noticed by economic developers and job creators. It becomes easier to convince others to live in a place that is happy and cared for by its citizens and city.

Figure 6: Support for Funding of Public Trees



The majority of respondents (79%) agreed that new developments should be required to plant trees. This is one way to offset city funding of new trees and is highly supported by residents.

Finally, an interesting outcome emerged from the written suggestions for what should be included in the urban forest master plan. The importance of tree maintenance received the highest number of comments followed by the need for tree species diversity including a plea for more native trees and trees that require less watering. Tree diversity and native trees were not specifically asked about in the questionnaire, therefore the repeated occurrence of these comments shows how very important it is to many people in Missoula.

It is recommended that the Urban Forest Division focus on tree diversity, and to that end, provide an education through media outlets and pamphlets on what is native to the Missoula area so residents are supportive of the type of tree planted in front of their home, as well as providing information on trees they should be planting on their private property. Working with MSU extension may provide avenues for education to residents about native trees.

In summary, the data show strong support for public trees. Missoula has always been proud of the 'Garden City' title. Planting and maintaining Missoula's urban forest will allow the city to keep that title for decades to come.

Appendix A – Survey Instrument

This is a questionnaire regarding Missoula’s public trees – the urban forest. Trees have been planted in Missoula since the early 1900s lining the street boulevards and throughout the parks. Maintenance activities, such as planting, watering, pruning and removal are funded through the Missoula Park District and the City General Fund. The purpose of this survey is to gain a pulse on the community’s attitudes toward long term maintenance, planting, pruning, and removal of Missoula’s public street, park and greenway trees. This questionnaire is being sent to a small, but scientifically valid, random sample of Missoula residents. Your response to this study, therefore, is important to the city of Missoula for planning Missoula’s current and future urban forest.

If you enter your survey online, please enter this code: _____

In front of my residence, I have...	<u>Yes</u>	<u>No</u>	<u>Don't know</u>
A boulevard strip between my sidewalk and curb	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public tree(s) in the boulevard strip between my sidewalk and curb	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A sidewalk next to the street (with or without curb)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No sidewalk or public trees next to the street	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I value Missoula’s public trees because these trees...	<u>Strongly disagree</u>	<u>Disagree</u>	<u>Neutral</u>	<u>Agree</u>	<u>Strongly agree</u>
Provide beauty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enhance my property value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide shade	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Encourage birds to live in my neighborhood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contribute to reducing air pollution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improve my quality of life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Make Missoula a nicer place to live	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Make me happy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide a benefit that outweighs their costs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Help prevent soil erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Help manage storm water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Keep streets and sidewalks cooler	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mask views I don’t want to see	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Make my neighborhood feel safer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provide oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I would do the following for Missoula’s public trees...	<u>Strongly disagree</u>	<u>Disagree</u>	<u>Neutral</u>	<u>Agree</u>	<u>Strongly agree</u>
Encourage adequate funding for maintenance of these trees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Take care of (water) the public trees planted in front of my house	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Remind my neighbor to water the public trees in front of their house	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Call the city when I see a problem with a public tree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Donate to causes that help maintain the public trees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volunteer with “Trees For Missoula” (a local nonprofit organization)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

It is important to me that the city of Missoula...

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Prunes the public trees to reduce future hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Removes hazardous public trees before they fall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Replaces dead/dying public trees with young trees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ensures that new public trees are planted and cared for properly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Funds Missoula's public trees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Requires new developments to plant public street trees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provides a separate revenue source for public tree maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provides a separate revenue source for public tree planting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plants public trees between the sidewalk and street (where applicable)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what extent do you agree with the following statements...

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Trees make neighborhoods more enjoyable to me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trees are important because of their ability to improve air quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am more likely to walk on a sidewalk lined with trees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would be OK if Missoula did not have trees along city streets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shaded streets make my house cooler	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Missoula's public trees are helpful in reducing my stress levels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am willing to increase my taxes to fund Missoula's public trees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trees around Missoula businesses make shopping more enjoyable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are you a... Male Female

In what year were you born? _____

What is your current zip code? _____

Are you currently a... Homeowner Renter

What is your CURRENT employment status? (circle only one)

Full time Part time Seasonal full time Seasonal part time Unemployed Retired


What is your highest completed level of education? (circle one)

Some high school Some college Bachelor's degree Doctorate
 High school diploma or (GED) Associates degree Master's degree Professional degree

What would you suggest should be included in Missoula's Master Plan for public trees?

Appendix B – Postcard mailed for on-line survey completion

Front

	<p>Missoula Parks and Recreation Department</p> <p>What is the value of trees in Missoula?</p> <p>Public Interest Survey</p>
<p>http://MissoulaTrees.surveyanalytics.com</p>	

Back

<p>Missoula's Trees – What do you think?</p> <p>The Parks and Recreation Department is conducting a survey to determine citizen interest and areas of concern regarding Missoula's trees. You are one of a small random sample selected to participate in the survey. Please help! Go to the survey online at http://MissoulaTrees.surveyanalytics.com. Use the code below to access the survey.</p> <p>(*Code inserted here)</p> <p>If a paper version of the survey is needed, call City Forester Chris Boza at 552-6270. ***Respondents have a chance to win a free 30-Punch Pass to Splash Montana or Currents.</p>	<p>(Address here)</p>
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Appendix C- Introductory Letter with Mail-back Survey



435 RYMAN MISSOULA, MONTANA 59802-4297 (406) 552-6001

May 27, 2014

Re: Urban Forestry Survey

Dear Missoula Citizen:

All of us who live in Missoula love our urban forest and want to protect our trees' health and longevity. In addition, Missoula's street trees, which number more than 20,000, are worth an estimated \$70 million.

At the City of Missoula, we take our responsibility for the urban forest seriously. You are among a randomly selected sample of residents receiving this survey to help shape a new Urban Forest Master Plan. The plan will detail the recommendations and resources needed to proactively manage Missoula's urban forest for the next protecting the trees lining city streets and trails and growing in city parks. We need your help to make the master planning process the best it can be.

As a thank-you for your time and survey answers, you have an opportunity to enter a drawing for a 30-swim punch card to Splash Montana or Currents Aquatics Center.

Help us continue to be good stewards of our green infrastructure today and in the future.

Sincerely,

John Engen
Mayor

***The Urban Forestry Division wants
to hear from YOU!***

Please complete and return the survey in the enclosed stamped envelope.

If you prefer to respond to the survey online, please visit www.missoulaparks.org. Please use the code on the enclosed survey.

PLEASE RESPOND BY JUNE 13, 2014

Appendix D – Master Plan open ended comments

All comments are listed here without editing.

Trees and landscaping in Big Box retail parking lots.
Some way to maintain an effective assault on beetles harming and killing fir trees and Ponderosas pines in Missoula and its park areas and open space
We need a variety of trees suitable to Missoula.
I LOVE trees and believe in their power, but recognize the extent of work they require. Master plan must incorporate native trees that require limited watering, think of native plants as well as trees. Perhaps small subsidies for owners to buy trees to encourage/promote that they (the owner, not the city) will take maintain and take care of them.
More trees!
Plant as many trees as possible.
colorfull hearty trees
Trees improve the quality of Missoula's life. My only request is that trees aren't planted in a position where they block the view of traffic when turning (i.e. so you can't see if traffic is coming when you turn). I suggest we plant as many trees as possible, for research shows that contact with green nature has substantial health (both physical and emotional) benefits. Trees make life better for me, my students, my family, and my neighbors.
Multiple sessions for public information sharing, discussion and input by all parties - with advance notice so we can attend!
a separate district for funding...based on taxing areas where pub trees are planted None up on south hill
I would like native trees to be used as much as possible. Maple trees are invading some of Missoula's natural parks (e.g., Greenough), and Siberian elms are growing like weeds in some neighborhoods. I would include actually removing and replacing trees in some instances. Weeds growing at the base of the trees might also be addressed as well.
diversity of species to avoid massive losses from diseases and insects. no monocultures. if sidewalks are required of homeowners, the the city must plant trees.
Careful consideration of tree types. No cottonwoods or maples. Beech, oak, willows, elms, quakies, etc all seem good choices. Maples are beautiful, but rip up other city assets with roots.
Concise, clear, information sessions in the community about the benefit (to all) of having trees and green spaces in a town or city.
MORE OF THEM - I am shocked there are not more trees in the 'Garden City.'
more trees, care for existing trees, and maintenance. Missoula has amazing green space for a city of its size and that should be encouraged and continue their dedication for green space for the future...
Use native species whenever possible.
Aggressive replacement/removal of Norway Maple and Siberian Elm. Careful selection of replacement species.
thank you for doing this survey and please make this happen - use volunteers a lot
Continuous maintenance of all public trees to make sure that they are benefiting all the people living and working in Missoula.
I think it makes more sense to have 'side of the road' trees than anything on a median strip.
Also, care needs to be taken with planting trees that are likely to push up sidewalks (or build sidewalks that discourage tree roots interference).
http://www.mrsc.org/artdocmisc/m58mannmade.pdf
Sidewalks that have pushed up sections may be completely unusable to people using power wheelchairs.
plant them, plant them, plant them... trees make everything better.
Emphasis on native trees to a certain extent
I think it is important to have a master plan for public trees but it must be reasonable. Funding sources must be included and replacement plans also. Obviously have more native trees is a preference but in some cases that may not be as reasonable. And trying to maintain older/bigger trees is important too.

<p>Include species that are appropriate for our climate.</p> <p>Include a maintenance plan.</p> <p>Identify priority areas for tree planting or replacement.</p> <p>Consider the use of native trees in boulevards where possible.</p>
<p>Sidewalks, as they are added to old neighborhoods, should respect existing parking and vegetation, which includes but is not limited to mature trees as is now stated in the city plan. Sidewalks do not need to be linear with a boulevard, because at times it is more appropriate to put the sidewalk with a curb next to the street, or winding around existing trees, particularly on side streets which are rarely if ever plowed anyway.</p>
<p>The plan should have some specific goal like the total number of trees we'd like to have in the city, or the number of new trees that need to be planted, or the percentage of tree covered public area we'd like to reach in the city limits. Having some sort of goal like this would help gain support from residents and help in efforts to promote the plan and eventually pass tax increases to fund its implementation. The idea is similar to the UM group '1,000 New Gardens'. Having the tangible and measurable goal of planting 1000 new gardens in Missoula is a great mission for people to get behind and support, as well as to measure progress.</p>
<p>Strive for the greatest yet practical diversification.</p>
<p>City should do what they say they are doing like watering, pruning, and replacement of trees. They don't water or prune the trees in the downtown area. Trees are on city property so they should be responsible at NO cost to the property owner. This cost is already in the Street Maintenance cost to the property owners downtown.</p>
<p>That the home owner be allowed to take care of their trees in front of their home using a qualified contractor approved by the city.</p>
<p>Adequate maintenance of trees.</p> <p>Plant low-growing trees under power lines.</p> <p>Start replanting Mount Jumbo, Mount Sentinel.</p>
<p>maintenance and replanting of trees</p>
<p>That trees be part of the 'Garden City' and that funds be provided to both purchase and maintain trees that make Missoula the beautiful place it is.</p>
<p>Native trees for water conservation</p>
<p>Birches and Black Walnuts, other fruit and nut trees</p>
<p>Don't create blind spots for traffic .</p>
<p>Asking home owners if they really want a new tree planted and no money for city if they could help with cost. Limit home owner over doing boulevard with growth that over hangers and they don't take care of</p>
<p>A small portion of city taxes should be put into a dedicated tree fund. A wider variety of trees should be planted (species preference by site, as applicable). Possibly plant fewer trees that grow larger on wide boulevards. Consider planting some high value trees that can be managed as a source of merchantable wood to fund the urban tree program. Maintain an inventory of city trees. Engage high school and university students (e.g., EVST and forestry) in helping with the inventory.</p>
<p>Consideration of working with a company that harvests or stores mature trees to be moved to key areas of town</p>
<p>replace and diversify</p>
<p>Continue to care for trees we already have, replace old/dead trees w/ more locally sustainable varieties (more drought tolerant). Make it part of new zoning that drought tolerant trees are planted in new housing developments, both apartments and houses.</p>
<p>Increase taxes or have a special tax for trees. Everyone should contribute, not just those with trees. It is a similar problem we have with sidewalks. I believe we all need to improving our city.</p>
<p>Consideration for native trees and low-water trees. Prioritizing neighborhoods that are in particular need of beautifying - low income neighborhoods also.</p>
<p>Public trees be supported across Missoula's neighborhoods, including the North and West Sides that have been ignored while the trees in the university area, # streets, and slant streets continue to get priority attention.</p>
<p>The southside neighborhoods are sorely in need of public trees. I feel that all the attention for tree life is on the downtown areas or the U area. The southside is a step child of the city as far as parks, trees, urban development.</p>
<p>Norway Maples.</p>
<p>Put cherry trees on boulevards under power lines. They would attract lots of birds in July.</p>
<p>Only qualified professionals should be tending the trees not random city employees who know nothing or care nothing about the trees.</p>

I see no reason why taxes should increase to care for the public trees. Budgeting on the part of the city should include a figure to maintain the trees. The answer is not always to increase taxes.
Monitoring of newly planted trees for maintenance problems (watering, injuries) until established.
mandatory tree planting for all commercial and residential development. Trees to be added to existing commercial/residential structures when major improvements are preformed.
Community involvement regarding choices.....
I have noticed that many trees planted by the city do not survive their early years, mostly due to the hot dry summers we are experiencing - the water bladders are helping, but not always enough. Part of the Master Plan should include follow-up on these young trees to assure survival. Currently, I am seeing a net loss of trees in Missoula.
Adequate funding; more native trees, but ones that can withstand the stress of being next to streets
plant native trees
All new subdivisions should plant trees.
Pruning as needed.
Planting of the right trees for Missoula, such as ones that are adapted to the climate and will not become invasive. An alternative to Norway maple should be investigated and its planting eliminated if an appropriate alternative is found. Can native trees be planted: ponderosa pine, alder, mountain maple, or larch?
If possible when removing trees, to haul them to a mill site or find an alternative use for them. (Not sure what the current policy is)
Additional planting where possible
No idea.
Creation of special task district
more natives or quasi-native naturalized varieties. more conifers. more diversity. shrubs too! less deciduous, esp. norway maples. yuck! don't like 'em. less sod, more xeriscaping & mulch.
A list of the benefits and drawbacks of different kinds of trees. I would like to see more native, water-wise, long-lived tree species planted if that's a viable option.
I'm not sure what Missoula's master plan for trees is. I think trees make the city more inviting; but I don't believe the city should be spending money on trees in residential areas. When I bought my house there were trees in the Boulevard area already. One died and I have replaced it. Not every home has trees in front of it and maybe that should be a personal choice.
It's probably already included, but I think it's important to plant trees other than maples, which are beautiful but whose seedlings become a nuisance.
NO 'plan' needed-
Include volunteers, parolees, homeless, students and anyone else in maintaining trees to save more money and/or provide a chance to give back as well as acquire work experience.
1) Include snags where possible (cavity builders)
2 Encourage litter/duff (natural of course)- for ground feeding birds
Responsible spending= better spacing with new plantings, fewer new plantings; let home owners plant their own trees. More is not better.
To the extent possible, most of the trees be native to the Missoula area.
Chainsaws
More trees to treat wastewater before it goes back into creeks + rivers. More true hardwood variety.
No more planted medians.
Use of Federal grant money.
Funding
No cottonwoods, think about what falls from the trees. Keep sidewalks clear of low hanging branches.

Include all aspects- not just downtown. Many untrimmed trees are traffic danger due to visibility.
Don't study the 'plan' to defer + waste \$ that should go towards maintaining + planting trees where they are needed.
Continued maintenance- my son died 14 years ago and a tree was donated to sky view park.- The tree died + the plaque was stolen- would like all replaced please- Thank you
Unlike sidewalk changes, if the city owns the tree, the city should care for the tree, otherwise put it in the hands of the homeowner to own the trees.
Plant trees that need the least amount of water or lower amounts of water-
Better budgeting by the city to include these costs in current funds. Nice , but not necessary to city management.
Public trees in parks & boulevard strips. Update the aging urban canopy, particularly surrounding SPH, nest side, Lowell school district. Cost lowering might include volunteers planting trees provided by the city of Missoula.
Provide business to local landscaping businesses.
A wide variety of tree types.
Education of property owners as to their obligation to water boulevard trees and the benefits of doing so.
A percentage of budget if needed.
Focus on native trees.
Public awareness of this issue and of any decisions made. Opportunity to be involved in the process.
Funding to provide for proper care- Maintain as insect and disease free as possible-
Answers to city problem trees!
Federal funding for trees
Deciduous- broad head trees. More trees downtown (where applicable).
Pay more attention to planning and taking care of existing plants an suck an stop w/ useless turn about an clustering an ruining traffic streets
Public school events and field trips to educate and help plant trees.
Garden boxes when trees are not possible- I want to see more public garden spaces for every to enjoy and fruit trees! Add fruit trees to the mix.
Arborist on call to assist homeowners with problems. City maintenance do public tree work instead of outsourcing.
Have a great variety of trees!
Don't separate trees into a special accounting category. They are part of the great mix in funds clumped into beaches and parks, the recreation funds. Use that appropriation to fund it.
Responsibility of businesses, including rental agencies and the properties they maintain, to ensure tree planing/care as part of their licensing.
Not really anything cuz you already have it covered.
Coordinated 'Arbor Day' activities.
Find funding aside from raising my taxes. You don't need as many as we have. They are overcrowding + roots cause problem. Thin them out!
Wise use of tax revenues allocated to parks and city trees, less manicured grass, more native plants and trees for less watering and maintenance.
For homeowners including out-of-state owners to be required to H2O and care for the trees in front of their house (something better than required shoveling- doesn't happen with rentals). Educate/discourage about Siberian Elm and Norway Maple.
Plant more trees, make sure property owners (or someone) keep these trees wetted. Stop cutting the Norway Maples in Greenough Park.
Plant replacement trees of same type as those being replaced. Mayor Engen need to tighten up on his spending. No new tax. We do not need to create more gov positions.
Prune to make sure trees don't obstruct street parking or walking on sidewalks!
Long-term plan for maintenance expenses.
Use the general funds, for which we are already heavily taxed. Encourage individuals, and require developers to plant trees appropriately. Pray for rain.

Being aware of the different types of trees that may actually cause structural damage to sidewalks. I love the atmosphere of trees and they are vital, however they need to keep year round especially in our urban areas.
1. A meaningful + effective plan that addresses all neighborhoods in Missoula in a timely + effective manner. 2. I think it would be meaningful to have the urban forester be visible in the neighborhoods. I also think it would be nice if the neighborhoods got access to equipment that the city owns to assist with care of these trees. Ex. The chipper in neighborhoods for a weekend to chip debris.
Where there is damage to sidewalks because of tree roots, the city should fix and not pass on costs to owner. Sidewalks need to be maintained for safety, especially in older sections of Missoula.
A way to incentivize neighborhoods to be accountable for their trees.
Roadways visual, not obstructed by trees or shrubs.
Require new developments to plant trees and maintain them.
Get rid of dead trees, maintain + care for existing trees.
More Linden trees.
Plant a variety of species to prevent aging trees all at the same time
Maybe more water wise trees, than maples. We have some p. pines or tamarack in our neighborhood and they are so lovely.
Build trees into cost of projects + annual budget. I will not vote for a separate tax just for trees. City of Missoula is out of control! Love trees but come-on a separate dept +tax
Maintain the Blvds. up Miller Ck. There are trees broken + down after our icy winter. We watched thru the thaw process of planting the pretty effect it made in our neighborhood, just keep it up.
They need to take care of dead trees. I called over a year ago and still haven't had anyone come look at the dead tree that is about to fall over in front of my house (623 Howell St.).
Plant more Nature trees + species good for wildlife (berry producers).
Make sure than new trees have their trunks protected from the deer. Some of the new trees on Miller Creek have already been rubbed by the bucks last fall.
Any time there is a transfer of ownership by property in an area with trees or where public trees could be planted, a city forester should meet with new prop owner to educate on care of trees + advise on planting new trees!
Keep trees out of boulevards- we need to maintain free streets they can cost us tons of money and 90% of them look bad or are dead. A waste of good water. Also stop tell people you will pick up leaves in the Fall what a mess and costly.
Maintain older trees in the downtown/University areas. Leave replacement decisions and associated costs to individual neighborhoods/homeowners. Take into consideration developing more natural landscapes that minimize/reduce watering.
Interpretive/ educational information for residents and children teaching the values of trees.
No additional taxes direct or indirect.
Trim and prune if obstructing.
Plant trees, but once they are planted, maintain them.
Take care of the trees after planted, including grass and area around trees.
Plant more Oak trees!
Funding and enforcement of waterings.
Tree species selected considering both purpose and safety- shade, strength of limbs, blowdown, potential, litter. Trees in parks, playgrounds, greenways and boulevards have different 'specs.'
Include incentives for landowners and developers to protect and enhance public trees- Do not worry about push back- regs are ok- it enhances property values! Aim for native species first- but contemplate other robust spp. that don't use as much water and are adaptable to climate changes.
Remove them all!
Have the jail work program help with labor to care for the trees.
Keep them off boulevards.
Trim them away from intersections to avoid blind spots + around stop signs.
Include an effort to plant a variety of trees, but focusing on those native to the region

Lot of trees. Especially trees that keep their green foliage.
Planting, pruning, disease control.
Some public input into types of trees planted- including public education re: pros + cons of different types.
Fruit trees- shade/oxygen/food!! Give the fruit to the Poverello Center.
Plant evergreens- don't have to pick up leaves!
More native plants and xeriscapes.
I think donations + fundraisers are good ideas.
Use the cities potential power to get better pricing for homeowner's that would plant trees in city- controlled areas. There has to be discount potential so that 1.5' trees don't cost \$200+/ each to plant.
A realistic sustainable approach especially in terms of requirements, costs and funding sources.
Do nothing more than done- nobody wants more taxes!!!
Maintaining + replacing older trees that are becoming a hazard. Spraying trees to prevent unwanted insects. Plant a variety of trees. In my area it's all poplar. UGH!
Nothing should be required for citizens, it should be voluntary.
Require new subdivisions to provide for planting trees and put covenants requirements for maintaining trees.
Resident awareness.
No tax increase! General fund only! Trim fat!
Keep including your city tree trimming crew and support them more. They do a great job not to mention several well paying jobs.
No new taxes. Use existing funds to care for public trees/ new developments responsible for their trees. Put trees on private not public land. property taxes already very high.
Adequate pruning. A 'catch up' fund to get up to date with the maintenance. It has been neglected for too long!!
Make sure that the trees are maintained in public areas. (example: Linda Vista Roundabout)
Make sure that grass is cut on boulevard strips or have reminders: someone call to ask property/business to do it.
Public access to tree-maps so public could identify species of trees. This would increase awareness and feeling of ownership.
It's such a buzz word these days, but... Diversity. Diversity of species should be a priority. Also, because the city seems to be non responsive to citizen's concerns regarding tree health, removal, pruning, maybe the city could reimburse a percentage of homeowner's expenses relative to trees on the city boulevard.
This 'Master Plan' needs to be short and to the point. With a common sense way.
Return planting maple trees!
Do not plant green ash. Do not plant any tree from Poplar family or genus populus. Educate residents about how to maintain healthy trees. City forester has to become more visible. Have special fund raisers to raise awareness + money. How about a 'run for trees' or a 'trees are neat campaign.' Get into the news and make some noise. How about an 'adopt a tree campaign'. Every responsible adult could adopt a tree or block of trees. I am just doing a little brainstorming. here, but you get the idea. How about 'Trees Are the Answer' to all of lifes more complicated questions.

Appendix E – Open ended general comments

All comments are listed here without editing.

Trees truly have more value than we can imagine. Trees make our lives more fulfilling and enriching. Although I don't have public trees on my block, myself and neighbors have several in our yards. Our trees have much more value than those insipid parking meters.
More trees please!!
Thank you!
Thank you for asking! I love Missoula's mix of urban amenities such as parks and paths, bike paths and trails - as well as the preservation of wild spaces and places for wildlife habitation. I live near the new Riverside Park (by the Osprey stadium) and I love it!!
center islands are to difficult to get residents to maintain. plant those with water wise and drought resistant plantings. if homeowners are required to water street trees, then maybe a very small tax could be leveled at all home owners or rental owners without such trees to help support the streets we all use.
One of Missoula's best qualities is the great amount of trees and green space. We should do all we can to maintain the esthetic and environmental benefits that trees bring to the Garden City.
I currently live on the Foothills above the 'bowl' - NO TREES UP HERE AND IT SUCKS!!
Additional tree thinning is needed on Mt Jumbo and along Rattlesnake Creek to lower the risk of uncontrollable wildfire. There may be other places as well.
I think you are doing a good job with a overwhelming task. I'm happy to see some different tree species get planted. Keep up the good work!
Thank you again
the city removed to huge trees from my neighbors lawn by the street, they were beautiful. they replanted two trees and one died quickly. i wish they would replant that tree. thanks for the survey~ go trees! :)
Instead of cutting cottonwoods down in public parks, such as Greenough when they are considered a 'hazard', consider leaving a main trunk to provide habitat. We are losing mature cottonwood canopy throughout the city on streams and the river. When removing maples or other trees for whatever reason in parks such as Greenough, followup with additional planting and weed control. Develop a habitat restoration plan for natural park areas that includes tree planting-this is distinct from landscaping along boulevards.
I support having a tree population that is native to this area, with as much variety as possible with this stipulation. There also needs to be some way to address the problem that many homeowners here live out of state and rent their homes. They need to be aware that it is there responsibility to see to it that the tree is taken care of. Renters are often not made aware if they are expected to care for a tree and not educated on how to do so.
Create a community nursery/forest whose operations are integrated into the public school system.
Object to having all the same kind of trees ---in NY City they had to remove many trees when the Asian beetle came in so we should NOT have all the same kind of trees. Tree leaves clog my roof drains downtown and cost me about \$1,000 per year to have them cleaned out. DWARF TRees should be considered OR flowering bushes.
Trees are beneficial but higher taxes are a detriment to living in Missoula
Missoula is the 'Garden City' and the trees contribute a lot to make it that way.
I think that trees provide a valuable service to humanity and that they should be treated with respect.
I live in Missoula because it is NOT an urban environment . Urban and crime free are never in the same sentence for a reason .so to that effect I say yes lets keep the trees .
I think the urban forest adds value to our city that is hard to quantify. There are places where there may be too many trees, such as in the university area. Maybe determine a tree density that is not quite as dense (50%-75% of current?). I do worry that we (city and citizens) use a lot of water to grow trees in an area the doesn't have sufficient precip to support them. To balance the desire for trees with the need to water them maybe plant fewer trees overall and, if possible, select species that require less water. If homeowners want to grow more trees on their property (vs. on city property) for shade they are welcome to.
I like the watering plastic bags around new trees for slow release
consistency in policy
Thanks for taking care of the trees in Missoula. They truly do make it the Garden City!

I have tried to contact the city arborist with questions re: my trees and cannot get a reply. That is frustrating as we really want to take good care of our trees, which seem to be in need of pruning badly.
I have never seen a public tree planted or pruned in either the north or west side neighborhoods (I have seen them cut down). Being poor does not mean one doesn't enjoy trees.
Reallocate present city funds to cover expenses for trees rather than increasing sids or property taxes. Property taxes and sids bear too great a proportion of public taxation already.
Labeling Norway Maples as 'invasive' and 'undesireable' is just 'modern correctness' and denies the valuable contribution the species made to our reputation as the Garden City and a great place to live. Are we ALL not 'invasive species'? I would argue that these very trees are a major reason the University district is the most desirable neighborhood in town.
Proper trees should be planted so the roots don't break the sidewalk. Again educated choices.
We DON'T need the city to initiate a new Tree District, to go along with the Street Maintenance District and Public Safety District. If the City needs money to fulfill its basic obligations, it should quit implementing so many tax increment districts, which cannibalize tax revenue which would otherwise go to the general fund.
I really value and want trees throughout the city....
I really don't have anything against maples, or other non native trees, as long as they can withstand the stress of being street trees. With global warming it may be necessary for the city to spend more to water street trees
I am totally OK with pine trees. Not every newly planted tree has to be a leafy deciduous.
If trees are diseased they should be removed. If the homeowner doesn't do it then the city should step in as they do when sidewalks aren't cleaned.
I LOVE trees! 20-something years ago, I planted three of them in the boulevard outside my house with the help of the city's cost-share program. I was really grateful for that program, which made it affordable to plant them. Today those trees--two burr oaks and an ash-- are big and healthy, and provide shade, bird habitat, and beauty.
1) Of course I like trees. Doesn't everyone? 2) Of course the city maintenance department should remove dead trees or dead limbs to serve public safety. However, since it is already measured that Missoula city taxes are the highest for any city in the state of Montana, I suggest that planting any new trees go near the bottom of any priority budget list for city services. 3) In my neighborhood, all of the trees are privately owned, and each homeowner cares for his own. If a property owner elsewhere in the city appreciates a nearby 'public' tree and wishes to water it, fine. In the 'public' tree dies from a lack of water and has to be removed, the adjacent property owner should be allowed to either plant another tree or not, as he or she decides. The city of Missoula has already spent unrevealed sums to plant trees around town. It's been done. Please do NOT add ANOTHER PLAN for the city government to increase city citizen's taxes AGAIN.
Our taxes are already the highest in the state. Cut some cost.
No trees in the boulevard because when the street needs to be enlarges the trees have to come out. Put them where they can live out a lifetime. Also trees, especially evergreens in roundabouts + boulevards make it difficult to see causing hazardous driving conditions.
Sidewalks up Hillview.
Keep planting.
T.L.C.
Our neighbors across from 180 Parkview Way have trees that are too large and block our view. The city should deal with this. Our property value has gone down because they have reduced our view.
Basic responsibility by property owners is really best simple, low cost solutions depending on neighborhoods. Most of the public trees have served well. You have a park district (tax) already for this!
This survey is incredibly biased and poor constructed.
I am happy with the care of my neighborhood trees- (The HipStrip)- What I know. The city plans are acceptable and supportive.
I provide residents with watering bags wrapped around trees that they could fill instead of running sprinklers.
It should be in-between.
Keep in mind trees have a life expectancy. Plan around the expectancy + budget for it.
We plan to leave Missoula soon because we can no longer afford the tax burden.
Consider working class people and retired folks living on your precious sidewalks under your newly planted public trees because they can no longer afford the property taxes. Compose a survey asking trees because they can no longer

afford their property taxes. Compose a survey asking how people feel about that. Let us all learn to live within our means. Save money on stupid questioners like this one.
Neutral.
You are taxing blue collar people who own property out of Missoula. Buy water company, free bus rides, attract transients + panhandlers, whats wrong with year round fiscal responsibility?
N/A
The city of Missoula has had trees for many years. The city already gets tax money to maintain them as well as the streets etc.. The city needs to live within the budget they have and not want to create a tax district to fund everything that happens here or wanting something new!
In 'old Missoula' the trees are dying and being replace constantly so our urban forest is very important to my husband and me.
Owners need to be responsible for trees on their lane. City should be able to accountability.
Will the master plan include open space trees such as on Mount Jumbo? I live near the Mount Jumbo trailhead and the trees in front of my house need to be cut down. I am concerned about the fire hazard and an open meadow becoming a mature forest.
We need 1/2 the trees we have. Do not plant a nasty tree in front of my house. They are not cared for + I have already landscaped the boulevard.
I disagree with Missoula's indiscriminantly cutting all of the non-native trees in our parks. Why not remove the old, decaying trees as they die? Remove, also non-native saplings they sprout.
Neutral.
Seems to me that parks + rec do a good job. Why do we need a master plan? As a whole I think Missoulia's are good stewards and take pride in their trees, landscape, lawns etc..
I personally think planting new trees, tending to them as naturally as possible (let nature take its course).
Take care of all the trees that are already in the city. We need them!
Trees along Miller Creek look awful because they aren't cared for.
Please enter me in the drawing for a 30- swim punch. Mac York. Phone: 257-3864.
P.S. 27 years Evans Ave.. New 8+ years--..... with the Rattlesnake- beautifully treed grounds.
Impossible to mow around tall weeds and grass around watering. Circle looks like crap. No-body keeps the new ones trimmed and roots (tree) eventually ruin sidewalks- trunk 3.5' from sidewalk and curb.
I live up the south hills. Value a view more than shaw. Wish my neighbor would cut down his obstructing trees.
The last thing this city needs in more government spending and taxing.
The city needs to quit taxing residents/ property owners into high debt. It is ridiculous. I planted my own trees and take care of them. The city never paid a dime for maintenance of them.
The city does not take care of the existing parkways. Never weeded! Money plants died.
I don't like newer housing areas where streets are narrow to allow for trees between sidewalk and street. This is a potential danger.
I am sure it is very expensive + care for our trees. How about teaming up with the University to make it a learning opportunity and ask for citizen volunteers.
No
I grow + plant my own trees. I also water them regularly + prune + maintain their health. The city should grow seedlings + ask residents to plant + maintain them. 'The city is out of control on assessments + taxes.'
The development I live in has trees in their planning- they belong to the owner for maintenance and care. Their questionnaire is all about public trees.
Thank you for asking.
The mayor is stealing all the thunder with his 'buy the water' system BS. And the county attorney with his suit of DOJ. I don't ever hear anything from the city forester. You have to get ingot he frey and mix it up a little. We all know that trees are pretty cool and they make our lives worth living. However, as a taxpayer I want to know Government is doing everything it can to get by without taxing me more. I am pretty sick of paying taxes but would be willing to donate to a campaign targeting improvement of the urban forest. I just got this survey on June 18th. I was in Alaska from June 2-17th.
The trees will be fine without you.

This survey, I believe, if we are honest, can be boiled down to 1. Are trees important to you? and 2. are you willing to pay for maintaining these trees. The rest of the questions a silly.