THE CITY OF CHICO’S CITIZEN TREE PLANTING PROGRAM

“THANKS” OR “LEAF ME ALONE”

A Project

Presented

to the Faculty of

California State University, Chico

In Partial Fulfillment

of the Requirement for the Degree

Master of Arts

in

Geography

Environmental Policy and Planning Option

by

© Tristan E. Ragsdale 2012

Spring 2012
THE CITY OF CHICO’S CITIZEN TREE PLANTING PROGRAM

“THANKS” OR “LEAF ME ALONE”

A Project

by

Tristan E. Ragsdale

Spring 2012

APPROVED BY THE DEAN OF GRADUATE STUDIES AND VICE PROVOST FOR RESEARCH:

_________________________________
Eun K. Park, Ph.D.

APPROVED BY THE GRADUATE ADVISORY COMMITTEE:

_________________________________
Don Hankins, Ph.D.
Graduate Coordinator

_________________________________
LaDona G. Knigge, Ph.D., Chair

_________________________________
Jacquelyn Rhea Chase, Ph.D.

_________________________________
Denice F. Britton, M.S.
PUBLICATION RIGHTS

No portion of this project may be reprinted or reproduced in any manner unacceptable to the usual copyright restrictions without the written permission of the author.
# TABLE OF CONTENTS

**PAGE**

Publication Rights ...................................................................................................... iii

List of Tables .............................................................................................................. vi

List of Figures ............................................................................................................. vii

Abstract ....................................................................................................................... viii

## CHAPTER

I. Introduction ............................................................................................................. 1

II. Literature Review ............................................................................................... 11

   Amenity of Trees ............................................................................................... 11
   Environmental Improvements ............................................................................. 12
   Physical and Emotional Benefits ....................................................................... 14
   Economic Benefits .............................................................................................. 14
   Habitat Enhancement ......................................................................................... 15
   Community Improvement .................................................................................... 16
   Urban Forestry .................................................................................................. 16
   Milwaukee ......................................................................................................... 20
   Baltimore ............................................................................................................ 21
   Sacramento ....................................................................................................... 22
   Canberra, Australia Capitol Territory .................................................................. 24
   Summary ............................................................................................................. 25

III. Methodology ....................................................................................................... 26

   Pre-Survey Activities ......................................................................................... 27
   Mixed Method Questionnaires Implementation ................................................. 31
   Permit Applicant Questionnaire .......................................................................... 33
   Non-Permit Applicant Questionnaire ................................................................... 36
   Summary of Administration of Questionnaires .................................................... 39
   Conclusion .......................................................................................................... 39

iv
<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV. Results</td>
<td>40</td>
</tr>
<tr>
<td>CTPP Results</td>
<td>41</td>
</tr>
<tr>
<td>Street Tree Plantings by Maintenance Zones</td>
<td>42</td>
</tr>
<tr>
<td>Questionnaire Response Rates</td>
<td>44</td>
</tr>
<tr>
<td>Results of Permit Applicant Questionnaire</td>
<td>44</td>
</tr>
<tr>
<td>Results of Non-Permit Applicant Questionnaire</td>
<td>51</td>
</tr>
<tr>
<td>Summary</td>
<td>60</td>
</tr>
<tr>
<td>V. Recommendations</td>
<td>63</td>
</tr>
<tr>
<td>VI. Conclusion</td>
<td>71</td>
</tr>
<tr>
<td>Literature Cited</td>
<td>74</td>
</tr>
</tbody>
</table>

Appendices

A. Initial Contact Letter | 80 |
B. Workshop Flyer | 82 |
C. 2010-11 City of Chico Street Tree Species | 84 |
D. CTPP Permit and Tree Voucher | 86 |
E. Permit Applicant Questionnaire | 88 |
F. Non Permit Applicant Questionnaire | 90 |
G. Codebook Sample | 92 |
H. Code Definitions | 94 |
I. Qualitative Responses | 96 |
## LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Existing Available and Existing Street Tree Population by Maintenance Zone</td>
<td>28</td>
</tr>
<tr>
<td>2. Street Tree Plantings by Maintenance Zones</td>
<td>41</td>
</tr>
<tr>
<td>3. Permit Applicant Questionnaire Results Question 1</td>
<td>45</td>
</tr>
<tr>
<td>4. Why Did You Not Participate in the CTPP?</td>
<td>51</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Street Tree Ownership Within the City of Chico</td>
<td>2</td>
</tr>
<tr>
<td>2. City of Chico Street Tree Planting Sites</td>
<td>3</td>
</tr>
<tr>
<td>3. Map Illustrating the Maintenance Zones of Chico</td>
<td>7</td>
</tr>
<tr>
<td>4. Evidence of Strong Tree Culture in Chico</td>
<td>9</td>
</tr>
<tr>
<td>5. The Urban Forest Manager at a Workshop Demonstrating Proper Street Tree Planting Technique</td>
<td>29</td>
</tr>
<tr>
<td>6. Participant Tree Planting Site Locations Within the City of Chico According to Maintenance Zone</td>
<td>42</td>
</tr>
<tr>
<td>7. Was the CTPP Related Material Easy to Understand?</td>
<td>47</td>
</tr>
<tr>
<td>8. Was the CTPP Permit Process Easy to Navigate?</td>
<td>48</td>
</tr>
<tr>
<td>9. Was the Initial Letter Easy to Understand?</td>
<td>55</td>
</tr>
<tr>
<td>10. Quantitative Responses to the NPA Question: “Please Check Off What Might Have Motivated You to Participate in the Program”</td>
<td>56</td>
</tr>
</tbody>
</table>
ABSTRACT

THE CITY OF CHICO’S CITIZEN TREE PLANTING PROGRAM

“THANKS” OR “LEAF ME ALONE”

by

© Tristan E. Ragsdale 2012

Master of Arts in Geography

Environmental Policy and Planning Option

California State University, Chico

Spring 2012

The project is a study of the effectiveness of the City of Chico’s 2010 – 2011 Citizen Tree Planting Program (CTPP) with two questionnaires that measured participant motivations, non-participant disincentives; and evaluated the administration of the CTPP. Being the City of Chico’s first public street tree planting initiative, city managers were interested in not only its success, but also how the public received it so that future implementations could be made more efficient and effective. The CTPP is relevant to living within the City of Chico and urban life in general, because street trees are important components to the urban forest landscape. Street trees are those located within the public right of way (PROW): beyond the contiguous street/sidewalk section, and before the right of way line; before the sidewalk, but after the gutter within a “tree lawn” or green
space between the gutter and the sidewalk; or in situations with no sidewalks, simply the area between the street/gutter and the right of way line. Street trees are important to the urban forest landscape - they help clean the air, ensure privacy, and provide habitat for wildlife. For Chico, the CTPP was able to facilitate planting of new street trees, yet still addressed the Street Trees Division budget and staff reductions. The CTPP was developed by the Denice Britton, City of Chico Urban Forest Manager in the General Services Department in collaboration with the Bidwell Park and Playground Commission and me, in my capacity as the Urban Forest Intern. The goals of the program were to initiate more citizen involvement and responsibility in the tree program while reducing city staff needs. The first goal was to have residents plant and maintain at least fifty free street trees, and - after the completion of the first program - to evaluate the program’s effectiveness. Sixty-one free trees were planted the first year. Follow-up inspections revealed that thirty-one of CTPP street tree planting sites were satisfactory. Two questionnaires were administered following the CTPP. The first questionnaire went to CTPP participant applicants who completed the program and planted a street tree and the second went to residents or business owners who received the invitation letter but were non-participants. The questionnaires provided information about the permit applicant motivations as well as reasons for non-participation in the program. Results indicated that issues of beauty, shade, and improving the neighborhood were those that most motivated participants. Issues of the CTPP being ‘too much trouble’ and residents not being able to plant a street tree on their own due to accessibility of the program, disability, or illness led the disin-
centive rankings. The data and results from the questionnaires have guided future CTPP implementation.
CHAPTER I

INTRODUCTION

Urban forestry has been described as: ‘a specialized branch of forestry that has as its objective the cultivation and management of trees for their present and potential contribution to the physiological, sociological and economic well-being of urban society. Inherent in this function is a comprehensive programme designed to educate the urban populace on the role of trees and related plants in the urban environment.’ (Deng et al. 2008, 371)

Chico boasts the presence of 31,896 street trees and the potential for 3,395 more within the city limits (Gregory 2011; interview with Denice Britton, October 6, 2011). Street trees are those planted in the public-right-of-way (PROW), within the green space between the street and the sidewalk, or within six feet of the street and sidewalk (Britton 2010) (please see Figure 1).

The 3,395 potential street tree sites are the focus of the Chico Citizen Tree Planting Program (CTPP) (Figure 2). Street trees are located in front of, behind, or alongside residences or businesses (both groups were included in the participation effort). The existing street trees, combined with privately owned and park trees, within the city limits comprise Chico’s urban forest. According to a recent study, the most common street tree species within the City of Chico are Norway maple (Acer platanoides), Chinese pistache (Pistachia chinensis), London planetree (Platanus X Acerifolia), black walnut (Juglans regia), and crape-myrtle (Lagerstroemia indica) (Gregory 2011).
As described in the epigram to this chapter, urban forestry is a specialized branch of forestry in cities. It involves both technical and social elements. Technically, Hansen-Møller and Oustrup define urban forests according to three scale conditions of density, height and viewshed, which are applied to various management, manipulation and maintenance programs (2004). That is, trees must be dense enough to be recognized as a forest at a distance, high enough (above head height) so that a canopy is established, and the view is tree dominated (Hansen-Møller and Oustrup 2004). Other researchers and urban forest practitioners simply define the urban forest as a green remnant or planted section in an urbanized area (Manning 2008; Payton et al. 2008).
Figure 2. City of Chico street tree planting sites.

Due to their location in cities, these forests inherently and intimately involve the public. The CTPP attempted to enhance the meaningful and consistent participation of the public in maintaining the urban forest through tree planting and care activities. This project is part of that overall effort. The creation of the CTPP arose out of 2010 Chico budget shortfalls and the need to streamline the Urban Forestry Program, headed by Denice Britton, the City of Chico Urban Forest Manager (hereafter referred to as Urban Forest Manager). As a pilot project to determine the best practices for future publicly-based tree planting programs, the goal of the CTPP was to distribute at least fifty free street trees without the city having to water or plant them, thus saving money. As a result of the CTPP it was hoped that more of Chico’s limited budget for urban forest activities could be devoted to essential activities such as precautionary pruning and dangerous tree removal (as opposed to street tree planting). Overall, the goals of this project are to determine the effectiveness of the CTPP primarily from the analysis of respondent recommendations and comments through two questionnaires, and make recommendations to improve the program in the future.

The CTPP seeks to increase residential and business owner participation in urban forestry by integrating varying viewpoints about the urban forest into decision-making processes, including the reasons people participated or not in the planting of trees, and how much and how well they tended the trees after they were planted, ultimately creating a community of part-time foresters. People were required to participate in training to maximize the success of the program, with the belief that this would lead to greater “buy-in” and persistence of care of the trees. As suggested by the title to this project, however, the lack of participation is an ongoing issue. This project
with the City of Chico analyzes the level of buy-in to the program to improve the survival of city trees, which are under the care of the people living adjacent to them. The purpose of this project is to use questionnaire data to study the effectiveness citizen participation has had on the CTPP, explore how to encourage future participation, discern how the public perceives the urban forest and evaluate how the CTPP could become more effective.

Public participation is, to some degree, an important component to the CTPP, which relies primarily on volunteerism. Participation in tree planting by the public has been described as “more challenging than the task of planting parks and greenbelts” (Summit and McPherson 1998, 90) because it requires municipal managers to plan for public input as opposed to implementing direct top-down management of parks and greenbelts. This difficulty may be the reason for the dominance, historically, of more traditional (top-down) urban forest planning (Summit and McPherson 1998, 90). Public participation attempts to integrate the public through volunteerism into programs, acknowledges that people are not always drawn in willingly to urban forestry efforts, and that sometimes those in charge of implementing public outreach do so in a perfunctory way. The literature review will explore the history, benefits, and meaning of urban forestry in greater detail. It will also evaluate the role of public participation through the evaluation of four case studies.

This study was conducted within the City of Chico, situated in California’s North Sacramento Valley between the Coastal Range to the west and the Sierra Nevada Range to the east. Numerous small creeks flow east to west within its city limits. It has a
population of 86,167 and is home to California State University, Chico. It is located ninety miles north of Sacramento, the California state capital.

The CTPP arose from collaboration between the City of Chico’s Urban Forestry Program and its governing body the Bidwell Park and Playground Commission in response to 2010 budgetary reductions as a way of extending scarce tax dollars for urban forest activities by involving citizens in the planting and maintenance of urban street trees. After several months of review by the Bidwell Park and Playground Commission, the program began in November 2010 with the creation of an initial contact letter mailed out in December 2010 to 285 potential participants (Appendix A). The potential participants were generated from a record of tree removal locations at residential and business sites within the seven maintenance zones of Chico (Figures 2 and 3). The letter contained information about the program and included an invitation to the Saturday workshops to be held on February 26 and March 12 of the following year (see Appendix B). The CTPP also conducted public outreach through local media outlets, such as a local daily newspaper the *Chico Enterprise Record*. The workshops were also open to people who had heard about the CTPP from media outlets, or who had contacted the Urban Forestry Department directly regarding street tree replacement.

The informational workshops allowed for participation by the public who were given the opportunity to ask the Urban Forest Manager questions regarding the program, the selection of a tree site (part of the permit process) and the species of tree1

---

1 Eleven different tree species were made available to participants in the CTPP (Appendix C). These tree species were chosen based on maintenance characteristics that involved reduced sidewalk uplift, and/or the limited need for clean up. Growth patterns and/or popularity of a species were also factors. No fruit trees were included in the CTPP (Britton 2012).
(once the permit had been completed), and by fostering the role of a part-time forester through training into the technical knowledge of how to properly plant and care for the tree(s). Preference in the CTPP was given to those participant applicants who had sites in the public right-of-way adjacent to their home or business where a tree had been previously removed by the City of Chico’s Urban Forestry Department for reasons ranging from disease to tree death or decay. Thus, the outreach for the first CTPP was prioritized to street tree replacement sites. Once a potential street tree-planting site was
identified and evaluated for underground utilities and the resident or business owner was granted a permit to receive a street tree, participants were expected to properly plant and care for the street tree. This is the main challenge facing this and many other urban street tree programs.

Proper maintenance behavior includes planting the tree at the appropriate depth, being careful to avoid girdling root systems, and providing mulch and watering the tree until it becomes established (usually two to three years for Chico). Residents or property owners were also asked to stake the trees, install root barriers and to keep lawns back at least 18” from the trunk of the tree in order to prevent hitting an unprotected trunk with a lawnmower or weedeater. Thus, the resident or property owner became a part-time forester, a promising new role in the field of participatory urban forest management (Summit and McPherson 1998).

The Urban Forest Manager directly managed the CTPP. I assisted in mailing the letters, and in organizing workshop presentations, on-site tree planting demonstrations, tree planting site confirmation, follow-up inspections, and the creation and administration of two questionnaires during the program. The questionnaires were mailed out in the spring of 2011, following the distribution and planting of the street trees, and returned to Chico’s General Services Department by September 2011. It was sent to two groups: those who completed the application and received a street tree referred to as permit applicants and those who did not complete the application and did not get a street tree referred to as non-permit applicants. High levels of participation for the CTPP and this project were projected, in large part, due to the urban forest culture that runs deep within Chico, a “City of Trees” (Figure 4).
In addition to being a self-proclaimed “City of Trees” Chico residents have enjoyed Tree City USA recognition for the past twenty-seven years. It has held this honor among numerous other Northern California cities, including Davis, Mt. Shasta, Oroville, Redding, Sacramento, and Woodland. In addition to being a Tree City USA,² Chico has the Voluntary Heritage Tree Program, managed by the City of Chico’s Urban Forestry Department, which identifies large, unique, historically relevant trees, or trees in outstanding health (City of Chico website). The Voluntary Heritage Tree Program, Tree City USA status, the maintenance of Bidwell Park, and the designation as a “City of

² There are four requirements set forth by the National Arbor Day Foundation to become and maintain status as a Tree City USA. The specific requirements include the presence of a tree care ordinance, devotion of at least two dollars per capita annually toward a city tree program, presence of a tree board or department, and an Arbor Day observance and proclamation. The requirements are evaluated annually as the city (re)applies for the recognition. (National Arbor Day Foundation 2010). Cities receive a small plaque and Tree City USA flag to recognize their designation as a Tree City USA. As of May 2011 there were 160 statewide and over 3,400 nationwide Tree City USA communities (National Arbor Day Foundation 2010).
“Trees” (Figure 4) help Chicoans recognize the value, benefits and importance of a vibrant urban forest. In places like Chico, that values its public trees, programs like the CTPP can be expected to thrive. It was thus a very appropriate initiative to undertake in this community. Overall, the aim of the CTPP in regards to participation is to improve the number of participants of future programs. The need to understand the motivations for people’s involvement in the first annual CTPP is paramount so that outreach and recruitment are more effective in the future. The following literature review addresses that need in addition to understanding, through four case studies, how other various municipalities have met the challenges of creating and maintaining a vibrant urban forest.
CHAPTER II

LITERATURE REVIEW

“We don't know if we're organizing communities to plant trees or planting trees to organize communities”

Residents, it has been found, enjoy street trees for a multitude of reasons (Summit and McPherson 1998). The reasons for enjoying the urban forest are often physiological, sociological and economic (Deng et al. 2008) as well as recreational, aesthetic and environmental (Banks 2003; Hansen-Møller and Oustrup 2004; Ries, and Reed, and Kresse 2007).

Despite the general positive attitude people have towards urban trees, it is not always simple to involve them in street tree programs. It is therefore important to start out with a vision of how such a program benefits urban environments and people. What follows is a discussion of urban forest benefits that encourage participation in urban forest programs including: amenity of trees, environmental improvements, physical and emotional, economic, habitat enhancement, and community improvement. It concludes with a discussion of urban forestry and four case studies of similar urban forest programs.

Amenity of Trees

Amenity benefits of urban forests rank high among motivations for urban forest program participants. These benefits include beauty, shade, privacy, and noise and
light reduction (Sommer et al. 1993; Tyrväinen, Silvennoinen, and Kolehmainen 2003; Summit and McPherson 1998). The Sacramento, California urban forest program participant motivation study by Summit and McPherson (1998) found that the most important amenity of the urban forest for participants in their tree-planting program was beauty, ranking higher among respondents than other benefits such as savings in energy costs of the tree cover, discussed further below.

Environmental Improvements

Urban trees provide numerous environmental benefits. These include physiological structures and systems such as leaf surface area, which facilitate pollution mitigation; roots systems, which facilitate storm water run-off; and growth patterns, which facilitate carbon sequestration. The environmental processes that will be discussed in the context of the CTPP include:

Storm Water Run Off Mitigation

Within the city limits of Chico the street trees increase surface run-off absorption rates and capture over twenty million gallons of water on their canopy, branches and trunk surfaces (Gregory 2011; Manning 2008). Absorbed storm run-off is then transferred back into the atmosphere long after the storm (Perkins, Heynen, and Wilson 2004; Summit and McPherson 1998).

Air Quality

Trees are also known to improve air quality (Perkins et al. 2004; Summit and McPherson 1998). Pollutants such as ozone, nitrogen dioxide, and particulates less than ten microns in diameter, are mitigated through physiological tree processes. Gregory’s
study found that Chico street trees are responsible for absorbing about 33 thousand pounds of pollutants per year (2011).

**Urban Heat Island Mitigation**

Large plots of concrete in urban environments reflect the sun’s rays and can result in urban heat islands. Parking lots are a prime example of an urban structure that creates these high temperature zones. Urban trees, through shading and absorption of the sun’s energy, can significantly reduce the effects of urban heat islands (Manning 2008).

**Carbon Sequestration**

Carbon sequestration is the conversion/absorption of airborne carbon dioxide into oxygen and carbon (woody tissue) (Perkins, Heynen, and Wilson 2004; Manning 2008). There are two benefits of carbon sequestration: first, trees help us breathe more oxygen-rich air through the process of carbon sequestration; secondly, the effects of global warming are reduced, through the creation of a carbon sink which absorbs some airborne carbon (Fernside 1998). Some trees store up to three metric tons of carbon dioxide and sequester ninety-three kilograms of carbon per year (Perkins, Heynen, and Wilson 2004). In Chico, the total amount of atmospheric carbon stored by its street trees has been estimated to be over 43 thousand tons with annual storage being approximately 1500 tons (Gregory 2011; interview with Denice Britton, October 6, 2011). Thus, carbon emissions from coal-burning power plants or automobiles are offset in an urban forest setting with the support of programs such as the CTPP (Manning 2008).
Physical and Emotional Benefits

Urban forests have also been found to promote greater physical and emotional health in people (Perkins, Heynen, and Wilson 2004; Lee et al. 2009; Hansen-Møller and Oustrup 2004). Simple passive observation (i.e., looking at a forest while sitting, working, walking or jogging) of the urban forest has been shown to result in improved job performance, emotional health and overall quality of life (Perkins, Heynen, and Wilson 2004; Lee et al. 2009).

A study in Japan of young adult males found that while viewing an urban forest landscape, opposed to a viewshed filled with buildings, observers had comparatively lower stress rates than people viewing a scene dominated by buildings (Lee et al. 2009) as indicated by lower pulse and blood pressure, and lower respiratory, and salivary cortisol (a stress hormone) levels. Some researchers have gone so far as to speculate that the health benefits of simply viewing or recreating in the urban forest landscape mean fewer hospital bills (Hansen-Møller and Oustrup 2004).

Economic Benefits

There are other significant economic benefits to the urban forest (Banks 2003; Wolf 2003; Payton, Heynen, and Wilson 2008). Urban trees provide energy savings for residences and businesses. Strategically planted trees around homes equate to energy savings or reduced energy consumption (Summit and McPherson 1998). Gregory’s study of street trees within the City of Chico concluded that they generated annual savings of over three thousand MWh of electricity and over five thousand therms of natural gas (2011). Elsewhere, trees planted around homes save thirty percent of energy costs
compared to those without (Perkins, Heynen, and Wilson 2004). Perkins, Heynen, and Wilson found 100 million trees nationally planted residentially and in the PROW would save approximately 2 billion dollars in energy costs per year (2004).

In Canberra, Australia Capitol Territory the predicted monetary value of the services provided by a single eucalyptus tree, over its useful life, might be as high as $16,000 (Banks 2003). This figure incorporates benefits like air pollution mitigation and energy savings (Banks 2003). Establishing and maintaining urban forest canopies in the United States may increase retail activities for districts that “offer diverse products at varied prices” (Wolf 2003). A study by Ries, Reed, and Kresse (2007) in Oregon found that there has been a positive relationship between the number of trees in an area and the amount of money people spend in shops (Ries, Reed, and Kresse. 2007). Increased property value is another economic benefit. Research has shown that homes with trees and shrubs can expect a higher property value compared to those without such landscaping (Payton, Heynen, and Wilson 2008; Anderson and Cordell 1988; Morales and Favretti 1976; Payne and Strom 1975).

Habitat Enhancement

Benefits of urban trees do not stop at increasing the property values of residential and commercial areas. There are many intangible benefits that should be taken into consideration. For example, urban trees provide increased habitat for wildlife (Hansen-Møller and Oustrup 2004; Rutz 2008; Summit and McPherson 1998). Wildlife thus finds refuge in urban forests (Summit and McPherson 1998). The presence of wildlife in urban forests can also be associated with another benefit, as simple as hearing
a blue jay sing, perched in a street tree outside your home. This final benefit is how urban forests instill a stronger sense of community, rejuvenation and place or identity in people (Summit and McPherson 1998; Hansen-Møller and Oustrup 2004; Perkins, Heynen, and Wilson 2004).

Community Improvement

Urban forests help residents create priceless emotional attachments to their city neighborhoods (Perkins, Heynen, and Wilson 2004). A study from Denmark shows that urban forest residents are emotionally “recharged” in the presence of urban trees (Hansen-Møller and Oustrup 2004). The urban forest environment also enhances the well being of residents and visitors (Perkins, Heynen, and Wilson 2004).

Tree planting programs were found to contribute to home or business owners’ “enhanced sense of community, the empowerment of inner-city residents to improve their own neighborhoods, and the promotion of environmental responsibility” (Sommer et al. 1993, 170). The argument for planting urban trees is thus strong and well established.

Urban Forestry

According to Schwab (2009, 2), in an American Planning Association report on urban forest planning, the definition of urban forestry for planners must include “ecological, climatic, urban, political, and cultural conditions that foster or inhibit the growth and survival of trees” (2009, 2). Importantly, Schwab notes that urban forestry planning has components that incorporate community visioning and goal-setting processes (2009).
The players in urban forest management can be any one of numerous groups, institutions, or organizations. For example, the non-profit Sacramento Tree Foundation has been instrumental in enhancing that city’s urban forest by engaging, educating, and empowering home or business owners while meeting urban forest goals (Rubin 2008). The Yale School of Forestry and the U.S. Forest Service, through separate Baltimore, Maryland initiatives, have enlisted residents to play a greater role in urban forest management decisions and program implementation (Burch and Grove 1993; New York Times 1996; Burke 1979). Additionally, some citywide efforts are notable. For example, Milwaukee, Baltimore, Sacramento, and Canberra, Australia Capitol Territory all have successful urban forestry programs that, in some way, involve the public (Perkins, Heynen, and Wilson 2004; Burch and Grove 1993; Walter 2005; Montano 2004; Banks 2003).

Recently urban forestry experienced sweeping changes in management practice. The focus on single trees during the 1990s changed to a more ecosystem approach, reflecting holistic management (Carreiro, Song, and Wu 2008). In 1994, the chief of the U.S. Forest Service described this shift towards ecosystem management as the guiding policy for state land and federal agencies (Bradley 1995). Ecosystem management is defined as a “holistic approach to natural resource management” (Bradley 1995, 49). Ecosystem management examines the larger landscape, involving “human, biological, and physical dimensions of natural resource management” (Bradley 1995, 49). The overarching goal of ecosystem management is to “achieve sustainability of all resources” (Bradley 1995, 49).
Holistic planning, popular among municipal urban forest managers (Banks 2003), can also be defined as a global (as opposed to individually focused), connected view of “open spaces, natural areas, parks, greenways, and urban forests on the landscape” and by any planning process that involves both public and private urban forests (Schwab 2009, 113). It is, for example, employed in the management of the Catskill Mountain forests for New York City’s drinking water, 160 kilometers away (Carreiro, Song, and Wu 2008).

According to the Swaziland Environmental Centre (2004), by not incorporating the bigger picture the lack of holistic planning in regard to urban forest goals can lead to “conflicts of interest among stakeholders.” To support holistic planning the Swaziland Environmental Centre encourages urban forest managers to involve stakeholders early on in the planning process. In addition, the Swaziland Environmental Centre stresses the importance that all stakeholders become participants in the planning of urban forests (2004).

Overall, most managers of tree programs hope that public participation is informative, relevant, and ultimately better for urban forests. In the 1990s the National Research Agenda for Urban Forestry considered public participation to be essential to the continued strength, vigor, and vitality of the urban forest (Sommer et al. 1993). Participation can lead to more affordable and effective urban forest programs. These programs can reap numerous community level benefits such as empowerment and skill sharing (Sommer et al. 1993). Public participation also increases the effectiveness of urban planning. However, the inclusion of participatory models is in contrast to technocratic planning processes where the technical aspects of planting and caring for
urban trees are controlled by the municipal government. Summit and McPherson write about the difficulty that some planners have in relinquishing technical control to the public, who may have little or no technical understanding. However, the public can in fact provide managers with local information not otherwise available, including urban forest (and particular tree) significance, narratives and management history (Duan et al. 2007). Local and professional knowledge can develop into urban forest strategies that give voice to residents, facilitate productive communication and reduce conflict (Duan et al. 2007).

Public participation in urban forestry can be appealing to managers for several reasons. It reduces tree mortality because it instills a sense of ownership, pride and maintenance behavior among people (New York Times 1996; Sommer et al. 1993). It fosters a positive social environment of self-reliance skills (Summit and McPherson 1998). It also makes tangible improvements to the community, increases volunteerism and reduces urban forest management costs to local governments (Sommer et al. 1993).

Through stakeholder participation and volunteerism, urban forest programs seek to turn people into part-time foresters (Summit and McPherson 1998). This can save time and money for urban forestry organizations while creating an important role for the public. According to Westphal, (citing Kollin 1986; Lyons 1986; Bouza 1989; Evans 1994) “[m]any practitioners have noticed significant change in neighborhoods and communities from participation in urban greening projects” (2003, 139).

The above information informs us about the benefits, potential, and capacity of urban forest programs to build community, save money, and improve health. The following section explores and describes various citywide case studies regarding similar
urban forestry programs. First, I will describe a project from Milwaukee, Wisconsin followed by projects and initiatives from Baltimore, Maryland; Sacramento, California; and finally Canberra, Australia Capitol Territory.

Milwaukee

For many Milwaukee residents, the 2002 Greening Milwaukee project developed by the City was successful. It was after all, the City’s largest public and private tree planting program. Despite its success, some have raised the specter of social equity issues. Perkins, Heynen, and Wilson claims that while the program ostensibly reached out to homeowners and renters equally, eighty-nine percent of trees planted through Greening Milwaukee were on owner-occupied properties (2004).

The equity problem of the tree program in Milwaukee arose, perhaps, from housing mobility and maintenance issues (Perkins, Heynen, and Wilson 2004). Housing mobility relates to the fact that renters are generally there for the short-term and unlikely to reap the long-term benefits of mature trees. Maintenance could have been a disincentive for some renters since trees are a form of home maintenance and add value to the property; increased property values were more likely to increase rents.

Overall, renters’ inability to perform maintenance, or unwillingness to improve housing values, is a systemic problem in the equitable distribution of free trees. Perkins, Heynen, and Wilson note that in Milwaukee increased public participation should be oriented to include having utility companies sponsor tree-planting programs that target a wider population than homeowners (2004). Milwaukee shows the need for greater equity in reforestation programs. The greater equity could be created through
holistic efforts. These holistic efforts could increase participation in urban reforestation programs by renters (Perkins, Heynen, and Wilson 2004).

Baltimore

Baltimore’s Urban Resource Initiative (URI) started in 1989 in collaboration with the Yale School of Forestry. In 1993, its interdisciplinary program, with its holistic approach, provided a variety of benefits, goods, and services from the urban forest ecosystem (Burch and Grove 1993). The goals reflected the public involvement assumption that the program went beyond just growing and planting trees. The managers hoped to include “group formation and collective action, institutional development and the establishment of sustainable social structures and value systems to mobilize and organize individuals” (Burch and Grove 1993, 20). These progressive managers established institutional frameworks so that public participation could be sustainable.

The Revitalizing Baltimore campaign, managed by the U.S. Forest Service, emphasizes community involvement. Rather than traditional city tree planting done by municipal crews, the U.S. Forest Service employs a participatory model. Here, the community foresters fan out across the community going to churches, meetings, and door to door to have people plant street trees or establish community gardens. Its participatory model equates to healthier trees. It helps reduce and prevent vandalism and improves street tree survival rates. According to a New York Times article, among the 1,238 street trees and 300 smaller barrel trees that community groups planted there was an eighty percent survival rate – compared to a fifty percent rate for city plantings (1996).
Revitalizing Baltimore is a do-it-yourself tree-planting program with far reaching effects on community. U.S. Forest Service officials have noticed that, by simply digging holes for the Red Maples, a cold, distant street comes alive with a sense of community. Furthermore, urban forest managers did not know whether they were “organizing communities to plant trees or planting trees to organize communities” (*New York Times* 1996). Overall, Revitalizing Baltimore has been organizing residents to not only plant urban street trees but to also see their city as an ecosystem. The Northeast Urban Forest Manager stated that the people have become an integrated part of the ecosystem (*New York Times* 1996). Revitalizing Baltimore managers organize the public to become active stakeholders in urban forest programs.

Sacramento

In general, Sacramento has made it a priority to help people care for trees and it claims about 165,000 street trees (Montano 2004). It is here that a study about motivation on residential tree planting behavior was conducted in 1998. The Sacramento study differs from this CTPP effectiveness project in that it also evaluates private and not strictly public street tree planting motivations and behaviors (Summit and McPherson 1998). The study found that private tree owners (from the motivational study) disclosed that shade and appearance were more important than energy savings, environmental benefits, or privacy (Summit and McPherson 1998). Therefore, city managers can better tool workshops to address aesthetic concerns and perhaps offer more aesthetically pleasing species for future tree planting projects.
In addition to the motivational study, Sacramento actively involves the public with its programs such as the Sacramento Tree Foundation, a non-profit foundation specifically focused on tree planting since 1982 (Summit and McPherson 1998). In 2004 the chairman of the City’s Park and Recreation advisory committee said it is time for the city to become equal partners with non-profits and the public, together becoming as a city councilman called it, “the three legs of a stool” (Montano 2004). As a result, this new direction would provide a vehicle for the public to participate in urban forest management (Montano 2004). The incoming 2005 urban forester noted Sacramento was unique in its level of community support. While many cities experience a moderate level of community support, according to the urban forester, Sacramento’s level is exceptional (Walter 2005). This was demonstrated in 2008, when the Sacramento Tree Foundation initiated Leading Education Awareness in (urban) Forestry or LEAF, bolstering the City’s commitment to public participation.

LEAF is a program where volunteers are recruited and trained to become part-time foresters to teach other members of the public about the benefits of an urban forest as well as how to plant and care for trees (Rubin 2008). Volunteers devote thirty-six hours to learning about urban forestry. As a tradeoff for the volunteer hours the LEAF managers must devote a similar amount of time with the community (Rubin 2008). Examples of this time spent with the community included giving tree tours or informational sessions on tree planting and care. According to Laura Burris, the educational program manager for the Sacramento Tree Foundation, this trade off is “a great way to gain experience in urban forestry” (Rubin 2008).
Canberra, Australia Capitol Territory

Because of the design concept and being one of the world’s very few modern planned cities, Canberra has met with urban forest success. With a human population nearly four times that of Chico, Canberra claims some 400,000 urban trees, four to every three residents. This is an impressive number: more than double that for the United States’ cities (Banks 2003). Canberra was created in 1908 on open, barren bush land with poor soils and difficult growing conditions for trees (Banks 2003). Canberra is unique in Australia, because since its inception, the trees on public land that dominated the urban forest were planted with design concepts in mind (Brack 2006).

Canberra was probably the first Australian city to embrace urban forestry (Tarran 2009). It has become then according to one author, “The most treed city I have ever seen, bar none…looking across the city from Mt. Ainslie, the suburbs and most of the inner city are invisible beneath the forest of trees” (Jury 2003). To the credit of town planners and locals, the abundance of trees is now welcomed and revered by many (Jury 2003). However, as the urban forest aged, Canberra has faced tough maintenance and replacement decisions (Jury 2003).

Canberra practices holistic landscape plans that make for a very dynamic city forest with “diverse mixture of species, longevity and age classes” (Banks 2003, 151). Due to an influx of a diverse population because of new immigration policies, the urban foresters were able to manage for correspondingly diverse urban forest perceptions through public interaction. Citywide approaches and holistic landscape planning to the urban forest environment have proved effective, at least for Canberra. It shows us that even in the harshest of climates a healthy urban forest can emerge.
Summary

The literature on other cities’ urban forest programs showed that they build communities, lessen management cost, and improve tree health through improved, inventive and imaginative volunteering ideas, such as a reciprocal city Urban Forest Manager volunteer program. The problems exemplified by the case studies on participation, motivation, and social equity were relevant to Chico’s CTPP and my measurement of its effectiveness. They provided a backdrop from which I was able to develop context for the CTPP. This allowed for a compare and contrast model of the CTPP with not only other city’s practical attempts at improving urban forests, but also larger concepts that improve the effectiveness of the CTPP. The Sacramento case study is especially relevant, as it not only covers a similar geographical region (i.e. Northern California) as the CTPP; it also explains the benefits of urban forest implementation for a residential tree-planting program, its challenges and possibilities. Programs like those instituted by the Sacramento Tree Foundation provide an excellent model for developing a community of urban foresters.
CHAPTER III

METHODOLOGY

With over thirty thousand street trees and over thirty five hundred more possible, there is plenty of room for Chico’s already thriving urban forest to grow. However, planting and maintaining street trees with city employees is expensive and the 2010 budgetary constraints forced the City of Chico’s Bidwell Park and Playground Commission and its Urban Forest Manager to consider other avenues. Thus, the Citizen Tree Planting Program (CTPP) was created. The goal was to train volunteers through workshops, who would then plant at least fifty street trees. Through the CTPP, members of the public could apply for a permit to obtain a tree, gain site clearance (Appendix D), become educated on tree planting and maintenance behavior through participation in a workshop, and subsequently plant and care for the street tree within the public right of way, adjacent to the participant(s)’ home or business. The city would still purchase the tree, but the program would save time and expense by having the trained volunteers plant, mulch, and water and generally care for the street tree.

This chapter describes the research methods undertaken to gauge the effectiveness of the CTPP in serving public needs, and to discover what improvements might be made for future implementations through the administration of two survey questionnaires (Appendices E and F). The questionnaires included areas for participants to write their thoughts, comments, and recommendations about the CTPP whether they
had completed the permit process and received a free street tree or not. The chapter contains three sections: Pre-Survey Activities, Mixed Method Questionnaires Implementation and Post-Plant Activities.

Pre-Survey Activities

Several activities were undertaken before the administration of the survey questionnaires. First, I defined the scope of the study according to the City of Chico’s maintenance zones, used to better manage urban forest resources (see Figure 1). This was followed by workshops that described the program and application process with hands-on tree planting instruction. Next, a database of participants and non-participants was created, followed by onsite inspections of potential participant locations.

Study Area – City of Chico Maintenance Zones

As described in the introduction, the over thirty thousand Chico street trees are planted within the city limits in the PROW in the seven populated maintenance zones (Figure 3 and Table 1). These zones were used in this study for ease of address management and are used generally by the City of Chico for planning and public works applications and in the management of Chico’s urban forest. These zones define the study area of this project. Since Bidwell Park, or Maintenance Zone 8, is unpopulated and contains only park trees, it was excluded from the CTPP.

Workshops

Two workshops were scheduled in connection with the CTPP. These workshops, as part of the public outreach for the CTPP, were intended to educate the participants on how to properly plant and maintain street trees. In addition, they offered
Table 1. Existing available and existing street tree population by maintenance zone

<table>
<thead>
<tr>
<th>Maintenance Zone</th>
<th>Available Street Tree Planting Sites #</th>
<th>%</th>
<th>Total Chico Street Tree Inventory #</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>597</td>
<td>17.58%</td>
<td>6,822</td>
<td>21.40%</td>
</tr>
<tr>
<td>2</td>
<td>360</td>
<td>10.60%</td>
<td>2,690</td>
<td>8.43%</td>
</tr>
<tr>
<td>3</td>
<td>334</td>
<td>9.83%</td>
<td>1,339</td>
<td>4.19%</td>
</tr>
<tr>
<td>4</td>
<td>564</td>
<td>16.61%</td>
<td>4,776</td>
<td>14.97%</td>
</tr>
<tr>
<td>5</td>
<td>728</td>
<td>21.44%</td>
<td>6,699</td>
<td>21.00%</td>
</tr>
<tr>
<td>6</td>
<td>464</td>
<td>13.67%</td>
<td>4,489</td>
<td>14.07%</td>
</tr>
<tr>
<td>7</td>
<td>348</td>
<td>10.27%</td>
<td>5,081</td>
<td>15.94%</td>
</tr>
<tr>
<td>Total</td>
<td>3395</td>
<td>100.00%</td>
<td>31,896</td>
<td>100.00%</td>
</tr>
</tbody>
</table>


background on the project and its purpose. The participants were drawn from three categories: those who had a street tree removed and those who had contacted the city about getting a street tree whose names were kept in the database of the Urban Forest Manager; and those that heard about the workshop through public outreach. Overall, the Urban Forest Manager’s database contained 285 people from the seven populated maintenance zones who qualified for an invitation letter mailed out in December 2010 that described the CTPP and the workshops (Appendices A and B).

The workshops were held on Saturday, February 26, 2011, and Saturday, March 12, 2011, at the municipal conference center at 965 Fir Street in Chico. Approximately sixty people attended.¹ The workshops consisted of a PowerPoint presentation and tree planting demonstration by the Urban Forest Manager who also

¹ Several people left during the workshop without signing in.
covered the background and need for the program. She stated that there were thousands of potential street tree sites within the city of Chico. The Urban Forest Manager’s presentation included a detailed explanation of proper planting and watering technique. After the hour-long presentation, permit applications were distributed to the attendees and the workshop moved outside. With the help of a volunteer and intern the Urban Forest Manager gave a thirty-minute hands-on demonstration on how to plant a tree (Figure 5).

Figure 5. The Urban Forest Manager at a workshop demonstrating proper street tree planting technique.

Source: Photography by Scott Gregory. Reproduced with permission.
After the demonstration, participants who were interested in obtaining a street tree for the PROW in front of or alongside their homes were asked to fill out a permit application (Appendix D). Street trees were made available for those that had complied with the requirements. Participants were able to choose the species of tree from the list of approved street tree species (Appendix C). This process meant that many were able to learn how to plant and take home the street tree that day. For those who still had to complete the permit process, trees were made available for pick up another day. Some recipients qualified for more than one street tree, given that the PROW alongside or in front of their residence allowed for numerous street trees and so received more than one street tree.

Participants and Database

In this study, participants from the tree-planting project were divided into two groups: those who completed the application and received a street tree referred to as permit applicants and those who did not complete the application and did not get a street tree referred to as non-permit applicants. There were thirty-seven participant applicants who successfully filled out a CTPP permit and received a free street tree(s) (Appendix D). Some applicants were allowed more than one free street tree. There were 248 non-permit applicant group members who had received the initial letter and/or attended the workshops but did not participate in the program to receive a street tree. An Excel database was created that included the names and addresses of both groups and included those who had been selected for one of the following reasons: those who requested a tree and lived near an available street tree site (see Figure 1); those that had a street tree removed; or those that had expressed interest in the CTPP because of media exposure.
Preparation and On Site Inspections

Beginning in December 2010 the permit evaluation process was underway. I traveled to each permit applicant’s street tree-planting site and marked the area six feet on either side of the plant site with white spray paint to ensure there would be no damage to underground utilities when the tree was planted.

The company USA North was then contacted and given the address of the street tree site. The spray-painted area (the street tree planting site), in compliance with the underground service alert marking protocol, was then inspected by USA North to prevent any hazards to underground service from tree planting.

The trees were distributed and planted by the applicants by May 2011, although many were planted earlier following the workshops. I conducted follow-up inspections of the planted street tree sites in late spring of 2011 to see if the trees had been planted, to confirm that watering had taken place and to remove any planting stakes that remained.

Mixed Method Questionnaires
Implementation

In late spring 2011 following the street tree planting and inspection, two survey questionnaires were developed by me to gauge the success of the CTPP and to determine ways to improve the program. The surveys were created in large part with the input from prior public contact with Chico’s Urban Forest Manager on tree related questions, issues, and maintenance. To reduce respondent fatigue and to increase response rate the questionnaires were one page long. The permit applicant questionnaire
was sent to the permit applicants who had completed the CTPP and planted a street tree (Appendix E). The non-permit applicant group questionnaire was sent to the non-permit applicants who had not completed the CTPP and not planted a street tree (Appendix F). The questionnaires were mailed with instruction to return them via the included self-addressed stamped envelope.

The questionnaires included both fixed response questions and open-ended questions to address the effectiveness of the CTPP. The initial question for each questionnaire was about reasons for participation or non-participation in the CTPP. Fixed-response questions are good for self-administered surveys as supplied answers serve as a guide for the participant and make it easier to answer. Furthermore, the results can be easily interpreted and quantified (McLafferty 2003). Open-ended questions allow the participants to give responses not included in the questionnaire and to use their own words to explain or describe unusual circumstances. These can ultimately give detail and personal points of view that fixed-responses questions cannot elicit. The use of both fixed-response and open-ended questions resulted in more comprehensive results that could better reflect how the public thought and felt (McLafferty 2003).

Likert-scale and fixed-response questions were used in both questionnaires. They are effective at eliciting responses along a range of choices. Likert-scale categories “are based on the level of agreement with a particular statement or issue” (Sirkin 2006, 43). These fixed response questions resulted in ordinal levels of measurements and correspond to a rank (or other) level of ordering (Sirkin 2006). While the results can be tabulated they cannot be statistically manipulated in ways that interval or ratio data can
(Newing 2011; Sirkin 2006). That is, while ordinal data can be used in pie charts, bar
charts, or tables, only interval data can be used effectively in averages (Newing 2011).

Responses to open-ended questions generate qualitative data that can be coded
and assigned to categories that do not imply amounts (Sirkin 2006). In other words, the
qualitative data includes naming of the non-numerical characterization of a quality
(Sirkin 2006). My qualitative responses were coded and categories were subsequently
developed (Appendix G and H). These codes were used to organize and reduce the data
to manageable level and improve categorical analysis of the data starting with general
response categories (Cope 2003).

Data interpretation took place with an analytic code and a coding structure
that resulted in the subsequent creation of categories (Cope 2005; Newing 2011). In the
CTPP project, these data were derived from open-ended questions to elicit personal
knowledge—something a pre-set survey could not predict. They lent insight into
particular reasons for a CTPP viewpoint or behavior (Newing 2011). The categories and
codes for the permit applicant and non-permit applicant questionnaires used to describe
the qualitative data are given in Appendix H.

Permit Applicant Questionnaire

The permit applicant group questionnaire inquired about the reasons that
members of the permit applicant group completed the CTPP and received a free street
tree (Appendix E). The questionnaire included Likert scale and open-ended “other, please
specify” response methods. Question one contained several Likert scale, fixed responses
with an open-ended option. Questions two and three contained a Likert scale question;
and question four was open-ended. The three Likert scale questions were created from research on urban forest benefits discussed in the introduction and based on the urban forest issues of attitude, motivation, and maintenance behavior from Summit and McPherson (1998).

For the participant applicant questionnaire, “the level of agreement with a particular statement or issue” was bounded by scales from 1 to 5 with one representing ‘a factor’ and 5 presenting ‘not a factor’ for question one, ‘easy to understand’ and ‘difficult to understand’ for question two, and ‘yes’ or ‘no’ for question three (Sirkin 2006, 43). The survey also included two qualitative questions. Question one ended with ‘other, please specify’, and question four was a fixed response to the question that asked the participant for comments or recommendations for future tree planting programs (Appendix I). Examples of coding appear in Appendix G.

**Question One: “Please Check off the Reasons Why You Have Participated in the City of Chico’s Tree-Planting Program”**

As described above, question one contained Likert scale, fixed responses with an open-ended option that addressed the reasons for participation in the CTPP. The participant was asked to rank possible motivational factors (beautification, property value, energy savings, wildlife habitat, privacy, shade, free tree and improve neighborhood) for participation in the CTPP on a scale of one to five where one represented ‘a factor’ and five represented ‘not a factor’ (Table 1, Appendix E). The possible motivators were chosen for their simplicity and ease of understanding. For example, some physiological effects and environmental benefits were excluded because they would have involved a lengthy explanation of complex key terms such as ‘salivary
cortisol levels,’ ‘evapotranspiration,’ and ‘carbon sequestration.’ Instead, the
questionnaire focused on questions such as the presence of wildlife, beauty or an increase
in property value – concepts which are readily describable and understood.

Coding of the qualitative responses to question one regarding ‘other reasons
for participating’ was minimal and is discussed below and reiterated in the results
chapter. Predominant themes included ‘beauty,’ ‘replacement’ of dead, diseased or
decayed trees; ‘environmental benefit’ (not listed) or ‘gratitude’. (See Appendix H for
Codebook with descriptions of qualitative codes and Appendix G for qualitative coding
example.)

Question Two: “If You Attended a Free Tree
Planting Workshop Was the Material
Presented Easy to Understand?”

Similar to question one, question two respondents were given a scale of one
through five. Question two (Figure 9 in Chapter IV) was about the comprehensibility of
the initial letter (mailed out to 268 Chico residents, home and business owners in
December 2010). It offered five selections and ranged from ‘easy to understand’ to
‘difficult to understand.’

Question Three: “Did You Find the Permit
Application Process Easy to Complete?”

The final Likert scale question (Figure 8 in Chapter IV) regarded the ease of
the permit application process. A scale of one through three was used: ‘yes, somewhat,
and no.’
Question Four: “What Comments or Recommendations Do You Have for Chico’s Future Tree-Planting Programs?”

Question four was an open-ended question regarding recommendations or comments on this and future CTPPs and six categories were coded. The categories included ‘continuation’, ‘gratitude’, ‘recommend’, ‘critical’ and ‘other’. See Appendix H for the Codebook with an explanation of the qualitative codes.

Non-Permit Applicant Questionnaire

The non-permit applicant group questionnaire inquired about the reasons that members of the non-permit applicant group did not complete participation in the CTPP and did not get a free street tree (Appendix F). The questionnaire included Likert scale, closed checklist, fixed response, and open-ended “other, please specify” response methods. Question one was both Likert scale and open-ended (which will be discussed below); question two contained a Likert scale; question three contained a closed checklist and open-ended question; while question four was a fixed response.

For the Likert scale questions, respondents were instructed to rank the checklist responses with a Likert scale ranging from 1 representing ‘a factor’ and 5 representing ‘not a factor.’ Closed checklist questions are those with a possible list of answers (Newing, 2011). This method applied only to question three where the respondents were asked to select all the possible enticements that would have encouraged them to participate. These included: ‘more free workshops,’ ‘greater tree species selection,’ ‘easier permit application process,’ and ‘free delivery of trees.’
Question One: Please Check Off the Reasons Why You Have Not Participated in the City of Chico’s Tree-Planting Program

Question one explored reasons why non-permit applicants did not participate in the program. The Likert scale options included: ‘Too much trouble,’ ‘not enough time,’ ‘City’s responsibility,’ ‘Don’t want to deal with the government,’ and ‘Can’t plant myself, need help.’ ‘Too much trouble’ related to there being too many hoops to jump through in regards to the permit application, workshop, and tree pick-up processes. ‘Not enough time’ related to the general level of busyness of the potential participant. ‘City’s responsibility’ related to the belief that it was up to the city to plant street trees and not the resident’s. ‘Don’t want to deal with the government’ related to perceived governmental overreach in their private lives. ‘Cannot plant their own tree’ related to those non-participants that could not plant the tree on their own, usually for reasons dealing with health or ability. These Likert scale options or statements were created according to feedback received at the two workshops and based on conversations with the Urban Forest Manager (Table 2 and Appendix F). Lastly, the question included an open-ended option, which was included to bring to light any additional reasons overlooked by the study design.

For the open-ended portion of Question one that asked for ‘other reasons for not participating’ I coded nine categories to reduce, organize and analyze the data. The nine categories were: ‘lack of need,’ ‘removal,’ ‘out of town,’ ‘species,’ ‘forgot/interest,’ ‘busy,’ ‘timing,’ ‘letter’ and ‘other’ (See Codebook in Appendix H for descriptions of qualitative codes).
Question Two: Did You Find the Letter Understandable?

Question two was directed at better understanding whether or not the initial interest letter (Appendix A) was comprehensible. It used a Likert scale with five increments from ‘easy to understand,’ to ‘difficult to understand.’

Question Three: Please Check Off What Might Have Motivated You to Participate in the Program

Question three explored which improvements to the CTPP would have enticed the non-participants to participate. The closed checklist included: ‘more free workshops,’ ‘greater species selection,’ ‘simpler application,’ and ‘free delivery of tree.’ ‘More free workshops’ related to the notion that many had busy weekend schedules. ‘Greater species selection’ related to how an improved selection of trees would have encouraged participation. ‘Simpler application process’ referred to a more streamlined application, as one of the requirements of applicants was to provide proof of homeowners insurance. Lastly, ‘free delivery of tree’ ended with an open-ended question, much like question one, designed to gather information on any improvements to the CTPP not included in the closed checklist. See Appendix H for codebook of qualitative coding.

Question Four: What Comments or Recommendations Do You Have for Chico’s Future Tree Planting Programs?

Question four drew out comments or recommendations for future programs and was coded and eight categories were developed to reduce, organize and analyze the data: ‘positive response,’ ‘negative response,’ ‘removal,’ ‘species,’ ‘let’s make a deal,’
‘contact,’ ‘lack of need’ and ‘permit process’ see Appendix H for qualitative code explanations.

Summary of Administration of Questionnaires

The questionnaires were sent out April 2011 to the participants contained in the database. The one-page questionnaires included pre-stamped, self-addressed envelopes to encourage participation. Between May and September of 2011 the questionnaires were returned. The responses were transferred into Excel and Tables 1 and 2 and all the figures in the Results Chapter were created using the program’s graph and chart function.

Conclusion

The first annual CTPP participant analysis was defined by its mixed methods approach. The one-page questionnaires included pre-stamped, self-addressed envelopes to encourage participation. The questionnaires were sent out April 2011. Between May and September of 2011, the questionnaires were returned. The responses were transferred into Excel and Tables 1 and 2 and all the Figures in the Results Chapter were created using the program’s graph and chart function. The qualitative categories created in the post-data collection phase delineated public concern and CTPP recommendations not captured by the close-ended and checklist questions. The full gamut of possible responses was analyzed and evaluated in determining the effectiveness of the CTPP, particularly with respect to new implementations of the program. In the next chapter, I will provide the results of this study.
CHAPTER IV

RESULTS

The purpose of this project is to study the effect citizen participation has had on the CTPP, discern how the public perceives the urban forest, explore how to encourage future participation and evaluate how the CTPP could become more effective. This chapter will describe the results of the two questionnaires administered to those who participated in the program and received a street tree (the permit applicant group) and those who were contacted through outreach to participate in the CTPP, but did not complete the CTPP and did not receive a free street tree (the non-permit applicant CTPP group). Results are discussed, organized and managed based on the methodology and research exemplified and defined in the former chapters. First, I will present analysis of CTPP street planting by maintenance zone and potential need for street trees. In the next section, the questionnaire results will be presented beginning with a discussion of overall response rates followed by the discussion of the permit applicant questionnaire results and the non-permit applicant questionnaire results. Finally, I will summarize the questionnaire about maintenance behavior compliance and renter vs. owner-occupied participation.
CTPP Results

From the initial mailing of 285 letters on December 2010, approximately sixty people attended the workshops, with thirty-seven successful CTPP permit applicants planting a street tree. The CTPP had a tree distribution goal of fifty trees, which was met and exceeded. Sixty-one total trees were given to participants (some participants were given two or three trees to plant). In addition, twelve street trees were given to the landscape company Lifescapes to plant along East Avenue, the Esplanade and in California Park. The distribution of the street tree planting by maintenance zone by both Lifescapes and public can be found in Table 2 plantings. The map shows the locations of the sites where the street trees were planted (see Figure 6).

Table 2. Street tree plantings by maintenance zones

<table>
<thead>
<tr>
<th>Maintenance Zone</th>
<th>Planted CTPP Trees</th>
<th>Available Street Tree Planting Sites</th>
<th>Total Chico Street Tree Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
</tr>
<tr>
<td>1</td>
<td>10</td>
<td>16.39%</td>
<td>597</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>16.39%</td>
<td>360</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>4.92%</td>
<td>334</td>
</tr>
<tr>
<td>4</td>
<td>15</td>
<td>24.59%</td>
<td>564</td>
</tr>
<tr>
<td>5</td>
<td>14</td>
<td>22.95%</td>
<td>728</td>
</tr>
<tr>
<td>6</td>
<td>8</td>
<td>13.11%</td>
<td>464</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>1.64%</td>
<td>348</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
<td>100.00%</td>
<td>3395</td>
</tr>
</tbody>
</table>

Figure 6. Participant tree planting site locations within the City of Chico according to maintenance zone.

Source: Adapted from Britton, Denice. 2012. Email message to author. Chico, CA.

Street Tree Plantings by Maintenance Zones

Table 2 describes the planting of the CTPP street trees (including those by Lifescapes in maintenance zones two, four, and five) as well as the number of street trees in the City of Chico, and available planting sites, per maintenance zone.

Of the sixty-one CTPP trees planted, the majority were planted in maintenance zones four, five, two and one (fifteen, fourteen, ten and ten, respectively). There was only one planted in maintenance zone seven and three were planted in
maintenance zone three. For the Chico street tree inventory, the majority are planted in
maintenance zone one with the fewest planted in maintenance zone three. The above data
derived from Scott Gregory’s Master’s thesis, “Quantifying Street Tree Function and
Distribution: Analysis of Environmental Services, Population Characteristics, and
Sidewalk Uplift in the City of Chico, California,” and communication with the Urban
Forest Manager, did not correspond well to the number of street trees planted to the
existing population of street trees according to maintenance zones (2011). Disparity for
CTPP plantings compared with Chico street tree population was found to be most
pronounced in maintenance zones one, two, four, five, and seven. The latter maintenance
zone was significantly below the Chico street tree population amount, while the others
showed an increase. There are no obvious pockets of participation, with perhaps a desert
of participation in maintenance zone 7 and 3 based on comparison with available planting
sites (Figures 1 and 3). The greatest number of available street tree sites are in zone 5
(21.4%), zone 1 (17.6%) and zone 4 (16.6%). It is interesting to note the disparity
between available sites and CTPP sites in zone 7, which has over ten percent of the
potential sites, yet only one tree was planted in this zone.

As part of the analysis for this project, maintenance zone locations for the
CTPP street tree sites was determined at the city of Chico General Services Department
and in conversation with the Urban Forest Manager. The City of Chico GIS database was
used to determine if the property adjacent to the CTPP sites were owner occupied or a
rental property. The overall ratio of renters to owner-occupiers in the City of Chico is
fifty nine to forty one percent (Brad Pierce, October 11, 2011, e-mail message to author).
In this project all of the thirty-three CTPP permit applicants were owner-occupied.
Questionnaire Response Rates

The questionnaires were sent to the permit applicants and non-permit applicants in 2011. These questionnaires were returned via self-addressed stamped envelope to the City of Chico General Services Department during May-September 2011 returned in person, or filled out at the General Services Department when the trees were picked up by the successful permit applicants picked up their trees.

There were thirty-seven questionnaires sent to the permit applicant group and 248 sent to the non-permit applicant group in April 2011. Responses were received from May to October 2011. Twenty-one people from the permit applicant group and 101 from the non-permit applicant group returned the surveys.

Thirty-seven participant applicant group members received surveys and twenty-one were returned, a fifty-seven percent response rate. For the non-permit applicant group 248 surveys were mailed out and 101 were returned, a forty percent response rate. McLafferty informs us that the expected response rate for questionnaires sent via post is thirty percent (2003).

Results of Permit Applicant Questionnaire

This section discusses the quantitative and qualitative responses from the permit applicant questionnaire (refer to Appendices G, H, and I) and offers analysis and results. The section lists each question, as it appeared on the questionnaire, followed by its results.
Question One: “Please Check off the Reasons Why You Have Participated in the City of Chico’s Tree-Planting Program”

Table 3 contains the responses to the fixed response questions. Responses to the open-ended questions can be found in Appendix I. The fixed response data are represented in Table 3.

<table>
<thead>
<tr>
<th>Motivation for participation</th>
<th>A Factor (1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>Not a Factor (5)</th>
<th>N Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beautification</td>
<td>17</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>Property value</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td>Energy savings</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Wildlife habitat</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>Privacy</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Shade</td>
<td>15</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>“Free tree”</td>
<td>10</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>“Improve neighborhood”</td>
<td>15</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>19</td>
</tr>
</tbody>
</table>

The strongest motivations for participation in the CTPP were factors of ‘beauty’ (18/21), ‘shade’ (18/19) and ‘improve neighborhood’ (17/19). Receiving a free tree was a motivation for ten of the participant applicant group respondents. The least frequent response was ‘privacy,’ which ranked barely above the ‘not a reason’ mark, with eight of the thirteen participants who responded marking it ‘not a factor.’ Some of the response distributions were bifurcated with nine people selecting ‘energy savings’ as a factor and seven as not a factor and an even seven responses to ‘property value’ as a factor and as not a factor.
Eight participants gave open-ended responses for their motivation for participating in the CTPP; refer to the methods chapter and qualitative codebook in Appendix H on how the categories were coded. Three respondents noted the value of the CTPP in the replacement of dead, dying or diseased trees. The specific comments that related to replacement included: “Removal of dreaded (dangerous and ugly) Sycamore” “Replace tree loss in same area,” and “Tree that was initially planted died.” In addition, one respondent noted the environmental value and the conversion of carbon dioxide to oxygen, while interestingly, and perhaps obviously, another described how energy saving was not to be a factor, because it would be “too far from house . . . since it was required to be a street tree.” This same respondent replied how streetlight and noise mitigation were factors. Other respondents either thanked us for the program or noted how it would improve the beauty of an area: “I’m trying to beautify by the preschool, and setup for another garden at 15th and Chestnut.” The latter comment reflects a hybrid response, which reflected not only a sense of beauty and neighborhood improvement, but also a sense of place.

These qualitative responses to question one from the permit applicant questionnaire reflect an educated applicant population with a well-versed knowledge of tree physiology, characteristics, and benefits. Clearly, as will be discussed in the Chapter V, many within the permit applicant group hold a rich and diverse motivational skill set from which they can act and participate in future City of Chico urban forest programs.
Question Two: “If You Attended a Free Tree Planting Workshop Was the Material Presented Easy to Understand?”

Figure 7 described the results from question two, or whether or not the CTPP related material, which included the initial letter, lecture content at the workshops and workshop handouts were understandable.

Figure 7. Was the CTPP related material easy to understand?

Seventeen out of eighteen of the respondents to question two found the survey either easy to understand (15) or somewhat easy to understand (2). Only one of the eighteen who responded found the survey difficult to understand. There was no qualitative remark associated with this question, so it is difficult to ascertain why the material was found to be ‘Difficult to Understand.’
Question Three: “Did You Find the Permit Application Process Easy to Complete?”

The great majority of respondents (nineteen out of twenty) found the CTPP permit application process easy to accomplish as shown in Figure 8. Since I was only able to count those who participated in the workshop long enough to leave their names and contact information, I was not able to count those who attended the workshop, but left before it was completed. It was possible they thought it was too difficult (or conversely, too rudimentary) and therefore gave up. One workshop participant got up and left after ten minutes and claimed that he was not there for “Landscape 101.” Also at a workshop a couple left after they decided that the proof of homeowner’s insurance required to participate was too involved. Since these residents did not participate in the CTPP and receive a tree they were not included in the permit applicant questionnaire responses.

![Question #3: Did you find the permit application process easy to complete?](image)

Figure 8. Was the CTPP permit process easy to navigate?
Question Four: “What Comments or Recommendations Do You Have for Chico’s Future Tree-Planting Programs?”

Lastly, eighteen participants responded to question four, which asked participants for recommendations for Chico’s future tree-planting programs. The majority (n = 17) of those who responded had favorable things to say about the CTPP. These comments ranged from the suggestion that the CTPP be continued to expressions of gratitude for conducting the program (see coding discussion in Chapter 3). For example, one respondent noted: “Continue these efforts. I think they are awesome and educational for folks and gives people a feeling of ownership to the street trees. Thank you so much!”

The positive comment also reflected the benefits of public involvement. There was only one ‘critical’ comment which related to the spray painted marks left by USA Utility Locators along a resident’s sidewalk or street (as will be discussed below). These were marks left from the evaluation of a tree site to determine whether or not the tree hole would disturb underground utilities, a required step for all the potential sites. In addition one respondent commented that additional services ought to be offered such as to have the city plant a more mature tree. The comment was taken as a need for greater tree selection.

There were eighteen comments to the final question eliciting comments and recommendations for future implementations of the CTPP. Sixteen were favorable with comments like: “Please continue this great program,” “I believe it’s a good idea...Thanks City of Chico...Chico is a beautiful city,” and “Just really thought it was a GREAT idea, and can’t believe how much I learned about tree planting. Thanks again.” Such comments
reflect support of the program and the potential for future educational projects such as a resident-forester program.

However, some of the comments for this question were critical of the sidewalk paint used for USA North utility location purposes: “Try not to mark up the street and/or sidewalk with USA markings” and “. . . AT&T did not need to mark up the middle of the sidewalk in fairly permanent paint – I obviously wasn’t going to dig there! Now the paint is slowly fading, but it will take a while.” It is important to note that the latter comment also contained support for the program and how the participant would recommend it to others. I address this issue in the recommendations section below.

Overall, the qualitative data collected from the permit applicant group was positive, as illustrated with responses like: “This program was very easy to navigate through and [the Urban Forest Manager] was very patient and understanding with us and was a pleasure to work with. This program is wonderful! Keep up the good work!” Due to the nature of the CTPP and the receipt of a “free tree” those who participated might have felt obligated add additional comments, as a measure of thanks.

To summarize, the high response rate may have been due to the inclusion of a self-addressed stamped envelope and a short (one-page) questionnaire or may be indicative of the popularity of Bidwell Park (lower and upper) and association with its title of a “City of Trees” and Tree City USA. CTPP participants, judged by the qualitative remarks, had a strong sense of place and association with strong community and trees.
Results of Non-Permit Applicant Questionnaire

For the non-permit applicant group there were 101 responses from 248 initial questionnaires sent (41% response rate). This section describes the results of the non-permit applicant questionnaire (Appendix F).

**Question One: Please Check Off the Reasons Why You Have Not Participated in the City of Chico’s Tree-Planting Program**

Question One was a broad question encompassing many reasons why a non-permit applicant did not participate and could have included the bother of bureaucratic paperwork; not being able, wanting or interested in sitting through a two-hour workshop on a Saturday; or the physical work (or trouble of hiring a landscaper) to plant and transport the tree. For this question participants were asked to check any of the five responses as 1 – ‘a factor’ to 5 – ‘not a factor.’ There was space provided for an open-ended response at the end of the question. The results for question one are shown in Table 4.

<table>
<thead>
<tr>
<th>Reason for not participating in the CTPP and getting a street tree</th>
<th>A Factor (1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>Not a Factor (5)</th>
<th>N-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too much trouble</td>
<td>20</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>24</td>
<td>55</td>
</tr>
<tr>
<td>Not enough time</td>
<td>11</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>21</td>
<td>46</td>
</tr>
<tr>
<td>City’s responsibility?</td>
<td>12</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>24</td>
<td>48</td>
</tr>
<tr>
<td>Government interaction?</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>28</td>
<td>45</td>
</tr>
<tr>
<td>Unable to plant</td>
<td>15</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>27</td>
<td>49</td>
</tr>
</tbody>
</table>

Table 4. Why did you not participate in the CTPP? From the non-permit applicant questionnaire. The n-value equals the number of responses to the question.
The ‘too much trouble’ factor resulted in an interesting bifurcation of the data represented in Table 4. There were nearly as many ‘a factor’ as ‘not a factor’ responses \( (n = 20, n = 24, \text{ respectively}) \). Twenty out of the fifty-five respondents (36%) selected ‘too much trouble’ as a factor for not participating in the CTPP.

Fifteen respondents reported that they did not participate in the CTPP because they were ‘unable to plant’ the tree. This could relate to either a physical inability to plant the tree or to the inability to transport the tree home from the CTPP pick up location. Physical inability could be related to being disabled, suffering from an illness, or age. Transportation issues could be due to lack of access to a vehicle suitable for moving a tree.

Only six of the forty-five respondents ticked off the ‘government interaction’ a factor for not participating in the CTPP, while twenty-eight (62%) specifically indicated that government interaction was not a factor. I believe this represents, even among the non-permit applicant group, the support Chico’s governmental activities and urban forest programs, as well as an indication of a positive urban forest culture in the City of Chico.

There were seventy-four responses to the open-ended qualitative portion of question one. The responses were diverse. Thirty-two of the comments related to there not being a need for a new tree with responses like “Are you nuts? I’m up to my ass in trees. They cause the sidewalks to rise. Leaves everywhere,” “At this time I do not need additional trees,” “I have enough trees – don’t want any more!!!”

Other general criticisms by the residents related to the desire for greater selection including: “I prefer natural trees,” “1. Thirty percent of the trees are considered
pest/invasive species! 2. All trees are hybrids/cultivars,” and “We would like to choose what kind of trees to plant.”

Additionally, four of the comments regarded removal issues reflecting possible inaccuracies with the CTPP database and included responses like: “A tree was removed from my property in early 2010 . . . there are still problems with the site . . . I would like to replant this area once the city has done proper repairs…Please contact me to have this discussion 342-####,” “When we tried to get the first City-owned tree taken out . . . it took the city two years to remove it,” and “The City took the trees out and already replaced by the City on Arcadian Ave.”

The next most frequent response was regarding problems with the initial contact letter, either in the actual receipt of the letter or comprehensibility of the letter including a comment that brought to bear the issue of English as a second language: “I didn’t understand the letter, but it’s not because of the letter. It’s me not understanding proper English.” Other related comments primarily revolved around not receiving the letter: “Did not receive first letter,” “We did not receive a letter outlining the tree-planting program,” and “I was not ever notified.”

A number of responses related to personal issues that the individual encountered with six people stating that they were out of town for the CTPP activities: “I live in the Bay Area,” “We live out of state. We cannot pick it up nor plant it” and “I would have definitely participated however was out of the country Oct 2010 to June 2011.” Four of the responses regarded the timing of the CTPP workshops that made it difficult for non-local residents to attend. Examples of timing include: “I had already planted trees on my own. I would definitely have participated in the program,” “Didn’t
know there was a tree-planting program until after we had already paid and had planted a Maple tree in 9/10/10,” and “We applied for new trees but you said you had run out of money. So we bought our own trees. We use the type of trees you suggested, after we planted you sent a letter about this program.”

Two respondents in the CTPP reported that they just forgot about the program. In this instance, the specific comments where the respondents noted that they had forgotten about the program (but had apparently read and understood the initial letter) included: “Put off and forgotten. Still interested in a small growing tree” and “Forgot about it.” Other respondents said they were not interested, and their comments included: “Skimmed it [letter] didn’t think I was interested” and “Just didn’t want to.”

Some reasons for not participating included comments relating to the full schedules of potential participants and their inability to participate in the CTPP because of them. The specific comments for this section included: “New puppy taking extra free time . . ..” “I don’t have the time to do it,” and “Got busy and didn’t go by and pick up a tree.”

One person responded: “I was out of town and did not have contact info. Do not need more trees – too many leaves.” Lastly, there were comments that included comments that related to issues like expense: “…we don’t want to have to take care of it – water is getting expensive!” being grateful for the program: “Thank you;” wanting greater control: “I wanted more control of its [the tree] care” and community issues which included this descriptive narrative of community trees and some of its problems:

Denice, the kids and adults at the skate park don’t respect anything. I think it’s a wasted effort. There [are] two orange trees in front of Mom’s house and it’s a constant clean-up for me. (Broken limbs from kids/skateboards being tossed up at
them etc, etc, etc.) If we were in another location away from the skate park, I would participate in a heartbeat! Thank you.

**Question Two: Did You Find the Letter Understandable?**

Seventy-five people responded to this question. The fixed response results are illustrated below (see Figure 9).

![Question #2: Did you find the letter understandable?](image)

Figure 9. Was the initial letter easy to understand?

Fifty-three of the seventy-five respondents (71%) reported that the initial letter was ‘Easy to understand.’ This shows that the letter appears to have been clear and effective, based on its content. Given the results from question one – on the qualitative responses – there were more problems with the letter actually getting to the potential participant than with understanding the letter. Although, since the addresses used for the questionnaires were from the same database as used for the initial letter, the addressing of the initial letter was not the problem. Thus, most of the problems surrounding the letters involved them simply getting lost en route or once received.
Question Three: Please Check Off What
Might Have Motivated You to
Participate in the Program

This question examined, using a series of selections, possible motivational
enticements to encourage participation in the CTPP. This question was critical to the goal
of evaluating the effectiveness of the CTPP and to increase future participation among
the residents of Chico. The fixed response results to, “What would have enticed you to
participate?” are given in Figure 10.

Free delivery of tree was the highest-ranking at twenty-six respondents
choosing this selection (39%). To elaborate and give context to this choice, Perkins et al.
described the social inequality that surrounds the six to eight foot tall tree (the height of a CTPP tree) delivery methods (2004). What if you did not own a truck? Is it possible to take a tree onto a city bus?

The next factor “a simpler application process” \((n = 19 \text{ or } 28\%)\) was second as something people thought would entice them to participate following free delivery of a tree. A simpler application process is one that may omit the need for proof of homeowner’s insurance or the requisite workshop process. At one of the workshops, a couple was observed leaving because proof of homeowners insurance was a requirement.

Greater species selection \((n = 13)\) such as a request for fruit trees appeared in some qualitative responses. It was the third most frequent factor selected by the non-permit applicant group respondents. Lastly, eight individuals requested more free workshops as a possible enticement to participate. This reason is addressed in the recommendations section below.

Open-ended responses to question three were numerous as well. There were thirty-four comments – from a pool of thirty-three respondents (one had two comments – and one respondent, not counted, wrote “None”). See codebook for codes for qualitative responses in Appendix H. Eight respondents commented on how the government was the primary reason for not participating. It related to dealings with the city, where many of the respondents simply noted their negative perception of the municipal government. It can be assumed that if there were improvement in this area regarding governmental efficiencies participation would increase. Eight of respondents to this question relayed some sort of grievance they had dealing with the city. Some comments here included: “I
should have control over the tree – not the City,” “I prefer not to deal with it,” and “No gov’t record.”

Seven of the respondents to this question told of how timing issues and being busy were reasons for not participating. Poor timing with the program (i.e., workshop dates) or simply being too busy to participate were common reasons given. Examples in this category included, “…too many things to deal with. Do I need one more?” “…didn’t make the time to participate” and “I work on weekends, makes it difficult to get to the workshops…”

Another seven respondents to this question’s qualitative responses went towards addressing the notion that there was no need for the trees. Examples of comments from this section included: “Not enough space for a tree,” “If I needed a tree,” “I don’t want anymore planted in my yard!” and “Tell us where we can put it – no room.”

Only two of the responses regarded issues with the letter and consisted of the following comments: “If he had understood it better and had more time,” “I thought this was for my residence. I have a lot of trees. Now I see it was for the rental.” Lastly, additional comments described a variety of requests, perspectives, or situations which included, “Offer of assistance,” “You asked re: ‘unintelligible’” and “Cancer, just don’t care anymore.”

Several of the qualitative comments indicated the need to continually monitor street trees and update the urban forestry database. For example, issues regarding the removal of dead, decayed, or diseased trees were also factors. They accounted for four of the responses. Examples included: “Someone would have to remove the present tree,” “Finish taking out the rest of the old stump and roots and replace my driveway and
walkway” and “Two trees needed to be removed.” For the Urban Forest Manager this means enhanced coordination between the Street Tree crews in the Urban Forestry Department, the mailings, and notification of the CTPP. Furthermore, need could be addressed with this issue.

**Question Four: What Comments or Recommendations Do You Have for Chico’s Future Tree Planting Programs?**

The final open-ended questions asked if there were any additional concerns that the residents had not addressed thus far in the questionnaire. Forty-eight people responded to this question. Seventeen of the comments were positive, expressing gratitude and appreciation for the CTPP with comments such as: “Keep up the good work!” “Thank you” and “Good idea! The trees in Chico are beautiful.” Nine of the comments were negative – some including pleas to just leave them alone, “I am elderly and live here for many years or I hire my lawn care done. Please just leave my yard as it is now. Thank you.” Other negative comments criticized the very existence of this survey, “This letter is an example of waste of taxpayer’s money” while others did “. . . not want any city trees” and asked us to “Please take us off whatever tree list we are on.”

Once again, tree species came up. Eight respondents were concerned about the species of trees being offered in the CTPP talked of issues of tree-related damage (i.e., sidewalk uplift) or allergies. Here respondents largely concerned with either sidewalk damage or allergic effects of certain species were wary of the program. Some examples of their comments included: “To plant trees that won’t damage sidewalks with its roots. All the trees planted in our neighborhood have damaged our sidewalks. Sidewalks are
uneven which makes it dangerous when kids are playing outside . . .” “Why not plant a
tree with no fruit?” and “Try to cut down on known allergen offenders.”

Six other respondents attempted to arrange a deal that would ultimately result
in the planting of a tree. Their desire to ‘make a deal’ described the negotiation of the
delivery of services from the city and examples of these comments included, “Give
control and ownership to participants,” “I would like to plant two palm trees in front of
the house,” and “You provide and plant the tree on your property and I will give
appropriate care for three years . . ..” Three other respondents with seeming interest in
participating in the CTPP described the need for further contact, usually directed at the
Urban Forest Manager, because of interest in the program – the comments comprised of:
“May I suggest you contact the new owners in a month or so . . ..” and “Awaiting return
call from person in charge.” One person had an issue with the City’s tree removal process
and noted “I purchased the replacement tree – the removal company left large roots and
bark returned weeks later but still left some roots.” Another person commented on how
the permit process was too involved, “It seems like the permit process takes too long…”
Lastly, one of the responses while it did not directly apply to the CTPP it did address city
tree trimmers, “None for you, but city hires incompetent trimmers, they nearly killed my
tree after neglecting then overtrimming.”

Summary

Follow-up inspections of the CTPP residential sites by the Urban Forest
Manager and me were done to judge proper maintenance behavior. It was determined that
of the thirty-five participant applicants, thirty-three correctly planted their tree(s) and a
majority of the trees had been watered correctly. Most of the trees were planted in maintenance zones 4 and 5, while the fewest trees were planted in zones 3 and 7. Of all the permit applicants in the program none were renters – all were owners.

The permit applicant group survey response rate was high as was the non-permit applicant group survey response rate. This high response rate may be attributed to the predominant tree culture in Chico that is, response rates tend to be high when the subject of the survey is of interest. This may also be attributed to the inclusion of self-addressed stamped envelopes and the short, concise questionnaire.

Beauty, shade and improve neighborhood were, respectively, factors in participation in the CTPP for thirty-five respondents. Qualitatively, the following response distills the essence of participation for many participants – particularly those that report a hybrid appreciation for trees (i.e., more than one motivational factor, in this case ‘beautification’ and ‘improve neighborhood’): “I’m trying to beautify by the preschool, and setup for another garden at 15th and Chestnut.” Thirty-three of respondents said ‘yes’ to the question of whether or not the permit application process was easy to complete. Forty-five of the qualitative comments for question four were positive.

For the non-permit applicant group findings, twenty reported that the ‘too much trouble’ component was ‘a factor’ in not participating, and twenty-four reported it being ‘not a factor.’ Seven respondents commented that there was no need for a tree, thus explaining their non-participation in the program. When asked what would have motivated them to participate, the highest rated reason was ‘free delivery of tree’ with twenty-six responses, followed by nineteen that said a simpler application process would have motivated them to participate. Overall, from non-permit applicant group question
three, eight of respondents were averse to the government. While for non-permit applicant group question four, seventeen were positive and eight were negative, and the remainder dealt with specific issues such as species selection, wanting to make a deal with the Urban Forestry department, and desiring additional contact from the Urban Forestry department.
CHAPTER V

RECOMMENDATIONS

This chapter will provide recommendations to improve the implementation, effectiveness and participation in future CTPP programs based primarily upon analysis of data collected about the motivations and disincentives for participating in the CTPP. They are drawn from the results collected from the two questionnaires and research conducted while developing the literature review. This chapter represents the purpose of this project.

The permit applicants were highly motivated to respond to the survey. This may have been due to interest in urban forestry, the self-addressed stamped enveloped, its concise nature, or as a means of thanking us for the free street tree – on six separate occasions within the qualitative sections of the participant applicant questionnaire – respondents expressed gratitude for the CTPP. This high response rate bodes well for future development of future CTPPs and with additional possible services (discussed below) dependent on sustained public interest in the program.

The findings exemplified by the non-permit applicant questionnaire, designed to learn how to increase participation and give the people a voice, showed the City of Chico that many respondents were not able to participate because of lack of tree delivery or physical ability and found the CTPP to be ‘too much trouble’ to complete. More specifically, the reasons for not participating included that they were too busy; would
have preferred delivery of the tree; a simpler application process; had no need for a tree; or took issue with the City of Chico government, management or bureaucracy. However, regarding the last question on their survey \((n = 48)\) seventeen expressed positive feelings and thoughts toward the CTPP (while nine were negative) – perhaps another reason for the high non-permit applicant group response rate. The following are the specific recommendations based on research, conversations, and questionnaires of the CTPP:

- **Accessibility.** Several responses referred to the inability to plant trees. Based on the literature and the questionnaire results, there were two different reasons for not participating: issues with transportation and physical ability. That is, many would be participants were unable to plant the tree themselves (but willing and able to water and care for the tree) because they could not transport the tree, or they were unable to plant it themselves due to disability or infirmity. It is recommended that a process to assist participants in these cases be developed (see below).

- **Language Barriers.** Some respondents commented on how the language of the letter proved difficult to their understanding. The letter could be bi-lingual. Public outreach may also include advertisements in local Hispanic publications or other venues that would reach non-native speakers. The workshops could be bi-lingual or special workshops could be held to accommodate non-English speakers.

- **USA North Markings.** Many respondents commented negatively about the spray paint that was used to mark the tree sites for utilities inspection. Participants showed preference for reduced use of paint on the sidewalks and streets by USA North. Perhaps different methods of marking the sites could be developed such as the use of
chalk, less permanent paint, or stakes. In addition, the person conducting the markings could reduce their use of paint on the streets, sidewalks and lawns.

- **Process Efficiency.** The results show that the primary factor behind the non-participant group members not participating involved the simple lack of need for a tree. Thirty-two out of seventy-five coded responses reflected this reason for not participating. That is to say, many respondents noted that they did not have a need for a street tree(s), or the contact letter. The improvement and continual update of the database and mailing list can become a priority.

In addition to an updated database, a number of steps, based on the following reasons, could be taken to improve the implementation, effectiveness, and participation in future CTPP programs. Any of those who did not complete the CTPP application and get a free street tree cited the following reasons for non-participation: Concern over species selection, wanting to make a deal (i.e., participate if they could plant fruit trees), and overall negative attitude towards the CTPP. To mitigate the first two factors above, better information and reasoning on the species of trees offered by the program might entice more people in the future to participate. In order to address the negative attitude towards the CTPP involvement of a trusted community organization like a church, Rotary Club, or environmental/urban forest non-profit (which may also have other benefits, described below) in the plantings, might be pursued.

The requirement for proof of insurance was also a deterrent to participation. At least two people left the workshops, and there were possibly many more who never attended the workshops – all due to the need for homeowner’s insurance. The possible removal of the proof of homeownership insurance (required for possible liability claims)
would facilitate the participation of renters, as it maybe difficult for renters to obtain the proof, and increase the overall ease of the permit process (as discussed below). Perhaps an umbrella insurance policy (discussed below) facilitated by a non-profit organization or a special landlord/renter outreach program could be used for future CTPPs.

- **Umbrella Insurance Policy.** The City of Chico could cooperate with existing organizations (e.g., Butte Environmental Council), or establish an organization similar to the Sacramento Tree Foundation, a non-profit which offers urban forestry services and training to neighborhoods so that they can become empowered to enhance their landscapes (Sacramento Tree Foundation website, 2012), to provide the umbrella insurance policy necessary to reduce permit application process complexity and improve renter, and more generally, public participation.

- **Training the Trainers.** To bolster public participation and take advantage of what Gregory defines as Chico’s “tremendous pride in maintaining a large population of healthy street trees” (2011) Chico could again follow Sacramento’s lead. It seems that interest, drive and love for the urban forest by the residents of Chico is not lacking. Responses indicate that those who planted trees were knowledgeable. There was erudite criticism of one of my motivational factors (i.e., street trees are located to far from the building to offer energy savings) and the suggestion of adding others related to street light and road noise mitigation. These responses indicate an informed citizenry. The City of Chico could emulate Sacramento’s LEAF program, which fosters participation by training volunteers to become trainers, and by having the urban forestry official volunteer an equivalent amount of time to other urban forest projects in the community (described below).
Permanent Internship. A continuous, or at least seasonal, urban forest CTPP internship could be created in collaboration with California State University, Chico. To address efficiency concerns, a permanent seasonal internship could maintain a current tree inventory database. The intern could also be tasked with identifying neighborhoods that would benefit from the program; disperse and design door-hanging brochures (the idea was discussed at a Bidwell Park and Playground commission meeting held on April 13, 2011) which emphasized resident concerns over sidewalk damage and allergies; assist in the permit application procedure (i.e., clearing sites for USA North); plant trees for people unable to do so themselves; send out letters; train community leaders; organize communities through civic and religious organizations for mass plantings; attend meetings; and, if the Urban Forest Manager were unavailable, lead workshops. With an intern on hand continually, or at least seasonally (e.g., November-May), greater services overall could be made available for the residents. The internship could extend the City’s scarce resources while maintaining a relationship with California State University Chico, which supports community-based and service learning, civic engagement, and volunteerism as part of their strategic priorities and has a “long history of service to the community” (California State University Chico website, 2012).

Workshops and Media. In light of the data and research conducted to measure the effectiveness of the CTPP, future workshops could be voluntary for those with prior tree planting experience. In order to impart the knowledge of tree needs and maintenance behavior information required by the CTPP rather than require attendance in the workshop, those with prior experience, or those unable to attend could be given instructions on how to plant the particular tree in print or digitally on a CD, DVD or
website. Furthermore, this could be an opportunity for future research into the program—driven by the question of whether the trees planted by workshop attendees resulted in a higher or lower level of maintenance behavior compliance.

- **Reciprocal Volunteering Program.** Additionally, following the lead of the Sacramento, California case study and its Sacramento Tree Foundation there could be a work/trade arrangement created to give back to the community the time it spends with the CTPP (i.e., at the workshops). Interns could lead tree planting training workshops for part-time foresters. Then a project could be identified in the community that the intern could then commit a similar amount of time that the part-time foresters devoted to the CTPP, creating a reciprocal relationship. For example, the part-time foresters could spend two hours training with the intern for the CTPP, then the intern could volunteer two hours of his/her time to say, help a neighborhood identify trees, develop neighborhood street tree planting projects, or hold a meeting(s) to answer any urban forestry related questions or to promote awareness of the benefits of the urban forest. The Urban Forest Manager could fill this role. That is to say, the Urban Forest Manager could reciprocate the time volunteers spend with the CTPP without the help of an intern.

- **Commercial/Community Workshops.** Mass plantings, like those carried out by contracted landscape firms, could be opportunities for tree planting education. A modest certificate program, like the creation of Chico’s “Resident-Forester Certificate,” could help residents unable to plant in their current circumstance (i.e., renting or living at a place with no need for street trees) but interested in urban forestry. The individual would attend the workshop and take part in a city-planting project and receive a certificate while gaining valuable experience transferable to future projects.
☐ **A community of Urban Foresters.** The CTPP can educate people so later, when residents find themselves in need of a tree, at a place of their own, they have the knowledge of how to plant trees. Those like Summit and McPherson (1998) and Baltimore urban forest planners believe that to create the part-time forester a city provides an invaluable service while both maintaining the urban forest and involving the residents.

☐ **Renter Involvement.** Since there were no renters involved with the first annual CTPP, while over half of the residents of Chico are renters, the City of Chico, since this is a public program, can reach out and attempt to include renters as well as owners. Future CTPP programs, the Urban Forest Manager, or an intern, could potentially work with landlords, or rental/property management groups to increase participation in the CTPP. Renters could have an organized tree-planting day, perhaps on Earth Day, and/or in collaboration with the Butte Environmental Center. In the case of situations where the renter’s landlord has a landscape firm, the landlord could commit to watering the tree(s). This could be achieved through possible incentives for renters to plant and care for the tree, or by simply advertising the possibility to care for a street tree(s) with the tradeoff of being able to learn more about tree planting and the urban forest. While the need for street trees adjacent to apartment buildings or multi-family complexes may be best addressed through the property manager, or landscape firm; those that live in houses may have more responsibility over the yard/PROW and thus maybe more interested in the CTPP. Overall, removing the need for proof of homeowner’s insurance may increase the number of renters involved. A note of caution, however, if a renter moves out during the establishment (i.e., regular watering) phase of the tree’s planting, the new renter, or
landscaper would then need to become responsible for the tree(s). This technique of encouraging renters to participate could also be used in targeting maintenance zones with the highest percentage of potential tree sites (i.e., zones 5 and 1) or those most underrepresented in the first annual CTPP (i.e., zones 3 and 7).
CHAPTER VI

CONCLUSION

The first annual CTPP and this project exemplify the ways that public participation in city programs can extend budgets in times of scarce resources and increase the public awareness and involvement in urban forestry. People became active participants, not only in the selection of the trees (Appendix C), but also in the maintenance and care of the tree(s). Milwaukee, Baltimore, Sacramento, and Canberra, Australia Capitol Territory also practice these principles.

Through letters mailed out to a predetermined population of Chico (Appendix A), the City of Chico Urban Forest website, and a local newspaper the Chico Enterprise-Record (that also sent a reporter to the workshops) the CTPP had considerable impact on the urban forest setting of Chico. The CTPP saved public tax dollars, and met budgetary constraints by having the public become part-time foresters. The follow-up maintenance behavior inspections revealed that over ninety-five percent of the participants were compliant. The Urban Forest Manager continued the program the following year.

This project benefited from high questionnaire response rates. There were favorable comments from both permit and non-permit applicant groups, many participants were grateful; many non-participants expressed interest in future CTPPs. Over twenty of the thirty-seven participant response group members responded with a
completed questionnaire. Over 100 non-participant respondents, from a pool of 248, responded with completed surveys.

The CTPP attempted to create a well-informed and active stakeholder base that improved a sense of ownership within their community and as a result, greater public awareness and participation in urban forest management decisions. It is also important to note that participant recruitment must be a goal in practice and theory by publicly funded programs.

Not a single participant was a renter in the CTPP, even though in Chico renters outnumber homeowners fifty-nine to forty-one percent (Pierce 2011). Like in Milwaukee (Perkins, Heynen, and Wilson 2004) much needs to be done in the way of expanding the CTPP to renters. However, the mobility of the population must also be considered. That is, renters are often transitory, and within the respondent population there were absentee owners. Renters may not be interested in street tree programs, due to their short time at a particular residence, and the need for someone after their tenure – if they leave before the tree becomes established – to take over the tree’s care. Additionally, rental agreements may prohibit renters from planting or pruning trees or the landlord may contract out the yard care, leaving renters with little involvement in landscape activities. Nevertheless, the educational value of learning about trees and the planting process may be enough to entice renters, even in high-density housing, to participate. If or, when the renters move out of the property adjacent to a street tree-planting site, the watering of the trees could become the responsibility of the landlord, or contracted landscape firm.

Public participation proved a valuable component to the successful implementation of the CTPP, under the guidance of the Urban Forest Manager. The
comments derived by the questionnaires informed the recommendations for this project, many of which were implemented into the design of the second annual CTPP. Programs like the CTPP and the feedback received through this research project results in a stronger, community of citizens engaged in urban forestry, and a healthier, more vibrant urban forest, all at a reduced cost to the city.
LITERATURE CITED
LITERATURE CITED


Duan, Shau Yung, Jonathan Lee, Chad Phelan, Dana Serovy, and Rebecca Webber. 2007. *Participatory approaches to urban forest management a case study of Hyde Park, Austin*. Austin: University of Austin.


Montano, Ralph. 2004. Loss of old trees worries residents of Sacramento officials seek new approach to managing the thinning urban forest. The Sacramento Bee, October 7.


APPENDIX A
Dear Citizen:

The City of Chico has initiated a program to encourage citizens to plant street trees at their residence. We are extending this invitation to you because you have requested a new tree in front of your property or your tree has recently been removed.

Come join us to help keep Chico Green. **The City has a limited number of free trees available on a first come, first serve basis.** To acquire a tree, fill out the attached permit and mail, fax or bring to the City at 965 Fir Street, Chico, CA 95928. To obtain information about how to plant your tree, we encourage you to attend a hands-on free **tree planting workshop on February 26 or March 12.**

After the permit is received, city staff will review the site for planting, mark the curb as to where the tree should be planted and call USA Alert to review and mark the area for utilities. Your approved permit will then be returned with a voucher for your free tree, which must be reserved within 10 days and planted within a week of delivery or pickup.

Tree planting information will be provided at the workshops, and a copy will also be included with the approved permit. Additional information is online at our City web site: http://www.ci.chico.ca.us/general_services_department/park_division/street_trees.asp

Citizens obtaining permits and free trees will be required to plant and maintain the tree for 3 years. This will help the City by freeing up tree crew time to concentrate on tree pruning. The City will provide information about how best to plant and care for your tree at the workshops. After establishment, the City will be responsible for pruning the tree. Our pruning goals are to form a strong structure and elevate the foliage over the road and sidewalk.

For further information, or to reserve a seat at one of the workshops, please call the street tree division at 896-7800 or email dbritton@ci.chico.ca.us. We look forward to working with you in this process.

Denise F. Britton
Urban Forest Manager

Attachments: Workshop Flyer, Tree Planting Permit

Source: Denice Britton, Urban Forest Manager, City of Chico.
Reproduce with permission.
TREE PLANTING WORKSHOP

Learn How to Plant a Tree and
How to Navigate the City’s Permit Process for Tree Planting

CHICO MUNICIPAL SERVICES CENTER
901 Fir Street, Chico
Conference Room

Public Workshops will be provided by Denice Britton, Urban Forest Manager

They will be held on:

February 26, 2011
March 12, 2011

Workshop Schedule:

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00-9:30 AM</td>
<td>Introductions</td>
</tr>
<tr>
<td></td>
<td>Overview of the City Street Tree Program</td>
</tr>
<tr>
<td>9:30-10:00</td>
<td>Tree Planting Application</td>
</tr>
<tr>
<td>10:00-10:45</td>
<td>Tree Planting Basics</td>
</tr>
<tr>
<td>10:45-11:30</td>
<td>Tree Planting Demo</td>
</tr>
</tbody>
</table>

Source: Denice Briton, Urban Forest Manager, City of Chico. Reproduce with permission.
## 2010-11 City of Chico Street Tree Species

<table>
<thead>
<tr>
<th>Species</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acer X freemanii 'Jeffersred'</td>
<td>Autumn Blaze maple</td>
</tr>
<tr>
<td>Acer rubrum 'October Glory'</td>
<td>October Glory maple</td>
</tr>
<tr>
<td>Fraxinus americana 'Autumn Purple'</td>
<td>Autumn Purple ash</td>
</tr>
<tr>
<td>Ginkgo biloba 'Fairmount'</td>
<td>Fairmount ginkgo</td>
</tr>
<tr>
<td>Koelreuteria paniculata</td>
<td>Goldenrain tree</td>
</tr>
<tr>
<td>Lagerstroemia indica 'Choctaw'</td>
<td>Choctaw crepe myrtle</td>
</tr>
<tr>
<td>Lagerstroemia indica 'Muskogee'</td>
<td>Muskogee crepe myrtle</td>
</tr>
<tr>
<td>Pistacia chinensis 'Keith Davey'</td>
<td>Keith Davey pistache</td>
</tr>
<tr>
<td>Ulmus parvifolia</td>
<td>Evergreen Chinese Elm</td>
</tr>
<tr>
<td>Tilia Cordata 'Greenspire'</td>
<td>Greenspire Linden</td>
</tr>
<tr>
<td>Zelkova serrata</td>
<td>Zelkova</td>
</tr>
</tbody>
</table>

Source: Denice Briton, Urban Forest Manager, City of Chico. Reproduce with permission.
CITY OF CHICO
PERMIT TO PLANT TREES
IN THE PUBLIC RIGHT-OF-WAY

Property Owner: __________________________ Representative: __________________________
Owner's Name: __________________________ Representative's Name: ______________________
Owner's Address: __________________________ Representative's Address: ____________________
Owner's Phone Number: __________________________ Representative's Phone Number: __________________________

REQUEST TO PLANT:

Location of tree(s): __________________________ (Address)
Number of tree(s): __________________________ Species of tree(s):

________________________________________
________________________________________

Sketch of Proposed Tree Locations: (Include location of sidewalk, driveway, utility boxes or meters, street lights, telephone poles, hydrants and road signs within 30' on either side of the proposed tree.)

HOMEOWNER'S INSURANCE CERTIFICATE IS REQUIRED

Attach Copy of Certificate of Liability OR Homeowners Insurance

Date __________________________ Signature of Property Owner or Authorized Representative __________________________

Source: Denice Briton, Urban Forest Manager, City of Chico. Reproduce with permission.
APPENDIX E
City of Chico Tree – Permit Applicant Questionnaire

1. Please check off the reasons why you have participated in the City of Chico’s Tree-Planting program:

<table>
<thead>
<tr>
<th>A factor</th>
<th>Not a factor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Beautification</td>
<td></td>
</tr>
<tr>
<td>Property value</td>
<td></td>
</tr>
<tr>
<td>Energy savings</td>
<td></td>
</tr>
<tr>
<td>Wildlife habitat</td>
<td></td>
</tr>
<tr>
<td>Privacy</td>
<td></td>
</tr>
<tr>
<td>Shade</td>
<td></td>
</tr>
<tr>
<td>Free tree</td>
<td></td>
</tr>
<tr>
<td>Improve neighborhood</td>
<td></td>
</tr>
<tr>
<td>Other, please specify:</td>
<td></td>
</tr>
</tbody>
</table>

2. If you attended a free tree-planting workshop was the material presented easy to understand?

<table>
<thead>
<tr>
<th>Easy to understand</th>
<th>Somewhat easy</th>
<th>Difficult to understand</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Did Not Attend □</td>
</tr>
</tbody>
</table>

3. Did you find the permit application process easy to complete?

<table>
<thead>
<tr>
<th>Yes</th>
<th>Somewhat</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. What comments or recommendations do you have for Chico’s future tree-planting programs?

Thank you for taking the time to complete this survey, please return it at your earliest convenience.
# City of Chico Tree – Non-Permit Applicant Questionnaire

1. Please check off the reasons why you have not participated in the City of Chico’s Tree-Planting program:

<table>
<thead>
<tr>
<th>Reason</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too much trouble</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not enough time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City’s responsibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don’t want to deal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can’t plant myself, need help</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other, please specify:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Did you find the letter understandable?

<table>
<thead>
<tr>
<th>Easy to understand</th>
<th>Somewhat easy</th>
<th>Difficult to understand</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Please check off what might have motivated you to participate in the program.

- More free workshops
- Greater tree species selection
- Easier permit application process
- Free delivery of trees
- Other, please specify:

4. What comments or recommendations do you have for Chico’s future tree-planting programs?

---

Thank you for taking the time to complete this survey, please return it in the enclosed self-addressed stamped envelope at your earliest convenience.
APPENDIX G
<table>
<thead>
<tr>
<th>Qualitative Response</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the city wants to plant more trees the damage done to personal property should fall on the city to repair or replace. Come out and examine my driveway and walkway and you will understand.</td>
<td></td>
</tr>
<tr>
<td>Good Idea! The trees in Chico are beautiful.</td>
<td></td>
</tr>
<tr>
<td>You provide and plant the tree on your property and I will give appropriate care for 3 years. A golden rain seems like a good fit. I already had to water the tree at the corner it was going dead - water did the trick.</td>
<td></td>
</tr>
<tr>
<td>Fewer wind-pollinated trees, more dogwood or crepe myrtle. I am horribly allergic to elms, alders, and others. The trees that wouldn't cause me grief were already &quot;sold&quot; by the time I got there. Couldn't afford to buy my own right now.</td>
<td></td>
</tr>
<tr>
<td>I would like to plant two palm trees in the front of the house.</td>
<td></td>
</tr>
<tr>
<td>Give control and ownership to participants.</td>
<td></td>
</tr>
<tr>
<td>Please continue - we will participate in the future.</td>
<td></td>
</tr>
<tr>
<td>None for you, but city hires incompenant trimmers, they nearly killed my tree after neglecting then overtrimming.</td>
<td></td>
</tr>
<tr>
<td>It seems like the permit process takes too long, I understand that it takes time for the city to perform any tree work requests. I don't want to wait for tree work if there is a danger of a branch or even tree coming down - causing danger.</td>
<td></td>
</tr>
<tr>
<td>Thank you!</td>
<td></td>
</tr>
<tr>
<td>Having lived with the old program for 40 years, I do not like being &quot;invited&quot; to do something I not only cannot do but have been told in the past I could not do. Maybe you could have an alternative program for people unable to participate.</td>
<td></td>
</tr>
<tr>
<td>I did not get info. No second contact made I need trees at XXX Humboldt!!!!!</td>
<td></td>
</tr>
</tbody>
</table>
### CODEBOOK FOR PERMIT APPLICANT QUESTIONNAIRE

<table>
<thead>
<tr>
<th>CODE</th>
<th>Description/Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>beauty</td>
<td>aesthetic impacts</td>
</tr>
<tr>
<td>replacement</td>
<td>the need for another tree to be replaced</td>
</tr>
<tr>
<td>environmental benefit (not listed)</td>
<td>noise, light and air pollution mitigation</td>
</tr>
<tr>
<td>gratitude</td>
<td>appreciation for the CTPP</td>
</tr>
<tr>
<td>continuation</td>
<td>overall support of the CTPP urging its continuation</td>
</tr>
<tr>
<td>recommend</td>
<td>when the CTPP was recommended to others</td>
</tr>
<tr>
<td>critical</td>
<td>negative impressions of the CTPP</td>
</tr>
<tr>
<td>other</td>
<td>general positive responses</td>
</tr>
<tr>
<td>education</td>
<td>enjoyed education component to program</td>
</tr>
<tr>
<td>good idea</td>
<td>believed the program to be a good idea</td>
</tr>
</tbody>
</table>

### CODEBOOK FOR NON-PERMIT APPLICANT QUESTIONNAIRE

<table>
<thead>
<tr>
<th>CODE</th>
<th>Description/Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>lack of need</td>
<td>no desire, need or room for new street tree</td>
</tr>
<tr>
<td>removal</td>
<td>issues with the City's tree removal program</td>
</tr>
<tr>
<td>out of town</td>
<td>potential participant lived out of the area or was out of town</td>
</tr>
<tr>
<td>species</td>
<td>desired increased selection of trees</td>
</tr>
<tr>
<td>forgot/interest</td>
<td>when the letter was forgotten or loss of interest in the CTPP</td>
</tr>
<tr>
<td>busy</td>
<td>too active to participate</td>
</tr>
<tr>
<td>timing</td>
<td>schedule conflicts</td>
</tr>
<tr>
<td>letter</td>
<td>issues with the language of the letter</td>
</tr>
<tr>
<td>government</td>
<td>distrust of the city government</td>
</tr>
<tr>
<td>positive</td>
<td>generally approving of the program</td>
</tr>
<tr>
<td>negative</td>
<td>had disagreement(s) with the program</td>
</tr>
<tr>
<td>contact</td>
<td>required more thorough communication</td>
</tr>
<tr>
<td>community issues</td>
<td>comments on neighborhood happenings</td>
</tr>
<tr>
<td>process</td>
<td>believed the permit process to be too complicated</td>
</tr>
<tr>
<td>expense</td>
<td>referred to the added expense of watering the tree</td>
</tr>
<tr>
<td>grateful</td>
<td>were thankful for the program</td>
</tr>
<tr>
<td>illness</td>
<td>could not participate due to illness</td>
</tr>
<tr>
<td>let's make a deal</td>
<td>wanted to trade participation for improved services</td>
</tr>
<tr>
<td>&quot;leaf&quot; me alone</td>
<td>wanted to be left alone</td>
</tr>
<tr>
<td>other/random</td>
<td>other issues not numerous enough to warrant additional category</td>
</tr>
</tbody>
</table>
QUALITATIVE RESPONSES

Questionnaire #1 Responses to: Other reasons for participating?

Removal of dreaded (dangerous and ugly) Sycamore and replace with slow growing and beautiful crepe myrtle (will be a pleasure for years to come).

Good for the environment (Carbon dioxide to Oxygen)

Replace tree loss in same area (several years ago).

Too far from house to help with energy since it was required to be a street tree. From Other1: Block a street light across the street, trees cut down on street noise.

To replace two damaged trees

Tree that was initially planted after moved into new home died soon after.

Thank you!

I'm trying to beautify by the preschool, and setup for another garden at 15th and Chestnut.

Questionnaire #1 Responses to: Comments or recommendations for future programs?

This program should continue - it is a brilliant program for citizens that truly care about the reasons listed in question #1.

If possible, do them once a month for 3-4 months - this could also be a terrific school project. ---

Thank you for your time, generosity and expertise.

It is great! I have recommended it to others. 1 comment - AT&T did not need to mark up the middle of the sidewalk in fairly permanent paint - I obviously wasn't going to dig there! Now the paint is slowly fading, but it will take awhile.

Keep doing it. As a participant I now have a personal investment and interest in the welfare of our new tree.

97
Please continue this great program.

Recommend program continuation.

Examples of roof girdling, was very good as well as showing us what to do when removing the tree from the pot.

I believe it's a good idea, otherwise there probably wouldn't be a tree planted if they hadn't been given away. Thanks City of Chico. I think you should keep it up. Chico is a beautiful city.

This program was very easy to navigate through and Denice Britton was very patient and understanding with us and was a pleasure to work with. This program is wonderful! Keep up the good work!

Get the word out more so more will participate. I've told everyone I know - I think it's terrific!

Thank you so much for providing this program. Now I do not have a huge whole in the middle of my lawn, which was a safety risk.

You did not have some trees that were on the list. But we are very happy with the myrtle you gave us!

1) Try not to mark up the street and/or sidewalk with USA markings. 2) Explain program.

Continue these efforts. I think they are awesome and educational for folks and gives people a feeling of ownership to the street trees. Thank you so much!

It was fun and interesting. Good idea.

The tree was very small caliper (<1") and I had to plant it myself so it would be nice if the city staff could have planted it and maybe provide a more mature tree. Thank you.

Just really thought it was a GREAT idea, and can't believe how much I learned about tree planting. Thanks again.

**Questionnaire #2 Responses to: Other reasons for not participating?**

There's already a big tree there.

1. 30% of the trees are considered pest/invasive species! 2. All trees are hybrids/cultivars.

I prefer natural trees.
The City took the trees out and already replaced by the City. On Arcadian Ave.

Sprinkler system is installed and I do not want to disrupt it.

A tree was removed from my property in early 2010. Before this happened I contacted the Urban Forest Manager and was given a list of appropriate trees approved for my area. I planted it (first I bought it) took care of it for several years prior to the diseased tree being removed. However, there are still problems with the site where the tree was removed.

The sidewalk is raised, a large piece of root is visible, and there is water pooling after it rains. I would like to replant this area once the city has done proper repairs. I am not sure where you think another tree should be planted at my property perhaps this needed to be identified first. Please contact me to have this discussion

My house has way better light with that space open - I don't want a tree there.

We live and work full time in Los Angeles. I couldn't leave my job for the length of time it would take to drive to Chico, participate in the program and drive back.

City took the word of a lady who was not owner of property and cut down 2 trees and after lots of telephone calls 2 replacement trees were planted.

I have enough trees - Don't want any more!!!

At this time I do not need additional trees.

The letter stated tree was removed from front and there has been no tree removal as of yet???

My renter signed up for this program, not me - a tree had been removed by the city, by they planted another small one.

When you remove the tree that is on "your list" to take down, I will plant another tree there. It should be removed before it falls and damages something or hurts someone.

Don't want a tree in front of my house.

Dear Denice - As you may remember I planted a maple tree in November 2010 to replace the dead walnut tree that the City had removed. I paid for the 15 gallon tree, posts + ties, planting by a landscape person, and extending an auto watering system over to the curb area to water the tree. The total amount of this investment came to around $300. I did not have money to do the same for another tree. I would like another tree, but it would have to come out of next year's expenses. Thanks.
Didn't need a tree! There is no place in my front yard to plant another tree! I already have 3 city trees on a 90' frontage.

The city has already placed 2 oak trees in my yard. I just don't have room for any other trees.

I do not want another tree - too much trouble - roots break up my driveway and create a liability hazard - only shades the street. Sap and leaves are nothing but a pain.

We applied for new trees but you said you had run out of money. So we bought our own trees. We use the type of trees you suggested, after were planted you sent a letter about this program.

No room for more trees.

I would have been more interested if the city would first remove the other dead and dying trees on our property. They are an eye sore!!!

Trees planted in our parkway is lifting up the sidewalk!

Put off and forgotten. Still interested in a small growing tree.

Forget about it.

New puppy taking extra free time, vet bills (couldn't afford to buy the hypo-allergenic tree myself).

Denice, the kids and adults at the skate part don't respect anything. I think it's a wasted effort. There is two orange trees in front of Mom's house and it's a constant clean-up for me. (Broken limbs from kids/skateboards being tossed up at them etc, etc, etc. If we were in another location away from the skate park, I would participate in a heartbeat! Thank you.

There is already a tree planted in the middle of my small front lawn. No room for another.

I live in the Bay Area

When we tried to get the first City-owned tree taken out (because it was dead) no one would touch the tree and it took the city 2 years to remove it.

Got busy and didn't go by and pick up a tree.

We don't remember receiving the letter; we probably would have participated if we had received it.
If you want to plant trees in front of my house that's fine. I don't have the time to do it.

Thank you.

I like my yard the way it is, don't want more trees I have 7 already.

Just didn't want to.

We have no room for a tree. Unless you put it near the road (let me know).

Because of water line and gas line and roots from removed trees - it would have been difficult to plant next to street. After tree removal, City was not providing free trees. I transported and bought my $80 tree…I wanted more control of its care.

I am not here on weekends and could not attend mandatory workshop on planting a tree. I have a gardener who could have planted it.

Due to back and shoulder surgery I could not even think of planting a tree. I don't like the whole process - having to apply, be approved, taking a workshop and having city decide whether I'm doing it right.

Our home is a rental and we don't want to have to take care of it - water is getting expensive!

Are you nuts I'm up to my ass in trees they cause the sidewalks to rise leaves everywhere.

Take your trees somewhere in town where there are none. Look around trees everywhere you look at the problems and wonder why more people don't want them

I had already planted 3 trees on my own. I would definitely have participated in the program.

I was not ever notified.

I was out of town and did not hear contact info. Do not need more trees - too many leaves.

I have enough trees and shrubs, plants, etc. in my yard and city strip.

We had already purchased and planted two Shumard Oaks and did not need additional trees.

Don't need another tree in yard.
There are two large trees in front of the home and no more trees are needed at this location.

We have enough trees already!!!

City is repairing and installing curb/gutter on my street. Don't know location.

The tree in question fell during "wind storm" Your office removed the tree. I payed for the stump removal and tree replacement - City recommended "October Glory" tree.

After several weeks of waiting to have old tree roots removed I was told there were no replacement trees available.

The soil is clay with some top soil - the trees end up with much of their root system on top of the lawn. Do not want a tree planted.

This is a rental. We live out of state. We cannot pick it up nor plant it.

They are rentals and tenants do not water by streets. We planted over 15 trees on our 16th St/Normal properties about 10 years ago.

Didn't know there was a tree-planting program until after we had already paid and had planted a Maple tree in 9/10/10.

We did not receive a letter outlining the tree-planting program

I have too much shade in yard already. Would like more sun!

Did not receive first letter.

I don't own that house anymore - the bank does. The house doesn't need anymore trees.

Don’t have any area which to add trees to current landscape.

Trouble because I don't live in Chico also I think in the next few months I will put my house on short sale.

I didn't understand the letter, but it's not because of the letter. It's me not understanding proper english.

1. Out of town. 2. Already have too many trees! Skimmed it [letter] didn't think I was interested.

The city removed a large maple 2 years ago and trucked in poor quality topsoil full of weed seeds. We waited a year for the city to plant a tree then were told the city had
discontinued planting new trees. So at our own expense we purchased a tree off the city list of trees. I planted the tree myself. Now, the city is planting trees again. I wish you had made up your mind and saved us the time and expense of planting our own tree. So, we don't need the tree-planting program.

We have a multitude of trees in the area.

We would like to choose what kind of trees to plant.

I would have definitely participated however was out of the country oct 2010 to June 2011.

**Questionnaire #2 Responses to: What would have enticed you to participate?**

Can we get any help with tree removal?

Not enough space for a tree.

If I needed a tree

As the program is currently set up, there is no way we could have taken part.

Did not participate as I said the city replanted the 2 trees they cut down which were not a problem.

I don't want anymore planted in my yard!

Two trees needed to be removed Old Black Walnut tree.

If he had understood it better and had more time.

Cancer, just don't care anymore.

If this program had been available when I bought the house I would have "jumped" on it!

Finish taking out the rest of the old stump and roots and replace my driveway and walkway.

I thought this was for my residence. I have a lot of trees. Now I see it was for the rental.

No more room for trees.

I prefer not to deal with it.

I work on weekends, makes it difficult to get to the workshops. Taught on Saturday.
I should have control over the tree - not the city.

None

Tell us where we can put it - no room.

At the time of tree removal, it didn't sound like the city was going to provide the tree.

I can plant the tree. I do not want to attend a workshop.

Offer of assistance.

Although I did not make contact too many things too deal with. Do I need 1 more?

We planted the new trees in early (Spring) 2010. The offer came up too late.

Someone would have to remove the present tree.

need for a tree

I don't think the correct trees were chosen originally for this neighborhood (alders, willows - a nightmare in 20 years!) So, not being an arborist, I don't know what to choose from the list provided. Personally, I'd chose something like a dogwood - was that on the list?

You asked re: 'unintelligble'

Trees not really needed at this property.

My son who lives at Chico home is a student and didn't make the time to participate.

City plant tree on my property with my approval.

It felt as though you were required to attend the training/meeting.

I would like to participate if I still on time.

No gov't record.

If the city would effectively manage the sidewalk problem from roots.

My husband and I are both teachers and don't usually have time for this kind of thing in the school year.
Questionnaire #2 Responses to: Comments or recommendations for future programs?

1. Offer native trees (various quercus, sequoia, cupressaceae for example). No native trees? How about some additional 'american trees: black walnut, alders, red oaks…If pretty trees are the city's aim, offer something like Jap. Maples and cherries.

We talked to Denice a couple of time some time back I don't know what kind of trees they planted, but they look good. We told Denice to use her own judgement.

We want one for the Park Way or to replace one. Please send us another list of types. We called about this program on 5-16-2011. Awaiting return call from person in charge.

Thanks! Beverly

This along with so many city services is another indication that our salaries for city employees have forced elimination of services to the community. Jann. (Letter was mailed to my husband, Lester - not to both of us This is patronizing, demeaning, and so "old school." Please update your records.

Try to cut down on known allergen offenders.

We wish we could have been part of the program. It's a great service in many ways. Is there some way that people who live far away could choose and plant a tree at another time during the year? We visit relatives in town, and our rental on Chestnut once or twice per year. We would love to do the tree planting at one of those times.

I live 67 miles from Chico and the only comment I have is to make sure you are talking to property owner before cutting trees down that were not a problem but thank you for replanting.

Sir: I have 2 trees in my front yard. One planted by myself (after I was informed that the city had no funds available - about 2 years ago - We are putting our house up for sale in the next few weeks. And will be moving out of town. May I suggest you contact the new owners in a month or so - Thank you Jack

I am elderly and live here for many year or I hire my lawn care done. Please just leave my yard as it is now. Thank you.

We already have street trees - did not need any more.

None, very satisfied.

Letter needs to be clearer. I have no problem taking care of tree. Need to offer CD for free workshop for free workshop when work conflicts and time. A CD on workshop would be easier to manage or a computer workshop.
Why plant a tree with no fruit?

No trees with balls - no messy trees

I hope this program continues.

Do not plant trees which will have huge root systems that will up heave the sidewalks and make them dangerous to walk on. This letter is an example of waste of taxpayer's money.

Keep the program going. I fully support this program.

If the city wants to plant more trees, the damage done to personal property should fall on the city to repair or replace. Come out and examine my driveway and walkway and you will understand.

Good idea! The trees in Chico are beautiful.

You provide and plant the tree on your property and I will give appropriate care for 3 years. A golden rain seems like a good fit. I already had to water the tree at the corner it was going dead - water did the trick.

Fewer wind-pollinated trees, more dogwood or crepe myrtle. I am horribly allergic to elms, alders, and others. The trees that wouldn't cause me grief were already "sold" by the time I got there. Couldn't afford to buy my own right now.

I would like to plant two palm trees in the front of the house.

Give control and ownership to participants.

Please continue - we will participate in the future.

None for you, but city hires incompenant trimmers, they nearly killed my tree after neglecting then overtrimming.

It seems like the permit process takes too long, I understand that it takes time for the city to perform any tree work requests. I don't want to wait for tree work if there is a danger of a branch or even tree coming down - causing danger.

Thank you!

Having lived with the old program for 40 years, I do not like being "invited" to do something I not only cannot do but have been told in the past I could not do. Maybe you could have an alternative program for people unable to participate.
I did not get info. No second contact made I need trees at XXX Humboldt!!!!!

I think it's a great program. You need to be clear in your explanation of trees as to what types of yearly cleanup is involved, ie. It drops hundreds of seedlings yearly that send up volunteers that need to be eradicated.

I think it is wonderful. It didn't work out for us because we were understanding that the tree replacement cost was ours, not the city's, so we planted trees from the list approximately one year before this offer was made. The trees that we replaced were removed in summer of '09.

We have trees in our front yard already that we do not have any control over. Don't want any others.

I think it's a good program.

I purchased the replacement tree - the removal company left large roots and bark returned weeks later but still left some roots.

I love the trees in Chico - this property is not very tree tolerant - neighbors trees invade my yard, break up my sprinkler systems; raise (are threatening to) the home foundations etc.

We had 3 city trees removed from our yard since we have lived here. They ruined our lawn and sprinklers system due to their roots. We are so thankful to be rid of the mess and work they created for us. We do not want any city trees. Please take us off whatever tree list we are on. thank you Tisha

The only tree that we'd be interested in a Crape Myrtle. Another factor on a smaller tree is the City cutting back on leaf pick up.

We have already planted 3 Muskogee Crepe Myrtles at curbside and would like permission, at our expense, to replace the City's Maple tree with another Muskogee to keep the area cohesive. Thank you for your consideration.

Very good idea.

I would prefer for you to list choices, we select and you deliver. The class and all the rest about care, we don't have time for.

Let's plant trees.

To plant trees that won't damage sidewalks with its roots. All the trees planted in our neighborhood have damaged our sidewalks. Sidewalks are uneven which makes it
dangerous when kids are playing outside. It also costs the city money to fix the sidewalks.

If the city thinks a certain area of the city needs trees then they should plant them and figure out a way to water them with the home owners permission.

I may not understand. City should plant and maintain street trees to ensure continuity.

Property owners should plant trees on private property.

When you bring in top soil to an area with beautiful vina loam soil don't use rocky, clay-based weed infested soil scraped from some road project. My once weed free lawn is infested with new weeds.

No red tape / no record for future ramifications - citations / Code enforcement cops.

Keep up the good work!