An Examination of Women's Representation and Participation in Bicycle Advisory Committees in California

MTI Report WP 11-03

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REPORT WP 11-03

AN EXAMINATION OF WOMEN'S REPRESENTATION AND PARTICIPATION IN BICYCLE ADVISORY COMMITTEES IN CALIFORNIA

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In the United States, women bicycle at significantly lower rates than men. One method of remedying this disparity is to ensure that women are engaged in bicycle planning and policy making through, for example, participation in bicycle advisory committees (BACs). No research has been conducted on women's representation and participation in these committees. This study attempts to fill that gap by examining women's membership levels in and experiences serving on California bicycle advisory committees and bicycle/pedestrian advisory committees. In addition, we explore some of the barriers to participation faced by female cyclists. A survey of 42 committees revealed that women make up approximately 24% of members on an average bicycle (and pedestrian) advisory committee in California. Through focus group interviews with 24 women currently serving on BACs, several common themes emerged. Women on these committees are more likely than men to bring up women's and children's issues, and some aspects of the committees themselves may serve as barriers for women to become more involved. An online survey of 565 women cyclists in California provided insight regarding some of the common barriers women identify as reasons for not becoming involved with a BAC. Lack of awareness of the committees did not seem to be a barrier: 67% of respondents were aware of their local committee. Instead, barriers indentified by participants included: time; perceived lack of qualifications; lack of information about the committee; family and household responsibilities; and lack of interest. Recommendations to increase women's representation on BACs include the following strategies: education about the committee; targeted recruitment efforts; and policy and procedural changes.

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- The 24 women who participated in the focus group interviews.
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> If men feel fine being aggressive and having open road biking, then that's what we're gonna have until women get on those groups and say "this actually makes me uncomfortable."
>
> -Woman member from a California Bicycle and Pedestrian Advisory Committee

In the United States, women bicycle at significantly lower rates than men. One method of remedying this disparity is to ensure that women are engaged in bicycle planning and policy making. Bicycle advisory committees are one group that undertakes such work. These bodies are formed by governments and planning agencies to provide input on bicycle planning and policy decisions. No research has been conducted on women's representation and participation in these bodies. This study attempts to fill that gap by examining women's experiences serving on California bicycle advisory committees and bicycle/pedestrian advisory committees. In addition, we explore some of the barriers to participation faced by female cyclists.

GENDER COMPOSITION OF BICYCLE (AND PEDESTRIAN) ADVISORY COMMITTEES IN CALIFORNIA

In the spring of 2011, the coordinators of 42 bicycle (and pedestrian) advisory committees throughout California were surveyed about the gender composition of their committee. Findings follow.

- At the time of the survey, women made up approximately 24% of members on an average bicycle (and pedestrian) advisory committee in California. Women made up approximately 19% of members on bicycle advisory committees and approximately 27% of members on combined bicycle and pedestrian committees.

- Men constituted the majority of members on 38 committees, while women were the majority on only three. (One committee had an equal number of male and female members.)

INTERVIEWS WITH WOMEN ON BICYCLE (AND PEDESTRIAN) ADVISORY COMMITTEES

In the summer of 2011, women from ten bicycle (and pedestrian) advisory committees in California were interviewed in an effort to understand women's experiences on these committees. The interviews with these women revealed the following findings:

- Women on these bicycle (and pedestrian) advisory committees are more likely than men to bring up women's issues, children's issues, and issues related to other user groups.

- Several aspects related to *these* committees might be unappealing to women, including:

  - The steep learning curve experienced by new members
  - The high proportion of male members
  - Men's unsupportive behavior
  - Men's tendency to dominate the floor
  - Men's increased likelihood of having a technical background

- Several characteristics related to the women themselves might act as barriers to participation, including the need to feel knowledgeable before speaking, the lack of confidence in their contribution, and women's tendency to care for children.
- Women on the three committees with the highest percentage of women (out of the ten) all commented on the significant presence of women in their local government.

ONLINE SURVEY OF WOMEN BICYCLISTS

In the fall of 2011, an online survey of women bicyclists was administered to explore the barriers that keep female citizens from seeking membership in bicycle (and pedestrian) advisory committees. This survey was distributed by 16 bicycle clubs and bicycle advocacy groups located throughout California. The main findings from the survey follow.

- The majority of women (67%) had some level of awareness of whether a bicycle (and pedestrian) advisory committee existed where they lived.
- The top five barriers to committee involvement named by the women were:
  1. Time (60%)
  2. Lack of qualifications (25%)
  3. Lack of specific information about the committee (18%)
  4. Family and household responsibilities (16%)
  5. Lack of interest in politics (12%)
- A number of survey respondents explicitly named the male-dominated nature of their local committee as a barrier to their involvement.

CONCLUSION

If women bicyclists are largely aware of bicycle (and pedestrian) advisory committees, but the number of women serving on these committees is low, the main focus should be increasing the number of women who get involved. Specific recommendations for doing so follow.

Policy Recommendations for Increasing Women's Participation

Governments and agencies wishing to increase women's participation in bicycle (and pedestrian) advisory committees should begin by reading the guide created by Iowa state called "Recruiting Gender Balanced Boards and Commissions: A Guide for Cities and Counties." In addition, to increase the number of women on bicycle committees, governments and agencies could implement the strategies below.

Education About the Committee

Almost one-fifth of survey respondents said they did not have enough specific information about their committee to consider membership. An easy remedy to this barrier is educating the public about the committee, which could also ease women's lack of confidence in their qualifications. Recommended strategies include the following:

- Outreach materials could explain the role of the committee, expectations for its members, and how the committee contributes to the community.

- New members could be given educational materials to help them understand planning terminology and practices, as well as the role and procedures of the committee.

- Women could be mentored through the application and appointment process, and they could be given additional support as new committee members.

Targeted Recruitment Efforts

Targeted efforts to recruit women could increase the number of women who apply to bicycle (and pedestrian) advisory committees. Ideally, this will result in committees with a more balanced number of men and women, which itself might make the committees appealing to more women. Recommended recruitment strategies include the following:

- Governments and agencies can expand their outreach efforts to women's organizations (women's clubs, mother's clubs) and to organizations in which women are very active (PTAs, Safe Routes to School groups, and so on). Environmental organizations might also be a good outreach target, as environmental interests were common amongst the women committee members who were interviewed.

- Individual committee members can be asked to encourage women they know to apply.

- Women who attend committee meetings as members of the public could be encouraged to apply.

- When advertising openings, the government or agency can state: "Women encouraged to apply."

Policy and Procedural Changes

Instituting new policies and procedures could help ensure that more women have an opportunity to become committee members and can also make the committee environment more comfortable for women. Recommended strategies include the following:

- The chair and staff support person(s) should be educated about the challenges to participation faced by many women committee members.

- The chair and/or staff support person(s) should facilitate the meetings in a manner that gives all members an opportunity to speak and that prevents dominant members from monopolizing. A formal turn-taking process could be instituted as part of this effort.

- The government or agency could provide childcare during meetings.

- The government or agency could create a policy that requires a gender balance on the committee. Enforcement of such a policy would be key, however, considering the lack of effectiveness of the few policies that currently exist.

- The government or agency could institute term limits. This is especially important on committees with a longstanding male majority.

I. INTRODUCTION

In the United States, women bicycle at significantly lower rates than men. One method to remedy this disparity is to ensure that women are engaged in bicycle planning and policy making. Bicycle advisory committees are one group that undertakes such work; unfortunately no research has been conducted on women's representation on and experiences within these groups. This study endeavors to fill that gap.

BACKGROUND

Bicycle Planning in California

Bicycle planning in California occurs at all levels of government and through various types of governmental bodies and agencies. At the regional level, agencies that oversee transportation and bicycle planning include metropolitan planning organizations (MPOs), regional transportation planning agencies (RTPAs), and congestion management agencies (CMAs). Locally, both county and city governments oversee bicycle planning in their jurisdictions. Each of these entities has a decision-making body (for example, city council, board of supervisors, board of directors, commissioners) that dictates transportation and bicycle planning policy. Often, these governing bodies form bicycle advisory groups to help guide their work. Some of these groups focus solely on bicycling, while others also address pedestrian planning issues. For the purposes of our study, we focused on both bicycle only and combined bicycle and pedestrian advisory committees, since they also influence bicycle policy and planning. In this report, these advisory bodies will be referred to as "bicycle (and pedestrian) advisory committees," "bicycle committees," or simply "committees."

Most of these committees are composed of community members who are appointed by the decision-making body, although some committees have an open membership. Some committees are composed solely of community members, while others also contain staff from various government agencies and maybe even an elected official. These committees vary in regard to their duties and whom they advise. Some are mainly involved with updates to the Bicycle and/or Pedestrian Master Plan, while others consider all manner of bicycle and pedestrian projects, policies, and programs. Finally, some committees directly advise the decision-making body, while others advise the staff that supports the decision-making body.

Committees versus Coalitions versus Clubs

Government-formed bicycle (and pedestrian) advisory committees should not be confused with community-formed bicycle organizations such as bicycle clubs and bicycle advocacy groups. Table 1 contains definitions of these three entities.

Table 1. Definitions of Key Bicycle Groups and Organizations

Bicycle (and Pedestrian) Advisory Committee	An advisory body appointed by a local government or a regional planning agency to advise that entity's decision-making body on bicycle (and pedestrian) planning and policy decisions. Some committees are composed solely of community members, while others also contain staff from various government agencies. The specific names for these groups vary, although most are called "committees." Others are called "boards," "commissions," "subcommittees," or "teams."
Bicycle Advocacy Group	A community group that advocates for improved bicycling conditions. These groups often call themselves "bicycle coalitions."
Bicycle Club	A community group that organizes recreational bike rides.

Community-based bicycle groups that plan bike rides or that advocate for improved bicycling conditions do influence bicycle planning; however, community-created groups are not the focus of this study. This study is concerned with bicycle (and pedestrian) advisory groups formed by public agencies whose mission is to directly advise such agencies.

Women's Political Participation

Serving on a bicycle (and pedestrian) advisory committee is a form of political participation, as its members directly influence public policy and decision making. In the United States, as in most countries, women have very low rates of political participation. While political participation can take many forms, electoral politics provides a useful example of women's underrepresentation. In 2011, women made up only 17% of elected officials in the U.S. Congress and less than 24% of state legislators.[1] Fortunately, women are more active than this on boards, commissions, and committees in California, but as of 1998, they only made up roughly 30% to 40% of appointees.[2]

WHY WOMEN'S INVOLVEMENT MATTERS

Equity

First and foremost, ensuring that women are represented on bicycle (and pedestrian) advisory committees is an equity issue. In the United States, women make up just over half (50.8%) of the population.[3] In California, 50.3% of state residents are female. As half of the population, women should be adequately represented in government institutions and government bodies in order to have the opportunity to influence policy.

Women's Impact on Decision-making and Policy

Equity aside, if women and men in decision-making groups behaved exactly the same, one could argue that women's presence was not necessary. Research, however, has found that women's behavior is not identical to men's in such situations. For example, women who hold political office are more likely than men to vote for bills related to children, women, health care, and social services.[4] In addition, one study found that women had a moderating influence on group decisions, which resulted in more democratic decision

making.[5] As these findings illustrate, women's participation in decision-making bodies can have an impact on group outcomes.

Gender Differences in Bicycling and Other Travel Behavior

In addition to the above arguments, women's participation on bicycle committees is important because women have different travel needs and patterns than men. In general, women make more trips per day, drive fewer miles, make more trips related to household chores and childcare, chain trips more often, and are less likely to have a driver's license.[6] Most relevant to this study, women in the United States bicycle at dramatically lower rates than men. Studies have shown that roughly 70 to 80 percent of bicyclists in the United States are male, meaning that less than one-third of cyclists are female.[7] National data from 2009 found that men were three times more likely to bicycle than women: they rode for 1.6% of their trips, while women rode for 0.5% of theirs.[8]

Evidence directly explaining women's low cycling rates is scarce, due to a plethora of possible factors, but some trends have emerged. As mentioned above, women make the majority of household and family-related trips; specifically, they have been found to take more shopping trips than men and are more likely to transport passengers (for instance, children).[9] Both tasks require the ability to transport cargo, which can be more difficult on a bicycle than in a car. In addition, studies show that women are more risk averse than men.[10] This may explain why, when asked about bicycling behavior, women are more likely than men to cite safety issues and concerns about riding with traffic.[11]

In summary, women in the U.S. bicycle less than men and may have different concerns and constraints surrounding bicycle use. If women are not adequately represented on bicycle (and pedestrian) advisory committees, it is unlikely that their unique needs and concerns will be considered by these policy-influencing bodies. As a result, the decision-makers advised by these committees will be less capable of crafting bicycle policies and practices that are supportive of women's needs. On the other hand, ensuring women's participation on bicycle committees could be a strategy for raising awareness of women's biking-related needs, which could lead to decisions that help increase women's rates of bicycling.

RESEARCH QUESTIONS

Our study focuses on the following research questions:

1. Are women underrepresented* on bicycle (and pedestrian) advisory committees in California?

2. What are the experiences of women on bicycle (and pedestrian) advisory committees?

3. What barriers keep female citizens from seeking membership on such committees?

4. What steps could be taken to increase women's participation in bicycle (and pedestrian) advisory committees?

*In this project, women are considered to be fully or adequately represented when their participation levels, on average, are similar to their presence in the overall population of the state. Even if the proportion of women on committees is similar to the proportion of female bicyclists, it does not mean that women's representation is necessarily equitable. Women's low rates of bicycling might exist, in part, because their ability to inform policy is hampered.

THE STUDY

To answer our research questions, we conducted three separate investigations of women's participation in bicycle (and pedestrian) advisory committees.

1. Telephone survey to determine the gender composition of bicycle (and pedestrian) advisory committees in California

2. Interviews with women serving on bicycle (and pedestrian) advisory committees in California

3. Online survey of women bicyclists in California to determine how aware women are of local committees and what keeps them from seeking membership

Only committees in California were included. Also, all committees included in the study were convened by city governments, county governments, or regional planning agencies. (The "Methodology" sections in Chapters 3 and 4 explain in detail how the committees included in the study were chosen.)

A WORD ON GENDER AND SEX

Much of this study examines women's experiences and attempts to determine if these experiences are different than men's. This study identifies such differences as "gender differences." We recognize that gender is an extremely complex concept and that dividing people into the categories of men and women is a simplistic dichotomy that misses the more complex aspects of human experience.

For example, we have suggested that female members of a bicycle committee might represent women and speak up for "women's issues," but this is an overly simplistic theory. Women are not a single entity with singular needs and perspectives. Although research has shown that women share common experiences in some areas, such as rates of political participation and bicycle behavior, women may differ in many other areas, including socioeconomic status, religion, and race/ethnicity.[12] It is possible that any given woman on a bicycle (and pedestrian) advisory committee will relate more to the men on the committee than to other women, based on shared backgrounds, experiences, interests, and personality.[13] Therefore, it is important to keep in mind that putting women on a committee does not mean that "women's bicycle problems" will be solved. Issues surrounding gender are much more complex than this.

As the first study of its kind on women's participation in bicycle advisory committees, however, an initial examination of broad-based differences between men and women will lay the groundwork for future research that can address gender in a more complex manner.

In addition to gender, the authors recognize that other characteristics, such as age, race/ethnicity, socioeconomic status, and parental status, are likely very important in determining an individual's propensity to bicycle, his or her desire to serve on a bicycle committee, as well as the perspectives he or she would bring to such a committee. Unfortunately, examining such characteristics was beyond the scope of this study.

REPORT STRUCTURE

This report begins with a review of the literature in two areas: 1) women and bicycling, and 2) women and politics. The next chapter explores the gender composition of 42 bicycle (and pedestrian) committees in California. Chapter 4 presents the results of interviews with women serving on ten bicycle (and pedestrian) advisory committees in the state. Chapter 5 presents the results of an online survey of women bicyclists in California. We then present our conclusions, suggest policy recommendations to increase women's participation on bicycle (and pedestrian) advisory committees, and discuss ideas for future research.

II. REVIEW OF THE LITERATURE

INTRODUCTION

The focus of this study is women's participation in bicycle (and pedestrian) advisory committees. No studies have examined women's involvement in these committees specifically. Nevertheless, because these bodies are political in nature, examining women's political participation could shed light on women's involvement in bicycle committees. In addition, it is important to understand women's experiences with bicycling because if these experiences vary substantially from those of other groups, women's presence on bicycle committees would be particularly important.

Therefore, this literature review will explore two main areas: gender differences in bicycling and women's participation in politics. In the bicycling section, women's rates of cycling will be explored, followed by a discussion on the barriers to bicycling women face. In the section on women and politics, women's rates of political participation will be explored, along with possible explanations for the rates. In addition, several methods for increasing women's political participation will be reviewed.

GENDER DIFFERENCES IN BICYCLING

Before the data on gender and bicycling is reviewed, it is important to note that research has consistently shown that women and men have different travel patterns.[14] In general, women make more trips per day than men, but travel fewer miles. They make more trips related to household chores and childcare than men, and they link multiple trips together more often. Finally, women are less likely than men to have a driver's license. In addition to these differences, women and men exhibit great differences in bicycle use and preferences, as described below.

Women's Rates of Bicycling in the United States

Research has consistently shown that women in the United States bicycle at dramatically lower rates than men, regardless of trip purpose. The way cycling has been measured varies greatly, though, making comparisons across studies difficult. Some studies report the percentage of bicyclists by sex,[15] while others report the percentage of bike trips by sex.[16] In other studies, the percentage of males and females who bicycle is calculated.[17] Despite these varying methods for measuring gender differences in cycling, the results clearly demonstrate that women in the U.S. cycle less than men. A summary of the latest data on gender differences in rates of cycling follows, first for overall cycling followed by commuting to work. Next, bicycling rates in other countries are briefly reviewed.

Overall Bicycling

Some studies break down the total number of bicyclists by sex. A 1992 Federal Highway Administration report examined ten such studies that surveyed U.S. men and women about bicycling.[18] In nine of the ten studies, females comprised the minority of bicyclists, ranging from 25% to 46% of riders. Similarly, a study of bicyclists in King County, Washington,

found that women made up 34% of bicyclists.[19] Several recent bicycle count studies in California corroborate these findings. In 2010, women made up 28% of observed bicyclists in San Francisco[20] and 26% in Santa Cruz County.[21]

Several studies use bicycle trips as the unit of analysis, rather than bicyclists, and all have found that women make a substantially lower proportion of bike trips than men. In 2009, per the National Household Travel Survey (NHTS), women made 24% of all bike trips in the U.S.[22] For any given trip, men were three times more likely to bicycle than women: they rode for 1.6% of their trips, while women rode for 0.5% of theirs. The same trend of women making less bike trips than men was found in earlier studies. The 2001 NHTS found that women made 33% of all U.S. bike trips,[23] while the 1990 National Personal Transportation Survey found that women made 28% of bike trips.[24]

Looking at the percentage of men and women who bicycled, the 2002 National Survey of Pedestrian and Bicyclist Attitudes and Behaviors found that men were more likely to ride bikes than women. Thirty-four percent (34%) of men in this study reported that they had bicycled recently, compared to 21.3% of women.[25] Twenty-four percent (24%) of men surveyed said they were likely to ride once a week, compared to 13% of women. Finally, 64% of women said they never ride a bike, compared to 49% of men.

Commuting to Work by Bike

National Census data from 1990 to 2010 has consistently shown that far fewer women than men commute to work by bicycle. According to the American Community Survey, 26.4% of bicycle commuters in 2010 were female.[26] In 2000, per the Census Supplemental Survey, only 18% of bicycle commuters in 50 major U.S. cities were female.[27] Finally, Census data from 1990 revealed that 20% of bike commuters were female.[28] This national Census data is consistent with data from the 2001 National Household Travel Survey that found that men in the U.S. were more likely to commute to work by bike than women.[29]

Studies at the city level have also found that women are less likely to be bicycle commuters than men. Pucher and Buehler examined 2006–2008 American Community Survey data for several large North American cities and found that women made up 20% of bike commuters in New York City, 28% in San Francisco, 31% in Chicago and Minneapolis, 33% in Portland, and 34% in Washington, DC.[30]

Finally, two studies examining commuter mode choice at universities found that women were less likely than men to commute to campus by bicycle.[31]

Women's Bicycling Rates in Other Countries

It is clear from the above research that women in the U.S. bicycle less than men. This is not the case in some countries. Research suggests that countries with a low overall bike mode share have a lower percentage of women who bicycle, and vice versa.[32] In the United States, United Kingdom, and Australia, only 1% of all trips are made by bicycle. In Canada, the percentage of trips made by bicycle is slightly higher, at 2%. In all four of these countries, women are much less likely to cycle than men; they typically make

between 20% and 30% of bike trips. In contrast, bicycling in Germany, Denmark, and the Netherlands is much more common, with bike trips constituting 10%, 18%, and 27% of all trips, respectively. In these three countries, women ride bikes at approximately the same rate as men. This equal biking rate shows that women are not inherently averse to bicycling, but that other factors must be influencing their travel mode decisions in the U.S. and in countries with similar bicycling trends.

Barriers to Bicycling for Women

The literature consistently mentions two possible explanations for women's low rates of bicycling: women's safety concerns and their responsibility for household and childcare activities.

Safety Concerns

Traffic Safety

When asked about bicycling, U.S. women overwhelmingly mention concerns about riding with motor vehicles. For example, in a 2010 study that asked U.S. women to indicate their safety concerns about bicycling, the majority of the highest ranked concerns were related to motor vehicles.[33] Table 2 shows the top six concerns.

Table 2. Women's Safety Concerns About Bicycling

Safety Concern	% of Respondents
Distracted driving	73
Speed of cars	67
Vehicles turning in front of me	57
Parked cars opening doors	50
Volume of cars	49
Motorists who run lights/stop signs	48

Source: Anna Sibley, Women's Cycling Survey: Analysis of Results, September 14, 2010, Association of Pedestrian and Bicycle Professionals, 9, http://www.apbp.org/resource/resmgr/downloads/womens_cycling_survey_091420.pdf.

Studies done in several U.S. cities have also found that women contemplating cycling have serious traffic safety concerns. In a survey of San Francisco women, 80% of respondents said they did not feel safe riding on the road with cars.[34] Forty-four percent said it was a significant barrier to riding. In a Portland study, bicyclists were asked about factors that affect their choice of routes. Female respondents placed significantly greater importance than males on avoiding high-traffic streets.[35] Finally, in a study examining data from Minnesota, women were less likely than men to rate the state as a safe place to bicycle.[36]

Studies in countries with bicycling trends similar to the U.S. also show that women have significant traffic safety concerns. In a Canadian study, adults were asked about barriers

to bicycling. Eight-two percent (82%) of women said that the amount and speed of motor vehicle traffic was a significant barrier, compared to 69% of men.[37] In an Australian study that asked cyclists what factors constrained their cycling, women rated "concerns about cycling in traffic" and "aggression from motorists" as significantly more important than men.[38] Finally, in a study of bicyclists in New Zealand, where cycling trends are similar to U.S. trends,[39] women were significantly more likely than men to say that "reduced vehicle speed" would encourage them to ride more.[40]

The traffic safety concerns of women in the U.S. may be a reflection of the actual state of safety on American roads. Pucher and Buehler looked at cycling fatality and injury rates in the U.S. and the United Kingdom, where women cycle significantly less than men. They also examined these rates in the Netherlands, Denmark, and Germany, where women bicycle at approximately the same rate as men. Of the five countries, the U.S. has the highest rates of cycling fatalities and injuries.[41] Specifically, non-fatal injury rates in the U.S. are six times greater than the United Kingdom's, eight times greater than Germany's, and approximately 30 times greater than the rates in the Netherlands and Denmark.

Personal Safety

In addition to traffic safety, the literature also suggests that fears surrounding personal safety may keep women from riding bicycles. In a survey of San Francisco women, 68% agreed with the statement, "I don't like riding in the dark or in areas without much street activity."[42] In a study from the United Kingdom, employees were asked about their commute to work. Significantly more women than men said that a major reason they drove to work was "personal security during the journey."[43] Finally, a study of potential and current bicycle commuters in Minnesota found that women were more likely than men to value lighting on bicycle paths.[44]

This research provides overwhelming evidence that women are significantly more worried than men about safety issues surrounding bicycling. One theory explaining this difference has to do with gender differences in risk-taking. A meta-analysis of 150 studies examining this topic found that men were significantly more likely than women to take risks.[45] The authors also found that males were more likely to take risks even when it was obvious that doing so would be unwise.[46]

Responsibility for Household and Childcare Activities

In addition to concerns about safety, women's low rates of bicycling might be related to their continuing responsibility for household and childcare activities. Analyzing data from 1998, Sayer found that U.S. women spent approximately an hour and a half more than men each day on tasks like housework, childcare, and shopping.[47] This study also found that women in 1998 did more total work each day than men (paid and unpaid). This left women with approximately 30 minutes less free time per day than men. More recent data from 2010 corroborates these findings.[48] On an average day in 2010, 84% of women (compared to 67% of men) spent at least some time doing household activities, including housework, food preparation/cleanup, yard work, and household management. Forty-seven percent of women spent time purchasing goods and services, compared to 40% of men.[49] Finally,

on an average day in 2010, 26% of women spent some time caring for household children, compared to 16% of men.[50]

Women's actual travel patterns do reflect their unequal responsibility for household tasks and childcare. Women are far more likely than men to make shopping trips.[51] They are also much more likely to drive passengers than men. In 1995, women made two-thirds of all trips that involved driving others.[52] Women with children, in particular, are two times more likely than men to make passenger-serving trips.[53] A study by McGuckin and Nakamoto found that more women than men stopped during the work commute to pick up or drop off children.[54] In families where both parents commuted to work, women dropped off or picked up kids twice as often as men (women made 66% of these trips, while men made 34%). Women also stopped more often than men on the way to or from work to shop and run errands.

These responsibilities impact a women's ability to bicycle in several ways. First, bicycling can take longer than driving, depending on the circumstances. If women spend more time in paid and unpaid work than men, saving time is likely to be important to them. In addition, driving others and going shopping both necessitate the hauling of cargo. While it is possible to haul both goods and children using a bicycle, it is certainly more difficult than doing so with a car. Several studies have reflected this reality. In a study of San Francisco women, 37% of respondents did not agree with the statement "It is possible to transport children or groceries on a bike."[55] In a different study on commute mode choice, many women said that nothing would get them to stop driving alone to work because they needed to shop or pick up children during their commute.[56] Another study had similar findings: in a study of employees in the United Kingdom, a significantly greater percentage of women than men chose the following two factors to explain why they commuted by car: 1) to shop before/after work, and 2) to drop off/collect children.[57] In contrast to these studies, Krizek and colleagues did find that women were more likely than men to ride their bike to go shopping and run errands.[58] So despite the difficulties of hauling goods by bicycle, women may be using this mode to serve their unique travel needs.

Having explored gender differences in bicycling, this review will now turn to women's political participation.

WOMEN AND POLITICAL PARTICIPATION

Women's Participation in Boards, Commissions, and Committees

No studies were found that looked specifically at women's participation in bicycle or bicycle and pedestrian advisory committees, but at least three studies have investigated women's participation in state and/or local advisory boards, commissions, and committees. Two of these studies found gender differences in participation, while the third did not.

The first study is extremely significant to this project, because it examined women's appointments to state and local boards and commissions in California.[59] The study collected data in both 1988 and 1998. As Table 3 shows, in 1988 the average percentage of women appointees to such bodies ranged from 27.6% to 35.5%, increasing as the

level of government became smaller.[60] From 1988 to 1998, the percentage of women increased at all three government levels, with the same pattern of higher participation as the government level got smaller.

Table 3. Women's Appointments to Boards/Commissions in California, 1988 and 1998

Level of Board/Commission	% of Women Appointed	
	1988	1998
State	27.6	34.4
County	34.3	35.7
City	35.5	39.8

Source: California Coalition for Women, California Women: Get on Board II: A Report on the Status of Women on California's Boards and Commissions and in Top Policy Positions (Sacramento, CA: California Elected Women's Association for Education and Research, California State University, Sacramento, 1998), 1, http://women.ca.gov/images/pdf/resources/195.GetOnBoard.pdf.

Despite these increases from 1988 to 1998, men still made up the majority of appointees at all three government levels.

This California-based study and one additional study also looked at men's and women's participation levels in relation to the content areas of the government bodies, and both found gender differences. The California study categorized state-level and city-level boards and commissions into 15 broad policy areas. The researchers found that at both levels of government, the percentage of women appointees was highest on boards and commissions that dealt with traditionally female-related policy issues: child/family/women, art/culture/library, health/welfare, and education.[61] Women made up between 40% and 49% of appointees in these areas. In traditionally male-dominated policy areas—such as trade, finance, and law—women comprised less than 25% of appointees at both the state and city level. Of particular interest to this project is the percentage of women appointed to boards and commissions related to transportation and housing, the policy area that bicycle (and pedestrian) advisory committees fall under. As Table 4 shows, women made up only 22% to 24% of members on these committees.[62]

Table 4. Women's Appointments to Transportation- and Housing-Related Boards/Commissions in California, 1998

Level of Board/Commission	% Women Appointed
State	24.4
City	22

Source: California Coalition for Women, California Women: Get on Board II: A Report on the Status of Women on California's Boards and Commissions and in Top Policy Positions (Sacramento, CA: California Elected Women's Association for Education and Research, California State University, Sacramento, 1998), 1, http://women.ca.gov/images/pdf/resources/195.GetOnBoard.pdf.

The other study examined the gender composition of local boards/commissions/committees in 17 Iowa cities.[63] While the sample size of each board type was small, the authors found that a board's gender composition was related to the type of board. Three board types were male-dominated: Planning and Zoning Commissions (73% male), Zoning Boards of Adjustment (68% male), and Historic Preservation Commissions (62% male). Parks and Recreation Commissions, on average, had an even gender composition (50.9% female, 49.1% male). Finally, Library Boards tended to be female-dominated, with women holding approximately 62.6% of seats. This dominance of men in planning- and architecture-related fields, and the dominance of women on library boards follows the traditional breakdown of men's and women's areas of interest/concentration.

Finally, one study found no gender differences in participation in local government boards. Respondents from a national sample were asked if they were active on such a board, and the study found no significant differences in the number of men and women who indicated involvement.[64] This study specifically asked respondents about "boards," though, which leaves room for interpretation by respondents. It is possible that individuals who served on commissions or committees—or even on government bodies with other types of names—would not have answered this question affirmatively. Because of this vagueness, the results of this study are questionable.

The other two studies shed an interesting light on women's involvement in boards, commissions, and committees. It seems that from 1988 to 1999, women in California were appointed to state and local boards much less frequently than men. In addition, two studies found that women were more likely to be members of bodies with stereotypically female content, while men were more likely to be members of bodies with stereotypically male content. California women's low numbers on bodies dealing with transportation, a historically male-dominated area, is consistent with these findings.

Most research about women's participation in politics has focused on their involvement in electoral politics. Studying that facet of political participation may provide additional clues about women's participation rates in bicycle advisory committees.

Women's Participation in Electoral Politics

Women are elected to public office at much lower rates than men. As of November 2011, women made up 16.8% of U.S. Congress members: they held 17% of Senate seats and 16.8% of House seats.[65] On the state level, women in 2011 made up 22.4% of statewide elective executive officials (governors, attorneys general, and so on) and held 23.6% of seats in state legislatures. This trend is the same in other countries; as of October 31, 2011, 19.4% of all national parliamentarians were women.[66]

Women in the U.S. have had the most success being elected to local school boards;[67] in 2001, 38.9% of U.S. school board members were women.[68] While women on these boards comprise a substantially greater proportion of total membership than women serving on legislative bodies, they still tend to be in the minority.

Besides being elected to office at lower rates than men, women have been found to engage in other political activities less frequently than men. Coffé and Bolzendahl found that women were less likely than men to be a member of a political party and to be active in their party.[69] Women were also less likely to attend political rallies or meetings, or to contact politicians. In another study, Burrell looked at women's involvement in the following five areas: 1) engaging in a political debate, 2) influencing the vote of others, 3) attending rallies/political gatherings, 4) wearing campaign buttons/using bumper stickers, and 5) contributing money to a campaign.[70] Fewer women (39%) than men (49%) reported engaging in at least one of these activities.[71] In another study, Verba, Schlozman, and Brady asked respondents whether they were active in the following eight areas:[72]

1. Voting
2. Campaign work
3. Campaign contributions
4. Making contact with a government official
5. Attending a protest
6. Informal community activity
7. Local government board membership
8. Affiliated with political organization

In all of these activities except one, a smaller percentage of women reported being involved than men (an equal percentage of men and women attended protests).[73] Although the difference in percentages wasn't always statistically significant, the overall trend of fewer women is worth noting.

Despite the low rate of women's political participation in these areas, women have been found to be more politically active than men in several realms. Aside from the Verba study in the previous paragraph, studies consistently show that since 1980, women vote as much or more than men.[74] In addition, Coffé and Bolzendahl found that women were more likely than men to engage in what the authors called "private activism."[75] Specifically, they found that women were more likely to sign petitions, deliberately boycott or buy certain products, and donate/raise money for a social or political activity. The authors suggest that women may be drawn to such actions because they take less time, a factor that is important to women who are working and taking care of families. This theory will be discussed more in the following section.

Barriers to Women's Political Participation

Although the literature explores many possible reasons why women are less active in politics than men, this review will only touch on a few major findings.

Studies on women's engagement in electoral politics have found that once women decide to run for office, they are as successful as men at raising funds. They are also just as likely to be voted into office.[76] The research shows that gender differences actually occur earlier, with significantly fewer women deciding to run for office in the first place.[77] For example, Fox and Lawless surveyed individuals in professions that tend to lead to political careers and found that a significantly greater percentage of men (59%) than women (43%) considered running for office.[78] What is keeping women from running? Studies examining this question have found that women are less interested in politics, that they have less political knowledge and confidence than men, that they are encouraged to run for office less often than men, and that their limited time may be affecting their participation.

Political Interest, Knowledge, and Confidence

Paxton and colleagues reviewed the literature on gender and politics and found consistent evidence that women have less interest in politics than men.[79] As mentioned previously, studies have also regularly shown that women's interest in pursuing political office is much lower than men's.[80]

Paxton and colleagues also reported that women tend to have less political knowledge than men.[81] Related to this, Elder studied political confidence and found that adult and high-school aged females were significantly less likely than their male counterparts to believe they were knowledgeable enough to be good politicians.[82] Similarly, Fox and Lawless found a direct connection between women's perceptions that they were not qualified and their decreased likelihood of considering running for office.[83]

Encouragement to Run

Fox and Lawless found that women were encouraged to run for office less often than men, which had a significant relationship with their lower likelihood of considering a run for office.[84] Thirty-two percent (32%) of women received encouragement to run for office from a party leader, elected official, or political activist, compared to 43% of men. A 2008 study by the Center for American Women and Politics provides further evidence of the importance of encouragement for female candidates.[85] The survey asked male and female state legislators in the U.S. about their paths to office. Far more women legislators reported that they had not seriously considered running for office until someone suggested it to them. In addition, women legislators were more likely than men to say that the most important reason they ran for office was because a party leader or elected official asked them to run. These studies illustrate just how important it is for women to be encouraged to engage in politics.

Time

In their investigation of the voluntary activity of U.S. residents, Verba, Schlozman, and Brady asked both male and female respondents who were not politically active to indicate why they were not, using a predetermined list. The top rated response (39%) was, "I don't have enough time." The second highest answer (34%) was, "I should take care of myself and my family before I worry about the community or nation."[86] Gender differences in these

responses were not explored. Nevertheless, considering that women have less free time than men and take on more family responsibilities than men, it is reasonable to assume that these barriers to political activity impact women significantly.[87] As an example, Coffé and Bolzendahl found that women were more likely than men to engage in private political acts, such as signing petitions, boycotting products, and donating/raising money.[88] As mentioned previously, the authors suggested that women may be drawn to such actions because they take less time than attending meetings and being involved in political parties.

These are just a few of the factors that may explain why women are less involved in electoral politics than men. Other factors include women's access to resources such as employment, education, and income as well as the specific impact that family and children have on women's political activity.[89] The findings on these factors are complex. Reviewing them is beyond the scope of this project, since the project's central focus is not women in electoral politics.

While factors like low political interest and political confidence help explain women's limited rates of political participation, it is important to take a deeper look at what might be causing these factors themselves. The following two theories are possibilities.

Underlying Factors: Sex-Role Socialization

A likely explanation for some of the above findings is sex-role socialization, or the continuing cultural ideas about the proper roles for women and men.[90] According to a national survey conducted in 2008, 25.9% of respondents agreed that "most men are better suited emotionally for politics than are most women."[91] In the 1998 version of the survey, 14.8% of respondents agreed that "women should take care of running their homes and leave running the country up to men."[92] In a different nationwide survey administered in 2006, participants were asked to indicate the ideal percentage of men in the U.S. government. Fifty-five percent (55%) of respondents thought men should constitute the majority of officeholders, compared to only 10% of respondents who believed that women should be the majority.[93]

The prevalence of such ideas can affect women's political participation in several ways.[94] First, girls may not be brought up to believe that politics is an appropriate realm for them. This can lead to a lack of interest and a subsequent lack of knowledge, as found in the literature. In addition, those who encourage candidates to run may have similar views about women and politics, leading them to tap fewer women to run than men.

Underlying Factors: Role Model Hypothesis

With so few women in elected office, girls have far fewer political role models than boys. This may make it harder for them to picture themselves in political office.[95] Research by Elder lends some support to this theory. The author found that females in junior high, high school, and college were more aware of female politicians than their male counterparts, which suggests that the presence of female politicians has a particular impact on girls.[96]

These are some of the reasons why women may be less active in politics than men. This discussion is relevant to this project because some of these same barriers may be limiting women's participation in bicycle committees. The next section will explore whether women and men make different policy decisions.

Women's Impact on Policy Making

Women's participation in politics is not only important for equity reasons, but also because women tend to make different decisions than men when in office. Specifically, a vast amount of research on legislative bodies in the U.S. shows that women are more likely to advocate for and vote for policy issues related to women.[97] Research since 1980 has clearly shown that women in state legislatures are more likely to prioritize legislation pertaining to women, children, education, health care, families, and welfare policy.[98] Women in Congress are more likely than men to introduce legislation pertaining to women's issues, and are also more likely to cosponsor such legislation.[99] Finally, congresswomen are more likely than men to vote for bills on specific women's issues.[100] These findings have important implications for women's participation in bicycle advisory committees, where advocacy of women's bicycling needs and concerns is likely to be lacking.

Methods for Increasing Women's Political Participation

The literature on women's political participation mentions several methods used to achieve greater gender equality in politics and policy making, including gender mandates and quotas, and gender mainstreaming efforts. Most relevant to this project is legislation that mandates gender parity on boards, commissions, and committees. Iowa enacted such legislation in the mid-1980s,[101] requiring that all state-level boards, commissions, committees, and councils "be gender balanced" by 1987.[102] In 2009, Iowa took their commitment to gender equality one step further by amending this legislation to include all local-level appointed boards, commissions, and committees, which must make a good faith effort to achieve a gender balance by January 1, 2012.[103] The state has even created a guide to help jurisdictions recruit more women onto these decision-making bodies.[104] Iowa is not the only state to pass such gender parity legislation. At least seven other states have passed similar legislation for state-level boards, commissions, and committees.[105] Gender balance mandates such as these could be implemented in California to increase women's participation in bicycle advisory committees.

Similar to the above gender balance mandates for boards, commissions, and committees, national governments around the world have adopted gender quotas for their elective bodies.[106] The general goal of such quotas is to increase the percentage of female representatives in a given governing body to 30–40%. Quotas vary in form: some require that women make up a certain percentage of official candidates, while others require that a certain number or percentage of electoral seats are held for women. Quotas may be mandated by the government or may be adopted voluntarily by local political parties. By 2006, approximately 40 countries had enacted some sort of gender quota system in their national parliament election process.[107]

Another tactic for involving women and women's needs in the policy-making process is called "gender mainstreaming," a term that grew out of the United Nation's 1985 Third World Conference for Women.[108] The UN has defined gender mainstreaming as:

> … the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated.[109]

Many countries throughout the world have implemented gender mainstreaming policies. For instance, the European Union requires all member countries to implement gender mainstreaming in their government policy-making processes.[110]

Based on the goals of gender mainstreaming, as outlined by the UN, the process has great potential to ensure that policies meet the needs of women. In addition, because women's and men's "concerns and experiences" are supposed to be an important part of policy design, gender mainstreaming could be a tool to increase women's participation in policy-making processes. For example, in October 2001, Sweden passed gender mainstreaming legislation that made gender equality the sixth goal of the country's transport policy. The language of the goal follows, with the especially relevant section in italics:

> The transportation system shall be designed so that both women's and men's travel needs are satisfied; *women and men shall be given the same possibilities to influence the system's design, formation and administration*; and women's and men's values shall receive equal consideration.[111] [emphasis added]

This gender mainstreaming goal explicitly says that women should have an equal opportunity to influence transportation policy. A similar goal and related implementation actions could be adopted by U.S. transportation agencies or local governments to increase women's participation in bicycle committees.

Gender mainstreaming is now mandated for all policy making in the United Kingdom. The Royal Transportation Planning Institute (or RTPI, the country's primary professional planning organization) has created a Gender Mainstreaming Toolkit to help local planning agencies incorporate a gender perspective into their practices and policy making.[112] The Toolkit suggests that planners ask the following question for each project or policy under consideration: "Who is consulted and who is involved in participation?" Incorporating this type of question into policy design could be used to increase women's involvement in bicycle policy making.

In addition, research done for the RTPI showed that one of the most successful ways to mainstream gender into the planning process was to involve female citizens.[113] Based on conversations with local planning agencies, the author of the RTPI research suggested the following best practices for increasing women's participation in the policy-making process: provide women more education about the planning process, be sensitive regarding the time

of meetings and the location of meetings (safety issues), provide childcare services, ensure access to restrooms, and provide transportation accommodations.[114] Such suggestions could be used in efforts to increase women's participation in bicycle advisory committees.

CONCLUSION

This literature review focused on gender differences in bicycling and in political participation. Research clearly shows that women in the U.S. bike less than men. Potential reasons include women's concerns about safety as well as their continuing responsibilities for household and childcare activities. This review also found that women participate in politics much less than men. Most important to this study is the finding that women in California have been appointed to boards, commissions, and committees at much lower rates than men. Similarly, women are far less likely than men to hold political office or be involved in political activities. Possible reasons for women's low rates of political participation include time constraints and women's low levels of political interest, knowledge, and confidence.

With women riding bicycles less than men and engaging in politics less than men, it is reasonable to assume that they have low rates of membership in bicycle advisory committees. Understanding the factors that keep women from engaging in politics could help local governments with bicycle committees target women by directly addressing these factors (such as lack of education and lack of political confidence). In addition, gender mandates or gender mainstreaming policies and procedures could help jurisdictions take the steps necessary to ensure that women are appointed to bicycle committees and thus are involved in bicycle policy making.

III. GENDER COMPOSITION OF BICYCLE (AND PEDESTRIAN) ADVISORY COMMITTEES IN CA

In order to answer our first research question—Are women underrepresented on bicycle (and pedestrian) advisory committees in California?—a telephone survey was conducted with coordinators of bicycle (and pedestrian) advisory committees throughout California to collect numerical data on the proportion of women serving on the committees.

We were interested in knowing whether women's participation reflected the proportion of women in the general population (50%), if it was closer to the proportion of women in the cycling population (20–35%), or if the proportion was some other value.

METHODOLOGY

Selection of Bicycle (and Pedestrian) Advisory Committees

As mentioned previously, both bicycle advisory committees and combined bicycle/pedestrian advisory committees were included in the study, since both address bicycle planning and policy issues.[115] Because committees at the regional and local level are the most abundant, they were the focus of this study.

Bicycle (and pedestrian) advisory committees are formed in California by the following regional and local entities:

1. Metropolitan planning agencies (MPOs)

2. Regional transportation planning agencies (RTPAs)

3. Congestion management agencies (CMAs)

4. County governments

5. City governments

We initially identified 17 committees formed at the MPO, RTPA, CMA, or county-level. Next, we reviewed a list of all cities in California with populations over 100,000 (a total of 69 cities) and determined that approximately 18 had bicycle or bike/pedestrian advisory committees. Finally, we identified 21 city-level committees in jurisdictions with less than 100,000 people. This resulted in a total of 56 bicycle committees (17 at the regional/county level plus 39 at the city level). We should note that this was not a statistically random sample of committees, nor is it a comprehensive list of every committee in the state, but we endeavored to select committees from different areas of the state (urban, suburban, and rural communities), and committees at different jurisdictional levels (city, county, or regional agency). We are confident, therefore, that our results on committee membership reflect the broader gender distribution of similar committees throughout California.

Telephone Survey of Committee Coordinators

Next, information was collected on the gender composition of the 56 bicycle (and pedestrian) advisory committees. Between February and May 2011, committee coordinators were surveyed by telephone (see Appendix A for the full script) and asked for the following information:

- Number of current voting members (total, male, female)[116]
- Efforts to recruit women
- Existing bylaws or official language governing the committee
- Names of other committees

Through this survey process, it was determined that not all 56 committees could be included in the study. Some committees had a variable membership, which made it impossible to pin down their gender composition, a crucial piece of data collected in this study. Some committees had few seats open to everyday citizens (for instance, some contained staff members or were comprised of members from other committees). Since this study explores possible methods of increasing women's membership in bicycle committees, we decided not to include committees with few completely open seats since the ability to increase women's numbers on such committees could be limited. For example, if a committee contained three staff members and none were women, it could be difficult to find other women staff members to fill the seats, depending on the size of the government and the gender composition of its employees. Because of these types of variations in committee characteristics, it was determined that the committees included in this study had to meet the following criteria:

- The committee had to have a fixed membership, with citizens officially appointed.
- At least half of the committee seats had to be open to any citizen.
- The committee had to meet more than once a year.

Committees that did not meet these criteria were removed from the study. In addition, several committees were added to the original list, based on names of committees gathered during the telephone survey. In the end, 42 committees were included in the study. These committees are shown in Figure 1.

Data Analysis

Simple descriptive statistics were used to describe the basic characteristics of the 42 committees as well as the gender composition of the committees. In addition, a t-test of independent samples was calculated to determine if the average percentage of women on bicycle advisory committees was significantly different from the average percentage of women on combined bicycle and pedestrian advisory committees.

In addition, efforts to recruit women were reviewed, and the committee bylaws and other official documents were examined for language about gender and/or the need for diversity.

Figure 1. Map of the 42 Committees Included in the Study

RESULTS

General Committee Characteristics

Table 5 shows the committee types and the government levels of the 42 committees.

Table 5. Characteristics of the 42 Committees

		No. of Committees
Committee Type	Bicycle	16
	Bicycle/Pedestrian	26
Jurisdictional Level	City	30
	Combined City/County	2
	County	10

Combined bicycle/pedestrian committees were the most common committee type in this part of the study: 26 were bicycle/pedestrian, while 16 were solely bike committees. In addition, city-level committees were the most common, although a substantial number of county-level committees were included.[117] Finally, as Figure 1 shows, the majority of the 42 committees were located in the San Francisco Bay Area. The Bay Area only makes up 19% of the state's population,[118] so population density cannot explain the heavy concentration of committees in this area. This concentration is likely due to a policy of the Metropolitan Transportation Commission (MTC), which is the metropolitan planning organization for the Bay Area. The MTC administers Transportation Development Act Article 3 funds, which are state grants for bicycle and pedestrian projects. In order to be eligible for such funds, the MTC requires local governments and agencies to establish bicycle advisory committees.[119]

The 42 committees varied greatly in size, as measured by the number of voting members a committee had when all seats were full. As Table 6 shows, the smallest committee had seats for five voting members, while the largest had 19. The average committee had seats for approximately nine voting members, although committees with seats for five voting members and seven voting members were the most frequent in the sample, as shown in Table 7.

Table 6. Committee Size

	No. of Voting Members[a]
Range	5-19
Average	9
Mode	5, 7

[a] *These numbers assume all seats are filled.*

Table 7. Committee Size Frequency

No. of Voting Members[a]	No. of Committees	% of Committees
5	10	23.8
6	1	2.4
7	10	23.8
9	7	16.7
10	2	4.8
11	5	11.9
12	1	2.4
13	2	4.8
14	1	2.4
15	1	2.4
19	2	4.8

[a] *These numbers assume all seats are filled.*

Gender Composition of the Committees

Table 8 shows the gender composition of each of the 42 committees in the spring of 2011. Some committees had vacancies at the time of our survey, so the number of male and female members listed does not always add up to the total number of voting members when all seats are full.

Table 8. Gender Composition of the 42 Committees, Spring 2011

Agency/Government	Committee Type	Voting Members			
		% Female	No. Female	No. Male	Total No. (seats full)
Santa Cruz County Regional Transportation Commission	Bike	0	0	11	11
San Luis Obispo County	Bike	0	0	9	10
Sonoma County	Bike/Ped	0	0	5	5
Calistoga	Bike	0	0	5	5
Lafayette	Bike/Ped	0	0	7	7
Napa (City)	Bike/Ped	0	0	5	5
Rohnert Park	Bike/Ped	0	0	5	5
San Bruno	Bike/Ped	0	0	6	7
Transportation Agency for Monterey County	Bike/Ped	8	1	11	19

Agency/Government	Committee Type	Voting Members			
		% Female	No. Female	No. Male	Total No. (seats full)
Napa County Transportation & Planning Agency	Bike	9	1	10	11
Transportation Authority of Marin	Bike/Ped	10	1	9	13
Los Angeles	Bike	11	2	17	19
Santa Clara (City)	Bike	11	1	8	9
Stanislaus Council of Governments	Bike/Ped	13	1	7	10
Menlo Park	Bike	14	1	6	7
San Luis Obispo (City)	Bike	14	1	6	7
Fullerton	Bike	17	1	5	7
Campbell	Bike/Ped	20	1	4	5
Cupertino	Bike/Ped	20	1	4	5
Gilroy	Bike/Ped	20	1	4	5
Milpitas	Bike/Ped	20	1	4	5
Pleasanton	Bike/Ped	22	2	7	9
Visalia	Bike/Ped	25	3	9	13
Walnut Creek	Bike	25	2	6	9
Sacramento (City/County)	Bike	27	3	8	12
Daly City	Bike/Ped	29	2	5	7
Merced (City)	Bike	29	2	5	7
San Francisco (City/County)	Bike	29	2	5	11
Alameda County Transportation Commission	Bike/Ped	30	3	7	11
Solano Transportation Authority	Bike	33	3	6	9
Davis	Bike	33	2	4	7
Los Altos	Bike/Ped	33	2	4	7
Fresno (City)	Bike/Ped	38	3	5	9
Fremont	Bike/Ped	40	2	3	5
City/County Association of Governments of San Mateo County	Bike/Ped	43	6	8	15
Santa Rosa	Bike/Ped	43	3	4	9
Sunnyvale	Bike/Ped	43	3	4	7
Emeryville	Bike/Ped	46	6	7	14
Woodside	Bike	50	2	2	6

Agency/Government	Committee Type	Voting Members			
		% Female	No. Female	No. Male	Total No. (seats full)
Petaluma	Bike/Ped	56	5	4	9
San Jose	Bike/Ped	60	6	4	11
Mountain View	Bike/Ped	80	4	1	5

As shown in Table 9, women made up 24% of the members on an average bicycle (and pedestrian) advisory committee in this study. This is significantly lower than the proportion of women in the general population, which is about 50%. This percentage, however, is similar to the percentage of women bicyclists in the United States (20–35%). Therefore, in California, the gender of bicycle (and pedestrian) advisory committee members is representative of the bicycling population, but not of the overall population.

Table 9. Average Percentage of Women on Surveyed California Bicycle (and Pedestrian) Committees

Committee Type	Average % of Women
All 42 committees	24
16 bike	19
26 bike/ped	27

While an average committee in the sample had 24% women, this number varied based on the committee type: bicycle advisory committees had an average of 19% women, while combined bicycle and pedestrian advisory committees had an average of 27% women. This difference suggests that women may be more likely to join committees that address pedestrian issues than ones that address only bicycle issues. The difference between the average percentage of women on the two committee types was significant at $p = .075$. While this is only a marginally significant difference, the sample was small. Examination of whether women are significantly more likely to be found on combined bicycle and pedestrian committees should be explored in future research with a larger sample size.

To further understand the gender composition of the committees, the frequency of women members was examined. Table 10 shows that 19% of the committees in the study had zero women members. The most common number of women per committee, found in 29% of the committees, was one.

Table 10. Frequency of Women Members

No. of Women on Committee	% of Committees	No. of Committees
0	19	8
1	29	12
2	24	10
3	17	7
4	2	1
5	2	1
6	7	3
	100	42

Finally, it is interesting to examine which gender holds the majority of seats on the committees. As Table 11 shows, 38 of the committees had a male majority, while only 3 had a female majority.

Table 11. Gender Majority of the Committees

Majority	No. of Committees
Male	38
Female	3
Equal Male-Female	1

Efforts to Recruit Women

The coordinators of the 42 bicycle (and pedestrian) advisory committees were asked whether they or their agency/government made efforts to recruit women onto the committee. In asking this question, we learned that the coordinators often have little to do with recruitment. In many cases, they report vacancies to the city/county clerk, and the clerk handles the search. Then, the city council, board of supervisors, or other governing body chooses amongst the applicants.

When asked about efforts to actively recruit women, the vast majority of coordinators stated that their agency's application process was open to anyone who applied. Two coordinators specifically stated that their government had an equal opportunity policy; the implication was that specifically targeting any group (including women) would violate this policy. At the same time, approximately five of the coordinators reported that they themselves made informal attempts to recruit women. One reported that he would inform appointees that the committee was short on female members, while another would let the current members know, since they are the ones who often do a lot of informal recruitment. The other three coordinators would sometimes encourage women they knew to apply.

Since neither the clerks nor the appointers were interviewed for this study, it is not known whether they attempt to recruit women.

Bylaw Language Referencing Gender or Diversity

Many of the committees had formal rules and procedures outlined in committee bylaws or in the municipal code. For other committees, the government body had a handbook with general guidelines for bodies such as boards, commissions, and committees. Finally, some committees had no formal guidelines.

As shown in Table 12, the guidelines for three of the committees specifically stated that the committee membership should reflect the community's gender composition.

Table 12. Formal Committee Language Referencing Gender

Agency/Gov	Committee	% Women on Comm.	Document	Language about Gender
Alameda County Transportation Commission	Bicycle and Pedestrian Advisory Committee	30	Committee Bylaws	"In addition, the BPAC should represent Alameda County's diversity in age, income level, gender, ethnicity, and bicycle experience, to the greatest extent feasible."
Transportation Authority of Marin	Bicycle/ Pedestrian Advisory Committee	10	Committee Bylaws	"The TAM Board intends that the BPAC represent both bicycle and pedestrian views, that it represent all areas of the county and that it reflect Marin County's diversity in age, income, gender and ethnicity to the greatest extent possible."
City of Visalia	Waterways and Trails Committee	25	City of Visalia Committees and Commissions Handbook (revised 11/2008)	"City advisory committees/commissions will reflect, to the extent possible, the community's geographic, ethnic, gender and age composition."

As Table 13 shows, two additional committees had guidelines stating that the committee membership should reflect the general diversity of the community, although these instances did not mention gender specifically.

Table 13. Formal Committee Language Referencing General Diversity

Agency/Gov	Committee	% Women on Comm.	Document	Language about Diversity
City of Davis	Bicycle Advisory Commission	33%	City of Davis Commission Handbook, "Commission Policy Guidelines: Qualifications," letter "g"	"City commissions should reflect the community's diversity."
City of Santa Rosa	Bicycle and Pedestrian Advisory Board	43%	Santa Rosa City Charter, Section 11: "Participation and Diversity in Boards and Commissions"	"The City shall undertake all reasonable efforts to encourage participation by all citizens. Further, the Council shall undertake all reasonable methods to ensure that its appointments to boards, commissions and committees reflect Santa Rosa's diversity, including geographic and ethnic diversity."

Of the five committees in Tables 12 and 13, the Santa Rosa Bicycle and Pedestrian Advisory Board is the only one with a gender split that roughly reflects that of the general population. Furthermore, there are committees with higher percentages of women that do not have gender or diversity mandates. This suggests that this language, by itself, does little to balance the involvement of men and women in these committees.

Summary of Findings

Through this survey of bicycle (and pedestrian) advisory committees in California, the following findings have emerged:

- Women make up approximately 24% of members on an average bicycle (and pedestrian) advisory committee in California. They make up approximately 19% of members on bicycle advisory committees, and approximately 27% on combined bicycle and pedestrian committees.

- Few efforts are made by committee coordinators to recruit women onto bicycle (and pedestrian) advisory committees in California. This study did not investigate whether other individuals in the governments/agencies actively recruited women.

- Only a handful of committees have formal governing language that either directly or indirectly requires a gender balance. These policies seem to be having little effect.

DISCUSSION

This study found that women make up approximately 24% of members on an average bicycle (and pedestrian) advisory committee in California. This is amazingly consistent with research from 1998 that found that women made up between 22% and 24% of members on transportation- and housing-related boards or commissions in the state.[120] In addition, the average percentage of women on bicycle (and pedestrian) committees (24%) falls within the percentage range of bicyclists that are women (20–35%). In this way, the committees reflect the gender composition of the bicycling population. The committees do

not, however, reflect the percentage of women in the population. This might be acceptable if women did not face certain obstacles to bicycling that were contributing to their low rates of riding. One way to address such obstacles might be to ensure that women are heavily involved in bicycle planning decision making, including service on bicycle (and pedestrian) advisory committees. With more women on committees, more of the barriers to women's bicycling might be addressed by these bodies. This notion will be explored further in the next chapter, where women's contributions to committees are examined.

It should be noted that this research focused on bicycle and pedestrian committees that had appointed members and a substantial number of seats for citizens. Therefore, it is not known whether the findings regarding gender composition apply to committees with other configurations.

This study also found that few committee coordinators actively recruit women to serve on the committees. This may be a function of the limited role these individuals play in recruitment.

Finally, this study found that committees with policies to equalize gender participation did not necessarily have a more equal gender composition than committees without such policies. This suggests that implementation and enforcement of gender parity policies is necessary for these policies to be effective.

Remedies for increasing women's participation are discussed at the end of this report, along with ideas for future research. The next section presents the results of our interviews with women serving on bicycle (and pedestrian) advisory committees.

IV. INTERVIEWS WITH WOMEN ON BICYCLE (AND PEDESTRIAN) ADVISORY COMMITTEES

Women from ten bicycle (and pedestrian) advisory committees in California were interviewed in an effort to answer Research Questions 2, 3, and 4:

2. What are the experiences of women on bicycle (and pedestrian) advisory committees?

3. What barriers keep female citizens from seeking membership on such committees?

4. What steps could be taken to increase women's participation in bicycle (and pedestrian) advisory committees?

Understanding women's experiences on the committees could provide insight into the findings from our analysis of gender composition on California bicycle (and pedestrian) advisory committees, which found that women's membership is low. For instance, perhaps factors associated with the committee environment affect women's desire to seek membership or to remain a member. Information about the women's experiences could also shed light on the extent to which women's bicycling issues are considered by these bodies.

METHODOLOGY

After we identified the final 42 committees, we chose ten committees with female members for in-depth interviews. To get a range of experiences, we selected committees with low, medium, and high percentages of female members. An attempt was also made to include both city-level and county-level committees, as well as committees from around the state. Additionally, the ten committees were each located in a region with an active bicycle club and/or bicycle advocacy group. As described in Chapter 5 of this report, these groups were asked to distribute an online survey to their members that asked women bicyclists about their awareness of and experiences with bicycle committees. This match in regions between the women being interviewed and the women being surveyed was deliberate, in case findings specific to an area were found.

Even though we endeavored to select committees from different areas of the state and from different jurisdictional levels, this was not a statistically random sample of committees. Therefore, the findings cannot be generalized to all bicycle (and pedestrian) committees in California. Nevertheless, the findings do provide an interesting snapshot of women's experiences on these specific committees. Such information may help raise questions about committee procedures and policies that will be useful to researchers, elected officials, committee members, and activists.

Specific information about the ten chosen committees is not included in this report in order to maintain the confidentiality of the interviewees. Table 14 contains some general characteristics of the committees.

Table 14. Committee Characteristics

		No. of Committees
Type of Committee	Bicycle	5
	Bicycle/Pedestrian	5
Percent Women	1–20%	4
	21–30%	3
	31–50%	1
	over 50%	2
Type of Planning Entity Convening Committee	Local government	8
	Planning/Transportation agency	2

Once the committees were identified, interviews were scheduled. Both individual and group interviews were arranged, depending on the number of women on a given committee and the number of women willing to participate. All interviews took place in the locale of the committee. In total, 11 interviews were conducted (four individual and seven group) with a total of 24 women from the ten committees.[121]

Each interview was audiotaped, and each group interview was also videotaped to capture changes in speaker. The interview sessions proceeded as follows:

- The interviewees were first briefed on the research project, including consent information.
- The interviewees were then asked to fill out a brief questionnaire requesting mostly demographic information. (See Appendix B.)
- The interviewees were then asked the interview questions (see Appendix C). The interview questions grew out of the study's overall research questions and explored the following topics:
    - Pathways to membership
    - The women's participation styles and contributions to meeting discussions
    - Gender differences in participation styles and contributions to meeting discussions
    - Ideas about women's low membership in committees, including remedies

Consistent with best practices, the questions were crafted and sequenced to elicit increasingly more detailed information from the participants as the interviews progressed.[122] Post-interview, the questionnaire responses were numerically coded to allow the calculation of descriptive statistics.

For the interview analysis, we identified common themes across the interviews.[123] To accomplish this, we listened to each interview multiple times and took detailed notes on

the participants' responses to each question. Conflicting experiences, nonverbal behavior, and interesting quotes were also noted.[124] We then analyzed these notes question by question, by pulling together the responses from all 11 interviews. The full collection of responses for each question was read through and themes were identified. The data was then reorganized so that responses were grouped by theme. Themes that emerged across questions were analyzed in the same fashion.

It is important to note that because only women were interviewed in this study, it is not possible to know whether their experiences differ substantially from those of the male members of the committees. Without including the men, this study can only uncover the experiences of these women.

RESULTS

This section presents the themes that emerged during the interviews. These themes are presented as answers to the following questions:

- Who are the women serving on committees and how did they become members?
- What aspects of the committee environment might affect women's participation?
- What factors related to the women influence their participation?
- What unique contributions do women make to committee discussions?
- Why is women's membership in committees low?
- What can be done to increase women's membership?

After these questions are answered, several additional findings will be discussed.

In several cases, the interview findings presented below are accompanied by findings from the online survey of women bicyclists, which will be presented in full detail in the next chapter. This occurs when the survey respondents' experiences with bicycle committees are similar to those of the interviewees.

Who Are the Women Serving on Committees and How Did They Become Members?

Exploring commonalities among the women and the ways these women became committee members could inform efforts to increase women's participation in committees. Twenty-four women from the ten committees participated in the interviews. Demographic information for these women is shown in Table 15.

Table 15. Interviewee Demographics

Age Distribution	
Range	26–69
Average	50
Standard deviation	13

Parental Status	% of Women
Do not have children	54
Have children	46
	100%

Work Status	% of Women[a]
Employed full-time	50
Retired	17
Employed part-time	13
Homemaker	13
Self-employed	13
Other	8
Unemployed	4
Student	4

Cohabitants	% of Women[a]
Live with spouse/partner	54
Live with children	29
Live alone	29

Note: n = 24.

[a] *Respondents could choose multiple options, so the percentages do not add up to 100.*

The average age of the interviewees was 50.[125] The largest group of women was aged 45–54, and 71% of the interviewees were 45 and older. Most of the women worked either full- or part-time, four women were retired, and three identified as a "homemaker." Less than a third of the women lived with children, and only 3 of the 24 (13%) lived with children aged 12 and under.

A slight majority of the women (54%) did not have children, but because some of the women were still of childbearing age, it is more useful to look at the percentage of older women without children. Of the interviewees 40 and older, 47% did not have children. This is much greater than the national average: in 2010, 18.8% of U.S. women aged 40–44 did not have children.[126] (Fertility data for women 45 and older is not readily available. Considering that few women over 44 have children,[127] the rate for 40–44 year olds is a reasonably accurate statistic for all women 40 and older.)

In summary, the committee members were mostly older, employed outside of the home, not likely to live with small children, and more likely than an average U.S. woman to not have any children.

In terms of interests, it is not surprising that many of the interviewees—who were all serving on a government advisory body that addressed biking and walking—were very involved in local politics, and biking and walking. Many of the women were active in local neighborhood groups or PTAs, and more than half had served on another government body at some point. The vast majority of the interviewees were also passionate about making their communities a better place to bike and walk. Many of them were involved with their local bicycle advocacy group, and several even helped found that group. Furthermore, several of the women held jobs related to bicycling and walking.

Another common thread among the women was an interest in environmental issues. Some of the women worked in environmental fields, and a few had stopped driving for environmental reasons. Still others expressed views that suggested an environmental perspective.

Finally, most of these women sought out the committees themselves, which is not surprising given the women's political bent and passion for biking and walking. The next most common path to membership was via formal and informal recruitment: roughly a quarter of the women were asked or encouraged to join their committee, usually by other members of the bicycle community, and sometimes by public officials. A few women were serving as a primary member on another advisory body, such as the Planning Commission, and they were appointed as the representative from that body to the bicycle (and pedestrian) committee. Finally, at least three of the 24 women were founding members of their committees. These women were all involved with their local bicycle advocacy group, and they were a part of that group's effort to push for the formation of an advisory body.

What Aspects of the Committee Environment Might Affect Women's Participation?

The interviews shed light on some aspects of the committees themselves that might be unappealing to women.

New Members Experience a Steep Learning Curve

Almost every woman said that she did not know what she was doing when she joined the committee. None of the committees had an orientation process. Many of the women did not know bicycle and pedestrian planning terminology and design standards. Many did not understand how local government worked and what the exact role of the committee was. As one woman explained:

> When I started ... just the conversation that was going on, I had a hard time even following it. Just trying to understand the terms and the acronyms … I didn't know any of the history. So I had this big learning curve, to ramp up and kind of figure out how things work, how does money flow, how to get things done…

Another woman expressed how overwhelming it was when she first began serving:

> When I first got there, I was like, "Oh my goodness,"—like a deer in headlights—"what did I get myself into?" … It's a lot of work and there's a lot to learn.

Still another woman said:

> Being a new member was like jumping into a game whose rules you don't know … [I] wish there was "City Government for Dummies."

This experience of feeling lost as a new member, which was common to most of the women interviewed, could contribute to high rates of turnover on bicycle (and pedestrian) committees.

Women's Minority Status Could Be a Deterrent

Three interviewees reported that their minority status as a woman on the committee was apparent to them, and one of them expressed discomfort at being the only woman member. Because there are so many male-majority committees in the state, many women who join committees will be in the minority, which could be off-putting. The comments of one survey respondent illustrate this point:

> In general, the men who dominate our local government and bicycling advocacy committees exude a feeling of exclusiveness and a closed social network that seems like it would require way too much energy to participate in as a woman and an outsider.

It is important to note that three interviewees were completely unaware that they were one of few women or that they were the only woman on their committee. Nevertheless, the fact that some of the women noticed they were in the minority suggests that women's status as "other" could affect their desire to seek committee membership.

The interviews also revealed that some of the women felt like minorities in other ways. Two women spoke about being the youngest person on the committee and how salient this difference was for them. Another member spoke about being the only non-white person on the committee. These findings suggest that committees might lack diversity in more realms than just gender.

Men on Several Committees Create an Unfriendly/Unsupportive Environment

Several women who were interviewed and several who took the survey called out unappealing or problematic behavior by male members. When speaking about differences in participation between the men and women on her committee, one interviewee said that the men tend to speak with a lot of bravado. She explained:

> … it's very common for the men in the group, especially the ones that contribute verbally the most … we'll be talking about some safety feature on a particular route or segment of roadway, and the guys will be like "Ah, I just race through there," or … this really macho, "Ah, I don't need to have my own off-ramp. I can handle the cars coming off the freeway." And so they like to kind of talk like that … Nothing fazes them …

She later called it a "testosterone perspective" and said:

> I think the guys [on the committee] feel the need to let everybody know that they're really gnarly gutsy riders … it's like a badge.

The women on this committee noted that this "I-can-bike-anywhere-under-any-conditions" attitude of the men sometimes resulted in the men dismissing safety concerns that the

women members would bring up. This same type of behavior was mentioned by a survey respondent who had served on a bicycle (and pedestrian) committee in the past. When asked why her involvement with the committee ended, this woman answered:

> When the other members of the committee laughed at bicyclists who were afraid of riding on [a certain road], in an area that terrifies me, I was sure I didn't belong there.

The committee in this woman's town was 100% male at the time of this study, and historically it has had very few women members.[128]

Two additional women who took the online survey pointed directly to the behavior of the men on the committee when describing why they had never sought to become involved. One explained:

> I was treated really crappy by the mostly male members there and noticed the few women who were there did not seem happy or outgoing …

The second woman's experiences were shared in the previous section, but they are worth repeating here because they provide a powerful example of the impact that men's behavior can have on women's participation:

> In general, the men who dominate our local government and bicycling advocacy committees exude a feeling of exclusiveness and a closed social network that seems like it would require way too much energy to participate in as a woman and an outsider.

Finally, another woman who was interviewed mentioned an instance of dismissive behavior by the men on her committee: her male colleagues made fun of her no-frills bike.

It is hard to say how common the experiences of the above women are. Of the ten committees interviewed in the study, women on two different committees mentioned instances of men's off-putting behavior. Many of the women on the other eight committees enjoyed the men they served with and did not report any unpleasant interactions. The sample of ten committees, however, is very small. Also, the sample contains at least three committees with substantial percentages of women, meaning that only seven had substantial male majorities. In terms of the survey, three respondents noted men's problematic behavior. While three women out of the approximately 350 who answered the related questions is a small percentage, these three women had direct involvement with the committee; it is likely that many women who took the survey did not. In conclusion, these instances raise the possibility that the environments of some male-dominated committees may be off-putting to some women, which could affect women's initial interest in joining a committee or their desire to continue serving.

Men Dominate on Some Committees, While Many Women are Interested in Sharing the Floor

In addition to making the above observations about men's behavior, some of the women spoke about situations during committee meetings in which the men did not share the floor

equally. Women on a committee that requires members to press a button and wait to be called on before speaking said that the men were less likely to follow this protocol. One of the women explained:

> [We women] We're more likely to push the buttons and wait our turns, and wait to be called on … [As chair] I never had to worry about [my fellow interviewee] speaking out of turn, or any of the other women when they were on. But every now and then the men would just get too excited about getting their viewpoint in, and I'd have to say, "Just a moment. It's not your turn yet."

A woman on another committee talked about how she had to make a real effort to be heard on her committee:

> For me, in terms of speaking, and in terms of participating … I hate having to compete to speak … and the guys are just gonna keep talking if nobody else jumps in … sometimes I will just sit there and insistently raise my hand … It is sometimes tough to feel like you're being polite in the committee, because to get your turn to say something sometimes you just have to jump in, which, to me, can feel impolite … I'm being aggressive, but I didn't mean to—I just wanna have my turn.

This woman and a fellow interviewee wanted the committee to institute a formal system of participation in which everyone could have their say. This desire to share the floor was common among the women interviewed. Several women on various committees said they make regular efforts, whether as chair or just as a rank-and-file member, to ensure that every member of the committee gets a chance to speak. One woman said:

> I like to make sure that everybody says something. I don't wanna see the committee run by a couple of louder mouths … I wanna make sure everybody has something to say.

Furthermore, women who served on committees with turn-taking protocols spoke very positively about these conventions.

Men May Have Authority Due to Professional Backgrounds

The interviews revealed another characteristic related to the male members that might affect women's participation. One woman noticed that most of the men on her committee were in planning and transportation-related professions, while the women members were not. As she explained:

> Four of the men are professionals—architect, planner, engineer types—so they come with a pretty clear sense of what they think and information and training to back it up. I'm really a layperson with a lot of experience, in having paid attention. But I don't have that kind of detailed … I don't have that kind of training.

She said that this background automatically gave the men an authority when they spoke—one she did not feel like she had as a layperson. Since men have traditionally dominated

the professions associated with planning and transportation, it makes sense that male members of bike committees may be more likely to have these backgrounds. This could leave many women feeling inferior in terms of qualifications.

Unfortunately, this finding emerged toward the end of the interviews, so it could not be explored with the women on each of the committees. Nevertheless, it is included in this report because it is related to other findings (later in this section) about women's interest (or lack thereof) in technical planning topics.

What Factors Related to the Women Influence Their Participation?

In addition to the above factors related to the committees, several factors related to the women themselves seemed to affect their levels of participation in their committee.

Women Need to Feel Knowledgeable Before Speaking

Many of the women talked about needing to feel that they knew what they were talking about before they spoke. This was most salient when the women were new members, leading many of the women to mostly observe committee happenings during their early meetings. A relatively new member said:

> I have been in kind of the observatory state … I don't want to be too aggressive, because I feel like I still don't know, I'm still learning, I'm still trying to figure out what's going on, and I don't want to say anything without knowing what I'm saying.

Another member talked about making sure she was prepared when she spoke in the early meetings:

> I would make sure to have something very well formulated before I said something … but I think that's sometimes just how I am in general with public speaking … I don't wanna just sound like an idiot so I try to make sure that I have some clear points to talk about.

This need to be knowledgeable before speaking continued for some of the members to the present, with many of the women saying that they would not participate as much if they were not prepared for a particular meeting. One woman said:

> It would be humiliating to come to a meeting unprepared.

Such a need to feel prepared and knowledgeable before speaking could hamper the amount of participation by women during committee meetings, which would result in their voices and perspectives not being heard as much as they could be.

Women Lack Confidence in Their Contribution

On a related issue, several of the women seemed to downplay their contributions to the committee and even their ability to contribute:

> I just interject things to make people laugh … because it [the committee] really, it functions at a higher technical level than my little brain.

> I interject occasionally … It'll usually be something that's not as important as what we've been talking about.

Lack of confidence is problematic for numerous reasons. First, it may limit the contribution of women members during meetings. In addition, it could affect women's desire to join committees or maintain their membership.

Women's Role as Caretaker Affects Participation

Two of the women interviewed discussed how their role as primary caretakers of their young children affected their level of participation on their committees. One woman described how this role influenced her engagement during meetings:

> I don't talk a ton, and part of it is that I have children and just a very, kind of, hectic life … when I do things, I try for there to be a certain economy of words and time 'cause, for me, every minute not spent at home is like, it's just hard … it's very hard for me when our meetings run late … so once things start to get past nine o'clock, I maybe stop contributing quite as much and I get a little bit more testy … 'cause I know there's two children [at home] running around naked, crying…

Another women with young children talked about how her ability to engage with the group outside of meetings was hampered:

> Even when I was supposed to take my [bike] count on the street corner, I couldn't find anybody to watch the kids.

For these women, being a caretaker meant the time they could contribute to the committee was constrained. This may be why women with young children were rare in the sample of women interviewed (only two women, or 8%, had children aged 5 and younger).

Talking About Gender Differences

It is interesting to note that many of the women did not "see" gender in their committee experiences. When asked about differences in behavior and contribution between men and women on the committee, most of the women could not think of anything. As each interview progressed, however, the researcher was able to identify a number of differences, although they were usually not discussed in the context of gender differences. Gender did not seem to be a salient aspect of many of these women's everyday lives. Therefore, asking directly about gender was not necessarily a useful means of uncovering experiences related to gender.

In addition to not being particularly aware of gender, some of the women seemed reluctant to identify differences between men and women. There was almost a sense that these women did not want to be perceived as being "anti-men." For example, one woman

volunteered an anecdote about differences in her committee when it had a male majority compared to when it had a female majority. When the researcher tried to confirm that the interviewee believed the difference was due to gender, the interviewee immediately stated: “I’m not biased one way or the other, male or female.” She then modified her earlier description to lessen the gender component. Instances like this were not uncommon throughout the interviews.

To get around women’s lack of gender awareness and their reluctance to speak about gender differences, future studies could directly observe meetings to better understand gender differences in interaction and contribution.

What Unique Contributions Do Women Make to Committee Discussions?

To explore what impact women’s presence has on committees, the women were each asked what sorts of topics they tended to interject into committee discussions. To understand if women and men brought up different topics, the women were also asked if they noticed gender differences in the content of their committee’s discussions. As discussed in the section above, explicitly asking about gender was not always the most effective way to uncover gender dynamics. To get at the topic via a different route, the researcher also asked the women whether they thought their committees might change if all the members were women or if all the members were men.

Of particular interest to this study is whether women bring up issues related to women’s bicycling. As illustrated below, the women interviewed not only brought up such issues, but they seemed more likely to do so than their male colleagues. In addition, some of the women believed that women were more likely than men to consider the needs of all user groups.

Women on the Ten Committees Seem to Discuss Women’s and Children’s Issues More Than Men

Women Discuss Barriers to Women’s Bicycling

As discussed previously in this report, women bicycle at much lower rates than men. Of the seven group interviews that were conducted, only one demonstrated a group-level awareness that women were less frequent bicycle riders than men. Nevertheless, individual women in every interview described instances during meetings when they raised issues related to barriers to women’s cycling, including safety concerns, the need to transport children, and the need to shop or haul goods.

One woman said that she often brought up a personal safety issue facing women bicyclists in her community:

> One issue that I bring up … we have our bike trail here. And we have part of the trail that’s, at times, is taken over by illegal campers, and it’s a very scary place to ride … It’s been my big thing for a long time because I don’t know how many women have told

> me that they're afraid to ride on the bike trail … I fought so hard to keep that bike trail protected so women feel comfortable …

A woman on another committee who had young children talked about how her role as a mother affected her perspective when reviewing projects:

> And always in the back of my mind is, okay this is a bike route, but am I gonna really feel comfortable on a bike with a trailer behind me taking my kid on this … I would say that's always in my thinking.

The women on another committee explained that when their committee reviews development projects, they talk to developers about how their projects can accommodate mothers and shoppers who bicycle. A woman on this committee described how another female committee member would always ask developers about:

> … [the] shopper woman who's got the baby on the back of the bike and has to negotiate this development … "She wants to buy your goods, but how's she gonna get there?"

As this group continued talking about their interactions with developers, another woman added:

> A lot of times these men developers don't take that into consideration, like they don't even think that someone would have a baby trailer and grocery bags … trying to navigate a thousand-car parking lot.

Finally, a woman on another committee talked about the importance of connectivity and being able to bike safely to shopping destinations:

> By connectivity I mean being able to get to a grocery store or to a department store … without having to ride in traffic.

Women Discuss Children and Bicycling

As discussed above, women on the committees do talk about the challenges posed by transporting children by bike. In addition, women's interest in children's independent biking and walking regularly showed up in the women's contributions to their committees. This is consistent with research on women in electoral politics, which shows that women in office often advocate for children's issues.[129] Below are several examples of women discussing children and bicycling on their committees:

> I do always focus on where the schools are … I just think getting more kids riding … any [bike] path that's toward the middle school especially… anything that helps that, I always support … more kids [riding] would be great to see.

> Because I've been involved in bicycle education in [city x] for several years, I had wanted to figure out how we could do some sort of an educational program in [the schools in my city] … I asked [the former chair of a PTA Traffic Safety Committee

> from a neighboring city] if she would be willing to come to one of our bicycle advisory committee meetings and talk with us about what they do in [her city] …

As these examples show, it is not uncommon for women to bring up issues relating to children biking and walking during their committee meetings. In addition, some of the women discussed their concerns about children during the interviews:

> My feminine perspective is about the safety of the children … when my nephew's calling me—"Can I ride my bike over to In-and-Out Burger?"—I'm like, "I really don't want you riding on that part of the road" … There's not enough connectivity to feel comfortable, even with a 16-year-old.

One member was upset about the school policies in a neighboring city as they relate to children's travel to school:

> For Safe Routes to School, that's the one city where the school district does not want to endorse walking and biking to school … it just blows my mind … it's really, really frustrating.

It was not clear whether the women who mentioned these issues during the course of the interviews brought up these same concerns on their committees. It is not a leap to assume, however, that they would.

Women Indicate that They Bring Up These Issues More Often Than Men

While the sections above show that women do discuss barriers to women's bicycling and issues related to children, this information alone does not provide evidence that the men on the committees do not have these same perspectives and concerns. In fact, some of the women shared examples of male committee members who brought up similar concerns. Nevertheless, the women shared information that suggested that women were more likely than men to bring up women's and children's issues, as illustrated in the quotes and anecdotes below.

One woman who was the only female member on her committee said that she tended to bring up bicycle education for children, while the other members (all male) tended to talk about infrastructure and design.

The women on another committee described a specific example of women members raising concerns about children's safety, while the men did not:

> [The city is] planning a new park … they gave us different options for how the bike path should go through and/or around the park and join into the street … A couple of the men thought it should just come out right on [the] street, but some of the women, the women were more concerned because there would be families with children in the park and they wanted a safer exit than just into the street … Once it was pointed out that this was going to be not just adults riding, but families with young children, then

> the men were easily swayed over that way. Maybe women just think about that more, or sooner … I don't know.

Several other women noticed that women were the ones who tended to bring up issues related to children:

> I noticed the newer woman who came on, she brought up an example of when she rides with her kids—ya know, I wanna feel safe when I'm riding with my kids—I noticed that a guy might not say that on a committee, but a woman, you know, she said it as a woman with children, like I wanna make sure this path is safe so my kids can cross over safely … When she said that I thought, oh yeah, and that's kind of a female perspective on things, you know, keep your family safe.

> The real advocate for Safe Routes to School was [a woman] … Perhaps her being a mother could have been an impetus … That did cross my mind at one point.

The women on one female-majority committee regularly raised the issues of transporting children and purchases by bike as part of their committee discussions. When asked if they believed an all-male committee would bring up these issues, one member answered:

> Not at all! … Most men don't go to the store on the bike. They use their bike for transportation … they don't take their kids around. I really don't see it.

This woman's view was shared by most of her fellow committee members.

Finally, a woman with two young children believed that mothers made a unique contribution to committees:

> I would definitely want a mother with young children on the committee, personally, 'cause I wouldn't trust that five men are gonna have—you know, five men who don't stay home with their children—are gonna have the same perspective that I do.

Women Believe They Have a Broader Perspective Than Men

The above examples show that the interviewees believe that women committee members are more likely than men to raise women's issues and children's issues. In addition, several interviewees believe that women on the committees were more likely than men to consider the needs of all transportation users, as illustrated in the following quotes:

> I think they [women] have the opportunity to bring a different perspective and probably to consider more broadly the diversity of the users or the constituency. I think women might tend more to consider the 8 to 80 crowd, you know, when it comes to facilities, because they will tend maybe more to think about kids, or they may tend more to think about someone who's older, or they may tend to think more about someone who's inexperienced, or they may tend to think more about someone who is hesitant, or concerned, or maybe a little more easily intimidated … I'm making a generalization … but that's my sense. But that's also what I've experienced, and not just on this

> [committee]. I've experienced it through the county [committee] … I've experienced it through what I've seen through [the local bicycle advocacy group] …
>
> The one thing that always pops up for me that seems gender different is … it's very common for the men in the group, especially the ones that contribute verbally the most … we'll be talking about some safety feature on a particular route or segment of roadway, and the guys will be like, "Ah, I just race through there, you know," or … this really macho, you know, "Ah, I don't need to have my own off-ramp. I can handle the cars coming off the freeway." … Sometimes I wanna go, "But, but the people in my neighborhood, you know, or me, or my female friends my age … they don't really wanna do that, that's not gonna be comfortable for them." … I feel like it's important, it's an important perspective and I think it's generally … a feminine perspective to say there's a bigger group of riders, we need to try to meet everybody's needs, all the different kinds of riders.

Summary: Women's Impact on Committee Discussions

Individual women certainly bring individual differences to any activity they engage in, including their work on bicycle (and pedestrian) advisory committees. The women interviewed for this study, as shown above, also raise issues related to women, children, and other user groups on these committees, and they believe that they do so more frequently than men.

Why is Women's Membership in Committees Low?

When asked to speculate why there were so few women on an average bicycle (and pedestrian) advisory committee in California, the women came up with the theories below.

Percentage of Women Members Reflects Percentage of Women Cyclists

Most of the women were quick to point out that the average number of women on a bicycle (and pedestrian) advisory committee in California (24%) was reflective of the average percentage of women who bicycle (20–35%).

Women are Less Involved in Politics Than Men

Several women talked about the fact that women's participation in politics is lower than men's, and that women's low participation in bicycle (and pedestrian) advisory committees might reflect this.

> Politics are historically male … it's probably historical, mostly, why there are not many women on the bicycle advisory committee. I don't think it necessarily has to do with the fact that there are not a lot of women cyclists. I think it has more to do with the fact that politics is primarily controlled by men …

> I would assume more men are interested in public office, and therefore maybe would start on these committees, 'cause I think one of my [male] friends was on it for that reason, and another guy was, kind of … I think that may be part of it.

Women Are Too Busy with Families and Work

Being on a bicycle (and pedestrian) advisory committee is a serious time commitment. Members are asked to read through large packets before each meeting, they are sometimes asked to do fieldwork, and they might be expected to meet with public officials and staff outside of official committee meetings.

When asked why there were so few women on bicycle (and pedestrian) advisory committees, many of the interviewees suggested that women do not have time because of their many responsibilities, including work and family.

> I know a lot of women who work outside the home, spending time in their job and having kids and being the primary caretaker—that in and of itself is a real juggling act. So if you add, on top of that, participation in something like this, it can be a deal breaker. It can just be too much.

One member who was a mother of small children said:

> Interestingly, on our committee, I'm the only one with kids, of the women, and there's nobody who works and has kids and is on our committee—no female … All my mom friends who have jobs, they would *never* do something like this, 'cause it's too extra-curricular, too time-consuming. They can barely manage their job and their household. And I have to say, even my peers who don't work and have children don't do stuff like this either. If they're gonna do something, it's gonna be in their kid's school, it's gonna be really, really focused … [on] the family or the smaller community.

Sex-Role Expectations Limit Women's Involvement

Several women mentioned that expectations for men with children and women with children differ, and that fathers generally have more freedom than mothers. One woman explained how these sex-role expectations may contribute to women's low rates of participation in bicycle advisory committees:

> And also, [it has to do with] how people perceive us … I was speaking [to another woman] who I really respected, and she said something to me that was completely out there. She said, "You know, I think men should have activities outside of their family, but women, it's ridiculous for them to do anything except tend the house and work, if they have to … Our role, as women, is to be in the house." And she just kind of said it matter-of-factly, and this is coming from a woman, not even a man. And so I think maybe some women just feel like, there's a level of guilt to do something outside of their homes … it's almost like you're taking time away from your family, when you should be there.

Meeting Content is Not Interesting to Women

Members of one committee reported that the content of their meetings was very technical and, as a result, somewhat boring to them and probably to many other women.

> We've been, as a committee, really focused on the pavement on the ground, and the angles … and honestly, you have to have a certain mind for that, and it's kind of boring sometimes. So I think that's a big deterrent to a lot of women … I think less women are engineering minded.

> I think that … the committee … it is really dry stuff, and it's not interesting to what women really care about [concerning] cycling potentially. I mean it's how you get there—the lines on the pavement and the bike paths and whatnot are what make it possible. But I think women might be more interested—and I certainly would be more interested, too—in talking about how do you actually educate riders to be safer, or provide safer riding environments …

If the content of bicycle (and pedestrian) advisory committees is uninteresting to many women, this will clearly impact their desire to get involved. Interestingly, this is the second instance in which the technical nature of the committees was raised by the women during the interviews. (See the previous section, "Men Have Authority Due to Technical Backgrounds," for the first instance.) The relationship between the committees' technical content and women's participation will be explored in the Discussion section at the end of this chapter.

What Can Be Done to Increase Women's Membership?

The women were asked to brainstorm about possible strategies that could be implemented to increase the number of female members on their committee or on other bicycle (and pedestrian) committees. Most of the tactics the women proposed would have to be undertaken by the government or agency that convenes the committee, since committee members typically have little to no involvement in choosing new members. The first suggestion below, however—which was the most common—does involve efforts of the committee members.

Committee Members Could Recruit Individual Women

Many of the women recognized that the committee members themselves could actively encourage individual women to apply to their committee. They suggested that they could tell their female friends and acquaintances who share their interest in bicycling and walking about the committee and could encourage them to apply. Many do this already, without a focus on gender:

> One thing I've done occasionally is, as I'm bicycling … if I meet somebody at a stoplight, I might mention it [the committee].

> You can kind of get people to get more involved … I'll talk to them and just say you'd be really good on [body X] … It is sort of recruiting. It's sort of planting that seed and talking to people and helping them see the benefit of being involved and the type of impact they can have …

Government/Agency Could Take a Range of Measures

In addition, the women suggested that the entity convening the bicycle (and pedestrian) advisory committee could engage in any number of the following measures:

- **Recruit women.** When the city/county/agency advertises an open committee seat, they could encourage women to apply.

- **Encourage appointers to choose women.** Staff could tell the people responsible for appointing new members—usually city council members or county supervisors—that the committee could use more women.

- **Enact a policy requiring a gender balance.** Governments/agencies could adopt a policy that specifies the desired gender composition of their committee, such as a 50/50 split. Such a policy could be part of the committee bylaws.

- **Target certain populations and groups.** To find women, recruitment efforts could be targeted at specific populations and organized groups, including:

  - Mothers, via schools[130] and mother's clubs
  - Schoolteachers
  - Young women in universities
  - Women's groups
  - PTA groups
  - Mixed-gender groups in which women hold leadership roles
  - Safe Routes to School task forces[131]

    As a current member who took the survey stated:

    I think a prime target might be mothers of schoolchildren who are concerned about the safety of their child or children's trip to and from school. That's how I got involved.

- **Impose terms limits.** For committees that have a male majority, lack of term limits could extend this male majority indefinitely. Therefore, several women suggested imposing term limits, in order to give women a chance to get involved.

- **Designate alternate members.** Having alternate members could give women a chance to participate in a committee in which the majority of the regular members are male. This tactic could be especially useful on committees that do not have term limits.

- **Increase the pedestrian focus.** As explained in the Results section in the previous chapter, combined bicycle and pedestrian committees had a higher percentage of women than bicycle committees. While this finding was only moderately significant, it suggests that women may be more interested in pedestrian issues than bicycle issues. Several times during the interviews, the researcher heard that bicycle issues tend to dominate combined bicycle and pedestrian committees. If this is common, and if women are more interested in pedestrian issues, balancing the focus between pedestrian and bicycle issues on combined committees could increase women's involvement.

- **Change time of meeting and/or provide childcare.** Several survey respondents who were current committee members suggested that evening meetings were hard for women and mothers with family responsibilities. When asked how committees could increase their female membership, one survey respondent said:

  > Have the husbands or partners assume more of the household responsibilities. Meetings are most often in the evenings making it challenging on the home front.

  Some of these survey respondents mentioned that offering childcare would enable more women to attend meetings.

- **Help women understand the importance of their contribution.** When asked how to get more women involved in bicycle (and pedestrian) advisory committees, a number of the interviewees discussed the importance of educating potential members about how they could contribute and what impact their involvement would have on the community. Some of the women thought this was especially important information for women. As one woman explained:

  > I've been involved with, as you all have, with community groups for a long time, and something that pops up all the time consistently … lots of women volunteer, and they're not looking for personal, they're not looking to pad their sphere of influence … they came because they wanted to make something better for people in the community … And the men will pop in … they want to associate with the prestige … I think the motivations for women are really strongly tied to … "I came here to make a difference, to make something better for other people in the community."

Snowball Effect: Women's Presence Will Encourage Other Women

Increasing the proportion of women on bicycle (and pedestrian) advisory committees can be its own tactic to further increase the number of women involved. A woman on a female-

majority committee was describing how she and her fellow female committee members influence other women, solely by their presence:

> I also think that we're kind of like visual marketing. I think when people just see us, it's kind of encouraging for them to join too. I remember when I first started, I told one of my mom's friends … She's an avid biker. She just asked me, "What's going on? I heard you were on some sort of a committee." I said, "Yeah, the bicycle/pedestrian committee." She said, "Women do that? … I kind of wanna join." So just seeing women involved in committees—that's a powerful effect. It's like, "Well if they can do it, I can do it."

Additional Findings of Interest

The interviews resulted in a mountain of data full of interesting insights and experiences. While the main findings are discussed above, a few additional findings are worth mentioning.

Need for Ethnic and Age Diversity

Interestingly, only a few women on male-majority committees explicitly stated that they thought their committee should have more women. It did not seem to be a concern for most of these women. On the other hand, women across most of the committees repeatedly discussed the need to increase the ethnic and age diversity of their committees. One woman explained the benefits of a diverse membership:

> I like input from different ethnic groups, and racial groups … It's just that you get different perspectives. Everything in society is better when you get perspectives from all different groups, from all different backgrounds and life experiences and so forth.

Another woman, who was the youngest on her committee, decried the lack of young people:

> Right now, high schoolers and college students are huge cyclists … that's a community that is not well-represented on the BAC—they probably don't know, half of them, about the BAC … I just think that we're not really representing the people of [our city] when the committee is not representative of the people of [our city].

Again and again, the women recognized the complete absence of Latino members on their committee and even on other advisory bodies:

> There are no minorities … and actually probably [our city] is majority Hispanic now, or at least half … and there are no Hispanic members on our [committee].

> We have, you know, a large Latino community and not one person on our [committee] is Latino … we need to … have more representation from the Latino community.

> I'll tell you one of the things that I thought would have been great to have on our committee—still could be in the future—is to have a Spanish-speaking person, you know, because it's very reflective of our community … to have somebody who's from

> the Latino population … I've been amazed. [Speaking to her colleagues] Look at all the committees and commissions in [our city]: How many people would you say are, represent that population? [A fellow committee member said "one."] Okay, okay, so one, out of all the committees and commissions.

This awareness that certain population groups were not represented on the committee may be related to the notion raised by some of the interviewees that women have an awareness outside of themselves—that they tend to focus on other groups.

Commonality Across Female-Heavy Committees: Women's Presence in Local Politics

An unexpected finding came from the three committees with the greatest percentage of female members. Women on all three of these committees talked about the strong presence that women had in their local governments. Women on the two female-majority committees interviewed said:

> [This committee] is the most female-dominated group I'm in, outside of PTA-ish kind of stuff … It's funny—Planning [Commission] has been pretty female-dominated too … and our council was pretty female-dominated. So I think this town has a lot of estrogen. It's in the water!

> I will make an observation, just beyond our committee … we happen to be in a situation where the main staff people we deal with are women, we have a city attorney who is a woman … The council members that I think we view as our strongest allies are women.

A woman on the next most female-heavy committee described something similar when she speculated why her committee might have so many women:

> Our council, there's a lot of female representation on our council … I think some of the female council members like to appoint more female representatives.

So women on the three committees with the most women all brought up how prominent women were in local politics. Compare the experiences of these women to the experience of an interviewee who was serving on a committee with fewer than 15% women members. In talking about the political climate in her city, she said:

> It's just like a boy's club, you know—smoke a cigar with someone you know [to negotiate] … I don't think that's something I'd be invited to.

Political climate was not discussed with all the committees, but these findings suggest that having women in positions of power could affect women's participation in bicycle (and pedestrian) committees. As suggested by one of the interviewees above, women in office might be more likely to appoint other women. This could be a deliberate action, or it is possible that women simply have more relationships with women than men. In addition, women in office or in government positions might serve as role models, which could inspire other women to get involved.

Summary of Findings

The interviews with the women from the ten committees revealed the following findings:

- Women on these bicycle (and pedestrian) advisory committees seem more likely than men to bring up women's issues, children's issues, and issues related to other user groups.
- Several aspects related to the committees might be unappealing to some women, including:
    - The steep learning curve experienced by new members
    - The high proportion of male members
    - Men's unsupportive behavior
    - Men's tendency to dominate the floor
    - Men's increased likelihood of having a technical background
- Several characteristics related to the women themselves might act as barriers to participation, including the need to feel knowledgeable before speaking, the lack of confidence in their contribution, and women's tendency to care for children.
- The interviewees suggested that women's low membership numbers might simply reflect women's low rates of participation in bicycling and politics. Other explanations provided were sex-role expectations, women's time constraints due to work and family, and women's lack of interest in the technical meeting content.
- Women on almost every committee had an awareness of their committee's lack of ethnic and/or age diversity. The women were less aware of their committee's lack of gender diversity.
- Women on the three committees with the highest percentage of women (out of the ten) all commented on the significant presence of women in their local government.

The women's ideas about how to increase women's membership in bicycle (and pedestrian) committees are incorporated into the Policy Recommendations section at the end of this report.

DISCUSSION

This study has found that the women on these ten committees make a unique contribution to their bicycle (and pedestrian) advisory committees. Of particular importance is the finding that these women seem more likely than men to raise issues that relate to women. This finding is consistent with research that women serving on legislative bodies in the

U.S. are more likely than men to advocate for women.[132] Knowing that women serve as their own advocates on the committees is an important finding, because it suggests that with women's increased presence, these bodies will be more likely to address women's unique cycling needs.

This study also discovered that some aspects of the male members' participation in the committees might be unappealing to women. Some women mentioned that men's dominance of the discussion was a deterrent, especially because the women did not feel comfortable interrupting to have their say. This is consistent with research that women are less likely than men to interrupt a speaker in a mixed-gender group,[133] meaning that men are more likely to interrupt and dominate the floor. Other women mentioned instances of men being dismissive of women's concerns. Both of these dynamics—men dominating and being unsupportive—may not only limit the retention of women members, but may also deter women from joining. Even though these dynamics were not found in the majority of committees, the sample size was small, making it impossible to know how common these instances are across all bicycle (and pedestrian) advisory committees. They are discussed here because they were mentioned by current members who were interviewed as well as past members and non-members who took the survey.

The technical nature of the committees was also raised during the interviews as a possible deterrent for women. First, some women believed that the technical content would not be interesting to women, which is supported by research that women tend to be less interested in engineering than men.[134] (The reasons for this lack of interest are very complex and are therefore beyond the scope of this research.) In addition, one interviewee noticed that more male members on her committee had technical backgrounds than the women, which is not surprising, considering that men dominate the fields of engineering,[135] architecture,[136] and planning.[137] This interviewee believed that the male members' technical backgrounds lent them an air of authority. Such a situation could lead the members without technical backgrounds—who are more likely to be women—to feel intimidated. In summary, these findings reveal that, in light of women and men's continuing dominance in certain professional fields, the technical nature of bicycle (and pedestrian) committees might contribute to women's lower rates of participation.

In addition, most of the women felt lost as a new member, a feeling that could contribute to high rates of turnover. This study does not provide evidence about whether the steep learning curve experienced by women is experienced to the same extent by men, but a few clues suggest that it is not. First, because men are more likely than women to have technical backgrounds, as discussed above, male members may come to committees with more knowledge than women and thus feel less lost. Second, research has shown that women tend to underestimate their abilities and knowledge.[138] This tendency may lead new women members to believe they know less than they actually do, which could make them more uncomfortable than men, who have been found to be overconfident in their knowledge.[139] Taken together, it is possible that women members' lack of technical knowledge and/or their lack of confidence in their knowledge could result in them leaving committees more frequently than men.

The interview findings also suggest that women may bring some of their own barriers to participation with them when they join committees. In particular, many of the women mentioned their general reluctance to speak when they were not prepared or confident in

their knowledge, and other women expressed a lack of confidence in their contributions. These findings might be explained by research mentioned above that women tend to underestimate their abilities and knowledge.[140] If women are more likely than men to feel unqualified, it may mean they are less likely to join committees in the first place or to participate once they are members. This reluctance to participate was seen across most of the interviews, and it is an important finding because it illustrates that women's presence on committees is not enough to ensure that women's perspectives are a part of committee discussions. Women on the committees must feel comfortable speaking—a task that may be more challenging for them than for men.

A final finding worth mentioning is the effect that family responsibilities seem to have on the participation of these women in their committees. Only two women of the 24 interviewed had children under five, and both of these women discussed instances in which their caretaking responsibilities limited their ability to participate in their committees. In addition, when all the women were asked to contemplate why women's rate of membership in committees was low, many suggested that women were too busy with work and family. These notions are consistent with research that women still bear the burden of family and household responsibilities.[141]

Although the interviews provided data about women's experiences that would have been difficult to obtain through other means, the methodology had its limitations. Explicitly asking women about differences between men and women may not have been the best way to elicit rich information. As mentioned previously, gender was not a salient aspect of many of the women's lives. Also, some of the women seemed defensive when answering such questions, as if they would be betraying men if they identified any differences. Other women seemed to struggle to find differences, making a clear effort to come up with some sort of response. This effort might have resulted in some of the women creating differences where they did not exist, just so they could produce an answer to the question. In this way, the questions themselves might have been leading and therefore may have biased the results.

Furthermore, individual interviews with committee members may not have been the best method for uncovering group dynamics. These one-on-one interviews were necessary because several women were the sole female member of their committee. Nevertheless, these solitary interviews did not afford these women the interplay with other members, which was common during group interviews. Again and again in the group interviews, the researcher saw one person's comment trigger an idea or recollection in another person, and this dynamic provided a rich source of information about gender differences. For example, an interviewee would say she did not see any gender differences on her committee. Later, a fellow committee member would bring up a difference. The group would then start talking about the issue, and often the initial member who saw no differences started relating her own stories about such differences. This dynamic was not possible in individual interviews, which means that the experiences of these lone women could not be tapped into in the same way.

Finally, the results of these interviews cannot be generalized to all women members of bicycle (and pedestrian) committees in California since the sample was very small and was not representative.

Remedies for addressing the above barriers to women's participation in committees are discussed in the Policy Recommendations chapter at the end of this report.

V. SURVEY OF WOMEN IN BICYCLE CLUBS/BICYCLE ADVOCACY GROUPS

An online survey of women bicyclists was created to answer Research Questions 3 and 4:

3. What barriers keep female citizens from seeking membership on bicycle (and pedestrian) advisory committees?

4. What steps could be taken to increase women's participation in bicycle (and pedestrian) advisory committees?

This survey was distributed through numerous bicycle clubs and bicycle advocacy groups in California. As described earlier, bicycle advocacy groups are community groups that advocate for improved bicycling conditions, while bicycle clubs are community groups that organize recreational bike rides.

METHODOLOGY

Identification of Bicycle Groups to Distribute the Survey

As part of the research done for the interviews in Chapter 4, ten community-run bicycle groups were identified in the same ten regions where the interviewed committees were located. This match was important for two reasons:

1. To ensure that conditions specific to a given area could be isolated. For example, town x might have certain conditions that make both the women on the bicycle committee and the women in the bike group answer in similar ways (and in ways that differ from women in the other areas).

2. To ensure that committees did exist in the areas that were surveyed, since the survey asked about the existence of local committees.

The ten groups chosen each agreed to distribute the survey information and URL to their members. To increase the reach of the survey, additional groups were contacted. Six of these agreed to distribute the survey information, making a total of 16 groups that would distribute the survey. Since ten of these groups are located in the same areas as the ten committees that were interviewed, the groups are not named here in order to protect the identities of the interviewees. When applicable, we also removed the names of these groups from the survey respondents' quotes that appear in this chapter.

Table 16 contains descriptive information about the 16 groups that distributed the survey information.

Table 16. Characteristics of the 16 Bicycle Groups that Distributed the Survey

		No. of Groups
Type of Group	Advocacy	13
	Riding Club	3
Geographic Scope	City	5
	County	8
	Regional (multiple counties)	3
Location[a]	San Francisco Bay Area	7
	Sacramento/Tahoe	3
	Central Coast	3
	Southern California	2
	Central Valley	1
	Northern California	0

[a] *The 6 geographic regions correspond to the following counties:* San Francisco Bay Area: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma. Central Coast: Monterey, San Benito, San Luis Obispo, Santa Cruz, Santa Barbara. Sacramento/Tahoe: El Dorado, Placer, Sacramento, Yolo. Central Valley: Alpine, Amador, Calaveras, Fresno, Inyo, Kern, Kings, Madera, Mariposa, Merced, Mono, San Joaquin, Stanislaus, Tulare, Tuolumne. Southern California: Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, Ventura. Northern California: Butte, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Nevada, Plumas, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, Yuba.

Once these groups distributed the survey information, news of the survey continued to spread: approximately 20% of the survey respondents indicated that they heard about the survey from sources other than the 16 groups, including other bicycle clubs and advocacy groups, bike shops, transportation organizations, bicycle (and pedestrian) advisory committee coordinators, transportation-related electronic discussion lists, email, and Facebook.

Survey Design

The survey instrument was created using SurveyMonkey, an online survey service. The target audience was women bicyclists over 18 who live in California.[142] Men were disqualified from taking the survey, as were women under 18.

The survey was designed to determine what barriers keep women from seeking membership in bicycle (and pedestrian) advisory committees in California. To explore these barriers, the survey sought to answer two main questions:

1. To what extent are women aware of their local bicycle (and pedestrian) advisory committee?

2. For women who are aware of their committee, but have never been members, what reasons keep them from seeking membership?

Awareness: Crafting a question to explore awareness proved difficult because bicycle committees are convened at both the city and the county level, which means that some areas have more than one committee. The simple intent was to discern whether the respondents were aware of the existence of any local committees, but it was determined that this awareness could take multiple forms:

- Respondents might know of a city-level committee and/or a county-level committee.
- Respondents might know that their area has no committees.
- Respondents might know that their city does not have a committee, but they might not know if their county does.
- Respondents might know that their county does not have a committee, but they might not know if their city does.

All of these scenarios indicate awareness of whether one or more committees exist where respondents live. Therefore, respondents were given all of the above options. Finally, respondents were given an option to indicate that they did not know whether there were any committees in their area. Women who chose this response were led to a list of committees throughout the state before they were directed out of the survey.

Barriers: To explore why women who were aware of a committee had never pursued membership, questions were first designed to filter out current and past committee members. (These respondents were asked for some information before they left, as shown in Figure 2.) The remaining respondents were asked to choose from a range of reasons they had never sought membership in their local committee. These options were mostly drawn from research on barriers to women's participation in politics. In addition to these provided options, respondents were also given an "other" box to add an additional response.

The survey was designed using skip logic, a method that guides respondents through different question paths based on how they respond. The main paths are shown in Figure 2.

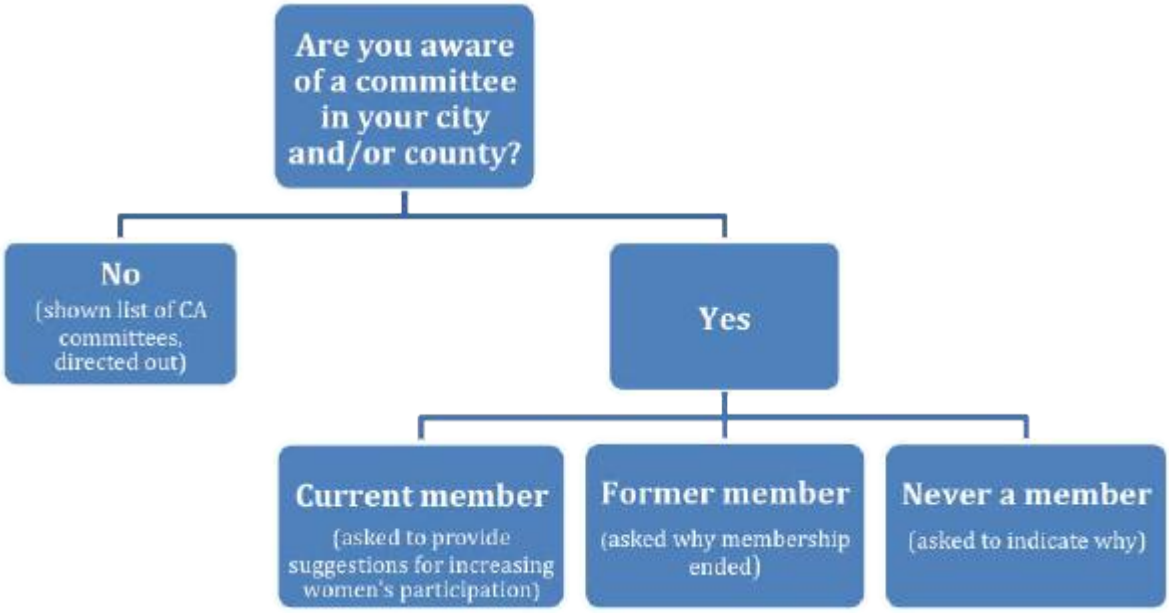

Figure 2. The Main Paths Through the Survey

The linear version of the entire final survey can be found in Appendix D. It is important to remember that this version is not what a typical respondent experienced. Each respondent was guided through a specific sequence of questions based on their previous responses. This means that each respondent was not presented with all the questions found in the full version of the survey. In addition, respondents were permitted to skip some of the questions (the full survey in Appendix D indicates which questions required a response).

Survey Testing and Distribution

Prior to distribution, the survey was pretested by thirteen women bicyclists living throughout California. Based on their feedback, changes were made to survey formatting, question wording, and multiple choice options.

The final survey was live from August 1, 2011, to September 30, 2011. The 16 bike groups sent out the survey information in various ways. Some of the smaller groups sent it to their email list or their group listserv. Many of the groups included the survey in their newsletter (electronic and print). Some posted the survey information on their Facebook page, and several groups posted it to Twitter.

Data Analysis

Five hundred and sixty-five respondents took the survey. First, the responses were filtered so that all respondents were women and California residents. This left us with a final sample size of 530 respondents (93.8% of the total respondents). Since we did not have membership rosters, or gender distribution for the bicycle groups, we cannot identify the total number of eligible respondents. Next, responses in the “other” boxes were coded. Responses that fit under existing response options were folded into the counts for those responses, and several new response categories were created.

After the data was prepared, the responses were analyzed using descriptive statistics.

It is important to note that because the survey was for women only, it is not possible to know whether the respondents’ experiences and barriers to participation differ substantially from those of men in the bicycling community in California. Without surveying men, this study can only uncover the experiences of women bicyclists.

RESULTS

Topline survey results can be found in Appendix D. The analysis of these results is presented below.

Survey Sample and Demographics

The final sample of 530 respondents consisted of women who lived in California and were 18 or older at the time of the survey. Table 17 shows the age and work status of these respondents.

Table 17. Survey Respondent Demographics

Age	% of Women[a]	Work Status	% of Women[b]
under 18	0	Employed full-time	55
18–24	6	Employed part-time	20
25–34	29	Student	12
35–44	23	Self-employed	11
45–54	20	Retired	7
55–64	18	Volunteer / intern	6
65–74	4	Homemaker	5
75 and over	1	Unemployed	4
		Other	1

Note: n = 530.

[a] *Due to rounding, percentages do not add up to exactly 100.*

[b] *Respondents could choose multiple options, so the percentages do not add up to 100.*

As Table 17 shows, 25- to 34-year-olds formed the largest age group in the sample, and 72% of the sample was between the ages of 25 and 54. In comparison, the women interviewed for this study were substantially older than the survey respondents. Interviewees aged 45 to 54 comprised the largest age group of that sample, and 71% of the interviewees were aged 45 and older. Employment status, however, was similar across the samples: like the interviewees, most of the survey respondents worked either full- or part-time.

Women living in 152 different California cities responded to the survey. Table 18 shows the spread of respondents across six regions in the state.

Table 18. Respondents' Region of Residence

Region[a]	% of Women[b]
San Francisco Bay Area	47
Southern California	37
Sacramento/Tahoe Area	7
Central Coast	6
Central Valley	3
Northern California	1

Note: n = 521.

[a] *The 6 geographic regions correspond to the following counties:* San Francisco Bay Area: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma. Central Coast: Monterey, San Benito, San Luis Obispo, Santa Cruz, Santa Barbara. Sacramento/Tahoe: El Dorado, Placer, Sacramento, Yolo. Central Valley: Alpine, Amador, Calaveras, Fresno, Inyo, Kern, Kings, Madera, Mariposa, Merced, Mono, San Joaquin, Stanislaus, Tulare, Tuolumne. Southern California: Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, Ventura. Northern California: Butte, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Nevada, Plumas, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, Yuba.

[b] *Due to rounding, percentages do not add up to exactly 100.*

As Table 18 shows, most of the women who took the survey lived in the San Francisco Bay Area or in Southern California.

Awareness of Committee

Question: Does your city and/or county have a Bicycle Advisory Committee or a Bicycle and Pedestrian Advisory Committee?

This question was one of the two main questions in the survey. The idea was to explore whether lack of awareness could be a major barrier to women's involvement in bicycle (and pedestrian) advisory committees.

The women were asked whether they were aware of a local city/county committee, and they were provided with five options in an attempt to cover all scenarios. For analysis purposes, these five options were collapsed into two overarching categories: awareness and complete lack of awareness. Table 19 shows how the responses were collapsed:

Table 19. Collapse of the Awareness Responses into Two Categories

Original Response Option	Analysis Category
Yes, I know of at least one committee in my community	Aware
No, neither my city nor my county has a committee	
My city doesn't have a committee, but I don't know if my county does	
My county doesn't have a committee, but I don't know if my city does	
I don't know if either my city or county has a committee	Completely unaware

The intent of the question was to determine not only if respondents knew of their local committee, but also whether they knew of these committees in general. Therefore, knowing that a committee did not exist was counted as awareness, since respondents would have to know that a committee could exist in order to know that one did not.

Table 20 shows the collapsed findings to the question about committee awareness:

Table 20. Awareness of Committee

	% of Respondents
Aware	67
Completely unaware	33

Note: n = 528.

The vast majority of the respondents—67%—had some level of awareness of their local bicycle (and pedestrian) advisory committee. While this number could be higher, it does not suggest that lack of awareness is a major barrier.

Caveat

After respondents were asked whether they knew of a committee, those who indicated yes were asked how they had first learned of the committee's existence. Several of the fill-in "other" responses to this question suggest that some respondents did not

understand the difference between a government-formed bicycle advisory committee and a community-formed bicycle advocacy group. One respondent stated this directly:

> I don't think I understand the difference between an advisory committee and an advocacy group. I am writing this assuming that the [bicycle coalition] is an advisory committee. If it's not, then I don't know of any advisory committees in my community.

Other responses clearly indicate that the respondents are explaining how they learned about their local bicycle advocacy group, rather than an advisory committee:

> The [bicycle coalition] offers valet parking at community events and I usually make sure my membership is up to date.

> The [bicycle coalition] publishes all the maps that have bike routes on them. I sought out one of these maps and became familiar with the [coalition] that way.

Another respondent's answer suggests that she is talking about her local advocacy group, since this group sponsors the ride she refers to.

> They sponsored a ride that a friend encouraged me to do [name of ride].

Three other respondents mentioned that they learned about their committee from this same ride. While it is possible that information about the committee was shared during the ride, the fact that the local bicycle advocacy group sponsors the ride makes the validity of these responses questionable.

Finally, several "other" responses from the final survey question indicate a similar confusion about the difference between a bicycle advisory committee and a bicycle advocacy group. In response to the question "What are the reasons you haven't joined your local committee," responses written under "other" included:

> I recently moved, and had been a member of a coalition (different than committee?) in a different area.

> I am a member of the [bicycle coalition], but I do not serve on its board.

Taken together, the above responses provide evidence that some of the respondents were not clear what a bicycle advisory committee is and how it differs from a bicycle advocacy group, despite the explanation in the survey. This confusion calls into question the validity of the answers to the question that asked whether respondents were aware of their local committee. Granted, many of the written-in responses to the "how did you hear about the committee" question made clear references to bicycle advisory committees, and only five definitely referred to advocacy groups. Also, for the final question about barriers to involvement, only 2 of the 94 "other" responses indicated confusion. Nevertheless, the fact that some respondents clearly did not understand what a bicycle advisory committee is means that the finding that 67% of women were aware of their local committee is a high estimate.

Membership Status

As discussed earlier, 67% of respondents (353 women) indicated that they had some level of awareness of a local committee. Twenty-four respondents indicated that they were current committee members and 18 indicated that they had been members in the past. Assuming that all 353 women answered the current and past member questions (they could skip them), 311 survey respondents were aware of a local committee, but had never been a member. This is approximately 59% of the total sample.

Barriers to Participation

Question: What are the Reasons You Haven't Joined the Committee or Haven't Considered Joining?

Respondents who knew about their local committee, but had never been a member were asked to indicate why they had not joined. The women were given 11 multiple choice options and an "other" fill-in box, and they were able to choose multiple options. (See the topline survey results in Appendix D for the original options and response counts.) Since several of the options fell into a larger category, we recategorized and recoded some of the response options. In addition, the open-ended "other" responses were coded and folded into the analysis. The results of this analysis are shown in Table 21.

Table 21. Barriers to Seeking Committee Membership

Barrier	% of Respondents[a]
Time	60
Not qualified	25
Lack of information about committee	18
Family/household responsibilities	16
Lack of interest in politics	12
Dislike of public speaking	9
No open seats	8
Lack of interest (general)	7
Unfriendly committee environment	4
Other	12

Note: n = 270.

[a] *Respondents could choose multiple options, so the percentages do not add up to 100.*

In hindsight, the wording of this question was somewhat misleading, because often one cannot simply join a committee. Although some committees in California have open membership, most have a formal application and appointment process. However, we feel that the responses received reflect the barriers faced by these women, regardless of whether they "join" or are "appointed" to the committee.

#1 Barrier = Time

Time was chosen by the most women (60%) as a barrier to involvement in bicycle (and pedestrian) advisory committees. Three response options were folded under this umbrella category. Table 22 shows the percentage of women who chose each. As a reminder, the respondents were allowed to choose multiple responses, so the percentage of respondents for the three options are not discrete. Because of this, they do not add up to the percentage of respondents for the overall category. This is true for all the categories and suboptions presented in this section.

Table 22. Time-Related Barriers to Involvement

Barrier	% of Respondents[a]
TIME	60
I don't have time	45
It's too big of a commitment	28
Meeting day/time does not work	12

[a] *Respondents could choose multiple responses, so the percentages for the three options are not discrete and do not add up to the percentage for the overall category.*

As Table 22 shows, approximately 45% of respondents indicated that they did not have time to become involved in the committees. Of the 11 pre-provided response options to the question about barriers, this option was chosen by the largest number of women.

#2 Barrier = Not Feeling Qualified

Approximately 25% of the respondents indicated that they did not feel qualified to be a member of their local committee. Three response options were folded under this umbrella category. Table 23 shows the responses to each of the three.

Table 23. Barriers Related to Lack of Knowledge/Qualifications

Barrier	% of Respondents[a]
NOT QUALIFIED	25
Don't know enough about government	17
Don't know enough about bicycling	13
Other (related fill-in responses)	2

[a] *Respondents could choose multiple responses, so the percentages for the two options are not discrete and do not add up to the percentage for the overall category.*

Seventeen percent (17%) of respondents felt they did not know enough about government to pursue committee membership, while 13% indicated that they did not know enough about bicycling. In addition, a number of women provided responses that indicate a general lack of qualifications:

I feel that others know more than I.

I don't know if I really have much to contribute other than I'd like to see more people feel like biking is a safe and viable option for their transportation needs.

These responses suggest that some respondents may simply lack confidence in their knowledge and qualifications. This lack of confidence was also seen in the interviews and will be discussed further in the Discussion section at the end of this chapter.

#3 Barrier = Lack of Information about the Committee

Approximately 18% of respondents indicated that they had not pursued membership in their local committee because they did not know enough about the committee. Two response options were folded under this umbrella category, as shown in Table 24.

Table 24. Barriers Related to Lack of Information About Committee

Barrier	% of Respondents[a]
LACK OF COMMITTEE INFORMATION	18
Don't understand what the group does	14
Other (related fill-in responses)	4

[a] *Respondents could choose multiple responses, so the percentages for the two options are not discrete and do not add up to the percentage for the overall category.*

Most of the respondents who lacked specific knowledge about the committee indicated that they did not understand what the group did. Other respondents wrote fill-in responses that indicated their lack of knowledge about the following aspects of the committee:

- How to become a member
- What experience and knowledge members must have
- How to find out about openings
- When/where the committee meets

#4 Barrier = Family/Household Responsibilities

Family and household responsibilities were named as the fourth greatest barrier to women's participation in bicycle (and pedestrian) advisory committees. Approximately 16% of respondents indicated that these responsibilities kept them from getting involved. Two response options were folded under this umbrella category. Table 25 shows the responses to each.

Table 25. Barriers Related to Family and Household Responsibilities

Barrier	% of Respondents[a]
FAMILY/HOUSEHOLD RESPONSIBILITIES	16
I have too many family/household responsibilities	16
I don't have anyone to watch my kids	3

[a] *Respondents could choose multiple responses, so the percentages for the two options are not discrete and do not add up to the percentage for the overall category.*

Because the overall percentage (16.3%) closely matches that of the first option (15.6%), it means that most of the women who chose the second option also chose the first.

It is interesting to note that even though 16% of the respondents indicated that family and household responsibilities were a barrier, only 3% indicated that lack of childcare was a barrier. For this sample, at least, childcare was not a major component of why household and family tasks were obstacles. Instead, with 16% of the women indicating they had "too many" of these tasks, the implication is that their time is scarce. This connects back to the number one barrier of time.

#5 Barrier = Lack of Interest in Politics

Twelve percent of respondents indicated they that had not made an attempt to join their local committee because they were not interested in politics. While research suggests that women tend to have low levels of interest in politics,[143] our results seem to imply that other barriers take precedence when asked to indicate the reasons why they haven't become involved.

The sixth through eighth most frequent barriers shown in Table 21 are self-explanatory, but the ninth deserves special attention.

#9 Barrier = Unfriendly Committee Environment

Of the 11 response options that were provided, none addressed the committee environment. Nevertheless, 4% of the women who answered the question wrote in "other" responses that indicated that the environment of the committee was a barrier to their involvement. These responses had to do with the general committee environment, specific personality conflicts, and the behavior of male members. The responses below illustrate these barriers:

<u>General Environment</u>

> The tone and hostility of committee was a real turn off.
>
> Group can be antagonistic and politicized. Local politics are not fun!

<u>Personality Conflicts</u>

> I observed a meeting and one member frequently rambled and went off-topic. It reminded me that we'd each [been] individually selected, but it didn't mean we'd

necessarily function well as a team, and I wouldn't want to commit several years and possibly have to serve with an individual like that.

I do not like one of the current committee members.

There also seems to be some big personalities on the committee, and I don't know how much compromise exists.

I don't particularly like some other members of the committee and don't think I would enjoy working with them.

Honestly, there was a member of the committee who was rude and often made personal attacks (verbal) against local city council members … I felt that he created an atmosphere in which compromise and rational discussion would not be possible.

Behavior of Male Members[144]

I was treated really crappy by the mostly male members there and noticed the few women who were there did not seem happy or outgoing, and no one was welcoming. It was a huge meeting. I thought, maybe I will wait until they evolve some before I spend my time and energy here.

In general, the men who dominate our local government and bicycling advocacy committees exude a feeling of exclusiveness and a closed social network that seems like it would require way too much energy to participate in as a woman and an outsider.

Too many geeky, 'obsessive' guys.

I don't like groups full of aggressive men, as bicyclists tend to be.

Four percent is a small portion of the respondents who answered, and it is not possible to know whether male members also have similar experiences with the committee environment. The most interesting information is that several survey respondents specifically mentioned the men on the committee as a barrier, although the percentage of respondents who reported this experience is extremely small. These responses are worth mentioning, however, because they echo some of the experiences of current and past women committee members, which were discussed previously. In addition, it is interesting that the women only explicitly called out male members as a deterrent—not one respondent specifically mentioned a female member, although several mentioned a problematic member without stating his or her gender.

Summary of Findings

The main findings from the survey are reviewed below.

- The majority of respondents (67%) had some level of awareness of whether a bicycle (and pedestrian) committee existed where they lived.

- The top five barriers to committee involvement named by the women were:

    1. Time (60%)

    2. Lack of qualifications (25%)

    3. Lack of specific information about the committee (18%)

    4. Family and household responsibilities (16%)

    5. Lack of interest in politics (12%)

- A small number of survey respondents explicitly named the male-dominated nature of their local committee as a barrier to their involvement.

DISCUSSION

The study has found that lack of awareness does not pose a major barrier to women's participation in bicycle (and pedestrian) advisory committees in California. The majority of survey respondents had some level of awareness about whether a local committee existed where they lived. This finding was unexpected at the conception of the study, because research has shown that women have less political knowledge than men. This lack of political knowledge was expected to extend to women's awareness of advisory committees, which are political bodies. Nevertheless, because the survey was distributed mostly by bicycle advocacy groups, which tend to be politically active, it makes sense that the sample would have a high level of awareness of these political committees that address bicycle issues. This level of awareness is advantageous for committees that want to increase their female membership, because it means they have the opportunity to target an audience that, for the most part, already knows about them.

Unfortunately, even though many women knew there was a committee in their city or county, 18% of these respondents reported that they did not have enough specific information about the committee to pursue membership. This means that governments and local agencies may not be providing enough details about their committees to the public, or that the information they are providing is not reaching the intended audience.

The most common barrier to committee participation, chosen by 60% of respondents, was time. This is consistent with a study by Verba in which respondents (both male and female) chose lack of time as the primary reason they were not politically active.[145] While this study does not provide evidence about whether lack of time affects women more than men, research has found that women face greater time constraints than men: women have less free time per day,[146] likely due to the fact that women spend more time than men on household activities and childcare.[147] In fact, women's continuing responsibility for the majority of household and childcare activities was reflected in another survey finding: the fourth most common barrier to women's participation in committees was having too many family and household responsibilities. This finding is also consistent with a study by Verba in which respondents (both male and female) chose the need to take care of

themselves and their family as the second most common reason for their lack of political participation.[148] Knowing that women are more likely than men to take care of their families, it is likely that this responsibility is a greater barrier for women than men when it comes to participation in bicycle (and pedestrian) advisory committees.

The second most common barrier to committee participation, chosen by 25% of respondents, was not being qualified to be a member. More specifically, many women felt they did not know enough about bicycling and/or government. The finding that women believe they do not have enough government-related knowledge to be a committee member is consistent with research that women are less likely than men to believe they have enough political knowledge to be a politician.[149] In addition, the women's feelings of not knowing enough about bicycling might reflect the fact that women are less likely than men to have technical backgrounds, which may put them at a disadvantage when it comes to understanding and analyzing the technical work of bicycle (and pedestrian) committees. On the other hand, it may be that women have sufficient qualifications, but simply lack confidence in them, which is consistent with research that women tend to underestimate their general knowledge and abilities.[150] Either way, many of our respondents do not feel they are qualified to serve. This is unfortunate, since they comprise half of the population, and their perspective and unique experiences could be of great benefit to committees.

The fifth most common barrier to women's involvement was a general lack of interest in politics, which is consistent with research that women are less interested in politics than men.[151] As with women's lower interest in technical fields (discussed in Chapter 4), women's lower level of interest in politics is likely due to a complex range of factors, including cultural norms that encourage women and men to pursue different interests and careers.

Finally, a number of survey respondents stated that they were not interested in committee membership because the environment created by the committee members was unpleasant and unwelcoming. Furthermore, a small number of these respondents specifically pointed to the male members and their presence and/or behavior. While this was an extremely infrequent response, it is included here because these responses echo previously mentioned responses. Further research is necessary to determine whether and to what extent men's presence and behavior on committees acts as a deterrent to women. Even without further evidence, committees can take steps to ensure that meetings are respectful and friendly to all members.

Like any research methodology, the survey had limitations. First, the sample of survey respondents was not representative of the population of women bicyclists in California, since the groups that distributed the survey were not chosen randomly. Instead, they were chosen based on specific factors such as their location, their size, and the researchers' familiarity with them. Additionally, most of the groups that distributed the survey were bicycle advocacy groups, which tend to be political in nature. It is likely that women involved with such groups may be more politically active and aware than an average woman bicyclist, making them more likely to know about bicycle advisory committees. If the survey had been distributed solely through bicycling clubs, for instance, awareness of bicycle advisory committees may have been lower.

Furthermore, the survey design had several flaws. Women who indicated that there was not a committee in their area were directed through the rest of the survey, which means they were asked why they had not joined their committee. This question clearly did not apply to them, so they should have been directed out of the survey. In addition, as mentioned previously, the language in several questions about “joining” a committee was misleading, since most committees in the state require interested citizens to go through an application and appointment process.

VI. CONCLUSIONS, POLICY RECOMMENDATIONS, AND FUTURE RESEARCH

This was the first known study to examine women's levels of participation in bicycle (and pedestrian) advisory committees in the United States. It attempted to provide a broad overview of women's participation in California committees, including an exploration of barriers to participation. Through an examination of committee composition, interviews with women serving on committees, and a survey of women bicyclists who were not committee members, this study uncovered the following findings:

- Women are underrepresented on bicycle (and pedestrian) advisory committees in California: the percentage of women on these committees (24%) is substantially lower than the percentage of women in the population (50%).

- Women committee members who were interviewed for this study regularly discuss women's issues related to bicycling, and based on the anecdotes and opinions they shared, they seem more likely to do so than men. This suggests that women's presence is vital if these committees are to address women's unique bicycling needs.

- Men's substantial presence and their behavior on bicycle (and pedestrian) advisory committees were named as deterrents to involvement by some women in this study (including current committee members, past committee members, and women who have never served on committees).

- Women committee members who were interviewed described additional barriers to participation, including a lack of confidence in their contributions and a reluctance to speak when they are not fully prepared. Knowing that women tend to underestimate their abilities and men tend to overestimate theirs, it is unlikely that male committee members exhibit this reluctance and lack of confidence to the same extent as women.

- The technical nature of bicycle (and pedestrian) advisory committees may be a deterrent to women's participation, since women are less likely than men to have technical backgrounds and are often less interested in fields such as engineering.

- A large percentage of women in the bicycling community—67%—are aware of their local bicycle (and pedestrian) advisory committee. Although this percentage is high, 18% of survey respondents said they did not have enough specific information about their committee to pursue membership.

- The number one reason women gave for not getting involved in bicycle (and pedestrian) advisory committees was time (chosen by 60% of respondents).

- The second most common reason women gave for not pursuing committee membership was their lack of qualifications (chosen by 25% of respondents). This study did not collect enough information to determine if this self-assessment was accurate. Nevertheless, women have been found to underestimate their abilities,

which casts doubt on the veracity of the women's assessment. The *feeling* of not being qualified, however, is something that can be addressed.

- Many women reported that they did not know enough about local government or have enough specific information about the committee to become involved. These findings indicate a great opportunity for governments and agencies to improve their outreach and educational efforts.

- Women's responsibility for household and family activities was identified in both the interviews and the survey as a factor that limits women's participation in committees. The committee members with young children discussed how their family responsibilities limited their participation, and approximately 16% of survey respondents indicated that family and household responsibilities were a barrier to pursuing committee membership.

If women bicyclists are largely aware of bicycle (and pedestrian) advisory committees, but the number of women serving on these committees is low, the main focus should be on increasing the number of women who seek to get involved. To do so, governments and agencies should expand their outreach to women. They must also address the barriers to involvement that women face, including committee-related barriers and personal barriers. Committee-related barriers are the easiest for governments and agencies to address, because the committee is under their direct control. Personal barriers to involvement are more complicated and therefore harder to address; for instance, governments and agencies can do little to ensure that women have more free time. Fortunately, there are steps that can be taken to address the other barriers listed above.

Next, we outline specific actions that governments and agencies can take to increase the number of women serving on their bicycle (and pedestrian) advisory committees.

POLICY RECOMMENDATIONS

Governments and agencies that want to increase women's participation in bicycle (and pedestrian) advisory committees should begin by reading the guide created by Iowa state called *Recruiting Gender Balanced Boards and Commissions: A Guide for Cities and Counties*. Although this guide is specific to Iowa, it contains many useful tips for recruiting women.

In addition, to increase the number of women on bicycle committees, governments and agencies could implement the strategies below. These suggestions grew out of the findings from the three parts of this study, including the suggestions made by the female committee members who were interviewed.

Education about the Committee

Almost one-fifth of survey respondents said they did not have enough specific information about their committee to consider membership. Educating the public about the committee is an easy remedy to this barrier, and it could also ease women's lack of confidence in

their qualifications. Additionally, continuing this education during membership could help address the steep learning curve many women members experience. Recommended strategies include the following:

- Outreach materials could explain the role of the committee, expectations for its members, and how the committee contributes to the community.

- New members could be given educational materials to help them understand planning terminology and practices, as well as the role and procedures of the committee.

- Women could be mentored through the application and appointment process, and they could be given additional support as new committee members. Considering the importance of women's perspectives to the committees, and knowing that women tend to lack confidence in their abilities, orientation to the committee's procedures and content might be more important for women than men.

Targeted Recruitment Efforts

Targeted efforts to recruit women could increase the number of women who apply to bicycle (and pedestrian) advisory committees. Ideally, this will result in committees with a more balanced number of men and women, which itself might make the committees appealing to more women. Recommended strategies include the following:

- Governments/agencies can expand their outreach efforts to women's organizations (women's clubs, mother's clubs) and to organizations in which women are very active (PTAs, Safe Routes to School groups, and so on). Environmental organizations might also be a good outreach target, based on the findings that many of the women committee members who were interviewed had environmental interests.

- Individual committee members can be asked to encourage women they know to apply.

- Women who attend committee meetings as members of the public could be encouraged to apply.

- When advertising openings, the government or agency can state, "Women encouraged to apply."

Policy and Procedural Changes

Instituting new policies and procedures could help ensure that more women have an opportunity to become committee members and can also make the committee environments more comfortable for women. Recommended strategies include the following:

- The chair and staff support person(s) should be educated about the challenges to participation faced by many women committee members.

- The chair and/or staff support person(s) should facilitate the meetings in a manner that gives all members an opportunity to speak and that prevents dominant members from monopolizing the floor. A formal turn-taking process could be instituted as part of this effort.

- The government/agency could provide childcare during meetings.

- The government/agency could create a policy that requires a gender balance on the committee. Enforcement of such a policy would be key, however, considering the lack of effectiveness of the few policies that currently exist.

- The government/agency could institute term limits. This is especially important on committees with a longstanding male majority.

OPPORTUNITIES FOR FUTURE RESEARCH

This study was a first attempt at understanding women's participation in bicycle (and pedestrian) advisory committees. As a result, there are many possible avenues for future research.

In hindsight, it would have been beneficial to include men in our study. By interviewing and surveying only women, we cannot definitively state that gender differences exist in committee members' experiences or in barriers to committee membership.

In addition to including men in the study, future research should explore the diversity of committee membership in terms of race/ethnicity, age, socioeconomic status, and other demographic characteristics. As discussed in Chapter 4, many of the women committee members who were interviewed referenced the lack of diversity in age and race/ethnicity in their committee membership.

Additionally, the survey should have been sent to an equal number of bicycle advocacy groups and bicycle clubs, to make sure it reached all different types of cyclists, and not just the politically natured ones who tend to join advocacy groups. Future research could remedy these missed opportunities.

Future research could also include direct observation of committee meetings, in order to obtain empirical evidence about gender dynamics or gender differences that occur within committees. For example, observation could answer the following questions:

- Do men (or women) tend to dominate the floor?

- Are men dismissive of women's concerns? Do they display macho or aggressive behavior?

- Is any of the above behavior more common when men are in the majority?

- Do men and women tend to bring up different topics of discussion?

This study found that women made up a larger percentage of members on combined bicycle and pedestrian committees than on bicycle-only advisory committees. These findings were only minimally significant, but future research with a larger sample of committees could explore this trend further.

Future studies could also gather data on the retention rates of committee members to determine if there are gender differences in the number of years served and the rates of turnover. If women are found to leave committees more frequently than men, the reasons behind the turnover could be investigated.

Finally, it would be interesting to study whether there is a relationship between the number of women in local government and the number of women serving on bicycle (and pedestrian) advisory committees. To explore this, data could be collected on the gender of bicycle/pedestrian coordinators and local elected officials. This data and the data on the committees' gender composition could be analyzed to determine whether patterns exist.

APPENDIX A:
TELEPHONE SURVEY SCRIPT

Date of Interview: _____

Agency/Entity: _____

Committee Name: _____

Committee Coordinator: _____

Coordinator's Contact info: (phone) _____

(email) _____

1. What is the formal name of your committee?
2. Is it a combined bicycle/pedestrian committee? YES / NO
3. When fully staffed, how many voting members does your committee have? _____
   - Are any seats currently vacant? YES: _____ NO: _____
   - How many current voting members are male? _____
   - How many current voting members are female? _____
   - Does the committee have alternate members? YES: _____ NO: _____

     # male: _____
     # female: _____
4. What is the configuration of your membership in terms of citizen vs. public officials/ employees?

   _____ # citizen members _____ # public employees
   _____ other:
5. Does your committee have member recruitment guidelines or rules about member- ship composition?

   YES / NO (If yes, could you send me a copy?)
6. Does the city / the county / your agency undertake any particular actions to recruit women onto your committee?
7. Do you know of any bicycle (and pedestrian) advisory committees in your area that I could include in my study?

APPENDIX B:
PRE-INTERVIEW QUESTIONNAIRE

Name: _____

1. In what year were you born? _____
2. What is your work status? (check all that apply)
    - ☐ full-time employed
    - ☐ part-time employed
    - ☐ homemaker
    - ☐ unemployed
    - ☐ retired
    - ☐ student
    - ☐ other: _____
3. Do you have children?
    - ☐ Yes
    - ☐ No
4. What is your household composition?
    - ☐ I live alone
    - ☐ I live with others: (check all that apply)
        - ☐ spouse/partner
        - ☐ children (select ages)
            - ☐ 0–5
            - ☐ 6–12
            - ☐ 13–18
            - ☐ over 18
        - ☐ others you live with: _____
5. How long have you served on the committee? (please fill in)

    ____ months OR ____ years
6. Do you currently serve on another government board, commission, or committee, or have you in the past?
    - ☐ Yes
    - ☐ No

If you do not ride a bicycle, you are done with the questionnaire. Thank you!

If you do ride a bicycle, please answer questions 7 and 8 below.

7. What is the main reason you ride a bicycle? (choose one)

- ☐ transportation
- ☐ fitness / sport / competition
- ☐ recreation / fun

8. How many hours do you ride a bicycle in an average week?

- ☐ less than 1 hour
- ☐ 1–2 hours
- ☐ 3–5 hours
- ☐ 6–10 hours
- ☐ 11–15 hours
- ☐ over 15 hours (Please specify: _____ hours)

APPENDIX C:
INTERVIEW QUESTIONS

1. How did you (each) come to be on the committee?

2. When you first joined the committee, what was it like to be a new member? Does anything stand out?

3. If I came to a typical meeting, what would your participation look like? For example, how much do you talk? Do you tend to lead the group, are you more of an observer, or are you somewhere in the middle? Etc.

4. Do you notice any difference between the participation styles of the men and the women on the committee? Do you notice any dynamics between the men and the women?

5. Do you feel respected by the men on the committee? Do you feel like they listen to you?

6. Research shows that women in the U.S. bike at much lower rates than men.
   6a.Were you aware of this?
   6b. Why do you think this is the case?

7. So you brought up X, Y, and Z as barriers to bicycling for women. Do issues like these get discussed by your committee? For instance, does your committee talk about X? Y? Z?

8. When discussing a project or program, what sort of concerns or issues do you tend to bring up? What topics are interesting or important to you?

9. Do you notice any differences in the types of issues and concerns that the men bring up, compared to what the women bring up?

10. If your committee was 100% women (or men), do you think the meetings and decisions would change in any way?

11. Why do you think there are so few women on bicycle/pedestrian advisory committees in the state?

12. If your city/county (or another city/county) decided they wanted to increase the number of women on your committee, what sort of things could they do? How could they achieve it?

13. Is there anything else that you'd like to share?

APPENDIX D:
SURVEY INSTRUMENT AND TOPLINE RESULTS

As mentioned previously, the survey used skip logic, so respondents did not answer all the questions listed below. Instead, they were directed through specific questions based on their responses.

* indicates required responses

Below are the topline survey results from the 530 respondents who indicated they were women aged 18 or older who lived in California.

1. What is your age?

Age Range	Response Percent
under 18	0.0%
18–24	5.5%
25–34	28.7%
35–44	23.0%
45–54	20.4%
55–64	18.1%
65–74	3.6%
75 and over	0.8%

Note: n=530

2. What is your work status? (select all that apply)

Work Status	Response Percent
full-time employed	55.3%
Part-time employed	19.8%
self-employed	11.1%
homemaker	4.9%
unemployed	4.3%
retired	7.4%
student	11.5%
volunteer / intern	6.0%
other	0.9%

Note: n=530

3. What is your household composition?

Household Composition	Response Percent
I live alone	22%
I live with at least one other person	78%

Note: n=528

4. Whom do you live with? (select all that apply)

Cohabitants	Response Percent
children	25.0%
spouse/partner	73.1%
other (please specify)	26.9%

Note: n=412

Women who indicated they lived with children were asked 5a and 5b. Women who did not live with children were directed to question 6.

5a. How many children do you live with?

No. of Children at Home	Response Percent
1 child	100%
2 children	47.6%
3 children	9.7%
4 children	1%

Note: n=103

5b. What are the ages of the children you live with?

Age of Children	Response Percent
0–5	19.4%
6–12	41.7%
13–18	37.9%
Over 18	26.2%

Note: n=103

6. How did you hear about this survey? (select all that apply)

The responses to this question are not presented here in order to maintain the confidentiality of this study's interview participants.

7. Where do you live?

Women from 152 cities in California completed the survey.

8. Does your city and/or county have a Bicycle Advisory Committee or a Bicycle and Pedestrian Advisory Committee?

Response Options	Response Percent
Yes, I know of at least one committee in my community	62.1%
No, neither my city nor my county has a committee	2.1%
I don't know if either my city or county has a committee	33.1%
My city doesn't have a committee, but I don't know if my county does	2.7%
My county doesn't have a committee, but I don't know if my city does	0.0%

Note: n=528

9. How did you learn of the committee's existence? (select all that apply)

Response Options	Response Percent
I was a founding member	1.2%
Someone told me about it	18.3%
I have a friend who is/was on the committee	14.9%
I learned about the committee through my local bicycle advocacy group	37.6%
I learned about the committee through my job	10.2%
I saw an announcement that there was an opening on the committee	6.8%
I learned about the committee through the city (or county or transportation agency) website	10.6%
I knew about bike (and ped) committees and sought out the committee myself	8.1%
I can't remember	11.2%
Other (please specify)	15.8%

Note: n=322

10. Are you currently a member of the committee?

Response Options	Response Percent
Yes	7.5%
No	92.5%

Note: n=320

Respondents who answered yes were directed to a page that asked for their ideas about how to increase women's participation in bicycle (and pedestrian) advisory committees. Respondents who answered no were asked question 11.

11. Have you been a member of the committee in the past?

Response Options	Response Percent
Yes	6.1%
No	93.9%

Note: n=294

Respondents who answered yes were then asked question 12. Respondents who answered no were asked question 13.

12. Why did your participation on the committee end? (select all that apply)

Response Options	Response Percent
I was termed out	22.2%
I didn't have time	22.2%
I had too many family/household responsibilities	11.1%
I didn't have anyone to watch my kids	0.0%
I didn't enjoy being on the committee	16.7%
I didn't know enough about bicycling to effectively contribute	0.0%
I didn't get along with the other committee members	0.0%
It didn't seem like we got anything accomplished	16.7%
Other (please specify)	55.6%

Note: n=18

13. Have you ever considered joining the committee?

Response Options	Response Percent
Yes	35.7%
No	64.3%

Note: n=272

14. What are the reasons you haven't joined the committee or haven't considered joining? (select all that apply)

Response Options	Response Percent
There are/were no open seats	7.8%
It's too big of a commitment	27.8%
The meeting day/time doesn't work for me	11.5%
I don't have time	43.0%
I have too many family/household responsibilities	15.2%
I don't have anyone to watch my kids	3.0%
I don't like speaking in groups	8.9%
I'm not interested in politics	12.2%
I don't know enough about bicycling to effectively contribute	13.0%
I don't know enough about government to effectively contribute	16.7%
I don't understand what the group does	13.7%
Other (please specify)	34.8%

Note: n=270

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115. General transportation advisory bodies were not included, because of their broad mission and because many focus solely on automobile-related planning decisions. In general, trails committees were not included, because many only address off-street bicycle facilities. Those that address on-street biking, however, were included.

116. Some committees have voting and non-voting members. For such committees, only voting members were counted since these individuals have the greatest influence over committee decisions.

117. Approximately eight of the 42 committees were convened by RTPAs, MPOs, and CMAs. While these agencies can operate at the regional or county level, the eight in this study were all county-level agencies.

118. U.S. Census 2010, calculated by author.

119. Metropolitan Transportation Commission, Resolution No. 875, Revised, “Attachment A: Transportation Development Act, Article 3, Pedestrian/Bicycle Projects: Procedures and Project Evaluation Criteria,” 2–3, http://*www.mtc.ca.gov/funding/STA-TDA/RES-0875.doc (accessed October 15, 2011).*

120. California Coalition for Women, 19, 25.

121. An interview with a previous committee member from one of the ten committees was added, so instead of ten interviews, a total of 11 interviews were conducted.

122. Richard A. Krueger and Mary Anne Casey, Focus Groups: *A Practical Guide for Applied Research*, 4th ed. (Los Angeles: Sage, 2009), 36–41.

123. Ellen Taylor-Powell and Marcus Renner, *Analyzing Qualitative Data* (Madison, WI: University of Wisconsin-Extension, Cooperative Extension Publishing Operations, 2003), 6–8, http://learningstore.uwex.edu/assets/pdfs/g3658-12.pdf (accessed September 1, 2011).

124. Krueger and Casey, 94, 110.

125. The women’s ages at the time of the interview are approximate, as the women only provided their year of birth and not the month.

126. U.S. Census Bureau, *Current Population Survey*, Fertility of American Women 2010, Table 2: Children Ever Born per 1,000 Women, Percent Childless, and Women Who Had a Child in the Last Year by Race, Hispanic Origin, Nativity Status, Marital Status, and Age, June 2010, http://www.census.gov/hhes/fertility/data/cps/2010.html (accessed November 11, 2011).

127. Joyce A. Martin et al., "Births: Final Data for 2009," *National Vital Statistics Reports* 60, no. 1 (November 2011): table 2, http://www.cdc.gov/nchs/data/nvsr/nvsr60/nvsr60_01.pdf. In 2009, women aged 45 and older had 0.19 percent of all births in the United States (calculated by author).

128. The committee is not named here, to protect the identity of the survey respondent. The author learned about this committee and its membership history during the course of this study.

129. Swers, 173.

130. This was suggested by several survey respondents who were current members of committees.

131. This was suggested by a survey respondent who was previously a member of a committee.

132. O'Connor, 24–26; Paxton, Kunovich, and Hughes, 173–175; Swers, 167–185.

133. See literature review in: Melissa C. Thomas-Hunt and Katherine W. Phillips, "When What You Know Is Not Enough: Expertise and Gender Dynamics in Mixed Groups," *Personality and Social Psychology Bulletin* 30, no. 12 (December 2004): 1586.

134. Rong Su, James Rounds, and Patrick Ian Armstrong, "Men and Things, Women and People: A Meta-Analysis of Sex Differences in Interests," *Psychological Bulletin* 135, no. 6 (2009): 873.

135. U.S. Bureau of Labor Statistics, "Labor Force Statistics from the Current Population Survey," Table 11: Employed Persons by Detailed Occupation, Sex, Race, and Hispanic or Latino Ethnicity, http://stats.bls.gov/cps/cpsaat11.pdf (accessed November 10, 2011).

136. U.S. Bureau of Labor Statistics, table 11.

137. Barbara Rahder and Carol Altilia, "Where is Feminism in Planning Going? Appropriation or Transformation?" *Planning Theory* 3, no. 2 (2004): 112.

138. Adrian Furnham, Tatsuro Hosoe, and Thomas Li-Ping Tang, "Male Hubris and Female Humility? A Cross-Cultural Study of Ratings of Self, Parental, and Sibling Multiple Intelligence in America, Britain, and Japan," *Intelligence* 30 (2001): 102.

139. Furnham, Hosoe, and Tang, 102.

140. See literature review in: Furnham, Hosoe, and Tang, 102.

141. Sayer, 291–296.

142. The survey was limited to California residents since the researcher was not familiar with the bicycle planning structure in other states.

143. Paxton, Kunovich, and Hughes, 267.

144. Some of these were also presented in the interview analysis in Chapter 4.

145. Verba, Schlozman, and Brady, 128–130.

146. Sayer, 296.

147. U.S. Department of Labor, *American Time Use Survey*, table 1.

148. Verba, Schlozman, and Brady, 128–130.

149. Elder, 39–40.

150. Furnham, Hosoe, and Tang, 102.

151. Paxton, Kunovich, and Hughes, 267.

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