

Bicycle Planning, Gender & Marketing: Creation of Publications for Women



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CREATION OF PUBLICATIONS FOR WOMEN

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executive summary

Bicycling is becoming a more popular among both commuters and people looking for outdoor recreational activities. With the increased usage of bicycles, cities are transforming to incorporate this mode of transportation into the planning process. Because of its importance and my interest in transportation planning, this report serves as the research needed for my final product – a bicycle guide created for the women living in San Luis Obispo.

The rise of bicycles in the late nineteenth century played an important role in women's emancipation. Riding bicycles gave women a sense of freedom and also greatly altered women's fashion. With the change in fashion, marketing began to play a role in advertising cycle-friendly garments. Companies started targeting different cycling populations to advertise their products. Studies have shown that there are differences in marketing implications when targeting different genders. Women tend to look to satisfy long term needs, act on emotions when making purchasing decisions, and often enjoy a sense of accomplishment. Companies that support a cause tend to appeal more to women because they act on the idea of social responsibility.

This report largely revolves around women empowerment. My beginning research has shown that women feel they are not as educated or informed about bicycle safety. There is increasing evidence to suggest that women and men experience cities in different ways, which would encourage the need for gender-sensitive urban planning. Planning as a profession is becoming more aware of how community development affects women largely as a result of the women's emancipation movement. The American Planning Association's Code of Ethics and Professional Conduct outlines the need to plan for all populations equally, and the statistics show a need to address certain issues among women. The final product aims to target women to address this disparity to give women equal opportunity to cycle comfortably.

This bulk of this report is divided into two main sections – literature review and best practice. The literature review covers a variety of topics, including bicycle planning innovations, gender inclusive planning, women's emancipation, and design in marketing. For best practice, I examine different existing bicycle guides and conduct a formal analysis to determine which ones serve as successful models for my own product.

introduction

As the world increases awareness of environmental considerations and becomes more health conscious, people start to turn to alternative modes of transportation as a solution to both problems. The development of planning theories and principles altered throughout the years, leading to different solutions to resolve planning issues. In the past, urban sprawl was seen as the “American Dream,” giving homeowners their own property and automobiles, but in recent years, New Urbanism, Smart Growth, Transit Oriented Developments, and other principles have paved the way for more sustainable cities. The ideas of mixed uses and walkability are emphasizing use of alternative modes of transportation, rather than relying on automobiles (New Urbanism, 2014). One particular mode of transportation, bicycling, has become gradually more popular among commuters and those looking for recreational activities. Bicycling is recognized as one of the most sustainable and healthy modes of transportation. The increase of bicycle ridership reduces the carbon footprint, increases mobility, and improves physical and mental health (Mattheis, 2012).

With the increased importance and usage of bicycles, cities are transforming to cater more to this mode of transportation. A variety of amenities and facilities are provided to adjust to this shift in traveling; urban planners recognize the need to plan for the bicycle community and evaluate safety considerations with new projects. While bicycling is more commonly seen as being a recreational sport, employees are beginning to turn to bicycling as a means of getting to their place of business. This movement has radically affected transportation planning. The idea of suburbia and motor vehicles is now being replaced by compact cities and mobility. With bicycling becoming increasingly more popular, I found myself intrigued by the benefits of this mode of transportation.

My first exposure to bicycle planning was through my internship at the California Department of Transportation (Caltrans), District 5. Even though Caltrans is an agency focused on improving mobility on the state’s highways, bicycle planning is a major component as well. I work closely with the agency’s bicycle coordinator and was assigned the project of updating the District’s Bicycle Guide. My tasks include making maps using ArcGIS, creating elevation profiles, and providing narratives describing basic safety tips. These maps show the allowed bicycle access on state highways, and alternate routes where they are prohibited. It was through this assignment that I was inspired to create a bicycle guide for my senior project.

purpose of research

The goal of this project is to evaluate the historical effect and different considerations of bicycling in regards to women. My research first started out with examining the evolution of the bicycle itself, then how it affected women empowerment and planning as a profession. The information provided in this report will serve as background research and literature review leading up to the final product.

My literature review begins by examining the evolution of bicycles. Bicycles have come a long way from when they were first developed, and have undergone technological advancement to cater to the comfort and safety of different bicycling populations. I examine specifically the difference between men's and women's bicycles, and how the frame and setup contributes to the ease of each rider.

Bicycling played a monumental role in women's emancipation in the 18th and 19th centuries. Women were much more restricted, and bicycling gave them a sense of freedom. The role of fashion in bicycling and everyday life was also pivotal. As bicycling became more popular among women, the fashion style altered towards comfort rather than appearance. I include this section in my research because bicycling played such a significant role in emancipation history that it is important to recognize the sport's contributions. Despite what bicycling did for women, there is still a considerable gender gap. This report examines possible causes and solutions to this gap. Based on this research, I can decide what information to include in my final product to make it more desirable to the targeted population.

The rise of bicycling has given way to a variety of planning innovations. My research also examines the effect bicycling has had on transportation planning, and the different amenities and facilities that have been implemented as a result. Because bicycling is seen as a sustainable mode of transportation, planners often try to devise new techniques and projects that improve the safety of both commuter and recreational cyclists. This project evaluates different bicycling systems around the world and offers analysis on what can be improved upon in the future.

With my final product being a bicycle guide, it was important that my research included marketing strategies and design in messaging. My product will not be as effective if it cannot draw in the costumers I want. My research includes how marketing may differ with men and women, and certain design standards that are used to appeal to a specific customer base.

Based on preliminary work, I anticipate the final product will be a bicycle guide targeted towards women. My findings show that there is a gender gap in bicycling and that more women than men are uncomfortable with riding a bicycle in the streets. The marketing research done will help target women and address issues such as safety that are not often addressed in other bicycle guides. The goal of this guide is to address any concerns women may have, and serve as an informative guide to commuter and recreational bicycling. The reason why I am interested in creating a product that is gender-specific is because of the disparities in cycling among women and men. My beginning research has shown that women feel they are not as educated or informed about bicycle safety. As a planner, the American Planning Association's Code of Ethics and Professional Conduct outlines the need to plan for all populations equally, and the statistics show

a need to address certain issues among women (APA, 2014). I dedicate a section in the Literature Review chapter examining gender-inclusive planning and what measures have been taken to ensure women feel included in the planning process. The final product aims to target women to address this disparity to give women equal opportunity to cycle comfortably.

This information will be presented in either digital or printed form. The research done for this project indicates that there are pros and cons for each means of communication. Both means will most likely be provided for the convenience of the users.

methodology

The research conducted was attained from a variety of sources. The websites of different bicycle organizations was a starting point for my research. From there, I turned to articles and journals to complete my analysis on history and marketing. Bicycle magazines and books were the most helpful in finding safety tips. The full list of methods used to complete the research for this project is as follows:

- Websites
- Newspaper articles
- Scholarly articles
- Journals
- Magazines
- Books
- Pamphlets, manuals, and existing bike guides

I start out with literature review and evaluating different articles to provide a basis for the final guide. The literature review section includes all the research done surrounding bicycles, and leads up to the best practice section. Best practice, or case studies, includes an in-depth analysis of different existing bicycle guides and how effective they are. I develop a system of criteria to judge these guides, which is further explained in that chapter. Based on the analysis of the existing bicycle guides, I am able to grasp an idea of what to do and what to avoid when creating my own guide. This background research will enable me to develop my own product as a final deliverable.

literature review

Evolution of Bicycles

German inventor Karl von Drais is widely recognized for developing the first bicycle, known as the “swiftwalker” at the time. The first model was released in 1817 (Bicycle History, 2013). This early bicycle form had no pedals, two wooden wheels with iron rims and leather-covered tires. The rider sat on top, walking with the bike, as shown in Figure 1. The idea of the swiftwalker was to find a muscle-powered replacement for the horse that would allow large numbers of people to move faster than walking or riding in a coach. Horses were expensive and required a lot of care and maintenance (Hoefer, 2006). However, the swiftwalker was not embraced by the public, and city law was passed, banning the invention from public places (Exploratorium, 2013).



Figure 1: Karl Von Drais' swiftwalker

The next era of bicycles is the penny-farthing, or high-wheeler, which was developed by Eugene Meyer. This contraption received its name from the British penny and farthing currency, one being much larger than the other. The size of the front wheel is due to the fact that gears had not yet been invented. This design made the bike faster, thus increasing its appeal for men interested in sports, and was made entirely of metal rather than wood, and the tires of rubber (Hoefer, 2006). However, the height of the bicycle contributed to the safety issues revolving around this style of bike. The large front wheel hitting a bump in the road would send riders flying off their bikes (BBC, 2013).



Figure 2: The penny-farthing, or high-wheeler, was sold for \$125 in the 1870's

At this time, safety was a major concern for bicyclists. Henry John Lawson was a British bicycle designer and racer. He was the developer of the first bicycle employing a rear wheel, chain-driven bicycle (Bicycle History, 2013). This made bicycling steadily more popular, which led to bicycle activism. People lobbied for smoother roads to

improve upon bicycle safety. This eventually led to the development of the safety bicycle, which became extremely popular in the late 1880's. It was a safer and more affordable alternative to the penny-farthing, and is now the most common type of bicycle today. This bicycle form has two wheels of equal diameter, allowing for more stability for the rider (OHTM, 2013). With the start of the 1990's, a variety of new bicycle developments came up. Fatter tires were constructed, which would pave the way for mountain biking. By 1990, bicycles had different gears to contribute to the comfort and ease of bicycling. Bikes now had different speeds and gear levels for the ease of riding.



Figure 3: The safety bicycle is the style still used today in modern bicycles

Bicycle Components

While each bike varies depending on its person and target audience, each bicycle has several common components. Figure 4 below illustrates the different parts of a bicycle.

There are several differences between men's and women's bicycles. While the image below shows a top tube that slants upwards, women's bicycles tend to slant down to make it easier for women riders to step over the frame when mounting their bicycle. In addition, the distance between the saddle and

handlebars are generally shorter to accommodate a woman's generally shorter torso and height. The saddle is also higher up and wider than that of a men's bicycle (Leigh, 2010). These changes in bicycle frames are extremely important, as women seek comfort when riding. Developing a frame that is gender-specific encouraged more women to start bicycling because they felt more comfortable on a bike. The development of the bicycle has come a long way. Women were initially prohibited from riding bicycles freely, and now bicycle companies are catering towards women's needs.

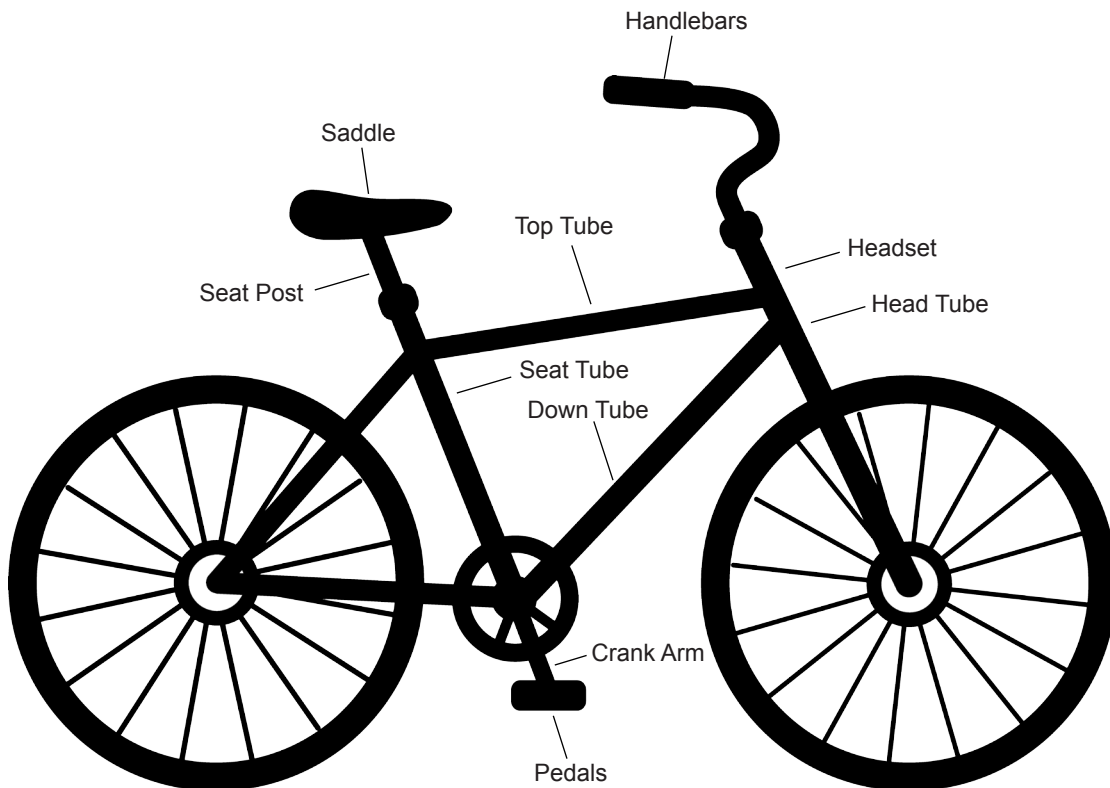


Figure 4: The different components of a bicycle shown on a typical men's frame

Bicycle Planning

At the start of the industrial age, cities were developing outward. Urban sprawl was seen as the innovative planning method that made the American Dream possible. Miles of cookie-cutter housing developments and strip malls were built. Residents were happy to own their own home with a large front lawn, and used their own cars to get around town. Automobiles changed everyone's lives; ordinary working Americans could now buy affordable cars and travel for business and pleasure. Huge traffic jams clogged city streets that were not equipped to handle such large volumes of automobiles. The Interstate Highway Act of 1956 placed further emphasis on car, and cities abandoned alternative modes of transportation as a result (Grabowski).

Despite the initial benefits, sprawling development proved to have undesirable effects. The spread of low-intensity development has led to reduced rural and agricultural land. In addition, the lack of mixed-use developments has resulted in employees living far from their workplace. This meant more driving, more oil consumption, more air pollution, and more runoff during the rainy season. The increased dependence on vehicles is arguably one of the most alarming concerns that developed as a result of urban sprawl. Vehicle use not only affects the environment, but affects the community as well. Obesity rates have skyrocketed in recent years, partly due to the way the built environment is structured. Lowered physical activity and rising public health problems have raised an alarm to urban planners to start accommodating different modes of transportation in order to address these impacts (Grabowski).

Because of this, bicycling is seen as one of the healthiest and most sustainable forms of transportation, and bicycle planning has risen in importance vastly within recent years (Grabowski). More city streets are designed with pedestrians and cyclists in mind. Bicycling contributes to a more livable city, and switching between walking and cycling is effortless. Between 1990 and 2011, many of the largest cities in North America experienced an increase in the percentage of bicycle commuters (BikePortland, 2012). The rise in bicycle planning and the implementation of bicycle-friendly design enhancements has contributed to the increased bicyclists.

Bicycle planning has led to a variety of innovations that is making bicycling safer than ever. Even having Class I or II bicycle lanes has not necessarily promoted bicycling in all cities. The key is to make bicyclists feel safe and planned for. Several progressive cities have made a conscious effort to devise innovative bicycle infrastructure ideas that increase bicycle usage while promoting awareness among drivers. Many ideas are being taken from Europe, where they have been applied and proven to improve bicycling conditions. Many European cities provide specific facilities for bicycles at intersections (BikePortland, 2012).

An example of an innovative technique is called the “Copenhagen Left.” At large intersections, instead of merging across traffic to make a left turn, the bicyclist rides through the intersection on the right, stops, and then turns left while obeying traffic lights. These are often combined with bike boxes, a bicycle facility that aids in turning movements. A bike box allows cyclists to move ahead of vehicle traffic during a red light (Arvidson, 2012).

Cycle tracks are also becoming increasingly more popular in cities. A cycle track combines the user experience of a separated bike path with the on-street infrastructure of a bike lane. This space is exclusively for bicycles, and separated from vehicle traffic lanes, parking lanes, and sidewalks (City of Portland). Cycle tracks are differentiated from other bicycle lanes because it takes the buffering concept by separating the facility with a raised curb, planted median, or parking (Arvidson, 2012).

A recent technique that cities are beginning to incorporate is the bike share program. This service is a system in which bicycles are made available for shared use to individuals on a short term basis. Bike share allows easy rental of bicycles from kiosks for people who do not own their own bicycles. In addition, these bicycles can be returned to any bike share station. This system has been shown to increase use of bicycles within cities because it is inexpensive and convenient (SFBike, 2014).



Figure 5: An example of a “Copenhagen Left” incorporated into a bike box

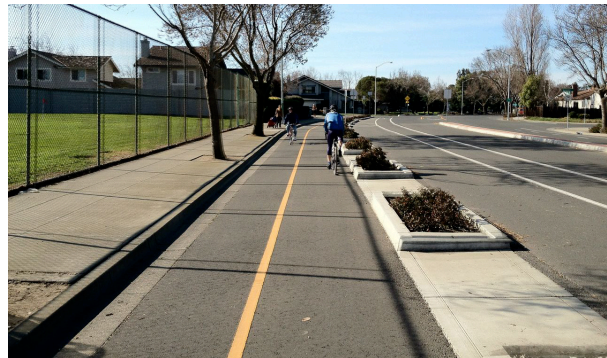


Figure 6: An example of a cycle track buffered by a median



Figure 7: Bike share programs make bike rentals available to those who do not own their own bicycles

Gender Inclusive Planning

There is increasing evidence to suggest that women and men experience cities in different ways, which would encourage the need for gender-sensitive urban planning. There are a variety of concerns including employment, housing, open space, transport, and environment. The gender dimension of planning can be reflected in guidelines for good practice, and women's active participation in planning can provide important insights. A common misconception is that many planners see planning as having only technical obstacles, not social. Gender mainstreaming in planning means understanding the views of men and women equally and taking those technical issues into consideration as well. It is difficult to plan specifically for women because planners must first be aware of gender gaps. Planners can accidentally exclude women in their planning practice, so participatory and inclusive planning processes have been developed to improve service in ways that benefit women (Greed, 2007).

The American Planning Association created the Planning and Women Division in 1979 in order to transmit ideas and career concerns of particular interest to women and to the general membership of the American Planning Association. The goals of the Division include the following:

- To address issues facing the planning and development and how they relate to the changing role of women and social equity
- To create a national network of planners that are equally involved
- To promote professional growth of women in planning
- To recognize the accomplishments of

women in planning

- To advance the technical knowledge of women in planning
- To promote the examination of women's issues at all planning levels

Planning as a profession became aware of how community development affected women largely as a result of the women's emancipation movement. A national conference of the American Society of Planning Officials presented a report encouraging professionals to address the needs of women, to encourage women to enter the profession, to monitor discrimination in employment, and other topics. This was the catalyst in gender-inclusive planning.

Women in the academic community played a major role in bringing in the perspective of gender considerations into urban planning policies. Several professors who originated as practicing planners promoted the issues of women in planning as part of academic study in order to raise awareness and encourage women to join the profession.

The American Planning Association approved the establishment of the Planning for Women Division, and the division became the largest in the APA (APA, 2014).

Women's Emancipation

The nineteenth century brought about fundamental changes in the role of women. Women were facing political, economic, and legal inequalities at the time. In this time of emancipation and equal rights activism, it is important to note that something as simple as bicycling could have had such a significant impact on women's emancipation. Bicycling was

women were only allowed to ride around the park as long as they were chaperoned by a male. Bicycling gave women a feeling of freedom and self-worth; it allowed them to travel beyond the confines of their homes (Bicycle Escape, 2013). Women were often discouraged to ride bicycles because men feared they would neglect their chores and other “womanly” duties. A medical debate circulated, implying that bicycling affected a woman’s fertility (Christie-Robin, 2012). However, these rumors were eventually put to rest and bicycling became a popular sport among all genders.

Bicycling fashion and the way women dressed played a pivotal role in women’s emancipation. As bicycling became more popular among women, women’s clothes altered to this change. Women’s fashion in relation to bicycle use can be broken down into four distinct eras – bustle, s-bend, divided skirt, and bloomer (Christie-Robin, 2012).

The bustle is a tight-fitted bodice with a high collar and puffy bell skirt. It is characterized for its numerous ruffles and pleats that emphasized and focused on expanding a woman’s backside. This style of clothing, tight with long skirts, greatly hindered a woman’s ability to ride a bike (Christie-Robin, 2012).

The s-bend outfit features a narrow waistline, long, flared skirts, and a shorter corset that forces the hips backwards. Contrary to the bustle, the s-bend has a narrow skirt that allows much greater ease of movement. While it was still not ideal for women to be bicycling in this style dress, it was much more comfortable moving around in the s-bend without the ruffled layers (Christie-Robin, 2012).



Figure 8: The bustle featured many layers of cloth that made it impossible for a woman to ride a bicycle



Figure 9: The s-bend eliminates the frilly ruffles of the bustle, making movement easier

Following the s-bend came the era of divided skirts. Divided skirts made it easier for women to bicycle. They looked like a full skirt, but actually had separated pant legs that kept fabric from getting caught in the pedals or other bicycle parts. The skirts were only divided in the front or back in attempt to conceal the split and have it resemble a conventional skirt. These skirts were shortened to the calf, giving women more freedom to move around (Christie-Robin, 2012).



Figure 10: The divided skirt looks like a conventional skirt, but actually allows for more freedom and movement because of the separated pant legs

The bloomer is the most widely known costume of early bicycling; it is a famous symbol of the bicycle era and nineteenth century feminist movement. Bloomers are trousers gathered at the ankle and sometimes worn with a calf-length skirt. While bloomers were popular among women because it was a promotion of freedom of dress, there was great opposition as well. Many claimed it was a symbol of usurpation of male authority, and the media ridiculed and condemned the outfit. However, the bloomer was a pivotal fashion change that aided women in this emancipation movement. (Christie-Robin, 2012).



Figure 11: An example of what the divided skirt looks like on a woman while riding

While the bloomer did not completely replace skirts, the rise of popularity in cycling gave dress reformers incentive to campaign for changes in clothing. The bloomer paved the way for other bicycling-targeted clothing, such as the bicycle corset. However, there was not yet substantial demand for comfort in bicycling clothing until the twentieth century; convention outweighed function in clothing. The fact that dress style changed, encouraging women to leave behind long, heavy skirts for looser clothing, suggested that women's position in society was improving. Bicycling is often recognized as the sport that had the greatest social impact on women (Christie-Robin, 2012).



Figure 12: Bloomers are a symbol of emancipation

With the change in fashion, marketing began to play a role in advertising cycle-friendly garments. As bicycling becomes more popular, certain bicycling gear has been developed as a result. Bicycling has recently become more of a trendy activity, and companies are working to create bicycling clothing that is both comfortable and appealing (Senger, 2013). Cycle-friendly garments include deep pockets with secure fastenings, reflective strips, and armpit venting. These are basic elements of bicycle clothing that developed as a result of the increase of bicycling popularity.

Cycling used to solely be a sport, but as more employees choose to commute to work by bicycle, more people prefer to ride in normal clothes rather than activewear. This trend became popular first in Europe, where it is common for people to bicycle in their street clothes. High-end cycling apparel brands, such as Rapha and Sky designed jeans and tailored shirts that are meant to be worn with messenger bags, giving commuters more options. Retailers hope to encourage more people to bicycle without having to change their style.

As a result, bicyclists, especially women, are incorporating fashion more into their daily lives. Women use high-end accessories for their handlebars that can amount to hundreds of dollars. They have given the image of cyclists a makeover, leaving behind spandex and flexible clothing to bicycling in normal or sometimes even dressy attire. The idea is to look like a pedestrian on wheels. Ms. Page-Green is a cyclist in New York City who chooses to move around town by bike. Sometimes she wears ankle-length dresses with heels, or blazers and slacks. She does not feel the need to change her dress style just because she is bicycling. George Bliss is a bike shop owner in the New York area. His clients tend to be women who

want more accessories for their bikes – fenders, baskets, chains, and other things. Most women are turning their back on the more traditional aerodynamic components and instead favoring more stylish accessories (La Ferla, 2010).

Gender Gap in Cycling

Despite the increase in bicycling among women, there is still a considerable gender gap. 26% of American women say bike safety education would encourage them to start or increase their riding. A study on women's bicycle riding has led to a conclusion of 5 C's that increase women's ridership: comfort, convenience, consumer products, confidence, and community (Szczepanski, 2013).

Comfort - Increasing comfort means making bicycling safe and inviting. 53% of women say that more bike lanes and bike paths would increase their riding, and 73% of women are afraid of distracted driving, and 63% are afraid of high traffic speeds. The number of women bicyclists would increase if cities offered proper bicycle infrastructure and facilities that are safe and comfortable to ride on (Szczepanski, 2013).

Convenience - Women also seek convenience and are embracing the flexibility of bike share programs. 43% of North American bike share members in 2012 were women (Szczepanski, 2013). Bike share programs address many issues that women commonly point to as the reason they do not bike, such as accessibility, convenience to multiple destinations, and comfort. From 2003 to 2012, the number of women cyclists rose 20% (Sierra Club, 2013). Women will not turn to bicycling as a mode of transportation if it is not convenient. This is partly why bike share programs have been so successful

with women; they can rent a bike and return it to any station without having to worry about maintenance or care of the bicycle.

Consumer Products - Women also pay attention to consumer products, such as fashion and function related to cycling. As discussed in the previous section, fashion played a major role in encouraging women to start bicycling more. Women often do not want to compromise how they look or what they wear, especially employees, just to bicycle. If more products were available that cater to both fashion and function, women may be more willing to bicycle (Szczepanski, 2013).

Confidence - Confidence is extremely important for women bicyclists; only 6% of American women say they are confident riding on all roads with traffic, and only 58% of women, as opposed to 81% of men, are very confident riding on a bicycle (Szczepanski, 2013).

Community - Community is also an important factor; women are more likely to ride as a family. Many cities, such as Portland, have set up organizations specifically for communities of women bicyclists to get together and ride (Portland, 2013). These types of programs have been successful in encouraging women to bicycle more often because they have a familiar group of people to ride with.

Design in Messaging

Because my final product will be a brochure targeted towards women, it was important for me to research design guidelines and marketing towards specific groups. The concept of “social marketing” was developed to create strategies to target certain populations. Many factors go into marketing and making a product desirable,

including packaging, communicating directly to targeted populations, minimizing barriers such as cost, ease of distribution, and size for convenience and portability (Ludwig, 2005).

Making a product marketable requires a number of design considerations to make the product appealing to a certain customer base. The first is to develop a functional strategy. Consider the following questions (Ladd, 201):

- What is the purpose of the product?
- What unique benefit can you offer your customers?
- What other key benefits will customers receive from your product?
- What target market are you aiming your product?
- What response do you want from your audience?

One must take into consideration how they will advertise their product – as public events, online, or through the mail. In addition to these questions, the product itself has certain requirements. The headline should promote consumer benefits, grab the reader's attention, and should balance the design. Subheadings should be followed by body text that provides descriptions and visual images. The graphics are a major component of the design strategy that will draw attention to the product, and it is important to use high quality and resolution images. Other design considerations to incorporate in the product are limiting fonts and font sizes. In addition, a maximum of three font sizes should be used; one for the heading, subheading, and text. The rule of two-thirds should be applied as well. Through text formatting and leaving white space, the brochure or pamphlet should have a visual divide of thirds (Ladd, 2010).

Studies have shown that there are differences in marketing implications when targeting different genders. Women look to satisfy long term needs, while men are shorter-sighted and look to satisfy short term needs. Women act on emotions when making purchasing decisions, and often enjoy a sense of accomplishment, such as cheaper prices so they are happy they got a good deal. Companies that support a cause tend to appeal more to women because they act on the idea of social responsibility. Women use other people's opinions to help make decisions, but social media, such as Facebook and YouTube, can sometimes outweigh a peer recommendation (Kraft, 2012). An important factor in marketing towards women is to show an altruistic side, or to create a produce that shares the same values as women, such as bicycle safety. It is essential to use terms that women can understand and relate to in order to build trust (Knerl).

There are two categories of women consumers – women who buy personality over product and women who are brand-name buyers. Women who buy personality tend to look for companies with a good reputation, are friendly and inviting, and whose products have a pleasant visual appeal. Women who are brand-name buyers flock to where other women shop (Knerl).

In addition to just gender differences, there are disparities in the generational gap. Different aged women respond differently to certain marketing techniques. Some things to take into consideration include how easy it is to navigate through the information, how trustworthy and credible the source is, and how quickly different options can be weighed when comparing two products. Older women tend to be more assertive and demanding and know exactly what they want. It is important to keep in mind that authenticity is the most important

marketing tool. Women's brains and thought processes are wired for big-picture thinking, multitasking, gut reasoning, social and verbal skills, and empathy. They respond well to upbeat messages, sentimental messages, and real-life activities that are friendly and relatable. Men's brains are conditioned for concrete thinking, goal-oriented tasks, logical solutions, competition, and defense. Men respond better to movement, competition, and humor. When marketing specifically towards women, it is a good idea to include emotion-based visual imagery, and to avoid overt messages that focus on conflict (Techvibes, 2013).

While there are subtle differences to take into consideration when marketing towards women compared to men, it is not actually necessary to market to women too differently. As long as a company sets high standards and delivers a quality product, women are likely to purchase your produce. Women tend to be better at detecting inconsistencies in marketing than men because they have more attention to detail (Kraft, 2012). Women like emotional context that they can relate to, interaction, and comprehensive decision making. They carefully weigh all elements, consider pros and cons, and look at the overall picture. Men, on the other hand, like the benefits of a product explained to them, and use elimination as a process of making decisions. They will eliminate products that lack the features they are looking for (Morgan).

There are three dominant styles of preferred communication with the targeted population: visual, verbal, and touch. Visual includes marketing through direct objects, such as pamphlets, DVD's and other visual materials. Verbal utilizes telephone calls, radio commercials, and other audio methods. Touch would make use of 3D models that the

targeted population can actually interact with (Kraft, 2012).

For my senior project, I choose the visual route, going with a portable pamphlet targeted towards women. In order to develop the best possible brochure, I further researched the benefits of providing a hard copy brochure versus an electronic copy. Printed brochures require additional costs, but if done right, can be appealing. The quality of paper is important – even if the brochure has a pleasing design, the professionalism of the product is lost if it is printed on flimsy, cheap paper. Because printing brochures takes away from the budget, organizations with lower budgets tend to compromise on fancier design elements in order to save for printing costs (Meske, 2011).

On the other hand, electronic brochures have no printing cost, so all the money is spent on design, increasing its worth. In addition, electronic brochures reflect that the organization is advanced with technology, and they are faster in reaching the target audience. However, they cannot be used for communication with customers as easily (Meske, 2011). In general, companies are leaning more towards electronic publications, and it is predicted that electronic distribution will become the usual medium for publications (Jacob, 1996). Some benefits of electronic publications include speed, lower cost, convenience, and fewer constraints. Online brochures are speedier because there is no need to assemble a series of information to fill a product; each article can be distributed as soon as it is ready. In addition, printing becomes an option for the reader; some prefer hard copies while others prefer electronic versions. However, if every reader prints everything, the costs are much higher than mass printing from the publisher. The only difference is that the costs would be on

the reader themselves rather than the company. Electronic versions are considered to be cheaper in general because it is likely that the reader will print only the section they need, if any. Another reason why electronic distribution is more convenient is because it can be easily stored, either online or on a hard drive. Searching for specific information this way is also easier. Electronic publications can also include sound and video for demonstration rather than explanation (Jacob, 1996).

best practice

Before making a bicycle guide of my own, I looked up existing bicycle guides to get a sense of what works and what does not. I analyzed close to twenty guides from a variety of cities and organizations in the US then developed a system of evaluating and comparing them. I established the following criteria in which to base my evaluation.

Credibility – Does the guide appear to come from a credible source? The guides I chose came from cities, bicycle organizations, and bicycle websites. Generally, the more credible sources come from transportation planning agencies within cities or established bicycle coalitions and organizations.

Format – Is the bike guide organized in a way that is easy to read and find information? Some guides can be text-heavy and have no clear organization of the information. Other guides may have a balance of text and graphics and have clear headings that let the reader know what information is presented in that particular section. The design of the guide is also important; if it is laid out in a confusing manner, the reader will not want to look through it. If there is a hierarchy to the text, it will be easier to read through the information.

Content – Is the content clear and specific? Does it give the reader the claimed information based on the title? Some titles may be misleading and indicate to the reader that they will be able to find certain information without actually doing so. The content should relate back to the title of the guide and give the reader the information it claims in a thorough but clear manner.

Graphics – Is the purpose of the images easily understood? Do they relate back to the information? A good guide will have a balance of graphics and text. If the guide is text-heavy, it will appear boring

to read through. However, if there are too many graphics, or the images use flashy, vibrant colors, they may actually be too distracting. Graphics includes both images and graphs or tables. A guide may sometimes include graphs with interesting statistics, but they may not actually be necessary. The graphics should supplement or explain further the information already provided, not just repeat what has already been stated.

Time-Saving – The guide should be a useful reference and answer the questions a reader might have about that particular topic. The reader should not have to look up additional information because everything they need is already addressed in the guide. This relates back to both content and format. The guide should include enough information that the reader does not still have unanswered questions, and the format should be organized in a way that the reader can quickly find the information they are looking for.

Portability – Is the brochure or pamphlet small enough that the reader would be able to carry it around for reference whenever needed? The size of the product should be taken into consideration. If it is a pamphlet, the thickness is important too. If the pamphlet has many pages, the guide may be cumbersome to carry around because of weight or size.

Gender Specific – Is the guide targeted towards women? This is important because I am aiming to create a guide targeted towards women and it would be good to have examples of what information should be included. The majority of the guides I am evaluating are not gender specific. For the ones that are, it is important to think about how the information presented in the guides cater to women's needs.

Given these criteria, I put the information into a table layout to rate all the bicycle guides. I included an additional “Notes” section to further explain the ratings that were given to the guides. The following table contains all the ratings and comments for the bicycle guides that were evaluated. The ratings are based on a 1-5 scale, with one being the worst and five the best. I sat down with a City and Regional Planning professor, William Riggs, who specializes in bicycle planning and discussed each guide. Afterwards, we gave them our individual ratings; the average of our two ratings is shown in the table on the following page.

The highlighted totals indicate the three highest-rated guides, one mid-rated guide, and the two lowest-rated guides. I will discuss these bicycle guides in more detail and the basis behind the ratings. The cities of New York, Portland, and San Francisco had the three highest ratings. I will be examining what made their guides so successful and user-friendly. In addition, I will examine in more detail Pittsburgh’s bicycle guide because the city had a very innovative approach in formatting and presenting the information. Lastly, I will be analyzing Caltrans and iBike’s guides and how they can be improved. It is important to examine both successful and less successful examples – I can learn valuable information from both about what works well and what does not, and apply those principles to my own bicycle guide.

	Caltrans	Evans Cycle	Florida	iBike	Illinois	IndySpeed	Maryland	massDOT	NHTSA	NYC
Credibility	5	2.5	4	2.5	3.5	2	3	4	4.5	5
Format	3	3	4	2.5	2.5	2.5	4	4	3	5
Content	4	3	3	3.5	5	4	3.5	3.5	3.5	5
Graphics	2	3	4	1.5	3	3	3.5	3	2.5	5
Time-Saving	3.5	3	3	2.5	2	2.5	3	3.5	3.5	4
Portability	N	N	N	N	N	N	N	N	N	Y
Gender Specific	N	Y	N	N	N	N	N	N	N	N
Notes	No color, outdated, maps difficult to read	Useful information, but possibly made to generate sales for the company	Good design, tourist angle rather than for commuters,need more specific maps	Text-heavy, need more graphics, does a good job focusing on one issue	Confusing layout, fragmented information	Not very portable, poor organization, but good information provided	Fragmentation in messaging, need more obvious headings, text-heavy	Layout is busy, break up the text more	Text-heavy, graphic behind text is distracting	Good graphics and organization, useful information
Total	17.5	14.5	18	12.5	15	14	17	18	17	24


	NYPD	Pittsburgh	Portland Box	Portland Women	Portland Guide	SF Safety	SF Rules	SF Guide	SsusTrans
Credibility	5	4	4.5	3.5	5	3.5	5	5	3
Format	4	4.5	4.5	3.5	3	2.5	5	5	4
Content	4	4	4.5	3.5	4	2	4	4	4.5
Graphics	3	5	4	3	3	2	4	4	4
Time-Saving	4	3.5	4.5	3.5	2.5	2	4	4	2
Portability	Y	N	Y	Y	Y	N	N	N	N
Gender Specific	N	N	N	Y	N	N	N	N	Y
Notes	Easy to navigate, text-heavy, incorporate more images and negative space	Very creative, but not very portable	Very clean layout, easy to read, good information about one subject	Clear, nice deisgn	Text-heavy, a lot of good information but not portable	Poor font choice, outdated information, difficult to read	Easty to read, portable, offered in multiple languages	Good text and graphics	Lots of useful information for women, not portable
Total	20	21	22	17	17.5	12.5	22	22	17.5

iBike - Total Score 12.5

The bike guide produced by the cycling organization iBike is specifically for providing information on helmets. iBike is not as credible of a source, but the pamphlet still provides some valuable information. The guide is extremely text-heavy with few images and headings to break up the information. The content includes useful information about how to choose the correct bicycle helmet, but the majority of the text could be eliminated and presented in a better way. Rather than including a lengthy narrative about death by not wearing helmets, I think the information could have been better presented through a graph with those statistics. The brochure

is not as time-saving as it could be. Because of the amount of text, it is difficult to navigate through the information to find what you need, and only a small portion of the product is dedicated towards helmet tips. I think the information on how to choose a good helmet is very useful, but overall the guide needs to include more safety tips and benefits of helmets in a way that is easily read and understood. iBike had the intentions by producing a brochure about the importance of helmets, but it could have been executed in a better way.

WHAT ABOUT BICYCLE HELMETS?



DO YOU NEED ONE? YES

It is common to see people involved in sports wearing head protection. Football players wear helmets. Rock climbers wear helmets. River rafters wear helmets. Hockey players wear helmets. And for good reason--each sport presents a risk of head injury. Bicycling presents a similar hazard and requires similar precautions. About 75% of all bicyclist deaths each year result from head injuries. Many more cyclists are permanently impaired by riding their heads into curbs, poles and the pavement. Scrapes and broken bones heal, but scrambled brains may not. Much of this tragedy is preventable. The simple precaution of wearing a bicycle helmet may prevent severe injury or save a life--yours.

Many serious bicycle accidents happen on 'quiet' residential streets, in parking lots and on bike paths. A large number (90%) of bicycle accidents don't even involve automobiles. Accidents also aren't a scourge of just beginner riders, or just experienced riders, or just young riders, or just older riders. Every bicyclist needs to wear a helmet, regardless of age, and whether riding across the street or across the continent.

There are other benefits. Most helmets are brightly colored so drivers can see you better and will take you more seriously. A helmet also provides protection from weather, including sun, rain and hailstones. But the main reason to wear a helmet is to protect your brains from damage in an unexpected impact.

Compared to the lifetime cost of a head injury the cost of a bike helmet is cheap. Think about tomorrow, buy and wear a helmet today.

WHAT TO LOOK FOR

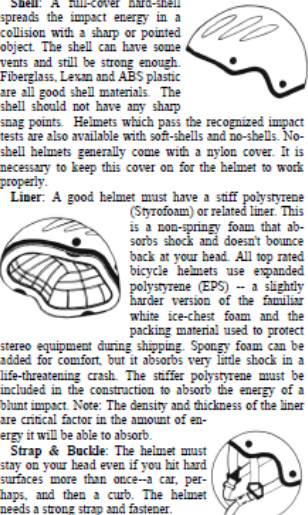
In the US market look for and buy only helmets that have a sticker inside saying they meet the CPSC standard. Don't trust what a salesperson or store promotional materials or images might tell you. The Snell B-95 and N-94 standards are even better. In Europe, manufacturers design to the CEN standard. This is slightly lower than the CPSC standard. Multi-sport helmets (i.e. skating and cycling) should carry stickers certifying each sport.

A good bicycle helmet must be able to absorb impact energy just as motorcycle helmets do to prevent brain injury. Most of the best helmets have three elements: a shell, a liner and straps and buckle.

Shell: A full-cover hard-shell spreads the impact energy in a collision with a sharp or pointed object. The shell can have some vents and still be strong enough. Fiberglass, Lexan and ABS plastic are all good shell materials. The shell should not have any sharp snag points. Helmets which pass the recognized impact tests are also available with soft-shells and no-shells. No-shell helmets generally come with a nylon cover. It is necessary to keep this cover on for the helmet to work properly.

Liner: A good helmet must have a stiff polystyrene (Styrofoam) or related liner. This is a non-springy foam that absorbs shock and doesn't bounce back at your head. All top rated bicycle helmets use expanded polystyrene (EPS) -- a slightly harder version of the familiar white ice-chest foam and the packing material used to protect stereo equipment during shipping. Spongy foam can be added for comfort, but it absorbs very little shock in a life-threatening crash. The stiffer polystyrene must be included in the construction to absorb the energy of a blunt impact. Note: The density and thickness of the liner are critical factor in the amount of energy it will be able to absorb.

Strap & Buckle: The helmet must stay on your head even if you hit hard surfaces more than once--a car, perhaps, and then a curb. The helmet needs a strong strap and fastener.



THE OPTION:

What can you expect if you or a cycling partner receives a severe head injury?

The National Institute of Handicapped Research defines severe head injury as, "serious traumatic injury to the brain requiring extensive services over an extended period of time." Much remains to be learned about the incidence and course of severe head trauma, but some facts are known about head injuries. The exact damage is hard to predict. The symptoms of severe head injury can vary greatly depending upon the extent and location of brain damage. Damage is not always confined to the point of injury. In many cases of brain injury the brain crashes violently against the skull on several sides causing diverse injury and symptoms unrelated to the functions associated with the specific part of the brain suffering acute injury. Damage at a specific location will cause specific symptoms. Person with damage to the left side of the brain often experience communication problems related to speech, comprehension, and reading and writing skills. They also often suffer paralysis or impaired functioning of the right side of the body. Person with damage to the right side of the brain often have impaired function of the left side of the body. Spatial perception and judgment are particularly vulnerable. Damage to either side can result in sensory impairments related to touch, vision, pain, and temperature and position sense. Often both sides of the body are impaired. Usually some communication, judgment and perception problems occur regardless of which side of the brain was damaged. Furthermore, people working with head injured clients often report their clients suffer from varying degrees of memory loss and impaired learning ability. Personality changes and lack of emotional control are also common. This then results in complications with the client's relationship to family and friends -- resources critical to successful rehabilitation.

Tragically, the severity of many brain injuries is controllable by preventive measures.

Adapted from "Rehab Brief," Vol. V, No. 5, National Institute of Handicapped Research

HELMET FIT TIPS

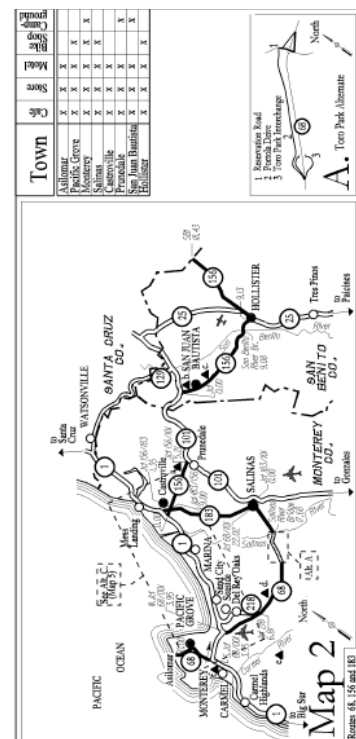
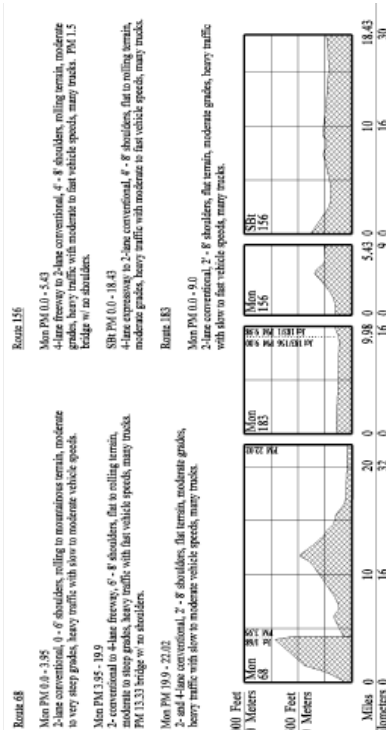
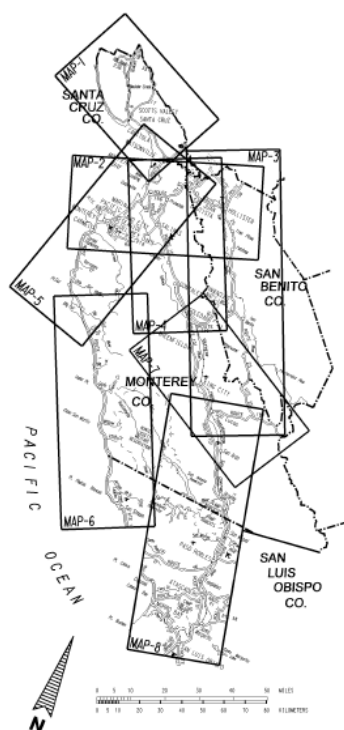
The helmet should sit level on the head, covering the forehead but not the eyebrows. It shouldn't rock from side to side.

All straps should lie flat, not be twisted. The chin strap splitter should lie right under the ears. It should be tight enough to allow only one finger between the strap and neck -- without choking.

Caltrans - Total Score 17.5

The Caltrans District 5 Bicycle Map was developed to show bikers where bicycling is allowed and prohibited on state highways. Caltrans is a very credible source and is a state organization that has access to the latest transportation data. The guide delivers everything it promises to offer, but the information is outdated, as the guide was released in 2004. The bicycle map is organized in a way where the District is broken up in a series of tiles based on the different highways. Each tile has its own subsequent page with information regarding bicycle access on state highways. Where bicycles are prohibited, the guide shows alternative routes on side streets that they can take. The format is lacking in certain areas. The tile system that Caltrans uses is confusing and the pages are cluttered with a lot of information. The graphics

could use some improvement as well; the entire guide is in black and white, and the images and graphs appear to be thrown on the page where there is space. There is no sense of hierarchy or clear organization. Once the reader figures out how the tiling system works and understands how to read the maps and elevation profiles, the guide could be time-saving. There is a lot of valuable information that can be found only in this guide, so the reader would only have to turn to this resource to answer any questions. As a pamphlet, the guide is pretty portable; it is the same size as a brochure. Overall, the district bicycle map is an extremely valuable resource, but the information and graphics need to be updated.



Pittsburgh - Total Score 21

The Pittsburgh bicycle guide was ranked neither high nor low, but it is worth noting because it was very different from the other guides in the way the information was presented. The Pittsburgh Downtown Partnership is a fairly credible source, since it is a city organization. This guide covers a range of topics, from choosing a bike to riding on the road to commuting in bad weather. The guide was rated in this category because it covers everything a reader may want to know about cycling in Pittsburgh. However, it is most notable for its format and graphics. The guide excels in this category because the information is set up in an innovative way – comic strip style. For this reason,




the guide is an interesting read. This bicycle guide is time-saving in the sense that the reader can find a lot of information without having to turn to other resources, but navigating through the graphics may take some time if the reader is trying to find out specific information. The pages are separated by topic, but because of the comic strip layout, there are no subheadings within each topic. In addition, this guide may not be as portable as others because of the page size and pamphlet layout. Overall, the Pittsburgh guide contains a lot of useful information and the interesting graphics make it stand out from other guides.

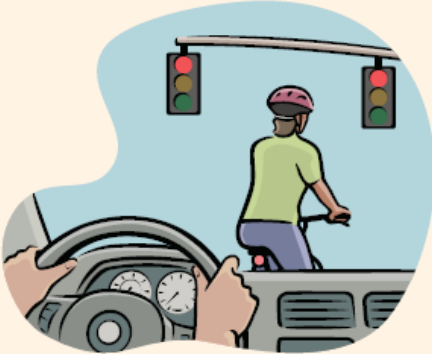


Portland - Total Score 22

The City of Portland created a brochure to inform both drivers and bicyclists of the bike box. The guide comes from a credible source, the City of Portland Bureau of Transportation. The format is very clean and simple. The subheadings make it easy for the reader to follow along, and the guide is not overwhelmed by text. The guide provides all the information about the bike box from both the driver and bicyclist perspective. The graphics are also useful and emphasize what the text is stating.

The image of the bicyclists' position from inside the car is especially useful. It notifies drivers of how to use the bike box and increases the safety of the bicyclists at the same time. This guide is both time-saving and portable. The information provided is informative and straightforward, and the brochure layout makes the guide easy to carry around if needed.

 WAIT BEHIND...
 WATCH AHEAD...
 BE SAFE.



CYCLISTS STOP IN BIKE BOX TO BE MORE VISIBLE. MOTORISTS WAIT BEHIND STOP LINE.

WHAT MOTORISTS SHOULD KNOW

When the traffic signal is yellow or red, motorists must stop behind the white stop line behind the green bike box. Don't stop on top of the bike box. Keep it clear for cyclists to use. No right turns on red at these intersections!

When the light turns green, motorists and cyclists may move through the intersection as usual, with cyclists going first. Motorists turning right on green should signal and watch for cyclists to the right, especially in the green bike lane in the intersection.

WHAT BICYCLISTS SHOULD KNOW

When a traffic signal is yellow or red, enter the bike box from the approaching green bike lane. Stop before the crosswalk.

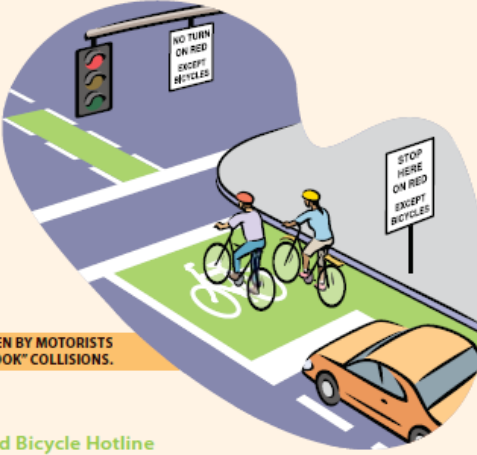
When the light is green, proceed as normal. Be aware of right-turning motorists, especially while in the green lane in the intersection.

WHY ARE BIKE BOXES BEING INSTALLED?

The main goal is to prevent collisions between motorists turning right and cyclists going straight. It's all about visibility and awareness. At a red light, cyclists are more visible to motorists by being in front of them. At a green light, the green bike lane through the intersection reminds motorists and cyclists to watch for each other.

BIKE BOXES

- Increase safety when drivers are making right turns by allowing cyclists to move in front.
- Increase safety by coloring the bike lane through the intersection.
- Increase safety by reminding motorists to be alert for cyclists.



CYCLISTS ARE EASILY SEEN BY MOTORISTS REDUCING THE RISK OF "RIGHT-HOOK" COLLISIONS.

www.GettingAroundPortland.org ■ 503.823.CYCL [2925] ■ Portland Bicycle Hotline

San Francisco - Total Score 22

The City of San Francisco Bicycle Coalition created a tri-fold brochure informing users about the rules of the road to increase awareness and safety. The Coalition is a well-respected source that is very involved with and informed about the latest news in regards to the City's bicycle community. The format of this guide is very clean and easy to follow. The colored blocks and side symbology make it simple for the reader to follow the text. What is especially unique about this guide is that it offers

the information in three different languages. San Francisco is a diverse city, and it was smart for the Bike Coalition to cater to the different populations by providing multiple languages. The guide is both time-saving and portable; the user has all the basic information that is needed regarding bicycling in the streets, and can carry the reference around with them easily.

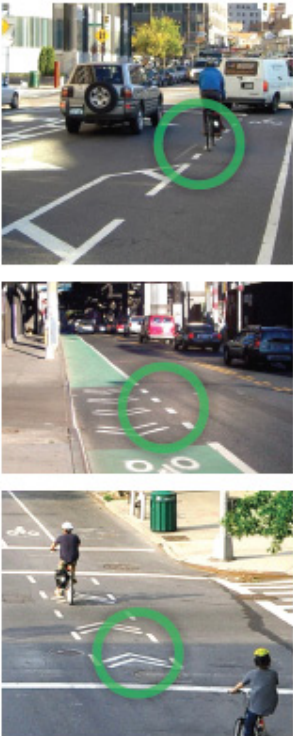
 BICYCLE RULES OF THE ROAD 	 REGLEMENTO DE TRÁNSITO PARA BICICLETAS	 自行車道路安全規則 
 Pedestrians Have the Right of Way. In the crosswalk or not, bike riders and drivers are required to yield to pedestrians. (CVC 21954 (B))	 Los peatones tienen el paso. Fuera o dentro del paso de peatones, los ciclistas y los conductores deben ceder el paso a los peatones. (CVC 21954 (B))	 行人經常有先行權。 不論是否在斑馬線，騎自行車和駕駛人士均須先讓行人。 (CVC 21954 (B))
 Stop Behind the Crosswalk. Leave crosswalks free and clear for pedestrians. Always stop behind the line. (CVC 21950, 21450)	 Detente detrás del paso de peatones. Mantén el paso de peatones libre y despejado para los peatones. Siempre detente detrás de la línea. (CVC 21950, 21450)	 停車在斑馬線的後面。 保持斑馬線無阻方便行人。經常停車在斑馬線的後面。 (CVC 21950, 21450)
 Mind the Signs and Lights. Stop at stop signs and obey red lights, just like all other vehicles. (CVC 21200)	 Pon atención a las señales y las luces. Detente ante las señales de "Stop" y obedezca las luces rojas, como cualquier otro vehículo. (CVC 21200)	 留意交通標誌和交通燈。 和其他車輛一樣，遵守紅燈和停車標誌的規定停車。 (CVC 21200)
 Stay on the Streets. It is illegal to ride on the sidewalk if you are over the age of 13. (SF TRANSPORTATION CODE SEC. 7.2.12)	 Transita por las calles. Es ilegal andar en bicicleta en la banqueta si tienes más de 13 años. (CÓDIGO DE TRANSPORTE DE SF, SEC. 7.2.12)	 留意交通標誌和交通燈。 在馬路上騎車。如果你年齡超過十三歲，在行人道上騎車是違法的。(三藩市交通法第7.2.12款)
 Go with the Flow. Ride the same direction as traffic. Walk your bike on the sidewalk if traveling the other direction on a one-way street. (CVC 21650)	 Sigue la corriente. Sigue la misma dirección que el tráfico. Camina con tu bicicleta en la acera si debes ir en el sentido contrario en una calle de un solo sentido. (CVC 21650)	 與汽車同一方向行車。 與汽車同一方向行車。如果你在單程路上想反方向前進，請在行人道上用手推單車前行。(CVC 21650)
 Take the Lane. If you're next to parked cars or you're riding in a narrow lane, you can take the lane and ride outside the door zone. (CVC 21202)	 Usa los carriles de los autos. Si te encuentras junto a automóviles estacionados o en un carril angosto y te sientes inseguro, usa los carriles para automóviles y buses, y alíjete de los vehículos con las puertas abiertas. (CVC 21202)	 佔控行車線。 無論你在停泊的汽車側邊或在窄線內騎車，如佔控該全線令你覺得較為安全，你可以在車門地帶外騎車。(CVC 21202)
 It's OK to Leave the Bike Lane. If you feel safer outside the bike lane, you can ride in other vehicle travel lanes. Merge when safe and signal when changing lanes. (CVC 21208)	 Se puede abandonar el carril para bicicletas. Si te sientes más seguro fuera del carril para bicicletas, puedes utilizar los carriles para los demás vehículos. Incorporate al tránsito cuando sea seguro y señala cuando cambies de carril. (CVC 21208)	 離開單車線是可以的。 當你認為在單車線外行車較安全的話，你可以在其他車輛的行車線騎車。在安全時尚進入該線，並在轉彎時打信號。(CVC 21208)
 Light up the Night! Reflectors and a front white light are required by law. We recommend you to use a rear light as well. (CVC 21201)	 ¡Ilumina la noche! La ley exige el uso de reflectores y luces delanteras. Recomendamos también utilizar una luz trasera. (CVC 21201)	 晚上亮燈。 法律規定自行車需設有反光燈和前面白燈。我們建議你同時設有後燈。(CVC 21201)
 Keep an Ear Clear. Even when using hands-free devices, bike riders and drivers are required to keep one ear free of headphones. (CVC 21400)	 Mantén un oído despejado. Aun si utilizan dispositivos de manos libres, los ciclistas y los conductores deben llevar audífonos en un solo oído y mantener el otro oído despejado. (CVC 21400)	 保持耳朵聽覺清楚沒有障礙。 即使使用無手耳機時，騎單車人士和駕駛人士都只可以有一隻耳可戴上耳機。(CVC 21400)
 Be a Friend to Disabled Neighbors. Paratransit vehicles (including taxis) may have to enter bikeways to pick-up or drop off passengers. Be a good neighbor and give them room. (SFMTA POLICY)	 Sé amable con los vecinos discapacitados. Los transportes para discapacitados quizás necesiten ingresar a las ciclovías para que los pasajeros puedan subir o descender. Sé un buen vecino y déjalas lugar. (POLÍTICA DE LA SFMTA)	 建議俾隔鄰。 有時傷殘人士需要利用街沿，輔助交通 (包括的士) 可能需進入單車線讓他們下車。請做一名好鄰居，禮讓他們。(SFMTA 政策)
 Learn more about the San Francisco Bicycle Coalition's extensive street safety and education work at: sfbike.org/safety	 Para saber más sobre lo que la Coalición de Bicicletas de San Francisco está haciendo para mejorar la seguridad en las calles de San Francisco, visita: sfbike.org/safety	 請瀏覽三藩市單車聯盟的網頁，了解更多聯盟改善三藩市街道安全的工作： SFBike.org/safety

New York - Total Score 24

The City of New York released an informative guide discussing cycling around the city. It offers a lot of information and illustrates everything a bicyclist might need to know when traveling around New York. The guide was developed by a credible source, and the format is very well organized. The titles at the top of the pages give clear indication on what information is about to be presented. There is a balance of text and graphics as well. I also think that I was very useful to include the bicycling laws section in multiple languages. Because New York is such a diverse city, it is important to take into

account different cultural groups when releasing products like this bike guide. Although the entire guide is not provided in multiple languages, a lot of the information is easily understood through the graphics. The graphics are simple and clear and can be understood completely without even reading the text. This guide is definitely time-saving; it gives the reader information on everything they would need to know about bicycling around New York City. The guide is a half-page sized pamphlet, so it is not as portable as other guides that are in brochure form, but if the cyclist wanted to carry it with them it would be easy to store in a bag. This bicycle guide was the highest rated out of all the case studies.

Read the Road



A dashed bike lane line indicates that cars may enter the bike lane.

A mid-block dashed line indicates an active driveway.

At intersections, the dashed line with chevrons indicates that cars may turn across your path.

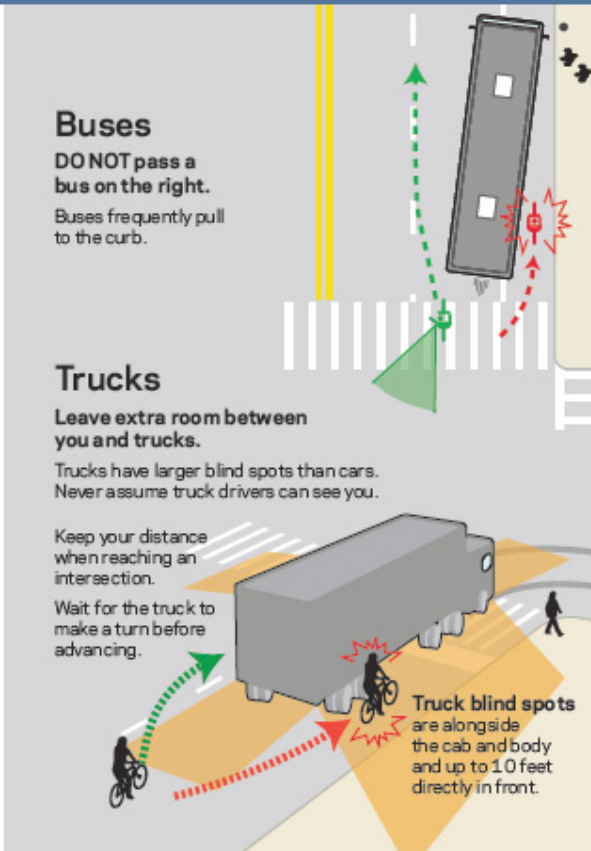
Blind Spots

Buses
DO NOT pass a bus on the right.
Buses frequently pull to the curb.

Trucks
Leave extra room between you and trucks.
Trucks have larger blind spots than cars.
Never assume truck drivers can see you.

Keep your distance when reaching an intersection.
Wait for the truck to make a turn before advancing.

Truck blind spots are alongside the cab and body and up to 10 feet directly in front.



conclusion

Looking at different guides created by a variety of organizations was helpful in deciding what I wanted to do with my own product. Based on careful analysis of the six guides, I learned what to do and what not to do with my own brochure. These pointers will make up the guiding checklist when I develop a product of my own:

- Titles or subtitles should be obvious
- Product is not overwhelmed with text
- Images support the text but are not too distracting
- Product should be portable so users can carry it easily for reference
- Information should be geared towards the targeted population

These five bullet points are reoccurring themes that I noticed through all six of the above guides. After having examined both poor and successful cases, I have an idea of what I want my guide to look like and how the information would be best presented.


Aside from design considerations, I learned about the importance of planning towards women. I was unable to find many bicycle guides catered towards women, but from my literature review and best practices, I gained an understanding of the basic information I should include in my guide. Because many women have safety and beauty concerns regarding bicycling, it is important I address these two issues in my own product. Many of the guides that already exist are not gender specific, mainly because the gender gap in cycling is closing, but there are still some issues that need to be addressed in regards to women. This kind of gender inclusive planning is necessary to make women feel more comfortable about bicycling.

The images on the following page are my final bicycle guide that I developed for the women in San Luis Obispo. I incorporate safety and beauty tips, two main concerns women have that prevent them from bicycling. The final size of the pamphlet is 4.25" x 3.5" for portability.

Bike Safety Tips

Always have bike lights and wear reflective clothing at night
It is the law to have bike lights when you ride at night. Front lights are white, and back lights are red.

Use proper hand signals



Left Turn Right Turn Slow Down or Stop

Wear a helmet when you ride
Wearing a helmet is the law for persons under 18 years of age, and highly recommended for adults. There should be about 2 finger widths between the helmet and eyebrows. Once buckled, the helmet should not be able to move in any direction.

Keep your bike properly maintained
Keep tires pumped (recommended pressure is generally stamped on the side of the tire), lubricate the chain with oil once a month, and keep it clean to prevent rusting.

Find a bike buddy
Finding a friend to ride with can make you feel safer and increase your confidence when you cycle. Joining local cycling groups can expose you to different cycling events.

Useful Resources

Every Woman's Guide to Cycling: Everything You Need to Know, From Buying Your First Bike to Winning Your First Race by Selene Yeager
This book covers how to find the right bike, how to train, and how to eat when cycling regularly.

San Luis Obispo County Bike Coalition
<http://www.slobikelane.org>
This website will inform you on biking events around SLO County.


San Luis Obispo Bike Rental
<http://slobikereals.com>
If you don't have a bike, you can always rent one from this website.

Map My Ride
<http://mapmyride.com/us/san-luis-obispo-ca/>
This website will help you plan your bicycle trips on the many trails San Luis Obispo has to offer.

Bike Shops in San Luis Obispo
Foothill Cyclery | Art's Cyclery | Flanders Bicycle | Cambria Bicycle Outfitter

WOMEN'S POCKET GUIDE TO BICYCLING

In San Luis Obispo



A Senior Project by Kelly Cheung, Advisor: William Riggs

Choosing a Bike

Classic Women's Frame



Having the correct size frame is most important. This depends on the type of bike you want and the kind of riding you will be doing.

Always have these with you when you bike!
Having a basket is a fashionable and convenient way to store these items.



Bike Lock Bike Bell Bike Lights Bike Helmet

What to Wear

You don't need special clothing to bike around!

- Flowing skirts can be gathered with a clothespin while you ride to keep them from getting caught in your bike or blowing in the wind.
- As long as you are comfortable, biking in flats, heels, boots, and sandals can be done.



Always wear what you feel most comfortable in!

Did You Know?
Cycling and bike fashion played a major role in women's emancipation. Bicycling gave women a feeling of freedom and self-worth. As the sport became more popular, women ditched the long, heavy skirts they were expected to wear for more comfortable clothing.

Look Good When You Ride

Prevent helmet hair by tying your hair back into a low bun or french braid. For short hair, style it with gel or hairspray when it is still damp, then fluff out your hair after you take off the helmet.

On The Blog
Check out Anna-Alexia Bastie's blog for quick and easy hairstyling ideas!
<http://www.refinery29.com/helmet-hairstyles>



- The exercise from bicycling will leave you with a healthy glow. Wear waterproof mascara when it rains and powder to touch up when you arrive.
- Avoid a sweaty back by putting backpacks and bags in a basket or wearing an undershirt underneath your clothes. Take it off when you arrive at your destination to leave your clothes clean and dry.

"Bicycling has done more to emancipate women than anything else in the world. I stand and rejoice every time I see a woman ride by on a wheel. It gives women a feeling of freedom and self-reliance." - Susan B. Anthony

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