

Bike Boulevard Communications Campaign

College of Public Health



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In partnership with the City of Iowa City

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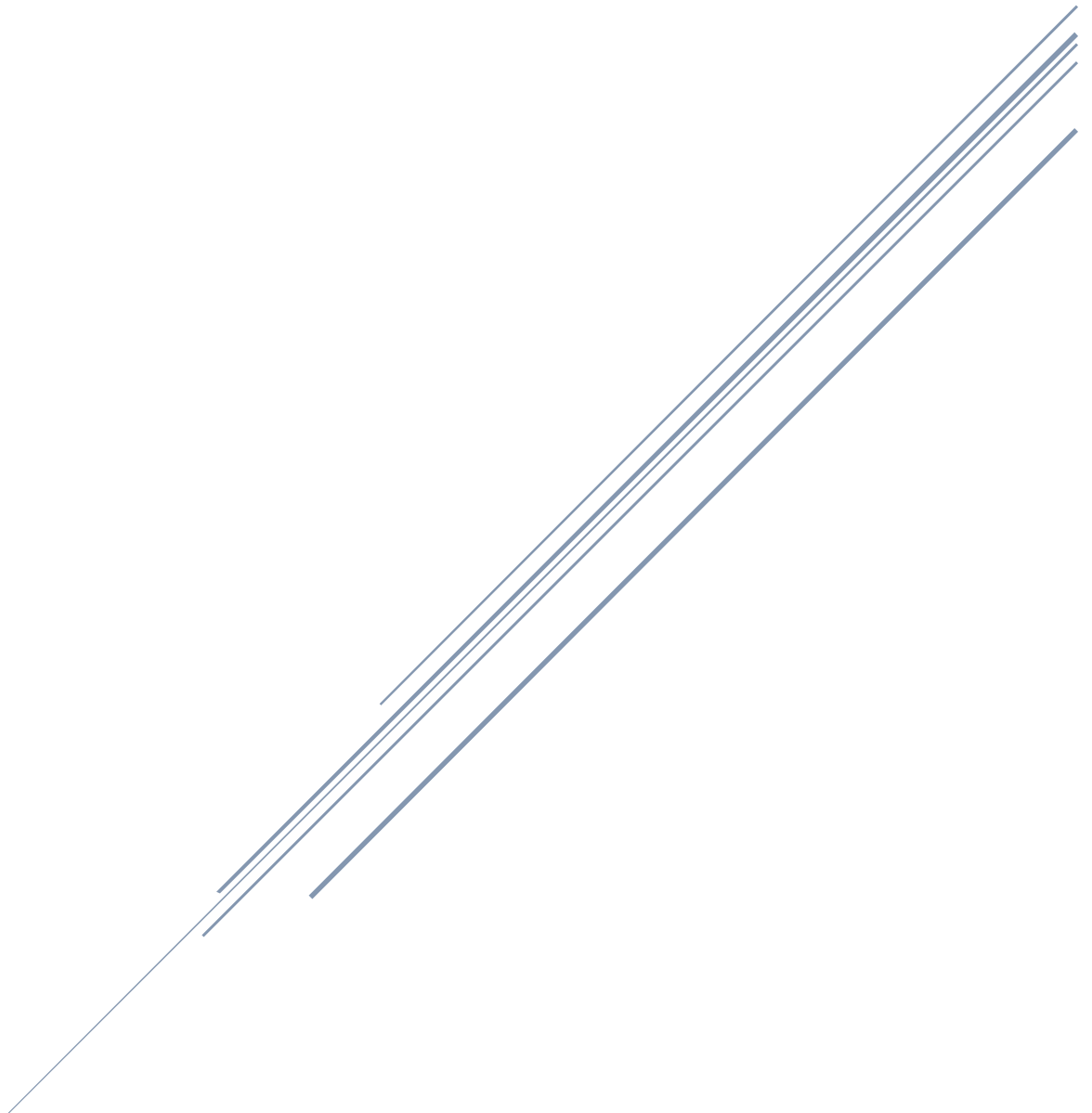
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Join the Movement

Iowa City Bike Boulevard



Erin Arneson, Emily Hejna, Mitch Kang, ThankGod Ugwumba
Health Communication Campaigns: Spring 2016

Significance of the Problem

Active transportation is an important way to get persons of all ages physically active (Aarts Mathijssen, Oers, & Schuit, 2012). In the past few decades, bicycling has become more and more popular for both recreation and commuting purposes. “[Bicycles] are a cheap, fast, healthy and environmentally friendly mode of transportation” (“Metropolitan Bicycle Master Plan,” 2008), and yet most beginner and moderate skilled bicyclists feel uncomfortable and unsafe bicycling on streets that are busier. The individuals who ride bicycles want to be able to go the same places that motorists go, meaning they want to have safe access to every street (excluding major highways). This mission is often supported by cities due to the number of crashes and fatalities that occur between bicyclists and motorists.

Pedestrian and bicycle fatalities were over 16% of all traffic-related fatalities across the nation in 2012; this numerates to around 5,000 pedestrians and bicyclists killed by motorists. Even as motor vehicle crash fatalities decline across the nation, the fatalities and injuries of pedestrians and bicyclists has steadily increased in the past 10 years (“Safer People, Safer Streets,” 2014). In Iowa City, between the years of 1998 and 2007, 273 bicycle crashes were reported. More recent data may be higher due to the more popular nature of bicycling in the community. However, of those crashes, college students experienced the highest number of crashes, and individuals between the ages of 16 to 25 made up 40% of all crashes. Locations that the crashes occurred were densely grouped in the immediate downtown (72 crashes) and surrounding blocks of downtown (61 crashes) (Knapp, Knoploh-Odole, Levy, Rosenberg, & Snyder, 2008). Among the crashes that safety equipment was checked, only 25% wore helmets and none had lights on their bicycles. According to the City, the streets where the most crashes occurred were on Burlington St., Gilbert St., Dodge St., First Ave., and Lakeside Dr. (“Metropolitan Bicycle Master Plan,” 2008).

The Iowa City region has over 40 miles of multi-use trails, and 40% of all trips are less than 2 miles in length. However, the community still strongly believes that more infrastructure could be put in place to encourage comfortable and safe riding on the street. In a 2008 survey by the City, 82% of the community strongly agreed that making Iowa City more bicycle friendly is important to their quality of life, and 38% agreed they would ride more often if there were more bike lanes. Enhancements in infrastructure design encourage safe bicycling, and positively influence individuals who are “eager to enjoy the benefits, cost savings, and pleasure of riding through [the] community” (“Safer People, Safer Streets,” 2014).

These infrastructure improvements can take the form of bikeways, bicycle lanes, bicycle routes, trails, or wide curb lanes. Sidewalks are sometimes offered as the best route for bicyclists; however, various studies have shown that riding on sidewalks puts individuals at 1.8 to 2.5 times greater risk of collisions than riding on the street. As such, best practice recommendations are to expand the bicycle travel network, increase network connectivity, and design systems that include smooth transitions between roadways. Bicycle boulevards are one way to achieve these components while also maintaining a safe, convenient, and comfortable cycling environment for all skill levels (“Metropolitan Bicycle Master Plan,” 2008). After evaluation of the City’s level of bikeability, the League of American Bicyclists recommended that the City focus its infrastructure changes on arterial and collector roads, especially Burlington St. (and Burlington St. bridge), and Gilbert St. On streets with speed limits greater than 35 mph, they recommend protected infrastructure, such as buffered lanes, expanding the network of bike lanes for both the City and the University, and to design a system of bicycle boulevards for a comfortable,

welcoming cycling environment (“Bicycle Friendly Community Feedback: Iowa City,” 2013; “Bicycle Friendly Community Feedback: University of Iowa,” 2014).

Literature Review

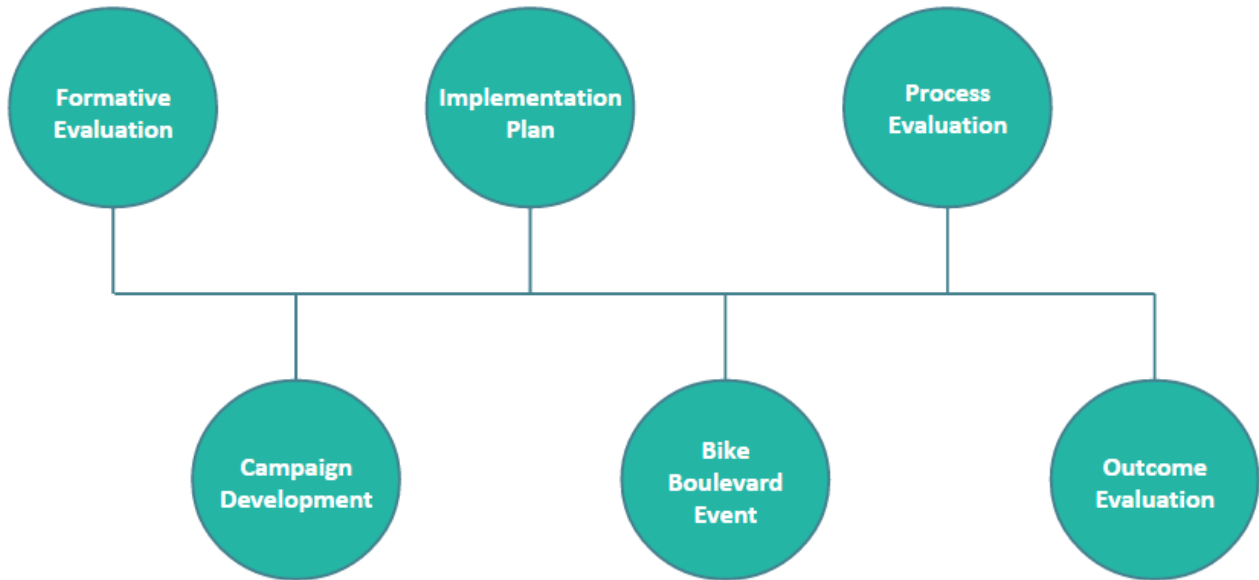
It has been expressed that in order to encourage bicycling within a community, certain improvements must be made. This includes the formation of dedicated bicycle lanes, trails and pathways separated from the roads, better lighting for travel purposes, and more convenient bicycle parking (Akar & Clifton, 2009). Current patterns show that a small minority of bicyclists will bicycle under most circumstances, simply due to the fact that they enjoy it, whereas the majority of people have never even contemplated bicycling (Gatersleben & Appleton, 2007). However, findings show that there is a group of people who would like to bicycle and could be persuaded to bicycle under the right circumstances, these being the community improvements regarding bicycling mentioned above. In Belgium for example, it was shown that community and environmental approaches may be effective in order to make the under-active population more active, and to reduce various barriers they may face in doing so (De Geus, De Bourdeaudhuij, Jannes, & Meeusen, 2008). Furthermore, two interventions have been effective in promoting physical activity in a community: 1) community-scale and street-scale urban design, and 2) land use policies and practices (Heath et al., 2006).

Bicycling across driveways and on side streets creates potential for conflicts, increasing the probability for accidents to occur (Dixon, 1996). Another major obstacle is on-street parking which discourages bicyclists. A factor analysis conducted by Heinen, Maat and van Wee (2011) showed that there are three underlying attitudinal factors in cycling: awareness, direct trip-based benefits, and safety. In addition, statistical analyses that have been conducted in 90 metropolitan areas in the United States regarding the role of bicycle paths and lanes, confirms the notion that cities with a greater supply of paths and lanes incorporated into infrastructure have significantly higher bicycle commute rates (Buehler & Pucher, 2012). One study found that for every one mile of bicycle lanes in existence, there was a one percent increase of bicycle commuters, showing how much of an influence infrastructure is in increasing bicycling (Parker et al., 2013). Furthermore, the likelihood that a given person walking or bicycling who will be struck by a motorist varies inversely with the amount of walking or bicycling (i.e. a motorist is less likely to collide with a person walking or bicycling if more people walk or bicycle in the community) (Jacobsen, 2003).

Regarding school children, one important way to get them physically active is to have them commute to school and back, one promising mode of transportation being the bicycle (Aarts et al., 2012). However, the issue arises with disadvantaged children who live in less affluent areas: the tendency to travel by bicycle or on foot is higher than other children, which exposes them to higher speeds and more traffic. This stresses the need for more crosswalks and bicycle lanes to be incorporated into the infrastructure in these areas (Dowswell & Towner, 2002). That being said, in regard to college students, many campuses employ strategies based on the concept of transportation demand management, which has influenced some schools to establish bicycle/pedestrian committees, including the implementation of full-time bicycle and pedestrian coordinators for campus grounds (Balsas, 2003). These places further stress and influence bicycling behaviors by having: 1) plans focused on implementation, development, and sustainability in the long-term; and 2) the dissemination of promotional materials, which include maps, brochures, bicycle store discounts, webpages, and spreading awareness at bicycle events. Promoting a visibly bicycle-friendly campus, and how messages regarding a bicycle-friendly

campus are conveyed to the public (via the physical environment) are essential in promoting a successful, visible campaign in university settings (Bonham & Koth, 2010).

Timeline



The general timeline for this campaign is outlined in the graphic above, with the extent of the campaign beginning in early February, and culminating at the end of May, 2016. We began investigating the issues surrounding bicycling in Iowa City with a formative evaluation plan and literature review throughout the month of February, followed by key informant interviews and campaign development continuing into mid-March. Since then, the campaign has focused on implementation of activities and development of materials, as well as logistics planning for the bike boulevard event on May 21st. We have also begun to conduct some initial process evaluation, with a pilot test for our larger event which took place on May 1st at the Old Capitol Criterium Race. Process evaluation will continue up until the bike boulevard demonstration itself, with outcome evaluation following immediately post-event and one week after.

Formative Evaluation

Preliminary Findings: Needs Assessment Survey

Based on the need to safely increase bicycling in the Iowa City area, we began with a survey to better understand the community's behaviors, attitudes, and concerns (Appendix A). Our initial formative evaluation consisted of a short needs assessment survey administered in an online format and distributed via social media, email, and a few intercept interviews at the Coral Ridge Mall. We received 44 responses with 60.1% of those surveyed residing in Iowa City, 20.5% in Coralville, and the remainder in North Liberty (6.8%) and other surrounding communities (Figure 1). The majority of respondents who answered the demographic questions fell within the 20-30 year age range, with an additional few in the 40-60 year age range. 75% of respondents indicated that they rode their bicycle at least sometimes, with Recreational use reported as the most common reason for bicycling, followed by Sport/Exercise, Commuting, and Other. The breakdown of reported barriers to bicycling are indicated in the graph below (Figure

2), and participants felt that city infrastructure strongly inhibited their desire or ability to cycle on a regular basis. Safety was another major concern, as one respondent indicated, “[d]rivers are not always friendly to cyclists.” Community members expressed great concern regarding motorists’ perceptions and behavior towards bicyclists, which appeared to be correlated with a general lack of dedicated bike infrastructure and education about road laws. Overall, these interrelated themes of infrastructure concerns, safety issues, and convenience were expressed among many survey participants who found such aspects to be significant barriers to regular bicycling in Iowa City.

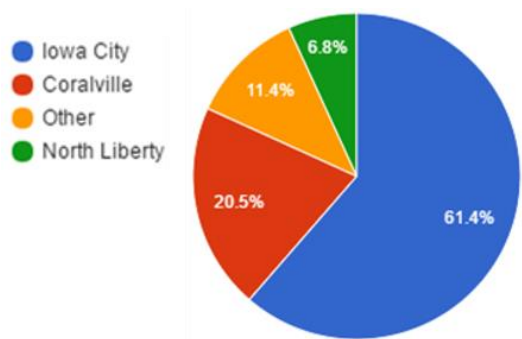


Figure 1: Demographics of Respondents

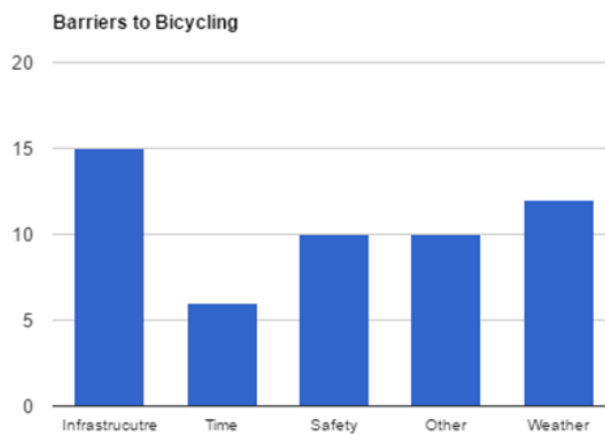


Figure 2: Barriers to Bicycling

(Bike Boulevard Campaign Team, Feb. 2016)

Key Informant Interviews

The results from the preliminary needs assessment survey, as well as research from our literature review, were used to guide key informant interviews with stakeholders in the City and bicycling community. Individuals that we initially met with are listed in Appendix B, and further information regarding those partnerships formed is detailed in a later section. Results of the survey were stressed to those key informants, with an emphasis on proposed solutions for addressing the barriers of infrastructure, safety, and a general lack of understanding road rules. The meetings were guided by a community partnership questionnaire in order to gain feedback on specific areas of interest, with unique questions added based on the position of the individual (Appendix B). Several key informants mentioned that the idea of a temporary bike boulevard had been discussed among various community stakeholders, with College St. already identified as an ideal location for such a demonstration (and potentially permanent change). However, no progress had been made in moving forward with this concept. More research was conducted to understand the benefits of temporary demonstrations of bike boulevards throughout the country, and these findings were also brought to those informants who had proposed the bike boulevard idea. With support from City officials, our team decided to move forward with designing our campaign around such an event. This allowed us to tie in positive infrastructure improvement and bike safety messages with an opportunity for practice-based education for the public on safe road sharing and supporting such changes. Below are several memorable key points that were brought up during the key informant interviews, and these ideas were ultimately used to shape the development of the campaign message and related activities.

Iowa City views the bicycle as a piece of art	“It would be interesting to do a campaign to push citizens to voice their concerns”	Parking is a barrier and people don’t know what sharrows mean
The City is pushing for more bike-friendly initiatives and education	Educate with commuting tips, recommend doing a trial run, identify a mentorship system	Cost of buses take away from costs for teachers: eliminating bus system is key, and biking to school is a great solution
Demonstration of how bike lanes would work	Need to get kids to ride, need people to feel comfortable and safe riding in the street	Big problem when people go against traffic: need people to ride on the right and enforce road rules for all road users
Safe passing laws - need to educate drivers	For kids schools have done bike rodeo, safety village	
Bike lane barriers have to be taller than the average car to be seen as a landscape barrier	Target new family riders who are inexperienced	

Interest Poll

The second component of the formative evaluation involved an interest poll to determine how community members would respond to a bike boulevard demonstration (Appendix C). The survey link was distributed through social media on the Iowa Initiative for Sustainable Communities’ Twitter page, e-mailed to our coworkers, sent out to college e-mail lists, and included in an initial article about the project in the Daily Iowan. We received overwhelmingly positive feedback, with about 90% of respondents indicating that they would support the idea of a temporary bike boulevard (Figure 3). In our open-ended question regarding comments and suggestions, some community members expressed that such an infrastructure change should be permanent, and is a much needed development for Iowa City’s bicycling community. Furthermore, we found that most respondents answered in strong agreement to the question “How interested would you be in demonstrating support for bike lanes in the city by riding the temporary Bike Boulevard?” (1 = not at all interested, 5 = very interested), with the results presented in the graph below (Figure 4). The results of this survey allowed us to gather suggestions and feedback regarding the event, which were then used to help shape our campaign message and goals.

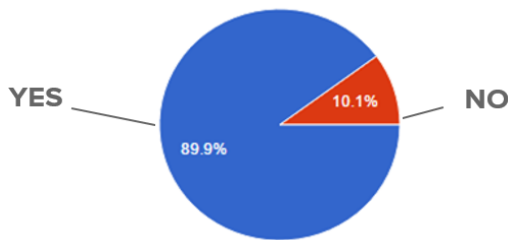


Figure 3: Support for Pop-Up Boulevard

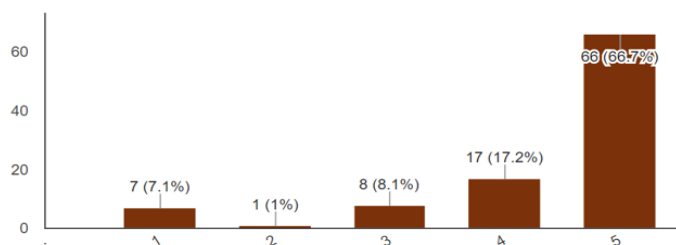


Figure 4: Level of Interest in Showing Support

(Bike Boulevard Campaign Team, March 2016)

Theoretical Approach

PRECEDE-PROCEED

The PRECEDE PROCEED model was used to inform the planning and implementation of this campaign. This model identifies predisposing, enabling and reinforcing factors that influence the adoption of an intervention. Predisposing factors informed the need to assess and enhance community members' motivation to take up bicycling as a new behavior, and was used to assess the knowledge of drivers and bicyclists on safe road and lane usage. Enabling and reinforcing factors informed our campaign message, which highlights the need to adopt bicycling as an active means of transportation in Iowa City. Additionally, the message encourages individuals to advocate for infrastructural change that will result in making Iowa City a more bike-friendly environment, and possibly enhance the likelihood of the City attaining The League of American Bicyclists' "Gold" status. Enabling and reinforcing factors also guided the development of educational materials which stressed the importance, incentives and rewards associated with adopting bicycling as a new behavior (Hendrickson & Becker, 1998; Reading, 2004).

To incorporate these constructs into a campaign, designing a temporary bike boulevard will address bicycling as a mode of transportation, and show individuals one way to advocate for infrastructure change. It will also provide an outlet to distribute educational and campaign materials. As described earlier, a bike boulevard is an effectively designed roadway for bicyclists that enables safe road sharing in the community and promotes active transportation. This temporary bike boulevard can be implemented by closing off a section of a street and painting a bike lane, or removing parked cars temporarily and placing barricades between the bike lane and cars. Such an event could take place over the span of several hours to several days, depending on public interest and available resources. By making the city more visibly bicycle-friendly, and allowing community members to demonstrate their support for infrastructure changes, riding the bike boulevard can have a positive impact on the sustainability initiatives of the City and the University.

Theory of Active Involvement

A central component of this campaign is the formation of partnerships with various community leaders and organizations within Iowa City. The rationale for utilizing community partnerships to promote the adoption of bicycling behavior is supported by the Theory of Active Involvement. This theory posits that key motivators (who are opinion leaders) have a higher social status, and are highly knowledgeable about bicycle safety strategies. Therefore, they can be very effective in influencing other community members' ability to change their bicycle riding attitude (Glanz, Rimer, & Viswanath, 2008; Ogilvie et al., 2011). In addition to using community leaders and members as key motivators, educational materials were designed to enhance the campaign's impact. These materials were used to promote, inform and educate community members on the health-related benefits, and environmental significance of bicycling in Iowa City. One major goal of this campaign is to advocate for policy change by having community members and key motivators engage in interactive feedback during or after the bike boulevard event. This interactive feedback provides an avenue for understanding community members' readiness to change.

Social Cognitive Theory

Constructs of Social Cognitive Theory (SCT) were used in designing and implementing this campaign in Iowa City. This approach recognizes that in the development of behavioral patterns, such as bicycling, learning processes play a major role. It also acknowledges that individuals can learn to identify and acquire appropriate knowledge and skills needed for behavioral change (Glanz et al., 2008). One major aspect of this campaign involves anticipating likely barriers to bicycling, and enhancing community members' self-efficacy by creating a realistic bicycling atmosphere, and demonstrating safe bicycling strategies using a bike boulevard event (De Geus et al., 2008; McNeill, Wywich, Brownson, Clark, & Kreuter, 2006). This element of the campaign aligns with SCT, which posits that learning most likely occurs if there is a close identification between the observer (in this case the participants and community members) and the model (which is the key motivators) and if the observer also has a great deal of self-efficacy (De Geus et al., 2008). The technique employed in this campaign involves both the key motivators and community members exploring barriers and benefits associated with bicycling, identifying situations that might discourage people from bicycling, and developing strategies to ensure safe bicycling. This shows that this campaign recognizes that an individual's self-efficacy plays a major role in how challenges are approached, and also in behavioral change (Glanz et al., 2008; De Bruijn, Kremers, Singh, Van de Putte, & Van Mechelen, 2009). The principles of this campaign are built on the belief that the skills and knowledge acquired through educational materials, and the bike boulevard event, will motivate community members in Iowa City to continue utilizing bicycling as an active means of transportation after the campaign.

Socioecological Model

The Socioecological Model is based on a public health theory of interconnected spheres of influence that ultimately determine health outcomes. Beginning with the individual (the smallest sphere of influence), the Socioecological Model progressively expands outward to portray the various aspects of life that affect health and well-being. From the individual, the model then continues on with interpersonal relationships, organizations and institutions, community factors, and public policy; the larger the sphere, the more significant the impact on both individual and population health (Sallis, Bauman, & Pratt, 1998; Pollack et al., 2012).

It is argued that policy- and community-level factors have the most substantial effect on population health, which is why this campaign sought to address bicycle-related issues at those levels. Therefore, the focus of the campaign became centralized around ideas of community engagement and discussions of public policy. Individuals are unlikely to change their attitudes or behavior if they are not provided the resources or adequate environment to do so. This socioecological concept became apparent in the results of our formative evaluation and literature review as we saw most respondents pointing to infrastructure as a major barrier to cycling. For this reason, campaign messages were developed to mobilize the target audience at the community and policy levels in order to impose the most impact on increasing cycling behaviors among residents in Iowa City. This focus on community-level change became a driving force behind our campaign message, which strives to bring people together and respectfully share the road, with implications that such positive movement could bring about beneficial change in the long-term.

Logic Model

INPUTS	OUTPUTS		OUTCOMES - Objectives		
	Activities	Participation	Short-Term	Medium-Term	Long-Term
Collaborate with interested city officials	Request permission and services from engineering and streets department and Iowa City officials	15 community partners	Increase public awareness on bicycle infrastructure and potential for change	Ensure at least 150 community members participate in the Bike Boulevard event	Improved health status through increased bicycle activity in Iowa City
Funding for media and marketing as well as donations	Develop Educational and event marketing materials (Fliers, postcards)	Iowa City community leaders and officials	Raise awareness of bike boulevard event	Increase number of community members using bicycle as active means of transportation on selected streets within a week after event	Improved infrastructural change that promotes bicycle riding in Iowa City
Grant application for additional funding	Advertise Bike Boulevard campaign on various media outlets and channels	Community members	Reach target audience through different outlets		Decline in crashes and fatalities resulting from bicycle activity in Iowa City
Assistance and input from community partners	Distribute campaign materials at outreach events and through social media		Increase knowledge on bike safety strategies and the need for conducive environment for biking	Increase the capacity of community members to advocate for infrastructure and policy change	
Marketing and event supplies (Handouts, stickers, shirts, Tables, tablecloths, chalk, cones, flowerboxes)	Recruit/sign up interested members of the community for Bike Boulevard event				
Sufficient staff to develop and implement campaign, including volunteers from various community partners.	Perform pre-test evaluation during outreach events				
	Pilot test Bike Boulevard event on Clinton street				
	Design and Implement Bike Boulevard event at College Street, as well as educate and encourage community members to advocate for infrastructural change.				
	Perform post-test evaluation at bike boulevard event or distribute online to event participants				

Campaign Development

Target Audience

The goals and objectives for this project speak to community members of the general population as the audience. With the timing of the event being in the middle of May, the majority of undergraduate college students will have graduated or returned home for the summer, and therefore are not considered as a main significant audience segment. Nonetheless, the proportion of those who stay, as well as the graduate students in town can be included in messages targeted toward the general public. In addition, an emphasis of this project will be on active transportation focusing on city street infrastructure, rather than recreational bicycling on trails. For this reason, individuals who are wanting to bicycle within the City for transportation purposes will be the main target audience of this campaign.

Based on the literature reviewed, audience segments can be divided based on adults who are commuters, adults who are non-commuters, and children (Bonham & Koth, 2010). Findings show that segmenting people into cyclists and non-cyclists, or commuters and non-commuters, will result in encouraging current cyclists to increase cycling behavior, due to the fact that they already own their own equipment, possess the necessary skills, etc. For children as a segment, the importance lies in safety education as well as encouraging families to view the bicycle as an alternative mode of transportation to places such as school. It was repeatedly brought up in our community meetings that children were and are an important group to target in increasing riding and raising overall bicycling awareness. This is because encouraging children to ride a bicycle at a young age can have positive long-term effects on riding into adulthood, with reverberating effects in the community school district where less money would be required to go into the school bus system if rates of active transportation to school were increased. In addition, parents and family members of these children are of importance, since parents serve as role models who have direct influence to educate their children on cycling and cycling safety.

Goals & Objectives

Goal: To increase the number of community members using the bicycle for safe, active transportation by removing the barriers of unsafe infrastructure through demonstrations, advocacy, and education.

Objectives:

1. To distribute bicycle safety educational materials to 150 community members during promotional events and at the bike boulevard event.
2. To ensure at least 150 community members participate in the bike boulevard event.
3. To increase the knowledge of bicycle safety in the Iowa City community by 20% from pre-test responses within one week post event.
4. To gather public feedback and knowledge assessment results to create a comprehensive advocacy report and event toolkit for community stakeholders in bicycle-friendly policy.

After developing our campaign concept, we decided upon a long-term goal of increasing cycling and active transportation in Iowa City. We envision that our campaign message, demonstrated by our bike boulevard event, would portray to the community that there is great potential for improved cycling infrastructure, and that participating in this event and showing

support for this cause will empower residents to advocate for bike-friendly initiatives. The overarching goal is to advocate for a bike-friendly environment in Iowa City by motivating community members through education and demonstration of what a bike-friendly environment would look like. The specific objectives of this campaign were informed by the results we obtained from the literature review and various components of formative evaluation. Our objectives describe our intended results and proposed outcomes of this campaign. They include: distributing educational materials to community members, recruiting participants for our bike boulevard event, increasing bike safety knowledge in the community, and gathering feedback and assessment results to create a toolkit for stakeholders in bike-friendly initiatives.

Message Development

Our group came up with a slogan to go with the overall promotion of our campaign. *Join the Movement* touches on two key ideas: 1) to physically join the movement of traveling (commuting) on the road, and 2) to engage in advocating for bike-friendly initiatives. The objective of the slogan was to be simple and catchy while empowering the audience, but also includes accompanying sub-messages that are intended for different segments of the target audience. Regarding the campaign process, we wanted to: educate all road users to follow the rules of the road and cycle safely; encourage those in the community to participate in our bike boulevard event (where they can receive various educational materials), and actually practice and experience these safe bicycling skills in a controlled environment; for the event participants to recognize how respectful road sharing and effective infrastructure can improve community life. A goal of ours is for community members to advocate and promote a bike boulevard to be implemented into the permanent infrastructure of the City, and the bike boulevard event can accomplish that by offering an opportunity to be involved in positive change.

The gain frame approach was utilized during the development of our campaign message. We wanted to emphasize advocacy for a bike-friendly environment and bike safety, using positively-sided content to shape the perception of adopting bicycling behavior as a benefit that should be enjoyed by everyone in the community. Caiata & Schulz (2009) and Lustria et al. (2013) posit that the extent of behavioral change can be substantially limited if a campaign message does not reflect the individual needs or personal relevance. The *Join the Movement* slogan was formulated to reflect community members' perception on the reasons why they do not utilize bicycling as an active means of transportation in Iowa City. The campaign message echoes the need for infrastructural change which would potentially result in increased use of bicycling as an active means of transportation. This message was chosen because it can be easily understood, does not require further explanation, and can instantly capture the attention of our target audience. In addition, sub-messages such as *Ride the Boulevard*, *Share the Road*, and *Be the Change* were built around clear messages which state the problem, the solution proposed, and the action our target audience can take to reach the campaign goal.

To effectively reach our target audiences, various versions of the campaign message were tailored to resonate with each audience segment (such as commuters, non-commuters, community members and children). Although these messages were adjusted for comprehension and credibility purposes, they still maintained the essence and overarching theme of our campaign message. This approach is supported by Smeets, Brug, and de Vries (2008) which state that compared to non-tailored materials, tailored educational materials command greater attention, are processed more intently, contain less redundant information, and are perceived more positively by consumers.

A participatory approach was adopted in the development of our campaign message. We sought the views and perspectives of some community partners so as to see their reaction and gain their input on the ability of our campaign message to effectively capture audience attention while conveying advocacy and safety messages. The feedback provided were predominantly positive, which thereby informed the usage of our campaign message. Throughout the message development process, we were continuously creating, revamping, and adapting various design materials to portray the main message of our campaign. Several versions of these promotional materials and campaign designs can be found in Appendix D-G.

Implementation & Campaign Activities

Development of Educational Materials

Educational materials were created based on the three target audiences for this campaign, with an overview of general road rules for all road users (drivers and bicyclists), as well as targeted tips for bicyclists who may want to increase their commuting activity, and parents who are teaching their young children to bicycle safely in the community. These print materials were developed in an infographic style, with simplistic yet informative text and image combinations to relay important safety information for each targeted group (Appendix H). This infographic approach was used due to the fact that utilization of visual imagery is much more successful in delivering messages than stand-alone text, as approximately 80% of all information relayed to the brain is entirely visual (Wiesenfeld, 2016). The layout of these materials was meant to be consistent and familiar, with all documents following a similar format to increase message recognition and association with the *Join the Movement* campaign.

To ensure appropriate content, the campaign team consulted with national bicycle groups, community stakeholders, and the literature to devise bicycle safety messages for both bicyclists and motorists that will be relevant to the bike boulevard event, including the following topics (among others):

For Bicyclists:

- Hand signaling
- Safety equipment
- Bicycling near vehicles & parked cars
- Bike lane and sharrows rules

For Motorists:

- Understanding hand signaling
- Safe passing laws
- Expecting cyclist movement
- Bike lane and sharrows rules

The goal of these documents was not to overwhelm the audience with detailed and lengthy text, but to hit on the main points of bicycle safety in a clear and concise manner that was specific to the target group of interest. Several documents were created to achieve those goals that were consistent with our campaign message.

A document for general *Rules of the Road* was created to target drivers and bicyclists, with information on how to safely share the road in a respectful manner. This document was meant to be used in conjunction with our other materials, which target commuters and children more specifically, with the general rules of the road infographic more broadly describing safe road sharing behaviors. The commuter-specific materials included *Bicycle Commuting Safety*, a *Bicycle Commuting Checklist*, and *Bicycle Commuting Tips* for initiating or increasing bicycle commuting behaviors. The combination of these materials was designed to encourage individuals

to consider the possibilities for commuting by bicycle, with specific content to guide them in the process.

Parents, families, and children were another key target audience for this campaign, as identified by various stakeholders. With these materials, the main goal was to educate parents on safe bicycling skills for children, so that they could then relay those messages to their families. The *Cycling for Children* document outlined recommendations for children of specific age groups, with age-appropriate content targeted to children ages 5-9 and 10+. Bicycle safety tips for children of all ages were also included, with references to the importance of following the general rules of road safety which could be found in the *Rules of the Road* document.

Our final educational document, *Boulevard: Step-by-Step Guide*, outlined the role of advocacy in creating bike-friendly initiatives, with a step-by-step process for community members in promoting a bike boulevard in their own neighborhood. In parallel to the advocacy component of our campaign message, this document was meant to provide a simplified approach to joining the discussion of bike-friendly initiatives in Iowa City. With specific bicycle-friendly organizations and City departments referenced, this step-by-step guide allows residents to have a voice in their community and show their support for bike-friendly policy.

Campaign Outreach

In order to meet the objectives of this campaign of distributing these educational materials, ensuring participation in the boulevard, and increasing knowledge measured by surveys and feedback, being involved and having a campaign presence in the community was essential. To start, we distributed our first flyer postcards that describe what a boulevard is and how a demonstration will be beneficial to attend. The outreach event, Bike Tune-Up, was put on by World of Bikes and the Office of Sustainability and was held in the Pentacrest. Due to poor weather, only a handful of flyers were distributed, but this allowed us to connect with both of these organizations and form stronger partnerships.

Reaching children and families as a target audience of our campaign was improved through the partnership we had with the Iowa City Community School District (ICCSA). This partner encouraged us to attend an ICCSD Board Meeting where we were allotted 4 minutes to present to the board, community members, and viewers of the school district's local television channel. The presentation moved through a discussion of who we are, our campaign message, why biking is important to the schools, children and parents, and how joining the movement and riding the boulevard will benefit each of these audiences. A few key safety messages were delivered and questions regarding the date and time were answered.

Attendance at the River Run 5k gave us a better chance to distribute flyers and talk to community members about the event. Through these interactions, followed by photos for social media, we were also able to receive feedback on the campaign messages we had designed thus far. Previous connections with other University and local groups gave us the chance to leave flyers at other booths for wider distribution. At the event, a connection was also made which assisted us to have our social media page shared to all individuals involved with the River Run Facebook page.

Based on an earlier partnership with the Bicycle Advisory Committee, we were connected to the Iowa City Cycling Club and invited to host a mini-boulevard at the Old Capitol Criterium Race. This event was projected to have a great turn out and audience of advanced cyclists as well as children riders. Details of this event as a pilot test will be provided in the Process Evaluation section. This outreach also required printing our education materials and

flyers, and provided a great space to distribute both of these. It connected us to the Bike Library and made our presence visible in the biking community. Despite the cold weather and rain, dozens of photos were taken and played in well to our social media outreach.

Further outreach plans include a meeting with the League of American Bicyclists which has a section both for small businesses as well as community members to listen and learn. This will allow us to pass out flyers to a group who would be likely to encourage and support our campaign and attend the bike boulevard event. Attendance at weekly Farmers Markets will also provide us a chance to distribute campaign materials, including educational handouts and flyers. The other component that is important to include during these outreach events is collecting responses to the pre-survey. A Family Ride with the mayor will be a great place for outreach to meet and encourage the child and family audience to attend the bike boulevard event so that families can learn how to hold events like this in their neighborhoods and schools.

At the start of the design of this campaign and campaign outreach, tabling at the Farmers Market was the only event that we were aware of that could provide a useful venue for reaching community members. Through partnerships, connections at events, and community engagement, we were able to increase our involvement in the community and spread the campaign message farther. Furthermore, T-shirts were designed and created for the campaign team to wear at all community outreach events, to establish a more recognizable symbol for the *Join the Movement* campaign as we engaged in more frequent and persistent community outreach (Appendix I). The importance of this step cannot be underestimated as it is vital to engage the community in decisions, build trust and presence, and reach all target audiences through different channels.

Social Media

The utilization of social media for a large segment of our target audience was necessary to inform and include individuals in the design and success of this campaign. Early on in the project, social media accounts were created for Facebook, Twitter and Instagram. Twitter was not utilized to the capacity we intended but served as a source to link our surveys, inform on upcoming outreach events as well as ‘brand recognition.’ The Iowa Initiative for Sustainable Communities frequently helped us with these tasks by retweeting or posting to all of their followers. We believe this assisted us greatly in obtaining sufficient responses to our surveys. Instagram provided an outlet to post photos on the outreach we were doing as well as a space for campaign message dissemination and recognition. Facebook was the primary channel for social media outreach due to the familiarity of it, however the other modes were utilized to different capacities.

Through Facebook, we were able to post our campaign flyers, education materials, links to surveys, as well as logos and images to provide a chance for dissemination and ‘brand recognition.’ After following and liking dozens of bike related organizations, both local and national, we were provided a good library of posts that we could share and repost in order to keep our presence noticeable. The goal of Facebook was to have a place where individuals could reference details about the campaign and event, as well as provide links and information that spoke directly to the education points that we felt necessary to elaborate on. Using a small portion of our budget to boost our posts (advertise on other people’s timelines) for our Mini Bike Boulevard at the Criterium, as well as our article in the Daily Iowan, showed a much larger reach of that information and was related to more visits to our page. We received positive results from other organizations when asking them to post our event, or share the link to our survey. As stated earlier, the River Run page shared our page to all of their followers which totaled over 1,000

people. Other pages that we reached out to included World of Bikes, the local Blue Zones Project, Iowa City Women's Cycling, Iowa City Cycling, University of Iowa Cycling, Geoff's Bike and Ski Shop, and Bike Iowa. When referencing the campaign and event, Facebook was utilized similarly to a website where in interviews with newspapers, presentations to school boards, or meeting community members, it is the primary place we referred people to for more information. It is also the place we have the event listed as to predict participation and promote giveaways during the event.

Local Media

In an effort to spread our campaign reach in the Iowa City community, we have reached out to numerous media outlets to distribute our campaign message, pre-survey link, and event information. To do so, we created a media package of detailed campaign and event information, as well as attachments of promotional materials, which were then emailed to specific contacts provided by a local bicycle advocate and community leader. We have recently been in contact with local newspapers, radio, and TV stations, including the following media channels: Iowa Now, UI News Release, Daily Iowan, Iowa City Press Citizen, Little Village Magazine, Cedar Rapids & Iowa City Gazette, WSUI-AM Iowa Public Radio, KCJJ Radio, PATV, City Channel 4, KCRG-TV9, and KGAN. We have successfully completed two interviews with the Daily Iowan: one initially regarding the partnership between the IISC, City of Iowa City, and College of Public Health, and a more recent article specifically outlining our campaign goals and how those concepts will be relayed through our bike boulevard event (Appendix J). As we near our Bike Boulevard event on May 21st, we have plans to follow-up with all media outlets to relay the immediacy and importance of campaign and event coverage, in hopes that they will be more receptive to an upcoming event.

Through a successful partnership with ICCSD, our materials have been distributed through the school district's monthly newsletters, the district website, and school-specific PTA newsletters. The UI Office of Sustainability has also been instrumental in distributing our campaign materials through their periodic newsletters. In the coming weeks, we intend to post printed flyers at various locations in the community displayed our campaign message and event information. These community postings will include City and University buildings, local businesses, bicycle shops, shopping malls, the pedestrian mall, and other public posting areas. We have already had successful relations with the University's Community Recreation and Wellness Center, where they have agreed to post our information on their digital screens and distribute printed copies of our materials as well.

Bike Boulevard Demonstration Community Partners




In order to effectively distribute our campaign message and host a successful bike boulevard event, partnerships were vital to this campaign. After the initial round of community meetings, the local organizations presented in the table below are the ones we further identified as partners. We met with them more frequently, and they offered to help us with the campaign design and event plan. Some examples of how these organizations are offering their expertise, include: offering safety checks (World of Bikes), helping plan commuting routes for event participants and anyone else interested, along with various giveaways (Think Bicycles), distribution of Bike to the Market coupons (Iowa City Farmers Market) after completing the

event ride, Jack Piper providing gift certificates (part of the ownership group of Basta, Atlas, and Jimmy Jack’s), among other miscellaneous activities.

Our group will also be distributing our education materials at the outreach activities listed, such as the Farmers Market, in order to accomplish our goal of educating the community on how to advocate for protected bicycle lanes, while increasing bicycling awareness in the area. In addition, we have partnered with People for Bikes as we applied and got awarded a grant from them to help us make the protected bike lane part of the event more prominent. They have also provided us with protected bike lane t-shirts, buttons, and People for Bike stickers to give away to participants at the event.

AGENCY	CONTACT PERSON(S)	RESOURCES
Bicycle Advisory Committee	Liz Christiansen Anne Duggan Willy Tan	<ul style="list-style-type: none"> · Assistance with promotional opportunities (Bike Tune-Up) · Presentation at monthly committee meeting: committee member input, comments on initial educational materials · Dissemination of promotional materials through newsletters
Bike Library 	Anne Duggan Cody Gieselman Del Holland Mark Pooley	<ul style="list-style-type: none"> · Volunteers for bike boulevard event - assistance with helping commuters plan routes
City High School 	John Bacon	<ul style="list-style-type: none"> · Use of City High parking lot as gathering point for bike boulevard
City of Iowa City: Neighborhood & Development Services 	Brenda Nations	<ul style="list-style-type: none"> · Coordination with City Manager’s Office · Assistance with street permits · General contact person for referrals within the City Government
City of Iowa City: Public Works & Engineering	Jason Havel	<ul style="list-style-type: none"> · Guidance in designing streets for bike boulevard event and meeting regulations
City of Iowa City: Streets & Traffic	Jon Resler	<ul style="list-style-type: none"> · Use of street equipment for events (orange traffic cones, pavement stencils)
Iowa City Cycling Club	Ben Anderson	<ul style="list-style-type: none"> · Provision of space at the Old Capitol Criterium Race for Mini Bike Boulevard demonstration and campaign tabling

 <p>iowa city cycling club</p>		
<p>Iowa City Farmers Market</p> 	<p>Tammy Neumann</p>	<ul style="list-style-type: none"> · Tabling opportunities at Farmers Market to distribute campaign materials and promote event · Use of Chauncey Swan Park adjacent to Farmers Market as a finishing point for bike boulevard event participants
<p>Iowa City Community School District</p> 	<p>Phil Hemingway</p>	<ul style="list-style-type: none"> · Presentation at Board Meeting (publicly televised) · Dissemination of materials though school & district newsletters, district website, and PTA newsletters
<p>Iowa Initiative for Sustainable Communities</p> 	<p>Sarah SanGiovanni</p>	<ul style="list-style-type: none"> · Contact person for project development · Assistance with funding · Contact for printing materials and acquiring supplies · Dissemination of campaign information through social media
<p>Metropolitan Planning Organization of Johnson County</p> 	<p>Sarah Walz</p>	<ul style="list-style-type: none"> · Main contact for bike boulevard event logistics · Aid with City standards for bike-friendly initiatives · Coordination with the City Government
<p>People for Bikes</p>  <p>peopleforbikes™</p>	<p>Aisling O’Suilleabhain</p>	<ul style="list-style-type: none"> · Mini grant (\$500) to enhance protected bike lanes features at event · Participant giveaways (T-shirts, buttons, stickers)
<p>Think Bicycles of Johnson County</p>	<p>Anne Duggan</p>	<ul style="list-style-type: none"> · Promotion of campaign on website · Provision of participant giveaways, and Think Bicycles items available for purchase at event

		
<p>University of Iowa Office of Sustainability</p> 	<p>Liz Christiansen George McCrory</p>	<ul style="list-style-type: none"> · Dissemination of campaign information through newsletters · Microfiber cloths with bike safety information to give away during event
<p>World of Bikes, Iowa City</p> 	<p>Ryan Baker</p>	<ul style="list-style-type: none"> · Volunteers to perform safety checks for participants at start of bike boulevard (at City High)

Event Logistics

In order to reach our target audiences and increase the likelihood of children being able to attend the boulevard, a Saturday was suggested as the best day to hold the event. Pairing it with the Farmers Market also provided a connection to an existing city event and a time frame of when to be available. Saturday, May 21st, 2016 from 8am to noon, individuals are welcomed to join the movement and ride down the boulevard to learn and support biking infrastructure. Filing a parade permit request was a simple initial step and met with approval and support from the City, and we are extremely grateful to them for waiving the cost of the permit. Approval from Principal Bacon at City High also allowed us a chance to use the faculty lot as the starting point, to allow individuals who are not riding to the event a place to park their cars and ride from there. At the start, we will have a table with our education materials and campaign flyer to provide individuals. There will also be safety checks available, conducted by local bicycle experts, for all individuals, and especially to ensure that children are wearing their helmets properly. Individuals in the biking community will be available to talk with participants who may be considering commuting regarding the safest route as well as other commuting tips. It was suggested that at this point we make a safety village, as is commonly done at community schools, for children to learn their cycling hand signals and proper biking behavior; however this has not been finalized. The end of the boulevard at the Farmers Market will also provide a place for informing individuals with our education handouts, campaign materials, and surveys. Volunteers were offered through a member of the Bicycle Advisory Committee, and will assist with set up and teardown, be located at the start and throughout the boulevard, and be stationed at the Farmers Market to assist individuals with questions regarding infrastructure, how to host a boulevard, safety crossing streets and following the route.

After meetings with various departments within the City, such as the Streets Department, Public Works and Engineering, the details of the infrastructure changes were approved. According to the Manual on Uniform Traffic Control Devices guidelines, the proper width of

bike lanes, roadways, paint and symbols will be followed to avoid liability issues. As seen in Appendix K, four blocks on College St. from Muscatine Ave. to Dodge St. will be altered as part of the boulevard. Blocks between City High and Muscatine Ave. as well as those from Dodge St. to the Farmers Market are already considered bike friendly, and therefore will not be altered. The main changes to occur will be in the protected bike lane between Muscatine Ave. and Summit St., re-defined sharrows in the Summit St. roundabout, and painted bike lanes between Summit St. and Lucas St.. Due to the mini-grant awarded by People for Bikes to host a protected bike lane, this section will include flower pots spaced out properly and under the 3 foot guidelines during the block. All changes will be held on the westbound side of College St. Due to the parking in this section already being prohibited on odd calendar days (and the event on May 21st), we were able to show how infrastructure without cars allows for these protected bike lanes. In addition to being more protective, and individuals feeling more comfortable and safe, this segment will be aesthetically pleasing. Past examples of protected bike lanes have provided resources on constructing flower boxes, but due to skills and time, other options will be reviewed to find the most effective and efficient demonstration.

Sharrow stencils and bike lane stencils were offered to use by the City and will be placed accordingly in lanes and around the Summit St. roundabout. For both of these, as well as the bike lanes, this will be demonstrated through the use of temporary chalk paint. Specific brands were recommended by referral from the Streets Department as a type of paint that washes away quickly. Concern was mediated regarding this when the City agreed to allow the chalk to stay on the street until the street sweepers clean on Sunday evenings or Monday mornings. Setting up the boulevard will begin the night before with spraying the lanes, sharrows, and bike lane stencils with the help of volunteers. Early in the morning on May 21st, we will set up the flower pots, cones, and tables at the start and end of the boulevard.

Plans for the boulevard took many forms early on. From being a larger stretch of College St. completely protected, to a smaller section for multiple days, this is the plan that met the needs of all partners. Removing cars for the whole road was an issue due to the nature of individuals not following guidelines and the only solution being towing. With odd-day-only parking on one block, we were happy to do this demonstration of the protected bike lane in a more condensed and high-quality manner. Additionally, the street was decided to remain open to all traffic in order to provide real practice for bikers of managing to ride with cars. It also allows for the demonstration to be experienced by drivers to see and learn how bike infrastructure affects them.

Pop-Up Bike Boulevard: A Reflection of *Join the Movement*

The bike boulevard demonstration provides the community with a practice-based experience to culminate the activities of our campaign in a very observable and participatory manner. This bike boulevard is not just an event, but rather an inclusionary example of what potential lies in bike-friendly infrastructure for our community. The pop-up boulevard will therefore exemplify the messages relayed throughout our campaign by providing an educational experience for community members in a protected and controlled environment, while portraying the benefits of bike-friendly communities, infrastructure, and attitudes. Our hope is that such a demonstration will show all road users, including cyclists and drivers, that respectful road-sharing is possible with the proper tools. Furthermore, this approach will demonstrate to the City and other community stakeholders that residents support bike-friendly initiatives, and their presence at the bike boulevard demonstration will help us to relay that message.

Budget & Justification

Expense	Quantity	Unit Price	Cost
Promotional/Educational Materials			
Promotional Education Materials	250	\$.64	\$160.00
Promotional Flyers	75	\$.32	\$24.00
Promotional Postcard	100	\$.25	\$12.50
Event Day Education Materials	275	\$.64	\$176.00
Promotional Stickers (2in)	60	\$.87	\$52.03
Subtotal (1)			\$424.53
Event Day Materials			
Chalk Spray Paint	4	\$40.00	\$160.00
Flower Boxes	15	\$25.00	\$375.00
T-shirts	4	\$25.00	\$104.00
Yard signs	10	\$16.50	\$165.00
Marketing and Advertising			
Radio	-	-	\$0.00
Newspaper	-	-	\$0.00
Television	-	-	\$0.00
Computer	-	-	\$0.00
Office Supplies	-	-	\$0.00
Logo Development	-	-	\$0.00
Internet	-	-	\$0.00
Professional Services	-	-	\$0.00
Miscellaneous Expenses			\$50.00
Subtotal (2)			\$479.00
Grand Total			\$1,278.53
Available Funds			\$1,300.00

Our initial funds were provided to us by the Iowa Initiative for Sustainable Communities, and that \$500.00 will go toward our promotional materials, which are mainly print services. The first round of postcard flyers was printed unprofessionally since neither the message or design was finalized, but allowed us to hand out information on the campaign at preliminary outreach events. The promotional education materials for outreach included our campaign goals sheet, a children’s safety handout, and three commuting handouts. Based on the initial printing and evaluation of how many individuals take handouts, we were able to determine how many more we would need for the event day. Event day education materials include the 5 handouts listed above, plus a general bike safety handout and a step by step guide to a boulevard (advocacy) handout. In total, there will be 75 copies of each handout and flyer. Promotional stickers, in combination with donated stickers from People for Bikes will be a process evaluation measure, handed out to each person at the start of the boulevard.

The second funding source, People for Bikes, allowed us to improve upon the infrastructure plans and distribute more education and campaign materials. One can of chalk spray lasts 50 linear feet, and the length of our boulevard will require 24 cans, which are sold in cases of six. This will be used to paint both bike lane lines and for the bike stencils. Flower boxes will be either built or purchased, but with the section of the protected road being around 500 feet, we would like to alternate a flower box with a cone every 15 ft. per guidelines, totaling

to a necessary 15 flower boxes, and 15 donated cones. Based on the remaining budget, the amount able to spend per flower box will be \$25.00. Yard signs have three purposes: 1) a campaign dissemination channel, 2) boulevard event advertisement, and 3) on the backside, will have safety and motivational messages for individuals riding or driving down the boulevard. They will be provided to residents of the block beforehand when explaining the event, or requested to be placed on the day of the event.

Lastly, both of our partners with the City of Iowa City and Think Bicycles have granted us a portion of funds to assist with the event. The remaining money was spent on T-shirts to make our presence more obvious at both outreach events and the bike boulevard demonstration, as well as a device to spray the chalk, and a table for outreach. We anticipate working with flower shops to donate or loan flowers for the event time and using the T-shirts provided by People for Bikes as a thank you gift to our volunteers as well as make them more obvious to participants during the event.

Monitoring & Process Evaluation

In order to ensure this campaign accomplishes its intended goal, we have had to assess how well various aspects of our campaign have been implemented. This form of evaluation focuses on the campaign's operations, implementation and service delivery.

As stated earlier, some of our major objectives were to distribute bicycle safety educational materials to 150 community members during promotional events and at the bike boulevard event, and to ensure that at least 150 community members participate in the bike boulevard event. In order to assess how effective our community outreach has been, and to ensure these objectives were accomplished, we have been and will keep track of the number of postcards and flyers distributed among community members in Iowa City; we kept count of the number of people that rode the mini bike boulevard; we counted the number of people we talked to; we kept track of the reach, views and likes on our Iowa City Bike Boulevard Facebook page; we also kept track of the number of newsletters and article publications that mention our campaign and bike boulevard event. The Daily Iowan, Iowa City Press Citizen, and Bike Iowa, all of which have a fairly high daily audience, posted articles or calendar listings regarding our campaign. This increases the likelihood that our campaign have been seen by a fair amount of Iowa City community members.

Another major objective of this campaign is to increase the knowledge of bicycle safety in the Iowa City community. In order to achieve this, we developed promotional and educational materials. Before distribution, we utilized community partners meetings, the school district meeting and intercept interviews to determine the credibility, likeability, attention getting, and reaction to our promotional and educational materials. The essence of engaging community members and partners in assessing these promotional and educational materials is to ensure that our campaign message resonates well with our target audience.

Furthermore, to fully assess how well the bike boulevard component of our campaign will be executed, we plan on using the feedback section of our pre- and post-survey to assess community members' perceptions of the event and to assess whether the campaign was able to meet those expectations. We will also be handing out stickers and keeping count of the number of stickers distributed, to help us determine the number of people that participated in the bike boulevard event.

Pilot Test: Mini Bike Boulevard

As part of our process evaluation, we worked with the Iowa City Cycling Club to hold a Mini Bike Boulevard at the Capitol Criterium Race on May 1st, 2016 on Clinton St. between Iowa Ave. and Jefferson St. We used this opportunity as a pilot test for our bike boulevard event, and constructed a small protected bike lane for half a block on Clinton St. outside of Phillips Hall, and also set up a table with our flyers and educational materials. Through this pilot test, we had a few take-away messages to work on for our College St. Bike Boulevard. We learned that the boulevard was most popular with children, that 5-ft bike lanes may not be wide enough, more proactive community outreach is needed to relay our campaign information, construction of the bike lane is time consuming, more printed educational and promotional materials are needed, clear signage and bike lane barriers to direct people into the boulevard must be used, actual signs rather than sidewalks chalk will be more effective, and that it might be helpful if we incorporate some kind of entertainment (i.e. music) to enhance event participation. Photographs of our Mini Bike Boulevard can be seen in Appendix L.

Impact and Outcome Evaluation

The essence of conducting an outcome evaluation is to determine whether the campaign had the desired effects on event participants and the community at large, and whether those effects are attributable to the campaign. In order to assess the extent to which our campaign achieves its outcome-oriented objectives, a pre- and post-survey will be used (Appendix M-N). This survey was developed after conducting literature reviews, community needs assessment, and establishing our target audience. The survey was designed to help assess the effectiveness of our campaign in enhancing community members' knowledge on bike safety, road sharing ability, their willingness to take up bicycling as an active means of transportation, and their motivation to advocate for infrastructural change.

To carry out this evaluation, we will provide a pre-survey questionnaire to each participant at the bike boulevard event, in addition to those we have already distributed via mass emails, Facebook, the City and MPOJC website, and the school district. After completion, the results will be recorded and documented. This survey captures the participants' bicycling behaviors, bicycling skills, road safety knowledge, willingness to actively use the bicycle as an active means of transportation, motivation to advocate for a bike-friendly Iowa City, and participants' expectations of the bike boulevard event. A post-survey will be handed out to each participant at the end of the event, and a week after. This survey captures the general performance of the campaign and its impact on participants' changes in bicycling behaviors, bicycling skills, road safety knowledge, willingness to actively use bicycle as an active means of transportation, motivation to advocate for a bike-friendly Iowa City, and bike boulevard event expectations. In addition to the pre- and post-survey, we will be counting the number of people that ride their bicycle down College St. one week before and after the bike boulevard event, to determine if the event had any influence on regular cycling traffic flow down this major thoroughfare.

After collecting the aforementioned data, the behavioral and learning effects of our campaign will be assessed by comparing the campaign outcomes, which represents results obtained from the post-survey, to an estimate of what would have happened in the absence of the campaign which represents the pre-survey. By comparing the results of our pre- and post-surveys, we hope to see an increase in bike-friendly attitudes, knowledge, and behaviors that is reflective of our campaign message and event.

Conclusion

Overall, the goals and messaging of the *Join the Movement* campaign aim not only to encourage individual behavior and attitude change, but engage the entire community in discussions of bike-friendly infrastructure and policy. This type of mobilizing change will have the most impact when stakeholders and City officials are involved and able to see the support for bike-friendly attitudes, and we believe that this campaign has the potential to ignite that motivation. Our semester-long initiatives coupled with this upcoming bike boulevard demonstration will provide the support for increased bicycle safety education, as well as the foundation to create a more cohesive and respectful community of road users. We believe that our efforts have laid the groundwork for engaging discussion that will continue beyond the scope of this event to foster the idea of safely sharing the road and advocating for progress.

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Appendix A: Needs Assessment Survey

Join the Movement: Iowa City Bike Boulevard

Community Needs Assessment

Your response to the following questionnaire is important to this program. We are interested in your honest opinions. Your responses to this questionnaire are anonymous and will remain confidential.

1. What is your age? _____
2. What town do/or did you live in?
 - Iowa City
 - Coralville
 - North Liberty
 - Other: _____
3. Do you bike?
 - Yes
 - Sometimes
 - No
4. If not, what are your reasons for not biking? _____
5. What keeps you (or others in your community) from biking, or biking more than you already do now? _____
6. Why do you bike?
 - Commuting
 - Sports/Exercise
 - Recreational
 - Other: _____

Appendix B: Key Informant Interviews & Questionnaire

Meeting Date	Contact Person(s)	Organization
3/2, 3/9	Sarah Walz	MPOJC
3/3, 3/27, 4/5	Anne Duggan	Think Bicycles, BAC
3/7	Cara Hamann	UI Injury Prevention Research Center
3/9	Phil Hemmingway	Iowa City Community School District
3/9	Willy Tan	UI Office of Sustainability
3/17	Juli Seydell Johnson	Iowa City Parks & Recreation
3/22	Brenda Nations	Iowa City Sustainability Services
3/22	Steve McGuire	Bike Building Class
3/23	Josh Shaumburger	IC & Coralville Visitors' Bureau
3/23	Bob Oppliger	
3/24	Jason Havel	Iowa City Engineering Dept.
3/30	Liz Christiansen	BAC
4/7	Jerry Anthony	UI Urban & Regional Designing
4/12	BAC (Ben Anderson & Joshua Smith)	BAC Committee Meeting
4/12	City Govt. (Simon Andrew & Jon Ressler)	City of Iowa City Meeting

1. What do you think is feasible for this group project in the next 2 months?
2. What barriers prevent people from biking more?
3. What barriers prevent The City from making infrastructure/policy changes?
4. Where is The City currently at in planning and implementing bike-policy changes?
5. In terms of expanding bike lanes and share roads, are there any criteria that make certain roadways a priority for future infrastructure changes?
6. What are the criteria for bike-friendly city rankings (silver, gold, platinum)?
7. Are there any specific risky areas in the city (high accident rate, troubled traffic flow)?
8. Are there any specific populations within the University/city that you think could be targetable for a bike campaign, or would be receptive to this kind of information?
9. [Where] are you in the process of doing a demo street closing for bikes? (have heard plans about testing on College St.)
10. What events in Iowa City could we potentially partner with to do some sort of campaign? (IC Arts Festival, River Run, etc.)
11. Do you have any interest in forming a partnership with our campaign?
12. Are there any other relevant people you think would have valuable input for this campaign, and would you mind providing contact information?

Appendix D: Preliminary Designs



Appendix E: Promotional Materials



IOWA CITY BIKE BOULEVARD

A **Bike Boulevard** is a low speed and low volume roadway that improves bicycling conditions to create a more safe, beautiful, and sustainable community street.

RIDE THE BOULEVARD this May to **learn** the rules of road sharing and show your **support** for bike-friendly streets in Iowa City!

Learn more and stay updated about our event during Bike to Work Week!
www.facebook.com/iowacitybikeboulevard/



JOIN the MOVEMENT

Iowa City Bike Boulevard

Saturday, May 21, 2016 8am - Noon

College Street, Iowa City
From City High to the Iowa City Farmers Market
Join us at any point along the route!
Kids of all ages welcome!

#ICBikeBoulevard
@ICBikeBoulevard
www.facebook.com/iowacitybikeboulevard/

Appendix F: Logo Development

Early Development:



Final Versions:



Appendix G: Campaign Goals

JOIN the MOVEMENT

Saturday May 21, 2016 8am-Noon
College Street, Iowa City



Ride the Boulevard

Bike, drive, or walk our College Street Bike Boulevard demonstration during Bike to Work Week, to experience the full potential of bike-friendly roadways.



Share the Road

Practice your road-sharing skills and learn the rules of cooperative transportation, to ensure safe travel and respect for all road users.



Be the Change

Show your support for bike-friendly initiatives by coming to the event and learning how to host a boulevard on a street near you.



What is a Bike Boulevard?

- A low speed and low volume street that optimizes bicycling conditions to create more safe, sustainable, and beautiful community streetscapes
- Creates more defined bike lanes and controls traffic flow to build a network of comfortable and safe streets for all community members
- Long-term impact of a Bike Boulevard encourages green spaces, promotes active transportation, and builds community cooperation


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@ICBikeBoulevard

www.facebook.com/iowacitybikeboulevard/



Appendix H: Educational Materials


JOIN the MOVEMENT 

RULES of the ROAD


*All drivers, cyclists, and pedestrians, must obey the rules of the road.
Learn more to help make road-sharing safe and respectful for all road users!*

Share the Road: Tips for Drivers

Cars must allow bicyclists **3 feet** when passing
Treat a bicycle as you would any other vehicle
Do not overtake a cyclist to turn right, unless it is safe and clear







3 feet




- Slow down and wait to pass if there is oncoming traffic
- When turning or passing, check mirrors for cyclists approaching from behind
- Be aware of **sharrows**: this means that the lane is a shared space for bicycles and cars

Follow the Rules of the Road

Drivers AND cyclists must obey all traffic laws and signs, including stop signs and traffic lights
Cyclists should ride with traffic on the right side of the road, not on the sidewalk
All road users should give special attention to intersections and driveways, and yield appropriately
Be alert, and watch for signals of other road users to anticipate movements









Left Turn Stop or Slow Right Turn

Bike Safety

- Use hand signals to relay your intentions to other road users
- Be visible and predictable: don't swerve within the lane
- Avoid riding in the door zone of parked cars
- Use bike lights and reflective gear when riding at night
- Prepare for a left turn by moving over one lane at a time
- Obey the rules of right-of-way at intersections
- Always wear a helmet!

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BICYCLING for CHILDREN

All children should follow the general rules of the road by riding right, using hand signals, and obeying stop signs. Here are some cycling skill-building recommendations for kids of different ages:

CHILDREN AGES 5-9



It's safest to ride on the sidewalk, on the right side of the road



Do not ride at night without an adult



Ride straight, without swerving

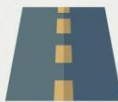


Look before you cross the street

CHILDREN AGES 10+



Ride in groups and at a safe distance from each other



The ROAD is the safest place to ride, not the sidewalk



Follow the direction of the lanes at intersections



Look behind you & signal before changing position



ALL CHILDREN should be aware of driveways, and look before crossing



Always make sure to wear a helmet that is fitted and secure

PARENTS: Be a Role Model!

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JOIN the MOVEMENT 

BICYCLE COMMUTING TIPS

PLAN YOUR ROUTE IN ADVANCE

Consider using a combination of less busy streets and/or trails if needed
Check your route using bicycle maps



TALK TO YOUR EMPLOYER

Find out where you can park your bicycle at work
Use a U-lock to lock your bicycle if parking outdoors
Ask if you can park your bicycle indoors

FOLLOW THE RULES OF THE ROAD

State law gives bicyclists the same rights as motor vehicle drivers
Obey all traffic signs and signals
Don't trust others for the sake of personal safety



CHECK YOUR BICYCLE

Make any needed repairs, inflate tires to the proper pressure, clean & oil the chain, check the brakes, adjust the seat height
Take your bicycle into a shop if needed

WEAR PROPER CLOTHING

Bright or reflective clothing if possible, rain-gear as necessary
Consider carrying a set of work clothes, toiletries, and a towel to clean up and change into
Make sure you have front & rear lights and reflectors
Wear a helmet and riding gloves for safety

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JOIN the MOVEMENT 

BICYCLE COMMUTING SAFETY

Be **VISIBLE** and **CAUTIOUS** at **INTERSECTIONS**



Most crashes occur at intersections

To avoid a crash:

- Use hand signals
- Wear visible clothing
- Stay out of blind spots
- Use your bell and/or lights
- Make eye contact with drivers

Ride With Others



Ride with co-workers, neighbors, and/or friends who may have a similar commute route – more riders means more visibility.

Keep Clear of Cars & Car Doors

Ride 4 feet away from parked vehicles, even if you take up a whole lane of traffic – it is your legal right to be able to take up a whole lane while on your bicycle



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BICYCLE COMMUTING CHECKLIST

As Provided by The League of American Bicyclists

HOW TO COMMUTE BY BICYCLE

Share the road
Signals and signs
Cycling safety
Route choice

Bike parking
Clothing
Showering
Maintenance
Weather



COMMUTER GEAR

Choose an appropriate bike
Carrying cases, racks, trailers
Tools for fixing flat tires
Visible clothing
Fenders, lights, helmet, lock

BICYCLE CARRYING CARGO

Rear rack
Front rack
Baskets
Packing panniers (bags)
Rain gear

BICYCLE SECURITY

Secure your bike
Carry a lock
Use a U-lock if possible



RAIN RIDING

Protect yourself
Protect your bike
Corner less sharply
Brake earlier
Look out for hazards



Need an affordable bicycle? Check out the **Iowa City Bike Library** at <http://www.bikelibrary.org/>

Looking for other options? Be on the look out for the **Bike Share Program** coming this fall!

Don't know where to ride? The **Iowa City Trail Map** can be found at <https://www.icgov.org>

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JOIN the MOVEMENT 

BOULEVARD: STEP BY STEP GUIDE



IDENTIFY A STREET

25 mph or less
Not a busy street
Connects schools, parks, etc.
Parallel to commercial streets



MAKE A TEAM

Gather friends, neighbors, and others interested in creating a bike boulevard
It's helpful to have a leader, a creative person, and someone involved community projects
Contact bike organizations and coalitions

Think Bicycles
Iowa City Cycling Club
MPOJC
Iowa City Bike Library



DESIGN THE BASIC STRUCTURE

Bicycle Priority
No center-line
Intersections
Wayfinding & Identification signs
Pavement markings

Manual on Uniform Traffic Control Devices (MUTCD)
Alta Planning
People for Bicycles
Portland State University
NACTO Guidelines



MEET WITH THE CITY

Gain approval with a simple permit request
Have a day and time picked out
Discuss design with streets department
Layout the benefits of the event



SPREAD THE WORD

Make an event online and share
Talk to people and get them interested
Host the boulevard and celebrate
Keep track of how many people came

For detailed directions, refer to the Iowa City Bike Boulevard booklet provided to The City of Iowa City

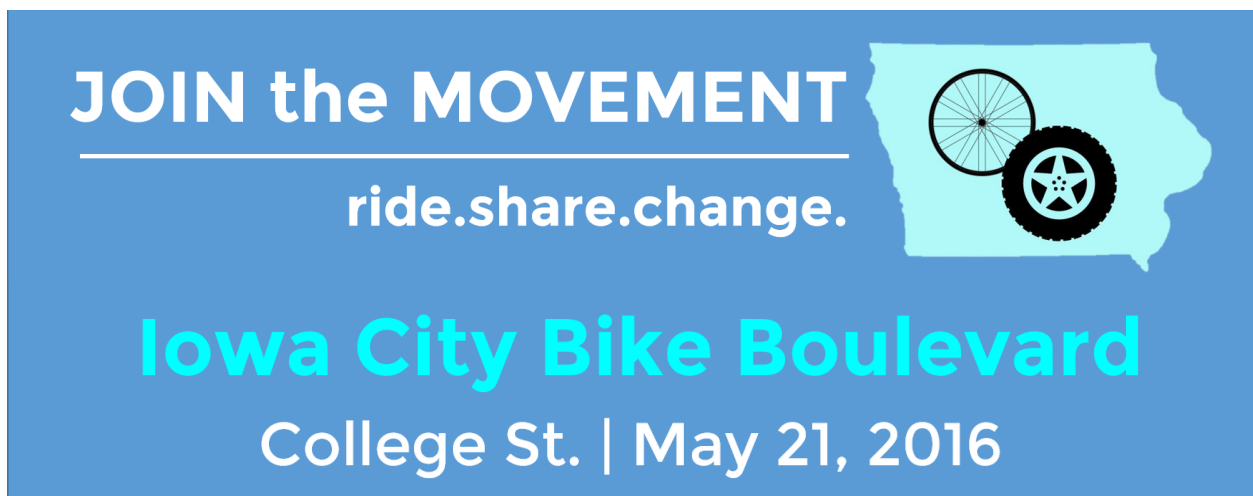
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Appendix I: T-Shirt Design Development

Early Development:



Final Versions:

[Front]



[Back]



Appendix J: *Daily Iowan* Articles

The Daily Iowan
NEWSPAPER • ONLINE • TELEVISION

 **Irish Language and Culture**
June 11-12, 2016 • Coe C

HOME METRO SPORTS OPINIONS 80 HOURS POLITICS MULTIMEDIA

◦ Bittersweet weekend for softball ◦ Grading the Hawkeye tracksters ◦ UI housing to burst at sea



Iowa has been moving toward a bike share program for some time now. This will give the public access to bicycles for a small fee. (The Daily Iowan/Glenn Somke Wooden)

> Metro DI Editor -Mar 23, 2016

LOCALS PEDDLE BIKE SAFETY



Eight graduate students are working with Iowa City to promote bike safety.

By **Katelyn Welsbrod**
katelyn-welsbrod@uiowa.edu

A class at the University of Iowa is working with the community to devise methods to make biking more safe in Iowa City.

In 2014, the Iowa Bicycle Coalition recorded 334 crashes involving bicyclists in the state.

Eight UI graduate students are working on two projects promoting bike safety as part of assistant professor Shelly Campo's communications campaign class in the College of Public Health. A UI program called the Iowa Initiative for Sustainable Communities has given the two groups \$500 each.

One group plans to create a temporary bike lane on Olive Street in Iowa City as a way to show the community what it would be like if there were provisions for bicyclists.

"We are identifying major areas of biking in the city that need improvement, so we looked to find barriers to biking," said Erin Arneson, a student in the class. "Infrastructure was a major one, like bike lanes, bike racks, things like that."

Arneson said her group is envisioning removing the cars from the side of the road and building temporary barricades as a way of hypothetically showing what having bike lanes would be like in Iowa City. The project is still pending approval from the city.

"We're meeting with community members to identify support," Arneson said. "We would like to have an event this spring to show community members what it would be like if there were that infrastructure."



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Entertainment
Specials



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to your homescreen for
quick access.

◦ The mists of neon: Neon Indian will perform a DJ set Saturday night as part of the FlyOver Fashion



A bike sits outside of the main library on Thursday, May 5, 2016. The month of May is National Bike Month. (The Daily Iowan/Brooklyn Kascel)

> Metro

DI Editor • May 6, 2016

‘BIKE BOULEVARD’ COMING TO IC



By **Katelyn Weisbrod**

katelyn-weisbrod@uiowa.edu

A temporary bike lane could make Iowa City even more bike-friendly.

A class in the University of Iowa College of Public Health collaborated with Iowa City and community organizations to put together a bike boulevard.

The temporary bike boulevard will be set up on College Street on May 21 from 8 a.m. to noon. The route will begin at City High and end at the Iowa City Farmers’ Market at Chauncey Swan Park. Along the route will be a few different types of bike lanes, some more protected than others.

The project was put in place by four graduate students in the College of Public Health as part of a communications campaign class. The bike boulevard is a part of a larger campaign the group has put together called Join the Movement.

Emily Hejna, a student in the class, said the goal of the larger campaign is to get people to push for a more bike-friendly Iowa City, and to educate the community on bike safety.

“It’s just joining the movement of travel in the road, whether it’s biking, walking, or driving,” Hejna said. “Iowa City is pushing for higher standards in bike friendly initiative, so we’re just encouraging the community to join that discussion.”

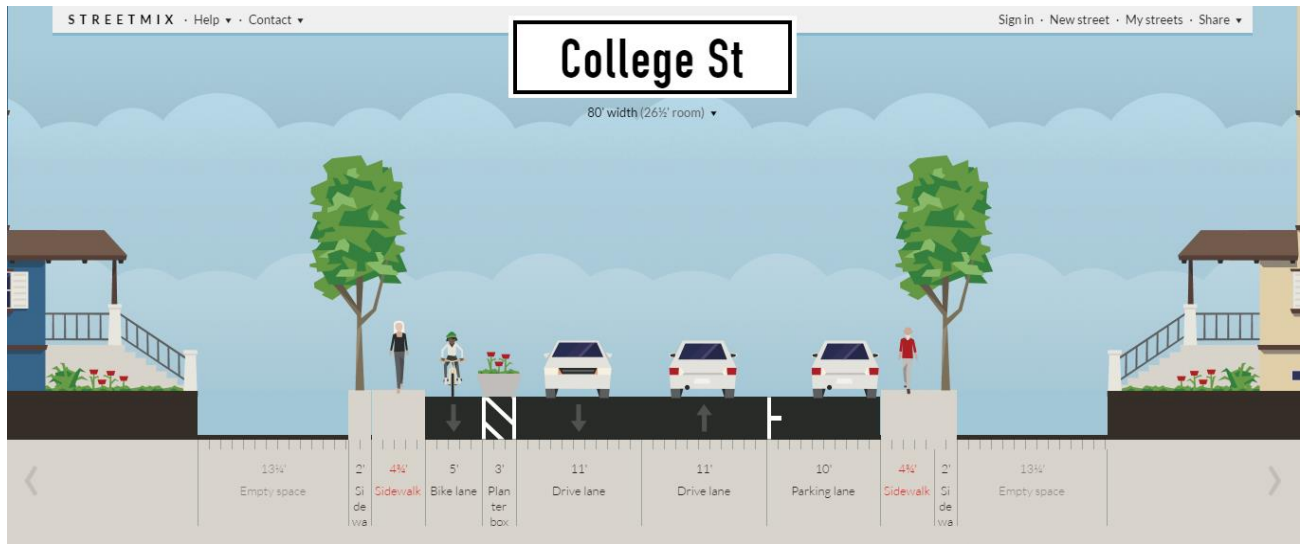
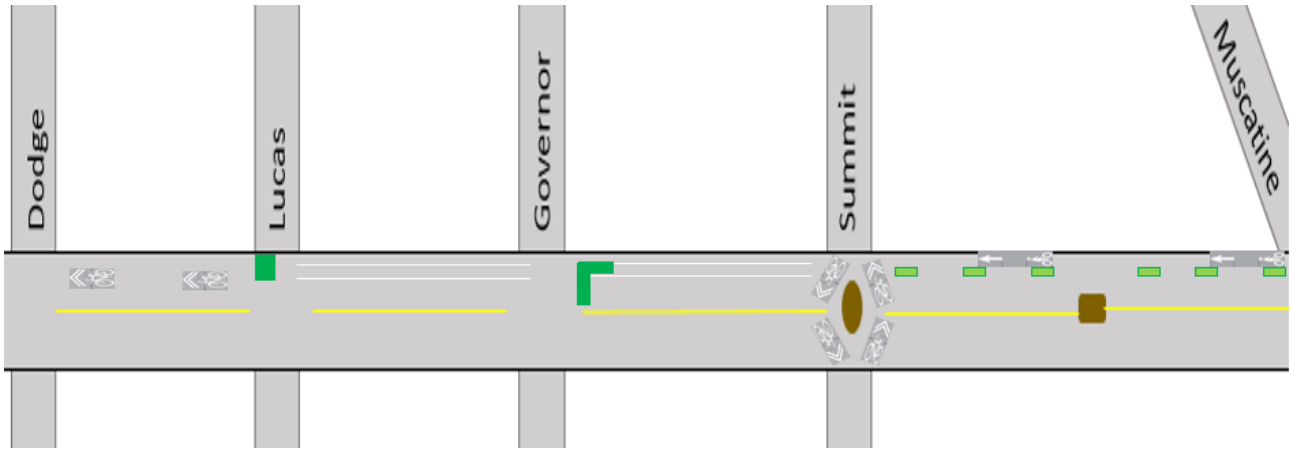
The city currently holds a silver rating as a bicycle friendly community, but Iowa City sustainability coordinator Brenda Nations said the new city council is interested in moving up a rating, and this initiative may help.

“Education and outreach are part of that rating,” Nations said. “This group is mainly focused on bike safety and awareness.”

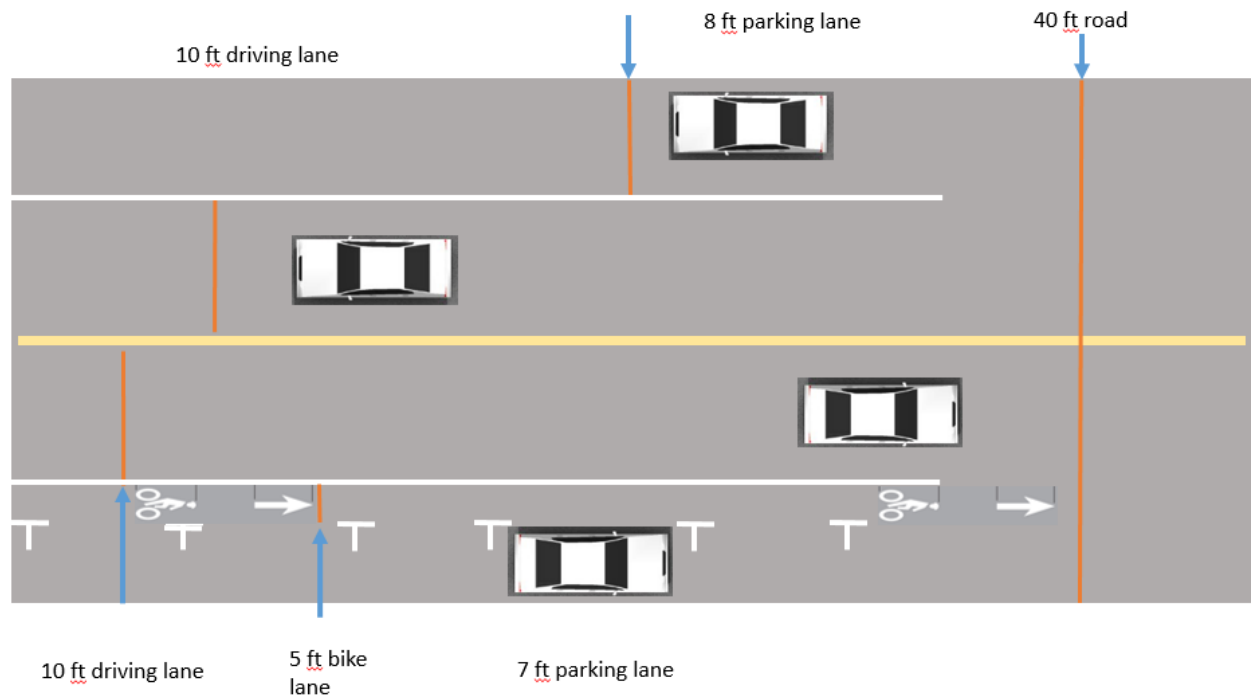
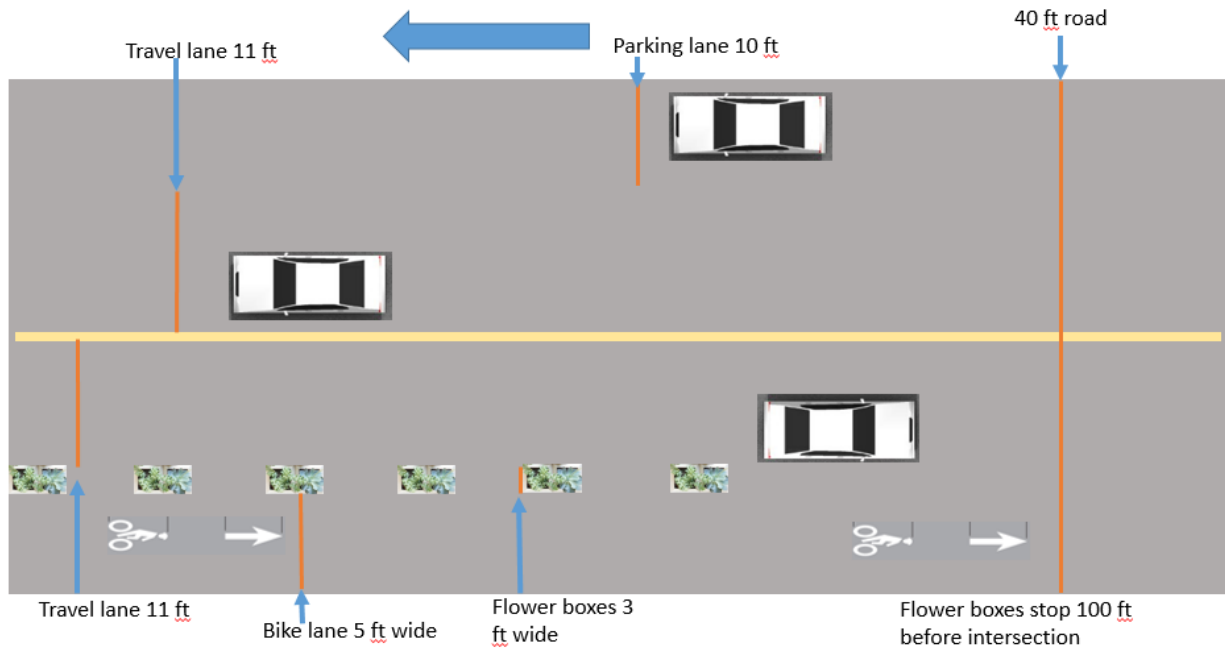
At either end of the bike lane, the group will have educational materials to inform people about bike safety and how to use the bike lanes.

Erin Arneson, a student in the class, said local bike shop World of Bikes will be there to offer bike

Appendix K: Bike Boulevard Street Plan

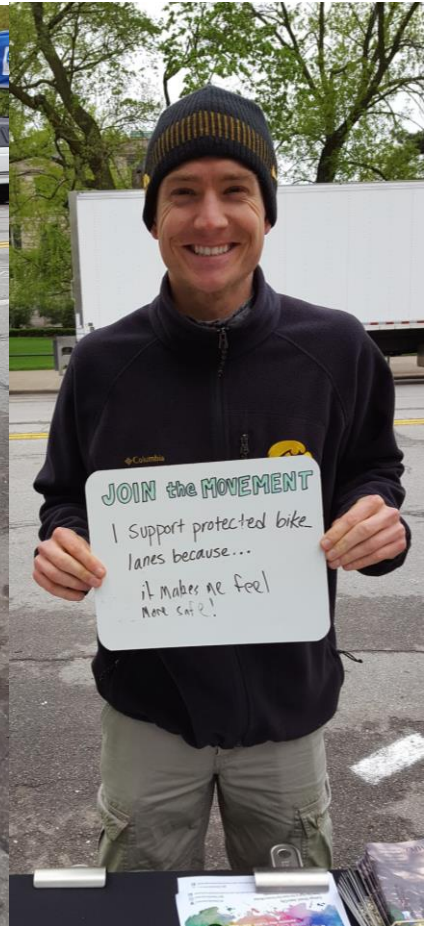
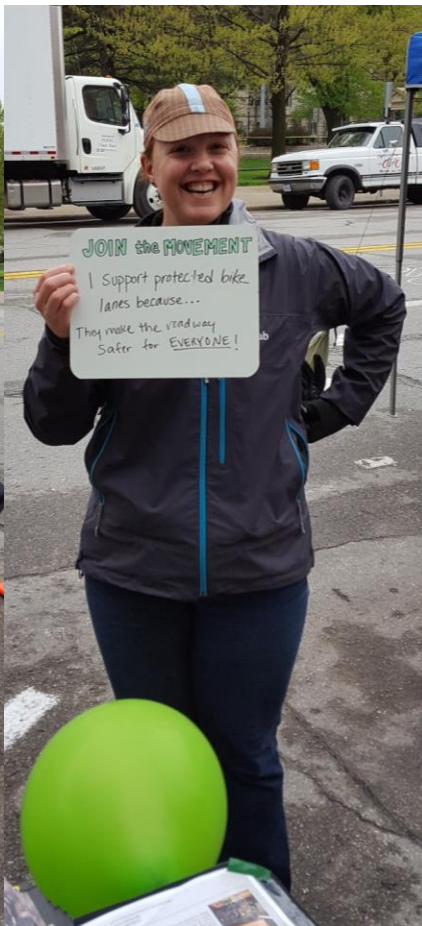


Join the Movement



Appendix L: Mini Bike Boulevard Pilot Test





Appendix M: Pre-Survey

Join the Movement: Iowa City Bike Boulevard

Pre-Survey Questionnaire

Your response to the following questionnaire is important to this program. We are interested in your honest opinions. Your responses to this questionnaire are anonymous and will remain confidential.

Demographics (optional):

1. Name: _____
E-mail: _____
Neighborhood: _____

2. Gender: Male Female Other

3. Age: _____

4. What best describes your race/ethnicity? Please check all that apply.
 American Indian, Eskimo or Aleut
 Asian or Pacific Islander
 Black or African American
 Hispanic or Latino
 Bi-racial/Multi-racial
 Other _____

5. How would you describe yourself? (select all that apply)
 High School Student
 College/Graduate Student
 Parent
 Work in Johnson County
 Iowa City Resident
 Iowa City Non-resident

Please consider the following questions and answer appropriately.

1. How many times a week do you ride your bicycle?

Never 1-2 3-4 5-7

2. I understand the meaning of a bike-friendly environment?

Strongly Agree Agree Neutral Disagree Strongly Disagree

3. I have sufficient knowledge on bicycling routes in Iowa City?

Strongly Agree Agree Neutral Disagree Strongly Disagree

4. I feel comfortable with my cycling skills and ability to ride safely?

Strongly Agree Agree Neutral Disagree Strongly Disagree

5. When driving, I feel confident in my skills to safely pass bicyclists on the road?

Strongly Agree Agree Neutral Disagree Strongly Disagree

6. I am confident in my ability to read and understand bicycle signs and signals?

Strongly Agree Agree Neutral Disagree Strongly Disagree

7. I feel Iowa City streets and bike lanes safely accommodate bicyclists?

Strongly Agree Agree Neutral Disagree Strongly Disagree

8. Redesigning roadways and bicycle lanes will improve cycling in Iowa City?

Strongly Agree Agree Neutral Disagree Strongly Disagree

9. The traffic markings and streets signs accommodate all road users?

Strongly Agree Agree Neutral Disagree Strongly Disagree

10. I feel motivated to use the bicycle as an active means of transportation?

Strongly Agree Agree Neutral Disagree Strongly Disagree

11. I have the knowledge and ability to host a bike boulevard event in my neighborhood?

Strongly Agree Agree Neutral Disagree Strongly Disagree

What are your expectations from this Bicycle Campaign?

Appendix N: Post-Survey

Join the Movement: Iowa City Bike Boulevard

Post-Survey Questionnaire

Your response to the following questionnaire is important to this program. We are interested in your honest opinions. Your responses to this questionnaire are anonymous and will remain confidential.

Demographics (optional):

1. Name: _____
Email: _____
Address (optional): _____
2. Gender: Male Female Other _____
3. Age: _____
4. What best describes your race/ethnicity? Please check all that apply.
 American Indian, Eskimo or Aleut
 Asian or Pacific Islander
 Black or African American
 Hispanic or Latino
 Bi-racial/Multi-racial
 Other _____
5. How would you describe yourself? (select all that apply)
 High School Student
 College/Graduate Student
 Parent
 Work in Johnson County
 Iowa City Resident
 Iowa City Non-resident

Please consider the following questions and answer appropriately. We are interested in knowing how much the Bike Boulevard campaign have impacted your attitude, skills and knowledge about bicycling and safety measures in Iowa City.

1. How many times a week do you ride your bicycle?

Never 1-2 3-4 5-7
2. I understand the meaning of a bike-friendly environment?

Strongly Agree Agree Neutral Disagree Strongly Disagree

- 3. I have sufficient knowledge on bicycling routes in Iowa City?
 Strongly Agree Agree Neutral Disagree Strongly Disagree
- 4. I feel comfortable with my cycling skills and ability to ride safely?
 Strongly Agree Agree Neutral Disagree Strongly Disagree
- 5. When driving, I feel confident in my skills to safely pass bicyclists on the road?
 Strongly Agree Agree Neutral Disagree Strongly Disagree
- 6. I am confident in my ability to read and understand bicycle signs and signals?
 Strongly Agree Agree Neutral Disagree Strongly Disagree
- 7. I feel Iowa City streets and bike lanes safely accommodate bicyclists?
 Strongly Agree Agree Neutral Disagree Strongly Disagree
- 8. Redesigning roadways and bicycle lanes will improve cycling in Iowa City?
 Strongly Agree Agree Neutral Disagree Strongly Disagree
- 9. The traffic markings and streets signs accommodate all road users?
 Strongly Agree Agree Neutral Disagree Strongly Disagree
- 10. I feel motivated to use bicycle as an active means of transportation.
 Strongly Agree Agree Neutral Disagree Strongly Disagree
- 11. I have the knowledge and ability to host a bike boulevard event in my neighborhood?
 Strongly Agree Agree Neutral Disagree Strongly Disagree

Was your expectations from the Bicycle Campaign met?
