



UVA BIKING ON GROUNDS

Enforcement Group

Global Sustainability, Fall 2011

Prof. Phoebe Crisman

Workshop Leader: Harsh Jain

Team Members: Austin Angulo, Sergi Benet, Tara Osborne

TABLE OF CONTENTS

Abstract.....

Introduction.....

Approach.....

Schedule.....

Budget and Funding.....

Dissemination.....

Conclusion, Documentation and Assessment.....

Future Work.....

Lessons Learned.....

Appendices.....

ABSTRACT

Our goal as the Enforcement group for the Biking on Grounds Project for Global Sustainability was to educate and enforce the rules of the road for bicyclists, drivers and pedestrians to the University of Virginia community. Biking on Grounds is a major form of transportation for UVa students and it is essential that certain rules and regulations are followed to ensure that the experience is a safe and problem free as possible.

The major focus of our outreach was focused around bicycle riding on Grounds. We wanted to stress certain rules for bikers to follow such as registration of bikes, parking bikes in designated bike racks and following road rules. There are many simple and hassle-free ways to ensure one's safety while biking on the roads and many of these "little things" are being overlooked. Some of these rules include but are not limited to: wearing a helmet and wearing it properly, installing reflectors and red lights on bikes for night riding, following traffic signals and yielding to pedestrians. We also wanted to point out some driving rules as well in our outreach so that it is clear not only what bikers are allowed to do, but also what drivers are not allowed to do while around bikes and pedestrians. Some of these rules are basic such as yielding to bikes and pedestrians, sharing the road, etc. The last part of our focus was on rules for pedestrians to follow to ensure their safety around drivers of both bikes and cars. A lot of the roads can get congested and it can be a hazard for people crossing the street, so we thought it was essential to include some information on proper pedestrian crossing.

We felt that in order to get all of this information out to the UVa community, it would be best to create a short survey to educate people on some of the rules of each of the three sections of our focus (biking, driving, walking) and provide some follow up questions to confirm that students, faculty and habitants understand this information. The survey we created contained a lot of great information regarding not only rules, but also suggestions for making it safer to be an on Grounds biker such as bike registration to protect it from theft. We talked with multiple different sources in the UVa community to help promote our outreach and post our survey/quiz on their website to make it easily accessible to site visitors. Some of our contacts included: SustainaUnity, Parking & Transportation, Outdoors at UVa and UVa Police. We are very pleased with our attempts in outreach and hope that all of our efforts help make the UVa community a safer and more enjoyable place for transportation around Grounds.

INTRODUCTION

Transportation around Grounds is a vital part in the functionality of the UVa community. Our schedules are dependent on how fast we can get from one place to another. While people have means of getting across Grounds fast such as biking or taking the bus, they sometimes tend to abuse these privileges by disobeying some of the simple rules of the road to make their trip even faster. Although it may be important to get from destination A to destination B, it is even more important to take into account the safety of all community members while making the trip across Grounds. By violating the basic rules of the road, the safety of everyone else is put at risk. Here at UVa there are multiple circumstances every day in which these violations occur and the possibility of an accident is raised, most of these violations committed by those who ride bikes.

Our role in the Bicycling on Grounds project is to enforce the laws of the road for bicyclists, drivers and pedestrians without dissuading anyone from biking. It is vital that the roads are safe for all people to ensure fast and trustworthy transportation around Grounds. There are many issues that we plan to solve to make the roads safe for everyone. First we wanted to address some of the rules bicyclists should follow such as registering their bike, parking their bike in the designated bike racks and following road rules. We also wanted to address rules for drivers on the road such as "bikers have the right of way" and not crossing into the bike lanes. Finally we want to advocate safe habits for pedestrians such as not J-walking and following crossing signals.

Some of our community partners were be Parking & Transportation, UVA Police, Office of Public Affairs, Outdoors at UVa and SustainaUnity. We used Parking and Transportation as our main contact since we had to funnel all of our ideas and information through them to make sure that we were providing sufficient and relevant information to the public. We also learned a lot from the UVA Police about the rules of the road. They were very helpful and even provided us with websites to view their handbook sections regarding both biking on grounds and driving rules when around bicyclists. By contacting the Office of Public Affairs we learned how best to disseminate our information to the public. There are multiple different steps in these kinds of processes and we wanted to make sure that we made it the simplest yet most effective way to get our information out to the public. We also contact Outdoors at UVa and SustainaUnity because both programs support sustainability efforts on Grounds so we thought that they would be very enthusiastic in helping us spread our survey out to communities that really care about such projects and efforts such as ours. The stakeholders in this project are the bicyclists, drivers, pedestrians and Parking & Transportation. All people using the road are always under the risk of possible accidents so it is important that they are aware of all of the rules of the road to make it as safe and hassle-free as possible. Parking & Transportation has the potential to lose a lot of money due to the uncertainty of the safety of biking around Grounds and needs positive advocacy and a strong foundation to fully support its cause.

We felt that the best way to disseminate our information was to create an online survey and quiz to educate and enforce people on the rules of the road for all different forms of transportation. This survey was to contain information mainly pertaining to bicycling rules and suggestions. Some of the main ideas we wanted to focus on were bicycle registration, hand signals, knowing who has the right of way, yielding to pedestrians, and proper bicycle parking. We also wanted to include a link in the survey to direct people to the bicycle registration website so that it is easily accessible and encourages more people to actually do it. Some other rules pertaining to pedestrians and driving we wanted to include were: crossing at the

designated crosswalks, sharing lanes with bikes, yielding to whoever has the right of way and keeping a proper distance from those on the road.

APPROACH

The main approach we have chosen to take towards this project is to create a survey that will educate and reinforce the rules of the road to as many students that we can reach out to. The survey will consist of three sections of information about bike safety, driving rules and pedestrian safety and then follow up questions spread throughout the survey that help students relate back to what they have learned/reviewed. The main rules we are stressing are hand signals while riding a bike, vehicle awareness, obeying traffic signals, following the flow of traffic, parking bikes in designated areas instead of wherever the owner wants, bicycle registration and theft, and proper gear to be worn at night. A lot of bikers out on the roads today do not have very much knowledge about what the proper techniques of biking are, so it will be very beneficial to include information such as hand signals so that bikers will be able to communicate with motor vehicles on the road. It is quite often that one sees a biker cross the street or the middle of an intersection without taking into account traffic signals and where traffic may be. In this survey we decided to make it very clear that bikes are subject to the same exact laws as motor vehicles while on the street, so by running a red light they are committing a traffic infraction. Bike registration is a large problem on grounds; more than half the bikes in use are unregistered. The survey is designed to promote bicycle registration so that bike owners will have some protection in the case that their bike has been stolen or gone missing. There is a link attached to the survey that will transfer people over to the UVa Police Department site to fill out the registration form if they plan on biking on grounds and have failed to register already. We will also address the importance of wearing the proper equipment when biking at night since it is quite dangerous to be biking on roads with shared lanes (such as Alderman Rd) without any sort of visual alarm to let cars know you are in front of them. There is also a minor section near the end of the survey that relates to pedestrian safety on grounds as well and will cover subjects such as crosswalks and when to use them, when cars have to give the 'right of way' and when they don't and obeying pedestrian traffic signals.

Survey Structure:

- The first section of the survey contains a welcome message explaining the importance of using biking as a means of transportation around Grounds. We used this section basically as our problem definition and to inform survey takers of our purpose.
- The second slide is dedicated to contain information on proper bike safety. After talking with our community partner, the UVa Police, we were given a digital copy of the sections of the UVa Police handbook pertaining to bicycle laws and safety. Our partner also told us that there is no specific problem spot around campus, but that the main problem they are trying to deal with is just infractions caused by bicyclists on a daily basis. After obtaining this information we decided to provide a list of the basic rules of the road so that community members would be reminded of the guidelines and think twice before making a possibly hazardous decision while biking. On this slide we also wanted to post a link to the registration website for people to fill out if they have not done so already with the UVa Police. We did this because bike registration is a great way to keep track of one's bicycle in case it were to be stolen or damaged by someone that is not the owner.
- The third slide contains questions pertaining to the preceding slide. We decided to make four questions, the bulk of the sum of the question, on biking since it is the most prominent of the

problems pertaining to our project that we wanted to address. The first question we decided to ask was a true or false question about bicycle registration. We wanted to have this question in there to stress to people how important it is to register their bikes. We also included questions pertaining to hand signals while turning, wearing red reflectors at night and what laws bikes are subject to so that we reiterate the most important rules for bicyclists to follow.

- The fourth slide is similar to the second, but it gives the reader information regarding to the proper rules for pedestrians to follow. We obtained another section of the handbook from the UVa Police containing multiple problem situations for pedestrians when crossing the road. We stressed certain rules such as crossing at designated crosswalks, crossing when ped-xing lights are flashing and when does and when doesn't a pedestrian have the right of way. All of these topics are important because there is a large problem on UVa campus with pedestrians crossing the road wherever they feel like with no regard to oncoming traffic.
- The fifth and final slide will contain three final questions pertaining to pedestrians and the right of way when crossing a road. We decided to ask questions about where pedestrians are allowed to walk and cross roads just as a simple reminder for people to think twice before running across the road with oncoming traffic.

We as the enforcement group also plan on working with the education group in this project to initiate a bike tagging program with our community partner Parking & Transportation. The bike tagging program is fairly simple, once a bike is seen improperly parked, a bright green tag will be placed on the handlebar that will aware the owner that they have illegally parked their bike and give them a warning that this infraction could lead to the bike being impounded and subject to a twenty five dollar recovery fee. The tag will also offer some bicycle safety tips such as wearing a helmet, using a light when riding at night, not riding on the sidewalks, being aware of all motor vehicles on the road, yielding to pedestrians in crosswalks and bicycle registration with the UVa Police Department. It is our job to enlist the help of either the UVa Police Department or Parking & Transportation to tag the bikes since they have the authority to ticket and enforce such rules.

The main groups and people we worked with include: Jonathan Monceaux of Parking and Transportation, Officer Angela Tabler and Sergeant Christopher Easton of UVa Police Department, and Julie Caruccio of the Office of Public Affairs. We have contacted and been working with Mr. Monceaux in developing the bike tagging programs around grounds. Officer Tabler and Sergeant Easton were also contacted about the survey that we created and helped provide information about bike safety, rules of the road and pedestrian safety. In order to actually complete the survey and figure out how to do so we contacted Julie Caruccio who also gave us even more information about biking on grounds and how to get the word out.

In our original plans we stated that we wanted to not only create the survey and bike tagging program, but we also wanted to install more crosswalks and traffic signs around grounds to make drivers more aware of pedestrians and bikers. Unfortunately this is a very difficult task to because it requires a lot of business work to get the 'okay' to actually install such signs. There is much funding and engineering work that has to go into figuring out where the best place to put a sign or crosswalk is and how much it will cost, and since we don't have the ability to carry out a project of such proportions we had to bag that idea. We also wanted to make it required that all incoming students take the survey we created to that everyone will have some knowledge about road safety, but after talking with Julie Caruccio we found out that it takes

almost a decade to make anything mandatory for student to take, so that idea was bagged to. We chose the approaches we did because they were the most feasible and most efficient means of getting the information out and enforcing it.

SCHEDULE

Regarding to the schedule, what we really wanted to do at the beginning was contacting with the partners we supposed to have, because taking into account they have other projects running and they use to be pretty busy as well, we didn't know how long were they responses going to take. So, for October 14th, we had assigned a community partner to contact with and try to get the biggest amount of information possible as soon as possible.

Having all the information organized and the possible questions for the final survey should have done before October 21st this way we could have our final survey created very soon making us able to get more responses before the final presentation. This way we can have a bigger sample and the results will be reliable. After finishing the general format of the survey we plan on talking with the Department of Parking & Transportation again to talk about what the best types of signs to put around Grounds are and where they should go.

It is also essential that we talk to the UVA Police before October fourteenth about the process of registering bikes and to find out more about some of the rules they wish to be more advocated and problem areas that need to be fixed.

Timeline	Things to be done...
10/14	Contacted all community partners and all have all information received necessary for executing survey.
10/21	Have all information/questions finalized for survey
10/28	Survey should be created
12/2	Figure out who will be posting the survey on their website
12/5	Figure out who will be tagging bikes

BUDGET & FUNDING

We managed our work in a way we don't really need any kind of funding necessary for our approaches. There is not budgeting as well. The survey we created was made of a free source found online and will be posted eventually on a Facebook page or other source of mass media that does not require any licensing or any kind of payment. Moreover, the paper needed for making the tags will be supplied by Parking & Transportation, the possible fees for breaking the laws will be on charge of the UVA police and any other aspect such as mass campaigns informing bikers of all the safety rules and regulations and other aspects related to bicycling and bikers on grounds will be covered by "Bike Charlottesville". Finally, we will work hand in hand with the Office of Public Affairs trying to advertise our cause across grounds and helping

us sending out the survey to incoming students. We don't know what budgeting or funding they have and there is no need to know it anyway.

DISSEMINATION

We wanted to get our survey out to as many people as possible. Initially we had planned on making the survey mandatory for all incoming students during the Fall 2012 semester. After talking to Julie Caruccio we learned that it would take years to get UVA to make anything mandatory. The different route that Julie suggested would be to get as many student and university organizations to take and publish the survey using their own resources. Using this approach we contacted the UVA Police Department, Parking & Transportation, Sheffield Hale who is in charge of the SustainaUnity Organization at UVA (SustainaUnity Newsletter and website), and any other biking awareness groups that we could find. We also worked with the education group to help spread the word by posting the survey on their Facebook page for anyone who will be interested in taking it. Our hope was that people who are interested in biking, and bike already, would find this survey on the sites that were already related to biking, and increase their awareness of the rules. This would lead to them to, if not suggesting others to take the survey, at least tell others about the new rules that they learned.

CONCLUSION, DOCUMENTATION AND ASSESSMENT

We feel very successful with all of the work we have completed this semester. Above all of our goals listed in our project definition, our true main goal was to spread the word of and gain support for Biking on Grounds. We feel that the survey was a great first step for the project itself to propose our project's argument and gain support for our cause. Our contacts and community partners all seemed very enthusiastic about the projects main idea and were really glad to help our and further support our cause, so from this we feel that Biking on Grounds can gain even more support in the upcoming years. What is left to accomplish is simply gaining more support for Biking on Grounds and possibly making changes to UVA to really make an impact on the people living in our community such as installing crosswalks and more traffic signal signs.

Early on in the project we documented our progress by keeping a running list of ideas that we had. These ideas all pertained to different ways that we could address the issue of enforcing biking rules and different methods that we could use to approach addressing these different methods. In other words we asked ourselves who we would contact and about what. Throughout the rest of the project we mainly documented our progress by saving emails of communication. These emails included our discourse between each other, our community partners, and the education group. We assessed our progress during group meetings to make sure that we had achieved what we wanted to in the appropriate amount of time. At each meeting we gave each other and ourselves deadlines to meet on or before our next meeting. This was mainly for the purpose of making sure that we completed everything that we needed for the deadlines set by the course. At each meeting we compiled the information gathered from our community partners. We also checked with each of our community partners for feedback and assurance that what we were working on would be agreeable with and acceptable to them.

FUTURE WORK

As a group we had a lot of ideas of what to do when we first received this project, but in order to get the project itself off the ground we were not able to do some of the big things we would have like to do. We took the “start small, grow big” approach with the project to test out which different paths we could take some of our small ideas and see if they could eventually lead to some of our bigger plans.

One of the bigger plans we had at first was to make it mandatory for incoming students at UVa to take our survey and fill out a bicycle registration form if they planned on bringing one with them on Grounds. We took this idea to the Office of Public Affairs to see if it was at all plausible to do so with the survey. Unfortunately, it is very difficult to make anything mandatory for students to fill out and takes about a decade for it to be approved if it is not so much of a pressing matter. One possible course we would like our project to go would be for the survey to be made mandatory; this of course only being possible once the project itself is big enough and has enough support to start taking on feats such as this.

Another possibility we looked at was to place more traffic signs up around Grounds. We looked at this approach because we felt that the more often people see signs regarding bike safety around Grounds, the more seriously they will take the law and the more likely they will follow it. There were a few different signs we looked at for multiple reasons pertaining to traffic safety and biking around Grounds. The one sign we wanted to see more of was the “Share the Lane” sign that had a symbol of a bicyclist on it. This sign we felt was most important because we really wanted to stress the fact that there are a lot of people who rely on biking as their main source of transportation around campus, so it is essential that their safety be of main focus to those driving. One of the other signs we wanted to put more of around Grounds was the “Ped X-ing” sign. Although there are multiple places designated for students, faculty and residents of the UVa community to cross the road, there is always the possibility of someone illegally crossing the road at any point they seem fit. Although we don’t condone such behavior, we find this situation to be almost unavoidable in a university environment, so in order to limit the chance of an accident happening we want to have more of these pedestrian crossing signs installed around Grounds as another reminder to drivers that they are driving in a potentially hazardous area and to be cautious and courteous to those walking. Parking and Transportation is not able to put up official signs such as the ones that we wanted to install, but it could be possibly to contact the state transportation offices to submit requests.

The last idea we had was to have more crosswalks painted along with the installation of signs along the roads. The issue with this goal is that it can be pricey and a longer process to have approved. Just like the signs, in order to paint traffic lines, the request must be evaluated by the state and town transportation offices. Although this approach seems to be quite lengthy and tasking, its effects could be tremendous. In larger cities today, such as New York City and Chicago, traffic engineers are attempting to put down more bicycle lanes and crosswalks on the city roads to dissuade people from driving and promote alternative methods of transportation since it is quite difficult to navigate through a city when one must stop twice every block. In order to get from point A to point B fastest in city layouts like these, citizens must convert to taking public transportation, walking or riding a bicycle. Not only does this limit the amount of cars on the road and lower the total carbon emissions/footprint of the city, it also promotes a healthier lifestyle for all city residents and creates a stronger sense of community by bringing people into more contact with each other. These same changes can be applied on Grounds here at UVa, but they require a lot of support from community members and dedication from the whole project team.

LESSONS LEARNED

Throughout the past couple of months that we have worked on this project we have learned a great many things. When it comes to working with people who have a busy schedule we should have jumped on the ball much more quickly. We assumed that because we had plenty of time to finish our project that our community partners would also have plenty of time to help us finish as well. As it turned out, in the last weeks of our project we were scrambling around looking for people to help us disseminate our survey. More than once we almost missed a deadline because our community partner took longer than expected to get back to us. If we had planned and worked ahead on our project there would not have been any 'scrambling'. We also learned that the details mean everything. When it came to talking to our community partners about our project we quickly learned that if we were not specific about what we were doing we were either ignored or pushed aside. After we learned this lesson we were very descriptive and specific in addressing our community partners and fellow project-mates. We also learned that specifics were necessary for writing our paper. It was not enough to cover the information. We needed to be precise about our methods, procedures, and work. In general we learned one major point from this project; clear concise communication is key. Things get done much more efficiently and effectively if everyone involved completely understands what is going on.

APPENDICES

Emails:

From: Monceaux, Jonathan (jcm9ec) <jcm9ec@eservices.virginia.edu>

Date: Wed, Oct 12, 2011 at 10:37 AM

Subject: RE: Bicycling on grounds

To: "Benet, Sergi (sb4wx)" <sb4wx@virginia.edu>, "White, Rebecca (rwc6j)" <rwc6j@eservices.virginia.edu>

Cc: "Osborne, Chloe (cto2bg)" <cto2bg@virginia.edu>, "Angulo, Austin (ava7gw)" <ava7gw@virginia.edu>, "Drake, Jasmine (jrd2tw)" <jrd2tw@virginia.edu>

Sergi, Chloe and Austin,

I've included Jasmine from the Education group as there may be some overlap between your projects.

For the signs our department operates a "sign shop" where we create many of the parking signs you see around Grounds. Depending on the quantity needed, we should be able to support the creation and placement of these signs. Do you all plan to identify potential location for signs? Official signs such as the "Bikes May Use Full Lane" are not something that we can create (see below).

I've attached a hangtag program that we are hoping to initiating this fall to discourage folks from parking their bikes illegally. I'm currently planning to print 500 of these door hanger-like projects that would be placed on illegally parked bikes. As you'll notice there is a place for notes, where the person placing the hangtag can write things like "parking is available around the south side of this building".

For the placement of crosswalks and signals we'll need to work with both the Office of the Architect and the City Traffic Planner. Do you plan to identify areas of need and then present them to us?

Vehicles crossing into bike lanes is a big problem. I'd be interested to hear what ideas you have to curb this behavior.

You may be interested in reviewing the Federal Highway Administration's standard highway signs and markings:

http://mutcd.fhwa.dot.gov/ser-shs_millennium.htm

http://mutcd.fhwa.dot.gov/shsm_interim/index.htm

http://mutcd.fhwa.dot.gov/knowledge/faqs/faq_part9.htm

Best, Jon

P Please consider the environment before you print



University of Virginia
Department of Transportation
www.virginia.edu/parking

Need repairs?
Visit the Bike Patch Station
outside of Clark Hall or
our check-out kiosk from one
of the libraries.

BIKE SAFETY TIPS

- Always wear a helmet
- Use a white light when riding at night
- Do not ride on sidewalks
- Watch for vehicles turning right at intersections
- Yield to pedestrians in crosswalks
- Register your bike with the University Police Dept.

Notes:



THIS BIKE IS PARKED IMPROPERLY

Please do not lock your bike to ramps, posts, trees or other structures other than bike parking racks.

Improperly parked bicycles may be impounded and subject to a \$25 recovery fee.

Hello Mr. Monceaux,

We are a group of three from Global Sustainability class, assigned to collaborate with you to help us on the enforcement task about bicycling on grounds.

Our role in the Bicycling on Grounds and beyond project is to enforce the laws of the road for bicyclists, drivers and pedestrians.

ISSUES that we plan to solve to make the roads safe for everyone:

1. Rules bicyclists should follow à registering their bike, parking their bike in the designated bike racks and following road rules.
2. Rules for drivers on the road à bikers have the right of way and not crossing into the bike lanes.
3. Habits for pedestrians à not J-walking and following crossing signals.

HOW:

1. Installing more signs around campus in congested areas (i.e. McCormick Rd.) to let drivers know that bikers and pedestrians have the "right of way."
2. Installing more crosswalks and crosswalk traffic lights and put up short informational signs at crosswalks displaying the importance of crossing at the right time.

Do you have any other suggestions on how can we solve this issues? And how can the department of parking & transportation help us with that?

Thank you,

Enforcement group

Sergi, Chloe and Austin,

I've included Jasmine from the Education group as there may be some overlap between your projects.

For the signs our department operates a "sign shop" where we create many of the parking signs you see around Grounds. Depending on the quantity needed, we should be able to support the creation and placement of these signs. Do you all plan to identify potential location for signs? Official signs such as the "Bikes May Use Full Lane" are not something that we can create (see below).

I've attached a hangtag program that we are hoping to initiating this fall to discourage folks from parking their bikes illegally. I'm currently planning to print 500 of these door hanger-like projects that would be placed on illegally parked bikes. As you'll notice there is a place for notes, where the person placing the hangtag can write things like "parking is available around the south side of this building".

For the placement of crosswalks and signals we'll need to work with both the Office of the Architect and the

City Traffic Planner. Do you plan to identify areas of need and then present them to us?

Vehicles crossing into bike lanes is a big problem. I'd be interested to hear what ideas you have to curb this behavior.

You may be interested in reviewing the Federal Highway Administration's standard highway signs and markings:

http://mutcd.fhwa.dot.gov/ser-shs_millennium.htm

http://mutcd.fhwa.dot.gov/shsm_interim/index.htm

http://mutcd.fhwa.dot.gov/knowledge/faqs/faq_part9.htm

Best, Jon

Dear Mr. Gibson,

My name is Austin Angulo and I am a student at UVA. For my Global Sustainability class, I am part of a group that is attempting to help educate the public on and enforce the rules of bicycling on grounds. Some of the problems we are addressing includes: bicyclists/drivers not following the rules of the road, bike registration and j-walking. Currently there are a lot of problems that could easily be fixed with some work. I am contacting the UVA Police to gain more information about some of these problems so that we can address them with as much knowledge as possible. What we hope to gain from the UVA Police is:

What is the process for registering bikes on grounds and what are some of the rules that the UVA Police wishes to be more advocated with biking?

What are the big problem areas around campus where the rules are being most violated? (i.e. major traffic congestion causing more people to just simply ignore lights and bike across roads)

We want to solve as many problems as possible while still encouraging students to bike more on grounds. We really appreciate all the help you can offer us.

Thanks,

Austin Angulo

UVA Student - 1st Year

ava7gw@virginia.edu

8044-513-4106

Hey Carla!

As part of our outreach for the Biking on Grounds project in Harsh Jain's discussion class, we are asking for your help to spread the word. I was thinking of ways to engage people in one of the surveys we made to educate/enforce some of the rules of the road to students, and being a recipient of SustainaUnity Newsletter I thought that it would be a great idea to have our survey sent out in that newsletter. Since you are an active role in both SustainaUnity and our class, I thought who better to contact than you. Recently one of the students in E-school who was biking on grounds was severely injured due to a bike/car crash, but unfortunately the rider wasn't taking the proper safety precautions and by doing so was actually violating a biking law (having reflectors). It is very important that the UVa community knows more about such safety precautions and rules to help prevent accidents such as this. Please let me know if it is at all possible to post this survey on the newsletter! Thank you so much for the help!

Link:

<http://surveys.questionpro.com/a/GoBackSurvey?id=2705569&responseSetID=4869660&submissionID=26514294>

Appreciatively,

Austin Angulo

ava7qw@virginia.edu

Hi all,

I hope that you are doing well! Austin is a student in the Global Sustainability class who is working on a project to improve the safety of biking on grounds. He was wondering if you all might be able to distribute this survey to your groups and add it to the next SustainaUnity newsletter. Let me know what you all think!

Thanks,

Carla

Mr. Angulo,

I appreciate your concern and interest in safety. Officer Tabler answered your questions very well.

I just wanted to add to what she had said as far as bicycles on the roadways. As she stated, if a bicycle is operating on the roadway it is considered a vehicle and must obey all of the same traffic laws as any other vehicle such as cars. The operator of the bicycle is subject to receive Virginia Uniform Summonses for violating traffic laws. To add to that, if a bicycle is on the roadway at night it must be equipped with a headlight and red rear light of some sort. Although helmets are not a requirement by law it is highly recommended that one wear one while operating a bike.

As Officer Tabler also stated, there is no one place that is more of a "trouble" spot than any other. Due to the amount of pedestrian and bicycle traffic here at the University it is a constant challenge everywhere to maintain safety for all.

As far as "J-walking", here is the link to the Virginia Code Section that outlines the law on pedestrians walking in the roadway not in a crosswalk.<http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+46.2-926>

Also I have attached the link that outlines the requirements of when a vehicle (including a bicycle) must yield to pedestrians. <http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+46.2-924>

We recently finished up a campaign known as "Drive Smart Virginia - Virginia Bicyclist and Pedestrian Awareness Week". That week was Sept. 11-17. During that week, Police Officers with this department as well as throughout the Commonwealth of Virginia distributed literature to educate and promote awareness to all, the safety concerns in regards to bicycle and pedestrian traffic. I still have some literature (brochures and posters) that I am willing to share with you if you would like.

If you would like to meet with me and talk more about any of the above or anything else please let me know. I am more than willing to assist you if I can.

Thanks.

Sergeant Christopher Easton

Midnight Shift Commander

Traffic Program Manager

University of Virginia Police Department

2304 Ivy Rd

Charlottesville, VA 22903

Main (434) 924 7166

Good Morning,

Thank you for concern and willingness and interest to improve the safety of pedestrians, bicyclist and motorist on grounds. The process for registering bikes is very simple. Individuals may go to the UVA police website and register them on line by completing a short quiz and then filling in appropriate information on a form that follows. The information comes directly to me, I then key in the information and mail a decal to them along with a safety brochure.

Bicycle safety is a big concern for us. Bicyclist along with pedestrians and those operating motor vehicles must remember safety is everyone's responsibility. Being alert and respecting one another's right to be on the road is most important. Bicyclist must remember they are expected to obey ALL traffic laws just as a motorist, including going in the same direction as motorist on a roadway.

I don't believe there are any particular areas that are of more concern than another. I'm part of a committee that is working on improving safety conditions for bicyclists. There have recently been "sharrows" placed on several roadways in Charlottesville. Hopefully this will catch on and more can be added.

I hope this information helps. If I can be of further assistance please feel free to contact me.

Officer Angela Tabler

Crime Prevention Coordinator

Program Coordinator-Victim/Witness Assistance

UVA Police Department

2304 Ivy Road

Charlottesville, Va 22903

434-531-5600

Official Papers

§ 46.2-926. Pedestrians stepping into highway where they cannot be seen.

No pedestrian shall step into a highway open to moving vehicular traffic at any point between intersections where his presence would be obscured from the vision of drivers of approaching vehicles by a vehicle or other obstruction at the curb or side. The foregoing prohibition shall not apply to a pedestrian stepping into a highway to board a bus or to enter a safety zone, in which event he shall cross the highway only at right angles.

(Code 1950, § 46-245; 1958, c. 541, § 46.1-232; 1989, c. 727.)

§ 46.2-924. Drivers to stop for pedestrians; installation of certain signs; penalty.

A. The driver of any vehicle on a highway shall yield the right-of-way to any pedestrian crossing such highway:

1. At any clearly marked crosswalk, whether at mid-block or at the end of any block;
2. At any regular pedestrian crossing included in the prolongation of the lateral boundary lines of the adjacent sidewalk at the end of a block;
3. At any intersection when the driver is approaching on a highway or street where the legal maximum speed does not exceed 35 miles per hour.

B. Notwithstanding the provisions of subsection A of this section, at intersections or crosswalks where the movement of traffic is being regulated by law-enforcement officers or traffic control devices, the driver shall yield according to the direction of the law-enforcement officer or device.

No pedestrian shall enter or cross an intersection in disregard of approaching traffic.

The drivers of vehicles entering, crossing, or turning at intersections shall change their course, slow down, or stop if necessary to permit pedestrians to cross such intersections safely and expeditiously.

Pedestrians crossing highways at intersections shall at all times have the right-of-way over vehicles making turns into the highways being crossed by the pedestrians.

C. The governing body of Arlington County, Fairfax County, the City of Fairfax, the County of Loudoun and any town therein, and the City of Alexandria, may by ordinance provide for the installation and maintenance of highway signs at marked crosswalks specifically requiring operators of motor vehicles, at the locations where such signs are installed, to yield the right-of-way to pedestrians crossing or attempting to cross the highway. Any operator of a motor vehicle who fails at such locations to yield the right-of-way to pedestrians as required by such signs shall be guilty of a traffic infraction punishable by a fine of no less than \$100 or more than \$500. The Commonwealth Transportation Board shall develop criteria for the design, location, and installation of such signs. The provisions of this section shall not apply to any limited access highway.

(Code 1950, §§ 46-243, 46-244; 1958, c. 541, § 46.1-231; 1962, c. 471; 1968, c. 165; 1972, c. 576; 1976, c. 322; 1989, c. 727; 2000, c. 323; 2002, c. 327; 2004, c. 658; 2007, c. 813.)

Survey

[Exit Survey »](#)

10%

Here at UVa, biking is a prominent means for transportation around Grounds. Although biking on grounds is encouraged for everyone, it is essential that certain precautions are taken in order to make it as safe and hassle-free as possible. In this survey you will be asked to read a few small sections about the rules of biking on grounds as well as pedestrian safety and to answer a few short questions about what you have read.

Thank you for taking your time to make UVa a safer community!

[« Back](#)

[Exit Survey »](#)

20%

In order to make Biking on Grounds a fun and easy alternative means of transportation for everyone in the UVa community, it is essential that the rules of biking on grounds are understood to ensure the safety of all of UVa's community members.

Below are some rules and suggestions issued by the State of Virginia Department of Motor Vehicles for safe and legal bicycle usage:

- Bicycles are subject to the same laws as motor vehicles
 - Stop and look both ways before entering the street
 - Bicyclists must obey all traffic devices such as stop signs and traffic lights
 - Bicyclists must ride in the same direction as traffic
 - Bicyclists must park their bikes in designated areas such as bike racks. Failure to do so could lead to loss of biking privileges or fine.
 - Bikes can be registered with your local Police Department to ensure that in the case of bike theft, there is a way you can get it back
 - Bicyclists must wear either a light or red reflector when driving at night
 - Be aware of vehicle blindspots and don't ride too close to any vehicle
 - Use proper hand signals when turning
- Proper Hand signals:
- Left arm held up in L-shape = Right Turn
 - Left arm held out parallel to ground = Left Turn
 - Left arm held down in upside-down L-shape = Stop

If you plan on riding a bike on grounds and have not yet registered it with the UVa Police, here is a link that will take you to the site to do so:
<http://www.virginia.edu/uvapolice/registration.html>

[« Back](#)

[Exit Survey »](#)

60%

True or False: Bikes can be registered with your local Police Department so that in the case that they are stolen, if found, can be returned to their owner.

True

False

What is the correct hand signal for a left turn when on a bike?

Left arm straight out parallel to the ground

Left arm up in a L-shape

Left arm held in an upside-down L-shape



Right arm straight out parallel to the ground

True or False: You must have either a light or a red reflector when biking at night.



True



False

True or False: Bikes are not subject to the same laws as motor vehicles.



True



False

[« Back](#)

[Exit Survey »](#)

70%

The Rules of the Road also pertain to pedestrians. Here at UVa there is a large population of people walking on the street at any given time of day. The congestion causes some sides of the sidewalks to become too full and pedestrians resort to crossing the street wherever and whenever in order to have more room or to get to their target location faster without the patience to walk with the crowd to a designated crosswalk. A pedestrian has the right of way when:

- He/She is in a clearly marked crosswalk
- He/She is given a walk sign from their designated light
- He/She is crossing an intersection that a vehicle has a green light to TURN into

Pedestrians are not allowed to cross the road with disregard of approaching traffic. It is highly dangerous for a pedestrian to assume that traffic will stop when he/she is in a crosswalk. It is suggested that one should look both ways before crossing the road, even at a designated crosswalk with a given signal. It is also prohibited that pedestrians use the road or a bike lane to walk/run in. Pedestrians are to use sidewalks and/or trails.

[« Back](#)

[Exit Survey »](#)

True or False: Pedestrians are allowed to use the bike lane if the sidewalk is too crowded.



True



False

Where is it permissible to cross the road?



Wherever you want



Where drivers can see you



At a designated crosswalk

True or False: Pedestrians have the right of way to cross at any point of a road.



True



False

Project Definition

Global Sustainability

Bicycling on Grounds and Beyond

Team 4: Enforcement

Our role in the Bicycling on Grounds and Beyond project is to enforce the laws of the road for bicyclists, drivers and pedestrians. It is vital that the roads are safe for all people to ensure fast and trustworthy transportation around Grounds. There are many issues that we plan to solve to make the roads safe for everyone. First we want to address some of the rules bicyclists should follow such as registering their bike, parking their bike in the designated bike racks and following road rules. We also plan to address rules for drivers on the road such as "bikers have the right of way" and not crossing into the bike lanes. Finally we want to advocate safe habits for pedestrians such as not J-walking and following crossing signals.

Some of our community partners will be Parking & Transportation, UVA Police, Bike Charlottesville and the Office of Public Affairs. Parking & Transportation would like help promoting bicycling around Grounds to reduce the number of people using the transit to hopefully take at least one bus off of the road. We plan on creating a stronger infrastructure to reduce road infractions and advocate the laws set out by the UVA Police. In order to voice our cause we plan on working with Bike Charlottesville to create a mass campaign informing bikers of some safety rules and regulations. By working hand in hand with the Office of Public Affairs we will try to advertise our cause across grounds. The stakeholders in this project are the bicyclists, drivers, pedestrians and Parking & Transportation. All people using the road are always under the risk of possible accidents so it is important that they are aware of all of the rules of the road to make it as safe and hassle-free as possible. Parking & Transportation has the potential to lose a lot of money due to the uncertainty of the safety of biking around Grounds and needs positive advocacy and a strong foundation to fully support its cause.

We hope to create an online tutorial for incoming and returning students and faculty to take before term that advocates registering their bike and teaches them some of the basic rules that bicyclists have to follow. If in any way possible we hope to install more signs around campus in congested areas (i.e. McCormick Rd.) to let drivers know that bikers and pedestrians have the "right of way." Lastly, in order to advocate pedestrian rules, we hope to possibly install more crosswalks and crosswalk traffic lights and put up short informational signs at crosswalks displaying the importance of crossing at the right time.

Conceptual Design

Global Sustainability Bicycling on Grounds and Beyond Team 4: Enforcement

Our role in the Bicycling on Grounds and Beyond project is to enforce the laws of the road for bicyclists, drivers and pedestrians. As the "Enforcement" group we plan on tackling problems such as: bicyclists/drivers not following the rules of the road, bike registration and j-walking. The risks of biking on Grounds increases as more people are starting to stray away from following some of the basic rules of the road such as "sharing the road," staying in designated lanes and following basic traffic principles. It is also essential that bicyclists register their bikes with the UVA Police to prevent any unwanted situations such as bike theft. J-walking has also been a big issue recently since it proposes risks to bikers, drivers and the pedestrians themselves.

One of the possible solutions we are proposing to help reduce some of the problems is to create an online program all incoming students will need to complete before starting the school year. This survey is intended to address multiple issues with Bicycling on Grounds. First, all students will have to take a short "crash-course" on some of the basic rules of the road. This section will address issues such as crossing the road in permitted areas, following crosswalk signals, giving the "right of way" to bicyclists and following traffic signals while biking. There will be a short 5 question quiz at the end of the course to ensure that all students understand the material. The main goal of this section is to just educate the students of the issues in order to promote safety on the roads. After taking this "crash-course" students will be asked if they plan to bring a bike on Grounds with them. If yes, the program will then take them to another short survey that has a few more in depth sections mentioning some more rules about biking on grounds such as bike parking and registration. At the end of this section of the survey students will be able to register their bikes online.

After finishing the general format of this survey we plan on talking with the Department of Parking & Transportation about what the best types of signs to put around Grounds are and where they should go. Some of the problem areas we have observed are: the McCormick Rd./Alderman Rd. intersection, University Ave., the Rugby Rd./University Ave. intersection, the Emmett Rd./Ivy Rd. intersection and the Engineering school pathway. We also plan on talking to the Office of Public Affairs about sending out our survey to incoming students. It is also essential that we talk to the UVA Police about the process of registering bikes and to find out more about some of the rules they wish to be more advocated and problem areas that need to be fixed.

Timeline	Things to be done...
10/14	Contacted all community partners and all have all information received necessary for executing survey.
10/21	Have all information/questions finalized for survey
10/28	Survey should be created
Undecided	Signs to be posted on Grounds

Tara Osborne- Office of Public Affairs: dealing with creating and sending out survey to students.

Sergi Benet- Department of Parking & Transportation: dealing with putting up signs around grounds.

Austin Angulo- UVA Police: dealing with learning more about rules of road and problem situations.

Preliminary Report

Tara Osborne, Sergi Benet, Austin Angulo

Enforcement Team

Preliminary Report

Project Definition

Our role in the Bicycling on Grounds and Beyond project is to enforce the laws of the road for bicyclists, drivers and pedestrians. It is vital that the roads are safe for all people to ensure fast and trustworthy transportation around Grounds. There are many issues that we plan to solve to make the roads safe for everyone. First we want to address some of the rules bicyclists should follow such as registering their bike, parking their bike in the designated bike racks and following road rules. We also plan to address rules for drivers on the road such as "bikers have the right of way" and not crossing into the bike lanes. Finally we want to advocate safe habits for pedestrians such as not J-walking and following crossing signals.

Approach

The main approach we have chosen to take towards this project is to create a survey that will educate and reinforce the rules of the road to as many students that we can reach out to. The survey will consist of two to three sections of information about bike safety, driving rules and pedestrian safety and ten follow up questions spread throughout the survey that help students relate back to what they have learned/reviewed. The main rules we plan on stressing are hand signals while riding a bike, vehicle awareness, obeying traffic signals, following the flow of traffic, parking bikes in designated areas instead of wherever the owner wants, bicycle registration and theft, and proper gear to be worn at night. A lot of bikers out on the roads today do

not have very much knowledge about what the proper techniques of biking are, so it will be very beneficial to include information such as hand signals so that bikers will be able to communicate with motor vehicles on the road. It is quite often that one sees a biker cross the street or the middle of an intersection without taking into account traffic signals and where traffic may be. In this survey we plan to make it very clear that bikes are subject to the same exact laws as motor vehicles while on the street, so by running a red light they are committing a traffic infraction. Bike registration is a large problem on grounds; more than half the bikes in use are unregistered. The survey is designed to promote bicycle registration so that bike owners will have some protection in the case that their bike has been stolen or gone missing. There will be a link attached to the survey that will transfer people over to the UVa Police Department site to fill out the registration form if they plan on biking on grounds and have failed to register already. We also plan on addressing proper equipment when biking at night since it is quite dangerous to be biking on roads with shared lanes (such as Alderman Rd) without any sort of visual alarm to let cars know you are in front of them. There will also be a minor section near the end of the survey that relates of pedestrian safety on grounds as well and will cover subjects such as crosswalks and when to use them, when cars have to give the 'right of way' and when they don't and obeying pedestrian traffic signals.

We as the enforcement group also plan on working with the education group in this project to initiate a bike tagging program with our community partner Parking & Transportation. The bike tagging program is fairly simple, once a bike is seen improperly parked, a bright green tag will be placed on the handlebar that will aware the owner that they have illegally parked their bike and give them a warning that this infraction could lead to the bike being impounded and subject to a twenty five dollar recovery fee. The tag will also offer some bicycle safety tips such as wearing a helmet, using a light when riding at night, not riding on the sidewalks, being aware of all motor vehicles on the road, yielding to pedestrians in crosswalks and bicycle registration with the UVa Police Department. It is our job to enlist the help of either the UVa Police Department or Parking & Transportation to tag the bikes since they have the authority to ticket and enforce such rules.

The main groups and people we will be working with include: Jonathan Monceaux of Parking and Transportation, Officer Angela Tabler and Sergeant Christopher Easton of UVa Police Department, and Julie Caruccio of the Office of Public Affairs. We have contacted and been working with Mr. Monceaux in developing the bike tagging programs around grounds. Officer Tabler and Sergeant Easton were also contacted about the survey that we created and helped provide information about bike safety, rules of the road and pedestrian safety. In order to actually complete the survey and figure out how to do so we contacted Julie Caruccio who also gave us even more information about biking on grounds and how to get the word out.

In our original plans we stated that we wanted to not only create the survey and bike tagging program, but we also wanted to install more crosswalks and traffic signs around grounds to make drivers more aware of pedestrians and bikers. Unfortunately this is a very difficult task to because it requires a lot of business work to get the 'okay' to actually install such signs. There is much funding and engineering work that has to go into figuring out where the best place to put a sign or crosswalk is and how much it will cost, and since we don't have the ability to carry out a project of such proportions we had to bag that idea. We also wanted to make it required that all incoming students take the survey we created to that everyone will have some knowledge about road safety, but after talking with Julie Caruccio we found out that it takes almost a decade to make anything mandatory for student to take, so that idea was bagged to. We chose the

approaches we did because they were the most feasible and most efficient means of getting the information out and enforcing it.

Schedule

Timeline	Things to be done...
10/14	Contacted all community partners and all have all information received necessary for executing survey.
10/21	Have all information/questions finalized for survey
10/28	Survey should be created
12/2	Figure out who will be posting the survey on their website
12/2	Figure out who will be tagging bikes

Budget & Funding

There is not budgeting or funding necessary for our approaches. The survey we created was made of a free source found online and will be posted eventually on a Facebook page or other source of mass media that does not require any licensing. The paper needed for making the tags will be supplied by Parking & Transportation, also.

Documentation & Assessment

The documentation of our progress will be done by saving emails of communication between community partners and keeping records of our group meetings and work done. Other documentation will include websites created that will stand as a picture of progression with our work. We will assess our progress during group meetings to make sure that we have achieved what we want by the time we wanted. Examples of this include past and future group meetings to make sure that we compile our information between community partners so that whatever we create (i.e. bike survey, etc.) consists of all information desired by each community partner.

Dissemination

We plan on trying to get our survey out to as many people so we need to use as many sources of dissemination as possible. Some of the sources we plan on using include: UVa Police Department, Parking & Transportation, Sheffield Hale who is in charge of the SustainaUnity Organization at UVa (SustainaUnity Newsletter and website), and any other biking awareness groups that we can contact. We also will be working with the education group to help spread the word by posting the survey on their Facebook page for anyone who is interested in taking it.