

Skidmore College Centennial Pedestrian and Bicycle Plan



“CREATIVE THOUGHT IN MOTION”



Presented by
Sustainable Mobility Solutions
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EXECUTIVE SUMMARY . . .

Sustainability is a topic of increasing concern in an era of climate change, ecological degradation, and social injustices. In response to concerns about the Earth's carrying capacity for a growing population, action towards greater sustainability is taking place on both a global, national, and local scale. This movement is even happening here at Skidmore. In fact, sustainability has been written into the College's Strategic Plan as one of the necessary components to fostering "informed, responsible citizenship."

As the Campus Sustainability Report of 2010 shows, Skidmore has "made significant progress towards reducing its environmental footprint and creating a permanent sustainability program." Initiatives already implemented include the installation of geothermal heating and cooling systems for the three newest buildings on campus, the creation of an organic student garden, the organization of a successful student "Eco Rep" program, and the completion of a greenhouse gas emissions inventory and report. In terms of mobility, however, there is still much work to be done to make Skidmore more sustainable.

In response to this need for greater sustainability related to campus mobility, our class has compiled this document, The Skidmore College Centennial Pedestrian and Bicycle Plan. First, in the "Introduction" section, we will identify global environmental stresses and explain the need for greater sustainability in all human activities, including mobility and transportation. Next, in the "Existing Conditions" section, we will demonstrate how Skidmore has responded to these global issues in the past and compare our efforts to those of our peer institutions in the "Peer Institutions" section. The following section, "Case Studies,"

will recommend future efforts to increase sustainable mobility at our school. This section will concentrate on 3 specific on-campus case studies conducted by students in our class: perimeter path, North/South divide, and bike sharing. Finally, in the "Creative Thought in Motion Guidelines" section, we will define a campus program for the future to ensure the longevity of the ideas we have proposed.

By conducting research on current mobility issues and presenting our findings in this Master Plan, we hope to raise awareness about the importance of sustainable mobility on campus. Furthermore, we hope to inspire interest across disciplines and form the framework of an organization to implement concrete strategies for lasting change. In the long term, we seek to establish the Skidmore campus as a model for sustainable mobility in higher education.

INTRODUCTION . . .

In the imminent future, our society will face increasing pressures of population growth and urbanization. Projected population growth will contribute to environmental issues including urban sprawl, deforestation, heightened stress on existing infrastructure, and increased congestion. There is no question that there will be continued development endeavors to support our population, but to be effective, these development plans must be sustainable. According to *Our Common Future*, also known as the Brundtland Report of 1987, sustainable development “meets the needs of the present without compromising the ability of future generations to meet their own needs.”



Sprawl in Saratoga Springs

This movement towards greater sustainability, which stems from simultaneous infrastructure refinement and behavioral change, must also encompass mobility. The Center for Disease Control and Prevention (CDC) recognizes that growing awareness of the potential for transportation systems to “impact quality of life and health” can act as a driving force for policy and program improvements (Healthy Weight). We must develop innovative transportation opportunities that minimize environmental degradation and provide public health benefits while still effectively moving people from origin to destination. The CDC recommends 2.5 hours of moderate exercise a week for adults (Healthy Weight), which equates to 30 minutes of brisk walking or biking each day during the work week. Walking and biking remain the two most sustainable forms of transportation, and when incorporated into a daily routine can also serve as the moderate exercise recommended for better health.

According to the Intergovernmental Panel on Climate Change (IPCC), one of the primary goals of sustainable development is “population health.” Currently, however, the overall health of our country is declining largely due to inactivity, which can be attributed to both technological and behavioral changes. Heart disease, a preventable disease, is the leading cause of death in the United States (Heart Disease), and according to the Center for Disease Control and Prevention (CDC), the top two risk factors of heart disease are inactivity and obesity (Heart Disease). More than a quarter of the United States’ population self-identify as obese (Healthy Weight). One of the key components to maintaining a healthy weight is daily physical activity.

INTRODUCTION . . .

Unfortunately, the development of suburbia has decreased the frequency of walking and biking as forms of transportation in favor of personal motor vehicles. However, these once-popular transportation modes are regaining status through the media. Bicycling has received national attention from media sources such as the New York Times, which recently featured the transportation mode on the front page of the Styles section. Though there still is a large socio-economic divide that must be addressed to reduce the stigma against walking, biking, and public transportation, we are clearly beginning to make progress.

Both here at Skidmore and across the country, college campuses have the potential to be densely concentrated areas of activism. Students have the time, energy, and determination to rally for change. The Energy Action Coalition, a union of youth-led and powered groups, sponsored Power Shift 2009, a rally that united 12,000 students from across the country to express a variety of environmental concerns (Energy Action Coalition). Students nationwide are interested in inciting change and making our daily lives more sustainable. We have seen and learned about implementation of sustainable alternatives to transportation

and we have evaluated how Skidmore ranks comparatively to some of our peer institutions.

CURRENT STATUS OF SKIDMORE'S CAMPUS

Our 2007 Campus Plan evaluated many of Skidmore Campus' transportation issues and outlined a time frame in which these issues would be addressed. However, while we recognize that this plan correctly identifies concerns of the walkability and bikability on campus, we have found additional and unresolved issues that we would like to address. As students of Skidmore College, we believe our school is well equipped to develop and implement a plan to target sustainable transportation challenges. The concept behind the "Creative Thought Matters" campaign can and should be applied to the development of a new and more sustainable transportation system and increasing the safety of these transportation modes.

We began by analyzing the Skidmore Greenhouse Gas Inventory Report of 2010 to determine where the largest omissions of GHGs were and how we could address them in our transportation plan. The Skidmore Greenhouse Gas Inventory Report of 2010 identified three



main sources of greenhouse gas emissions:

- 1) Direct emissions that are owned and controlled by the college (such as on site combustion of natural gas)
- 2) Indirect emissions that are from the purchase of power (such as electricity purchased from the grid)
- 3) Indirect emissions that are a result of activities related to the College, but not owned or controlled by the College (such as travel to and from campus, study abroad, and solid waste)

The report found that this third area contributed the largest percentage of GHG emissions (35%), with approximately 9,808 Metric Tonnes of Carbon Dioxide Equivalent (MTCDE). While Study Abroad is the largest contributor to this GHG emission (2,606 MTCDE), there is also a significant portion of the emissions that consist of Auto Travel (Faculty/Staff Auto with 1816 MTCDE and Student Auto with 873 MTCDE) (See Figure A1). Reducing these emissions will be crucial in establishing greater sustainability.

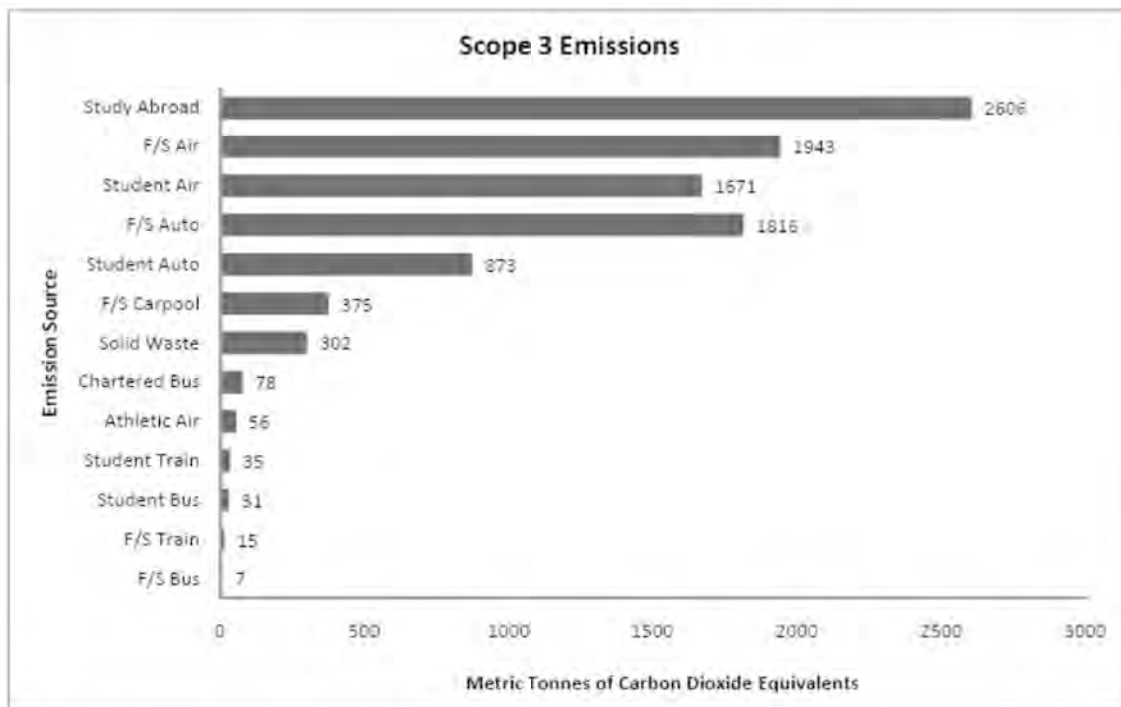


Figure A1: Scope 3 Emissions as reported by the Skidmore Greenhouse Gas Inventory Report (2010)

The Greenhouse Gas Inventory Report names the following efforts that have already been made to reduce emissions associated with travel to and from campus: providing a CDTA bus stop on campus as well as a free

bus pass for all Skidmore community members, the "Leave Your Car at Home Week" initiative, opportunity for carpooling, and a campus design that is friendly to both walkers and bikers. As our class has found, however, there

INTRODUCTION ●●●

are still many impediments to walking and biking on campus. The consideration of these challenges could further reduce our carbon footprint, while contributing to a healthier, more sustainable campus.



The Greenhouse Gas Inventory Report of 2010 states that Skidmore's campus design is friendly to both walkers and bikers, yet the reality is often very different.

In addition, the development of a campus that is truly pedestrian and bike friendly aligns with many of the goals named in Skidmore Strategic Plan. The Executive Summary of the Strategic Plan lists four main goals intended to fulfill the college's mission statement:

- I) Student Engagement and Academic Achievement
- II) Intercultural and Global Understanding
- III) Informed, Responsible Citizenship
- IV) Independence and Resources

Goal III in particular seeks to:

- "Foster pedagogical innovation relating to responsible citizenship; support campus initiatives that teach and exemplify this value."
- "Enhance the campus residential environment, with special attention to common spaces."
 - "Increase support for athletics, fitness, and wellness."
 - "Develop, broaden, and deepen the College's connections to the local community."

The implementation of the structural suggestions made within this Pedestrian and Bicycle Plan could fulfill many of these objectives listed in the Strategic Plan. It could enhance student awareness of environmental issues such as climate change. It could promote healthier lifestyles by providing a safe, enjoyable atmosphere for exercise (whether walking, running, or biking). It could promote interdisciplinary learning and collaborative projects. And it

could improve interdepartmental relations as well as the campus-community connection.

FROM THOUGHT TO ACTION

A sustainable campus is something in which every member of the Skidmore community can actively partake. Furthermore, the greater Saratoga Springs community has sustainability-focused groups with which we can unite to create campus-community connections to ensure the prolonged success of our proposal. Ranging from small-scale projects that can be remedied in a matter of weeks, to long-term goals that may not be achieved for years, there

are many things that can and should be done.

As a liberal arts school, Skidmore emphasizes the benefits of interdisciplinary learning. Using this same interdisciplinary approach we have created a transportation plan that involves multiple academic departments and student interest groups. As a class, we are taking responsibility for addressing these issues

and developing the framework to ensure their accomplishment. In honor of Skidmore's 100th graduating class, a class with the creative thought necessary to address this issue, we must do all that we can to ensure that our voices are heard and our concerns are brought to the forefront.



Skidmore College students on October 10th 2010 (10/10/10) in downtown Saratoga Springs promoting sustainable transportation.

METHODS . . .

In creating this document we used a variety of different processes to collect data, and produce images derived from our findings. During the months of October and November 2010 we collected information regarding biking on campus, walking on campus, as well as the efforts being made by Skidmore and its peer institutions to address these issues.

We began our research by using www.surveymonkey.com to create a survey which was distributed to Skidmore students through e-mail using student announcements. The purpose of the survey was to gauge the sentiments of the Skidmore community towards the college's current mobility conditions. We then used Microsoft PowerPoint to produce graphs of the survey results. This information was supplemented by the completion of biking and problem area audits. Using GPS makers, we walked the entirety of the Skidmore campus paying specific attention to the location and presence of bike racks, bikes racked and unracked, bikes locked and unlocked, bikes covered, incomplete paths, nonexistent paths, poorly maintained paths, and dangerous paths. We then used Geographical Information Systems (GIS) to overlay our points of observation with a map (obtained from ArcGIS online) of the land area of Skidmore College. Information on the complete and incomplete areas of the perimeter road path was collected using personal observations and Google Maps. We also took photographs of numerous problem areas on campus and pinpointed each location with GPS's. The points taken at each location were then extracted to ArcMap using the program DNR Garmin. We then used Adobe Photoshop and Google Sketch Up to superimpose potential solutions to the problems we identified.

The current state of Skidmore and peer institutions was also examined. This was accomplished by looking at the public information made available on several college's official websites. We also contacted schools through personal e-mails and phone calls. We then examined Skidmore's 50 year plan regarding future development as it related to transit issues, taking into account certain initiatives including a bike sharing program. We also used the outside source www.greenreportcard.org to understand Skidmore's relation to its peer institutions. Additionally, the website allowed us to better understand the actions being taken at other colleges and universities.

To calculate the square footage on Skidmore's campus that is designated to car parking in addition to the area devoted to all buildings on campus, the program ArcMap in the GIS Center was used. First, an aerial map of Skidmore's campus was imported to the program ArcMap. Once the map was projected in a set coordinate system, two shapefiles were created using the program ArcCatalog and then added into ArcMap where the aerial photo of Skidmore's campus was displayed. Using the editor toolbar, all the buildings on campus were traced as polygons and displayed under the same layer. The same was done for all the car parking spots on campus. To measure the land area on campus devoted to car parking spots, the measure tool in ArcMap was used and each polygon for car parking spots was calculated and added up for a total sum. The same method was used for the amount of building space on campus. This allowed us to get a total sum of square footage devoted to car parking spots as well the square footage devoted to buildings on Skidmore's campus.

BIKE AND CAMPUS AUDITS ...

Currently, Skidmore College has three different types of bike racks located throughout the campus. Figure 1 (below) represents the locations of the bike rack usage between 4:30-5:30 pm on October 11, 2010 from 4:30 - 5:30 pm.

Figure B1 demonstrates that bike racks are predominantly used in the center of campus, near the dorms McClellan Hall, Wiecking Hall, Penfield Hall, Wilmarth Hall, Jonsson Tower, Howe-Rounds Hall, and buildings Case Center and Palamountain. In addition, Figure B2 visually indicates the amount of un-racked bikes on campus during the same time slot the data was taken for Figure 1, October 11, 2010.



Figure B1: An Aerial View of Bike Rack Usage

BIKE AND CAMPUS AUDITS . . .

Figure B2 shows a large amount of unracked bikes in Scribner Village as well as near Lucy Scribner Library, Murray-Aikins Dining Hall, and Zankel Music Building (currently not pictured).

The data demonstrates that the current

amount of bike racks on campus do not sufficiently support the quantity of people wishing to park their bicycles on campus. In order to avoid potential bicycle theft as well as better manage bicycle congestion, a greater amount of bike racks located throughout the

entire campus need to be installed. Locations where bike racks are in greatest demand are the Zankel Music Building, Lucy Scribner Library, Murray-Aikins Dining Hall, and throughout Scribner Village.



Figure B2: Un-Racked Bikes on Skidmore Campus

In addition to the constraint of an insufficient amount of bike racks on campus, there exist other areas on campus in need of improvement, which the college is not attending to. Figure B3 indicates where issues including accessibility, crosswalk, motor vehicle safety, and path issues are

compromised by the current built environment. This data demonstrates that while there are a number of constraints and problems with the physical environment, there are also a great amount of potential improvements that could be made to effectively refurbish and integrate the college campus.



Figure B3: Skidmore Campus: Areas for Improvement

BIKE AND CAMPUS AUDITS ●●●

Data was also compiled for the amount of land area devoted to car parking and the amount of land area devoted to buildings on campus. Figure B4 is a map of Skidmore's inner campus with a red line defining its boundary.



Figure B4: Boundary of Skidmore's inner campus

Figure B5 shows the same aerial view of Skidmore's campus with the red line defining its boundary, however, the amount of space on campus devoted to buildings is displayed using yellow polygon shapefiles which were created in the program ArcMap in Skidmore College's GIS Center. Figure B6 shows Skidmore's boundary again in red, but this time the amount of space on campus devoted to car parking is



Figure B5: Buildings on Skidmore's Campus

displayed using green polygon shapefiles. For a better visual representation, Figure B7 shows the combination of the data compiled from Figure B5 and Figure B6.

Currently, there are approximately 220,000 square feet of land area devoted to buildings and approximately 250,000 square feet of land area devoted to car parking spots on Skidmore's Campus. These numbers suggest

that future development can be built on existing campus land devoted to car parking.



Figure B6: Parking Spots on Skidmore's Campus



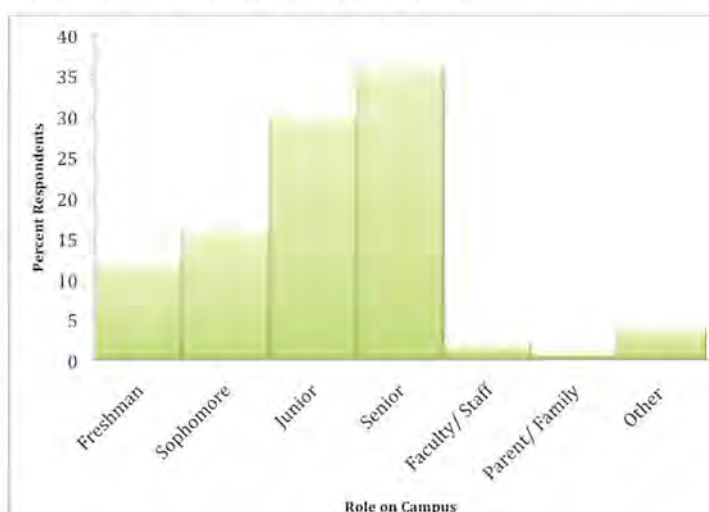
Figure B7: Land Area Devoted to Parking Spots and Buildings on Skidmore's Campus

SURVEY . . .

We conducted a random sample survey of members of the Skidmore community to determine current trends in transportation as well as desired transportation improvements for the future. We used social media networks, such as Facebook, and emailed lists of students and faculty members to distribute the survey online. The survey consisted of seven multiple-choice questions presented using an online survey website. We chose the method of online survey creation and distribution in order to maximize the number of respondents within a relatively short period of time. After a weeklong distribution period, we had 100 survey responses, which we analyzed in Excel in order to determine the focus of our implementation projects on Skidmore's campus.

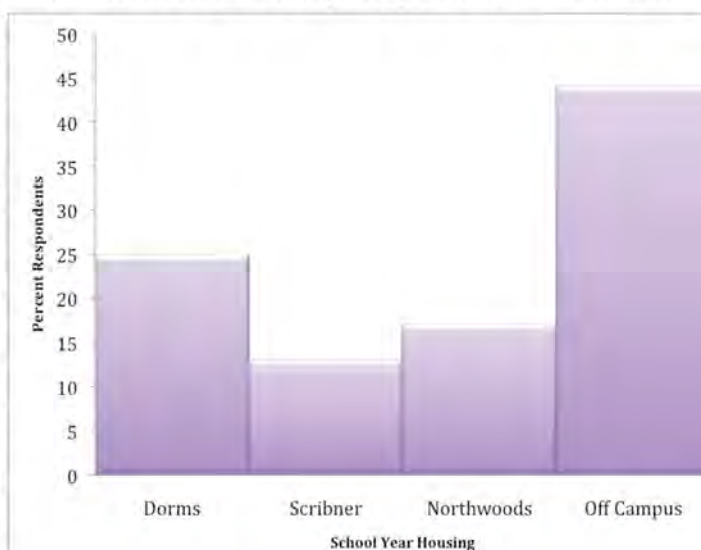
ROLE ON CAMPUS

The majority of respondents for this study were students in their senior year at Skidmore College, followed by Juniors, then Sophomores and Freshmen. Limited responses came from faculty members, families, or 'other'. The majority of responses from seniors and seniors may indicate that students living off campus have a greater vested interest in sustainable transportation due to the daily issues faced arriving to campus. On the other hand, most students distributing this survey were upperclassmen, meaning that survey results could be skewed, as upperclassmen tend to have social and academic circles consisting of other upperclassmen.



SCHOOL YEAR HOUSING

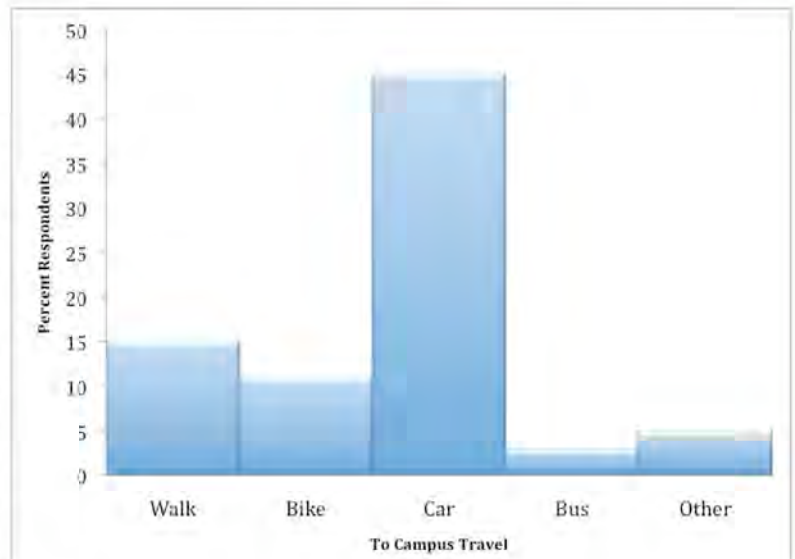
Off campus housing represents the greatest number of survey respondents. The sum of Scribner Village, Northwoods apartments, and Off-Campus housing constitutes the majority of the study. This coincides with the fact that the majority of respondents are upperclassmen, meaning the remaining 25% of respondents are underclassmen, and live in dorms as required by Skidmore's current policies. Together, roughly 30% of respondents live in Skidmore-provided on-campus apartment-style housing. This group is most threatened by dangerous perimeter road crossings as these students must cross the road by foot or bicycle every day, usually multiple times, to travel between their apartments and campus.



The 25% of students living in the dorms do not have the issue of arriving to campus, but spend the most time actually on campus, thus regularly experiencing the effectiveness/ ineffectiveness of pedestrian initiatives.

TO CAMPUS TRAVEL

The majority of respondents, 45%, reported arriving on campus by car every day. As just under 45% of respondents report living off campus, these figures mean that even students living in Scribner Village and/or the Northwoods apartments use vehicles to arrive on campus every day. The purpose of our project will be to promote the levels of Walking (15%), Biking (11%), and bus (3%) transportation while discouraging the use of cars as the most prevalent form of transportation. Ideally, we should have a base of sustainable transportation such as biking and walking, only supplemented occasionally by the least sustainable method of transport—personal vehicles.



ON CAMPUS TRAVEL

At 63%, the most common form of on campus transportation is walking. This figure suggests that Skidmore's campus is already conducive to walking, although whether this is due to proper planning, inconvenience of alternative transportation or simply small campus size the study does not specify. Due to the large percentage of walkers, our study will work to ensure that the facilities used by these pedestrians are of the highest quality so that walking on campus is a safe and enjoyable activity. At only 8%, our implementation plan will work to increase the current percentage of biking used on campus through improved infrastructure as indicated by the student body.



SURVEY ...

WALKING SAFETY

Average Score: 4.25

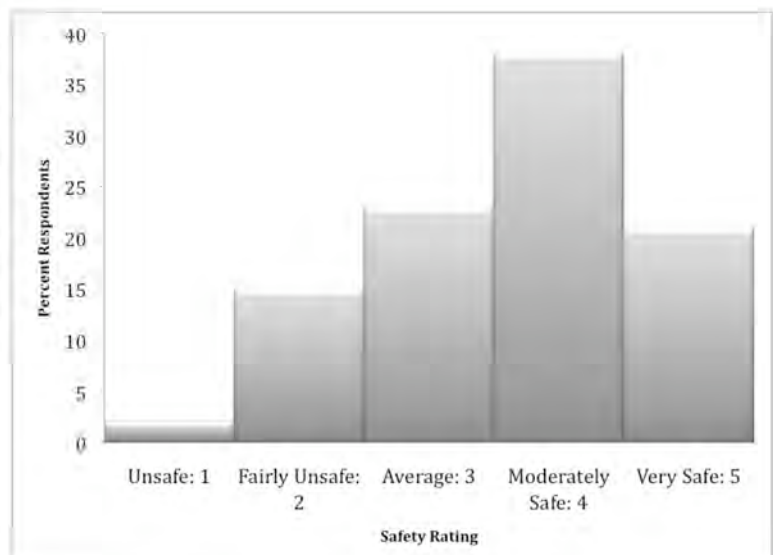
The majority of respondents rate Skidmore Campus as above average in terms of walking safety, with almost 50% of respondents calling the campus 'very safe'. While this figure suggests successful implementation of safe walkways, roughly 70% of respondents spend every day walking around campus, and half of them still feel campus needs improvement in terms of walking safety. Any improvement that benefits such a large percentage of respondents will improve the image of the school and foster a safer community especially for walking, increasing social benefits.



BIKING SAFETY

Average Score: 3.62

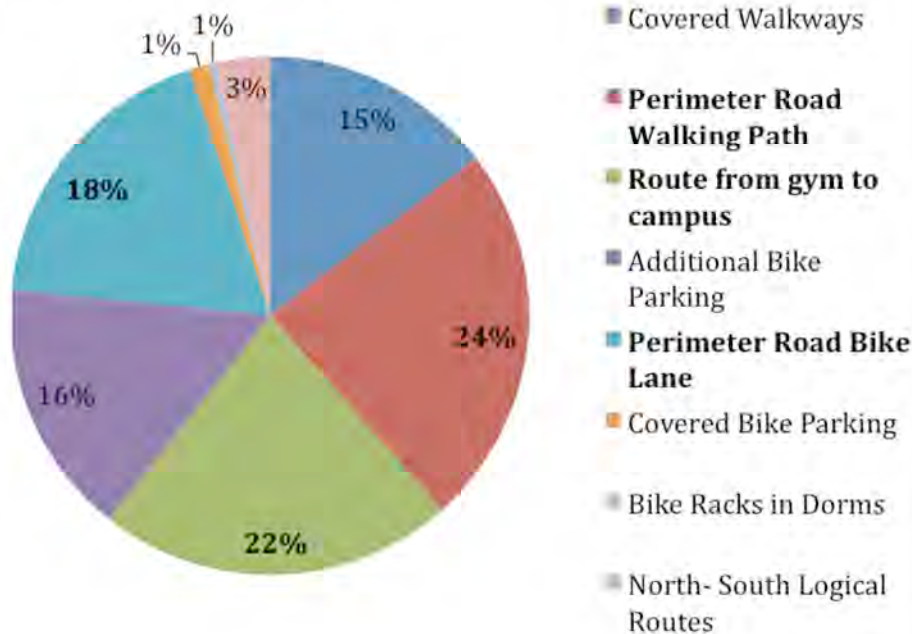
Of all the respondents, 40% found infrastructure for biking at or below average for accessibility. The majority of respondents found current facilities 'good' (36%). While 21% of respondents found biking facilities 'excellent'. However, the fact that only 7% of respondents regularly bike around campus suggests that finding the current infrastructure as 'good' is not enough to encourage regular utilization of this mode of transport. Changes to improve biking on campus came from requests indicated by the respondents in the stated 'desired changes' section.



DESIRED CHANGES

When polled on what changes respondents would like to see on campus, a walking path around perimeter road was the most mentioned improvement. This suggests that despite the high percentage of individuals walking on campus, basic walking infrastructure still needs improvement. Close behind, respondents asked for a better pedestrian route from the athletic center to main campus, additional bike parking on campus, a bike lane on perimeter road, and

more covered walkways. While “other” was also a response option, none of the respondents indicated that the campus does not need any improvements. Results can be seen in the pie chart below. With 100% of respondents (comprised of students, faculty, and family members) requesting changes, we have a definite impetus for change; action must be taken as soon as possible to meet the needs of Skidmore College’s population.



CONCLUSIONS

- Almost 70% of total respondents walk around campus - our project will encourage safe, dependable infrastructure to make sure all walks around campus are enjoyable and safe.
- Less than 10% of respondents currently bike around campus, and a strong percentage of desired changes indicated improvements to biking infrastructure - our project will strive to improve infrastructure giving our campus above average ratings.
- The most desired changes to campus include a walking path around perimeter road, a safe and logical route from south campus to north campus, additional bike parking, and a bike lane on perimeter road - our report will discuss solutions to incorporate these improvements through detailed implementation plans.

PEER INSTITUTIONS . . .

Sustainability has become an important factor in the decision making process for students and the broader collegiate community. From coursework and building design, to student involvement and campus events, sustainability is an issue that Skidmore must integrate as a priority in its vision of future development. The growing attention that campus greening efforts have received is indicative of the mounting importance of campus sustainability for the growth of Skidmore as a collegiate institution.

In the competitive market of higher education, LEED (Leadership in Energy and Environmental Design) building certification and campus integrated pest management are the details that are now defining the image of colleges and universities. Both the Princeton Review and Peterson's college guide include "green ratings" as part of standard college ratings, and the Kaplan College Guide 2009 includes an entire "green section" complete with the most "green" colleges and universities and a list of "green" careers. The creation of the Official College Sustainability Report Card in 2007 was instrumental in shaping the future of sustainability at institutions of higher education. The program website states, "The Report Card is designed to identify colleges and universities that are leading by example in their commitment to sustainability. The aim is to provide accessible information for schools to learn from one another's experiences, enabling them to establish more effective sustainability policies." Green Report Card's research indicates that green initiatives continue to be a focus of investment on college campuses despite the recent decline in the endowments of most higher education

institutions. This supports campus sustainability as a priority in budget allocation. The emphasis placed on campus greening by colleges and college guide companies, reflects the growing importance of these issues for prospective students.

Studies have shown that the stress placed on green assessments is shared between institutions and students. In 2008 Princeton Review released a survey titled, "College Hopes & Worries." Of the 10,300 respondents,



The College Sustainability Report Card

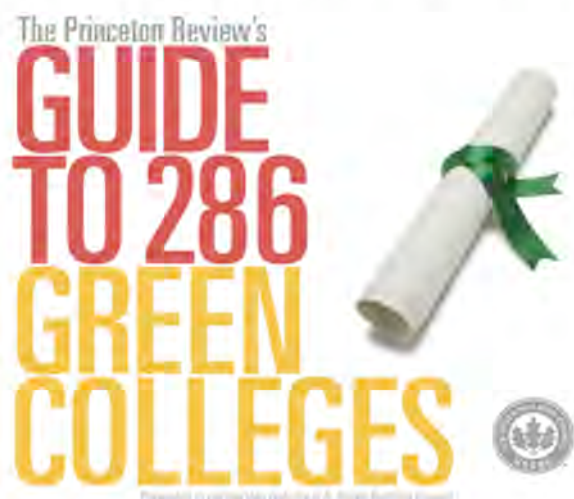
6,489 indicated that they would value having access to information pertinent to a college's commitment to the environment. Approximately one quarter of the respondents said this information would "strongly" contribute to the process of choosing what schools to apply to or attend. The demand from students for this type of information shows the importance of the issue throughout the college application process. From the initial visit to the final decision, prospective students are relying on

the information made available through green ranking systems and assessments. As such it is not enough for a campus to exercise a certain level of awareness of sustainability. Students are now looking for colleges that actively address the issue through committed campus efforts, and institutions that do so will be more effective in attracting top students.

The desire for sustainability to be integrated into all walks of campus life is a recent development. In a study issued by the College of William and Mary in 2008, more than 1700 students from nine college campuses were surveyed, and researchers concluded,

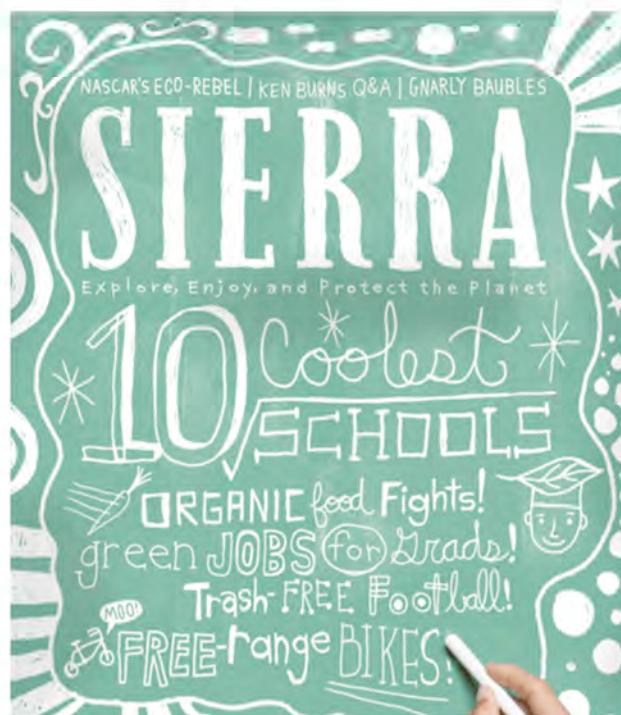
has created a demand for sustainability in all aspects of campus life. Skidmore College must answer this call by making campus sustainability a fundamental part of its future growth as an academic community.

Most colleges focus exclusively on installing bike infrastructure and bike sharing programs, or reducing the carbon impact of the vehicle fleet. Pedestrian issues are rarely advertised on sustainability websites, yet deserve equal attention and consideration. The first college to successfully develop, implement and advertise a comprehensive bike and



The Princeton Review's Guide to 286 Green Colleges

"Current freshmen are two times more likely to choose their school based on sustainability concerns than the entering freshman class just 3 years ago." The emergence of sustainability as a standardized criterion for college admissions is becoming common. The market that is being devised by college guide companies for greening is directed at this new wave of interest. Heightened awareness of environmental issues



The Sierra Club's Guide to the 10 Coolest Schools

pedestrian program will have created a better atmosphere for current students and created a major selling point for prospective students.

PEER INSTITUTIONS . . .

The improvements that we hope to make to our campus are essential if we are to encourage greener choices enhance the sense of community, but few people know to ask for these improvements. Unless trained to analyze the built environment, most of us pass through it, unable to articulate when a design decision or piece of architecture becomes an obstacle. Students can hardly be expected to ask for better bike and pedestrian infrastructure if they do not know that infrastructure is missing. To put it another way: if you build it, they will wonder how they ever did without it.

Skidmore is in the position to institute a comprehensive bike and pedestrian plan that will set our campus apart from other institutions that have yet to incorporate sustainability into their campuses as such a root level. In the eyes of a prospective student, Skidmore's commitment to sustainable mobility will trump other institutions that have neglected the issue entirely.

The peer institutions evaluated in this survey, as well as other institutions that were not considered analogs to Skidmore on the basis of size, location or endowment, seem to fall into three categories:

- The first kinds of schools are those that have sustainability hardwired into campus design, administration decisions and student life. In most cases, these institutions have held sustainability as a core value for many years, and may have acquired a reputation for being at the forefront of sustainable endeavors (ex. Oberlin College).

- The second grouping consists of schools that have very recently realized the potential for sustainable development to enhance campus life, decrease the carbon footprint and entice

new students who desire a greener college and a deeper feeling of community. They may have started to transition to an electric vehicle fleet, or instituted a new bike sharing program. In doing so, they are becoming more effective in attracting students who value sustainability (ex. Bates College).

- The third group consists of institutions that have not yet worked sustainable development into their strategic plans and vision for the future of the campus, or their commitment to green development is mostly talk and little action ("greenwashing"). Sustainable mobility solutions are limited to reducing carbon emissions; they rarely offer support for alternative modes of transportation. These institutions will be less likely to attract sustainability-minded students and will miss the opportunity to be seen as one of the pioneers in sustainable development (ex. Wesleyan University).

Skidmore College is most similar to institutions in the second group, which means that while we are actively integrating sustainability into our campus design, we still have a lot of opportunity for expansion and more aggressive action. A commitment to consider how each new building project will integrate into the campus, for example, would ensure that



alternative modes of transportation are encouraged for years to come.

Most colleges focus exclusively on installing bike infrastructure and bike sharing programs, or reducing the carbon impact of the vehicle fleet. Pedestrian issues are rarely advertised on sustainability websites, yet

deserve equal attention and consideration. The first college to successfully develop, implement and advertise a comprehensive bike and pedestrian program will have created a better atmosphere for current students and created a major selling point for prospective students.

Institution	Green Report Card Grade	Student body size	Estimated endowment market value
Skidmore College	B+	2674	unpublished
Oberlin College	A	2888	\$633,188,315
Middlebury College	A-	2482	\$798,000,000
Bates College	B-	1738	\$183,848,236
Dickinson College	A	2376	\$320,744,241

Institution	Bike sharing program
Skidmore College	est. 2006 - 15 bikes - free - current status unknown
Oberlin College	est. 1986 - 50 bikes - \$45 per semester
Middlebury College	est. 2010 - bike count unknown - fee TBD
Bates College	est. 2007 - 10 bikes - \$10 per semester
Dickinson College	est. 2006 - 15 bikes - free

Institution	Funding for green initiatives?	Involvement with town?
Skidmore College		
Oberlin College	Yes, student-moderated	Yes
Middlebury College	Yes, students well represented	
Bates College		
Dickinson College		Yes

ON CAMPUS

PERIMETER PATH ●●●

The physical layout of our campus offers serious impediments to mobility. Full connectivity around the perimeter of campus only serves cars. To remedy these issues, we are proposing a continuous greenway around the perimeter of campus (Perimeter Path) including connections to external roads and sidewalks to better connect the Skidmore campus to greater Saratoga.

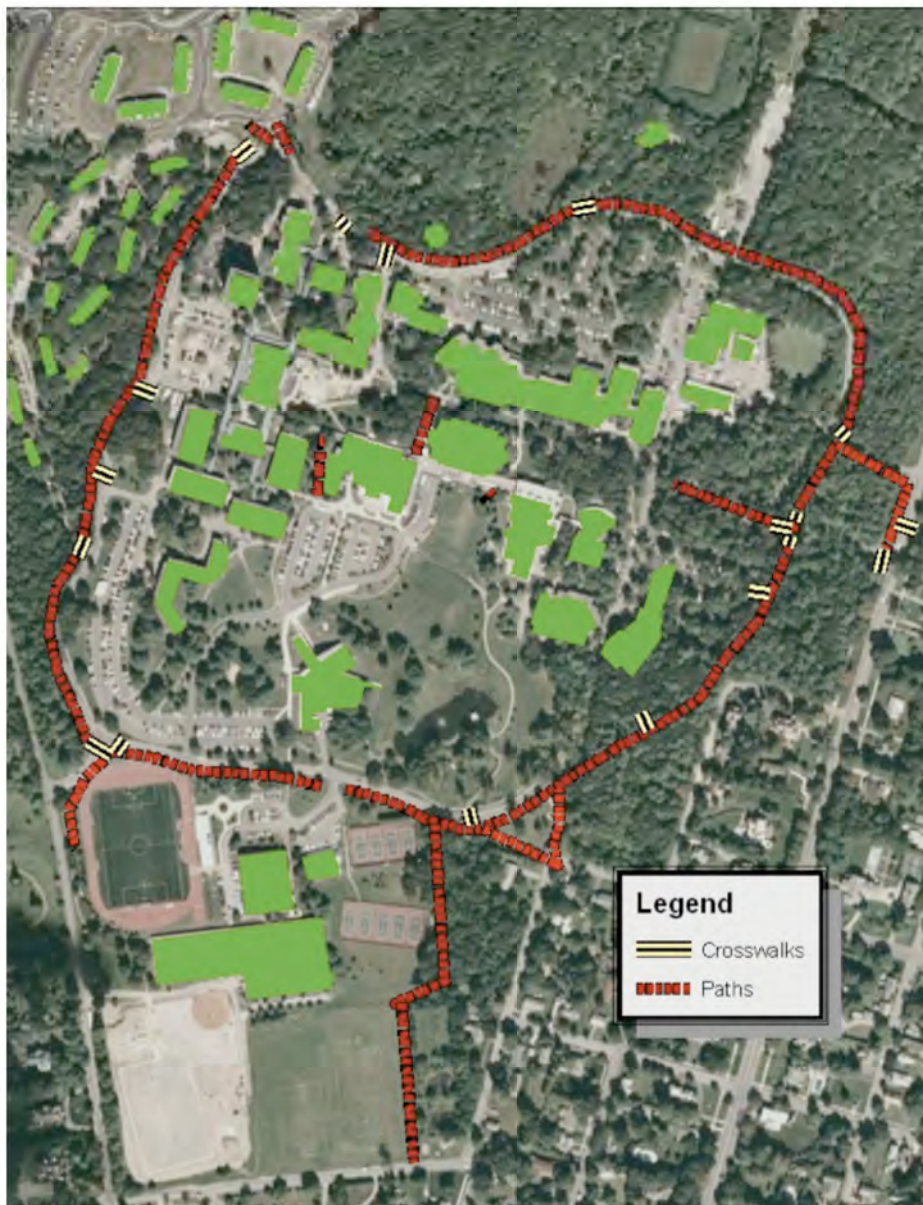


Figure C1: GIS Map of proposed path and crosswalks

PERIMETER PATH

Students and community members currently use the perimeter road that encircles the campus as a path for both exercise and recreational activities. Pedestrians and cyclists are forced to share the road with traffic because long stretches of the road do not include a sidewalk or path. An example of the current Perimeter Path is shown in Figure C2, in front of the Zankel Music Center. By creating a continuous greenway for pedestrians and cyclists, the college would improve safe mobility, increase the amount of pedestrian traffic on campus, improve the overall aesthetic value of the campus, and connect it to the surrounding community (Figure C3). Cars are the most supported means of transportation on campus. This greenway will encourage students to leave their cars in parking lots and travel around school on foot. An increase of pedestrian traffic leads to a stronger community as a whole because walking is a social activity. The path also offers a unique opportunity to install student art along the perimeter of the campus. Currently, the paths that connect the surrounding community to the school end at the perimeter road. By connecting the campus paths to city sidewalks, the accessibility of the campus to the surrounding community would increase. When we take action, these solutions will strengthen the sense of community between the city and the campus.



Figure C2



Figure C3

ON CAMPUS

PERIMETER PATH ●●●

FOOTPATH CONNECTION TO STATE STREET

The paths connecting Skidmore's campus to the corner of 3rd Street and State Street at Skidmore's southern end present a perfect biking and walking access point from the college to the town and vice versa. Currently, the paths remain unfinished and unconnected to the larger Skidmore pedestrian infrastructure. The completion of the paths connecting Perimeter Road to Saratoga will be a pivotal step in completing a continuous pedestrian path around Perimeter Road and will create a beautiful new green space at the campus' south end. The space already enjoys benches, landscape artwork, a picturesque footbridge, and proximity to South Park and Haupt Pond. To complete this space and improve the connection to the Saratoga Springs community, Skidmore must complete the unfinished path (Figure C4a and C4b), and implement proper pedestrian safety measures at the path's connection point to 3rd and State Streets. These solutions will foster improved Skidmore-Saratoga connectivity, contribute to the Perimeter Road walking and biking path, and create a beautiful green space lining Perimeter Road at the campus' south end.



Figure C4a



Figure C4b

CLINTON STREET ENTRANCE

The entrance to Skidmore College via Clinton Street is seriously inadequate for alternative forms of transport for several reasons. Compounded by many drivers' disregard for the stop signs at this intersection, the deficient layout of the Clinton Street entrance:

- 1) Lacks pedestrian crossings- Within the three-way stop intersection, there are currently no designated crossings for pedestrians. This is a serious safety issue and impediment for mobility for people traveling by foot along perimeter road and Clinton Street, especially at night.
- 2) Lacks designated road space for bicyclists- Currently, bicyclists traveling along perimeter road or entering campus by Clinton Street must use vehicle lanes. Narrow roads can make this area difficult to maneuver, especially with the high rate of use by cars and buses.
- 3) Lacks traffic calming features in entrance intersection- Clinton Street is the second major entrance to campus. The center of the intersection is very large, lacks pedestrian crossings, and contains small-scale stop signs. As a result, speeding and ignoring stop signs is an issue, especially for pedestrians and bicyclists.
- 4) Lacks complete pedestrian and bike path on campus- Although Clinton Street has a paved walkway, it ends abruptly at perimeter road. Currently, there is no infrastructure for pedestrians and bicyclists nearing Clinton Street (Figure C5a). Implementing a central traffic-

calming feature in a "teardrop" design would act as a refuge island for pedestrians and bicyclists (Figure C5b). This addition would act as another piece of the Perimeter Path puzzle.



Figure C5a



Figure C5b

ON CAMPUS

PERIMETER PATH ...

CLINTON STREET TO SCRIBNER

In the area between the Clinton Street entrance and Scribner Village, pedestrians and bicyclists are forced to share the road with vehicles. Perimeter road consists of narrow lanes and frequently speeding vehicles. Pedestrians or bicyclists are often uncomfortably close to vehicle traffic while traveling this section of the road (Figure C6a). Students moving to and from Scribner Village need safe access to Clinton Street and the center of campus. To address these issues, Skidmore College should retrofit the road to include the Perimeter Path. To create space for pedestrians and bicyclists, the parallel parking spaces on the inner side of the road should be converted into vehicle lanes and the centerline should be shifted inwards to make room for Perimeter Path (Figure C6b). Considering the number of students within Scribner Village and the number of commuters using Clinton Street, this section of perimeter road is a critical connection to the rest of campus and is in need of suitable walking and biking infrastructure.



Figure C6a



Figure C6b

SCRIBNER EXIT INTERSECTION

The Scribner turn services a high level of pedestrian traffic. The painted median at this section of road has been worn off because passing cars travel so quickly that they do not remain in their lane (Figure C7a). The current crosswalk is invisible to vehicles that are headed downhill and drivers are often unaware that they are approaching a crosswalk. Traffic

around this turn can be calmed by installing bollard style cones along the painted median (Figure C7b). The visibility of the intersection can be improved by installing a reflective in-street pedestrian crossing (Figure C7c). These two traffic calming devices will help slow the speed of traffic and increase the overall level of safety around this intersection.



Figure C7a



Figure C7b



Figure C7c

ON CAMPUS

PERIMETER PATH ●●●

ADMISSIONS CROSSWALK

As campus tours leave the admissions building, they are forced to cross North Broadway with no crosswalk (Figures C8a and

C9a) and walk up the road towards the center of campus—the sidewalk is often too narrow for a large group of parents and prospective students. We propose a visible crosswalk



Figure C8a



Figure C8b

Figure C9a



Figure C9b



on North Broadway as well as a path that connects the admissions building and crosswalk to the paths towards campus (Figure C8b and Figure C9b). This crucial infrastructural connection would show parents and prospective students that Skidmore College cares about the wellbeing of its students and faculty and considers accessibility on and around campus.

CROSSWALKS

All of the crosswalks on campus should have traffic calming devices. Most of the crosswalks are not adequate: they are two-dimensional and not reflective (Figures C10a and C11a). The design of crosswalks should enforce the state law that drivers must stop for a pedestrian in a crosswalk (Figures C10b and C11b).



Figure C10a



Figure C10b



Figure C11a



Figure C11b

ON CAMPUS

NORTH-SOUTH DIVIDE ●●●

The physical layout of our campus impedes mobility from the center of campus outwards, especially in the North-South direction. These impediments are particularly problematic for persons with disabilities and need to be addressed immediately. The arrangement of buildings within the campus hinders movement within it, thus we are proposing several ramps and staircases to better link locations around campus. The implementation of these ideas will help improve overall mobility and accessibility for pedestrians, persons with disabilities, and cyclists.

STAIRS AND/OR RAMP FROM CASE WALKWAY

Currently, there is no direct path from the CDTA bus stop and Case Parking lot to the central green, the dining hall, and North Quad. The space that leads directly from Case Parking Lot to the central green and North side of campus is a steep unmaintained steep slope (Figure D1a). This route to the central quad is not conducive to pedestrian and bicycle traffic, and is inaccessible to persons with disabilities. Many students and faculty use this slope to walk from Case Parking lot to the center of campus, which is evident by the dirt footpaths that have been created by the constant use. We propose that a ramp, stairs, or a combination of the two be installed in the space between Case Center and Wilmarth Hall (Figures D1b and D1c, respectively).



Figure D1a



Figure D1b



Figure D1c

LIBRARY SWITCHBACK

A ramp or staircase in front of the library would greatly increase accessibility for those attempting to move directly from the Library, Library Green, Dana, Harder and the Art building to the Southern part of campus without having to go around the Saisselin Art Building or cut through Case center (Figure D2a and Figure D2b). In addition, the section of the Case walkway between Lucy Scribner Library

and Saisselin Art Building provides ideal, alternative, space for a ramp or stairwell, (Figure D3a). We propose a switchback ramp in front of the library (Figure 11b) or next to Saisselin Art Building (Figure D3b).



Figure D2a



Figure D2b



Figure D3a

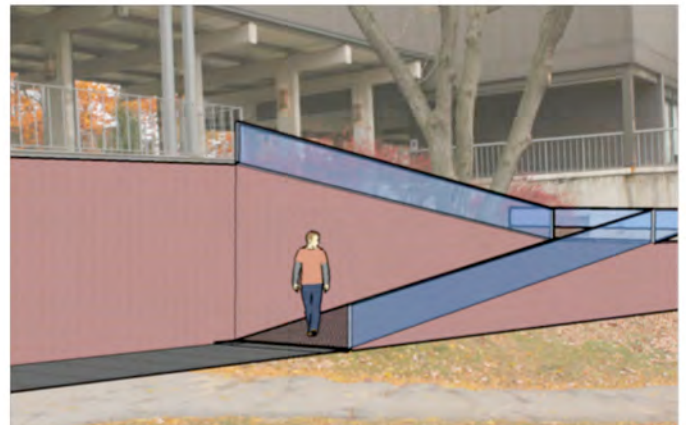


Figure D3b

ON CAMPUS

NORTH-SOUTH DIVIDE ●●●

COVERED WALKWAY

One great asset of the Skidmore campus is the covered walkways, which provide students' shelter from rain and snow when moving around campus. However, there is currently no covered path from Lucy Scribner Library, Case Center, and the Dining Hall to the academic buildings (Figure D4a). Building a covered, cross-campus connection would decrease maintenance costs and help persons with disabilities move across campus in inclement weather. We propose a covered walkway from the entrance of Palamountain Hall to the ramp leading to Case walkway in between the library and Case Center (Figure D4b). This walkway will make the walk from the academic buildings to the library, Case Center, the Art building, and the Dining Hall easier in the rain and snow.



Figure D4a



Figure D4b

CASE STAIRS

The stairways on Case Center's East side offer important pedestrian access from Case lot and the greater South Quad area to North Quad. The ramps included on these stairways hold great potential to complete campus bike routes, offering bikers a way to push their bicycles up and down the steps. However, large blocks built onto the ramps currently eliminate the possibility of transporting a bicycle up and down the stairways (Figure D5a). We propose that these blocks be removed (Figure D5b). In these renderings, the blocks have been removed and been replaced with 2 inch gaps in the concrete on each ramp. These gaps will eliminate the possibility of skateboarding down the ramps, a danger that led to the initial installation of the blocks. Bicycle wheels, however, will not be affected by the gaps, and will pass over the ramps with ease. Removing the blocks from the stairways will contribute to the larger goal of easy bicycle and pedestrian access between North Quad and South Quad on Skidmore's campus.



Figure D5a

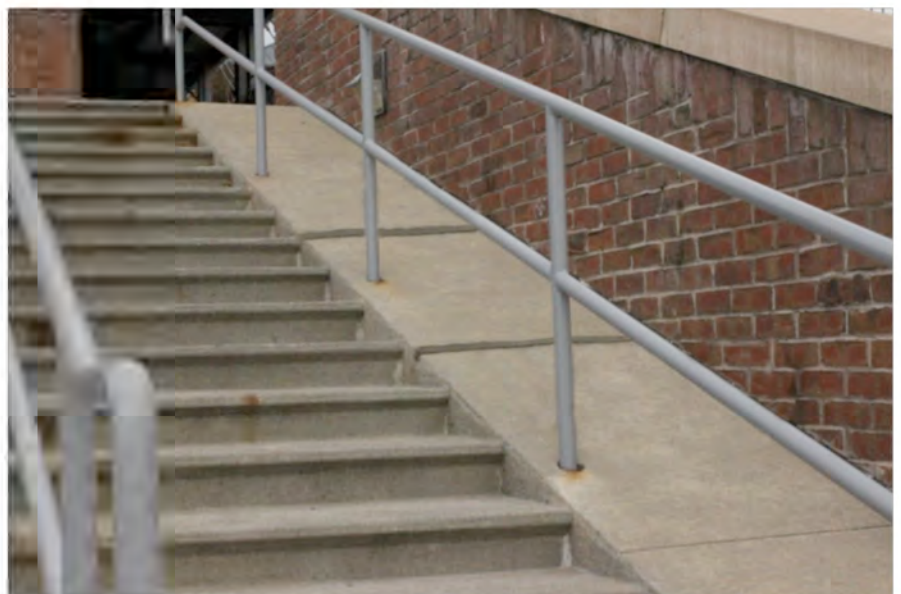


Figure D5b

NORTH WOODS

RECREATIONAL USE . . .

The Skidmore administration and students should work together to come to decisions about usage of the North Woods that best suits the needs of all members and factions of the community. The North Woods are an incredible resource for the school, its students, and members of the community. We understand that there are multiple apparently contradicting needs for different groups in the North Woods; faculty and students may see the woods as a laboratory that should not be disturbed, as a sanctuary for exploration, as a place for exercise, or an inspiration for art. With effective discussion between these groups we believe that the woods can successfully fit all of these multiple uses without detracting from any one of them.

By prohibiting mountain biking in the North Woods we are alienating an entire group from enjoying the bounty of the North Woods. At a minimum, one portion of the woods should be opened to mountain biking. In order to protect the ongoing research in the North Woods efforts will be made to educate users about the deleterious consequences of erosion and areas which are not to be disturbed through signage, trail maps, and active communication by the current North Woods steward. When each of the users of the North Woods respects the other uses everybody will benefit. Bikers must respect that some people are coming to the woods for peace, and those walking must respect that bikers are coming for sport and exercise.

In addition to opening a portion of the North Woods to biking, we suggest that those who are interested work with the Biking Club to create a trail from Skidmore to the already available trails in the woods behind Daniels Road. This connection will allow mountain

bikers to safely and enjoyably access the trails already available to them.

The woods are a great resource for students, but many do not have the equipment to enjoy its full potential. We suggest that either the Outing Club or the Department of Campus Safety provide equipment like mountain bikes, crosscountry skis, and snow shoes for rental by either Skidmore ID or a nominal fee. This would allow students to exercise and enjoy the outdoors.

Figure E1 is a full graphic overview of the last three sections. This map shows all of the current designated and undesignated trails in the North Woods, as well as the proposed bridge to stables and the trails that exist on the other side of the tracks. All of these things are overlaid with the land owned by Skidmore College to give a complete picture of the potential our campus has to become a leader in recreational access.

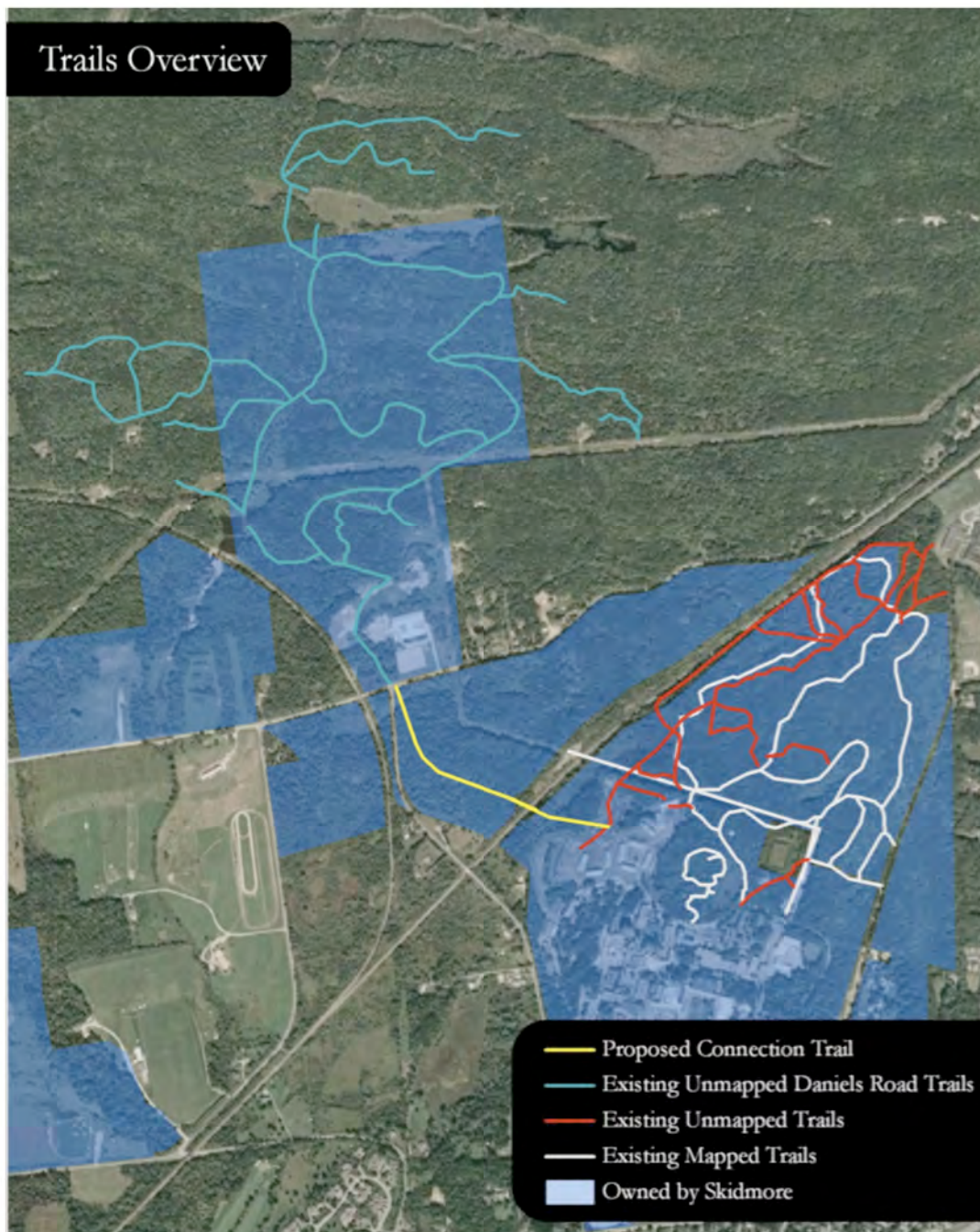


Figure E1

NORTH WOODS

SIGNAGE . . .

The North Woods are an integral part of Skidmore's culture. Students, faculty and staff, along with residents of the Saratoga area use the North Woods for relaxation, exercise, and education. There is a diverse group of people using Skidmore's North Woods it is therefore crucial that it be easy to navigate. Currently, the signage within North Woods is lacking: trails are not clearly marked, single-track trails have no markers, and the maps are not complete. Skidmore can easily improve signage in the North Woods. New signage should take advantage of Skidmore's creativity: instead of the tops of canned beans being painted and nailed to a tree, allow an art student to create a design for a specific trail that would represent Skidmore. There should also be more signs and more clearly marked trail intersections to ensure that visitors of North Woods do not lose their way.

At the moment, the North Woods maps available to the public do not show all existing trails. These current, official, trails are depicted in Figure F1 in white. Many smaller trails also exist within North Woods that have not been mapped, depicted in Figure F1 in red. This is an opportunity for the GIS center to create maps that depict all trails within North Woods. Skidmore College Professor Bob Jones has involved his Introduction to GIS class in gathering track data with GPS on North Woods trails. Skidmore can take this data and use it to make new maps for the general public that would greatly improve visitor's experience. Making such changes to North Woods would make the area more appealing, improve visitors' experiences, and show that Skidmore values the importance of the North Woods.



An entrance to the North Woods



Figure F1

NORTH WOODS

BRIDGE TO STABLES . . .

The North Woods is a valuable recreational asset for Skidmore College. Located on the Northern section of the campus, it is used by both students and community members for walking, running and hiking. It is bound on the North and Northeastern sides by the railroad tracks, which confine the area of the woods to a roughly triangular shape. In addition to the North Woods, Skidmore also owns land on the other side of the railroad tracks. This land presents another valuable asset for recreation on Skidmore's Campus because it contains its own set of trails and borders the land maintained by the Saratoga Mountain Biking Association (SMBA). Connecting these pieces of land to Skidmore's North Woods

would greatly improve the recreational appeal of our campus. Currently, because of the railroad tracks, anyone who wishes to use the SMBA land must go off campus and onto Clinton Avenue to where it meets Daniels Road. This is a very circuitous route that could be avoided if a connection across the tracks were created. Additionally, neither of these roads have pedestrian or bike lanes, which makes the trip to the SMBA area very dangerous. A bridge, connecting the two Skidmore owned parcels of land that are bisected by the tracks would enable walkers, hikers, runners, as well as bicyclists to access the SMBA land without the need to travel on the main roads.

To pass the standards of the railroad,



Figure G1

any bridge built crossing the tracks must be at least 22.5 feet above the tracks. Using Google Earth we were able to identify several possible locations for the bridge. We then explored these areas on foot and verified that there are several places that have enough clearance to build a bridge. This is possible because on both sides of the railroad tracks the land slopes up very steeply and then levels off at a similar height on both sides. The best possible location is shown red in Figure G1.

The bridge only needs to be strong enough to transport people and bicycles, so it does not need to be an enormous project. The bridge would be a simple cable suspension type, and it would need to be about 150 feet

long. An existing bridge similar to the one we would like to put here is shown in Figure G2.

This connection to the land beyond the tracks would go great lengths in promoting Skidmore's image as a recreational destination and progressive institution. The 2050 Skidmore College Campus Master Plan includes a bridge at this point, and we propose the college build this sooner rather than later. We do not have an exact estimate for this project, but believe it would be possible with a very modest budget. The recreational benefits of this connection are worth the economic costs, especially considering the recreational appeal this would have for prospective students.



Figure G2

BIKE SHARING ●●●

Bike sharing programs are an emerging staple of many college campuses. Small, liberal arts private schools of similar caliber to Skidmore have exhibited steps towards “greening” their campus, as shown by programs like The College Sustainability Report Card. A major facet of this “greening” is the implementation of a cohesive bike sharing system that makes bicycling an accessible, simple, and convenient mode of transportation. Unfortunately, Skidmore has been lagging behind in its efforts to “green” the campus in this respect. The current bike-sharing program at Skidmore has been disorganized, poorly funded, poorly supported, and under-utilized. We intend to remedy these issues through a suggested bike sharing and parking plan. We have compiled information from various resources, including similar institutions’ bike sharing programs, to create an effective, easy to implement, and user-friendly bike share program that will fit Skidmore’s plan for the future, as well as current campus needs. Skidmore’s “Green Bikes” program is significantly underdeveloped in comparison to many of Skidmore’s peer institutions. Comparable schools such as Oberlin, Middlebury, and Bard have successful and expanding bike share programs that can be used as inspiration and a model for an improved system at Skidmore.

Oberlin College’s strategic plan makes a bold commitment towards becoming national and global leaders in sustainable development, partially using their thriving bike share program as a catalyst for a larger shift towards sustainability. Oberlin’s campus contains a 13.5-mile bike path maintained by facilities services, which also connects to the North Coast Inland trail. Oberlin’s Bike Co-op, which was introduced in 1986, houses 40-

50 bikes and offers bike rentals, sales, repairs and a community liaison. The program offers anyone willing to work 10 hours towards learning about bike repair a free bike, as well as coordinating organized bike trips. The Co-op is partially funded by Oberlin’s “Green EDGE Fund”, which provides money for sustainability projects on campus, and is currently considering financing a bike shelter for the Co-op.

Middlebury College is similarly sustainability-minded and also boasts a successful bike-share and mobility program. The College asserts that 99% of the student body commutes in non-single occupancy vehicles, partially bolstered by incentives that reward students and faculty utilizing alternative forms of transportation. The Middlebury bike-share program was launched in 2007 and is funded by the Public Safety Department and annual sales of unclaimed or salvaged bikes. Students can rent bikes for \$25 per semester, and take advantage of free repairs from the bike shop. The College’s sustainability funds provide for events like Bike Week, the operations of the bike shop and other mobility opportunities. Middlebury’s master plan reflects these sustainable mobility goals and contains “specific recommendations for a bike/pedestrian friendly campus”.

As part of Bard College’s 2008 “Comprehensive Climate Plan”, the college pledged to diversify its transportation fleet and encourage biking and walking among students. Bard’s “Bard Bike Share” program was recently launched as part of the college’s climate plan, and includes 10 refurbished bikes with locks, lights and helmets available on a limited basis due to the small size of the new program. Bard provides winter bike housing in 5 dorms, as well as covered outdoor racks and bike maps

that illustrate the easiest way to move around the campus by bike. Although the program is new and small, it is currently receiving funding from the US Department of Energy's Clean Cities program, which the College has agreed to match, leaving room for further expansion and improvement.

The Skidmore "Green Bike" program started in 2006/2007, offering a shed of rentable bikes made available by Campus Safety in Jonsson Tower. Initially this program was meager, only able to supply a few bikes to a mildly enthusiastic student body. However, in 2009 Green Bikes was revamped by then-Vice President of Skidmore's Environmental Action Committee (EAC) due to a collaborative effort between EAC and the Saratoga Healthy Transportation Network (SHTN). This teamwork translated to a significant shipment of bicycles

to Skidmore, creating a substantial base for Green Bikes to work from. Green Bikes is maintained through a \$1,000 budget via EAC, which covers regular maintenance and bicycle repair workshops.

Green Bikes can boast an extremely popular program during sunny days, and the appeal of bike sharing has only grown due to the blossoming trendiness of bicycling as a means of transportation. Keeping track of these bikes is the responsibility of Campus Safety, who maintains a sign-out list that covers each bike's numbered ID, as well as the name, email address, Skidmore ID and phone number of the renter. Each customer gets a key to the bike shed in the Wait Parking Lot (Figure H1), and they are asked to return the bike and key before dusk.



Figure H1

BIKE SHARING ●●●

Any complex program does not come without its drawbacks, and Green Bikes is no different. In a few cases, non-Skidmore students, such as those attending summer programs on campus, took out bicycles and never returned them. Additionally, bikes are prone to breaking and in some instances renters would discard the broken bikes elsewhere, rather than return them for fix-ups (Figure H2). In a similar vein, the burden of maintenance was placed upon a single unpaid student who could not keep up with the repairs each bike required.



Figure H2

The current shed used for Green Bikes is not large enough for an ideal supply, and can only hold 15 bikes in its current location. By having just a single locale for bike rentals the purpose of bicycling for transportation is forfeited. Rather than offer multiple sites, which provide a "Start" and "End" for bicycle excursions, renters must return to the shed, making Green Bikes only useful if the rider intends to return there the first place. Because the inherent nature of a single-location rental system does not do much to stress cycling as a means of transportation, Green Bikes is usually used for recreational biking. Though this is an important and recommended hobby, it does not translate to the winter months when Green Bikes is often forgotten.

The first move towards a comprehensive program is to improve how our system works. As stated above, the current system runs through a tiny, hidden, unattractive shed. As a result, there has been a lack of users. To resolve this issue, we suggest spreading the bike share program throughout campus. Being able to rent a bike from outside of Case Center would

entice more students to use the program. This would be a simple and positive fix; by giving the Student Government Association (SGA) control of the bike program in Case Center, it would remain secure, put the program in control of students, and make bikes more accessible to students. In the future, rental locations could be expanded around campus, to places such as the Williamson Sports Center or in the basements of dorms.

By teaming up with the SGA, the Cycling Club, the Environmental Action Club, Health Promotions, community partners, and many others, the program will be able to become an organized, centralized and widely-known aspect of campus culture. Another critical flaw of the current program that must be addressed is bike repairs. As stated above, other schools' programs incorporate bike repair education, which must be included in order to sustain Skidmore's program. Without proper repair and the ability to maintain a fleet of shared bicycles, the program cannot function and will fall disproportionately on the shoulders of unpaid student volunteers. Just like the

"Complete the Streets" Initiative, it is necessary to implement most or all of these suggestions in order to have a sustainable, cohesive program that will benefit the school and larger community for years to come.

Eventually, as technology improves, a fully automated bike share system which uses students' ID cards to log rentals could be incorporated throughout the campus, which would solve issues such as returning bikes, bike parking and security. But to remedy the issues of bike returns and parking for the time being, we suggest yet another simple solution. We believe that if the bike share system provided Skidmore bike locks for each rental bike, the problems of lost and stolen bikes would significantly decrease. If students have the option of locking a bike up somewhere on campus, it is likely that it can be found and returned more easily. Another solution to this problem would be to create a tracking system for rental bikes on campus. Options such as RFID trackers and GPS location devices could be used. Although there is an issue of funding here—current GPS tracking devices are quite expensive, and although RFID tracking devices are cheaper, they are less accurate and do not provide a permanent fix to this issue—companies such as Immobilize™ have created RFID tracking devices specifically for bicycles. These companies register the bikes and maintain a database of bikes with RFID tags. Those with registered products are able to report lost or stolen bikes to the global Police stolen property database through Immobilize. Measures such as these will deter thieves from stealing bikes on campus, and will create an improved and more methodical system for finding lost or stolen bikes.

As for the issue of bike parking—a vital

aspect of on-campus mobility—changes must be made. In recent years, there has been an upsurge in the amount of bikes students are bringing to campus, and yet bikers have few places to park at key locations on campus. Bikes are constantly being locked to railings or poles, and current bike racks are covered in bikes, many fallen and in disrepair. We propose that bike rack locations be changed to where students currently use bikes, and provide lighted and covered racks. The company Dero Bike Racks has a variety of racks that are easy to install on campus, and even suggest certain bike racks for various locations. Along with these bike parking improvements we suggest a solution to improve the aesthetics of the campus, as well as getting students more involved: custom bike racks. Dero Bike Racks offers its services to create custom bike racks of any type. Because most buildings on campus already have bike racks in front of them, we suggest replacing or adding to these custom bike racks in the shape of the name of the building they are situated in front of. This solution kills three birds with one stone; improve campus signage, increase bike parking, and aesthetically improve the Skidmore College Campus.

In summation, we believe that Skidmore has great potential to cater towards a bike-friendly environment, but we also realize that to reach this vision we must overcome some financial and organizational obstacles. First, there is the issue of funding. It is imperative that more funding is included in the future Bike share and parking program, either through a grant from the college, Alumni donations, a federal grant, or through fundraising. Along with funding, there needs to be more of a campus-wide effort to promote and run the program.

CREATIVE THOUGHT IN MOTION GUIDELINES . . .

"What this college does so well—I really believe better than any other school—is teach students to solve problems holistically, to see the interrelatedness and complexity of issues and bring their powers of creativity and rigorous analysis to bear in crafting solutions. It's what the phrase Creative Thought Matters is all about. It's unique and at the core of what makes this place extraordinary. That, in a nutshell, is why the world needs Skidmore."

Philip Glotzbach—Why does the world need Skidmore?

A PROGRAM TO INSPIRE SUSTAINABLE MOBILITY ON CAMPUS

Creative Thought in Motion will serve as an umbrella mechanism to implement the ideas and aspirations of the Sustainable Mobility Solutions class and to ensure the legacy of this movement towards more sustainable mobility.

As a testimony to our school's belief that Creative Thought Matters, this program will seek to establish the framework that encourages sustainable mobility on campus by connecting the built environment to a sustainable mobility mindset. This program will be the mechanism for students, faculty, and staff of all ages and abilities to work together and influence their campus so that it reflects the creativity of Skidmore community.

GOALS OF THE FRAMEWORK

1. To raise awareness of the importance of sustainable mobility on campus and to make Skidmore's campus a model for sustainable mobility in higher education in the long term.

- Infrastructure for sustainable mobility—including walking, biking, bus transit, and carpooling—will be promoted.

- A permanent management entity will be required for this. Currently, we are seeking to create an EAC subcommittee to spearhead this effort next semester. Our hope is to eventually expand this committee to include Faculty and Staff perspectives. Under this goal, our aspiration is to prompt the Skidmore community to notice the inconsistencies of the built environment for non-motorized travelers in order to make this issue more of a priority.

2. Complete the Campus.

- Skidmore's streets, trails, buildings, and open spaces should be designed with a walking and biking transit-oriented design. Skidmore College should make all reasonable provisions for the accommodation of pedestrian and bicycle traffic for users of all ages and abilities. These modes of transportation must be considered for all campus proposed projects from the beginning of the development process to the end.

3. Support interdisciplinary education that promotes a sustainable campus.

- Sustainable mobility is more than an environmental issue. As a school that advocates interdisciplinary learning, Skidmore has the opportunity to apply its liberal arts education and creativity to the campus itself. Skidmore's physical campus should be the embodiment of its interdisciplinary creativity. Skidmore has already begun to foster this campus-centered approach to learning with the Sustainable Mobility Solutions class. Additional cross-curriculum classes should be encouraged

to accompany classes like Environmental Art, Introduction to Public Health, Literature and the Environment, and Environmental Politics and Policy to enforce a holistic understanding of sustainability to a variety of Skidmore students. These collaborations between departments and between different interest groups will broaden Skidmore's sustainability audience as well as increase diverse and creative solutions to sustainability issues. More interdisciplinary partnerships like this should be promoted in the future to provide students with hands-on, experiential opportunities to learn about sustainability.



CONCLUSIONS

With a large human population that is projected to grow on a planet with finite resources, a more sustainable world can be hard to imagine. However, structural changes that we can make to our society that affect our everyday lives, which can make a difference

in the future, is walking and biking. On a global level, walking and biking: 1) are carbon neutral, 2) decrease dependence on oil, and 3) decrease the number of automobiles, one of the greatest non-point sources polluters. On a local and more personal level, walking and biking: 1) increase physical activity, 2) gets people outside and reconnects them with the outdoors, and 3) makes mobility a more social and economic activity.

For the above reasons, everyone has incentives, on the global, local, and personal level, to walk and bike when possible. It seems as though the problem is not convincing people why walking and biking is better for individual health and local and global sustainability, the problem is crossing the threshold of talking about it to doing something about it. Transportation planning is the key to get people from just thinking walking and biking are good in theory, to practicing what they believe. Current society and infrastructure are designed in a way that discourages walking and biking. Therefore, transportation planning must engineer, educate, encourage, and enforce redevelopment of our cities and towns that promote walking and biking. If walking and biking are marketed with the above benefits and engineered and encouraged, our society can be changed from the ground up to a more fit and sustainable culture.

Structural changes to society can be hard to imagine, but it is happening. A college campus has great potential to be on the forefront of this movement as locations of potential concentrated activism. It is our hope that if we can inspire innovative changes to accommodate for sustainable mobility for people of all ages and abilities on a campus as creative as Skidmore's that these changes will continue to the greater community and the

CREATIVE THOUGHT IN MOTION GUIDELINES...

national and international levels.

SKIDMORE AND ITS COMMUNITY CONNECTION

Skidmore is at a crossroad—the campus can mimic the current suburbia-style of development or the campus can become a leader in sustainable mobility innovations as some of our peer institutions, such as Middlebury and Oberlin, have done.

A current opportunity for Skidmore to make this connection is to join with the Safe Routes to School chapter in Saratoga Springs. Maple Avenue Middle School serves the towns of Saratoga Springs, Greenfield, and Wilton. Currently, many parents drive their children to and from the school each day, due to issues of distance and safety. The students of Maple Avenue have an opportunity to take advantage of an existing asset located next to Skidmore's Northwoods. After North Broadway passes the entrance to Skidmore, it becomes an un-maintained dirt road. Unbeknownst to many, this path continues directly to the back of the Maple Avenue Middle School. For students living on the East side of town, this road signifies a direct, safe route to school. By improving and maintaining this path, it would be possible for children to use this road to commute to and from Maple

Avenue School. This would serve to benefit students' health through physical activity, help reconnect them with the outdoors, and reduce carbon emissions from parents chauffeuring their children.



The Safe Routes to School (SRTS) program is a national organization that seeks to provide secure and reliable means for children to get to and from school by foot or bike. There is currently a SRTS chapter in Saratoga Springs, who seeks to make this path a reality. Additionally, there are two students in the Sustainable Mobility Solutions class whose senior capstone project consists of on making this road a safe route to school. Creative Thought in Motion looks to support this safe route, as it brings the transportation changes we hope to see on our campus to a community

level.

ACTION AGENDA: WHERE DO WE GO FROM HERE?

The Creative Thought in Motion program is inspiring an interdisciplinary movement towards a more sustainable mindset. The suggestions of this document can all be potential possibilities. We recognize that we have suggested some big ideas, some of which are idealistic and expensive, and we realize that these ideas will take time to spread since they require structure as well as ideals to change. However, if we can successfully gain

momentum for this program, particularly with our fellow students, by spreading awareness of the benefits of sustainable mobility and by threading this theme across disciplines in order to broaden the audience, we believe we will lower Skidmore's greenhouse gas emissions and will establish a creative and progressive campus that will attract and foster outstanding future leaders in our society.

Our hope for the future is to see a Skidmore that has firmly established sustainability as a top priority. When this happens, we look forward to seeing how Skidmore uses its creativity to become a leader in higher education. It is possible to begin this future now with the legacy of the Sustainable Mobility Solutions class of Fall 2010.

1. Take note of the built environment and the environment.
2. Include students, faculty, and staff in the planning process of what happens to their campus.
3. Establish a committee composed of students, faculty, and staff to permanently oversee Creative Thought in Motion and the mindset that it promotes.

4. Connect students, faculty, staff, and community members of all ages and abilities to healthy lifestyle choices for themselves and for the environment.

- Build a perimeter path.
- Improve Skidmore's physical connections to Saratoga Springs.
- Consider the walking and biking mobility between new buildings and establish a north-south route.

5. Reduce the amount of cars on-campus.
 - Mobility hierarchy must be: pedestrians, bicyclists, and lastly, cars.



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RELEVANT CLUBS AND ORGANIZATIONS

Environmental Action Club
Eco Rep Program
Cycling Club
Bicycles Against Poverty
Peer Health Educators
Benef-action

RELEVANT TOWN ORGANIZATIONS AND MEMBERS OF THE SARATOGA COMMUNITY

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ADDITIONAL PUBLICITY METHODS USED

Skidmore Events Calendar
Student Announcements
Skidmore Ecoofficial
Skidmore Unofficial
Facebook Event
Environmental Studies major, minor, and interest email lists
SkidNews
The Saratogian
Saratoga Today

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