



**Macalester College**

**2015-2016 Post Secondary Nominee Presentation Form**

**ELIGIBILITY CERTIFICATIONS**

---

**College or University Certifications**

The signature of college or university President (or equivalent) on the next page certifies that each of the statements below concerning the institution's eligibility and compliance with the following requirements is true and correct to the best of their knowledge.

1. The college or university has been evaluated and selected from among institutions within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
2. The college or university is providing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a compliance review.
3. OCR has not issued a violation letter of findings to the college or university concluding that the nominated college or university has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
4. The U.S. Department of Justice does not have a pending suit alleging that the college or university has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
5. There are no findings by Federal Student Aid of violations in respect to the administration of Title IV student aid funds.
6. The college or university is in good standing with its regional or national accreditor.
7. The college or university meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Public 4-Year    Public 2-Year    Private Non-Profit

Name of President/Chancellor: Brian C. Rosenberg

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official College or University Name: Macalester College

(As it should appear on an award)

College or University Street

Mailing Address: 1600 Grand Avenue; Saint Paul, MN 55105

(If address is P.O. Box, also include street address.)

County: Ramsey IPEDS Number\*: 173902

Telephone: 651-696-6000 Fax:

Web site/URL: [www.macalester.edu](http://www.macalester.edu) E-mail: [rosenbergb@macalester.edu](mailto:rosenbergb@macalester.edu)

\*Integrated Postsecondary Education Data System

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.



\_\_\_\_\_  
(President's/Chancellor's Signature) Date: 25 January 2016

### **Nominating Authority's Certifications**

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the college or university's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

1. The college or university has been evaluated and selected from among institutions within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
2. The college or university meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: Minnesota Office of Higher Education

Name of Nominating Authority: Lawrence J. Pogemiller  
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.



\_\_\_\_\_  
(Nominating Authority's Signature) Date: January 25, 2016

### **SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS**

Provide a coherent summary that describes how your college or university is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars and their underlying Elements. Then, include concrete examples for work in every Pillar and Element. Only institutions that document progress in every Pillar and Element can be considered for this award.

### **SUBMISSION**

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to [ed.green.ribbon.schools@ed.gov](mailto:ed.green.ribbon.schools@ed.gov) according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509  
Expiration Date: March 31, 2018



## Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email [ICDocketMgr@ed.gov](mailto:ICDocketMgr@ed.gov) and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

## Summary Narrative

Macalester College has a long-standing tradition of sustainability particularly as it relates to Macalester's broader commitments to internationalism, multiculturalism, and service to society. Macalester College's sustainability efforts are guided by a campus-wide Sustainability Plan originally developed in 2009. The highlights of the plan include a commitment to climate neutrality by 2025 and zero waste by 2020 and education for sustainability.

Macalester has reduced environmental impacts and costs through implementing operational goals for green building, energy, transportation, water and storm water. As of December 2014, the cumulative savings were \$1.8 million US dollars through sustainability projects, primarily through energy or waste reduction projects. The College's greenhouse gas emissions have also been declining since 2004-2005; meeting the first intermediate greenhouse gas emissions reduction goal of a 17.5 % reduction in 2015. The College has further reduced its environmental impacts by having the first certified LEED Platinum facility on a higher education campus in Minnesota. As of December 2015, the College has begun an on-campus solar installation project; the College has also committed to buying the equivalent of 100% of its electricity through a community solar garden.

Macalester continues to be conscious of its environmental and social footprint through an innovative Zero Waste by 2020 program; as of 2015, Macalester has a diversion rate of over 79%. The college also has developed programs for hazardous waste reduction, water use reduction, a Sustainable Landscaping Master Plan, and innovative storm water projects. The college also developed ways to improve walkability, bicycling and alternative transportation use.

The college is also committed to improving the health and wellness of students, faculty and staff. An operational example of this is the Facilities Services Department using an integrated pest management system, green cleaning chemicals, and low or no VOC paints. The student wellness programs create a campus environment in which students feel empowered to make healthy choices for themselves that contribute to their overall personal and academic success. Wellness programs include free physical education classes, a sleep well first year student initiative, sexual health education, and high-risk drinking prevention. The staff wellness program aims to develop a culture of wellness at Macalester College and promote and support healthy lifestyle choices for faculty, staff, and students. Staff programs include low or no cost physical activity classes, lunch educational sessions, a flu shot clinic, blood drives and a personal training program. Macalester also began a relationship with HealthPartners in March 2013 with an On-site Health Coach /Wellness Program Manager.

Macalester College has incorporated education for sustainability into the campus-wide Sustainability Plan. Education is essential for strengthening the culture of sustainability on campus and empowering students, faculty, staff, and the community to take action in the wider world. The college's Sustainability Plan includes sections on Education inside the Classroom, Outside the Classroom, After the Classroom (alumni), and Campus and Community Learning. The College recently received a major grant to support an Educating Sustainability Ambassador's program to increase sustainability in the classroom.

The college has a long history of incorporating sustainability in the co-curricular area through student life activities and the civic engagement center. More recently the College has worked to provide students with information about sustainability career options. Sustainability goals and resources are also included in new staff orientation and through educational activities for the entire community.



## 2015-16 COVER SHEET

### MINNESOTA GREEN RIBBON POSTSECONDARY APPLICATION

College/University Name: Macalester College  
Street Address: 1600 Grand Ave  
City: St. Paul State: MN Zip: 55105  
Website: www.macalester.edu Facebook page: Macalester College Sustainability Office  
President/Chancellor Name: Dr. Brian Rosenberg

President/Chancellor Email Address: rosenbergb@macalester.edu  
Phone #: \_\_\_\_\_  
Lead Applicant Name (if different): Suzanne Savanick Hansen

Lead Applicant Email: shansen2@macalester.edu Phone #: 651-696-6019

#### Institutional Profile

Basic Carnegie Classification: Baccalaureate Colleges – Arts and Sciences

Minority-Serving Institution (Check all that apply.):

AANAPISI  ANNH  TCU   
HBCU  HIS   
NASNTI  PBI

#### Enrollment Profile

Undergraduate Enrollment: 2172 Graduate Enrollment: 0  
Percent of Undergraduates Receiving Pell Grants: 17% (2013-2014)  
Graduation Rate (150% of normal time): 90% (Fall 2009 Cohort)  
Average Institutional Net Price: \$23,513 (2014-2015)

### Application Content Requirements

#### Cover Sheet

#### Cross Cutting Questions

1. Is your college or university participating in a local, state or national program which asks you to benchmark progress in some fashion in any or all of the Pillars?

(X) Yes ( ) No Program(s) and level(s) achieved. \_\_\_\_\_ Association for the Advancement of Sustainability in Higher Education(AASHE), gold level

---

2. Has your college or university received any awards for facilities, health, or environmental improvements?

( X) Yes ( ) No Award(s) and year(s):

\_\_\_\_\_Sierra Magazine's 2015 Coolest Schools Special Achievement Award for Purchasing; Sustainability Tracking Assessment and Rating System Gold Rating from AASHE (2014); Energy Efficiency Partner Award Winner (2011);Trane Energy Efficiency Leader in Education Award(2010); Minnesota Waste Wise Leadership Award(2009);Twin Cities Bike Walk Week Workplace Team Champion 1<sup>st</sup> place and 2<sup>nd</sup> place(2008/2009);City of Saint Paul Sustainable Saint Paul Excellence in Energy Efficiency(2008)

## Narrative

### Pillar I: Reduced Environmental Impact and Costs

**Element A: reducing or eliminating greenhous gas emissions, including using energy audits, energy efficient facilities and practices, and use of renewable energy.**

#### Introduction

Macalester College's sustainability efforts are guided by a campus-wide Sustainability Plan (<http://www.macalester.edu/sustainability/sustainability-plan/>). The highlights of the plan include a commitment to climate neutrality by 2025 and zero waste by 2020. In addition, the plan includes operations goals for green building, energy, transportation, water and stormwater. The Sustainability Office also keeps a record of sustainability-related cost savings projects. As of December 2014, the cumulative savings were \$1.8 million US dollars. Most of the savings are due to energy or waste reduction projects.

#### Greenhouse Gas Emissions

The college's 1990-2006 greenhouse gas emissions were originally calculated by an environmental studies senior seminar class. Fig. 1 shows that greenhouse gas emissions have been declining since 2004-2005. Figure 2 shows greenhouse gas emissions by activity. The college met the first intermediate goal of a 17.5 % reduction in 2015.

Figure 1: Greenhouse gas emissions from 1988 to 2012

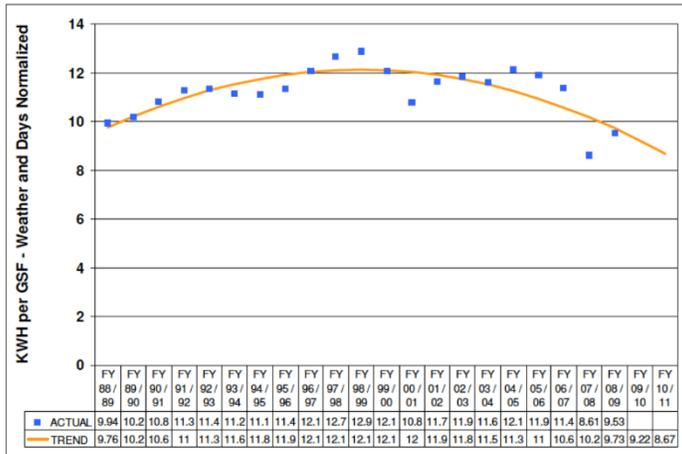


Figure 2: 2010-2011 Greenhouse Gas Emissions by Sector.

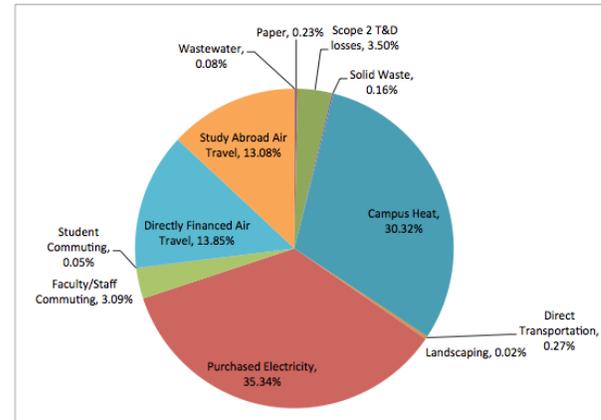
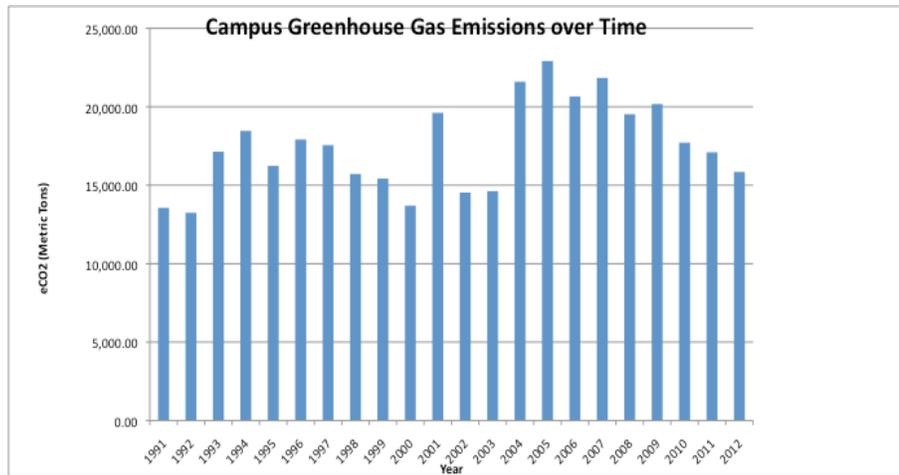


Figure 3: Macalester Campus Energy Use, weather normalized, per square foot

Figure 1: Declining Greenhouse gas emissions since 2004-2005



## Energy

Macalester Facilities Services has worked to improve energy efficiency since the 1960s and many of these projects have resulted in significant cost savings. For example, the 2006-2008 recommissioning of Olin Rice Science Center included a retrofit of the HVAC system, which now produces an estimated \$50,000 in annual energy savings. Similarly, in 2008, Macalester replaced its campus air-conditioning system with a highly efficient new chiller system. A recommissioning of all main campus buildings was completed in 2009. Figure 3 shows how the college has become more energy efficient since the late 1990's. An energy manager was hired in 2015 whose focus is on reducing the college's energy use.

## Buildings

Markim Hall is the first LEED platinum facility on a college or university campus in Minnesota and the third facility in the State of Minnesota. The Sustainability Plan includes a goal of building to a LEED silver standard or using the

Minnesota B3 Guidelines for new building construction.

Table 1: Green Buildings at Macalester College

Date	Building	Sustainability Features
2007	EcoHouse	Student residence renovated with sustainability criteria
2008	Leonard Center	Significant energy reductions; over 90% recycled or reused, sustainable design
2009	Markim Hall	LEED Platinum certified, first in Minnesota Higher Education
2012	Fine Arts Center	MN B3 building criteria; significant energy reductions; Xcel Energy Award

**Renewable Energy**

Solar panels are getting installed on Markim Hall in December 2015. The EcoHouse has had solar thermal hot water since 2007. The college is also planning to buy the equivalent of 100% of the college’s electricity use from a community solar project, once that project is up and running. In addition, the college buys renewable energy credits for 100% of the projected energy use of Markim Hall.

**Element B: Improving quality, efficiency and conservation of water**

**Water Use in Buildings**

Macalester’s Sustainability Plan calls for installing water efficient fixtures when renovating or replacing existing fixtures. Significant progress was made on this issue in 2011-2012 when as an extension of an internship with the Clean Energy Resource Teams (CERTS) Rosie Mate ’12 proposed that the college take part in a bulk buy of faucet aerators and commercial kitchen pre-rinse spray valves. The projects are expected to save 2,962,500 gallons of water and 562,090 BTUs of energy a year. Figure 4 shows the reduction of wastewater on campus over time.

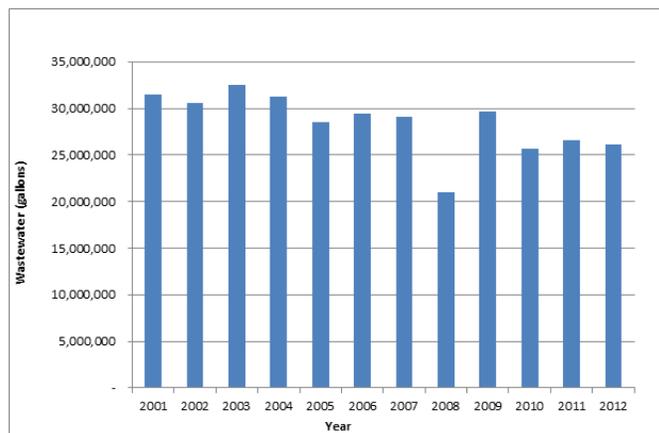


Figure 4: Campus wastewater from 2001 to 2012



### Water Use in Grounds

In 2011, the college produced a Sustainable Landscaping Master Plan. In addition, the college received a grant from the Capitol Region Watershed District to improve stormwater in the Janet Wallace Fine Arts Center Parking Lot. An estimated level of pollutant removal for the runoff volume capacity is 70 to 80% removal of Total Suspended Solids, over 50% removal of Total Phosphorus, 45 to 85% removal of metals, 35% removal of pathogens and 80% removal of hydrocarbon toxins. In addition, the Katharine Ordway Natural History Study Area includes nearly 300 acres of natural areas. Table two summarizes sustainable landscaping projects on campus and table three summarizes campus stormwater projects.

Table 2: Sustainable Landscaping Projects

Date	Project	Notes
2005	Olin Rice prairie	80 species of prairie plants
2002	Library rain garden	Native plants included as part of a class project
2009	Markim Hall landscaping	Native plants included as part of a LEED platinum building
2011	East entrance landscaped with sustainable design features	Sustainable landscaping
2012	EcoHouse re-landscaping	Sustainable and low maintenance landscaping in 2012

Table 3: Campus Stormwater Projects

Date	Project	Notes
2002	Library rain garden	Infiltrates stormwater from the library roof
2009	Markim Hall	Perforated stormwater pipe promotes; first porous pavers installation
2006	Green roofs: Link and Kagin	Built by student volunteers and EPA grant. Kagin roof replanted in 2012.
2009	Porous paver project	Porous pavers installed near Weyerhaeuser Hall and created Marvin Plaza
2011	Parking lot rain garden	Grant from the Capitol Region Watershed District. Infiltrates stormwater from parking lot east of Janet Wallace Fine Arts Center
2012	Janet Wallace Fine Arts Building	Permeable pavers, no mow grass, stormwater rain garden for the north parking lot, roof drains discharge to an underground perforated pipe



## Element C: reducing solid and hazardous waste through recycling and composting, reduced consumption, and improved management.

### Solid Waste

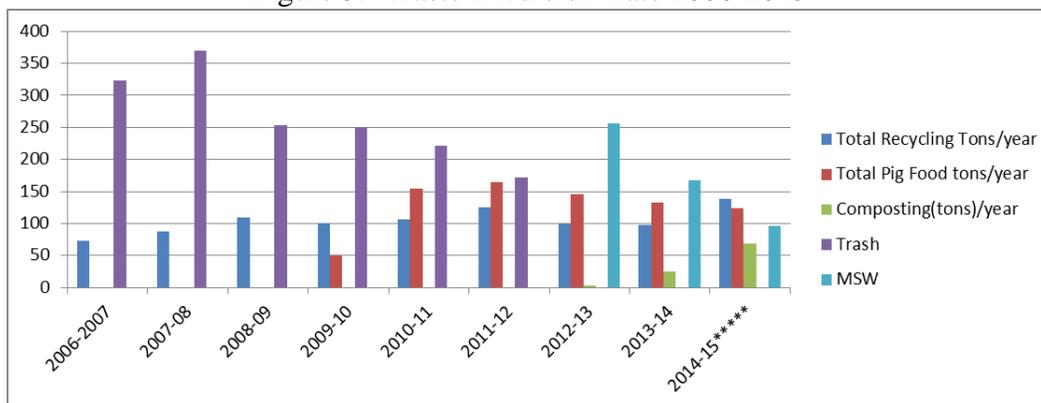
The college has a long history of reducing waste and promoting recycling. Students started the first recycling program in the 1960s. The Sustainability Plan includes a goal of zero waste (90% reduction from 2008) by 2020. Last year for the national Recyclemania competition, Macalester was fourth in the nation with a diversion rate of 79.69%. Table four summarizes zero waste projects on campus. Figure five shows the dramatic decrease in waste since 2006.

Table 4: Zero Waste Projects

Date	Projects	Notes
2008	Greening Reunion	Zero Waste Picnic incorporated, started email outreach instead of postcards, water coolers instead of water bottles.
2009	Papercut software	ITS installed Papercut software to count pages printed by student
2009	100% Recycled Letterhead	Letterhead changed to a 100% post-consumer waste recycled paper
2009	Printing awareness week	Library starts annual printing reduction outreach
2009	Pig Food Waste Recovery	Food waste sent to Barthold Farms instead of going to a waste hauler
2009	Student Account eBilling	Switched from paper bills to eBilling
2009	Move Out	Extensive recycling and reuse program put in place. Recycling rate jumped from 17% in 2008 to 46% in 2009
2010	Onesies	Reused one sided paper notebooks, "onesies" given to all first year students from the library
2010	CFL and e-waste recycling on campus	Bins available in the Sustainability Office for student, staff and faculty
2010	Reusable dishware	MCSG bought reusable dishware for campus student organizations
2010	MacFreeSwap	Listing service on 1600 Grand and a free swap started in Kagin Commons
2010	100% Recycled Copy Paper	100% recycled copy paper standard started as campus standard
2010	Print release stations	Reduces accidental printing
2011	Bottled Water Ban	Bottle water policy instituted on campus. Bottled water is not sold and college funds are not used to purchase bottles
2011	Macalester Pipe Organ	Macalester Pipe Organ reused by donating to a local church
2011	Holiday Light Recycling	Collaboration with the Recycling Association of Minnesota to collect

	Program	discarded holiday lights and electrical cords starts
2012	Backyard composting	Backyard composting bins added to campus houses
2012	Recycled Art and Craft Fair	Student recycled art and craft fair hosted
2012	Composting	Commercial compost pick up started on campus
2013	Graduation Gown	Rented graduation gowns are used instead of one-use gowns
2014	Compostable Dishware	Food Service switched to 100% compostable wares for retail and catering
2014	Zero Waste Pledge	Departmental pledge initiated by students

Figure 5: Waste Diversion Rate 2006-2015



### Hazardous Waste

Macalester College has taken a number of steps to reduce hazardous waste on campus. These include:

- Centralized chemical ordering system
- Laboratory exercises scaled down from grams to milligrams
- Many laboratory experiments redesigned to reduce the chemical hazards associated with them
- Yearly inventory of chemicals
- Chemical tracking system

Use of hazardous chemicals is subject to specific protocol outlined in the college’s Chemical-Hygiene Plan. It delineates specific procedures for chemical usage as well as detailed protocol to be used in the case of overexposure to hazardous chemicals. The disposal of this chemical waste is taken care of by a licensed recycling company contracted by Macalester. Macalester chooses which company to use based on methods for waste transport and disposal, company reputation, and cost. Macalester prefers to dispose of its hazardous wastes using combustion or fuel blending. In its waste disposal practices, the college aims to be economical as well as environmentally responsible. Some additional steps include:

- Use of water miscible paints to allow safe disposal down the drain
- Recycling of used car batteries, oil, light bulbs, and other waste from Facilities Services
- Remediation of select wastes in-house to reduce shipping (e.g. acid neutralization)

Macalester College has implemented a campus-wide inventory system to facilitate the reuse of laboratory chemicals.

Each chemical bottle has a unique barcode. The computerized inventory system uses this barcode to store the bottle's information, including chemical information, container size and room location. Faculty can then always be aware of what chemicals are available for use. Faculty also do an evaluation on the use of chemicals once a year to better inform which kinds of chemicals should be purchased in lower quantity to reduce any unnecessary waste.

The Information Technology Staff work to make sure that our e-waste vendors use sustainable practices. The college pays a materials recycling company for e-waste recycling. Broken and irreparable components are broken down, and their component elements are either recycled or disposed of in approved, environmentally-conscious ways. Computers and electronic devices that still work are refurbished and resold to the public at substantial discounts - Macalester gets 50% of the proceeds from these sales. Recently, the profit sharing has been sufficient to cover our costs for recycling our e-waste, which is in itself economically sustainable. Our original vendor is no longer operating, so for our last pick up, we used a different vendor, Dynamic. A new vendor is planned to be under contract soon.

In order to keep e-waste out of our college waste stream, the college also has special e-waste collection when students move out of the dorms. The Sustainability Office also manages a regular drop site for students and staff for small electronics, compact florescent bulbs and button batteries. Both of these collections are done at no cost for the students or staff. The college then includes this material with the regular college hazardous waste stream.

**Element D: expanded use of alternative transportation through active promotion of locally available transportation, energy efficient options and implementation of alternative transportation supportive projects and policies.**

The college has a goal of reducing single occupancy vehicles commuting to campus by 50% by 2025 in the college Sustainability Plan. Table five summarizes transportation projects undertaken.

Table 5: Alternative Transportation Projects

Transportation projects	
First-year car ban	First-year students are not allowed to have cars on campus.
E-workplace telework	Training materials are available for employees and supervisors considering telework.
Bike/Walk to Work Day	The college takes part in the annual event and was recognized in 2008.
Alternative Commuter Culture	Sustainability Office invites employees who bike or walk to work to complimentary coffee twice a month and maintains an active listserv of participants.
Nearby Childcare	MacParents group hosts a list of pre-school and daycare options near campus.
Pedestrian projects	
Pedestrian-oriented development projects	Macalester’s High Winds Fund developed medians adjacent to campus on Grand and Snelling Avenues, to calm traffic and improve pedestrian and bicyclist safety



“Walk to Work” Program	Macalester’s High Winds Fund provides \$4,500 for faculty and staff members to purchase homes within one mile of campus.
Bicycle projects	
Bikeshare	The Library, Sustainability Office, and MacBike collaborate to provide a free bikeshare to the Macalester community.
Bicycle repair facilities	MacBike hosts open shop and structured bike repair instruction to the community. A public bike fix it station is available at the multi-modal transit hub on campus.
NiceRide Bikeshare	HighWinds funded the installation of a NiceRide Bikeshare on campus.
WHAM Lunch and Learns	WHAM, the staff wellness group, co-sponsors a bike commuting lunch and learn in collaboration with the Sustainability Office.
Bicycle racks	Bicycle parking is available on campus. New bicycle racks are added as needed.
Low emission Commuting	
Low emitting parking	Priority designated parking available throughout campus.
HOURECAR	Community car sharing program supported through a grant by the High Winds Fund.
Electric vehicle charging	Level 2 charging was installed in 2013 and Level 3 charging was installed in 2014
Carpool listing service	Since 2012, the MetroTransit portal established a Macalester carpoolers group.
Transit	
Subsidized bus passes	Started as part of the American College and University Presidents’ Climate Commitment. Available to students, staff and faculty.

## Pillar 2: Improve the health and wellness of students, faculty, and staff

### Element A: an integrated campus environmental health program, including: pest management, contaminant controls, asthma control, indoor air quality, moisture control and chemical management.

The Facilities Services Department handles campus environmental health. The college has an integrated pest management policy. Green cleaning chemicals and reusable microfiber cloths and mop heads are used in cleaning the buildings. Indoor air quality was one of the LEED points for Markim Hall’s LEED platinum certification. Several

years ago the college switched to using low and no VOC paints, mastics, and adhesives. In addition, the carpet is low VOC emitting as well. The new Art Building was built to current IAQ standards, a significant upgrade from the previous building. Outside air is introduced at a much higher rate than it was in the old building in order to ensure pollutants and particulate generated through art creation processes are removed quickly and efficiently. Specialized solvent capture and venting equipment was installed in the printmaking shop. As of January 1, 2014, the college also went tobacco-free.

## **Element B: health and wellness programs**

Macalester College has been proactive in promoting health and wellness among both students and staff.

### **Student Wellness Program**

The mission, led by a professional health education specialist, is to create a campus environment in which students feel empowered to make healthy choices for themselves that contribute to their overall personal and academic success. The vitality and energy of the program is enriched by a diverse team of students who work together to offer education and initiatives that enhance the health of their peers.

### **Student Wellness Outcomes**

Major health promotion program objectives include the following:

- 1. Increase proportion of students who engage in moderate/vigorous physical activity.
- 2. Decrease proportion of students who engage in high risk drinking.
- 3. Increase proportion of students who receive information about sexual health choices including information about consent and sexual violence prevention.
- 4. Increase the proportion of students who receive information on healthy sleep habits.
- 5. Create general wellness programs, classes, and experiences for students, faculty, and staff.

### **Initiatives to meet program objectives:**

**Physical Activity Classes and an Annual Wellness 5K Run/Walk** –Free physical activity classes and events are offered throughout the year to focus on the mind/body connection. Our cornerstone event is the Annual Wellness 5K Run/Walk held in conjunction with Family Fest. Last fall, 425 people participated in this event. Physical activity classes are offered 51 times throughout the academic year. February Fitness Fridays are Friday evening activities including ice skating, curling, and roller skating.

Results:

- 73% of respondents reported that the Wellness 5K helped moderately to very greatly in helping set or maintain fitness goals.

**Sleep Well First-Year Student Initiative** - Health and Wellness Center collaborates with first-year course professors as part of a sleep initiative targeting first-year students.

Educational Interventions: A Health and Wellness Center employee delivered three 10-minute sessions throughout the semester. These three educational messages included: 1) sleep basics and why it matters, 2) tips for better sleep, and 3) benefits of napping. Participants were given sleep masks, earplugs, decaffeinated tea, and sleep journals. The fourth meeting at the end of the semester was the distribution of the Post Sleep Questionnaire.

### **Questionnaire Results:**

- 1. Students reported getting statistically significant more sleep after the intervention.
  - a. They reported more days of enough sleep
  - b. They reported less days of getting up too early
  - c. They reported getting to sleep at more consistent bedtimes
  - d. They reported improvement in arranging activities to optimize nighttime sleeping.
- 2. Students were significantly more likely to make changes to their sleep habits after the intervention.

- 3. Students reported overall lower scores on Epworth Sleepiness Scale (not statistically significant).

**SEXY Education** - Health and Wellness Center collaborates with Residential Life to present a peer-led workshop on sexual health basics including the intersection between sexual choices and alcohol use. All first-year floors receive the SEXY education.

**Results:**

- 72% of respondents reported that the workshop played a moderate to very great role in increasing their knowledge of sexual health
- 50% of respondents reported that the workshop played a moderate to very great role in influencing their sexual decisions during first semester.

**High-risk drinking prevention** - The goal of the Macalester College Alcohol and Other Drug (AOD) prevention program is to create a healthy campus environment by reducing health risks associated with alcohol misuse and illicit drug use, increasing awareness of these risks, encouraging healthy behaviors as an overall lifestyle choice, and enforcing Macalester AOD policies as well as state and federal regulations. This program supports the academic mission of Macalester College by reducing the negative impact to students and the campus community around the misuse and abuse of alcohol and other drugs and to create a campus environment that promotes healthy lifestyle choices. Most of the Macalester AOD program elements conform to the strategies delineated in the National Institute on Alcohol Abuse and Alcoholism's *3-in-1 Framework* -recommendations for colleges to address excessive college drinking. It is estimated that the program elements have reached nearly 100% of the Macalester students through the variety of strategies implemented.

One program element is challenging alcohol expectancies of first-year students. All first-year students are required to complete an educational online module, Alcohol.Edu, prior to their arrival at college. Upon arrival at Macalester, first-year students attended the *This Matters@Mac* Orientation workshop led by both peers and Student Affairs professional staff. First-year students gathered as a group for the presentation that shared myths and facts about low-risk alcohol use, the links between alcohol use and sexual violence, and the alcohol policy in the residence halls. After the large group presentation, first-year students divided into smaller groups as the Orientation Leader facilitated a discussion utilizing questions that tied back to the information presented.

**Assessment Results:**

After completing the online course, students reported increases in positive behavior intentions.

- 70% reported intent to set a limit
- 65% reported intent to alternate alcohol and non-alcohol
- 59% reported intent to pace drinks
- 54% reported intent to avoid drinking games
- Among high-risk drinkers who did not see a need to change their drinking behavior before the course, 29% indicated a readiness to change their drinking after completing the course.

**Staff Wellness Program**

The WHAM (Wellness and Health at Macalester) program aim is to develop a culture of wellness at Macalester College and promote and support healthy lifestyle choices for faculty, staff, and students. The WHAM Committee is composed of faculty and staff who are interested in promoting health and wellness at Macalester. WHAM sponsors a variety of initiatives including classes, workshops, and other events or activities. The committee also provides health and wellness resource information and materials for the Macalester community.

WHAM sponsored a variety of programs and activities this past year. A mainstay of the committee's initiatives include the regularly offered physical activity classes such as yoga, pilates, circuit training, and boot camp. These physical activity classes are 6 weeks in length and are offered seven times throughout the calendar year. The start dates



correspond with the academic schedule. This past year, 27 separate classes were offered with 578 participants. WHAM also offers educational sessions throughout the year dubbed “Lunch and Learns”. These workshops range in topics from “Making the Most of Sleep”, “Holiday Cooking and Eating”, to “Supporting Students with ADHD”. This past year, 6 workshops were offered with 227 participants.

Other WHAM sponsored activities include an onsite Flu Shot Clinic, blood drives each semester, personal training for a fee, and seated chair massage. WHAM provided give-away prizes for the Wellness 5K held during Family Fest weekend and helped with the purchase of a bike fix-it station to be placed at the intersection of Grand Avenue and Macalester Street.

**Staff Assessment Results:**

- 227 faculty/staff participated in and discussed wellness concepts utilizing 6 educational workshops that spanned 3 dimensions of wellness
- 578 faculty/staff participated in physical activity classes that contribute to overall health and wellbeing
- 175 faculty/staff received a flu shot at an onsite clinic

To leverage the existing wellness brand, WHAM, and to further support the culture of health and well-being for employees, Macalester began a relationship with HealthPartners in March 2013 with an On-site Health Coach / Wellness Program Manager three days/week. Macalester offers all employees with HealthPartners insurance a \$50 paycheck contribution for completing an annual Health Assessment and a well-being program. This year, drawings for Fitbit activity trackers were also offered. In, 2013, approximately 263 employees participated (52.6% participation). So far in the 2014-2015 program year, 152 employees have completed the Health Assessment (30% participation). Macalester offers HealthPartners’ online health and well-being programs, a mobile app, and individual and group coaching to encourage behavior change. The programs focus on increased activity, improving sleep, weight management, stress management, tobacco cessation and healthy living. In 2013, 86 employees have participated in an online program (~17%). In the 2014-2015-program year, 121 employees enrolled in a well-being program (~24%). Employees are encouraged to discuss the results of their Health Assessment with the Health Coach and work together to establish attainable long and short-term goals. The Health Coach averages 35 appointments per month.

**Other highlights of the well-being program include:**

- The launch of a wellness website for staff and faculty
- Partnering with the nearby HealthPartners Clinics to provide blood pressure checks at the Benefits Fair, attending our “Walk with a Doc” series, and providing educational presentations.
- Implemented a “Know Your Numbers” initiative
- Partnered with an organic farmer to provide a weekly onsite Farmer’s Market and CSA
- Implemented a pilot project to offer onsite chair massages
- Started a recurring 6-week Mindfulness class in partnership with WHAM
- Offered numerous presentations and workshop on topics ranging from: weight loss, a healthy cooking demo, food and mood, healthy neck and back, strength training, healthy thinking, mindful eating, living clutter-free, and the neuroscience of health behavior change.

**Staff Wellness Outcomes**

Table 6: Health Assessment outcome data

Health Factor	Change	Health Factor	Change
Normal Blood Pressure	2.5% increase	Stress	2% decrease
Missed Work Due to Health	4.5% decrease	Back Pain	6% decrease



Feeling More Productive	3% increase	Insufficient Sleep	8% decrease
Emotional Health Concerns			2.5% decrease

## Food

In Fall 2012 Macalester College President Brian Rosenberg signed the Real Food Campus Commitment, which requires the college to purchase 30 percent “real food” by 2020. “Real food” refers to local or community-based, fair and humane, and ecologically sound. The college food service, Bon Appetit, regularly educates students about the effect of food on greenhouse gas emissions, local foods, and healthy food choices. Macalester Urban Land and Community Health, the student group known as MULCH, grows food and raises chickens on campus as well as organizing outreach and education on sustainable agriculture. As another step toward completing the feedback loops between our food production, food consumption, and food waste, our dining service Bon Appétit sends its leftovers to a food recovery program for homeless shelters and the food waste is sent to a hog farm.

## Pillar 3: Effective Environmental and Sustainability Education

**Element A: interdisciplinary learning about the key dynamic relationships between environmental, energy and human systems and Element B: environment and sustainability curriculum and programs to develop STEM content knowledge and thinking skills to prepare graduates for the 21st century technology-driven economy**

### Introduction

Macalester College has incorporated education for sustainability into the campus-wide Sustainability Plan. Integrating sustainability throughout the curriculum and other programs and activities that comprise the student experience at Macalester is consistent with both the college’s mission and the goals of the American College and University Presidents’ Climate Commitment (ACUPCC) and the Talloires Declaration, of which Macalester is a signatory. Education is also essential for strengthening the culture of sustainability on campus and empowering students, faculty, staff, and the community to take action in the wider world. These two areas are included in the “Education in the Classroom” section of the college Sustainability Plan.

### Education in the Classroom

In 2014, the Institute for Global Citizenship received a major grant to support the “Educating Sustainability Ambassadors: a shared value approach” program. From 2014-2017, along with additional funds from the College, the grant will support:

- a student sustainability fellows program in which students will engage in classroom work and community-based activities;
- student-faculty research collaborations advancing sustainability scholarship;
- student entrepreneurial projects focused on sustainability;
- an annual summer workshop to help faculty develop connections between sustainability, shared value, and Macalester's curriculum;
- faculty course development grants to incorporate sustainability into existing courses or propose new courses on sustainability;
- faculty participation in sustainability dialogues to promote incorporation of sustainability into courses; and
- a shared value practicum designed to bring together faculty, staff, and students with community participants to explore how sustainability issues affect both Macalester and the larger community.

The college also has a longstanding environmental studies department that has been the cornerstone of sustainability education. Environmental Studies is an interdisciplinary department that offers students the opportunity to develop a holistic understanding of environmental issues. Relying heavily on case studies, problem-solving strategies, and community involvement, the curriculum addresses environmental issues at local, national, and global levels. The program emphasizes perspectives from the natural sciences, social sciences, and humanities. It encourages depth of disciplinary knowledge, breadth of cross-disciplinary perspectives, and integration through core courses and a required off-campus internship.

#### **Outcomes to date:**

- 26 sustainability courses offered
- 21 academic departments that offer at least one sustainability course and/or course that includes sustainability
- Five course development grants were awarded in June 2014. Courses will be offered beginning Spring 2015.
- Six student-faculty summer research collaboration grants were awarded and completed in the Summer 2014. Many of these projects were presented at the annual poster fair on October 10, 2014.
- Sustainability Dialogue held with more than 40 faculty, staff, and students.

### **Element C: the development of civic engagement knowledge and skills and students' application of such knowledge and skills to address sustainability issues in their community.**

The “Education Outside the Classroom” section of the Sustainability Plan includes these concepts as does the “Campus and Community Learning” section and the “Student Learning After The Classroom section”.

#### **Education Outside The Classroom**

Macalester has a history of incorporating sustainability into co-curricular activities. The terms for these activities have gone by many names including civic engagement or residential life activities, student organization activities or outreach campaigns. In 2009-2010, residence hall outreach activities included sustainability. The halls had sustainability learning goals developed by Campus Life staff. In 2010-2011, sustainability student workers in Residential Life will work to improve residence hall outreach.

Macalester student organizations such as MacCARES, MULCH, MacBike, and MPIRG, all focus on environmental aspects of sustainability issues. Cultural organizations and social justice organizations have focused on the social side of sustainability. A unique program to Macalester College is our Sustainability Student Worker network. Through this program, student employees are empowered to identify opportunities for their host department to become more sustainable.

#### **Outcomes**

- sustainability related student groups
- sustainability included in new student orientation

#### **Campus and Community Learning**

The Civic Engagement Center (CEC) of Macalester’s Institute for Global Citizenship has a long history of connecting Macalester students with the larger community through academic service learning, volunteer activities, and off-campus work-study positions. Many of the CEC programs revolve around sustainability themes.

Employee outreach has been a focus of the Sustainability Office since 2009. The Sustainability Manager meets with all new staff members during new staff orientation. The Library and Sustainability Office collaborate to offer a sustainability book club open to all students, staff, and community members to discuss one book each semester. In 2011-2012, staff and students organized sustainability lunch discussion groups. The Sustainability Office started a pilot Green Star Office training in spring 2012 to offer sustainability training to interested staff. A Staff Sustainability



Network was initiated in 2014.

**Outcomes:**

- 22 student workers in 10 college departments participate in the Sustainability Student Worker Network
- 38 staff participate in the Staff Sustainability Network
- Sustainability is included in all new staff orientation

**Student Learning After the Classroom**

The Sustainability Plan includes a goal of providing students with information about sustainability career options by connecting alumni with Macalester’s sustainability programs and goals. The Sustainability Advisory Committee started a task force in this area in 2011. In 2012, the Career Development Center, Alumni Office, and Sustainability Office collaborated on a Student-Alumni Connect program specifically on sustainability. In addition, a reception for alumni working in the sustainability field was hosted at reunion in 2012 after a sustainability walking tour of campus. The Sustainability Tours have been a regular feature of reunion since 2008. The Sustainability Office has regular theme months for green jobs twice a year to help students find sustainability-related career information. In spring, 2016, the Sustainability Office plans to host a “How to Find a Job in the Sustainability Field” event for students.