

Saint Louis University

Annual Report 2013-2014



MESSAGE FROM THE CHIEF SUSTAINABILITY OFFICER

Kathleen Brady *Vice President for Facilities Services*

Dear Reader,

It is my pleasure to once again showcase a year of great sustainability accomplishments and activities in this year's Annual Campus Sustainability Report. This report highlights many of the social, economic, and environmental programs that occurred this past year to help Saint Louis University become more sustainable.

SLU is strategically increasing focus on the direction and goals necessary to further campus sustainability efforts long-term. This year saw the creation of the Department of Sustainability and Benchmarking within Facilities Services (page 5) and the Sustainability Advisory Council's adoption of a SLU-specific definition of sustainability (page 7). Other highlights of the past year included: the hiring of the Banpu Endowed Chair of Sustainability (page 19), strides made in the annual Recyclemania competition (page 23), implementation of the single-stream recycling refresh project at Chaifetz Arena (page 25), and the establishment of energy and water reduction goals for the University (page 28). This year also saw the University receive a recognition for sustainability efforts conducted by the campus community, including being named a Cool School by Sierra Club (page 32) and being listed in Princeton Review's Green Colleges Guide (page 33). This recognition could not have happened without the

support and assistance from the entire University community.

Thank you for taking the time to read about the sustainability efforts of the University. As you read this report I hope you take note of the number of individuals, groups, and departments involved in sustainability programs over the course of the year. It takes more than one department or individual to make our campus sustainable. It requires the entire University to embrace ongoing sustainability efforts on campus. I look forward to working with all of you to make SLU an even more sustainable campus in the future.



Planning &
Administration
Coordination & Planning
Diversity & Affordability
Health, Wellbeing,
& Work

Engagement
Public & Campus
Engagement

Academics
Curriculum
Research

Operations
Buildings P
Dining Ti
Energy W
Grounds W

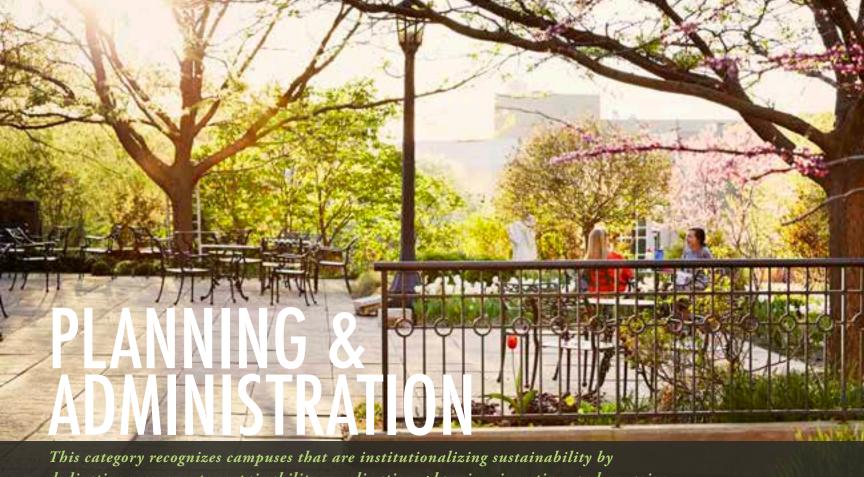
Purchasing Transportation Waste Water Recognition & Achievements

Local & National Awards



The purpose of Saint Louis University's (SLU) Campus Sustainability Report is to provide the campus community with a summary of SLU's sustainability achievements

comments, or concerns about any of the material presented in this report please email greenbilliken@slu.edu.



This category recognizes campuses that are institutionalizing sustainability by dedicating resources to sustainability coordination, planning, investing, and engaging in governance. This category also recognizes institutions that work to advance diversity and affordability as well as incorporating sustainability into their human resources programs and policies.

CREATION OF THE DEPARTMENT OF SUSTAINABILITY AND BENCHMARKING

The Department of Sustainability and Benchmarking was created in July 2013 as a part of Facilities Services' organizational re-structuring plan. Brandon Verhoff, former Project Analyst in the Service Operations Department, was appointed the Director of Sustainability and Benchmarking. Caeden Sweet, former Graduate Assistant for the division and graduate from the Center for Sustainability, was hired as the new Project Analyst. In addition, the Department employs two graduate assistants, Sarah Burke and Amy Hargis, from the Center for Sustainability and a graphic design undergraduate intern, Matt Meyers.

This Department actively identifies, prioritizes, and tracks Facilities Services' sustainability initiatives including but not limited to recycling programs, waste reduction, alternative transportation, and energy initiatives. The Department works collaboratively with Facilities Services employees as well as with other campus stakeholders to identify, inform, and support the development of sustainability on campus through new initiatives, activities, and special projects. Finally, the Department creates, monitors, and maintains assessment and communication tools to report on sustainability, benchmarking, and operational effectiveness.

SUSTAINABILITY
ADVISORY COUNCIL
INCLUDES HIGH LEVEL
ADMINISTRATORS, STUDENTS,
FACULTY, STAFF AND FIELD EXPER
TO TO TO TO TO TO TO TO TO

MEMBERS OF THE

1,600

DOLLARS RAISED
IN ANNUAL TASTE
OF SUMMER SALE
TO SUPPORT SLU'S
HELPING OUR
OWN PROGRAM



FACILITIES SERVICES' STRATEGIC PLANNING ACTION TEAMS

In November, the Facilities Services' Environmental Resource Optimization (ERO) Action Team responsible for many of the major sustainability initiatives on campus reorganized forming two focused groups.

The first group, the **Waste Minimization Action Team**, was the continuation of the former ERO action team with a renewed emphasis on waste reduction and recycling practices.

The second group, newly formed, was the **Energy** and **Utilities Strategies Action Team** tasked with an objective to identify opportunities for energy savings and to establish priorities on campus for energy and utility projects. By reorganizing the ERO Action Team, Facilities Services is able to focus more attention on individual goals. The strategic initiative of ERO is "to maintain and conserve natural resources, protect our environment, and to do so in a sustainable manner through actions that will enhance environmental quality."

STUDENT GOVERNMENT ASSOCIATION (SGA) ORGANIZED AND SPONSORED THE SECOND ANNUAL OATH WEEK APRIL 5-11

This week-long series of events and diversity programs focuses around the University's Oath of Inclusion. The Oath of Inclusion, implemented in 2007, is SLU's commitment to diversity and inclusion written by students for the students of the University. Oath Week is meant to give students the opportunity to learn more about the tough issues: bias incidents, political correctness, racism; as well as serving to facilitate change and action. ^{2,3}

14TH ANNUAL SAM AND MARILYN FOX ATLAS WEEK: MARCH 31ST - APRIL 4TH

The theme for this year's Atlas Week was 'Education: Igniting the Flames of Change'. One of the main goals of Atlas Week is to increase awareness of global issues that are confronting us today with the aim to not only increase discussion on those topics but also to inspire and bring about action. One particular session focused on sustainable food systems. ⁴

SUSTAINABILITY ADVISORY COUNCIL ADOPTS A STATEMENT OF PURPOSE FOR SUSTAINABILITY AT SLU

In July 2013, a volunteer sub-committee of the Sustainability Advisory Council joined together to develop a SLU-specific definition of sustainability. In August, the following Statement of Purpose was adopted by the Council:

"SLUstainability complements the Mission of Saint Louis University by promoting a campus community that engages in decision making based on the dimensions of social justice, environmental stewardship, and economic accountability. SLUstainability supports, values, and practices these dimensions to ensure that current and future generations have the opportunity to thrive."

STUDENTS RECEIVE JOHN H. GLADNEY DIVERSITY AWARD FOR THEIR IMPACT IN THE COMMUNITY

3

Jennifer Ray, Kanika Turner, and Taron Davis were recipients of this year's John H. Gladney Diversity Awards. This recognition is given to students who promote and enhance diversity in the School of Medicine through academic performance,



ar and/or community d organizational and nvolvement.

In addition, the Council developed three action teams: Community Engagement, STARS Reporting, and Strategic Planning for the fiscal year. The Community Engagement team was charged with fostering awareness and involvement in sustainability on campus by promoting the "Green Billiken" and coordinating events sponsored by the Council. The STARS Reporting team was charged with providing a system, network, and oversight for the gathering and reporting of STARS data. Finally, the Strategic Planning team was charged with identifying and developing a strategic plan for SLUstainability as it moves forward.



This category recognizes institutions that provide sustainability learning experiences outside the formal curriculum and promote sustainability through public engagement, community partnerships and service.

2013 SLUSTAINABILITY WEEK & GARDENS TO TABLES FOOD DAY

Sponsored by the Sustainability Advisory Council, the second annual SLUstainability Week took place on October 21-26. The week coincided with the International Campus Sustainability Day, sponsored by AASHE, held on October 23. Some of the highlights from this year's event included the annual Cannonball Picnic, which focused on composting and recycling the waste, and the release of SLU's second annual Campus Sustainability Report. This report, a collaborative effort between the Division of Facilities Services and the Center for Sustainability, highlighted the successes that occurred during fiscal year 2013.

The major event of the week was the SLUstainability Expo, held in the Center for Global Citizenship. The event featured information about alternative transportation options, energy, sustainability organizations, and campus partners such as food and office suppliers, campus departments, and student groups. In addition, some of the special presentations given throughout the day included:

Basics of Sustainability - SLU Center for Sustainability

Life of the Project - McCarthy and Fox Architects

State of Sustainability in St. Louis - St. Louis Green

Finally, on Friday, October 25, the monthly SLU Spirit Day went "Green". Faculty and staff were invited to wear a green shirt with their jeans in order to promote practicing an ecologically responsible lifestyle.

SLUstainability Week is designed to raise awareness about sustainability and showcase all that the University is and could be doing to be stewards of the environment, advocates of social justice, and promoters of economic viability. Events during the week are designed

1,614,711

HOURS OF COMMUNITY SERVICE CONTRIBUTED BY STUDENTS

10,752

STUDENTS ENGAGED IN COMMUNITY SERVICE

3,700

STUDENTS,
FACULTY, STAFF,
PARENTS, ALUMNI
AND COMMUNITY
MEMBERS TOOK
PART IN MAKE A
DIFFERENCE DAY 2013



2013 SLUSTAINABILITY WEEK & GARDENS TO TABLES FOOD DAY

to help the campus community learn about sustainability at SLU and how to incorporate sustainable practices into their daily campus life.

In addition, the third annual "Gardens to Tables Food Day" was also held during this week to promote sustainable, healthy, and just agricultural practices, as well as to promote a healthier St. Louis community. This event was made possible through the partnership of SLU's Department of Nutrition and Dietetics, the City of St. Louis Department of Health and Les Dames d'Escoffier International.

The event kicked off with a keynote speech by Jacki Dirksmeyer from "Feed My Peeps". In addition, several teaching stations were available for attendees to learn about various topics such as food deserts and food access, composting and vermiculture, how to get involved with community-supported agriculture, fighting childhood obesity, and how to promote sustainable agricultural practices.

AMEREN SUSTAINABLE BUSINESS SPEAKER SERIES

Tony Calandro from Vox Global presented "The Evolving Role of Business in Society" during the 2nd Annual Ameren Sustainable Business Speaker Series in February. This series, hosted by the John Cook School of Business in partnership with Ameren Corporation, aims to educate the community about the importance and future of sustainability in business. 12





2ND ANNUAL SUSTAINABLE DISASTER RECOVERY CONFERENCE

Building on the success of the inaugural year, the Center for Sustainability hosted the 2013 Sustainable Disaster Recovery Conference in partnership with Greensburg GreenTown and GreenTown Joplin. This year's conference continued the exploration of sustainable disaster recovery with added emphases on sustainable approaches to predisaster planning, emergency response, long-term recovery, and community resilience.

The two-day conference, attended by over 100 individuals, brought together leaders in the fields of disaster response and recovery, government, urban planning, emergency management, design, renewable energy, public and private enterprise, green building, social work, and sustainability. This year's conference featured two keynote speakers: Steve Hewitt, City Manager for Clinton, Oklahoma and former City Administrator for Greensburg, Kansas and Lisa LaDue the Assistant Director of Field Education for the School of Social Work at Colorado State University. 13

THE DEPARTMENT OF NUTRITION & DIETETICS HOSTS SUSTAINABLE AGRICULTURE LECTURE

In April, the Department of Nutrition and Dietetics hosted a presentation providing an introduction about farm-scale permaculture, by permaculturist Mark Shepard, author of the best-selling book Restoration Agriculture. This presentation was cosponsored by the Department and EarthDance Farms.¹⁴

CONVERSATIONS ON CLIMATE CHANGE SPEAKER SERIES

This three-part speaker series, held twice during the academic year, explored creative viewpoints and dimensions on climate change from academic disciplines varying from biology to theology to literature. The speaker series was sponsored by the Center for Sustainability, the College of Arts and Sciences, the Department of Earth and Atmospheric Sciences, the Department of Philosophy, the Laclede Gas Company Energy Efficiency Collaborative, the Center for Service and Community Engagement, and the Center for Global Citizenship. 15,146



CHARTWELLS SUSTAINABILITY FAIR

Held in March, Billiken Dining by Chartwells hosted a fair to showcase local vendors – including Companion Bakery, Gelato Di Riso, Kaldi's Coffee, and Local Harvest – who had a direct tie to SLU through Chartwells. Attendees also were able to participate in free yoga classes, participate in an "Ethical Coffee Talk" with Kaldi's Coffee, and listen to a free "Ryan Chollet and Friends" concert. The fair concluded with a free community showing of the St. Louis-based "upcycling" reality TV show Salvage City with the cast from the Discovery Channel series.

Billiken Dining also took the time to demonstrate its partnership with SLUstainability through its programs, such as "Love Food [Not Waste]" and "Project Clean Plate". Its continued commitment to environmental responsibility was also showcased in its everyday practices, which include: reusable & recyclable carry-out containers, cage-free eggs, free range chicken and pork, Seafood Watch, and fair trade coffee pledges. ¹⁷

FOOD SUSTAINABILITY COMMUNITY PANEL

The Center for Service and Community Engagement, in partnership with the Center for Sustainability, hosted a food sustainability community panel in April. The forum discussed food sustainability in a local and international context; as well as, how it is affected by such problems as international mobility, climate change, and socio-economic forces. The speakers included Kelley Belina and Mildred Mattfeld-Berman, Ph.D. both from SLU as well as Rachel Levi from EarthDance Farms and Joel Walker from the International Institute of St. Louis. 18

SGA & CHARTWELLS GIVE \$13,000 TO FIGHT HUNGER

In October, SGA, in partnership with Chartwells, presented the St. Louis Area Food Bank with a S13,000 donation, which was collected as part of an innovative program called *Flex-to-Feed*. This donation provided the food bank with enough money to purchase approximately 300,000 pounds of food. Due to the success of the program, representatives from the Food Bank announced that they had plans to present the *Flex-to-Feed* SGA initiative to other colleges and universities in hopes of creating similar programs across the region. ¹⁹

FRESH GATHERINGS HARVEST

Starting in May, 'Fresh Gatherings Harvest', a Community Supported Agriculture (CSA) program, began accepting registration for this year's harvest. The program is designed to support local farmers who practice agriculturally sustainable methods. Any non-claimed CSA produce each week is either sold at the SLU Farm Stand or donated to a local charity – such as Campus Kitchen.

DEPARTMENT OF NUTRITION AND DIETETICS INTRODUCES SLU FARM STAND IN THE GARDEN

In the summer of 2014 the Department of Nutrition and Dietetics moved their Farm Stand, organized by the department's Americorps Vistas, from the Schlafly Farmers Market to the SLU Garden. The Farm Stand is one of many ways in which the department works to improve access to healthy, affordable, and local food by providing fresh produce, soaps, vinegars, spice blends, and freshly baked bread. The garden is located in a food desert and the department is committed to continuing to find ways to address food insecurity issues in St. Louis.

"GOOD EATS, GOOD HEALTH"

The Department of Campus Recreation's Wellness Program presented "Good Eats, Good Health". This event, held in February, showcased healthy food alternatives; as well as, businesses and organizations on and off campus that help promote living well in and around SLU.

358

INDIVIDUALS RECEIVED SLUSTAINABILITY PRESENTATION DURING NEW EMPLOYEE ORIENTATION

2,500

DOLLARS RAISED
BY THE FILIPINO
STUDENT
ASSOCIATION
FUNDRAISER FOR
SUPER-TYPHOON
HAIYAN RELIEF 23-24

400

MEALS DELIVERED DURING THE ANNUA CAMPUS KITCHEN TURKEYPALOOZA²⁵







SLU PLANTS TREES IN CELEBRATION OF CITY'S ANNIVERSARY

SLU and the Billikens partnered with Forest ReLeaf of Missouri to celebrate the 250th anniversary of the founding of St. Louis. As part of the celebration, the University pledged to plant a tree around the community for each point scored by the men's basketball team up to 250 trees during the last four games of the 2013-2014 season. The men's basketball team did not disappoint and ended up scoring 261 points during the last four home games.

The trees will be planted during Make a Difference Day 2014 to give students the opportunity to participate in the planting. The trees will be distributed to at least seven different non-profit organizations in the surrounding area, including SLU's campus. ²⁶

EARTH DAY FESTIVAL: APRIL 27

The Center for Sustainability participated in the 25th annual St. Louis Earth Day Festival held in Forest Park. As a sponsor of the event, the Center for Sustainability maintained a booth where faculty and staff promoted the Center's graduate programs in sustainability, urban planning & development and geographic information systems (GIS).²⁷

AASHE CONFERENCE & EXPO 2013

In October, Brandon Verhoff, Director of Sustainability and Benchmarking, and Kelley Krejnik, former Graduate Assistant in the Department, presented a poster titled "Lessons from the Rookie Years: Building a Sustainability Program on a Shoestring Budget" at the AASHE conference in Nashville, Tennessee. The aim of the poster was to assist other institutions, especially those with pending or new sustainability programs, by providing tips and tools for introducing and implementing a structure for sustainability at their respective campuses.



ST. LOUIS EARTH DAY SYMPOSIUM APRIL 1-2

The Center for Sustainability was a presenting sponsor of the St. Louis Earth Day Symposium, which provided educational and networking opportunities for local government officials, community leaders, and professionals from diverse backgrounds in the planning and environmental fields. The 2014 program focused on environmental goals and objectives of the newly adopted Regional Plan for Sustainable Development (OneSTL). The Center moderated a panel discussion, titled "Community Resilience", in which participants learned how communities prepare efficient and effective recovery plans in the face of environmental threats. In addition, research was presented by faculty, staff, and students from the University in the areas of GIS and campus operations.

700

POUNDS OF DONATED ITEMS COLLECTED DURING ANNUAL CLOTHING AND TOILETRY DRIVE 32

1MILLION

DOLLARS INVESTED IN 8 LOCAL STARTUPS BY THE BILLIKEN ANGELS NETWORK 33

11,000

SUPPLIES COLLECTED
DURING THE ANNUAL
SCHOOL SUPPLY
DRIVE FOR TEACHERS
AND UNDERSERVED
CHILDREN IN ST LOUIS

GREAT ISSUES COMMITTEE SPEAKER SERIES

Once again, the Great Issues Committee provided students, faculty, and staff with the opportunity to hear speakers discuss current global issues. Two of this year's speakers focused on sustainability. First, Jeff Corwin entertained the crowd with animals as he discussed his adventures in the field, integrating how and why individuals need to protect wildlife and the environment, and second, Molly Barker, the founder of Girls on the Run, discussed her initiatives to empower women through mentoring and exercising. 30,31



education programs and courses that address sustainability as well as those conducting research on sustainability topics.

CENTER FOR SUSTAINABILITY NAMES INAUGURAL BANPU ENDOWED CHAIR OF **SUSTAINABILITY**

In June 2014, the Center for Sustainability named Thomas Crawford, Ph.D., as the Banpu Endowed Chair of Sustainability. Crawford, who comes to SLU from East Carolina University, brings a strong background in sustainability that encompasses academics, research, and global issues. Supported by a fellowship with UNC's Carolina Population Center, Crawford's dissertation work focused on human-environment interactions and regional change in rural northeast Thailand.

His recent work includes a project to examine the effect of monsoons on human land use and livelihoods in Bangladesh and analyzing the impact of carbon dioxide emissions in urban areas in Scotland. He is currently studying the sea level rise at the Cape Hattaras National Seashore.

The Banpu Chair of Sustainability was created with a gift from Thailand-based Banpu Public Company, LTD and its two founding executives, SLU alumni Chanin Vongkusolkit and Metee Auapinyakul. The company is a leader in global energy, known in Asia for its commitment to sustainability and improving the communities where the company is located.35

2,786,983

DOLLARS OF **FUNDED GRANT SUSTAINABILITY**

SPECIFIC RESEARCH

NUTRITION AND DIETETICS PLANTS URBAN ORCHARD

In March 2014, the Department of Nutrition and Dietetics began planting trees in the Gardens to Tables Orchard, funded through a grant from the Missouri Department of Agriculture Specialty Crop Block Grant program. The orchard will primarily be used for teaching with a focus on organic growing techniques, while also providing faculty with additional research opportunities. The fruit harvested from the orchard will provide fresh, local fruit to Fresh Gatherings Café and Fresh Gatherings Harvest, with any excess fruit to be donated to Campus Kitchen. The orchard was built around the concept of permaculture, which aims to create a self-sustaining landscape through the use of companion plants for natural soil enhancement and pest control, while lowering the amount of maintenance and encouraging others to add fruit trees to the community landscape.

In addition, this spring the Department started hosting educational programs, in partnership with Stark Bro's Nursery and Orchards, targeted to those individuals wanting to add fruit trees to their school and community gardens or at home. The Department is also partnering with the Department of Biology to expand research on edible crops on campus and enhance the curriculum in sustainable food systems.^{36,37}





General Electric awarded \$25,000 to SLU's College for Public Health & Social Justice in support of research carried out by Brett Emo, Ph.D., MPH, assistant professor of environmental and occupational health.

The research being conducted by Emo looks to find a more sustainable means of removing metal and metalloid contaminants, such as lead and arsenic, from soil and water. The project utilizes nano-materials to detect environmental contaminants.38

Emo's research is an opportunity to address long-standing and widespread heavy metal soil contamination in a manner that minimizes energy consumption and allows for the re-use of decontaminated soil and metals recovered from the remediation process. If successful, this technology could be used to treat drinking water in places like Bangladesh and lead contamination in cities like St. Louis.







CAMPUS STORMWATER PROJECT ENGINEERED BY SLU STUDENTS

In April, construction began on a stormwater management project located on the east side of Busch Student Center, an area known to suffer from erosion and flooding on campus. Four SLU engineering students: James Buerck, Diana Byrne, Michael McFadden, and Monica Stochl with support from adjunct professor, Jay Hoskins, P.E., designed and created an innovative urban green infrastructure project to sustainably manage stormwater on campus as part of the Environmental Protection Agency's Campus Rain Works Challenge. The project was later funded by the St. Louis Metropolitan Sewer District and implemented by SLU's Grounds Services Department.

The area affected totaled 5,800 square feet of impervious surface and is projected to redirect 13,000 cubic feet of water from the combined sewer system. The project included three rain barrels, two bio-retention basins, a pervious path, and re-grading of the entire area.³⁹









In Fall 2013, a practicum site was developed for Applied Behavior Analysis graduate student, Tara Grant, in cooperation with Facilities Services. Grant's research involved direct observation and data collection of items placed in recycling bins on campus in an attempt to show the effects of signage and motivational campaigns, such as RecycleMania, on accurate placement of recyclables.

In addition, Grant applied principles of Organizational Behavior Management to help develop a mutually beneficial partnership between Distribution Services and MERS Goodwill to efficiently redistribute surplus furniture to the local community. To date, MERS Goodwill has helped Distribution Services redistribute over 57,000 pounds of unwanted furniture.

JOHN COOK SCHOOL OF BUSINESS SERVICE LEADERSHIP SUSTAINABILITY WORKSHOP

In March, the Center for Sustainability led a two-hour workshop, titled *Sustainability 101*, to undergraduate business students. The workshop provided an introduction to the concept of sustainability as an interdisciplinary field of study that examines the social, ecological, and economic impacts of our individual and collective actions within the context of the modern-day global society. 40



BILLIKEN BRIDGE TO SUCCESS SUSTAINABILITY WORKSHOP

For the third year in a row, the Center for Sustainability participated in SLU's summer bridge program by integrating sustainability into part of the workshop. Approximately 30 students were assigned mock projects in which they had to consider the social, environmental, and economic impacts of their proposals. The workshop was designed to aid students in understanding core sustainability concepts and how they are connected to various activities in modern society.



This category recognizes institutions that have implemented sustainability initiatives in their operations. These initiatives include improving sustainability performances of buildings, supporting sustainable food systems, reducing energy and water consumption, maintaining campus grounds in a sustainable way, implementing sustainable transportation systems, and moving institutions towards zero waste through reducing, reusing, recycling, and composting.

14 TONS OF WASTE
DIVERTED FROM THE
LANDFILL DURING
FALL MOVE-IN

80%

OF CONSTRUCTION
AND DEMOLITION
PROJECT MATERIALS
DIVERTED FROM THE

160

POUNDS OF
WASTE RECYCLED
AND COMPOSTED
DURING FACILITIES
SERVICES' ZERO
WASTE EMPLOYEE
RECOGNITION PICNIC

232,751

WATER BOTTLES SAVED FROM THE LANDFILL THROUGH THE USE OF 14 WATER BOTTLE FILLING STATIONS ON CAMPUS

OPERATIONS 23

RECYCLEMANIA 2014

For the fourth year, SLU participated in RecycleMania; a friendly intercollegiate competition that brings awareness to campus sustainability and aims to increase recycling. The eight week competition, which ran from February to March, was sponsored by the Sustainability Advisory Council, in coordination with Facilities Services.

This year's programming activities, organized by the Graduate Assistants in the Department of Sustainability and Benchmarking, included bringing awareness to SLU's single-stream recycling program through programs such as Adopt-A-Spot and Sustainable Selfies. In addition, groups were invited to host their own activities to raise awareness in their office, department, or residence halls. The University also competed for the second time in the E-CycleMania Category and for the first time the Game Day – Basketball Category.

This year, Facilities Services' Waste Minimization Action Team set a goal to collect 220,000 pounds of single-stream recycling for the Gorilla category of the competition. SLU met and exceeded this goal with more than 235,000 pounds of recycling collected, which is equal to removing 79 cars from the road. 41,42



E-WASTE DRIVE & SHREDMANIA

As part of this year's RecycleMania competition, SLU's Facilities Services, in partnership with Midwest Recycling Center (MRC), hosted the fourth annual electronic waste collection drive on March 28. Community members, both at SLU and throughout the St. Louis area, were encouraged to donate old, broken, or unused electronics to be responsibly recycled by MRC. This year's collection drive was sponsored by the Sustainability Advisory Council. SLU placed 6th out of 68 schools competing with 67,154 pounds of e-waste collected, which equates to 3.5 pounds per SLU student.

New to the collection drive this year was ShredMania, a free shredding event hosted by SLU in partnership with Cintas. Campus and community members were encouraged to bring sensitive documents and other paper materials to be responsibly shredded by Cintas on site. The total poundage of shredded paper assisted SLU in increasing its score during the RecycleMania competition by adding 10,500 pounds of paper collected at the 4 hour event.

ΔΠΩΡΤ-Δ-SPΩΤ

This year's Adopt-A-Spot competition included two students groups and one campus department with a separate competition for fifteen Chartwells locations.

The winning student/department the Biology Department. For the competition, Caffe won for the and Bannister won for being improved.



SUSTAINABLE SELFIES

Below is one of the winning photos from the Sustainable Selfies photo competition. This competition was a way to utilize social media and peer-to-peer activity to raise awareness about recycling.



SLU STUDENT, RYAN KOHL, RECYCLES IN CHINA DURING SPRING BREAK

SINGLE-STREAM RECYCLING REFRESH AT CHAIFETZ ARENA



SLU, Global Spectrum, and Sodexo partnered to revitalize recycling efforts at SLU's Chaifetz Arena. Since the implementation of the refresh program in November 2013, almost 26 tons of recyclable materials have been diverted from the landfill.

The environmentally-minded priorities at Chaifetz Arena were jump-started in early 2013. The Division of Facilities Services, in partnership with the Center for Sustainability, was awarded a \$30,000 grant from the St. Louis – Jefferson Solid Waste Management District and the Missouri Department of Natural Resources to refresh the single-stream recycling program at Chaifetz Arena creating uniformity at the arena to mirror the rest of campus. 44

At the beginning of the 2013-2014 basketball season Billiken fans were greeted by:

...big Belly Solar Compactors at each entrance to collect and compact discarded materials.

...over 50 new recycling bins located at the main entrances and throughout the arena increasing the Arena's recycling capacity by 40%.

...standardization of purchasing supplies provided by Sodexo, ensuring recyclability of concession items.

...introduction of educational signage for the promotion of single-stream recycling.

1,297 PIECES OF FURNITU DONATED BY HOUSE AND RESIDENCE LI

SLU WINS BATTLE FOR THE BOOT FOR THE THIRD CONSECUTIVE YEAR

SLU collected 4,479 pairs of wearable shoes weighing 5,327 pounds during the third annual shoe drive, sponsored by the Staff Advisory Committee, and claimed victory over Washington University and the University of Missouri – St. Louis. The University collected enough shoes to purchase approximately two purifiers for the Shoeman Water Project to be installed in Kenya or Haiti. A total of 8,853 pounds of shoes were donated by all three universities during this year's competition. 46,47





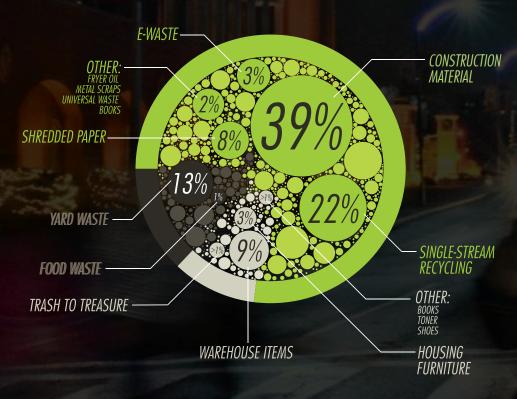
GREEN GAME

As part of RecycleMania 2014 and the ongoing sustainability efforts at Chaifetz Arena, the inaugural Green Game event was held on February 22nd during the men's basketball game against George Washington University attended by 9,231 fans. The event was a collaborative partnership between Facilities Services, Global Spectrum, Sodexo, and Athletics. Over 30 green ambassador student volunteers, along with a number of Facilities Services staff, engaged the fans about the recycling refresh program at the arena. Other highlights of the Green Game included: "Green Billiken Party Zone" promoting sustainable and local food/ beverage providers and an informational booth on SLUstainability; Lorenzini's locally sourced menu selections; In-game recycling sweeps by the green ambassadors

SLU and Chaifetz Arena, due in large part to the efforts of the green ambassadors, were able to divert 1,400 pounds of recyclables, equal to 1,019 basketballs, away from the landfill during that single game. The results for the Game Day competition through RecycleMania ranked SLU 22nd with a 21% diversion rate for single-stream recyclables.^{48,49}

FY14 WASTE DIVERSION BREAKDOWN

1,584 TONS OF TOTAL DIVERTED MATERIALS



74% RECYCLED 14% COMPOST 12% REUSE/DONATED

DIVERTED WASTE BY THE YEARS



Facilities Services set a strategic goal for the University to divert 30% of its waste from the landfill. The University continues to climb closer to achieving that goal with increased efforts in waste reduction and diversion occurring each year. This year, based on STARS' classification of diverted waste, SLU was able to divert 922 tons of waste from the landfill, which is equal to 154 adult male elephants.

SLU LAUNCHES BLUE PRINTS MANAGED PRINT SERVICE

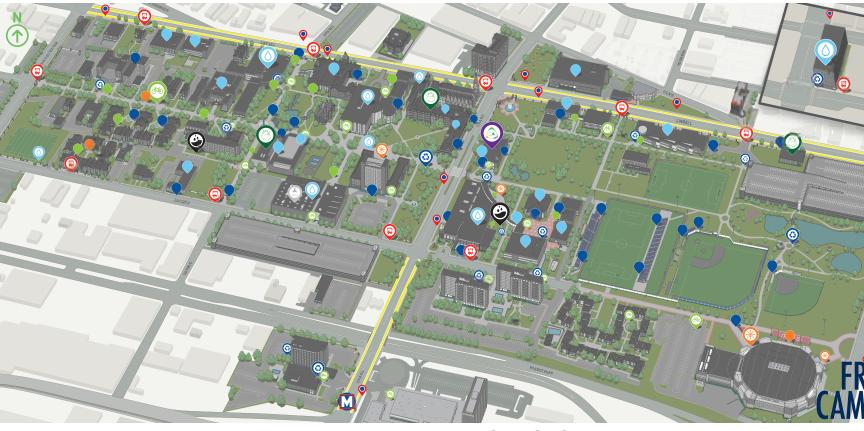
Business Services, in collaboration with ITS, is implementing the Blue Prints Managed Print Service (MPS) program from Xerox. The MPS program will decrease printing costs as well as reduce the University's impact on the environment for several reasons. First, once fully implemented, redundant photocopiers and printers will be removed with only energy efficient devices in operation. This change will reduce the amount of energy needed to operate those devices as well as reduce the amount of energy vampires, machines that still use energy in stand-by or sleep-mode, on campus. Second, the MPS program will centralize all printing processes and proactively order toner and ink, eliminating the stockpiling of consumables. Finally, paper consumption will be reduced through actively promoting efficient use of paper. The University anticipates a reduction of its printing carbon footprint by up to 20% annually upon full program implementation.

TREES SAVED BY THE
RECYCLING AND REUSE
OF BOOKS

ACRES OF CAMPUS
GROUNDS COVERED
BY A NEW INTEGRATED
PEST MANAGMENT PLAN,
UTILIZING NATURAL
FERTILIZER AND MINIMAL
PESTICIDES

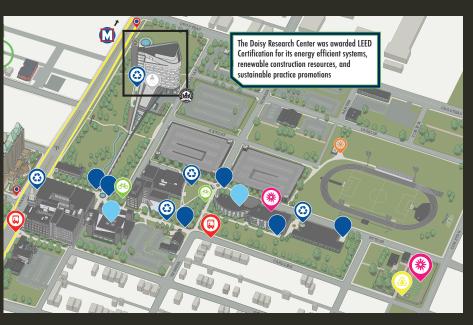
TREES ADDED TO CAMPUS





SLU SUSTAINABILITY MAP

Slustainability works effortlessly to make slu's campus as sustainable as possible encouraging the use of these initiatives while promoting sustainable practices year round. To find out more information and how to get involved go to greenbilliken.slu.edu or email greenbilliken@slu.edu



Yellow lines on Grand and Lindell represent bike lanes offered around campus for students and employees who bike to campus.



Campus grounds and greenery are fertilized with natural composted fertilizer.



Water bottle refilling stations reduce the amount of plastic water bottles used



BigBelly Solar compactors save time, fuel, and money & reduces carbon footprint



Outdoor recycling bins reduce the amount of materials sent to landfills



Bike racks on campus reduce the carbon footprint and car usage on campus



Campus compost containers collect biodegradable waste to later be used as fertilizer



The shuttle service connects the campuses and provides alternative transportation



Lead by Nutrition and Dietetics, Fresh Gatherings Cafe is a student-supported cafeteria that utilizes local farmers and manages an on-campus organic garden, a sunflower remediation plot, an orchard to grow a variety of produce, and raise cage-free hens that lay organic eggs.



Just Earth is a student organization focused on environmental concerns. Their meetings are located in Ritter Hall.



The Water Retention Areas sponsor a variety of plants native to the St Louis area and absorb storm water that would normally be relocated to drainage.



Shower stations are conveniently located for those who bike to campus



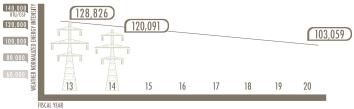
Center for Sustainability & Facilities Services Offices



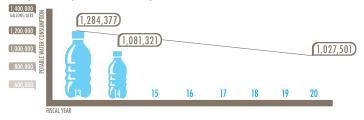
FACILITIES SERVICES SETS ENERGY AND WATER REDUCTION GOALS

This spring, Facilities Services' Energy and Utilities Strategies Action Team finalized reduction goals for energy and water consumption on campus which were reviewed and endorsed by the Sustainability Advisory Council. The Energy and Utilities Strategies Action Team is actively formulating strategies and initiatives to achieve these goals. The graphs below show the average decrease required each year to achieve the University's goal, shown by the line, compared to the actual consumption for each year, represented by the powerlines and water bottles.

ENERGY GOAL: 20% REDUCTION IN ENERGY INTENSITY (BTU/GSF) BY 2020 FROM THE 2013 BASELINE



WATER GOAL: 20% REDUCTION IN POTABLE WATER CONSUMPTION (GALLONS/CAMPUS ACRES) BY 2020 FROM THE 2013 BASELINE



SGA MOVES FORWARD WITH SUSTAINABILITY INITIATIVES

The SGA Wellness committee developed a plan to expand the opportunities for students to re-fill their reusable water bottles. The 31 new water bottle filling stations are expected to be installed by Fall 2014 all across campus. The goal of this student-led initiative is to reduce the use of plastic water bottles on campus by 50% in the upcoming academic year by providing more access to water bottle filling stations and by promoting the use of reusable water bottles. Another approved SGA proposal, Billikens on Bikes, a new bike-share program, is expected to place ten bikes outside the Busch Student Center this Fall that students will be able to check out for free. Both of these initiatives were funded by the Wellness Fee. 52

TRASH TO TREASURE

The Trash to Treasure program grew again this past year diverting 14,141 pounds of material from the landfill. This semi-annual event, sponsored by the Center for Service and Community Engagement in partnership with Housing and Residence Life and Facilities Services, collects food, clothing, furniture, books, and appliances during campus move-out and donates these items to local charities. Over \$30,000 worth of donations were distributed from the Winter and Spring move-out to Mission St. Louis, Salvation Army, the Dream Center, Campus Kitchen, the International Institute of St. Louis, Stray Rescue, Better World Books, Connections to Success, and the Resale Shop. 53,54

VEHICLE DONATIONS SPARK SOCIAL AND ENVIRONMENTAL JUSTICE

Fewer Missouri families lack basic transportation thanks to recent donations by SLU. As part of their fleet vehicle rotation plan, Facilities Services donated eight vans and trucks to Vinnie's Autos, a car donation and transfer program operated by the Society of St. Vincent de Paul. Four of the donated vehicles were transferred to clients of the program, including a struggling family from the St. Louis area, a couple with disabilities living in rural southeast Missouri, and a nonprofit organization that serves the homeless in the region. The remaining vehicles were sold at auction or recycled to raise funds for the organization. 555

DEPARTMENT OF NUTRITION AND DIETETICS CHAIR AWARDED \$35,000 COMPOSTING GRANT

Mildred Mattfeldt-Beman, Ph.D., was awarded a grant from the Jefferson Solid Waste Management District to fund "Start to Actively Recycle Today (START) III", a program designed to direct food waste away from landfills. The START III program aims to compost more than 21,000 pounds of food, paper, and landscaping waste through the use of Earth Tubs, NatureMill composters, traditional composting, and vermiculture. In addition to decreasing food waste, START III will investigate different mechanisms for breaking down compostable dinnerware, used at the Fresh Gatherings Café, to increase their composting potential. ⁵⁶

FOOD SERVICE TAKES STRIDES IN SUSTAINABILITY

Dining Services on campus received more focused attention in the area of sustainability during the new food vendor search by devoting a section of the food service RFP to sustainability. In response, Chartwells hired Lindsey Jones as the Director of Sustainability for SLU's Billiken Dining Services. This position was created to provide the SLU community with a more sustainable, local, and creative dining experience. Although Chartwells did not ultimately receive SLU's food service contract, Aramark plans to fill a similar position on SLU's campus as part of its DineSLU program.⁵⁷

142,430 × 1

KWH SAVED THROUGH LED LIGHTING UPGRADES

60+

SLU'S TWO REFUELING
STATIONS DURING BIKE
TO WORK DAY 2014

162,365

INDIVIDUALS UTILIZED

5 FREE SHUTTLES

CONNECTING THE

THREE CAMPUSES

81.6

KHW SAVED NIGHTLY
BY CHANGING THE
INCANDESCENT LIGHT
BULBS IN THE NATIVITY
SCENE CHRISTMAS
DISPLAY TO LED LIGHT
BULBS **





SLU NAMED 2013 COOL SCHOOL BY SIERRA CLUB

The University has been acknowledged for its commitment to sustainable practices and education by being named one of Sierra Club's *Cool Schools*, an honor given by the environmental organization to colleges and universities that are committed to tackling the most important elements of campus sustainability. The list recognizes institutions' green efforts and accomplishments and includes measurable goals, such as promotion of sustainable commutes among students and employees, faculty and departments engaged in sustainability research, and sustainability-themed courses and curricula. ^{59,60}

SLU INCLUDED IN PRINCETON REVIEW'S "332 GREEN COLLEGES: 2014 EDITION"

The guide profiles institutions that demonstrate a strong commitment to sustainability in their operations and programming. The University's inclusion for the first time in this guide is a testimony to the ongoing efforts and accomplishments in sustainability-related policies, practices, and academic offerings. One example is SLUstainability, a collaborative effort between Facilities Services and the Center for Sustainability, which works to promote environmentally conscious efforts at all levels of the University.⁶¹

62%

OF STUDENTS
ENTERING COLLEGE
SAID A SCHOOL'S
COMMITMENT TO
ENVIRONMENTAL
ISSUES WOULD
CONTRIBUTE TO
THEIR DECISION TO
APPLY OR ATTEND

2

JESUIT UNIVERSITIES, SLU BEING ONE, → HAVE BEEN GIVEN THE TITLE OF TREE CAMPUS USA



SLU RECEIVES CIRCLE OF EXCELLENCE AWARD

SLU was recognized by the St. Louis Regional Chamber with the Circle of Excellence Award as part of its 2013 Green Business Challenge for the University's efforts to become more sustainable and for being a sustainability leader among companies and organizations across the St. Louis region.

The St. Louis Green Business Challenge evaluates companies' efforts in regards to what their business is doing to become more sustainable, which is measured before and after the challenge using a detailed scorecard. The categories include reduction of energy usage, tracking of waste and water consumption, engaging employees, improving indoor environmental quality, and promoting alternative transportation options.

SLU's submission outlined a broad array of current university strategies and highlighted specific initiatives such as the recycling refresh at Chaifetz Arena, hosting a two-day Global Reporting Initiative (GRI) training and certification program on sustainability reporting, and educating more than 1,000 faculty, staff, and students on the campus single-stream recycling program.⁶³

SLU RECOGNIZED AS A 2013 TREE CAMPUS

In February, SLU was awarded *Tree Campus* USA recognition for the second consecutive year. This national program, administered by the National Arbor Day Foundation, honors colleges and universities for promoting healthy trees and engaging students and staff in the spirit of conservation.

As part of the re-certification process for 2013, Grounds Services, with assistance from volunteers, planted 11 trees around Clemens Hall. Another ceremonial tree planting, to prepare for re-certification for 2014, was held in April during which Flowering Dogwoods were planted near the south side of DuBourg Hall. During both events, individuals were also able to learn proper planting techniques from representatives of the Campus Tree Advisory Staff.





FACILITIES SERVICES RECEIVES 2014 APPA EFFECTIVE AND INNOVATIVE PRACTICES AWARD

APPA, the Association for Leadership in Educational Facilities, granted SLU's Division of Facilities Services with the Effective and Innovative Practices Award for three case study submissions. The submissions highlighted new or restructured programs that had an overall benefit for the campus. One entry, "Improvement of Waste Management through Infrastructure and Engagement", showcased the efforts made by the Waste Minimization Action team to increase the University's waste diversion rate through improvements in recycling infrastructure, staff education, and campus engagement. A formal award presentation occurred in July 2014 during a reception at the APPA 2014 national conference held in San Diego, California. 666

SLU NOMINATED AS "EMERGING LEADER" IN GOING GREEN AWARDS

Facilities Planning and Construction Department was nominated for the Emerging Leader Award, provided by the U.S. Green Building Council – Missouri Gateway Chapter, for the sustainable construction practices used to repurpose the West Pine Gym into the Center for Global Citizenship. The nomination was primarily received for the Department's ability to overcome the challenge of maintaining the University's historic architecture while incorporating green building practices to provide form *and* function. ⁶⁷

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Created by Sarah Burke & Matt Meyers



Thank you to all the individuals who helped in the creation of this report.

If you have a story that you would like to have included in next year's publication, submit ideas to greenbilliken@slu.edu.

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