U.S. DEPARTMENT OF EDUCATION

GreenRibbonSchools

2014-2015 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.

U.S. Department of Education Green Ribbon Schools 2014-2015

[X] **Public 4-Year** ☐ Public 2-Year ☐ Private Non-Profit

Name of President/Chancellor: **Dr. Jay Gouge**
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official College or University Name: **Auburn University**
(As it should appear on an award)

College or University Street
Mailing Address: **200 Langdon Annex, Auburn, AL 36849**
(If address is P.O. Box, also include street address.)

County: **Lee County** IPEDS Number*: **100858**

Telephone: **334-844-7777** Fax: **344-844-7726**

Web site/URL: www.auburn.edu E-mail: sustain@auburn.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:

U.S. DEPARTMENT OF EDUCATION

GreenRibbonSchools

Nominating Authority's Certifications

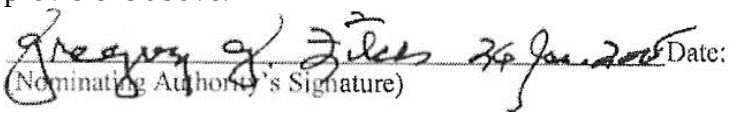
The signature by the Nominating Authority on this page certifies that each of the statements below concerning the college or university's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

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: **Alabama Commission on Higher Education**

Name of Nominating Authority: **Dr. Gregory G. Fitch**

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:

Name of Nominating Agency: **Alabama State Department of Education**

Name of Nominating Authority: **Dr. Thomas R. Bice**

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: **01-27-15**

SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent "snapshot" 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 nine Elements. Then, include documentation and concrete examples for work in every Pillar and Element.

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 green.ribbon.schools@ed.gov according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509
Expiration Date: February 28, 2015

Public Burden Statement

U.S. DEPARTMENT OF EDUCATION
GreenRibbonSchools

ED-GRS APPLICATION FOR COLLEGES AND UNIVERSITIES

Contact Information

College/University Name: Auburn University

Street Address: 200 Langdon Annex

City: Auburn State: AL Zip: 36849

Website: www.auburn.edu/sustainability Facebook page: www.facebook.com/AUsustain

President/Chancellor Name: Dr. Jay Gouge

President/Chancellor Email Address: gig0002@auburn.edu Phone Number: 334-844-4650

Lead Applicant Name (if different): Mike Kensler

Lead Applicant Email: sustain@auburn.edu Phone Number: 334-844-7777

Basic Carnegie Classification	**High Research Activity**	Minority-Serving Institution (check all that apply): AANAPISI _____ ANNH _____ HBCU _____ HSI _____ NASNTI _____ PBI _____ TCU _____ **NONE APPLY** **X**
Enrollment Profile	Size and setting Undergraduate Enrollment: **20,626** Graduate Enrollment: **5,283** Percent of Undergraduates Receiving Pell Grants: **17%**	Graduation rate (150% of normal time): **71%** Average Institutional Net Price: **UNKNOWN**

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:

Sustainability Tracking, Assessment, and Rating System (STARS) – Silver (2013), Princeton Review Guide to Green Colleges (2010-2014)

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

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

Sustainability Tracking, Assessment, and Rating System (STARS) – Silver (2013), Princeton Review Guide to Green Colleges (2010-2014), Tree Campus USA (2009-2014), General Electric's "Proof Not Promises" Award (2014), Camil Farr's "5-Star Award" (2014), General Electric's "Return on Environment Award" (2014)

Sustainability at Auburn University (Summary Narrative)

Auburn University demonstrates its commitment to its role in helping to create a sustainable world through the pursuit of strategies that improve environmental conditions, enhance individual wellbeing, and develop well-educated, thoughtful, and engaged graduates. Efforts to achieve a more sustainable university can be found in the university's instruction, research, operations, and outreach activities, and are being championed by students, faculty, and staff at all levels within the university.

While a great deal of this activity comes from the ground up, the administration has established polices, plans, and administrative units to support this transition toward sustainability. Adopted in 2011, the Sustainability Policy affirms the university's commitment to sustainability as a core value and guiding principle for operations, instruction, research, and outreach. It outlines key sustainability goals, and commits to measuring progress towards these ends. The Sustainability Policy comes to life through the integration of its principles in the university's many plans, including the Strategic Plan, the Campus Master Plan, the Landscape Management Plan, the Stormwater Management Plan, the Climate Action Plan, and the Parkerson Mill Creek Watershed Management Plan. In addition to these policies and plans, the university has also established an Office of Sustainability, housed in the President's Office, and the Academic Sustainability Programs, which operates from the Provost's Office. Together these two units help encourage, support, and advance sustainability through all functional areas of the university.

Recognizing the rapid progress within the field of sustainability, Auburn also engages with the larger movement beyond campus. As a member of the Association for the Advancement of Sustainability in Higher Education (AASHE), Auburn seeks to connect with other universities to both share successes and learn from colleagues. In addition, the university maintains membership in the United States Green Building Council, and is a licensed affiliate of the AtKisson Group sustainability firm, which has been at the forefront of the movement since 1992. Furthermore, the university has joined with other colleges and universities in dedicating themselves to be part of the solution to global climate change by becoming a signatory to the American College and University Presidents Climate Commitment. Most recently, the university has partnered with the City of Auburn to participate in the Urban Sustainability Accelerator program offered by Portland State University, to identify ways to improve the infrastructure of downtown Auburn in ways that demonstrate and promote sustainable development.

The university's successes in sustainability have resulted in a Silver rating in AASHE's Sustainability, Tracking, Assessment, and Rating System, and annual recognition in the Princeton Review's Guide to Green Colleges every year since 2010. Auburn will not, however, rest on its laurels, but rather continue to accelerate its commitment to sustainability via practice with an eye toward creating the natural, economic, social, and individual wellbeing conditions that will lead to a flourishing future for all.

Pillar I: Reduced Environmental Impact and Costs

Auburn University maintains an active commitment to reducing our environmental impacts and costs, and strives to have a restorative impact on the environment. By identifying and implementing strategies that minimize negative impacts, the university can serve as an example to students, faculty, staff, citizens, and communities on how sustainable actions can optimize performance, enhance connections between people, and support individual wellbeing. Furthermore, pursuit of these strategies enable the university to engage students in hands-on learning projects, while also controlling operational costs, thereby decreasing pressure on the need to raise tuition rates.

Energy & Emissions

As the only Alabama signatory to the American College and University President's Climate Commitment (ACUPCC), Auburn University has led the way among the state's higher education institutions in making a commitment to become carbon neutral. In an effort to achieve carbon neutrality by 2050, the university developed and adopted a Climate Action Plan (CAP) in 2010 and set our greenhouse gas baseline year at 2008. This first committee-designed CAP established interim goals of achieving a

10% reduction by 2015 for each of the following sources of greenhouse gas emissions: purchased electricity, on- campus combustion, commuting, funded travel, and campus fleet. While we have not yet reached our 10% reduction goals, in 2010 we managed to stop the upward trend of total emissions and have seen a steady decline since that time. This is particularly promising since we have added over 1200 people and 2.8 million square feet of building space since 2008. To help monitor progress toward achieving both our long- term neutrality goal, as well as the interim goals, the university conducts an annual greenhouse gas inventory and submits biennial progress reports to the ACUPCC. As we begin the second phase of our CAP, we will once again be assembling a broad group of stakeholders to help inform our next set of interim goals and to assist in the implementation of the designated strategies as we work our way to carbon neutrality.

As reflected in our CAP, we have identified a range of strategies to help curb emissions, as well as to create a more sustainable campus overall. One key area of focus has been how we design, build, and maintain campus facilities. Since 2010, the university has designed and built over 36% of its new square footage to LEED certified standards, with the majority of this new building space obtaining LEED Gold certification. Building on this progress, the university is currently revising its design and construction standards to include sustainability outcomes and guidelines for all major renovations and new buildings on campus. It is anticipated that these new standards will result in an outcome of having all future projects benchmark at a LEED Gold level or higher. In addition, requirements for commissioning of major building systems will help ensure these buildings operate as designed.

While integrating sustainability into our new buildings remains key to achieving our sustainability goals, the current facilities on campus also present ample opportunities for reducing our environmental impacts and operational expenses. As such, our Utilities and Energy Department (U&E Department) has worked with outside contractors and campus personnel to run commissioning projects in 21 campus buildings in the last 6 years resulting in over $1 million in utility savings. A prime example of the type of partnerships involved and the outcomes achieved can be found in the commissioning project completed on Auburn Arena. The Athletics Department partnered with Facilities Management to help enhance the Arena's energy performance by making improvements to air handling units, heat exchangers, and operational controls. Together these efforts have saved over $123,000 in operating costs and reduced carbon emissions by 2,014 metric tons, which is equivalent to taking 424 passenger vehicles off the road for one year.

In addition to continuous commissioning projects, the U&E Department has also completed retro-commissioning studies on 17 buildings in the past 3 years, and has implemented a portion of the identified opportunities as funding has allowed. In the past two years, the university has reallocated a portion of the utility savings back to the U&E Department for investment in efficiency projects identified through the retro-commissioning studies, and should this trend continue, the results from the 17 studies will serve as a ready stream of projects for implementation. As an added benefit of the efficiency planning efforts of the U&E Department, 3 of the 17 studies have been led by students enrolled in the Mechanical Engineering Senior Design course; thus providing Auburn students with an opportunity to apply their classroom learning in a real-world context.

The university utilizes additional strategies to help reduce utility consumption. For instance, the U&E Department has established occupancy schedules for 52 of the campus' buildings to control HVAC demands for times when the buildings remain unoccupied. They have also partnered with various departments across campus to make building upgrades. For example, they worked with staff in the Ralph Brown Draughon Library on a series of projects to reduce energy demand and improve occupant satisfaction. Through the use of LED lighting, daylight harvesting, and occupancy sensors, they have been able to reduce energy consumption by 57% while providing softer, warmer, and more natural light for library patrons.

As a complement to these projects, the university has also established purchasing preferences to ensure computers and peripherals acquired for campus use are at least EPEAT Gold certified, which includes requirements for EPA Energy Star ratings. The university has also explored the application of alternative energy sources through the installation of a geothermal system at the Soccer and Track Facility, as well as by erecting two solar array projects, which have generated 36,000 kWh since being installed in 2012-2013.

In addition, the energy produced from the stadium parking deck array helps offset the electricity needed for the 10 electric vehicle charging stations in the parking deck. The solar arrays also serve as an excellent outreach tool for educating students and campus visitors on alternative energy via campus sustainability tours given throughout the year. Other outreach efforts to raise energy awareness have included an annual residence hall resource competition called Sustain-A-Bowl, which in its 6-year history reached over 4,000 student residents and generated nearly $50,000 in utility savings.

Together the efforts to design and build more sustainable buildings, improve the operational efficiency of current facilities, apply alternative energy technologies, and engage the campus community in conversation behaviors have helped the university to reduce its energy intensity by 17.1% from its 2006 baseline. By continuing to aggressively employ these types of strategies, the university expects to achieve its strategic goal of reducing energy intensity by 20% by 2020.

Water

While energy reduction efforts are a critical part of reducing our environmental impacts and costs, our relationship with water also forms a critical component of our overall sustainability. To this end, the university has set a goal of reducing our water intensity by 30% by 2020 based on a 2007 baseline. To achieve this goal, Auburn has implemented a variety of strategies to reduce our water consumption, which to date have resulted in a 40% decrease in campus water intensity. These efforts have also generated recognition from General Electric in the form of their Proof Not Promises and Return on the Environment awards. We received the Proof Not Promises award for improvements to the campus steam system that resulted in saving over 4,000 gallons of water per day and reducing operating costs by $20,000. The Return on the Environment award bestowed recognition for changes in our cooling tower process. Implemented in late 2011, the project saved the university more than 2 million gallons of water which would have been added from the City of Auburn water supply and more than 14 million gallons of water that would have been sent to sewers. The project has resulted in overall annual cost savings of more than $71,777.

Beyond these two specific projects, the university has employed a variety of other strategies to reduce our water consumption. For instance, we have installed the Aclara Monitoring System on most campus buildings. These real-time, wireless utility monitors, enable the U&E Department to identify and investigate areas of unusually high usage. Within 1 year of the system being fully operational, university staff fixed 48 water-related problems resulting in savings of over 4.75 million gallons of water and $33,000. The university has also installed 10 smart irrigation control systems and 7 irrigation systems with integrated rain sensors. To ensure these irrigation systems operate as designed, they are maintained via a regular service schedule. Other measures to help control water consumption include the use of native vegetation, regular turf aeration, and the installation of motion-sensor faucets and toilets in many campus lavatories.

While controlling water consumption remains a central part of our role in protecting water resources, implementing practices to help maintain and/or improve water quality is equally important. In an effort to do our part to improve the water health of our region, the university has developed, and is in the process of implementing, a Stormwater Management Plan, a Landscape Master Plan, and the Parkerson Mill Creek Watershed Management Plan. All three plans incorporate best management practices for protecting water quality through efforts like soil erosion control, riparian corridor restoration, stream daylighting, limiting the use of pesticides and fertilizers, and litter control efforts. The university also actively manages campus trees via a tree policy and committee, and has received the Tree Campus USA recognition every year since 2009. In addition to these policies and plans, the university has also installed a number of low impact development demonstration projects on campus to raise awareness of water quality and enlightened stormwater management practices, and encourage the adoption of best management practices in our community. Demonstrations projects include bioretention cells in the courtyard of the Corley Building; a rainwater cistern on Dudley Hall; a stormwater best practices tour at the Donald E. Davis Arboretum featuring cisterns, bioswales, rain gardens, dry stream beds, and pervious pavement; a stream restoration

project at the Wellness Kitchen facility; and various installations of pervious concrete at sites both on and off campus.

Other efforts of the university that help protect the water quality of our region include the preservation of forests and vegetation via the 13.5-acre Donald E. Davis Arboretum and the 120-acre Louise Kreher Forest Ecology Preserve; both of which provide educational outreach to the community that includes discussions of the role landscapes play in protecting water quality. Furthermore, the university is home to the Water Resources Center (WRC), which exists to help the people of Alabama, the Southeast and beyond make sound, science-based decisions and take sound, science-based actions that result in healthier ecosystems as well as equitable and sustainable use of water resources. Programs of the WRC include: the AU Center of Excellence for Watershed Management, which as an EPA-affiliated program that works to provide communities with hands-on, practical products and services to solve watershed problems, such as pollution control and water availability; the Alabama Water Resources Research Institute, which provides research, training, information transfer, and public service programming involving personnel from many academic disciplines in the state's research universities; Alabama Water Watch, which is a citizen volunteer, water quality monitoring program covering all of the major river basins of the state with a mission to improve both water quality and water policy through citizen monitoring and action; and the Global Water Watch program that extends the practices of Alabama Water Watch to countries around the globe.

Waste

In addition to minimizing our impacts from energy and on water, Auburn also recognizes the importance of controlling the effects of our resource consumption and disposal. Led by our Waste Reduction and Recycling Department (WRRD), the university has expanded our capacity for the campus-wide collection and recycling of a variety of materials, including mixed paper, #1-7 plastics, aluminum, tin, steel, scrap metal, and cardboard. They also work with the Environmental Management unit of our Risk Management and Safety Department to offer recycling of specialty items, such as toner and ink cartridges, electronic waste, batteries, used oils, lightbulbs, lighting ballasts, solvents, and a variety of construction and demolition debris. Through these efforts, the university was able to achieve a diversion rate of 23% for fiscal year 2014 by recycling 1,530.85 tons of waste. This tonnage does not include hazardous waste materials, of which we recycled 1,495 gallons of used oil, 20+ tons of batteries, 61+ tons of fluorescent lightbulbs, and 3,872 pounds of lighting ballast from 2012-2013. In addition, we were able to recycle over 69 tons of electronic waste during 2013, and had over 1,600 gallons of kitchen oil/grease made into biodiesel in just a 5-month period in 2014. In addition to keeping materials out of our landfill, our recycling program also helps benefit our regional economy as most of our standard recyclables go to the City of Columbus, Georgia's material recovery facility, and our construction and demolition waste travels just 6 miles to the Sandhill Recycling facility. Our municipal waste goes to the Salem Landfill 16 miles away, and our hazardous waste is collected by trained technicians on campus, handled according to regulations, and sent to authorized facilities for disposal.

Whereas providing the necessary infrastructure for recycling forms the foundation of a successful program, additional efforts must be implemented to achieve high diversion rates. To this end, the university has supported the development of a number of initiatives that help educate and support the campus population with opportunities for waste reduction and recycling. One of the largest special initiatives of WRRD is the operation of the Gameday Recycling Program for home football games, which typically draw over 100,000 people to Auburn's campus. Through this program fans can recycle via bins dispersed throughout campus, "tent-side" bags distributed by student volunteers, and at receptacles throughout the stadium. During the 2014 season, 86 student volunteers worked over 124 hours to help with the program, which diverted almost 37 tons of plastic and aluminum from the landfill. In addition to Gameday Recycling, the Athletics Department just launched a water refill station program for gamedays. This program provides free water refill coolers for visitors inside Jordan-Hare Stadium. While full season numbers are not available, in one game alone the stations saved over 17,000 16-ounce plastic bottles from being used.

While Gameday Recycling and water refill stations focus just on football gamedays, two other programs WRRD supports, in coordination with the Housing Department, are the Move-In Recycling program and Check Out for Charity. The Move-In Recycling program provides additional recycling bins, as well as on-site personnel, to assist residents with recycling efforts during their arrival each fall semester. Check Out for Charity provides students with the opportunity to divert food waste, clothing, durable goods, and standard recyclables when they move out of the residence halls in May. During the 2014 Check Out for Charity event, students donated about 46 tons of goods to local charities and over 2,250 pounds of food to the Food Bank of East Alabama.

Another key area of focus for the university is the waste generated by food service. Through collaborative efforts led by Tiger Dining, a number of successful initiatives have been implemented. In 2014, campus dining officially became polystyrene-free by requiring all food retail locations to no longer offer Styrofoam cups or containers. Efforts have also included the creation of a food waste compost pilot project, which was able to divert over 4,600 pounds of pre-consumer food waste from the Village Dining facility in one month – effectively reducing landfill waste by 15% for that specific location. Due to this success, efforts to formalize and expand food waste composting continue. Other initiatives launched by Tiger Dining include Trim Tracks and Project Clean Plate. Trim Tracks focuses on the proper training of staff on how to minimize waste while prepping food and requires monitoring of food waste generated during food preparation. This program has been implemented in locations on campus, and has reduced prep food waste by 45% in just one semester at the Village Dining facility. While Trim Tracks focuses on pre- consumer food waste, Project Clean Plate helps inform consumers of the amount of food they waste. This project is currently implemented at the all-you-can-eat dining location on campus, and has helped consumers reduce the amount of food waste per person. Tiger Dining also partners with the Campus Kitchens student organization to help divert unserved food to local shelters and food banks. In the 2013-2014 academic year, 802 student volunteers worked more than 1,236 hours to recover 7,952 pounds of food and prepare 5,494 nutritious meals for the community.

Facilities Management also looks for opportunities to reduce waste. For example, in 2012 the Preventive Maintenance Department wanted to address the university's use of air filters, as they were typically consuming around 25,000-30,000 filters per year. They were able to identify a filter that allows better air flow, requires less energy, and lasts 3-4 times longer than the old filters. As a result, the university cut filter consumption down to a little over 4,500 filters in all of 2013; leading to reduced energy and waste disposal costs, reduced demand on personnel time, lower inventory needs, and improved air quality for building occupants. These multi-faceted results earned the Preventative Maintenance Department Camfil Farr's 5-Star Award in 2014.

Two other special initiatives also help encourage responsible waste management by the larger Auburn family. Launched in September 2014, the Adopt-A-Spot program lets university groups and individuals adopt an area of campus and maintain that location through litter collection and recycling. In just a few short months, 20 groups and 8 individuals have adopted spots and picked up 26 bags of trash and 12 bags of recycling. The university is also part of a community-wide effort to increase recycling through participation in the East Alabama Recycling Partnership (EARP). Through this collaboration with the City of Auburn, the City of Opelika, and Lee County, EARP has hosted 10 electronic recycling and document shredding events where they have diverted almost 55,000 pounds of electronic waste and just under 196,000 pounds of paper documents.

Special initiatives like those mentioned above have played a critical role in raising awareness and diversion rates. Other less visible efforts, however, have also contributed to our increasing success at waste minimization and diversion. In the past few years, the university has stopped printing an annual campus directory; allowed reuse of envelopes for intercampus mail delivery; created a mobile application for the annual new student Welcome Week instead of printing brochures; launched the use of mobile ticketing for football games; installed numerous water fountains with water bottle refill mechanisms; and switched from paper travel voucher reimbursement forms to electronic vouchers. In addition, WRRD hosts an annual binder giveaway each fall, which is stocked with used binders collected from various people and

departments around campus.

Together all of these achievements reflect the investments the university has made in the needed personnel, infrastructure, and education for waste minimization and recycling. Building on this foundation, we will carry on our work toward achieving our goal of a 70% diversion rate by 2030 through the continued support and expansion of these efforts and the adoption of additional waste reduction and recycling strategies.

Alternative Transportation

The impact of individualized, fossil-fuel based transportation on the health and wellbeing of both people and the planet remains costly. As such, the university acknowledges the role it can play in helping people make the transition to alternative transportation options that improve the overall health of individuals and ecosystems. Through financial support and promotion of a variety of options for students, faculty, and staff, Auburn is helping usher in changes in transportation behaviors.

One of the primary methods by which we support alternative transportation is through the Tiger Transit bus program. Tiger Transit operates 19 bus lines that run both on and off campus from approximately 7 am until 10 pm, and operates 8 bus lines from 10:30 pm until 3 am on Friday and Saturday nights. Rides are free to all students, and faculty/staff may ride on campus for free or purchase a $50 yearly bus pass to ride external routes. Tiger Transit also offers its service free of charge on gamedays to campus visitors. This mass transportation option has proven itself popular among students, faculty, staff, and guests, as last year alone it provided over 2.5 million rides. In addition to reducing the number of individual vehicles on the road, the Tiger Transit fleet is also being upgraded to help reduce its own impact, with 17% of the fleet now consisting of diesel-hybrid buses.

Other services supported by the university include participation in the Enterprise Zimride and CarShare programs. Zimride allows the university to have a university-only carpool arrangement service for students, faculty, and staff. In addition, it allows campus members to track their daily commuting modes to compete in contests for prizes. As a complement, the CarShare program allows university members to join the CarShare program at a subsidized rate and then use one of the two CarShare cars on campus for personal transportation for an hourly fee. Also, CarShare members can tap into Enterprise's network of CarShare cars whenever and wherever they travel. Thus, the program reduces the need for bringing a personal car to campus.

Other sponsored services also help ease the transition to alternative transportation for students. For example, the university provides space for the GOTCHA Ride Company to operate on campus. This company owns a fleet of all-electric, street-legal neighborhood vehicles that provide no-fare rides with only a tip for the driver as the requested payment. GOTCHA Ride will offer rides to most locations within 5 miles of campus, and provides a cheap curb-to-curb transportation option for community members. GOTCHA Ride is not the only curb-to-curb service available for campus community members, as the university helps support the Lee-Russell Public Transit service for students, faculty, and staff, which enables Auburn community members to ride the Auburn-Opelika service for free with their university identification. The university also coordinates the services of BreakShuttle for students. This company arranges commercial bus service to and from campus on major academic breaks, and typically services the following destinations: Birmingham, Huntsville, Nashville, Atlanta, Greenville, Charlotte, Lake City, Tampa, Mobile, and Orange Beach. BreakShuttle provides students a low-cost option for getting to and from campus, reducing the need for personal cars.

While all of the above options help reduce the need for individualized, fossil-fuel based transportation, support for non-motorized forms of transportation remains critical to combating climate change. As such, the university has made significant investments in encouraging and improving the walking/biking infrastructure on campus, and has integrated a non-motorized campus core into its Campus Master Plan. Key components available to community members to support their efforts to commute via bicycle include: bike racks on all Tiger Transit buses; fix-it bike repair stations at strategic locations throughout campus; on and off street bicycle lanes; bike racks located at most every building on campus, with covered bike parking

at residence hall locations; showers available for bike commuters in a number of campus buildings; and a bike maintenance clinic and shop ran by student leaders and staff in the Auburn Outdoors program.

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

Auburn prides itself on the family-feeling created among its students, faculty, staff, alumni, and general community members. With this sense of family comes the desire, and significant responsibility, to help ensure family members live long, healthy, and fulfilling lives. Securing a healthy environment is the first step to protecting human health, and the provision of facilities, programs, and awareness initiatives helps to empower people in making responsible choices for their individual wellbeing. Auburn actively works toward securing a safe environment for its students, faculty, staff, and visitors, and continues to make investments in the needed infrastructure and programs to help its family members thrive. These strategies support the wellbeing students during their time at Auburn; thus, contributing to graduation rates and the overall success of students.

Integrated Environmental Health

Auburn University understands the importance of providing a safe and sound environment for its students, faculty, staff, and visitors. By protecting the environmental health of the campus, the university can help ensure the campus community can thrive in its studies, research, and play. Therefore, Auburn has put into place a range of programs and practices that safeguard against exposure to environmental contaminants that may jeopardize the health of the community.

A healthy environment begins with how we treat the landscape around us. In the past few years, Auburn has moved away from intensive chemical management of its grounds to a more holistic approach to landscape management. To date, over 39% of campus maintained acreage is actively managed using integrated pest management practices. Furthermore, the landscape services staff aerates this acreage to improve water filtration, and either mulches leaf litter back into the landscape or removes it for on-site composting. In addition, they have increasingly incorporated native vegetation into the landscape to reduce the overall need for fertilizer and pesticide applications.

Outdoor exposure is not the only concern of the university when it comes to environmental health. The quality of the indoor air and level of contaminants within buildings is also an area of focus. Many standard practices are implemented to help maintain the quality of indoor air, including using appropriate area recharge rates for the type of activity taking place within the building; training students and faculty on the proper use of fume hoods; regularly scheduled maintenance on HVAC systems; regular replacement of HVAC filters; alert-system integrated carbon dioxide detectors in many buildings; and entryway contaminant controls, such as grates and carpets. The university also has a purchasing and use preference for certified green cleaning products, which helps to control indoor air quality and protect chemical exposure for both cleaning staff and building occupants. In addition, the current proposed revisions to the university design and construction standards require air quality control measures during construction, ensure that appropriate indoor air standards are met prior to building occupancy, require the installation of integrated carbon dioxide detectors in large indoor gathering spaces, and limit the amount of volatile organic compounds present in building materials used during construction. The Office of Sustainability also encourages the use of indoor plants to help improve office air quality.

Even with these best practices, issues with indoor air still arise, particularly in the summertime. To help address these issues, the university employs two staff persons who have primary responsibility for monitoring and responding to indoor air issues. It is the university's policy to have all indoor air meet or exceed the recommendations and standards found in the ASHRAE 62.1. Furthermore, all university students, faculty, staff, and even visitors, have the opportunity to report to the Risk Management and Safety (RMS) department issues they find with indoor air, including problems associated with moisture, allergens, and asthma triggers. When a concern is received, RMS sends a questionnaire to building occupants, dispatches a representative to investigate the concern, and conducts air quality testing. In more extensive cases, the university may contract out the testing of air quality to a more advanced laboratory. The RMS staff then works with building occupants and Facilities Management to find the source of contamination and

identify a remedy to return the building to the appropriate air quality standard.

Proactive management of air quality contamination is not the only way to protect the environmental health of the campus community. As a research institution, a variety of chemicals and hazardous materials can be found in buildings around campus. To help ensure the proper use, storage, and disposal of these chemicals, the university has established the Environmental Management Department (EMD) within RMS. EMD staff work with researchers and Facilities Management staff across campus to train them on the proper storage, use, and disposal of chemicals. They have also established an online system for the campus community to contact them when they are ready to dispose of a hazardous chemical. EMD then dispatches appropriately trained and certified personnel to retrieve the chemicals and deliver them to a central facility for proper classification, storage, and then disposal via an appropriately licensed recycler or hazardous waste disposal company. The EMD department also utilizes an Environmental Management System to track and monitor hazardous materials on campus, and to ensure the appropriate RMS staff have access to the needed information to ensure the campus community remains safe from accidental exposures. The EMD staff have taken their dedication to proper chemical and hazardous waste management beyond the campus borders. Since 2006, they have held educational programs around the Southeast for rescue workers, teachers, and university and agency employees. They have also helped the United States Armed Forces develop laboratory chemical management plans for the field operations in Afghanistan. These efforts address the procedures of proper hazardous waste handling and disposal, which helps prevent catastrophic damage to people and the environment.

Health & Wellness Promotion

Ensuring minimal exposure to environmental health hazards provides a strong foundation for the wellbeing of the campus community, but those actions alone do not create thriving individuals. Efforts to enhance individual wellbeing also benefit from support via infrastructure and programming. As such, Auburn University continues to make financial and programmatic investments to provide mechanisms that aide students, faculty, and staff in making positive wellbeing decisions.

Auburn provides a range of facilities for its students and employees to visit in order to attend to a variety of wellbeing needs. Auburn University Campus Recreation opened its doors to the brand new 240,000 square-foot Recreation and Wellness Center in August 2013, which is open to all students and available to faculty and staff via a membership package. With highlights such as a 1/3-mile indoor track, two 50-foot rock-climbing towers, a PGA golf simulator, a wide array of cardio equipment, extensive selection of strength equipment, 150+ group fitness classes, multi-purpose indoor courts, and more, the facility offers something for everyone. There is a four level Fitness Tower with specialized activities on each floor. Located at the top of the Fitness Tower is the Mind/Body Room which features garage-door-style windows that can be hydraulically lifted to give members a spectacular view and fresh air. The outdoors were literally brought inside with the Livingston Courtyard, an open air courtyard located in the middle of the building, which features a unique variety of plants and greenery. Furthermore, the facility complies with LEED Standards which help reinforce the other sustainability practices of the university.

The university has also established the Auburn University Medical Clinic (AUMC). AUMC provides medical services on a fee-for-service basis with a focus on serving the student population, while also providing care to the administration, faculty, staff, and citizens from the community. AUMC is staffed with physicians, nurse practitioners, physician assistants and a full nursing staff, who offer such services related to: acute/urgent care, allergies, immunizations, laboratory testing, radiology, women's care, massage therapy, and pharmacy needs. AUMC works with a variety of insurance carriers, files claims for all insurance providers as a courtesy to patients, and contracts with the Student Government Association to serve as provider for their sponsored policy. It is the only primary and urgent care facility in the area accredited by the Joint Commission on Accreditation of Healthcare Organizations, and has 40 exams rooms, digitized x-rays, and cutting edge lab equipment.

The Harrison School of Pharmacy operates 2 distinct pharmacy centers on campus: the Student Pharmacy and TigerMeds Employee Pharmacy. Between the two locations students, faculty, and staff can

get their needs met in relation to pharmacy services. The Student Pharmacy exclusively serves our Auburn University students and their families; whereas, TigerMeds Employee Pharmacy is reserved solely for Auburn employees and their dependents. Both locations are full-service pharmacies that accept most major insurance plans. They are preferred locations for the university and student government association insurance plans, and offer free or low-cost generic prescriptions to persons served by these plans. More than just a location to fill prescriptions, they provide a range of services including: offering a wide assortment of over-the-counter medications, medical equipment rentals, smoking cessation and weight management counseling, free annual medication check-ups and monitoring services, free on-campus delivery, and a 24/7 on-call pharmacist. As an added dimension, both locations provide hands-on training for post-doctoral residents and Pharm.D. Students.

In addition to the AUMC and pharmacies, the university supports other facilities that serve the campus community. For instance, the College of Liberal Arts Speech and Hearing Clinic is staffed by state licensed and nationally certified audiologists and speech-language pathologists, who provide a full range of diagnostic evaluation and treatment services for clients of all ages, from infants to the elderly. The clinic is open to the public, provides training opportunities for students, and offers numerous public outreach services, including free screenings. The College of Liberal Arts also houses the Psychological Services Center, which is a training facility for clinical psychology graduate students that offers individual and group therapy and psychological evaluations for children, adolescents, adults, and college students under the supervision of licensed clinical psychologists, who are faculty members in the Department of Psychology. The Psychological Service Center houses the Health Behavior Assessment Center, which provides substance abuse assessments, personalized assistance, and any necessary referrals. All Auburn students that visit the Health Behavior Assessment Center via self or medical referral receive 2 sessions free of charge. The Marriage and Family Therapy Center is a faculty-supervised training facility for graduate students enrolled in Auburn University's Master of Science Marriage and Family Therapy Program, and serves the campus and broader community by providing therapy services to individuals, families, and couples to help them manage challenges in their everyday lives in a way that creates opportunities to live healthy, happy, and abuse-free lives.

Auburn not only provides facilities that offer direct care services, but also supports venues that promote and facilitate healthy food choices. Campus and community members can get direct access to locally grown, and in many cases sustainably raised, foods by visiting The Market at Ag Heritage Park. Since 2005, The Market has offered the community an opportunity to support local farmers by featuring around 25 vendors a week from May-August with goods such as produce, honey, canned goods, cheese, meats, popsicles, and more. The College of Agriculture also offers meat and egg sales through the Lambert-Powell Meats Laboratory, and fish sales through the Center for Aquatic Resources Management. For those who want a more hands-on experience with their food, Auburn Real Food Challenge offers 75 plot rentals in its 1.5 acre on-campus community garden, as well as gardening workshops for the public.

Prepared food venues that support healthy food choices include the Wellness Kitchen and the Plains-to-Plate dining locations. Opened in 2014, the Wellness Kitchen is a state of the art facility dedicated to providing high quality food, nutritional balance, and an outstanding dining experience. The facility is buffet style with multiple make-to-order action stations, a pizza oven, a hot line featuring fresh meats and vegetables, as well as carving stations, a huge salad bar and fresh fruit smoothies. Local, organic produce is preferred and sourced as much as possible, and complemented with high quality lean meats. Created by Auburn's Sports Dietician and Tiger Dining's Executive Chef, the menu is designed to promote maximum nutritional benefit per calorie consumed. It also contains Auburn's first Gluten/Allergen Free prep area. This allows for made without gluten and other allergen free items to be fresh prepped in an environment where cross contamination can be controlled. Like the Wellness Kitchen, the Plains-to-Plate venue focuses on providing high quality products prepared in a health-conscious manner. It sources a majority of its food from regional producers, helps bring the story of the farmers to the community, and provides a variety of vegetarian options for its guests. A collaborative effort between Tiger Dining and Auburn Real Food Challenge, Plains-to-Plate opened in January 2014 and served over 21,000 meals in its first semester of

operation.

Beyond direct care and nutritional foods, access to nature can provide numerous health benefits for people. The university is proud to support the operations of both the Donald E. Davis Arboretum and the Louise Kreher Forest Ecology Preserve. Both locations offer acres of walking trails for exploration in a natural environment, while providing ample spaces to stop and reflect.

While these key facilities aide community members in addressing multiple dimensions of their individual wellbeing, Auburn also offers a variety of programs designed to encourage and support positive health behaviors. These programs target both employees and students. Programs addressing employee wellbeing include Healthy Tigers, the Employee Assistance Program, and Tiger Fit, along with the range of benefit options including health, dental, and vision insurance.

The Healthy Tigers Wellness Program provides an opportunity for employees to "earn" an insurance premium discount by completing a voluntary health and wellness screening. This screening includes evaluation of several health risk factors including: blood pressure, cholesterol, glucose, height, weight, and body mass index. The results of the screenings are available immediately during the appointment, and the employee can receive personalized counseling from a pharmacist concerning the results. During calendar year 2014, 62% of eligible employees and their dependents participated in the Healthy Tigers Wellness Program. Healthy Tigers also serves as the central location for employees to connect to the variety of health and wellness resources on campus and in the community.

The Employee Assistance Program (EAP) is a confidential assessment, counseling, and referral service available to all benefit eligible employees and their dependents. EAP offers up to 3 free visits per year to help in areas such as: marital and family issues, alcohol and drug dependency, stress, financial/legal referrals, and emotional problems.

TigerFit offers its services not only to Auburn employees, but to students and the general public. It is a curriculum-based program designed to provide School of Kinesiology students with “hands-on” training in clinical health and fitness assessment. Participants receive a low-cost health and fitness assessment that includes a cardiovascular disease risk assessment, cholesterol and blood glucose screening, assessments of pulmonary function, body composition and bone mineral content, a graded exercise test with ECG for aerobic fitness, muscular strength and endurance, flexibility and a musculoskeletal evaluation. After which, clients receive their results and an individualized exercise prescription designed to help them start an exercise program based on their specific needs.

TigerFit is not the only wellness-focused program available to students. Students can find visit Health Promotion and Wellness Services (HPWS) as an entry point to learn about and access wellness programs designed specifically for students. HPWS provides evidence-based and theory-driven health promotion and prevention services to the student body. HPWS helps support the Tiger Education Screening Intervention program, which assists students in identifying their habits related to drugs and alcohol and supports them as they take the necessary steps to manage these issues in a way that improves their wellbeing. They also operate the student-led Be Well Hut, which provides peer-to-peer education to encourage healthy living by leading activities and discussing topics that are focused on making healthy choices as college students. Topics addressed by the Be Well Hut include relationships, heart health, eating disorders, alcohol, environmental health, nutrition, mental health, sexual assault awareness, and sleep. HPWS also conducts outreach presentations to students groups and classes on topics like alcohol and drugs, interpersonal violence, academic health, men’s health, women’s health, sexual health, and bystander intervention strategies, among others. Generally, HPWS serves as the “front door” to student health and wellness services. They provide a warm, welcoming environment for students and help direct them to the range of resources and programs both on and off campus that may help with their specific wellbeing needs.

One of the programs HPWS may direct students toward is the Student Counseling Services (SCS) Department. SCS focuses solely on Auburn students, and provides comprehensive preventative and clinical mental health services to enhance the psychological well-being of individual students through individual and/or group therapy services. They offer programming and services related to managing anxiety, depression, alcohol and drug dependencies, eating disorders, gender identity, and psychosomatics, among

others. SCS also operates the university's Safe Harbor program that advocates for and assists students who have experienced sexual violence, stalking, harassment, and other sexual misconduct situations. In addition, they have created the Zen Den as a way for students to proactively manage their stress through the use of biofeedback, robotic massage chairs, light therapy, and other stress management solutions.

Another program that works in concert with HPWS is Campus Recreation. Campus Recreation fosters engagement, leadership, learning and wellness through quality programs, state-of-the-art facilities, and a professional and highly qualified staff. Structured intramural and club sports, informal recreation, fitness and nutrition programs and services encourage the Auburn University community to develop lifelong patterns of healthy living. Campus Recreation oversees the 18 intramural and 23 club Sports, which offer students the opportunity to engage in competition, meet other students, and remain active. Campus Recreation also offers fitness assessments and personal training. Group classes in aquatics, cardio, cycling, fusion, mind/body, and muscular strength/endurance are offered for students and Recreation Center members. Campus Recreation provides lifeguard certification, and various fitness instructor trainings and certifications. Students can also access registered dieticians/nutritionists for assistance with grocery shopping, meal planning, weight management, food allergy issues, gastrointestinal issues, disease prevention, fertility issues, and eating disorder recovery. Finally, the newest Campus Recreation program, Auburn Outdoors, provides adventure-based recreational trips in nature that follow the Leave No Trace ethic. In its inaugural semester in 2014, the 22 student leaders for Auburn Outdoors held 9 programs for 72 of their peers. Auburn Outdoors also rents equipment for students to pursue outdoor recreation independently of sponsored trips.

Auburn's support for student and employee wellness does not end with the provision of facilities and programs. The university also participates in or sponsors a number of initiatives to raise awareness on a variety of health and wellbeing topics. For instance, the university promotes Walk at Work Week, Bike to Work Week, the American Heart Association's Wear Red Campaign, All in All Pink Breast Cancer Awareness activities, and Get Ticked Off – Lyme's Disease Awareness. In addition to these campaigns, Auburn is an active partner with the City of Auburn and Lee County in the Travel With Care Campaign held every September. Travel With Care is a transportation safety campaign that encourages courtesy between all modes of transportation and aims to educate citizens on the laws, rules, and safety related to these various modes. Furthermore, the Healthy Tigers program conducts regular lunch-and-learn sessions for employees that focus on a variety of health topics throughout the year, and has created the Follow the Paws Trails, which mark walking routes and distances on campus that are available to all community members. Auburn has also worked with the East Alabama Medical Center to host an annual Mammogram Day that provides these screenings to employees and dependents on the university insurance plan that are overdue for their screening. These tests are provided without co-pay or deductible charges and do not require the employee to take sick leave for the testing appointment. Finally, the university maintains a smoke free campus policy that bans the use of all smokable products on campus property by students, faculty, staff, consultants, contractors, and visitors.

Pillar 3: Effective Environmental and Sustainability Education

Auburn University provides effective environmental and sustainability education through a diversity of programs, both within and among the 9 colleges on campus. Many of these programs include education in Science, Technology, Engineering, and Math (STEM), as these fields readily apply to sustainability issues. Simply having the knowledge and skills related to sustainability and STEM fields, however, is not enough to create the needed changes for a sustainable world. Students must also understand the dynamic, rewarding, and necessary work that must take place within civic life to bring about the future we all desire. Auburn supports and ensures ample opportunities for students to exercise their civic understanding and skills. This combination of STEM education and civic engagement provides Auburn graduates with the knowledge, skills, and abilities sought by potential employers, and has contributed to alumni success in regions across the country.

Interdisciplinary Learning

While Auburn has many distinctive academic majors, minors, and programs, it has embraced interdisciplinary learning as a fundamental approach to education in the 21st century. One of the prime examples can be found in the establishment of the Academic Sustainability Programs (ASP). Created as an independent unit in 2011, ASP focuses on training students and faculty in the concepts and application of sustainability; expanding the incorporation of sustainability into the curriculum; fostering interdisciplinary sustainability research; and overseeing, advising, and administering the Minor in Sustainability Studies.

Created in 2008, the Minor in Sustainability Studies is housed in the Office of Undergraduate Studies in the Office of the Provost. As such, it is administered above the level of the 9 discipline-specific colleges on campus, and encompasses a truly interdisciplinary framework. Enrollment in the minor has increased every year since its inception, with a total of 91 students graduated with the minor as of 2014. Students from 7 of the 9 colleges on campus are currently enrolled; the ~60 currently-declared minor students are pursuing majors in the Colleges of Architecture, Engineering, Liberal Arts, Sciences and Mathematics, Agriculture, Human Sciences, and Business. Thus, the minor engages students from STEM majors (biology, chemistry, engineering), civic studies (hunger studies, economics, political science, sociology) and green career pathways (soil science, horticulture, landscape architecture, environmental design, etc.).

The minor includes an overview course, SUST 2000 Introduction to Sustainability, which is open to all students on campus (including non-minor students, who comprise about half of those who enroll in this course), and is taught every semester. In addition, an honors version is taught each Fall, HONR 1027 Sustainability and the Modern World, and is open to all students in the Honors College, who can use it to fulfill the Social Science Core.

Both introductory courses are co-taught by a professor from a science/technical field (past instructors have been from the departments of biology, fisheries, food science, soil science, ecology, agriculture, engineering) paired with a professor in a liberal arts/humanities field (past instructors came from community planning, philosophy, English, history, anthropology, education). The courses include sections on defining sustainability, systems thinking, ecosystem services, climate change, energy, transportation, built environment, sustainable communities, food systems, water systems, and materials consumption and waste. Of the ~800 students who have taken the introductory courses since 2008, a large majority (>90%) report on student evaluation forms that they have "substantially increased awareness and understanding of sustainability issues." The minor also requires 3 elective courses in the broad areas of Society and Markets (economic issues), Environment, and Social Justice, and students may choose from >30 possible electives encompassing these areas.

Finally, all minor students take SUST 5000 Senior Capstone in Sustainability, which also is a team-taught course, in which students design sustainability-related projects in interdisciplinary teams of 3-5 students from different majors. Many of these projects inform campus and community efforts toward sustainability, such as campus dining, transportation, building design, etc. One recent project on Rails With Trails for Auburn-Opelika was conceived by students in this class, and now is an on-the-ground project being pursued by the Auburn Bicycle Committee and the City of Auburn.

Alumni of the minor have gone on to employment with E.A.T. South in nearby Montgomery, Alabama; sustainable clothing firms in Portland, Oregon; a sustainability-centered restaurant in Kentucky; and sustainability-focused resorts in Florida, among other industries. Alumni have reported that having the Minor in Sustainability Studies on their resume has been one of the most important aspects of their academic training in the eyes of their potential employers, who value the broad interdisciplinary framework and problem-solving skills that alumni bring to the job.

While a large focus of ASP is oversight of the Minor in Sustainability Studies, it also provides training for current faculty members through its Fall Line Workshop. Since 2006, over 90 faculty representing 10 colleges & schools have expanded their understanding of sustainability and explored ways to integrate it into their teaching and research by participating in the Fall Line Workshop. Participants expand their understanding of sustainability and earn monetary awards when they revise course syllabi to include sustainability issues and concepts.

Beyond the Minor in Sustainability Studies and the Fall Line Workshop, Auburn also offers many undergraduate major and graduate degree programs related to environmental, social justice, civic engagement, and other sustainability-related topics. For example, the university offers Environmental Science and Biosystems Engineering for undergraduates, and graduate programs in Community Planning and Landscape Architecture. These programs incorporate systems thinking and sustainability issues as key components of their curricula. In total, over 300 courses in 42 departments on campus offer sustainability-related content, including education on a wide diversity of issues in our social, economic, and environmental systems.

There are also sustainability-themed academic offerings for entering students via the Learning Communities initiative. Incoming students can choose from either the Live Green, Save Green or the BeWell learning communities, among others, upon entering Auburn. These 2 interdisciplinary communities are limited to 25 students who are co-registered for 3 core curriculum courses during their first year at Auburn, as well as the theme-focused course. Together they learn about the focus topic, refine their academic skills in preparation for their college careers, and build relationships with students and faculty leaders.

Other unique offerings emphasizing sustainability can be found in the myriad of active learning projects, study abroad opportunities, and special events. Faculty members are increasingly providing sustainability-focused, active learning opportunities beyond the classroom, such as: community development projects, participation in competitions, and campus sustainability tours. Students may also choose to enroll in a number of study abroad courses, such as Regional Sustainable Technologies in Northern Spain; Climate Change and Environmental Management in Panama; Watershed Services in Costa Rica; or Local Culture and Eco-Tourism in Fiji, among others. Additional opportunities to explore concepts and connections related to sustainability can be found in the Office of Sustainability's monthly Campus Conversation series, which provides a chance to have dialogue with students, faculty, and staff on topics like climate change, food systems, civic engagement, and wellbeing. Furthermore, students also have access to regional and national conferences hosted on campus that address sustainability issues. For example, in 2014 the Biennial Conference on University Education in Natural Resources provided faculty and students a chance to explore teaching and learning innovations and issues facing educators in natural resource fields. In 2015, the Harbert College of Business, in conjunction with the Office of Sustainability and ASP, will host the Sustainability in Business Symposium. This event will provide students and faculty the opportunity to learn how businesses large and small are incorporating sustainability into their core mission and practices, and the types of research needed to advance this integration.

STEM Learning

Both undergraduate and graduate students also engage in faculty-supervised research projects that have sustainability content, and investigate everything from the efficiency of recycling systems, to the sociology of hunger and food deserts in Alabama, to the development of solar and biofuels energy systems. A sampling of these research projects is catalogued on the Auburn website, and includes projects supervised by over 70 professors in 26 departments. Virtually all of these projects involve student participants, often with graduate students, and even in some cases undergraduates, taking the lead on the project. This type of hands-on education and experience in developing and investigating science-based, systemic, sustainable solutions to societal problems is invaluable, and an important part of education at Auburn.

Beyond the individual research projects, students also have the opportunity to engage with a variety of institutes and centers on campus that explore and advance knowledge and skills related to sustainability. Given the inherent scientific foundation of sustainability and the systems thinking approach it requires for advancement, these entities provide Auburn students an opportunity to develop their capacity for applying STEM knowledge to develop solutions for a sustainable world.

Graduate students have the opportunity to work with researchers from around the world in the International Center for Climate and Global Change Research (ICCGCR). The ICCGCR is a global coalition of scientists, scholars, and researchers from diverse disciplines committed to constructive and

responsible participation to address society's increasing needs for understanding global climate change and potential solutions. It exists to serve as the focal point for developing, coordinating, and implementing interdisciplinary research and education related to climate and global change. In particular, this research is broad scale and examines ecosystem processes and the food-water-energy nexus in the context of climate change. The research being produced by the faculty and students of this center continue to receive international recognition and inform policymaking the world over.

Students may also engage with researchers in the Center for Forest Sustainability (CFS). The CFS engages students, researchers and stakeholders in interdisciplinary efforts to clarify the influence of urbanization across rural landscapes. The center seeks to enhance and facilitate linkages among research and education activities that focus on comparability between natural resources and urban expansion at regional, national, or international scales. CFS accomplishes this by fostering interdisciplinary efforts that integrate biological and socioeconomic issues. It functions as a primary interface between society and natural resources issues which directly influence our quality of life.

The aforementioned Alabama Water Resources Research Institute (AWRRI) also engages students in its work. It is a university-based interdisciplinary, problem-oriented research and technology center with support from the federal government that enables the program to address broad national needs and relevant industrial technology. The AWRRI coordinates research programs which are applicable to the solution of present and emerging water resources problems. In carrying out this mission, the Institute has developed a broadly based research, training, information transfer, and public service program involving personnel from many academic disciplines in the state's research universities.

As another learning opportunity, the Hunger Solutions Institute (HSI) encourages students to explore the multiple dimensions of hunger in both the United States and abroad. HSI is a collaborative effort between the College of Human Sciences & Alabama Agricultural Experiment Station at Auburn that facilitates the fight against hunger and nutrition at community, state, and global levels. As part of the College of Human Sciences, HSI is able to tap into a rich base of existing and emerging human sustainability and nutrition research, as well as benefit from proximity to its newly formed Center for Health Ecology Research. The Center for Health Ecology Research was created to leverage basic and applied research expertise within the College to create novel ways of investigating and supporting human health. By combining expertise representing the various disciplines within the college and across Auburn's campus, the goal is to both generate new knowledge and understandings of health and to identify means through which this knowledge can be applied at the individual and population levels to increase the human capacity for health.

Students in the College of Architecture, Design, and Construction may choose to participate in Rural Studio. Putting into practice the philosophy that everyone deserves access to good design, architecture students travel to rural West Alabama to gain a hands-on, educational experience, designing and building for an underserved population. Since 2001, the Studio has evolved toward more community-oriented projects across four counties. With a triple focus of community, housing, and food, the multi-year, multi-phase projects—such as the recently completed Newbern Town Hall—continue the Rural Studio ethos of recycling, reusing, remaking and delighting in using local materials, while maintaining the belief that affordable, good design is important to all. Twenty years and 150 projects later, Rural Studio continues to educate citizen architects through a mixture of hands-on learning and a healthy dose of social activism. Immersing themselves in West Alabama has afforded students the opportunity to apply their skills as designers, while also learning about the nature, history, culture, economy, architecture and community in this educational landscape.

In addition to these unique centers of research and hands-on applications, the Undergraduate Research Program hosts Research Week. During this week, students and faculty showcase their current research projects through poster and oral presentations. Many examples of sustainability-related projects are submitted each year for this on-campus conference, with a substantial number of them winning awards.

Beyond formal research, faculty from a range of disciplines are engaging their students in hands-on application of STEM knowledge and skills to help develop sustainable solutions. For instance, Auburn maintains Solar Decathlon and Solar Car teams, providing hundreds of students with the opportunity for

hands-on learning about non-fossil fuel energy development and applications. These teams have had great success, including a First Place and 3 additional Top 5 places nationally. In addition to enhancing student learning, these teams and their products have provided opportunities for outreach on science and math to K-12 students throughout the state and beyond.

While the Solar Decathlon and Solar Car teams provide extracurricular opportunities for the application of STEM skills, a number of hands-on opportunities exist within the formal curricula of the university. For example, Mechanical Engineering students in the Senior Design class spend two semesters working with Facilities Management to investigate building performance. To date, students have investigated 5 campus buildings and uncovered opportunities to increase occupant comfort and energy efficiency, while making the buildings easier and safer to maintain. Similarly, students in Building Sciences have worked with faculty to design and install a variety of pervious concrete applications on campus, as well as in the community. Another example of this type of academic engagement is offered to students in the Consumer and Design Services Department. Many of these students not only receive their LEED AP accreditation as a result of their classwork, but have also participated in the deconstruction of single-family homes in conjunction with the City of Montgomery, the Home Builders Institute, and Rescue Relics. In addition, students in the School of Forestry and Wildlife Sciences also have a chance to apply their classroom work through projects in the Environmental Interpretation class, where they have created signage for the Arboretum's Stormwater Tour and the Office of Sustainability's Green Residence Hall Room. These are but a few of the many examples that illustrate how faculty promote the application of classroom knowledge in STEM-related fields to real-world sustainable solutions.

Civic Knowledge and Skills

Developing informed and engaged citizens of the United States and the world serves as one of the primary educational goals of Auburn University. All undergraduate students must take at least 3 credit hours in courses designed to provide students with basic understanding of key systems that underlie successful societies. Courses that satisfy this requirement cover topics like economics, technology, politics, government, sustainability, and history. In addition, incoming students may choose to participate in the Community and Civic Engagement Learning Community, which operates like those previously mentioned but with a focus on building civic capacity.

For students who wish to further their understanding of civic life, they can minor in Community and Civic Engagement through the College of Liberal Arts (CLA). The faculty teaching in the program are personally committed to community and civic engagement and have designed classes that provide context, skills, tools, and methods for understanding and addressing public issues using processes of participatory democracy. This is an interdisciplinary minor that offers each student an opportunity to complete at least one service-learning course that places students in a community setting to apply the knowledge they are learning in the classroom and to gain knowledge from community partners in a mutually beneficial relationship.

The minor encourages active student participation and offers many opportunities for students to apply their knowledge. Examples include alternative spring break courses that take students to locations within or outside the state for intense study and work in the community; essay and You Tube contests that highlight views and accomplishments of students; fellowships for outstanding students; and service-learning opportunities that relate to classroom activities. Students must take at least one course from each of four categories: Context; Public Issues; Public Skills, Tools, & Methods; and Service Learning. In addition, all students enrolled in the minor must complete a capstone course, which requires students to draw upon knowledge obtained throughout coursework to perform relevant service projects.

The CLA also coordinates a number of other Community and Civic Engagement Initiatives that encourage active participation by students. For the past five years, the CLA has offered the course Practicum in Liberal Arts in the spring semester as an intensive, week-long living-learning experience in the East Tennessee coal mining communities of the Clearfork Valley. The Clearfork Community Institute hosts the experience, and students learn firsthand the challenges of extractive industries, as well as the ways in which

local people create sustainable livelihoods in the hinterland of Appalachia. The Institute is located in a renovated coal camp school and its geothermal system is one of the many ways in which it seeks to operate in a sustainable manner. As students interact and work alongside generations of family who call the area home, they begin to think more critically and holistically regarding the relationship between rural and urban communities.

In partnership with the Dave Mathews Center for Civic Life, the Living Democracy project develops civic skills by bringing together students and citizens to collaborate on issues of concern to Alabama communities. The Living Democracy project provides a unique living-learning experience in active citizenship throughout the school year, but especially in the summer, when participants live in an Alabama community for ten weeks. Students work on projects they identify and organize with local civic leaders. The backgrounds, interests, majors, and skills of the students are as diverse as the communities where they reside. The journey is an adventure in developing relationships, building on what has grown, understanding a community's hopes and dreams, and discovering what makes democracy work as it should. Now entering its fourth year, the Living Democracy project has provided 22 students from various majors with enriching, hands-on experiences in the Alabama communities of Elba, Linden, Selma, and Collinsville.

From local to global, CLA also provides the Global Citizenship Project, in recognition of the growing importance of global perspectives and engagement. The Global Citizenship Project strives to foster global citizenship to promote universal justice, peace, and culture appreciation through cross-cultural collaboration and personal engagement. Students are challenged to make the world a better place through educational curricula and activities, leadership preparation, and hands-on experiences. The project is already working closely with University Learning Communities by hosting a Living in the Global Community Learning Community open to all interested freshmen. The project also offers a book club open to all CLA students interested in global issues; the International Voices Series that features lectures, film screenings, shows, and exhibits featuring global issues and cultures; faculty and student retreats focused on experiencing other cultures; faculty workshops to establish models for globally-oriented curricula; research symposia; career abroad fairs for students; and global experiential learning opportunities for undergraduate and graduate students including Hearing Screening in Guatemala, American War Memorials Overseas, and a Community and Civic Engagement Internship in London, among others.

In a less formal manner, the CLA organizes "No Impact Week" each spring, which is affiliated with the international No Impact Project. Activities challenge students to live one week in a more sustainable way and connect with others who share the same values and habits of living with as little ecological impact as possible. Nationally-known speakers are invited to campus to discuss their sustainability work in classes and open forums, and students are encouraged to connect with campus, local, national, and international organizations and networks that promote responsible, sustainable living.

Students may also engage in civic work through student-led initiatives like IMPACT, Alternative Student Breaks, and the Big Event. IMPACT coordinates students seeking opportunities for service with local groups that address community needs. Student volunteers have assisted a range of organizations, including: The Boys & Girls Club, The BigHouse Foundation, The Louise Kreher Forest Ecology Preserve, Storybook Farm, Lee County Humane Society, Auburn City Library, and the East Alabama Food Bank, among many others. Alternative Student Breaks provide students with an opportunity to travel to domestic and international communities to work on a variety of issues like youth development, affordable housing, animal welfare, disaster relief, community development, and ecology preservation. Each trip is led by a student site leader, who coordinates, supervises, and guides their peers on these volunteer trips designed to make a difference in the local community. In addition to IMPACT and Alternative Breaks, Auburn Student Government Association's BIG Event encourages volunteerism from the Auburn family to give back to the community for providing a thriving environment in which to live and learn. Each year, 3500+ participants complete projects in over 200 schools, homes, and churches within the Auburn-Opelika area.

These three efforts simply scratch the surface of the myriad of ways Auburn students and student-athletes give back to the community, as thousands of students complete service projects, visits, and programs in local schools, community centers, and churches each year. Perhaps the final lines of the

Auburn Creed best sum up the approach the university and its students take toward civic engagement:

> "…I believe in the human touch, which cultivates sympathy with my fellow men and mutual helpfulness and brings happiness for all.
> I believe in my Country, because it is a land of freedom and because it is my own home, and that I can best serve that country by ''doing justly, loving mercy, and walking humbly with my God.'
> And because Auburn men and women believe in these things, I believe in Auburn and love it."