

If you are interested in pursuing any of the projects below, please send an e-mail expressing your interest to sustainability@duke.edu.

**Sustainability Project List
2014 - 2015 Academic Year**

Energy & Water (Facilities Management Department)

Evaluation of potential impact of behavior change vs. operational changes for utility conservation

- Utilize best sample residence halls (Bell Tower, K-4?) to conduct educational campaign with control group to evaluate impact
- Review existing research and other institutions evaluation of potential impact of behavior change campaigns

Irrigation

- Review existing system to further develop current baseline and metrics
- Review current Duke standards for irrigation in new construction
- Develop educational materials/efforts to illustrate impact of irrigation and Duke's initiatives

Communication/behavior change

- Develop broad educational/behavior change initiative focused on energy and water conservation
- Develop "Shut the Sash" fume hood behavioral campaign in labs at Duke

Buildings

- Develop profiles for recently certified LEED buildings to be highlighted on sustainability website (project overseen by Sustainable Duke)

Waste & Recycling (Duke Sanitation & Recycling Services)

Education and outreach programming

- Update existing education programs and materials
- Help develop new programs
- Help create a campus wide communication plan
- Work on Zero Waste Wallace Wade Program
- Promote transition to single-stream recycling
- Promote post-consumer composting

Research

- How to properly dispose of non-traditional recyclables
- What alternatives are there to the use of non-recyclable materials
- Understanding the environmental impacts of specific materials
- Develop FAQ sheet for material disposal
- Research most effective communications practices

Duke Recycles warehouse and operations

- Help maintain inventory
- Weigh material after football games
- General clean up and organization of sorting area
- Implement transition to single-stream recycling

<ul style="list-style-type: none"> • Implement post-consumer composting
<p>Waste audits of specific buildings or locations</p> <ul style="list-style-type: none"> • Build upon previous audits to understand waste stream at Duke • Analyze waste audit data • Report findings
<p>Plan and operate Duke Free Store events</p> <ul style="list-style-type: none"> • Read more about the Free Store: http://sustainability.duke.edu/campus_initiatives/waste/freestore.html • Schedule, promote and manage events • Manage inventory and promote donations
<p>Special event services</p> <ul style="list-style-type: none"> • Help to set up events • Work/volunteer at waste stations • Help develop/promote green event services
<p>Building and bin audits</p> <ul style="list-style-type: none"> • Track the number and types of bins available in Duke Buildings • Evaluate location and number of bins for efficiency
<p>Volunteer projects</p> <ul style="list-style-type: none"> • Recycle for the Children • Organizing a group to help at the recycling warehouse
<p>Any additional topic ideas are welcome</p>
<p>Materials Management (Procurement Services)</p>
<p>Surplus</p> <ul style="list-style-type: none"> • Obtaining average weights for surplus items • Assisting with the surplus donation site
<p>Community</p> <ul style="list-style-type: none"> • Attend City of Durham Styrofoam ban meetings and update team through Durham Environmental Affairs Board
<p>Carbon Offsets (Duke Carbon Offsets Initiative)</p>
<p>Write a case study of Duke University's Loyd Ray Farms Swine Waste to Energy Project and submit to an Engineering journal</p>
<p>Develop criteria for prioritizing carbon offset types for future carbon offset portfolio development</p>
<p>Complete an employee energy efficiency carbon offsets pilot program and an internal energy efficiency offsets protocol in partnership with the Clinton Climate Initiative</p>
<p>Develop an urban forestry carbon offsets pilot project and internal carbon offsets protocol in partnership with the City and County of Durham</p>
<p>Lead a Bass Connections project to investigate opportunities to decrease Duke University's baseline through distributed solar generation</p>
<p>Lead a Nicholas School Group MP to compare carbon offsets with Renewable Energy Certificates and Energy Efficiency</p>
<p>Investigate the carbon offset potential and carbon offset price of southeastern peatland hydrology restoration</p>
<p>Transportation (Parking & Transportation Services)</p>

Campus Outreach

- Promote the regional student SmartMoves Campus Challenge to encourage alternative commuting at Duke, with a competitive drive to win regionally against UNC, NCSU, etc.
- Identify on-campus events and other opportunities to promote the PTS Housing Guide and regional “SmartMoves” Apartment Finder app to off-campus students to encourage them to live along bus routes serving Duke (e.g. Campus Housing Fair, bulletin boards, Facebook, etc.)
- Help to promote campus survey tools and results to student organizations and representatives, in order to collect feedback on travel modes that have more or less potential to reach students
- Assist in the promotion of special campaigns and initiatives, such as the Unpark Competition, Spring Break carpool contest, etc.
- Coordinate with PTS and Sustainable Duke staff to organize special events such as “Try Transit Week,” promotions for the Bull City Connector, bicyclist outreach for the “Lighten Up Durham” campaign, etc.

Campus Transportation Inventories

- Work with PTS staff to measure walk times to/from popular campus destinations for the creation of a campus walk times map
- Work with PTS staff to inventory campus bus stop amenities (i.e. benches, trash cans, shelters, etc.) and develop a prioritization matrix for stop improvements
- Work with PTS staff to collect bicycling shortcut data for a campus bike map

Strategic Sustainability Plan Initiatives

- Create a detailed plan for lowering air travel miles at Duke that builds on previous research and the information in Duke’s Climate Action Plan
- Research and create plans for regional park and ride locations and assist with execution

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Food & Farming (Duke Campus Farm)

Outreach and Communications

- Traceability – help us document a vegetable from seed to mouth by photo-documenting one vegetable from farm to dining hall
- Help us look great – we’re always looking for high-resolution/professional quality photos of the farm and farm events
- What happens to the compost in the West Campus events pavilion? Make a graphic or map.
- Design a table tent campaign to promote some/all of the following: workdays/workshops/educational events at the farm, impacts of local eating, performance-enhancing properties of vegetables

Enhancing Biodiversity

- Build bat, raptor and birdhouses to increase farm biodiversity, possibly as part of broader agroecology farm plan

- What are the local/native pollinator and beneficial insect populations in the Piedmont? What plants will attract and keep them on our farm?

Research

- Who lived and worked on our land? Look at city, county and Duke records, interviews and/or oral histories for the history of the Duke Campus Farm site.
- Estimation of the farm's carbon footprint – what is the impact of our driving, inputs, cooling systems, etc.?

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