Interim Report  
Waste Reduction and Recycling  
Intern: Brendon Baatz  
Mentors: Kathy McCarnes & Steve Akers

This brief report will outline the progress made in the area of recycling and waste reduction on the campus of Indiana University by Brendon Baatz during the 2009-2010 IU Office of Sustainability academic year internship. In the first section, the significant projects, their results, and their progress will be reviewed. The second section will follow with recommendations on how to move forward with the results from the first set of projects. These recommendations will outline my goals for how I intend on moving forward this summer. While not all of these recommendations will be possible to complete in the summer timeframe, many of them will be initially explored. Finally, this report will contain a timeline for how I intend to work through my summer goals.

Progress and Updates on Projects for Academic Year 2009-2010

Project One: NoWaste Website

When I first began work with the office, I was given the task of creating a one-page guide to what items could be recycled in each of the three main recycling systems (IMU, RPS and Building Services). The guide was to be a comprehensive guide for students, faculty and staff to use when questions arose concerning recycling locations on campus. When I began gathering information for the guide, I realized that IUB was the only institution in the Big Ten lacking a comprehensive recycling website. After consultation with the Office and my mentors, I set out to gather the relevant information for the IU NoWaste website.

The beta version of the Indiana University Bloomington (IUB) NoWaste website was completed in late March. Much of the current focus of the website content is centered on recycling practices, policies and facts. This is primarily due to the fact that the initial scope of my internship was recycling on campus and how to raise awareness of IU’s recycling practices. The website will evolve to include other information on reusing and reducing to meet the objective of promoting waste reduction on campus with recycling as a last option. However, I still feel the website is a valuable medium of communication to relay to the faculty, staff and students of IUB information on IU’s recycling program and system.

The Website currently contains the following information:

- Comprehensive guide for recyclable items and where they can be recycled on campus
- Waste reduction and recycling events happening around campus
  - Hoosier2Hoosier
- RecycleMania!
- EcoCell Collection
- More Art, Less Trash
- E-Waste Collection

- A photo guide of the various recycling bins on campus
- Frequently asked questions and answers regarding recycling practices and the campus recycling program
- Contact information for further questions regarding recycling on campus

**Project Two: Unification of the Three Separate Recycling Systems on Campus**

Currently, IU’s recycling system is operated as three separate and autonomous systems. The three systems are operated by the Indiana Memorial Union (IMU), Building Services, and Residential Programs & Services (RPS). Each system is coordinated differently, recycles slightly different materials, uses different recycling receptacles and uses alternate methods to transport materials to the recycling center.

Following the recommendations of a previous intern and the guidance of my mentors, I set out to create a proposal to integrate these three systems on campus. Both the IMU and RPS use Hoosier Disposal to pickup their recycling. Building Services has traditional garbage trucks that they use to pick up their own recycling and waste. They take this waste to Hoosier Disposal for proper disposal. Building Services handles the waste needs for over 150 buildings on campus. The initial goal of the project was to have Building Services pick up the recycling at IMU and RPS and transport it to Hoosier for disposal.

This project began with collecting the relevant data from the three separate systems. The most important of this data was the number of locations for pickup, the volume of recyclable material at the pick up sites, the frequency of pickup and the cost of pickup. The cost of pickup is the fees paid to Hoosier Disposal by IMU and RPS for pickup and transport of recyclable material. Once this data was collected, a map was created of the pickup sites on campus containing the volume and frequency of pickup. Finally, this map was presented to Building Services for review and consideration.

**Project Three: Examination of Recycling Practices in the Big Ten**

In an effort to learn more about what recycling practices have been successful in the Big Ten, I began researching what other institutions had done and how this may have impacted recycling rates. This research has revealed a number of different possible leads for IU to examine including a single stream recycling system. Other Big Ten universities have also taken advantage of all communication techniques possible including social networking sites such as Facebook and Twitter. Finally, it seems that the Big Ten universities with the highest recycling rates shared a number of commonalities. These included: a visually consistent system throughout campus, a feeling of student ownership of the campus had been created
and a significant effort to have recycling at all campus events and locations. The data and research for this report has been completed and the final report will be published soon.

Projects Moving Forward into Summer of 2010

Completion and New Content for IUB NoWaste Website

Currently, the IU NoWaste website is under development and will hopefully be available online in early June. Following evaluation, review and changes to the beta version of the website, new content will be added. This new content will be added over summer and some of it will include:

- A possible purchasing guide for reusable products on campus (ie new metal water bottles for RPS)
- Other tips for waste reduction
- A guide to what happens to the recyclable material on the IUB campus
- Other new content as well
  - Offering a recycling/waste reduction program for events being held on campus.
    - This would include offering recycling bins for pickup and dropoff for events on campus. It could also include offering reusable cups, plates and other dining materials for events to reduce disposable dining waste from such events.

Completion of the Unification Plan

Currently, Building Services is still reviewing the collection maps to determine what additional costs would be incurred if they were to take over the collection of all recyclable materials on campus.

A final report of the possibility of the unification scheme will include:

- The details of the three separate systems on campus.
- Possible benefits of the unification scheme.
- The costs incurred by RPS and IMU for collection of recyclable material.
- The costs that would be incurred by Building Services if they were to take over all collection.
- A cost benefit analysis on the unification scheme.
- What possible (if any) economic efficiencies will be gained from a unification scheme
- Possible barriers and other considerations effecting the unification of the three systems.
**Outdoor Recycling Bins**

This project would be focused on securing permanent outdoor recycling bins for the IUB campus. Given that considerable effort has already been expended on this goal, the scope of this work will be working with Steve Akers and Kathy McCarnes on ways to move this forward. This could include research on possible funding sources and possible outdoor bins. The outdoor recycling strategy will also include placement of bins in IU parking garages.

**E-Waste**

Currently, IU holds an annual E-waste collection event in April with the support of Apple. While this is a great event, it is only held for three days a year and the support is not guaranteed for the following year. The scope of this project would be to look for alternative ways to recycle electronic waste on the campus of IU throughout the year and to then get information out as to where people can recycle electronic waste.

**Demolition and Construction Waste**

Little has been done to examine what happens with the demolition waste on IU’s campus. Newer buildings that are LEED certified are required to have a certain portion of waste recycled and contractors will recycle some of the waste out of pure economic interest. This project will involve an examination of what happens with the construction waste on campus.

**Examination of Single Stream Recycling System for IUB**

A number of other cities and universities are switching to single stream recycling systems. The choice of using a dual stream or single stream system is dependent on a number of different factors and some areas are better suited for one or the other. This project will examine the benefits of using a single stream system on the campus of IUB.

**Standardization of Indoor and Outdoor Recycling Bins on Campus**

Currently, the recycling bins on IU’s campus vary in color, size, shape and overall appearance. In order to increase recycling rates on campus, it would be advantageous to standardize the bins in buildings across campus. This is a massive undertaking and will take quite some time to complete. However, it will give the system a uniform appearance for easier recognition of recycling receptacles. For this project, it will be best to work with the IU Purchasing Department and the University Architects Office.
Calendar of Dates for Summer 2010 IUOS Waste Reduction Internship

May 1 – Post beta version of the IUB NoWaste website for review

May 21 – Post final version of the Recycling in the Big Ten Report

June 1 – Gather list of key contacts for the demolition and construction waste research project

June 1 – Begin research into dual v. single stream recycling

June 15 – Have sent out emails and arranged interviews for demolition and construction waste research project, begin writing outline

June 31 – Post final version of the Recycling System Unification Plan

July 15 – Have list of five to ten sources for grant money for outdoor recycling bin program

July 15 – Have outline complete and all questioned answered regarding demolition and construction waste procedures on campus

July 21 – Finish brief on single v. dual recycling scheme

July 31 – Finish final additions for the IUB NoWaste website for review

August 10 – Complete research and write-up of construction and demolition waste project

August 15 – Post final additions to the IUB NoWaste Website

August 15 – Have submitted applications for grants for outdoor recycling bins and other possible recycling funding for IUB

Other projects to work on in the slow times...
- outdoor recycling meetings
- indoor recycling bin standardization plan with purchasing
- secondary e-waste disposal option (other than spring event)