



## **Appalachian State University**

**Boone, North Carolina**  
**Transportation**

### **SCHOOL**

Appalachian State University is a public, 4-year school with approximately 17,000 students located in Boone, North Carolina.

### **ABSTRACT**

The last few years have shown significant growth in Appalachian State University's campus community population. The increase in population has posed challenges for campus parking. Campus leaders have worked to continue to provide alternative transportation options without using unnecessary campus resources and funds. By implementing an alternative transportation system, Appalachian seeks to reduce greenhouse gas emissions, fulfill requirement in the 2010 Climate Action Plan\*, create a healthier environment, and teach our campus community how to move about the planet more sustainably. This case study identifies ways Appalachian has successfully reduced the number of vehicles on our campus by offering various modes of alternative transportation such as car sharing, ride sharing, increased bicycle accessibility and an improved public bus system. Appalachian was able to accomplish these all while keeping economic viability in mind.

\*[http://sustain.appstate.edu/sites/default/files/toward\\_climate\\_neutrality.pdf](http://sustain.appstate.edu/sites/default/files/toward_climate_neutrality.pdf)

### **GOALS AND OUTCOMES**

#### **Goals**

The overarching goal of our campus is to become carbon neutral by 2050. In an effort to reduce emissions from transportation, several initiatives have been identified. The broad goal is to increase the number of alternative transportation options offered. Strategies within the next 5 years include incentivizing walking and bicycling, implement car and ride sharing alternatives, increase distance learning capability, provide alternative fueled vehicles for fleet use, and increase public transportation options.



## **Accomplishments and Outcomes**

Appalachian has successfully sought relationships with key stakeholders to further our aggressive alternative transportation options. Ride and car sharing initiatives, non-motorized methods and mass transit options are programs that have been identified by mutual stakeholders. Ride and car sharing will be available to the campus community fall 2011. Appalachian's Physical Plant has made commitments to purchase fuel efficient and low emission vehicles for future purchases. Once these programs are in place, we will capture emissions data as part of our annual greenhouse gas inventory. The public mass transit system, AppalCART, has increased their bus routes and recently just added two new biodiesel buses.

Reducing the number of vehicles on campus benefits the university and community in so many ways. The air quality is improved both on campus and in the local community. The campus community will experience health benefits from increased personal mobility. Appalachian's greenhouse gas emissions from transportation are reduced, thus working to reach our overarching goal of climate neutrality by 2050.

## **Challenges and Responses**

The economic environment creates significant challenges to introducing new programs. The cost savings for car sharing and ride sharing are significant. These programs will alleviate the need for additional parking structures to accommodate for the increase in campus population. A substantial obstacle to successful usage of these options is current behavioral habits. A possible solution to overcome these challenges is to incentivize the new options and create ease of use for them.

## **Campus Climate Action: Your School's Carbon Footprint**

Appalachian State University conducts an annual greenhouse gas inventory to monitor the progress towards the goal of carbon neutrality. Emissions from transportation were approximately 8% of our 2009 inventory. With the implementation of these initiatives we anticipate a reduction in emissions. With the reduction of cars on campus, not only is the campus air quality but the air quality in the surrounding area improved.

## **Commentary and Reflection**

The positive impacts promoting alternative transportation and bringing car sharing and ride sharing programs to campus are numerous. Promoting these programs and their success will lessen our carbon footprint; save the university, students, faculty, and staff money in the long run; and put Appalachian one step closer to reaching the goal of carbon neutrality by 2050. The time dedicated to properly implement, market and promote these programs will take approximately 1 year, thus delaying immediate environmental benefits.

## **ENGAGEMENT AND SUPPORT**

### **Leaders and Supporters**

Appalachian created a Sustainability Council comprised of administration, faculty, staff, and students from a wide array of academic departments and university offices. It represents the most diverse committee on campus. Of the 12 Sustainability Council subcommittees established around various areas of sustainability, the transportation subcommittee has been a supporter in implementing car sharing

and ride sharing on campus and other options. This committee evaluated the campus' current policies and offerings as it pertained to sustainable transportation and made recommendations to the entire Council. In the spring of 2011, the Office of Sustainability hired a graduate assistant, Danielle Adams, to look into those recommendations (specifically car sharing and ride sharing). Ged Moody, sustainability director, Crystal Simmons, sustainability specialist, Barry Sauls, director of parking and traffic, Chris Turner, AppalCART director, and members of the Sustainability Council Transportation subcommittee are key program decision-makers.

### **Funding and Resources**

Upfront costs associated with these programs are funded by respective units/departments on campus. By and large financing of these various programs occurs through Parking and Traffic. There are some instances where stakeholders for these programs are outside the university, such as bicycling. Users of these programs provide further financial sustainability.

The Office of Sustainability and Parking and Traffic assist these endeavors through providing financial and staff support. We did not seek support from a NWF Campus Ecology Fellowship.

### **Education and Community Outreach**

These initiatives will be listed on the campus sustainability website, [www.sustain.appstate.edu](http://www.sustain.appstate.edu), outlining all alternative transportation option. This information will also be listed on Parking and Traffic's website, [www.parking.appstate.edu](http://www.parking.appstate.edu). The Office of Sustainability will be targeting certain university groups and special days as marketing tools to get the community involved in the programs (i.e. Greek life, academic departments, open houses, football games, and other marketable groups and event days). The Town of Boone shows full support of Appalachian's sustainable transportation offerings. Not only will the programs reduce traffic and car usage on campus, but it will have the same effect through town.

### **CONTACT INFORMATION**

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## **MORE ABOUT YOUR SCHOOL**

### **Campus Sustainability History**

Sustainability is more than an initiative at Appalachian State University- it is a way of life that is becoming increasingly ingrained into the campus community's individual and institutional decision-making. Appalachian has a rich history of commitment to sustainable practices. Besides having the nation's oldest, recognized Sustainable Development and Appropriate Technology academic programs, Appalachian rethinks common practices and implements state-of-the-art technologies related to energy production and energy conservation on campus. The Office of Sustainability was created in 2009. Since its inception, the university has made tremendous strides toward the overarching goal of carbon neutrality. A 50-plus member Sustainability Council was developed to help guide university operations into more sustainable practices. Appalachian was named as one of Sierra Club's "Coolest Schools" in 2011 by scoring 12th across the nation. Appalachian is participating in the Sustainability Tracking, Assessment and Rating System (STARS®), which was developed as a standards-based rating system for sustainability in higher education. For more information visit, [www.sustain.appstate.edu](http://www.sustain.appstate.edu)

Image credit: Appalachian State University