

# UAA ISN'T PARKED IN OLD WAYS

**19** Street lights converted to LEDs

**3,724** Watts saved every hour

**5.24** Pounds of carbon dioxide emissions reduced every hour

**65%** Energy savings per fixture



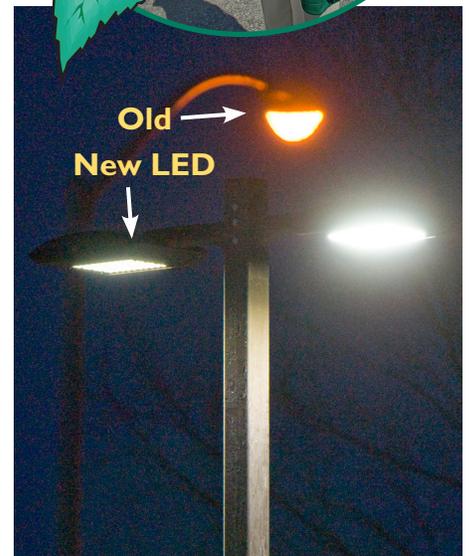
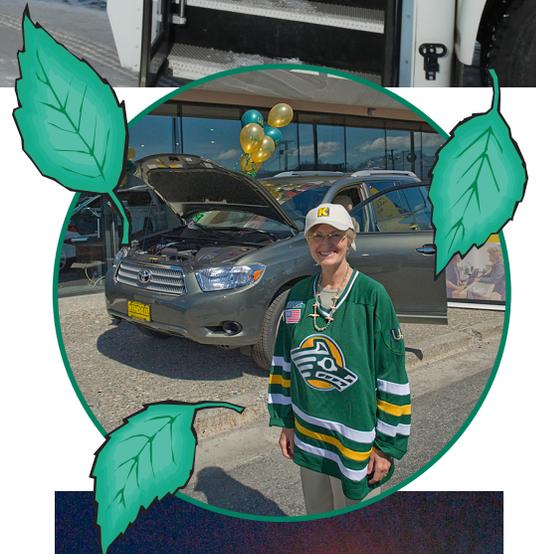
## UAA Parking and Transportation Goes Green

### LED Street Lamps

Street lamps traditionally are high wattage fixtures; however, UAA is currently testing LED street lamps in a number of locations, but notably at the University Lake Building parking lot and in the Central Parking Garage. Previously, UAA used 300-watt high pressure sodium (HPS) or 175 watt metal halide fixtures in these locations. The test LEDs use only 104 watts equaling an energy savings of 65%! Every hour that these 19 lamps are in full use, UAA is saving 3,724 watts and 37¢, while reducing carbon dioxide emissions by 5.24 pounds. LED lamps are dimmable and work better in the cold; all of this creates much longer lasting lights than the HPS lamps, requiring much less maintenance, too. Nearly all lamps on campus are on photocell sensors and timers to reduce electricity use and cost.

### Sweepers & Snow

Conventional winter road maintenance to remove snow and reduce icy road conditions can harm the environment and roads, but UAA is taking measures to reduce these impacts. UAA frequently uses potassium acetate instead of calcium chloride to de-ice roads. Potassium acetate is less aggressive on soils and less corrosive. In 2008, UAA also purchased a new PM-10 certified street sweeper. PM-10 certification guarantees lower air pollution from particulate matter, keeping dirt out of the city's air, which ultimately means the particulates don't end up in our water either. At the end of winter, sand is collected and processed through a sifter and strainer to be reused, eventually making its way back to our roads.



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## Dealing with the Cold

UAA's shuttle buses and fleet vehicles are all equipped with timed block heaters. These devices warm vehicles a couple hours before they are used each day, which reduces idling time and air emissions. Timers reduce energy consumption, as heaters are not left on all night. UAA will stripe all parking lots this summer with water-borne paint lowering the VOC even further because no solvent will be used. The paint is being tested between Rasmuson Hall and Wells Fargo Sports Center in the motorcycle parking area.

## Reusing & Recycling Parking Materials

UAA reuses asphalt and concrete on campus. When there's an unusable surplus, UAA sends these materials to a local contractor for re-use as aggregate. One example of re-use on campus is the University Lake Building parking lot. Infrared heating technology was used in October 2008 to heat existing asphalt and re-apply it, fixing cracks and damaged areas. UAA also recycles scrap metal such as bent traffic signs.

## Spills

UAA has a detailed spill control and prevention-counter-measures plan, which is constantly revised as new issues arise. One example of the plan at work is the particulate, fuel and oil separator catch basins, that are used on storm water drains from the parking lots.

## Alternative Fuels

UAA's recycling truck runs on veggie oil fuel, and Facilities staff worked with the Alaska Truck Center to demonstrate a hybrid 44-passenger bus on campus. The bus runs on electricity and diesel, but could be converted to biodiesel. The electric/diesel hybrid test took place from November 1 to March 1, 2009. UAA has also purchased a low-sulfur diesel bus, which has the potential for biodiesel conversion as well. Whether or not UAA converts diesel trucks to biodiesel, it is researching the feasibility of building a biodiesel plant to start recycling used oil. UAA's fleet also consists of three gasoline/electric hybrid vehicles. UAA's Chancellor and Facilities and Campus Services all use hybrid vehicles.



## Individual Responsibility

Over 30% of UAA's carbon footprint is from its student commuter transportation. Students can make a big difference by switching to alternatives with by riding the bus or your bike more often, or switching to biodiesel or hybrid technology vehicles will make a big difference! If you own a vehicle, use your engine block heater and purchase a timer to reduce idling and energy consumption.

*"UAA strives to make facilities on our several campuses models for northern universities, giving particular emphasis to support for environmental sustainability."*

– UAA Strategic Plan 2017 –

## Key Players

UAA Facilities  
UAA General Support Services  
UAA Parking Services

## Key Environmental Factors

Energy  
Transportation  
Waste Reduction  
Water Quality and Conservation  
Air Quality and Carbon Emissions

## UAA Sustainability

UAA is committed to teaching sustainable practices through classrooms, research and community service. UAA leads by example, advancing sustainability in daily operations and long-term planning, and coordinating efforts with the communities we serve. To learn more about UAA's efforts, visit [www.uaa.alaska.edu/sustainability](http://www.uaa.alaska.edu/sustainability).

## Green Star

Green Star's Internship Program assisted UAA in developing this series of case studies. Green Star is a local non-profit dedicated to assisting, certifying and recognizing businesses committed to resource efficiency and environmental leadership. To learn more about Green Star, visit [www.greenstarinc.org](http://www.greenstarinc.org).



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