
Parking & Transportation Services
Sustainability & Environmental Initiatives
May 2008



As a long-time leader in the areas of waste abatement, pollution reduction, energy management and sustainable architecture, the University of Minnesota has demonstrated a strong commitment to environmental responsibility.

Embracing the policies of the larger university, Parking and Transportation Services has consistently shown foresight and innovation in developing programs that alleviate traffic congestion, reduce emissions from automobiles and buses, and reduce fuel consumption. Since the 1980's, PTS has consistently promoted the use of transportation other than the individually driven car – walking, biking, carpooling, busing. And people are taking notice. By demonstrating the success of our programs, we have set an example for academic institutions and municipal entities throughout the state.

The University of Minnesota Twin Cities campus is the third largest traffic generator in Minnesota. We believe that it is the duty of the University, as Minnesota's largest academic institution, to take a leadership role in encouraging environmental responsibility on a statewide level. We are serious about our commitment to advancing the public good and improving the human condition.

Overall Excellence in Programming Recognition

- 2007 Minnesota Association of Government Communicators Award of Excellence – for the response to the 35W bridge collapse.
- 2007 Commuter Choice Award for Outstanding Promotion for a Large Organization – for the response to the 35W bridge collapse.
- 2007, 2006, and 2005 Fleet Equipment Magazine 100 Best Fleets in North America Award (one of just two universities in the country to receive the designation)
- 2004-2007 U.S. Environmental Protection Agency and Department of Transportation designation of "Best Workplaces for Commuters" award.
- 2001 National Wildlife Federation Achievement – in recognition of one of the leading transportation programs in the country.
- 1997 Metro Commuter Services Infinity Award – in recognition of alternative transportation programs.
- 1996 Minnesota Rideshare Ride Choice Award – for the transit system redesign and the Commuter Transportation Fair.
- 1993 Association for Commuter Transportation Merit Award – in recognition of travel demand management efforts.
- 1993 & 1990 Ride Choice Award from Minnesota Rideshare – in recognition of a commitment to maintaining impressive and viable alternative transportation programs.

TRANSPORTATION SYSTEM DESIGNS

Sustainability Measures

- Will incorporate an Intelligent Vehicle System as an integral part of the Transportation Operations Plan beginning in 2009. The system is designed to keep traffic moving and reduce engine idling due to congestion and backups. The components include:
 - Adaptive Signal Control – a real time, on-line operation that is specifically designed to deal with conditions of critical traffic flow management, heavy demands and unpredictable special event traffic surges. Traffic signal system detectors monitor the flow of traffic at each intersection and automatically compute optimum signal timing to keep traffic moving.
 - Video Monitoring – to quickly detect, verify and respond to campus bottleneck locations.
 - Automated Parking Space Counting Systems – will allow for up-to-the-minute counts of available parking space.
 - Real-time Travel Information Distribution – transmit gathered information to travelers.
 - Variable Message Signs – located along access routes to direct drivers around congested routes and to parking locations with open space.
 - PTS Web site – will convey real-time traveler information including traffic conditions, available space by facility, list of current events on campus and campus shuttle arrival times.

TRANSIT

Cornerstone Program – Transitway

In partnership with the Minnesota State Fair, obtained federal funding to build a transitway connecting Minneapolis and St. Paul campuses.

Award: 1994 Institutional and Municipal Parking Congress Merit Award for Excellence in Parking Design and Program Innovation

Cornerstone Program – U-Pass Program

Developed a program using federal CMAQ funds that offers University students an unlimited ride buspass that is good on every bus and rail route in the Twin Cities. The program has been a tremendous success, growing 148% in seven years with sales topping out at 20,439 for Fall 2007.

- Employed Go-To technology beginning Fall 2007. This technology will decrease boarding time, thereby lessening pollution by shortening bus idle time.

Awards:

- 2002 Minnesota Governor's Award of Excellence in Waste and Pollution
- 2000 Metro Commuter Services Commuter Choice Award

Cornerstone Program – Campus Shuttles

- Cut down the number of buses in the Campus system to provide a consistent service.
 - Conserved 53.76 gallons of fuel per day.
- Upgraded the bus fleet to fuel efficient buses.
- Improved bus stops and service on the Campus routes.
 - Instituted 'Express Service' buses which stop at every other bus stop.
 - Eliminated 3 stops on the Campus Connector bus route
 - Fewer stops on Washington Avenue created less pollution by increasing traffic flow.
- New and improved buses planned to serve the University of Minnesota by Fall 2008.
 - Purchase hybrid buses with federal funding.
 - 12 three-door, forty foot buses which allow for faster boarding and less idle time which cuts pollution.
 - 4 four-door artic buses that allow faster boarding which nearly eliminates idling time and leads to cleaner air.

Additional Sustainability Measures

- Implemented Go-To technology for U-Pass/Metropass program. The Go-To system utilizes chip-embedded technology which provides quicker boarding times on metro buses. Reduced time at a bus stop means less pollution-producing engine idling, and less traffic congestion overall.
- Bus shelter heaters turn off automatically.
- Transit manager, Bill Stahlmann, serves on the University's Sustainability Committee.

PARKING

Awards:

- 1997 Minnesota Governor's MN Great! Award – for use of technologically advanced parking designs to reduce fuel use and pollution.

Sustainability Measures

- In 1997, instituted the McGann keycard system which allowed contract holders quicker entrances and exits, thereby reducing emissions from car idling.
- Offer dedicated carpool parking lots and a discounted carpool rate.
- Re-use returned keycards.
- Instruct field operation staff to turn off vehicles and power equipment to conserve energy and reduce pollution.
- Accept and manage reservations through an online system.

FLEET

Cornerstone Program – E85 Program

In response to the 1992 Congress Energy Policy Act, Fleet Services began purchasing vehicles compatible for E85 fuel in 1995. From that initial purchase of six, the number of E85 vehicles has grown substantially to 75, 14% of the university's fleet. This includes cars, trucks, vans and SUVs.

Fleet Services is among country leaders in converting a portion of its fleet to Flexible Fuel Vehicles (FFVs). The university is the greatest user of E85 fuel – in the state and also nationally – with over 20,000 gallons pumped each year.

Awards:

- 2005 Minnesota Governor's Minnesota Great Award
- 2004 American Lung Association's Extra Mile Award
- 2004 Minnesota Environmental Initiative Awards Finalist

Cornerstone Program – Hybrid Vehicles

In 2001, Fleet Services purchased the first hybrid vehicle for the University. Hybrids are currently on of the earth's cleanest, most fuel efficient vehicles. Hybrids have quickly become a popular vehicle of choice for rent. Hybrids in the University fleet now number 37.

Cornerstone Program – Motor Oil

Fleet Services has taken various steps to be environmental stewards when using motor oil.

- Has been crushing used oil filters for at least 10 years.
- Has been selling used motor oil to a recycler for quite some time.
- Began buying recycled motor oil in 2004.

Cornerstone Program – Zipcar

In 2006, PTS brought the car-sharing concept to campus. We partnered with an experienced, national company, Zipcar, to offer the University community a membership program that gives an alternative to owning a car.

E20 Testing

In 2006, the University of Minnesota Fleet Services was selected by the State of Minnesota as the test site for a vehicle drivability evaluation of E20, an experimental biofuel.

- Testing span is from June 1, 2006 until July 31, 2007.
 - Cut pumping from 20,000 gallons to 8,000 gallons by converting tank to E-20.
 - Currently have 40 vehicles that are designed to run on more than 10% ethanol.
 - Testing at 20% to test for drivability issues

Additional Sustainability Measures

- In 2008, installed GPS systems in PTS department vehicles to track and reduce engine idling and jack rabbit starts.
- Fleet Services began buying bio-diesel fuel in May, 2006.
 - 20% of the fuel comes from either soybeans or waste cooking grease
- In 2002, Fleet Services purchased a no hazardous waste washer.
- Switched to car wash cleaning solutions containing low VOC (volatile organic compounds) or harmful substances in September 2008.

FINANCE

Sustainability Measures

- In partnership with other Auxiliary Services departments, developed a billing service that allows University departments to view their parking charges online.

FACILITIES

Awards:

- 2002 Minnesota Concrete and Masonry Contractors Association's Excellence Award – for University Avenue Ramp.
- 1995 Institutional and Municipal Parking Congress Award for Design Excellence and Program Innovation – for the Washington Avenue Ramp
- 1992 Institutional and Municipal Parking Congress Award for Design Excellence and Program Innovation – for the 4th Street Ramp.

Cornerstone Program – Gopher Way

In 1998 on Beautiful U Day, PTS unveiled the Gopher Way system. The system encourages walking by providing people a guide of the tunnels and skyways on campus through maps and directional signage.

Cornerstone Program – Biking Program

PTS encourages the U community to bike to and around the University by offering the tools to facilitate this mode of transportation.

- Developed a system of biking lanes and paths that connect to the city/regional network.
- Placed 6,700 racks/hoops around campus. Added 1,000 bike racks in the last three years.
- Provide 169 bike lockers for secure storage.
- Initiated Helmets and Headlights in partnership with Boynton Health Service and the Wellness Campaign to promote safe bike riding.
- Abandoned bikes are collected twice a year and are recycled through Campus Reuse Center every year. Any bikes not sold are taken to the University Recycling Center.

Sustainability Measures

- Parking structures use photocells turn off perimeter lighting during daylight hours on interior parking decks. Parking lots use photocells to turn off lights in daylight hours.
- Use high pressure sodium (HPS) lighting fixtures in structured facilities decks and surface parking lots. HSP is a highly efficient electrically powered light source with an average lamp life in excess of 20,000 hours.
- Use T8 fluorescent lights in elevator lobbies and public areas.
- Pedestrian exit signs use LED lights in all PTS structured facilities.
- Multiple parking ramps – 4th Street, 19th Avenue, 21st Avenue, Washington Avenue, University Avenue – were designed with glass-backed elevators or glass-enclosed lobby areas to bring in light and heat during the winter.
- Have placed recycling containers in all parking facilities.
- PTS, along with Landcare, pre-treats surfaces with deicer slurries prior to snow events to minimize icing and reduce plowing costs. PTS no longer uses sand.
- For field operations, use golf cart in lieu of vehicle on campus whenever possible.
- Switched to bio-degradable custodial products which contain low petroleum products and no phosphorus.
- Instruct maintenance and project staff to turn off vehicles and power equipment to conserve energy and reduce pollution.
- Green roofs – trees, shrubs, plantings and grass – were used in the construction of Church Street Garage, Nolte Center Garage and East River Road Garage.
- Storm water treatment in structured parking facilities. Facilities have gas and sediment traps to prevent pollution. Residues are dealt with as hazardous waste. Top level runoff is channeled into storm sewer while runoff from internal levels goes into sanitary sewer.

MARKETING

Sustainability Measures

- For the majority of printed materials, converted paper from 30% post-consumer recycled to 100%.
- Selected a printer (Printing Services) who is FSC-certified and who incorporates sustainable measures into their operations - soy-based inks, metal plate recycling, direct to plate technology, etc.
- Discontinued printing the Biking and Driving Guides. (Annual decrease of 14,000 pieces)
- Condensed the size of the Transit and Walking Guides by one panel apiece.
- Placed the Contract Holders newsletter online, thereby cutting the quantity printed from 13,500 to 1,000.
- Discontinued printing the Fleet newsletter and placed it online. (Annual decrease of 1600 pieces)
- Discontinued marketing posters for U-Pass and the Transportation Fair. (Annual decrease of 1,000)
- Perform an annual assessment of staple marketing pieces - maps, brochures. This has lead to decreasing the quantities printed so there is less overstock. Quantities trimmed:
 - Flat maps - from 200,000 to 130,000
 - Transportation Guide - from 25,000 to 19,000
 - Transit Guide - from 12,000 to 10,000
- Developed a foldable, reusable pocket map with the intent of replacing the one-time use flat map.
- Deliberately look for material designs that fit standard rolled and cut paper sizes better so there's less excess waste.
- Receive printing proofs via e-mail PDFs instead of paper copies.
- Recycle all overstock marketing materials.
- Chose sustainable products in the lobby redesign - furniture, counters, signs, plants, no-VOC paint.
- Purchase tableware made from natural, renewable resources (corn, soy, potato) for marketing/staff events.
- Select usable, practical promotional items - notepads, pencil sharpeners, ice scraper, marker - rather than "fun" stuff.
- Save supplies - trays, utensils, etc. - to reuse from event to event.
- Save boxes that marketing materials are delivered in and reuse them to fulfill map/brochure orders.
- Moved from printing a paper phone list multiple times per year to a one-time annual printing with regular updates to a network directory.
- Commonly print reports/presentations on both sides of the paper.
- Encourage sustainable efforts through newsletter articles and signs posted in the office.
- In 2007, a portion of our map stock was wiped out from a storm. Instead of reprinting, we substituted another map stock.

OFFICE OPERATIONS

Sustainability Measures

- Switched to 100% post consumer waste copy paper.
- Converted to motion control light switches in conference rooms, lunch room, kitchen areas in TSB office and FSR maintenance area.
- Use T8 fluorescent lights in offices.
- Have recycling containers placed throughout the offices for paper, cardboard, glass and aluminum.
- Incorporated flush-o-meter automatic flush system for toilets in all PTS bathrooms to save water.
- Encourage employees to reduce electrical usage by turning off office lights when not present and to completely turn off computers at the end of their shift.
- Integrated live plants into the lobby décor. Support the presence of live plants in staff office space.