



*Parking and
Transportation Services*

UNIVERSITY OF MINNESOTA

Parking & Transportation Services
Sustainability &
Environmental Initiatives

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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. By demonstrating the success of our programs, PTS has 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. 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. The University is committed to advancing the public good and improving the human condition.

Overall Excellence in Programming Recognition

- 2011 AIR (Awards Incentive & Recognition) from Business & Community Economic Development at the U of M – for purchasing practices from diverse suppliers
- 2010 Transit System of the Year from Minnesota Public Transit Association
- 2010 Bicycle Friendly Business Silver Award from League of American Bicyclists
- 2009 AIR (Awards Incentive & Recognition) from Business & Community Economic Development at the U of M – for purchasing practices from diverse suppliers
- 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.
- 2005-2010 Fleet Equipment Magazine 100 Best Fleets in North America Award (one of just two universities in the country to receive the designation)
- 2004-2009 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. 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, the University of Minnesota obtained federal funding to build a transitway connecting Minneapolis and St. Paul campuses.

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, to decrease boarding time, thereby lessening pollution by shortening bus idle time.

Awards:

- 2010 Transit System of the Year from Minnesota Public Transit Association
- 2002 Minnesota Governor's Award of Excellence in Waste and Pollution
- 2000 Metro Commuter Services Commuter Choice Award

Cornerstone Program – Campus Shuttles

- Upgraded the bus fleet to fuel efficient buses.
- Improved bus stops and service on the Campus routes.
 - Incorporated Metro Transit service with Campus Connectors to provide more options for transportation.
- Planned new and improved buses 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.
 - Two 40-foot Hybrid buses; with one 30-foot Hybrid bus on order.

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.
- Use bus shelter heaters that turn off automatically.
- Implement Bus tracking system in near future.

PARKING

Awards:

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

Sustainability Measures

- Instituted the McGann keycard system in 1997 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.
- Accept and manage reservations through an online system.

FLEET

Cornerstone Program – E85 Program

Began purchasing Fleet Services vehicles compatible for E85 fuel in 1995 (in response to the 1992 Congress Energy Policy Act). From that initial purchase of six, the number of E85 vehicles has grown substantially to 179 (34% 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 35,000 gallons pumped each year.

Awards:

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

Cornerstone Program – Hybrid Vehicles

Purchased the first hybrid vehicle for the University in 2001. Hybrids are currently one of the earth's cleanest, most fuel-efficient vehicles. Hybrids have quickly become a popular vehicle of choice for rental. Hybrids in the University's central motor pool now number 80 (15% of the motor pool).

Cornerstone Program – Motor Oil

Taken various steps to be environmental stewards when using motor oil.

- Crush used oil filters for at least 10 years.
- Sell used motor oil to a recycler.

Cornerstone Program – Zipcar

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

Cornerstone Program – Zimride

Introduced the social network based, ride-sharing concept to campus in 2009. PTS partnered with a national company, Zimride, to offer the University community a free membership program that matches drivers and riders via an online private database. As of August 2011, Zimride has over 2,500 University of Minnesota users.

Additional Sustainability Measures

- Installed GPS systems in PTS department vehicles in 2008 to track and reduce engine idling and jack rabbit starts.
- Began buying bio-diesel fuel in May 2006.
 - 20% of the fuel comes from either soybeans or waste cooking grease.
- Purchased a no hazardous waste washer in 2002.
- Switched to car wash cleaning solutions containing low VOC (volatile organic compounds) or harmful substances in September 2008.
- Installed new car wash. Amount of water used per vehicle is now 15 gallons compared to 208 gallons used in the old car wash.
- Reduced the amount of fuel used; 36,370 gallons less compared to 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

Cornerstone Program – Gopher Way

Unveiled the Gopher Way system in 1998 on Beautiful U Day. 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

Encourages the U community to bike to and around the University by offering 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.
- Installed shared-lane or "sharrow" markings along with a northbound bike lane on Pleasant Street south of Arlington Street and along Pleasant Street between Arlington and Pillsbury Drive.
- Initiated innovation "bike box" at the intersection of University Avenue and Pleasant Street in 2011 (painted the road green with white bicycle symbols; vehicles must stop behind the painted box)
- Opened the University Bike Center on campus in September 2011. Center offers: showers and secure bike parking (membership fee); repair service (fee based on service); bike retail outlet (accessories only); RFID (radio frequency identification) tagging and tracking capabilities; public meeting space; electronic bike trip-planning kiosk; collection point for abandoned bicycles; and educational opportunities, such as smart cycling courses and bike maintenance classes.
- 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

- Use photocells in parking structures that turn off perimeter lighting during daylight hours on interior parking decks. Parking lots also 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.
- Use LED lights in pedestrian exit signs in all PTS structured facilities.
- Design multiple parking ramps – 4th Street, 19th Avenue, 21st Avenue, Washington Avenue, University Avenue – with glass-backed elevators or glass-enclosed lobby areas to bring in light and heat during the winter.
- Placed recycling containers in all parking facilities.
- Pre-treat, along with Landcare's efforts, surfaces with deicer slurries prior to snow events to minimize icing and reduce plowing costs. PTS no longer uses sand.
- Use golf cart for field operations in lieu of vehicle on campus whenever possible.
- Switched to bio-degradable custodial products which contain low petroleum products and no phosphorus.
- Create green roofs – trees, shrubs, plantings and grass – in the construction of Church Street Garage, Nolte Center Garage and East River Road Garage.
- Support 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

- Converted majority of printed materials to 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.
- 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 1,600 pieces).
- Discontinued marketing posters for U-Pass and the Transportation Fair (annual decrease of 1,000).
- Perform annual assessments of 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 100,000
 - Transportation Guide - from 25,000 to 8,000
 - Transit Guide - from 12,000 to 8,000
- Deliberately look for material designs that fit standard rolled and cut paper sizes better so there's less excess waste.
- Recycle all overstock marketing materials.
- Chose sustainable products in the 2008 lobby redesign - furniture, counters, signs, plants, no-VOC paint.
- Select usable, practical promotional items - notepads, pencil sharpeners, ice scraper, marker - rather than "fun" stuff.
- 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.

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.