



**Harvard University Cambridge Campus
Parking and Transportation
Demand Management Plan
2007 Annual Progress Report**

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INTRODUCTION

Harvard's Parking and Transportation Demand Management (PTDM) Plan provides the City of Cambridge with a baseline assessment of Harvard's current parking supply and how it manages its vehicle trips through the TDM measures and strategies offered by the *CommuterChoice* Program. The PTDM Plan describes the menu of transportation services and cost-effective financial incentives that Harvard has in place with the goal of reducing its single occupancy vehicle "SOV" rate from 27.4 percent to 24.7 percent, or 10 percent.

As a leader of Cambridge employers of its size, Harvard has consistently maintained an exceptionally low SOV rate. When adopted, Harvard's PTDM Plan targeted a goal of reducing the Single Occupancy Vehicle (SOV) rate by 10% (from 27.4% to 24.7%). This goal was surpassed the following year when Harvard achieved an SOV rate of 17.0%. The results of the 2007 PTDM survey document Harvard's SOV rate at 16.5 % for Cambridge based employees and graduate students.

Harvard currently houses approximately 40% of its graduate students but aspires to house one half of its graduate students by 2011. The University believes this will further reduce transportation impacts by reducing the number of commuting students. In August 2007, new graduate housing opened at 5 Cowperthwaite. The new graduate housing building includes covered bike parking in the underground garage. Currently, overall commute trips to Cambridge have been reduced by 5,005 trips per week.

In the Monitoring Section of the PTDM Plan, Harvard commits to providing updates to the City of Cambridge PTDM Officer. The monitoring updates include:

- ◆ Yearly surveys starting a year from the approved plan
- ◆ Driveway counts on parking lots/garages
- ◆ Parking utilization counts
- ◆ Annual parking inventory update
- ◆ Annual parking inventory summary sheet
- ◆ A total parking space inventory of 4,536 spaces.

The following is a progress report of Harvard's monitoring efforts and TDM activities from November 30, 2006 through November 30, 2007. Since the 2006 PTDM Progress Report Harvard has:

- ◆ Increased its Departmental Bike Program by 3 new departments
- ◆ Implemented a GoLoco program to supplement its Rideshare activities
- ◆ Increased Zipcar Affiliates registered to 4,439, a 21 percent increase since 2006
- ◆ Increased the MBTA average monthly pass sales by 6 percent
- ◆ Increased Bike Week Challenge Registrants by 45 percent
- ◆ Continuously been recognized as a member of the EPA's National Best Workplaces for Commuters Initiative
- ◆ Continued to develop its alternative fuels program
- ◆ Been an active participant in "Greater Boston Breathes Better" an EPA-led initiative to reduce emissions that result from transportation and construction vehicle sources
- ◆ Presented *CommuterChoice* Program at university-wide New Hire Orientation sessions 3-4 times per month to introduce new employees to available benefits and options
- ◆ Assisted the Harvard Green Campus Initiative with efforts to gain LEED accreditation through carpool, carshare, and innovation credits

SECTION I Parking Inventory Summary

The University's parking inventory was updated in November 2007 after facility and lot spaces were counted, and design layouts were verified.

Representatives from Harvard's Parking Services and Planning departments each performed separate field checks. Each group visited every lot and compared observations to determine changes to the inventory. During this process accessible space locations were identified and signs were verified. Work was done during the month of October 2007. Summary inventory and parking design layouts were updated and new parking layouts were created.

The summary inventory and parking layouts were submitted separately to the City of Cambridge Parking Office, and the 2007 Parking Inventory and Lot Locator Map is included as complimentary documentation to this PTDM Progress Report.

Parking Management Summary

Harvard continues to maintain a stable parking inventory, and manages all new demand for parking and transportation services using a combination of transportation demand management and parking fee increases. Approximately 85 percent of Harvard employees and graduate students commute to campus using alternative modes such as public transit, carpools, walking and bicycling. The commute modes are supported by Harvard's well-established planning principles of preservation of open space, minimization of vehicular circulation and optimization of pedestrian orientation.

The goal of Harvard's parking management is to encourage alternative mode use and serve as many people as possible by optimizing the current parking supply. This goal is achieved through parking pricing, preferential parking, and reduced parking fees for carpools and free parking for vanpools. Harvard University parking management measures include the following:

Parking Pricing: Harvard University's parking management strategy includes pricing mechanisms that encourage carpool and vanpool use at its parking facilities. Harvard's parking rates increased 8% in the 2007-2008 academic year. Rates will continue to increase in the future—an effective tool for encouraging transportation modes other than drive-alone commuting. Please refer to the updated parking rates on page 5.

Preferential Parking: Harvard's *CommuterChoice* Program and Parking Office have worked together to designate the most desirable parking spaces closest to the building entrances for the exclusive use of carpools and vanpools.

Description of the management of various parking facilities: A comprehensive description can be reviewed on line at www.uos.harvard.edu/transportation/par.shtml. In general, incremental increases in the campus population have a minimal effect on overall parking demand. Harvard has a limited amount of assigned/reserved spaces. Based on historical practice, Harvard has been moving away from this type of management. Over 90 percent of the spaces are available on an "unreserved" designation which is on a "first-come, first-served" basis.

Proposed Parking Rate Structure 2007-2008

Permit Type	FY06	FY07	FY08 8%
Reserved Garage	\$1,725.00	\$1,830.00	\$1,975.00
Reserved Surface	\$1,625.00	\$1,720.00	\$1,860.00
Unreserved Garage	\$ 925.00	\$ 980.00	\$ 1,060.00
Unreserved Surface	\$ 865.00	\$ 915.00	\$ 990.00
Morn / After / 3 Day Garage	\$ 660.00	\$ 700.00	\$ 755.00
Morn / After / 3 Day Surface	\$ 620.00	\$ 655.00	\$ 710.00
Tenant Garage (BWYG & EVRT)	\$1,655.00	\$1,900.00	\$2,050.00
Tenant Surface	\$1,590.00	\$1,685.00	\$1,820.00
Metered Surface	\$ 265.00	\$ 280.00	\$ 305.00
Extension / Night Garage	\$ 50.00	\$ 50.00	\$ 50.00
Extension / Night Surface	\$ 50.00	\$ 50.00	\$ 50.00
Motorcycle	\$ 140.00	\$ 150.00	\$ 165.00
Commuter Student (Garage only)	\$ 770.00	\$ 815.00	\$ 880.00
Neighbors Surface	\$ 50.00	\$ 50.00	\$ 50.00
Summer Garage	\$ 300.00	\$ 320.00	\$ 345.00
Vendor	\$2,070.00	\$2,195.00	\$2,370.00
One Day Permit (weekdays)	\$ 9.00	\$ 9.00	\$ 10.00
One Day (after 5:00PM & weekends)	\$ 5.00	\$ 5.00	\$ 5.00
Tenant Garages 12-months:			
One Western Ave	\$1,795.00	\$1,900.00	\$2,050.00
52 Oxford Street	\$1,795.00	\$1,900.00	\$2,050.00
Soldiers Field Park	\$1,795.00	\$1,900.00	\$2,050.00
Peabody Terrace	\$1,795.00	\$1,900.00	\$2,050.00
29 Garden Street	\$1,795.00	\$1,900.00	\$2,050.00
DeWolfe Street	\$1,795.00	\$1,900.00	\$2,050.00

SECTION II Driveway Count Summary

The University's final PTDM Plan (dated July 11, 2003 including all subsequent amendments) committed to conducting driveway counts at all Harvard parking lots/garages with 20 or more spaces. In addition, Harvard committed to supplying parking utilization counts for all Harvard parking lots/garages with 100 or more spaces for reporting in 2004, for all lots/garages with 40 or more spaces in 2006, and every two years thereafter. In a PTDM Ordinance Form dated August 31, 2006, the University was advised that "Driveway and Parking Utilization Counts [were] Not required for the 2006 Annual Report." The Driveway and Parking Utilization Counts were resumed in 2007.

SECTION III Trip Reduction Incentives Update

Harvard University's Rideshare Program and Trip Reduction Incentives are incorporated into its *CommuterChoice* Program (CCP). Harvard University's Transportation Services Department introduced the *CommuterChoice* Program to faculty and staff in October 2000. The components of the program take into consideration all elements of "choice." The objective of the program is to apply cost-effective measures that will address supply and demand problems and generally improve access to and mobility around Harvard University's Campus.

Public Transit

Harvard has been offering its employees a convenient online MBTA pass ordering system since September 2004, allowing employees to receive their discounted monthly passes at their home address. Because the cost of the pass is deducted directly from an employee's paycheck, they now benefit from pre-tax savings and effective January 1, 2007 the 40% subsidy for bus, subway, and link passes was increased to 50%, which is the same as commuter rail and boat passes.

Also at the beginning of 2007, bus, subway and link riders received a new reusable plastic CharlieCard with a computer chip designed to last five years. Each month, with a recurring order, our system now automatically updates the new CharlieCards. Eliminating the monthly mailing of more than 5,000 T passes increases efficiency and enhances the university's sustainability efforts. By eliminating this mailing, the university eliminates the use of approximately 5,000 sheets of paper per month or 60,000 sheets per year. Extrapolated over five years, *CommuterChoice* saves 300,000 sheets of paper, or 36 trees (Claudia Thompson, *Recycled Papers: The Essential Guide*, Cambridge, MA: MIT Press, 1992.) and this does not factor in the 300,000 saved envelopes and saved transportation costs associated with delivery.

Commuter rail and boat commuters will continue to receive monthly passes until the MBTA updates these facilities to accommodate CharlieCards. As of November 2007 6,084 employees participate in the monthly pass program.

Semester Pass: In addition, Harvard Graduate School of Arts and Sciences, Harvard Law School, Harvard Medical School, Harvard School of Public Health, Harvard Graduate School of Education, Harvard School of Design, Harvard Kennedy School of Government, and Harvard Divinity School all administer the MBTA's Semester Pass program to their students.

The University continues to meet with MBTA Bus Operations staff to discuss bus service improvement needs and shares the comments collected in the PTDM survey. In addition to the survey comments, comments are collected throughout the year via telephone and online inquiries to the *CommuterChoice* Program. *CommuterChoice* plans to meet this spring with the MBTA concerning the particular issues voiced about the Oak Square bus and the #66 bus.

Bicycle Program

The *CommuterChoice* program works with staff at the Harvard University Planning Office and the Allston Development Group to continually improve the cycling environment on the Cambridge and Allston campuses. The following is a list of some recent accomplishments that have helped to increase bicycling to campus as a mode from 11.4% to 13.2%:

- ◆ Reviewed and commented on the Allston Development Group's Draft Bicycle Plan.
- ◆ Continued planning efforts for a new 74-space covered structure in the former Andover Lot
- ◆ Consulted with project managers and building managers on proper rack type and installation, as well as appropriate pathways and shower and locker facilities for cyclists
- ◆ Provided input regarding extensive bicycle facility improvements on the Law School's Northwest Corner Project
- ◆ Increased the number of "Bicycle Users Group" members and maintain an email list of these interested bicyclists at Harvard who come together periodically for trainings and information sessions, as well as to provide a sounding board for potential new policies and programs
- ◆ Implemented Departmental Bike Loaner program to test viability of bike use in various university departments
- ◆ Publicized the MBTA's "Bike to the Beach" program to encourage interested cyclists to take their bikes on the commuter rail to specific beach destinations
- ◆ Continued to market Harvard's Departmental Bicycle Program. For more information, see www.commuterchoice.harvard.edu/dept_bikes.shtml, the featured article in the spring 2007 issue of the Resource newspaper

The *CommuterChoice* Program distributes free of charge the following publications to Harvard employees, faculty and students requesting bicycle information:

- ◆ Boston's Bike Map
- ◆ Bicycling Street Smarts
- ◆ Bikes on the T
- ◆ "Go By Bike: A Guide to Commuting on a Bicycle"
- ◆ "How to Lock (and Keep!) Your Bike"
- ◆ "RACK ON" – How to utilize Harvard's shuttle fleet's exterior bicycle racks

Bicycle Events: Since May 2001, Harvard has continuously held Bike Appreciation Day events in coordination with the City of Cambridge's "Go Green Month" bike events. In May 2007 more than 200 bicyclists arrived between 7:30 and 9:30 a.m. to receive a free breakfast at Au Bon Pain when they presented their bike helmet. Participation has increased among "Bike Week Commuter Challenge" participants since bike week 2002 when there were 32 participants. In 2007 there was a 45 percent increase of participants from the previous year. The bike week events were marketed by means of the Harvard media, *CommuterChoice* web site, MassBike web site, Charles River TMA web site, Boston Metro newspaper, e-mail announcements to past participants, as well as campus-wide posters and flyers.

Outreach: Registering through the *CommuterChoice* Program allows commuting cyclists access to information about cycling around Boston and Cambridge. Regional bike route maps and safety information are available free to everyone who registers. A map showing "safer" bike routes on campus, locations of bike racks, and locker and shower locations can be viewed at www.commuterchoice.harvard.edu/bicycling.shtml. Interested cyclists could also reach the MBTA's "Bike to the Beach" program to take their bikes on the commuter rail to specific beach destinations during the summer.

Bicycle Registration and Safety: The Harvard University Police Department administers a free bicycle sticker/registration program for all employees and students to help deter theft and to aid in the recovery of stolen bicycles. Bicycle registration can be done online at <http://www.hupd.harvard.edu/>.

Showers and Lockers: The University has designated areas for showers and lockers. See the map referenced above for locations. All general athletic facilities are open for use by any employee or student.

Departmental Bike Program

The Departmental Bike Program offers any School or Department at Harvard the option to purchase a bicycle(s) for use as transit in and around campus vs. using a car or taxi. The goals of this program are to reduce air pollution, improve cardiovascular health, save time getting to meetings, and reduce costs for parking and taxi fees.

There are 2 different types of bicycles offered for purchase in this program. The Breezer Town Bikes feature easy-shifting Shimano Nexus hub transmissions and a choice of a diamond frame or step-through U-frame. These bikes are perfect for relaxed rides and errands. For more experienced cyclists, the Fuji Police Special offers 28 speeds and a fork suspension system for a smooth easy shifting ride. These efforts, and countless more (see www.greencampus.harvard.edu), demonstrate that the University is acting responsibly to maintain and improve the quality of life within the City of Cambridge.

Cycling is more than a fast, fun way for employees to get around campus; it's a critical component of Harvard's response to global climate change. Leith Sharp, director of Harvard's Green Campus Initiative, says transportation accounts for about a third of U.S. greenhouse gases, the primary culprit in global warming. Alternative modes of transportation are crucial if the University is to reduce its environmental "footprint."

A recent Resource article created renewed interest in the program, and as a result 3 additional Departments (Dining Services, Earth & Planetary Sciences, and the External Relations Department of the Harvard Business School) purchased Departmental Bikes. At the close of 2007, the total number of bikes registered for this program was 22.

Additionally, University Operations Services (UOS) consolidated all the individual UOS Departmental Bikes into one program, therein providing unlimited access for all the UOS Blackstone employees to 5 bikes (2 Breezers and 3 Fujis). These bikes may be reserved for use through Meeting Maker, an on-line calendar system. The Blackstone building, home to UOS, also offers shower facilities for all cyclists.

The role of the *CommuterChoice* Program in the Departmental Bike Program is to provide assistance in the selection, purchase and delivery of the bikes; arrange for bike repairs, maintenance and winter storage; and establish a monitoring system for bike usage.

There are only two requirements for program participants. Before a cyclist hops on the bike, s/he must sign the waiver liability form, which is available on-line at the *CommuterChoice* web site, http://www.commuterchoice.harvard.edu/dept_bike_program_guidelines.pdf. Also, all cyclists must wear a bike helmet when riding the Departmental Bikes.

Program participants rave about this program, and have sent emails to *CommuterChoice* thanking it for having this program available at Harvard. The program has received inquiries about replication from other universities across the country, as well as from the Longwood Medical Area (LMA) campus.

Harvard Walks

The *CommuterChoice* Program began a series of walking events beginning on April, 7, 2006, National Walk to Work Day. Stephanie Anderberg, the City of Cambridge's Associate Planner/Transportation Demand Management Planner assisted with each event, and all events were open to City of Cambridge staff.

The Spring Walk-To-Work Breakfast: In April 2007, due to several consecutive rainy days, the Spring Walk was rescheduled twice and then finally canceled.

The Fall Walk-To-Work Breakfast: This walk was held on October 25th in front of the Au Bon Pain in Harvard Square, and over 100 participants attended this event. Requested pre-registration for this Breakfast provided many walkers with the opportunity to comment on their walk to work, and here are some of the statements:

“I'll walk from my house in Cambridge to Holyoke, then on to the Arnold Arboretum in JP, where I work.”

“I live in Brookline and I will continue to walk to work every day weather permitting.”

“This will be my first attempt at walking to work. A group of us will be meeting at the Park Street Station and we will walk to Harvard Square – see you there.”

An invitation for this Breakfast was also extended to people who walked to the MBTA or got off at an MBTA stop and walked the remaining distance to work.

“I walk 1.5 miles to GET to the MBTA and I will stop by the event on Oct 25!”

Everyone was encouraged to participate in the raffle, and prizes included *CommuterChoice* messenger bags, 2 gift memberships to Walk Boston, umbrellas, walking socks, and recycled durable grocery bags. Blinking safety lights, walking maps, and brochures were giveaways that all participants appreciated.

Stefanie Anderberg from the City of Cambridge and Walk Boston's Courtney Curran assisted in hosting the Breakfast.

Historic Walking Tour: *CommuterChoice* participated in "A Walking Tour of Historic Harvard Yard" in November, 2007 as part of the Office of the Vice President for Administration "VPA Connections" event, aimed at better connecting the university to its workforce.

In addition, with assistance from *CommuterChoice* staff, several commuters have utilized the interactive Google Pedometer Map to plot out walking commuting routes.

Preferential Carpool Parking

Harvard continues to evaluate and respond to the need for additional carpool parking signage. Staff meets quarterly to review this process.

Employees who are registered as carpools or vanpools and rideshare five days a week receive preferential parking in designated spaces and lots on an as-needed basis. Harvard's policy is to set aside up to 10% of parking for carpools depending on demand. Harvard believes this policy is flexible and can accommodate eventual increases in ridesharing. During parking permit renewal season, *CommuterChoice* checked in with all carpoolers to ensure satisfaction with the carpool program.

In addition, Harvard currently provides spaces, free of charge, for vanpools as they are organized.

Carpool Matching

Ridematching: Harvard University has been offering a ridesharing program to employees and students who are interested in carpooling since 1975 through the Parking Office. Since 2000, Harvard employees can create their own rideshare profile and receive matches electronically, using the web-based rideshare matching service on the *CommuterChoice* Web site at www.commuterchoice.harvard.edu or by calling at 617-384-RIDE. The paper registration form for carpool information is part of the *CommuterChoice* Program brochure. The web registration form is at www.commuterchoice.harvard.edu/cgi-bin/register.pl. As of November 2007, there are 221 Harvard affiliates registered in the system.

Carpool Incentives

Harvard employees who register through the *CommuterChoice* Program receive a 50 percent discount on their annual parking permit if they carpool with one other employee five days/week. Carpools of three or more people riding together five days/week, receive a discount of 75 percent on their annual parking permit. As of November 2007, there are 99 two-person carpools and 6 three-person carpools.

GoLoco

GoLoco is a new on-line company that offers a new commuting service that helps you quickly arrange ride sharing opportunities. GoLoco allows you to build your own network of trusted carpoolers though

their affiliation with the FaceBook web site. GoLoco helps you share trip costs online with friends, neighbors and colleagues. GoLoco encourages trip sharing to reduce CO2 emissions from single occupancy vehicles.

Vanpool Program

Harvard University's vanpool program provides free preferential parking on campus in designated lots to vanpools containing at least five Harvard-affiliated riders. The *CommuterChoice* office also offers assistance in recruiting possible vanpoolers, ridematching services, and marketing with assistance from MassRides. Additionally, a *CommuterChoice* representative will investigate possible collaboration with VPSI, Inc., the nation's largest vanpool provider, and area employers after attending a presentation at a MassCommute Employee Transportation Coordinator (ETC) training seminar.

Although Harvard has increased its efforts to form a vanpool, according to the 2007 PTDM survey, a majority of Harvard's employees live less than 10 miles from the campus. Due to these relatively short commutes, coupled with the transit rich area surrounding Harvard, vanpooling is not a cost-effective or viable option for the majority of Harvard's current commuting population.

Emergency Ride Home Program

Harvard University employees participating in some form of ridesharing program (carpool or vanpool) five days a week are eligible for the Emergency Ride Home Program. All employees must register for the program with the *CommuterChoice* office. An Emergency Ride Home is supplied during the following situations, and when regular transportation is not available:

- ♦ Illness or crisis of the participant or of a family member (note: this does not include injuries sustained at work that would fall under a Workers' Compensation Claim)
- ♦ Unexpected request of a supervisor to work past regular schedule without advance notice. Unexpected is defined as not knowing before the morning of the request
- ♦ Stranded at work because the driver of your carpool or vanpool had to leave because of an emergency. If the driver of a vanpool is unable to drive home, the driver will receive an emergency ride home and a designated alternate driver will drive remaining van riders home

Shuttles

Harvard Shuttle Services transported 721,748 people in academic year '07; 62,617 additional riders since academic year '06. The shuttles' services are open to anyone with a University ID, and provide a useful link in getting employees and students from public transit stops and carpool/vanpool spaces to their final destination. This coordinated service facilitates the option to leave the car at home. Complete information on the Harvard University Shuttle System is available from the *CommuterChoice* at www.commuterchoice.harvard.edu, "Bus & Shuttle" link to "Harvard Shuttle Service."

Harvard Shuttle Bus: A year-round comprehensive shuttle bus system operating throughout the Cambridge and Allston campuses. It is a fixed-route service with over 15 stops in Cambridge and 3 stops in Allston (at Soldiers Field Park, the Business School Rotary, and North Harvard Street between Morgan Way and Gate 3). Service operates seven days a week. On weekdays service begins as early as 5:45 am and continues until 4 am. On weekends, service starts as early as 7:30 am and continues until 5 am. This service is free to all members of the Harvard

community. During student “reading periods” in January and April, the Harvard Shuttle runs 24 hours per day during the week and extended hours on the weekend.

Harvard Daytime Van Service: This shuttle is designed for persons who, because of mobility impairment or medical condition, find it difficult to use the regular shuttle bus system. Transportation is provided door-to-door within the Cambridge and Allston campuses.

Evening Van Service: This shuttle is a free, on-call, taxi-style service that operates between 7:00 pm and 3:00 am nightly. It is designed for transporting Harvard community members throughout the Cambridge and Allston campuses within a specified service boundary, as portrayed on the shuttle map.

Law School North Shuttle: Aimed at supplementing the evening shuttle service, this is a scheduled service that provides safe, one-directional evening transportation to home addresses in Somerville for Harvard community members. This service is available from October through May and operates during the hours of 6:30 pm and 12:30 am.

Longwood Medical Area Shuttle - the M2: This is a year round, Monday through Saturday shuttle service to facilitate transportation between the Cambridge/Allston campuses and the Longwood Medical Area campus. The first bus leaves Cambridge each morning at 6:40 am with the last bus leaving the Longwood Medical Area at 11:30 pm. For a complete schedule, please visit www.masco.org. Harvard faculty and staff can board the shuttle buses for free with the swipe of their Harvard ID cards. Most students, including all undergraduates, are eligible for free fares. All other students can purchase tickets.

Biodiesel Program

Harvard’s Fleet Management Department manages and operates a biodiesel fuel program for all university diesel vehicles. Currently, B20 is used in 68 vehicles ranging from snow plows, shuttle buses, solid waste and recycling trucks, landscape services vehicles, tractors and pick-up trucks. Biodiesel is a cleaner burning alternative fuel that can be used in any diesel engine. A domestically produced, renewable fuel, it can be made from animal fats or vegetable oil. The use of biodiesel in a conventional diesel engine results in a substantial reduction of unburned hydrocarbons, carbon monoxide, and particulate matter. Harvard’s Green Campus Initiative, Facilities Maintenance Operations (FMO), and Dining Services converted a Solid Waste and Recycling truck to run on the waste vegetable oil from Annenberg Hall’s dining facility in 2006. These efforts, and countless more (see www.greencampus.harvard.edu or www.uos.harvard.edu/transportation/fle.shtml), demonstrate that the University is acting responsibly to maintain and improve the quality of life within the City of Cambridge.

Bus Signage and Dedicated Shuttle Stops

Bus signage and dedicated shuttle stops continue to be a cooperative venture between Harvard University and the City of Cambridge.

Harvard developed and finalized transportation guidelines for its campus in Cambridge. The guidelines recognize the importance of bus stop signage and dedicated stops on Cambridge City streets.

Zipcar

Zipcars are located throughout Harvard's campus and the City of Cambridge such that they are easily accessible by employees and eligible students over the age of 21. Zipcars are particularly beneficial to employees who leave their car at home, providing extra mobility during the day. Zipcars are available for use by members for as little as one hour—or as long as they need it. Harvard employees can access a car whenever they want without the hassles of owning one. Harvard's participation in the corporate program entitles Affiliates to reduced membership fees. Additional benefits to Harvard employees and students include:

- ◆ On-site 24-hour access to cars
- ◆ Use of car for as little as one hour
- ◆ Access to other Zipcars in Boston, Brookline, Charlestown, Cambridge, Dorchester, Jamaica Plain, and Somerville, as well as in the New York metro area, Denver, Washington D.C., and San Francisco
- ◆ Efficient use of on-site parking
- ◆ Compelling environmental benefits
- ◆ On-line reservation and smart card access eliminate annoying and time consuming paperwork of traditional car-rental agencies (or leasing)
- ◆ Car use can be billed to specific accounts or cost-centers
- ◆ Hassle Free Program: Zipcar handles all customer service issues
- ◆ Cars are fully insured

Zipcars can be found in the following locations on the Harvard campus:

- ◆ Peabody Terrace
- ◆ Radcliffe Quadrangle
- ◆ 8 Mt. Auburn Street
- ◆ Holyoke Center Garage
- ◆ 219 Western Avenue
- ◆ Garden Street/Fernald Drive
- ◆ Business School Lot, Allston (2)
- ◆ One Western Avenue aka East Drive, Allston

The allocation of on-campus spaces to Zipcar is an efficient use of limited parking facilities. There are currently 4,439 Harvard Affiliates registered with Zipcar, an increase of 21 percent since 2006. A recent article in the Harvard Crimson, the student newspaper, quotes a faculty member as saying, "Nearly everyone I know uses them."

In October 2007, Zipcar announced its merger with Flexcar, another leading car sharing provider, which will provide customers with a larger fleet of vehicles and greater geographic area including the United States, Canada, and Europe.

SECTION IV Supporting Documentation

2007 Annual PTDM Survey

Each year, Harvard University follows the Department of Environmental Protection's (DEP) recommended Random Sample Survey Method for its PTDM survey. The following information was prepared using the instructions and guidance offered in 2006 DEP Massachusetts Rideshare Program packet for Educational Facilities with more than 1000 commuting employees and students. The DEP Rideshare Program requires a survey every other year in the even years; therefore the PTDM survey process follows the DEP 2006 Guidelines.

As of November 2007, Harvard University (campus-wide) had approximately 20,346 full-time "applicable" or commuting employees and graduate students who either work or attend class between 6 am and 8 pm. The graduate student population and the employee population have both decreased slightly in numbers since the 2006 survey. Currently, 9,960, or 49 percent, are commuting graduate students and 10,386 or 51 percent, are commuting employees. Even though the applicable number decreased the sample size, the category percentages remained the same in 2007.

The decrease in the "applicable population" (campus-wide) was not significant enough (1.3 percent) to change Harvard's random sample category for a population of 20,000 to 29,999 with its corresponding sample size of 1,014 (as defined in the DEP Rideshare Guidelines 2006 for sample size).

Survey Sample Cambridge Only

As of October 2007, Harvard University (Cambridge Only) had approximately 17,338 employees and graduate students work or attend class in Cambridge. The 2007 number reflects 1,003 fewer applicable Cambridge commuters than the 18,341 in 2006. The student/employee breakdown for 2007 is: 9,112 full-time "applicable" commuting employees and 8,226 "applicable" commuting graduate students who either work or attend class between 6 am and 8 pm.

The graduate student population has decreased since the 2006 survey. Currently, 47 percent are commuting graduate students and 53 percent are commuting employees. This represents a 2 percent decrease in applicable commuting graduate students and a 2 percent increase in applicable commuting employees to the Cambridge Campus. Subsequently the PTDM sample size for 2007 also decreased slightly from 872 to 865.

Harvard University conducted a transportation survey during the week of October 15 through October 19, 2007 to collect the necessary data for the PTDM Progress Report. Harvard used an on-line random sample survey of the combined "applicable commuters" (employees and graduate students). The Cambridge-only PTDM survey sample size was 865. The University Information Systems (UIS) and the Office of Human Resources (OHR) provided the data used to determine the statistical percentages.

Data Collection and Analysis

Harvard conducted the survey during the week of October 15 to October 19, 2007. The survey was available electronically and in paper form. It was distributed primarily by email, except for the small number of people who did not have access to email, who received the survey at their place of work. The paper surveys were distributed and collected through department supervisors. In addition to the DEP required questions, Harvard University's survey instrument included 16 questions that would provide the University with more comprehensive comparative data. The survey provided both quantitative data for the PTDM Progress Report and qualitative data for Harvard to use as supportive information for implementing additional campus-wide transportation demand measures.

Harvard University has consistently achieved a 5 percent margin of error and a 95 percent reliability rate in its random sample surveys. This year the goal was to receive 865 completed surveys for the 2007 PTDM Progress Report. Harvard's return rate in 2007 was 100 percent.

PTDM Survey Categories

All Cambridge based "applicable" employees and graduate students were stratified into four basic categories based on payroll codes determined by the University Information Systems (UIS) and the Office of Human Resources (OHR). To determine the Cambridge-only sample, survey results for employees and students who had Allston as their primary work or school location were removed.

The Cambridge-only responses were then sorted into the HR categories indicated in the table below.

Employee and Graduate Student Category Chart

DEP/PTDM Category 2007	DEP Sample Number	DEP Sample Percent *	PTDM Sample Number	PTDM Response Percent
Services	49	5	43	5
Non-exempt	164	16	144	17
Exempt	305	30	268	31
Students	496	49	410	47
Total	1,014	100	865	100

*Percents are rounded

PTDM Commute Mode

The table below shows the results of the PTDM 2006 survey and the PTDM 2007 survey. The results include employees and graduate students from Cambridge only. The PTDM 2007 results indicate that Harvard has exceeded its 10 percent PTDM SOV reduction goal for four consecutive years even while employee population increased and graduate student population decreased in Cambridge since October 2006.

Commute Mode Comparison Chart

Commute Mode	PTDM Goal 2003	PTDM 2006	PTDM 2007
Drive Alone	24.7%	15.1%	16.5%
Carpool	5.0%	3.7%	4.5%
Vanpool	0	.12%	0
Public Transit*	29.3%	29.2%	28%
Bicycle	8.3%	11.4%	13.2%
Walk	32.7%	37.8%	34.4%
Telecommute/CWW/etc.	NA	2.7%	3%

*Public Transit includes Private Bus and Amtrak.

According to the 2007 survey results approximately 84 percent of Harvard’s “applicable commuting” population use alternative transportation modes when traveling to work or class located in Cambridge. Of the 84 percent, fully 3 percent telecommute or have a Compressed Work Week (CWW) therefore reducing approximately 2, 238 trips to the Cambridge campus. Also, bicycling to the Cambridge campus has increased significantly over the PTDM goal. Harvard offers an extensive Bike to Work program and this past year increased the Departmental Bike program described more fully in Section V.

PTDM Commute Trips

The table below uses the official 2006 DEP Rideshare Update Report Summary Commute Data Form chart as an illustration of extrapolating the sample trips to the whole made by all of the applicable commuters to the University’s Cambridge campus.

07 Commute Trips Summary Chart

**Summary Commute Data Form 4
PTDM Update Report 2007**

Total Commuters	x	# of days in facility workweek	=	Estimated total # of trips taken by all applicable commuters at facility
17,340		5		86,700

Commute Mode	Column I		Column II	=	Column III	x	Column IV		=	Column V	
	# of trips in mode taken by applicable commuters in sample						Estimated total # of trips taken by all applicable commuters at facility	Estimated total # of trips in mode taken by all applicable commuters			
Total # of drive-alone trips	688		4,160	=	0.165384615	x	86,700	=	14338.85		
Carpool*	187		4,160	=	0.044951923	x	86,700	=	3897.33		
Vanpool**	0			=		x		=			
Boat/ferry	0			=		x		=			
Public transit	1,164		4,160	=	0.279807692	x	86,700	=	24259.33		
Bicycle	549		4,160	=	0.131971154	x	86,700	=	11441.90		
Walk	1,430		4,160	=	0.34375	x	86,700	=	29803.13		
Other mode motorcycle	25		4,160		0.006009615	x	86,700	=	521.03		
Other CWW telecommute	117		4,160	=	0.028125	x	86,700	=	2438.4375		
TOTAL# Trips	Put this # in each box of Column II	4,160								86,700*	
TOTAL # Out-of-Office Off Campus Days ***		165									
Add above “TOTAL #’s”		4,325	*Not rounded to achieve the 86,700 number of estimated total # of trips.								

Towns and Zip Code Summary

In 2007 eighty-two percent of the applicable commuter population has less than a 10 mile commute one way. Sixty eight percent live in contiguous towns, indicating a 2 percent shift out from the traditional core.

Towns and Zips Summary Chart

Towns and Zips 2006			Towns and Zips 2007		
Cambridge	366	42%	Cambridge	347	40%
Somerville	127	15%	Somerville	123	14%
Boston (all)	82	9%	Boston (all)	90	10%
Arlington	38	4%	Arlington	35	4%
Belmont	22	3%	Belmont	29	3%
Brookline	18	2%	Medford	28	3%
Medford	15	2%	Watertown	23	3%
Watertown	14	2%	Brookline	17	2%
Lexington	13	1%	Lexington	15	2%
	695	80%		707	82%

Harvard University has successfully reduced drive-alone commuting over time using the TDM measures described in Section V below. Additionally, the *CommuterChoice* Program has grown to include a menu of sustainable transportation options. Sustainability has been formally added to these programs and will continue to be documented and monitored by the Manager of *CommuterChoice*, TDM and Sustainability.

SECTION V *CommuterChoice* Publicity Update

Publicity and Marketing

The *CommuterChoice* Program has gained significantly more visibility since taking over administration of the monthly MBTA pass sales in the fall of 2004. Employees must use the *CommuterChoice* website (www.commuterchoice.harvard.edu) to access the online MBTA pass ordering system.

Outreach to employees who do not take advantage of the subsidized MBTA pass program is conducted by way of transportation kiosks that are located at various locations across the campus. The kiosks contain the *CommuterChoice* Program brochure (which was updated in the summer of 2005), as well as bicycling, Zipcar, and shuttle information. Outreach to new employees is conducted by way of New Employee Orientation, at which the *CommuterChoice* Manager makes presentations three to four times/month, to explain all of the existing commute options available to new employees.

The *CommuterChoice* Program continues to market new incentives and services through the various Harvard media outlets, in addition to spreading information through the 141 Transportation Coordinators who represent all of Harvard’s departments.

Website and on line registration: www.commuterchoice.harvard.edu. The *CommuterChoice* website enables employees to have fast, easy access to information about the services offered through the *CommuterChoice* Program. Employees can easily register with the office and request information on carpools, vanpools, transit, car sharing, cycling and walking. The convenience of website registration allows employees to contact *CommuterChoice* with a minimum of effort and disruption to their workday. Employees without Internet access can contact *CommuterChoice* at 617-384-RIDE. The *CommuterChoice* website has offered a web-based rideshare-matching software since February 2002, which empowers Harvard affiliates to find their own matches for carpool or vanpool situations. This software can be viewed by way of the *CommuterChoice* website (Ridesharing) section or by visiting <http://harvard.vivacommute.com>.

Bicycling: Harvard held a Bike Appreciation Day event in May of 2001, which was coordinated with the City of Cambridge's "Go Green Month" events. Another event, a "Bicycle Breakfast" has taken place every year since 2002 in mid-May. Cyclists arrived between 7:30 and 9:30 am to receive a free breakfast at Au Bon Pain in Harvard Square when they present their bike helmet. Participation increased among "Bike Week Commuter Challenge" participants since bike week 2002 when there were 32 participants. In 2003 there were 49 participants; in 2004 there were 87 participants; in 2005 there were 132 participants; in 2006 there were 107 participants; and in 2007 there were more than 200 participants. The bike week events were marketed by means of the Harvard media, *CommuterChoice* website, MassBike web site, Charles River TMA web site, and Boston Metro newspaper.

Bike Maps: *CommuterChoice* created maps of safer campus-wide routes as well as on-campus amenities, such as rack, locker, and shower locations. In addition, the website has links to preferred local bicycle paths and routes. A free bicycle map and safety/informational brochure (Bicycling Street Smarts) is available upon request by visiting the *CommuterChoice* web site or by calling the *CommuterChoice* office.

Departmental Bike Program: A Resource article in the spring focused on the successful implementation of a program at Harvard Real Estate Services (HRES) that resulted in 3 additional departments purchasing departmental bikes.

GoLoco: This new on-line company that helps individuals quickly arrange ride sharing opportunities can be accessed directly through the *CommuterChoice* website. In addition, postcards are displayed at the Parking Office at 46 Blackstone South as well as at university-wide kiosks. Go Loco representatives also presented over the summer at the Harvard Law School orientation as well as the Harvard University's Retirees Association's annual weeklong fair.

T Pass information: Monthly MBTA passes are now sold online or by paper form through the *CommuterChoice* website. Marketing for this program was accomplished by way of email, paycheck stuffers, the Harvard intranet web site (www.harvie.harvard.edu), *The Harvard Gazette*, and *The Resource*, the monthly staff newspaper, as well as other newsletters, posted announcements, and HR staff meetings. Information about Harvard's T Pass discount and the extra savings through payroll deduction is also included in the "New Employee Orientation" presentation, as well as in many Schools' staff orientation packets. An email marketing

campaign targeted at the recently opened Greenbush commuter rail line yielded at least two commuters turning in parking permits and placing public transit orders.

Kiosks: Kiosks are made available to all Harvard departments at a 50% discount from the *CommuterChoice* Program Office.

Articles in Harvard Newspapers: Communication with various campus newspapers and publications is on-going. Campus publications are an important vehicle for educating the Harvard commuting public about new initiatives the University is undertaking to benefit commuters. *CommuterChoice* articles appear regularly in the Harvard *Resource* among others.

Transportation Fairs: Harvard's *CommuterChoice* Program participates annually in various Health, Benefit, and Orientation Fairs across the University. Materials about alternatives to driving alone are distributed to employees and students and they are encouraged to sign up for *CommuterChoice* options. Small, flashing "safety lights" are given away on a "first-come, first-served" basis, to make Harvard's bicyclists and pedestrians more visible at night. Raffles are held at all events where front and rear bike light sets, *CommuterChoice* courier bags, and reflective umbrellas with the "Harvard Walks" logo are given away as prizes. Another attraction is bicycle safety checks and bicycle registrations conducted by the Harvard University Police Department.

Online Chats: Harvard's intranet, HARVie, has hosted two online, real-time "chats" with Harvard Transportation Services staff. These "chats" have provided an excellent opportunity for Harvard faculty and staff information to obtain information on their commute options.