



HARVARD UNIVERSITY CAMBRIDGE CAMPUS  
PARKING AND TRANSPORTATION  
DEMAND MANAGEMENT PLAN  
2006 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.

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.

Since the PTDM Plan was approved in 2003, Harvard University remains a leader of Cambridge based employers of its size and geographic location in maintaining an exceptionally low SOV rate. In fact, the results of the 2006 PTDM survey document Harvard's SOV rate at **15.1 %** for Cambridge based employees and graduate students, a reduction from the 2005 SOV rate of 17%. This sharp reduction from the base year rate reflects Harvard's ongoing commitment to the extensive programs and measures contained in Harvard's PTDM Plan. In comparison, the average SOV rate for Massachusetts is 77% (2005 Census data) and for Middlesex County the average is 73.6% (2004 Census data).

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, 2005 through November 30, 2006. Since the 2005 PTDM Progress Report Harvard has:

- ◆ Continued planning efforts for a new bicycle structure in the former Andover Lot
- ◆ Initiated a Walk to Work program
- ◆ Continued to develop its alternative fuels program
- ◆ Increased Zipcar Affiliates registered to over 3,500
- ◆ Assisted the Harvard Green Campus Initiative with efforts to gain LEED accreditation through carpool, carshare, and innovation credits
- ◆ Continuously been recognized as a member of the EPA's National Best Workplaces for Commuters Initiative
- ◆ Been an active participant in "Greater Boston Breathes Better" an EPA-led initiative to reduce emissions that result from transportation and construction vehicle sources

The programs and measures in Harvard's PTDM Plan are extensive, as are those of Harvard's Fleet Management and Shuttle Services Department, which has converted its fleet of shuttles and buses, as well as any diesel university vehicle that they maintain, to an 80/20 biodiesel mix. Further, the Fleet Management Department is testing a new diesel exhaust filter that will further reduce vehicle emissions, and has worked with Harvard's Green Campus Initiative and Dining Services to convert a Recycling truck to run on the waste vegetable oil from Annenbun Hall's dining facility. These efforts, and countless more (see [www.greencampus.harvard.edu](http://www.greencampus.harvard.edu)), demonstrate that the University is acting responsibly to maintain and improve the quality of life within the City of Cambridge.

## **SECTION I Parking Inventory Summary**

The University's parking inventory was updated in November 2006 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 2006. 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 are included as complimentary documentation to this PTDM Progress Report.

### **Parking Management Summary**

Harvard maintains a stable parking inventory, and manages all new demand for parking and transportation services. The University transportation demand management strategies work to reduce congestion, improve air quality, and maintain its very low drive-alone rate. Approximately 85 percent of Harvard employees commute to campus using alternative modes such as public transit, 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 ridesharing vehicles. 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 have increased almost 50% in 2006/07 from the 2001/02 rates. Rates will continue to increase in the future—an effective tool for encouraging transportation modes other than drive-alone commuting. Please refer to the "Carpool Incentives" section on page 9.

*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](http://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 a "unreserved" designation which is on a "first come, first serve" basis.

Permit Type	FY06	FY07
Reserved Garage	\$ 1,725.00	\$ 1,830.00
Reserved Surface	\$ 1,625.00	\$ 1,720.00
Unreserved Garage	\$ 925.00	\$ 980.00
Unreserved Surface	\$ 865.00	\$ 915.00
Morn/After/3Day Garage	\$ 660.00	\$ 700.00
Morn/After/3Day Surface	\$ 620.00	\$ 655.00
Metered Surface	\$ 265.00	\$ 280.00
Evening Commuter Garage/Surface	\$ 50.00	\$ 50.00
Motorcycle Garage	\$ 140.00	\$ 150.00
Motorcycle Surface	\$ 110.00	\$ 150.00
<b>Tenant Parking (12-month basis)</b>		
Tenant Garage (Broadway/Everett)	\$ 1,655.00	\$ 1,885.00
Tenant Surface	\$ 1,590.00	\$ 1,685.00
One Western Avenue	\$ 1,795.00	\$ 1,900.00
Soldiers Field Park	\$ 1,795.00	\$ 1,900.00
Peabody Terrace	\$ 1,795.00	\$ 1,900.00
29 Garden Street	\$ 1,795.00	\$ 1,900.00
DeWolfe Street	\$ 1,795.00	\$ 1,900.00

## **SECTION II Driveway Count Summary**

The University's final PTDM Plan (dated July 11, 2003 and 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."

## **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. Employees now receive their discounted monthly passes in the mail at their home address. Because the cost of the pass is now deducted directly from an employee's paycheck, they now benefit from pre-tax savings in addition to the discount of 40% for bus, subway, and combo passes, and 50% discount (since July of 2005) for commuter rail passes. Currently, between 850 and 900 people take advantage of the Commuter Rail discount on a monthly basis. ***Beginning in 2007, Harvard will subsidize all passes at 50%.***

*Semester Pass:* In addition, Harvard College, Harvard Graduate School of Arts and Sciences, Harvard Law School, Harvard Medical School, Harvard School of Public Health, Harvard 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 *CommuterChoice* office makes transportation information kiosks available to all of Harvard's Schools and Departments.

The University has initiated discussions with MBTA Bus Operations staff to discuss bus service improvement needs this year.

### **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 9.9% to 11.4%:

- Reviewed and commented on the Allston Development Group's Draft Bicycle Plan.
- Continued planning efforts for a new 74-space bicycle 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.
- Continued to market Harvard's Departmental Bicycle Program (for more information, see [www.commuterchoice.harvard.edu/dept\\_bikes.shtml](http://www.commuterchoice.harvard.edu/dept_bikes.shtml))

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"

*Bicycle Events:* Harvard held a Bike Appreciation Day event in May of 2001, which was coordinated with the City of Cambridge's Go Green Month bike events. Another event, a "Bicycle Breakfast" took place in mid-May of 2002, 2003, 2004, 2005 and 2006. More than 200 bicyclists arrive annually between 7:30 and 9:30 a.m. for to receive a free breakfast at Au Bon Pain when they present their bike helmet. Participation increased among "Bike Week Commuter Challenge" participants since bike week 2002, when there were 32 participants. In 2006 there were 120 participants. The bike week events were marketed by means of the Harvard media, the *CommuterChoice* web site, the MassBike web site, Charles River TMA web site, and E-mail announcements to past participants.

*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](http://www.commuterchoice.harvard.edu/bicycling.shtml).

*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.

### **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 assisted with each event, and all events were open to City of Cambridge staff. The following events helped increase walking as a mode from 36.9% to 37.8%.

*Spring Walk to Work Breakfast* The *CommuterChoice* Program sponsored the first annual Walk to Work Day on Friday, April 7. Over 100 walkers attended this event, and enjoyed free breakfast, as well as raffle prizes; safety lights, walking maps of Boston and Cambridge, and pedometers from Walk Boston and the City of Cambridge. Participants discussed their walks to work with other attendees.

*One Stop Walks* Two "One Stop Walks" were held at different locations this year. The Porter Square "One Stop Walk" was held on Friday May 5. The Central Square "One Stop Walk" was held on June 9<sup>th</sup>. These walks were designed to encourage employees to get off the subway or bus one stop early, and then walk the remaining distance to work. Over 50 people pre-registered for these events, and

enjoyed a complimentary cup of coffee from either Rosie's Bakery in Porter Square or the 1369 Coffee House in Central Square, as well as raffle prizes and giveaways.

**Commencement Walk** The "Construction of Commencement" Walk was held on the morning of July 7. This event was created to promote an understanding of how short a walk it is to many of the buildings located in Harvard Yard, as well as being a guided tour of how the annual Commencement planning evolves. Attendees toured the entire Harvard Yard area, and were treated to historical tales of the origins of several Commencement traditions, as well as interesting insights into some of the unique aspects of past Commencement ceremonies. All Commencement Walk participants received a complimentary coffee from Au Bon Pain in Harvard Square.

**Fall Walk to Work Breakfast** The last organized walk of the year took place on Friday October 6. Extensive marketing for the Fall Walk to Work Breakfast by way of the Harvard media, emails to all past walk participants and Harvard's Transportation Coordinators, as well as by posting flyers. Attendees at this event were treated to breakfast provided by Broadway Marketplace. A variety of raffle prizes were awarded, and walkers enjoyed each others' company.

### **Preferential Carpool Parking**

Harvard continues to evaluate and respond to the need for additional carpool parking signage.

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.

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](http://www.commuterchoice.harvard.edu) or by telephone at 617-384-RIDE. The paper form is part of the *CommuterChoice* Program brochure. The web registration form is at [www.commuterchoice.harvard.edu/cgi-bin/register.pl](http://www.commuterchoice.harvard.edu/cgi-bin/register.pl). As of November 2006, there are 185 Harvard affiliates registered in the system—an 8.7% increase over 2005.

***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 2006, there are ninety-six 2-person carpools, six 3-person carpools, and two 4-person carpools.

### **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. The University also utilizes MassRides to assist in vanpool formation. In 2006, according to the survey, 0.1% of commuters are in a vanpool.

This is significant considering the effort it takes to form a vanpool. According to the 2006 PTDM survey, a majority of Harvard's employees live within 1 to 5 miles of the campus (note the high percentage of walkers and bicyclists, shown on page 13), and taken together, 82 percent live within

the metro Boston area and travel less than 20 miles each way. Due to these relatively short commutes, coupled with the transit rich area surrounding Harvard, vanpooling is not a cost-effective option for the majority of the 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 659,131 people in academic year '06; 4,759 additional riders since academic year '05. The shuttles' services are open to anyone with a University I.D., 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* office. Persons interested in getting on-line information can access Shuttle Services' website through Harvard's main web page, [www.harvard.edu](http://www.harvard.edu) (following the Neighbors & Visitors link) and the University Operations Services (UOS) website at [www.uos.harvard.edu](http://www.uos.harvard.edu). Shuttle riders can visit [www.shuttletime.harvard.edu](http://www.shuttletime.harvard.edu) to find out when the next three shuttles serving their stop will be arriving. This feature can also be downloaded to a palm-pilot or web-enabled cell phone. Shuttle services include:

*Harvard Shuttle Bus:* this is 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:* the Harvard Daytime Van Service 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 Services:* the Evening Van Service 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:* Supplementing the evening shuttle service 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:* Harvard operates 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 a.m. with the last bus leaving the Longwood Medical Area at 11:30 p.m. For a complete schedule, please visit [www.masco.org](http://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 and Shuttle Services Departments converted their fleet of shuttles and buses, as well as any diesel university vehicle that they maintain, to an 80/20 biodiesel mix. Further, the Fleet Management Department is testing a new diesel exhaust filter that will further reduce vehicle emissions, and has worked with Harvard's Green Campus Initiative and Dining Services to convert a Recycling truck to run on the waste vegetable oil from Annenbungh Hall's dining facility. These efforts, and countless more (see [www.greencampus.harvard.edu](http://www.greencampus.harvard.edu)), demonstrate that the University is acting responsibly to maintain and improve the quality of life within the City of Cambridge.

### **Bus Shelters**

Bus shelter placement continues 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 amenities and suggest the following considerations where practical:

- ◆ Provide signage at all shuttle stops
- ◆ Incorporate seating at major shuttle stops
- ◆ Design building lobbies so they can be used as bus shelters
- ◆ Incorporate bus shelters at future new transfer points

### **Zipcar**

Zipcars are located throughout Harvard's campus and the City of Cambridge such that they are easily accessible by employees and 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 initiation 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 benefit

- ◆ 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:

- ◆ Peabody Terrace Visitors' lot,
- ◆ North Hall lot,
- ◆ 8 Mt. Auburn Street lot,
- ◆ Holyoke Center Garage,
- ◆ 219 Western Avenue lot,
- ◆ Garden Street/Fernald Drive
- ◆ Business School lot, Allston (2), and
- ◆ East Drive, Allston.

The allocation of on-campus spaces to Zipcar is an efficient use of limited parking facilities. There are currently over 3,500 Harvard Affiliates registered with Zipcar, an increase of 1,050 since 2005. In a recent Zipcar member survey, 40% of members report that they would have to get a car if they did not have access to Zipcar. Relative to the number of Zipcar members at Harvard, this would be equal to 1,400 extra vehicles on campus.

The *CommuterChoice* Program works to encourage individual departments to create their own departmental memberships with Zipcar. There are currently sixteen individual departments located on Harvard's Cambridge or Allston campuses that have departmental memberships with Zipcar .

## SECTION IV    Supporting Documentation

### **2006 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.

As of November 2006, Harvard University (campus wide) had approximately 20,609 full-time "applicable" or commuting employees and graduate students who either work or attend class between 6 a.m. and 8 p.m. Currently, 10,151 or 49 percent are commuting graduate students and 10,458 or 51 percent are commuting employees. Although the graduate student population and the employee population have both increased slightly in numbers since the 2005 survey, the percentages remained the same in 2006.

Overall the increase in the "applicable population" was not significant (1 percent), however, the actual numbers continue to place Harvard in the random sample category for a population of 20,000 to 29,999 with a corresponding sample size of 1,014. What is significant is the fact that Harvard's SOV rate decreased from 17 percent in 2005 to 15.1% this year, even though its population increased. According to the 2006 survey results, the additional trips created by the increased population were proportionally assumed into alternative modes.

Harvard University has consistently worked to reduce drive-alone commuting, and to implement and maintain a rideshare program. Since 2000, the menu of sustainable transportation options increased through the creation of the *CommuterChoice* Program. These programs have been continuously

documented and monitored by the *CommuterChoice* Program, and are successfully reaching the new employee and student population. Supporting documentation for the overall accomplishments of Harvard University’s transportation demand management program is in Section V of this PTDM Progress Report.

**Survey Sample**

Harvard University conducted a transportation survey during the week of October 16 through October 20, 2006 to collect the necessary data for the PTDM Progress Report. Harvard used an on-line stratified random sample survey of the combined “applicable commuters” (employees and graduate students). The Cambridge-only PTDM survey sample size was 872, or 86 percent of the total population of employees and graduate students who work or attend class in Cambridge or Allston. The data used to determine the statistical percentage was provided by University Information Systems (UIS) and the Office of Human Resources (OHR).

**Data Collection and Analysis**

Harvard conducted the survey during the week of October 16 to October 20, 2006. 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. 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) Department and the Office of Human Resources (OHR). This year the goal was to receive 872 completed surveys for the 2006 PTDM Progress Report. Harvard’s return rate in 2006 was 100 percent.

**PTDM Survey Categories**

According to the **University Information Systems (UIS) Department and the Office of Human Resources (OHR)**, 86 percent of Harvard University’s Cambridge and Allston-based employees and graduate students work or attend class in Cambridge, a decrease of 1%. To determine the Cambridge-only sample, the survey results were filtered by employees and students who had selected Allston as their primary location. The Cambridge only responses were sorted into the categories indicated in the table below utilizing only the first in responses from the random sample.

Category 2006	Sample Number	Sample Percent*	Response Number	Response Percent
Services	44	5	43	5
Non-exempt	139	16	139	16
Exempt	262	30	260	30
Students	427	49	430	49
Total	872	100	872	100

\*Percents are rounded

### PTDM Commute Mode

The table below shows the results of the PTDM 2005 survey and the PTDM 2006 survey. The results include employees and graduate students from Cambridge only. The PTDM 2006 results indicate that Harvard has exceeded its 10 percent PTDM SOV reduction goal for three consecutive years even while increasing its student and employee population by 2% over the same time period.

Commute Mode	PTDM Goal 2003	PTDM 2005*	PTDM 2006
Drive Alone	24.7%	17.2%	15.1%
Carpool	5.0%	4.3%	3.7%
Vanpool	0	0	.12%
Public Transit*	29.3%	29.2%	29.2%
Bicycle	8.3%	9.9%	11.4%
Walk	32.7%	36.9%	37.8%
Telecommute/cww	NA	2.3%	2.7%
Other**	NA	NA	NA

\*Public Transit includes Private Bus and Amtrak; \*\*the "other" choice for a main mode was removed in 2005.

### PTDM Commute Chart

The table below uses the official 2005 DEP Rideshare Update Report chart as an illustration of trips made to the University's Cambridge Campus by those responding to the 2006 random sample survey.

Commute mode	Column I		÷	Column II		=	Column III		x	Column IV		=	Column V	
	# trips <u>in mode</u> taken by applicable commuters in sample			Total # trips by applicable commuters (See <i>TOTAL # TRIPS</i> , Column 1)			Proportion of trips taken in mode by applicable commuters ( <u>Do not round off number</u> )			Estimated total # trips by <u>all</u> applicable commuters (See Step 2)			Estimated total # of trips in <u>mode</u> taken by all applicable commuters ( <u>Round off this number</u> )	
Adjusted #Drive Alone Trips	See Step 1.#7	631	÷	4,188	=	.1506685	x	91,705	=	<b>A.</b>	13,817			
Carpool (2-6 people)	155		÷	4,188	=	.0370105	x	91,705	=	B.	3,394			
Vanpool (7+ people)	5		÷	4,188	=	.0011938	x	91,705	=	C.	109			
Boat/Ferry	0		÷	0	=	0	x	0	=	D.	0			
Public transit	1,221		÷	4,188	=	.2915472	x	91,705	=	E.	26,736			
Bicycle	477		÷	4,188	=	.1138968	x	91,705	=	F.	10,445			
Walk	1584		÷	4,188	=	.3782234	x	91,705	=	G.	34,685			
OtherCWW	15		÷	4,188	=	.0035816	x	91,705	=	H.	328			
Other Tele.	100		÷	4,188	=	.0238777	x	91,705	=	I.	2,190			
1.TOTAL # TRIPS	Put this # in each box of Column II	4,188									<b>J.</b>	91,704 rounded		
2.Total # Out-of-Office/etc.		172												
Total # Trips (Add 1 – 2.)		4360												

\* A carpool carries 2 to 6 passengers, including the driver. \*\* A vanpool carries 7 or more passengers. \*\*\* Out-of-office days include days out of the office due to vacation, sick, business meeting, etc.

According to the 2006 survey results, approximately 85 percent of Harvard's "applicable commuting" population use alternative transportation modes when traveling to work or class, when Cambridge is their destination. This is an overall increase of 2%. Almost 3 percent telecommute or have a Compressed Work Week (CWW).

## Town and Zipcode Summary for 1-5 mile Commute

Cambridge	366	42%
Somerville	127	15%
Boston	82	9%
Arlington	38	4%
Brookline	18	2%
Belmont	22	3%
Medford	15	2%
Watertown	14	2%
Lexington	13	1%
Newton	9	1%
Malden	9	1%
	<b>713</b>	<b>82%</b>

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## **SECTION V Commuter Choice 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](http://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* Program Manager makes presentations two 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](http://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, and cycling. 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* web site 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* web site (Ridesharing) section or by visiting <http://harvard.vivacommuter.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. More than 200 bicyclists arrive annually between 7:30 and 9:30 a.m. 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, and in 2005, there were 132 participants, and in 2006 there were. The bike week events were marketed by means of the Harvard media, the *CommuterChoice* web site, the MassBike web site, the Charles River TMA web site, and the Boston Phoenix.

The Harvard website has links to preferred local bicycle paths and routes, as well as to rack, locker, and shower locations on campus. 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.

*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](http://www.harvie.harvard.edu)), the weekly staff newspaper; *The Harvard Gazette*, the monthly staff newspaper; *The Resource*, 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.

*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 were distributed to employees and students and they were encouraged to sign up for *CommuterChoice* options. Small, flashing "safety lights" were given away on a first-come, first-served basis, to make Harvard's bicyclists and pedestrians more visible at night. Raffles were held at all events and front and rear bike light sets, "*CommuterChoice*" courier bags, and reflective umbrellas with the "Harvard Walks" logo were given away as prizes. Another attraction was 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 providing Harvard faculty and staff information on their commute options.