Harvard University Cambridge Campus
Parking and Transportation Demand Management Plan
2013 Annual Progress Report

Submitted by:

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Introduction

Harvard University is a leader among Cambridge’s large employers in maintaining an exceptionally low Single Occupancy Vehicle (SOV) rate. This accomplishment represents a significant contribution to state and local transportation planning and is an important component in Harvard’s goals for greenhouse gas emission reduction. Since 2003, when Harvard’s first Parking and Transportation Demand Management (PTDM) Plan established the goal of reaching an SOV rate of 24.7%, a broad range of exemplary programs and incentives managed by Harvard’s CommuterChoice Program have encouraged commuters to leave their cars at home. According to the 2013 PTDM survey results, Harvard’s current SOV rate for Cambridge-based employees and graduate students is 12.8%—far exceeding Harvard’s original goal of 24.7%.

The report that follows reviews both Harvard’s TDM monitoring data and the programs/activities supporting the data for the period ranging from December 1, 2012 through November 30, 2013.

PTDM Monitoring

In the Monitoring Section of the original 2003 PTDM Plan, Harvard committed to providing annual updates to the City of Cambridge PTDM Officer. In odd years, including this one, the monitoring updates were to include the following items, all of which are included in this report:

- Yearly survey results (Appendix 1)
- An annual parking inventory summary sheet of 4,576 spaces (Appendix 2)
- Parking Locator Map (Appendix 3)
- Parking Utilization and Driveway Count Data (Appendix 4)

2013 Programs/Activities Overview

Below is a partial list of current CommuterChoice and Parking Services programs, with updates and new programs for 2013 in bold:

Transit Pass Program

- Offered 50% MBTA monthly pass subsidy
- Sold an average of approximately 7,100 MBTA passes per month
- Offered pre-tax savings on purchase of private transit passes and commuter checks
- Implemented new Emergency Ride Home (ERH) Program now open to all green commuters

Ridesharing/Car-sharing

- Offered discounted Zipcar membership for University affiliates 18 and older
• Zipcar membership count increased to approximately 11,000 University affiliates
• Added 4 Zipcar spaces including a plug-in electric vehicle, for a total of 32 vehicles
• Offered carpool partner matching and carpool registration
• Offered discounted and preferential parking for carpools and vanpools
• Provided assistance with vanpool formation
• **Piloted 50% subsidy on vanpool expenses**
  • Increased carpool (CARP) and Low Emission Vehicle (LEV) spaces as needed
  • Promoted Zimride, an online ride sharing program for commuters or single-trip travelers
• Won Zimsgiving competition against MIT, resulting in 123 new trips posted in November and December on the Zimride rideshare platform.

**Bicycles**

• Supported Hubway Regional Bike Share program
• Distributed free one-day Hubway memberships to all undergraduates at the beginning of the school year
• Offered first ever Hubway Champion Level discounted annual memberships of $50 to all members of the Harvard community
• Launched Bike Commuter Benefit for the reimbursement of purchase, repair, maintenance and storage of bicycles
• Installed two new bicycle repair stations at the Cambridge Street Overpass (The Plaza) and 46 Blackstone Street
• Installed 64 new bike racks at the Cambridge Street Overpass (The Plaza) for a capacity of 133 bikes
  • Offered reservation and tracking system for use with departmental bikes including electric bikes
• **Coordinated the purchase of three departmental bikes at the Arnold Arboretum**
• **Sold 320 discounted bike helmets to help promote bike safety**
• Offered Harvard affiliates a bike registration program in conjunction with the Harvard University Police Department
• Distributed information on safe bicycle routes and general bicycle safety
• Updated campus bike rack map
• Communicated bike regulations and *CommuterChoice* programs to incoming first year students and their parents
Walking

- Managed Walk-to-Work programs and information
- Distributed Harvard Walks Map to members of the Harvard Community

Parking

- Installed 17 Electric Vehicle Charging Stations for a total of 23 across the Allston and Cambridge Campuses
- Stenciled Low Emission Vehicle (LEV), Carpool (CARP) and Electric Vehicle Charging Station (ECS) parking locations to increase visibility and enhance consistency across campus
- Expanded Low Emission Vehicle (LEV) and Carpool (CARP) Preferential Parking

Shuttle Services

- Transported over 852,000 faculty, staff, and students in 2013
- Promoted iPhone application showing real time location of vehicle fleet

Outreach

- Publicized transportation initiatives at 22 information kiosks around campus
- Assisted employees with transportation information related to moving/relocating

Miscellaneous

- Developed parking inventory maps identifying carpool (CARP), Low Emissions Vehicle (LEV), Zipcar and Electric Vehicle Charging Stations (ECS) locations
- Awarded Bike Friendly University Silver Award from the League of American Cyclists, April, 2013
- Awarded Best Workplace for Commuters by the National Center for Transit Research at the University of South Florida
- Won Massachusetts Excellence in Commuter Options (ECO) Award, Pinnacle Level, March 2013
- Awarded Boston Bike Friendly Award (Gold), May 2013
- Participated in the Green Streets Initiative Walk/Ride Day Corporate Challenge, May-October 2013
- Won MassRIDES’ 2013 Car Free Week, with 1,778 registrants
Section I. Parking Inventory Summary

Each year the University submits a parking binder to the City of Cambridge that includes three parts: a summary sheet, locator map, and prints of all the individual lots. This year’s binder was updated in November by staff at Harvard Parking Services and Harvard Planning & Project Management, who performed separate field checks of spaces and signage. This binder was submitted under separate cover to Adam Shulman, Transportation Planner in the Traffic, Parking and Transportation Department, City of Cambridge.

In 2007, the University and the City of Cambridge amended the scope of the University’s first PTDM plan (2003) to account for the automation of Harvard’s parking lots/garages. Under the new amended guidelines, Harvard University began conducting driveway counts and parking utilization counts for all automated lots/garages every two years.

Section II. Parking Management Summary

Harvard maintains 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 eighty-seven percent (87%) of Harvard employees and graduate students commute to campus using alternative modes such as public transit, carpools, walking, and bicycling or by participating in various non-commuting alternatives such as teleworking. Harvard’s well-established planning principles of open space preservation, minimization of vehicular travel, and optimization of pedestrian circulation also support alternative commuting modes.

The goal of Harvard’s parking management plan is to encourage alternative mode use and serve as many people as possible by optimizing the current parking supply. This goal is achieved through a careful balance of parking pricing, preferential parking, reduced parking fees for carpools and free parking for vanpools.

This year Parking Services installed 17 Electric Vehicle Charging Stations available for use by permit holders for a total of 23 around campus. The University also stenciled Low Emission Vehicle (LEV), Carpool (CARP) and Electric Vehicle Charging Station (ECS) parking locations to increase visibility and enhance consistency across campus.

Additional incentives designed to reduce the drive-alone rate include:

- 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 (CARP), vanpools, Low Emission Vehicles (LEV), and Electric Vehicle Charging Stations (ECS).
• Occasional Parking: Harvard strongly encourages faculty and staff to take public transportation and other alternate commuting options to campus but realizes that employees may occasionally need to drive to work. To support this flexibility, Harvard offers an online one-day parking permit system, which allows employees to purchase single-day parking permits and drive to campus only when truly necessary.

• Description of the Management of Various Parking Facilities: Over 90% of Harvard’s parking spaces are available on an “unreserved” designation, which is on a “first-come, first served” basis. Harvard has a limited number of assigned/reserved spaces and has been moving away from this type of management.

• 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 another 8% in FY14 (2013/14). 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 rate chart below.

Parking Rate Structure 2014
In FY14, annual permits range from $1,356 for unreserved surface parking to $2,964 for reserved garage parking. Fees are exempt from income and payroll taxes when paid for through the University payroll deduction program. Choosing payroll deduction can reduce the net cost of a parking permit up to 35%, depending on income tax bracket.

<table>
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<tr>
<th>Permit Type</th>
<th>FY11 8% 12 months Expires 6/30</th>
<th>FY12 9% 12 months Expires 6/30</th>
<th>FY13 9% 12 months Expires 6/30</th>
<th>FY14 8% 12 months Expires 6/30</th>
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<td>Reserved Garage</td>
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<tr>
<td>Tenant Surface (12 month)</td>
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<td>Extension/Evening Garage</td>
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<td>Commuter Student (12 months, garage)</td>
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<td>Summer Garage (2 months, tenant)</td>
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Section III. Trip Reduction Incentives

Harvard University’s CommuterChoice Program is pleased to report on its transportation demand management programs and incentives and is committed to improving its programs based on annual survey data and other feedback. For results of previous surveys, please refer to the University’s annual PTDM Progress Reports, on file with the City’s Community Development Department and last year’s report online at Harvard’s Planning and Project Management page: www.home.hppm.harvard.edu/pages/reports

A. Public Transit

Harvard offers its employees a convenient online MBTA pass ordering system, in place since September 2004, allowing employees to receive their discounted monthly passes at their home address or as an automatic update to their transit card. Because the cost of the pass is deducted directly from an employee’s paycheck, employees receive a pre-tax benefit in addition to the 50% subsidy.

As of November 2013, an average of nearly 7,100 passes were purchased by Harvard employees each month. Bus and subway riders receive a reusable, computer chip-enabled Charlie Card designed to last multiple years. Harvard’s online system automatically updates these Charlie Cards each month, eliminating the monthly mailing of approximately 5,800 passes, and thus increasing efficiency and contributing to the University’s sustainability efforts. Commuter Rail, Ferry, Senior, and Express Bus commuters will continue to receive monthly passes by mail until the MBTA updates these transportation options to accommodate Charlie Cards.

Semester Pass Program


MBTA Advocacy

To maintain and increase public transit ridership at Harvard, University representatives meet and communicate with MBTA staff on a regular basis to discuss service improvements and to share the comments collected in the PTDM survey.

B. Private Transit

Harvard offers benefits eligible faculty and staff pre-tax savings on the purchase of private transit passes and vanpool Commuter Checks. Private transit includes most non-MBTA trains and buses, such as those operated by Amtrak or Regional Transit Authorities (RTAs) such as those in Lowell and Worcester. Private transit products and/or discounted monthly MBTA passes can be ordered through one easy-to-navigate website, and all products are conveniently mailed to employees’ homes. The cost of all transit products (MBTA and private) is deducted on a pre-
tax basis, with most individuals saving approximately 30-35% on their commuting costs, depending upon their income tax bracket and withholding rate.

C. Bicycle Programs

Recent Accomplishments:
The CommuterChoice Program works with the Harvard Planning & Project Management staff to continually improve the cycling environment on the Cambridge and Allston campuses and encourage the use of bicycles for inter-campus travel. The following is a list of recent accomplishments:

- Continued to strongly support the Hubway Regional Bike Share network, with seven supported stations in Cambridge and five in Boston.
- Publicized the Bicycle Commuter Benefit program providing up to $240/year for the purchase, repair, maintenance or storage of a bicycle for benefits eligible employees.
- Awarded Bicycle Friendly University Silver Award from the League of American Bicyclists
- Awarded the Boston Bike Friendly Award (Gold) in May 2013

Bicycle Promotion and Marketing
The CommuterChoice Program strives to find new ways to promote and market cycling as a mode of transportation. Over the last year CommuterChoice efforts have included the following:

- Distributed free one-day Hubway memberships to all undergraduates at the beginning of the school year
- Offered first ever Champion Level annual memberships for $50 to all members of the Harvard Community
- Sponsored the annual Bike Bash at Harvard’s Queen’s Head Pub as a culmination of Bay State Bike Week Commuter Challenge
- Worked with the cities of Cambridge and Boston, MassRIDES, MassDOT and Bike Week Committee members to promote and market the Bay State Bike Week Commuter Challenge
- Marketed new bicycling initiatives including the Bike Commuter Benefit Program and Discounted Hubway Membership through online, print, and in-person promotion
- Marketed Harvard’s Departmental Bicycle Program, currently involving 21 departments and 46 bikes
- Encouraged bicycle registration, particularly focusing on incoming first-year students and new faculty and staff
- Continued to tag and remove abandoned bicycles across the campus
- Distributed the following publications free of charge to Harvard employees, faculty and students requesting bicycle information:
  - Boston Bikes Map (2013)
  - Bicycling Street Smarts
  - Bikes on the T
  - Go By Bike: A Guide to Commuting on a Bicycle
  - Getting Around Cambridge map
Bicycle Events
On Wednesday, May 15, 2013 CommuteChoice held its annual Bicycle Appreciation Breakfast outside Holyoke Center Arcade, a tradition since 2001. Cyclists arrived in Harvard Square between 7:30 and 9:30 a.m. and received a free t-shirt and breakfast items upon presenting their bike helmet as well as entrance into a raffle to win cycling equipment, reflective leg bands, safety lights, Hubway memberships, bike locks and more. This year, 255 cyclists attended. This breakfast took place in conjunction with Bay State Bike Week, May 12-18, which included events across the Commonwealth designed to increase overall bicycling within that week, as well as continuing the Commuter Challenge, a friendly competition among Massachusetts businesses and institutions geared toward commuting employees. As part of Bike Week activities in 2013, 131 Harvard cyclists pledged to ride over 3,533 miles.

As a culmination of the Mass Commute challenge, CommuteChoice hosted the annual Bike Bash at Harvard’s Queen’s Head Pub, attracting hundreds of cyclists to celebrate and congratulate group and individual award winners from the competition. During the Bike Bash, Harvard was announced as the winner of the Mass-Commute Bicycle Challenge in the Large Education category.

Campus Route Maps
CommuteChoice has a map of suggested campus-wide routes and location of bike racks which can be viewed and downloaded at the bicycling section of the CommuteChoice website: http://www.campusservices.harvard.edu/commutechoice/bicycling/bicycle-rack-locations-and-bicycle-routes. The content of these maps is updated annually to reflect improved bicycling facilities and infrastructure.

Online Interactive Bike Rack Map
The CommuteChoice Program, in conjunction with the Harvard Planning & Project Management staff, maintains an interactive bike rack location map for the
Cambridge and Allston campuses: www.map.harvard.edu. When the user clicks on a bike icon, a dialogue box opens, giving the user the specific bike rack location and capacity, as well as information as to whether the rack is covered or lit. The site also lists suggested bicycle routes. The content of these maps is updated annually to reflect improved bicycling facilities and infrastructure.

Links to Online Information
The *CommuterChoice* web site provides useful links for interested cyclists. Examples include links to the following information:

- Information on bicycle registration
- Information on safety classes
- BostonBike’s Urban Cycling Guide
- Quad Bikes, a non-profit, on-campus bike shop for the Harvard community
- MassBike, the statewide advocacy group for promoting and encouraging cycling
- Bike safety advice and tips
- Safe cycling on Hubway

Bicycle Registration and Safety
*CommuterChoice* has collaborated with the Harvard University Police Department to develop and administer an online bicycle registration program for all employees and students to help deter theft and to aid in the recovery of stolen bicycles. This collaboration has included outreach to the Harvard community, both about the registration program and about bike safety and security in general. Outreach has included presentations around campus throughout the year, with a special emphasis on reaching students and their parents at Freshman Move-In. *CommuterChoice* also worked on bicycle related data collection with the Harvard University Police Department as part of the Bike Friendly University application which culminated in a silver-level award.

Rather than hosting classes on campus as in previous years, *CommuterChoice* encouraged employees interested in learning about bicycle safety or repair techniques to take classes at any location and be reimbursed for expenses. This reimbursement process allows employees the convenience and accessibility to take classes whenever and on whatever bicycling subject they desire. Students and staff members alike were also encouraged to participate in classes through the City of Cambridge focusing on urban cycling, bike repair and maintenance techniques, and women powered cycling.

Through funding from the Boston Public Health Commission, Harvard, in an effort to encourage safe cycling, offers $9.00 helmets for sale at the *CommuterChoice* office. Over 320 were sold in 2013 alone, 120 more than 2012.
Bike Planning
Bicycling is recognized as an integral component of the University’s transportation system, and Harvard’s Schools and administrative units have long supported the strengthening of the cycling network and facilities across campus. Harvard invests considerable effort in developing cycling programs, creating a cycling infrastructure, and supporting the improvement and growth of local and regional bike networks that connect the University campus with other parts of Cambridge and Boston. The University’s Cambridge Campus Transportation Guidelines (2006) include considerations for the provision of bicycle parking and other facilities as part of Harvard’s commitment to strengthening its campus bicycle network.

Harvard University works collaboratively with MassDOT, the City of Cambridge, the City of Boston and other stakeholders on municipal bicycle planning initiatives and on incorporating bicycle facilities and pedestrian enhancements into planning efforts in areas of Boston and Cambridge that affect the Harvard community. The University is working with the City of Boston and the City of Cambridge on the implementation of the North Harvard Street and Western Avenue bike lanes which provide important cycle links between the Allston and Cambridge campuses. Harvard continues to coordinate with MassDOT on the construction for the Anderson Bridge and design of the Western Avenue and River Street Bridges. These projects will include new bike facilities: bike lanes on the Anderson Bridge and cycle tracks and shared paths on the other two bridges. In Boston, Harvard continues to coordinate with the City of Boston regarding the planned extension of bike lanes on Western Avenue from Barry’s Corner to Market Street.

The CommuterChoice Program works with staff at Harvard Planning and Project Management (HPPM) to continually improve the cycling environment on the Cambridge and Allston campuses and encourage use of bicycles for intercampus travel. As part of the feedback from the League of American Bicyclists as part of the Bike Friendly University process, CommuterChoice and HPPM are collaborating to address identified recommendations to further enhance bicycling conditions.

Bicycle Repair Stations
Bicycle repair stations allow cyclists from across the Harvard community to pump air into their tires, make adjustments and perform minor bike repairs. This year two stations were installed at the Science Center Plaza and at 46 Blackstone St. Additional stations are located at Pound Hall (Harvard Law School), and the i-lab in Allston as well as a city owned station at the corner of Eliot and Brattle Street. All station locations are listed on the CommuterChoice website.
Hubway Bike Share Program
Harvard continues to collaborate closely with the cities of Cambridge and Boston to support the regional bike-sharing program, Hubway, around Harvard’s campuses. The program allows users to access bikes from solar-operated stations by purchasing an annual or casual membership with which the first 30 minutes of riding are always free. Bikes can be reserved and returned at any station in the network. The University supports seven Cambridge stations, at Peabody Terrace, the River Houses, the Kennedy School, the Law School, the School of Engineering and Applied Sciences, Gund Hall and the Radcliffe Quad. Boston supported stations include four along Western Avenue at Soldiers Field Park, the i-lab, Barry’s Corner and at the Brighton Mills Shopping Plaza and one in the Longwood Medical Area Campus.

The Hubway bike-sharing system provides an exciting transportation alternative for faculty, staff, students and visitors. The 12 Harvard supported stations along with the 125+ stations in the network connect all of Harvard’s undergraduate and graduate Schools, providing an alternative to driving between the Cambridge, Allston, and Longwood campuses as well as destinations across Boston, Cambridge, Somerville and Brookline. The system provides Harvard the ability to better connect areas of the campus not as well served by existing transit systems and enable more transit connections between existing public and private transit modes for Harvard affiliates and the general public. Hubway also contributes to the University’s sustainability goals by reducing inter- and intra-campus vehicle trips.

As part of Harvard’s support for Hubway, the University was able to offer the first ever Champion level membership, allowing affiliates to enroll in a discounted Hubway Annual Membership for only $50 – over 40% off the regular price. Since the membership was launched in May 2013, over 800 community members have enrolled under this membership.
Hubway successfully connects Harvard’s Cambridge, Allston, and Longwood Campuses. The map below displays Harvard and City of Cambridge supported stations.
The Spring Walk to Work Breakfast was held on April 24, 2013. The event was held in the recently redesigned Cambridge Street Overpass (The Plaza). The new venue proved a success as 153 participants attended the breakfast. They received information and handouts from the City of Cambridge, the Harvard University Credit Union, MassRIDES, Harvard on the Move and Hubway.

In an effort to take advantage of warmer weather and lighter conditions, the Fall Walk to Work Breakfast was moved up in the calendar this year and held on September 13, 2013 at The Plaza. The event coincided with Massachusetts Car Free Week, and featured representatives from the MassRIDES, the City of Cambridge, Zipcar, Harvard Athletics, the Harvard Center for Wellness and the Harvard Credit Union along with 236 participants. Post event evaluations indicated high participant satisfaction the timing, food, incentives, and atmosphere at the event.

**Departmental Bike Program**

The Departmental Bike Program offers all schools and departments at Harvard the option of purchasing bicycles for campus transit as an alternative to relying on cars or taxis. The goals of this program are to reduce vehicle trips and air pollution, improve cardiovascular health, shorten campus travel time, and reduce parking and taxi costs. This year the CommuterChoice program worked with the Arnold Arboretum to implement a dynamic departmental bike system with four bicycles and helmets for use by staff on site. Even with the expansion of Hubway, the departmental bike program has slightly enhanced beyond last years levels, now involving 21 Harvard departments and 47 bikes.

The role of the CommuterChoice Program in the Departmental Bike Program is to provide assistance in the selection, purchase, delivery, and labeling of the bikes; arrange for bike repairs, maintenance and winter storage; and establish a monitoring system for bike usage. CommuterChoice also offers a subsidy for bike purchases and provides guidelines for riders. Before using a departmental bike, employees must sign a general agreement and guidelines for use form and wear a helmet. Feedback on the Departmental Bike Program continues to be favorable on campus, and the program has been replicated at other colleges. Transportation Services provides unlimited access to five departmental bikes for Campus Services employees who work at the Blackstone Complex. These bikes may be reserved for use through an online reservation system that includes access to the “Geared Up” bike safety video. Two other bike share programs, CrimsonBikes and Read & Ride Bikeshare, serve the Harvard community by providing a cycling transportation option to students, facility and staff without having to own a bicycle.

**Showers and Lockers**

The University has designated areas for showers and lockers primarily at athletic facilities. All general athletic facilities are open for use by any employee or student for a nominal fee.

**D. Walking Programs**

**Walk to Work Breakfasts**

The Spring Walk to Work Breakfast was held on April 24, 2013. The event was held in the recently redesigned Cambridge Street Overpass (The Plaza). The new venue proved a success as 153 participants attended the breakfast. They received information and handouts from the City of Cambridge, the Harvard University Credit Union, MassRIDES, Harvard on the Move and Hubway.

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Harvard Walks Map
Enthusiastically received by the Harvard community ever since it was first produced in 2009, this map is now in its third printing, and thousands are distributed each year. CommuterChoice developed this map in conjunction with WalkBoston to provide a physical orientation to the campus and provide suggestions for walking destinations. Distributed at new employee orientation sessions, at conferences on campus, in transportation kiosks and to students living in University housing, the maps continue to be well received. A new employee recently wrote: “I was so happy that I picked up a Harvard University Walking Routes map at New Employee Orientation. I started working at Harvard only a month after moving to the Cambridge area so I was unfamiliar with all of the street names and buildings. Within my first week I used the map in order to deliver letters to different departments on campus, as well as navigate my way to lectures and the Farmers Market. In addition to the clearly labeled streets and buildings, I could also estimate the time needed to get to each place. I keep a copy in my purse, just in case.”

E. Preferential Parking for Low Emission and Fuel-Efficient Vehicles
Several years ago, Harvard Parking Services partnered with the Harvard Business School (HBS) and the Office for Sustainability (OFS) to pilot a preferred parking plan for low-emission and fuel-efficient vehicles. In addition to the spaces already reserved for disability and carpool parking in the HBS surface lot, HBS permit holders had the option of using specially designated parking spaces if they drove designated low emissions vehicles. Due to the pilot’s success, the LEV parking option has expanded, and preferred LEV parking is an option at ten garages and large parking lots across campus for a total of 33 spaces. As with carpool spaces, Low-Emission Vehicle (LEV) spaces are designated in preferred parking areas and are reserved for qualifying permit holders weekdays until 10:00 am each day.

To apply for an LEV parking hangtag, permit holders must demonstrate that they drive a vehicle that meets EPA SmartWay Elite certification requirements. Once Parking Services confirms that a vehicle qualifies and receives a copy of the owner’s registration, an LEV permit is issued. As of November 2013, Parking Services has issued 58 LEV permits.
F. Installation of Electric Vehicle Charging Stations

The University has installed 23 Electric Vehicle Charging Stations throughout the Cambridge and Allston campuses. As of November 2013, Parking Services has issued 14 ECS permits. Stations are listed below, with stations installed this year in bold.

Allston:
• 111 Western Avenue (Soldiers Field Park Garage) - 4 stations
• 125 Western Avenue (Innovation Lab) - 2 stations
• 230 Western Avenue - 2 stations

Cambridge:
• 5 Cowperthwaite Street - 2 stations
• 7 Felton St (Broadway Garage) - 3 stations
• 10 Akron Street - 2 stations
• 10 Everett St - 4 stations
• 52 Oxford Street - 2 Stations
• 120 Banks Street (Peabody Terrace) - 2 stations

G. Ridesharing Programs

Designated Carpool Spaces and Signage
Harvard continues to monitor and respond to the need for additional designated carpool spaces and corresponding signage. Carpooling demand and available resources are reviewed several times each year. Current demand calls for 95 carpool spaces.

Carpool Preferential Parking
Employees who are registered as carpoolers 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, a policy that provides flexibility and can accommodate increases in ridesharing. During parking permit renewal season, CommuterChoice checks in with all carpoolers to ensure that they are satisfied with the carpool program and to provide them with updates on program policies as needed.

Carpool Matching
Harvard University has offered a carpool-matching program to interested employees since 1975. Establishing a carpool involves several steps: 1) finding a partner(s), 2) reviewing the “Tips” for carpoolers, 3) reading the policies and guidelines and completing all necessary paperwork.

Carpool Incentives
Carpoolers who register through the CommuterChoice Program receive a 50% discount on their annual parking permit if they carpool with one other employee, and a 75% discount if they travel with two or more employees. These carpool discounts are available to employees commuting to campus four or five days per week, benefitting both full-time employees and employees who work flexible schedules or compressed work weeks or who telecommute from home. With the
exception of primary permit holders, each carpooler with a registered vehicle receives four temporary passes per month to allow participants to park separately when schedules vary. In 2012 CommuterChoice transitioned to an online system for obtaining these temporary passes thus eliminating antiquated paper permits, and improving ease of use. Carpoolers continue to receive additional savings by paying for the service pre-tax through payroll deduction. As of November 2013, there are 243 total carpoolers, and Parking Services has issued 117 two-person Carpool Permits and 3 three-person Carpool Permits.

**Vanpool Program**

Harvard University’s vanpool program provides free preferential parking in designated lots on campus to vanpools containing at least six Harvard-affiliated riders (all of whom must live at least 17 miles from Harvard’s Cambridge or Allston campuses). To help make vanpools a more attractive option for employees, the CommuterChoice office offers assistance in recruiting possible vanpoolers, identifying ride-matching services, and marketing the vanpool concept with assistance from MassRIDES and area businesses.

Several years ago, CommuterChoice researched and wrote a Vanpool White Paper, which outlined the major obstacles in forming vanpools as being the identification of a critical mass of participants, the prohibitive cost of insurance, and the issue of finding alternative transportation if/when the vehicle breaks down. Harvard continually works to encourage vanpools, but since the majority of Harvard employees live within 10 miles of campus and they have an abundance of public/private transit options from which to choose, vanpooling has always maintained a very small share of the overall mode split. It is simply not a cost-effective or viable option for the majority of Harvard’s commuting population.

This year, CommuterChoice implemented a pilot 50% monthly subsidy for the two current University vanpoolers. Commuters choosing to vanpool purchase CommuterChecks from Crosby Benefits to pay for their vanpool monthly expenses through the CommuterChoice online transit pass ordering system. This process allows for pre-tax payroll deducted vanpool payments, with an additional 50% discount paid for by the University.

**Emergency Ride Home Program**

In 2013 the CommuterChoice program transitioned to a simpler, more streamlined and more comprehensive Emergency Ride Home (ERH) Program by partnering with MassRIDES and the Massachusetts Department of Transportation (MassDOT). ERH allows green commuters to take a taxi, rental car or transit to where users need to be in a family or personal emergency and be reimbursed for the trip excluding tip and tax, up to four times per calendar year.

The previous ERH program was limited to two trips per year only for carpoolers and vanpoolers, and only allowed transportation via specific cab companies. Furthermore, the new program is for any employee who green commutes at least twice per week rather than just fulltime carpool and vanpool commuters.
Since in the inception of the program, 1705 employees have registered and 46 trips have been reimbursed for a total of $1,635.62.

Zimride
Zimride is a shared-ride program that helps Harvard affiliates locate other people with similar commuting patterns or travel needs and then facilitates the sharing of cars and rides. Zimride is a social network platform that can integrate with Facebook, and users can view profiles before deciding to share a ride. Since the program's inception, over 1,800 users have registered for the program, with nearly 300 new users signing up this year alone.

In 2012, MIT joined Zimride and became a trusted partner in the Harvard network, expanding the number of users, and increasing the possibility for a successful ride match. To celebrate this expansion, the two Universities teamed up to hold a Zimsgiving competition, to see which school could garner the most new trips posted to the Zimride website over November and December 2012. Harvard won the competition with 123 new trips posted, and awarded a random participant an iPad courtesy of Zimride.

Harvard maintains a year-round comprehensive shuttle bus system operating throughout the Cambridge and Allston campuses, providing a fixed-route service with more than fifteen stops in Cambridge and three stops in Allston. Service operates seven days a week, beginning as early as 5:45 a.m. and running until 4:00 or 5:00 a.m. The shuttle service is free to all members of the Harvard community. Harvard developed and maintains transportation guidelines for its Cambridge campus that recognize the importance of bus stop signage and dedicated stops on city streets. Bus signage and dedicated shuttle stops continue to be a cooperative venture between Harvard University and the City of Cambridge.

Harvard Shuttle Services transported over 852,000 faculty, staff and students in 2013. The shuttle service is open to anyone with a University I.D. and provides a critical link in getting employees and students around campus and transporting them from public transit stops and carpool spaces to their final destination. Harvard provides a range of fleet and passenger transport services including:

ShuttleTracker
Transit Visualization System (TVS) for Real-Time Bus Locations: The Transit Visualization System™ (http://www.shuttle.harvard.edu/) continuously displays the location of Harvard University shuttles and animates their motion against a detailed map of recognizable University buildings and landmarks. The TVS helps riders save time, stay safe, and have more control over their schedules, while also enabling Transportation Services to manage its fleet with unprecedented precision and clarity.
Harvard Daytime Van Service
The Harvard Daytime Van Service is designed for people who find it difficult to use the regular shuttle bus system due to a mobility impairment or medical condition. Transportation is provided door-to-door within the Cambridge and Allston campuses.

Harvard Evening Van Service
The Harvard Evening Van Service is a free, on-call, taxi-style service that operates between 7:00 p.m. and 3:00 a.m. nightly during the academic year and between 7:00 p.m. and 12:30 a.m. in the summer. It is designed for transporting Harvard affiliates throughout the Cambridge and Allston campuses within a specified boundary (shown on the shuttle map, http://www.shuttle.harvard.edu/).

Longwood Medical Area Shuttle - the M2: Harvard operates a year-round, 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., and the last bus leaves the Longwood Medical Area at 11:30 p.m. A complete schedule is posted on the MASCO web site (http://www.masco.org/directions/routes). Harvard faculty and staff can board the shuttle buses for free with a swipe of their Harvard ID cards. Most students, including undergraduates, are eligible for free fares, and other students can purchase tickets.

Fleet Management Programs
Harvard’s Fleet Management Department manages and operates a biodiesel fuel program for all University diesel vehicles. Currently, B20 is used in 71 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 developed and maintains transportation guidelines for its Cambridge campus that recognize the importance of bus stop signage and dedicated stops on city streets. Bus signage and dedicated shuttle stops continue to be a cooperative
venture between Harvard University and the City of Cambridge.

Fleet Management continues to run its Nitrogen for Vehicle Tires program, which was introduced in December of 2008. Nitrogen-filled tires last longer and provide increased safety, better fuel efficiency and reduced operating costs. Tires inflated with compressed air lose close to two psi/month, but it takes up to six months or more for the same loss with nitrogen. More importantly, tires properly inflated with nitrogen provide a 3.3% average increase in miles/gallon, eliminate chemical aging of the tire, promote longer tire life by up to 25%, and increase re-treadability.

I. Zipcar

Zipcars are located throughout Harvard’s campus and the City of Cambridge and are easily accessible by employees and eligible students over the age of 18 as well as the general public. Zipcars are particularly beneficial in providing mobility to non car owners and employees who leave their cars at home. Zipcars are available for use by members for as little as one hour—or as long as needed. Harvard employees can access a car whenever they want without the hassles of owning one, and Harvard Schools and administrative units can set up no-cost Departmental accounts allowing for hourly and daily discounted rates for work-related travel. Harvard’s participation in the corporate program entitles affiliates to a reduced membership fee of $25/year and $15/year for students, thanks to a special promotion through Ford, as well as Z4B discounted rates on weekday reservations.

Additional benefits to Harvard employees and students include:

- On-site 24-hour access to cars
- Access to hundreds of Zipcars around Boston and thousands around the world
- Reservations can be made online or with mobile apps
- Reservations include gas and insurance
- International drivers licenses accepted

32 Zipcars can be found in the following locations on the Harvard campus, with new vehicles this year in bold:

Allston:
- 111 Western Avenue (Soldiers Field Park Garage)
- 117 Western Avenue (Harvard Business School Lot, 2 spaces)
- 125 Western Avenue (Innovation Lab)
- 219 Western Avenue
- **370 Western Avenue (Brighton Mills, 2 spaces)**

Cambridge:
- 120 Banks Street (Peabody Terrace, 2 spaces)
- Cowperthwaite Street @ Banks (2 spaces, 1 pick-up truck)
- Cowperthwaite Street @ Dewolfe
- Perkins Lot: Everett St/Oxford Street (3 spaces, 1 van)
• 28 Fernald Drive (Botanic Gardens, 2 spaces)
• Francis Avenue lot (2 spaces)
• Holden St and Farrar St (Holden Green, 2 spaces)
• Malkin Athletic Center (MAC, 2 spaces)
• 1651 Massachusetts Avenue (North Hall)
• Mellon Lot: 14 Mellen St (2 spaces)
• 8 Mt. Auburn Street (2 spaces)
• **Observatory Lot (2 spaces)**
• Shaler Lane (near Mt. Auburn Hospital)
• 53 Shepard Street (Radcliffe Quad)

The allocation of on-campus spaces to Zipcar is an efficient use of limited parking facilities. There are currently 32 vehicles at locations, with approximately 11,000 Harvard affiliates who are registered to participate in the program. According to Zipcar, each “Zipster” saves 219 gallons of crude oil per year.

On Thursday, October 10th, Zipcar and CommuterChoice celebrated the i-lab as a mobility hub by painting a Zipcar destination with a sustainable transportation theme. Throughout the day, nearly 150 guests were treated to complimentary Ben & Jerry’s ice cream, coffee from Black Magic Coffee Co. and the opportunity to watch art in action as Sidewalk Sam painted a Zipcar parking space with original art work.

**J. Car Free Week**

MassRIDES promoted Car Free Week from September 16-22nd as an opportunity to celebrate walking, biking, carpooling, transit use and teleworking. Harvard had 1,778 members participate from the Cambridge/Allston campus, by far the most participants across the Commonwealth. To coincide with the event, the annual CommuterChoice Walk to Work Breakfast was held, and a participant was selected at random to receive a Car Free Week grab bag provided by MassRIDES.

**K. Walk/Ride Day Corporate Challenge**

The Green Streets Initiative is an organization dedicated to celebrating and promoting the use of sustainable, active transportation through monthly Walk/Ride days in which local retailers offer incentives to participants. The Walk/Ride Day Corporate Challenge, running from March through October, encouraged Boston area employers to promote alternative commuting habits. CommuterChoice publicized the program on its website and through targeted emails to faculty and staff. Among all Universities in the region, Harvard had the most participants over the course of the challenge.

**L. Publicity and Marketing**

The CommuterChoice Program maintains a high level of visibility on campus through creative marketing and outreach. Each program and event affords the opportunity to make people aware of other CommuterChoice offerings.

The CommuterChoice Program continues to upgrade and enhance its website to
provide customers with the most up-to-date information regarding transportation initiatives and updates.

The CommuterChoice Program continually engages the Harvard community and markets new transportation services and incentives through the following outlets:

- Presents at weekly university-wide New Employee Orientation sessions
- Disseminates transportation information through the 141 Transportation Coordinators who represent all of Harvard’s departments
- Displays posters, pamphlets and brochures in 22 Transportation Department kiosks, located at various locations across campus (Note: any Harvard department can purchase a kiosk with a 50% discount from CommuterChoice)
- Publishes articles in Harvard newspapers
- Publicizes new initiatives on the Harvie intranet
- Attends annual Transportation Health & Benefits Fairs featuring giveaways and raffles
- Presents at numerous conferences and symposiums. This year, Kris Locke, Associate Director of CommuterChoice, TDM and Sustainability held a Parking and TDM Workshop at the 2013 New England Transportation Conference presented by the ACT Patriot Chapter.
Section IV. Supporting Documentation

Each year, Harvard University follows the Department of Environmental Protection’s (DEP) recommended Random Sample Survey Method for its PTDM survey. The information provided follows the instructions and guidance offered in the DEP Massachusetts Rideshare Program packet for Educational Facilities with more than 1,000 commuting employees and students.

Survey Sample Cambridge Only
As of October 2013, Harvard University (Cambridge campus) had approximately 16,496 full-time applicable or commuting employees and graduate students who either work or attend class between the hours of 6:00 a.m. and 8:00 p.m. The Cambridge employee/student breakdown for 2013 is 8,903 full-time applicable commuting employees and 7,593 applicable commuting graduate students who either worked or attended class between 6:00 a.m. and 8:00 p.m.

Data Collection and Analysis
Harvard University conducted a transportation survey during the week of October 21 through October 25, 2013 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 907. The Senior Manager of Student Financial Policy at the Harvard University Office of Vice President for Finance (VPF) and Harvard Human Resources (HHR) provided the data used to determine the statistical percentages.

The survey was distributed primarily by email, and a paper form was also available for service employees without computer access. For the seventh consecutive year the paper form was provided in English, Haitian Creole, Spanish and Portuguese. The paper surveys are distributed through department supervisors and sent back anonymously via intercampus mail in pre-addressed envelopes. Harvard University’s survey instrument included a variety of questions designed to provide the University with more comprehensive comparative data.

A section of the survey (both paper and on-line) is devoted to specific questions for public transit users (employees and students) who use public transit for all or part of their commute. The section was created because more than one-third of Harvard’s employees and students use public transit to commute to campus. For planning purposes, it is thus important to capture specific data pertaining to this mode. The data from this specialized page is used as backup information for meetings and ongoing negotiations with the MBTA. In addition to the Public Transit section the survey provided both quantitative data for the PTDM Progress Report and qualitative data for Harvard to use to support the development of additional campus-wide transportation demand measures.

Harvard University has consistently achieved a 5% margin of error and 95% reli-
ability in its random sample surveys. The goal for the 2013 PTDM Survey and Progress Report was to receive 907 completed surveys. Harvard’s 2013 return rate was 100%.

**PTDM Survey Categories**

All Cambridge based applicable employees and graduate students were stratified into five basic categories based on payroll codes determined by the Senior Manager of Student Financial Policy at the Harvard University Office of Vice President for Finance (VPF) and Harvard Human Resources (HHR). The Cambridge-only responses sorted into the HR payroll categories are shown in the table below.

### Employe and Graduate Student Category Chart

<table>
<thead>
<tr>
<th>PTDM Category 2013</th>
<th>PTDM Sample Number</th>
<th>PTDM Sample Percent</th>
<th>PTDM Response Number</th>
<th>PTDM Response Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services</td>
<td>46</td>
<td>5%</td>
<td>46</td>
<td>5%</td>
</tr>
<tr>
<td>Non-exempt</td>
<td>151</td>
<td>17%</td>
<td>151</td>
<td>17%</td>
</tr>
<tr>
<td>Faculty/PD</td>
<td>87</td>
<td>10%</td>
<td>87</td>
<td>10%</td>
</tr>
<tr>
<td>Exempt</td>
<td>221</td>
<td>24%</td>
<td>221</td>
<td>24%</td>
</tr>
<tr>
<td>Graduate Students</td>
<td>402</td>
<td>44%</td>
<td>402</td>
<td>44%</td>
</tr>
<tr>
<td>Total</td>
<td>907</td>
<td>100%</td>
<td>907</td>
<td>100%</td>
</tr>
</tbody>
</table>

**PTDM Commute Mode**

The table below shows the results of the 2010, 2011, 2012 and 2013 PTDM surveys. The results include employees and graduate students from Cambridge only. The PTDM 2013 results indicate that Harvard continues to exceed its 10% PTDM SOV reduction goal.

### Commute Mode Comparison Chart

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Alone</td>
<td>24.7%</td>
<td>11.3%</td>
<td>15.9%</td>
<td>13.2%</td>
<td>12.8%</td>
</tr>
<tr>
<td>Carpool</td>
<td>5.0%</td>
<td>4.8%</td>
<td>3.6%</td>
<td>2.6%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Vanpool</td>
<td>0%</td>
<td>.2%</td>
<td>.2%</td>
<td>.05%</td>
<td>.07%</td>
</tr>
<tr>
<td>Public Transit (Includes Private Bus and Transit)</td>
<td>29.3%</td>
<td>31.7%</td>
<td>35.1%</td>
<td>38.4%</td>
<td>35.4%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>8.3%</td>
<td>12.8%</td>
<td>14.3%</td>
<td>17.3%</td>
<td>14.5%</td>
</tr>
<tr>
<td>Walk</td>
<td>32.7%</td>
<td>36.5%</td>
<td>27.6%</td>
<td>25.2%</td>
<td>29.2%</td>
</tr>
<tr>
<td>Telework/CWW/flextime</td>
<td>NA</td>
<td>2.8%</td>
<td>3.1%</td>
<td>3.1%</td>
<td>3.9%</td>
</tr>
</tbody>
</table>

According to the 2013 survey results, approximately 87.2% of Harvard’s applicable commuting population use alternative transportation modes when traveling to work or class located in Cambridge. Commuting by alternative modes has increased slightly by .4% since 2012 when it was 86.8%. Harvard remains well below the established target PTDM SOV rate of 24.7%.
Since 2012, use of public transit has decreased by 3% and bicycling also decreased by 2.8%. For the first time in three years, telework increased to almost 4% (3.9%). It will be interesting to see if this is a start of an upward trend. Of the 87% of Harvard’s commuters using alternative modes, 3.9% telework or have flextime/Compressed Work Week (CWW), eliminating approximately 3,177 trips to the Cambridge campus in 2013. Carpooling increased by 1.3% in 2013 over 2012, walking increased by a dramatic 4%, and there was a small increase in vanpooling. The shift away from public transit use to more walking may be a reflection of the larger number of graduate students in the sample.

PTDM Commute Trips

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

<table>
<thead>
<tr>
<th>Commute Mode</th>
<th>Column I</th>
<th>Column II</th>
<th>Column III</th>
<th>Column IV</th>
<th>Column V</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEP 2013 Sample Trips*</td>
<td>4,414</td>
<td>0.1278</td>
<td>82,480</td>
<td>10,539</td>
<td></td>
</tr>
<tr>
<td>Drive Alone</td>
<td>564</td>
<td>4,414</td>
<td>0.1278</td>
<td>82,480</td>
<td>10,539</td>
</tr>
<tr>
<td>Carpool</td>
<td>171</td>
<td>4,414</td>
<td>0.0387</td>
<td>82,480</td>
<td>3,195</td>
</tr>
<tr>
<td>Vanpool</td>
<td>3</td>
<td>4,414</td>
<td>0.0007</td>
<td>82,480</td>
<td>56</td>
</tr>
<tr>
<td>Public Transit</td>
<td>1,564</td>
<td>4,414</td>
<td>0.3543</td>
<td>82,480</td>
<td>29,225</td>
</tr>
<tr>
<td>Bicycled</td>
<td>642</td>
<td>4,414</td>
<td>0.1454</td>
<td>82,480</td>
<td>11,996</td>
</tr>
<tr>
<td>Walk</td>
<td>1,288</td>
<td>4,414</td>
<td>0.2917</td>
<td>82,480</td>
<td>24,068</td>
</tr>
<tr>
<td>Telework</td>
<td>42</td>
<td>4,414</td>
<td>0.0095</td>
<td>82,480</td>
<td>785</td>
</tr>
<tr>
<td>CWW, Flex</td>
<td>128</td>
<td>4,414</td>
<td>0.0289</td>
<td>82,480</td>
<td>2,392</td>
</tr>
<tr>
<td>Motorcycle</td>
<td>12</td>
<td>4,414</td>
<td>0.0027</td>
<td>82,480</td>
<td>224</td>
</tr>
<tr>
<td>Total trips</td>
<td>4,414</td>
<td>4,414</td>
<td>0.2917</td>
<td>82,480</td>
<td>24,068</td>
</tr>
<tr>
<td>Out of Office</td>
<td>121</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total trips All</td>
<td>4,535</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*907 x 5days = 4,535 trips to sample

**16,496 (full-time applicable or commuting employees and graduate students who either work or attend class between the hours of 6:00 a.m. and 8:00 p.m) X 5days = 82,480 trips to whole

*** Column III x Column IV

Harvard’s low SOV rate contributes to Cambridge’s goal of reducing this mode of commuting to and from the city. It also reflects the University’s ongoing commitment to maintaining its excellent TDM programs and implementing the measures contained in Harvard’s PTDM Plan.
Employee and Graduate Student 2013 Town Summary

In 2013, 80.5% (less than a 1% decrease since 2012) of the applicable commuter population, including both employees and graduate students, live in the towns listed below. All of the towns are within 10 miles from campus, except for Quincy.

<table>
<thead>
<tr>
<th>Top 10 Towns</th>
<th>Numbers</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambridge</td>
<td>299</td>
<td>32.97%</td>
</tr>
<tr>
<td>Somerville</td>
<td>160</td>
<td>17.64%</td>
</tr>
<tr>
<td>Boston</td>
<td>126</td>
<td>13.89%</td>
</tr>
<tr>
<td>Arlington</td>
<td>37</td>
<td>4.08%</td>
</tr>
<tr>
<td>Medford</td>
<td>23</td>
<td>2.54%</td>
</tr>
<tr>
<td>Watertown</td>
<td>22</td>
<td>2.43%</td>
</tr>
<tr>
<td>Belmont</td>
<td>21</td>
<td>2.32%</td>
</tr>
<tr>
<td>Brookline</td>
<td>18</td>
<td>1.98%</td>
</tr>
<tr>
<td>Newton</td>
<td>14</td>
<td>1.54%</td>
</tr>
<tr>
<td>Quincy</td>
<td>10</td>
<td>1.10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>730</td>
<td>80.49%</td>
</tr>
</tbody>
</table>

Over time, Harvard experiences very little change in the Top Ten Towns with Cambridge, Somerville and Boston vying for the top three (3) placements. One difference is this year Quincy moved into the top 10 towns list.

Employee Only 2013 Top Ten Town and Mode Summary

Commencing in 2012, the PTDM Officer required an additional calculation of employee only commute trips by Town and by Mode. Below is the Harvard Cambridge Employee Only Top 10 Towns by Mode Summary Table.

<table>
<thead>
<tr>
<th>Harvard PTDM 2013 Employee Only Summary Table</th>
<th>Top Ten Towns By Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Employees</td>
<td>Town</td>
</tr>
<tr>
<td>94</td>
<td>Cambridge</td>
</tr>
<tr>
<td>76</td>
<td>Boston</td>
</tr>
<tr>
<td>48</td>
<td>Somerville</td>
</tr>
<tr>
<td>31</td>
<td>Arlington</td>
</tr>
<tr>
<td>19</td>
<td>Belmont</td>
</tr>
<tr>
<td>18</td>
<td>Medford</td>
</tr>
<tr>
<td>17</td>
<td>Brookline</td>
</tr>
<tr>
<td>14</td>
<td>Newton</td>
</tr>
<tr>
<td>14</td>
<td>Watertown</td>
</tr>
<tr>
<td>10</td>
<td>Quincy</td>
</tr>
</tbody>
</table>

341 Top 10 | 68% of all employees fall within the Top 10 towns
505 All EEs

*Other includes flextime, telecommute (work from home), out of office, no clear majority
2013 Drive Alone Reasons and Trip Reduction Incentives

According to the 2013 survey results, Harvard commuters indicated that their top three reasons for driving alone were need to have a car for errands, irregular hours, and a having commute that took less time. The same three reasons were chosen in this order last year as well, but have become more salient among the driving population as can be seen from the increased percentages below.

<table>
<thead>
<tr>
<th>Dive Alone Reasons</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need car for errands before/after work or class during the day</td>
<td>12.65%</td>
<td>14.55%</td>
</tr>
<tr>
<td>Hours are irregular</td>
<td>10.58%</td>
<td>11.14%</td>
</tr>
<tr>
<td>Driving alone takes less time</td>
<td>6.32%</td>
<td>7.83%</td>
</tr>
</tbody>
</table>

Harvard commuters continue to choose “Additional public transportation service” as the incentive that would be “very likely” or “somewhat likely” to persuade them to switch their commute mode to alternative options. “More flexible work hours” has moved up from the 3rd incentive to the 2nd rank that would “likely” persuade commuters to switch to an alternative mode. “Additional compressed work week options” has moved into the top 3 incentives in 2013. Also, in 2013 “Formalized Telecommuting” moved off the top three list, as noted in the chart below.

<table>
<thead>
<tr>
<th>Trip Reduction Incentives</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional public transportation service to/from home community</td>
<td>13.74%</td>
<td>15.77%</td>
</tr>
<tr>
<td>More flexible work hours</td>
<td>11.34%</td>
<td>14.99%</td>
</tr>
<tr>
<td>Additional compressed work week options</td>
<td>11.02%</td>
<td>14.88%</td>
</tr>
</tbody>
</table>

Harvard is supportive of alternative work options such as a compressed work week and telecommuting. However, typically these decisions are made by managers at the local level in the context of the particular requirements of the position.

2013 Alternative Commute Option Ranked

An interesting point to note is when asked to “Rank in order of preference (1 - 5) each alternative commute option you would consider using instead of driving alone” Harvard commuters chose Transit as their 1st choice in 2011, 2012 and again in 2013. An important point to note in 2013, “Bicycle” moved up to the 2nd spot in the rankings as a first choice among commuters for switching to an alternative mode. This result is interesting considering the mode share for bicycling actually decreased in this year’s survey. This may signal that commuters are becoming more open to bicycling as a means of transportation, but several barriers remain to adoption of this mode.
<table>
<thead>
<tr>
<th>Alternative Mode</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transit</td>
<td>11.89%</td>
<td>12.68%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>3.93%</td>
<td>4.74%</td>
</tr>
<tr>
<td>Carpool</td>
<td>4.80%</td>
<td>4.63%</td>
</tr>
<tr>
<td>Walk</td>
<td>1.85%</td>
<td>3.97%</td>
</tr>
<tr>
<td>Vanpool</td>
<td>0.55%</td>
<td>0.66%</td>
</tr>
</tbody>
</table>

Harvard University has successfully reduced drive-alone commuting over time using the TDM Measures described in this report. The *CommuterChoice* Program continues to grow and document its menu of sustainable transportation options.