New Workplace Benefits to Reduce Drive-Alone Commuting to Campus

An MIT Case Study

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A broader vision that seeks to provide MIT with affordable, flexible, and low-carbon mobility choices.
Why Access MIT?
Drive-Alone Mode Share, 2004 to Present

Source: US Census & ACS; MIT Commuter Survey
MIT parking at a glance

~11,000 staff

~4000 parking spaces (73% gated, 20% non-gated & 7% leased)

38% the parking subsidy last year ($1,100 per permit)

$200,000 the estimated cost to build a new parking space in underground garages on campus
Research in practice

**evaluate**
Analyze the impact of novel travel demand management (TDM) strategies at two major employers in the Boston Area: MIT & Partners HealthCare

**design**
Develop and test a series of experimental interventions to inform the design of future TDM programs

**recommend**
Put forth lessons learned for policy-makers, transit agencies and employers to reduce car commuting using demand-side strategies informed by behavioral science
Access MIT: Program design & implementation
Features of Access MIT

- Shift to **daily** parking pricing
- **Free** universal bus & subway transit pass
- Increased **commuter rail** monthly pass subsidy
- New parking subsidy at **transit stations**
- Online commuter **dashboard**
Marketing Access MIT

• How do you get someone to re-consider their commute?
• Testimonials of real MIT commuters who find interesting ways to get to work and enjoy the unexpected quality of life benefits of their commute.

Switch modes. And love your commute.
I’m never in bump-to-bump mode

See how Access MIT's new, flexible commuter benefits can benefit you and make a positive impact on the planet.

Your commute counts.
Switch it up.
- Take the T for free with your new MIT employee ID
- Park & Ride with a 50% parking subsidy
- Don’t drive...don’t pay! With pay-per-mile and carpooling
- Grab a shuttle ride across campus

web.mit.edu/accessmit

We’re in harbor cruising mode.

See how Access MIT's new, flexible commuter benefits can benefit you and make a positive impact on the planet.

Your commute counts.
Switch it up.
- Catch the ferry with a 65% subsidy for commuter rail and boat
- Take the T for free with your new MIT employee ID
- Don’t drive...don’t pay! With pay-per-mile rates in gated lots
- Share a ride with a colleague in a van or carpool

web.mit.edu/accessmit
Ditch the car and the cost. Give public transit a try.

Your commute counts.
Switch it up.
web.mit.edu/accessmit
AccessMyCommute Dashboard

Consider carpooling with your MIT colleagues?
Use the ‘Favorite Trips’ widget on the right to find carpoolers in your neighborhood!

Log Your Trips

Log Trips

How did you get to work?
Log your trips here.
Select dates on the calendar to log trips

Departure Time:
Return Time:

Let's Go!

Easily compare transportation modes and track your distance

Shared Trips

A 143 Albany St, Cambridge, Massachusetts, 02139
B 77 Massachusetts Ave, Cambridge, Massachusetts, 02139

Department Challenge (Over 50 Members)
Top 10 Results — View all results.

Networks

TOP NETWORKS
1 McGovern Institute for Brain Research
2 RLE Area
3 Division of Comparative Medicine
4 Chemical Engineering
Research results
evaluation strategy

biennial transportation survey
• Questions added on perceptions of AccessMIT & associated behavior changes

passive data collection & analysis
• Parking lot in/out data
• Employee CharlieCard usage

engagement with key stakeholders
• Informal interviews with staff in P&T Office, Office of Sustainability, Campus Planning
• Membership on MIT Institute Committee on Parking & Transportation
2016 Commuter Survey data
Fewer drivers, more transit users

Primary Mode (Staff)

2014
- Public Transit: 43%
- Drive Alone: 30%
- Active Mode: 19%
- Shared Ride: 8%

N=6,386

2016
- Public Transit: 48%
- Drive Alone: 25%
- Active Mode: 20%
- Shared Ride: 7%

N=5,563
mode shifts
selected results

mode shift from solo car commuting to transit
• Decline of single-occupant vehicle mode share from 30% to 25%
• Growth in multi-modality

reduction in parking
• 8% drop in parking transactions
• 13% drop in parking permits purchased
• 10% drop in average weekday peak occupancy

growth in transit ridership
• 24% increase in staff using MBTA on a regular basis
• 11% increase in weekday ridership based on survey daily diaries
west garage closure

one in six WG parkers stopped purchasing a permit
- Every parker was offered space in a different parking area
- 4% of regular parkers did not renew their permit

parking frequency dropped 16% among former WG permit holders
- Significant decrease in overall parking transactions

small disruptions to habit can have big impacts
- Additional walk time of 2-5 minutes led to significant reductions in parking
- Parkers discovered shuttles
financial impact

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<thead>
<tr>
<th></th>
<th>Revenue</th>
<th></th>
<th>Expense</th>
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<td>2015-16</td>
<td>2016-17</td>
<td>2015-16</td>
<td>2016-17</td>
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<tr>
<td>Parking</td>
<td>$4.8M</td>
<td>$4.5M</td>
<td>$5.8M</td>
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<td>Transit*</td>
<td></td>
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<td>$3.0M</td>
<td>$5.2M</td>
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*Including Lincoln Employees
Challenges & future planning
What’s next at MIT

• Streamline daily parking – make it work
• Simplify user experience and access to information
• Tackle carpooling
it’s about classical economics…

• Both MIT and Partners case studies showed that getting the pricing right on parking & transit is key to shifting behavior

…but behavioral economics plays a role too

• importance of cost salience cannot be overemphasized, both for commuter and for employer
  • pay-as-you-park pricing relies on this (e.g. credit card vs. payroll deduction)
  • nudging the nudgers
motivating the stakeholders

<table>
<thead>
<tr>
<th>the traveler</th>
<th>the employer</th>
<th>the transit agency</th>
<th>the government</th>
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<tr>
<td>• overcome tragedy of the commons</td>
<td>• show that:</td>
<td>• hedge against risk</td>
<td>• create incentives to align interests (e.g. tax credits)</td>
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<td>• internalize externalities</td>
<td>(a) economics are favorable, and</td>
<td>• build corporate relationships (e.g. 55% of MBTA pass sales are through employers; 1/3 of revenue)</td>
<td>• regulatory tools (e.g. PTDM ordinance)</td>
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<td>(b) employees want it</td>
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Questions & discussion