



# New Workplace Benefits to Reduce Drive-Along Commuting to Campus

## An MIT Case Study

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# accessMIT

A broader vision that seeks to provide MIT with affordable, flexible, and low-carbon mobility choices.

# Why *Access* MIT?













MIT WEST GARAGE

ENTRANCE

DO NOT ENTER

WARNING  
LOW CLEARANCE  
2.13m (7ft 0in)

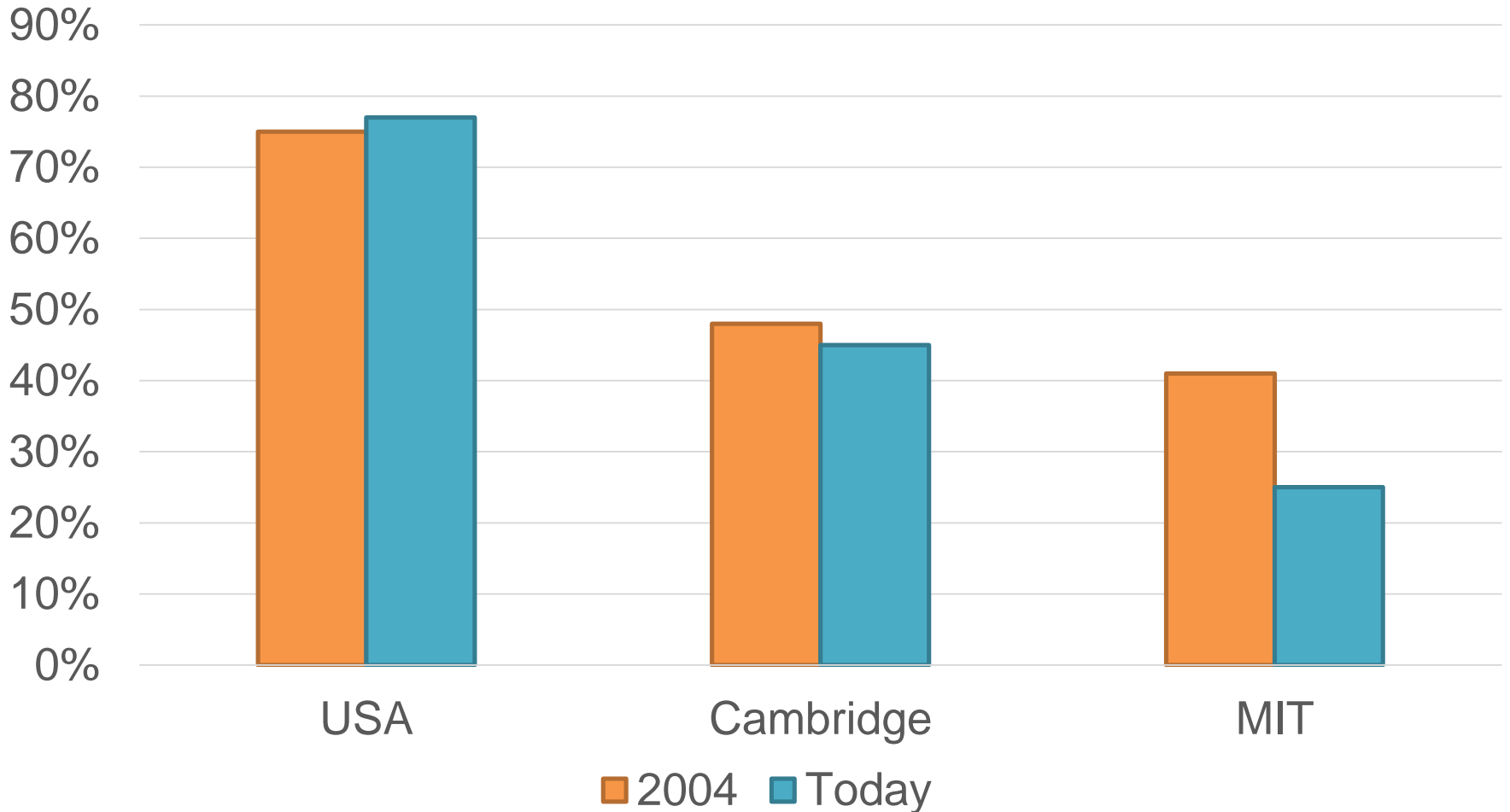
MIT  
ENGINEERING  
PARKING





Photo credit: Neema Nassir

# Drive-Along 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.**



**accessMIT**



**Jarvis Smith**  
Staff Accountant  
Office of the Vice President for Finance  
Jarvis avoids the headache of driving to work while reading, studying or just enjoying his ride on the T.



accessMIT

## 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
- **Park & Ride** with a 50% parking subsidy
- **Don't drive...don't pay!** With pay-per-ride
- **Grab a shuttle ride** across campus

[web.mit.edu/accessmit](http://web.mit.edu/accessmit)



**Maureen Ratigan**  
Director of Benefits  
Human Resources Department  
By switching from car to commute, Maureen saves precious resources including time and money.



**Cecilia Stuopis**  
Director of MIT Medical  
Whenever she can, Cecilia takes the Express Bus to Boston and leaves her car at the lot and her stress far behind.



**John Sterman**  
Jay W. Farrell Professor of Management,  
MIT Sloan School of Management  
John puts sustainable practices to work every day by biking to the T.



**Kiley Clapper (Gunner)**  
Academic Administrator  
Department of Civil and Environmental Engineering  
For Kiley and Gunner, taking the META Commuter Boat to work isn't just a commute, it's a way of life.

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 60% 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-day rates in gated lots
- **Share a ride with a colleague** in a van or carpool

[web.mit.edu/accessmit](http://web.mit.edu/accessmit)





I'm never in bumper-to-bumper mode

Jarvis Smith  
Staff Accountant



**Ditch the car and the cost. Give public transit a try.**



Your commute counts.  
Switch it up.  
[web.mit.edu/accessmit](http://web.mit.edu/accessmit)



**accessMIT**

# AccessMyCommute Dashboard

The dashboard features a navigation bar with 'Home', 'Dashboard', 'Admin', 'Incentives', and 'Tools'. A user profile for Adam Rosenfield is displayed, showing 25 non-SOV trips and 25.0 miles. A 'Log Your Trips' calendar for November 2016 is visible, with the 31st highlighted. A 'Department Challenge' section lists top networks, including McGovern Institute for Brain Research at 7.97%.

**Navigation:** Home | Dashboard | Admin | Incentives | Tools | Adam

**Banner:** Consider carpooling with your MIT colleagues? Use the 'Favorite Trips' widget on the right to find carpools in your neighborhood!

**User Profile:** Adam Rosenfield  
My Stats | Edit Profile  
25 Non-SOV Trips | 25.0 mi Non-SOV Distance

**Log Your Trips:** November 2016  
Sun Mon Tue Wed Thu Fri Sat  
30 31 1 2 3 4 5  
6 7 8 9 10 11 12  
13 14 15 16 17 18 19

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

TOP NETWORKS	MULTI-MODE CHALLENGE
1 McGovern Institute for Brain Research	7.97%
2 RLE Area	5.87%
3 Division of Comparative Medicine	5.79%
4 Chemical Engineering	5.41%

# 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**

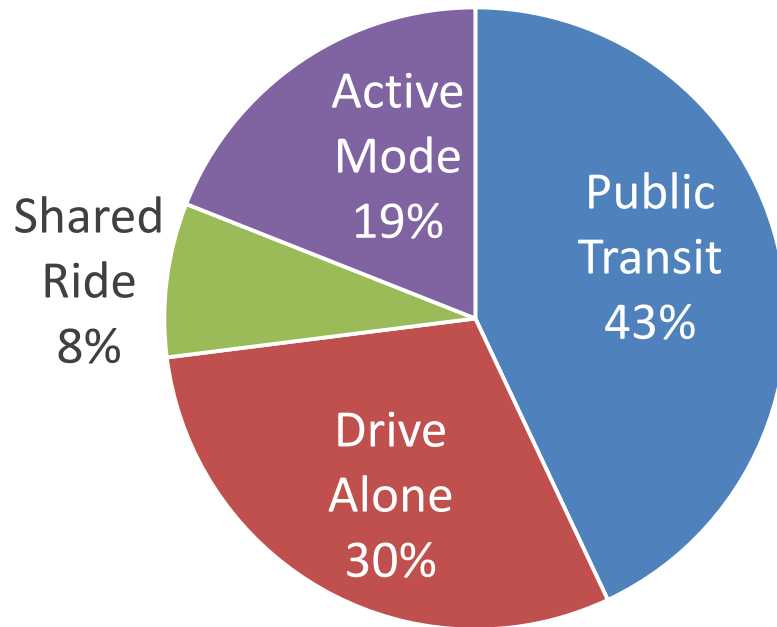
- Informal interviews with staff in P&T Office, Office of Sustainability, Campus Planning
- Membership on MIT Institute Committee on Parking & Transportation

# 2016 Commuter Survey data

## Fewer drivers, more transit users

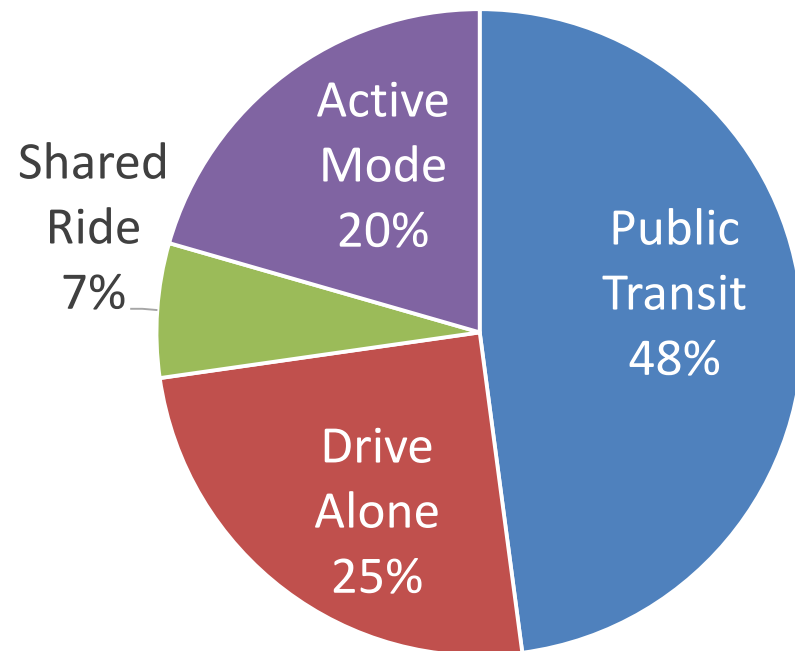
Primary Mode (Staff)

2014



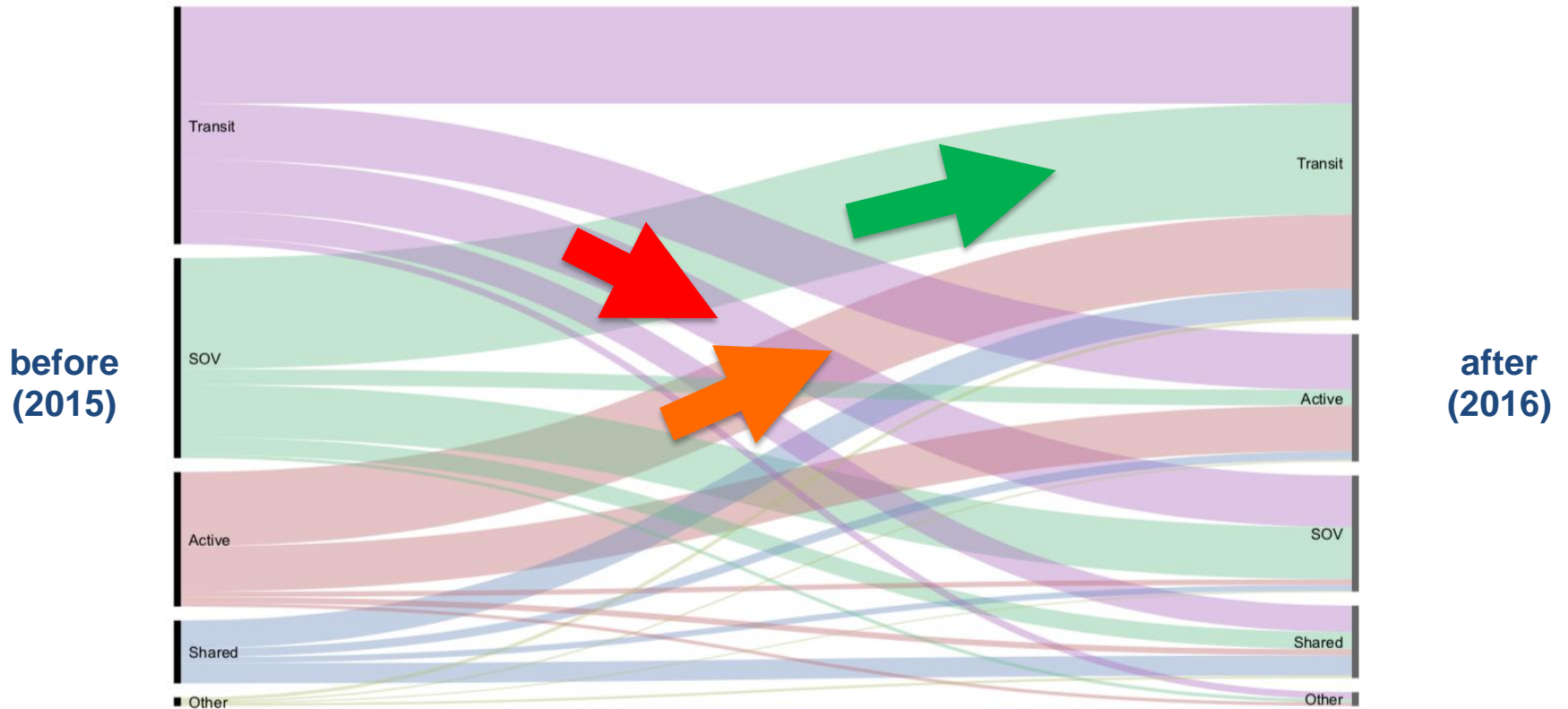
N=6,386

2016



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



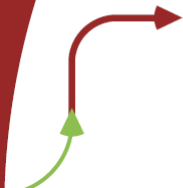
# financial impact

	Revenue		Expense	
	2015-16	2016-17	2015-16	2016-17
Parking	\$4.8M	\$4.5M	\$5.8M	\$7.2M
Transit*			\$3.0M	\$5.2M

\*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

the traveler	the employer	the transit agency	the government
<ul style="list-style-type: none"><li>• overcome tragedy of the commons</li><li>• internalize externalities</li></ul>	<ul style="list-style-type: none"><li>• show that:<ul style="list-style-type: none"><li>(a) economics are favorable, and</li><li>(b) employees want it</li></ul></li></ul>	<ul style="list-style-type: none"><li>• hedge against risk</li><li>• build corporate relationships (e.g. 55% of MBTA pass sales are through employers; 1/3 of revenue)</li></ul>	<ul style="list-style-type: none"><li>• create incentives to align interests (e.g. tax credits)</li><li>• regulatory tools (e.g. PTDM ordinance)</li></ul>

# Questions & discussion

