The Mobility Pass: Restructuring Employee Transportation Benefit Programs in High Transit Use Areas

A University Case Study

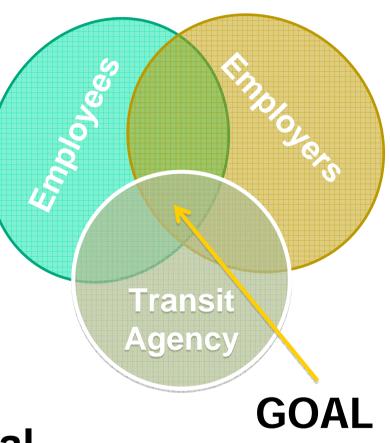
Sources: John Attanucci, Fred Salvucci and David Block-Schachter (MIT)

Nigel H.M. Wilson



Motivation

- Imbalance between private subsidies for parking + transit
- Opportunity for winwin-win
- Good employer decision-making can produce environmental benefits





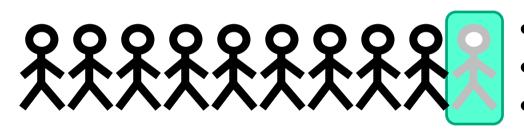
Problem definition: High transit use areas

- Parking subsidies cost \$\$\$\$

 Parking takes up valuable land—
 opportunity costs
- Transit subsidies + demand Command Com
- Difficult to give employees enough incentive to change commuting habits
- \$\$\$\$\$\$\$\$\$\$\$\$\$

Defining terms

- Federal Transportation Benefits
- Transit subsidies
- Universal Passes





- Have transit passes
- •Pay 100% of pass cost



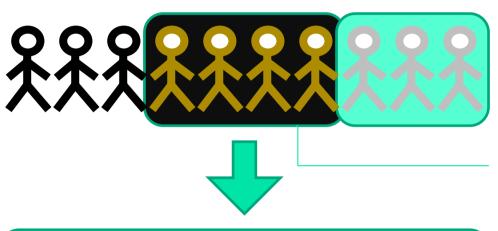
- Have transit passes
- •Pay 10%+ of pass cost
- •Transit agency: same revenue

Past research

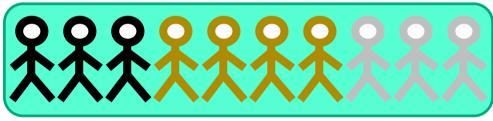
- Brown Hess & Shoup 2001, 2003
 - 40 years of UPass
 - Reduce parking demand + increase access, while improving transit service
 - University as largest customer leads to transit agency incentive to lower fare to fill unused capacity
 - "Adverse selection" of optional programs
 - It works at UCLA!
- Focused on low transit mode share areas



In high transit mode share areas UPass may be problematic



- Take transit regularly
- Have transit passes
- Pay 100% of pass cost
- •Take transit 30% of time
- Don't have transit passes



- Have transit passes
- •Pay 42%+ of pass cost
- 70% of people are worse off because of
 - The added cost of "occasional" transit usage
- Distribution of benefits



Solution

- Allow limited "opt out"
 - Only people who do not park
 - Avoids penalizing walkers and cyclists
- Allow mode switch from day to day
 - People's behavior are complicated
 - Incentives for incremental change
- Smartcards & trust



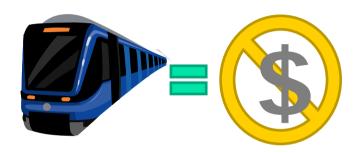


Can not Opt Out



Mobility Pass

- Transportation fee
 - Less than retail price of transit
 - Includes unlimited transit pass
 - Subsidized by employer
 - "Right to park" included



- Daily parking fee
 - Either nominal or market rate



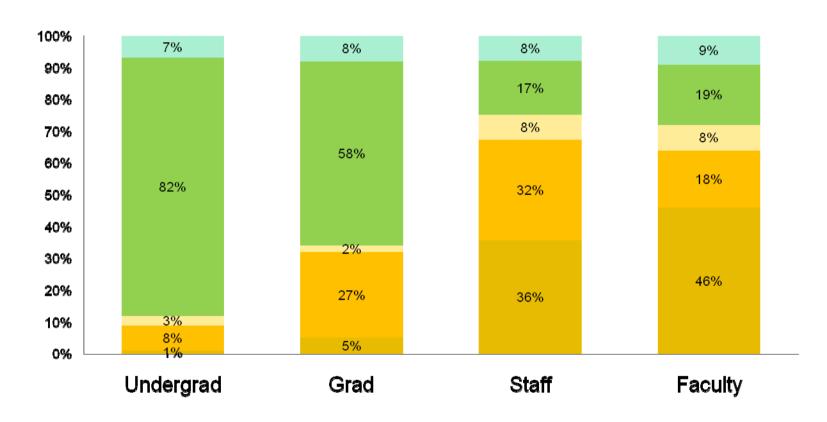


MIT Case Study

- Energy use and CO₂ emissions from MIT transportation activities represent 8-10% of overall campus energy consumption and CO₂ emissions
- Transportation incentives make sense given charge to "Walk the Talk" on energy!
- Cheap (MIT-owned) parking lots are disappearing and have been replaced by expensive leased parking spaces
- New underground parking spaces cost over \$100,000 each to build or over \$7,000/year to amortize and maintain
- As growth-driven demand (>100 faculty and staff/yr) for new parking increases, MIT's average parking subsidies are skyrocketing (\$1790/yr for parkers, compared to \$410/yr for transit users)



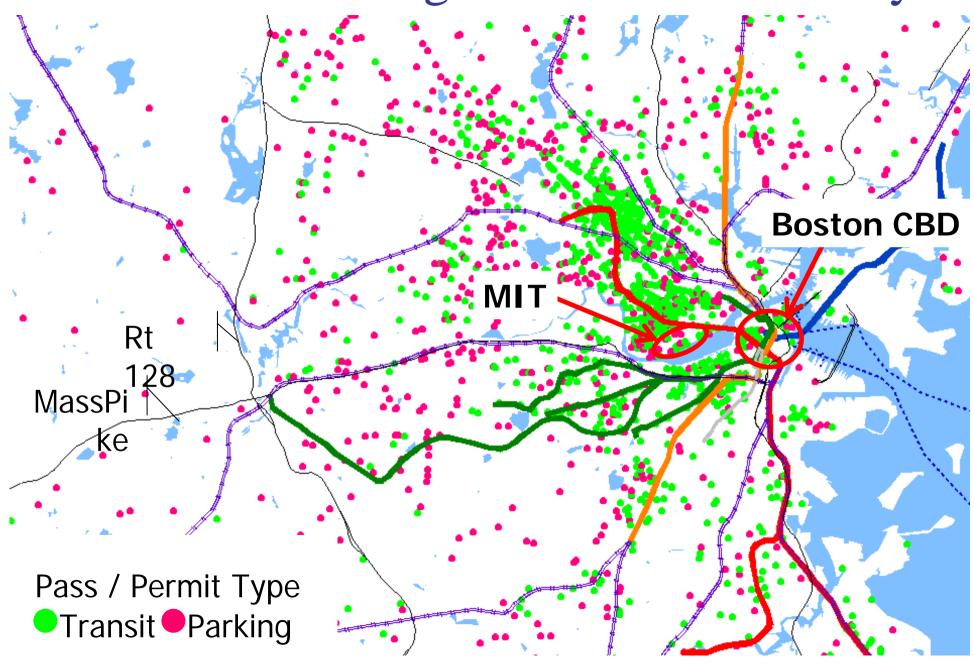
Current Commuting Modes



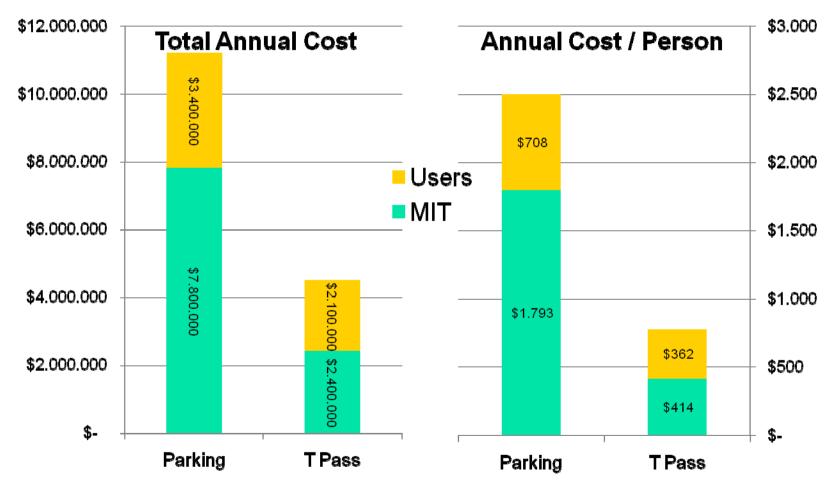




Current Commuting Modes - 2006 survey



Current Commuting Costs





MIT Mobility Pass Pilot Program

 It combines the subsidized MBTA pass and parking permit programs into a single transportation benefit program

 Saves energy by providing new incentives to encourage commuters to take public transit and form carpools more frequently



MIT Mobility Pass Program - Shifting Incentives

Today

- Most commuters who drive decide once a year to buy an annual parking permit, encouraging use of a car every day
- Riding the MBTA has an incremental cost
- Drivers cannot buy subsidized MBTA passes from MIT, so they have to pay full price for each ride

With Mobility Pass

- All commuters have an MBTA pass, encouraging the use of public transportation
- Driving has an incremental cost most parking lots are converted to daily rate fees



Key Elements

- All members of the MIT community are eligible to purchase a Mobility Pass for an annual rate of \$330 (\$27.50/month) for faculty and staff, \$180 for students (\$20/month for 9 months)
- The new Mobility Pass provides users with an MBTA Charlie Card (using an embedded chip in their MIT ID Card), unlimited use of the bus and subway, and an occasional parking permit, allowing them to park on campus for a daily charge via payroll deduction







Key Elements (cont'd)

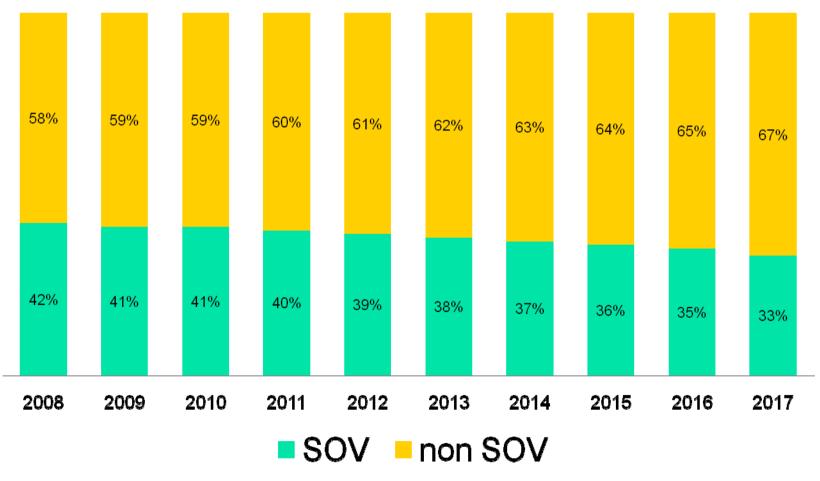
- Any time a faculty or staff person who participates in the program parks on campus, they pay a daily rate of between \$3.00 and \$5.00
- In the first year of the program, everyone is capped at a total transportation cost at the price of next year's annual parking permit (\$786)
- For September and October 2008, faculty and staff and students who have not previously been part of the transit or parking program will have their Charlie Card chip activated for unlimited MBTA rides at no charge
- Any faculty, staff, or student who does not want to park or receive subsidized transit may opt-out during first 2 months

Key Elements (cont'd)

- Current bus pass holders will have the choice to remain on current plan (with no parking privileges) or upgrade to a LinkPass for \$27.50/month, which includes daily parking privileges
- There is no daily charge for parking on evenings and weekends



Projected Results





Program Benefits

- Reduce MIT's transportation energy use and emissions by up to 15% and its overall use by 1-2%
- Allow MIT to stabilize parking subsidies
- Provides a means by which MIT community members can lower their transportation costs by driving less frequently and taking the MBTA or carpooling
- Reduce parking demand for buildable campus sites, allowing continued growth without increasing local congestion
- Enable MIT to take a leadership position in transportation demand management among institutions in the Boston region



How does this affect me?

- I drive every day
 - You have a free transit pass for your personal use, even if you decide not to use it
- I drive most days
 - You have a transit pass at your disposal, and if you drive a little less, you can save money
- I drive occasionally but mostly take transit
 - You save a little money



How does this affect me?

- I take transit every day
 - You pay a little less. If you take the commuter rail from a long way out, you pay a lot less.
- I walk or bike almost every day
 - You get an unlimited CharlieCard for the first 2 months free. After that, you can choose not to participate. If you do stay in, it's a little cheaper than it was before.

