Leveraging Behavioral Science to Reduce Car Commuting
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?
Transforming a neighborhood from old factories, abandoned buildings, and... parking lots
To a vibrant sense of place
From parking lots...
To new labs and walkable green spaces
Drive-Alone Mode Share, 2004 to Present

Source: US Census & ACS; MIT Commuter Survey
Research in practice

• How can workplaces be active players in travel demand management (TDM)?
• What tools are effective for which institutions?
• How should we use campuses as an experimental testbed?
Access MIT: Program design & implementation
Goal for new program

- Reduce commuter parking demand by 10 percent over two years
New package – “Access MIT”
Shift to daily parking pricing
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- Free universal bus & subway transit pass
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- Online commuter dashboard
AccessMyCommute Dashboard
Research & preliminary results
2016 Commuter Survey data
Fewer drivers, more transit users

Primary Mode (Staff)

<table>
<thead>
<tr>
<th>Mode</th>
<th>2014</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Alone</td>
<td>30%</td>
<td>25%</td>
</tr>
<tr>
<td>Public Transit</td>
<td>43%</td>
<td>48%</td>
</tr>
<tr>
<td>Shared Ride</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>Active Mode</td>
<td>19%</td>
<td>20%</td>
</tr>
</tbody>
</table>

N=6,386
N=5,563
Permit Purchases

‘15–’16 to ‘16–’17: 7% drop
‘16–’17 to ‘17–’18: 10% drop
Takeaways So Far: Parking

- Reported SOV mode share decreased from 30% to 25%
- Total person parking days decreased by 9%
- Peak lot utilization dropped 5%
- Continuing permit holders have not decreased parking significantly
Takeaways So Far: Transit

• ~24% more staff are using the MBTA on a regular basis
  - Staff using their T-pass have reduced parking the most (by 31%)

• Transit Accessibility:
  - Staff living in areas where transit and driving times are most similar have reduced parking the most

• MIT expense increased by $1.5 M
Challenges & future planning
Takeaways for MIT & beyond

• Challenge of designing effective TDM strategies
  – Newton’s Third Law

• Illuminating trends on Access MIT program
  – Technical design: Feedback shed light on shortcomings in program
  – System boundary: Nudges are only as effective as the things we’re nudging about
What’s next

• Streamline daily parking – make it work
• Simplify user experience and access to information
• Tackle carpooling
• Onward and upward
Questions & discussion