Today’s Conversation

• Mode shift policy in Cambridge
• How PTDM works
• 2018 monitoring results
• Multi-year trends
• Reevaluating the PTDM Ordinance
• Breakout session: Policy brainstorm
Cambridge Transportation Policies and Plans

to improve mobility and access, reduce traffic congestion and air pollution, and increase safety
How the PTDM Ordinance Works

• Triggered by
  • Creation of new non-residential parking or
  • Change of use of parking spaces (employees, customers, etc.)

• Size of parking facility
  • 1 to 4 parking spaces = does not trigger PTDM or
  • 5 to 19 parking spaces = Small Project or
  • 20+ parking spaces = Large Project

• Special permit, building permit, variance, etc. only granted with approved PTDM plan

• Enforcement

• Exemptions—Police, Fire
Large Project PTDM Plan (20+ parking spaces)

Single-Occupancy Vehicle (SOV) mode-share commitment
- 10% below 1990 Census data or
- SOV goal established in planning study or
- Baseline survey, then reduce by 10% within 5 years

Comprehensive set of TDM measures

Annual monitoring and reporting
1. Mode-share survey and
2. Status of TDM measures and
3. Driveway and parking occupancy counts (every 2 yrs)
# TDM Measures

| Highly Effective Measures                                      | Good Supporting Measures                                      |
|================================================================|================================================================|
| Market-rate parking charge, with carpool discount               | Pre-tax transit purchase                                      |
| Daily parking rate, no monthly pass available                   | Transportation Management Association                         |
| Parking cash-out or something-for-everyone benefit             | Bike buddy matching and bike repair service                   |
| Transit subsidy up to 100%                                     | Transportation Coordinator                                   |
| Vanpool subsidy or park-and-ride reimbursement                 | New employee transportation information packet                |
| Employees paid for days they carpool, walk, or bike            | Annual transportation event                                  |
| Flexible work hours or telecommuting                           | Transportation information (real-time screen or bulletin board)|
| Bluebikes membership                                           | Shower/lockers                                               |
| Free EZRide or Alewife TMA shuttle                             | Parking for carpools, carsharing vehicles                    |
| Bluebikes station location site and/or funding                 | Electric vehicle charging station (Level 2 or higher)         |

Employee Programs

On-Site Features
SEEING RED

We endure some of the nation’s worst rush-hour traffic. Our aging transit system is maddeningly unreliable. It is a crisis — a very slow moving crisis — that puts our region’s economic prosperity at risk. Who is to blame? Can anything be done? The Globe Spotlight Team investigates.

PART 1: POLITICAL GRIDLOCK
As commutes become intolerable, political leaders cling to an old car-first mentality

PART 2: THE EMPLOYER PROBLEM
Top companies bemoan traffic, yet many effectively entice employees to make it worse

PART 3: TECH AND CONSEQUENCES
Companies like Uber, Lyft, and Amazon intensify gridlock, with little government pushback

TEN TAKEAWAYS
ANATOMY OF A TRAFFIC JAM
BIG NUMBERS FROM BOSTON’S TRAFFIC CRISIS

A city program in Cambridge has influence over employer transportation benefits, but similar programs in Boston and Massachusetts are not as strong.

November 20, 2019
TDM Measures required or voluntarily offered in 2018

- Charge parking fees—60% of projects
- Provide transit subsidy—85%
- Provide pre-tax transit benefit—53%
2018 Monitoring

- 16 Small projects (not monitored)
- 74 Large/Non-Residential SP projects
  - 55 projects required to do monitoring
    - 51 Large PTDM and Special Permit reports
- 26,000 parking spaces
- 14.8 million sq ft of commercial development
- 17.4 million sq ft of institutional development
- 45,000 employees (35\% of total Cambridge employees)
- 10,000 graduate and primary school students
- Project types
  - Hospital, retail, restaurant, office, R&D, library, educational facilities
2018 PTDM/Special Permit Survey Results

- Response rates were 60% or greater
- 89% met their PTDM mode-split commitments
- 5 projects failed the mode-split commitment
  - Excess of parking
  - Location at least 10-minute walk from rapid transit
  - First year of monitoring
2018 Employee Survey results – PTDM/Special Permit

- Single-Occupancy Vehicle range—14% to 64%
- Median SOV rate—38%
- Avg SOV rate—36%
PTDM / Special Permit Results Over Time

Average—All employee types (Office, R&D, retail, restaurant, etc.)
All Cambridge Employee Commute Modes

Source: Census/American Community Survey

1990 Census: 51.1%
2000 Census: 50.6%
'06-'10 ACS CTPP: 45.0%
'11-'13 ACS Avg: 45.0%
'14-'16 ACS Avg: 42.0%
'16-'18 ACS Avg: 42.7%

Commute Modes:
- SOV
- Transit
- Walk
- Carpool
- Bike
- Work at Home
- Other
Employee Commute Comparison ACS-PTDM/SP

<table>
<thead>
<tr>
<th>Mode</th>
<th>2018 PTDM/SP</th>
<th>2018 Office/R&amp;D</th>
<th>'16-'18 ACS Avg</th>
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<tbody>
<tr>
<td>SOV</td>
<td>36%</td>
<td>37%</td>
<td>43%</td>
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<tr>
<td>Carpool</td>
<td>6%</td>
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<td>7%</td>
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<tr>
<td>Transit</td>
<td>37%</td>
<td>36%</td>
<td>28%</td>
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<tr>
<td>Bike</td>
<td>7%</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>Walk</td>
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<td>8%</td>
<td>13%</td>
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<tr>
<td>Worked At Home</td>
<td>6%</td>
<td>6%</td>
<td>3%</td>
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<tr>
<td>Other</td>
<td></td>
<td></td>
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</tbody>
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Evaluating the PTDM Ordinance

Strengths

• Millions of square feet of development have been possible, so the program is not significantly opposed by developers

• Ongoing monitoring generates a rich data set to use for focused TDM Strategies

• Setting the expectation of a non-driving culture in regulated properties has helped influence neighboring properties to also limit driving

• Policy is supported by continuously improving sustainable transportation infrastructure

• Planning processes provide community-approved SOV goals

• Plans are flexible—Amendments can add or adjust TDM measure as new ideas come along
Evaluating the PTDM Ordinance

Opportunities

• Target non-commute trips
• Include residential properties in the Ordinance
• Adjust the trigger to apply to more properties
• Keep parking as trigger, but need effective way to account for Uber/Lyft trips
• Set lower SOV percent commitments or move to a limit on number of driving trips or vehicle miles traveled
• Tie fines and rewards to level of failure or success
• Standardize TDM measures
• Use new mobility to support mode shift
• Use a cloud-based tool for data submission
• Reduce monitoring frequency for projects who perform well
• TDM policy in surrounding cities or statewide program
Evaluating the PTDM Ordinance

Aspirations

• The policy would allow for more development with no additional traffic

• Developers would save significant development costs by building less parking and bring down the cost of commercial rent

• Brokers would see that its possible to create a thriving business district with low parking ratios

• The City would meet its transportation-related greenhouse gas reduction goals.
Transit Advisory Committee Role

Questions to think about

• What other practices are supportive of TDM measures?
• What policies do other places enact to reduce SOV rates? What can we learn from newer programs?
• What do other places do to make it easier to get around by transit?