Introduction

This paper summarizes certain results of the Atlanta Employer Commute Options Survey, an element of the Commute Atlanta Project. These survey results summarize the implementation of various employer-based trip reduction (EBTR) strategies over time, employer perceptions regarding the benefits of EBTR strategies, and barriers identified by employers as impeding EBTR implementation. The researchers also find a positive correlation between employer membership in the Clean Air Campaign (CAC) or local Transportation Management Associations (TMA) and positive employer perception and high degree of EBTR strategy implementation.

Background

The ongoing Commute Atlanta research project uses GPS-instrumented vehicles to study driver behavior and consumer response to mileage-based and real-time congestion pricing. The Commute Options employer survey element was designed to control for changes in employer policies and practices that might impact trip-making behavior during the study period. The survey results provide unique insight into employer participation in EBTR strategies, but the survey was not designed to directly assess the effectiveness of the actual strategies implemented in the ‘Atlanta Framework for Cooperation to Reduce Traffic Congestion and Improve Air Quality’.

Data Sample

• Employers of Commute Atlanta households
• A selection of Metro Atlanta Chamber of Commerce members
• A selection of employers of participants in the Strategies for Metropolitan Atlanta’s Regional Transportation and Air Quality (SMARTRAQ) regional travel diary study

Analytical Approach

• 200 data elements (binary, categorical, ordinal, and numeric) for employer characteristics, EBTR strategy, metrics, and implementation levels
• Data filtered for each analysis to eliminate non-response for that analysis
• Chi-square test for binary variables using 2x2 contingency tables $\alpha = 0.05 \text{ (critical } \chi^2 = 3.84)$

Longitudinal Frequencies

Table: Benefits Offering

<table>
<thead>
<tr>
<th>Survey Question: “Please indicate whether your organization offers the following benefits to employees:”</th>
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<tbody>
<tr>
<td><strong>Parking Benefits</strong></td>
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<tr>
<td>Free parking*</td>
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<tr>
<td>Cash or transit passes to employees who give up parking spaces</td>
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<tr>
<td>Shuttle service to and from offsite parking areas</td>
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<tr>
<td>Preferential or reserved parking for carpools, vanpools</td>
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<tr>
<td>Preferential or reserved parking for alternative fuel vehicles</td>
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Benefit: Free parking*

- To maintain EBTR value directionality, the inverse is displayed in the charts: “no free parking,” meaning no parking or pay parking.

Program Promotion

• Guaranteed Ride Home: guarantees ridesharing employees a trip home under emergency circumstances
• 1-87-RIDEFIND: matches potential carpoolers
• Information about public transit routes and fares

Work Mode Availability

• Traditional work week dominates

Survey Question: “Please indicate the current availability of the following work modes to your organizations employees:”

- Traditional 40-hour work week
- Compressed work week
- Multiple work shifts
- Flexible arrival/departure times
- Working from home occasionally, 1 or 2 days per week, or 3 or more days per week

Response choices:

- Available to all employees
- Available to some employees
- Not available to employees

No statistical difference was detected between Phase 1 (2003) and Phase 2 (2005) in the offering of benefits, CAC/TMA membership, program promotion, or work mode availability.

Survey Question: “How often does your organization promote (by newsletter, flyers, email, meeting announcements, etc.) the following programs to employees?”

Survey Question: “Is your organization a member of any non-profit group devoted to promoting employee commute options?”

Employers were classified into geographic regions:

- Rail Core:
  - 1⁄4 mile from rail station
- Transit Zone:
  - 1⁄4 mile from any transit line
- Unserved:
  - Other urbanized and un-urbanized areas

By Phase

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<tr>
<td>738 Employers Contacted</td>
<td>705 Employers Contacted</td>
<td>506 Employers</td>
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</table>

- Decline 35% 49%
- Result 408 55%
- Nonresponse 237 46%
- Result 345 49%
- Nonresponse 338 48%
- Both 225 44% 34%
Employer Perception of Employer-Based Trip Reduction Benefits and Strategy Implementation (07-0676)

Randall Guensler and Kai Zuehlke (Georgia Institute of Technology)

Barriers to EBTR Strategy Implementation

- Cross-tabulation of barrier influence with commute benefit offering produced 3 major findings:
  1) The most commonly perceived barriers
  2) The strength of perceived distance to transit
  3) Barriers associated with offering onsite transit sales
- Response choices of "no influence," "some influence," and "strong influence" were collapsed into binary "influence" or "no influence"
- N = 357 (Phase 1) and N = 305 (Phase 2)

Influential Barriers

- Insufficient employee interest (62% Phase 1, 60% Phase 2)
- Minimal perceived benefits to organization (54%, 58%)
- Lack of upper management support (52%, 49%)
- Office's distance to public transit (51%, 43%)

Distance to Transit as a Barrier

Of all barriers, perception of office's distance to transit most strongly related to low level of benefits
- Difference factor, $\gamma$:
  - Of employers indicating barrier influence, difference in percent between those not offering and those offering benefit
- Consistency factor, $\chi$:
  - Of employers indicating barrier influence, percent that offer the benefit anyway

Mapping employer concern for distance to transit yields inconsistent results:

- Many employers with transit access report no influence
- Many reporting influence are within transit zone
- Employers in unserved areas might dismiss transit altogether

Barriers to Onsite Transit Sales

- Employers who offer “onsite sale of transit passes or tokens” report:
  - Potential conflict with organization operations
  - High cost to our organization
  - Equity issues across types of employees
  - Lack of government incentives
  - Equity concerns correlate with low levels of “employer-subsidized bus, rail, or vanpool passes”

Future work for planners and policymakers should focus on:

- Surveying employers about the specific benefits/value derived from programs promoted, commute and parking benefits offered, and even CAC/TMA membership
- Assessing changes in EBTR implementation and perceptions over time
- Assessing trends in employer perception of subsidies on potential conflict with organization operations
- Investigating transit user/non-user perceptions as to acceptance of walking distance to transit and then directing educational initiatives on transit accessibility toward employers within an acceptable distance of transit
- Evaluating the equity impacts associated with employer commute options strategies
- Developing strategies to reduce the employer burden associated with offering onsite sales of transit passes
- Investigating ground-truth as to the effectiveness of various strategies that are offered