Communicating Commuter and Employer Preferences: Case Study of Houston

GIS in Transit Conference
September 2, 2015

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Transit Mobility Program
Texas A&M Transportation Institute

www.ghcommutes.org
Acknowledgements

U.S. Department of Transportation
Federal Transit Administration

Federal Highway Administration

Houston-Galveston Area Council

Texas Department of Transportation
Focus corridors:
- I-45 North
- US-290
- US-59 South
Current Journey to Work

- 80% drove alone
- 11% carpooled/vanpooled
- 2.4% public transportation
- 1.4% walked
- 1.9% other means
- 3.5% worked at home

9% of survey respondents telecommuted sometimes

Source: US Census, 2009-2013 ACS
Houston-The Woodlands-Sugar Land MSA
Scope of Work & Timeline

2014
- Survey commuters & employers
- Document findings

2015
- Region adjusts incentives/programs

2016
- Follow-up with commuter panel
- Use other data to measure trends
Survey Instrument

- English and Spanish
- Online and print (highly accessible)
- 103 questions, extensive logic

Categories:
- Commute Practice
- Employer policies & preferences
- Awareness of alternatives
- Incentives
- Response to change
- Communication
- Demographics
Outreach

- Calls
- Emails
- Visits
- Flyers
- Social media

43 Links

Partner organizations key.
Response window: 67 Days

Usable Responses

- Partial
- Complete
Survey Responses

10,813 Hits on Survey

Commuters 7,249 complete

Employers 213 complete
Opinion
On a scale from 1 to 5...How much do you agree or disagree with each statement?*
click on the bar to move the ball

Strongly Disagree 1 2 Neutral 3 4 Strongly Agree 5

Changing my commute mode(s) could save me time.

Changing my commute mode(s) could save me money.

I am happy with my current commute.

Desktop/Laptop: 92%

Mobile: 8%
Non-Random Study

- Observations about responses, not population
- Statistical equivalence, not inference

“I think...” instead of “I represent 300 commuters”
Commuter Findings
Why drive alone?
- Prefer independence, flexibility
- Transit does not work for trip
- Need their vehicle during day

Why car/vanpool?
- Save money
- Use HOV, HOT, managed lanes
- Convenient
- Employer incentive
Why transit?
- Avoid traffic
- Don’t have to drive
- Save money

Why walk/bike?
- Exercise
- No other way to get to work
- Save money
37 percent

No other viable way to commute if their current way was not available tomorrow
47 percent Think Construction delays will have *most negative impact* on their commute *next five years*

43 percent thought *fuel prices* over $5

10 percent thought *poor economy*
Preferred parking: 21%
Parking cash-out: 27%
Alternative schedule: 58%
Telecommute/work: 63%
How much would the following incentives motivate YOU to consider commute alternatives?

1 No extra motivation
2
3
4
5 Much more motivation
# Financial Incentives

<table>
<thead>
<tr>
<th></th>
<th>only used alternative(s)</th>
<th>drove alone</th>
<th>drove &amp; used alternative(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower car insurance cost</td>
<td>3.29</td>
<td>2.84</td>
<td>3.48</td>
</tr>
<tr>
<td>Tax benefits, $ assistance</td>
<td>3.09</td>
<td>2.59</td>
<td>3.22</td>
</tr>
<tr>
<td>Free or discounted monthly transit pass</td>
<td>3.18</td>
<td>2.23</td>
<td>3.05</td>
</tr>
<tr>
<td>Lower tolls on HOV</td>
<td>2.67</td>
<td>2.52</td>
<td>2.98</td>
</tr>
</tbody>
</table>
“Which of these would be better for the greater Houston region?
Spending taxpayer money to...”

55% improve transit (bus/rail), walking, biking
31% expand or build new highways
14% maintain existing highways
Employer Findings
57 percent

Do *not currently provide* commuters with *benefits* or *information* relative commuting
Companies that do provide benefits/incentives do so to...

- Reduce Parking Demand
- Retain Employees
- Reduce Employee Stress
“Businesses should provide programs and incentives to facilitate employees using a commute mode other than driving alone.”
Employers should lead providing...

- Alternative work schedules (60%)
- Telecommute, telework programs (52%)
- Preferred parking for car/vanpools (47%)
- Information, increasing awareness (45%)
- Pre-tax transit, carpool or vanpool subsidy deducted from paycheck (45%)
Benefits to Region...

- Reduced traffic congestion
- Reduced family expenses
- Improved air quality
Findings

Employers

Commuters

You

from

“Interesting”

to

“Action”
GHCommutes.org documents the survey portion of a study of commuter and employer transportation preferences in the greater Houston region. The Texas A&M Transportation Institute (TTI) conducted the outreach on behalf of the Houston-Galveston Area Council (H-GAC) in Fall 2014. More than 7,000 commuters and 61 employers participated. Findings from the study enable H-GAC and partners to review and improve incentives aimed at managing roadway congestion by boosting participation in alternative travel modes, telecommuting, alternative work schedules, and other practices.

GHCommutes.org is organized in a logical progression of information.

“The Challenge”

Describes the impetus for the study: congestion, population, mode choice, etc.
Greater Houston Commutes

Analysis of 8,000+ survey responses

THE CHALLENGE
Describes impetus for the study

THE STUDY
Documents study process. (download survey data)

FINDINGS
Provides high-level findings from employer and commuter surveys

MORE FINDINGS
Contains deep, interactive analysis (maps, charts, dashboards)

COMMUTE HELP
Lists resources and information

HOME THE CHALLENGE THE STUDY FINDINGS MORE FINDINGS COMMUTE HELP
### Power of Incentives to Motivate Commuters by...

<table>
<thead>
<tr>
<th>Incentive</th>
<th>Score</th>
<th>Fuel price over $5</th>
<th>Poor economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower car insurance cost (less driving, lower cost)</td>
<td>2.9</td>
<td>2.8</td>
<td>2.6</td>
</tr>
<tr>
<td>Transit closer to my home, work, or school</td>
<td>2.9</td>
<td>2.4</td>
<td>2.7</td>
</tr>
<tr>
<td>Employer allowing alternative work schedule</td>
<td>2.7</td>
<td>2.2</td>
<td>2.7</td>
</tr>
<tr>
<td>Tax benefits, cost assistance</td>
<td>2.7</td>
<td>2.2</td>
<td>2.7</td>
</tr>
<tr>
<td>Lower tolls on HOV/managed lanes</td>
<td>2.6</td>
<td>2.3</td>
<td>2.7</td>
</tr>
<tr>
<td>More reliable transit service</td>
<td>2.5</td>
<td>2.4</td>
<td>2.7</td>
</tr>
<tr>
<td>Free or discounted monthly transit pass</td>
<td>2.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Better or easier access to park &amp; ride lots</td>
<td>2.1</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Reward for giving up parking space</td>
<td>1.9</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Help finding dependable car or vanpoolers</td>
<td>1.8</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Better, safer bike routes with amenities</td>
<td>1.8</td>
<td>1.9</td>
<td>2.0</td>
</tr>
<tr>
<td>Better, safer walking routes</td>
<td>1.7</td>
<td>1.9</td>
<td>2.0</td>
</tr>
<tr>
<td>Prize drawings</td>
<td>1.7</td>
<td></td>
<td></td>
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<tr>
<td>More information and awareness materials</td>
<td>1.6</td>
<td>1.7</td>
<td>1.8</td>
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**SUM of Measure Values:** 33.0
Get Data, Explore, GO!

Database of 7,249 Commuter Responses

<table>
<thead>
<tr>
<th>A</th>
<th>MORE INFORMATION/DOCUMENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td><a href="http://www.ghcommutes.org">www.ghcommutes.org</a></td>
</tr>
<tr>
<td>3</td>
<td>For questions regarding the study, information on ghcommutes.org, or data in this file contact Jonathan Brooks of the Texas A&amp;M Transportation Institute (TTI). Jonathan is a member of the Transit Mobility Program at TTI and appreciates feedback and questions.</td>
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<td>6</td>
<td>Jonathan Brooks</td>
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<td>Texas A&amp;M University System</td>
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<td>11</td>
<td>Houston, TX 77024</td>
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<td>12</td>
<td>ph. (713) 613-9206</td>
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<td>13</td>
<td><a href="mailto:j-brooks@ttimail.tamu.edu">j-brooks@ttimail.tamu.edu</a></td>
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HOW TO CITE
ContactDisclaimer  DataDictionary  CommuterData
QUESTIONS?

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VISIT  www.ghcommutes.org