Houston, Texas
Taxi Study Briefing

Objective: Recommendations
And Review Findings

April 9, 2014
Ray A. Mundy, Ph.D.
Issues Identified

- Most issues identified relate to airport & stand taxi services provided by companies and drivers that do not have access to dispatch, i.e. small operators.

- Most users of taxi stand market – i.e. Hotels, restaurants, medical facilities, airport customers – rated quality of taxi vehicles and drivers low compared to other cities; 2.54 out of 5 rating.

- Secret shoppers found drivers to be unfamiliar with streets; drivers smoked in cabs; drivers talked on cell phones.

- Hundreds of vehicle color schemes confusing to users; proliferation of DBAs as a result of taxi leases.

- One-car operators do not serve the whole Houston area.

- Lack of dispatch means some riders don’t get picked up; Lack of dispatch means too many cabs at the stands and the airports.

- Permit lease prices vary, from $120 per week to $500 per week (Note: permittees pay the City only $535 per year for a permit!) – many permit leases for non-dispatch companies have no added value.
Study Recommendations

1. **Value-Added Permits**: Require all taxi permit holders to be able to generate a minimum # of trips per day, per vehicle, to create value-added leases that maximize revenues for drivers and permitees. For example, Dr. Mundy found that Yellow Cab lessees receive 6 to 7 dispatch trips per day and can earn a weekly income of $900 or more with owner/operators of cabs paying between $225 and $295 per week. **Bottom line**: Over the long run, Dr. Mundy recommends that Houston require that all leases be allowed only for value-added permits (either through dispatch or pre-arranged business)

   a. Require all Houston taxi drivers to be able to be dispatched from taxi dispatch companies.

   b. Require that all vehicles be painted in colors, and branded, according to those dispatch companies to minimize the proliferation of taxicab colors.

2. Implement a form of distance-based bar coding or electronic monitoring for use on all regulated vehicles so inspectors know when a vehicle and driver are illegal.
3. Increase standards for obtaining a Houston taxi driver’s chauffeur license and create a formal training program paid for by drivers. Drivers should be trained in customer service, geography, etiquette, etc. Consider a driver dress code.

4. Require that all taxi dispatch companies implement mobile dispatch applications.

5. Require that all taxi mobile dispatch applications contain a customer complaint functionality that transmits the complaint directly to ARA.

6. Set a maximum number of complaints that can be received against a taxi driver before the driver’s license is revoked.

7. Require security cameras in all taxicabs.

8. Require integrated GPS/credit card processing equipment in all taxicabs.

9. The Study DID NOT recommend the elimination of the minimum limousine fare.
## Project Process Overview

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task I</td>
<td>Initial meetings with officials &amp; staff</td>
</tr>
<tr>
<td>Task II</td>
<td>Analysis of existing Houston Taxi operating Procedures &amp; Stakeholder Interviews</td>
</tr>
<tr>
<td>Task III</td>
<td>Analysis/Comparison of Houston’s Taxi Regulations/Rules/Practices with other cities</td>
</tr>
<tr>
<td>Task IV</td>
<td>Taxi Service Survey of Frequent Users &amp; Secret Shopper Survey</td>
</tr>
<tr>
<td>Task V</td>
<td>Analysis of Houston Taxi Dispatch Data</td>
</tr>
<tr>
<td>Task VI</td>
<td>Drafting of Recommendations</td>
</tr>
</tbody>
</table>
Continuum of Houston Taxicab Firms

Taxi Company Orientation

Category 1
Total Taxi Firm

Category 2
Taxi Firm/Vehicle Lessor

Category 3
Permit and Vehicle - Only Lessor

Category 4
Permit Owner/Operator Independent

Category 5
Company Name Only

Individual Driver Orientation
Houston Yellow/Fiesta/United Cab
Houston Yellow Cab
A. This chart shows that most trips are Dispatch trips.

B. This chart shows that nearly 80% of dispatch calls result in a completed trip.
Distribution of Average Daily Completed Dispatch Trips
Yellow

Average Daily Trips Per Vehicle

Number of Vehicles

0
50
100
150
200
250
0%
20%
40%
60%
80%
100%
120%

0 to 1
1 to 2
2 to 3
3 to 4
4 to 5
5 to 6
6 to 7
7 to 8
8 to 9
9 to 10
> 10

Cumulative %

Frequency

TTLF
Distribution of Wait Times
Yellow

% of Trips

Wait Time in Minutes

76.51%

16.42%

4.21%

1.54%

0.67%

0.33%

0.16%

0.08%

0.04%

0.03%

0.02%

0.01%

0% 15 30 45 60 75 90 105 120 135 150 165 180

% of Trips

Wait Time in Minutes

TTLF
Houston Transportation Services
HTS Distribution of Average Daily Completed Dispatch Trips*

* Only includes those vehicles that actually picked up a trip.
Institutional Survey

• Total 142 respondents
• Surveyed three groups:
  1. Restaurants/Bars/Diners
  2. Hotels
  3. Medically Related Facilities
Which of the following taxicab companies do you regularly call for service? Please check all that apply.

Total Respondents: 139
How do you arrange the taxicab services? Please check all that apply.

- Telephone: 81%
- From cab stand: 19%
- Cellphone Apps: 16%
- Internet: 14%
- Hail a cab: 14%

How many times in a day do you typically arrange for taxis on behalf of your guests?

- Do not arrange: 17%
- 1 to 2: 30%
- 3 to 5: 18%
- 6 to 10: 19%
- 11 to 20: 6%
- More than 20: 9%

Total Respondents: 141

TTLF
<table>
<thead>
<tr>
<th>Wait Time</th>
<th>Reasonable</th>
<th>Average</th>
<th>Total Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 minutes</td>
<td>17%</td>
<td>17%</td>
<td>139</td>
</tr>
<tr>
<td>5-10 minutes</td>
<td>44%</td>
<td>44%</td>
<td>139</td>
</tr>
<tr>
<td>10-15 minutes</td>
<td>28%</td>
<td>28%</td>
<td>139</td>
</tr>
<tr>
<td>15-20 minutes</td>
<td>8%</td>
<td>8%</td>
<td>139</td>
</tr>
<tr>
<td>20-30 minutes</td>
<td>3%</td>
<td>3%</td>
<td>139</td>
</tr>
<tr>
<td>More than 30 minutes</td>
<td>1%</td>
<td>1%</td>
<td>139</td>
</tr>
</tbody>
</table>
**Taxi Service Quality Rating**

- Willingness to pick up passengers at... 3.26
- Willingness to accept credit cards 3.24
- Affordability 3.13
- Promptness of arrival 3.06
- Answering their phone 3.04
- Help with luggage when needed 3.00
- Appearance of Vehicles 2.97
- Driver's knowledge of the area 2.85
- Courtesy of drivers 2.74
- Appearance of drivers 2.67
- Willingness to service passengers... 2.56
- Your overall opinion of Houston taxi... 2.54
- Handling of complaints 2.26

**Rating Scale:** 1 = Very Poor | 2 = Poor | 3 = Okay | 4 = Good | 5 = Very Good

Total Respondents: 142
Do you or your guests find taxi service to be confusing given all the different vehicle color schemes?

- Yes, 60, 43%
- No, 79, 57%

Total Respondents: 139

Do you know whom to call if you have a problem with taxicab service?

- Yes, 40, 29%
- No, 99, 71%

Total Respondents: 139
What should Houston do to make the taxicab services better? Please list any additional comments you would like to make regarding Houston Taxicab services.

<table>
<thead>
<tr>
<th>Complaints</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rude, Unreliable service - Driver / Operator</td>
<td>9</td>
</tr>
<tr>
<td>Untidy Cab / Cab Driver Appearance</td>
<td>8</td>
</tr>
<tr>
<td>No Knowledge of area</td>
<td>7</td>
</tr>
<tr>
<td>Unprofessional conduct by Drivers</td>
<td>6</td>
</tr>
<tr>
<td>Long waiting period</td>
<td>4</td>
</tr>
<tr>
<td>Over Charge</td>
<td>3</td>
</tr>
<tr>
<td>Irresponsible driving</td>
<td>3</td>
</tr>
<tr>
<td>Do not accept Credit Card</td>
<td>3</td>
</tr>
<tr>
<td>Bad Air conditioning</td>
<td>3</td>
</tr>
<tr>
<td>Unsafe/Angry behavior</td>
<td>3</td>
</tr>
<tr>
<td>Driver / Taxi company Accountability</td>
<td>3</td>
</tr>
<tr>
<td>Take longer routes for higher fare</td>
<td>3</td>
</tr>
<tr>
<td>Expensive fares</td>
<td>2</td>
</tr>
</tbody>
</table>
Secret Shopper Survey

How did you book your secret shopper ride?

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone</td>
<td>41%</td>
</tr>
<tr>
<td>Smartphone App</td>
<td>21%</td>
</tr>
<tr>
<td>Taxi Stand</td>
<td>17%</td>
</tr>
<tr>
<td>Internet</td>
<td>14%</td>
</tr>
<tr>
<td>Street Hail</td>
<td>7%</td>
</tr>
</tbody>
</table>

Total Respondents: 29
### Taxi Company Used

<table>
<thead>
<tr>
<th>Taxi Company</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow Cab</td>
<td>45%</td>
</tr>
<tr>
<td>Lone Star Cab</td>
<td>27%</td>
</tr>
<tr>
<td>Fiesta Cab</td>
<td>9%</td>
</tr>
<tr>
<td>Humble Taxi</td>
<td>5%</td>
</tr>
<tr>
<td>Harris Cab</td>
<td>5%</td>
</tr>
<tr>
<td>United Cab</td>
<td>5%</td>
</tr>
<tr>
<td>Liberty Cab</td>
<td>5%</td>
</tr>
<tr>
<td>Total Respondents</td>
<td>22</td>
</tr>
</tbody>
</table>

### Time for operator to answer the phone or app to respond (in minutes)

- Less than 1 minute: 14%
- 1 minute: 59%
- 2 to 5 minutes: 27%

Total Respondents: 22
**Did your ride arrive on time?**

- Yes, 17, 59%
- No, 5, 17%
- Taxi Stand/Street Hail, 7, 24%

**Time it took for the taxi to arrive (in minutes)**

- 5-10: 38%
- 11-15: 43%
- 16-20: 5%
- 21-30: 5%
- 31-50: 5%
- >50: 5%

Total Respondents: 21
Please describe the telephone call. Was the operator friendly?

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friendly</td>
<td>10</td>
</tr>
<tr>
<td>Quick to respond</td>
<td>5</td>
</tr>
<tr>
<td>Thanked me</td>
<td>5</td>
</tr>
<tr>
<td>Gave an ETA</td>
<td>3</td>
</tr>
<tr>
<td>Followed up with a text</td>
<td>2</td>
</tr>
<tr>
<td>Greeted me</td>
<td>2</td>
</tr>
<tr>
<td>Not friendly</td>
<td>1</td>
</tr>
<tr>
<td>In a hurry</td>
<td>1</td>
</tr>
</tbody>
</table>

If you got your ride by street hailing or from a taxi stand, how long did you wait before you secured a ride?

- More than 30 minutes: 14%
- 0-5 minutes: 86%
Did you request immediate pick up or did you schedule your trip in advance?

- Immediate pick up, 27, 93%
- Scheduled in advance, 2, 7%

Total Respondents: 29

Did the driver know the way to your destination?

- Yes, 21, 72%
- No, 7, 24%
- No Show, 1, 4%
Was the driver talking on the phone or texting at any point during your trip?

- Yes, 8, 28%
- No, 20, 69%
- No Show, 1, 3%

Did you feel safe in the vehicle?

- Yes, 23, 79%
- No, 5, 17%
- No Show, 1, 4%

Total Respondents: 29
Did the driver fill out the receipt completely?

- Yes, 18, 62%
- No, 10, 35%
- No Show, 1, 3%

Total Respondents: 29

Did the driver accept credit cards?

- Yes, 23, 79%
- No, 5, 17%
- No Show, 1, 4%
Minimum Limousine Rates???

- Currently stable, employee oriented limousine companies
- Umbrella rate-making – protect public’s interest in taxi availability/affordability
- Protect % of typical taxi trips from price competition
- Use of statistical analysis
<table>
<thead>
<tr>
<th>Company</th>
<th>Texas Taxi</th>
<th>%</th>
<th>Houston Yellow</th>
<th>%</th>
<th>Fiesta</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0-$5</td>
<td>57161</td>
<td>10%</td>
<td>21583</td>
<td>10%</td>
<td>1807</td>
<td>8%</td>
</tr>
<tr>
<td>$5-$15</td>
<td>242879</td>
<td>44%</td>
<td>94372</td>
<td>42%</td>
<td>13539</td>
<td>58%</td>
</tr>
<tr>
<td>$15-$25</td>
<td>116246</td>
<td>21%</td>
<td>47676</td>
<td>21%</td>
<td>4147</td>
<td>18%</td>
</tr>
<tr>
<td>$25-$35</td>
<td>63602</td>
<td>11%</td>
<td>21851</td>
<td>10%</td>
<td>1760</td>
<td>8%</td>
</tr>
<tr>
<td>$35-$45</td>
<td>26428</td>
<td>5%</td>
<td>10991</td>
<td>5%</td>
<td>848</td>
<td>4%</td>
</tr>
<tr>
<td>$45-$55</td>
<td>18247</td>
<td>3%</td>
<td>8621</td>
<td>4%</td>
<td>478</td>
<td>2%</td>
</tr>
<tr>
<td>$55-$65</td>
<td>12190</td>
<td>2%</td>
<td>7603</td>
<td>3%</td>
<td>355</td>
<td>2%</td>
</tr>
<tr>
<td>$65-$75</td>
<td>8157</td>
<td>1%</td>
<td>5589</td>
<td>2%</td>
<td>230</td>
<td>1%</td>
</tr>
<tr>
<td>$75 or greater</td>
<td>8459</td>
<td>2%</td>
<td>5516</td>
<td>2%</td>
<td>290</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>553369</strong></td>
<td></td>
<td><strong>223802</strong></td>
<td></td>
<td><strong>23454</strong></td>
<td></td>
</tr>
</tbody>
</table>
Limousine/Sedan and Rideshare

• Threat of unregulated competition
  – Ridesharing: competition from unregulated vehicles and drivers
    • Fine for commuters so apply ridesharing regulation
    • Prohibit commercialization of peer-to-peer practices
  – Require Uber and others to be regulated as limousine or taxi dispatch companies
    • Apply dispatch company rules and regulations
Taxi and taxi type trips are derived demand; oversupply results in less revenue per vehicle in the marketplace

Taxi fares rose 29% the first year after deregulation

"Increasing fares to residential areas means that the impact of more taxicab is borne disproportionately by low-income persons. In other words, those who can least afford to pay would be charged the most...Those who follow the academic argument of 'letting the market decide' taxicab fares are really 'letting the poor pay more.'" 

Service availability increases but quality is diminished

Every major city that has deregulated, re-regulated within 10 years

9 Gilbert, Gorman, Effect of Open Entry and Variable Fares on the Cost of Taxicab Service to Residential areas, 1984
Best Practice Recommendations

• Incorporate new technologies within existing service providers
• Work with full service taxi companies
• Standardization of vehicles and drivers
• Accomplishment of regulation through companies – minimal city staff
• Minimization of medallions, individual permits/color schemes
• Incentives for taxi company growth/flexibility
• Solid strategy of protecting the public’s interest