1.0 INTRODUCTION

1.1 The Houston Airport System ("HAS") serves the City of Houston and the greater Houston Region—including the ten counties comprising the Metropolitan Statistical Area of Houston—with a population of over six million.

1.2 A department of the City of Houston, HAS owns and operates three airport facilities: George Bush Intercontinental Airport, William P. Hobby Airport and Ellington Airport ("IAH", "HOU", and "EFD" respectively). In 2015, HAS handled more than 55 million passengers. It is one of the world’s largest public airport systems and positions Houston as a major international passenger and cargo gateway. Houston enjoys non-stop passenger air service to approximately 118 domestic and 70 international destinations.

2.0 PURPOSE OF REQUEST FOR PROPOSAL (RFP)

2.1 HAS is seeking qualifications for non-exclusive passenger and parker research and data analytics services. This RFP process will result in a 5-year contract with a 30-day right of cancellation at the sole discretion of the Director. The option of extending the contract for an additional two years may be exercised at the discretion of the Director.

2.2 The successful Proposer (also referred to as “Consultant”) will assist with a broad range of passenger and parker research and data analytics needs, from ongoing passenger satisfaction research to ad hoc and/or comprehensive customer experience research to customer data analytics. Data analytics will include but not be limited to using transactional data traced back to de-identified households to build psychographic passenger profiles. These psychographic customer profiles would be predictive of behavior, expectations and needs, and also would include location information which would render advertising campaigns more targeted and effective (for example). This may also include structured surveys as well as online micro-surveys administered to measure key drivers of passenger satisfaction revealing the corresponding weights of attributes which contribute to the overall satisfaction and likelihood to recommend airports and services within HAS. Additional scope of work will involve the execution and analysis of qualitative and quantitative research for the purpose of identifying a hierarchy of needs for passengers at both IAH and HOU airports.

3.0 ITEMIZATION AND DESCRIPTION OF SERVICES

3.1 The Consultant shall provide passenger and parker research and data analytics services for the Houston Airport System.

3.2 The Consultant shall furnish all labor, materials, equipment, supplies, and supervision necessary to perform the work and services listed below in a timely manner, as directed and ordered in writing by the Director, in accordance with provisions of the agreement. The Consultant is also responsible for fees and travel costs associated with airport badging and renewal, in-person presentations, costs of printing reports and survey flyers, and parking charges. The Consultant must also handle logistics and any expense related to badging, badge pickup, parking and scheduling for staff and subcontractors working through this contract when onsite activity or research is required.

3.3 The Consultant will perform the “passenger and parker research and data analytics consulting services” described herein without limitation, as requested and ordered in writing by the Director. The passenger and parker research and analytics consulting services shall include, but not be limited to, the tasks listed below:
3.3.1 PASSENGER SATISFACTION RESEARCH

3.3.1.1 Passenger satisfaction surveys are to be conducted in airports through intercepts with an appropriate sampling to provide 95% confidence level with no more than a 5% margin of error or confidence interval on key drivers and attributes by airport, and terminal or concourse. This research exercise will take place between zero and four times per year based on the needs or requirements of the Director. The passenger satisfaction survey is planned to be conducted once the first fiscal year (July 1- June 30) and twice per fiscal year thereafter over the course of two weeks through on-premises intercepts of departing and arriving passengers at IAH and HOU. Previously satisfaction surveys have been conducted at least twice per year since Spring of 2013 and past data is available and should be incorporated into future survey reports. Should additional waves of surveys be required during a given year, they will be done on an ad hoc basis.

3.3.1.2 Segments of passengers will include departing, arriving, and connecting, domestic and international passengers at both IAH and HOU. Interviews should be conducted in gate areas, baggage claim, lounges/clubrooms as well as post-Federal Inspection Stations (FIS to insure assessment of the entire immigration/customs experience). In order to accomplish a statistically viable sample, a total of 4800+ intercepts, or about 400 per terminal/concourse for both arriving and departing passengers at each airport, must be completed. The Houston Airport System has approximately 55 million passengers per year with about 43 million using IAH and 12 million using HOU. This sample size may increase to accommodate increased passenger traffic at each airport in the future.

3.3.1.3 Information on departing passengers and their perceptions of various facets of the passenger experience must include:

- Demographic information including age, country, state, city and zip code of origin, household income, size and ages of family, country of residence, expected departure time (for the purpose of establishing how early each arrived), and frequency and type of travel (business, leisure, etc.)
- Usage and ranking of airport facilities and services including dining and shopping, parking, amenities, airline lounges, shuttles, ground transportation, inter-terminal transportation, cleanliness, restrooms, ticketing and baggage, security, wayfinding, and customer service. The current survey tracks between 70-73 attributes depending on airport.
- Key Driver Analysis through multivariable regression and asymmetry analysis resulting in the prioritization of the top ten actionable conclusions – currently 7 for departing passengers
- Added insight on demographics provided through a subscription to Nielsen/Scarborough or other metropolitan-level research for the Houston market
- Open-ended responses captured, translated, and codified for context by airport – currently 24 different categories are tracked and 16% of respondents provided open-ended responses in the last wave of research
3.3.1.4 Information on arriving passengers and their perceptions of various facets of the passenger experience must include:

- Demographic information including age, country of origin, household income, size and ages of family, country of residence, expected departure time (for the purpose of establishing how early each arrived), and frequency and type of travel (business, leisure, etc.)
- Usage and ranking of airport facilities and services including dining and shopping, parking, amenities, airline lounges, shuttles, ground transportation, inter-terminal transportation, cleanliness, restrooms, ticketing and baggage, security, wayfinding, and customer service. The current survey tracks approximately 20 attributes.
- Key Driver Analysis through multivariable regression and asymmetry analysis resulting in the prioritization of the top ten actionable conclusions – currently 3 for arriving passengers
- Open ended responses captured, translated, and codified for context by airport – currently 24 different categories are tracked and 16% of respondents provided open-ended responses as of the last wave of research

3.3.1.5 Intercepts must be conducted in both Spanish and English.

3.3.1.6 Summaries of quantitative sample data should be identified as a spectrum of the audience rather than averages, (for example; include segments of age ranges and percentages of each instead of overall average of total population).

3.3.1.7 Analysis of findings shall be presented, highlighting previously benchmarked satisfaction elements and trend comparisons as well as contributing attributes ranked as key drivers of passenger satisfaction. The timing of this deliverable shall be no later than 30 days after the last day of passenger intercepts to ensure timely delivery of satisfaction insight.

3.3.2 HIERARCHY OF NEEDS FOR DOMESTIC PASSENGERS

3.3.2.1 DOMESTIC HIERARCHY OF NEEDS QUALITATIVE STUDY

3.3.2.1.1 The Consultant will work with HAS Senior Manager, Market Research and Analytics to moderate a series of focus groups comprised of 10 passengers for the purpose of establishing a hierarchy of needs for domestic passengers at IAH and HOU airports. As many as 20 individual focus groups will be conducted to capture qualitative research from key demographics from geographic regions, as identified by HAS, such as passengers to/from Texas, California, the Midwest and the East Coast. The focus groups will be moderated and include passengers recruited from the airports prior to departure on airport premises, and recent passengers recruited based on stringent criteria for focus groups to take place at fixed times in an off-site facility. Depending upon the passengers in the focus group, moderators with language skills may be required.

3.3.2.1.2 Design of questions and methodology will be created for the purpose of identifying the key needs and desires of passengers flying through Houston Airports as well as suggested amenities. Domestic passengers of both IAH and HOU must be recruited and findings should include any similarities or contrasts between each airport group. Reporting for both airports should capture key sentiments of each geographical segment and be analyzed by travel type, including business, leisure, education, medical, and family travel.
3.3.2.2 DOMESTIC HIERARCHY OF NEEDS QUANTITATIVE STUDY

3.3.2.2.1 Upon completion of this study and identification of potential needs, a quantitative survey will then be administered to an appropriate sampling to provide 95% confidence with no more than a 5% standard of error of domestic flight passengers based geographical segment. Attributes or suggested amenities will be ranked and ordered through a MaxDiff, conjoint or regression-based analysis of raw data. The result will be a categorization of a hierarchy of domestic passenger needs and key drivers, which will then aid in development and prioritization of current and future initiatives in furthering the quality of service and experience at Houston Airports.

3.3.3 HIERARCHY OF NEEDS FOR INTERNATIONAL PASSENGERS

3.3.3.1 INTERNATIONAL HIERARCHY OF NEEDS QUALITATIVE STUDY

3.3.3.1.1 The study would build upon previous hierarchy of needs research conducted through focus groups and quantitative surveys in 2015. The Consultant will work with HAS Senior Manager, Market Research and Analytics to moderate a series of qualitative focus groups comprised of 10 passengers for the purpose of establishing a hierarchy of needs for international passengers at IAH and HOU airports. As many as 20 individual focus groups will be conducted to capture qualitative research from key demographics and geographic groups, including travelers to and from Central and South America, the Caribbean, Asia, Europe, Mexico, Africa, Australasia, and the Middle East. The moderation of this study must be documented through video recording, translation, and transcription. The focus groups will be moderated and include passengers recruited from the airports prior to departure on airport premises, and recent passengers recruited based on a stringent criteria for focus groups to take place at fixed times in an off-site facility. Based on the passengers in the focus group, moderators with language skills may be required.

3.3.3.1.2 Design of questions and methodology will be created for the purpose of identifying the key needs and desires of passengers flying through Houston Airports as well as suggested amenities. International passengers of both IAH and HOU must be recruited and findings should include and similarities or contrasts between each group. Reporting for both airports should capture key sentiments of each geographical segment and be analyzed by travel type served by that airport, including business, leisure, education, medical, and family travel.

3.3.3.2 INTERNATIONAL HIERARCHY OF NEEDS QUANTITATIVE STUDY

3.3.3.2.1 Upon completion of this study and identification of potential needs, a quantitative survey will then be administered to an appropriate sampling of international passengers based on geographic passenger origins and destinations to and from HAS. The previous study had approximately 3300 respondents and addressed only passengers at IAH. A future study will need to include international passengers at HOU as well. Attributes or suggested amenities will be ranked and ordered through a MaxDiff, conjoint or regression-based analysis of raw data. The result will be a categorization of a hierarchy of international passenger needs and key drivers, which will then aid in development and prioritization of current and future initiatives in furthering the quality of service and experience at Houston Airports.
3.3.4  **PSYCHOGRAPHIC AND TRANSACTIONAL ANALYSIS**

3.3.4.1  The Consultant will procure de-identified transactional data from Visa, Experian or similar external and internal sources in order to analyze Zip+4 level credit card transaction data over the previous one year period in the zip code of 77032 for IAH and 77061 for HOU to determine psychographic data including geographic densities and representation, consumption propensities, media preferences, and behavioral and attitudinal properties of core segments of current and potential users of the Houston Airport System. There should be 20,000+ (IAH) and 13,000+ (HOU) credit card transactions analyzed by CBSA, State, Zip, and County with a breakdown of pertinent purchases allocated to apparel, computers, hotels, restaurants, specialty, and any other notable and appropriate category represented. Analysis should contrast any shifts from the previous period and identify trends from previous periods. Utilization and access of other sources of demographic research such as Nielsen, Pew or other sources may be requested to provide additional insight on the populations. The top actionable opportunities based on trends or growth in psychographic segments must be presented.

3.3.5  **LICENSE PLATE CAPTURE ANALYSIS**

3.3.5.1  HAS collects more than 1.5 million license plate scans per year in multiple on- and off-site parking locations. For analysis, the consultant will collect a de-identified sub-sample of at least 75,000 of these scans and have them appended with Zip+4 level data. The sample should include all parking locations and parking loyalty programs. A description of these locations and programs may be found in section 3.6 below. Analysis should be done on average length of stay by location or program based on frequency of consecutive scans, and overlap in parkers between locations. Finally, a psychographic analysis will be performed using zip codes to identify the top user segments. Analysis should contrast any shifts from the previous period and identify trends from previous periods. Utilization and access of other sources of demographic research such as Nielsen, Pew or other sources may be requested to provide additional insight on the population. The top actionable opportunities based on trends or growth in psychographic segments must be presented.

3.3.6  **AIRPORT PARKING SATISFACTION RESEARCH**

3.3.6.1  The consultant will conduct annual research by intercept, online, or by a combination of both to assess satisfaction of parking products provided by HAS and other parking options available near IAH and HOU. Proposals should include pricing for three options, 100% intercept (similar to Passenger Satisfaction, 3.1), 100% online (participants driven by response to cards handed out with discounts for completion), and a hybrid technique of 33% intercepts and 66% online surveys. The survey should be conducted over the course of four weeks.

3.3.6.2  This survey will be compared to the previous year’s survey and notable changes or trends found in parker satisfaction will be presented. The previous survey had approximately 1500 responses and contained approximately 30 questions. The Houston Airport System has over 1.5 million parkers per year. Sample size must statistically represent all garage locations and programs. There are twelve separate facilities or services to be represented including:
3.3.6.3 In addition, HAS parking loyalty programs include Valet Parking Plus program and ecopark has a separate Parking Plus program. Parkers may also be members of a Corporate Parking program.

3.3.6.4 The following data will be collected through a statistically meaningful sample size for each (95% confidence with no more than 5% standard of error):

- **Demographic Information** including age, geography, household income, size of family, country of residence, length of stay, quantity of baggage, frequency of parking, make/model of vehicle, and type of travel (business, leisure, education, medical, and family travel).
- **Usage and ranking of parking facilities and services** including decision set, parking location, shuttle experience and timing, use of amenities, advertising effectiveness, form of payment and use of coupons, safety, cleanliness, walkways, elevators, guidance technology, wayfinding, membership in airline and parking loyalty programs, and customer service.
- **Open ended responses** captured, translated, and codified for context by airport – currently 13 different categories are tracked and 6% of respondents provided open-ended responses in the last wave of parking research.
- **Correlation to other parking-related research** should be identified and incorporated into presentations, such as similarities to psychographic segments, overlap in parkers and insights from previous passenger research.

### PARKING PRODUCT RESEARCH (AD HOC)

3.3.7.1 Further analytical support and research may be conducted to measure parking behavior, optimal pricing, and potential new parking products or parking brand extensions with a statistically significant sample from key segments identified in previously conducted HAS research. This research may be conducted through a combination of qualitative and conjoint analysis. Any technology or platform required to collect or administer such research should be provided by the consultant. The conjoint analysis will feature existing and hypothetical parking options. The population of the sample will be dependent on the facility or product being tested. The end result will be to identify key drivers and attributes for satisfaction, optimal pricing, and proclivity for each parking option by primary parker segments to improve the overall mix of parking options and programs at HAS.
3.3.8 MICRO-SURVEYS (AD HOC)

3.3.8.1 Consultant shall assist with design and deployment of micro-surveys utilizing the technological infrastructure and assets of HAS, including but not limited to Wi-Fi splash pages, websites, social media, or other channels that present potential for statistically relevant ‘on-the-spot’ short surveys in real time with a frequency determined by HAS. Collection of responses for any online surveys and the technology or platform to administer them should be provided by consultant. Results and reporting from micro-surveys will be provided via dashboard or integration into existing data channels for reporting and analysis.

3.3.9 BRAND PERCEPTION SURVEYS (AD HOC)

3.3.9.1 BRAND PERCEPTION QUALITATIVE SURVEY (AD HOC)

3.3.9.2 The Consultant will work with HAS Senior Manager, Market Research and Analytics to moderate a series of focus groups comprised of 10 stakeholders (including passengers, parkers and others who use HAS) for the purpose of establishing a brand perception study for HAS and associated brands (IAH, HOU, Houston Spaceport, etc.). As many as 5 individual focus groups will be conducted to capture qualitative research from key demographics from geographic regions and groups, as identified by HAS. Results from the qualitative study will inform the survey design of 3.9.2 Brand Perception Quantitative Survey (below). Based on the participants in the focus group, moderators with language skills may be required.

3.3.9.3 BRAND PERCEPTION QUANTITATIVE SURVEY (AD HOC)

3.3.9.4 A brand perception survey will be conducted using a statistically-representative sample to measure the perceptions and sentiment among HAS travelers. Attributes may include but are not limited to:

- Familiarity of HAS brands including IAH, HOU, Houston Spaceport, ecopark, Parking Plus, Surepark and any new products, programs (such as Harmony in the Air) or services identified by HAS
- Perceptions and attributes of HAS, IAH, HOU, Houston Spaceport, etc.
- Current logos, positioning and brand identity analysis including potential concepts
- Familiarity with current advertising and identification of marketing channels by segment
- Familiarity, perception and sentiment of all digital assets identified by HAS including but not limited to websites, digital kiosks, and other branded channels of information

4.0 REPORTING

4.1 Written reports and related in-person presentations will be required for each study for senior HAS leadership and staff members highlighting results, trends, strategic insights and opportunities. Online modules containing data for each study will be loaded to a pre-existing dashboard interface, or an interface created or developed at no additional cost to HAS, to allow analysis and custom report generation by multiple users. Historic data from previous studies will also be required to be integrated into this interface. This includes 9 previous waves of passenger satisfaction research, one previous study of parker satisfaction research and may include other databases of information HAS deems relevant. If needed, training should be provided by the consultant for users of the content on any platform providing research and reporting.
5.0 ADDITIONAL SERVICES

5.1 In submitting a proposal, Proposers shall indicate a willingness to negotiate additional services deemed appropriate for the Scope of Services, as provided herein, or deemed necessary and/or desirable by HAS. HAS may request additional work to be quoted in detail, including personnel, hourly rates and any other expenses prior to authorization.

6.0 AUTHORIZATION OF SERVICES

6.1 As the Consultant completes various portions of the scope of the contract, as well as for ad hoc research requests, HAS will request the Consultant to develop a work plan detailing the specific tasks to be completed, a detailed, itemized budget - including personnel and hourly rates - for performing such tasks and an assurance that all necessary resources are available to accomplish such task. Consultant shall not perform any services until HAS has issued a written notice to proceed after the execution of the work plan for each initiative, component or stage. Consultant will not be authorized to perform or invoice HAS for any work not specifically authorized in HAS’s notice to proceed.

7.0 BADGING

7.1 One badge will be provided to the primary project contact in the firm awarded the contract. This person will then be the signatory for additional badging credentials for any staff or subcontractor required or hired by the firm to conduct on-site research or activities at IAH and HOU. Logistics for parking and parking passes must also be managed by primary project contact.

8.0 DATA OWNERSHIP AND DELIVERY

8.1 All raw data and reports shall remain the property of HAS. Within fourteen (14) days of delivery of any survey or research project, collected data (including video and multimedia, transcripts and other raw data provided in Excel, CSV or HAS-identified form) shall be delivered to the Senior Manager, Market Research and Analytics either electronically or via external hard drive for larger-sized files. Research data should be made accessible to HAS online via password-protected hosting on intranet or module.

9.0 RESEARCH FREQUENCY

9.1 Below is a table summarizing the research requested and potential ad hoc research for the five year contract. There is also an estimate of the scope of projects should a two year extension to the contract be granted. This representation should not be construed as a complete listing of all research that may be conducted during the course of the contract. HAS may change the frequency or timing of any research listed in this document as deemed appropriate.
<table>
<thead>
<tr>
<th>HAS Research</th>
<th>Estimated Frequency</th>
<th>Estimated Projects for 5 Year Period</th>
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<tr>
<td>Passenger Satisfaction Research (3.1)</td>
<td>1-2 times per year</td>
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<tr>
<td>Hierarchy of Needs for Domestic Passenger (3.2)</td>
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<tr>
<td>Hierarchy of Needs for International Passengers (3.3)</td>
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<tr>
<td>Psychographic and Transactional Analysis (3.4)</td>
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<td>License Plate Capture Analysis (3.5)</td>
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<tr>
<td>Airport Parking Satisfaction Research (3.6)</td>
<td>Every year beginning 2nd year</td>
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<tr>
<th>AD HOC HAS Research</th>
<th>Potential Frequency</th>
<th>Potential AD HOC Projects per 5 Year Contract</th>
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<tr>
<td>Additional Passenger Satisfaction Research (3.1)</td>
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<td>Parking Product Research (3.7)</td>
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<td>Brand Perception Surveys (3.9)</td>
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<th>Two Year Extension Scope (Estimated)</th>
<th>Potential Frequency</th>
<th>Estimated Projects for 2 Year Contract Extension</th>
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<td>Airport Parking Satisfaction Research (3.6)</td>
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<td>Psychographic and Transactional Analysis (3.4)</td>
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<td>License Plate Capture Analysis (3.5)</td>
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