Long-range plan goals

- The City requires a comprehensive and integrated plan that considers and addresses all components of an integrated solid waste system
- Looks out 20 years
- What services should the city provide?
- How best to manage various waste streams (residential, multi-family, commercial, construction, organics)
The RFP

Starting the Process and Team Selection & Scope of Project

Scope of Services
- Assist in setting goals & objectives
- Solid Waste Facility Inventory
- Waste Quantities and Projections
- Waste Management Activity Analysis
- Strategic Analysis
- Solid Waste Management Plan Adoption
- Public Outreach
- Project Management

RFP issued June 2017
Proposals due July 2017

Successful Team has experience with solid waste planning
Meets M/WBE requirements

Notice to proceed August 2018
Kick-off meeting in September 2018
Purpose of the Plan

- Review of Current Program & Services
- How does Houston Compare with Other Cities
- Determine Short-term and Long-term Needs
- Identify Specific Strategies to Achieve Goals & Objectives

Outreach Program includes:
- Conducting a series of one-on-one interviews with key stakeholders in the industry
- Working with Mayor’s Solid Waste Advisory Task Force (includes community, academia and industry)
- Development of web page with opportunity for written comments
- Survey of Public
- Public Meetings
Mayor’s Advisory Task Force

- Establish Goals & Objectives
- Review Technical Assessments & Reports
- Recommend Priorities
- Provide Input on Plan Direction
- Assist in Public Outreach

Citizen Task Force Members

Becky Edmunson – Community Representative  
Jessica Hulsey – Community Representative  
Allen Goodlow – Community Representative  
Debbie White – Community Representative  
Rogene Calvert – Community Representative  
Vincent Sanders – Community Representative  
Abate T. Wolde-Kirkos - Academic  
Amy Boyers – Community Representative  
Rachel Powers – Non-profit Organization  
Cheryl Mergo – H-GAC  
Brandon Rogers – Solid Waste Industry  
Shanna Lopez – Solid Waste Industry  
Andy Teas – Apartment Industry  
Lora Hinchcliff – Composting Industry  
Justin DuBose – Composting Industry  
Andrea Rodriquez – Recycling Industry  
Joe Rizzo – Construction / Demolition  
Brett Sarver – Solid Waste Industry  
Andra Wilcox - HARC
Planning for Real Results
Houston’s Goodness

- Garbage & Recycling as base services
- Monthly bulk waste collections (junk/green)
- Weekly yard waste collection
- Comprehensive Environmental Programming (HHW, Drop-off Sites)
- Re-use warehouse & Neighborhood Depository Sites
- Great waste disposal and recycling processing contracts and services
- Highly successful disaster management response
- Highly experienced executive leadership
Houston’s Challenges

- Program funding impacts:
  - Currently required collection routes and staffing
  - Service growth to meet demand
  - Best practice equipment procurement
  - Customer engagement and education
  - Enforcement of Illegal dumping
- Multi-family waste management and disposal practices
- Greater participation by Commercial Sector is critically needed
- Disaster Response and Ongoing Storm Events
- Long-term landfill disposal capacity
Houston’s Long-term Needs

- Houston currently generates 4.3 million tons of waste, will increase to 5.4 million tons in 2040 at current rates.

- Approximately 2.0 million tons of material are diverted from the landfill due to City and private sector efforts (includes C&D recycling)

- Majority of this waste is from the commercial sector, including multi-family housing (80%)

- Landfill capacity is approximately 330 million cubic yards regionally. This capacity will be at 100 million cubic yards in 2040.

- Construction / demolition landfill space will be consumed by 2040

- Landfill closures will reduce the number of options available to the City – by 2040, it is possible that half of MSW landfills will have reached capacity
MSW (Type I) Landfills and City of Houston Transfer Stations

Only 4 of 12 MSW Landfills are within 15 miles of a City of Houston Transfer Station.

City’s primary landfills are McCarty Road Landfill, Atascocita Landfill and Blue Ridge Landfill. Combined, they have an average of 30–35 years of capacity.
Right-size collection’s operations with necessary collections equipment and staffing: 122 driver positions and 147 collections units which includes necessary backups

Increase the number of additional depositories needed – City has 6, however needs 5 more to meet demand and coverage of the expanse of the city footprint of 640 sq. miles

Increase the number of inspectors needed to address illegal dumping enforcement in a more substantial way

With proper service resources, customer service levels would be greatly enhanced

Provide first class programs designed to reduce waste generation and improve quality of recycling programming
Texas Cities’ Comparison

Green stars - programs funded with service fee
Yellow diamonds – programs funded with environmental fee
Blue square – funded by other departments
Blue triangle – funded with general fund

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</tbody>
</table>

- ★: Provided with monthly rates
- ◆: Provided with other funding source
- ★★★: Material collection provided but not as separate service
- NR: Not Reported
- Blank: Service is not provided by the city
## Houston’s Resources Compared to Other Cities (fy 2020 budgets)

Houston’s 2021 Budget request is $88.978 Million

<table>
<thead>
<tr>
<th>City</th>
<th>Houston</th>
<th>San Antonio</th>
<th>Dallas</th>
<th>Fort Worth</th>
<th>Austin</th>
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<tr>
<td>Households Served</td>
<td>390,435</td>
<td>356,000</td>
<td>245,000</td>
<td>225,049</td>
<td>200,550</td>
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<td>FTEs</td>
<td>434</td>
<td>624</td>
<td>525</td>
<td>116*</td>
<td>462</td>
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<td>Households Served Per FTE</td>
<td>893</td>
<td>570</td>
<td>466</td>
<td>NA*</td>
<td>434</td>
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<td>Annual Budget ($millions)</td>
<td>$92.0</td>
<td>$130</td>
<td>$113.7</td>
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<td>Budget $ / HH</td>
<td>$235</td>
<td>$365</td>
<td>$464</td>
<td>$308</td>
<td>$494</td>
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*does not include private haulers collecting waste / Dallas includes landfill operations
## Solid Waste Fees for Other Cities

<table>
<thead>
<tr>
<th>Rank</th>
<th>City</th>
<th>Monthly Solid Waste User Fee</th>
<th>Monthly Environmental Fee</th>
<th>Monthly Cart Lease Fee</th>
<th>Enterprise Fund</th>
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<tr>
<td>1</td>
<td>Houston</td>
<td>$ -</td>
<td>$ -</td>
<td>$1.14</td>
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<tr>
<td>2</td>
<td>San Antonio</td>
<td>26.76</td>
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<td>3</td>
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<td>4</td>
<td>Austin</td>
<td>42.85</td>
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<td>6</td>
<td>El Paso</td>
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<td>7</td>
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<td>14.94</td>
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<td>8</td>
<td>Corpus Christi</td>
<td>16.91</td>
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<td>9</td>
<td>Plano</td>
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<td>10</td>
<td>Laredo</td>
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1. Cities are ranked by population size
2. A 96-gallon cart is chosen if/when other options are available to keep service level and cost comparisons equal
## Solid Waste Fees in H-GAC Region

### Ten Largest Cities\(^1\) in H-GAC Monthly Solid Waste User Fees

<table>
<thead>
<tr>
<th>City</th>
<th>Population</th>
<th>Monthly Solid Waste User Fee(^3)</th>
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</thead>
<tbody>
<tr>
<td>Houston</td>
<td>2,325,502</td>
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<tr>
<td>Pasadena(^4)</td>
<td>151,718</td>
<td>40.99</td>
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<td>The Woodlands(^5)</td>
<td>108,070</td>
<td>14.15</td>
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<tr>
<td>Pearland</td>
<td>102,513</td>
<td>20.11</td>
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<td>League City</td>
<td>95,735</td>
<td>22.50</td>
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<td>Sugar Land</td>
<td>91,192</td>
<td>19.38</td>
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<td>Missouri City</td>
<td>74,092</td>
<td>12.65</td>
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<td>Baytown</td>
<td>73,720</td>
<td>27.71</td>
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<td>Conroe</td>
<td>66,181</td>
<td>16.19</td>
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<tr>
<td>Galveston</td>
<td>49,471</td>
<td>20.48</td>
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</table>

1. The Woodlands is classified as unincorporated territory but was included for the purposes of this comparison.
2. Cities are ranked by population size according to US Census Bureau
3. A 96-gallon cart is chosen if/when other options are available to keep service level and cost comparisons equal
4. The charge for solid waste service in Pasadena is included with the water bill. Rate shown is 100 gallon cart
5. Residents of The Woodlands pay $169.80 for solid waste collection. Collected with property taxes. $169.80 / 12 = $14.15.
6. Data collected March 2020
## Issues Related to Privatization

- Risk Sharing
- Level of Service Provided
- Costs Savings & Revenue Sharing
- Flexibility
- Emergency Management Opportunities
- Reliability

---

### Houston’s current system is a mix of public and private sector waste management

- Residential Collection – Public / Private
- Recycling – Public / Private
- Transfer Stations – Public / Private
- Landfills - Privates

### Landfill Ownership/Operation for Major Texas Cities

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<tr>
<th>City</th>
<th>Public / Public</th>
<th>Public / Private</th>
<th>Private / Private</th>
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<tr>
<td>Arlington</td>
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<tr>
<td>Corpus Christi</td>
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<td>Dallas</td>
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<td>Fort Worth</td>
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<tr>
<td>Houston</td>
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</tbody>
</table>
The road ahead…

1. Financial sustainability
2. Rightsizing Service Operations
3. Establish best-practice fleet replacement schedule/model
4. Enhanced customer engagement/education
5. Initiate future waste disposal outlet(s) now
6. Strengthen transfer station infrastructure (NE, SW)
7. Multi-family and Commercial waste management reductions
8. Ongoing Council actions to implement programs and policies
Solid Waste Management Planning
1990 Houston
Fort Worth
Arlington
Dallas Climate Action Plan
Collection system transitions
Recycling material procurement
Transfer Station & Landfill Site Selection & Permitting
Waste-to-Energy Implementation
Organizational Assessments & Feasibility Studies
TxSWANA Presenter
GDPC – Natural Resources Task Force Leader
Dave Yanke - Member of the TCEQ Municipal Solid Waste Management and Resource Recovery Advisory Council. Conducted numerous financial planning assessments nationally for city solid waste programs, collection analysis and solid waste planning, including H-GAC studies on MSW generation and diversion forecasts, commercial food waste collection and management.

Risa Weinberger PE has over 39 years experience in solid waste management and co-wrote the textbook SWANA program manager compost certification course and has taught it on a national level. She has been a board member of the State of Texas Alliance for Recycling and is on the Texas Commission on Environmental Quality Municipal Solid Waste Management Resource Recovery Advisory Council.

Allison Trulock – Past director of SWANA’s Collection and Transfer Technical Division. Ms. Trulock specializes in master planning, collection options evaluations and efficiency studies, stakeholder outreach, procurement assistance, and financial feasibility analysis.

Christine Arbogast has 30 years of planning, permitting, and civil engineering experience in environmental and solid resource management projects. She has directed long-term strategic planning studies for public solid waste management agencies.

Tammi Wallace is the Founder and Principal Consultant for EnFocus Strategies (EFS). EnFocus Strategies, founded in 2012, is a management consulting firm that offers strategic planning services focused on public relations, business development and diversity & inclusion training and consulting.

**Project Team**

Team will achieve an 11% minority / women owned business goal.
Next Steps

- Task Force Review and Comments
- Public survey & comments
- Final Plan to City Council
- Council Actions for adoption and implementation