OFFICE OF THE CITY CONTROLLER



CITY OF HOUSTON

2019 ENTERPRISE RISK ASSESSMENT

Chris B. Brown, City Controller

Courtney E. Smith, City Auditor

Report No. 2019-11



OFFICE OF THE CITY CONTROLLER CITY OF HOUSTON TEXAS

CHRIS B. BROWN

June 26, 2019

The Honorable Sylvester Turner, Mayor City of Houston, Texas

SUBJECT: REPORT #2019-11 CITY OF HOUSTON – 2019 ENTERPRISE RISK ASSESSMENT

Mayor Turner:

I'm pleased to submit to you the Enterprise Risk Assessment (ERA) performed by the Controller's Office Audit Division during Fiscal Year (FY) 2019. This is a process that supports our efforts in developing the FY 2020 Annual Audit Plan and deploying the necessary resources to execute.

The risk assessment process is performed annually by updating departments on a rotational basis each fiscal year. This approach provides full coverage of all City Departments over a four to five year period rather than re-perform the entire process every year. Our methodology is consistent with professional standards and considers available resources, cost-benefit, and will allow us to advance the quality of the assessment each cycle.

In selecting the departments to update, we identified and considered several factors, including "Notable Changes since the Previous Risk Assessment" (See Executive Summary, p.2). Based on this, the three departments selected and updated for the FY2019 ERA were:

- General Services Department (GSD)
- Housing and Community Development Department (HCDD)
- Houston Emergency Center (HEC)

The ERA Report contains two sections: Executive Summary and Separate Risk Profiles organized by key business processes within each department. There are two primary perspectives that are graphically presented within the Executive Summary, and shown in detail within each Risk Profile. These perspectives are described as follows:

KEY BUSINESS PROCESSES – analyzed by common functions performed across the organization, which can reveal potential efficiencies, overlap, redundancies, synergies, and leverage of resources. This perspective is looking at activities that the City performs without consideration of its organizational structure; and

DEPARTMENTAL - analyzed in terms of the impact and likelihood of risk associated with the organizational design in executing the City's overall mission and objectives.

We appreciate the cooperation and professionalism extended to the Audit Division during the project by personnel from GSD, HCDD and HEC.



OFFICE OF THE CITY CONTROLLER CITY OF HOUSTON TEXAS

CHRIS B. BROWN

Respectfully submitted,

Chris B. Brown City Controller

xc: Department Directors
 City Council Members
 Marvalette Hunter, Chief of Staff, Mayor's Office
 Harry Hayes, Chief Operating Officer, Mayor's Office
 Shannan Nobles, Chief Deputy City Controller
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City of Houston FY2019 Enterprise Risk Assessment

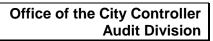
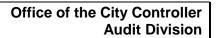


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EXECUTIVE SUMMARY

PURPOSE AND INTRODUCTION

The Audit Division within the Office of the City Controller adheres to professional standards issued by the Government Accountability Office (GAO's *Yellowbook*) and the International Standards of the Professional Practice of Internal Auditing (*Redbook*) per the Institute of Internal Auditors (IIA). Both sets of standards require a risk-based approach to identify the scope and objectives of the audit planning and to properly design audit procedures. The *Redbook* specifically requires an Enterprise Risk Assessment (ERA) process be performed annually as a primary driver to support the annual audit plan, while the *Yellowbook* requires that risk be considered at the engagement/process level.

In adherence to these Standards, the Audit Division applies risk-based methodology in the following manner:

- Annual ERA on all major processes within five to seven departments, which then provides a basis for input to the Audit Plan (See Report # 2019-01 Updated FY2019 Controller's Audit Plan); (*Note: Due to limited resources, only three departments were included in the FY2019 ERA Update*)
- Risk Assessment procedures at the Engagement/Audit project level; and
- Risk Consideration in rendering conclusions and determining the impact and magnitude of findings and preparing the final audit report.

BACKGROUND AND METHODOLOGY -

The Audit Division conducts an annual process to update the ERA. Departments are selected on a rotational basis for efficiency and to ensure full coverage of all City Departments over a four to five-year period. The 2019 ERA process includes other considerations in addition to length of time since the previous assessment. The process begins with preliminary planning, a review of prior risk assessment reports, consideration of Audit Reports issued since the departments were last updated, and the following components, as impacted during the fiscal year.

COMPONENTS OF THE ANNUAL ERA PROCESS:

- Notable Changes
 - Significant Events and Operational Changes
 - Structural Changes (new departments, creating new entities, changes to processes, consolidation, etc.)
- Consideration of Significant Information Technology and Systems
- Department Risk Profile Updates

NOTABLE CHANGES

To applying the risk based methodology noted above, the Audit Division considers significant changes of events, operational and/or business processes, as well as changes in departmental leadership that have occurred since the last risk assessment update. These changes, whether individually or collectively, may have an effect on the way the City conducts business operationally and the resources available. The Audit Division considers these factors when preparing the Annual Audit Plan.

SIGNIFICANT EVENTS AND OPERATIONAL CHANGES SINCE THE FY2018 ENTERPRISE RISK ASSESSMENT UPDATE (ERA) – include the following:

- On July 30, 2018, the Mayor announced the creation of the City Council Economic Development Subcommittee on Education, which will focus on improving educational opportunities to support a flourishing workforce. The Subcommittee on Education will uphold the Economic Development Committee's mission to build prosperity through job creation and business and trade opportunities.
- On August 29, 2018, the Mayor and Michael Berkowitz, President of 100 Resilient Cities (RC) Pioneered by the Rockefeller Foundation, announced that Houston is joining the 100RC Network, a \$164 million global effort to build urban resilience around the world. Through the partnership with 100RC, Houston will create and implement a comprehensive Resilience Strategy to enhance the City's long-term vision to build resilience to the shocks—such as hurricanes and flooding and stresses that can weaken the fabric of a city on a day-to-day or cyclical basis, such as affordable housing and mobility.
- On November 6, 2018, Houstonians voted "For" a salary increase for Houston Firefighters in Proposition B (Prop B), resulting in additional unfunded expenses of over \$79 million a year.
- On November 8, 2018, the Mayor and former Houston First Lady Elyse Lanier announced a \$4.9M project to restore City Hall and Hermann Square.
- On November 15, 2018, Fitch announced it had changed the City of Houston's outlook from stable to negative, while maintaining the City's "AA" bond rating.
- On January 15, 2019, the City opened four Housing Resource Centers, one in each quadrant of the City, to begin the process of distributing \$1.17 billion in federal aid to assist Houstonians, especially the disadvantaged, senior citizens, those with limited English proficiency, and those with special needs, whose homes were damaged by Hurricane Harvey.
- On March 6, 2019, the Mayor announced the creation of the Smart City Advisory Council comprised of City and regional partners.
- On April 29, 2019, the Fire Chief released information during a special-called City Council Meeting regarding layoff of 220 firefighters and reduction of 251 promoted positions to help balance the City's budget with Prop B.
- On May 15, 2019, a State district judge ruled that Proposition B was unconstitutional.

STRUCTURAL CHANGES TO THE RISK UNIVERSE -

Changes to the Risk Universe are considered when for example: there are Departmental and/or management structure changes; functions/responsibilities/processes are added, or eliminated; and consolidation, centralization or decentralization occurs between Departments or on a City-wide basis. In addition, the Audit Division must consider the Risk Universe of the increasing number of Local Government Corporations (LGC) being created on the City's behalf, as well as other forms of Component Units (**See description below**).

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AUDITABLE ENTITIES – Auditable Entities for risk assessment purposes are defined as areas upon which audits or reviews can be conducted by internal or external auditors. These functions or activities may also be considered key business processes or defined organizational structures, as described in more detail below. Changes that occurred in the risk universe included:

- The Mayor's Office created three new Divisions to include: 1) Mayor's office of Complete Communities, which will work to develop collaborative relationships with neighborhood residents, City departments, other governmental agencies and officials, private donors, and non-profit organizations to fulfill the Complete Communities Action Plan; 2) Recovery Division, which will work with all levels of government, private and non-profit organizations, interest groups, individuals, Mayor's staff and City departments to ensure a rapid, quality recovery from Hurricane Harvey and other legacy disasters and position the City to be less vulnerable to the next record-breaking storms; and 3) Resilience Division, which will lead the City's partnership with 100 Resilient Cities to help prepare Houston for catastrophic events like hurricanes, floods, and cyberattacks and slow-moving disasters like aging infrastructure, homelessness, and economic inequality.
- Key personnel appointments made during FY2019 included:
 - Steven L. Hall Director, Office of Veteran's Affairs (November 2018)
 - Theodore "Ted" Irving, Manager, HTV (November 2018)
 - Stephen Costello Chief Recovery Officer, Recovery Division (November 2018)
 - Margaret W. Brown Interim Director, Planning and Development (December 2018)
 - Marissa Aho Chief Resilience Officer, Resilience Division (February 2019)
 - Shannon Buggs Director, Mayor's Office of Complete Communities Division (March 2019)

Component Units - Component Units are defined by the Governmental Accounting Standards Board (GASB)¹ as a related entity whose leadership/management is controlled and/or appointed by a primary government (e.g. City of Houston) and who is dependent on the primary government financially or who would not exist if the primary government did not exist. In determining whether a legally separate entity is a component unit of a primary government, there are three specific tests that involve:

- Appointment of the unit's governing board;
- Fiscal dependence on the primary government; and
- The potential that exclusion would result in misleading financial reporting.

Most Component Units of the City are responsible for obtaining and issuing audited financial statements, which are submitted to the City for reporting purposes. Component Units are reported in the City's Comprehensive Annual Financial Report (CAFR). Blended component units (although legally separate entities) are, in substance, part of the City's operations and they provide services exclusively or almost exclusively for the City. In addition, both discretely presented component units - governmental and business-type are presented in the CAFR.

A Component Unit is considered major, thus presented discretely, if assets, liabilities, revenues or expenses exceed 10% of that Component Unit's class and exceed 5% of all Component Units combined.

ADMINISTRATIVE POLICIES AND PROCEDURES, EXECUTIVE ORDERS, AND MAYOR'S POLICIES – The City Charter, Article VI gives the Mayor power and the duty to exercise administrative control over all departments of the City, which include the authority to sign into effect Administrative Policies and Procedures (APs), Executive Orders (EOs), and any Mayor's Policies (MPs). The Code of Ordinances states that the Administration & Regulatory Affairs Department (ARA) has been designated by the Mayor as having the responsibility for the development and implementation of City-wide policies, regulations, and procedures. Policy audits are considered when developing the annual Audit Plan.

One new EO was established and implemented in FY2019 to include, 1-59, "Technology Related Purchases from Cooperatives". Mayor Turner also approved AP 8-6, "Electronic Signatures" in June 2018.

Using the risk criteria shown below, the Audit Division performed an initial review and risk ranked the APs, EOs, and MPs based on their significance or level of impact of the policy to City-wide operations. Each department was then risk rated based on the level of the department's operational risk exposure. These ratings were combined to determine the overall risk rating for each of the policies and these policies were then categorized by: 1) Administrative, 2) Public Service, 3) Development and Maintenance, Human & Cultural and Other. A total of 117 policies were reviewed during the initial assessment:

¹ GASB Statement No. 14, *The Financial Reporting Entity;* GASB Statement No. 39, *Determining Whether Certain Organizations are Component Units;* and GASB Statement No. 61, *The Financial Reporting Entity: Omnibus an amendment of GASB Statements No. 14 and No. 34*.

RISK CRITERIA

- Complexity of Operations
- Council & Public Interest
- Financial Impact/Concerns
- Human Resources Concerns
- Regulatory and/or Compliance Risk/Concerns
- Technology Concerns
- Time Since Last Audit
- Mission Criticality
- Internal Control Consideration (as reported by management)
- Legal Claims
- Public and Employee Safety Concerns

CONSIDERATION OF SIGNIFICANT INFORMATION SYSTEMS

Utilizing a risk-based approach as required by the standards, the Audit Division considered the City's information technology systems that have been implemented, as well as the technology initiatives that are being developed, which affect operational/business processes. The Audit Division took into consideration Information Technology projects and initiatives being developed for City-wide and departmental use. Projects and initiatives in various stages of development are:

- Network Infrastructure refresh;
- Border Firewall refresh;
- Cyrus One Data Center Upgrade;
- Houston Permitting Center Network Upgrade;
- Contact Center Upgrade;
- JPC Video Arraignment Upgrade;
- Infor IPS Permitting and Inspection (in progress for HFD, ARA);
- SharePoint Online; and
- Infor Enterprise Solution.

DEPARTMENT RISK PROFILE UPDATES

Departmental assessment update candidates were selected and structured based on available resources, time constraints, and cost-benefit considerations. The departmental portion of the ERA performed during FY2019 utilized two professional staff from the Audit Division, who performed reviews of the selected Department's responses from prepared questionnaires and any follow-up questions, and interviews with key operational and management personnel from the following three City Departments:

- General Services Department(GSD)
- Housing and Community Development Department (HCDD)
- Houston Emergency Center (HEC)

City of Houston FY2019 Enterprise Risk Assessment

The process was performed using three basic components: Data gathering, Analysis, and Output as shown in Table 1 and further explained the remaining sections.

DATA GATHERING	ANALYSIS	Ουτρυτ
Previous Risk Assessments Changes to the Dept Structure/Operating Unit Process since Last ERA	Analyze Questionnaire responses and follow-up with questions/interviews/discussions Identify Key Business Processes and related	Updated City-wide business risk profile Audit Division Planning tool
Mission Statement Organizational Structures Business Objectives	changes Identify Potential Risks Identify Risk Management techniques as stated by management	
Develop Questionnaires Financial Data City and Department Websites Interviews	Map identified risks to stated risk management techniques Evaluate process significance to the Department and overall City operations Perform Department-level risk assessments and validate with management	

 Table 1 – Department Risk Profile Update - Components

KEY BUSINESS PROCESSES –

In context of the ERA, "Key Business Process" (KBP) is defined as a vital business procedure, function or activity on which a Department spends a significant amount of financial or personnel resources to perform, or an activity over which they have primary responsibility within the City. KBPs also represent areas upon which audits or reviews can be conducted by internal auditors or external consultants.

While the City-wide analysis identified 145 total key business processes, it was discovered that 19 of them were *common* throughout most Departments, so they were grouped together for more efficient analysis. Thus, Graph 2 provides a perspective to see potential efficiencies, overlap, redundancies, synergies, and leverage of resources when looking at activities that the City performs without consideration of its organizational structure² (*For a contrasting perspective, see Graph 1*).

² The ratings were determined by applying each KBP within each Department to the weighted criteria identified in the ERA Process Section. A "High" rating indicates that conditions and events which prevent the City from achieving its objective(s) within that process could have a significant impact. This is measured in terms of disruption to essential services, financial loss, ability to protect public health and safety, impediments to economic development, or negative perception. In contrast, a "Low" rating indicates that the impact of such an occurrence would be minimal or the likelihood of occurrence is remote.

Office of the City Controller Audit Division

The common KBPs are identified as follows:

- Administration
- Communications
- Compliance
- Customer Service
- Disaster Recovery
- Facilities Management
- Financial Management
- Fleet Management
- Grant Management
- Human Resources (HR)
- Inventory/Materials Management

- Information Technology (IT)
- Payroll
- Procurement
- Project/Construction
 Management
- Public Safety
- Records Management
- Revenue Generation (and Collection)
- Security
- Specific Operational

NOTE: 'Specific Operational' is made up of processes that are unique to the operations of the various Departments (e.g. "Call-Taking" for the Houston Emergency Center (HEC), "Certification" of Minority, Women, and Disadvantaged Business Enterprise (MWDBE) for the Office of Business Opportunity (OBO), "Collection" for Solid Waste Management, etc.). For purposes of the report 'Security' was combined primarily within 'Public Safety'.

RISK IDENTIFICATION AND RATINGS -

It is important to clarify the factors used in determining the levels of risk as presented in the departmental risk assessments. For audit purposes, risk is evaluated by distinguishing between types of risk. For purposes of the ERA and its support for the Annual Audit Plan, the following definitions are provided:

INHERENT RISK – the perceived likelihood and impact associated with an entity or activity that exists simply from the perspective of its current environment. This assumes no significant actions taken by management to mitigate (address) those risks. For example, the City has *inherent risks* associated with its geographic location, funding sources, population, global economy, structure of federal and state government, etc. This can then begin to be refined to the Departments within the City government.

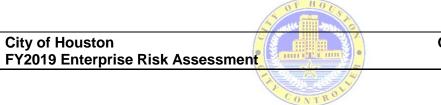
CONTROL RISK – the perceived likelihood and impact of deficiencies in management controls put in place to ensure the achievement of objectives, protection of assets, financial reporting, etc. These are based on managerial decision-making, risk management techniques and strategy, which are generally within the accountability and control of operational management.

For example, the design of the organizational chart, structure of reporting lines, and development of major processes to execute the mission and objectives are high-level examples of management controls and risk management techniques.

RESIDUAL RISK – the level of impact and likelihood of an adverse event occurring to impede the City, Department, and/or Key Business Processes from achieving success *after identifying and testing of management (internal) control structure*.

AUDITOR RISK – this is the probability that the Auditor will render erroneous conclusions to the audit objectives based on; insufficient and/or inappropriate evidence, lack of reasonable auditor judgment, lack of proficiency or competency, lack of sufficient resources or tools to perform





substantive procedures. This risk category comes into play during audits of Departments, Sections, Divisions, or Key Business Processes.

The ERA considered primarily inherent risks, with limited identification of control risk as self-reported by management. We did not substantively test specific management controls in detail and therefore, do not render an opinion on the effectiveness of design nor the efficiency in implementation or existence. The ratings do not imply a judgment on how management is addressing risk and thus is not a specific assessment of

management performance nor concludes on 'Residual Risk'. The actual projects³ performed will allow us to test more comprehensively where necessary. Additionally, as we continue the annual ERA, we will be able to bring the assessment to a deeper level, and thus help us to effectively adjust our course and focus our efforts.

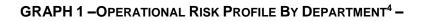
The ratings were determined by applying each Key Business Process within each Department to the weighted criteria identified below. For example, a "High" rating indicates that conditions and events which prevent the City from achieving its objective

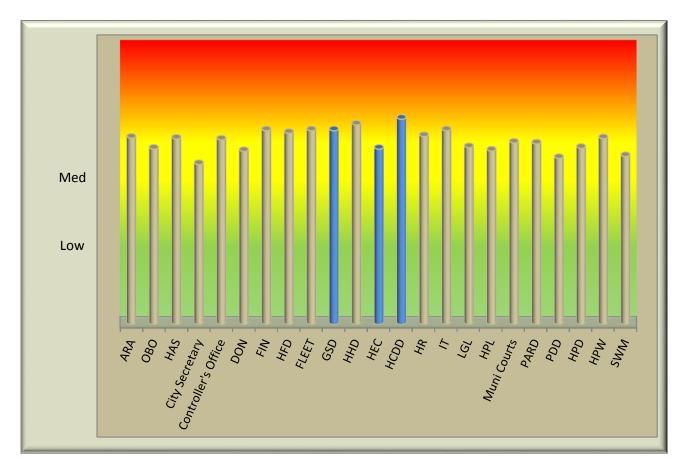
within that process could have a significant impact in terms of disruption to essential services, financial loss, ability to protect public health and safety, impediments to economic development, or negative perception. In contrast, a "Low" rating indicates that the impact of such an occurrence or aggregated occurrences would be minimal.

The following graphs summarize the Audit Division's assessment of risk from two different perspectives: (1) Department and (2) Key Business Process (KBP). <u>Each KBP was evaluated</u> within each department and then rated based on the same weighted risk criteria as shown on page 6.

³ NOTE: Where the term 'projects' is used in the Audit Plan, this includes audits, reviews, monitoring, and other ongoing procedures, etc.

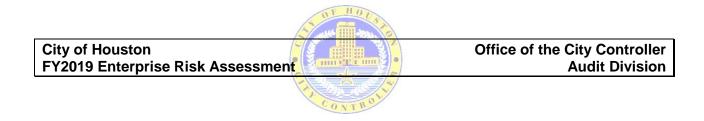




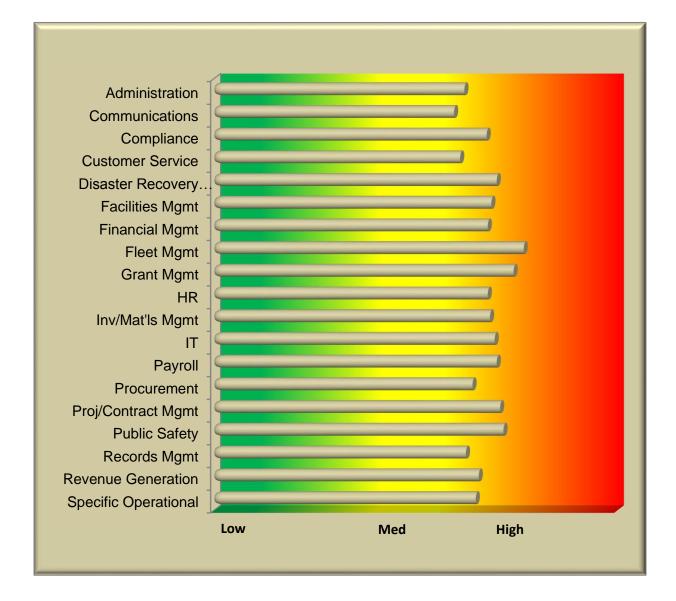


Evaluating all of these various factors provides indicators on prioritizing the potential projects for the upcoming year. In other words, this points us in the direction of "*what*" to audit. We then identify the available resources to determine the volume of activity to include in our plan.

⁴ The blue vertical bars represent the 3 departments updated for the FY2019 ERA.



GRAPH 2 – OPERATIONAL RISK PROFILE BY KEY BUSINESS PROCESS⁵ –



The risk assessment revealed that the areas of Fleet Management, Grant Management, and Public Safety fall within the high-risk category (See *Graph 2 above*).

⁵ 'Specific Operational' is comprised of those key business processes that are unique to the operations of the various Departments (e.g. "Call-Taking" for the Houston Emergency Center (HEC), "Certification" for Minority, Women, and Disadvantaged Business Enterprise (MWDBE) for the Office of Business Opportunity (OBO), "Collection" for Solid Waste, etc.).



OUTPUT -

The primary output of the ERA is to utilize the risk profile as one of the catalysts in designing the Controller's Office Annual Audit Plan. As the risk profile of the City changes, it is reflected in the selection of some of the Audits to perform for FY2020. Projects that the Audit Division will audit from the Annual Audit Plan include High Risk business processes identified above, for example: Fleet Management which resides within the Fleet Management Department; and Grant Management, and Public Safety, which reside within the following Departments: Airport, Finance, Fire, General Services (GSD), Houston Emergency Center, Houston Health, Housing and Community Development, Human Resources, Municipal Courts, Parks, and Police.⁶

ACKNOWLEDGEMENT AND SIGNATURES -

The Project Team would like to express our appreciation to the participating Departments and their representatives, who gave their time and efforts. Their input was and is critical to the success of this annual assessment by actively responding to questionnaires, interviews, discussions, and review of data presented in this report. It was evident throughout the process that the City continues to have a significant number of qualified professionals who serve the constituency by providing quality services in an economically challenged environment and who are proud of the work that they do.

Richard Denney, Lead Auditor

Theresa Watson, CIA Audit Manager

Courtney E. Smith, CPA, CFE, CIA City Auditor

⁶ Where the term "Projects" is used in the Audit Plan, this includes audits, reviews, and other ongoing procedures, etc. See **REPORT 2019-01 FY2019 CONTROLLER'S ANNUAL AUDIT PLAN**, which was released in July 2019.



UPDATED DEPARTMENT RISK PROFILES

Mission and Objectives

The mission of the General Services Department (GSD) is to provide leadership and best practices in real estate, design, construction, property management, security, and resource conservation to City departments and residents in a safe, reliable, and fiscally responsible manner.

Notable Changes since the Previous Risk Assessment

A previous risk assessment of the General Services Department took place in fiscal year 2015. Since that assessment, C.J. Messiah was appointed as the new Director by Mayor Sylvester Turner. The Strategic Planning and Asset Management Division was dissolved; Environmental Services were transferred to Property Management, Real Estate Services were transferred to Design and Construction, and at the direction of the Mayor, Sustainability was transferred to the Administration and Regulatory Affairs (ARA) Department. The Training and Development Division was created.

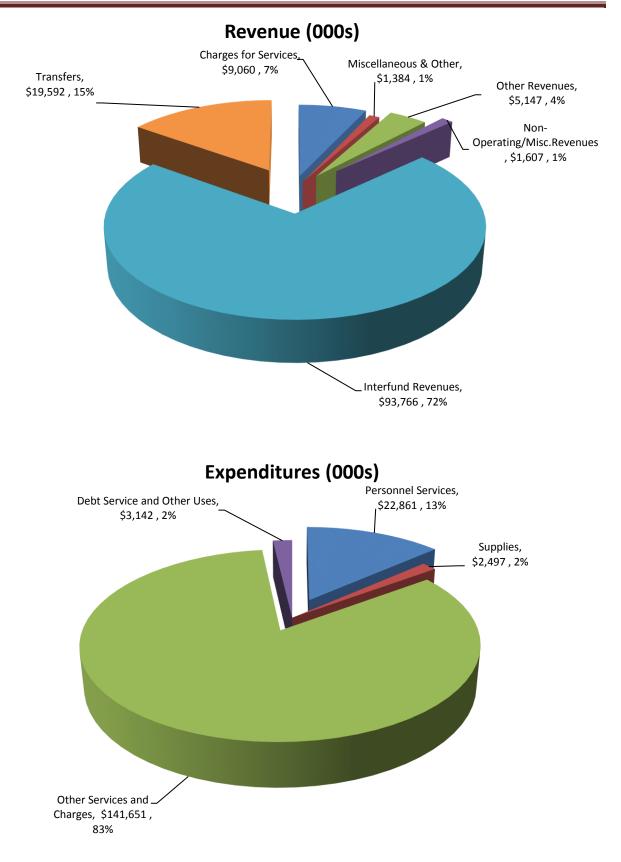
Significant Activities

GSD supports the operational needs of client departments through centralized management of property, security, real estate, environmental programs, and project management for renovations or construction related to Capital Improvement Projects. Operational decisions in client departments impact the daily allocation and deployment of resources made by GSD. Significant activities of GSD include:

- Maintain and manage property for over 332 City owned or leased facilities;
- Repair and renovation of City facilities such as carpentry, plumbing, HVAC, etc.;
- In-House renovation group does full restoration on two to four fire stations per year;
- Review and revise periodic disaster recovery/business continuity plans;
- Manage energy and energy conservation efforts;
- Perform environmental inspections, evaluations, and remediation or abatement of contaminated materials;
- Provide oversight of physical security for various City properties;
- Administer and maintain photo identification badges for access control City-wide;
- Develop and manage approximately \$75 million in departmental budget, accounts payable, financial analysis and reporting; and
- Provide financial transaction accountability to all client departments for activities managed through the department.

Fiscal Year 2018 Financial Data

During Fiscal Year 2018 GSD's total revenue was \$130.5 million with expenditures for the same period totaling \$170.1 million. Graphical representations of the revenues and expenditures below depict the amount and source of both revenues and expenditures.



Key Business Risk Areas

Key Process	Potential Risks	Reported Risk Management Techniques	Risk Rating
Facilities Management	 Unsafe buildings Unknown history of infrastructure maintenance Ineffective preventive maintenance Insufficient building services Insufficient staffing/inadequate staffing Inadequate customer service 	 Security personnel and surveillance where feasible Computerized Maintenance Management System Each building superintendent keeps facility binder for all equipment to include preventative maintenance Tracking of operational costs Monitor percentage completion of work orders and special projects Training division established within the department Evaluations and surveys used to monitor and track efficiency 	High
Project / Contract Management	 Inadequate project specifications Ineffective change order management Improper contractor solicitation Incomplete construction projects 	 Aurigo Project Management system in place Project Status Reports are reviewed and analyzed Project Manager ensures three-level review process prior to execution Policies and procedures for soliciting contractors and consultants Consultants required to have Errors and Omissions Insurance City Engineer Policies and Procedures address contract management procedures Inspection walk-through are conducted before payment is released 	High

GSD

000			
Security	 Inadequate monitoring Insufficient staffing Unidentified/unauthorized persons in secure areas Unauthorized access to computer systems or confidential information Facilities vulnerability to external threats Inadequate physical access (badging versus key) Inadequate training of staff 	 Periodic inspection of monitoring equipment Contract specifies screening, background checks, training and equipment requirements Ensuring proper access is given to employee badges with supervisor approval COH guidelines or department directives Threat assessments conducted Users report failures of existing access points Hire qualified personnel, monitor performance and provide formal training and cross training Bi-weekly progress 	High
	 compliance with contractual stipulations Vague contract language Non-compliance with applicable local, state, and federal regulations Lack of environmental compliance Ineffective or inadequate adherence to building codes 	 reports by project managers Legal Department assists with drafting of contracts Contracts Compliance Officer used Environmental manager handles inspections and manages reporting City Engineer reviews compliance to applicable circular(s) Building safety is reviewed by division manager, superintendents, and HR Safety monthly 	
Disaster Recovery	 Inability to access facilities Inability to establish safe working environment Loss of computing and operational equipment Loss of data 	 Emergency Call Tree activated to notify employees of emergency and lockdown of facilities Staff deployed, pumps made ready, windows protected and floor gates deployed Continuity of Operations Plan is used by the City Periodic update of plans 	Medium

GSD

Disaster Recovery		Strategic purchasing	
(cont.)		requirements in place to prevent failures from impacting operations	
Financial Management	 Reduced funding Budget overruns Inaccurate or untimely recording of financial transactions Lack of accounting skills 	 Strategic CIP to ensure best use of available budget and resources All payments must be approved and signed by division before being made Monthly monitoring and reconciliation of reports Analysis of expenditures Review of job tasks and completion dates Regular audits Cross training and outside training as needed 	Medium
Inventory Management	 Lack of inventory availability to complete work orders Failure of computerized system Ineffective management of warehouses Incomplete inventory of real property Theft of inventory Inadequate asset management system 	 Integrated work order planning process Manual inventory lists kept for each warehouse location Uses Group Drive and Microsoft Access Gathers and delivers all original documentation to HPW Real Estate Services 	Medium
Revenue Generation	 Inaccurate /incomplete title searches Unauthorized property sales Ineffective oversight of real property sales Inadequate oversight of bid process Inadequate monitoring of appraisers Unrecorded sales Lack of qualified real estate staff 	 Title companies are used or City legal examiner Contracts prepared by Legal, reviewed by City Council and signed by Mayor before sale occurs Appraiser selection and assignment are processed by Houston Public Works (HPW) HPW real estate is responsible for accurate inventory of all City real estate Formal property sales process 	Medium

GSD

Revenue Generation	 Use of internal and
(cont.)	external real estate
	professionals

Housing and Community Development Department (HCDD)

Mission and Objectives

Houston's Housing and Community Development Department (HCDD) focuses on providing economic opportunity, revitalization, and improvement of the City's low to moderate income neighborhoods by: (1) developing and maintaining an adequate supply of safe, sanitary, and decent affordable and accessible housing, (2) expanding sustainable homeownership opportunities of low to moderate income families, (3) reducing chronic and family homelessness, (4) ensuring that City residents with long-term support needs have access to appropriate services and accessible, community housing options, (5) ensuring full and fair access to housing, and (6) enhancing the economic well-being of the City while ensuring that economic growth is compatible with the community.

Notable Changes since the Previous Risk Assessment

A previous risk assessment of HCDD took place in fiscal year 2015. Since that assessment, significant changes in the Department's organizational structure included:

- Tom McCasland was selected as interim Director in July of 2016 and confirmed as the permanent Director in November 2016.
- The Disaster Recovery and Policy and Communications Divisions were created and are reporting directly to the Director.
- The department was restructured to include direct reporting of the following divisions to the Director: Single Family, Multifamily, Policy and Communications, and Disaster Recovery.
- Successfully establishing relationships with Houston Public Works for the funding of infrastructure projects connected to DR-15(Disaster Recovery 2015) and Harris County Flood Control District for funding of the Buyout Program.
- The Planning and Grants Management Division took over responsibility for Grants Systems reporting from HCDD Finance and added Grant Systems and Reporting, Fair Housing, Uniform Relocation Assistance, Program Development and Implementation sections.

Significant Activities

HCDD addresses housing needs in the community through the development, implementation, and administration of programs, several of which are funded through both entitlement and disaster recovery funding to include the following:

- 1. Home Repair Assistance (HRP)
- 2. Harvey Homebuyer Assistance Program (HBAP)
- 3. Harvey Homeowner Assistance Program (HoAP)
- 4. Harvey Recovery Small Rental Program (HRSR)
- 5. Multifamily Program
- 6. Single Family Development Program (SFDev)
- 7. Public Facilities Program
- 8. Public Services Program

HCDD

Risk Profile

Each program is designed to encourage home ownership, maintain safe and attractive housing stock, renovate or improve public facilities, and alleviate homelessness. Programs funded in part or in whole by Disaster Recovery grants are designed, in addition to the aforementioned goals, to alleviate and remedy material loss in the wake of the five presidentially declared disasters from 2015 to 2017.

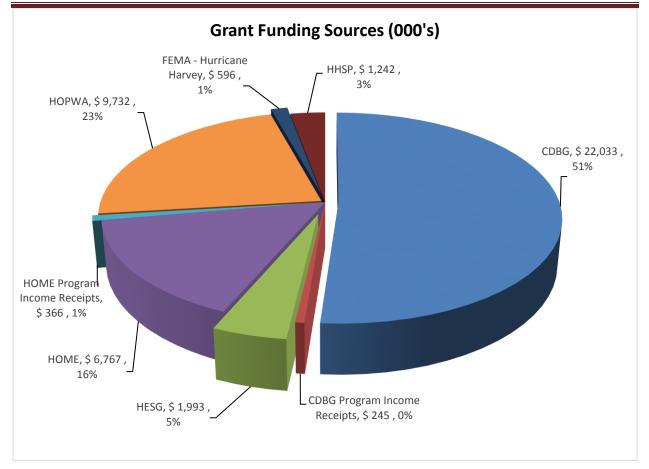
Below are some significant activities performed by HCDD:

- Prepared grant applications that successfully secured more than \$1.3 billion from various funding sources;
- Developed 5-year planning data and coordinated federally required Quarterly Performance Reporting (QPR) for Disaster Recovery funding and the Consolidated Annual Performance and Evaluation Report (CAPER);
- Educated approximately 9,071 citizens about available programs and eligibility requirements through 380 community outreach events;
- Assisted low income citizens with home repairs needed to alleviate threats to health, life, and safety of homeowners by providing daily inspections to monitor construction progress and reconstructed 22 housing units and 44 rehabilitations projects;
- Provided transitional housing, case management, transportation, rental and utility assistance, meals on wheels, counseling to mentally challenged citizens, and services to 31,564 elderly and other applicable persons, costing over \$17.2 million through a network of local agencies;
- Provided services to 1,356 people through homeless prevention programs;
- Currently managing construction projects of 20 public facilities;
- Conducted inspections of construction and renovation work done on behalf of HCDD;
- Focused on disaster recovery efforts after unprecedented damages with an estimated impact of \$550 million, \$525 million of which, resulting from housing damages incurred during the floods of 2015 and 2016; and
- Successfully established partnerships with the Texas General Land Office and the United States Department of Housing and Urban Development in service delivery and regulatory oversight, which resulted in HCDD receiving funding for Hurricane Harvey Housing recovery efforts.

Fiscal Year 2018 Financial Data

In FY 2018 HCDD grant funding awards totaled \$42.3 million with an additional \$611 thousand in revenue from program income.

HCDD



HCDD

Key Process	Potential Risks	Reported Risk Management Techniques	Risk Rating
Compliance	 Noncompliance with federal, state, local laws Inadequate monitoring of contract and grants Noncompliance with grant and contract requirements Noncompliance of sub- Recipients Noncompliance with housing program eligibility Noncompliance with building codes or ADA regulations Noncompliance with rules/regulations 	 Federal and state agencies monitor funds through random audits Operations procedures that detail compliance requirement Inspectors monitor compliance of contractor project work Train staff on relevant policies and procedures Site reviews, technical assistance and program oversight Annual review for eligibility Damage assessors and Inspectors throughout construction Established policies and procedures 	High
Grant Management (Includes non-grant Financial Management and Procurement activities)	 Loss of funding Failure to meet Federal spending requirements Inadequate management of grant activities Lack of timely and accurate reporting on grant activities Inadequate management of and tracking of grants and other programs funds Inadequate Recordkeeping Improper use of funds Lack of monitoring sub- recipients Ineligible grant or program participants Inadequate documentation for payments 	 Ensuring several different sources of funding are available Daily monitoring of funds Grant management is distributed across many divisions Grant Systems and Reporting team has QA, technical assistance and timely data entry OnBase system utilized All invoices reviewed by URA Compliance section Annual reviews to ensure eligibility Sub-recipients monitored and audited 	High

Key Process	Potential Risks	Reported Risk Management Techniques	Risk Rating
		Management rechniques	
Grant Management (cont.) Project Management	 Inadequate monitoring and review of project 	 by independent auditors Provide grant reports in accordance with requirements Developed project tracking and monitoring 	High
	 contractors Lack of qualified construction inspectors Inadequate project management 	 procedures All inspectors adhere to HUD's Housing Quality Standards Staff includes dedicated project managers Improvement and efficient streamlining process 	
Administration	 Unfunded legislative mandates Lack of formal policies and procedures Non-compliance with policies and procedures Lack of transparency in decision making process Lack of public accountability Inadequate or insufficient data collection and analysis Lack of monitoring of third party operated properties Lack of complaint follow up 	 Periodic reviews and RFP for new contractors' ready Policies and Procedures on Department SharePoint site, manuals, and some still in development Non-compliance issues or complaints are formally investigated Public hearings held Social Media platforms and CitizensNet Proactive measures for disaster recovery data collection Close working relationship with the Legal department Compliance review inspection schedule Contractors are not paid unless all customer concerns are addressed 	Medium

Houston Emergency Center (HEC)

Mission and Objectives

The Houston Emergency Center (HEC) processes calls reporting situations that threaten life, health, safety, and property in an efficient, accurate and professional manner. The department operates the public safety communications system and works with the Mayor's Office of Emergency Management to coordinate and manage disasters and emergency situations.

Notable Changes since the Previous Risk Assessment

A previous risk assessment of HEC took place in Fiscal Year 2015. Since that assessment, HEC is in the process of transitioning to a NexGen 9-1-1 phone system (NG911), which is Internet Protocol (IP) or digitally based. NG911 will be instrumental to the success and reliability of 911, because there will be enhanced emergency number services, which will create a faster and more robust system that not only allows receipt of voice, but also photos, videos, and text messages from the public to the 911 network.

Significant Activities

HEC is the result of a consolidation of the Neutral Public Safety Answering Point, Houston Police Department (HPD) Emergency Communications Division, and Houston Fire Department (HFD) Emergency Communications Operations. Core operations include call taking and dispatch. However, because the facility is 128,000 square feet and can withstand 170 mph hurricane force winds, HEC quickly becomes a command center during major emergency or disaster events.

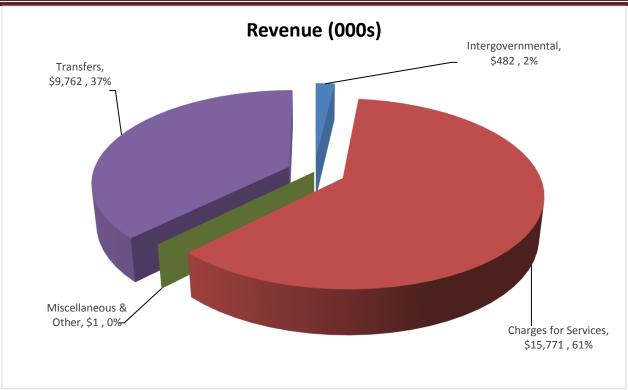
The department's activities include:

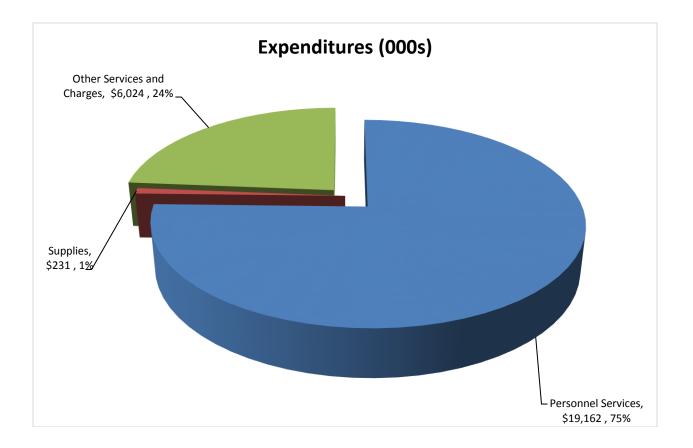
- Processing over 9,000 emergency and non-emergency calls each day;
- Answering 90% of emergency calls within 10 seconds;
- Processing ten-digit calls (non-emergency phone calls for HPD and HFD);
- Answering 80% of non-emergency calls within 10 seconds;
- 100 percent of HEC call-takers and dispatchers are licensed Texas Commission on Law Enforcement (TCOLE) Telecommunicators;
- HEC houses approximately 500 FTE's (HEC, HPD & HFD);
- Redundant capabilities include true diverse routing for power feeds and telecommunication systems;
- Coordinating Texas Public Information Act responses;
- Evaluating emergency call protocols periodically to refine and improve response;
- Maintaining City-wide systems infrastructure to ensure availability of mission critical dispatch applications, consoles, and servers and managing tape backups;
- Upgrade and standardize existing dispatch and records management hardware/software systems;
- Conducting classroom and on-the-job training for call takers; and
- Serve as benchmarking reference for Dallas, San Antonio, Austin, Chicago and New York.

Fiscal Year 2018 Financial Data

HEC receives reimbursement from Greater Harris County 911 (GHC911) for employees every year, the amount is dependent on 9-1-1 call volume. The remainder of HEC's budget comes from the General Fund. Total operating budget for FY 2018 was \$28 million.

Houston Emergency Center (HEC)





HEC

Key Process	Potential Risks	Reported Risk Management Techniques	Risk Rating
Call Taking	 Inadequate shift coverage Ineffective equipment Inadequate call protocols delay appropriate response Incorrect mapping data in CAD Extended or unscheduled system downtime Lawsuits Lack of a backup for dispatching Unsupported customized applications Language barriers 	 Equipment provided by GHC 911 and the City Protocol reviewed and updated regularly with input provided from HFD and HPD CAD updated weekly to ensure staff can determine locations GHC 911 pays 100% of 911 calls Manual back-up system in place City Legal Dept. and mediation efforts Erlang C Formula is used for optimal staffing Current Contract for language translation services 	High
Public Safety	 Lack of systems or procedures in place to aid coordination with other jurisdictions during natural/man-made disasters Loss of life and property Endemic diseases, as a result of environmental contamination Lawsuits System outage or failure of equipment/human errors Obsolete and unsupported equipment 	 Establishment of an emergency management coordinator Participation in the State of Texas Emergency Assistance Registry (STEAR) Updating of the Registry on periodic basis to ensure the most current information is available Regularly collaborates with regional, statewide and national agencies to ensure common operating protocol and situational awareness. Use of Wireless Emergency Alerts (WEA) and the Emergency Alert System (EAS) through IPAWS and other variety of systems to 	High

HEC

		Reported Risk	
Key Process	Potential Risks	Management Techniques	Risk Rating
Public Safety (cont.) Administration	 Unfunded legislative mandates 	 communicate City-wide warnings to the public City Legal Dept. and mediation efforts Manual operations will take place HITS personnel on site Reviewing legislative bills 	Medium
	 Lack of formal policies and procedures Non-compliance with policies and procedures Hacking 	 Suggestions for new or revised policies are formally considered for approval Non-compliances issues or complaints are formally investigated HITS Cyber Security team 	
Financial Management	 Lack of funding Inappropriate or unauthorized purchases Noncompliance with procurement laws and regulations 	 Adhere to established practices Compliance with federal, state, and local ordinances and regulations Good budgeting City-Approved vendor list Vendor approval process of P-cards and requisitions Compliance with City procurement policies Adhere to established practices Compliance with federal, state, and local ordinances and regulations 	Medium
Training	 Inadequate staff training Lack of qualified instructors Inability to schedule training without jeopardizing shift coverage Inadequate performance requirements 	 New hires receive 13 weeks of classroom and floor training Additional training required for HEC Fire/EMS staff 	Medium

HEC

Key Process	Potential Risks	Reported Risk Management Techniques	Risk Rating
Training (cont.)		 Training and trainers provided by GHC 911 and HEC Managers Staff encouraged to obtain Emergency Communications certification Performance is measured daily, monthly and yearly against the generally "accepted" standard of answering 90% of all 9-1-1 calls within 10 seconds 	



DEPARTMENT RISK ASSESSMENT DATES

City of Houston FY2015 Enterprise Risk Assessment



OF

CITY OF HOUSTON DEPARTMENTS

LAST ASSESSMENT

ADMINISTRATION & REGULATORY AFFAIRS	2018
CITY SECRETARY	2015
CONTROLLER'S OFFICE	2018
FINANCE	2016
FIRE	2017
FLEET MANAGEMENT	2017
GENERAL SERVICES	2019
HEALTH AND HUMAN SERVICES	2017
HOUSING AND COMMUNITY DEVELOPMENT	2019
HOUSTON AIRPORT SYSTEM	2018
HOUSTON EMERGENCY CENTER	2019
HOUSTON INFORMATION TECHNOLOGY SERVICES	2018
HOUSTON PARKS AND RECREATION	2018
HUMAN RESOURCES	2018
LEGAL	2015
LIBRARY	2017
MUNICIPAL COURTS	2017
NEIGHBORHOODS	2017
OFFICE OF BUSINESS OPPORTUNITY	2015
PLANNING AND DEVELOPMENT	2016
POLICE	2016
PUBLIC WORKS AND ENGINEERING	2016
SOLID WASTE MANAGEMENT	2016



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