# TABLE OF CONTENTS

I. PURPOSE AND INTRODUCTION 3  
II. BACKGROUND 3  
III. METHODOLOGY 4  
IV. RISK IDENTIFICATION 5  
V. COMPONENTS OF THE ERA PROCESS 5  
VI. NOTABLE CHANGES 5  
VII. STRUCTURAL CHANGES TO THE RISK UNIVERSE 6  
VIII. CONSIDERATION OF SIGNIFICANT INFORMATION SYSTEMS 6  
IX. KEY BUSINESS PROCESSES 6  
X. DEPARTMENT RISK PROFILE UPDATES 7  

## SECTOR RISK PROFILES

- ADMINISTRATION 8  
- REVENUE 9  
- CONSTRUCTION 10  
- INFORMATION TECHNOLOGY 11  
- PROCUREMENT 12  
- OPERATIONS 13
I. PURPOSE AND INTRODUCTION

This Enterprise Risk Assessment (“ERA”) has been performed by the Port of Houston Authority (“PHA” or “Port Authority”) Internal Audit Department for Fiscal Year (“FY”) 2015. The purpose of the risk assessment is the determination of quantitative and/or qualitative value of risk related to a concrete situation and a recognized threat. The risk assessment is a process that supports our efforts in developing the Annual Audit Plan.

The main purposes of the Annual Audit Plan are:

a) to determine priorities and to establish the most cost-effective means of achieving audit objectives;

b) to assist in the direction and control of audit work;

c) to help ensure that attention is devoted to critical aspects of audit work; and

d) to help ensure that work is completed in accordance with pre-determined targets.

This approach will provide full coverage of all PHA sectors over a specific period rather than re-visit every sector annually.

Our methodology is consistent with professional standards and considers available resources, cost versus benefit, and will allow us to advance the quality of the assessment each cycle.

As a whole, the annual ERA process considers:

- The Port Authority’s Risk Universe
- Current Internal Controls
- Information Technology
- Financial Impact
- Operational areas of concern by management
- Fraud
- Results of previous audits

II. BACKGROUND

The Port of Houston Authority’s strong historical connection to Harris County, beginning with its origin as the Harris County Houston Ship Channel Navigation District in 1911, is reflected throughout the historical statutes governing the Port Authority, even though it has since evolved into a more independent organization accountable to four appointing entities. At the same time, Harris County taxpayers have a vested interest in the Port Authority’s financial health, as they approve and pay property taxes to support the Port Authority’s bonds, and they benefit from the economic activity generated by the Port Authority’s capital investments. Currently, Harris County taxpayers pay approximately $50 million per year to fund debt service on the PHA’s outstanding general obligation tax bonds.
State statutes designated the Harris County Auditor as the Port Authority’s auditor, and described specific routine duties, such as pre-approving all PHA expenditures and certifying funds availability.

Pursuant to recommendations made by the Sunset Advisory Commission, the Texas Legislature passed H.B. 1642 (“Sunset Legislation”) effective September 1, 2013 which, among other things, repealed outdated provisions prescribing the Harris County Auditor’s day-to-day audit duties at the Port Authority. The Sunset Legislation was incorporated as Chapter 5007, Texas Special District Local Laws Code, and requires:

- the Port Authority to establish an internal audit function in accordance with accepted internal auditing standards as described in Chapter 2102, Texas Government Code (the “Texas Internal Auditing Act”);
- the Port Commission to hire a chief audit executive and approve the risk-based annual audit plan;
- the internal audit function to report to an internal audit task force of the Port Commission; and
- the Port Authority to provide internal audits to the Harris County Auditor and appointing entities upon request and make its internal audit plan available on its website.

The bill also requires the internal auditor to coordinate audit activity relating to compliance reviews; reviews of internal controls; Harris County audits; contracted audits; performance reviews; investigations of reported ethics violations or fraud; and compliance with laws relating to Promotion and Development Fund expenditures.

Prior to 2013, the Harris County Auditor’s Office conducted an initial risk assessment which identified PHA’s broad risk universe without consideration of internal controls. In FY2013, the Port Authority’s Internal Audit Department utilized its own risk assessment and used the previous Harris County risk assessment as a foundation.

III. METHODOLOGY

The Internal Audit Department within the Port of Houston Authority 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 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.

The ERA considers primarily inherent risks, with limited identification of control risk as self-reported by management. 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 process 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 Port Authority from achieving its objective within that process could have a significant impact in terms of disruption to essential services, financial loss, 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.

IV. RISK IDENTIFICATION

- **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.

- **RESIDUAL RISK** – the level of impact and likelihood of an adverse event occurring to impede the Port Authority, 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, or lack of sufficient resources or tools to perform substantive procedures.

- **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.

V. COMPONENTS OF THE ANNUAL RISK PROCESS

- Notable Changes
- Significant Events
- Organizational and Operational Changes
- Consideration of Significant Information Technology and Systems
- Departmental Risk Profile

VI. NOTABLE CHANGES

Applying the risk based methodology as noted above in preparation of the FY2014 Annual Audit Plan, the Internal Audit Department 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 Port Authority conducts business operationally and the resources available. The Internal Audit Department considers these factors in preparation of the Annual Audit Plan.

VII. STRUCTURAL CHANGES TO THE RISK UNIVERSE

Changes to the Risk Universe are considered when there are departmental and/or management structure changes; functions/responsibilities/processes are added, or eliminated; and consolidation or centralization occurs between Departments or on a PHA-wide basis.

- One noted structural change is the departure of the Harris County Auditor as the Port Authority’s auditor.

VIII. CONSIDERATION OF SIGNIFICANT INFORMATION SYSTEMS

Utilizing a risk-based approach as required by the standards, the Internal Audit Department will consider the Port Authority’s information technology systems that have been implemented, as well as the technology initiatives that are being developed, which affect operational and business processes.

The primary considerations in information technology are:

- Maximizing the use and functionality of JD Edwards - the enterprise resource planning ("ERP") system of record
- Reducing the number of business unit sub-systems by an automated interface
- Acquiring a new vendor information system

IX. KEY BUSINESS PROCESSES

In context of the ERA, a 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 it has primary responsibility within the Port Authority. Key Business Processes also represent areas upon which audits or reviews can be conducted by internal auditors or external consultants.

The common KBPs are identified as follows:

- Administration
- Compliance
- Disaster Recovery
- Facilities Management
- Financial Management
- Operations
- Grant Management
- Human Resources ("HR")
X. DEPARTMENT RISK PROFILE UPDATES

The assessment was then structured based on available resources, time constraints, and cost-benefit considerations. As a result of this year’s process, the key risks that remain within the Port Authority from the perspective of an auditable business process or technology considerations are:

- Administration
- Revenue
- Construction
- Information Technology
- Procurement
- Operations

These risk profiles are discussed in the following pages.
Administration

Mission and Objectives
To grow revenues and support PHA’s mission via execution of policies and procedures and staff development opportunities.

Notable Changes since the 2014 Risk Assessment Report
Revisions to organizational structure

Significant Activities
- Recently appointed Port Commissioners
- Recently appointed new Executive Director
- Departmental leadership changes
- Employee turnover (retirements, attrition)

Administration Risk Profile

<table>
<thead>
<tr>
<th>Key Business Process</th>
<th>Potential Risks</th>
<th>Mitigation Risk Techniques</th>
<th>Risk Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulations and Policies</td>
<td>• Conflict between Employee Handbook and policies</td>
<td>• Conflicts approved by Executive Director or Port Commission</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>• Outdated policies and procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Informal/unwritten policies and procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code of Ethics</td>
<td>• Conflicts of interest</td>
<td>• Ethics training</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>• Threats to integrity of processes</td>
<td>• Annual re-acknowledgement of Ethics Policy</td>
<td></td>
</tr>
<tr>
<td>Staff Development/Training</td>
<td>• Employee turnover</td>
<td>• Updated job descriptions</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>• Higher frequency of avoidable errors/omissions</td>
<td>• Career guidance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Unclear and/or inconsistent application of policies and procedures</td>
<td>• Staff training</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>• Increased risk of inadvertent violations of regulations</td>
<td>• Port Authority-wide communications</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>• Increased risk of litigation</td>
<td>• Townhall meetings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Unclear and/or inconsistent application of policies and procedures</td>
<td>• Intranet</td>
<td></td>
</tr>
</tbody>
</table>
Revenue

Mission and Objectives
To grow revenues and support PHA’s mission via existing and new services and opportunities. The Port Authority is heavily reliant on its own business revenues to fund its operations.

Notable Changes since the Sunset Advisory Commission Report
Revenue is coming from many sources. However, the lack of communication and technology prevent timely recognition. The month-to-month revenue fluctuates, but the YTD revenue is up 5%.

Significant Activities
- More vessel traffic
- More tonnage being transported
- Lease renewals, permits, licenses
- Self-Reporting

Revenue Risk Profile

<table>
<thead>
<tr>
<th>Key Business Process</th>
<th>Potential Risks</th>
<th>Mitigation Risk Techniques</th>
<th>Risk Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulations and Policies</td>
<td>Lack of documented processes</td>
<td>New policies and procedures</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Non-compliance with local, state, or federal election regulations</td>
<td>Review of all contracts for compliance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Over-reliance on the vendor’s self-reporting process</td>
<td>Perform periodic audits</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>More oversight by reviewing contract terms</td>
<td></td>
</tr>
<tr>
<td>Rates</td>
<td>Inaccurate fees, rates, and tariffs</td>
<td>Agree all fees, rates, and tariffs to active contracts</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Outdated pipelines fees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Billing/ Invoicing</td>
<td>Invoices not posted timely</td>
<td>Monthly financial reconciliations</td>
<td>Med</td>
</tr>
<tr>
<td></td>
<td>Customers are inaccurately charged for cargo</td>
<td>Reconciliations of operating reports</td>
<td></td>
</tr>
<tr>
<td>Access to Customs &amp; Border Protection (CBP) database</td>
<td>Under or unreporting of vessel movements (Harbor fees)</td>
<td>Reconciliation to CBP database and other available data</td>
<td>Med</td>
</tr>
</tbody>
</table>
Construction

Mission and Objectives
To maintain the highest levels of professionalism, integrity, honesty and fairness in our relationships with suppliers, subcontractors, professional associates and customers.

Notable Changes since the Sunset Advisory Commission Report
The Engineering Department experienced a workforce reduction.

Significant Activities
- Workforce reduction in the Engineering Department
- Outsourcing design work
- Ranking contractors/ Vendor scorecards

Construction Risk Profile

<table>
<thead>
<tr>
<th>Key Business Process</th>
<th>Potential Risks</th>
<th>Mitigation Risk Techniques</th>
<th>Risk Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policies and Regulations</td>
<td>Non-compliance with local, state, or federal regulations</td>
<td>Update policies and procedures to align with government regulations</td>
<td>High</td>
</tr>
</tbody>
</table>
| Bidding Process/ PM | Proposal process is unfair  
Proposals are not sealed to other bidders/ under bidding to get job  
Certain vendors are given preferences  
Vendors having system problems submitting bids  
Potential for fraudulent documentation  
High volume of change orders  
No documented process for completed projects  
Outside influences | Monitor bid process to ensure an equity  
Rank the vendors/ Scorecard  
New vendor system application  
Improve the scope process  
Construction audits | High        |
| Vendors | Bogus vendors | Vendor verification audits | Medium |
Information Technology

Mission and Objectives
To support PHA's business strategy through the implementation and management of its technological resources.

Notable Changes since the Sunset Advisory Commission Report
A new IT Director has been hired to forge a new direction for our information technology assets and strategies. Policies and procedures are in the development stage to ensure accountability and transparency.

Significant Activities
- New IT Director
- Developing policies and procedures (inventory tracking/procurement/receiving)
- Implementing a new application with asset tracking capability

Information Technology Risk Profile

<table>
<thead>
<tr>
<th>Key Business Process</th>
<th>Potential Risks</th>
<th>Mitigation Risk Techniques</th>
<th>Risk Rating</th>
</tr>
</thead>
</table>
| JDE and Subsystems   | ▪ Unauthorized data access  
                      | ▪ Information and data security  
                      | ▪ Outdated system  
                      | ▪ Maintenance            | ▪ End-User training  
                      | ▪ Penetration testing  
                      | ▪ Regular system maintenance  
                      | ▪ User Access Review     | High |
| Inventory            | ▪ Employee theft or loss of inventory  
                      | ▪ Inability to track inventory  
                      | ▪ Overspending on unneeded software licenses, etc. | ▪ Cycle counts  
                      | ▪ Annual physicals  
                      | ▪ New policies and procedures for receiving and tracking inventory  
                      | ▪ Constant monitoring | High |
| Cyber Security       | ▪ Operational shutdown  
                      | ▪ Compromised sensitive data  
                      | ▪ Damage to reputation | ▪ Regular penetration testing  
                      | ▪ New regulations requiring Homeland Security monitoring | High |
| Staffing Levels      | ▪ Insufficient to support operations | ▪ Increase to staffing or equivalent FTEs | High |
| Business Continuity  | ▪ Natural disaster or other catastrophic event  
                      | ▪ Breaches due to cyber attack | ▪ Revision/update of business continuity plan | Medium |
Procurement

Mission and Objectives
To procure goods and services to meet the needs of the Port Authority while obtaining the best possible price and complying with all applicable laws and regulations without qualification or evasion.

Notable Changes since the Sunset Advisory Commission Report
A new Procurement Director has been hired to lead the Procurement Services Department in a new direction. Policies and procedures are being developed to ensure accountability and transparency.

Significant Activities
- Recently hired Procurement Director
- Recently hired Procurement Manager
- Recently hired Contract Administrator
- Developing policies and procedures
- Implementing a new vendor software application with contract management capability

Procurement Risk Profile

<table>
<thead>
<tr>
<th>Key Business Process</th>
<th>Potential Risks</th>
<th>Mitigation Risk Techniques</th>
<th>Risk Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policies and procedures</td>
<td>Inconsistent departmental purchasing processes</td>
<td>New procurement policies and procedures</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase orders</td>
<td>Open Purchase Orders</td>
<td>Monitoring of open purchase orders</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Payment of unauthorized invoices</td>
<td>Strict adherence to approval policy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Payment for items not received</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fictitious vendors</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not obtaining proper approval</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Technology</td>
<td>Legacy vendor information system (VIS) not supported</td>
<td>New vendor management system</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Manual contract tracking</td>
<td>JDE interface solution</td>
<td></td>
</tr>
</tbody>
</table>
Operations

Mission and Objectives
- To provide the highest quality services, which exceed our customers’ requirements and expectations;
- To manage resources responsibly, efficiently, and with accountability;
- To operate and maintain our facilities, buildings, grounds, and utilities in a clean, safe, and responsible manner; and
- To evaluate and continually improve the actions, methods and processes of our organization.

Notable Changes since the Sunset Advisory Commission Report
No significant changes made since the Sunset Advisory Commission Report.

Significant Activities
- New Environmental Director hired
- Development of policies and procedures

Operations Risk Profile

<table>
<thead>
<tr>
<th>Key Business Process</th>
<th>Potential Risks</th>
<th>Mitigation Risk Techniques</th>
<th>Risk Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fleet Management</td>
<td>Higher costs due to uncoordinated processes&lt;br&gt;</td>
<td>Recently established fleet management committee</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Inefficiencies in operational activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventory/ Supplies</td>
<td>Lack of documented procedures for asset inventory (including fuel)</td>
<td>Updating of written procedures&lt;br&gt;</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Periodic cycle count of certain Inventory</td>
<td></td>
</tr>
<tr>
<td>Equipment &amp; Facilities</td>
<td>Insufficient resources to monitor equipment maintenance</td>
<td>Periodic reviews&lt;br&gt;</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In-house safety training for staff</td>
<td></td>
</tr>
<tr>
<td>Asset Disposition</td>
<td>Lack of documented procedures for surplus asset inventory</td>
<td>Periodic review of process and reconciliation of</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the sub-ledgers</td>
<td></td>
</tr>
<tr>
<td>Cruise Line Parking</td>
<td>Mis-allocation of funds &amp; revenue sharing&lt;br&gt; Theft of funds</td>
<td>Monthly/ weekly reconciliation of reports and bank deposits</td>
<td>Low</td>
</tr>
</tbody>
</table>