Citywide Risk Assessment Results

June 2010

City Internal Auditor's Office

City of College Station

File # 10.04

Citywide Risk Assessment

Introduction

Every two to three years, the City Internal Auditor performs a citywide risk assessment as a tool to assist in creating the annual audit plan. The purpose of the annual audit plan is to allocate scarce audit resources to areas that will most benefit the city. The risk assessment is the first step in determining which areas of the city have high risk factors and are candidates for an internal audit.

In developing the annual audit plan, potential audit topics are identified based on several factors:

- Assessing financial and performance risks through the citywide risk assessment
- Considering requests and suggestions from the City Council, city management, and other interested parties
- Reviewing the external financial auditors' results
- Determining the feasibility of audit topics and the availability of resources

While a risk assessment provides quantitative information, not all risk factors are quantifiable – judgment and opportunities to improve outcomes are also used to recommend audit projects. Therefore, the following is also considered when making audit selection decisions:

- The impact the audit would have (the risks it would address and the likely types of findings and recommendations to result)
- The sensitivity, complexity, and difficulty of the project compared to its likely impact
- The breadth and depth of audit coverage across city government
- The availability of other resources

Methodology

Several quantitative risk factors are identified and utilized in the risk assessment model. The risk factors used in this assessment are split between six categories as shown in Table 1.

Table 1: Risk Categories

Fiscal Accountability	**Planning & Performance**
• Cash handling	• Overtime expenditures
• Average purchasing expenditures	• Cost per customer
• Professional service expenditures	• Average sick hours per FTE
• Purchasing trend	• Overtime hours per FTE
• Travel as a percentage of training expenditures	• Budget to actual expenditure variance
Organizational Change	**Size & Complexity**
• Budget trend	• Budgeted expenditures
• FTE change	• FTE
• Operation revenue change	• Operation revenues
• Turnover	• Expenditure trend
Safety & Liability	**Public Concern & Perception**
• Average worker's comp amounts	• Media perception
• Average training expense per FTE	• Claims against the city

Note: FTE stands for full time equivalent, which equals the number of paid hours during a work period (part-time and fulltime) by the number of working hours in the period.

Information for each of the risk factors was gathered from a variety of sources. The city's financial information system was used to collect revenue, expenditure, purchasing, and personnel related data. The fiscal year 2009 and 2010 approved annual budgets were also a source of data. Other information was supplied by a number of city employees.

The raw data collected was then aggregated into the risk factors identified in Table 1 above. These factors were then scored on a scale of one to five, with five being the highest. A score of one was reserved for those cost centers that did not have data for that factor or scored a zero in that risk factor, meaning there would be no or low risk. The rest of the scale was distributed evenly for each factor when possible.

The scores for each risk factor within a category were then summed to get a category score, as shown in Table 2 on the next page. The total scores varied for each category score, since some categories contained

more risk factors than others. As an example, Residential Collections was chosen randomly to illustrate the scoring methodology.

Table 2: Category Score Example

Size & Complexity	Data	Score
Budgeted expenditures	3,451,918	5
FTE	24.15	5
Operation revenues	6,933,172	5
Expenditure trend	4%	2
Residential Collection Size & Complexity Score:		**17**

Each category was weighted based upon reliability and availability of data, number of risk measures in the category, and professional judgment of the risk measure. The category score was then multiplied by the category weight to get the overall risk score for that cost center. See Table 3 for an example of the weighted score methodology.

Table 3: Weighted Score Example

Residential Collection	Score	Weight	Weighted Score
Size & Complexity	17	16%	2.72
Organizational Change	10	18%	1.80
Fiscal Accountability	18	22%	3.96
Planning & Performance	23	22%	5.06
Public Perception	5	11%	.55
Safety & Liability	8	11%	.88
Total:	74	100%	14.97

Each cost center was then ranked by this overall score. The overall scores were ranked in groups of 19 to 20 cost centers, since there are 98 total cost centers identified in this assessment.

Risk factors were adjusted as best as possible to account for missing and incomplete data before scoring. For example, the Media Coverage category contains data for the departmental level only, not cost center. Therefore, media coverage was distributed among the cost centers of areas with available data.

In the case of Residential Collections, Table 3 shows a low public perception score; however, this is the maximum score available for this cost center. This reflects the lack of media coverage data for Residential Collections and Sanitation. The public perception score shown above is entirely weighted on the claims against the city risk factor.

Results

The risk assessment scores provide a very broad overview of the departmental cost centers and their activity in various risk factors. The findings below are not representative of any audit findings and should not be taken as such.

High Ranking Cost Centers

Table 4 lists the cost centers with the highest weighted risk factor scores. The risk factors constructed in this model have identified these 20 cost centers as having high risk functions or opportunities.

Table 4: The 20 Highest Ranked Cost Centers

Department	Cost Center	Score
Fire	Fire Suppression	15.89
BVSWMA	Landfill Operations	15.25
Sanitation	Residential Collection	14.97
Police	Uniform Patrol	14.66
Police	Special Services	14.60
Wastewater Fund Ops	Wastewater Collection	14.31
Water Fund Ops	Water Production	13.54
General Government	Economic Development	13.32
Sanitation	Commercial Collection	13.17
Fire	Emergency Med Services	13.07
Fiscal Services	Municipal Court	13.02
General Government	City Secretary	12.98
Police	Communications/Jail	12.95
Utility Customer Service	Billing Collection	12.94
Fire	Fire Prevention	12.57
Wastewater Fund Ops	Wastewater Treatment	12.55
Public Works	Traffic Signals	12.54
General Government	Human Resources	12.51
Public Works	Drainage Maintenance	12.46
Public Works	Streets Maintenance	12.37

The overall risk score measure shows which cost centers obtained higher values on the risk assessment model. While this does provide a good measure of risk, there are issues to consider when examining this table. First, the higher value each of these cost centers received could be due to the availability of data. If more data is available for the departmental cost center, there are more opportunities to be rated higher in that risk factor.

Second, the size of the department, budget, and responsibilities could also lend these departments to a higher risk score. However, the score weighting methodology accounts for some of these discrepancies, making the above table of cost centers representative overall.

Finally, cost centers that have the highest risk scores may not have significant issues that need correction. For example, the Municipal Court was recently selected for an audit based on quantitative risk factors indicating high risk in the area of cash handling. However, a cash handling audit revealed that the Municipal Court had strong internal controls and cash handling practices that significantly mitigated the inherent risk associated with their operations.

Planning & Performance

Average Cost per Customer

The average cost per customer of a cost center's services was used as a risk factor. This measure includes the costs of services per customer for fiscal year 2009. The ten most expensive cost centers are listed in Table 5 below; however, the list should be considered carefully.

Table 5: Cost per Customer

Cost Center	Cost/Customer
Economic Development	$128,485
City Manager	$119,608
Capital Projects Operations	$107,695
Community Development	$38,920
Facilities Maintenance	$14,384
Public Works Engineering Division	$9,155
Communication Services	$6,799
Management Information Services	$2,515
E-Government	$2,428
Warehouse	$2,300

The table illustrates the highest cost per customer for each cost center. However, because the definition of customer changes for each cost center, this measure is slightly skewed. For example, Economic Development and Community Development "customers" were only counted as those that directly use the services of these divisions. This list was relatively small, since only a few non-profits or companies directly utilize these divisions' services. However, the benefit to the city is greater, since these organizations help many more citizens.

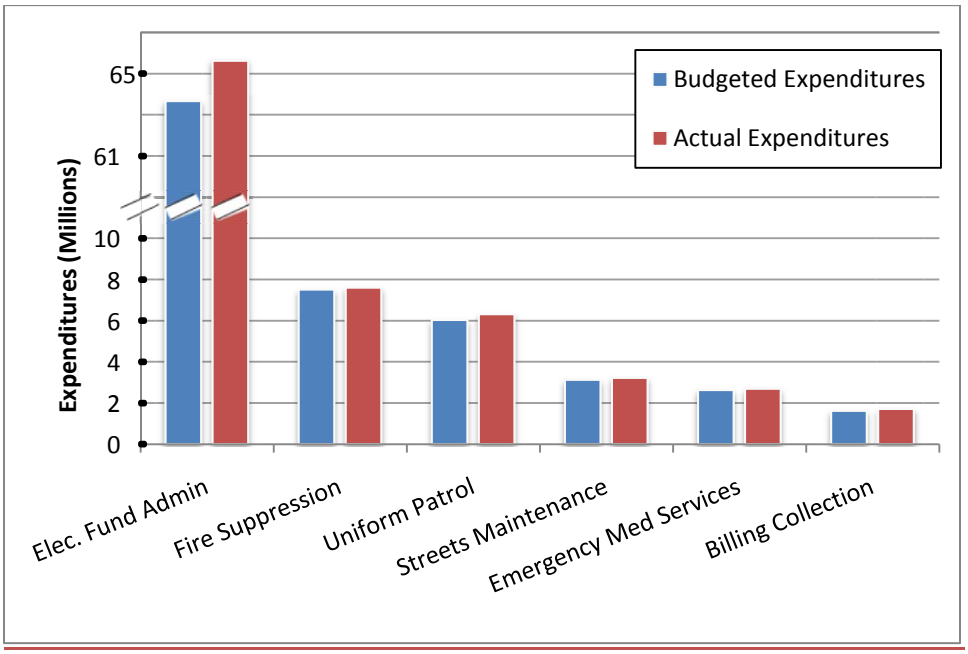
For some internal services, the number of city employees was used as total number of customers. The number of employees was gathered from the online employee directory and does not include many seasonal, temporary, or unpaid positions. Other internal services do have users within the city and those numbers were obtained when possible.

Budget to Actual Expenditure Variance

Another risk factor based on expenditures is the variance between the approved budget for each cost center and the actual amount of expenditures. When looking at this factor, it should be noted that the values for variance were taken as absolute values—the rankings do not represent positive or negative expenditure trend variances.

Figure 1 below illustrates the budgeted expenditures and actual expenditures of the six highest spending cost centers that went over budget in fiscal year 2009.

Figure 1: Budgeted to Actual Expenditures



Cost Center	Over Budget
Electric Fund Operations Administration	$1,959,247
Fire Suppression	$100,212
Uniform Patrol	$ 274,089
Streets Maintenance	$ 95,166
Emergency Medical Services	$ 56,619
Utility Customer Service Billing Collection	$ 81,253

Overtime Expenditures
For each cost center, overtime expenditures were gathered using expenditure data from the city's financial systems. This information was used to calculate total overtime expenditures for each cost center.

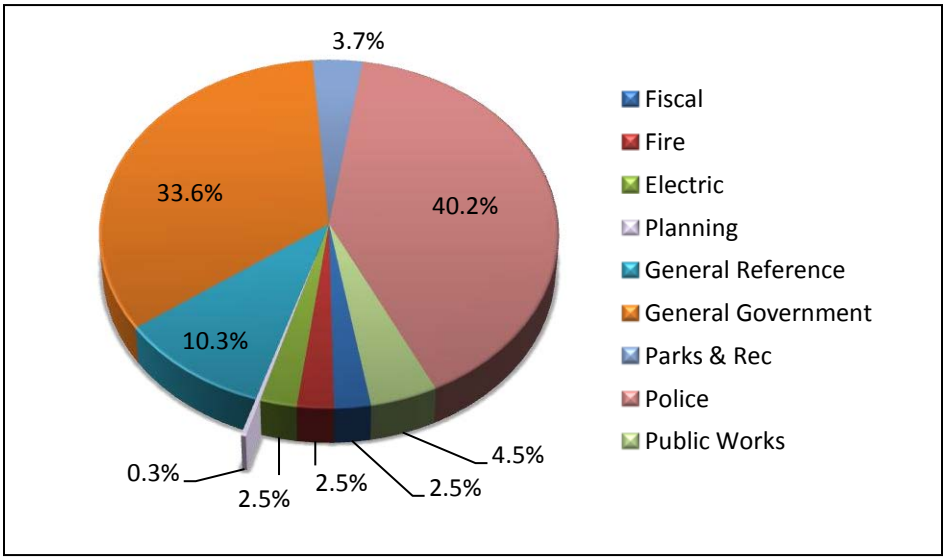
Average Sick Hours per FTE
Total sick hours for each cost center were calculated from payroll information. This data was collected from the city's information systems and the approved annual budget. The number of sick hours taken for each cost center was averaged over the three years examined. The data was not trended due to missing or incomplete numbers.

Overtime Hours per FTE
Overtime expenditure data was used in conjunction with FTE data collected from the approved annual budget to calculate an overtime hours per FTE risk factor. While this factor does provide a comparison, it should be noted that the FTE numbers used for this measure include employees exempt from FLSA overtime requirements.

Public Concern & Perception

Media Coverage
As mentioned in the methodology section of the report, media coverage data was unavailable at the cost center level. However, the data provided was still useful in examining the public perception of city departments as a whole. Figure 2 illustrates the percentage of media coverage per department from January 1, 2010 to June 3, 2010.

Figure 2: City Media Coverage



Of the news coverage for Police, roughly 80 percent was classified as reactive, while the other 20 percent was categorized as proactive responses. The vast majority of the reactive coverage was further classified as neutral, while proactive coverage was largely positive in nature. General government coverage was broken into cost centers, but no cost center experienced a large negative response from the media. Half of the media coverage was neutral for general government, with positive coverage at 43 percent. Only 7 percent of the general government coverage was negative.

Claims Against the City

The number of claims made against the city was totaled for each cost center to create this risk factor. This number includes the number of legal claims made against the city, property damages, and vehicle damages.

Organizational Change

Turnover

To calculate turnover, only fulltime employees were considered in the calculations; actual FTE data was not used. In using only fulltime employees, the results of turnover calculations are more comparable across city departments. The calculations exclude part-time and temporary/seasonal workers. The cost centers with the largest turnover are shown in Table 6.

Table 6: Turnover

Department	Cost Center	Turnover	Full-time
Information Technology	E-Government	50%	2
Community Development	Community Development	44%	4.5
Police	Special Services	33%	9
Planning & Development	P&DS Administration	33%	3
Utility Customer Service	Meter Services	30%	10
Capital Projects	Capital Project Operation	30%	10
Planning & Development	Code Enforcement	25%	8
General Government	City Secretary	20%	5
Fiscal Services	Budget & Strategic Planning	20%	5
Police	Police Administration	18%	11
Parks & Recreation	South District	18%	11
Sanitation	Commercial Collection	18%	11

Using FTE data to calculate turnover for each cost center would have resulted in skewed data towards those cost centers that utilize a seasonal workforce. Parks & Recreation cost centers would likely be affected the

most by this alternative calculation, as summer and temporary jobs (lifeguards, event staff, etc) would produce a higher turnover rate.

While these departments do demonstrate a high turnover rate in the data, consideration should be given to the number of fulltime staff per cost center. For example, E-government demonstrated a 50 percent turnover rate; however, there are only two fulltime employees within that cost center. Thus, the higher turnover rate does not necessarily indicate more employees lost compared to larger cost centers.

Budget Trend
The approved annual budget provided information on budgeted expenditures. These expenditures were trended across fiscal year 2007 through 2009 to create the budget trend risk factor.

FTE Change
The budgeted FTE numbers, from the approved annual budgets, provide the raw numbers for this calculation. The average percent change between fiscal year 2009 FTE and fiscal year 2007 FTE was used for this measure.

Operation Revenue Change
Operating revenue was trended for this risk factor. The raw data was collected from the city's financial information system. The risk factor includes operating revenues, charges for services, fines & forfeits, and licenses & permits. Other categories of revenue were eliminated that did not represent operating revenues.

Size & Complexity

FTE
The budgeted FTE numbers were taken from the approved annual budget to create this risk factor. Examining the number of FTE within a cost center allows comparison across cost centers in regards to staff size and organizational complexity. Part-time and temporary/seasonal employees were included in this calculation of FTE.

Operation Revenues
The operational revenues of various services were used to create this risk factor. The raw data was collected from city information systems. The risk factor includes accounts for operating revenues, charges for services, fines & forfeits, and licenses & permits. Other categories of revenue were eliminated that did not constitute operating revenues.

Budgeted Expenditures
The fiscal year 2009 approved budgeted expenditures were used for this risk factor. The budgeted expenditures risk factor identifies cost centers with large budgets and, when used with other factors, provides a comparison of size between cost centers.

Expenditure Trend
For each cost center, actual expenditures were trended across the three years examined. The expenditure trend risk factor reflects the results of the trend. This risk factor identifies those departments with large increases or decreases in spending over the course of fiscal year 2007 through 2009. It should be noted that departments with small expenditures one year and larger expenditures the next could have skewed trend percentages. The trend for the Internal Auditor is an example, where the expenditure of $15,889 in 2007 skews the trend when compared with expenditures of $114,331 in 2009.

Safety & Liability

Average Worker's Comp Amounts
Reports were generated from the risk manager's office to obtain the total number of worker's comp claims and amounts. The total claim amounts for each fiscal year were then averaged together to create this risk factor. It should be noted that not every cost center experienced claims each year; therefore, a consistent trend was not feasible.

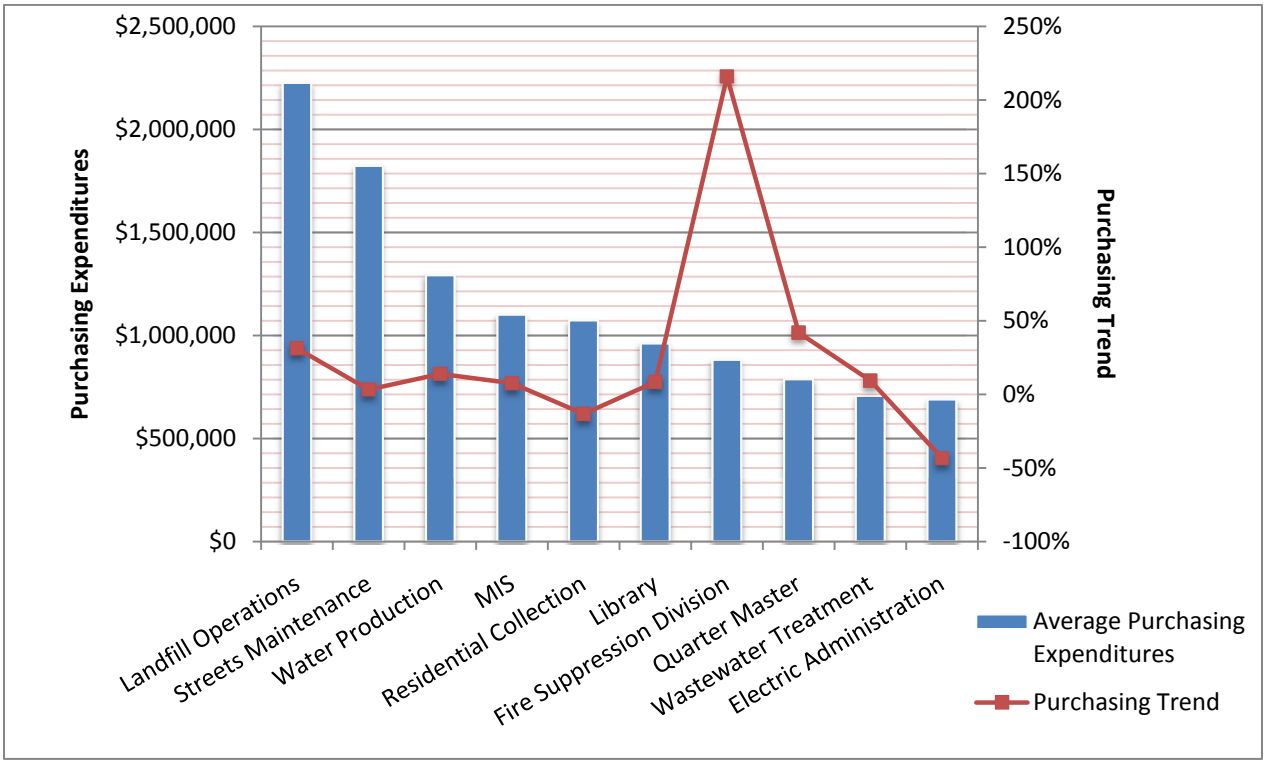
Average Training Expenditure per FTE
The total training expenditures for each cost center were gathered from the city financial systems. To create this risk factor, the total FTE was divided into training expenditures to determine the training expenditure per FTE for each fiscal year. The totals were then averaged together to complete the risk factor.

Fiscal Accountability

Purchasing Activity
The average purchasing expenditures and purchasing trend risk factors were combined to create a purchasing activity model. To calculate purchasing activity, purchasing data was compiled to create a trend of fiscal year 2007 through 2009. The average purchasing expenditures of each cost center were also calculated. Both measures include figures for the total expenditures through purchase orders and through purchasing card use.

Figure 3 illustrates the cost centers with the largest purchasing expenditures and their corresponding purchasing trend for fiscal years 2007 through 2009.

Figure 3: Cost Center Purchasing Activity



Cash Handling

Information regarding cash handling in each cost center was collected from the cash handling survey conducted by the City Internal Auditor in 2009. Not all cost centers handle cash; therefore, only cost centers that do handle cash are represented in the data.

Professional Service Expenditures

Data was also collected to provide a trend in the professional service expenditures for each cost center. These costs could include the costs for hiring consultants or other miscellaneous professional service related costs. Not every cost center experienced professional service expenditures.

Travel as Percentage of Training Expenditures

Travel and lodging costs for training are included in the total training expenditures. As another risk factor, the travel expenditures were extracted from total training expenditures. This permits the examination

of travel expenditures as a percentage of total training expenditures for each cost center.

Table 7: Percentage Travel Costs of Training Expenditures

Department	Cost Center	% of Training Expenses	% of Total Expenses
Parks & Recreation	Xtra Education	100%	1%
Parks & Recreation	Hotel Tax Program (Athletics)	99%	14%
Parks & Recreation	Heritage Programs	82%	2%
Parks & Recreation	Recreation	81%	1%
Fire	Emergency Management	76%	2%
Parks & Recreation	Senior Services	71%	1%
Electrical	Utility Dispatch Operations	66%	0%
Parks & Recreation	Special Facilities Admin	66%	1%
Police	Communications/Jail	65%	1%
BVSWMA	BVSWMA Administration	65%	1%

The Xtra Education in Table 7 has relatively low training costs, but 100% of those costs are in travel. Therefore, it is logical for these percentages to be taken into context of the total training expenditures of a cost center.

Audit Coverage

Many areas of city government have been directly audited or have fallen under the purview of a recent internal audit. The audits conducted have provided a broad coverage of topics within the City of College Station; however, not all cost centers have fallen under the scope of a previous audit. Table 8 lists the highest scoring departments from Table 4 that have not received audit coverage.

Table 8: Top Cost Centers without Audit Coverage

Department	Cost Center	Score
Fire	Fire Suppression	15.89
Sanitation	Residential Collection	14.97
Wastewater Fund Ops	Wastewater Collection	14.31
Water Fund Ops	Water Production	13.54
General Government	Economic Development	13.32
Sanitation	Commercial Collection	13.17
Fire	Emergency Med Services	13.07
General Government	City Secretary	12.98
Fire	Fire Prevention	12.57
Wastewater Fund Ops	Wastewater Treatment	12.55

Among previous audits, an audit of purchasing processes, policies and procedures has likely had the broadest scope. The report of findings from the purchasing audit identified areas of improvement for internal controls, purchasing practices, and check security. The Purchasing Audit's recommendations affected citywide purchasing and requisition policies, procedures, and practices by strengthening internal controls.

The 2010 Payroll Phase I audit provided an analysis of payroll practices throughout the city. The findings from this audit focused mainly on overtime and compensatory pay policies, procedures, and practices. The audit was applicable to all city cost centers and found some payroll practices were exceeding the minimum Fair Labor Standards Act guidelines. Other payroll issues will be audited at a later date in Phase II of the payroll audit.

The Ethics Hotline, established and maintained by the City Internal Auditor, provides an opportunity for city employees and individuals to anonymously report suspicious activity without fear of retaliation. Hotlines repeatedly have proven their ability to detect and deter illegal behavior. According to the ACFE's 2004 Report to the Nation on Occupational Fraud and Abuse, fraud losses are reduced by nearly 60

percent when a hotline is present. In the past year, there have been nine hotline reports submitted by city employees from various city departments. All reports submitted through the hotline have been fully investigated and resolved.

A performance audit was performed by external consultants in 2008, which examined the Police department in detail. The report provided recommendations for all cost centers within the Police department. Recommendations included alternative methods of scheduling work hours, improvements to reporting incidents, and overall organizational improvements.

The City Internal Auditor conducted an audit of fuel inventory, purchasing and use throughout the city. This audit discovered areas of improvement in fuel practices within the city. In addition, recommendations to improve internal controls included using an odometer reasonability control for all fuel cards, verifying prices and terms independently of the vendor, and restricting the quantity of fuel available for each fuel card.

Cash handling audits were performed within the Utility Customer Billing and Municipal Court cost centers. These audits examined the internal controls and security for cash and cash equivalents. The recommendations included more segregation of duties, improved receipt practices, and improved recordkeeping.

In November 2008, the City of Bryan hired a consultant to perform an audit of the Brazos Valley Solid Waste Management Agency (BVSWMA). The City Internal Auditor assisted the City of College Station's Finance Department during the duration of this review.

Audit Plan

Based on the results of the risk assessment, professional judgment, findings from previous audit work, and information provided by city staff, the following areas are potential audit topics for the next fiscal year.

Sanitation Operations

Based on risk assessment results, both residential and commercial refuse collections were identified as high risk cost centers when compared to other cost centers throughout the city. An internal audit of sanitation operations would include a review of internal controls, procedures, and practices. In addition, the audit could identify opportunities to mitigate safety and liability concerns, increase efficiencies, reduce overhead costs and other expenses, or potentially increase revenues.

Land Acquisition

At first glance, the process of acquiring land for new city developments is not uniform across departments. While the land agent does provide some services for most of the departments purchasing land in the last ten years, there may be room for improvement and uniformity. Within the last ten years the following departments/divisions have been involved in the purchasing of land: BVSMA, Capital Improvement Projects, City Manager's Office, Economic and Community Development, Fire, Planning and Development, Parks and Recreation, Public Works, and Electric and Water Utilities. Currently, Economic and Community Development and Electric Utilities land acquisition processes differ from other departments in that they do not use the city's land agent when purchasing land or property.

Convention and Visitors Bureau

During the June 18, 2010, City Council retreat, a potential audit of the Convention and Visitors Bureau was discussed. Depending on future direction from the City Council, an audit of the Convention and Visitors Bureau may be included in the fiscal year 2011 audit plan.

Asset Management

Asset management was identified as a high risk auditable area in the 2007 risk assessment. Although this area received some audit coverage during the Fleet Fuel Inventory audit, management of city assets throughout the city still remains an area of risk. The area of the largest

risk exists in College Station Utilities, which maintains a large warehouse of water, wastewater, and electric asset related inventories. In addition, the Information Technology Department inventories some computer equipment and the Fleet Services Division inventories various equipment and parts for fleet maintenance purposes.

Payroll Audit Phase II

In May 2010, a payroll audit was completed that examined the overtime and compensatory pay practices of the city. Phase two of this audit will expand the scope to include a review of all other payroll practices, policies and procedures. Audit test to detect common payroll frauds will also be performed.

Fleet Utilization

There are over 600 vehicles or equipment city staff operates on a daily basis. Most of these vehicles and equipment are utilized by the Fire, Police, Public Works, Parks and Recreation, and Utilities departments. Utilization of these vehicles and equipment constitute a significant risk to the city because (1) of the high monetary value of these assets and (2) the potential liability the city faces if these assets are not used prudently. Included in this audit would be a review of efficient and effective use, safety and training, personal or inappropriate use, and compliance with city, state, and federal laws and regulations.

Change Orders

A purchasing card audit and purchasing processes audit were conducted in 2007 and 2008 respectively. However, a review of the change order process was not included in the scope of these audits. An audit to inspect the number of contract changes after the bidding process is closed could find potential cost savings for the city. This audit would examine the number of change orders for each vendor. Cost savings could be found by switching to vendors that would not likely require a change in the contract after the bidding process is completed. This audit could also identify potential areas of risk within vendor contracts.

Implementation of Continuous Monitoring Systems

Continuous monitoring is the automated collection of indicators from the city's information systems on a frequent or continuous basis. Through the use of analytics, continuous monitoring is also an automated feedback mechanism to ensure that the systems and controls have been

operating as designed and transactions are processed appropriately. The purpose of implementing continuous monitoring systems is to (1) help ensure compliance with policies, procedures, and regulations and (2) act as an early warning system to detect control failure on a timelier basis than under traditional approaches. Using Audit Command Language (ACL) analytics and scripts, the City Internal Auditor is capable of developing robust automated monitoring systems. A continuous monitoring system of the city's purchasing card program will be the first system developed due to the risk associated with this program (i.e. the majority of city purchases across all city departments are made on city credit cards).

Water/Wastewater Utility

Based on the risk assessment results, water and wastewater were identified as a high risk area. An audit of the water/wastewater utility would include a review of compliance with state and federal regulations, meeting service demands, and cost of providing services. In addition, the audit could include an evaluation of the adequacy of planning and performance monitoring practices necessary to direct and control departmental operations in the short and long term; financial management practices necessary to protect the financial condition of the utility and to provide accounting information for cost control and decision making; management practices for facility operation to promote efficient and effective use of that major investment; and staffing policies, procedures and practices necessary to ensure efficient utilization of workforce and retention of qualified personnel.

Professional Services Contracts

The city expends over $2.3 million in professional services each year. A citywide review of all professional services contracts and expenditures would include a review of compliance with city policies and procedures and a cost benefit analysis of the method of outsourcing versus performing the service in-house.

Revenue Generating Cost Centers

One of the strategic goals that the City Council formed during the June 2010 city council retreat was that services should pay for themselves. A citywide audit of revenue generating cost centers would review these cost centers' financial management practices, policies and procedures. In addition, the audit could include a cost utility analysis, cost minimization analysis, and a staffing analysis.