



# Chappaqua Central School District

*Risk Assessment Update FY 2009/2010  
& Recommended Audit Plan  
December 2009*

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June 9, 2010

Mr. Jeffrey Mester  
President of the Board of Education  
Chappaqua Central School District  
66 Roaring Brook Road  
Chappaqua, NY 10514

Dear Mr. Mester:

We have recently completed our risk assessment update for the Chappaqua Central School District (the "District") on behalf of the Board of Education and Audit Committee. Our risk assessment of District operations identified and prioritized risks in accordance with New York's Chapter 263 of the Laws of 2005.

In our initial risk assessment, our overall goal was to determine the degree of risk within the major functional areas of District operations. This resulted in our designing an annual audit plan to focus on those areas which were most at risk.

In our risk assessment update, we re-evaluated the same functional areas to determine if there were any significant changes that would impact the risk evaluation. Process and control improvements were noted in the Purchasing & Accounts Payable functional areas. As a result, the overall risk rating for this functional area was lowered from High to Medium.

Also, the risk rating for Debt, Investments and Cash increased from a Low to Medium rating. This is the result of our realignment of the functional areas. Specifically, we moved the processes affiliated with the "Cash" functions from "Budget, Financial Accounting & Reporting, and Cash" to the "Investment and Debt" This realignment resulted in the transfer of additional risk criteria which increased the rating for this now expanded category.

In our FY08/09 risk assessment report, we identified the area of Student Services as a candidate for audit. We then conducted an internal audit of the Extraclassroom Activity Funds, and made some recommendations in response to the audit findings. The final report was issued in June 2009. Management developed and implemented a Corrective Action Plan in response to the audit's recommendations.

Based upon the results of this current fiscal year risk assessment, and after discussion with the Audit Committee on September 23<sup>rd</sup>, 2009, we updated our proposed risk-based



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audit plan. Our risk assessment update and corresponding recommended audit plan identified the following areas as candidates for audit:

- Student Services- Food Services Audit
- Follow-up to implementation of Corrective Action Plan to NYS Comptroller's Audit

The risk assessment assigns an overall composite risk rating score to each functional area. A higher score translates to a potentially higher risk for the District. However, Internal Audit does not strictly recommend auditing only the functional areas with the highest risk rating score. Other factors affecting the recommendation include Board/Management priorities, limited resources, prior audit results, the opportunity for a greater impact in adding value to the organization, as well as the degree of organizational change in the functional area. All of these factors are addressed when devising the recommended audit plan.

A summary for each functional area reviewed and related risk rating is in the attached risk assessment update report. We met with Management and the Audit Committee on June 8, 2010 to discuss the report and the recommended internal audit plan. We are available to meet with the Board at its convenience.

We appreciate the cooperation and assistance provided by District staff.

Very truly yours,

A handwritten signature in cursive script that reads "Accume Partners".

Accume Partners

*Chappaqua Central School District  
Risk Assessment FY 09/10 and  
Recommended Internal Audit Plan*

**Executive Summary**

We have performed an audit risk assessment update for the Chappaqua Central School District (“District”), on behalf of the District Audit Committee and Board of Trustees in accordance with New York’s Chapter 263 of the Laws of 2005. A risk assessment is a systematic process for identifying and controlling risk. Risk can be defined as the possibility that something could negatively affect the District. More specifically, risk can be defined as the internal and external factors that threaten the achievement of the District’s mission, goals, and objectives.

As the District’s Internal Auditor, our primary responsibility is two-fold. First, internal audit’s role is to assist the Board in ensuring that the District’s risks are identified. Second, Internal Audit provides the Board and Management with a systematic assessment of risk to ensure that appropriate internal controls are in place to mitigate those risks. The primary purpose of a risk assessment is to accomplish the first objective, i.e., to identify risk in the District. The recommended internal audit plan is derived from the risk assessment. The internal audit plan summarizes the recommended audits or “test of controls” the District should conduct to evaluate its risk management strategies. Effective and efficient internal controls, or risk management strategies, gives the Board and Management greater assurance that the District can achieve its mission, goals and objectives. It is important to note that the operational effectiveness of internal controls is only tested in an internal audit, not in a risk assessment.

Our risk assessment included a District-wide analysis consisting of a broad review of the major school district business functions, processes, and controls. The audit risk assessment considered qualitative and quantitative factors; materiality to the financial statements; policies and procedures; strategic planning; organizational change; and complexity of operations. The risk assessment includes a quantitative risk rating. The scoring and rating system represents an aggregate assessment of risk relative to the financial and operating environment, information technology, governance, internal controls and compliance factors.

In the initial risk assessment, our overall goal was to determine the degree of risk within the major functional areas of District operations. This resulted in our designing an annual audit plan to focus on those areas which were most at risk. In our risk assessment update, we re-evaluated the same functional areas to determine if there were any significant changes that would impact the risk evaluation.

Internal Audit does not strictly recommend auditing only the functional areas with the highest risk rating score. Other factors affecting the recommendation include Board/Management priorities, limited resources, prior audit results, the opportunity for a greater impact in adding value to the organization, as well the degree of organizational change in the functional area. All of these factors are addressed when devising the recommended audit plan.

*Chappaqua Central School District  
Risk Assessment FY 09/10 and  
Recommended Internal Audit Plan*

**Risk Rating Methodology**

In performing our risk assessment we categorized the District into nine functional areas. We then utilized a rating methodology that takes into account fifteen quantitative and qualitative factors such as: policies and procedures; financial materiality; operational change; employee knowledge & training; internal controls; internal management reporting; and laws and regulations. The fifteen quantitative and qualitative factors were individually weighted by relevance and importance. Then, a risk matrix was developed to comprise the fifteen qualitative and quantitative factors across all nine functional areas. The risk matrix is used to provide a systematic evaluation of risk. Each functional area's composite risk rating score is derived from the sum of the individual ratings scores of the 15 qualitative and quantitative factors. The scoring and rating system represents an aggregate assessment of risk, with the level of risk determined by the composite risk score as defined in the table below:

**Composite Risk Rating Score and Level**

<b>Low &lt; 131</b>	<b>Medium 131 – 210</b>	<b>High 211 – 300</b>
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It is important to point out that qualitative and quantitative factors are individually weighted for relevance and significance. Thus, some factors will affect the overall risk rating more than others. In other words, the financial significance, materiality or criticality of a particular function to the organization's operations can increase the composite risk rating of a function. For example, in functional areas that include Payroll and Purchasing, the composite risk rating score for most Districts will be relatively higher than other areas because of the financial significance or materiality of these operations.

This explains that particular functional areas within the District may have higher inherent risks associated with them relative to other operations. Thus, the District should ensure that it has in place adequate risk management strategies, or internal controls, to mitigate the risk. In addition, these areas should be audited, for the purpose of determining the effectiveness of internal controls, and identify ways to improve the overall internal control environment.

Another factor that can increase the composite risk rating of a functional area within the District's operations is the design of its internal controls. Although our risk assessment did not test and evaluate the operational effectiveness of internal controls, our methodology includes the identification of internal controls, as well as an evaluation of the design of internal controls. If the District was lacking in a key control over a functional area such as adequate segregation of duties or policies and procedures, that would create more risk.

In addition, we review for a system of internal controls that both prevent and detect errors. Preventative internal controls are controls that may prevent errors from occurring, whereas detective controls are controls that may detect errors once they have occurred. If

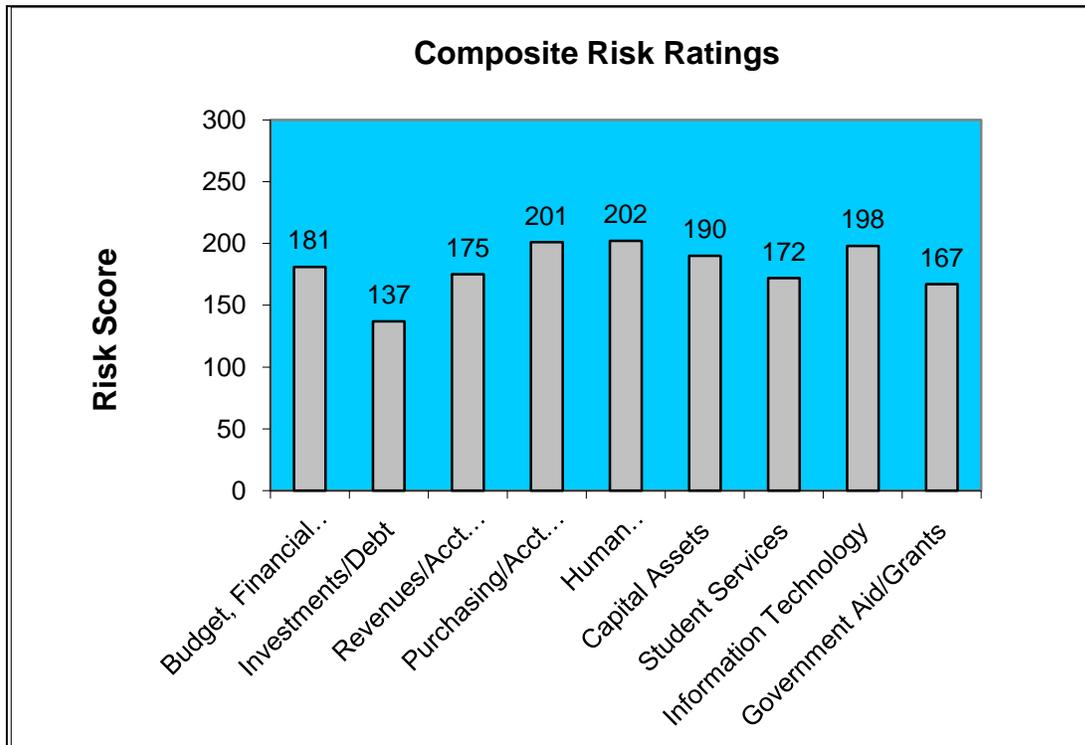
*Chappaqua Central School District  
Risk Assessment FY 09/10 and  
Recommended Internal Audit Plan*

the District has more controls in place that prevent errors, then the overall control environment would be stronger, and hence there would be less risk, than if the District relied solely on detective controls. The ultimate goal is to effectively manage the risks in all functional areas through the implementation of a system of internal controls that help to ensure that errors, irregularities, and fraud are less likely to occur or go undetected.

**Composite Risk Ratings**

Functional Area	FY09/10		FY08/09	
	Risk Rating	Level	Risk Rating	Level
Budget, Financial Accounting & Reporting	181	Medium	202	Medium
Debt, Investments and Cash*	137	Medium	126	Low
Revenues and Accounts Receivable	175	Medium	181	Medium
Purchasing and Accounts Payable	201	Medium	213	High
Human Resources and Payroll	202	Medium	194	Medium
Facilities and Capital Assets	190	Medium	192	Medium
Student Services	172	Medium	207	Medium
Information Technology	198	Medium	204	Medium
Government Aid and Grants	167	Medium	165	Medium

\*Cash added to this functional area



*Chappaqua Central School District  
Risk Assessment FY 09/10 and  
Recommended Internal Audit Plan*

**Recommended Internal Audit Plan**

<b>Chappaqua Central School District Recommended Internal Audit Plan</b>	<b>FY Audit Hours</b>	
	<b>09/10</b>	<b>Future</b>
<b>Risk Assessment Update</b>	<b>50</b>	<b>50</b>
<b>Budget, Financial Accounting &amp; Reporting</b>		<b>X</b>
Review of internal controls related to fiscal accountability and budget control, and operations in the Business Office.		
<b>Debt, Investments and Cash</b>		<b>X</b>
Review of internal controls over debt and investment monitoring and cash management.		
<b>Revenue and Accounts Receivables</b>		<b>X</b>
Review of internal controls over revenue, billing & collections, and accounts receivables.		
<b>Purchasing and Accounts Payable</b>		<b>X</b>
Review of the internal controls over purchasing, accounts payable, and the internal claims audit process.		
<b>Human Resources and Payroll</b>		<b>X</b>
Review internal controls over hiring and terminating employees, changes to employment status and pay, and the payroll process.		
<b>Facilities and Capital Assets</b>		<b>X</b>
Review of internal controls over facilities operations, capital project monitoring and reporting, and capital asset accounting and inventory control.		
<b>Student Services</b>		
Follow-up to implementation of Corrective Action Plan in response to Extraclassroom Activity Fund audit.		<b>X</b>
Review of internal controls over the Food Service operations	<b>105</b>	
<b>Information Technology</b>		<b>X</b>
Review of General Computer Controls		
<b>Government Aid and Grants</b>		<b>X</b>
Review internal controls over grant administration, grant finance and accounting, grant performance monitoring, and compliance.		
<b>Other</b>	<b>55</b>	
Follow-up to implementation of Corrective Action Plan in response to NYS Comptroller's Audit Report.		
<b>Total Internal Audit Hours</b>	<b>210</b>	

*Chappaqua Central School District  
Risk Assessment FY 09/10 and  
Recommended Internal Audit Plan*

**Discussion and Risk Rating by Functional Areas**

**BUDGET, FINANCIAL ACCOUNTING and REPORTING  
Risk Rating 181 Medium**

This area is concerned with the budget development, implementation and monitoring process; financial accounting and reporting; the operations of the Business Office; and Board governance.

Staffing within the Business Office has remained stable over the last fiscal year. There have been no significant personnel or organizational changes since the previous risk assessment.

In the previous risk assessment, Internal Audit noted a segregation of duties weakness with the duties of the Assistant Business Manager. The Assistant Business Manager, who serves as the District Treasurer, posted journal entries, cash receipts and budget transfers, and prepared bank reconciliations and the Treasurer's Report. Now, the Accountant posts most journal entries to the general ledger. The Assistant Business Manager will only post those required for bank reconciliation purposes. In addition, the Accountant posts Budget Transfers. A journal entry binder consisting of monthly journal entry reports and supporting documentation is maintained. To ensure monitoring controls are in effect, evidence of the independent review and approval of journal entries should be made by an initial or signature.

In our previous risk assessment, we noted that the Board Vice President was appointed the Clerk Pro-Tem during Board Meetings, and took Board Meeting Minutes. This procedure has changed and now the Board appointed District Clerk attends all Board Meetings and takes the official Board Meeting Minutes. This is an improvement to the process. However, we noted that not all information on which the Board acts is summarized in the Meeting Minutes. Board Meeting Minutes are the historical and legal record of actions of the Board. According to the Open Meetings Law, at a minimum, minutes must consist of a record or summary of all motions, proposals, resolutions, and other matters formally voted upon, including the result of any vote. For example, according to NYSED, all personnel appointments should include the following: title of position, name of appointee, period of the appointment, date of service, annual salary, tenure area, and certificate status. If there is extraneous information, it should be filed separately from the minutes, and the minutes should reference the document and indicate the place where it may be found. In addition, the official meeting minutes are not posted on the District's website, although they are noted as "official."

A key factor affecting the change in the risk rating score includes the transfer of reviewing internal controls over Cash within this functional area to the Debt, Investments and Cash functional areas. The risk rating level was evaluated as Medium. Overall, factors that contributed to the change in risk rating score were financial reporting significance and Board governance.

*Chappaqua Central School District  
Risk Assessment FY 09/10 and  
Recommended Internal Audit Plan*

**DEBT, INVESTMENTS and CASH**

**Risk Rating 137 Medium**

Debt, Investments and Cash review looks at the processes the District has in place to oversee issuing, monitoring and recording of debt; as well as policies and procedures for managing and monitoring investments and collateral, and cash management controls.

The long term debt outstanding for the District totaled \$60,032,696 for the fiscal year ended June 30, 2009, compared to \$58,500,302 in the previous year. Although the District redeemed \$2,820,000 in bonds during the year, an additional \$4,200,739 was added to reflect “other post employment benefits,” per implementation of accounting requirement GASB 45.

In FY09/10, the District estimates \$5,167,815 in debt service expenditures, which account for approximately five percent of the total expenditure budget. Debt service as a percentage of expenditures has remained stable over the last several fiscal years. In addition, there is no planned issuance of long-term general obligation debt in the near future.

At fiscal year ending June 30, 2009, the District held approximately \$21,002,475 in cash and equivalents. The District Treasurer is responsible for investing District funds, and periodically prepares fund balance projections to appropriately manage cash on hand. As in the previous fiscal year, the District issued \$8 million in Tax Anticipation Notes (“TANs”), maturing in June 2010. The TAN’s are issued in anticipation of property tax receipts and are used to facilitate cash management.

In the last fiscal year, there were several steps taken to improve cash controls at the Building level, in response to found control weaknesses. The High School Main Office added another safe strictly to hold cash. In addition, the office instituted signing procedures for receipt and release of cash. In addition, the Continuing Education staff now use sealed bank bags for couriering cash to the Business Office.

This area was rated a Medium risk. A key factor affecting the change in the risk rating score includes the addition of reviewing internal controls over Cash within this functional area.

**REVENUE and ACCOUNTS RECEIVABLE**

**Risk Rating 175 Medium**

The review of this area focuses on property tax and non-tax revenue, recording and reporting revenue, billing and maintaining accounts receivable, and other Treasury functions in the Business Office.

The District does not collect its own taxes. The towns of Mt. Pleasant and New Castle are responsible for the billing and collection of the taxes and guarantee the full payment of the District’s property tax warrant. This lowers the overall risk in collecting and

*Chappaqua Central School District  
Risk Assessment FY 09/10 and  
Recommended Internal Audit Plan*

receiving property tax revenues. The District established a reserve fund for tax certiorari claims. In general, the District has minimal exposure to tax certiorari claims' potential impact on estimated revenues and the budget.

The District has a relatively small Accounts Receivable process. The District does not allow out-of-District students to attend its schools and therefore does not bill for out-of-District tuition or health services. The District does receive tuition for its Continuing Education Program. However, course fees must be paid upon registration and are not billed.

In general, billing and accounts receivable for miscellaneous items is a decentralized process. Health Services for retirees is billed and tracked by the District's Benefits Clerk. Facilities and Field Use is handled by the staff in Operations & Maintenance (O&M) and the Athletics Departments. In general, the accounts receivable ledger is maintained on a manual basis. However, the O&M Department recently automated its process and implemented a new Facilities Use system. The system allows online requests and approvals for renting space, as well as tracking rental status, event calendar, billing and payment information.

The risk rating for this area is Medium. Significant factors affecting the evaluation include financial reporting significance, compliance with laws and regulations, and susceptibility to misappropriation of assets.

**PURCHASING and ACCOUNTS PAYABLE**  
**Risk Rating 201 Medium**

This area is concerned with the Purchasing function and Accounts Payable, Cash Disbursements, and the Internal Claims Audit processes.

The State Comptroller's audit of the District had several findings in the Accounts Payable and Purchasing area. The Comptroller noted that District was not always using competitive bidding to obtain goods and services; did not have established procedures over contracting of professional services; and the Internal Claims Auditor was not verifying completion of work for claims related to special education service contracts. In response, the District implemented a corrective action plan to address these control deficiencies. Internal Audit recommends conducting a follow up audit to ensure all corrective actions are in place and operating effectively.

Internal Audit noted that the Internal Claims Auditor's reports show that the District continues to have problems with confirming purchase orders, albeit at a lower rate than in the previous fiscal year.

In our previous Risk Assessment, we noted that Accounts Payable staff had the ability to modify vendors. Proper segregation of duties suggests that Purchasing add and modify vendors only. This procedure was changed and Accounts Payable staff can no longer add and modify vendor's records.

*Chappaqua Central School District  
Risk Assessment FY 09/10 and  
Recommended Internal Audit Plan*

This area was rated a Medium risk. Factors affecting the change in risk rating score include internal controls, operational change, and management reports.

**HUMAN RESOURCES and PAYROLL  
Risk Rating 202 Medium**

Both Human Resources and Payroll areas are closely linked in the administration of personnel, payroll, and benefits. In addition, this area is concerned with District compliance to Board Policies, union contracts and bargaining agreements, and applicable state and federal laws and regulations. The District's largest expense is salaries, wages and fringe benefits. This functional area is a highly significant one, not only due to the magnitude of its share of the District's budget, but also due to the complexity and sensitivity of its operations and ensuring compliance.

The District has both Human Resources and Payroll Departments. Human Resource functions are divided between the Assistant Superintendent for Business, who oversees non-instructional staff; and the Assistant Superintendent for Human Resources, who oversees instructional staff. The Payroll Department comprises two Payroll Clerks who report to the Assistant Superintendent for Business.

Internal Audit noted that the Payroll Clerk process biweekly payroll and tracks Attendance. The Senior Payroll Clerk processes new hires, terminations, and changes to payroll. Specifically, the Senior Payroll Clerk enters into the system appointments and salaries for new hires, changes in pay for current employees, as well as inactivates terminated employees. In conclusion, the District has a segregation of duties weakness since these functions (Attendance and Earnings & Appointments) should reside in Human Resources.

The Business Office has several compensating controls to mitigate the risk associated with this internal control weakness. The Senior Payroll Clerk cannot enter new employees into the system. In addition, the Payroll Change Analysis Report that lists any additions, deletions, and changes to payroll is independently reviewed by the Accountant. The District Payroll is certified by the Assistant Superintendent for Business.

In conclusion, this area was evaluated as a Medium risk. Factors affecting the rating include financial reporting significance and internal controls.

**FACILITIES and CAPITAL ASSETS  
Risk Rating 190 Medium**

*Chappaqua Central School District  
Risk Assessment FY 09/10 and  
Recommended Internal Audit Plan*

This area includes buildings and grounds, facilities maintenance, custodial operations, building use, capital projects, school building improvements and new construction, capital assets and inventory controls.

The Facilities Director oversees the Operations and Maintenance Department. Since coming on board in October 2008, the Director has planned several improvements in response to problems identified during the past fiscal year. In July 2009, the Department completed installation of a new work order request system. The system enables Building staff to submit work requests and check the status of requests online. It also automatically notifies staff via email as work is assigned and completed. The system should help the Department become more responsive and accountable to Building needs. In addition, the Department plans to install a new Timekeeping system. The system will improve controls over recording actual work hours, and will have the ability to automatically interface into the District's payroll system. The planned installation is targeted for completion in December 2009.

The District recently completed the Horace Greeley High School Bleachers Project and the majority of the EXCEL Project during the last fiscal year. The EXCEL Project went towards boiler, window and roof repairs and replacements at Horace Greeley High School and Bell Middle School.

The District recently entered into an Energy Performance Contract, to obtain long term energy cost savings by incorporating energy conservation improvements or equipment. All project costs are paid by guaranteed energy savings once the project is implemented. Work is planned to begin in the summer of 2010 and run through January 2011.

This section has been rated a Medium risk. Factors affecting the risk rating score were operational change, complexity of process, and internal management reports.

**INFORMATION TECHNOLOGY**  
**Risk Rating 198 Medium**

This area includes IT Strategy and Planning, Outsourced Vendor Management, Business Continuity Planning, IT Infrastructure and Maintenance, Information Security, Governance, Systems Development and Maintenance, Systems Support and Critical Systems. There have been no major changes in IT since our last risk assessment update. However, we made two recommendations based on our discussions with IT personnel. Although mandatory passwords changes are established on the network and Finance Manager, Infinite Campus password changes are not systematically enforced. The District agreed, and will begin enforcing a mandatory password change in this system as well.

We also recommended that the District perform a formal internal vulnerability assessment on a periodic basis. A vulnerability assessment helps to identify devices on a network that are open to known vulnerabilities, and determine whether security patches have been applied which address known security issues. In addition, a vulnerability

*Chappaqua Central School District  
Risk Assessment FY 09/10 and  
Recommended Internal Audit Plan*

assessment can help ensure that a secured environment is maintained, and determine whether security over infrastructure components is properly designed. This recommendation is being added to the District's draft 2010-2013 Technology plan.

Although the operational effectiveness of the controls in place at the District have not been tested, this area remains at a Medium risk level with a slightly lower risk rating based on the policies in place and the level of procedural documentation maintained at the District. The effectiveness of the controls that have been established will be tested and validated upon the performance of an Information Technology Audit. Details are provided in the Appendix of this report.

## **STUDENT SERVICES**

### **Risk Rating 172 Medium**

This area includes Transportation, Food Service, Extraclassroom and Co-curricular Activities, Afterschool Programs, Adult Continuing Education, Interscholastic Athletics, and Safety and Security. Although these areas represent a small percentage of the District's budget, they directly impact the District's mission and objectives. In addition, these areas tend to be more operationally decentralized, and have a potentially greater impact on reputational risk to the District.

The District's Adult Continuing Education Program is a service offered to the community throughout the year. The program is self-supporting through registration fees paid by the enrollees. The budget for this program is approximately \$225,000. Thus, the program does not have a materially significant impact on the District's finances. However, the District bears some operational and reputation risks from this type of program. Thus, the District should ensure that all Instructors are well qualified and appropriately self-insured, if applicable. For example, all physical fitness, dance, and yoga instructors should be self-insured.

The District provides a Food Service program to students at all the schools. The program is administered by an outside contractor, awarded through a competitive bid. The program functions as a self-sustaining operation. The District reported \$1,986,169 in food service revenues in FY08/09. The District participates in the National School Lunch Program, a federally subsidized meal program. Thus, the District is subject to various federal and State requirements.

In FY08/09 an internal audit was conducted to review the internal controls over the Extraclassroom Activity Funds ("ECAAF"). Recommendations were made in response to audit findings, and Management developed a Corrective Action Plan in response to the audit. Details can be found in the final report.

The District's Athletic budget for FY09/10 is \$1,007,605, a decrease of approximately eight percent from the previous fiscal year. The budget lines most affected were equipment & supplies, as well as the Ice Hockey program. The District maintains an active student body and a high participation rate in its sports and teams.

*Chappaqua Central School District  
Risk Assessment FY 09/10 and  
Recommended Internal Audit Plan*

Pupil transportation expenditures totaled \$5,670,815, or approximately six percent of total expenditures in FY08/09. The District contracts with an outside vendor to provide transportation services to its students. There were no significant changes to transportation policy or operations.

This area was given a Medium risk rating. Factors most affecting the rating were internal management reporting, external audit results, internal controls, and compliance with laws and regulations.

**GOVERNMENT AID and GRANTS  
Risk Rating 167 Medium**

This area includes grants and aid from the state and federal governments, and foundation and other not-for profit aid and donations. This area also includes Special Education, since a large proportion of state and federal aid goes toward funding these services.

The District is projected to receive approximately \$7,256,355 in state aid. This represents seven percent of estimated total revenues for FY09/10. The District receives most of its federal aid through grants that support costs toward educating students with disabilities. Of the \$2,012,324 in federal grants awarded in FY09/10, IDEA Part B Section 611 and 619 grants accounted for \$1,172,036 or sixty percent of the total. These grants are aimed specifically for funding special education costs. The grants associated with these funds are administered by the Director of Special Education.

The NYS Comptroller's Audit of the District noted several findings related to processing of special education services claims and special education services contracts. The District established a corrective action plan to address the findings. Internal Audit recommends a follow-up audit to ensure all corrective actions are in place and operating effectively.

This area has a Medium risk rating. Factors affecting the rating were internal and external audit reports, and compliance with laws and regulations.

## **APPENDIX**

### ***Information Technology Risk Assessment Update FY09/10***

*Chappaqua Central School District  
Risk Assessment FY09/10 Appendix  
Information Technology Risk Assessment FY09/10*

Information Technology in education environments has basic inherent risk due to the concentration of critical information being in an electronic format and the need to provide for the proper security over this information. The following risk assessment was conducted in cooperation with IT management for each of the following IT audit areas:

**IT Strategy & Planning**

An assessment of the School District's IT management controls determines whether the organizational structure, the IT resources used, and related control policies and procedures are adequate to foster effective management of Information Technology. Management and the School District's Board of Education must be clearly involved in the IT planning and decision-making process. Specifically, policies and procedures which support the IT planning process should ensure that:

- Management has developed an IT steering committee
- Management has developed long-term and short-term IT strategic plans
- IT job descriptions match the responsibility for the position
- IT employees do not have responsibilities for others in non-IT functions
- The Board of Education has reviewed IT staffing levels, budgets, and status of IT projects
- IT policies and procedures are documented and current
- Reports used by management to oversee IT activities, such as security monitoring, status of software purchase/development, and internal or external IT audit reports are generated and reviewed
- Management reviews IT insurance on an annual basis

The Information Technology functions at the School District are performed under the direct supervision of the Director of Technology who reports to the Assistant Superintendent. Technology staff who report to the Director of Technology include the following:

- One Instructional Technology Specialist
- Seven Computer Aides
- Four Network Technicians – New England Software and Systems Consultants
- One Network Administrator – New England Software and Systems Consultants
- Two Database Support Specialists – New England Software and Systems Consultants
- One Office Assistant

Areas of responsibility for each IT position are documented in formal job descriptions and outlined within each individual's contract with the School District. An IT organizational chart has also been developed.

Information Technology goals and objectives have been developed, documented and incorporated into the three year strategic Technology Plan for 2007-2010. This document provides a detailed description of the School District's technology goals and objectives,

*Chappaqua Central School District  
Risk Assessment FY09/10 Appendix  
Information Technology Risk Assessment FY09/10*

strategies and implementation plans. The three year Technology Plan is reviewed on an annual basis, and approved every three years by the Board of Education.

A District Technology Committee has been established with representatives from various schools. The committee is chaired by the Director of Technology and is responsible for continually updating the District's three year Technology Plan and addressing the learning and teaching needs of the students, as well as the technical infrastructure required to meet those needs.

**Outsourced Vendor Management**

An assessment of the School District's IT vendor management process controls determines whether vendors are appropriately selected, effectively managed and monitored as a normal course of business. Specific attributes, which demonstrate the effective use of vendors include:

- A formalized vendor selection process which includes appropriate due diligence procedures such as background checks, capability, cost, financial stability, quality of IT personnel etc.
- Formalized vendor contract review which includes the development of specific service level metrics
- A structured process for monitoring activities performed by vendors

The Director of Technology reviews vendor contracts on an as-needed basis and must follow a structured vendor selection process, as defined by applicable New York State law, in order to be eligible for discounts provided by the Schools and Libraries Program of the Universal Service Fund (commonly referred to as "E-Rate"). The E-Rate Program funds some of the School District's telecommunications and internet connections and the applications that use them. Services that are outsourced by the School District include:

<b>Outsourced Function/Application</b>	<b>Provider</b>
Internet Service Provider	Lighttower Fiber Networks
Finance Manager Technical Support	BOCES
IEP Direct – Web-based Special Education Student Information System	Centris Group
Emergency Phone System (AlertNow)	Saf-T-Net
Emergency E-mail System (K12 Alerts)	Message Logix, Inc.
Technical Expertise	New England Systems and Software

As a result of these outsourcing arrangements, the majority of IT operational risk for these functions has been transferred to outsourced providers. This transfer of risk, however, requires the District to establish strong monitoring controls to ensure service providers maintain a controlled operational environment.

**Business Continuity Planning**

*Chappaqua Central School District  
Risk Assessment FY09/10 Appendix  
Information Technology Risk Assessment FY09/10*

The School District has developed a formal Disaster Recovery Plan that documents emergency contact information; as well as procedures for the following:

- Data Recovery
- Backup and Off Site Storage
- Finance Manager Recovery
- Student Management Recovery
- File Server Recovery
- Data Center Recovery

Individual parts of the Disaster Recovery Plan have been tested, and the District plans to test Data Center Recovery in 2010.

### **IT Infrastructure and Maintenance**

The School District's network infrastructure connects the classrooms, schools and buildings to each other and the Internet via fiber optic cables, Dell and HP servers and various switches and routers that control traffic throughout the School District. A Cisco PIX Firewall provides firewall protection. The content filtering for the District's Internet connection is supplied by M86 Technologies. Network diagrams have been developed and document the current network infrastructure.

Major applications housed on servers in the District include the human resources, payroll and accounting system, Finance Manager; the Student Information System, Infinite Campus; the transportation system, Transfinder (housed at the Chappaqua Transportation Company); and the Food Service System, QSP. These applications are located on servers at the High School and District Office.

An inventory of all computer hardware and application software is completed each year and documented in the Technology Plan. Software maintenance is routinely performed for security and application updates, which includes virus protection. Hardware images are created for implementing major upgrades to operating systems, and desktops and laptops are on a six year replacement cycle. All infrastructure maintenance is performed in-house by the Network Technicians who coordinate server maintenance and switch and router installation and support.

### **Information Security**

Systems security administration is a process which entails: performing risk analysis, administering the security policy, identifying security breaches, reporting incidents to management, maintaining and reviewing audit and security logs, and coordinating with both users and management regarding security.

*Chappaqua Central School District  
Risk Assessment FY09/10 Appendix  
Information Technology Risk Assessment FY09/10*

Formal policies over information security have been documented and include procedures over the following:

- Network Accounts
- Access to Data (Finance Manager and Infinite Campus)
- Remote Access
- Physical Access
- Network Password Rotation
- Network Lockout

In addition, an Acceptable Use Policy (AUP) for both students and staff has been documented and formally approved by the Board of Education.

Access to the School District's Network is controlled through network user ID's and passwords. The Technology Department mandates that all employees' passwords must be changed twice per year. Specific network login rights and access are determined by the type of account provided to the user, such as teacher, student, district administrator, etc. An additional user ID and password is required to access critical application systems. The Finance Manager passwords are set to expire every 90 days, Infinite Campus passwords are not systematically forced to expire. Application security is maintained by a designated individual within the department that uses the system.

Procedures for network account set-up have been documented and are performed by the Network Administrators, who have limited Administrator rights to modify the security settings. Human Resources will send a formal notification to the Technology Department of any changes in employment relative to new hires, resignations or terminations. At the request of Human Resources, user accounts are either created or disabled.

Access to the main server room at the High School is controlled by a key lock and contains a climate control system, fire/smoke detection systems and a UPS system.

The District's internet filter provides surf control protection and on-line activity is monitored. In addition, McAfee anti-virus software is used throughout the District with automatic updates received as they become available.

### **Governance**

IT management within the School District is responsible for the development of policies and operating procedures that assure effective management, the security of information technology resources and compliance with applicable regulatory guidelines. In addition to the Board approved acceptable use policies, most operating policies and procedures are documented and include procedures for Disaster Recovery, District Security and Technology Protocol.

*Chappaqua Central School District  
Risk Assessment FY09/10 Appendix  
Information Technology Risk Assessment FY09/10*

**Systems Development and Maintenance**

The School District does not perform any systems development and does not make changes to the academic or business office application systems. Finance Manager owns the source code for the business office applications and if a product update or software change is needed, management coordinates with the vendor to remotely install the update. Once the install is complete, remote hosting is closed.

As the School District does not perform its own programming functions in support of its systems, performing system development and maintenance functions is not critical to the continued success of the organization. The management of these functions provided by service providers, however, is critical as noted in the Vendor Management section of the Risk Assessment.

**Systems Support**

Systems Support includes those components of information technology that support systems processing and consist of help desk procedures, desktop support, production support and change management control.

The District utilizes the centralized online technical support Help Desk system, HelpStar to assist users with technical problems or computer repair requests. Faculty and staff logon to the system and submit repair reports or work orders by completing a standardized request form. The form is then electronically submitted to the Network Administrators/Technicians who process the request, assign priorities and distribute the work to the appropriate technical team. Technicians are then deployed based on the specific hardware, software, operating system or network work order request.

The District's backup plan utilizes a tape backup system at the High School and offsite tape storage. A weekly full backup runs every Friday with daily differentials. Tapes are rotated out and archived with every full tape stored for two months and every other full backup permanently archived. Archived tapes are stored in a fireproof safe at the High School for two months and then permanently stored at an off-site storage facility.

**Critical Applications**

Critical applications have a material impact on the School District's operations and management of non-public information. These applications must be reviewed and tested on an annual basis to ensure the integrity of processing and the security of information. Critical applications include the following:

<b>Service Provider/Vendor</b>	<b>Application</b>	<b>Type of Data</b>	<b>Tests of Controls</b>
Finance Manager	Human Resources, Accounting and Payroll Management System	Employee non-public	Internal Audit

*Chappaqua Central School District  
Risk Assessment FY09/10 Appendix  
Information Technology Risk Assessment FY09/10*

<b>Service Provider/Vendor</b>	<b>Application</b>	<b>Type of Data</b>	<b>Tests of Controls</b>
Infinite Campus	Student Management System	Employee/Student non-public	Internal Audit
Transfinder	Bus Transportation System	Student non-public	Internal Audit
IEP Direct	Special Education Student Management System	Employee/Student non-public	Internal Audit
QSP/Rediker Software	POS and Food Inventory System	Employee/Student non-public	Internal Audit