Introduction to Performance Measurement

Ohio school districts regularly measure academic performance and track other education-oriented indicators or performance measures. Using the assessments in this guide, districts can incorporate performance measurement and monitoring for business processes that support academic achievement. The four areas covered in this guide are considered critical to school district operations:

- *Financial systems focuses on short and long-term planning and financial and performance management;*

- *Human resources focuses on personnel management issues like staffing levels, health insurance, and negotiated agreements (personnel costs represent the largest single cost category for any school district);*

- *Facilities and transportation focus on a district's two largest non-academic business areas and include maintenance and procedural issues.*

By identifying critical systems and performance targets, districts can tailor business processes to better support the mission of the district at the best value to constituents.

Using this Guide

The specific sections of this guide contain typical assessments used to identify the use of recommended practices and efficient or effective processes and organizational behaviors. An overview of the assessments is shown on the first page of each section. Supporting information, including recommended and leading practices and methods for measuring performance, are included in the detailed section of each self-assessment area. At the conclusion of each chapter, additional resources are listed to assist administrators in gathering detailed information on recommended practices and methods of implementation. In some cases, example and sample tables or spreadsheets are included to assist administrators in collecting and analyzing basic information.

The **introduction to performance measurement** section discusses the principles of performance measurement and management and includes examples of governmental units using performance measurement as a regular part of their operations. Additional resources and web links are also included in the introduction and at the end of this section.

What is Performance Measurement?

Simply put, performance measurement is a determination of what a program accomplishes and whether desired results are being achieved. Performance measurement is the ongoing monitoring and reporting of program accomplishments, particularly progress towards pre-established goals. The process was developed to measure the effectiveness of organizations, programs, or services and enhance accountability. Performance measures may address the type or level of program activities conducted (process), the direct products and services delivered by a program (outputs), and/or the results of those products and services (outcomes). A "program" may be any activity, project, function, or policy that has an identifiable purpose or set of objectives.

Once established, performance measurement provides organizations with a valuable tool that allows administrators/managers a method of determining progress toward a specific defined organizational objective. Performance measurement systems can be implemented at all levels of government: school districts, cities, counties, and local and State agencies. While high performing organizations may have sophisticated and complicated performance measurement systems, basic performance measurement techniques can be used in all organizations regardless of size, complexity, or mission.

Why Measure Performance?

The saying, "What gets measured gets done," has been attributed to Peter Drucker, Tom Peters, Edward Deming and others. Certainly what is measured gets attention. However, school district administrators should ensure that measures reflect the "right things" and that the measures focus on what really matters. In production, it's easy to identify important goals like "on time" and "lower costs" which can be measured and then related to changes in processes. Identifying important business-side goals in education is more difficult, particularly when attempting to relate those goals and measures to the district's primary mission of educating its students.

Despite the effort required in establishing, maintaining, and reporting measures, performance measurement has several critical, tangible benefits. First, without some form of standard for achievement, there is no rational basis for decision-making. Performance measurement provides an achievement standard for business processes and can help identify areas that are succeeding or failing. Furthermore, things that are not measured usually fall by the wayside and are not done (or done well), so it is critical to include key business processes in the performance measurement system. More importantly, if a district measures the wrong thing, it will reinforce the wrong behavior, which will ultimately detract from its ability to achieve its mission. Finally, it is important not only to measure performance, but also report performance outcomes and reward desired performance. As noted leadership trainer John E. Jones remarked, "What gets measured gets done. What gets measured and fed back gets done well. What gets rewarded gets repeated."

Methods

Each office, entity, organization, or government has its own way of gathering, reporting, interpreting, and using performance information. There is no set methodology for doing this. Usually some information is derived from the financial or accounting system (costs, labor hours, etc.). The means for tracking other information ranged from a simple spreadsheet to complex web-based programs.

Performance measures organize information for use by district decision-makers. By measuring, analyzing, and evaluating performance data, district administrators and board members can identify ways to maintain or improve the efficiency and effectiveness of activities and provide students and stakeholders with objective information on the organization's results.

A selection of definitions and approaches is described below.

Traditional Performance Measurement:[1] Performance measurement is defined as an assessment of an organization's performance. While this guide contains several measures encompassing a range of performance indicators, districts are encouraged to develop their own measures targeted at mission-critical systems. Traditional performance measurement includes measures of:

- Productivity, which quantifies the outputs and inputs of an organization and expresses the two as a ratio. Generally, the ratio is expressed as output to input.
- Effectiveness, which determines the relationship of an organization's outputs to what an organization is intended to accomplish.
- Quality, which examines an output or the process by which an output is produced. Quality is indicated by attributes such as accuracy (or error rate), thoroughness, and complexity.
- Timeliness, which evaluates the time involved producing an appropriate output.

Performance measurement also provides *input* and *output* measures. Input measures track the resources a government uses to provide a service, such as total dollars spent, the number of teachers or aides employed, or the number of buildings operated or buses used. Output measures are indicators of the amount of service provided such as the number of students enrolled, the number of lunches served, or the number of riders transported.

Arguably, the two most important performance measures from a performance audit standpoint are *outcomes* and *efficiency*. Outcome measures assess how well a service accomplishes stated

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[1] In 1980, the US General Accounting Office (GAO) defined performance measurement as an assessment of an organization's performance. Performance Reporting for Government, Governmental Accounting Standards Board, http://www.seagov.org/aboutpmg/performance_measurement.shtml

goals and objectives, and indicate the quality or effectiveness of a service. For instance, cleanliness ratings based on routine inspections could describe custodians' success in cleaning their buildings and grounds. To gauge its success, the transportation department might track the success of its maintenance effort using its Highway Patrol safety rating. Food service personnel could use food waste data to gauge the quality of food served. Adequate yearly progress and the results of random parent surveys could be used to determine the outcome of special education services provided. A school district might collect information on the percentage of graduating students gainfully employed or continuing education two years after graduation.

Efficiency indicators measure the amount of resources required to produce a single unit of output or to achieve a certain outcome. Efficiency measures how well resources were used to achieve intended aims—and addresses the question of "bang for the buck"—by comparing input indicators with output and outcome indicators.

- Input-output comparisons include personnel costs per student, facility costs per square foot, average special education costs per special education student, and cost per bus or cost per mile traveled.
- Input-outcome measures include annual cost per graduating student, maintenance cost per building rated by users in good or excellent condition, the cost per child transported without accident, and the cost per student meeting adequate yearly progress.

Balanced Scorecard Method:[2] The balanced scorecard approach to performance measurement is an advanced method created in the early 1990s to determine whether the activities of an organization are meeting its objectives in terms of vision and strategy. Originally, the balanced scorecard method was strictly a performance measurement system which required management to view an organization's operations from four key perspectives: customer, internal business, innovation and learning, and financial. Since its origins, the balanced scorecard method has evolved into a performance management system with the addition of a strategy map which describes how an organization creates value by connecting strategic objectives in explicit cause-and-effect relationships with each other in the original four key perspectives.

The balanced scorecard method starts with a strategic planning process which identifies needs and key success factors (strategic themes) to achieve the organization's vision. From the strategic vision developed in the planning process, perspectives and desired outcomes are then created for the strategic themes. Next, a strategy map is completed for each strategic theme. A strategy map contains a chain of causes and effects that the planners believe will lead to the desired outcome. Performance measures and targets (metrics) are also developed to allow strategic themes to be measured. Developing metrics allows management to determine if the organization's goals are being achieved.

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[2] Building a Government Balanced Scorecard, Paul Averson, Balance Scorecard Institute, March 2003

The balanced scorecard approach provides an organization's management/administrators with a new way to assess how well their organization is functioning, predict future performance, and align the organization toward new strategies to achieve breakthrough performance. It provides a framework that not only provides performance measurements, but helps planners identify what should be measured. Many modern businesses and government agencies hold most of their value in their intangible assets, namely their people, and the knowledge those people have. Also, modern organizations recognize that mission success (or competitiveness in the case of commercial companies) is largely driven by the ideas and innovations that come from their people. Industrial-age management practices, focused on financial metrics and supply-chain production, are not appropriate in this new environment. Financial metrics are lagging indicators that tell what happened in the past. The balanced scorecard has evolved to support strategic planning and management in this new work environment. It transforms the strategic plan from an attractive but passive document into the "marching orders" for the organization to use on a daily basis.

Performance Measurement in Ohio School Districts[3]

Measures used by the Ohio Department of Education: In order to evaluate performance data for school districts, the Ohio Department of Education (ODE) has created several tools that facilitate comparisons among districts based on the same data set. One method uses Ohio's Local Report Cards, starting with any given district and identifying up to 20 districts that are most similar according to certain criteria.[4] Statistically speaking (not geographically), these are the "nearest neighbors" of the selected district. ODE has established a consistent and objective method for determining similar districts and within that framework, comparison groups have been tailored to each individual district. Each district's characteristics drive the creation of the comparison groups, and each district's set of "peers" is developed with only that district's characteristics in mind. Every district thus has its own unique set of peers.

Eleven different characteristics were used to characterize and differentiate Ohio school districts and were incorporated into the 20 similar district methodology. Of these, four stand alone, and seven are included in two composite measures. Composite measures are used to determine dimensions for which there is no single valid data element that can be used to describe the dimension.

ODE has also developed efficiency measures for aspects of transportation through its *Office of Pupil Transportation.* Districts are grouped based on size and geographical layout and rated based on the efficiency and effectiveness of the transportation system.

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[3] Ohio Department of Education website: https://webapp2.ode.state.oh.us/similar_districts/
[4] 20 similar districts can be found on https://webapp2.ode.state.oh.us/similar_districts/Similar_Districts.asp

Measures used by the Auditor of State: For the purpose of performance audits, the Auditor of State identifies 10 districts that are high performing/low spending districts for each of the 7 school district types. Performance data for these selected high performing districts is collected and inserted into spreadsheets for comparison to client districts. Several additional elements are considered in identifying the 10 districts, including financial health and past practices. In most cases, additional comparison districts are selected to augment comparison data. These may be districts in close geographic proximity (to illustrate regional factors such as wages) or of similar size (to emphasis the challenges sometimes faced by very urban or rural districts). The 10 high performing/low spending districts are used for most measures because they represent a high level of expected efficiency and effectiveness and may contribute operating practices that are beneficial to other districts.

Other Measures and Systems: Many professional associations related to school business operations have developed measures and benchmarks for specific services. The National Food Service Management Institute, for example, has developed workload benchmarks for food service personnel. Annual facility costs are available through American Schools and Universities.

A more comprehensive system, which may be of use to districts in developing measures to support strategic goals and objectives, is the *District Resource Allocation Model*[5] provided free of charge through Education Resource Strategies. This web-based tool allows district administrators to input basic data and test scenarios for resource use. Users can experiment with program design decisions and view the impact of these designs on budgetary performance.

Steps or Processes Required in Implementing Performance Measurement Systems

When implementing a performance measurement system in an organization, the following characteristics, at a minimum, should be developed and put into practice:

- **Customer driven strategic planning and multi-year goal setting** – the district's administrators should create a vision and plan by department or program that sets goals tailored to the students' and stakeholders' needs. Outputs and outcomes should be identified and strategies should be developed for how resources will be allocated towards achieving the desired outputs and outcomes.

- **Establishing and updating performance measures and goals** – methods of assessing the district's progress in achieving the goals should be established. Performance levels should be reflective of the organization's resources. This is typically where the balanced scorecard tool is used. Baselines may be established to use as targets.

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[5] http://www.educationresourcestrategies.org/webtools.htm

- **Measuring performance** – data sources are identified and data entry, tabulation and summarization methods are documented for each measure. The district should ensure that it has a viable method of collecting the data that will be used in the measurement.

- **Analyzing and reviewing performance data** – management reviews the results and expectations and makes mid-course corrections. Feedback is provided to pertinent individuals to ensure continuous improvement.

- **Evaluating and using performance information** – measurement results are displayed and shared with the Board, employees, students, community members, and other stakeholders. Management feedback is provided for updating goals and measures. Performance information is used to identify opportunities for reengineering and allocation of resources.

For districts just beginning to implement performance measurement of business operations, selecting a limited range of goals, objectives, and associated measures will help ensure implementation, evaluation, and reinforcement. Administrators might consider initially selecting two or three measures for each area of operations. These can be expanded and tailored in subsequent years based on the outcomes of the performance measurement process.

Common Performance Measurement Mistakes

Some common mistakes/misconceptions of performance measurement include the following:

- **Measuring without goals or targets** – some organizations track a significant amount of performance data and create performance ratios but make no analysis or comparison on goal achievement. If comparisons are made, these may not be translated into strategic management decisions (particularly when the data does not support desired processes).

  o *Solution:* Organizations should use performance data to compare performance to departmental or program goals and established targets to assess progress.

- **Not communicating or using performance measurement results** – some organizations effectively measure performance but do not use the results to improve operations.

  o *Solution:* The results of performance measurement should be communicated to the governing body of the organization, employees, the public, and other stakeholders, and plans on improving performance should be created.

- **Performance measurement is confused with benchmarking** – some organizations use benchmarks to assess program performance. Although benchmarking is a measurement tool, it uses only external organizations for comparison.

o *Solution:* Performance measurement should center on internal measures with goals and targets set for internal performance. Benchmarking can be used as an external measure of organizational effectiveness or to assist in setting appropriate internal targets.

Leading Practice Organizations – a National Perspective

Throughout the country, many governments have been recognized for their performance measurement practices. Each year, this cadre of high performing organizations grows as additional governments adopt recommended practices. A selection of programs is described below.

General Government

The Government Accounting Standards Board (GASB):[6] GASB's mission is to establish and improve standards of state and local governmental accounting and financial reporting to improve public accountability and to have information to make informed economic, social, and political decisions. In conjunction with the Sloane Foundation, GASB has developed nonauthoritative guidance on performance measurement and reporting. Its Service Efforts and Accomplishments (SEA) publications and web site provide a range of measures and real-world examples of performance measurement practices at all levels of government.

State Level Measurement of Local Educational Institutions

Florida:[7] The Florida Office of Program Policy Analysis and Government Accountability (OPPAGA) is a special staff unit of the Legislature created by state law under the oversight of the Joint Legislative Auditing Committee. Its mission is to support the Florida Legislature by providing evaluative research and objective analysis to promote government accountability and the efficient and effective use of public resources. The 1997 Florida Legislature created the Best Financial Management Practice Reviews to increase public confidence and support for school districts that demonstrate good stewardship of public resources, to encourage cost savings, and to improve district management and use of funds.

OPPAGA reviews Florida school districts on a regular basis and uses comprehensive measures developed in conjunction with educational and business professionals. Through an exhaustive process, it has identified best practices in financial and human resource management; facility, food service, and transportation operations; and educational and management technology

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[6] http://www.seagov.org/. See also the National Center for Public Productivity (http://andromeda.rutgers.edu/~ncpp/cdgp/resources.html) and the Alfred P. Sloane Foundation (http://www.sloan.org/main.shtml)

[7] http://www.oppaga.state.fl.us/reports/topic/eductop.html

application. These practices are encouraged within each Florida school district and progress toward leading practices is measured on a periodic basis.

Texas:[8] The Texas Department of Education and Texas Comptroller monitor school district accountability through the Texas School Performance Review. Initially based on financial and management practices, performance measurement and management has been expanded to incorporate academic and business operations. The Department of Education Division of Performance Reporting is responsible for developing the Academic Excellence Indicator System (AEIS) reports, which pull together a wide range of information on the performance of students in each school and district in Texas every year. These reports also provide extensive information on staff, finances, programs, and demographics for each school and district.

From the information contained in the AEIS, the division also develops and implements the state *Accountability Rating* system used to rate Texas public schools and school districts on their use of resources. Comprehensive reports and follow up data on management practices and business processes is available for individual districts and in composite form. Each district is rated based on its performance in several management and operational categories. Exceptional districts are recognized through *Gold Performance Acknowledgements*.

Arizona:[9] In November 2000, Arizona voters approved Proposition 301, which increased the State's sales tax to provide additional monies for educational programs. The Joint Legislative Budget Committee establishes the fiscal year allocation and the Arizona Department of Education distributes the schools' share of actual sales tax revenues based on student counts each month. As a component of Proposition 301, the Arizona Auditor General regularly reviews school districts to ensure that funds are spent on allowable categories (teacher performance pay, teacher base pay, and maintenance and operations), identify efficient and effective practices, and report on school district initiatives.[10]

The Arizona Auditor General has conducted annual performance audits of school districts under Proposition 301 since 2002. Performance information is available in summary and detailed report format for each district in the state. State-wide reports are prepared on an annual basis.

Local Governments

Fairfax County, Virginia:[11] Fairfax County, Virginia implemented a performance measurement system to help it create a more responsive and competitive government. The goal of the system was to provide county administrators with a consensus on services, service levels, and service

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[8] http://www.tea.state.tx.us/perfreport/account/index.html
[9] http://www.azauditor.gov/Reports/School_Districts/School_Districts.htm
[10] Arizona Revised Statutes (A.R.S) §41-1279.03, requires the Auditor General to monitor the percentage of each dollar spent in the classroom and conduct performance audits of school districts.
[11] A Manual for Performance Measurement Fairfax County Measures Up, Performance Measurement Team, Department of Management and Budget, 11th Edition 2007

quality and cost. Fairfax County had been measuring its performance by tracking data since the 1960s. However, in the 1990s, it shifted from measuring input indicators to measuring output indicators. In its 1998 budget, 84 percent of Fairfax County's management indicators were output oriented. In general, Fairfax County's performance measurement system is designed to provide answers to the following questions:

- What was achieved?
- How efficiently was the work done?
- How were citizens helped by the effort?

To implement its performance measurement system, Fairfax County underwent a three phase process. The first phase constituted assessing existing goals, objectives, and indicators to reorient its system from measurement of outputs toward outcomes. It examined agency mission, goals and objectives, and developed indicators to measure performance. The second phase consisted of comparing benchmarks externally through the establishment of a Regional Performance Measurement Consortium designed to share performance measurement methodologies with other local governments. In the third and final phase, the county redesigned its budget to form a link between each agency's mission, focus, new initiatives, and recent accomplishments, and performance measures. At the program level, benchmarking data was included in the budget to demonstrate how Fairfax County's performance compares with other jurisdictions.

Information on Fairfax County's performance measurement system is available in *Fairfax County Measures Up*. Performance measurements and benchmarking data have been included in the county's annual budgets since 1998.

Phoenix, Arizona[12]

In 1990, the City Auditor Department of Phoenix, Arizona began to work with city departments to develop results indicators using research done by the Governmental Accounting Standards Board. Indicators were developed to reflect inputs, outputs, efficiency, and outcomes. In addition, Phoenix made strides in seeking input from citizens through surveys, forums, and questionnaires. In order to measure performance, the city found it necessary to change terminology to simplify the input-output-efficiency-outcome labels. Because the citizen surveys focused on results, it used the categories of satisfaction, cost, cycle time, and mission.

The results categories were used by all 25 city departments to evaluate management and front-line employees. Every two years, the City Auditor Department surveys all departments to gauge their continued focus on these categories and their results. Indicator data is included in the City Manager's Executive Report, and the city reports service level trends in its annual budget.

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[12] Managing for Results, City of Phoenix

The city uses output and outcome measures to assess departmental and program performance in four main areas. First, citizen surveys are used to determine what issues and problems should be addressed as well as to measure whether goals are met. Secondly, benchmarking is used to compare Phoenix's outputs to other cities. The city council has established a list of cities to use for survey comparison purposes. Third, the city collects and uses baseline data as an initial measurement of performance for a service delivery area. Baseline data is often collected to measure the incremental change or improvement over time of specific outcomes or measures. Lastly, the city uses specified performance targets. Performance targets reflect key performance measures in the area of responsibility and are used in the pay-for-performance system.

Additional information on the performance measurement system is available in *Managing for Results* (City of Phoenix). Performance measurement information is also incorporated into the city's City Manager Executive Report, and appears in the Annual Budget, the Community Attitude Survey, Council sessions and subcommittee meeting minutes, the Annual Citizens Report, and other newsletters/reports.

Charlotte, North Carolina[13]

The City of Charlotte, North Carolina implemented a balanced scorecard method of performance measurement to create a performance measurement tool that resulted in a quick but comprehensive view of progress in strategic areas, and translated mission and strategy into tangible objectives and measures. This method challenged administrators to evaluate success and achievement across four perspectives: financial, customer, internal processes, and learning and growth.

In short, the balanced scorecard method forced Charlotte to focus on key results and a method to accurately measure them. This method provided the city with a way to summarize the most critical performance measures in a single management report.

In 2000, Charlotte first attempted to integrate the balanced scorecard concept with its annual budget to show the city council and citizens of the city how the budget was tailored to meet the goals and focus areas of city council. In addition to the balanced scorecard approach, the City of Charlotte participates in an annual performance measurement benchmarking study of select service areas, including solid waste collection, public safety services, and asphalt maintenance. This study is conducted by the Institute of Government at the University of North Carolina at Chapel Hill and includes 14 large and mid-size cities statewide.

Information on the City of Charlotte's balanced scorecard method of performance measurement can be found in *A Charlotte Story: Public Service is Our Business* (City of Charlotte, 2000). In addition, the city provides performance measurement reports and an annual budget, including performance measurements and benchmarking reports, on its website.

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[13] The Charlotte Story: Public Service is Our Business, City of Charlotte, April 2000

Additional Resources

A Manual for Performance Measurement Fairfax County Measures Up, Performance Measurement Team, Department of Management and Budget, 11th Edition 2007

Building a Government Balanced Scorecard, Balanced Scorecard Institute, March 2003

Linking Performance Management to Budgeting, Government Finance Review, April 2001

Managing for Results, City of Phoenix

Performance Measurement Challenges and Strategies, Office of Management and Budget, June 2003

Serving the American Public: Best Practices in Performance Measurement, National Performance Review, June 1997

The Charlotte Story: Public Service is Our Business, City of Charlotte, April 2000

What gets measured gets done: are you measuring what really matters? Robert Williams (2006) http://www.swspitcrew.com/articles/What%20Gets%20Measured%201106.pdf.

Financial Management

Introduction

This section of the self-assessment guide provides procedures for identifying opportunities to increase the effectiveness of school district financial information. Furthermore, this section provides guidance on understanding the usefulness of five-year financial forecasts and how to address typical problems found within a forecast. In addition, this section includes selected policies and procedures that districts should consider implementing as a way to increase internal controls over critical financial processes. This section also provides methods to aid school administrators and board members in gauging their operational efficiency against other school districts. Finally, this section includes information on district-wide strategic planning, and information that can be used to improve the efficiency and effectiveness of aspects of the technology and food service operations.

In schools and other organizations, fiscal officers are responsible for recording and reporting all financial activity of the organization. This information has powerful applications in the decision-making process and is a primary managerial control over operating results. Furthermore, it is the foundation of any performance measurement system. The value of financial information comes from its ability to summarize operating information in a manner that allows feedback on past operating decisions and predictive value for planning future operating activities.

Financial Systems Assessments

Overview

1. Has the district implemented performance measurement and benchmarking? Has it selected a group of similar districts to which it routinely compares its performance?
2. Does the district conduct high level expenditure comparisons to capture and compare its allocation of resources to prior years and similar districts?
3. Does the district monitor its discretionary spending and, when needed, reduce discretionary expenditures?
4. Has the district refined its comparisons to include a comparison on an expenditure by object and by function basis?
5. Does the district have an up-to-date forecast with sound assumptions? Is the forecasting process governed by Board-approved policies and procedures and is the forecast updated as conditions change?

6. Does the district have up-to-date, comprehensive financial policies and procedures to guide processes and decision-making on financial matters? Do the policies cover recommended areas and are they tailored to the district?
7. Does the district maintain and publish a clearly written, multi-year strategic plan to provide vision and direction to the district? Does the plan incorporate the Comprehensive Continuous Improvement Plan (CCIP) and plans for other operational areas of the district, such as transportation, technology, facilities, and food service?
8. Are enterprise funds self-sufficient and has the district avoided supporting its enterprise funds through General Fund transfers?
9. Has the district taken steps to protect its technology resources? Does it have a technology plan in place that is linked to its strategic plan and budget to ensure its investment in technology resources is maintained?

Performance Measurement, Benchmarking and Selecting Peers

1. The district has implemented performance measurement and benchmarking. It has selected a group of similar districts to which it routinely compares its performance. Any evaluation of operations requires criteria to judge the relevance of data. Without a point of reference, it becomes difficult to determine if data represents good or poor performance. The most common sources for comparison are industry measures or recommended practices or service levels, similar organizations, past versus current operating results, or the requirements of laws and regulations that govern school districts versus current operating practices.

While comparing past operating results to current results is an effective way to track ongoing performance improvement or decline, it does not provide an adequate means of identifying and prioritizing operating efficiency issues. External comparisons provide a means of evaluating the appropriateness of operations. Basic financial data can be used to benchmark a school district's expenditures against those of districts of like-type. Additional sources of benchmark criteria include:

- Best practices,
- Standards and norms,
- Prior periods' performance, and
- Performance of similar entities (peer average).

The Ohio Auditor of State's Office (AOS) uses seven classifications of school district types to match a district to its peers. After establishing a list of school districts of the same classification/type, AOS examines the number of Ohio Department of Education (ODE) performance indicators met by each district to select high performing/low spending peers of the same type. Data from these districts is collected and used for comparison purposes. Because of the nature of these districts, they represent a high degree of performance.

School districts can also access a list of 20 similar districts which are selected by ODE based on type, size, wealth, poverty rates, and other indicators. The 20 similar districts represent a median benchmark, as a range of performance and spending patterns may be represented within the group.

Regardless of the "closeness" of peers, district size has substantial impact on operating and financial measures. Comparing expenditures on a per-student educated basis helps establish a common denominator. The number of students educated in a district can be calculated by taking the district's total percent of time enrollment according to the district's Education Management Information System (EMIS) report and subtracting the number of joint-vocational service (JVS) students, the number of educational service center (ESC) students, and the number of post-secondary enrollment option (PSEO) students.

Monitoring Expenditures

2. The district conducts high level expenditure comparisons to capture and compare its allocation of resources to prior years and similar districts. It monitors and reports these benchmarks on a routine basis. Using the expenditure flow models available on ODE's website[1], districts can examine their expenditures in the areas of administration, operations support, staff support, pupil support, and instruction across fiscal years. In addition, districts can use these reports to compare their expenditures to the expenditures of their peers. **Table 1-1** provides an example of a comparison of expenditures per student educated.

Table 1-1: Comparing Expenditures Per Student Educated

	Example District			Example Peer Average				
	Students Educated: 1,535			Students Educated: 1,138				
	Total $ in '000s	$ Per Student	Expenditure as a % of Total	Total $ in '000s	$ Per Student	Expenditure as a % of Total	Diff. Per Student	Percent Diff.
Administration	$1,727	$1,125	13%	$1,234	$1,089	13%	$36	3.2%
Operations Support	$2,697	$1,757	20%	$1,920	$1,683	19%	$74	4.2%
Staff Support	$447	$291	3%	$204	$179	2%	$112	38.5%
Pupil Support	$1,128	$735	9%	$873	$767	9%	($32)	(4.4%)
Instruction	$7,218	$4,703	55%	$5,696	$5,005	57%	($302)	(6.4%)
Total	**$13,217**	**$8,610**	**100%**	**$9,949**	**$8,676**	**100%**	**($66)**	**(0.8%)**

Source: Ohio Department of Education Expenditure Flow Model and Education Management Information System (EMIS) enrollment information.

This comparison allows districts to identify opportunities for cost shifting or cost savings. For example, if it is determined that a district is spending a larger percentage of expenditures per student in administration than its peers, this could indicate that the district may want to examine

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[1] http://ilrc.ode.state.oh.us/Power_Users.asp; Revenues and Expenditures; Expenditures per Pupil (District)

its administrative structure. This could also mean that the district's administrative personnel are highly tenured or have substantial experience that results in higher-than-average personnel costs. These types of comparisons and the analysis of variances prepare a district to address financial changes if future conditions require such changes.

3. The district monitors its discretionary spending and, when needed, reduces discretionary expenditures. Discretionary expenditures are not governed by negotiated agreements or contracts, so a district can control these expenditures to some degree in the short term. A district can compare its performance in controlling discretionary General Fund expenditures at the object level. This information may be compared across several fiscal years or to similar districts. **Table 1-2** is an example of discretionary fund expenditures that can be used for these comparisons. These costs are shown on a total expenditure, per-student educated, and percent of total basis.

Table 1-2: Comparing Discretionary General Fund Expenditures

	Example District			Example Peer Average		
	Students Educated: 1,535			**Students Educated:** 1,138		
	Total $	**$ per Student**	**% of Total**	**Total $**	**$ per Student**	**% of Total**
Professional & Technical Services	$110,044	$72	0.8%	$216,756	$190	2.4%
Property Services	$130,547	$85	0.9%	$151,988	$134	1.7%
Mileage/Meeting Expense	$24,803	$16	0.2%	$24,560	$22	0.3%
Communications	$66,267	$43	0.5%	$27,480	$24	0.3%
Craft or Trade Services	$0	$0	0.0%	$1,586	$1	0.0%
Pupil Transportation Services	$0	$0	0.0%	$6,928	$6	0.1%
Other Purchased Services	$0	$0	0.0%	$2,857	$3	0.0%
General Supplies	$98,139	$64	0.7%	$148,115	$130	1.6%
Textbook/Reference Materials	$81,744	$53	0.6%	$42,865	$38	0.5%
Plant Maintenance & Repairs	$4,076	$3	0.0%	$57,471	$51	0.6%
Fleet Maintenance & Repairs	$186,962	$122	1.3%	$103,133	$91	1.1%
Other Supplies & Materials	$5,570	$4	0%	$14,096	$12	0.2%
Capital Outlay	$413,469	$269	3.0%	$168,569	$148	1.9%
Dues & Fees	$549,704	$358	4.0%	$186,207	$164	2.1%
Insurance	$6,684	$4	0%	$13,186	$12	0.1%
Total Discretionary Expenditures	$1,678,010	$1,093	12.1%	$1,165,797	$1,024	12.9%
Total General Fund Expenditures	**$13,867,609**			**$9,059,517**		

Source: Districts' 2006 year end 4502 reports.

In general, districts spending less than 8 percent of General Fund revenues on discretionary expenditures are controlling costs in these areas. Because these categories contain some fixed

expenses (e.g., property insurance and communications), costs cannot be completely eliminated. Discretionary expenditures above the benchmark of 8 percent indicate that, in the event of financial difficulties or the need to shift costs, some savings may be generated by economizing in this area.

4. The district has refined its comparisons to include a comparison on an expenditure by object and by function basis. Refined financial analyses help districts target more closely areas of operations that may warrant additional examination. Assessments of object-level data should include the following:

- Personnel Services,
- Employees' Retirement/Insurance Benefits (ERIB),
- Purchased Services,
- Supplies and Materials,
- Capital Outlay, and
- Other Objects.

The total expenditures in each category and the expenditures per student in each category can be compared across fiscal years and to the peer average. **Table 1-3** is an example of a comparison of expenditures by object code.

Table 1-3: Comparing Expenditures by Object Code

	Example District		Example Peer Average		Difference Per Student	% Difference
	Total $	$ Per Student	Total $	$ Per Student		
Personnel Services	$6,909,062	$4,476	$5,129,610	$4,466	$10	0.2%
Employees' Retirement / Insurance Benefits	$2,466,619	$1,598	$1,945,054	$1,692	($94)	(5.5)%
Purchased Services	$2,160,077	$1,399	$1,127,658	$1,009	$390	38.6%
Supplies and Materials	$580,579	$376	$365,680	$324	$52	16.1%
Capital Outlay	$1,739,011	$1,127	$214,631	$148	$979	662.7%
Other Objects	$635,921	$412	$202,283	$178	$234	130.9%
Total	**$14,491,269**	**$9,388**	**$8,984,916**	**$7,817**	**$1,571**	**20.1%**

Source: Districts' 2007 five-year forecasts.

Variances between fiscal years should be evaluated to identify the effects of inflation and increases contained in collective bargaining agreements. Variances between districts on an object-level basis may indicate higher or lower levels of staffing, greater or shorter tenure in staff, more generous or better controlled benefits expenditures, a higher or lower degree of outsourcing, and more aggressive or deferred acquisition of materials or repair/replacement of buildings.

An alternative examination involves comparison trends and variances in expenditures by function code. This assessment illustrates which operations receive the greater degree of funding and, by extension, appear to be the priorities of the district. In any case, academic programs should predominate, so more than half a district's resources should be dedicated to instructional activities. In conjunction with strategic planning, functional code analyses can help districts align expenditures with goals and objectives. **Table 1-4** is an example of a comparison of expenditures by functional activity.

Table 1-4: Comparing Expenditures by Functional Activity

	Example District			Example Peer Average		
	Students Educated: 1,535			**Students Educated:** 1,138		
	Total $	**$ Per Student**	**% of Total Expenditure**	**Total $**	**$ Per Student**	**% of Total Expenditure**
1000's						
Regular (1100)	$5,163,786	$3,364	36.1%	$4,256,306	$3,740	47.4%
Special Education (1200)	$582,808	$380	4.1%	$625,450	$550	7.0%
Vocational Education (1300)	$231,978	$151	1.6%	$246,772	$217	2.7%
Adult/Continuing Education (1400)	$0	$0	0.0%	$1,405	$1	0.0%
Other Instruction (1900)	$1,278,519	$833	8.9%	$281,833	$248	3.1%
Total Instruction	**$7,257,091**	$4,728	**50.7%**	**$5,411,767**	$4,756	**60.3%**
2000's						
Support Services. - Pupil (2100)	$356,013	$232	2.5%	$287,283	$252	3.2%
Support Services-Instruction (2200)	$540,552	$352	3.8%	$351,235	$309	3.9%
Support Services-Board Of Ed. (2300)	$57,664	$38	0.4%	$25,291	$22	0.3%
Support Services-Admin. (2400)	$1,475,605	$961	10.3%	$838,306	$737	9.3%
Fiscal Services (2500)	$239,844	$156	1.7%	$287,613	$253	3.2%
Support Services – Business (2600)	$0	$0	0.0%	$15,284	$13	0.2%
Operation and Maintenance Of Plant (2700)	$1,217,469	$793	8.5%	$841,213	$739	9.4%
Support Services-Pupil Transportation (2800)	$1,091,211	$711	7.6%	$602,247	$529	6.7%
Support Services - Central (2900)	$4,923	$3	0.0%	$24,528	$22	0.3%
Total Support Services	**$4,983,282**	$3,246	**34.8%**	**$3,273,001**	$2,876	**36.5%**
3000's						
Total Operation of Non-Instructional Services (Food Service)	**$0**	**$0**	**0.0%**	**$6,072**	**$5**	**0.1%**
4000's						
Total Extra Curricular	**$202,803**	$132	**1.4%**	**$188,422**	$166	**2.1%**
5000's						
Total Facilities Acquisition	**$1,626,868**	**$1,060**	**11.4%**	**$97,500**	**$86**	**1.1%**
6000's						
Total Payment of Debt	**$230,189**	**$150**	**1.6%**	**$1,500**	**$1**	**0.0%**
7000's						
Total Other Funds	**$0**	**$0**	**0.0%**	**$0**	**$0**	**0.0%**
Total Expenditures	**$14,300,233**	**$9,316**		**$8,978,263**	**$7,890**	

Source: Districts' 2006 year end 4502 reports.

Trends in function level expenditures illustrate spending patterns and can verify efforts to redirect expenditures into direct instruction. Variances between districts can illustrate various methods of allocating resources and, in many cases, novel approaches to organizing or managing business-side operations (as opposed to academic programs). However, these variances may also simply be indicators of differing geographical and/or demographical differences among the

districts or their students. In any case, additional analysis is warranted to determine if shifts in spending patterns would better support the district's academic mission.

Once a district has identified operational differences through benchmarking and/or the use of performance measures, the district should evaluate the effects of these differences and take appropriate performance management action. However, it is also critical for districts to determine the operational impact of particular actions. Once performance management actions have been implemented, they should be monitored on a regular basis to ensure that the desired results are being achieved. Furthermore, implementing performance management actions may help a district maintain a positive year-end fund balance and/or redirect resources to instruction and raise academic proficiency. Finally, performance reporting enhances accountability and provides assurance to community members that financial resources are being appropriately spent.

Financial Planning & Forecasting

5. The district has an up-to-date forecast with sound assumptions. The forecasting process is governed by Board-approved policies and procedures. The forecast is updated as conditions change and these updates are communicated to constituents and ODE. Pursuant to Ohio Revised Code (ORC) Section 5705.391(A), school districts are required to submit five-year projections of operational revenues and expenditures to the Ohio Department of Education twice each year. *Best Practices* (AOS, 2004)[2] describes forecasting as a key component in determining future operations, problems, and opportunities. Good financial forecasts benefit governments by enabling decision-makers to:

- Develop an understanding of available funding;
- Evaluate financial risk;
- Assess the likelihood that services can be sustained;
- Assess the level at which capital investment can be made;
- Identify future commitments and resource demands; and
- Identify the key variables that cause changes in the level of revenue and expenditures.

Individual district forecasts are posted online at http://fyf.oecn.k12.oh.us/fyforecast/. ODE has developed a helpful publication entitled *How to Read a Five-Year Forecast*, which can be accessed on ODE's website[3] and can provide additional assistance in understanding five-year forecasts.

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[2] The Ohio Auditor of State's *Best Practices* Newsletter. Volume 1, Issue 1. Spring 2004.
http://www.auditor.state.oh.us/Publications/BestPractices/BestPractices_Vol1Issue1_Spring%202004.pdf.
[3] http://www.ode.state.oh.us/GD/Templates/Pages/ODE/ODEDetail.aspx?page=3&TopicRelationID=1437&
ContentID=30962&Content=30970

Governments can use either quantitative or qualitative methods, or a combination of both, to develop forecasts. Qualitative methods are more intuitive and are based on the following types of information:

- **Judgmental-** Based on "good sense" or a decision made through discerning and evaluating,
- **Consensus-** Based on collective opinion or general accord among relevant stakeholders, and
- **Expert-** Based on the advice of an expert.

Quantitative methods include any of the following types of information:

- **Trend Analysis-** Compares historical information to forecast percentage changes;
- **Multiple Regression Analysis-** Uses chosen factors to determine the forecasted percentage change; and
- **Time-Series Analysis-** Uses the average percentage change during specified time periods.

While entities may use any of these methods, research has shown that combining qualitative and quantitative methods improves forecasting accuracy. Regardless of which method or combination of methods is used to develop a forecast, the following steps should always be followed:

- Establish a base year;
- Assess revenue and expenditure growth trends;
- Clearly specify underlying assumptions;
- Select a forecasting method;
- Assess the reliability and validity of the data used to determine assumptions;
- Monitor actual revenue and expenditure levels against the forecast and explain variances; and
- Update the forecast based on changes and updated information.

Some common problems concerning financial forecasting and financial reporting, along with their associated recommendations, are shown below.

- **Few sound assumptions.** Many forecasts do not contain adequate assumptions. Sometimes assumptions are based on unsupported or inaccurate information. Since assumptions are the essence and most important determinant in developing useful financial forecasts, school districts should include detailed, sound assumptions in each forecast.

    o **Create more detailed assumptions.** Assumptions should be sufficiently detailed to allow the reader to understand the factors included in each line item of the forecast. Best practice forecasts are accompanied by explanations of each assumption which often include supporting documentation. Supporting

documentation may include trend analyses, expert opinions, or other critical information.

- **Overlooked cost drivers and revenue generators.** Forecasts sometimes exclude important sources of revenue or costs. In some school districts, for example, forecasts reflect only the net amount from open enrollment instead of reflecting the costs and revenue as separate items. Using net amounts limits the district's ability to capture open enrollment costs.

    o **Include all revenues and expenditures.** All revenues and expenditures that influence the fund should be included in the forecast. While this may require additional preparation on the part of the fiscal officer, the inclusion of all cost drivers ensures that no large costs escape the notice of decision-makers.

- **Overly optimistic approach.** Governments occasionally overstate revenues and understate expenditures in their forecasts. This may lead to a financial crisis because the result of operations is actually worse than forecasted amounts.

- **Overly conservative approach.** Revenues are sometimes understated and expenditures are overstated in forecasts, making an entity's future financial picture appear unrealistically dire. This may lead to unnecessary increases in revenue or overly harsh, unnecessary expenditure reductions.

    o **Ensure assumptions are reasonable.** Forecasts should be reasonable- neither overly optimistic nor overly conservative. Using the best information available to develop a forecast ensures greater accuracy and, as a result, a better understanding of the entity's long-term financial health. Reasonable forecasts ensure that the entity is prepared for changes in revenue or expenditures.

General guidelines for forecasting are available from several sources including the American Institute of Certified Public Accountants (AICPA)[4]. Best practice guidelines include the following:

- Financial forecasts should be prepared in good faith;
- Financial forecasts should be prepared with appropriate care by qualified personnel;
- Financial forecasts should be prepared using appropriate accounting principles;
- The process used to develop financial forecasts should provide for seeking out the best information that is reasonably available at the time;

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[4] *Guide for Prospective Financial Information, Attachment A- Financial Forecast Guidelines.* AICPA, 1999. Available at http://www.fhwa.dot.gov/programadmin/mega/fplans_a.cfm.

- The information used in preparing financial forecasts should be consistent with the plans of the entity;
- Key factors should be identified as a basis for the assumptions;
- Assumptions used in preparing financial forecasts should be appropriate;
- The process used to develop financial forecasts should provide the means to determine the relative effect of variations in the major underlying assumptions;
- The process used to develop financial forecasts should provide adequate documentation of both the financial forecasts and the processes used to develop them;
- The process used to develop financial forecasts should include, where appropriate, the regular comparison of the financial forecasts with attained results; and
- The process used to prepare financial forecasts should include adequate review and approval by the responsible parties at the appropriate levels of authority.

Several districts in Ohio have adopted recommended practices. Other helpful practices include providing the board and administration with an updated five-year forecast on a monthly basis and/or including detailed assumptions based on variables derived from economic factors as well as trend data. Integrating planned actions from the district's comprehensive strategic plan helps illustrate the fiscal effect of planned program changes. Implementing recommended forecasting practices requires additional time and resources initially but results in a greatly improved understanding of the district's long-term financial condition. Most importantly, a forecast can identify future financial problems and allow incremental corrective action over time rather than large-scale changes when the financial problems manifest in the current fiscal year.

A sound financial forecast can help management make critical operational decisions based on the district's financial situation. Although it can be difficult to accurately project major assumptions, such as State funding, consensus on assumptions helps to ensure an understanding of and preparation for unpredictable events. It may be helpful for a district to implement policies that require multiple forecast scenarios (best, worst and most-likely case). This allows the district to examine the projected outcomes of potential operational decisions based on available resources.

Financial Policies and Procedures

6. The district has up-to-date, comprehensive financial policies and procedures to guide processes and decision-making on financial matters. The policies cover recommended areas and are tailored to the district. Most importantly, the district follows these policies and implements appropriate procedures to respond to policy directives. Accounting policies and procedures should explain the design and purpose of controls-related procedures to increase employees' understanding of and support for controls designed by management. Furthermore, it is critical that a district's policies and procedures are comprehensive and are consistent with actual practices and decision-making processes. Policies and procedures should be reviewed on an annual basis and updated when necessary to ensure that potential risks are identified and the potential effects of a control failure are minimized.

The Government Finance Officers Association (GFOA) has published a list of recommended budget practices for financial management.[5] These practices represent accounting policies and procedures that districts should consider implementing to ensure sound accounting practices and/or to avoid the appearance of impropriety:

- **A Budget Stabilization Policy** can guide the creation, maintenance, and use of resources for financial stabilization purposes;

- **A Fees and Charges Policy** helps identify the manner in which fees and charges are set and the extent to which they cover the cost of services provided;

- **A Debt Issuance and Management Policy** guides the issuance and management of debt;

- **A Debt Level and Capacity Policy** establishes guidelines on the maximum amount of debt and debt service that should be outstanding at any one time;

- **A Use of One Time Revenue Policy** establishes guidelines for the use of one-time revenue for ongoing expenditures;

- **A Use of Unpredictable Revenues Policy** helps to identify major resources the district considers unpredictable and define how these revenues may be used;

- **A Balancing the Operating Budget Policy** helps define a balanced operating budget, encourages commitment to a balanced budget under normal circumstances, and provides for disclosure when a deviation from a balanced operating budget is planned or when it occurs;

- **A Revenue Diversification Policy** will help encourage a diversity of revenue sources; and

- **A Contingency Planning Policy** outlines the financial action a district will take in the event of emergencies, natural disasters, or other unexpected events.

GFOA has also published a list of recommended budget practices.[6] These represent policies and procedures that will improve a district's budgeting process. Budgeting practices are particularly helpful to districts that are routinely late in filing their annual appropriations with the County or habitually overspend estimated revenues. Some of the major practices highlighted in the publication are as follows:

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[5] For detailed descriptions and examples of GFOA recommended policies, see http://www.gfoa.org/services/nacslb/.
[6] GFOA Recommended Budget Practices- A Framework for Improved State and Local Government Budgeting (1998). http://www.gfoa.org/services/dfl/budget/RecommendedBudgetPractices.pdf.

- A government should **publish a comprehensive budget calendar** that specifies when budget tasks are to be completed and that identifies timelines for those tasks;

- A government should **develop and implement a set of procedures** that facilitates the review, discussion, modification, and adoption of a proposed budget;

- A government should have a financial planning process that assesses **the long-term financial implications of current and proposed policies, programs, and assumptions** and that develops appropriate strategies to achieve its goals;

- Governments should **prepare multi-year projections of revenues and expenditures** for each fund and for existing and proposed new programs;

- Budget documents and related materials made available to stakeholders should be **presented in a clear and readily comprehensible format**; and

- Governments should **monitor and evaluate external factors** that may affect budget and financial performance and achievement of goals.

Other policies and procedures a district should consider relate to procurement of contracted services, the use of purchasing cards, prompt payment policies, and time and attendance monitoring and record-keeping.

Contracting for Services (National State Auditors Association, 2003)[7] recommends governments develop policies and procedures for the **procurement of contracted services**. Such policies can guide districts through the decision to contract, the development of performance requirements, the request for proposal (RFP) process, the contract award process, contract provision, and contract monitoring.

Purchasing Card Programs (GFOA, 2003)[8] explains that, if not properly monitored, the issuance of purchasing cards or credit cards to employees could result in internal control issues or abuse. Therefore, districts should develop a policy for the issuance and use of purchasing cards. The recommended **purchasing card** policy provides guidelines for the establishment of spending and transaction limits, record-keeping requirements, segregation of duties for approvals, and card issuance and cancellation.

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[7] *Contracting for Services*- A National State Auditors Association Best Practices Document. NSAA, 2003. http:// www.nasact.org/onlineresources/downloads/BP/06_03-Contracting_Best_Practices.pdf.
[8] *Purchasing Card Programs*- A Government Finance Officers Association (GFOA) Recommended Practice Document. 2003. http://www.gfoa.org/downloads/cash-purchasing_card_programs.pdf.

Extension of Federal Prompt-Pay Requirements to State and Local Governments (GFOA, 1989)[9] emphasizes the importance of timely payments and the creation of **payment policies**. These polices should include a requirement that payments are timed to avoid penalties caused by late payments. The policies should also address discounts offered for early payments.

Finally, the United States Government Accountability Office (GAO) [formerly known as the General Accounting Office] publication *Maintaining Effective Control Over Employee Time and Attendance Reporting* (2003)[10] recommends **time and attendance** policies and procedures be clearly communicated and written, and they should set forth the responsibilities of employees, timekeepers, supervisors, and others regarding recording, examining, approving, and reporting of time and attendance.

Best Practices (AOS, Spring 2006)[11] describes a well-designed internal control structure as a means to help reduce improper activities. Designing and implementing internal controls is a continuous process that requires risk evaluation; the design, testing and revision of procedures; and formal monitoring. This could be completed through management, an audit committee, or an internal audit function. Also, as conditions change, control procedures may become outdated and inadequate. Therefore, districts must anticipate that certain procedures will become obsolete and modify internal control systems in response to these changes. Lastly, well-documented and maintained policies and procedures enhance both accountability and consistency among staff and management.

7. The district maintains and publishes a clearly written, multi-year strategic plan to provide vision and direction to the district. The plan incorporates the Comprehensive Continuous Improvement Plan (CCIP) and plans for other operational areas of the district, such as transportation, technology, facilities, and food service. In developing the strategic plan, the Board identifies and formally adopts a limited number of district priorities to guide its strategies and major financial and program decisions, while instructing staff on how these priorities should be considered when making program and budget decisions. The strategic plan clearly delineates the district's goals and objectives and the strategies for achieving them; the priorities the Board assigns to its goals, objectives, and strategies; the performance measures and standards used to judge progress toward meeting its goals; and the entities or departments responsible for implementing the strategies in the plan along with the time frames for implementation.

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[9] *Extension of Federal Prompt-Pay Requirements to State and Local Governments.* Government Finance Officers Association (GFOA), 1989. http://www.gfoa.org/index.php?option=com_content&task=view&id=116#Extension%20of%20Federal%20Prompt-Pay%20Requirements%20to%20State%20and%20Local%20Governments.

[10] *Maintaining Effective Control Over Employee Time and Attendance Reporting*. Government Accountability Office (GAO), January 2003. http://www.gao.gov/new.items/d03352g.pdf.

[11] The Ohio Auditor of State's *Best Practices* Newsletter. Volume 3, Issue 1, Part 2. Spring 2006. http://www.auditor.state.oh.us/Publications/BestPractices/BestPractices_Vol3Issue1 Part2_Spring2006.pdf.

Recommended Budget Practices on the Establishment of Strategic Plans (GFOA, 2005)[12] states that entities should develop multi-year strategic plans that provide long-term perspectives for services delivered and budgeting, thus establishing logical links between authorized spending and annual goals based on identified needs, projected enrollment, and revenues. Several steps are integral to the strategic planning and management process:

- Initiate the strategic planning process;
- Prepare a mission statement;
- Assess environmental factors and critical issues;
- Agree on a small number of goals and develop strategies and action plans to achieve them;
- Develop measurable objectives and incorporate performance measures;
- Approve, implement, and monitor the plan; and
- Reassess the strategic plan annually.

The strategic plan can be adopted as part of each school's improvement plan, which links state and district educational and operational goals. The goals, objectives, and strategies of the strategic plan should be listed in their order of importance. By implementing a strategic plan, the district can gain a better perspective on its future financial needs and develop a more comprehensive approach to balancing its finances with its educational goals. The implementation of a strategic plan can potentially provide the following results:

- Improve communication between the school, community, and town officials;
- Provide direction for the school board;
- Align other planning processes to the district-wide strategic plan;
- Create a willingness of staff to work on school improvement of prioritized goals;
- Establish uniformity among staff in working toward accomplishment of prioritized goals; and
- Align the budget process with strategic plan goals and objectives.

Other operational areas of the district should provide input to the strategic planning process with specific information about particular operations. At a minimum, the district should incorporate a staffing plan, a comprehensive facilities master plan, a bus replacement plan, and a technology plan.

Several established methods of strategic planning exist. At a minimum, a district should establish a few clear, measurable goals and associated objectives. To ensure implementation, assigning responsible parties and dedicating funds to implementation is critical. Frequent reviews of goals and progress is also essential to keeping the plan on track. Similarly, community involvement and buy-in to the plan ensure that the district is meeting the expectations of constituents.

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[12] http://www.gfoa.org/downloads/budgetStrategicPlanning.pdf.

8. Enterprise funds are self-sufficient and do not use instructional resources for business operations. In particular, the district's Food Service Fund is self-sustaining. Enterprise funds are used to account for any activity for which a fee is charged to external users for goods or services.[13] School district food service operations can be run as enterprise funds because the school charges external users (students and staff) for its goods and services (food preparation and consumption). The food service fund is typically the largest enterprise fund within a school district.

The food service department should seek to maintain a self-supporting operation with funds generated from services and/or from the National School Lunch Program and the School Breakfast Program. However, the rising cost of operations has forced many food service departments to rely on transfers from the General Fund in order to maintain a positive year-end fund balance. The practice of transferring general fund dollars into the food service enterprise fund can increase the potential for deficits within the five-year forecast and decrease available funds for educational programs. Therefore, it is critical that school districts examine their food service operations on an ongoing basis and make appropriate changes to improve the efficiency and effectiveness of food service operations.

According to the National Food Service Management Institute (NFSMI)[14], many school administrators use the productivity index of meals per labor hour to monitor the effectiveness of food service operations and determine the appropriate levels of staffing. Meals per labor hour is an important piece of information that indicates to administrators whether they are using their resources efficiently and productively. This measure can help in determining how many employees are needed in a single production unit or throughout the district. Many factors affect meals per labor hour and should be considered when comparing measures among kitchen or production units. These factors include:

- Type of service provided,
- Production system,
- Amount of convenience foods used,
- Skill level of employees, and
- Complexity of the menu.

Paid labor hours are calculated on time actually paid for by the school food service program. For example, if break times for employees are paid for by the program, then the break time should be included; if breaks are unpaid, the break time would not be included when calculating paid labor hours. Meal equivalents can be calculated using the conversion methods shown in **Table 1-5**.

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[13] http://www.auditor.state.oh.us/LocalGovernmentServices/Publications/LocalGovernmentManualsHandbooks/ uniform_school_accounting_system_user_manual.pdf.
[14] National Food Service Management Institute Financial Management Participant Workbook. Chapter Five- Using Financial Reports to Analyze Program Efficiency. http://www.nfsmi.org/Information/financial%20management/ Answer%20Packs/Ch%205%20Meals%20Per%20Labor%20Hour.pdf.

Table 1-5: Conversion of Meal Equivalents

Type of meal	Industry Meal Equivalent Standards
Lunch	1 Lunch = one meal equivalent
Breakfast	3 Breakfasts = two meal equivalents
A la Carte Meal Equivalents	A la Carte Sales divided by: (Free Lunch Reimbursement + Commodity Value per Meal)

Source: NFSMI Financial Management Information System

Table 1-6 depicts the National Food Service Management Institute criteria, which provides the basis for which the meals per labor hour of a school can be examined.[15]

Table 1-6: Recommended Meals per Labor Hour (MPLH) Standards for Number of Equivalents

Number of Meal Equivalents	Low Productivity	High Productivity
Up to 100	10	12
101–150	11	13
151–200	12	14
202–250	14	15
251–300	15	16
301–400	16	18
401–500	18	19
501–600	18	19
601–700	19	20
701–800	20	22
801–900	21	23
901+	22	23

Source: *School Foodservice Management for the 21st Century* (Fifth Edition, 1999)[16]

Note: Meal equivalents include breakfast and a la carte sales. Three breakfasts equate to two lunches. A la carte sales of $3 equate to one lunch

Although there are no magic formulas that can be applied to all food service operations, the publication *School Foodservice Management for the 21st Century*[16] states that the number of employees and the labor hours needed will be influenced by a number of factors, including the following:

- **Type of food service operation:** On-site production, central kitchen operation, finishing kitchen operation, pre-plated meals, etc., require different amounts of labor. On-site production will usually have the lowest productivity and pre-plated meals the highest;

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[15] The methodology for determining meals per labor hour is to divide the number of meals or meal equivalents by the number of paid labor hours:

[16] *School Foodservice Management for the 21st Century* (Fifth Edition, 1999) by inTeam Associates, Inc.

- **Number of meals to be served at the location:** The smaller operation (serving under 200 meals) will have a higher labor cost percentage than an operation twice the size. The larger the operation, the higher the productivity can be;
- **Menus:** The no-choice menu will take less labor than the choice menu, particularly in smaller schools;
- **Type of food used:** Cooking from "scratch" with raw materials, heavy use of convenience foods, or an arrangement somewhere in between must be carefully considered;
- **Number and length of lunch periods:** The most common and workable schedules in high schools, for example, are three 30-minute lunch periods. Scheduling four or five lunch periods, or lunch over extended time, requires more labor;
- **Kinds and arrangement of equipment:** It will make a difference if the equipment is automated or manual. A compact, well-designed, and efficiently planned kitchen can mean increased productivity (versus a too-large, awkward, poorly planned kitchen, which may reduce productivity);
- **Number of serving lines:** A serving line should be able to handle at least 100 students in 10 minutes. The more serving lines, the more employees needed. How many employees are needed on a serving line? It depends on how much self-service is utilized and how many foods are actually served. Good "backup" (keeping food replenished) of serving lines is imperative to the speed and efficiency of the line;
- **Experience and training of employees:** Training in how to do jobs efficiently and correctly, along with experience in doing the jobs, makes a difference in the number of employees needed;
- **Supervision:** Supervision and direction in what to do and when to do it can mean a better flow of work and more effective staff performance. The value of work schedules cannot be overemphasized- they are a management tool; and
- **Using disposable service items or washing dishes:** The time dish washing takes will depend a great deal on the degree of automation of dish washing and how many dishes are involved. Even when using disposables for students, using a mechanical dish machine for pots and pans may be beneficial to efficiency.

Many school districts have been facing rising costs in the area of food service operations, but have not seen corresponding revenue increases. Therefore, it is critical that school districts examine their food service operations on an ongoing basis and make appropriate changes to improve the efficiency and effectiveness of food service operations. By using efficiency measures such as the meals per labor hour standard and studying food service staffing levels, districts can maintain efficient and effective food service operations despite these rising costs.

9. The district has taken steps to protect its technology resources. It has a technology plan in place that is linked to its strategic plan and budget to ensure the district's investment in technology resources is maintained. The integrity of technology systems is protected to ensure data is not lost or altered, and acceptable use policies govern internet usage. Finally, old technology equipment is disposed of in an appropriate manner.

According to the Ohio School Boards Association (2006)[17], the following steps should be incorporated in the development of a technology plan:

- Create a vision,
- Involve all stakeholders,
- Gather data,
- Review the research,
- Integrate technology into the curriculum,
- Commit to professional development,
- Ensure a sound infrastructure,
- Allocate appropriate funding and budget,
- Plan for ongoing monitoring and assessment, and
- Prepare for tomorrow.

The National Center for Technology Planning (NCTP)[18] states that a technology plan has the potential to provide directions for success. The plan is merely the physical manifestation of a major planning effort that is focused on improving all segments of instruction, using technology in a natural infusion process. A sound technology plan helps an organization effectively use current technology and be in position to accurately budget for and purchase technology in the future. NCTP describes an effective technology plan as follows:

- The planning range should be short-term, not long-term;
- The plan should focus on applications, not technology;
- The plan should go beyond enhancing the curriculum- it should help the students, staff, and administration work smarter, not harder;
- The plan should stress the integration of technology into the curriculum;
- The technology plan should be tied to other planning efforts, such as staff development plans;
- The plan should help administrators make technology part of the daily cost of doing business;
- The plan should possess critical attributes based on research, such as on-site technical support, access to adequate hardware, access to appropriate types and amounts of software, and long-term, sustained staff development and training;
- The technology plan should be developed by the staff members who will be involved in implementing the plan; and
- The plan should focus on a clear vision.

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[17] *Success- Timely Tips for OSBA Student Achievement Liaisons* by the Ohio School Boards Association (OSBA). April 2006.
[18] *Technology Planning: A Recipe for Success.* National Center for Technology Planning (NCTP), March 1994.

ETech Ohio serves as the State's certifying entity for Ohio public school district technology plans. All Ohio public school district technology plans must be submitted for review and approval through the eTech website. An eTech plan is only three years in length, although the recommended model is a five-year plan. Likewise, eTech does not use Uniform School Accounting System codes to describe planned expenditures. Districts should use special object codes to delineate technology expenditures.

In addition to a technology plan to protect resource investments, all districts should have model disaster recovery plans. Disaster recovery planning, simply defined, is the process an organization uses to prepare for events that disrupt normal operations. A disaster recovery plan, also called a business resumption plan, incorporates the actions an organization anticipates taking when normal operations are disrupted. *Best Practices* (AOS, 2007)[19] describes the main objective of such planning, which is to help an organization survive a disaster and to guide the organization in resuming normal business operations. Additional disaster recovery planning objectives are as follows:

- Generate awareness and involve elected officials/upper management in the planning process;
- Build a diverse planning team and a mission-driven planning process;
- Analyze and assess the organization and identify any significant risks;
- Rank major business areas and prioritize core critical functions, hardware, and software;
- Identify and record resources;
- Implement response and recovery steps;
- Develop alternatives to processing key data;
- Employ risk reduction strategies; and
- Test and update the plan.

Data security should be improved on a day-to-day basis using better password security. The National Forum on Education Statistics[20] notes that the use of passwords is important for securing the privacy and confidentiality of student and personnel information. Passwords can also assist the district in monitoring access to mission-critical applications. All districts that maintain websites should consider implementing procedures related to password security. These procedures should be written and distributed to all members of the district. Some password-related issues include the following:

- A password should consist of both alpha and numeric characters;
- The agency should require that passwords be of a sufficient length (e.g., eight alpha and numeric characters);

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[19] The Ohio Auditor of State's *Best Practices* Newsletter. Volume 4, Issue 1. Winter 2007.
http://www.auditor.state.oh.us/Publications/BestPractices/BestPractices_ Vol4Issue1_Winter2007.pdf
[20] *Weaving a Secure Web Around Education: A Guide to Technology Standards and Security* by the National Forum on Education Statistics. April 2003. http://nces.ed.gov/pubs2003/2003381.pdf.

- The agency should establish procedures that require passwords to be changed frequently (e.g., every thirty to sixty days);
- Passwords should not be shared or "loaned" to another person; and
- Passwords should not be written down.

Password security procedures should include a help desk, or an automated process, for staff to contact when a password is forgotten. Password restoration procedures should include a method to verify the identity of the person calling the help desk. This could include recalling the staff member's pet, mother's maiden name, or some other item that will identify the person requesting a new password.

Acceptable use policies that are well understood, broadly circulated, and effectively implemented make the Internet a more safe and productive environment for students.[21] The National Education Association (NEA) recommends the adoption of an acceptable use policy (AUP), which should include the following key elements:

- **Preamble**,
- **Definition Section**,
- **Policy Statement** identifying the computer network services that are covered by the AUP and the circumstances under which students can access the computer network services,
- **Acceptable Uses Section** describing and defining the appropriate purposes for student use of the school's computer network services,
- **Unacceptable Uses Section** identifying the kinds of sites (if any) that are off limits to students and/or staff; the kinds of information (if any) that students and/or staff are prohibited from sending, forwarding, or posting; and the types of behavior deemed destructive to the computer network services, and
- **Violations/Sanctions Section**.

Computer use policies cannot succeed unless they represent the institutional culture. Thus, teachers, other qualified education employees such as school librarians and media specialists, parents, administrators, and students should be included in the policy development process. Using an inclusive process will garner wide support for the final product and, thus, facilitate compliance and enforcement. Because numerous legal and technological issues will arise, the committee should consult with legal counsel and a computer network services expert during the policy development stage.

Lastly, because computer assets involve hazardous waste issues and data security risks, in addition to traditional inventory control issues, a computer disposal policy should be developed that will incorporate specific documentation procedures for disposal of these fixed assets.

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[21] *Technology in the Classroom- Student Acceptable Use Policies* by the National Education Association (NEA). Contact the NEA at (202) 833-4000 for more information.

According to *Disposal of Old Computer Equipment* (The CPA Journal, July 2004)[22], even a small organization may fall under the federal requirement to document the proper recycling for all computers. The CPA Journal recommends that organizations obtain and keep written documentation verifying disposal. While computer monitors are a hazardous waste, the district should also include circuit boards and keyboards as hazardous waste and disposal of these items in accordance with EPA directives.

Systematic technology planning is essential for every organization.[23] Technology development is costly and complex and the development of a technology plan is difficult work, involving participation from all areas of the agency. Without a plan, the technology is still accessible, but its use may be haphazard and unduly expensive. If a district has no plan at the outset, it is a certainty that a plan will be necessary later. Districts should understand that there is no "one size fits all" plan for technology development or technology security. Each district must develop an individualized plan that meets the specific needs of the organization. Effective technology implementation involves a continuing professional development program, a plan to replace and/or redirect hardware and software, current virus protection, time allotted to evaluating existing policies/procedures, and an ongoing budget to accomplish all of these tasks. In addition to the inclusion of a disaster recovery plan and a data security plan, the technology plan should address the potential for security breaches and a proactive plan for how such breaches will be handled.

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[22] *Disposal of Old Computer Equipment* by Michael J. Meyer, Waleed Abu El Ella, and Ronald M. Young. The CPA Journal. July 2004. Available at http://www.nysscpa.org/cpajournal/2004/704/essentials/p70.htm.
[23] *Technology Planning: A Recipe for Success.* National Center for Technology Planning (NCTP), March 1994.

Additional Resources

Auditor of State Bulletin 98-015 (*Five Year Forecasts and Ohio Rev. Code §5705.412 Certifications*)

Computer Disaster Recovery Planning. Government Finance Officers Association (GFOA). http://www.gfoa.org/services/nl/computer-disaster-recovery.shtml.

Contracting for Services- A National State Auditors Association Best Practices Document. NSAA, 2003. http://www.nasact.org/onlineresources/downloads/BP/06_03-Contracting_ Best_Practices.pdf.

Disaster Recovery: Best Practices White Paper. www.cisco.com/warp/public/63/disrec.html.

Disposal of Old Computer Equipment by Michael J. Meyer, Waleed Abu El Ella, and Ronald M. Young. The CPA Journal. July 2004. Available at http://www.nysscpa.org/cpa journal/2004/704/essentials/p70.htm.

Guide for Prospective Financial Information, Attachment A- Financial Forecast Guidelines. AICPA, 1999. Available at http://www.fhwa.dot.gov/programadmin/mega/fplans_a.cfm. Information Resources on Archives and Records Administration for State and Local Governments. http://www.statearchivists.org/arc/states/res_disa.htm#salvage.

Maintaining Effective Control Over Employee Time and Attendance Reporting by the Government Accountability Office (GAO), January 2003. http://www.gao.gov/new.items/ d03352g.pdf.

National Food Service Management Institute Financial Management Participant Workbook. Chapter Five- Using Financial Reports to Analyze Program Efficiency. http:// www.nfsmi.org/Information/financial%20management/Answer%20Packs/Ch%205%20 Meals%20Per%20Labor%20Hour.pdf.

Ohio's Continuity of Operations Plan template, best practices, and other helpful information: http://www.ema.ohio.gov/plans/Coop.zip.

Purchasing Card Programs. GFOA Recommended Practice, 2003. http://www.gfoa.org/ downloads/cash-purchasing_card_programs.pdf.

Recommended Budget Practices: A Framework for Improved State and Local Government

Budgeting by the National Advisory Council on State and Local Budgeting (NACSLB) and the GFOA (1998). http://www.gfoa.org/services/dfl/budget/RecommendedBudgetPractices.pdf

Recommended Budget Practices for Financial Management by the Government Finance Officers Association (GFOA). http://www.gfoa.org/services/nacslb/.

Recommended Budget Practices on the Establishment of Strategic Plans by the Government Finance Officers Association (GFOA, 2007). http://www.gfoa.org/downloads/budget StrategicPlanning.pdf.

School Foodservice Management for the 21st Century (Fifth Edition, 1999) by inTeam Associates, Inc.

Success- Timely Tips for OSBA Student Achievement Liaisons by the Ohio School Boards Association (OSBA). April 2006. Contact the OSBA at (614) 540-4000 or (800) 589-OSBA for more information.

Technology in the Classroom- Student Acceptable Use Policies by the National Education Association (NEA). Contact the NEA at (202) 833-4000 for more information.

Technology Planning: A Recipe for Success. National Center for Technology Planning (NCTP), March 1994.

The Little Black Book of Budgets and Forecasts by Michael C. Thomsett, 1988.

The Ohio Auditor of State's *Best Practices* Newsletter. Volume 1, Issue 1. Spring 2004. http://www.auditor.state.oh.us/Publications/BestPractices/BestPractices_Vol1Issue1_Spring%20 2004.pdf.

The Ohio Auditor of State's *Best Practices* Newsletter. Volume 3, Issue 1, Part 2. Spring 2006. http://www.auditor.state.oh.us/Publications/BestPractices/BestPractices_Vol3Issue1 Part2_Spring2006.pdf.

The Ohio Auditor of State's *Best Practices* Newsletter. Volume 4, Issue 1. Winter 2007. http://www.auditor.state.oh.us/Publications/BestPractices/BestPractices_Vol4Issue1_Winter2007 .pdf.

Uniform School Accounting System Users Manual (Updated July 2005) by the Ohio Auditor of State's Office. http://www.auditor.state.oh.us/LocalGovernmentServices/Publications/ LocalGovernmentManualsHandbooks/uniform_school_accounting_system_user_manual.pdf

Weaving a Secure Web Around Education: A Guide to Technology Standards and Security by the National Forum on Education Statistics. April 2003. http://nces.ed.gov/pubs2003/ 2003381.pdf.

When Crisis Comes: How NFC overcame calamity and kept its operations going. The Government Leader. http://www.governmentleader.com/issues/1_6/features/134-1.html.

Human Resources

This section of the self-assessment guide provides procedures for identifying opportunities to increase efficiency levels in district human resources (HR) management functions. In addition, this section provides general benchmarking statistics to aid school administrators in gauging their operation efficiency against regional, State, and national benchmarks.

Monitoring the efficiency of human resources related expenditures is a critical factor in the overall financial stability of a school district because of the large financial outlay associated with personnel expenses. Human resources functions include staffing levels, compensation, employee benefits, and negotiated agreements. By continuously managing and appropriately adjusting human resources relative to established benchmarks, school districts are better able to control expenditures. Finally, controlling these expenditures on an incremental basis will help the district adjust operations to its available funding without having to make substantial, mid-year changes if financial difficulties are encountered.

Human Resource Assessments

Overview

Staffing and Human Resource Allocation
    1. Does the district conduct staffing comparisons on at least an annual basis and, when appropriate, adjust staffing on the basis of comparisons, goals, and objectives?
    2. Has the district created staffing plans detailing administrative, certificated, and classified staff by building and district-wide?

Salaries, Benefits and Other Compensation
    3. Does the district compare and analyze salary information by staff category to ensure that district salary expenditures are fair to employees and appropriate to the regional and local economy and the district?
    4. Has the district restricted retirement contributions in excess of ORC requirements to top-level administrators?
    5. Does the district routinely review premium costs and plan design to ensure that it is obtaining its health insurance coverage at a reasonable rate, that plan elements are consistent with those offered in other governments and the private sector, and that employees are participating in the cost of coverage at an acceptable rate?

Collective Bargaining

      6. Does the district work with its collective bargaining units to implement alternative bargaining models and to develop collaborative tools to resolve disputes? Does it regularly review the provisions of its agreements and compare them to similar districts and State law? Are changes to bargaining agreement provisions modeled to ensure financial viability and sustainability? Finally, are participating administrators trained in collective bargaining practices?

Other Assessments

      7. Does the district have detailed recruitment plans and strategies to enhance employee retention?

      8. Does the district collect and analyze feedback from employees and try to incorporate the feedback in district planning and operations?

      9. Does the district routinely evaluate the cost of special education services (as well as other specialized programs) on a per student basis and compare these costs to similar districts and State averages?

      10. Does the district routinely review job descriptions and ensure they are up to date and reflect job duties and then link these to policies and procedures and annual evaluations?

Staffing and Human Resources Allocation

1. The district conducts staffing comparisons on at least an annual basis and, when appropriate, adjusts staffing on the basis of comparisons, goals, and objectives. District staffing level assessments should be conducted separately for certificated and classified employees based on their responsibilities for educating students and the infrastructure for learning, respectively. For certificated staff, levels should be compared and adjustments made based on district mission and goals, academic need, and available resources. Establishing a desired student-teacher ratio that is within the long-term financial means of the district is a critical first step in managing human resource levels and is discussed under *staffing plans*. Classified staff should be compared based on industry-generated workload measures which are discussed in **facilities** and **transportation.**

Prior to conducting a staffing comparison, the district should compare its staffing levels to applicable Ohio Administrative Codes (OAC) (http://codes.ohio.gov/oac) to ensure that it is meeting State requirements.

- OAC § 3301-35-05 requires the ratio of teachers to students district-wide to be <u>at least one full-time equivalent classroom teacher for each twenty-five students in the regular student population</u> as defined in section § 3317.023 of the Revised Code.

- A minimum <u>of five full-time equivalent educational service personnel shall be employed district-wide for each one thousand students in the regular student population </u>as defined

in section § 3317.023 of the Revised Code. Educational service personnel should be assigned to at least five of the eight following areas: counselor, library media specialist, school nurse, visiting teacher, social worker, and elementary art, music, and physical education. Educational service personnel assigned to elementary art, music, and physical education must hold the special teaching certificate or multi-age license in the subject to which they are assigned.

- <u>Every school also must be provided the services of a principal, and every school with 15 or more FTE classroom teachers is to be assigned the services of a full-time principal.</u> No principal may be assigned to more than two schools.

  OAC § 3301-51-09 also allows up to six age-eligible, typically developing peers to be enrolled in a center-based class. In such cases, the teacher caseload may not exceed twelve children at any one time. This section of the code also addresses preschool special education staffing ratios. In general, a combination itinerant and special class teacher has both center-based and itinerant caseloads and shall serve a total of 6.0 FTE and no more than a total of 8.0 FTE preschool children with disabilities.

Once the district has compared its staffing levels to OAC requirements and determined that it meets State minimum requirements, it should obtain the EMIS All Regular Staffing Reports per 1,000 SimDist Report (http://www.ode.state.oh.us) for itself and similar districts to conduct a peer comparison. The district should use the reports and enrollment information to compare staffing levels per 1,000 students[1] by each EMIS category. Recommended staffing categories to focus on include the following: Administration, Professional Education, Educational Service Personnel, Clerical, Maintenance and Custodial, and Food Service.

A comparison of district staffing levels per 1,000 students with similar districts allows the district to examine specific areas of operation and determine if it is staffed appropriately in comparison to like-districts, and based on its goals and objectives. The following is an example of a peer staffing comparison:

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[1] Smaller districts may find it helpful to use a per 100 student ratio.

Staffing Comparison Spreadsheet Example

	District FTE	District Per 1,000	Peers Per 1,000	FTE Above/ (Below) Peers
FTE Students Educated	n/a	1,534.98	1,199.35	n/a
Administrators	**8.0**	**5.21**	**5.62**	**(0.4)**
Office / Clerical Staff	**8.0**	**5.21**	**7.40**	**(2.2)**
Librarian / Aides	**3.0**	**1.95**	**1.35**	**0.6**
Teaching Aides/Paraprofessionals	**3.0**	**1.95**	**6.00**	**(4.1)**
Remedial Specialist/Tutors	**6.0**	**3.91**	**4.19**	**(0.3)**
ESP's:	**12.0**	**7.82**	**7.59**	**0.2**
ESP Teachers	5.0	3.26	5.13	(1.9)
Counselors	3.0	1.95	1.58	0.4
Librarians / Media Specialists	3.0	1.95	.81	1.1
Registered Nurses	1.0	.65	.07	0.6
Teachers:	**78.2**	**50.88**	**51.29**	**(0.4)**
Regular Teachers	76.0	49.51	48.81	0.7
Vocational Teachers	2.2	1.37	2.48	(1.1)
Special Education Teachers	10.0	6.51	8.66	(2.2)
TOTAL	**128.2**	**83.44**	**92.10**	**(8.66)**

Source: ODE District and Peer EMIS Reports and Enrollment

In examining these categories, districts are encouraged to drill down into specific classifications. However, coding and job description variances between districts may create complications in conducting highly detailed comparisons.

This information can be maintained in a spreadsheet and examined on an annual basis for planning purposes. The combination of staffing data and enrollment information can also help districts that are experiencing rising or declining enrollment better prepare for and accommodate changes in student population.

In general, a common staffing allocation issue involves right-sizing staff for a changing student population. Districts most often encounter difficulties when student populations have declined but staffing has not been adjusted to meet the lower student population.

2. The district created and uses staffing plans detailing administrative, certificated, and classified staff by building and district-wide. The staffing plan should be based on enrollment, academic and operational goals, desired and feasible student teacher ratios, and district configuration. The plan should be reviewed annually to ensure it is up to date and appropriately outlines the district's goals and State requirements.

Staffing plans assist districts in preparing for changes in service levels and anticipating the needs of students and community members. Accordingly, proactive staff planning and allocation can help districts tie service needs to available funding and district goals.

Strategic Staffing Plans (SHRM, 2002) (http://www.shrm.org) notes that high performing organizations use plans and a system to monitor and control the cost of engaging human capital. A strategic staffing plan forms an infrastructure to support effective decision-making in an organization. SHRM elaborated on the effect of strategic staffing plans on organizations in *Staffing Strategy Over the Business Cycle* (2005). In detailing how organizations may react to changes in the business cycle, SHRM noted that <u>reductions in staffing to meet declining labor needs often did not result in anticipated savings for 12 to 18 months</u>. As a result, staffing plans tied to strategic plans and organizational needs can help organizations better meet the constraints of their operating environments.

Leading practice plans incorporate staff allocation factors such as State and federal regulations, workload measures, and industry benchmarks, as well as staffing levels determined by the administration. Tulsa Public Schools benchmarks staffing based on general fund revenues to help maintain a focus on a balanced budget when considering school staff levels. The plan is used as a guide to determine staffing levels on an annual basis, as well as mid-year, to determine if the staffing levels need to be modified based on actual enrollment. A copy of the staffing plan can be found at (http://www.tulsaschools.org/district/staff.shtm). In Ohio, Olentangy Local School District (Delaware County) and Lakota Local School District (Butler County) were using leading practice staff planning methodologies in FY 2007-08

Salaries, Benefits, and Other Compensation

3. The district compares and analyzes salary information by staff category to ensure that district salary expenditures are fair to employees and appropriate to the regional and local economy and the district. If salaries are not in line, the district could be using scarce resources in areas that do not yield the greatest benefit or undermining the stability of its organization by not sufficiently compensating its personnel. By having an appropriate salary schedule based on regional and local economic factors and district resources, the district can ensure it is compensating its employees in a fair and equitable manner.

To conduct a peer comparison, districts can compare the average salary for each classification as reported in EMIS Regular Staff Reports-- the Average Salary of Classroom Teachers by District report and the Average Salary of all School Personnel Report. Once obtained, the district should compare salary schedules from collective bargaining agreements to those of similar or neighboring school districts for both certificated and classified staff. Collective bargaining agreements are available on-line from the State Employment Relations Board. The district should also review the amount it pays for substitute teachers and the number of times substitutes are needed (to determine if sick leave use may be an issue).

Additional comparisons which can provide different perspectives on salaries include average salary per EMIS category and salary per 1,000 students by category.[2] The district can examine both the average salary per category and the salary per 1,000 students by category in comparison to similar districts. Using these calculations reduces variances caused by disparities in salaries within certain categories, as well as the effects of over or under staffing in specific categories. The following is a sample of a peer salary comparison spreadsheet:

Salary Comparison Spreadsheet Example

	District Average Salary	Peer District Average Salary	Percent Difference	District Total Salary per 1,000 Students	Peer Total Salary per 1,000 Students	Percent Difference
Administrators	$72,513	$65,891	10.0%	$334.35	$353.81	(5.5%)
Educational	$47,238	$45,178	4.6%	$2,957.72	$3,260.61	(9.3%)
Professional	$44,978	$47,588	(5.4%)	$58.60	$49.20	19.1%
Technical	$36,935	$19,486	89.5%	$48.12	$100.24	(52.0%)
Office/Clerical	$26,965	$21,669	24.4%	$175.67	$206.51	(14.9%)
Maint./Mechanic	$40,137	$40,076	0.2%	$78.44	$75.85	3.4%
Bus Drivers	$14,812	$15,271	(3.0%)	$164.04	$146,81	11.7%
Custodians/Grounds	$28,349	$28,377	(0.1%)	$155.15	$171.06	(9.3%)
Food Service	$19,742	$14,318	37.9%	$144.05	$113.05	27.4%
Totals	$40,261	$37,404	7.6%	$4,116.14	$4,477.14	(7.5%)

Source: ODE District and Peer District EMIS Reports and Enrollment

4. The district restricts retirement contributions in excess of ORC requirements to top-level administrators. The district should review its collective bargaining agreements to determine the amount it pays for staff retirement contributions by the district for employees. ORC § 3307.28 and 3309.49 require that each employer shall pay to the appropriate public retirement system a specific percentage of the employee's salary called the "employer contribution."

Some districts also "pick up" some or all of the employee's share, usually for top administrators. This obviously increases expenditures for retirement contributions and, over time, it can become an additional hidden cost that is not recognized in general salary analyses. These additional contributions may be extended to other employees in lieu of salary increases. However, districts are generally discouraged from using this rationale as a basis for picking up a portion of the employee's share, as it is often forgotten in future rounds of collective bargaining. Districts that are able to maintain only a few "pick ups" or roll back extensive pick up programs are able to realize significant cost savings over time.

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[2] The District should use the peer student population, number of FTEs per EMIS category, and average salary per EMIS category in order to calculate these figures.

5. The district routinely reviews premium costs and plan design to ensure that it is obtaining its health insurance coverage at a reasonable rate, that plan elements are consistent with those offered in other governments and the private sector, and that employees are participating in the cost of coverage at an acceptable rate. Because it constitutes a major expenditure and rates of inflation are high, district administrators should consistently review health insurance premium amounts. Health insurance premiums for medical, prescription, dental, and vision for both single and family coverage for the current year as well as prior years can be compared to like-governmental entities using the State Employment Relations Board (SERB) Annual Report on the Cost of Health Insurance in Ohio's Public Sector (http://www.serb.state.oh.us), the Kaiser Foundation Survey (http://www.kff.org), and OEA Survey of School District Health and Life Insurance Plans (http://www.ohea.org). Employee contributions for health and other types of insurance should also be compared to those listed in the SERB Annual Report (using similar sized governmental entities and those within the same geographic region), the Kaiser Foundation Survey, and the OEA Survey of School District Health and Life Insurance Plans.

Potential reasons costs may be higher include the type of plans and benefits that employees receive, whether districts have joined an insurance consortium, and/or the district's insurance claim history. Methods to decrease insurance expenditures include changing the type of plan, seeking alternative sources to purchase coverage, discussing with the current provider why the rates are significantly above the peer averages, and using plan redesign to raise co pays and change the prescription drug formulary or tiers of coverage. Some districts also seek to change employee behavior to lower their experience ratings. This can be accomplished through higher co pays and annual deductibles accompanied by an increased focus on wellness programs and chronic condition management.

A leading practice districts can implement to help control health insurance costs is a labor/management health insurance committee. Labor/management committees are used in a variety of settings to discuss and reach consensus on bargaining issues during a contract period. Health insurance committees can include members from all bargaining units representing a cross-section of employees. The committee can compare costs and contribution rates and make recommendations to the bargaining units and district administration regarding changes to health insurance plans. SERB's Bureau of Mediation encourages adoption of collaborative tools in areas like health insurance. Mediators have found that using labor/management committees helps demystify health insurance for employees and helps build consensus for cost containment strategies.

Collective Bargaining

6. The district works with its collective bargaining units to implement alternative bargaining models and to develop collaborative tools to resolve disputes. To help contain costs, the district regularly reviews the provisions of its agreements and compares them to

similar districts and State law. Changes to bargaining agreement provisions are modeled to ensure financial viability and sustainability. Finally, participating administrators are trained in collective bargaining practices. Most school districts have classified and certificated collective bargaining agreements in place for district staff which describe the different provisions that staff members abide by. During negotiations, district administration and bargaining unit representatives come to agreements on the terms of these contracts for the length of time the contract is in place. The district should review its negotiated agreements in order to ensure that the terms meet minimum standards set, but also remain conservative enough to ensure the long-term financial viability of the district.

In some instances, labor/management committees can be used to ensure a fair agreement for employees while preserving management's right to modify business practices to be more efficient or effective, or to address changes in the district's business climate. Interest based bargaining can also be used to improve the negotiation process and preserve management and worker rights. SERB routinely assists governmental entities in Ohio with implementing these models in the collective bargaining process. SERB also offers low cost training for administrators who represent the district at the bargaining table.

In evaluating the cost effectiveness of collective bargaining agreements, following are the applicable certified provisions that should be reviewed and benchmark data for comparison purposes:

- **Length of school year** (ORC § 3313.48 – no less than 182 days each school year);
- **Teaching time, contractual and actual** (OAC § 3301-35-06 – at least 5 hours for K-6 and 5.5 hours for 7-12, excluding a lunch period);
- **Planning time for teachers** (OAC § 3301-05-35 – a teacher that has a work day of 6 hours or longer, excluding lunch, shall include 200 minutes per week for planning);
- **Lunch period for teachers** (ORC § 3319.072 – a teacher shall be granted at least 30 minutes for lunch each school day);
- **Maximum class size** (OAC § 3301-35-05 – 1 full time equivalent teacher for every 25 students);
- **Reduction in force** (ORC § 3319.17 – this section enumerates reasons a district can enact a reduction in force);
- **Leave of absence – professional** (ORC § 3319.131);
- **Number of contract days** (ORC § 3313.48 – each school shall be open for instruction with pupils in attendance for not less than one hundred eighty-two days in each school year, which may include all of the following [additional details are included in the code]);
- **Evaluations** (ORC § 3319.111 – any board of education evaluating a teacher shall adopt evaluation procedures that shall be applied each time a teacher is evaluated [additional details are included in the code]);

- **Incentive (sick and personal)** (SHRM, *Managing Absenteeism Legally* and Business and Legal Reports (BLR) – using structural approaches such as incentive pay, creative shift scheduling, and cross-training can assist organizations in managing attendance proactively and lawfully. BLR encourages managers to analyze the record on absences on a regular basis to help identify emerging themes. In addition, the organization should be able to use the data to assess the effectiveness of the structural approaches put in place to control excessive leave use);
- **Sick leave accrued** (ORC § 3319.141 – each person who is employed by any board of education in this state shall be entitled to fifteen days sick leave with pay, for each year under contract, which shall be credited at the rate of one and one-fourth days per month. School employees can accrue up to 120 workdays [additional details, including those surrounding sick leave use, are included in the code]);
- **Maximum sick leave paid at retirement** (ORC § 124.39 – if an individual retires from active service with ten or more years of service with the state, they are entitled to be paid in cash for one-fourth of the value of accrued but unused sick leave credit up to a maximum of 30 days [additional details are included in the code]);
- **Number of personal days** (ORC § 3319.142 – each board of education shall adopt rules entitling regular non-teaching employees, during each school year, to a minimum of three days of personal leave at the employee's regular compensation);
- **Board pick up on the pick up** (Attorney General opinions 78-049 and 84-036 – it is proper for the board of education to pay, as part of its compensation of a teacher, the teacher's required contribution to the state retirement system) (http://www.ag.state.oh.us/legal/opinions); and
- **Retirement incentive** (ORC § 3307.54 – an employer may establish a retirement incentive plan for its employees who are members of the State Teachers Retirement System [additional details are included in the code]).

The following are the applicable classified provisions that should be reviewed as well as the appropriate criteriaagainst which they should be reviewed:

- **Work week** (ORC § 3319.086 – 40 hours is the standard work week for all non-teaching school employees);
- **Evaluations** (OAC § 3301-35-05 – classified staff shall be evaluated at regular intervals. Evaluation results shall be discussed with the classified staff in evaluation conferences);
- **Minimum call in hours** (several school districts in Ohio have established a minimum call in hours at 2 hours);
- **Number of holidays** (ORC § 3319.087 – all regular non-teaching school employees are entitled to the following holidays: Eleven or twelve month employees: New Year's Day, Martin Luther King Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. Nine or ten month employees: New Year's Day, Martin Luther King Day, Memorial Day, Labor Day, Thanksgiving Day, and Christmas Day. Less than

nine month employees are entitled to a minimum of those holidays enumerated in this section which fall during the employees' time of employment);

- **Vacation leave** (ORC § 3318.084 – non-teaching school employees, including full-time hourly-rate and per diem employees, are entitled to the following number of vacation weeks: One to nine years: two calendar weeks; Ten to 19 years: three calendar weeks; and Twenty or more years: four calendar weeks);

- **Leave non-use incentives** (SHRM, *Managing Absenteeism Legally* and Business and Legal Reports (BLR) – using structural approaches such as incentive pay, creative shift scheduling and cross-training can assist organizations in managing attendance proactively and lawfully. BLR encourages managers to analyze the record on absences on a regular basis to help identify emerging themes);

- **Sick leave** (ORC § 3319.141 – each person who is employed by any board of education in this state shall be entitled to fifteen days sick leave with pay, for each year under contract, which shall be credited at the rate of one and one-fourth days per month. School employees can accrue up to 120 workdays [additional details are included in the code]);

- **Maximum sick leave paid at retirement** (ORC § 124.39 – if an individual retires from active service with ten or more years of service with the state, they are entitled to be paid in cash for one-fourth of the value of the employee's accrued but unused sick leave credit up to 30 days [additional details are included in the code]); and

- **Number of personal days** (ORC § 3319.142 – each board of education shall adopt rules entitling regular non-teaching employees, during each school year, to a minimum of three days of personal leave at the employee's regular compensation).

Other Assessments

Other areas recommended for examination which may not yield financial savings but may present opportunities to improve procedures and practices include the following:

7. **The district has detailed recruitment plans and strategies to enhance employee retention.** National Education Association (NEA), *Meeting the Challenges of Recruitment and Retention* (2003);

8. The district collects and analyzes feedback from employees, and tries to incorporate the feedback in district planning and operations. Society for Human Resource Management's (SHRM) *Soliciting Employee Feedback: Getting Results (2004)*;

9. The district routinely evaluates the cost of special education services (as well as other specialized programs) on a per student basis and compares these costs to similar districts and State averages. Ohio laws governing special education include OAC 3301-51-07, ORC 3323.04, OAC 3301-51-06, OAC 3301-51-09, and ORC 3317.15. Because individual education programs (IEPs) govern services, districts must ensure that they continue to meet the requirements of the IEP if services undergo changes. Strategies for containing costs in special

education and other specialized programs include adjusting staffing, partnering with other districts or agencies for the provision of special education services, and/or increasing the efficiency of programs by revising and enforcing strict participation guidelines.

10. The district routinely reviews job descriptions and ensures they are up to date and reflect job duties. Job descriptions are linked to policies and procedures and annual evaluations. *Job Descriptions: A Resource Guide for School Management*, (Ohio School Boards Association, 1998). Job descriptions are valuable resources for job applicants, employees, supervisors, and human resource administrators. To be valuable, they must be accurate, up to date, and sufficiently detailed to clearly communicate expectations and prevent misunderstandings.

Conclusion

As school districts allocate the majority of their resources to personnel costs and benefits, periodically reviewing key operational and cost indicators for human resources ensures that the district expenditures are reasonable and HR expenditures are focused on the district's academic goals and mission. This is particularly important when the district may be encountering financial hardship.

Additional Resources

Attorney General opinions 78-049 and 84-036 (http://www.ag.state.oh.us/legal/opinions);

Kaiser Foundation Annual Survey (http://www.kff.org);

National Education Association (NEA), *Meeting the Challenges of Recruitment and Retention* (http://www.nea.org);

Ohio Administrative Code (OAC) § 3301-35-05, § 3301-35-06, § 3301-05-35, § 3301-51-09, § 3301-35-06, § 3301-35-05, (http://codes.ohio.gov/oac);

Ohio Department of Education (ODE) EMIS All Regular Staff per 1,000 SimDist Reports (http://www.ode.state.oh.us);

ODE Average Salary of Classroom Teachers by District Reports (http://www.ode.state.oh.us);

ODE Average Salary of All School Personnel Reports (http://www.ode.state.oh.us);

OEA Survey of School District Health and Life Insurance Plans (http://www.ohea.org);

Ohio Revised Code (ORC) § 145.48, § 3313.48, § 3319.072, § 3319.17, § 3319.131, § 3319.11.1, § 3319.141, § 124.39, § 3319.142, § 3307.54, § 3319.086, § 3319.087, § 3318.084, § 3301-51-07, § 3323.04, § 3317.15 (http://codes.ohio.gov/orc);

Ohio School Boards Association, *Job Descriptions: A Resource Guide for School Management* (http://www.osba-ohio.org);

Society for Human Resource Management (SHRM) *Managing Absenteeism Legally* and *Business and Legal Reports (BLR)* (http://www.shrm.org);

SHRM *Soliciting Employee Feedback: Getting Results* (http://www.shrm.org);

SHRM Staffing Research, *Staffing Strategy Over the Business Cycle* (http://www.shrm.org);

SHRM White Paper, *Strategic Staffing Plans* (http://www.shrm.org);

State Employment Relations Board (SERB) Annual Report on the Cost of Health Insurance in Ohio's Public Sector (http://www.serb.state.oh.us);

State Employees Retirement System (SERS) contribution rates (http://www.ohsers.org);

State Teachers Retirement System (STRS) contribution rates (http://www.strsoh.org); and

Tulsa Public Schools 2005-06 Staffing Plan issued February 4, 2005 (http://www.tulsaschools.org/district/staff.shtm).

District Resources

- Copy of job descriptions;
- District organizational chart;
- Payroll staffing list with name, title, building, classification, hours worked per day, days per year, and salary for the current and previous fiscal years and funding code;
- List of any staffing cuts made since the last EMIS data was submitted;
- Schedule of medical, dental, vision, and life insurance premiums for single and family coverage and the employee contribution (if any);
- List of employees currently covered by health insurance, indicating whether employee coverage is single or family;
- Description of benefit levels for all medical, prescription drugs, and dental plans;
- List (names and position) of employees for whom the Board pays the employee retirement contribution and the amount (or percentage) paid by the Board. ["pick up on the pick up"];
- Substitute teacher pay rates for current fiscal year;
- Most recent staffing plan covering current and future years; and
- Bureau of Workers' Compensation Experience Rating Letters for current and previous two years.

Facilities

Background

The facilities self-assessment guide provides procedures for identifying opportunities to increase efficiency levels and control or reduce costs in the area of facility management. In addition, this section provides best practice information and benchmarking statistics to aid school administrators in gauging their operational efficiency against regional, State, and national benchmarks.

Districts spend a significant amount of their operating budget on school buildings. However, few districts adequately plan and budget for facility maintenance and management. Unaddressed facilities issues can cause long-term problems that degrade the fiscal and operational health of a district. Similarly, poorly managed maintenance and cleaning operations can compromise the health and safety status of school facilities. Adjusting operations and implementing more aggressive planning and management practices can help districts maintain facilities in a more efficient and effective manner while better preparing for future capital expenditures.

Facilities Assessments

Overview

1. Does the district monitor its costs per square foot (by object), compare this information to benchmark data, and make adjustments to operations to address cost variances?
2. Does the district set custodial and maintenance staffing levels at rates commensurate with recommended workload measures? Does it provide custodial maintenance employees with procedural manuals, appropriate training programs, and regular feedback on performance?
3. Does the district review building utilization rates and adjust utilization and configuration as needed based on increases or declines in student population and changes in building use?
4. Does the district have a comprehensive facility master plan that incorporates recommended elements and is updated annually? Are elements of the master plan incorporated into a five year capital improvement plan, the forecast, and annual budget?
5. Does the district have a comprehensive facilities management program which includes a preventive maintenance program to addresses routine and preventive maintenance for critical systems?

6. Does the district have an energy management program that includes both energy efficiency building management programs and an educational program to increase staff and student awareness of energy management practices?

Facility Cost Management

1. The District compares its expenditures per square foot on an object-code basis to national data and prior years' expenses. When variances are identified, the causes are investigated and changes are made to operations to address higher than normal cost centers. Using BUDSUM reports for the 2700 function, districts should break out costs by object, dividing the costs by the total square footage of the district. When possible, utilities costs should be shown as a specific component of purchased services. Identifying trends over a three year period will help districts isolate the effects of inflation, rising utility costs, and personnel and bargaining agreement changes. An example of the basic cost breakdown is shown below:

Sample Table on Function 2700 Costs by Object

Object Code Range	Description
100	Salaries/Wages
200	Retirement/Insurance
400	Purchased Services
450	Utilities
500	Supplies/Materials
600	Capital Outlay
700	Capital Outlay -Replacement
800	Other

The following example compares a district's maintenance and operations expenditures per square foot with those reported by American Schools and Universities (AS&U). In addition to comparing expenditures per square foot with AS&U data, columns could be added to the table to show selected peer district information or a three year history of expenditures. A similar analysis can be made on a building-by-building basis to identify facilities that may be more or less efficient.

Facilities Expenditures per Square Foot Comparison

Cost Area	Your District	AS&U Median All Districts [1]
District Square Feet	879,088	N/A
Salaries/Benefits	**$1,957,971**	
Per Square Foot	$2.23	$2.54
Purchased Services	**$467,477**	
Per Square Foot	$0.53	$0.01
Utilities	**$1,448,406**	
Per Square Foot	$1.65	$1.71
Supplies/Materials	**$100,711**	
Per Square Foot	$0.11	$0.32
Capital Outlay	**$93,374**	
Per Square Foot	$0.11	N/A
Other	**$1,412**	
Per Square Foot	<$0.01	$0.49
Total Expenditures	**$4,069,351**	
Per Square Foot	$4.63	**$5.09**

[1] AS&U 36th Annual Cost Survey

Variances in the object level expenditures can reveal efficient or inefficient practices in selected areas. Higher than average personnel costs could be indicative of overstaffing or more generous wages and/or benefits. Higher costs in purchased services may indicate a reliance on contracted services—this can offset lower personnel costs, or higher personnel investments may mitigate the need to contract out specialized services.[1] Higher utility costs can be indicative of less energy efficient buildings or practices, or they may be related to spikes in the costs of fuel and electricity. Finally, supply and materials costs can reveal the efficiency and effectiveness of cleaning and maintenance practices, while capital outlay costs may reflect maintenance initiatives or delayed maintenance which may have negative future repercussions. Total expenditures per square foot provide an aggregate portrayal of the cost effectiveness of facility management functions.

Custodial and Maintenance Workload Management

2. The district sets custodial and maintenance staffing levels at rates commensurate with recommended workload measures. Efficiency staffing levels are made more effective through detailed procedural manuals and associated training programs, as well as practices like team cleaning when appropriate. Custodial and Maintenance staff members are provided regular feedback on performance. The district should calculate total full time equivalent (FTE) staff for each of the facilities classifications (custodial, maintenance, and grounds, as well as administrative personnel). FTEs are based on the total hours per year a

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[1] This is most often feasible in large districts where increased investment in trades personnel offsets the costs of contracted services.

person works divided by 2,080 hours per year.[2] Because of overlap and job sharing, districts must account for FTE's by considering the staffs' other duties and then adjusting the FTE calculations as needed.

The National Center for Education Statistics (NCES) notes there are no nationwide standards for describing "cleanliness," and the actual number of square feet that a custodian can clean depends on several variables (e.g., flooring, wall covers, and number of windows) which must be taken into account when determining workload expectations. Additionally, each school district must decide what standard of cleanliness it desires for its facilities. Level 3 cleaning is the most common cleanliness standard for school facilities and does not pose any health issues. At this level, a custodian working an 8-hour shift can clean between 28,000 to 31,000 square feet. Some variance may be noted between types of school buildings. Because of the age of students using the buildings and a higher use of carpeted spaces, elementary schools often require higher staffing levels and custodians can not clean as large an area in an 8 hour shift.

Maintenance personnel generally are responsible for about 75,000 to 100,000 square feet per FTE. This number fluctuates from year-to-year. Both the NCES and AS&U provide comparative data and benchmarks for maintenance activities. In some instances, maintenance personnel can maintain a larger area through strategies such as outsourcing and having custodians complete some light maintenance tasks.

Finally grounds keeping staff generally maintain between 20 and 40 acres per FTE. In most school districts, maintenance or custodial personnel devote a portion of their time to this function. In some districts, effective outsourcing has helped keep costs low for grounds keeping tasks.

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[2] For example, a custodian working 6 hours per day for 260 days, works 1,560 hours per year, which when divided by 2,080 gives an FTE of 0.75.

Staffing and Workload Statistics

Number of School Buildings	**9**
• Elementary Schools	7
• Middle School	1
• High School	1
Total Square Feet Maintained	**879,088**
• Administration Offices	8,660
• Elementary Schools	371,860
• Middle School	207,118
• High School	275,550
• Other	15,900
Square Feet per Custodial FTE	**27,819**
• Administrative Offices (0.8 FTE) [1]	10,825
• Elementary Schools (14.5 FTEs)	25,646
• Middle School (6.9 FTEs)	30,017
• Senior High School (9.4 FTEs)	29,314
AS&U 36th Annual Cost Survey National Median	**23,408**
NCES – School Facilities Maintenance Task Force	**29,500**
Square Feet per Maintenance FTE	**274,715**
AS&U 36th Annual Cost Survey National Median	**86,194**
Acres per Groundskeeper FTE	**65**
AS&U 36th Annual Cost Survey National Median	**44**
NCES – School Facilities Maintenance Task Force	**20**

[1] Enter the number of FTEs your district has assigned to each of the types of facilities.

If a district has low square footage per FTE, staff reductions or reallocations should be considered. High square footage per FTE would indicate the potential to add staff, which may ensure proper upkeep of the facilities and help control expenditures. Depending on the circumstances of the district, outsourcing may also be considered. Optional modes of cleaning, such as team cleaning, may be feasible in larger buildings and may enhance the effectiveness of custodial operations. Team cleaning, as described by AS&U, involves making assignments for specific duties (restrooms, vacuuming, dusting and surface cleaning, and closing) to a team of custodians, usually four employees. These individuals undertake component tasks which speeds productivity without compromising quality. When adjustments are made to building configurations or building usage, staffing levels should be reexamined.

To ensure that staff members are prepared to address their work in an efficient and effective manner, districts are encouraged to develop procedural manuals for employees. These may be as simple or comprehensive as the nature of the district requires. Training on the use of chemicals and new equipment, as well as standardized or expected cleaning and maintenance protocols and procedures, should be provided on a regular basis to ensure consistency and safe use of materials. The International Sanitary Services Association (ISSA) and NCES provide standard topics that should be covered in procedural manuals and training regimens.

The district should explain the frequency of each of the expected procedures, including details such as how often to dry mop the science lab floors or how often to spray for pest control. By using a policy and procedure manual, the district can better evaluate staff performance and ensure that the facilities are maintained as specified.

Finally, employees should be provided feedback on their performance and the level to which they meet district expectations. Per the Ohio Administrative Code, classified staff should receive annual evaluations. The facilities or custodial supervisor should obtain the input of building principals for the evaluation process. A variety of evaluation models exist, and the district should ensure that the model in use is appropriate for its staff. In any case, on-the-spot feedback enhances job performance and reinforces desired practices.

Facilities Utilization and Configuration

3. The district reviews building utilization rates and adjusts utilization and configurations as needed based on increases or declines in student population and changes in building use models. Reviews of building capacity and enrollment trends are important when planning for future facility needs and controlling facilities expenditures. Districts should routinely project enrollment trends.[3] The most typical method is the "cohort survival" method which is employed by the Ohio School Facilities Commission. Initially, districts should assemble a 10-year enrollment history to show trends in student population. An example is shown below.

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[3] Enrollment projections are also critical to planning future financial position (forecasting) and staffing (see *staffing plans* in **human resources**.)

District Historical Enrollment (Example)

Grade	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Pre K	7	2	1	3	0	16	16	2	1	0
K	41	64	42	59	51	61	52	49	46	33
1	79	46	66	46	46	56	62	55	34	44
2	78	66	43	63	48	50	45	53	49	38
3	65	77	68	40	82	56	43	39	46	54
4	57	60	60	63	38	72	49	38	42	47
5	66	53	46	52	70	53	65	45	34	46
6	65	68	54	41	49	68	44	57	48	35
7	60	61	66	49	53	74	67	46	58	56
8	51	56	69	66	59	64	69	60	46	60
9	85	70	74	79	77	78	101	79	75	62
10	65	52	53	50	73	84	73	77	76	66
11	63	51	51	53	53	66	70	67	78	70
12	42	54	38	45	43	51	58	62	68	61
Pre K-12	824	780	731	709	742	849	814	729	701	672

In this example, the enrollment has been decreasing. Future enrollment can be projected using a simple spreadsheet or through a contracted arrangement using an OSFC approved vendor. A sample of future enrollment projections is illustrated below. Projections should be updated annually and compared from year-to-year with actual enrollment so the accuracy of projections can be improved over time.

Table E: District Enrollment Projection

Grade	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Pre K	2	2	1	0	0	0	0	0	0	0
K	36	32	29	25	22	18	14	11	7	4
1	31	34	31	27	24	20	17	14	10	7
2	42	30	32	29	26	23	19	16	13	10
3	42	46	32	35	32	28	25	21	18	14
4	45	35	39	27	30	27	24	21	18	15
5	50	49	38	41	29	32	29	25	22	19
6	39	43	41	32	35	25	27	24	22	19
7	32	35	39	37	29	32	22	24	22	20
8	55	31	35	38	37	29	31	22	24	22
9	58	54	30	34	37	36	28	30	21	23
10	58	54	50	28	31	34	33	26	28	20
11	64	56	53	49	28	31	34	32	25	27
12	71	65	57	53	49	28	31	34	33	25
Pre K-12	625	566	507	455	409	363	334	300	263	225

Projected enrollment is applied to a district's existing or planned facilities. A high-level analysis can be performed by collapsing individual building calculations into single calculations for elementary, middle/junior high, and high school buildings.

The capacity for elementary school buildings is calculated by multiplying the number of regular classrooms by 25 students, the number of kindergarten and preschool rooms by 25 students for all-day programs (by 50 for half-day programs), and the number of special education classrooms by 10 students. The capacities for each category (elementary, kindergarten/preschool, and special education) are then totaled to arrive at the capacity for elementary grade buildings. Classrooms used for gym, music, art, library, and computer labs (collectively known as special use rooms) are excluded from the number of rooms used in the calculation. The capacity for middle schools and high schools is calculated by multiplying the number of regular classrooms by 25 students and special education classrooms by 10 students. Special use rooms are also excluded from these calculations.

Building capacity divided by actual and projected enrollment results in the "utilization rate." A utilization rate of eighty-five percent is considered "optimal." A simplified example of this analysis is shown below. Districts can calculate capacity for individual buildings to obtain a better picture of where excess capacity or crowding may be occurring within the district.

Sample Building Capacity and Utilization Rate Analysis

Building	# of Regular Classrooms	Building Capacity	200A-0B Head Count	Building Utilization Rate	Over or Under
Elementary (k-6)	17	510	297	58.2%	Under
High School (7-12)	24	600	375	62.5%	Under
Total for District	41	1,110	672	60.5%	Under

If the analysis shows that buildings are at optimal capacity or over-capacity and the enrollment trend indicates increasing enrollment, a district is better able to plan for an expansion of its facilities. Under-utilization can help identify opportunities to close current buildings and reduce operating expenditures. Depending upon conditions and likely future scenarios, it is helpful for districts to incorporate several scenarios for building utilization into the facility master plan.

Master Planning

4. Districts should develop facility master plans covering a ten year period. These plans should be updated annually. Elements of the master plan should be selected for incorporation into a five year capital improvement plan which should then be factored into the forecast and annual budget. District master plans should incorporate recommended elements to ensure a comprehensive plan is in place to maintain district facilities.

Master planning is essential for establishing short and long-term goals for school district facilities. Master planning includes remodeling, building maintenance, and considerations about the future needs of the district. A successful master plan will establish priorities, set a framework for decision-making, and identify funding sources for proposed maintenance, remodeling, and construction. However, the plan should be sufficiently flexible to accommodate changes in the district enrollment, State and federal laws, and the condition of district facilities.

In developing its master plan, the district should consider the following:

- Plan futuristically and realistically for remodeling and new construction;
- Consider future trends;
- Plan for small projects, not just big-ticket construction;
- Consider net to gross space ratios when planning a new building or addition;
- Understand that room dimensions are important for learning;
- Have a third party review the plan;
- Portray building capacity and utilization accurately to the public;
- Include building maintenance in the plan;

- Facilitate partnerships with community leaders; and
- Create and promote a facility master plan that benefits the entire community.

Creating a Successful Facilities Master Plan (DeJong, 2001) recommends facility master plans incorporate several elements:

- Capital improvement and financing,
- Preventive maintenance/work orders,
- Overall safety and condition of buildings,
- Enrollment projections, and
- Capacity analysis.

The plan should be developed on a foundation of sound data and community input. A facilities master plan, if developed appropriately, can have a significant effect on the quality of education in a school district. As a road map, this plan should specify the projects that have been identified, the timing and sequence of the projects, and their estimated costs. A district-wide facility master plan is typically a 10-year plan but it should be updated periodically to incorporate improvements that have been made and changes in demographics or other educational directives.

Information in the long-range master facilities plan provides a base for a capital improvement program. A capital improvement program is a schedule of capital improvements, listed in priority order, over a number of years (usually five or more). The capital improvement program's time span typically coincides with the long-range plan. In contrast to the long-range plan, the capital improvement program is a set of proposed actions for specific projects to meet the needs identified in the long-range plan. If the long-range plan offers a range of alternatives, the capital improvement program identifies a specific course of action the district intends to take. Capital improvement programs typically include remodeling and new construction, as well as major maintenance projects.

To maintain an up-to-date master plan, districts should conduct regular facility audits as a component of routine maintenance. *The Planning Guide for Maintaining School Facilities* (NCES, 2003) describes a facility audit as a comprehensive review of a school district's buildings. The audits are a standard method for establishing a baseline of information about the components, policies, and procedures of existing facilities. Facility audits are important because they help planners, managers, and staff know the condition of facilities, service history, maintenance needs, and location. The audits rely on facts, not guesswork, to establish plans for maintaining and improving school facilities, and allow in-depth analyses of product life cycles to occur on a routine basis, measuring actual life versus expected life. Once initiated, audits must be performed on a regular basis (e.g., annually) because conditions change constantly. If facility audits are an ongoing feature of maintenance management, each year's data can be used as a baseline, making the next year's audit task easier.

Facility audit information should be contained in a facility data management system (*Planning Guide for Maintaining School Facilities* (NCES, 2003)). This system should document the current status of the major systems and components in every school building; the capital and maintenance needs of every school building; and the short and long-term needs of the district, thus meshing components of the facility audit, capital plan, and master plan. The information can be contained in a spreadsheet or database or, if available, a comprehensive facilities management program.

By integrating the findings of annual audits over time, planners can ascertain realized product life cycles, the impact of various maintenance strategies and efforts on product life cycles, and the future demands the aging process might place on the infrastructure of a school district. This information can be used to increase the efficiency and cost effectiveness of facility use and maintenance efforts in the future.

Preventive Maintenance

5. The District has a comprehensive facilities management program which includes a preventive maintenance program to addresses routine and preventive maintenance for critical systems. The facilities management program is linked to its master plan and facility audits. Using its facility audit and building inventory, the district should compare the condition of all equipment to the manufacturer's recommended life cycle and schedule regular maintenance tasks. Using manufacturer recommended life and maintenance cycles (balanced with available finances), the district should develop a facilities management program. A well-designed facilities management system generally encompasses four categories of maintenance, including: emergency (or response), routine, preventive, and predictive. Routine and preventive maintenance tasks can be scheduled on an electronic calendar or spreadsheet and are generally based on manufacturer recommended service intervals. Predictive maintenance also can be scheduled and can be based on manufacturer recommendations or known issues with a piece of equipment or system.

According to *Preventative Maintenance for Local Government Buildings* (Minnesota Office of the Legislative Auditor), preventive maintenance means the regularly scheduled repair and maintenance needed to keep a building component operating at peak efficiency and extend its useful life. It includes scheduled activities intended to prevent breakdowns, such as periodic inspections, lubrication, calibrations, and replacement of equipment. Because prolonging the life of major building systems requires periodic replacement of equipment, preventive maintenance typically requires both capital and operating expenditures. Practicing effective routine and preventive maintenance helps ensure the following:
- Preserve taxpayers' investments in public buildings;
- Help buildings function as they were intended and operate at peak efficiency, including minimizing energy consumption;

- Prevent failures of building systems that would interrupt occupants' activities and the delivery of public services;
- Sustain a safe and healthful environment by keeping buildings and their components in good repair and structurally sound; and
- Perform cost effective maintenance.

A maintenance program should contain the following elements to ensure success:

- Inventory building components and assess their conditions;
- Build the capacity for ranking maintenance projects and evaluating the costs;
- Plan strategically for preventive maintenance in the long and short-term;
- Structure a framework for operating a preventive maintenance program;
- Use tools to optimize the preventive maintenance program;
- Advance the competence of maintenance workers and managers; and
- Involve appropriate maintenance personnel in decision-making and communicating buildings' needs.

As building systems represent a major cost to school districts, attention to the ongoing maintenance of these systems is essential to ensure maximum life cycles and control facility costs.

Energy Management and Conservation

6. The district has an energy management program that includes both energy efficiency building management programs and an educational program to increase staff and student awareness of energy management practices. Energy costs continue to rise and funds spent on uncontrolled energy costs detract from resources available for use in the classroom. Energy costs usually represent a large portion of the district's manageable or variable costs when compared to other more fixed expenditures, such as salaries and benefits that are contractually stipulated.

The district should develop an energy management policy that stresses its commitment to containing costs through conservation programs and education of staff and students. The district should develop a program staff and budget, and should monitor the progress of the energy management programs. By separating out the utilities costs from the purchased services line item, the district can better monitor energy costs. The district can use the cost data to track utilities costs per square foot, and costs per building.

There are a variety of maintenance and operations options available to help control energy costs. These include the following:

- Energy tracking and accounting, which stress recording energy usage by building;

- Voluntary energy awareness, which focuses on educating faculty, staff, and students on energy costs;
- Performance contracting, which involves hiring a company to monitor and implement cost saving measures on behalf of the district; and
- Quick and low cost strategies, which include installing weather stripping and insulating pipes.

Additional specific steps a district can implement to help control energy use include:

- Establish an energy policy with specific goals and objectives;
- Assign someone to be responsible for the district's energy management program, and give this energy manager access to top-level administrators;
- Monitor each building's energy use;
- Conduct energy audits in all buildings to identify energy-inefficient units;
- Institute performance contracting (i.e., contracts requiring desired results rather than simply a list of needed products) when replacing older, energy-inefficient equipment;
- Reward schools that decrease their energy use;
- Install energy-efficient equipment, including power factor correction units, electronic ballast, high-efficient lamps, night setbacks, and variable-speed drives for large motors and pumps; and
- Install motion detectors that turn lights on when a room is occupied (and off when the room is unoccupied).

According to *School Operations and Maintenance: Best Practices for Controlling Energy Costs* (U.S. Department of Energy, 2004), a district can focus on several potential areas to reduce excess energy consumption. These areas include:

- Lighting strategies;
- Computers and office equipment;
- The building envelope;
- HVAC;
- Water heating;
- Kitchens; and
- Vending machines.

Small items, such as electric heaters, window air conditioners, and small refrigerators can also represent substantial utility costs. Districts should develop and enforce policies to minimize the use of these appliances in the classroom.

Several districts have also implemented energy conservation education programs that have netted reduced energy use. For example, Spring Independent School District (Spring ISD) outside of

Houston, Texas achieved energy savings by developing policies and programs to promote and reward student and staff participation in energy conservation. It developed a rebate program that rewards each school for efficient energy use by sharing savings with any school that reduces its usage below the budgeted amount. The school receives a check for 50 percent of the savings amount. Spring ISD's Office of Construction and Energy reviews actual energy costs against budgeted amounts and sends a monthly report to each school. Principals encourage students and staff to participate in activities such as turning off lights and closing doors when leaving a room to retain conditioned air in the classrooms. Some principals have encouraged operational staff by sharing cost savings with them. The district saved 7 to 14 percent per year for the five years of the rebate program.

Also, more than 2,000 Texas schools participate in the State Energy Conservation Office's Watt Watchers and WATTEAM Programs. Student teams patrol assigned areas of their school, checking for lights left on in unoccupied rooms. "Tickets" or thank you notes are left for the occupants to remind them to turn off lights when they are not needed. This hands-on energy education program for students can actually save up to 30 percent on utility costs.

In Ohio, Lakota Local School District's (Butler County) Union Elementary School has an energy conservation education program which consists of lists of energy conservation reminders being placed on or near all office equipment and energy consuming items. In addition, Union Elementary reiterates these reminders to students, parents, and community members through their continued inclusion in the building's community newsletters. These energy conservation education measures were observed as producing savings for Union Elementary of approximately 21 percent relative to the District's average elementary building.

Implementing an energy management program can yield savings of 5-15 percent of typical costs depending on the age and condition of a district's facilities, its use of HB 264 funds to improve energy efficiency, and the degree of prior implementation of energy management programs. Any programs should be documented, reviewed annually, and reported to stakeholders to illustrate district efforts.

Other Assessments

Other areas recommended for examination which may not yield financial savings but may present opportunities to improve procedures and practices include the following:

7. **The district has a work order process and system which allows it to collect and prioritize requests, track costs and job status, and report progress to stakeholders.**

8. Custodial and maintenance overtime costs are minimized through the use of formal procedures and policies governing overtime use. Likewise, the circumstances prompting

overtime usage are regularly examined and, when possible, the conditions are addressed to minimize overtime.

9. The district has adequate formal policies and procedures governing how to contract for services, monitor purchased services, and ensure contractor compliance with requirements and performance. Recommended practices promulgated by the Government Finance Officers Association should be used to develop contracting policies and procedures. In addition, the district should centralize purchasing for custodial and maintenance supplies and, when possible, use cost savings strategies like participating in consortia.

10. The district has implemented automated building controls that also monitor security and critical systems, eliminating the need for weekend building checks.

Conclusion

Considering the amount of resources school districts invest in facilities, periodically reviewing key operational and cost indicators for facilities helps ensure that these resources are spent wisely and managed appropriately. This is especially critical when school districts face financial hardship and budget shortfalls. The benchmarks and recommendations identified in this section of the self-assessment guide will help districts increase the efficiency and effectiveness of facility operations, and identify possible cost-reduction strategies without negatively impacting the quality of services provided.

Additional Resources

American Schools and Universities, *The Visionary Master Plan*, 2003. (http://asumag.com).

Brevard County, Florida, *Custodial Procedure Manual* and *Custodial Standards Manual*, 2005-06. (http://www.brevard.k12.fl.us)

DeJong and Associates, *Defining Capacity*, 1999 (http://www.dejonginc.com/definingcapacity.pdf)

Department of Administrative Services, general information on Ohio's Cooperative Purchasing programs, (http://das.ohio.gov/gsd/Procurement/Coop/ods.htm)

Franklin Hill and Associates, *Educational Facility Master Planning*, 2005. (www.schoolfacilities.com).

ICMA, *Performance Measurements, and Benchmarks in Local Government Facilities Maintenance*, 2002. (http://bookstore.icma.org)

NCES, *Planning Guide for Maintaining School Facilities*, 2003. (http://nces.ed.gov)

Ohio Department of Education for historical enrollment, similar district data, etc. (www.ode.state.oh.us)

The Ohio School Facilities Commission (OSFC): information on enrollment projections, facility assessments, energy management, and funding for construction projects. (http://www.osfc.state.oh.us/whatwedo/FacilityPlanning.html#Enrollment)

Society for Human Resources Management, *Preparation of the Employee Handbook*, 2002 (http://www.shrm.org/).

U.S. Department of Energy, *Best Practices for Controlling Energy Costs*, 2004. (http://www.ase.org/uploaded_files/greenschools/School%20Energy%20Guidebook_9-04.pdf)

Pupil Transportation

Background

This section of the self-assessment guide provides procedures for identifying opportunities to increase efficiency levels in the provision of pupil transportation services. In addition, this section provides benchmarking statistics based on data that is reported annually by school districts via T reports and then compiled by the Ohio Department of Education (ODE). School administrators can use this information to gauge their operational efficiency against regional, State, and national benchmarks.

Pupil transportation is a form of public transportation that is designed to be safe and efficient while serving as many students as possible. Districts spend a sizeable amount of their operating budgets on pupil transportation services, typically about 5 to 6 percent of General Fund expenditures. However, districts often do not revise routing with sufficient frequency or reduce fleet size to correspond with declining enrollment. Unaddressed utilization issues create conditions of diminished efficiency and raise costs. Similarly, poorly managed maintenance and bus replacement plans can compromise the safety of school buses. Adjusting operations and implementing more aggressive planning and management practices can help districts operate their transportation services in a more efficient and effective manner while better preparing for future bus replacement and maintenance expenditures.

Transportation Assessments

Overview

1. Does the district review and update its transportation plan on a regular basis to ensure it meets the needs of the district and all State legal requirements surrounding pupil transportation?
2. Has the district implemented formal standard operating procedures to ensure the accuracy, quality, and timeliness of transportation-related information?
3. Does the district analyze operating costs on a per-pupil, per-bus, and per-mile basis to identify areas of higher-than-average costs? Does it take steps to control costs in these areas when identified?
4. Does the district evaluate the efficiency of its transportation program and use proven strategies and creative approaches to enhance ridership and efficiency levels?
5. Does the district monitor special needs transportation costs and conduct cost/benefit analyses to ensure it is providing services in an efficient and effective manner?

6. Does the district minimize the number of spare buses to reduce maintenance, insurance, and replacement costs?
7. Does the district track the maintenance cost per bus and use this data to make informed bus replacement decisions? Does it have and follow a Board approved bus replacement plan? Is preventive maintenance used effectively to ensure the longevity of the fleet?

Pupil Transportation Issues

1. The district has a transportation plan, articulated in Board policy, that reflects the needs of the district and the requirements of State law. The transportation policy reflects actual district service levels. Transportation services should be developed with input from the local board of education, the transportation supervisor, the district treasurer/business manager, and the special education coordinator. In some instances, the district will also include the Ohio Department of Education, Pupil Transportation Department in modifying or redesigning its services. A district's transportation plan typically includes the designation of walk-in areas to school, identification of hazardous areas, the location of bus stops, and details pertaining to planning bus routes. These items should be maintained and revised on an annual basis. Whenever possible, the information should be communicated to stakeholders on the district's web site.

In some instances, districts may establish a safety committee that is responsible for reviewing the bus routes for safety hazards and reporting the results to the Board for approval. In using this method, the district should develop procedures that require a re-evaluation of all hazardous areas every three years and that identify specific issues that should be considered when assessing student safety. Other options for identifying and resolving transportation hazards include instructing bus drivers to report hazards, requiring administrative personnel to drive routes and identify hazards, and/or relying on local law enforcement to identify hazardous locations.

Other issues, such as the ability of a school district to accommodate day-care arrangements, alternative bus stops, and the length of time a student rides on a bus are also determined by the district, often by the Board with input from district administrators. These issues should, at a minimum, be addressed in district procedures. Optimally, they are included in Board policy.

As a component of the transportation plan and district policies and procedures, districts must abide by the following minimum standards pertaining to the provision of pupil transportation services, as stipulated in Ohio Revised Code (ORC) Chapter 3327 and Ohio Administrative Code (OAC) Chapter 3301-83:

- Districts are prohibited from charging pupils for transportation services.

- Transportation shall be provided for all resident school pupils in grades K-8 who live more than two miles from the school to which they are assigned by the local board of education of the district of residence.

- Pupils attending community or non-public schools are entitled to the same transportation services (further limited under law by a 30-minute eligibility rule) as public school pupils.

City, local, and exempted village school districts may provide transportation for resident pupils in grades 9 through 12. They may also provide transportation for students who live less than two miles from school. However, transportation of riders living less than one mile from school is not reimbursed by ODE. Although subsidized by the State, transportation services provided above minimum standards are considered by ODE to be discretionary spending items.

In the event a pupil is deemed "impractical" to transport, ORC § 3327.02(C) stipulates that a local board must offer payment in lieu of transportation. The Auditor of State (AOS) typically recommends that districts work to effectively identify – via formal policies/procedures and planning – impractical riders and to pursue payment in lieu options when applicable. Finally, districts may be required to transport non-public and/or community school pupils on days when public schools are not in session. Therefore, AOS also recommends that districts submit the appropriate form (T-1S) to ODE for the reimbursement of the cost of additional miles traveled on such days.

Internal Controls

2. The district has developed and implemented formal standard operating procedures to ensure the accuracy, quality, and timeliness of transportation-related information. Formal procedures surrounding the provision of transportation services are collected in a transportation department manual and drivers' handbook. The district collects reimbursement from the appropriate service groups/funds for non-routine trips. The majority of this information is captured in T-reports (T-1, T-1S, T-2, etc.), which districts must annually submit to ODE, but also in motor fuel tax refund applications (MVF 31) and claim forms (MVF 81) submitted to the Ohio Department of Taxation (ODT). This information is necessary for management reporting and monitoring purposes (e.g., tracking riders per bus, maintenance cost per bus, etc.), as well as for receiving all State reimbursement revenue.

Typically, the district transportation coordinator works with the treasurer (or business manager), superintendent, and Education Management Information Systems (EMIS) coordinator to collect necessary data and submit reports to the State. Districts should formalize this process through standard operating procedures which document, in detail, the activities of all positions responsible for providing, collecting, reconciling, reporting, and submitting this information. This strengthens internal controls by ensuring that transportation data is collected in accordance with State instructions (e.g., October ridership counts), reconciled, verified, and submitted in a timely manner. In the event of turnover, formal standard operating procedures also ensure continued service delivery in the absence of employees with institutional knowledge. Finally,

formal procedures help to ensure that districts are collecting all State revenue for which they are entitled.

At a minimum, districts should conduct their ridership count in October as prescribed by ODE. Optimally, districts collect ridership information and tailor services at multiple points throughout the year. Similarly, high quality information is derived from specific and detailed financial information. Districts should ensure that the financial information related to transportation services is sufficiently detailed to allow accurate decision making. In any case, non-routine transportation should be clearly identified and all special education transportation costs should be captured and reported.

Non-routine miles typically include travel for field trips and extracurricular activities for which districts are not legally obligated to provide transportation and do not receive State-reimbursement. As a result, AOS also recommends that districts seek reimbursement from appropriate educational groups and/or activity funds (e.g., boosters, athletic department, etc.) to cover the actual cost of non-routine transportation. Non-routine miles should typically not exceed 10 percent of total fleet mileage.

Districts should collect procedures related to pupil transportation in department policies and procedures to ensure the maintenance and transference of knowledge among transportation department personnel. Critical information, including bus safety information, routing information, and transportation regulations should also be compiled in a driver handbook.

Transportation Efficiency

3. The district analyzes operating costs on a per-pupil, per-bus, and per-mile basis to identify areas of higher-than-average costs. Steps are taken to control costs in areas such as personnel, maintenance, and fuel. ODE provides an operation cost analysis for each fiscal year based on T-2 report expenditures. In FY 2005-06, the cost per Type I pupil, annual routine mile and active bus for each T-2 line item for the Statewide average for transportation is presented **Table 4-1**.

Table 4-1: Statewide Benchmark Costs per Type I Rider, Mile, and Active Bus

	Cost per Rider	Cost per Annual Routine Mile	Cost per Active Bus
Salaries:			
Regular Bus Drivers	$217.91	$1.37	$15,570.82
Substitute Bus Drivers	$16.48	$0.10	$1,177.51
Total Bus Drivers	$234.39	$1.47	$16,748.33
Supervisors	$22.82	$0.14	$1,630.82
Mechanics	$29.08	$0.18	$2,078.14
Mechanics Helpers	$3.55	$0.02	$253.58
Secretary – Clerk	$9.72	$0.06	$694.69
Bus Attendants	$0.67	$0.00	$47.57
Total Support Staff	$65.84	$0.41	$4,704.80
Other Staff Costs	$145.14	$0.91	$10,370.90
Total Staff Costs	$445.38	$2.79	$31,824.06
Maintenance and Repairs	$32.33	$0.20	$2,309.90
Fuel	$67.66	$0.42	$4,834.68
Tires and Tubes	$5.30	$0.03	$378.89
Bus Insurance	$13.29	$0.08	$949.91
Other	$22.75	$0.14	$1,625.57
Total	**$586.71**	**$3.68**	**$41,922.98**

Source: ODE

Table 4-1 shows that the Statewide average for Type I transportation is approximately $587 per rider, $4 per annual routine mile, and $42,000 per active bus for FY 2005-06. Districts can compare their cost ratios with the Statewide average or other districts. This will allow districts to determine more specifically where excess dollars are spent. Salaries, maintenance/repairs, and fuel are typically considered to be the highest operational cost categories for district transportation departments. Districts can use these benchmarks to assess transportation-related staffing levels and to compare operational costs per pupil, annual routine mile, and per active bus. In consideration of high operational cost categories, AOS typically recommends:

- **Salaries**: Review collective bargaining agreements and reduce guaranteed minimum payments for bus drivers to include only those hours that are actually worked;
- **Maintenance and repairs**: Formally evaluate the costs and benefits of in-house vs. outsourced mechanics; and
- **Fuel and bus insurance**: Review procurement practices to ensure the district issues competitive bids (or formal requests for proposals), purchases fuel and supplies in bulk, and/or joins a purchasing cooperative/consortium.

The average cost per pupil by type for FY 2005-06 is presented in **Table 4-2**:

Table 4-2: Cost per Rider by Type, FY 2005-06

	Type I Board- Yellow Bus	Type II Contractor- Yellow Bus	Type III Public Transit	Type IV Payment in Lieu	Type V Board Owner Other Vehicles	Type VI Privately Owned Other Vehicles	All Types
Cost per Rider	$587	$829	$268	$161	$1,395	$4,078	$579

Source: ODE pupil transportation reimbursement analysis

Table 4-2 shows the average cost for all types of riders is $579, while Type VI is the most expensive. Type IV, payment in lieu is the least expensive method, assuming a district reimburses parents/guardians at the same rate per rider as ODE. Districts can use the information on operating costs to determine the most effective means of providing transportation to students.

4. The district evaluates the efficiency of its transportation program and uses proven strategies and creative approaches to enhance ridership and efficiency levels. Type I (i.e., district-owned) buses are evaluated specifically because these typically account for a significant majority of a district's regular needs transportation-related operating costs.

National efficiency ratings (or utilization rates) are set based on two students per seat. Therefore, a 72 passenger bus is considered well-utilized if it transports 48 to 50 students per run. ODE also provides efficiency targets for each school district but adjusts these based on the number of riders, square miles of the district, and assigned buses. Riders per mile and riders per bus are adjusted by the rider population density (riders/square miles). Districts that are relatively small (square miles) with a high number of riders can more easily achieve a high number of riders per bus, while a district that is geographically large with fewer riders will experience lower riders per bus.

To determine efficiency, districts should examine the number of riders per bus in relation to their ODE efficiency ratings and the national benchmarks. If a district falls below the recommended utilization rate, it should examine the following options to increase efficiency:

- Increase/decrease the number of bell schedule tiers as necessary to accommodate changes in ridership/enrollment;
    - In some cases, it may be more efficient to change from multiple tiers to a single tier depending on enrollment and district configuration. The higher number of buses that may be required can sometimes be offset by lower personnel costs.
- Monitor routes throughout the year and adjust for changes in ridership;
    - These changes can include enrollment fluctuations and trends, and know patterns of bus use based on extracurricular activities and weather conditions.
- Coordinate school bell times to maximize transportation efficiency;

      o   Routes may be adjusted to ensure buses do not idle or have long layovers between routes.

- Maximize ridership capacity with a goal of 50 riders per bus per tier;
  - Using cluster stops and routing using "hubs" can help enhance the number of riders per bus.
- Change policies to only transport students living more than one mile from school;
  - Reducing total riders by expanding the walking area to a school can alleviate the need for additional buses.
- Review and file accurate T-reports with ODE;
  - Inaccurate T-reports can hamper analysis and, ultimately, reimbursement rates.

Other factors which are not within the control of a district and which can inhibit how efficiently a district performs transportation services include the following:

- Declining (or open) enrollment;
- High severe special needs population requiring specialized transportation;
- Large number of community and private schools that require district transportation;
- Private and community schools that are unable to accommodate requested bell times; and
- Fewer riders within a large geographic area.

Fleet Management

5. The district monitors special needs transportation costs and conducts cost/benefit analyses to ensure it is providing services in an efficient and effective manner. While special needs pupils typically account for a small percent of average daily membership (ADM), costs per rider to transport could be significant.[1] Higher average costs per rider may be attributable to a higher special needs percentage of ADM, as well as the method of transport. AOS has found that, typically, transporting special needs students on board-owned buses is less expensive than through contracted vendors (e.g., taxis). Regardless, AOS recommends that districts formally evaluate the costs and benefits of transportation service delivery alternatives.

Transportation personnel should be included in individualized education program (IEP) meetings to ensure the most cost efficient method of transporting special needs students. Frequently, special needs education professionals are not aware of the more cost effective options available to transport special needs students. Where appropriate, districts should also consider promoting parent/guardian contracts for transportation, as well as working with neighboring districts or educational service centers (ESCs) to consolidate services.

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[1] The FY 2006-07 State average cost for special needs transportation was $4,819 per rider.

6. The district minimizes the number of spare buses to reduce maintenance, insurance, and replacement costs. On average, active buses should comprise at least 80 percent of a school district's bus fleet and travel a significant majority of annual routine miles. Spare buses, on the other hand, should account for no more than 20 percent of fleet size and typically travel more non-routine miles. This information is reported annually to ODE via district T-1 and T-2 reports. Districts can use these benchmarks to assess the size of bus fleets, eliminate excess spare buses, and replace older, high-mileage/high-cost buses.

7. The district tracks the maintenance cost per bus and uses this data to make informed bus replacement decisions. A Board-approved bus replacement plan is used to maintain an appropriate age and condition in the fleet. Preventive maintenance is used to extend the effective life-span of the buses. Older buses can require more maintenance and repairs and could be more costly to the district. Districts need to track costs per bus, including the labor hours and labor costs, in addition to supplies and parts, to achieve maximum efficiency. When maintenance costs are excessive, it may be more cost effective to purchase a new bus. Based on best practices and interviews with pupil transportation professionals, districts should develop a formal vehicle replacement plan that compares the benefits of replacement (e.g., reduced maintenance costs) with costs (e.g., purchase price), as well as the availability of funds, such as annual ODE bus purchase subsidies.

Other Assessments

Other areas recommended for examination which may not yield financial savings but may present opportunities to improve procedures and practices include the following:

8. Bus schedules and routes have been streamlined to increase efficiency. When appropriate, computerized routing software is used to enhance routing.

9. The district has eliminated excess bus stops and service to students who live within walking distance of school buildings. Cluster stops, located at or near the State maximum distance of up to ½ mile, have been implemented where practical.

10. The district submits the appropriate form (T-1S) to ODE for the reimbursement of the cost of additional miles traveled by district buses to provide required transportation services to approved non-public, community, or vocational schools on days when public schools are not in session.

11. The district solicits competitive bids and/or issues RFPs when selecting a vehicle maintenance/repair provider or purchasing bus fuel and insurance. When practical, it purchases fuel in bulk (or via a purchasing consortium) and submits appropriate forms (MVF 31 and MVF 81) to ODE for the reimbursement of State fuel taxes.

12. The district performs cost/benefit analyses to ensure its mode of transportation (district-owned buses, contracted vendors, or other private transportation services) is the most cost effective. When practical, it works with neighboring districts and/or ESCs to consolidate pupil transportation services.

Conclusion

ODE indicates that, on average, districts were reimbursed for nearly 54 percent of the local cost of pupil transportation services in FY 2005-06. When school districts face financial hardship and budget shortfalls, they are required to identify areas of cost savings to avoid budget deficits. In many cases, districts identify reductions to non-classroom related programs and operations, including pupil transportation services. Pupil transportation is a common first step because many districts provide these services in excess of State minimum standards. However, because State reimbursements have been historically based on a district's total ridership, a reduction in service may result in a net loss of revenue for the district. The benchmarks and recommendations identified in this section of the self-assessment guide will help increase the efficiency and effectiveness of pupil transportation operations, without negatively impacting service levels.

Additional Resources

Ohio Revised Code (ORC) Chapter 3327 (http://codes.ohio.gov/orc/3327)

Ohio Administrative Code (OAC) Chapter 3301-83

Ohio Department of Taxation: Form XT 2003-08 Excise motor fuel tax reimbursement. form
http://dw.ohio.gov/tax/dynamicforms/searchresults.asp

Ohio Department of Administrative Services General Services, Cooperative Purchasing Program
http://das.ohio.gov/gsd/Procurement/Coop/ods.htm

Transporting the Nation's School Children (National Association of State Directors of Pupil Transportation
Services) http://www.nasdpts.org/

Courtesy, Service, Protection (Texas Department of Public Safety)

Government Finance Officers Association (http://www.gfoa.org)

Public Utility Commission of Ohio
(http://www.puco.ohio.gov/PUCO/GIS/MapInfo.cfm?id=5756) maps of all the school districts
in the state of Ohio

Ohio Department of Education
(http://www.ode.state.oh.us/GD/Templates/Pages/ODE/ODEPrimary.aspx?Page=2&TopicID=4
&TopicRelationID=99) pre-service driver training, pupil transportation publications,
transportation safety, pupil transportation finance, rules and requirements for pupil
transportation, Statewide email on pupil transportation.