

# Managing for Results in America's Great City Schools 2013

RESULTS FROM FISCAL YEAR 2011-12



**ActPoint KPI**  
PERFORMANCE MANAGEMENT SYSTEM

A REPORT OF THE PERFORMANCE MEASUREMENT AND BENCHMARKING PROJECT

OCTOBER 2013



To Members of the Council of the Great City Schools –

We are pleased to present the 2013 edition of *Managing for Results in America's Great City Schools* to the membership and the public. Both the report and the web-based system, developed by TransAct Communications, Inc., are components of the *Performance Management and Benchmarking Project*, an initiative created by the Council of the Great City Schools to define, gather, and report data on key performance indicators (KPIs) in various non-academic operations of school district management. The operational areas include finance (accounts payable, cash management, compensation, financial management, grants management, procurement, and risk management); business services (food services, maintenance and facilities, safety and security, and transportation); human resources; and information technology.

The goal of this project is to define benchmarks in a way that will allow urban school districts to assess their performance and set strategic goals based on the data. The project adheres to the notion that when a district measures its performance and compares itself to others, it can better identify where it is successful, where it needs to improve, and how to do so strategically.

An increasing number of school systems have come to rely on the results of this project as an essential strategic tool. They have found that once they bring data and performance measurement into the governing and management process it lays the foundation for a more results-oriented school system.

The 2013 report reflects several changes and improvements in the KPIs over previous years. Metric definitions and their survey questions have been updated and revised based on district feedback. As a result, the data in this report are more precise and more comparable than in earlier years. This report also introduces several new visualizations of the data, which can be found in the “Featured Analysis” page of each section. These charts are prepared to provide models for how districts might think about analyzing their own data.

There are many other important aspects of this report that cannot be summarized briefly, but we hope you will take the time to explore its pages. The *Performance Management and Benchmarking Project* will continue to be one of the Council's most important initiatives and one of the most innovative and promising developments in public education in many years. The Council will continue to develop new performance measures that spur accountability and improvements in urban public school systems. A special thanks to Jonathon Lachlan-Haché, Special Projects Specialist for the Council, who has managed the project this past year, and to so many others who have lent their time and expertise to further these goals.

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# INTRODUCTION

## OVERVIEW

### The Performance Management and Benchmarking Project

In 2002 the Council of the Great City Schools and its members set out to develop performance measures that could be used to improve business operations in urban public school districts. The Council launched the Performance Measurement and Benchmarking Project to achieve these objectives. The purposes of the project were to:

- Establish a common set of **key performance indicators** (KPIs) in a range of school operations, including business services, finances, human resources, and technology;
- Use these KPIs to benchmark and compare the performance of the nation’s largest urban public school systems;
- Use the results to improve operational performance in urban public schools.

Since its inception, the project has been led by two Council task forces operating under the aegis of the organization’s Board of Directors: the Task Force on Leadership, Governance, and Management, and the Task Force on Finance. The project’s work has been conducted by a team of member-district managers, technical advisors with extensive expertise in the following functional areas: business services (transportation, food services, maintenance and operations, safety and security), budget and finance (accounts payable, financial management, grants management, risk management, compensation, procurement and cash management), information technology, and human resources.

### Methodology of KPI Development

The project’s teams have used a sophisticated approach to define, collect and validate school-system data. This process calls for each KPI to have a clearly defined purpose to justify its development, and extensive documentation of the **metric definitions** ensures that the expertise of the technical teams is fully captured. (The definitional documentation for any KPI that is mentioned in this report is included in the “KPI Definitions” section of each functional area.)

At the core of the methodology is the principle of **continuous improvement**. The technical teams are instructed to focus on operational indicators that can be *benchmarked* and are *actionable*, and thus can be strategically managed by setting improvement targets.

From the KPI definitions the surveys are developed and tested to ensure the comparability, integrity and validity of data across school districts.

### Power Indicators and Essential Few

The KPIs are categorized into three levels of priority—Power Indicators, Essential Few, and Key Indicators—with each level having its own general purpose.

- **Power Indicators:** Strategic and policy level; can be used by superintendents and school boards to assess the overall performance of their district’s non-instructional operations.
- **Essential Few:** Management level; can be used by chief executives to assess the performance of individual departments and divisions.
- **Key Indicators:** Technical level; can be used by department heads to drive the performance of the higher-level measures.

This division is more or less hierarchical, and while it is just one way of many to organizing the KPIs, it is helpful for highlighting those KPIs that are important enough to warrant more attention being paid to them.

### A Note on Cost of Living Adjustments

We adjust for **cost of living** in most cost-related measures. Regions where it is more expensive to live, such as San Francisco, Boston, New York City and Washington, D.C., are adjusted downward in order to be comparable with other cities. Conversely, regions where the costs of goods are lower, such as Columbus, OH, and Nashville, TN, are adjusted upwards.

## *FREQUENTLY ASKED QUESTIONS*

### **Why do the charts in this report have axes labeled with numbers instead of district names?**

Each bar chart in this report has axis labels that show the district ID number. This is done in order to keep the district data confidential.

### **How do I find my district's ID number?**

You can contact CGCS at 800-394-2427 and ask for your KPI ID. Your ID is also shown when you log in to ActPoint® KPI (<https://kpi.actpoint.com>).

### **How do I get the ID numbers for all the other districts?**

The ID numbers of other districts are confidential, and we do not share them without the permission of each district. If you would like to identify specific districts that are in your peer group in order to collaborate with them, please contact CGCS at 800-394-2427.

### **Why isn't my data showing? My district completed the surveys.**

It is likely that your data was flagged for review or is invalid. To resolve this, log in and check the Surveys section of the website. You should see a message telling you that there are data that needs to be reviewed.

It is also possible that you submitted your data after the publication deadline for this report.

In either case, it may be possible to update your data in the surveys. Once you do, your results will be reviewed and approved by CGCS or TransAct within 24 hours of your submission. You will then be able to view the results online.

### **Can I still submit a survey? Can I update my data?**

You may still be able to submit or edit a survey depending on the survey cycle. You will see a message saying "This survey is now closed" if the survey is closed to edits. If you do not see this message, then updates are still allowed for the fiscal year.

If the surveys are still open, any data that is updated will need to be reviewed and approved by CGCS or TransAct before the results can be viewed online. You can expect your data to be reviewed within 24 hours of your submission.

# FINANCE

## ACCOUNTS PAYABLE

Performance metrics in Accounts Payable (AP) focus on the cost efficiency, productivity, and service quality of invoice processing. Cost efficiency is measured most broadly with **AP Costs per \$100K Revenue**, which evaluates the entire cost of the AP department against the total revenue of the district. This metric is supported by a similar metric, **AP Cost per Invoice**, which compares against the number of invoices processed rather than district revenue.

Productivity is measured by **Invoices Processed per FTE per Month**, and service quality is captured, in part, by **Days to Process Invoices**, **Invoices Past Due at Time of Payment** and **Payments Voided**.

With the above KPIs combined with **staffing** and **electronic invoicing** KPIs, district leaders have a baseline of information to consider whether their AP function:

- Needs better automation to process invoices
- Is overstaffed or has staff that is under-trained or under-qualified
- Should revise internal controls to improve accuracy
- Needs better oversight and reporting procedures



## *LIST OF KPIS IN ACCOUNTS PAYABLE*

Below is the complete list of Power Indicators, Essential Few, and other key indicators in Accounts Payable. Indicators in bold are those included in this report. (See "KPI Definitions" at the back of this section for more complete descriptions of these measures.) All other KPIs are available to CGCS members on the web-based ActPoint® KPI system.

**POWER INDICATORS**

**AP Cost per \$100K Revenue**

**AP Cost per Invoice**

**Invoices - Days to Process**

**Invoices Processed Per FTE per Month**

**ESSENTIAL FEW**

**Invoices - Past Due at Time of Payment**

**Payments Voided**

**Payments Voided Due To Duplication**

**Payments Voided Due To Error**

**OTHER KEY INDICATORS**

AP Staff - Accountants with AP Certificate

AP Staff - Accountants with CPA

AP Staff - Cost Per FTE

AP Staff - District FTEs per AP FTE

AP Staffing Ratio - Clerical and Support

AP Staffing Ratio - Managers

AP Staffing Ratio - Professionals

AP Staffing Ratio - Supervisors

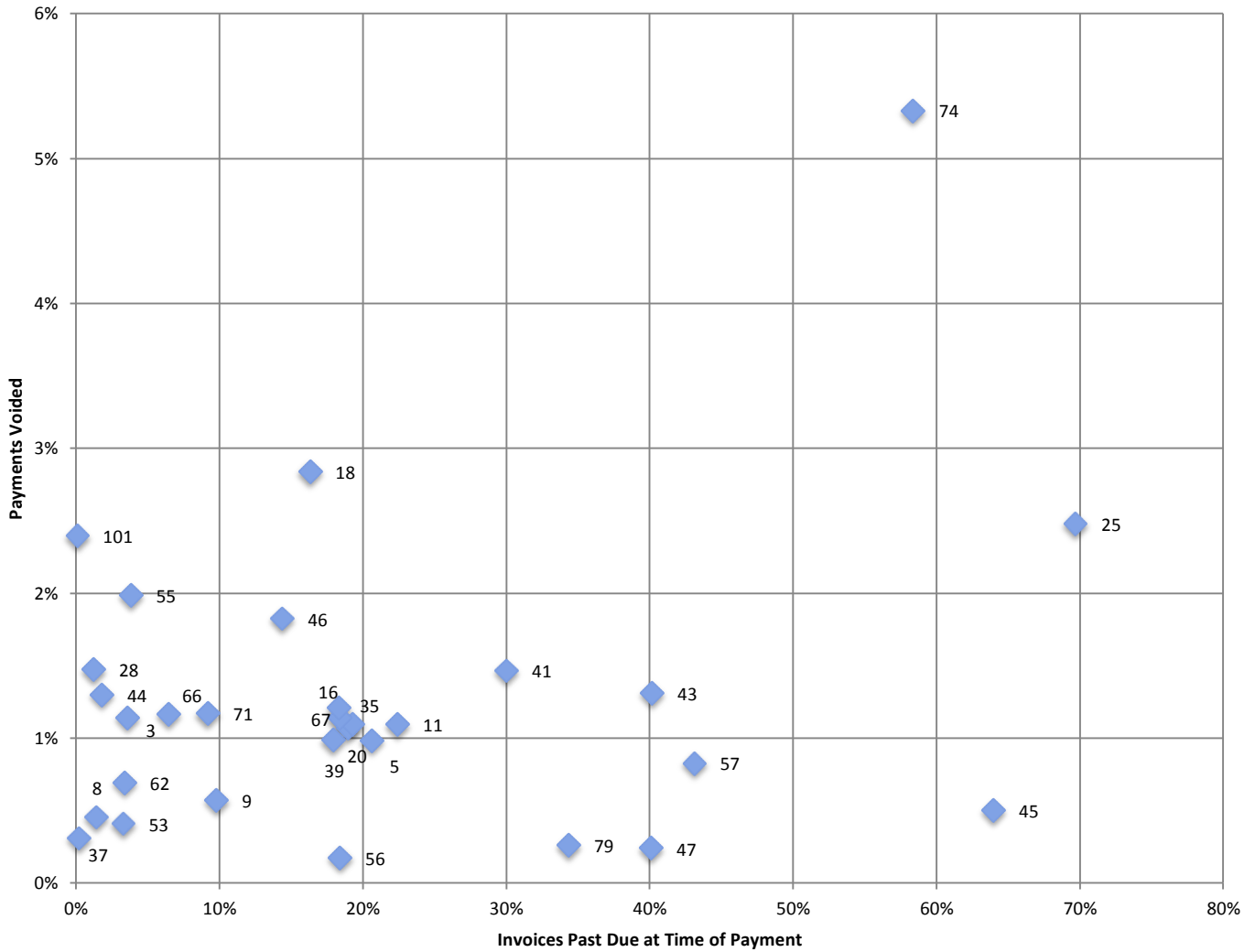
Invoices - Percent Paid Electronically

Invoices - Percent Received Electronically

# FEATURED ANALYSIS

Figure 1  
**Payments Voided vs. Invoices Past Due**

This scatter plot shows the percent of payments voided compared with the percent of invoices that were past due at the time of payment. These two KPIs should both be minimized, so the best-performing districts are those that are at the bottom-left of the chart. Districts that are far to the right or far to the top—or both—should track the corresponding KPI closely, and review their practices to move toward the bottom-left.



FINANCE  
ACCOUNTS PAYABLE

# DATA DISCOVERY

The following charts show the data from the *Power Indicators* and the *Essential Few* in Accounts Payable. There are also guiding questions to encourage critical thinking about your district's data. See the "KPI Definitions" at the back of this section for more complete descriptions of these measures.

Figure 2  
AP Cost per \$100K Revenue

This is the total AP department cost relative to the district's total operating revenue. *Not adjusted for cost of living.*

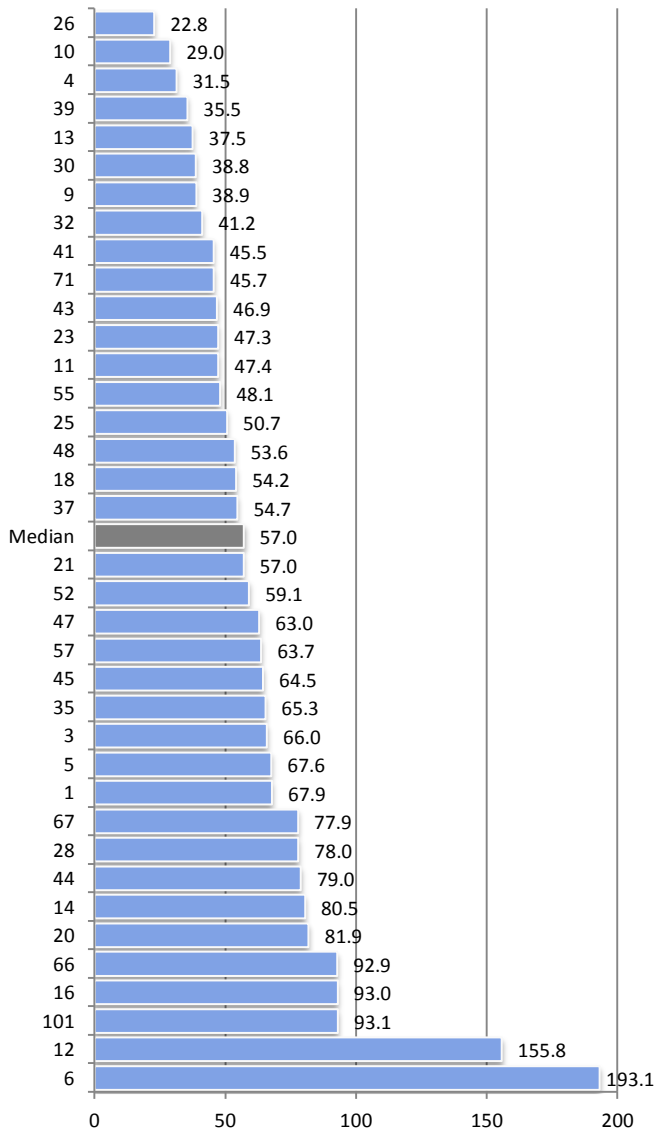
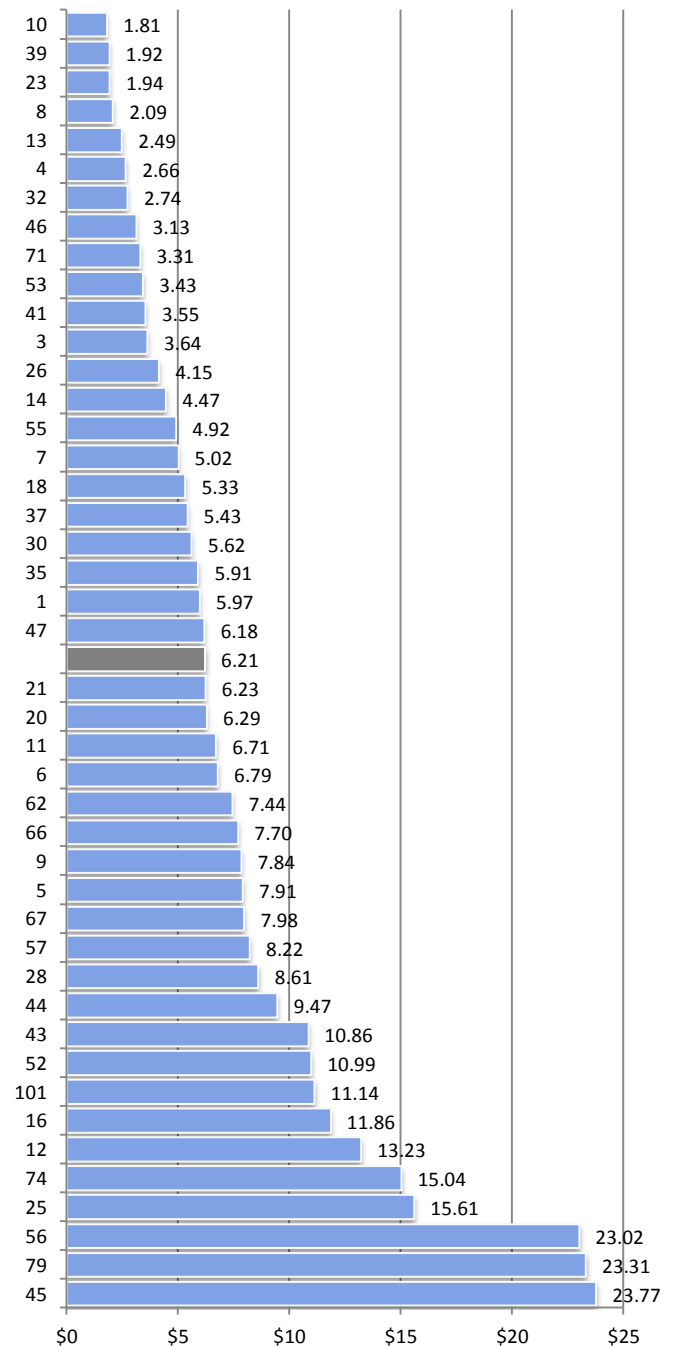


Figure 3  
AP Cost per Invoice

This is the total AP department cost relative to the number of invoices that were processed. *Adjusted for cost of living.*



Do you think this indicator accurately reflects the cost efficiency of your A/P department? If not, why?

What are some factors that influence this measure? (See KPI Definitions at the back of this section.)



Figure 4  
Invoices – Days to Process

Average processing time can reflect the efficiency of the AP department.

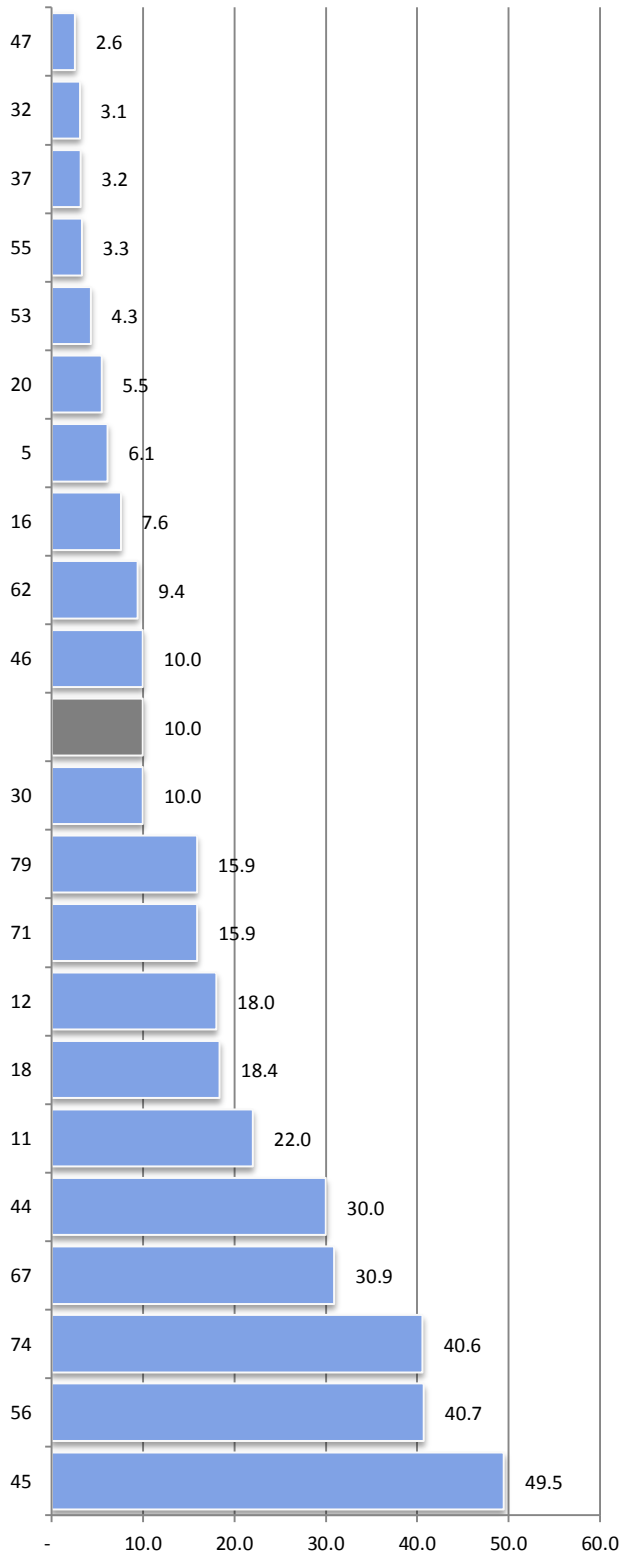
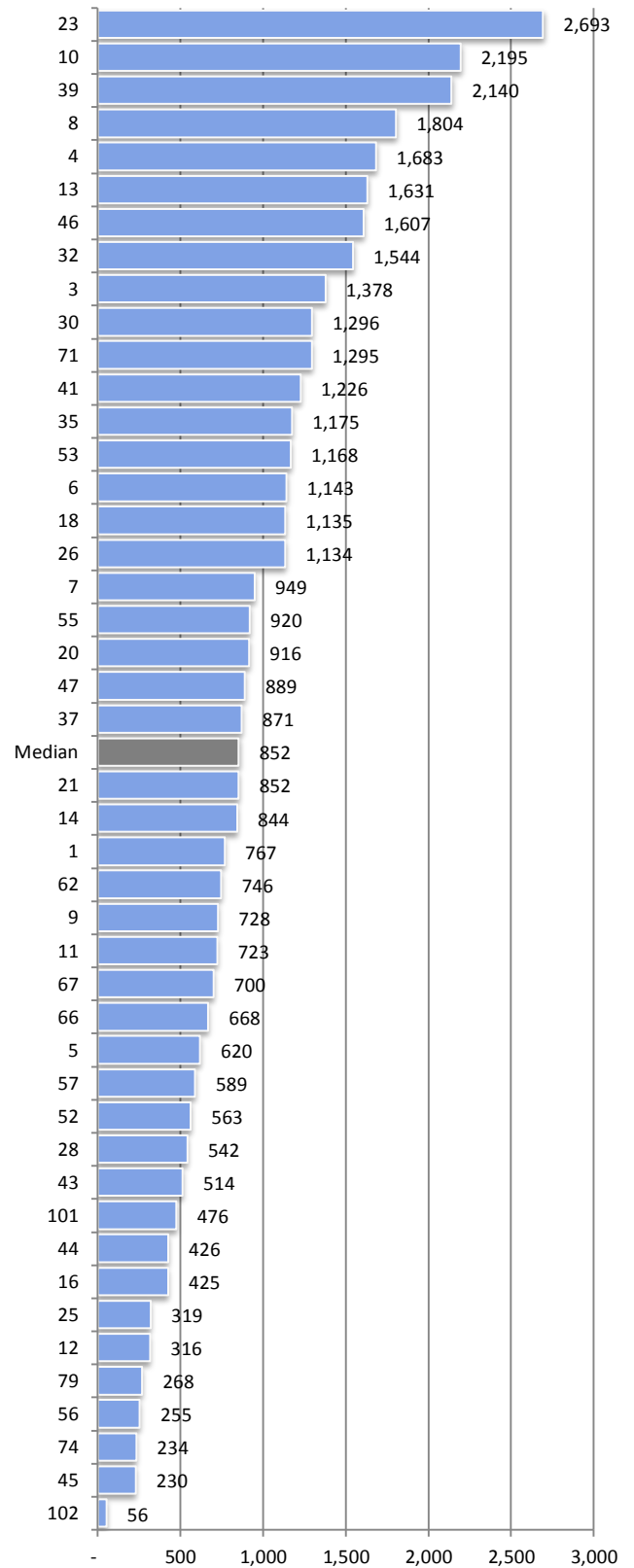


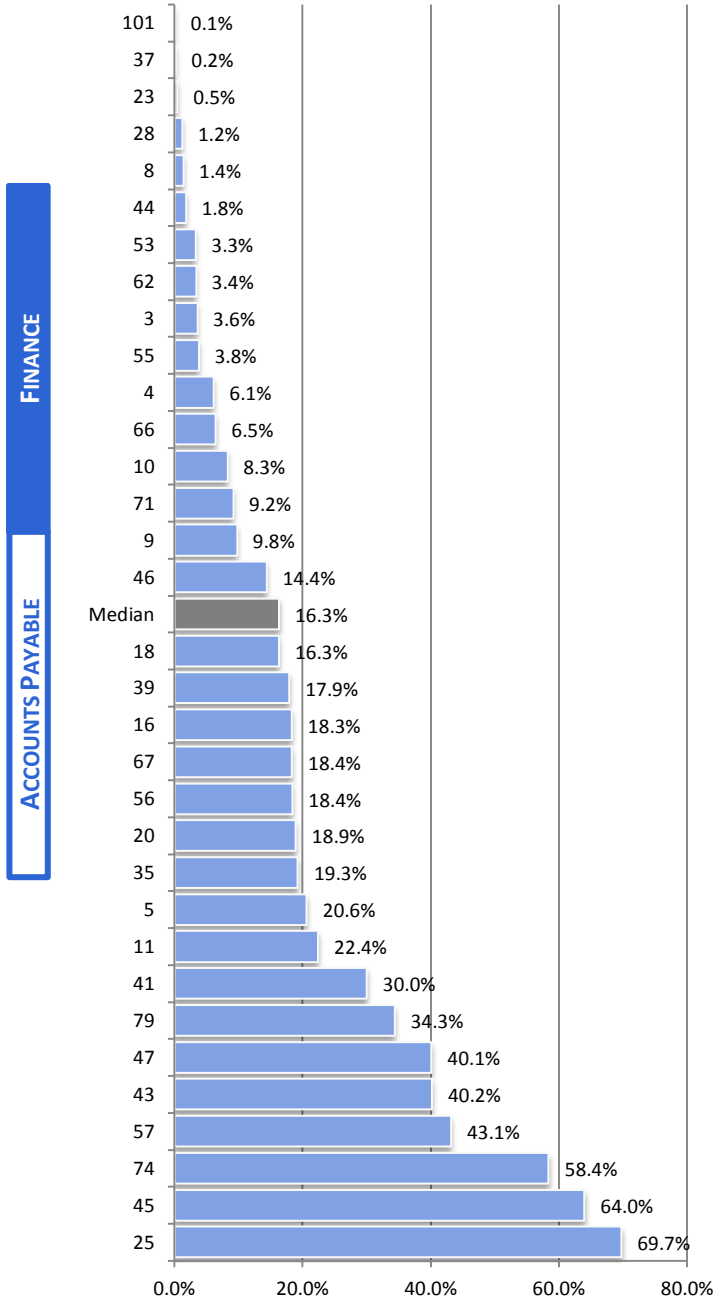
Figure 5  
Invoices Processed per FTE per Month



FINANCE  
ACCOUNTS PAYABLE

Figure 6  
Invoices Past Due at Time of Payment

Payments are often held until the due date (often net 30 days). One reason for doing this is to sustain positive cash flow. However, payments that are made after their due date can result in fees and/or harm the district's reputation.

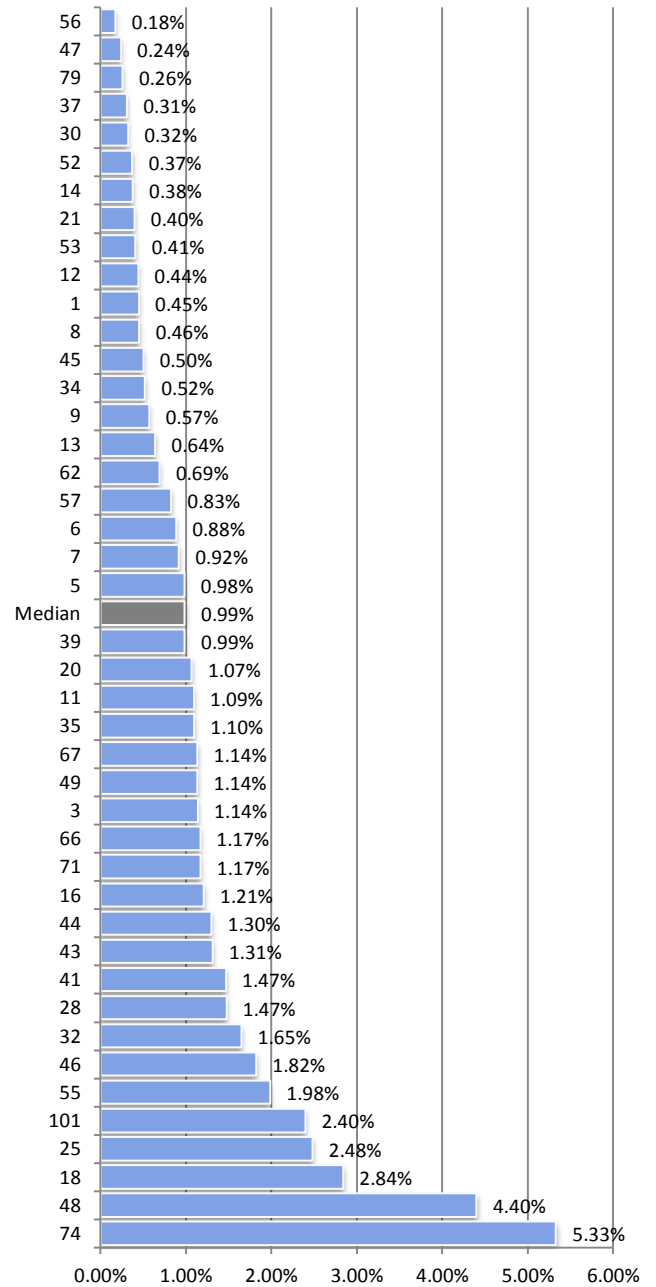


How many percentage points would you need to improve in order to move to the next highest quartile? To move into the Top 5?

How many more invoices would need to be paid on-time in order to gain that many percentage points?

Figure 7  
Payments Voided

This can be used to identify your void rate.



What does your Accounts Payable department need to work on?

Which KPIs will track progress towards your improvement goals? Who is responsible for reporting on this?

Whose buy-in and support is needed to support these goals (e.g., CFO, Assistant Superintendent, CIO/CTO)?

# KPI DEFINITIONS

## AP Cost per \$100K Revenue

**Importance** This measures the operational efficiency of an Accounts Payable Department.

### Factors that Influence

- Administrative policies and procedures
- Administrative organizational structure
- Administrative leadership style, decision-making process and distribution of organizational authority
- Departmental and individual employee responsibilities and competencies
- Performance management systems
- Monitoring and reporting systems
- Number of FTEs in the Accounts Payable Department
- The total dollar amount of invoices paid annually
- Level of automation
- Regional salary differentials and different processing approaches

### Calculation

Total AP department personnel costs *plus* AP department non-personnel costs *divided by* total district operating revenue over \$100,000.

## AP Cost per Invoice

**Importance** This measure determines the average cost to process an invoice. According to the Institute of Management, the cost to handle an invoice is the second most used metric in benchmarking AP operations.

### Factors that Influence

- Administrative policies and procedures
- Administrative organizational structure
- Administrative leadership style, decision-making process and distribution of organizational authority
- Departmental and individual employee responsibilities and competencies
- Performance management systems
- Monitoring and reporting systems
- Number of FTEs in the Accounts Payable Department
- The total dollar amount of invoices paid annually
- Level of Automation
- Regional salary differentials and different processing approaches

**Calculation** Total AP department personnel costs *plus* AP department non-personnel costs *divided by* total number of invoices handled by the AP department.

## Invoices – Days to Process

**Importance** This measures the efficiency of the payment process.

### Factors that Influence

- Automation
- Size of district
- Administrative policies

**Calculation** Aggregate number of days to process all AP invoices, from date of invoice receipt by the AP department to the date of payment post/check release *divided by* the total number of invoices handled by the AP department.

## Invoices Processed per FTE per Month

**Importance** This measure is a major driver of accounts payable department costs. Lower processing rates may result from handling vendor invoices for small quantities of non-repetitive purchases; higher processing rates may result from increased technology using online purchasing and invoice systems to purchase and pay for large quantities of items from vendors.

### Factors that Influence

- Administrative organizational structure
- Administrative leadership style, decision-making process and distribution of organizational authority
- Departmental and individual employee responsibilities and competencies
- Performance management systems
- Monitoring and reporting systems
- Number of FTEs in the Accounts Payable Department
- The number of invoices paid annually
- Level of automation

**Calculation** Total number of invoices handled by the AP department *divided by* total number of AP staff (FTEs), *divided by* 12 months.

## Invoices Past Due at Time of Payment

**Importance** Minimizing the number of payments that are past due should be a mission of the accounts payable department.

### Factors that Influence

- Process controls
- Department workload management
- Overtime policy

**Calculation** Number of invoices past due at time of payment *divided by* total number of invoices handled by the AP department.

## Payments Voided

**Importance** This measure reflects processing efficiencies and the degree of accuracy. A high percentage of duplicate payments may indicate a lack of controls, or indicate that the master vendor files need cleaning.

### Factors that Influence

- Administrative policies and procedures
- Administrative organizational structure
- Administrative leadership style, decision-making process and distribution of organizational authority
- Departmental and individual employee responsibilities and competencies
- Performance management systems
- Monitoring and reporting systems
- Number of FTEs in the Accounts Payable Department
- The total number of checks written annually
- Level of automation

**Calculation** Number of payments voided *divided by* total number of AP transactions (payments).

FINANCE

ACCOUNTS PAYABLE

# CASH MANAGEMENT

These performance metrics can help a district assess their cash management. Cash management relies upon *well-controlled cash-flow practices*. Performance metrics that indicate healthy cash management include **Months below Target Liquidity Level** and **Short-Term Loans per \$100K Revenue**.

Measures that look at *investment yield* include **Investment Earnings per \$100K Revenue** and **Investment Earnings as Percent of Cash/Investment Equity**.

When evaluating cash-management performance, the following conditions should be considered among the influencing factors:

- Revenue inflows and expenditure outflows, and the accuracy of cash flow projections
- School board and administrative policies requiring internal controls and transparency
- Accounting standards
- Borrowing eligibility and liquidity
- State laws and regulations



## *LIST OF KPIS IN CASH MANAGEMENT*

Below is the complete list of Power Indicators, Essential Few and other key indicators in Cash Management. Indicators in bold are those included in this report. (See "KPI Definitions" at the back of this section for more complete descriptions of these measures.) All other KPIs are available to CGCS members on the web-based ActPoint® KPI system.

**POWER INDICATORS**

**Cash Flow - Short-Term Loans per \$100K Revenue**

**Investment Earnings per \$100K Revenue**

**ESSENTIAL FEW**

**Cash Flow - Months above Liquidity Baseline**

**Cash/Investment Equity per \$100K Revenue**

**Investment Earnings as Percent of Cash/Investment Equity**

**Treasury Staffing Cost per \$100K Revenue**

**OTHER KEY INDICATORS**

Treasury Staff - Cost Per FTE

Treasury Staff - District FTEs per Treasury FTE

Treasury Staffing Ratio - Clerical and Support

Treasury Staffing Ratio - Managers

Treasury Staffing Ratio - Professionals

Treasury Staffing Ratio - Supervisors

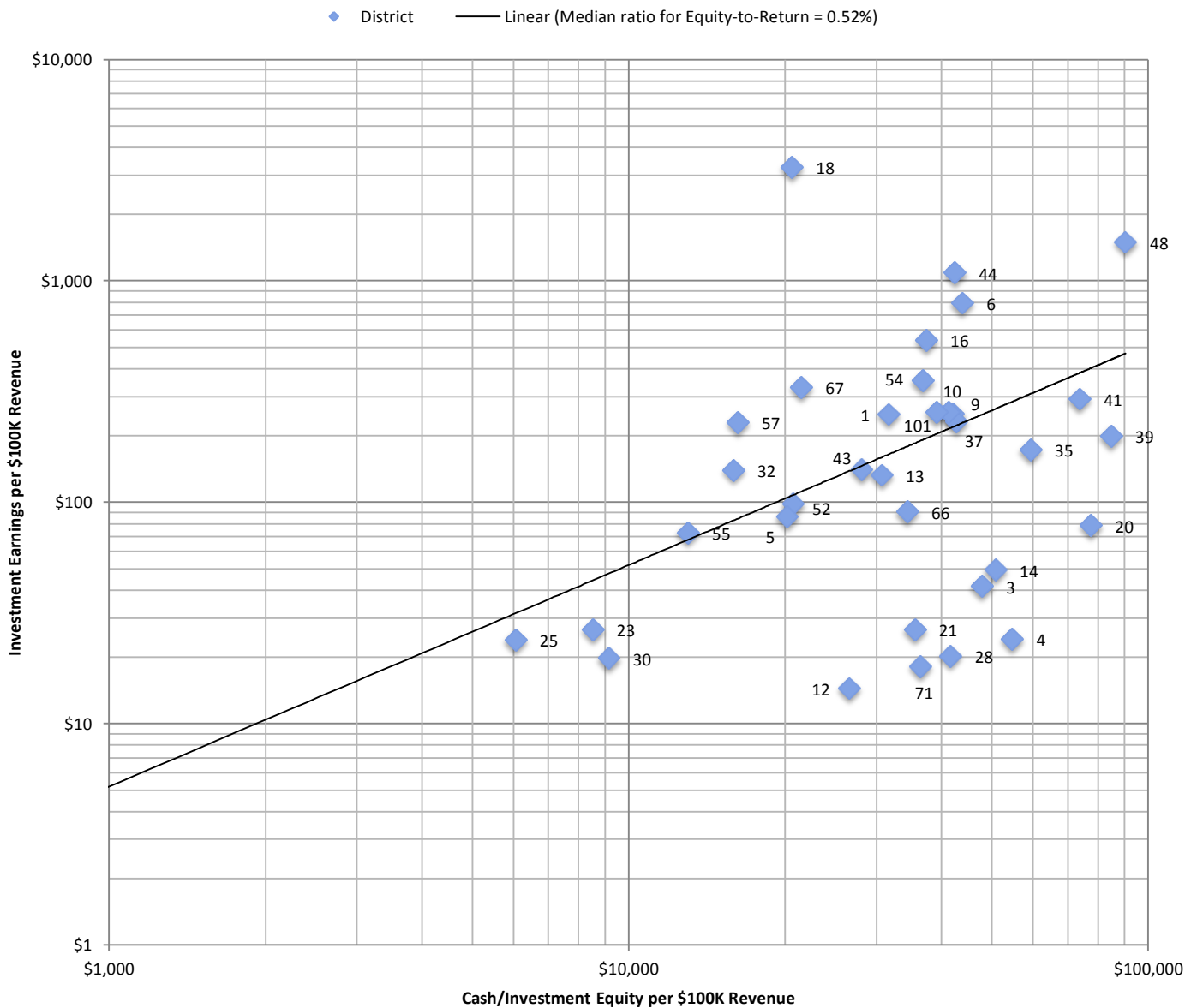
# FEATURED ANALYSIS

Figure 8  
Cash/Investment Equity vs. Investment Earnings

A district with more available equity might hope to create additional value through investments. This chart shows the level of equity compared with the level of investment earnings.

The ratio between these two measures is represented by the KPI “Investment Earnings as Percent of Cash/Investment Equity”, and the line in this chart shows the median ratio from that KPI (at 0.52%). Districts that are below the line have an equity-to-income ratio that is lower than the median ratio—making it a sensible improvement benchmark.

The axes in this chart are on a base 10 logarithmic scale, so values increase exponentially by ten across every major gridline. This means that districts further to the bottom are actually *much* further to the bottom. The reason for presenting the data in this way is to visualize the incremental differences between districts at the lower end of the X- and Y-axis, while at the same time pointing out the substantial differences between the top and bottom of the spectrum.

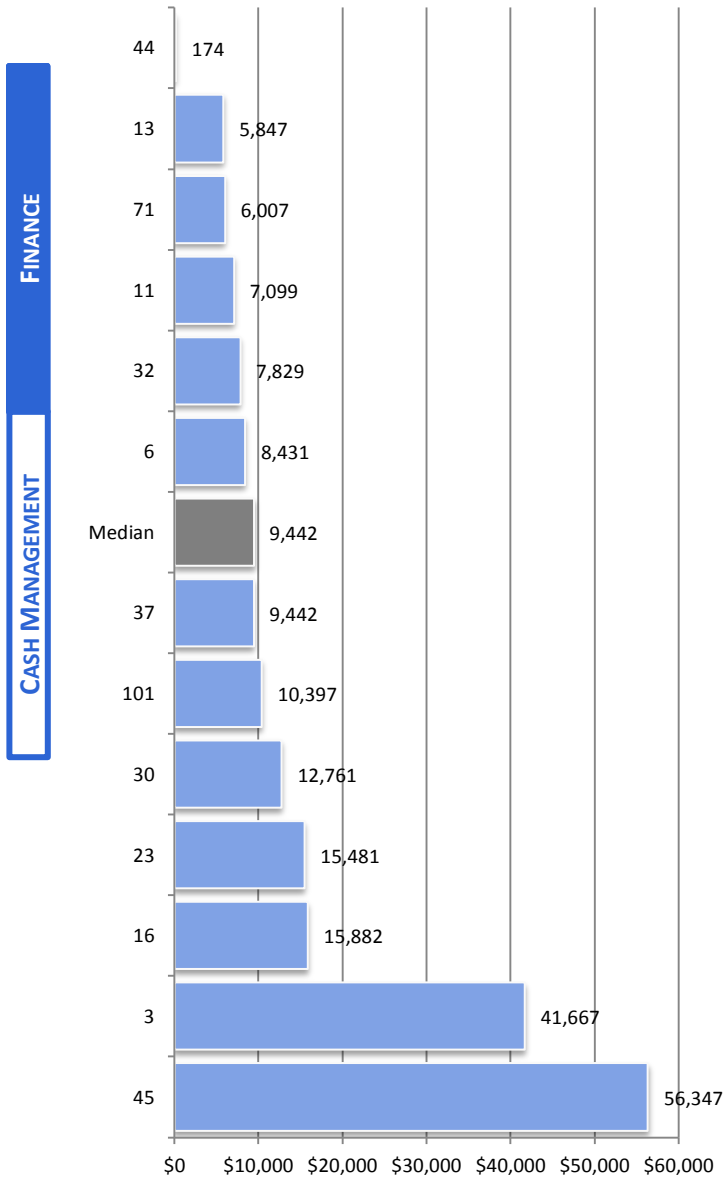


FINANCE CASH MANAGEMENT

# DATA DISCOVERY

Figure 9  
Cash Flow - Short-Term Loans per \$100K Revenue

High levels of short-term borrowing (loans with a repayment term of less than one year) are a sign that the district has cash flow problems. (Note that some districts are legally not allowed to take out short-term loans.) *Not adjusted for cost of living.*

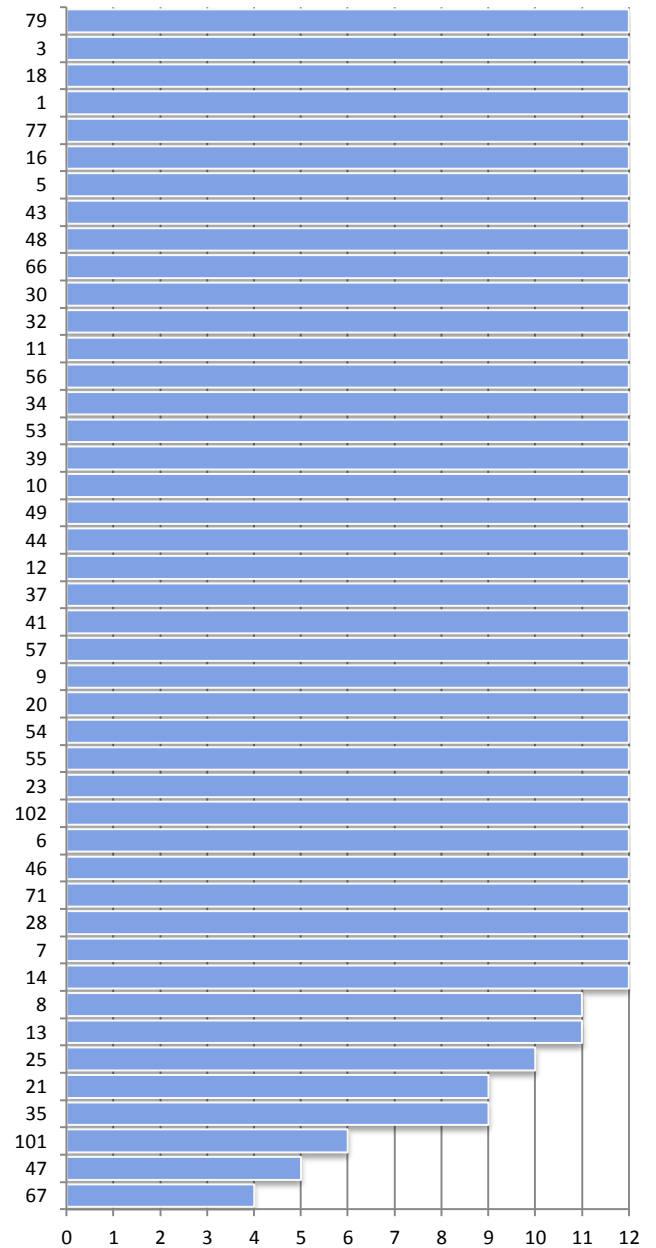


*If your district takes out short-term loans, have you quantified the marginal costs of those loans?*

*If your level of short-term borrowing is high, what steps can you take to bring it down to the median? To bring it down to zero?*

Figure 10  
Cash Flow - Months Above Liquidity Baseline

This reflects the district's level of cash liquidity against the district-established (internal) liquidity baseline. Twelve (12) months means that the district did not fall below its liquidity baseline floor within the fiscal year.



*Are your investments generating value relative to total cash and investment equity? See the featured analysis on Page 13.*



Figure 11  
Investment Earnings per \$100K Revenue

Not adjusted for cost of living.

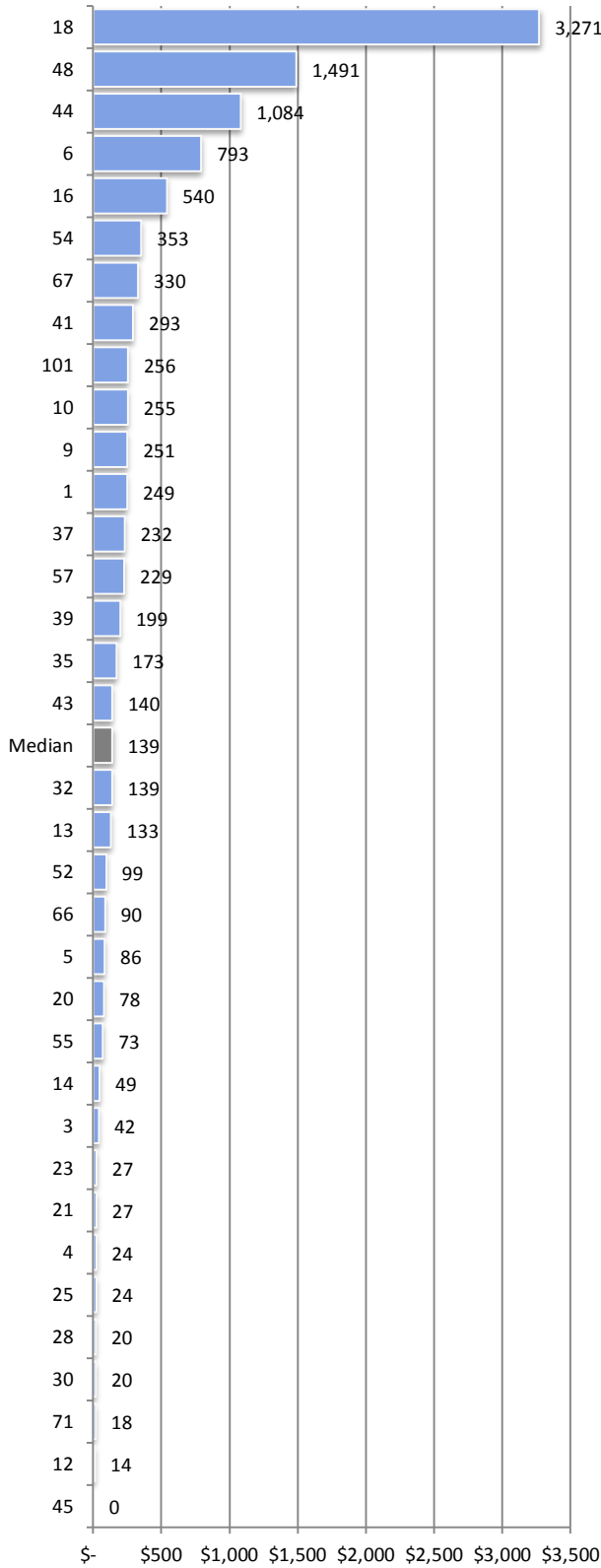
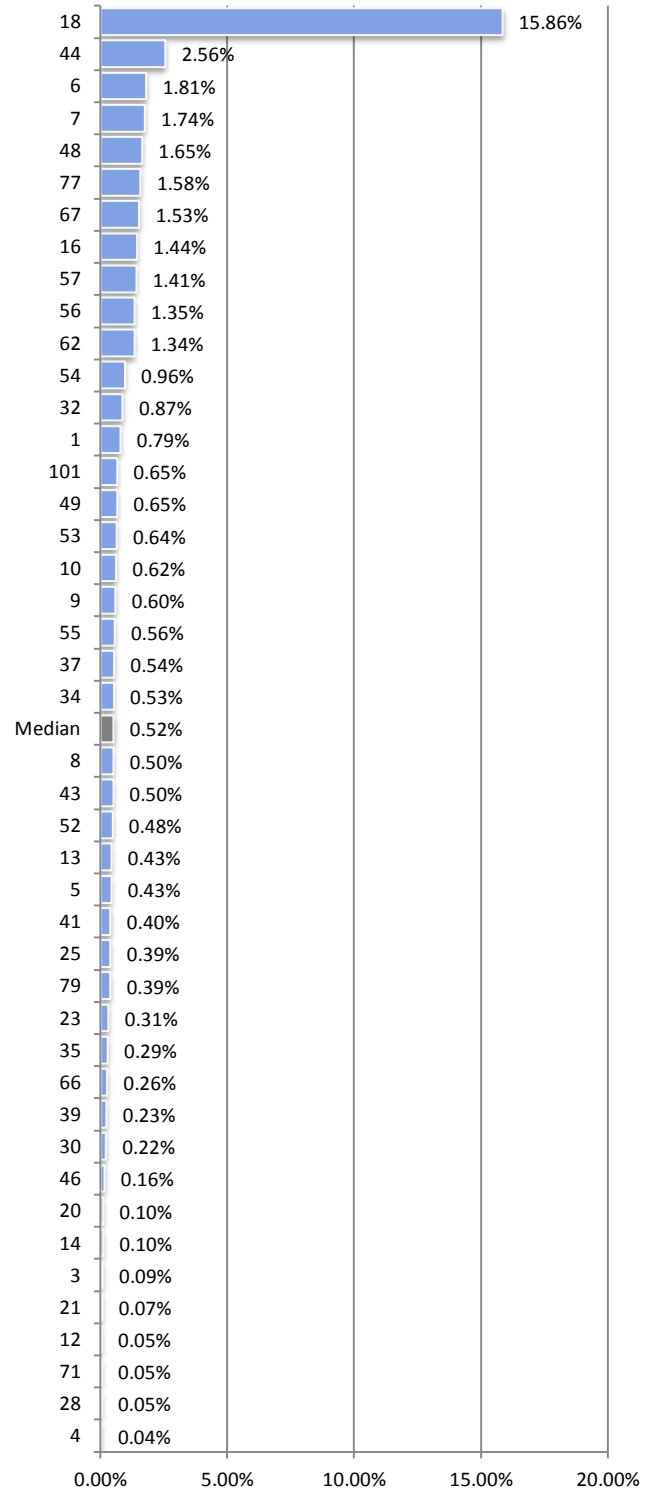


Figure 12  
Investment Earnings as Percent of Cash/Investment Equity

This is the cumulative amount of investment earnings relative to the available equity (as of year-end) that theoretically could be used for investments. Not adjusted for cost of living.



FINANCE  
CASH MANAGEMENT

Figure 13  
Cash/Investment Equity per \$100K Revenue

This is the level of cash and investment equity available to the district at year-end. *Not adjusted for cost of living.*

FINANCE  
CASH MANAGEMENT

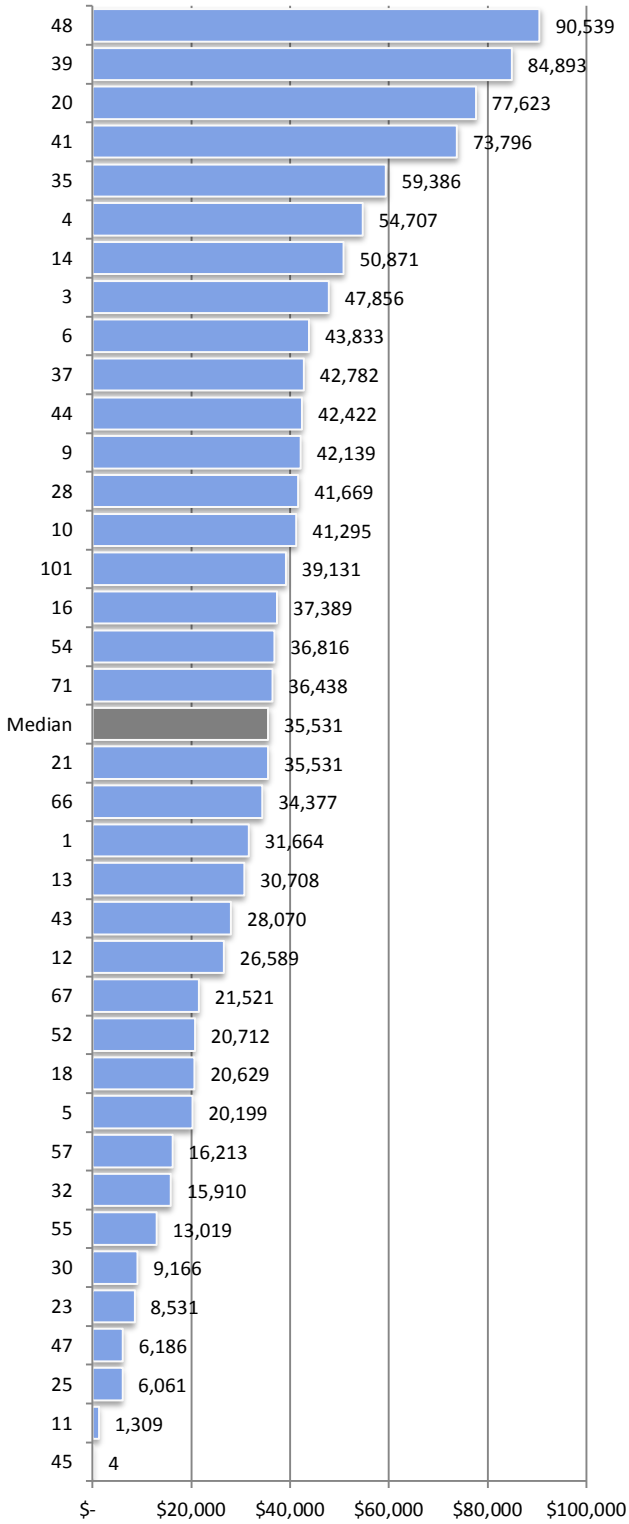
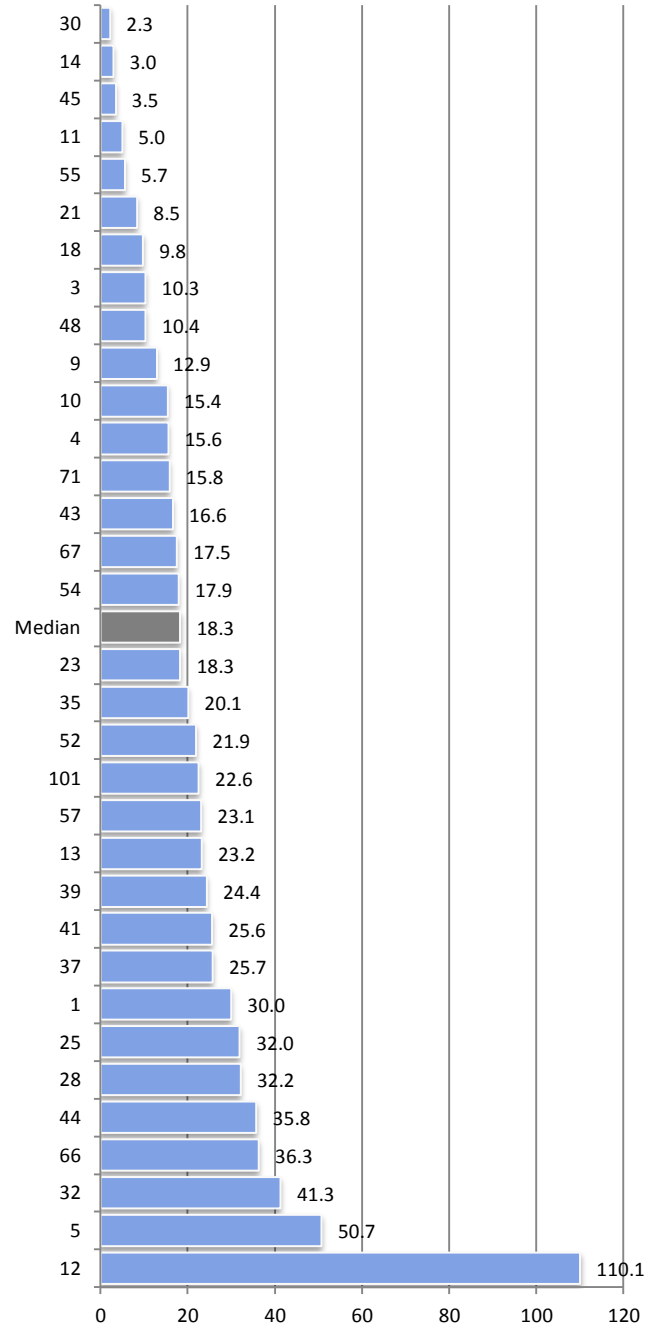


Figure 14  
Treasury Staffing Cost per \$100K Revenue

This is the total Treasury department cost relative to the district's total operating revenue. *Not adjusted for cost of living.*



*Are there any signs that you have a problem with cash flow?*

*Is your cash and investment equity being utilized effectively to bring value to the district?*

# KPI DEFINITIONS

## Cash Flow - Short-Term Loans per \$100K Revenue

**Importance** This measure identifies the degree to which districts need to borrow money to meet cash flow needs. Short-term borrowing is defined here as any loan with a repayment term of less than one year.

### Factors that Influence

- The timing of revenue inflows and expenditure outflows and the arbitrage ability to cover the borrowing
- Ability to meet required spending for tax-exempt borrowing eligibility
- State law may restrict or prohibit certain types of short-term borrowing

**Calculation** Total amount borrowed in short-term loans (with a repayment period of one year or less) *divided by* total district operating revenue, *divided by* \$100,000

## Investment Earnings per \$100K Revenue

**Importance** This measure analyzes the risk of the investments versus its projected returns.

### Factors that Influence

- Revenue types
- Types of receipt percentages
- Investments internal or external
- Investment policy

**Calculation** Total investment earnings *divided by* total district operating revenue, *divided by* \$100,000.

## Cash Flow - Months above Liquidity Baseline

**Importance** This measure highlights cash-flow performance relative to an established minimum liquidity level.

### Factors that Influence

- Cash management policies and strategies
- Business tracking systems

**Calculation** Twelve months *minus* the number of months that the district was below the target liquidity baseline.

## Cash/Investment Equity per \$100K Revenue

**Importance** This measure indicates the total amount of cash and investment equity relative to annual district revenue.

**Calculation** Total cash and investment equity *divided by* total district operating revenue, *divided by* \$100,000.

## Investment Earnings as Percent of Cash/Equity Investment

**Importance** This indicates the rate of return on cash and investment assets. It reflects the degree to which the district uses its available assets to build value.

**Calculation** Total investment earnings *divided by* total cash and investment equity.

## Treasury Staffing Cost per \$100K Revenue

**Importance** This measure helps evaluate staffing costs.

**Calculation** Total Treasury personnel costs *divided by* total district operating revenue, *divided by* \$100,000.



# COMPENSATION

Performance metrics in compensation evaluate the cost efficiency and productivity of the payroll department. Cost efficiency is broadly represented by the two measures **Payroll Cost per Pay Check** and **Payroll Cost per \$100K Spend**, which both evaluate the total costs of the Payroll department relative to workload. Productivity is broadly represented by **Pay Checks Processed per FTE per Month**, which is also a cost driver of payroll.

Because compensation involves high volumes of regular and predictable transactions, most cost efficiencies can be realized by expanding the use of existing tools such as employee direct deposit and employee self-service modules. This is captured in part by the measures **Direct Deposit Rate** and **Personnel Record Self-Service Usage per District FTE**.

Conversely, districts that underutilize modern automation systems could see an increase in **Pay Check Errors per 10K Payments** and increased **W-2 Correction Rates (W-2c's)** due to the manual effort required, as well as an excessive level of **Overtime Hours per Payroll Employee**. **Percent of Off-Cycle Payroll Checks** may also indicate lower productivity, as this may increase the workload of the Payroll department staff.

These service level, productivity, and efficiency measures should be considered in combination, and provide district leaders with a baseline of information to determine whether their payroll function:

- Needs better automation to improve accuracy and reduce workload
- Should consider switching to software that is more accurate and efficient
- Has problems with time management or workload management, or should have clearer policies around timelines
- Has staff that is under-skilled or under-trained
- Should adopt a policy to increase direct deposits

Additionally, the following factors should be considered when evaluating performance levels:

- Number of contracts requiring compliance
- Frequency of payrolls
- Complexity of state/local reporting requirements



## *LIST OF KPIS IN COMPENSATION*

Below is the complete list of Power Indicators, Essential Few and other key indicators in Compensation. Indicators in bold are those included in this report. (See "KPI Definitions" at the back of this section for more complete descriptions of these measures.) All other KPIS are available to CGCS members on the web-based ActPoint® KPI system.

**POWER INDICATORS**

- Pay Checks Processed Per FTE per Month**
- Payroll Cost per \$100K Spend**
- Payroll Cost per Pay Check**

**ESSENTIAL FEW**

- Pay Checks - Errors per 10K Payments**
- Payroll Staff - Overtime Hours per FTE**
- Personnel Record Self-Service Usage per District FTE**
- W-2 Correction Rate (W-2C)**

**OTHER KEY INDICATORS**

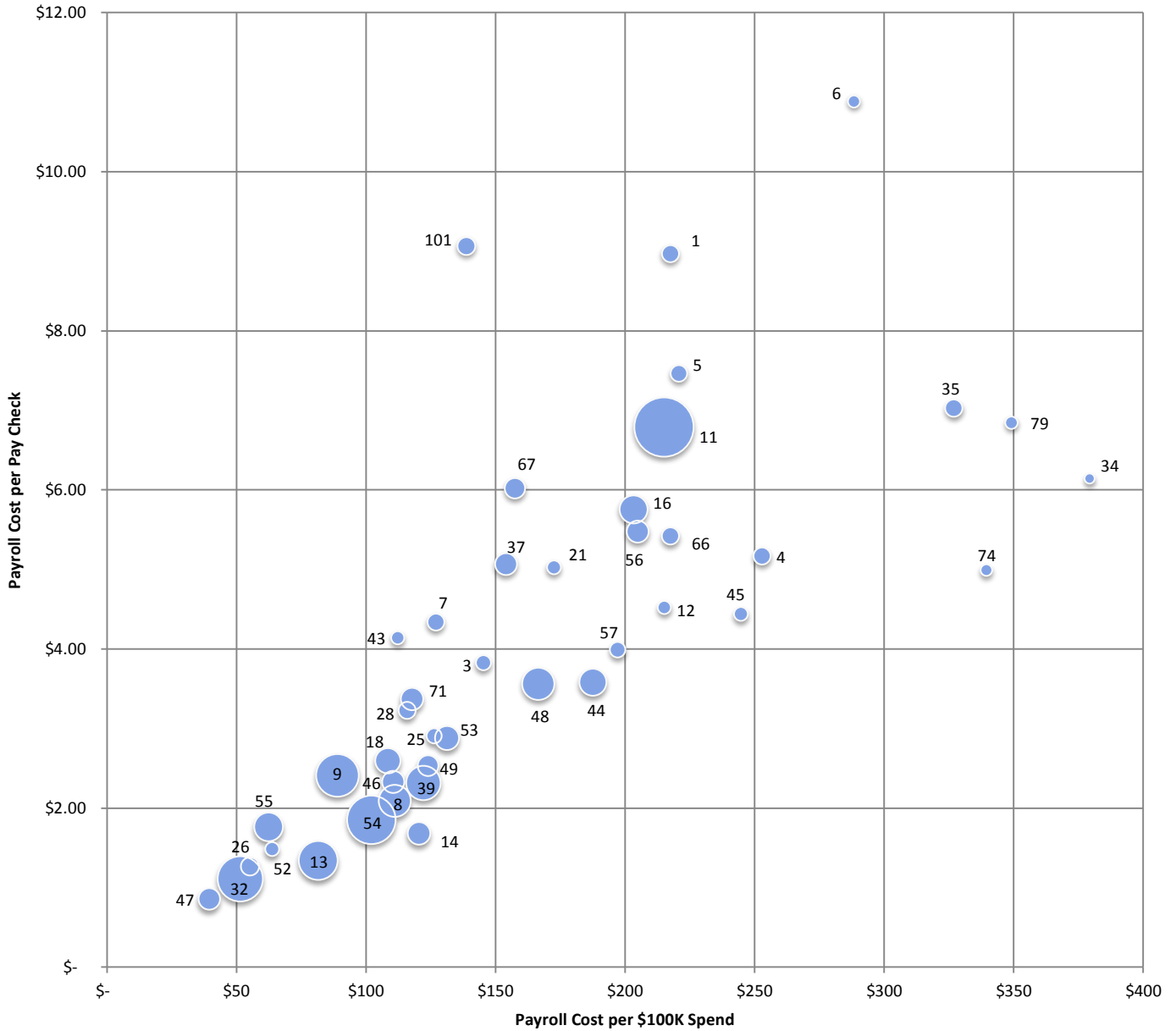
**Pay Checks - Direct Deposits**

- Pay Checks - Percent Off-Cycle
- Payroll Cost per \$100K Revenue
- Payroll Outsourcing as Percent of Costs
- Payroll Staff - Cost Per FTE
- Payroll Staff - District FTEs per Payroll FTE
- Payroll Staffing Ratio - Clerical and Support
- Payroll Staffing Ratio - Managers
- Payroll Staffing Ratio - Professionals
- Payroll Staffing Ratio - Supervisors
- Personnel Records Self-Service Usage: Address Changes
- Personnel Records Self-Service Usage: Direct Deposit Changes
- Personnel Records Self-Service Usage: W-4 Changes

# FEATURED ANALYSES

Figure 15  
 Payroll Cost per \$100K Spend vs. Payroll Cost per Pay Check

These two measures each approximate the cost efficiency of the Payroll department. The size of the bubbles in this chart represents the district's student enrollments. Several of the largest districts appear to dominate the bottom-left quadrant (the most cost-efficient), whereas more medium-sized districts are in the middle (average cost efficiency) and top-right (the least cost-efficient).



FINANCE  
COMPENSATION

*How does your district compare with similarly sized districts?*

*How much should district size matter as you set benchmark targets for these measures?*

# DATA DISCOVERY

Figure 16  
Pay Checks Processed per FTE per Month

This is a productivity measure that compares your staffing level with workload.

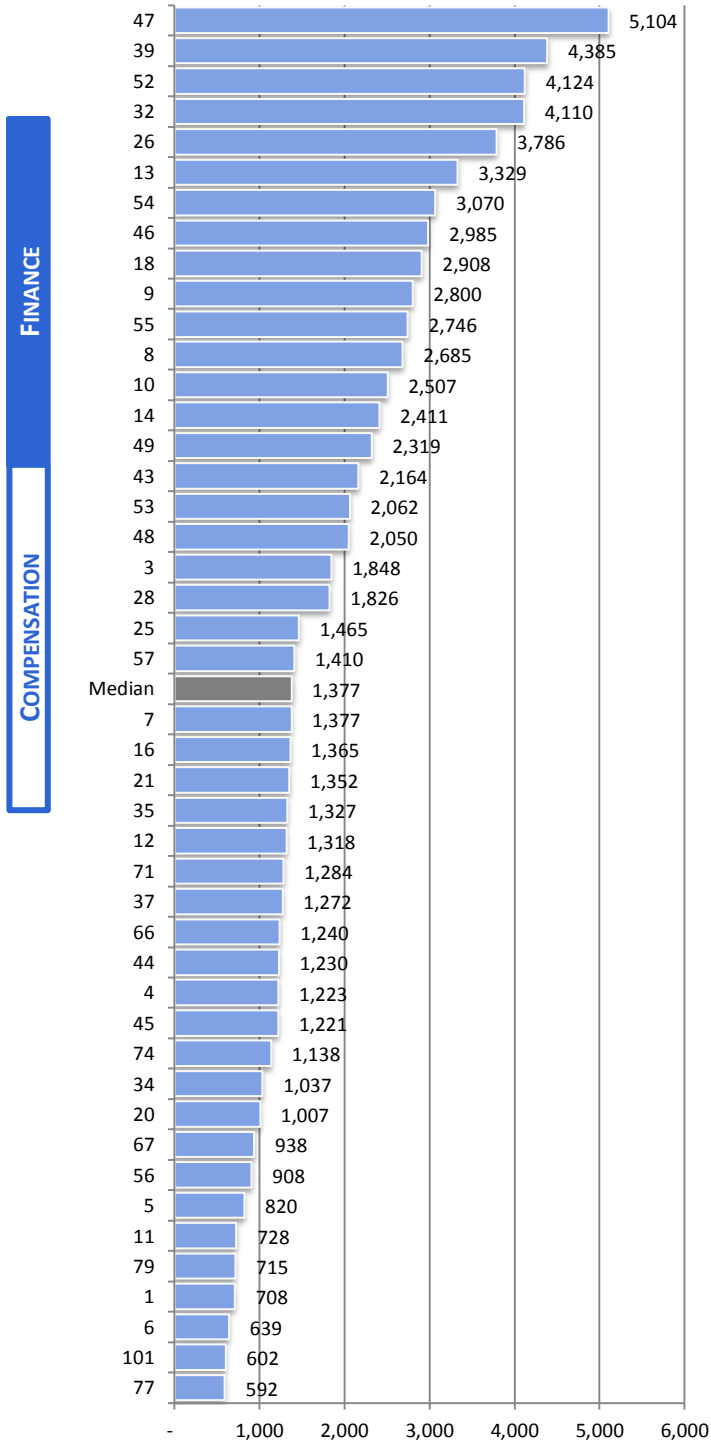


Figure 17  
Payroll Cost per \$100K Spend

This cost efficiency measure compares the Payroll department expenditures with the total annual payroll payout. *Not adjusted for cost of living.*

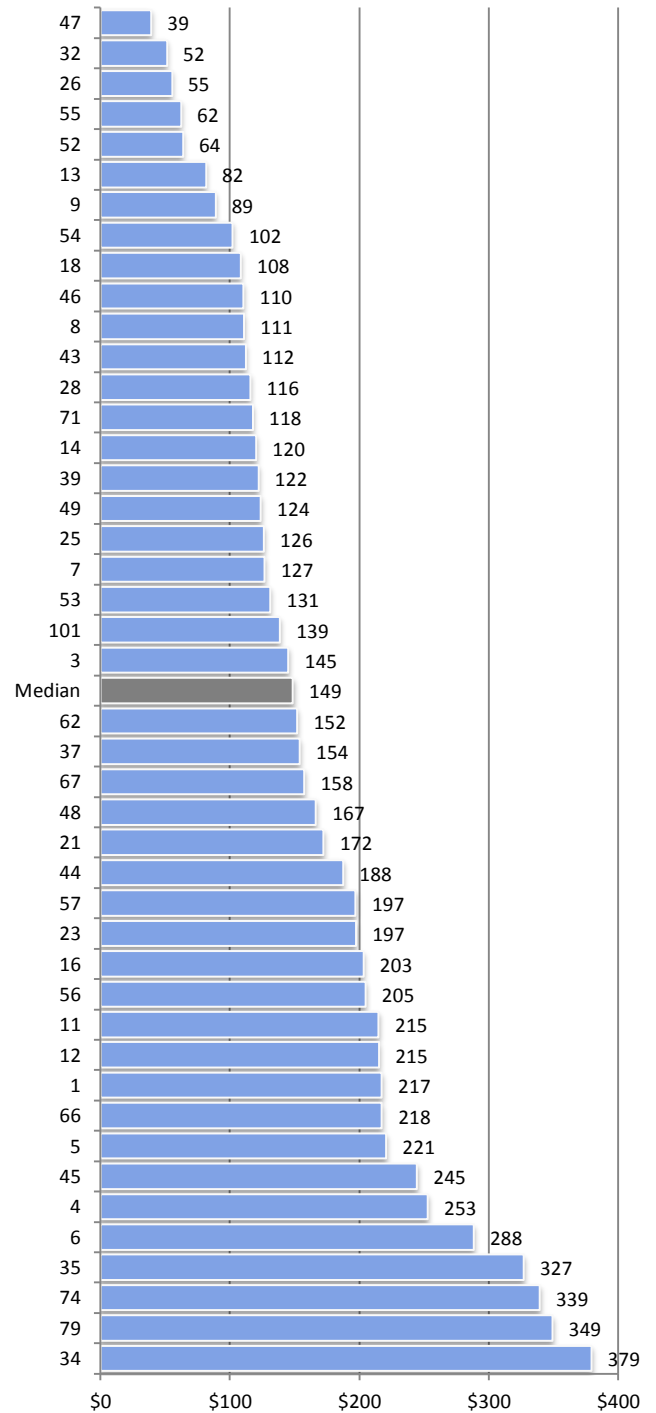
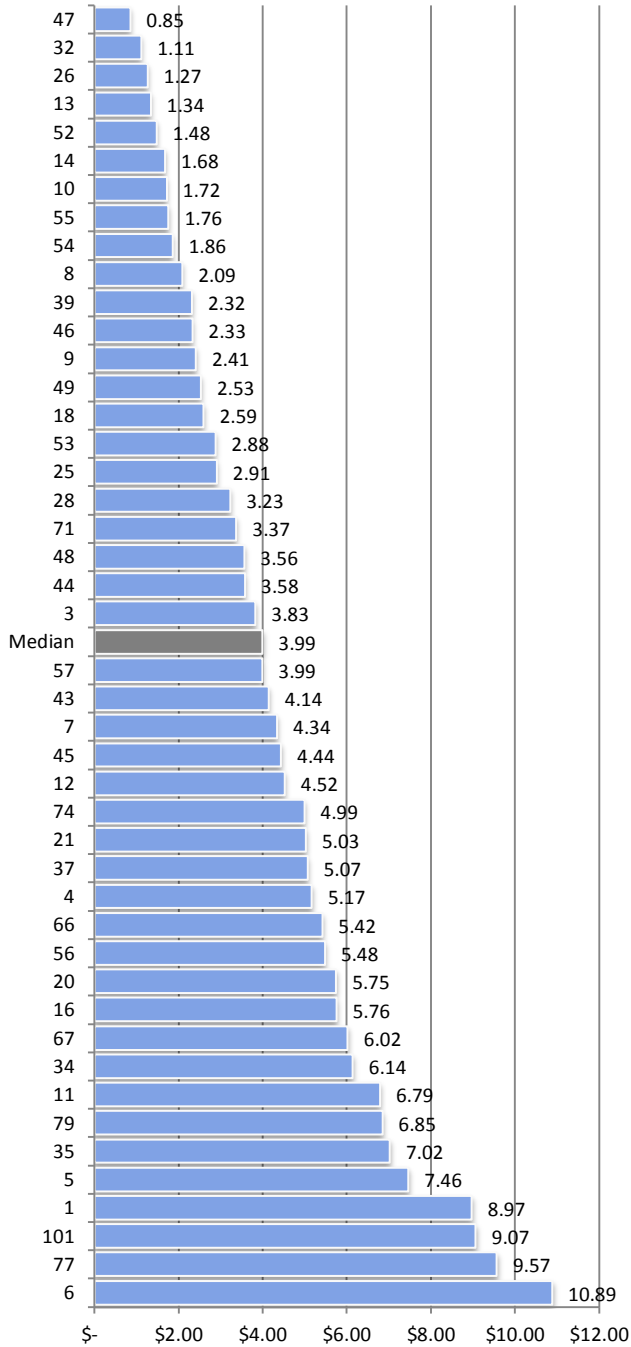




Figure 18  
Payroll Cost per Pay Check

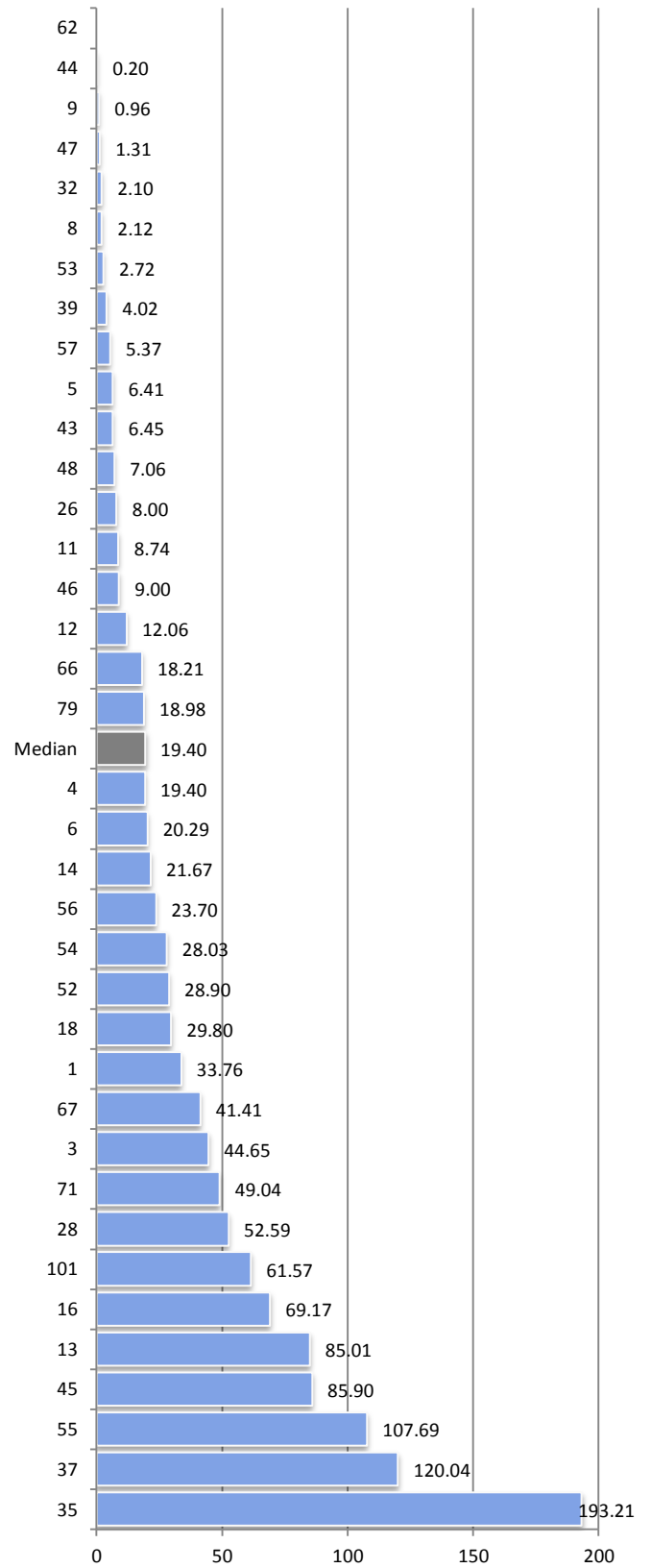
This cost efficiency measure compares the Payroll department expenditures with the annual number of paychecks. *Adjusted for cost of living.*



How many more paychecks per month would your staff need to process in order to reach the median? To move into the Top 10?

Would more automation and/or direct deposits improve your processing rate?

Figure 19  
Pay Check Errors per 10K Payments



FINANCE

COMPENSATION

Figure 20  
Payroll Staff - Overtime Hours per FTE

This is the average number of annual overtime hours per Payroll employee.

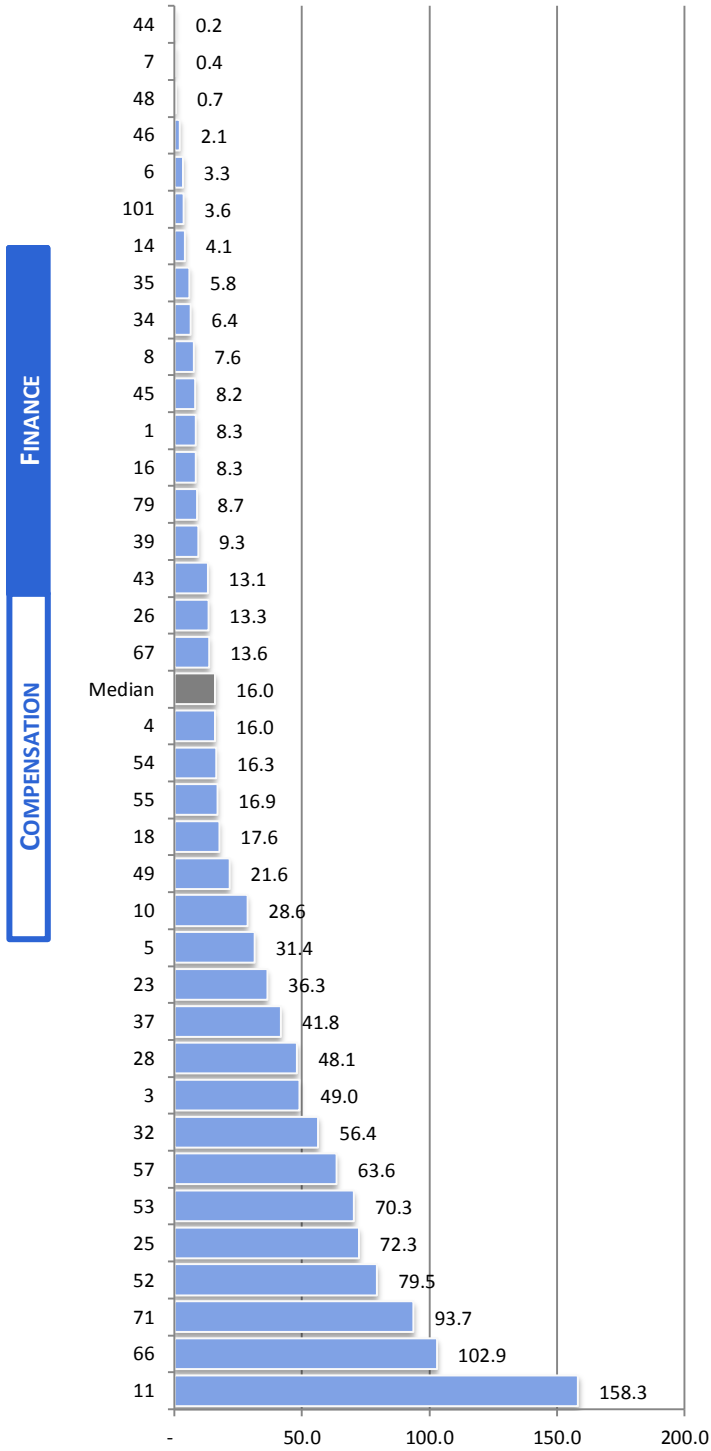
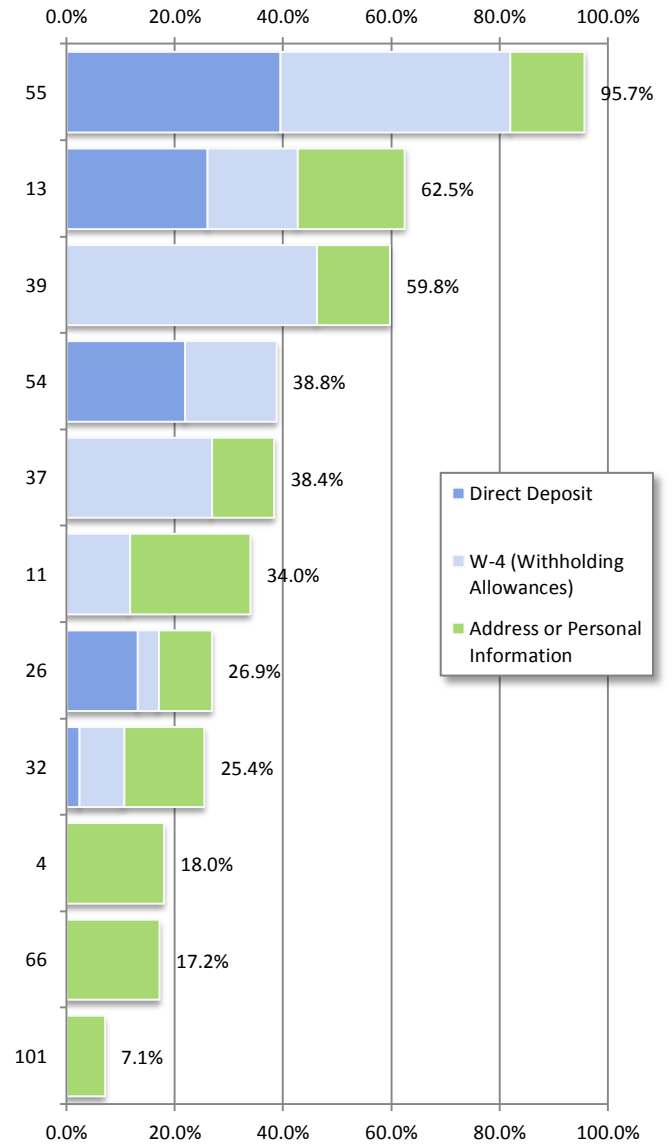


Figure 21  
Personnel Record Self-Service Usage per District FTE



How many fewer errors would your district need to produce in order to reach the next quartile? To move into the Top 10?

Is overtime more cost efficient for your district than hiring more personnel?

Figure 22  
W-2 Correction Rate (W-2c's)

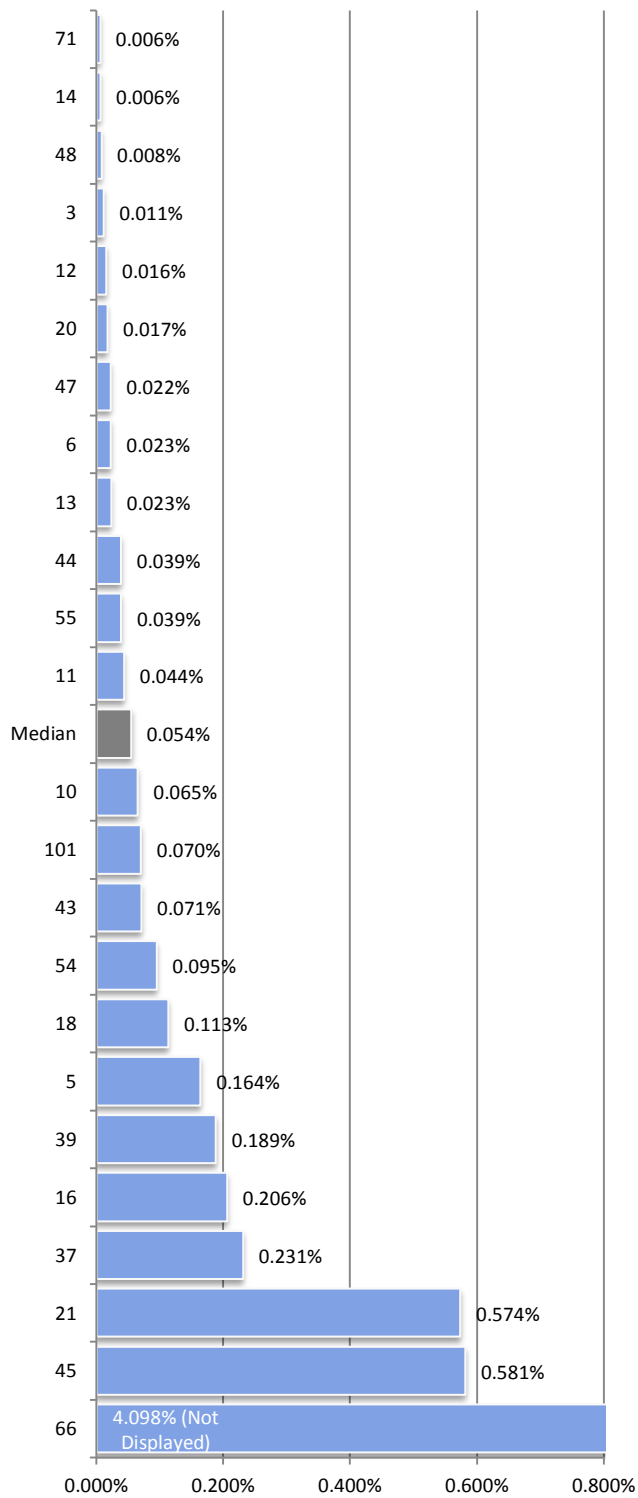
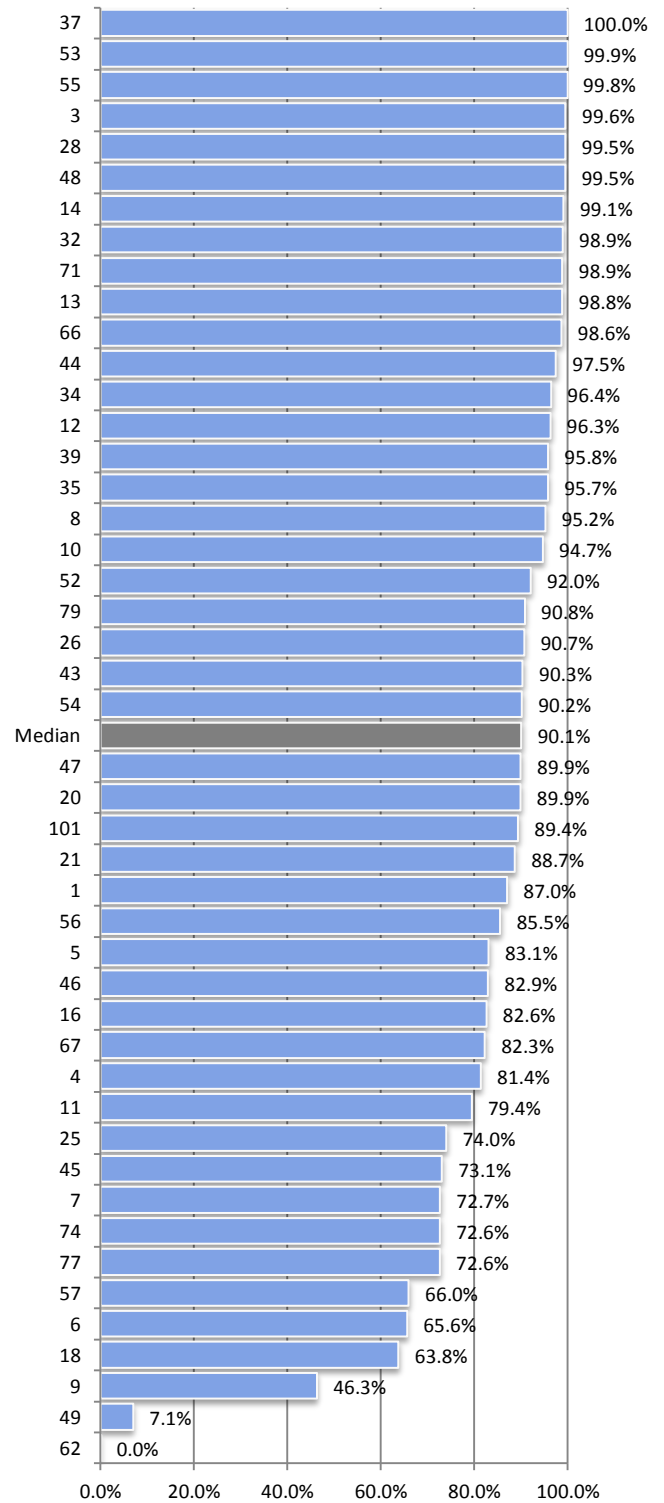


Figure 23  
Pay Checks - Direct Deposits

This is the percent of pay checks issued that were direct deposits.



# KPI DEFINITIONS

## Pay Checks Processed per FTE per Month

**Importance** This measure is a driver of a payroll department's costs. Lower processing rates may result from a low level of automation, high paycheck error rates, or high rates of off-cycle paychecks that must be manually processed. Higher processing rates may be the result of increased automation and highly competent staff.

**Calculation** Total number of paychecks processed by Payroll department *divided by* total number of Payroll staff (FTEs), *divided by* 12 months.

## Payroll Cost per \$100K Spend

**Importance** This measures the efficiency of the payroll operation. A higher cost could indicate an opportunity to realize efficiencies in payroll operation while a lower cost indicates a leaner, more efficient operation.

### Factors that Influence

- Number of employees processing the payroll
- Skill level of the employees processing payroll
- Types of software/hardware used to process the payroll
- Processes and procedures in place to collect payroll data
- Number of employees being paid
- Number of contracts requiring compliance
- Frequency of payrolls
- Complexity of state/local reporting requirements

**Calculation** Total Payroll personnel costs *plus* total payroll non-personnel costs *divided by* total district payroll spend, *divided by* \$100,000.

## Payroll Cost per Pay Check

**Importance** This measures the efficiency of the payroll operation. A higher cost could indicate an opportunity to realize efficiencies in payroll operation while a lower cost indicates a leaner, more efficient operation.

### Factors that Influence

- Number of employees processing the payroll
- Skill level of the employees processing payroll
- Types of software/hardware used to process the payroll
- Processes and procedures in place to collect payroll data
- Number of employees being paid
- Number of contracts requiring compliance
- Frequency of payrolls
- Complexity of state/local reporting requirements

**Calculation** Total Payroll personnel costs *plus* total payroll non-personnel costs *divided by* total number of payroll checks.

## Pay Checks - Errors per \$10K Pay Checks

**Importance** High error rates can indicate a lack of adequate controls.

### Factors that Influence

- Process controls
- Staff turnover
- Staff experience
- Payment system
- Level of automation

**Calculation** Total number of paycheck errors *divided by* total number of paychecks handled by Payroll department, *divided by* \$10,000.

## Payroll Staff - Overtime Hours per Payroll FTE

**Importance** This measures the efficiency and effectiveness of the payroll department. Excessive overtime can be an indication that staffing levels are inadequate or that processes and procedures need to be revised and streamlined to make the work more efficient. An absence of any overtime may indicate staffing levels that are too high for the volume of work the department is processing.

**Calculation** Total number of Payroll overtime hours *divided by* total number of Payroll staff (FTEs).

## Personnel Record Self-Service Usage per District FTE

**Importance** This measures the level of automation of the payroll department, which can reduce error rates and processing costs.

### Factors that Influence

- Software used may not provide employee self-service
- Employee self-service modules of the software may not be in use
- Implementation of these modules may be too costly
- Support/help-desk services for the employee self-serve modules may not be available

**Calculation** Total number of employee records self-service changes *divided by* total number of district employees (FTEs).

## W-2 Correction Rate (W-2c's)

**Importance** W-2(c) forms are the result of errors in the initial W-2 filing. Corrections can be costly in terms of staff time.

### Factors that Influence

- Process controls
- Quality controls

**Calculation** Total number of W-2(c) forms issued *divided by* total number of W-2 forms issued.

## Pay Checks - Direct Deposits

**Importance** Use of direct deposit can increase the levels of automation and decrease costs.

### Factors that Influence

- Payment systems
- Pay check policy

**Calculation** Total number of pay checks paid through direct deposit *divided by* the total number of pay checks issued.

# FINANCIAL MANAGEMENT

Performance metrics in financial management assess the overall financial health of a district, as measured by its **Fund Balance Ratio to District Revenue** and **Debt Service Burden per \$1,000 Revenue**. They also measure a district's *practices in effective budgeting*. These practices are broadly represented by a district's **Expenditure Efficiency** and **Revenue Efficiency**, which compare the adopted and final budgets to actual levels of income and spending. A value close to 0% shows highly accurate *budget forecasting*. Finally, **Days to Publish Annual Financial Report** is a measure of the timeliness of district's financial disclosures.

Generally, *leadership and governance factors* are the starting point of good financial health:

- School board and administrative policies and procedures
- Budget development and management processes
- Unrestricted fund balance use policies and procedures
- Operating funds definition

Additionally, other conditions and factors should be considered as you evaluate your district's financial health and forecast for the future:

- Revenue experience, variability, and forecasts
- Expenditure trends, volatility, and projections
- Per capita income levels
- Real property values
- Local retail sales and business receipts
- Commercial acreage and business property market value
- Changes in local employment base
- Changes in residential development trends
- Restrictions on legal reserves
- Age of district infrastructure
- Monitoring and reporting systems



# *LIST OF KPIS IN FINANCIAL MANAGEMENT*

Below is the complete list of Power Indicators, Essential Few and other key indicators in Financial Management. Indicators in bold are those included in this report. (See "KPI Definitions" at the back of this section for more complete descriptions of these measures.) All other KPIs are available to CGCS members on the web-based ActPoint® KPI system.

**POWER INDICATORS**

- Debt Principal Ratio to District Revenue**
- Debt Servicing Costs Ratio to District Revenue**
- Fund Balance Ratio (A) Unassigned**
- Fund Balance Ratio (B) Uncommitted**
- Fund Balance Ratio (C) Unrestricted**
- Expenditure Efficiency - Final Budget as Percent of Actual**
- Revenue Efficiency - Final Budget as Percent of Actual**

**ESSENTIAL FEW**

- Annual Financial Report - Days to Publish**
- Expenditure Efficiency - Adopted Budget as Percent of Actual**
- Revenue Efficiency - Adopted Budget as Percent of Actual**

**OTHER KEY INDICATORS**

- Budget Amendments
- Debt Servicing Costs Ratio to Total Debt
- Fund Balance - Percent (a) Unassigned
- Fund Balance - Percent (b) Assigned
- Fund Balance - Percent (c) Committed
- Fund Balance - Percent (d) Restricted
- Fund Balance - Percent (e) Nonspendable
- Fund Balance Ratio (D) All except Nonspendable**
- Fund Balance Ratio (E) All Types**

FINANCE

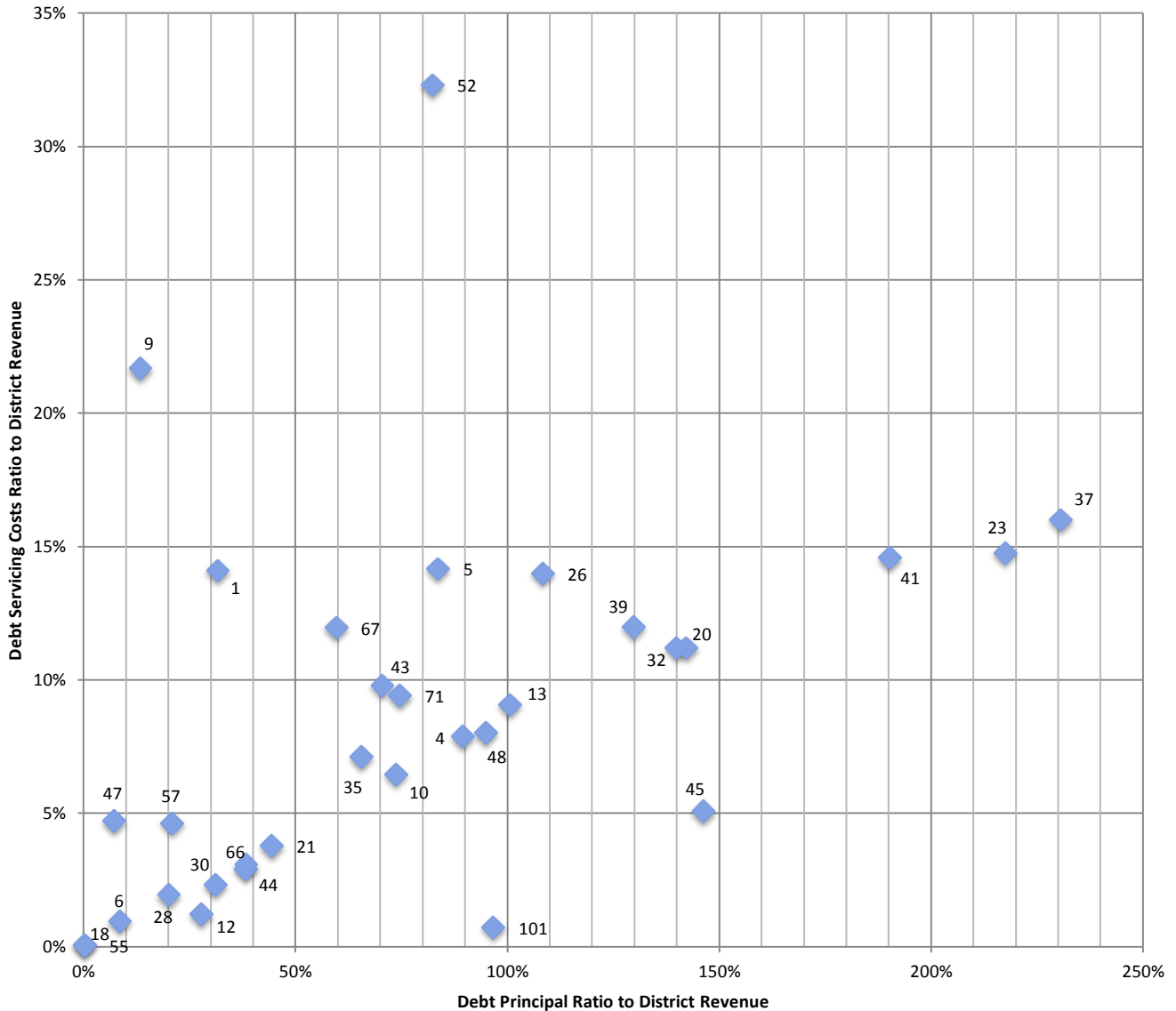
FINANCIAL MANAGEMENT

# FEATURED ANALYSIS

Figure 24  
**Debt Principal vs. Debt Servicing Costs**

This scatter plot shows a district's total outstanding debt (regardless of the period of repayment) as a ratio to one year of revenue, compared with the debt servicing costs over one year (also as a ratio to one year of revenue). The clear trend to notice is not surprising: more total debt means more money that is spent annually on debt repayments.

What is not represented in this chart is what the district was able to do with those borrowed funds. Often borrowing is done in order to make worthwhile investments, such as school buildings.



FINANCE  
FINANCIAL MANAGEMENT

*Have your borrowed funds been worthwhile enough to justify the cost of debt?*

*Where do you expect your district to be on this chart in three years?*

# DATA DISCOVERY

Figure 25  
Debt Principal Ratio to District Revenue

This shows the total amount of debt outstanding (regardless of re-payment term) relative to one year of revenue.

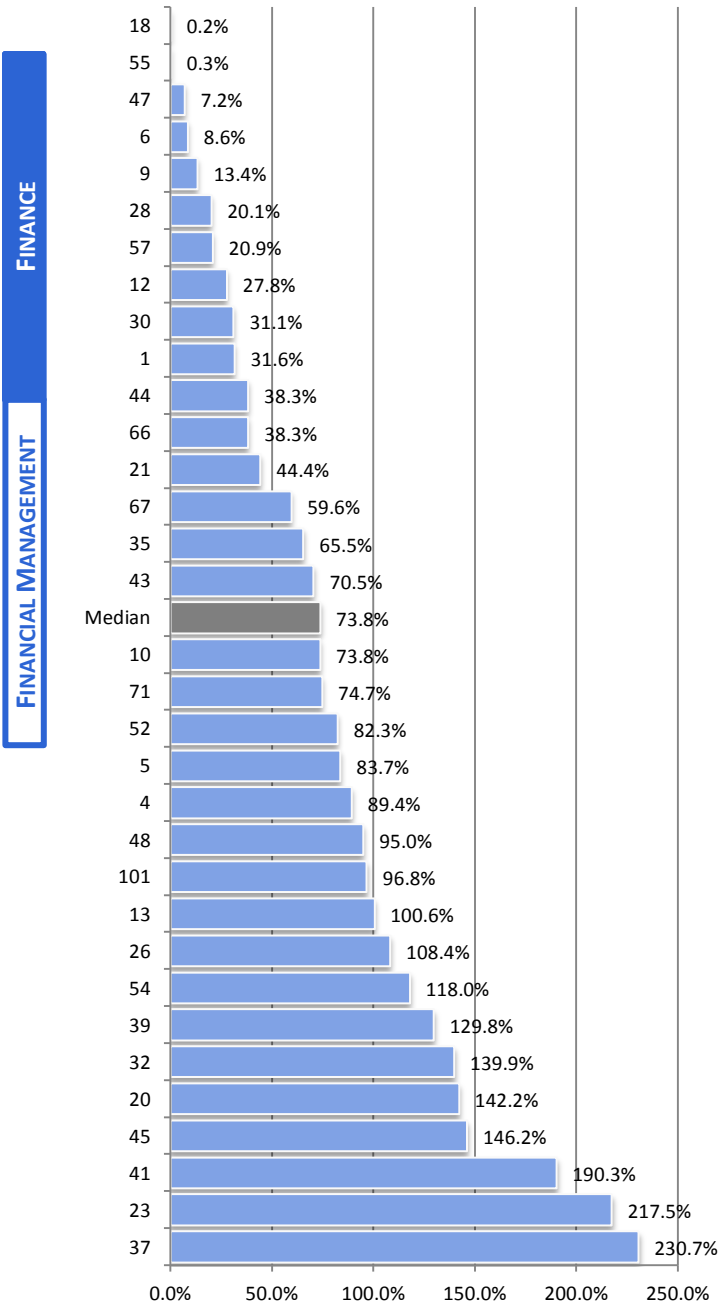


Figure 26  
Debt Servicing Costs Ratio to District Revenue

This is the amount paid in debt payments over one year relative to one year of revenue.

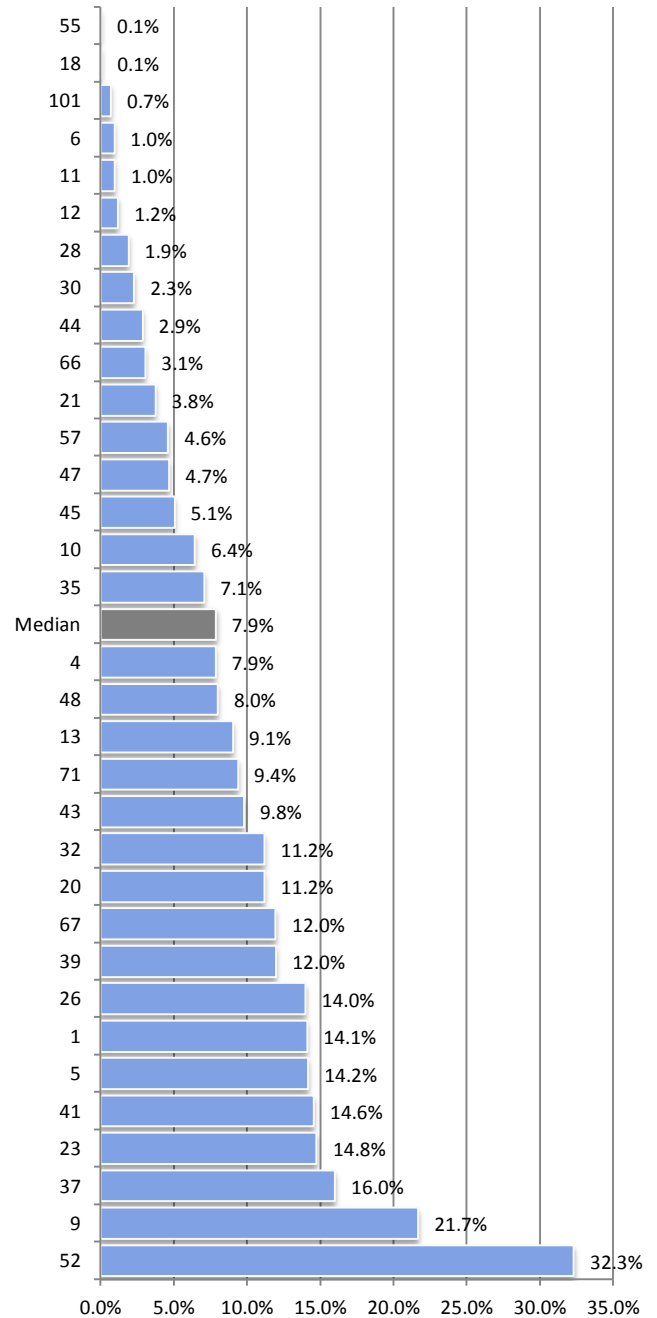




Figure 27  
Fund Balance Ratio to District Revenue - All Types

This is the year-end fund balance relative to total annual revenue, including both unrestricted and restricted fund balance types. An adequate fund balance means that there is enough money to maintain cash flow for regular district operations.

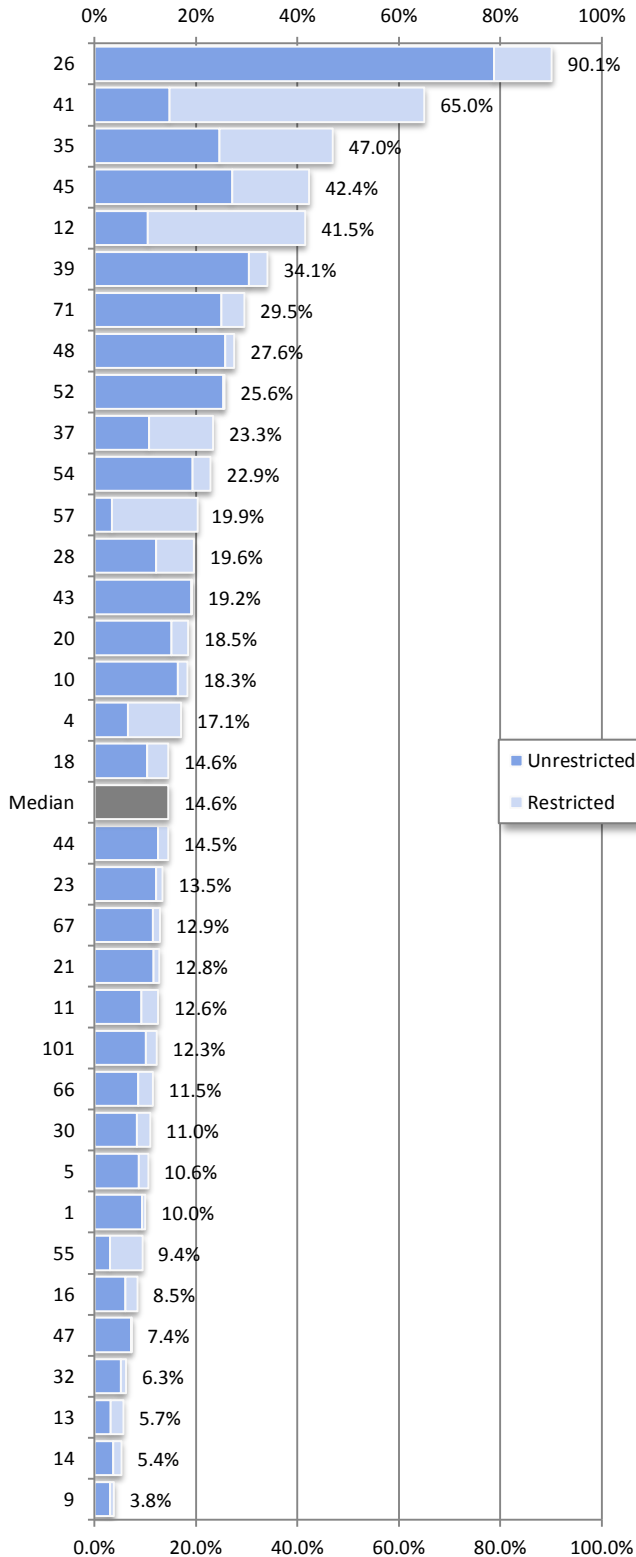
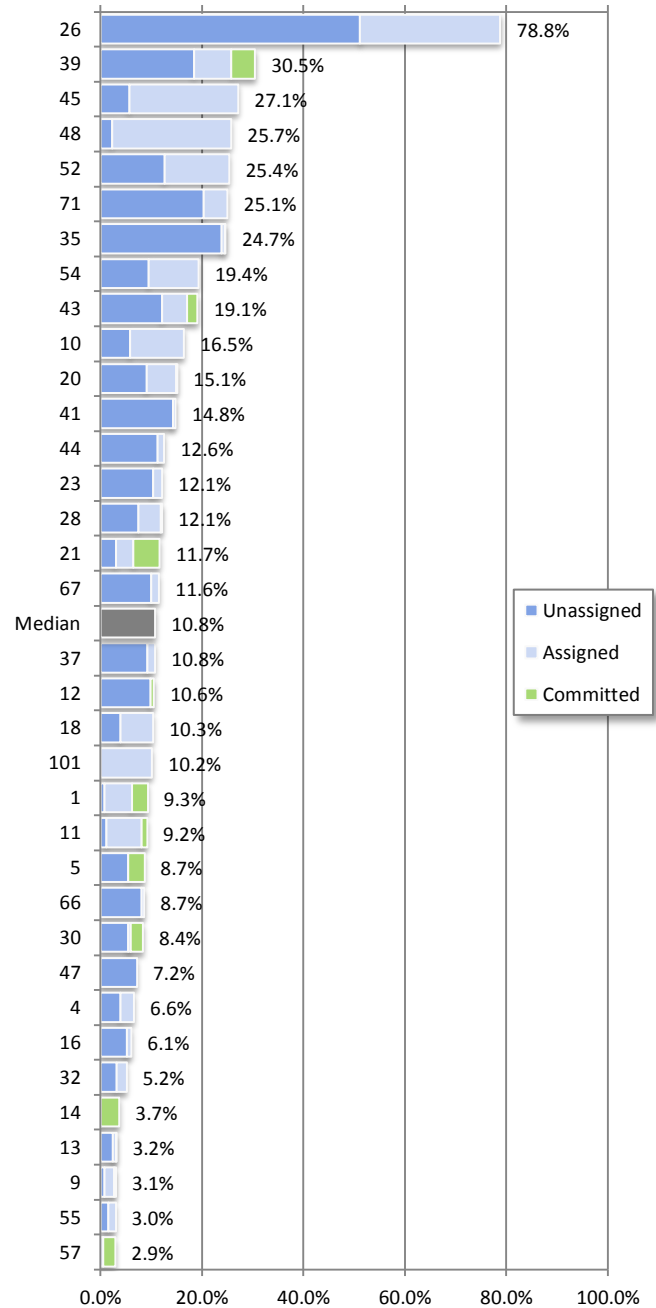


Figure 28  
Fund Balance Ratio to District Revenue – Unrestricted

This is the year-end fund balance relative to total annual revenue for all unrestricted fund balance types (which includes unassigned, assigned and committed). Unrestricted funds are generally easier to repurpose if the need arises, especially if they are unassigned.



FINANCE  
FINANCIAL MANAGEMENT

*Have your fund balance levels been enough to avoid cash flow and/or programming problems?*

Figure 29  
Expenditure Efficiency – Adopted Budget  
Difference from Actual

A ratio above zero means that the district spent less than expected.

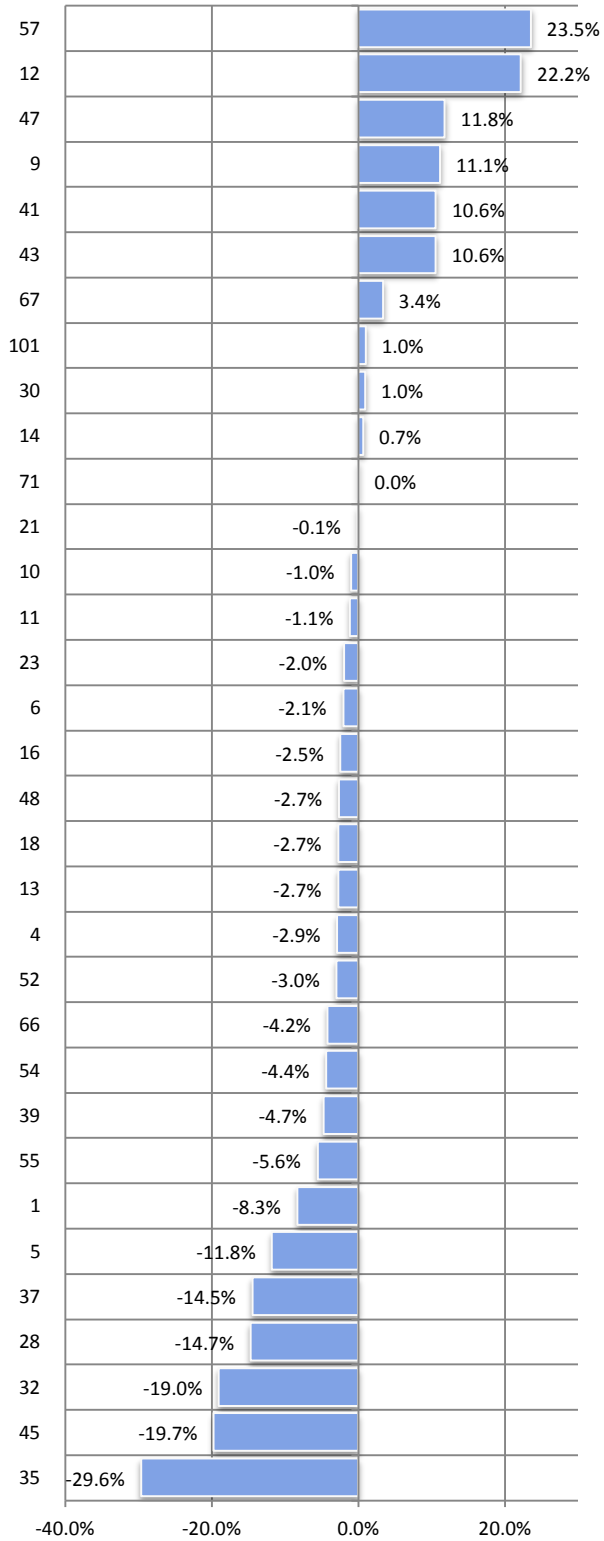


Figure 30  
Revenue Efficiency – Adopted Budget  
Difference from Actual

A ratio below zero means that the district received more revenue than expected.

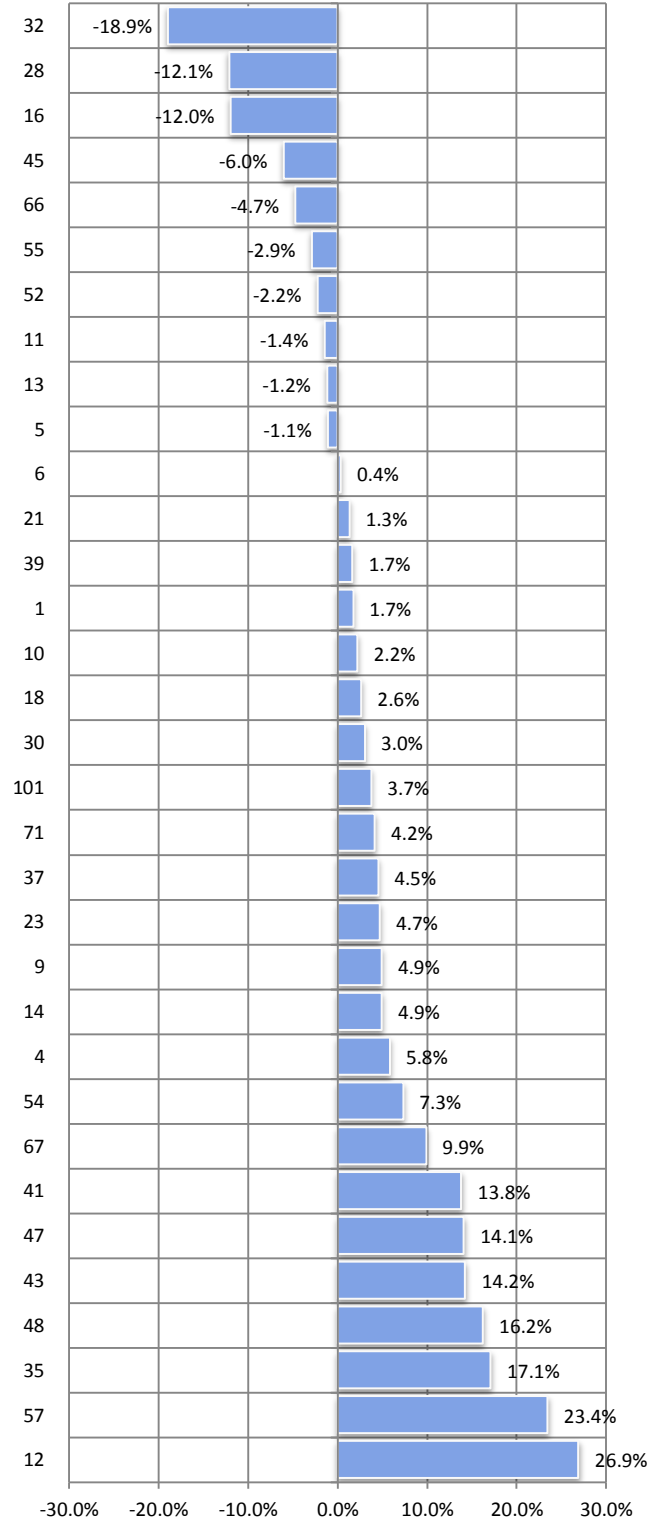


Figure 31  
Expenditure Efficiency – Final Budget Difference from Actual

A ratio above zero means that the district spent less than expected.

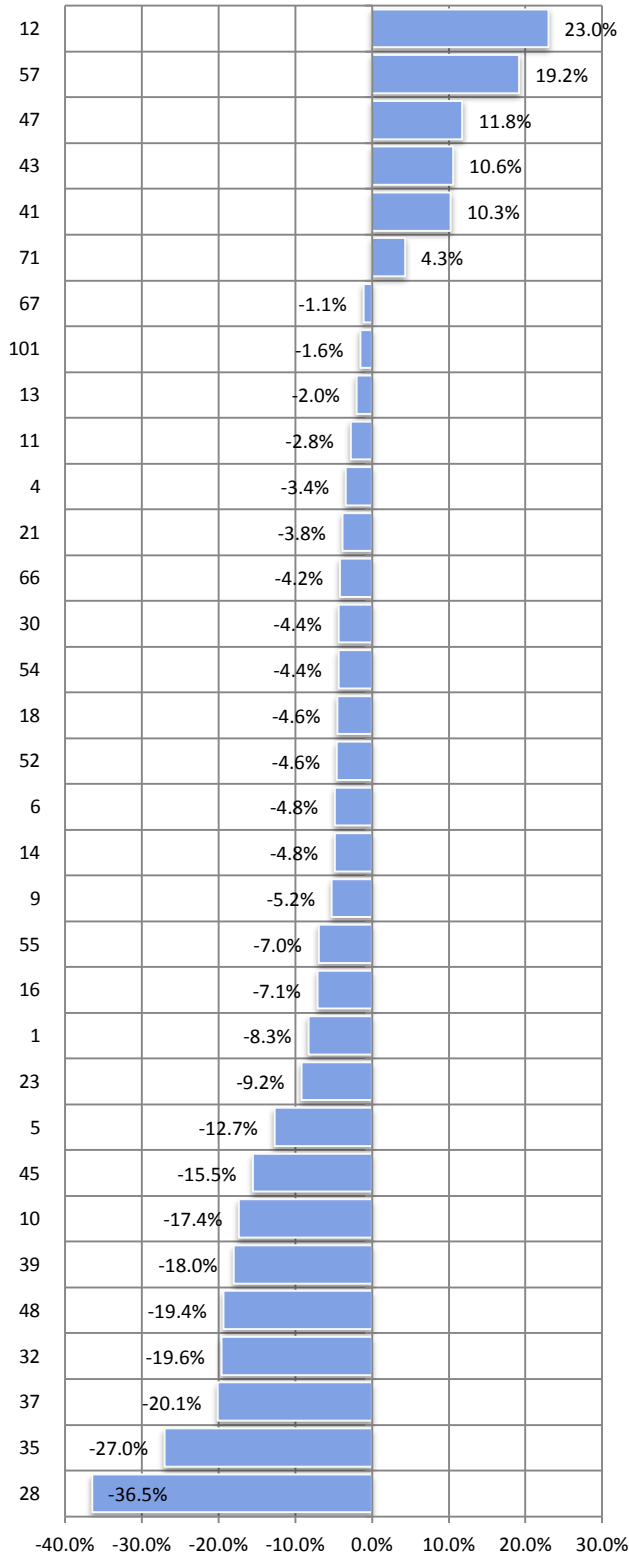


Figure 32  
Revenue Efficiency – Final Budget Difference from Actual

A ratio below zero means that the district received more revenue than expected.

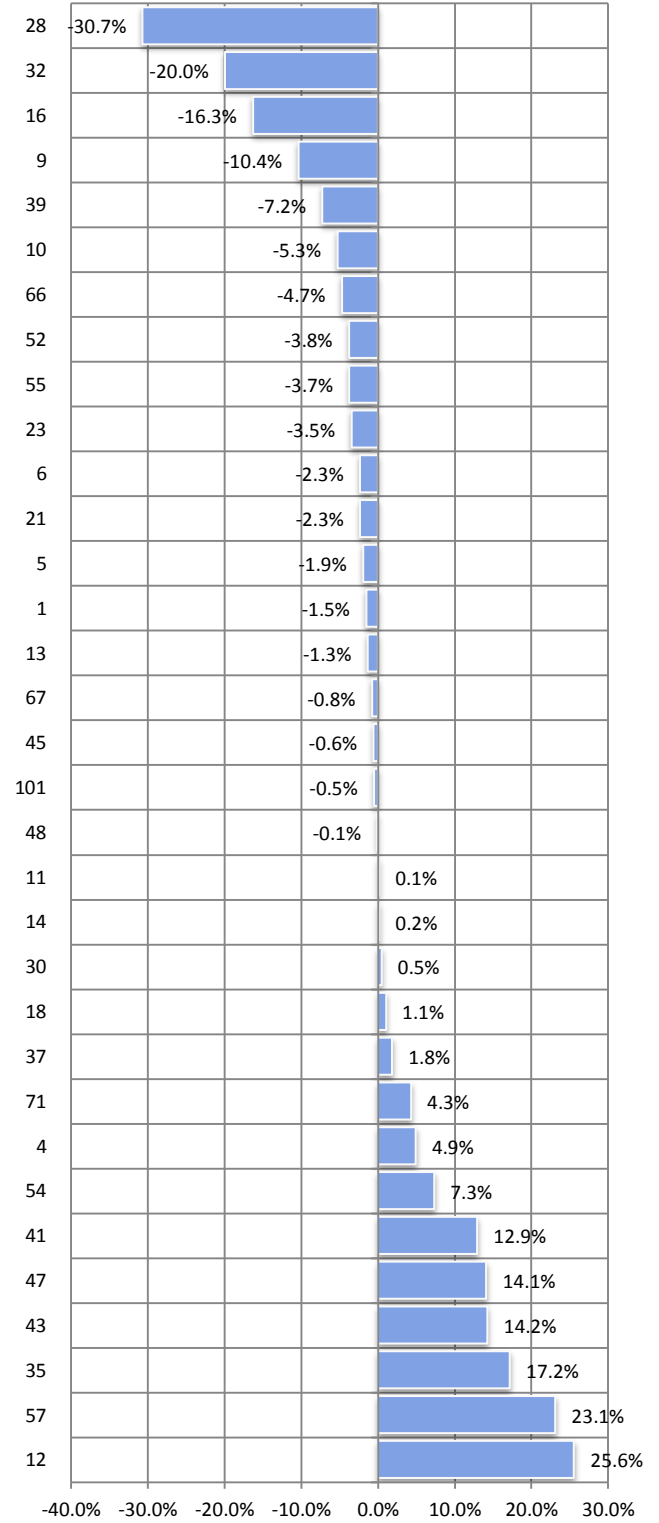
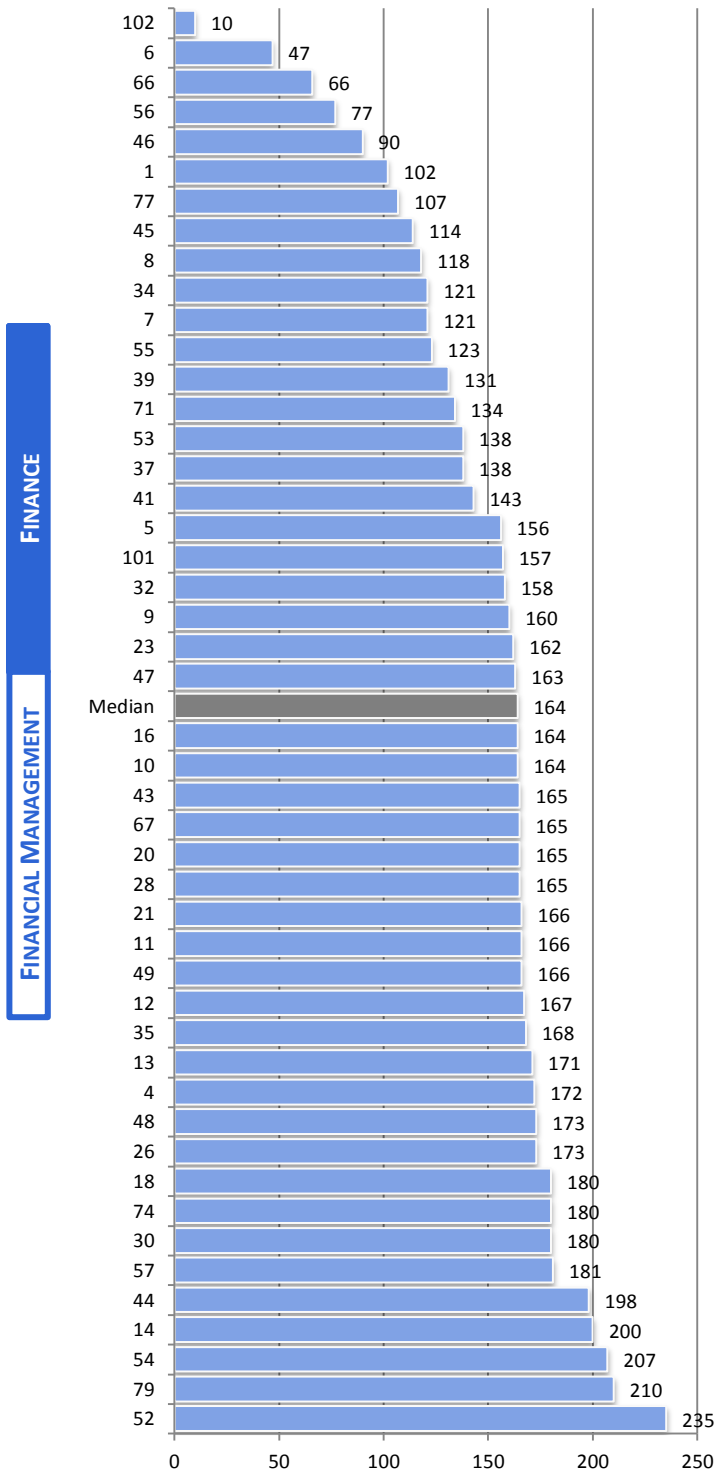


Figure 33  
Annual Financial Report – Days to Publish



Are you satisfied with the length of time it took to publish your annual financial report?

# KPI DEFINITIONS

## Debt Principal Ratio to District Revenue

**Importance** This evaluates the total level of debt that the district currently owes relative to its annual revenue.

**Factors that Influence**

- Tax base and growth projections
- Capital projects
- Levels of state and grant funding
- Interest rates (cost of borrowing)
- Fund balance ratio

**Calculation** Total debt principal *divided by* total debt servicing costs.

## Debt Servicing Costs Ratio to District Revenue

**Importance** This evaluates the annual amount paid in debt servicing relative to annual district revenue.

**Factors that Influence**

- Interest rates (cost of borrowing)
- Level of debt
- Tax base and growth projections
- Revenue sources to pay down debt
- Fund balance ratio

**Calculation** Total debt servicing costs *divided by* total district operating revenue.

## Fund Balance Ratio to District Revenue

**Importance** This measure assesses the fiscal health of the district supported by the general fund, including financial capacity to meet unexpected or planned future needs. A high percentage indicates greater fiscal health and financial capacity to meet unexpected or future needs. A low percentage indicates risk for the district in its ability to meet unexpected changes in revenues or expenses.

**Factors that Influence**

- School board and administrative policies and procedures
- Administrative leadership and decision making processes
- Budget development and management processes
- Revenue experience, variability, and forecasts
- Expenditure trends, volatility, and projections
- Planned uses of fund balance
- Restrictions on legal reserves
- Unreserved fund balance use policies and procedures
- Local fiscal authority policies and procedures
- Operating funds definition

**Calculation** Total fund balance that was unassigned *divided by* total district operating expenditures.

## Expenditure Efficiency

**Importance** This measure assesses efficiency in spending against the final approved general fund expenditure budget. A high percentage nearing 100% indicates efficient utilization of appropriated resources. A low percentage, or a percentage significantly exceeding 100%, indicates major variance from the final approved budget and signifies that the budget was inaccurate, misaligned with the actual needs of the school system, significantly impacted by unforeseen factors, and/or potentially mismanaged. Districts experiencing a low percentage or a significantly high percentage should thoroughly investigate the causes for the variances and reevaluate their budget development and management processes to improve accuracy and alignment. Districts having significant variances in expenditures to budget when measured against the original budget, but near 100% when measured against the final amended budget, are monitoring and adjusting their budgets during the year to meet the changing conditions of the district. Such districts should also consider reevaluating their budget development and management processes to improve accuracy and alignment.

**Factors that Influence**

- School board and administrative policies and procedures
- Budget development and management processes
- Administrative organizational structure, leadership styles, decision making processes, and distribution of authority
- Departmental and individual employee responsibilities and competencies
- Performance management, monitoring, and reporting systems
- General Fund definition

**Calculation** Total budgeted expenditures in the final budget *divided by* total district operating expenditures.

## Revenue Efficiency

**Importance** This measure assesses efficiency in spending against the final approved general fund revenue budget. A high percentage nearing 100% indicates efficient utilization of appropriated resources. A low percentage, or a percentage significantly exceeding 100%, indicates major variance from the final approved budget and signifies that the budget was inaccurate, misaligned with the actual needs of the school system, significantly impacted by unforeseen factors, and/or potentially mismanaged. Districts experiencing a low percentage or a significantly high percentage should thoroughly investigate the causes for the variances and reevaluate their budget development and management processes to improve accuracy and alignment. Districts having significant variances in revenues to budget when measured against the original budget, but near 100% when measured against the final amended budget, are monitoring and adjusting their budgets during the year to meet the changing conditions of the district. Such districts should also consider reevaluating their budget development and management processes to improve accuracy and alignment.

**Factors that Influence**

- School board and administrative policies and procedures
- Budget development and management processes
- Administrative organizational structure, leadership styles, decision making processes and distribution of authority

- Departmental and individual employee responsibilities and competencies
- Performance management, monitoring, and reporting systems
- General Fund definition

**Calculation** Total budgeted revenue in the final budget *divided by* total district operating revenue.

#### Annual Financial Report – Days to Publish

**Importance** Timely publication of annual financial reports is an important part of responsible financial management and governance.

**Factors that Influence**

- Reporting processes
- Time management and goal-setting
- Staff experience and credentials

**Calculation** Number of calendar days to publish the annual financial report, from end-of-year date to publishing date.

# GRANTS MANAGEMENT

Good performance in grants management is reflected in a few basic performance characteristics. Cash flow and availability of grant funds are the primary concerns: Do you spend all your grant funds in the grant period? How quickly do you process reimbursements? These are addressed in part using the metrics **Returned Grant Funds per \$100K Grant Revenue** and **Aging of Grants Receivables**.

Grant-funded programming should also be considered an exposure to risk. Looking at levels of **Grant-Funded FTE Dependence** can guide a district to either:

- a) Allocate enough fund reserves to insure themselves against possible shifts in funding sources; or
- b) Have an evaluation system in place that helps determine whether positions should be continued beyond the term of a grant.

These metrics should give a basic sense of where a district might improve its performance in grants management. Areas of improvement may include:

- Monitoring and reporting systems
- Escalation procedures to address timeliness
- Administrative leadership style, decision-making process, and distribution of organizational authority
- School Board, administrative policies, and management process
- Procurement regulations and policies
- Reserve funds to supplant the risks of high grant dependency



## *LIST OF KPIS IN GRANTS MANAGEMENT*

Below is the complete list of Power Indicators, Essential Few and other key indicators in Grants Management. Indicators in bold are those included in this report. (See "KPI Definitions" at the back of this section for more complete descriptions of these measures.) All other KPIs are available to CGCS members on the web-based ActPoint® KPI system.

**POWER INDICATORS**

- Grant Funds as Percent of Total Budget**
- Grant-Funded Staff as Percent of District FTEs**
- Returned Grant Funds per \$100K Grant Revenue**

**ESSENTIAL FEW**

- Amendments to Grant Budgets
- Competitive Grant Funds as Percent of Total**
- Days to Access New Grant Funds**
- Grants Receivables Aging**

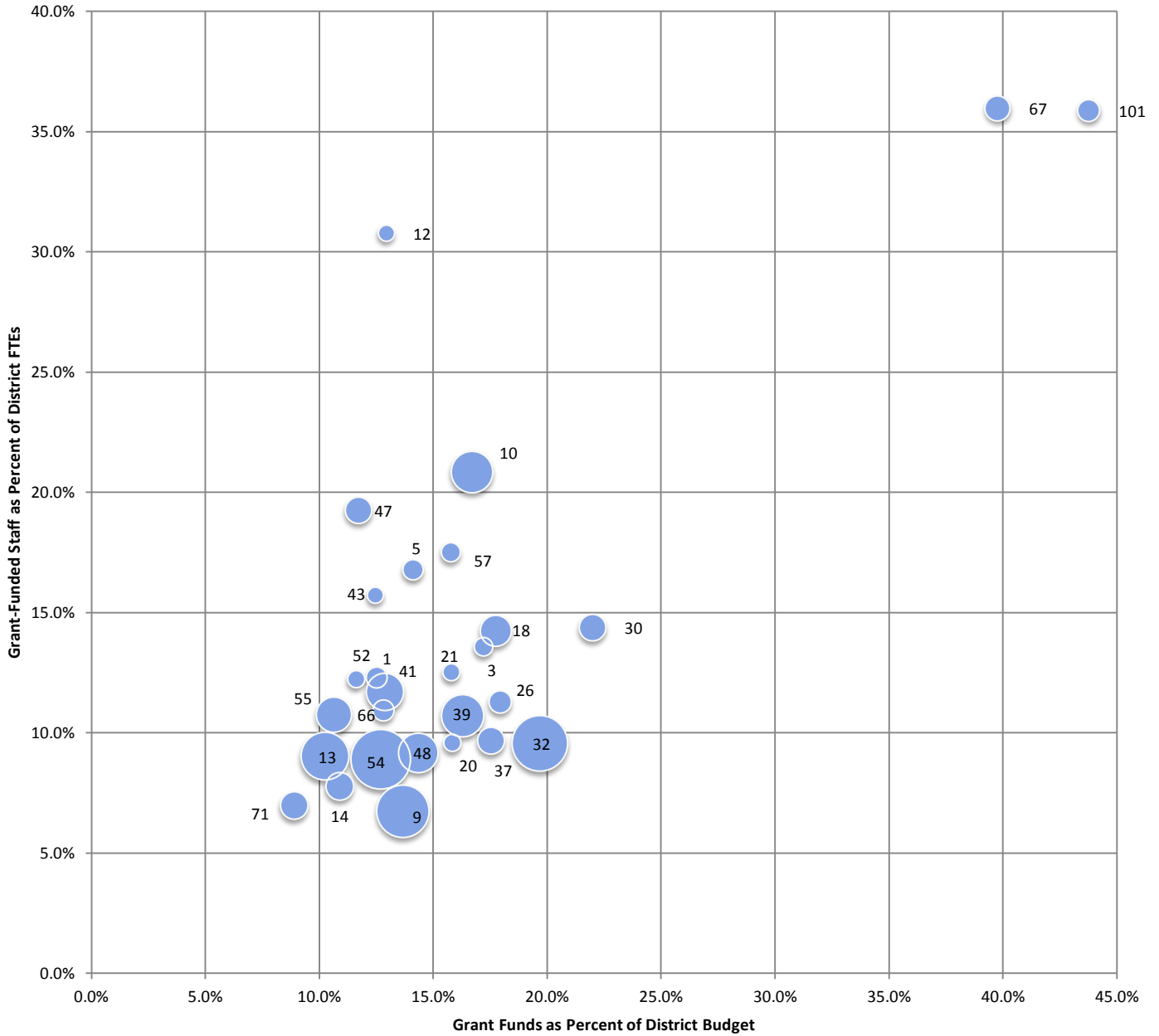
**OTHER KEY INDICATORS**

- Grant Funds - Percent Federal
- Grant Funds - Percent Local/Private
- Grant Funds - Percent State
- Grants Receivables Aging - Days to Process
- Grants Receivables Aging - Days to Receive Payment
- Returned Grant Funds - Federal
- Returned Grant Funds - Local/Private
- Returned Grant Funds - State



# FEATURED ANALYSIS

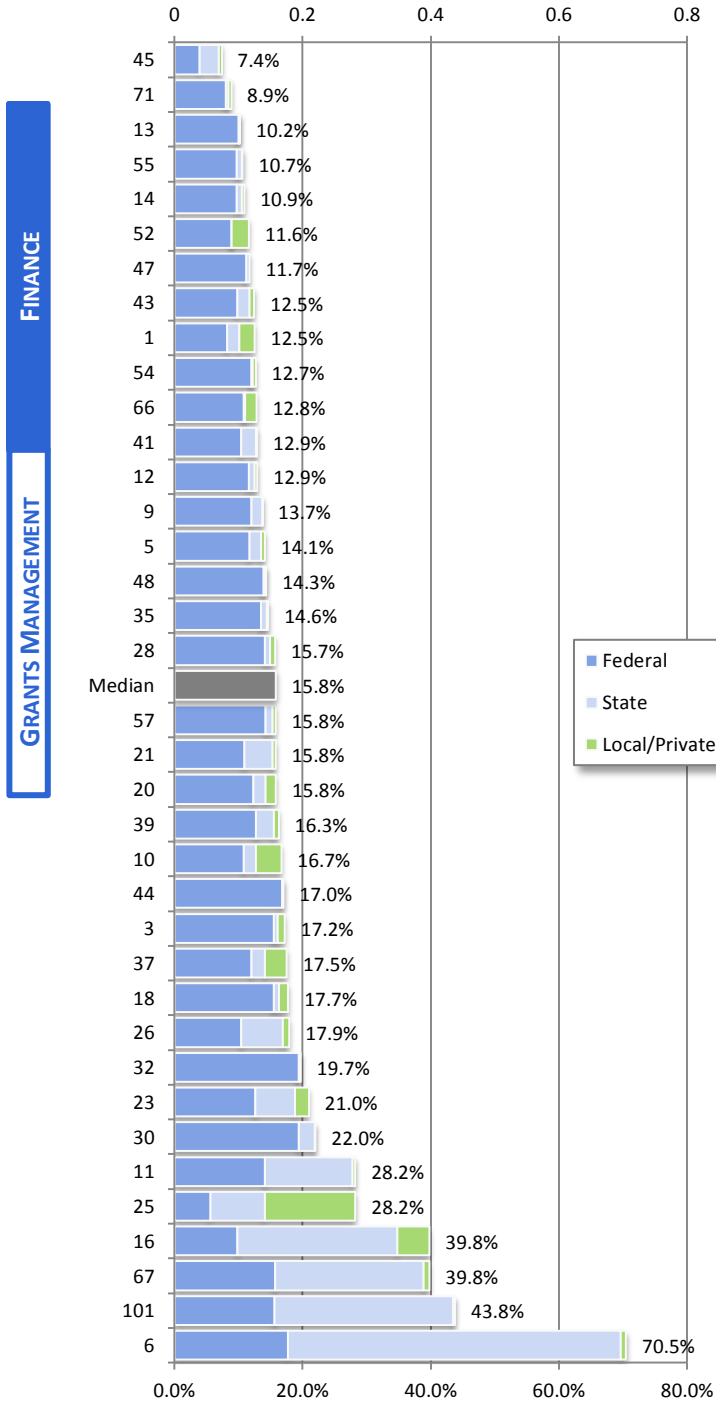
Figure 34  
Grant Funds vs. Grant-Funded Staff



# DATA DISCOVERY

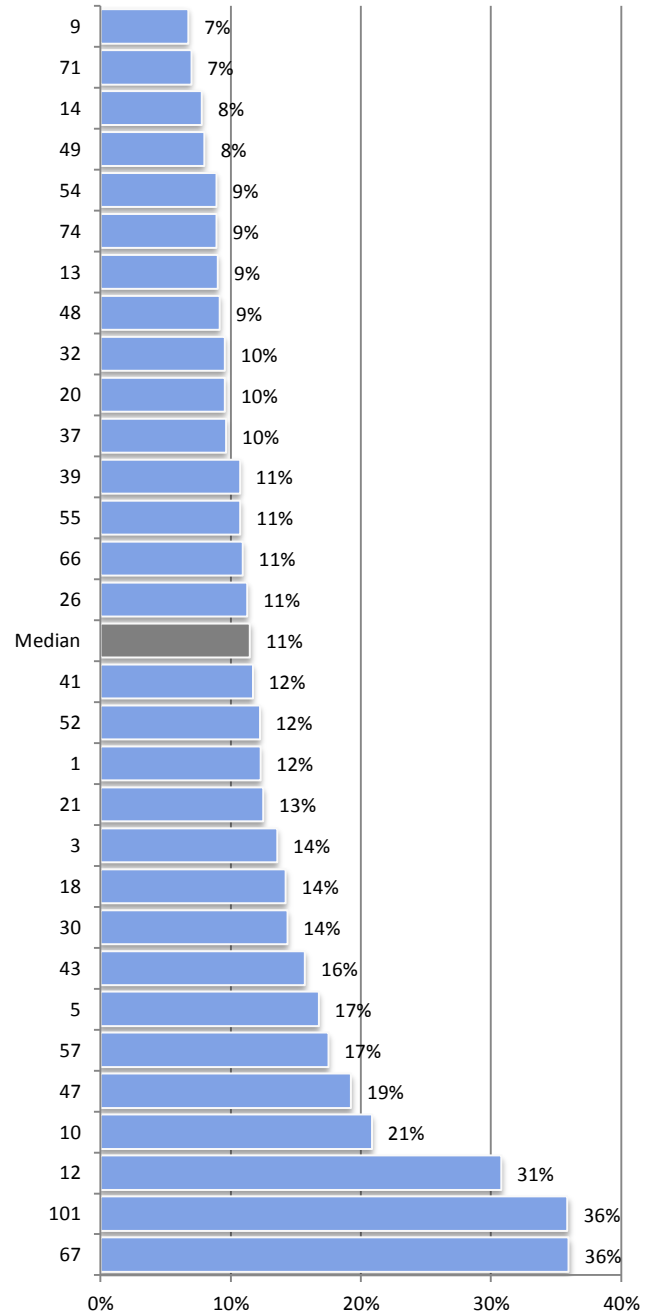
**Figure 35**  
Grant Funds as Percent of Total Budget

This answers the basic question, "How much of district funding comes from grants?" Grants here are defined as funds that are restricted due to constraints set by the grantor.



**Figure 36**  
Grant-Funded Staff as Percent of District FTEs

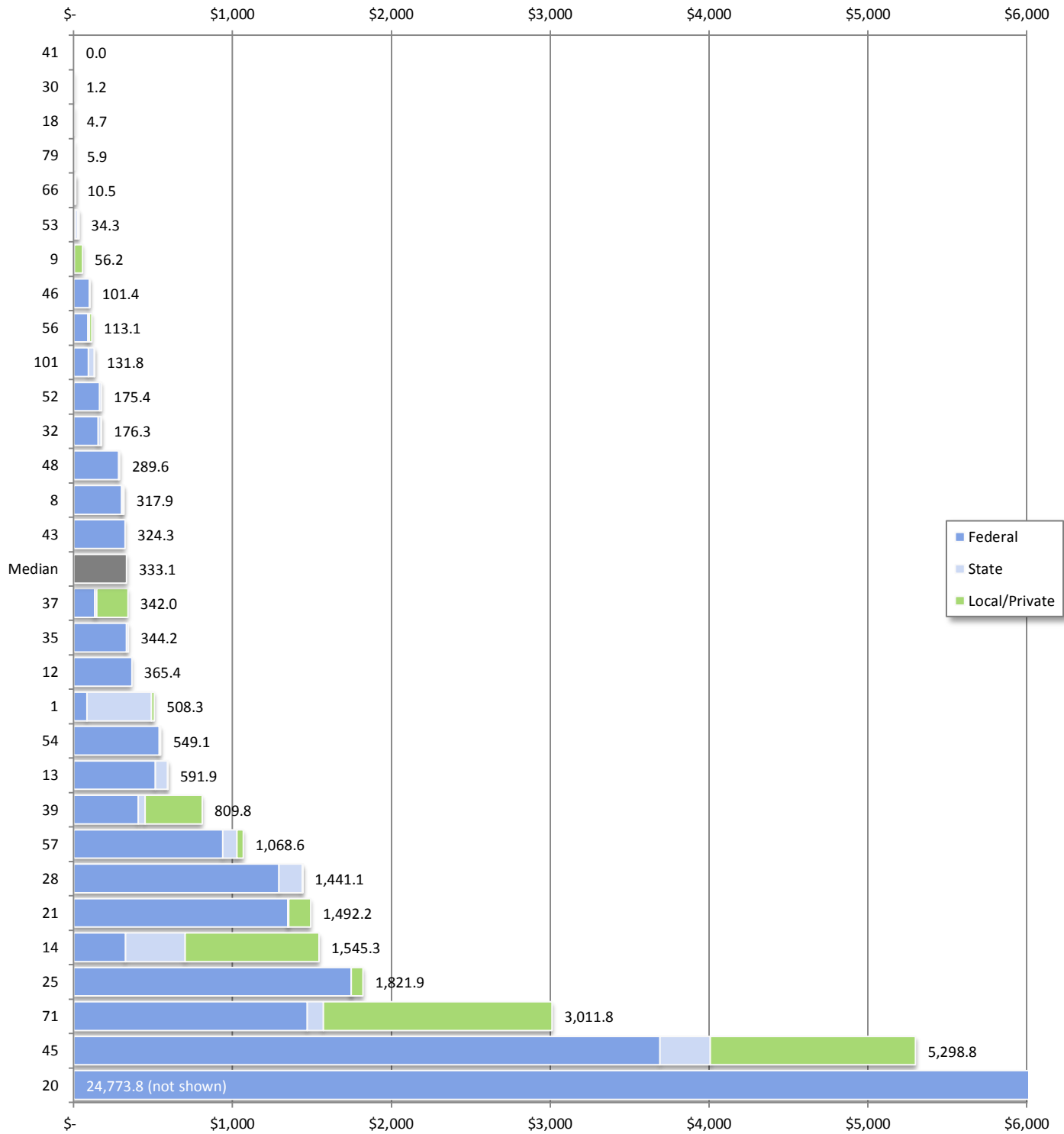
This shows the level of dependency on grant funds for district staff.



*Does your level of grant fund dependency expose your district to risk?*

Figure 37  
Returned Grant Funds per \$100K Grant Revenue

Grant funds are typically returned when there is no carryover option and the grant term is finished.



FINANCE  
GRANTS MANAGEMENT

Figure 38  
Competitive Grant Funds as Percent of Total

This answers the question, "How much of a district's grant funding comes from competitive grants?" Note that the order in this chart does not suggest ranking.

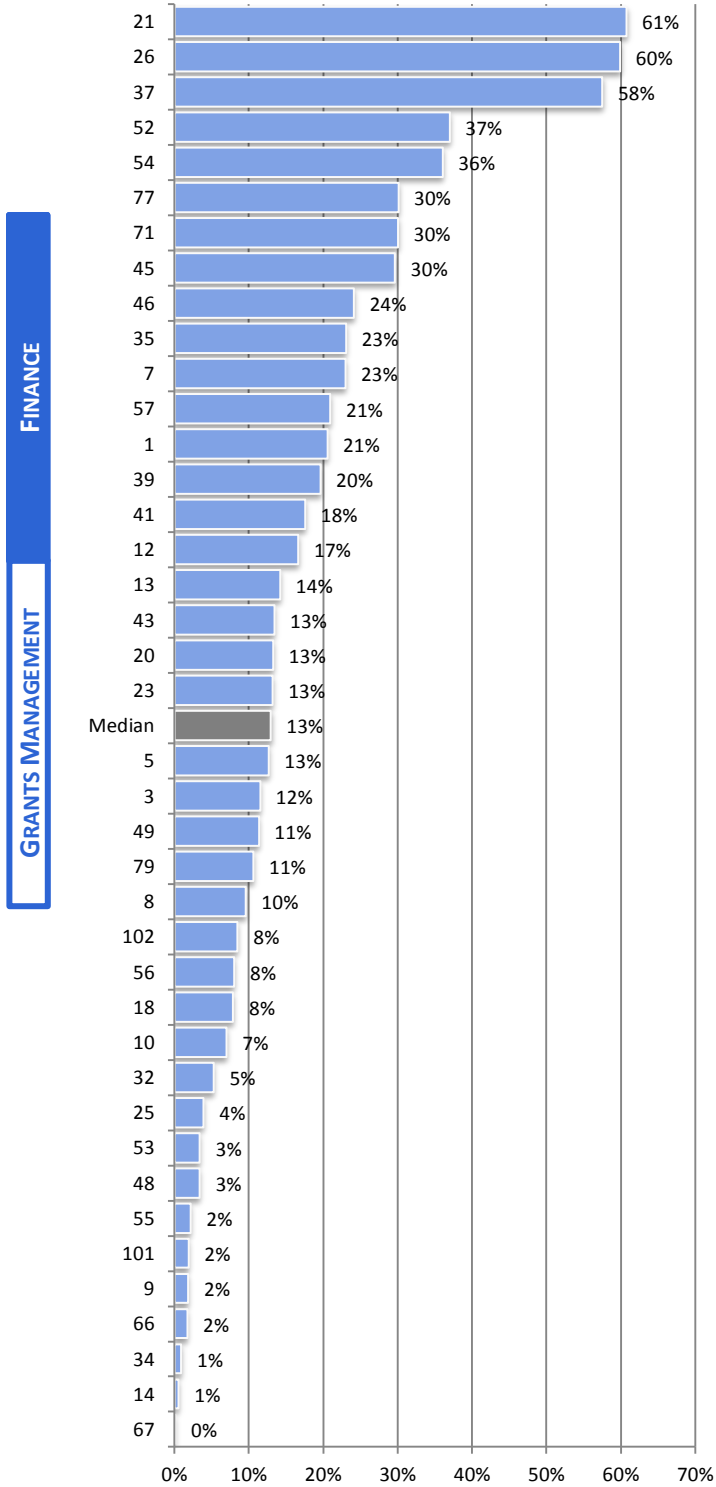
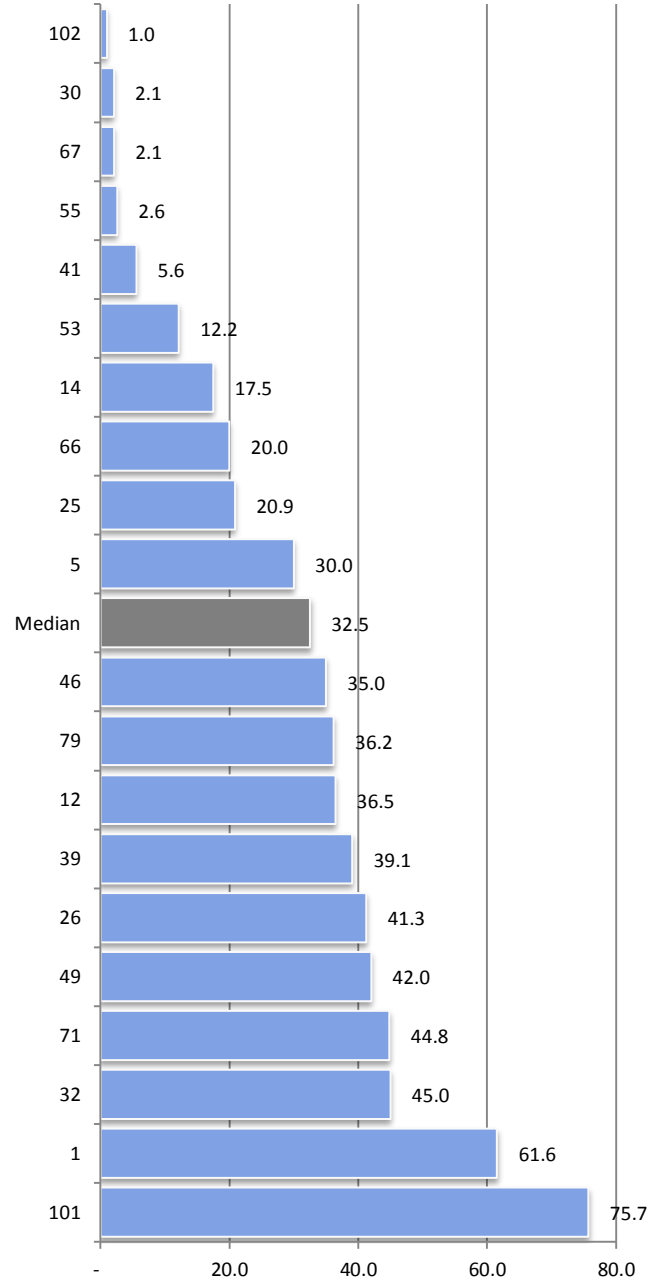


Figure 39  
Days to Access New Grant Funds

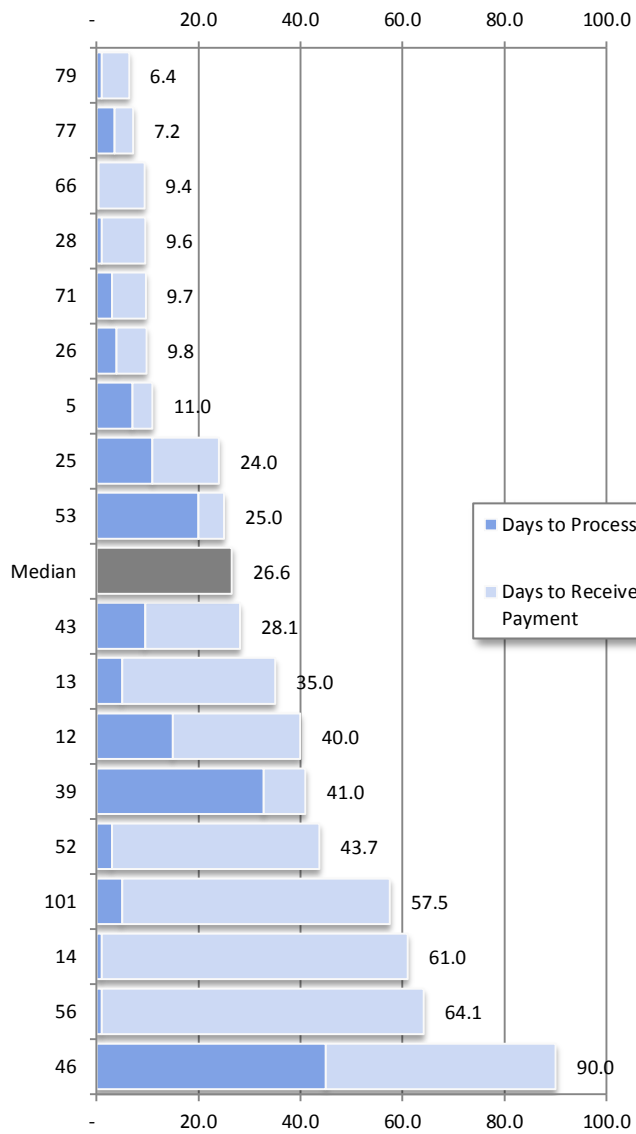
This is the average number of days it takes before spending begins on a grant project after it has been approved by the grantor. It is an efficiency measure for the office that processes grant approvals.



*Should it be easier for district personnel to use their grant funds?*

Figure 40  
**Grants Receivables Aging**

This is the average number of days it takes to invoice and receive grant reimbursements.



*What are the issues, if any, that your district faces when it comes to Grants Management? Are there any risks that the district is exposed to on account of these issues?*

# KPI DEFINITIONS

## Grant Funds as Percent of Total Budget

**Importance** Shows the magnitude of a district's reliance on additional and alternative funding sources.

**Factors that Influence**

- District demographics that drive eligibility for categorical grants
- Philosophy, policies, procedures embraced by a district in identifying and pursuing grants
- Local economic conditions

**Calculation** Total grant fund expenditures *divided by* total district operating revenue.

## Grant-Funded Staff as Percent of District FTEs

**Importance** This measure shows the level of dependency on grant funds for district personnel funding.

**Calculation** Number of grant-funded staff (FTEs) *divided by* total number of district employees (FTEs).

## Returned Grant Funds per \$100K Grant Revenue

**Importance** Identify and improve cycle time of grant-fund availability. Ensure that no delays exist from budget approval to program implementation that the grant timelines can't be met. This measure assesses efficiency in spending grant funds that are provided by federal, state, and local governments, as well as other sources such as foundations.

**Factors that Influence**

- Who monitors awards and the grant program coordinator to assure timeliness
- Timeliness of award notification from federal and state entities
- School board and administrative policies; as well as budget development and management process and procurement regulations and policies
- The timeliness of expenditures is a good indicator for the grantor to ensure that programming is occurring in time to meet grant deliverables and expected outcomes by the expiration date
- A low number of days between the date the budget is approved until the date of the first expenditure would indicate an effective use of grant funds
- A high number of days would indicate an ineffective use of supplemental resources that could limit or reduce the district's ability to obtain additional revenues in the future

**Calculation** Total grant funds returned (not spent) *divided by* total grant funds expenditures over 100,000.

## Competitive Grant Funds as Percent of Total

**Importance** This can be used to evaluate the level of competitive grant funding in a district. Competitive grant funds can provide useful resources, but can be difficult for long-term planning and can raise concerns about sustainability.

**Factors that Influence**

- Experience and network of grant writers

- Level of focus on obtaining competitive grants
- Vision of district mission

**Calculation** Grant funds expenditures that are from competitive grants *divided by* total grant funds expenditures.

## Days to Access New Grant Funds

**Importance** Identify and improve cycle time of grant fund availability. Ensure that no delays exist from budget approval to program implementation that the grant timelines can't be met. This measure assesses efficiency in spending grant funds that are provided by federal, state, and local governments, as well as other sources such as foundations.

**Factors that Influence**

- Who monitors awards and the grant program coordinator to assure timeliness
- Timeliness of award notification from federal and state entities
- School board and administrative policies, as well as budget development and management process and procurement regulations and policies
- Therefore, the timeliness of expenditures is a good indicator for the grantor to ensure that programming is occurring in time to meet grant deliverables and expected outcomes by the expiration date
- A low number of days between the date the budget is approved until the date of the first expenditure would indicate an effective use of grant funds
- A high number of days would indicate an ineffective use of supplemental resources that could limit or reduce the district's ability to obtain additional revenues in the future

**Calculation** Total aggregate number of days that passed after new grant award notification dates to the first expenditure date *divided by* the total number of new grant awards in the fiscal year.

## Grants Receivables Aging

**Importance** Aging greater than 30 days may indicate that expenditures have not been submitted in a timely way to the funding agency or the funding agency is slow in sending reimbursement, thereby requiring follow-up.

**Factors that Influence**

- Funding agency reimbursement process
- Level of automation
- Complexity of grant
- Frequency of billing
- Payroll suspense

**Calculation** Aggregate number of calendar days to internally process grant receivable invoices, from date grant reimbursements are filed to date invoice is submitted to the grantor *plus* the aggregate number of calendar days to receive payment of submitted invoices, *divided by* the total number of grant receivable invoices.

# PROCUREMENT

Procurement improvement strategies generally fall into two categories:

1. Increasing the level of cost savings, represented broadly by **Procurement Savings Ratio**.
2. Improving efficiency and decreasing costs of the Purchasing department, represented broadly by **Cost per Purchase Order** and **Purchasing Department Costs per Procurement Dollars Spent**.

The first goal is assessed by the cost savings measures **Competitive Procurements Ratio**, **Strategic Sourcing Ratio**, and **Cooperative Purchasing Agreements Ratio**.

Purchasing department cost efficiency is generally improved through *the effective automation of procurement spending*. This is largely represented through **P-Card Transactions Ratio** and **Electronic Procurement Transactions Ratio**. Figures 43 and 44 show the relationship between districts who use P-cards and electronic transactions and their total Purchasing Department Costs per Procurement Dollars Spent.

Finally, metrics of the procurement department's service level, such as **Procurement Administrative Lead Time**, should also be considered.

These metrics of district procurement practices should provide district leaders with a good baseline of information on how their district can improve its Procurement function. The general *influencing factors* that can guide improvement strategies include:

- Procurement policies, particularly those delegating purchase authority and P-Card usage
- Utilization of technology to manage a high volume of low dollar transactions
- e-Procurement and e-Catalog processes utilized by district
- P-Card reconciliation software and P-Card database interface with a district's ERP system
- Budget, purchasing, and audit controls, including P-card credit-limit controls on single transaction and monthly limits
- Utilization of blanket purchase agreements (BPAs)
- Degree of requirement consolidation and standardization
- Use of P-Cards on construction projects and paying large dollar vendors, e.g., utilities, textbook publishers, food, technology projects
- Number of highly complex procurements, especially construction



## *LIST OF KPIS IN PROCUREMENT*

Below is the complete list of Power Indicators, Essential Few and other key indicators in Procurement. Indicators in bold are those included in this report. (See "KPI Definitions" at the back of this section for more complete descriptions of these measures.) All other KPIs are available to CGCS members on the web-based ActPoint® KPI system.

### POWER INDICATORS

- Competitive Procurements Ratio**
- Procurement Cost per \$100K Spend**
- Procurement Cost per Purchase Order**
- Procurement Savings Ratio**
- Strategic Sourcing Ratio**

### ESSENTIAL FEW

- Cooperative Purchasing Ratio**
- P-Card Purchasing Ratio**
- PALT for Requests for Proposals**
- PALT for Invitations for Bids**
- PALT for Informal Solicitations**
- Procurement Staff with Professional Certificate**
- Warehouse Operating Expense Ratio**
- Warehouse Stock Turn Ratio**

### OTHER KEY INDICATORS

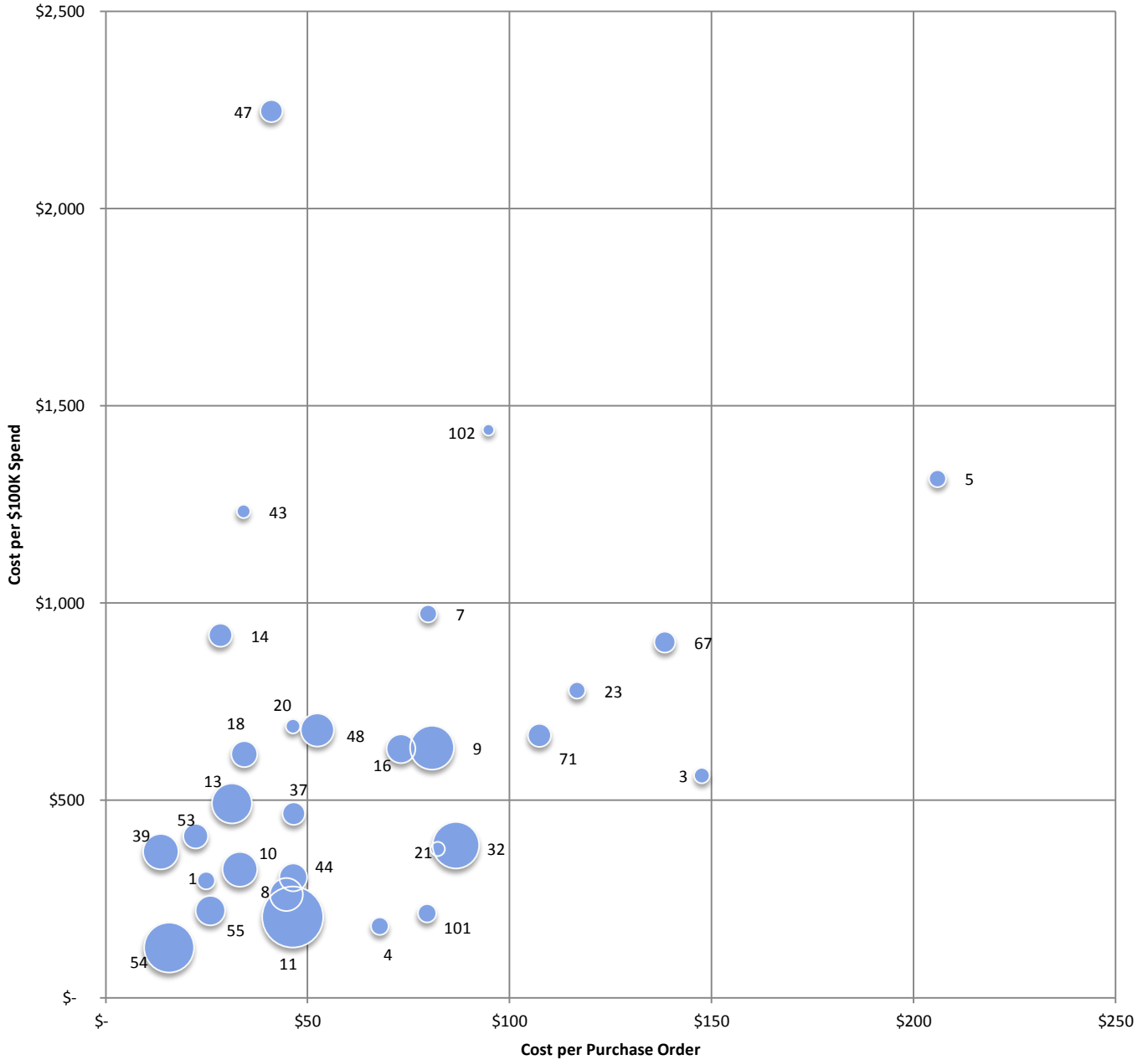
- Competition-Eligible Procurements - Percent Emergency
- Competition-Eligible Procurements - Percent Non-Authorized
- Competition-Eligible Procurements - Percent Sole-Source
- Competition-Eligible Procurements Percent of Total Spending
- Construction - Percent of Purchasing
- Construction Contracts Awarded
- Cooperative Purchasing Ratio - Excluding P-Cards
- M/WBE Vendor Utilization
- P-Card Average Transaction Amount
- P-Card Single Transaction Limit
- PALT for Invitations for Bids - (A) Days to Prepare
- PALT for Invitations for Bids - (B) Days of Advertising and Open Bidding
- PALT for Invitations for Bids - (C) Days to Issue after Close

- PALT for Requests for Proposals - (A) Days to Prepare
- PALT for Requests for Proposals - (B) Days Proposals Accepted
- PALT for Requests for Proposals - (C) Days to Issue after Close
- Procurement Costs per \$100K Revenue
- Procurement Costs Ratio - Outsourced Services
- Procurement Costs Ratio - Personnel
- Procurement Savings - Percent through Informal Solicitations
- Procurement Savings - Percent through Invitations for Bids
- Procurement Savings - Percent through Requests for Proposals
- Procurement Staff - Cost Per FTE
- Procurement Staff - District FTEs per Procurement FTE
- Procurement Staffing Ratio - Professional Staff
- Procurement Staffing Ratio - Supervisors and Managers
- Procurement Staffing Ratio - Support and Clerical
- Threshold for Formal Proposal
- Threshold for Formal Sealed Bid
- Threshold for School Board Approval
- Warehouse Number of Unique Items
- Warehouse Number of Unique Items - Facility Maintenance
- Warehouse Number of Unique Items - Food Services
- Warehouse Number Of Unique Items - School/office Supplies
- Warehouse Number of Unique Items - Textbooks
- Warehouse Number of Unique Items - Transportation Maintenance
- Warehouse Operating Expense Ratio - Facility Maintenance
- Warehouse Operating Expense Ratio - Food Services
- Warehouse Operating Expense Ratio - School/Office Supplies
- Warehouse Operating Expense Ratio - Textbooks
- Warehouse Operating Expense Ratio - Transportation Maintenance
- Warehouse Stock Turn Ratio - Facility Maintenance
- Warehouse Stock Turn Ratio - Food Services
- Warehouse Stock Turn Ratio - School/Office Supplies
- Warehouse Stock Turn Ratio - Textbooks
- Warehouse Stock Turn Ratio - Transportation Maintenance



# FEATURED ANALYSIS

Figure 41  
Cost per Purchase Order vs. Cost per Spend



Is your procurement department cost-effective?

# DATA DISCOVERY

Figure 42  
Procurement Cost per Purchase Order

This is the cost of the procurement department relative to the total number of purchase orders issued in the fiscal year. *Adjusted for cost of living.*

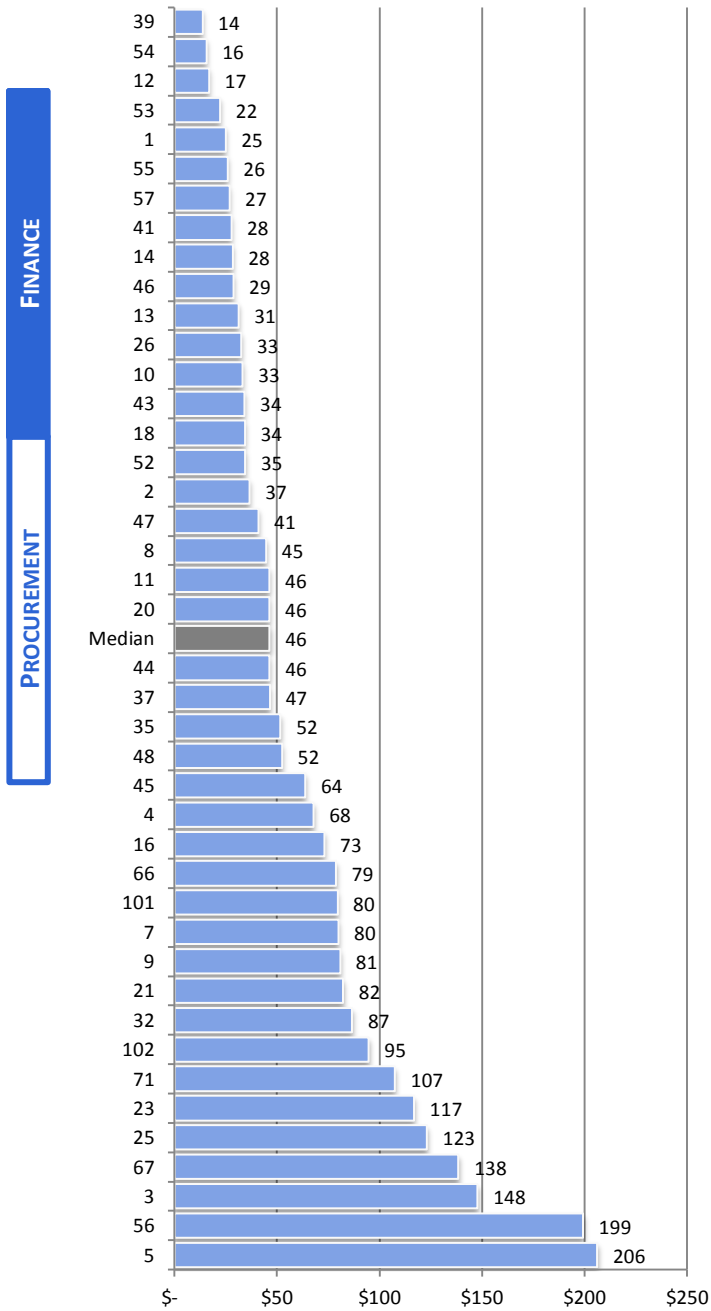


Figure 43  
Procurement Cost per \$100K Revenue

This is the cost of the procurement department relative to the total operating revenue of the district. *Not adjusted for cost of living.*

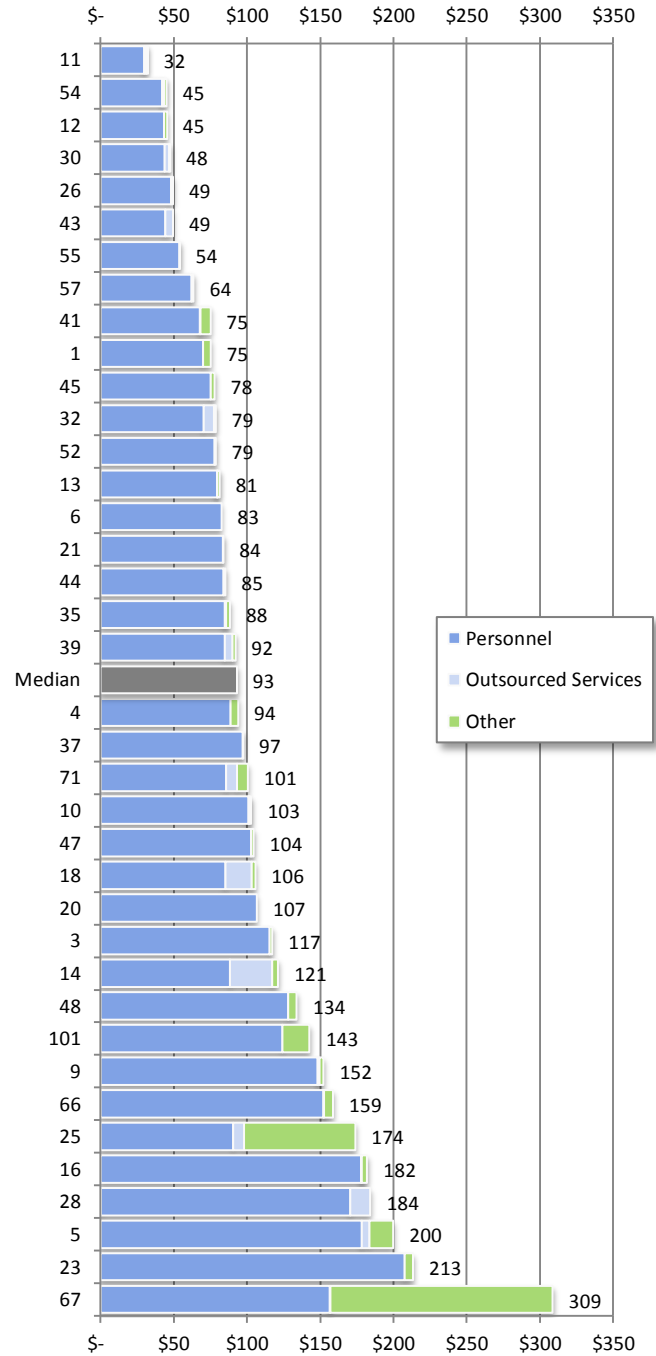


Figure 44  
Procurement Savings Ratio

This is the annual amount of savings (defined as the difference between the average bid, proposal or quote amounts, and the actual amount paid) as compared to the total amount of purchasing.

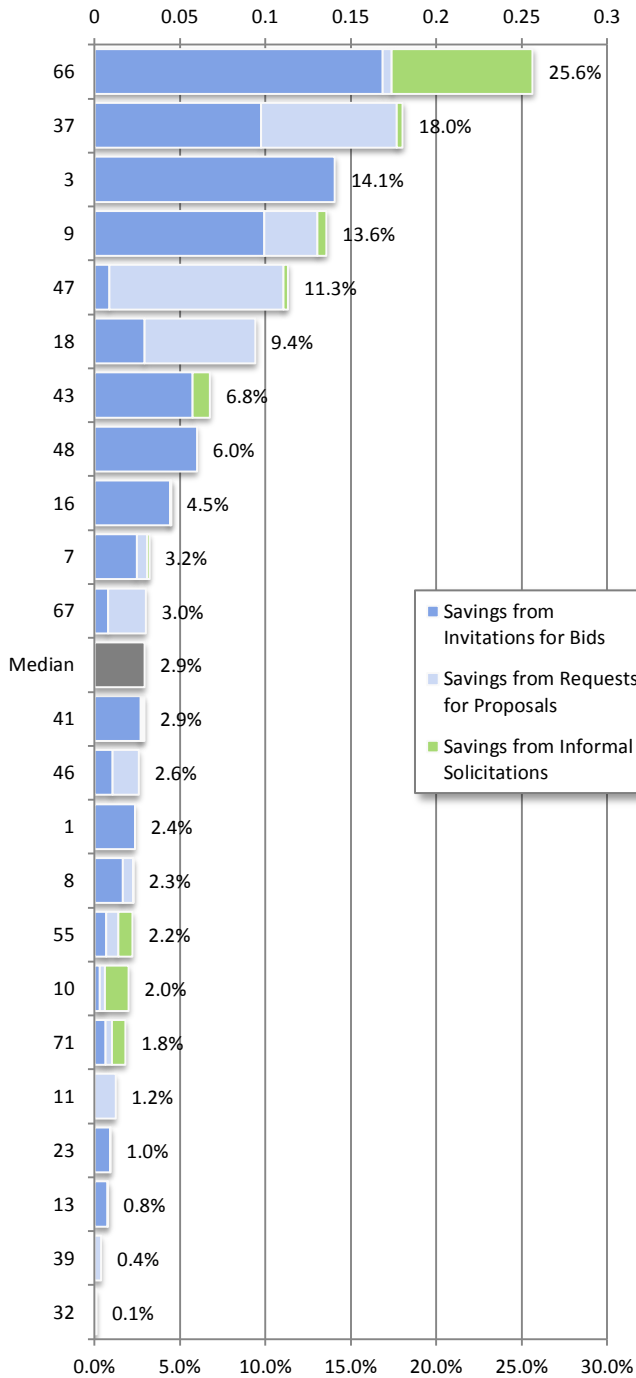
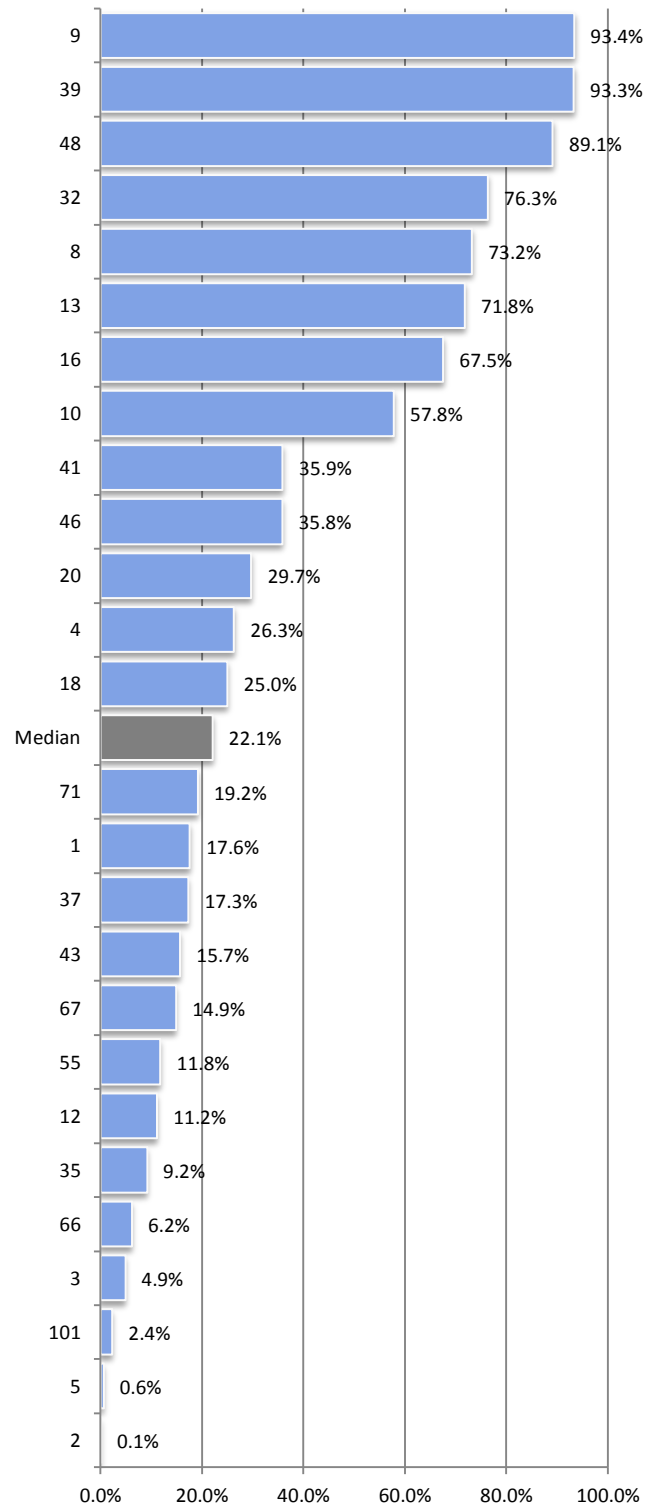


Figure 45  
Strategic Sourcing Ratio

The total amount spent through strategic sourcing relative to the total amount of purchasing.



What are some of the factors that might influence this result? (Hint: See "KPI Definitions".)

Figure 46  
Competitive Procurements Ratio

This is the amount spent through competitive purchasing relative to the total amount of purchasing.

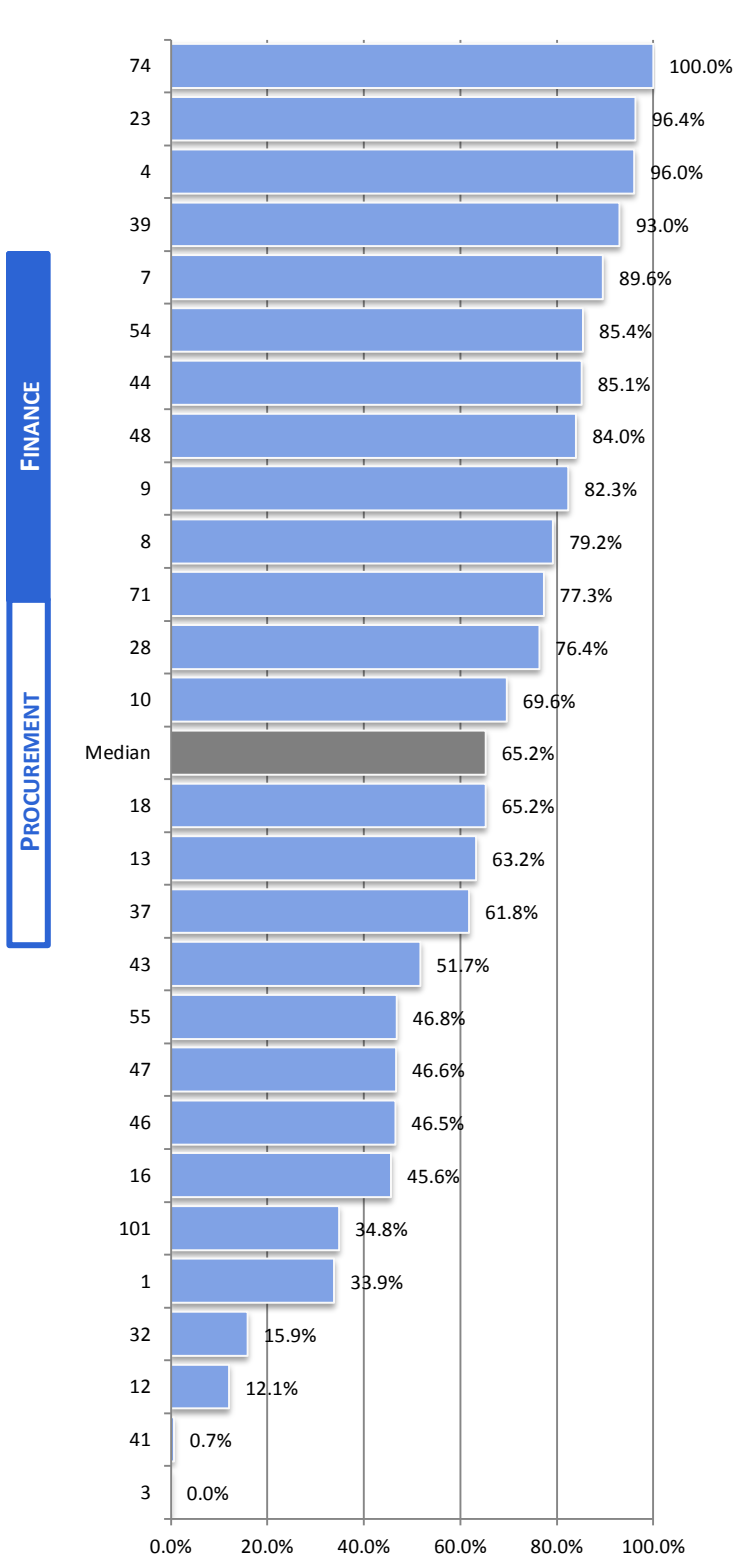


Figure 47  
Cooperative Purchasing Ratio

This is the amount spent through cooperative purchasing relative to the total amount of purchasing.

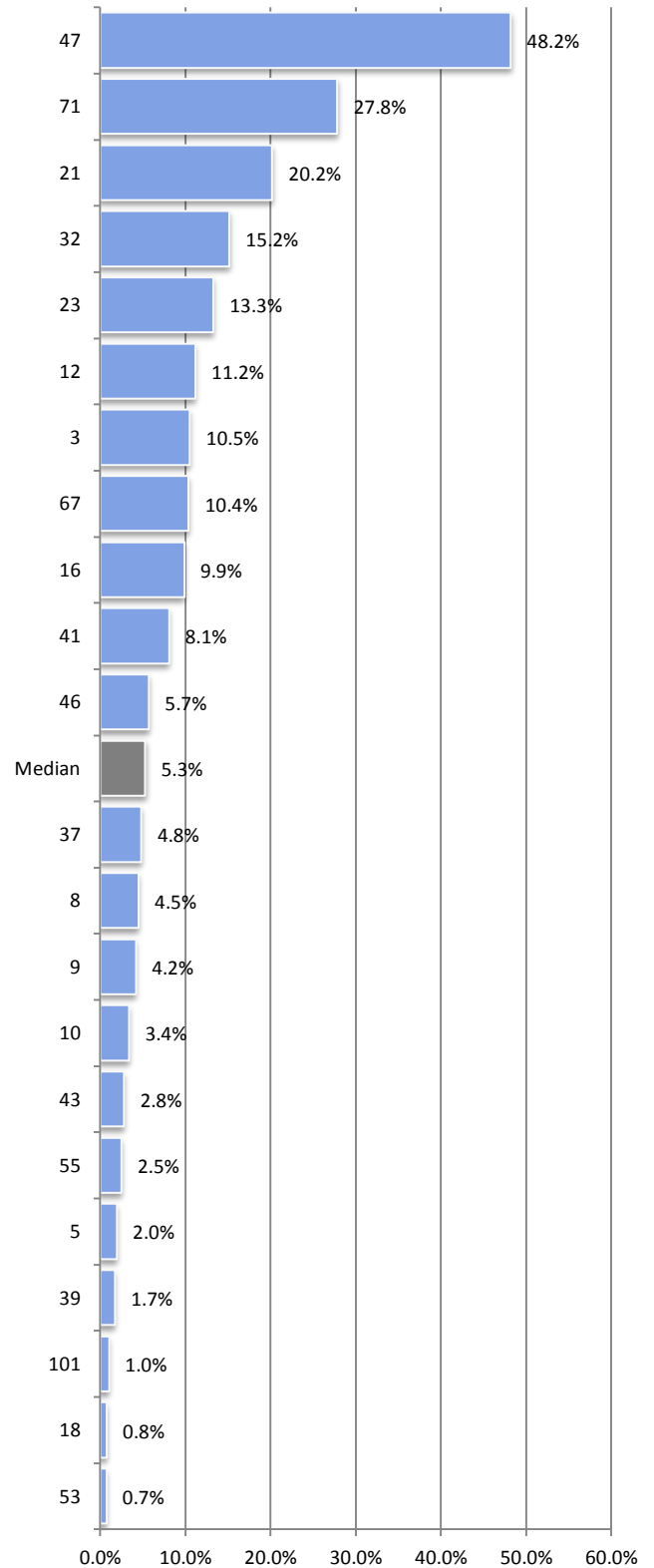


Figure 48  
P-Card Purchasing Ratio

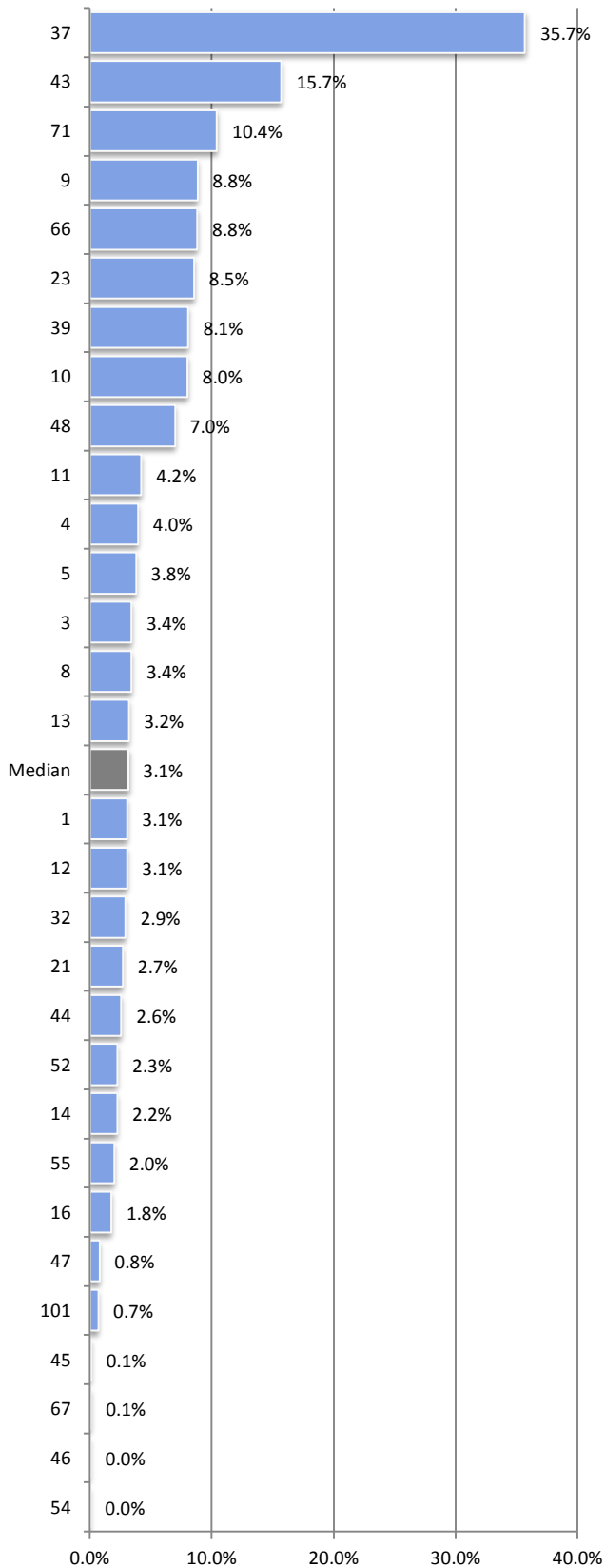
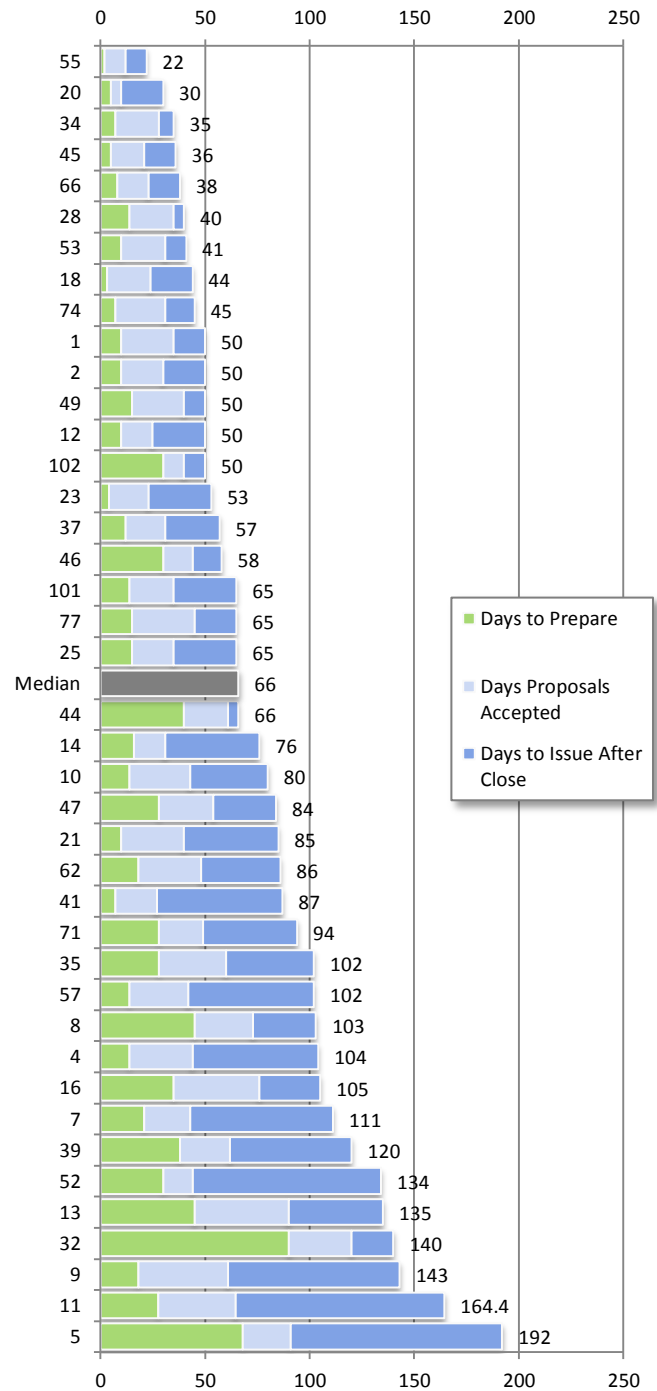


Figure 49  
PALT for Requests for Proposals

The Procurement Administrative Lead Time captures the processing time from receipt of requisition to when the contract was issued.



FINANCE  
PROCUREMENT

Which phase could be shortened to move your district up into the next highest quartile?

Figure 50  
PALT for Invitations for Bids

The Procurement Administrative Lead Time captures the processing time from receipt of requisition to when the contract was issued.

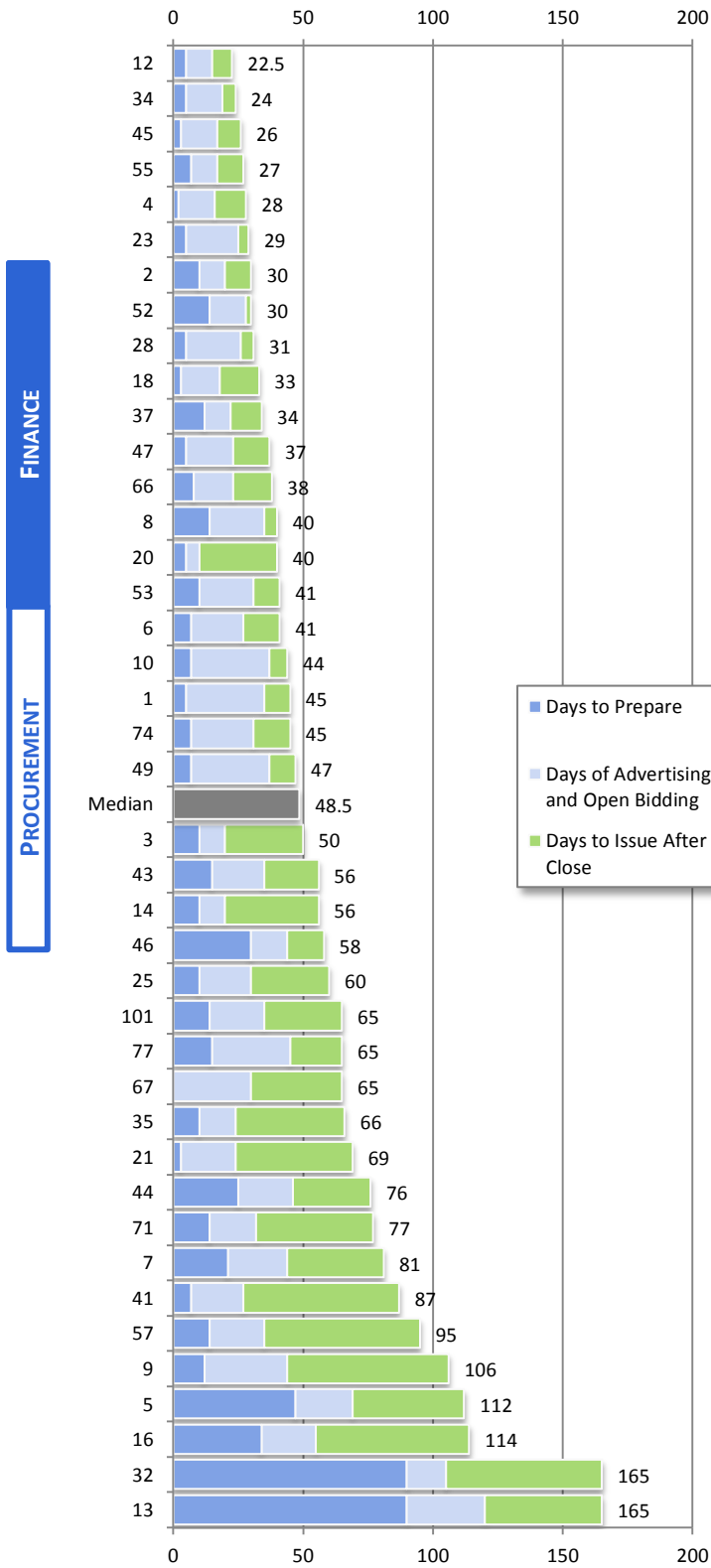


Figure 51  
PALT for Informal Solicitations

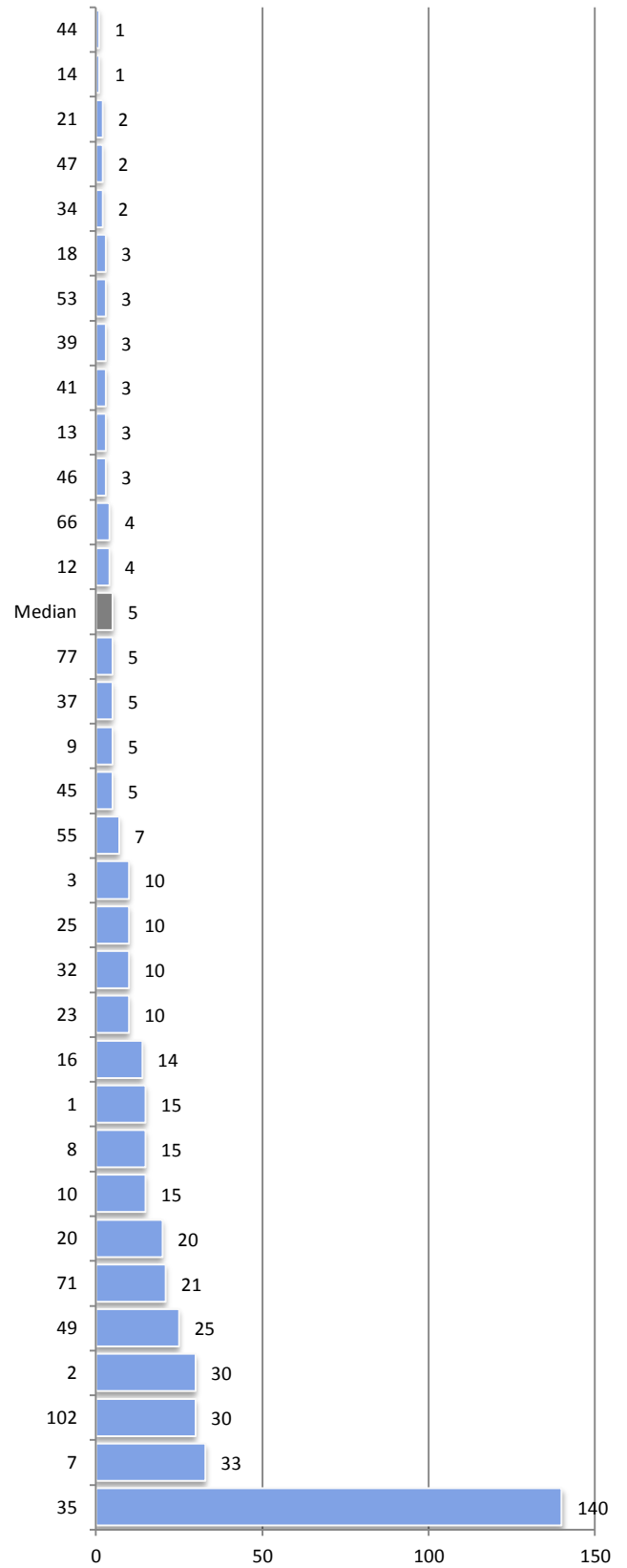


Figure 52  
Procurement Staff with Professional Certificate

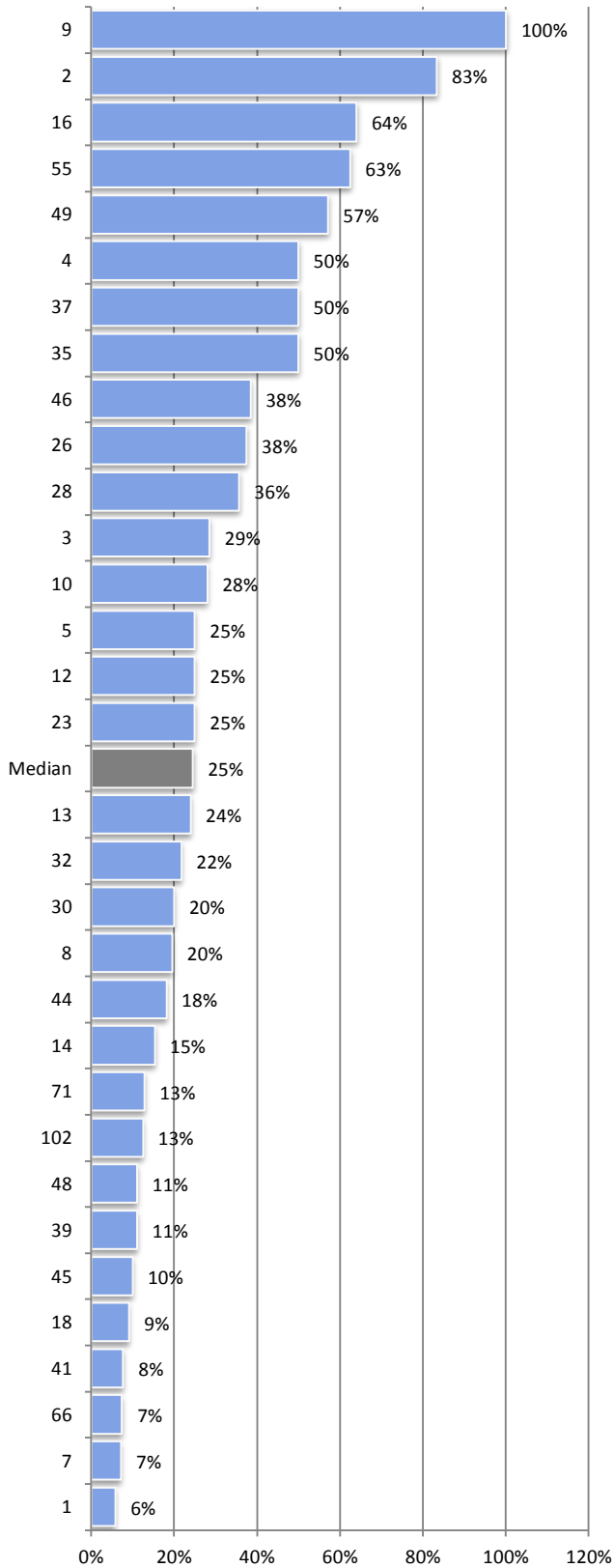
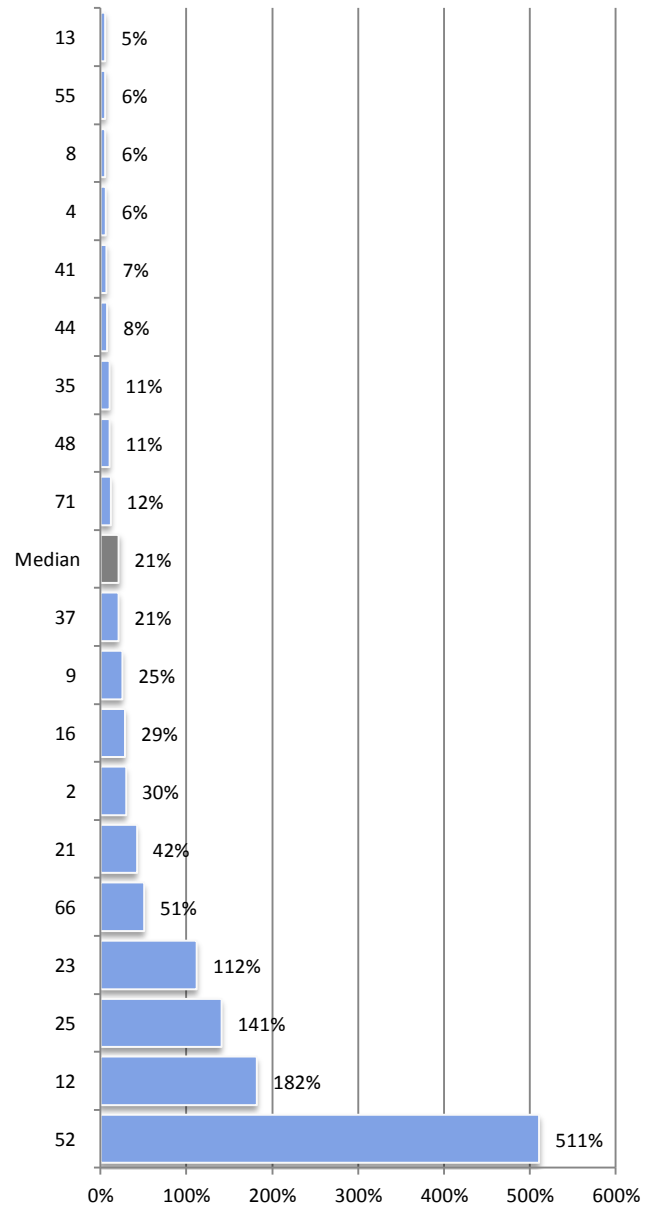


Figure 53  
Warehouse Operating Expense Ratio

This is the total cost of operating warehouses relative to the total value of inventory that was issued from the warehouse (i.e., the amount of inventory that left the warehouse).

This is an overall average measure of all warehouses that were surveyed, and thus includes warehouses for the following kinds of supplies and purposes: school/office supplies; textbooks; food services; facility maintenance; and transportation maintenance.



FINANCE  
PROCUREMENT

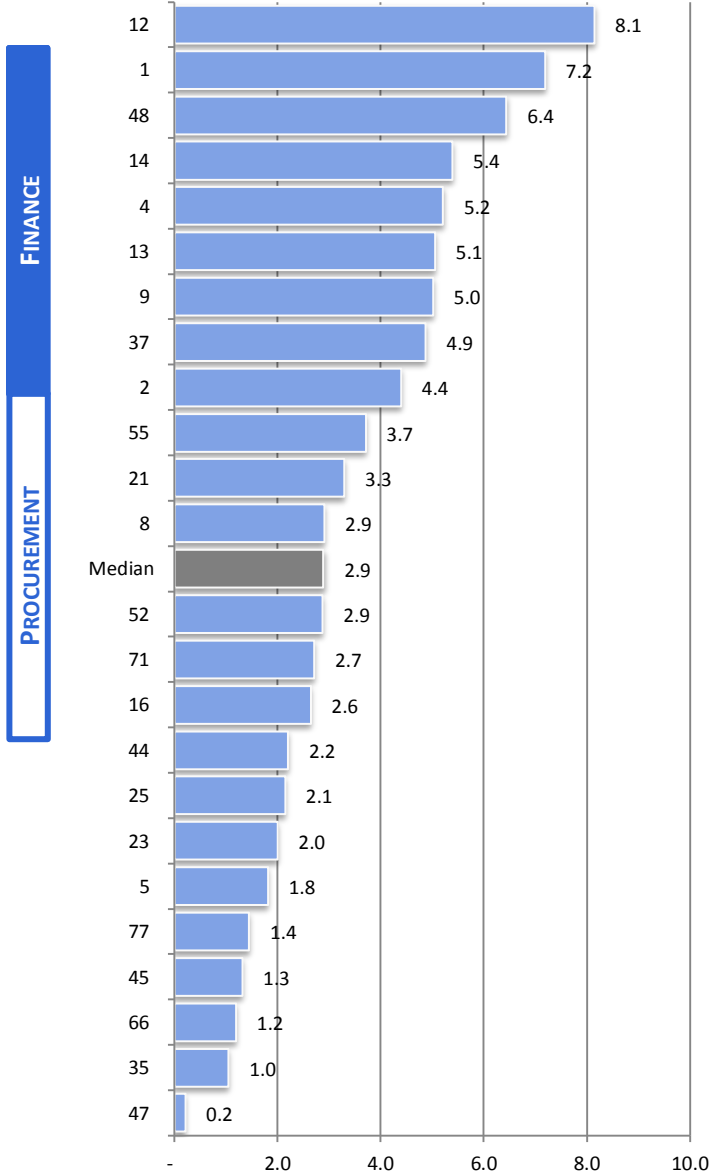
*Does the volume of inventory that is managed through your warehouses justify the cost of operating those warehouses?*

*Which of your warehouses most influence your result in this measure?*

Figure 54  
Warehouse Stock Turn Ratio

The stock turn ratio represents how much inventory volume passes through the warehouse over the course of the year. It is calculated by dividing the total annual volume (by dollar value) by the average month-end inventory value.

This is an overall average measure of all warehouses that were surveyed, and thus includes warehouses for the following kinds of supplies and purposes: school/office supplies; textbooks; food services; facility maintenance; and transportation maintenance.



Is stock turn ratio a good approximation of operational efficiency?

In which area(s) of improvement does your Purchasing Department need to focus? Who can take ownership for this?  
  
Whose buy-in and support is needed to support these goals (e.g., CFO, Assistant Superintendent, COO)?



# KPI DEFINITIONS

## Competitive Procurement Ratio

**Importance** This measure is important because competition maximizes procurement savings to the district, provides opportunities for vendors, assures integrity, and builds school board and taxpayers' confidence in the procurement process.

### Factors that Influence

- Procurement policies governing procurements that are exempted from competition, emergency or urgent requirement procurements, direct payments (purchases without contracts or POs), minimum quote levels and requirements, and sole sourcing
- Degree of shared services that may be included in purchase dollars with other public agencies
- Vendor registration/solicitation procedures that may determine magnitude of competition
- Professional services competition that may be exempted from competition
- In some instances, districts may have selection criteria for certain programs, such as local preference, environmental procurement, M/WBE, etc., that result in less competition
- Utilization of technology and e-procurement tools
- Market availability for competition; e.g., utilities

**Calculation** Total amount of purchasing through competitive procurements *divided by* the sum of total procurement outlays, total P-card purchasing and total construction spending.

## Procurement Cost per \$100K Spend

**Importance** This measure identifies the indirect cost of the procurement function as compared to the total procurement dollars purchased by the district. Assuming all other things being equal, this is a relative measure of the administrative efficiency of a district's procurement operations.

### Factors that Influence

- Degree of P-Card Utilization
- e-Procurement automation
- Delegation of purchasing authority
- Purchasing office professional staff grade structure, contract services, and other expenditures
- Number of highly complex procurements especially construction
- Skill level of staff

**Calculation** Total purchasing department costs *divided by* total procurement outlays over \$100,000.

## Procurement Cost per Purchase Order

**Importance** This measure, along with other indicators, provides an opportunity for districts to assess the cost/benefits that might result from other means of procurement (e.g., P-Card program, ordering agreements, and leveraging the consolidating requirement).

### Factors that Influence

- Utilization of BPAs
- Strategic sourcing (minimizing total vendors)
- Purchasing Department expenditures and FTE degree of e-procurement automation and P-Card utilization
- Degree of requirement consolidation and standardization

**Calculation** Total purchasing department costs *divided by* the total number of purchase orders that were processed by the purchasing department, excluding P-card transactions and construction.

## Procurement Savings Ratio

**Calculation** Total savings from Invitations for Bids, Requests for Proposals, and informal solicitations *divided by* total procurement outlays (excluding P-cards and construction).

### Factors that Influence

- Procurement policies, e.g., delegated purchase authority level, procurements exempted from competition, minimum quote requirements, sole-source policies, vendor registration/solicitation procedures (may determine magnitude of competition)
- Utilization of technology and e-procurement tools
- Use of national or regional vendor databases (versus district only) to maximize competition, use of on-line comparative price analysis tools (comparing e-catalog prices), etc.
- Identification of alternative products/methodology of providing services.
- Degree of leveraging required volume through standardization and utilization of cooperative contracting

**Importance** This measure compares a district's savings or "cost avoidance" that result from centralized purchasing to the total procurement spend (less P-Card spending). This measure only captures savings/cost avoidance in a limited form since districts may realize other procurement savings that are not captured by this measure (e.g., make-buy, certain life cycle savings, service, quality, reliability, and other best value "savings" to the district).

## Strategic Sourcing Ratio

**Importance** This measure is a strong indicator of potential cost savings that can result from leveraging consolidated requirements with competitive procurements, and minimizing spot buying and maverick spending. The National Purchasing Institute (NPI) Achievement of Excellence in Procurement Award cites an agency's use of term (annual or requirements) contracts for at least 25% of total dollar commodity and services purchases as a reasonable benchmark. Strategic sourcing is a systemic process to identify, qualify, specify, negotiate, and select suppliers for categories of similar spend that includes identifying competitive suppliers for longer-term agreements to buy materials and services. Simply put, strategic sourcing is organized agency buying that directly affects the available contracts for goods and services, i.e., items under contract are readily accessible, while others are not.

### Factors that Influence

- Technical training of procurement professional staff
- Effectiveness of spend analysis regarding frequently purchased items
- Policies on centralization of procurement
- Balance between choice and cost savings
- Dollar approval limits without competitive bids

**Calculation** Total spending utilizing strategic sourcing *divided by* total procurement outlays (excluding P-cards and construction).

**Cooperative Purchasing Ratio**

**Importance** This measure assesses the use of cooperative purchasing agreements that districts can use to leverage their collective buying power to maximize savings through economies of scale. Additionally, cooperative agreements provide purchasing efficiencies by having one buyer from one district buy for many districts, and decreasing the cycle time for new requirements.

**Factors that Influence**

- Procurement laws and policies
- Commodity (some goods and services lend themselves to leveraging volume more than others)
- Degree of item standardization with other entities
- Number of available and eligible cooperative agreements
- Market environment (cooperative contracts may not remain competitive with market)

**Calculation** Total district dollars spent during the fiscal year under cooperative agreements (including P-Cards transactions but excluding construction) *divided by* total procurement outlays (including P-Cards but excluding construction)

**P-Card Purchasing Ratio**

**Importance** P-Card utilization significantly improves cycle times for schools, decreases procurement transaction costs as compared to a Purchase Order (2010 RPMG Research Corp cited average PO transaction cost = \$93 from requisition to check, versus P-Card transaction cost = \$22), and provides for more localized flexibility. It also allows procurement professionals to concentrate efforts on the more complex purchases, significantly reduces Accounts Payable workload, and gives schools a shorter cycle time for these items. Increased P-Card spending can provide higher rebate revenues, which in turn can pay for the management of the program. There are trade-offs however. The decentralized nature of these purchases could have an impact on lost opportunity for savings, and requires diligent oversight to prevent inappropriate use and spend analysis to identify contract savings opportunities.

**Factors that Influence**

- Procurement policies, particularly those delegating purchase authority and P-Card usage
- Utilization of technology to manage a high volume of low dollar transactions
- e-Procurement and e-Catalog processes utilized by district
- P-Card reconciliation software and P-Card database interface with a district's ERP system
- Budget, purchasing, and audit controls, including P-Card credit limit controls on single transaction and monthly limits
- Accounts Payable policies for P-Card as an alternative payment method
- Use of P-Cards on construction projects and paying large dollar vendors, e.g., utilities, textbook publishers, food, technology projects.

**Calculation** Total dollar amount purchased using P-cards *divided by* total procurement outlays (including P-card purchases).

**PALT for Requests for Proposals**

**Importance** This measure establishes a "cycle time" benchmark for commencing and completing the acquisition process for informal bidding or quoting. Informal bids/quotes are usually for small purchases less than the formal bid or formal proposal threshold where quotes can be obtained in writing, including electronically using e-commerce tools via telephone, etc., and can be processed without school board approval typically using more efficient small purchase procedures.

**Factors that Influence**

- Federal, state, and local school board procurement policies and laws, including formal solicitation requirements, minimum advertising times and procurement dollar limits
- Frequency of school board meetings
- Budget/FTE allocation for professional procurement staff
- Training on scope of work and specification development for contract sponsors
- The award process including RFP proposal evaluation, vendor presentations, # of proposals, negotiations, pre-proposal conferences, site visits, and vendor reference checks
- Use of standard boilerplate bid and contract documents
- Use of current ERP and e-procurement technology to streamline internal procurement processes and external solicitation process with vendors
- Frequency of vendor protests
- Complexity and size of procurement
- Degree of commodity standardization within the district

**Calculation** Average number of days to administer Requests for Proposals from receipt of requisition to the date that the contract was issued.

**PALT for Invitations for Bids**

**Importance** This measure establishes a "cycle time" benchmark for commencing and completing the acquisition process for formal competitive bidding (IFBs). It is an important measure that examines the balance between competition/objectivity, procedural compliance, and the need to get products/services in place in a timely manner to meet customer requirements.

**Factors that Influence**

- Federal, state, and local school board procurement policies and laws, including formal solicitation requirements, minimum advertising times, and procurement dollar limits
- Frequency of school board meetings
- Budget/FTE allocation for professional procurement staff
- Training on scope of work and specification development for contract sponsors
- The award process, including IFB evaluation, pre-bid conferences, site visit requirements, and vendor reference checks
- Use of standard boilerplate bid and contract documents
- Use of current ERP and e-procurement technology to streamline internal-procurement processes and external solicitation and response process with vendors
- Frequency of vendor protests
- Complexity and size of procurement
- Degree of commodity standardization within the district

**Calculation** Average number of days to administer Invitations for bids from receipt of requisition to the date that the contract was issued.

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PROCUREMENT

### PALT for Informal Solicitations

**Importance** This measure establishes a "cycle time" benchmark for commencing and completing the acquisition process for informal bidding or quoting. Informal bids/quotes are usually for small purchases less than the formal bid or formal proposal threshold where quotes can be obtained in writing, including electronically using e-commerce tools via telephone, etc., and can be processed without school board approval typically using more efficient small purchase procedures.

#### Factors that Influence

- Degree of P-Card utilization
- Extent of delegated purchase authority for small dollar procurements
- State/local laws and regulations
- Small purchase policies/procedures
- Utilization of e-procurement automation tools including online solicitation broadcasts and responses

**Calculation** Average number of days, from receipt of requisition by the purchasing department to date that purchase order issued, to process all informal solicitations.

### Procurement Staff with Professional Certificate

**Importance** This measure assesses the technical knowledge of the district's procurement staff, which directly affects processing time, negotiations, procedural controls, and strategies applied to maximize cost savings. The procurement function should show procurement professional staff focusing on--

- Strategic issues versus transactional processing
- Advanced business skills that look at agency supply chain, logistics optimization, total cost of ownership evaluations, make versus buy analysis, leveraging cooperative procurements, complex negotiations focusing on cost and other value-added factors, and agency spend analyses, and
- Balance of service with internal controls and compliance.

#### Factors that Influence

- Budget/FTE allocations to central procurement functions and employee professional development
- Procurement policies such as delegated purchasing authority, formal procurement dollar threshold, small purchase procedures, P-card utilization, etc.
- Utilization of technology and knowledge required for e-procurement and e-commerce
- Value that an organization places on its procurement functions and procedures
- Policies favoring internal promotion over technical recruitment
- Incentive pay

**Calculation** Number of purchasing department staff with a professional certificate *divided by* total number of purchasing staff (FTEs).

### Warehouse Operating Expense Ratio

**Importance** The operational cost of maintaining an intermediate storage/distribution point (warehouse) should be constantly evaluated against other alternatives as the market and other supply chain factors change in the district's region.

#### Factors that Influence

- Warehouse building utility cost and space efficiency
- Total SKUs for indirect and direct cost allocations
- Number of warehouse personnel and material handling equipment/vehicles

- Type of warehouse (environmentally controlled or not)
- Cycle time requirements

**Calculation** Total operating expenses of all measured warehouses (including school/office supplies, textbooks, food service items, facility maintenance items, and transportation maintenance items) *divided by* total value of all issues/sales from the warehouse(s).

### Warehouse Stock Turn Ratio

**Importance** Warehouse inventory turnover ratios can be used to examine opportunities for improved warehouse operations and reduced costs. Generally, total costs decline and savings rise when inventory stock turn increases. After a certain point - typically 8-10 turns - the reverse occurs, according to the National Institute of Governmental Purchasing (NIGP). Generally, an inventory turn rate of 4-6 times per year in the manufacturing, servicing, and public sector is considered acceptable. However, the overall stock turn ratio should be broken down into types of commodities, as some commodities are optimally less than 4-6 (NIGP). Viewed another way, inventory turnover ratios indicate how much use districts are getting from the dollars invested in inventory. Stock turn measures inventory health and may provide an indication of—

- Inventory usage and amount of inventory that is not turned over ("dead stock"),
- Optimum inventory investment and warehousing size, and
- Warehouse activity/movement.

#### Factors that Influence

- Inventory financing costs
- Inflation
- Purchasing policies

**Calculation** Total dollar value of annual issues/sales at purchase price at all measured warehouses (including school/office supplies, textbooks, food service items, facility maintenance items, and transportation maintenance items) *divided by* the twelve-month average.

FINANCE

PROCUREMENT

# RISK MANAGEMENT

Performance metrics in risk management evaluate the rate of incidents that could lead to claims against the district, as well as the total cost of claims and insurance. The total cost is broadly considered with **Cost of Risk per Student**, and **Employee Incident rate** (expressed per employee or per work hour) could be a reflection of the general safety of a district.

Broad measures of *relative costs* and *levels of claims* for both workers' compensation and liability will help district leaders understand their performance in risk management, which may prompt such improvement strategies as:

- Searching for better medical management programs
- Improving access to quality medical care
- Providing benefits in a timely fashion
- Conducting risk factor analysis and prevention
- Adopting policies that avoid litigation
- Improving the reporting and tracking process for correcting hazardous conditions
- Revising safety protocols/guidelines/Employer Policies
- Improving injury investigations used to determine cause of injury



## *LIST OF KPIS IN RISK MANAGEMENT*

Below is the complete list of Power Indicators, Essential Few and other key indicators in Risk Management. Indicators in bold are those included in this report. (See "KPI Definitions" at the back of this section for more complete descriptions of these measures.) All other KPIs are available to CGCS members on the web-based ActPoint® KPI system.

**POWER INDICATORS**

- Cost of Risk per Student**
- Workers' Compensation Cost per \$100K Payroll Spend**
- Workers' Compensation Cost per Employee**
- Workers' Compensation Lost Work Days per 1,000 Employees**

**OTHER KEY INDICATORS**

- Liability Claims - Percent Open as of Year-End
- Liability Cost per Claim
- Workers' Compensation Claims - Percent Indemnity
- Workers' Compensation Claims - Percent Litigated
- Workers' Compensation Cost per Claim

**ESSENTIAL FEW**

- Liability Claims - Percent Litigated**
- Liability Claims per 1,000 Students**
- Liability Cost per Student**
- Workers' Compensation Claims per 1,000 Employees**
- Workplace Incidents per 1,000 Employees**

FINANCE

RISK MANAGEMENT

# DATA DISCOVERY

Figure 55  
**Cost of Risk per Student**

The “cost of risk” measure currently includes costs associated with Workers’ Compensation and liability, i.e., insurance, claims costs, and administration costs. Other cost drivers for risk management are currently not included in this measure.

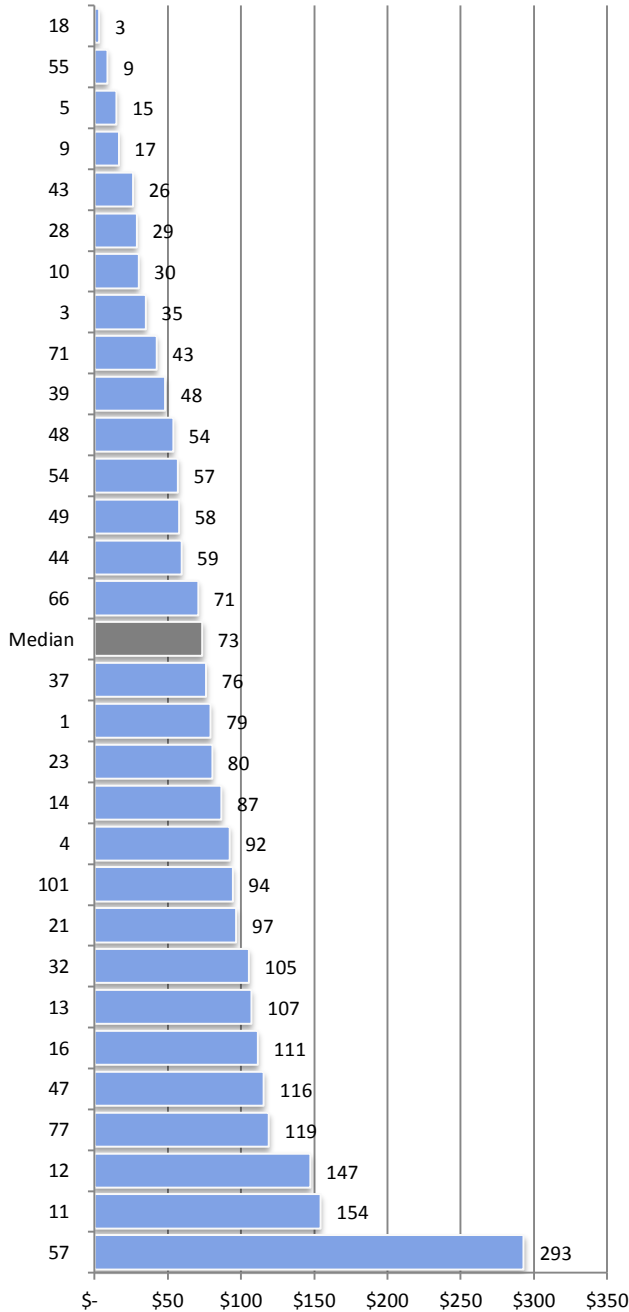
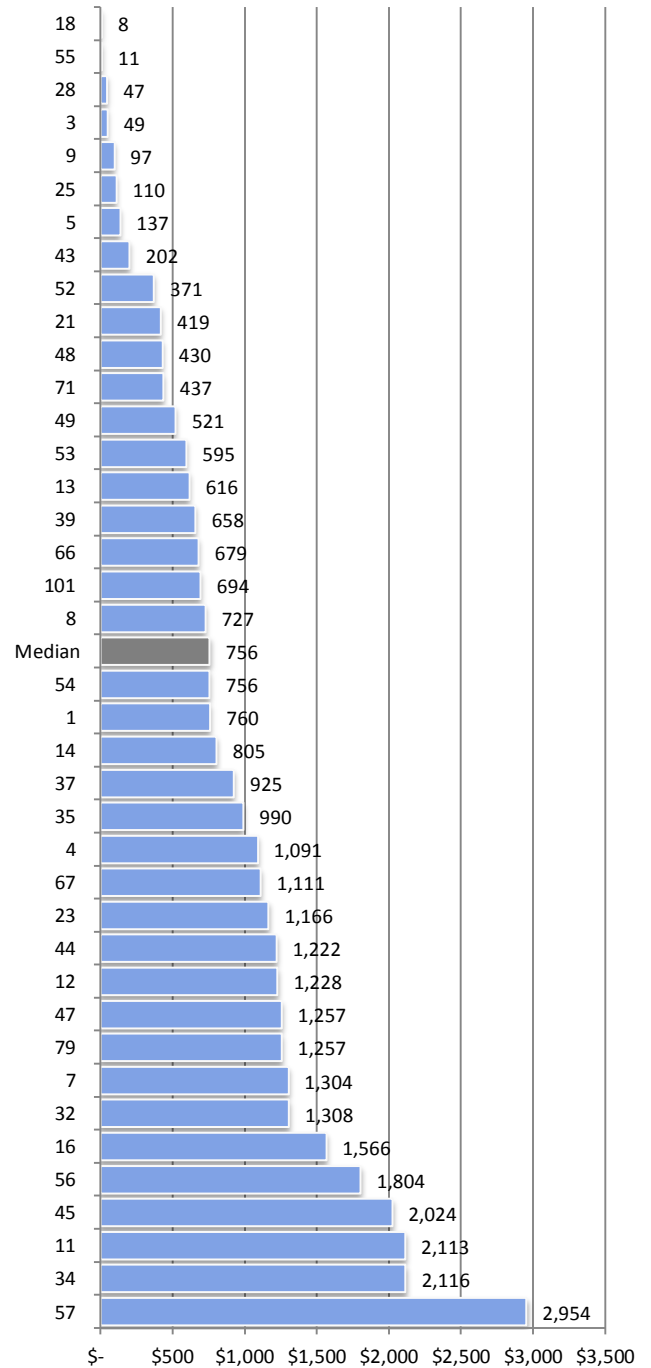


Figure 56  
**Workers’ Compensation Cost per \$100K Payroll Spend**



FINANCE  
RISK MANAGEMENT

Figure 57  
Workers' Compensation Cost per 1,000 Employees

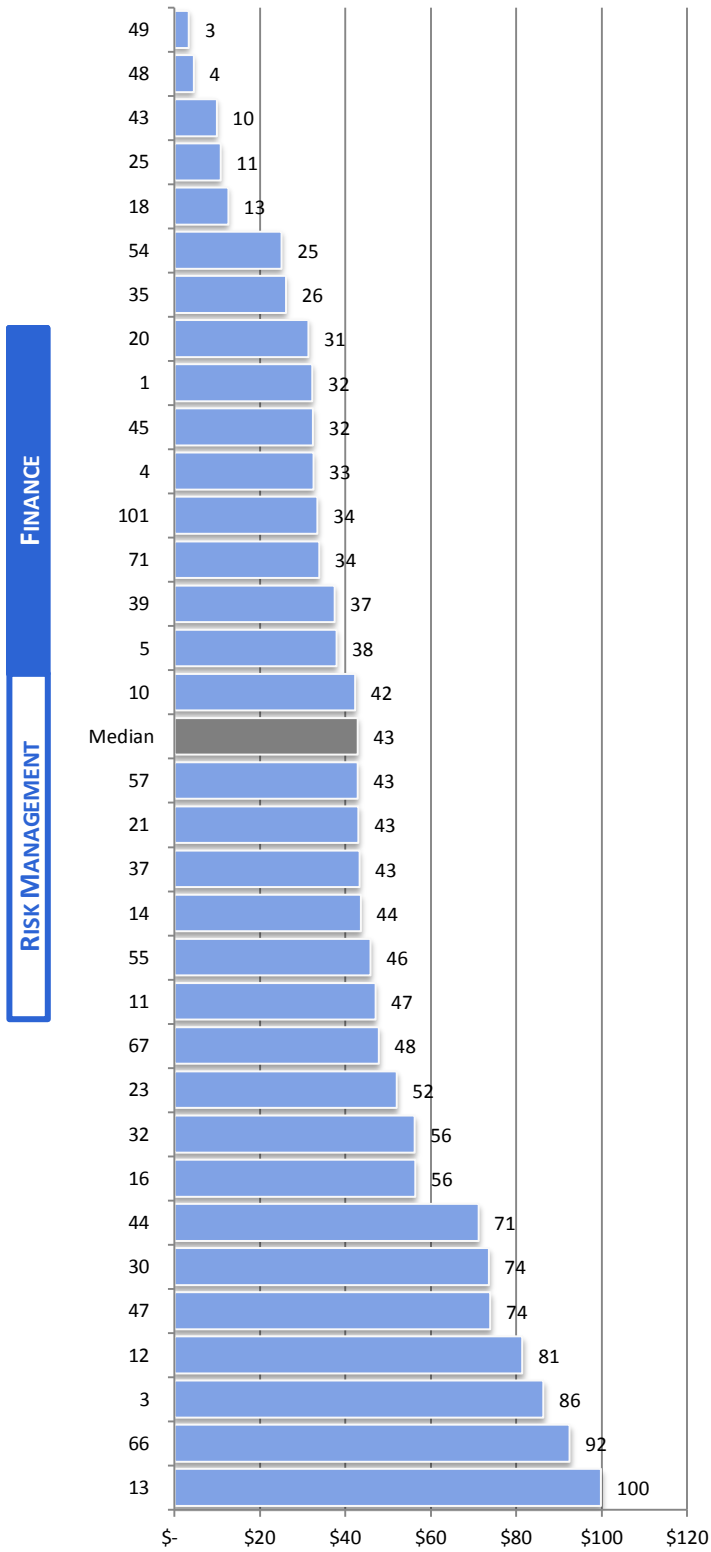


Figure 58  
Workers' Compensation Lost Work Days per 1,000 Employees

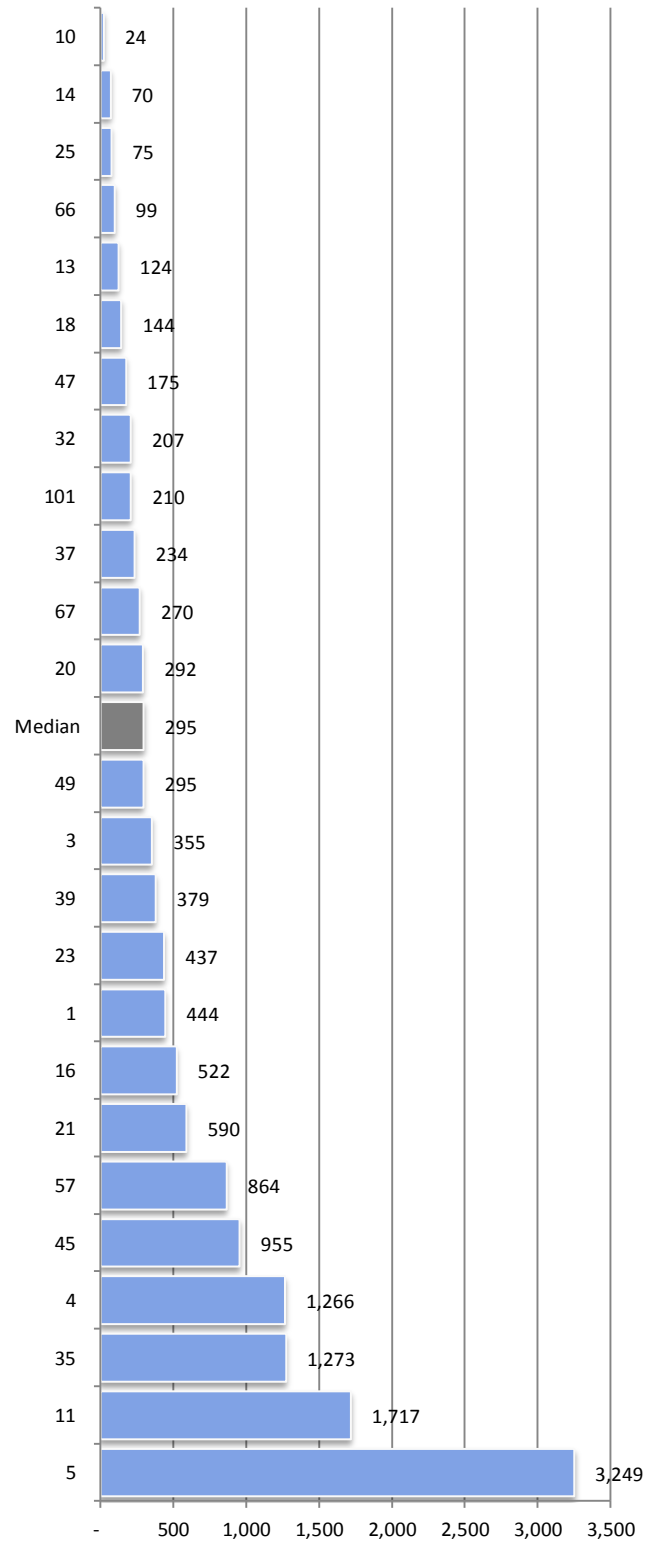




Figure 59  
Liability Claims - Percent Litigated

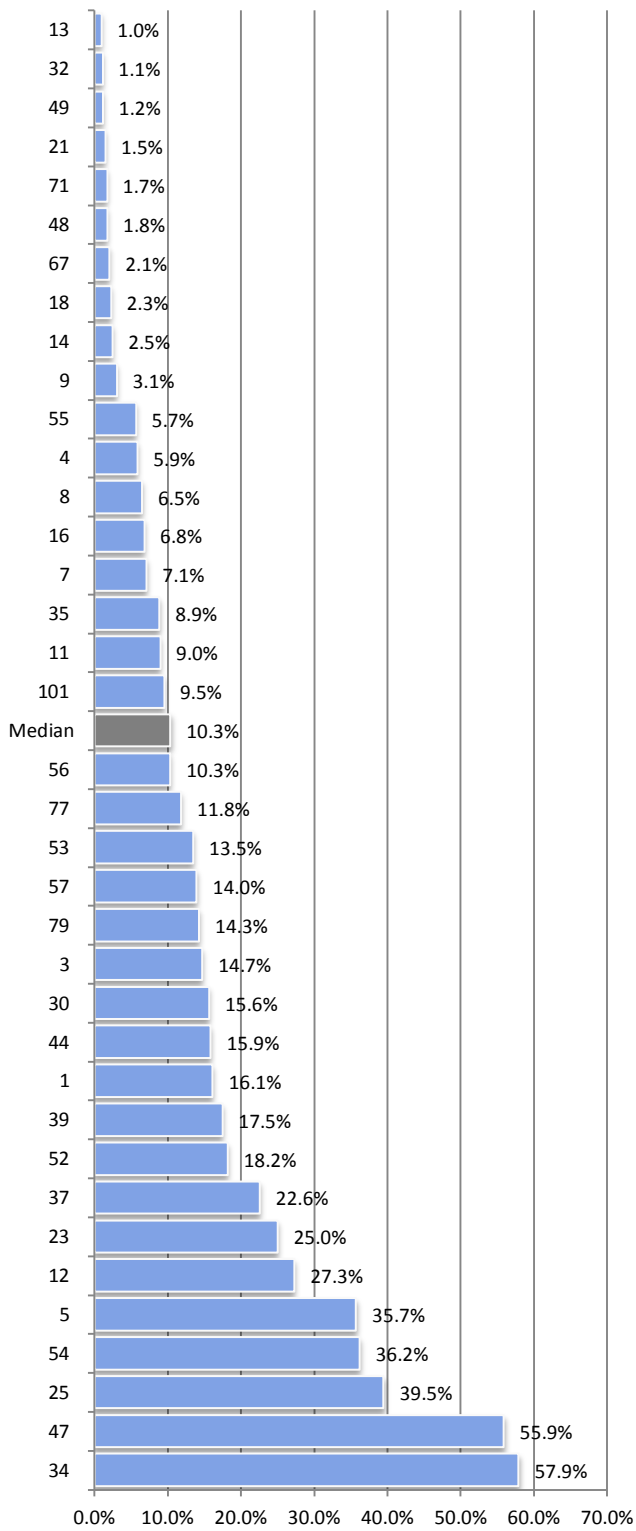
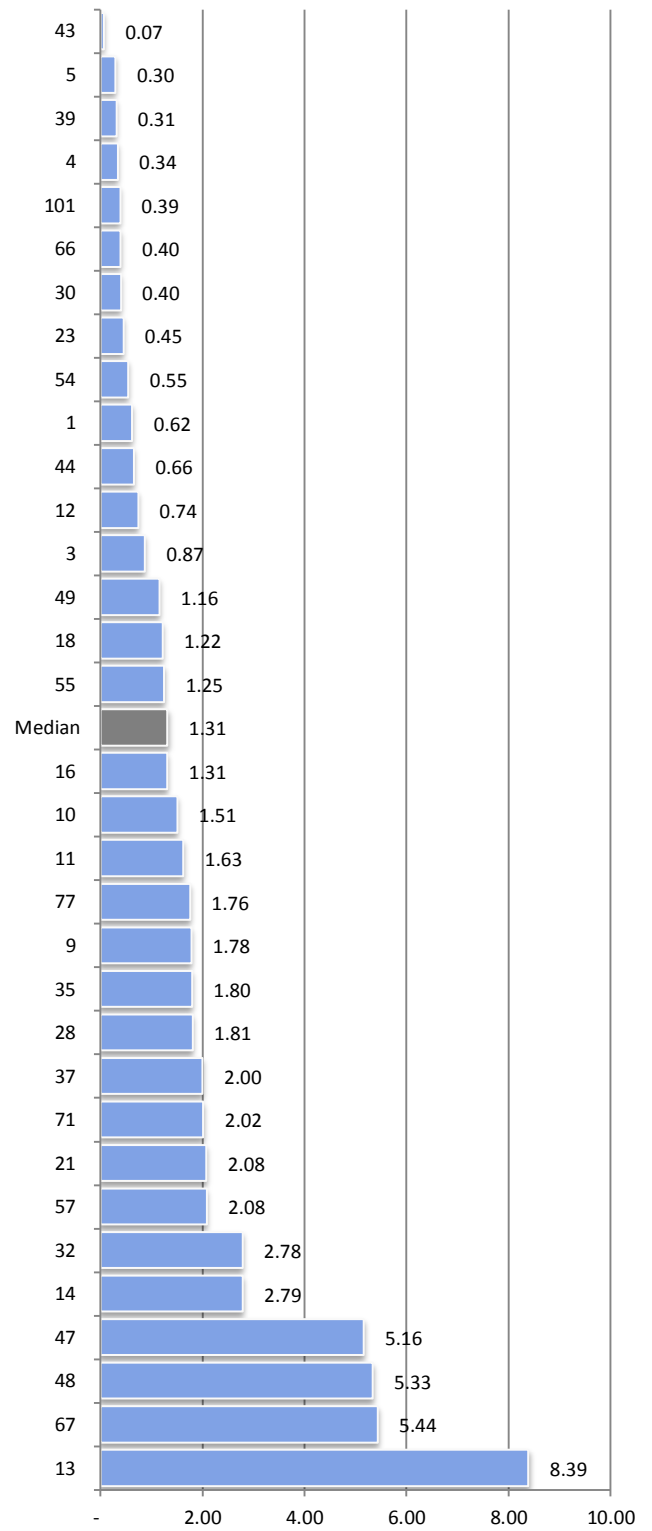


Figure 60  
Liability Claims per 1,000 Students



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RISK MANAGEMENT

Figure 61  
Liability Cost per Student

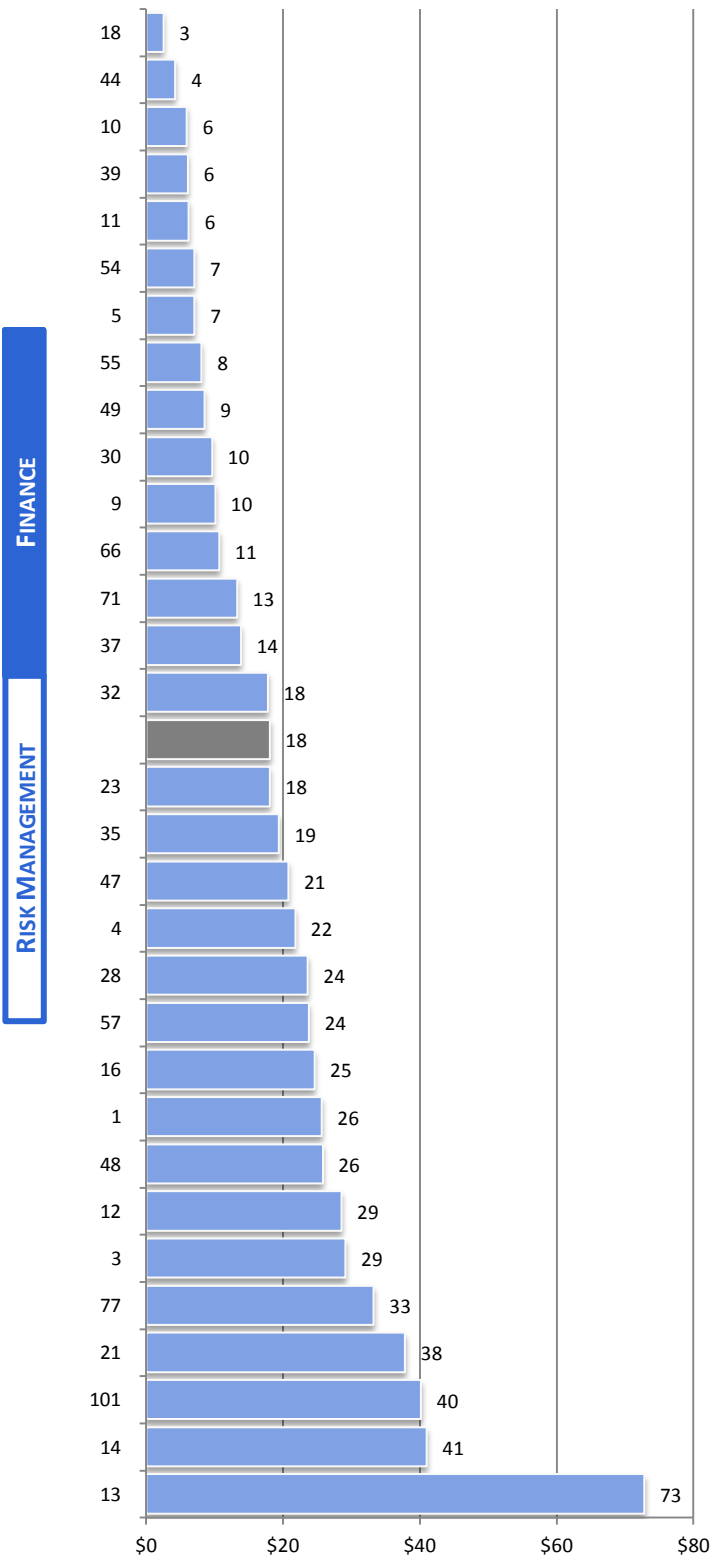


Figure 62  
Workers' Compensation Claims per 1,000 Employees

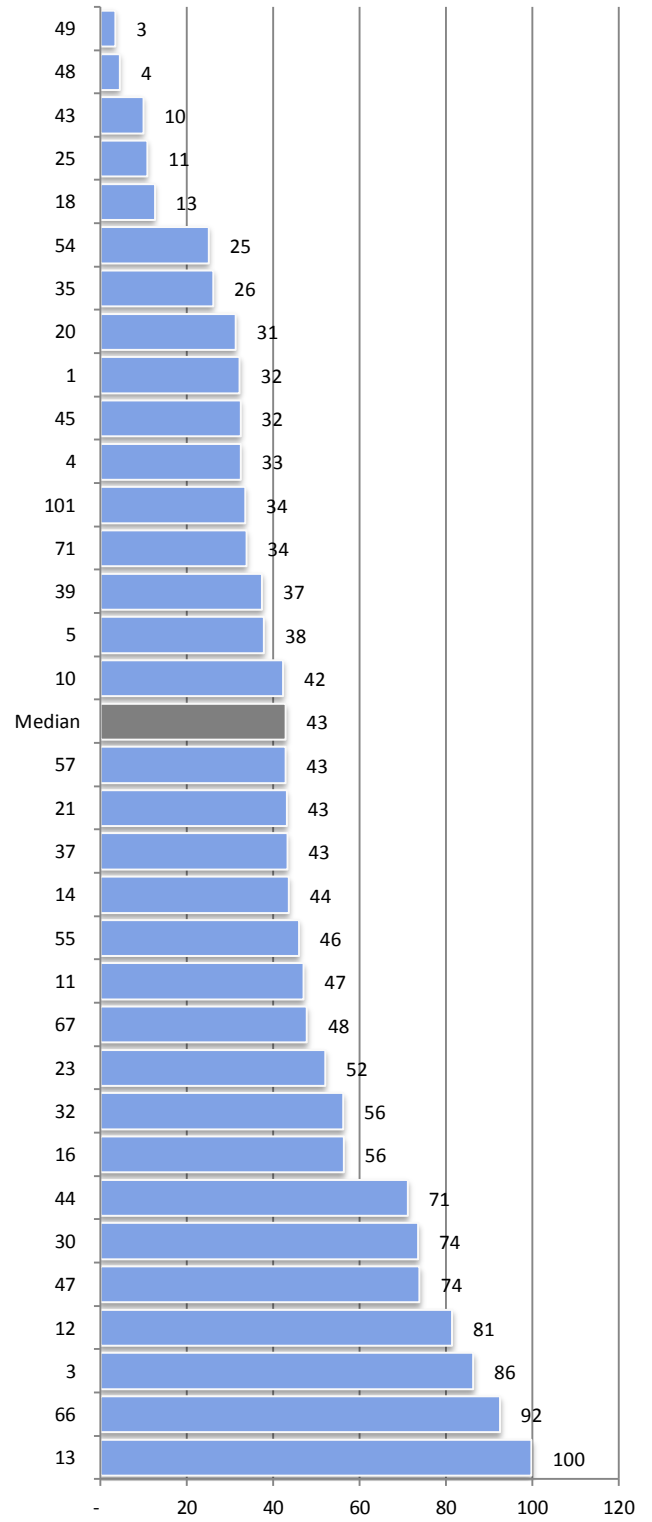
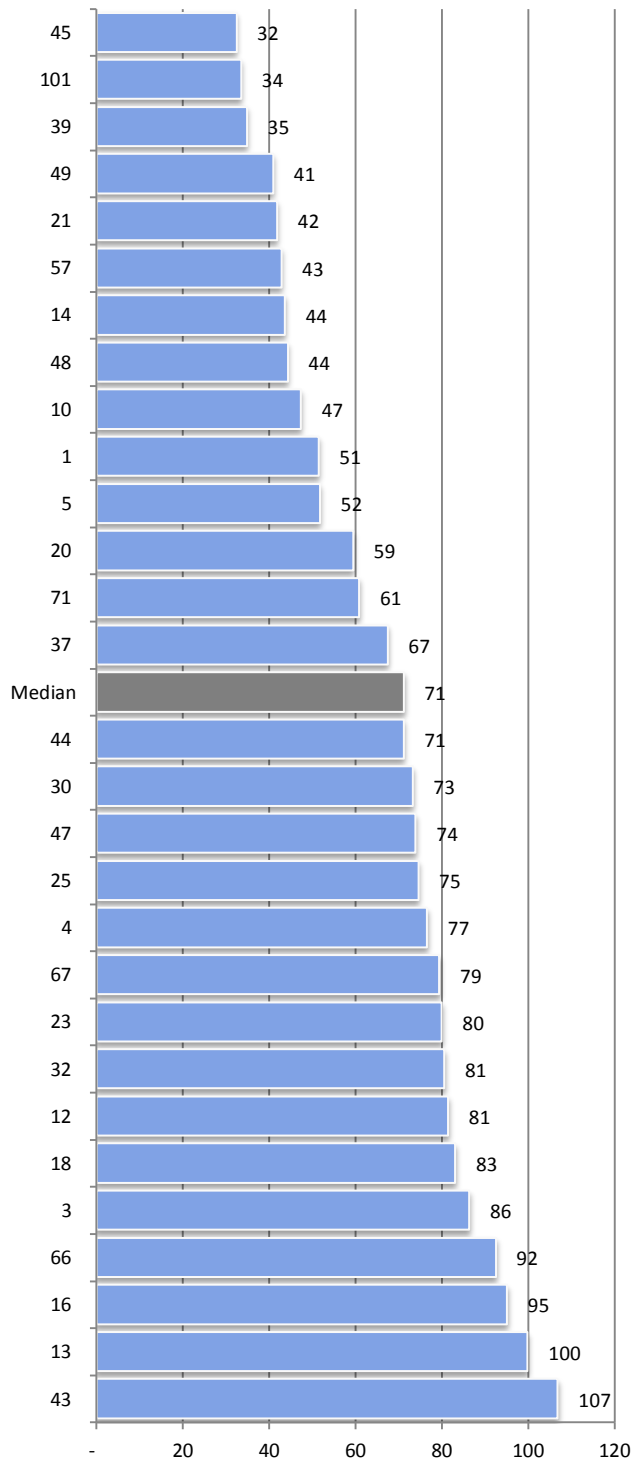


Figure 63  
 Workplace Incidents per 1,000 Employees



FINANCE  
RISK MANAGEMENT

*Does your district have an enterprise-wide risk management task force?*

# KPI DEFINITIONS

## Cost of Risk per Student

**Importance** This metric is important for long-term budget planning. School funding is based on student enrollment.

**Factors that Influence**

- Frequency and severity of claims filed
- Safety program's efforts to correct hazardous conditions

**Calculation** Total liability premiums, claims, and administration costs *plus* total workers' compensation premiums, claims, and administration costs *divided by* total district enrollment.

## Workers' Compensation Cost per \$100K Payroll Spend

**Importance** This is a metric that can be used to measure success of programs or initiatives aimed at reducing workers' compensation costs.

**Factors that Influence**

- Medical management programs
- Quality of medical care
- Litigation
- Timely provision of benefits

**Calculation** Total workers' compensation premium costs *plus* workers' compensation claims costs incurred *plus* total workers' compensation claims administration costs for the fiscal year *divided by* total payroll outlays over \$100,000.

## Workers' Compensation Cost per 1,000 Employees

**Importance** This metric would most likely be used for the same purpose as the average cost per workers' compensation claim – to measure success of programs and initiatives. It can also be a way to measure trends over time or to bench mark against other employers.

**Factors that Influence**

- Medical management programs
- Quality of medical care
- Litigation
- Timely provision of benefits

**Calculation** Total workers' compensation premium costs *plus* workers' compensation claims costs incurred *plus* total workers' compensation claims administration costs for the fiscal year *divided by* total number of district of district employees (number of W-2's issued).

## Workers' Compensation Lost Work Days per 1,000 Employees

**Calculation** Total number of lost work days for all workers' compensation claims filed during the fiscal year *divided by* total number of employees (W-2's) over 1,000.

**Factors that Influence**

- Quality of medical care (Medical Provider Networks)
- Type of injury
- Use of nurse case managers
- Litigation
- Availability of modified or alternative work on both a temporary and permanent basis

**Importance** This metric could be used to track the effectiveness of medical treatment and a Return to Work program, but since this metric is using all employees in the equation instead of just the number of injured employees, a drastic change in the number of employees (reduction in force, etc.) would impact this metric without any actual change in the items being tracked.

## Liability Claims - Percent Litigated

**Importance** This is an important metric as litigation is expensive and increases the cost of the claim.

**Factors that Influence**

- Severity of injuries
- Settlement rate
- Motivation of plaintiff

**Calculation** Number of liability claims litigated *divided by* total number of liability claims filed during the fiscal year.

## Liability Claims per 1,000 Students

**Importance** This metric can be used to measure your performance against other entities of similar size and with similar claims.

**Factors that Influence**

- Frequency of claims
- Type of claims
- Severity of injuries

**Calculation** Total number of liability claims filed during the fiscal year *divided by* total district enrollment over 1,000.

## Liability Cost per Student

**Importance** Used to determine estimated costs for claims referred to outside attorneys. This measure can also be used to compare performance with other entities of similar size and with similar claims.

**Factors that Influence**

- Litigation
- Frequency of claims
- Injury type

**Calculation** Total liability premiums, claims, and administration costs *divided by* total district enrollment.

## Workers' Compensation Claims per 1,000 Employees

**Importance** This is a metric that can be used to measure success of programs or initiatives aimed at reducing workers' compensation costs.

**Factors that Influence**

- Risk factor prevention
- Medical management programs
- Quality of medical care
- Timely provision of benefits

**Calculation** Total number of workers' compensation claims filed during the fiscal year *divided by* total number of district employees (W-2's issued) over 1,000.

### Workplace Incidents per 1,000 Employees

**Importance** This metric would be used to measure the success of programs and initiatives aimed at reducing workplace injuries/incidents.

**Factors that Influence**

- Disciplinary actions
- RIF notices
- Management support
- Effectiveness of safety programs
- Safety training
- Injury investigations used to determine cause of injury
- Maintenance of facilities
- Established safety protocols/guidelines/Employer policies

**Calculation** Total number of employee workplace incidents reported during the fiscal year *divided by* the total number of employees over 1,000.



# OPERATIONS

## FOOD SERVICES

Performance metrics in food services measure the productivity, cost efficiency, and service levels of a district's nutritional services. Productivity is broadly assessed by **Meals per Labor Hour**, a standard measure of the industry. Cost efficiency can be determined by looking at **Food Cost per Revenue** and **Labor Cost per Revenue**. Finally, a basic measure of service levels includes meal participation rate (measured by **Breakfast Participation Rate** and **Lunch Participation Rate**, and is further measured by looking at rates by grade spans.).

These measures should serve as diagnostic tools to gauge performance, as well as a guide for improvement. The importance and usefulness of each KPI is described under the "Importance of Measure" and "Factors that Influence" sections of each indicator in the pages that follow.



# LIST OF KPIS IN FOOD SERVICES

Below is the complete list of Power Indicators, Essential Few and other key indicators in Food Services. Indicators in bold are those included in this report. (See "KPI Definitions" at the back of this section for more complete descriptions of these measures.) All other KPIS are available to CGCS members on the web-based ActPoint® KPI system.

## POWER INDICATORS

### Cost per Meal

### Food Cost per Meal

### Fund Balance as Percent of Revenue

### Total Costs as Percent of Revenue

Breakfast Participation Rate (Districtwide)

Lunch Participation Rate (Districtwide)

Supper Participation Rate (Districtwide)

## ESSENTIAL FEW

### Breakfast Participation Rate (Meal Sites)

Breakfast Participation Rate (Districtwide), Elementary/K-8

Breakfast Participation Rate (Districtwide), Secondary Schools

### Lunch Participation Rate (Meal Sites)

Lunch Participation Rate (Districtwide), Elementary/K-8

Lunch Participation Rate (Districtwide), Secondary Schools

### Supper Participation Rate (Meal Sites)

### Food Cost per Revenue

### Labor Costs per Revenue

### Meals per Labor Hour

### USDA Commodities - Percent of Total Revenue

## OTHER KEY INDICATORS

Breakfast Access - During Breakfast Break

Breakfast Access - Served in the Cafeteria

Breakfast Access - Served in the Classroom

Breakfast Access - Universal Free Breakfast

### Breakfast Access Rate

Breakfast Access Rate, Elementary/K-8

Breakfast Access Rate, High School

Breakfast Access Rate, Middle School

Breakfast F/RP Participation Rate

Breakfast F/RP Participation Rate, Elementary/K-8

Breakfast F/RP Participation Rate, High School

Breakfast F/RP Participation Rate, Middle School

Breakfast Non-F/RP Participation Rate, Elementary/K-8

Breakfast Non-F/RP Participation Rate, High School

Breakfast Non-F/RP Participation Rate, Middle School

Breakfast Participation Rate (Districtwide), High School

Breakfast Participation Rate (Districtwide), Middle School

### Breakfast Participation Rate (Meal Sites), Elementary/K-8

### Breakfast Participation Rate (Meal Sites), High School

### Breakfast Participation Rate (Meal Sites), Middle School

Cost Per Meal - Contractor-Operated

Cost Per Meal - District-Operated

Indirect and Overhead Costs as Percent of Total Costs

Indirect Costs Ratio - License Fees and Contract Services

Indirect Costs Ratio - Rent, Warehousing and Storage

Indirect Costs Ratio - Training and Professional Development

Indirect Costs Ratio - Travel, Advertising and Office Expenses

## Lunch Access Rate

Lunch Access Rate, Elementary/K-8

Lunch Access Rate, High School

Lunch Access Rate, Middle School

Lunch F/RP Participation Rate

Lunch F/RP Participation Rate, Elementary/K-8

Lunch F/RP Participation Rate, High School

Lunch F/RP Participation Rate, Middle School

Lunch Non-F/RP Participation Rate, Elementary/K-8

Lunch Non-F/RP Participation Rate, High School

Lunch Non-F/RP Participation Rate, Middle School

Lunch Participation Rate (Districtwide), High School

Lunch Participation Rate (Districtwide), Middle School

### Lunch Participation Rate (Meal Sites), Elementary/K-8

### Lunch Participation Rate (Meal Sites), High School

### Lunch Participation Rate (Meal Sites), Middle School

Management Company Share of Total Expenditures

Management Company Share of Total Meals

### Meal Accountability - Percent of Sites with POS System

### Meal Reimbursements - Breakfasts, Percent Free

### Meal Reimbursements - Breakfasts, Percent Reduced-Price

### Meal Reimbursements - Lunches, Percent Free

### Meal Reimbursements - Lunches, Percent Reduced-Price

Meal Reimbursements - Supper, Percent Free

Meal Reimbursements - Supper, Percent Reduced-Price

Operating Cost Ratio - Equipment

Operating Cost Ratio - Food

Operating Cost Ratio - Labor

Operating Cost Ratio - Supplies and Small Wares

Operating Cost Ratio - Technology

Operating Cost Ratio - Utilities, Custodial and Trash Removal

Operating Cost Ratio - Vehicle Fleet

### Outside Meal Services - Catering as Percent of Revenue

### Outside Meal Services - Meals to Charter/Other

Outside Meal Services - Meal Sites That Are Charter/Other

### Provision II Enrollment Rate - Breakfasts

### Provision II Enrollment Rate - Lunches

Revenue Percentage - A La Carte and Vending Sales

Revenue Percentage - Federal Meal Reimbursements

### ServSafe or Equivalent Staff per Site

### ServSafe-Certified Staff per Site

### Supper Access Rate

Supper Access Rate, Elementary/K-8

Supper Access Rate, High School

Supper Access Rate, Middle School

Supper Participation Rate (Districtwide), Elementary/K-8

Supper Participation Rate (Districtwide), High School

Supper Participation Rate (Districtwide), Middle School

Supper Participation Rate (Meal Sites), Elementary/K-8

Supper Participation Rate (Meal Sites), High School

Supper Participation Rate (Meal Sites), Middle School

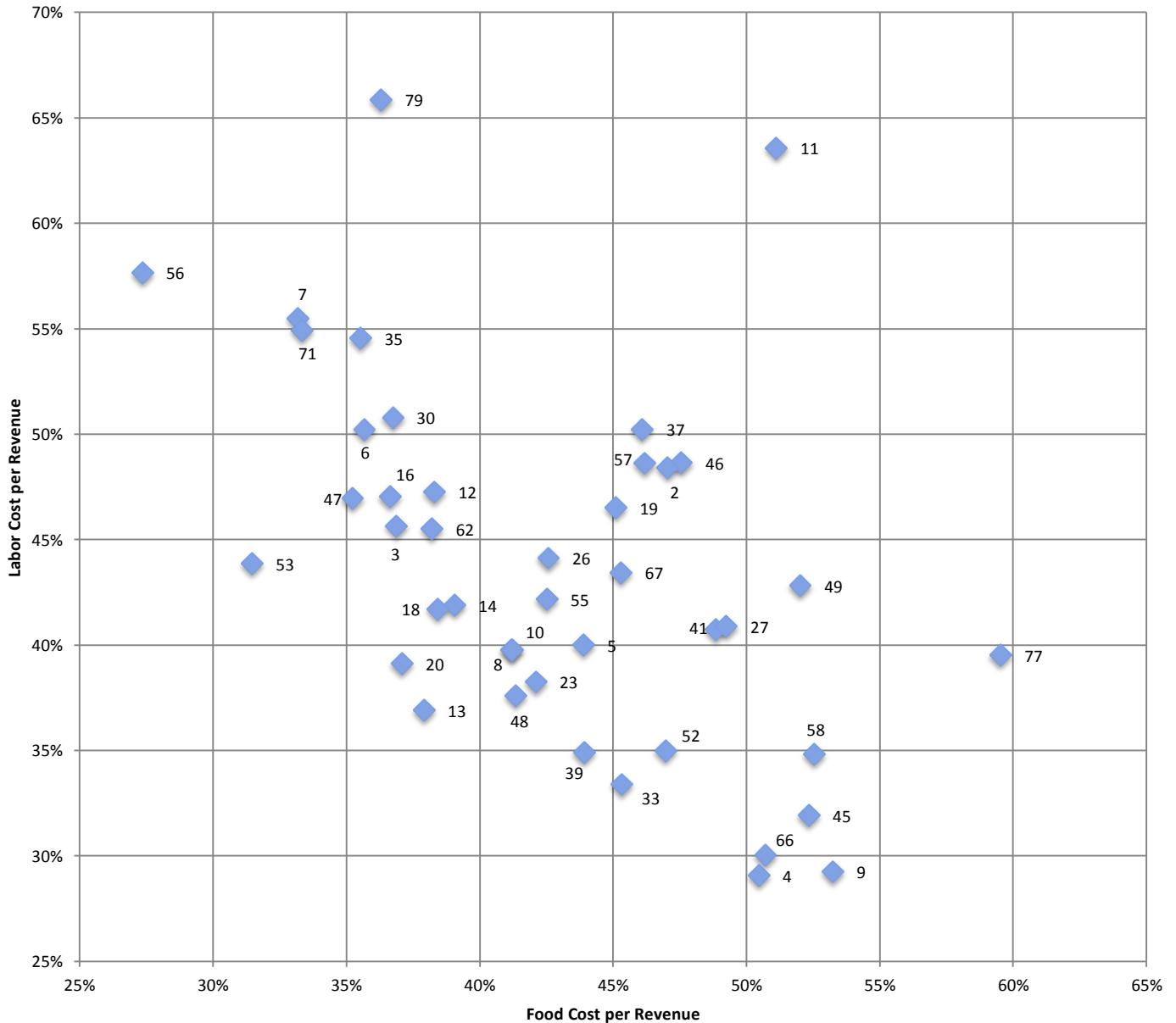
### USDA Commodities - Percent as Donations (Bonuses)



# FEATURED ANALYSIS

Figure 64  
Food Cost vs. Labor Cost

Food and labor costs are the two largest cost factors of school nutritional services. This chart shows the ratio between these two factors so that districts can identify how their cost trend compares to other school districts. The general trend is somewhat linear from the top-left to the bottom-right, which means that those districts that save in labor costs tend to spend a majority of their remaining revenue on food, and vice-versa.



OPERATIONS  
FOOD SERVICES

# DATA DISCOVERY

Figure 65  
Breakfast Participation Rate (Meal Sites)

This is the participation rate for school sites that offer breakfasts.

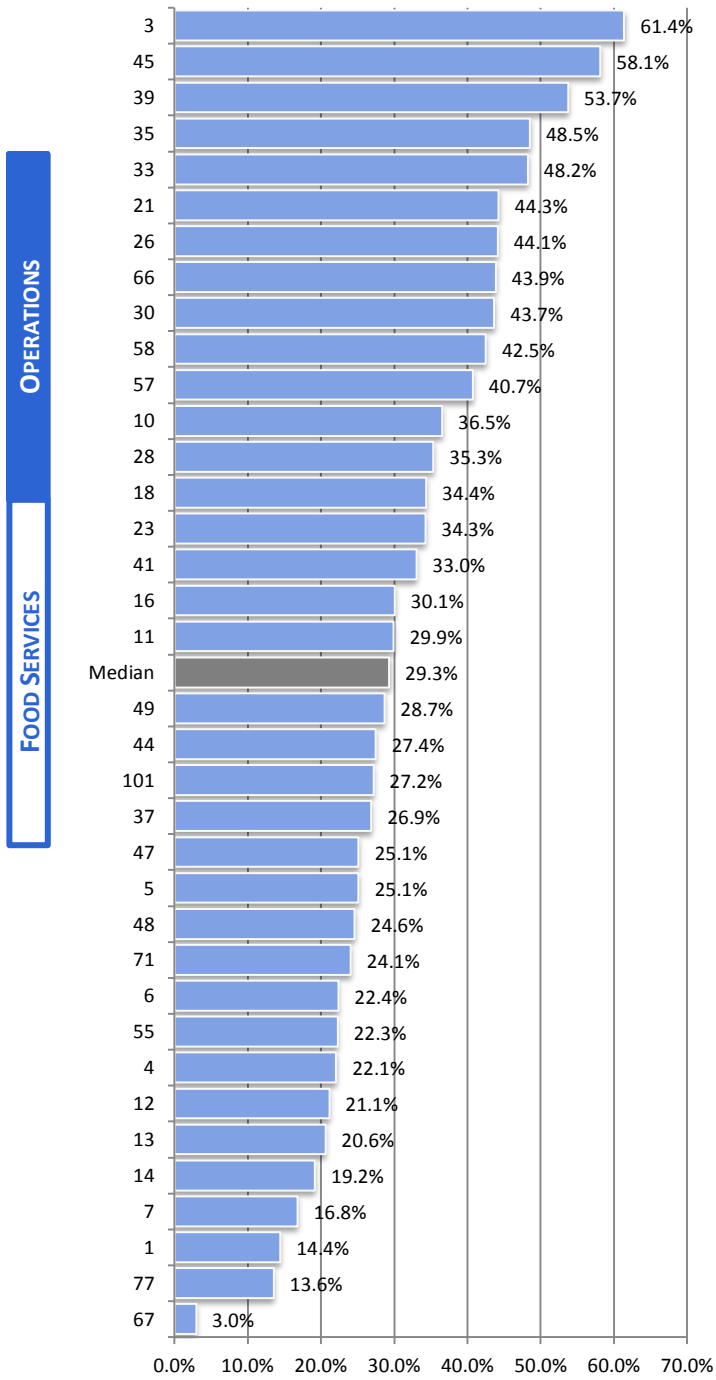
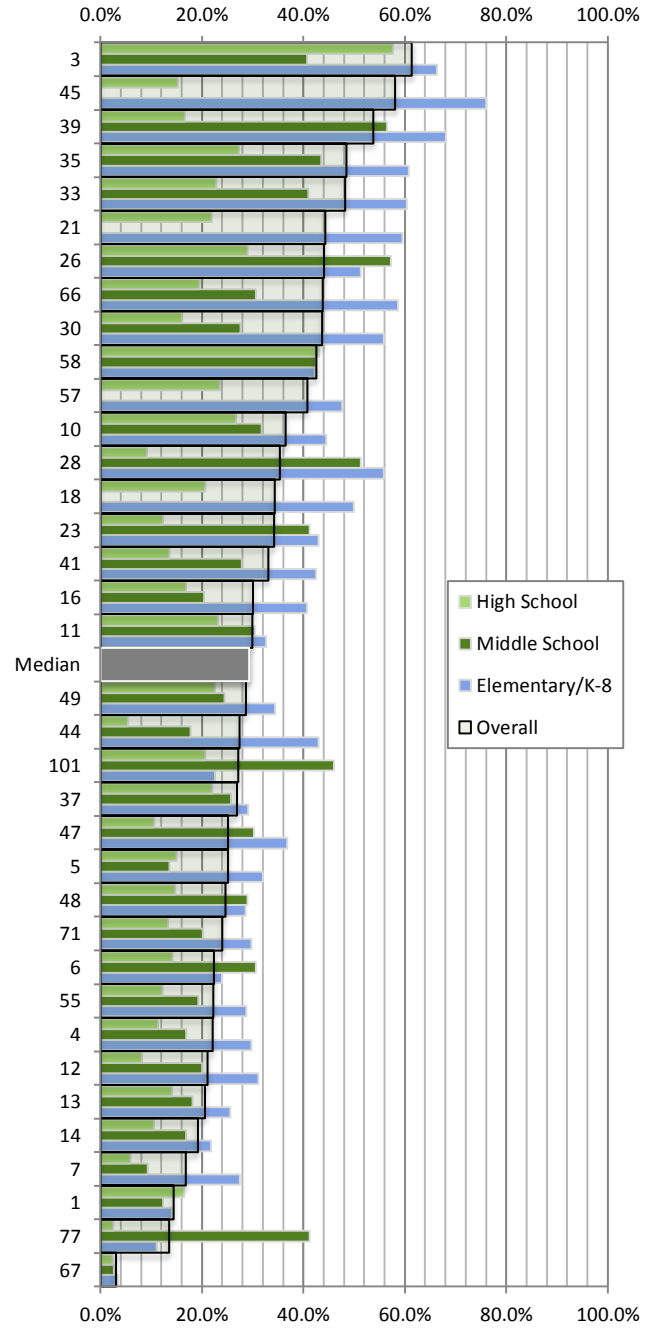


Figure 66  
Breakfast Participation Rate (by Grade Span)

The "overall" element in this chart shows the same information as the chart at left, and also shows drill-down data of breakfast participation by grade spans. (Data that are missing may be under review.)



*Which grade span is contributing the most to your overall breakfast participation rate (either negatively or positively)?*

Figure 67  
Breakfast F/RP Participation Rate

This is the participation rate of students that are eligible for free or reduced-price (F/RP) breakfasts.

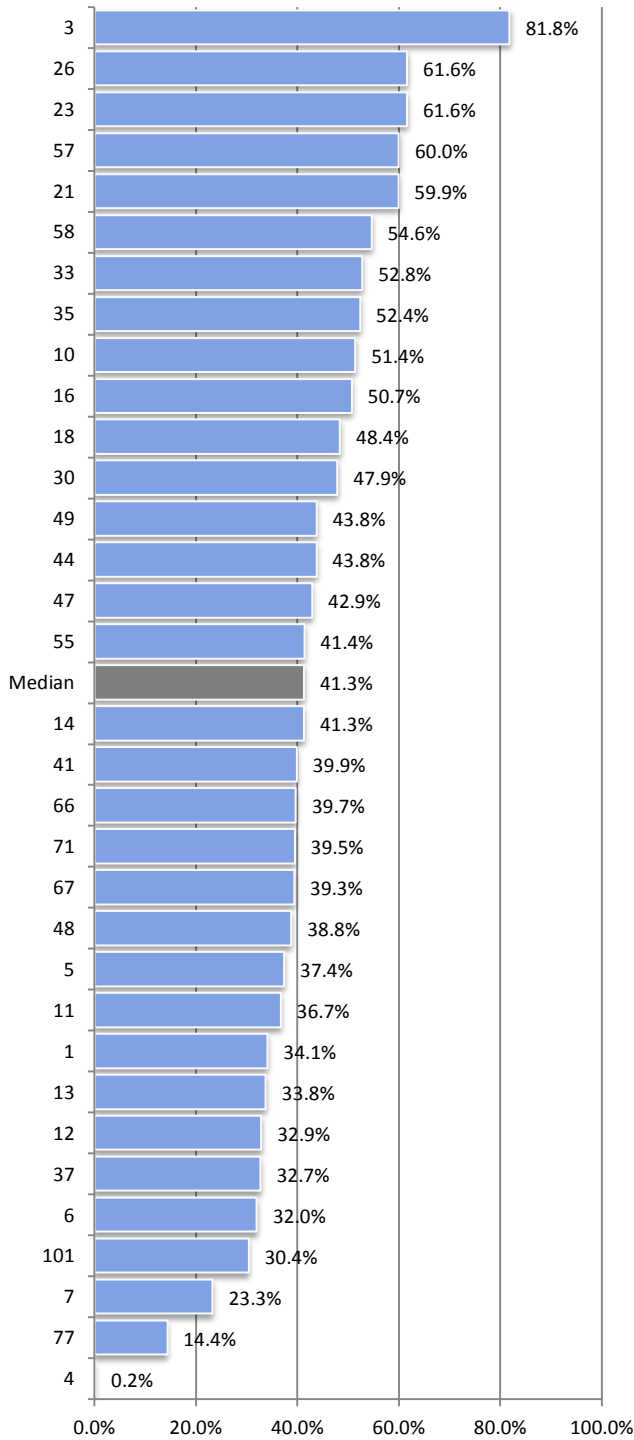
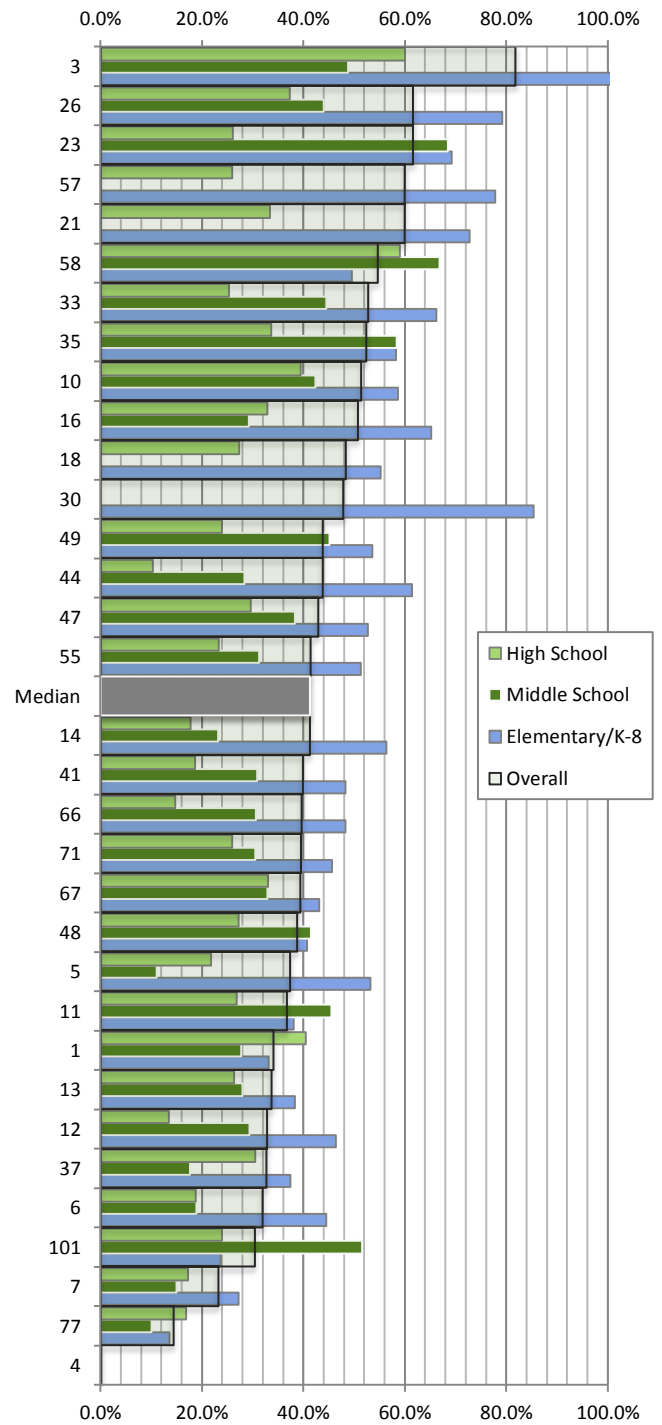


Figure 68  
Breakfast F/RP Participation Rate (By Grade Span)

The "overall" element in this chart shows the same information as the chart at left, and also shows drill-down data on breakfast participation by grade spans. (Data that are missing may be under review.)



OPERATIONS  
FOOD SERVICES

*Which grade span is contributing the most to your overall free- and reduced-price breakfast participation rate (either negatively or positively)?*

Figure 69  
Lunch Participation Rate (Meal Sites)

This is the participation rate for school sites that offer lunches.

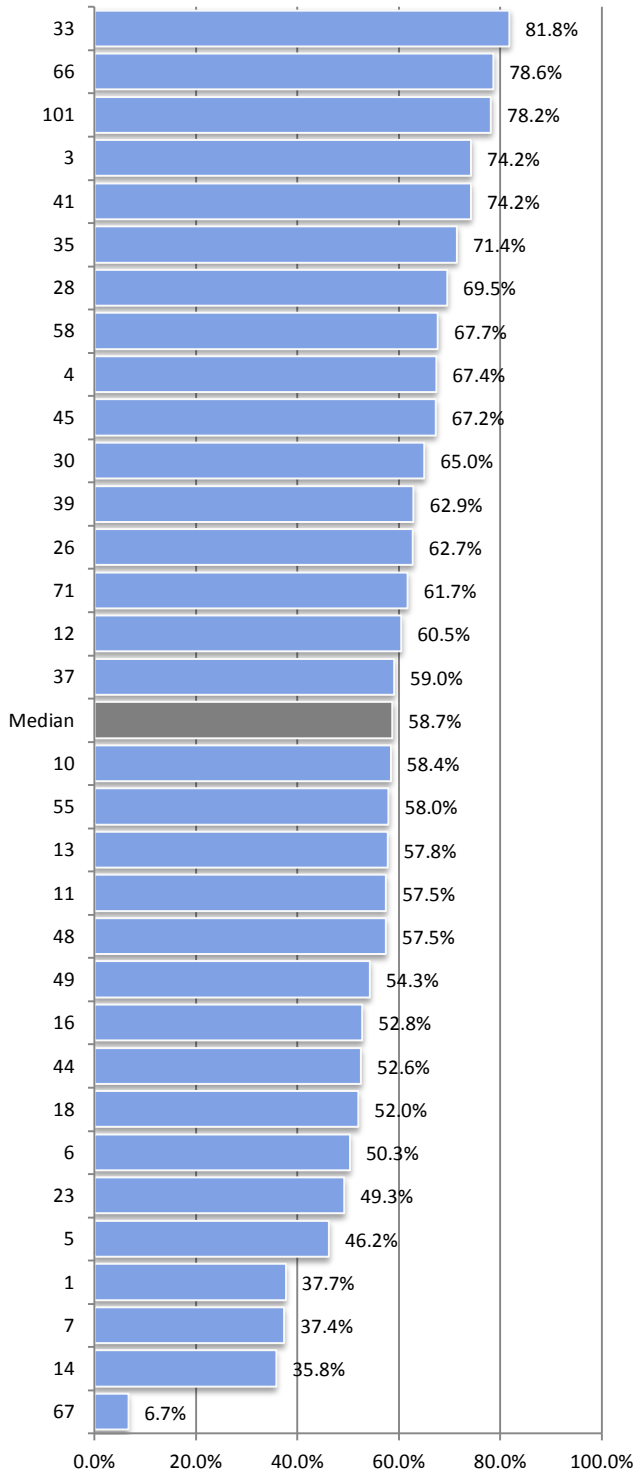
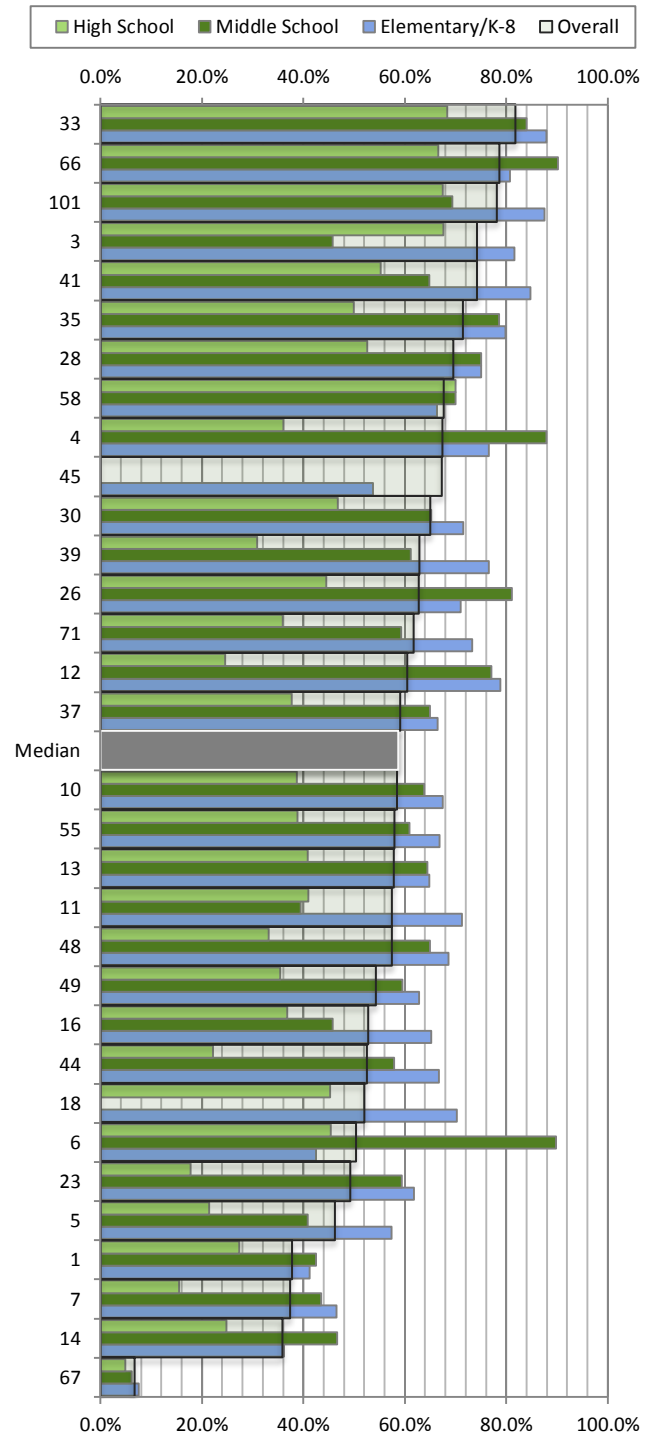


Figure 70  
Lunch Participation Rate (by Grade Span)

The "overall" element in this chart shows the same information as the chart at left, and also shows drill-down data on breakfast participation by grade spans. (Data that are missing may be under review.)



Which grade span is contributing the most to your overall free- and reduced-price lunch participation rate (either negatively or positively)?

Figure 71  
Lunch F/RP Participation Rate

This is the participation rate of students that are eligible for free or reduced-price (F/RP) meals.

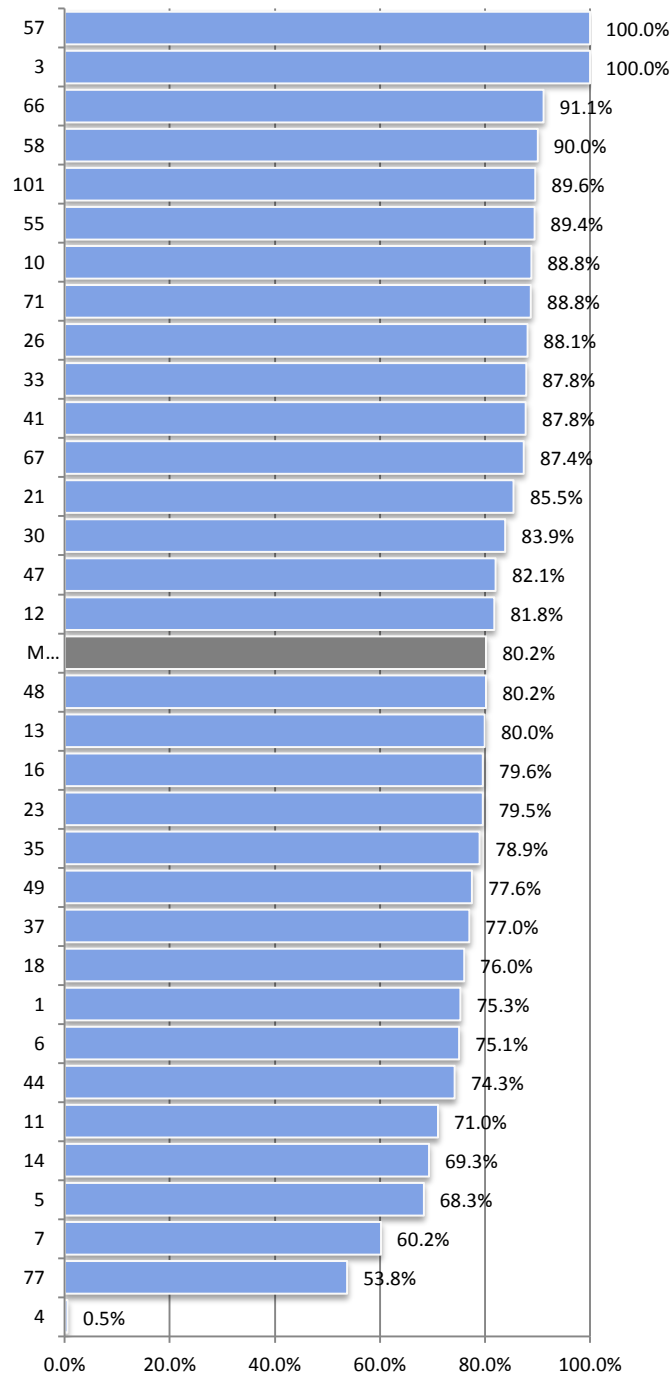
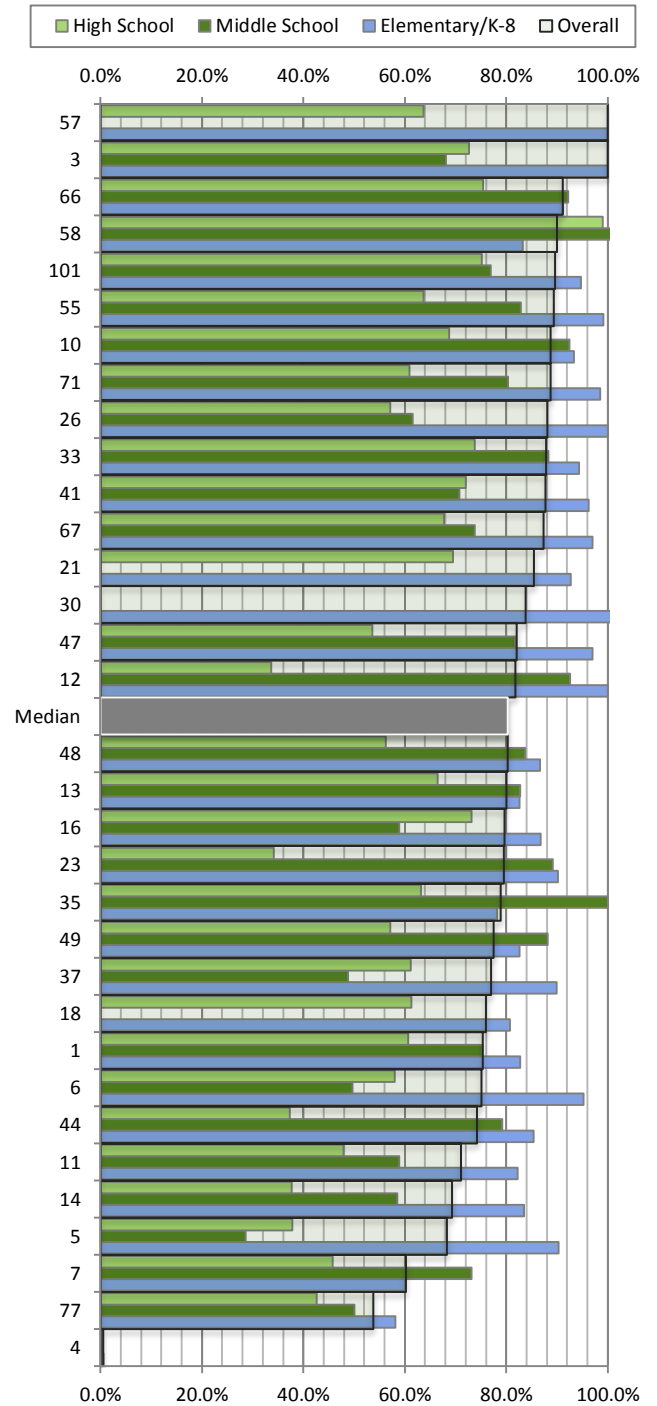


Figure 72  
Lunch F/RP Participation Rate (by Grade Span)

If any subset data are missing (i.e., the bar is blank), then the data may be under review.



OPERATIONS  
FOOD SERVICES

*Which grade span is contributing the most to your overall free- and reduced-price lunch participation rate (either negatively or positively)?*

Figure 73  
Cost per Meal

This is the total operating cost of the food services department relative to the total number of meals served in the year. *Adjusted for cost of living.*

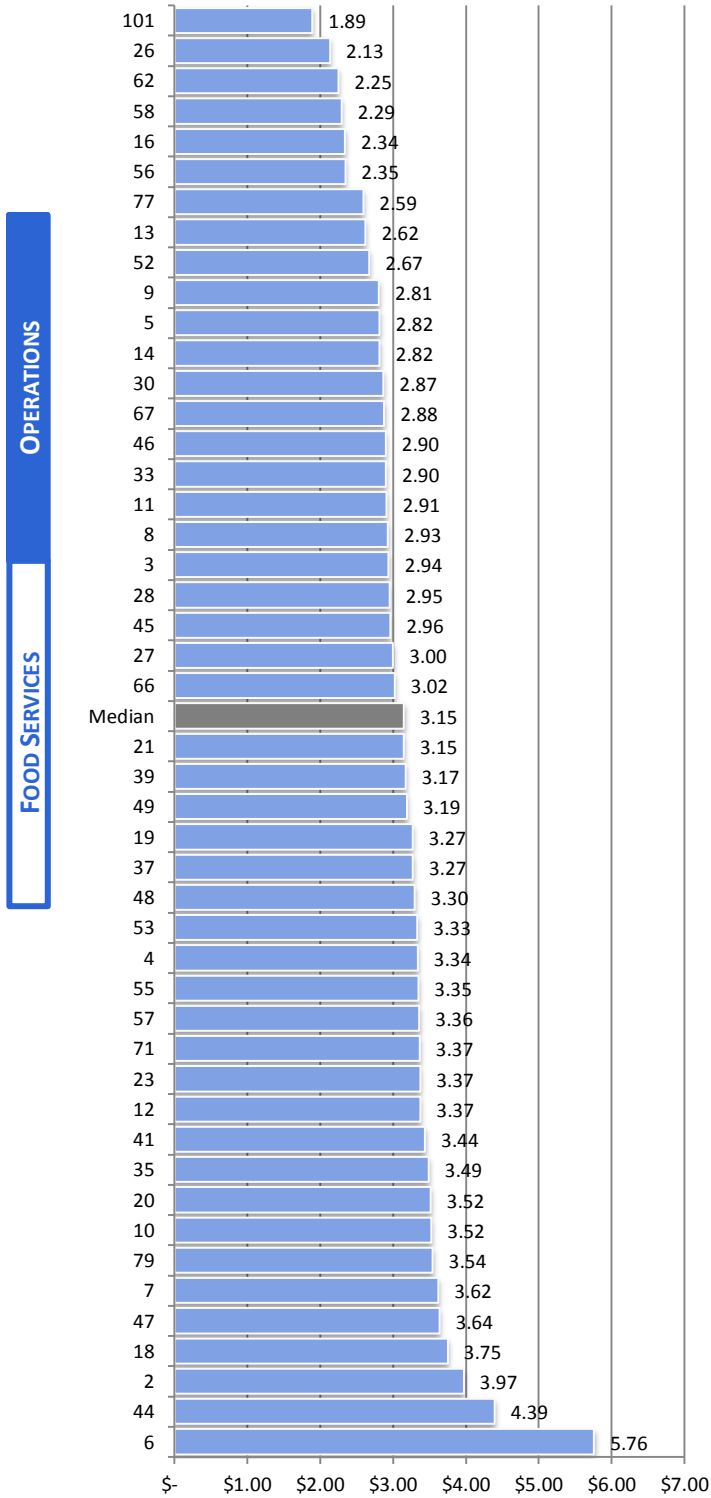


Figure 74  
Food Cost per Meal

This is the total food costs *divided by* total meals served. (Meal counts are adjusted by common meal equivalency factors. See KPI definitions.) *Adjusted for cost of living.*

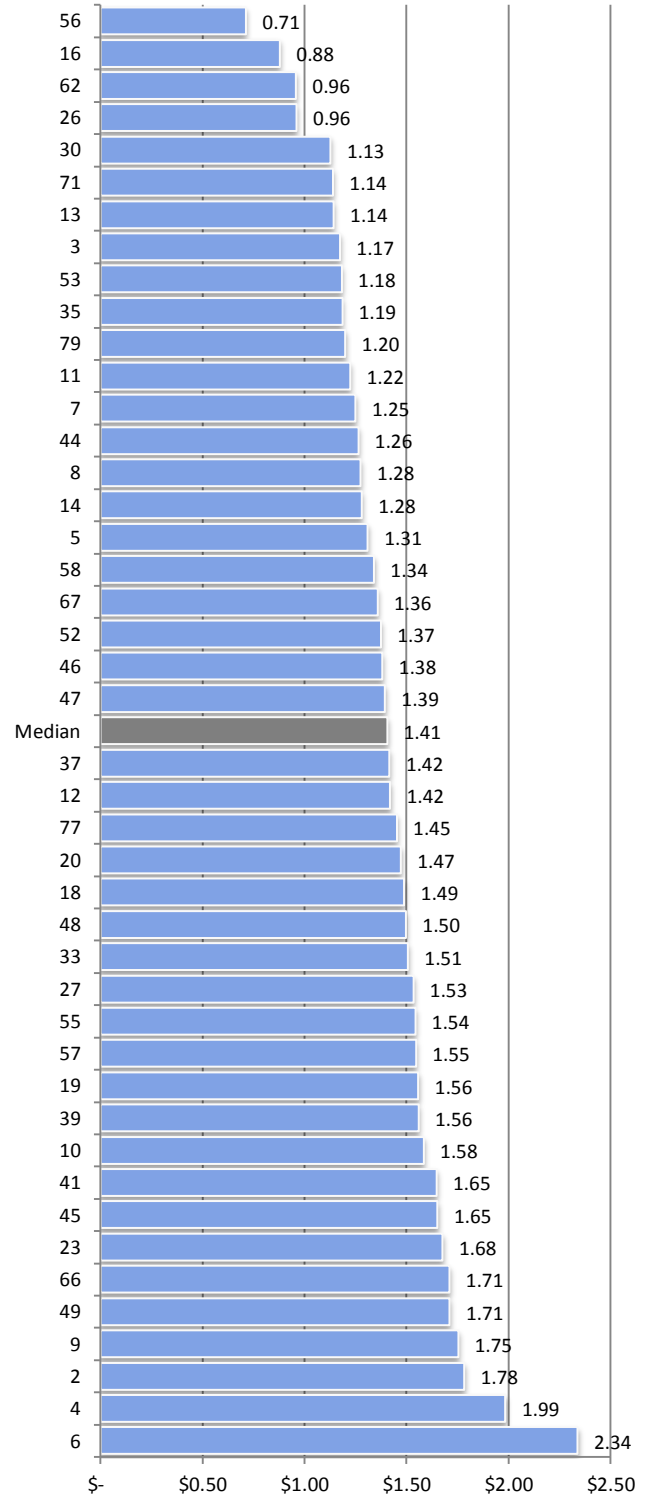


Figure 75  
Fund Balance per Revenue

This is the fund balance as of year-end relative to the total annual revenue. A fund balance is important for the financial health of the food services operation, although it is sometimes capped by the district or state.

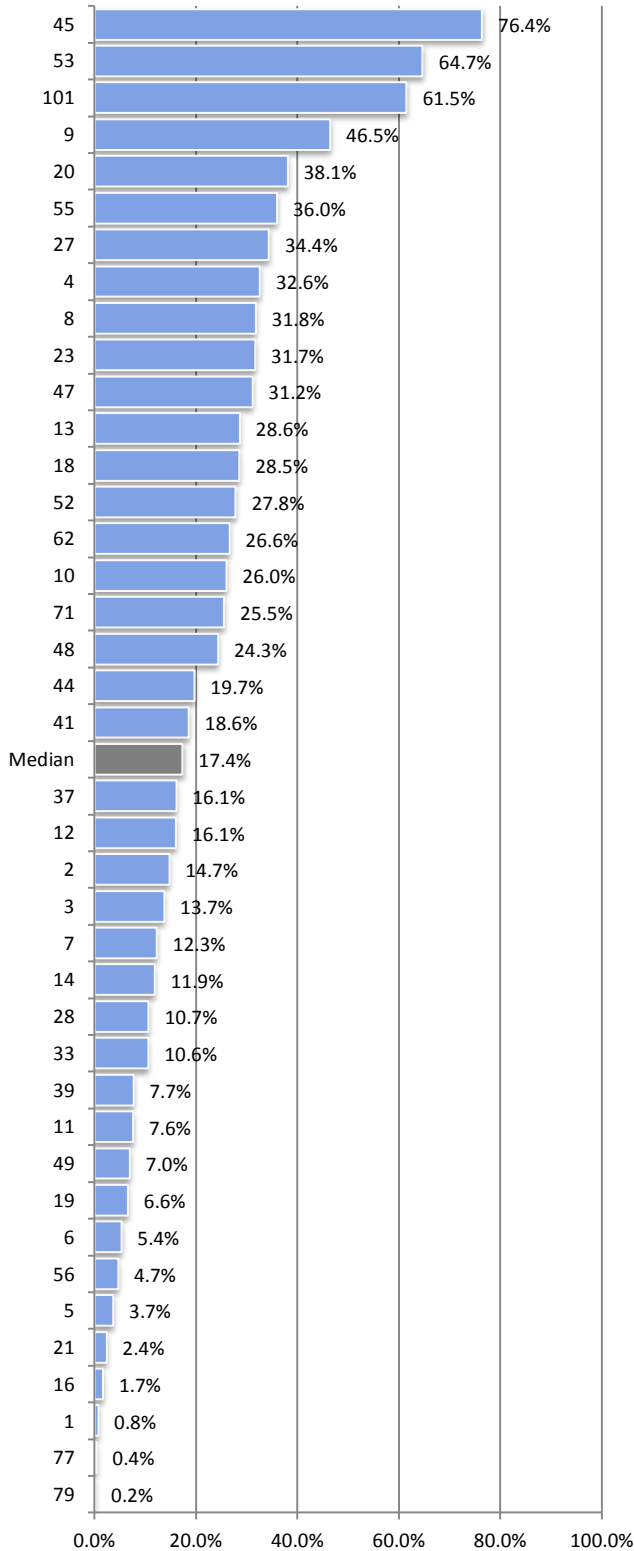
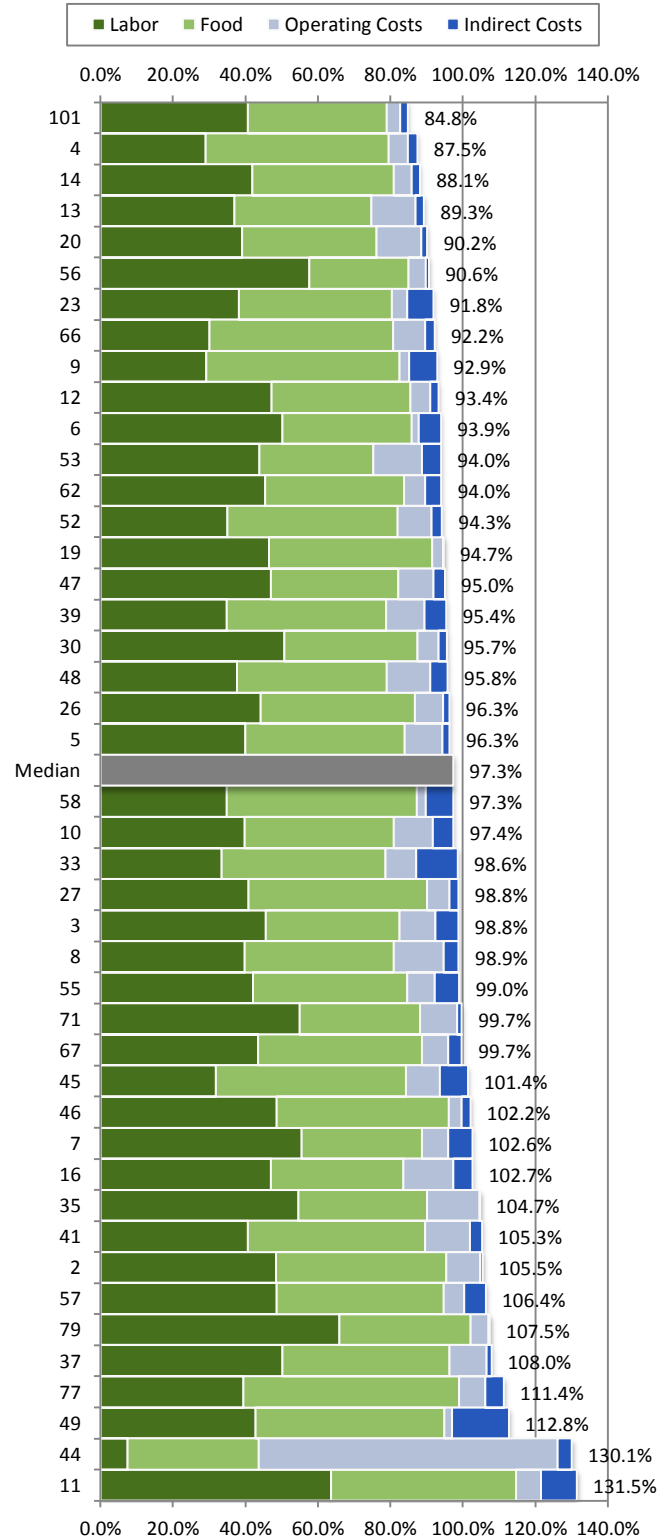


Figure 76  
Total Cost as Percent of Revenue

A ratio below 100% indicates that the food services operation brought in more revenue than it spent, meaning that it is self-sustaining.



OPERATIONS  
FOOD SERVICES

Figure 77  
Food Cost per Revenue

This is the percent of food services money that was spent directly on food costs.

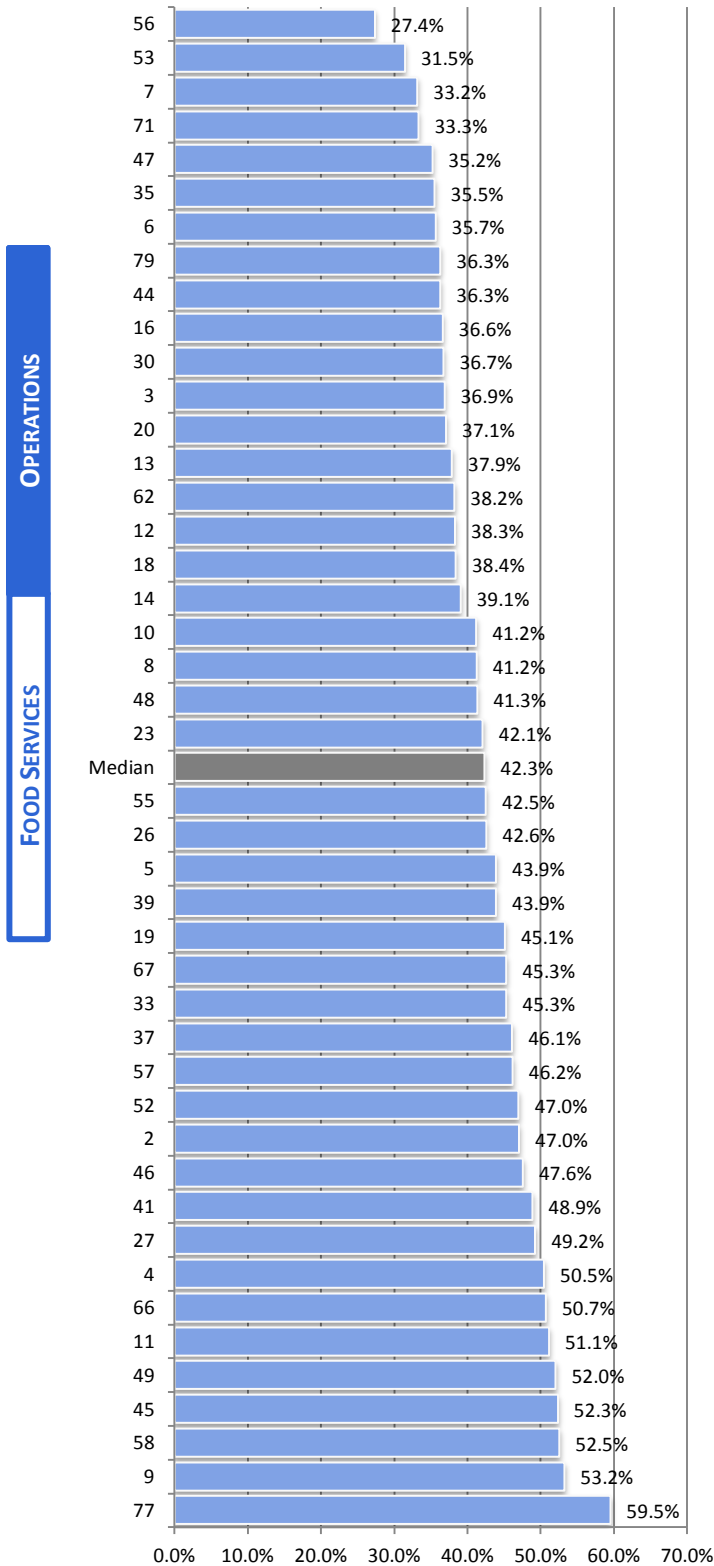


Figure 78  
Labor Cost per Revenue

This is the percent of food services money that was spent on district staff.

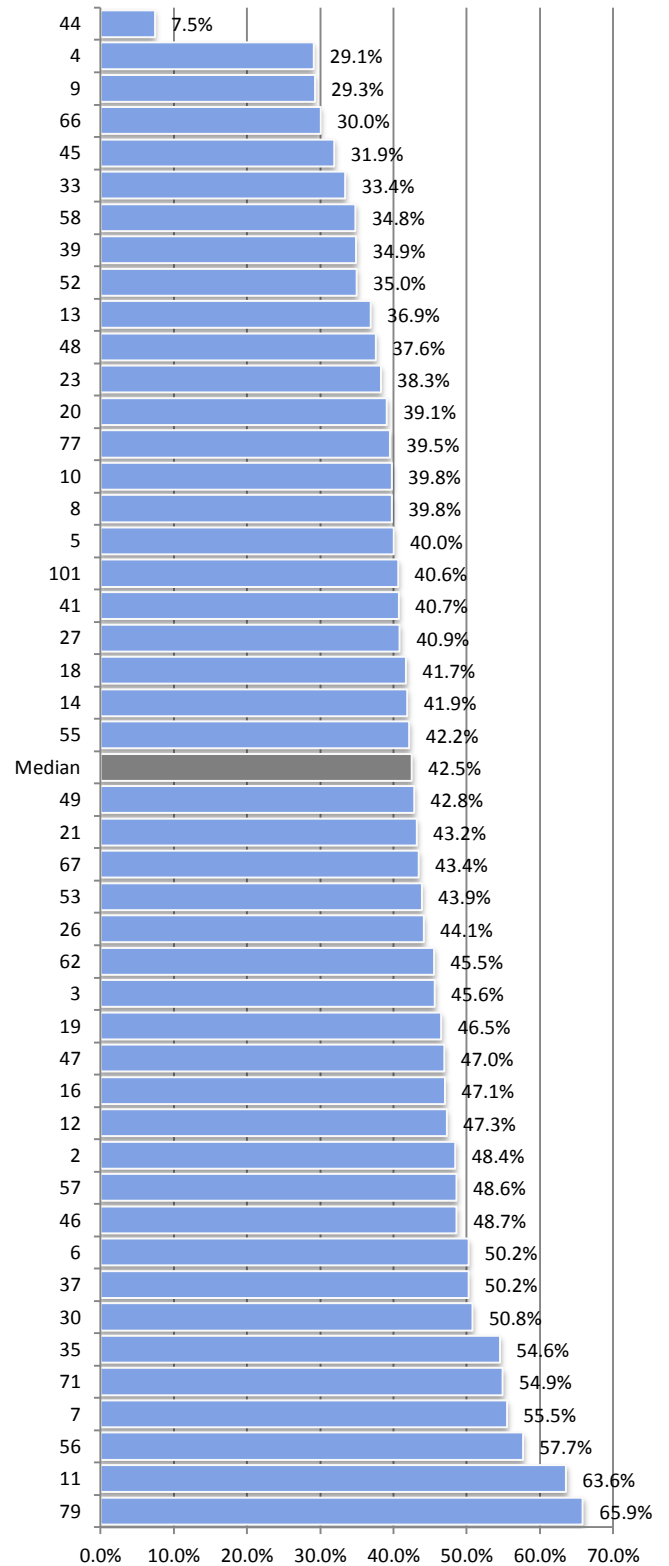




Figure 79  
Meals per Labor Hour

This is the total number of meals produced relative to the annual number of labor hours. (Meal counts are adjusted by common meal equivalency factors. See KPI Definitions.)

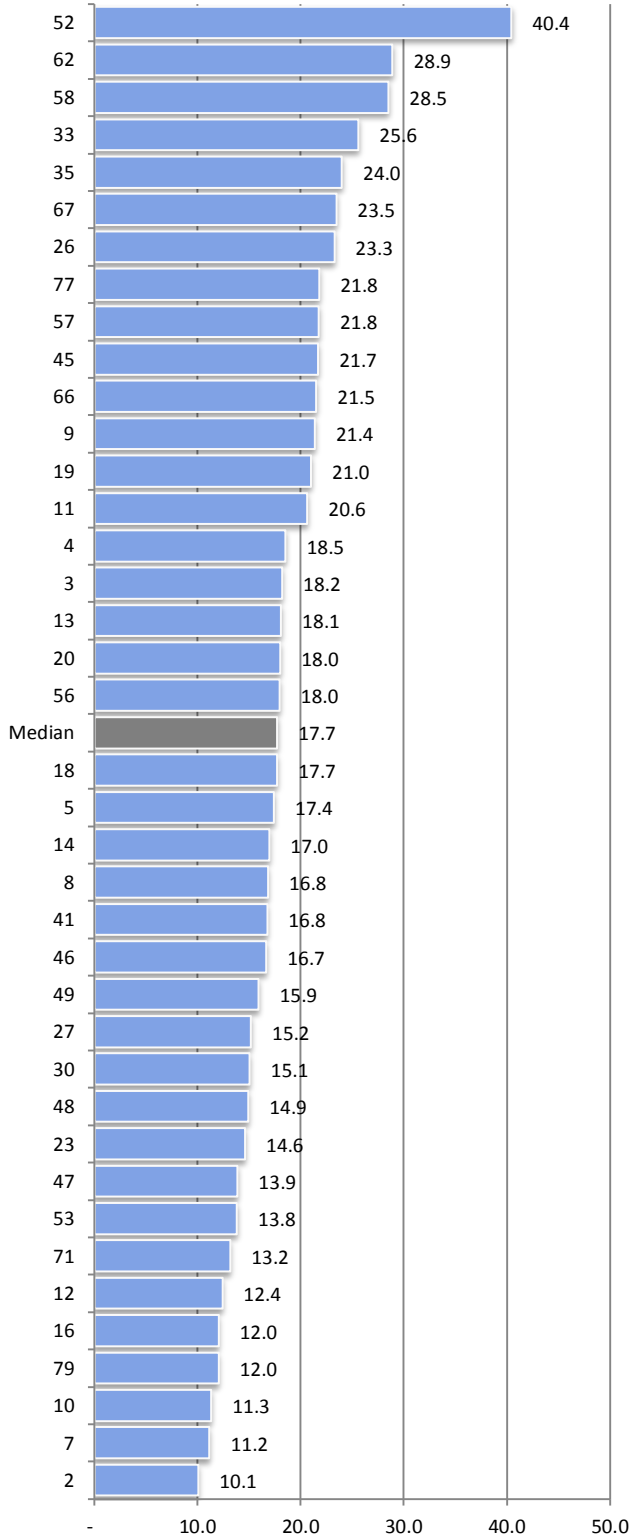
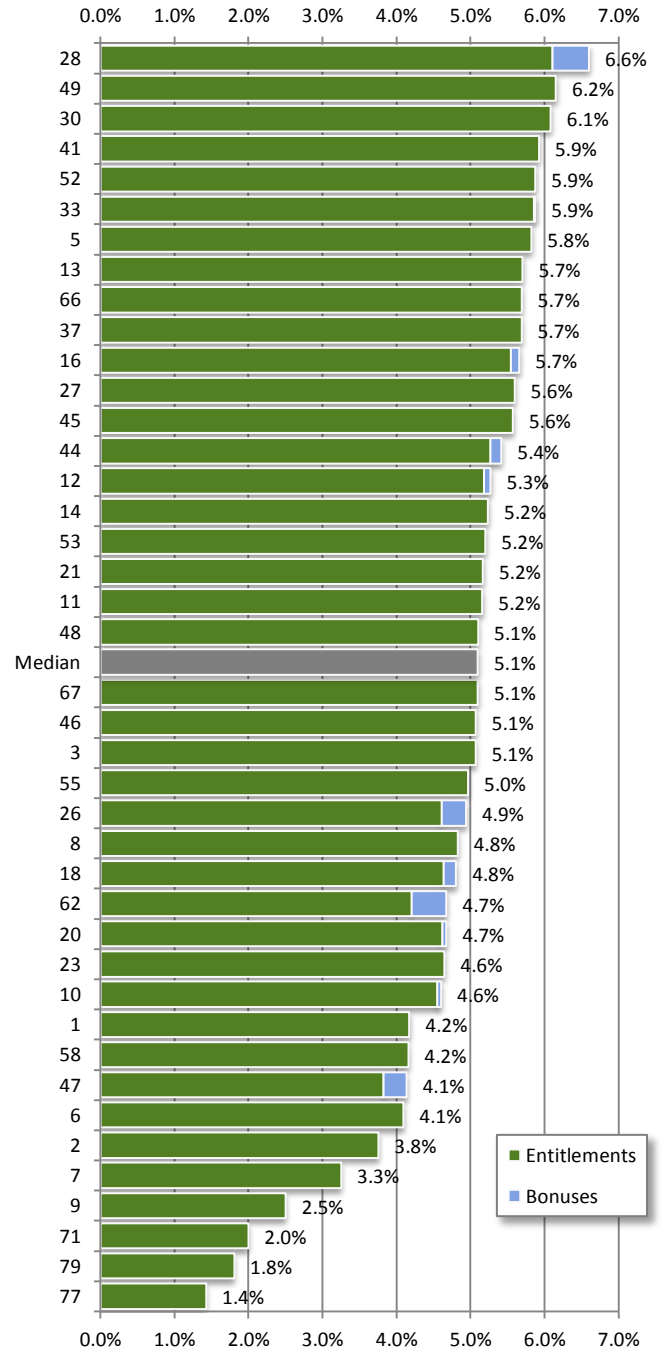


Figure 80  
USDA Commodities as Percent of Revenue

USDA Foods is an important federal program that grants food to education agencies. Sometimes USDA Foods also offers “bonuses” that are only available for a limited time, and are influenced by excess food stocks.



OPERATIONS  
FOOD SERVICES

*Do you take advantage of USDA Commodities to the fullest extent possible in order to reduce food costs?*

Figure 81  
Provision II Enrollment Rate - Breakfasts

Provision II can increase overall participation by reducing the paperwork burden.

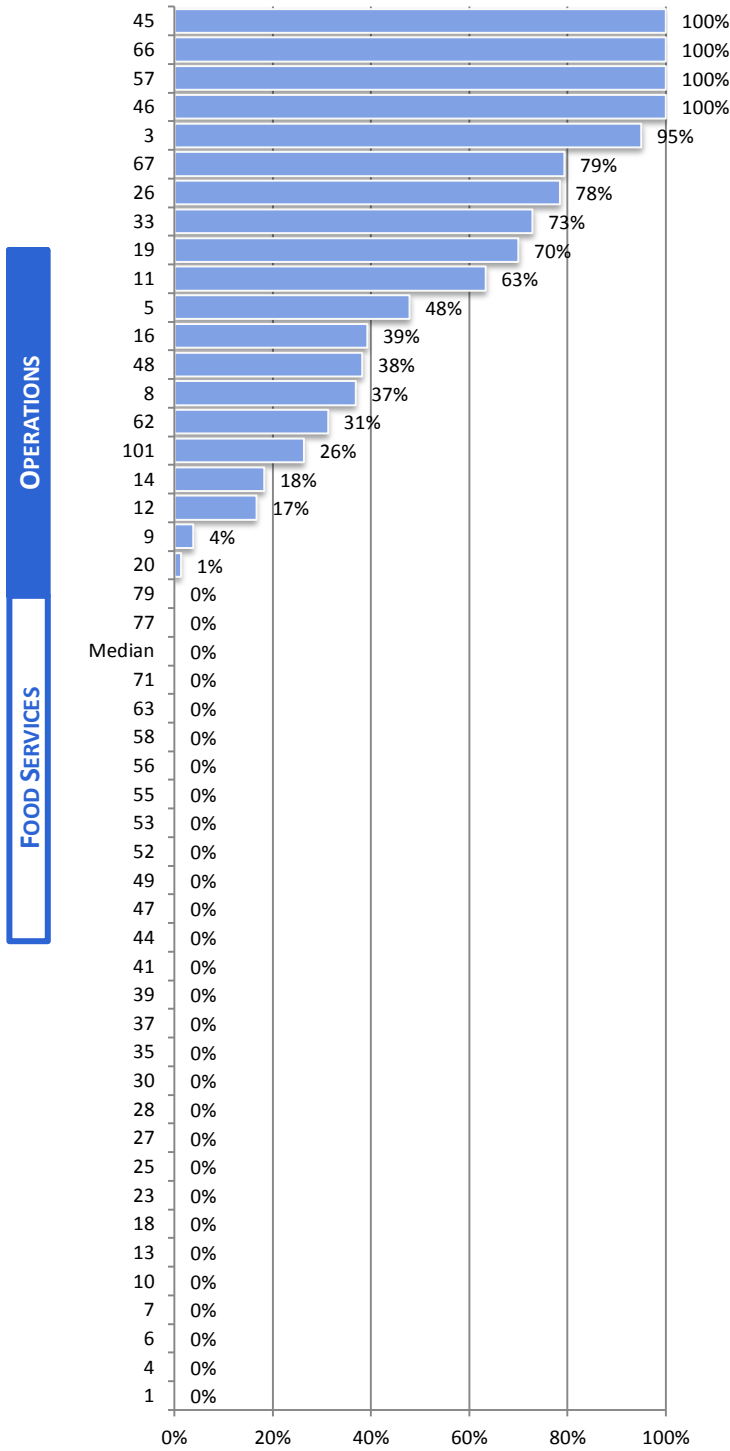


Figure 82  
Provision II Enrollment Rate – Lunches

Provision II can increase overall participation by reducing the paperwork burden.

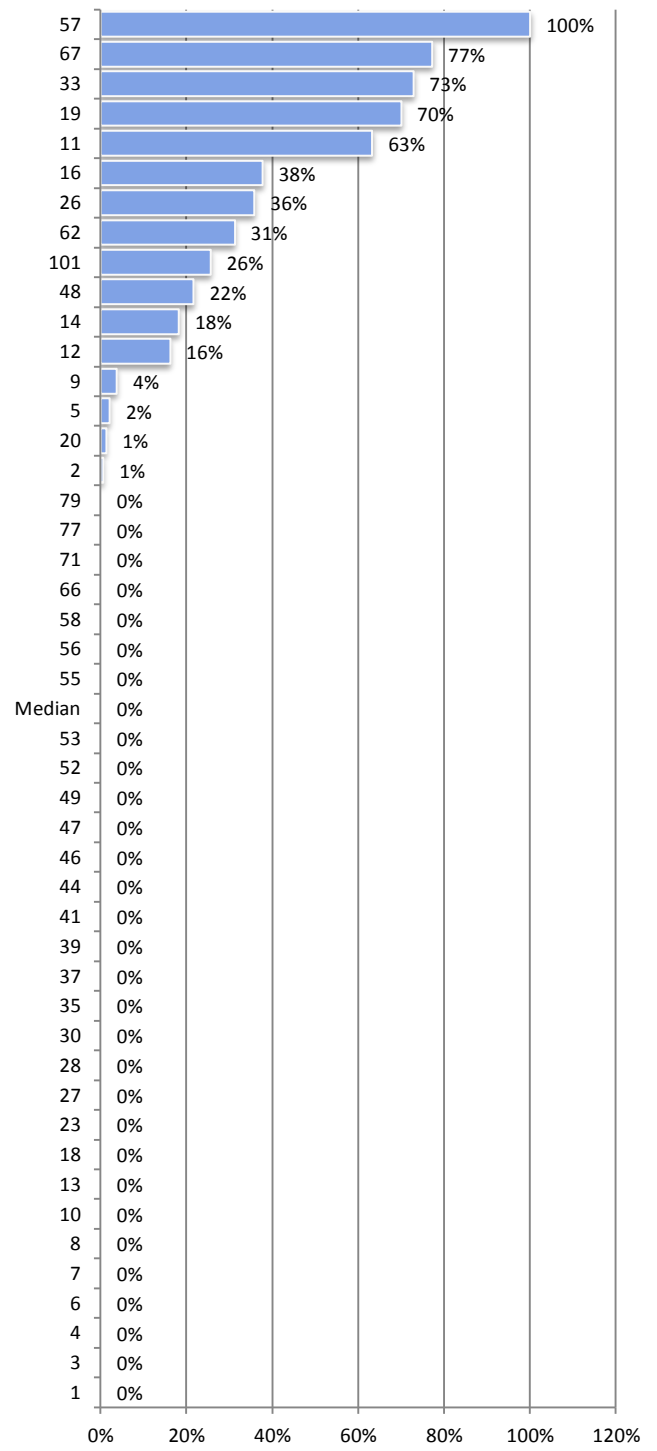


Figure 83  
 ServeSafe or Equivalent Staff per Site

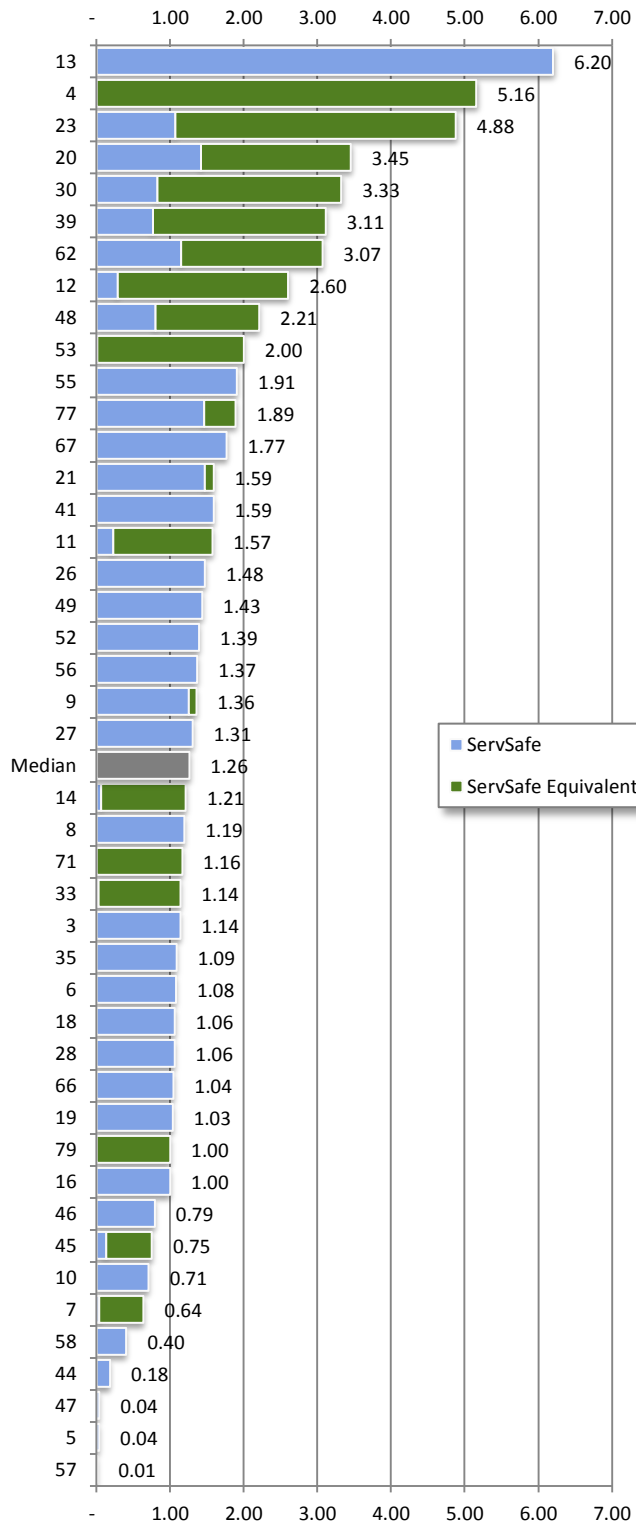
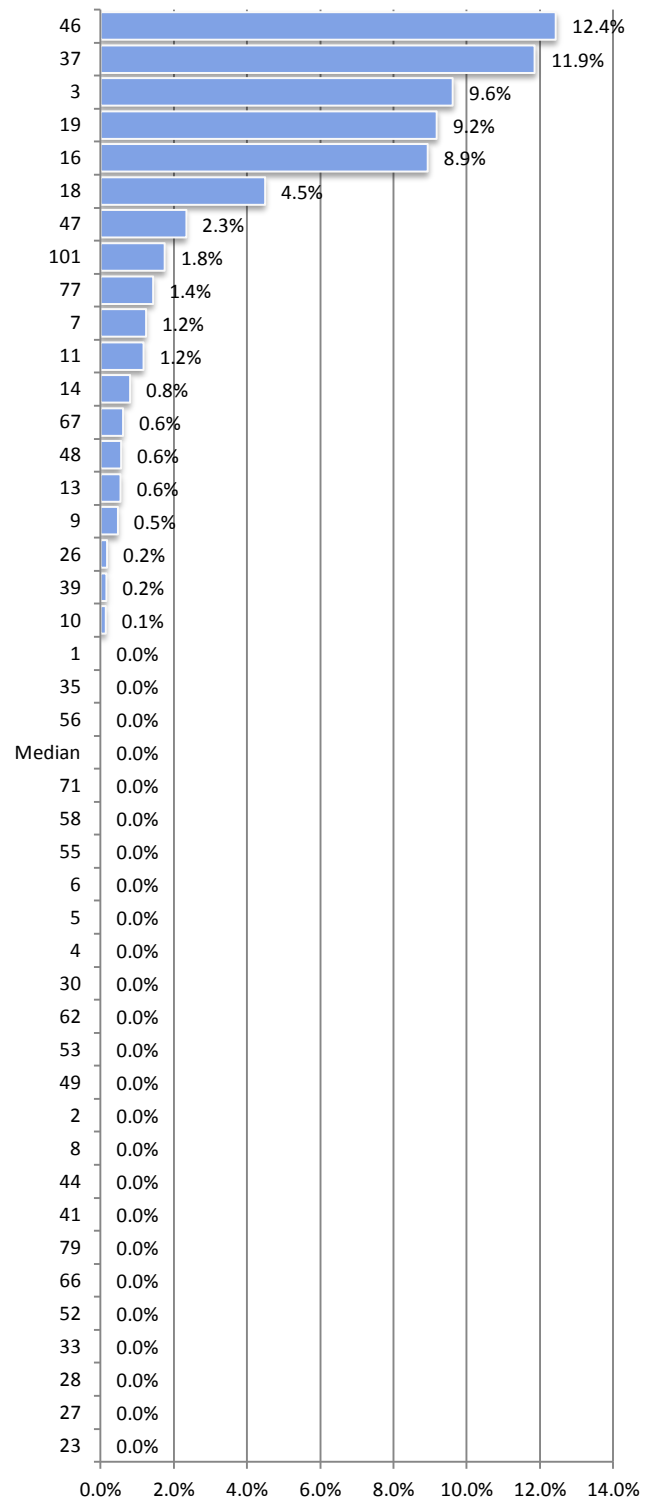


Figure 84  
 Outside Meal Services - Meals to Charter/Other



OPERATIONS  
FOOD SERVICES

Are you responding to shifts in the educational landscape?

Figure 85  
Meal Accountability - Percent of Sites with POS System

A point-of-sale (POS) system is essential for automated meal counts.

OPERATIONS  
FOOD SERVICES

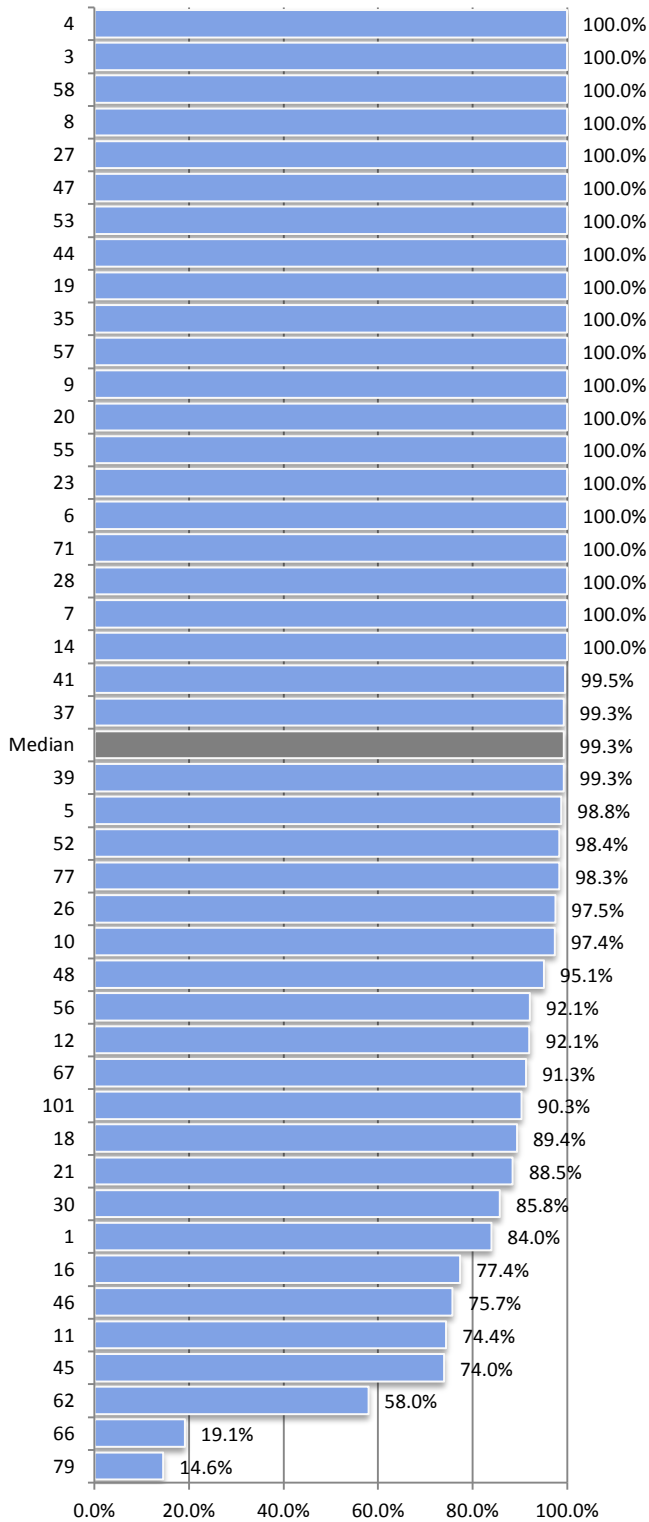


Figure 86  
Meal Reimbursements - Breakfasts

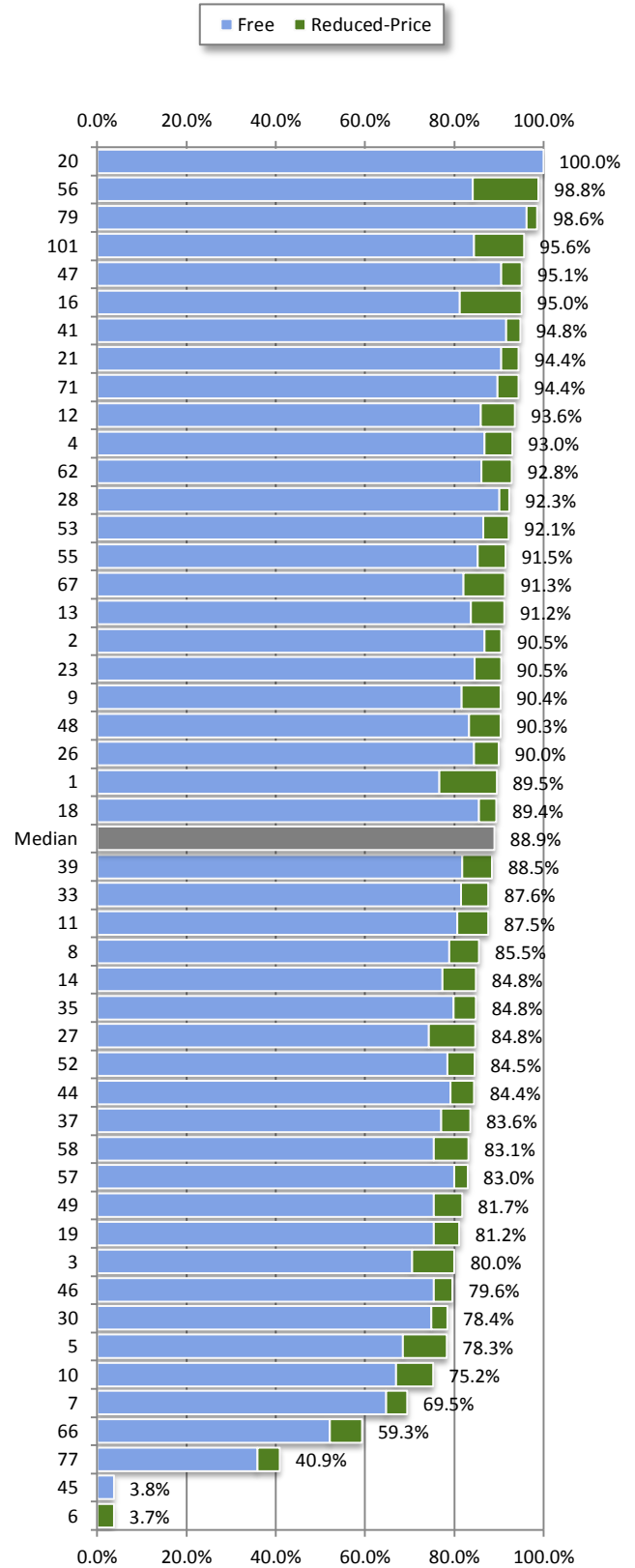
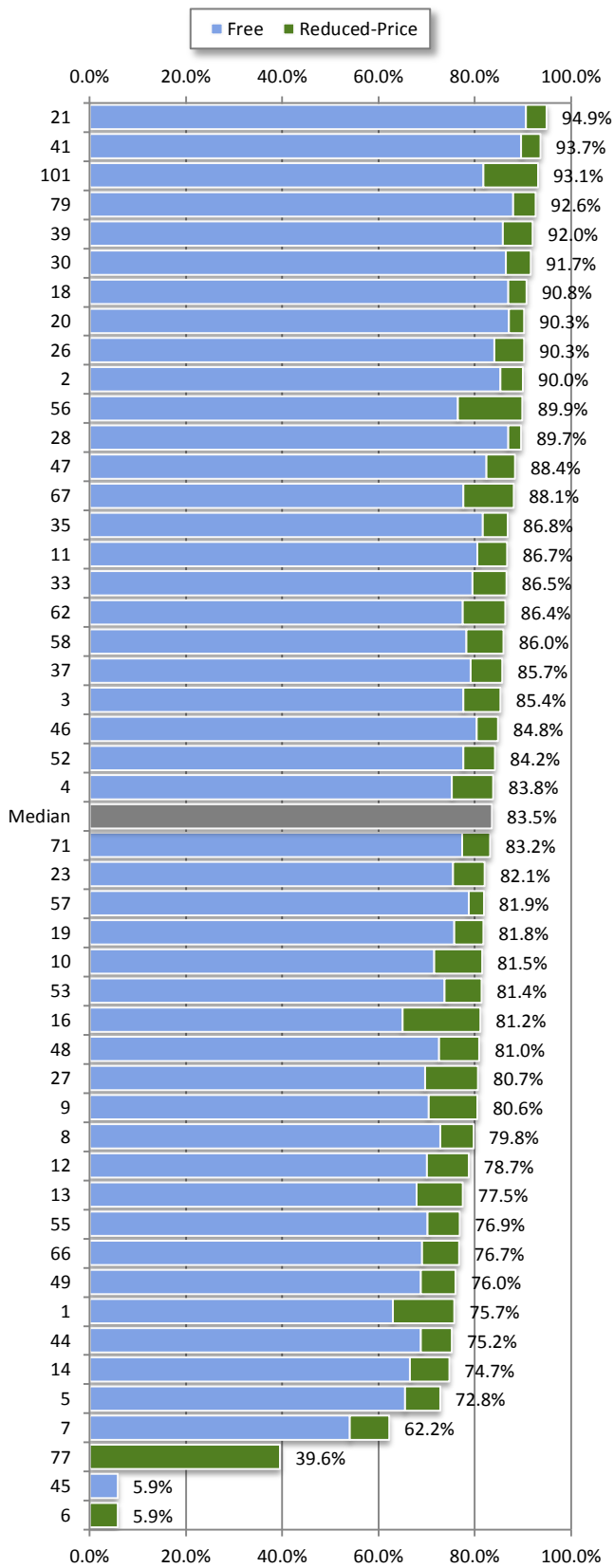


Figure 87  
Meal Reimbursements - Lunches



# KPI DEFINITIONS

## Breakfast Participation

**Importance** Studies show a positive correlation between breakfast and school attendance, alertness, health, behavior, and academic success.

A strong breakfast program indicates a commitment by the food service program and district leadership to preparing students to be "ready to learn" in the classroom.

### Factors that Influence

- Menu selections
- Provision II and III and Universal Free
- Free/Reduced percentage
- Food preparation methods
- Attractiveness of dining areas
- Adequate time to eat

**Calculation** Total breakfast meals served *divided by* total district student enrollment times the number of school days in the year.

## Lunch Participation Rate

**Importance** High participation rates indicate customer satisfaction because food selections are appealing, quick to eat, and economical.

### Factors that Influence

- Menu selections
- Dining areas that are clean, attractive, and "kid-friendly"
- Adequate number of Point of Sale (POS) stations to help move lines quickly and efficiently
- A variety of menu selections
- Adequate time to eat
- Food preparation methods

**Calculation** Total lunch meals served *divided by* total district student enrollment times the number of school days in the year.

## Cost per Meal

**Importance** Total costs relative to meal volume demonstrates efficacy of the food service operation.

### Factors that Influence

- The "chargebacks" to food service programs such as energy costs, custodial, non-food service administrative staff, trash removal, and dining room supervisory staff
- Direct costs such as food, labor, supplies, equipment, etc.
- Meal quality
- Participation rates
- Purchasing practices
- Marketing
- Leadership expertise
- Meal prices
- Staffing formulas

**Calculation** Total direct costs of the food services program *divided by* the total meal count of all meal types. Breakfast meals are weighted at one-half; lunch meals at one-to-one; snacks at one-fourth; and suppers at one-to-one.

## Food Cost per Meal

**Importance** Food cost is the second largest expenditure that foodservice programs incur.

Careful menu planning practices, competitive bids for purchasing supplies, including commodity processing contracts, and implementation of consistent production practices can control food costs.

Food cost as a percent of revenue can be reduced if participation revenue is high.

### Factors that Influence

- USDA menu & nutrient requirements
- A la carte items
- Convenience vs. scratch food items
- Purchasing and production practices
- Meal prices
- Participation rates
- Use of commodities
- Use of a warehouse or drop-ship deliveries
- Theft

**Calculation** Total food costs *divided by* the total meal count of all meal types. Breakfast meals are weighted at one-half; lunch meals at one-to-one; snacks at one-fourth; and suppers at one-to-one.

## Fund Balance per Revenue

**Importance** A positive fund balance can provide a contingency fund for equipment purchases, technology upgrades, and emergency expenses.

A "break-even" status indicates that there is just enough revenue to cover program expenses, but none left for program improvements.

### Factors that Influence

- USDA allows a food service program to have no more than a three month operating expenses fund balance.
- Districts may have taken part or all of the food services fund balance for non-food service activities.
- Food services may have funded large kitchen remodeling projects, implemented new POS systems, and thereby reduced a fund balance with a large capital outlay project

**Calculation** Fund balance *divided by* total revenue.

## Total Cost per Revenue

**Importance** This measure gives an indication of the financial status of the food service program, including management company fees. Districts that keep expenses lower than revenues are able to build a *surplus* for reinvestment back into the program for capital replacement, technology, and other improvements. Districts that report expenses higher than revenues may either be drawing from their fund balance, or may be subsidized by the district's general fund.

### Factors that Influence

- The "chargebacks" to food service programs such as energy costs, custodial, non-food service administrative staff, trash removal, dining room supervisory staff
- Direct costs such as food, labor, supplies, equipment, etc.
- Meal quality
- Participation rates
- Purchasing practices
- Marketing
- Leadership expertise
- Meal prices
- Staffing formulas

**Calculation** Total direct costs *plus* indirect and overhead costs *divided by* total revenue.

### Food Cost per Revenue

**Importance** Food cost is the second largest expenditure that food service programs incur.

Careful menu planning practices, competitive bids for purchasing supplies, including commodity processing contracts, and implementation of consistent production practices can control food costs.

Food cost as a percent of revenue can be reduced if participation revenue is high.

#### Factors that Influence

- USDA menu & nutrient requirements
- A la carte items
- Convenience vs. scratch food items
- Purchasing and production practices
- Meal prices
- Participation rates
- Use of commodities
- Use of a warehouse or drop-ship deliveries
- Theft

**Calculation** Total food costs *divided by* total revenue.

### Labor Cost per Revenue

**Importance** Labor contributes the largest expense that food service revenue must cover.

School boards can control labor costs by establishing salary schedules and benefit plans, and directors can control labor cost by implementing productivity standards and staffing formulas.

#### Factors that Influence

- Salary schedules and health and retirement benefits
- Number of annual work days and annual paid holidays
- Staffing formulas and productivity standards
- Union contracts
- Type of menu items

**Calculation** Total labor costs *divided by* total revenue.

### Meals per Labor Hour

**Importance** Labor contributes the largest expense that food service revenue must cover.

School boards can control labor costs by establishing salary schedules and benefit plans, and directors can control labor cost by implementing productivity standards and staffing formulas.

#### Factors that Influence

- Salary schedules and health and retirement benefits
- Number of annual work days and annual paid holidays
- Staffing formulas and productivity standards
- Union contracts
- Type of menu items

**Calculation** Total labor costs *divided by* total revenue.

### USDA Commodities - Percent of Total Revenue

**Importance** Maximizing the use of USDA commodities can reduce costs.

**Calculation** Total value of commodities received *divided by* total revenue.

### USDA Commodities - Percent as Donations (Bonuses)

**Importance** Districts can bring down overall food costs when they maximize the number of "bonuses" that are periodically offered by USDA Foods.

#### Factors that Influence

- Frequency of bonuses offered by USDA Foods
- Regions where USDA Foods bonuses are offered
- Agility of food services staff to change menus quickly

**Calculation** Value of commodity donations (bonuses) received, *divided by* total value of commodities received (including entitlements and donations).

### Provision II Enrollment Rate - Breakfasts

**Importance** This provision reduces application burdens and simplifies meal counting and claiming procedures. It allows schools to establish claiming percentages and to serve all meals at no charge for a four-year period.

#### Factors that Influence

- History of schools serving meals to all participating children at no charge for 4 years
- Stability of income of school's population
- Increased participation to offset increased costs and loss of full pay and reduced-price meal charges.

**Calculation** Number of students enrolled in Provision II breakfast program *divided by* total number of students with access to breakfast meals.

### Provision II Enrollment Rate - Lunches

**Importance** This provision reduces application burdens and simplifies meal counting and claiming procedures. It allows schools to establish claiming percentages and to serve all meals at no charge for a four-year period.

#### Factors that Influence

- History of schools serving meals to all participating children at no charge for 4 years
- Stability of income of school's population
- Increased participation to offset increased costs and loss of full pay and reduced-price meal charges.

**Calculation** Number of students enrolled in Provision II lunch program *divided by* total number of students with access to lunch meals.

### ServSafe or Equivalent Staff per Site

**Importance** The measure is indicative of a district's intention to provide a safe and sanitary dining environment for students and staff.

#### Factors that Influence

- State requirements for food service workers
- District policy for staff

**Calculation** Number of staff that are ServSafe-Certified or equivalent *divided by* the total number of sites that serve meals.

### Outside Meal Services - Meals to Charter/Other

**Importance** Charter schools, private schools, and community centers may benefit from district-provided services. This measure identifies the degree to which this occurs and provides a basis for detecting trends.

**Calculation** Number of meals served in schools that were charter, private, or other school *divided by* total number of meals served.

Meal Accountability - Percent of Sites with POS System

**Importance** A point-of-sale system is necessary for accountability of meals served.

**Calculation** Number of sites with a point-of-sale system *divided by* the total number of sites that serve meals.

Meal Reimbursements - Breakfasts

**Importance** This can be useful for tracking the levels of federal meal reimbursements, as well as trends over time.

**Calculation** Total free or reduced-price breakfast reimbursements *divided by* the total number of breakfast meals served.

Meal Reimbursements - Lunches

**Importance** This can be useful for tracking the levels of federal meal reimbursements, as well as trends over time.

**Calculation** Total free or reduced-price lunch reimbursements *divided by* the total number of lunch meals served.



# MAINTENANCE & OPERATIONS

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Performance metrics in maintenance and operations (M&O) assess the cost efficiency and service levels of a district's facilities management and labor. Areas of focus include *custodial work, maintenance work, renovations, construction, utility usage, and environmental stewardship*.

The cost efficiency of custodial work is represented broadly by **Custodial Workload** and **Custodial Cost per Square Foot**, where low workload combined with high cost per square feet would indicate that cost savings can be realized by reducing the number of custodians. Additionally, the relative cost of supplies can be considered by looking at **Custodial Supply Cost per Square Foot**.

The relative cost of utilities is represented by **Utility Usage per Square Foot** and **Water Usage per Square Foot**.

These KPIs should give district leaders a general sense of where they are doing well and where they can improve. The importance and usefulness of each KPI is described in the "Importance of Measure" and "Factors that Influence" headings, which can be used to guide improvement strategies.



# LIST OF KPIS IN MAINTENANCE & OPERATIONS

Below is the complete list of Power Indicators, Essential Few, and other key indicators in Maintenance & Operations. Indicators in bold are those included in this report (See "KPI Definitions" at the back of this section for more complete descriptions of these measures.) All other KPIs are available to CGCS members on the web-based ActPoint® KPI system.

## POWER INDICATORS

**Custodial Work - Cost per Square Foot**  
**Custodial Workload**  
**Routine Maintenance - Cost per Square Foot**  
**Major Maintenance - Cost per Student**  
**Renovations - Cost per Student**  
**Work Order Completion Time (Days)**

## ESSENTIAL FEW

**M&O Cost per Student**  
**M&O Costs Ratio to District Operating Budget**  
**Custodial Supply Cost per Square Foot**  
**Routine Maintenance - Cost per Work Order**  
**Major Maintenance - Design to Construction Cost Ratio**  
**Renovations - Design to Construction Cost Ratio**  
**New Construction - Cost per Student**  
**New Construction - Design to Construction Cost Ratio**  
**Recycling - Percent of Total Material Stream**  
**Utility Costs - Cost per Square Foot**  
 Deferred Maintenance - Percent of Projects Completed

## OTHER KEY INDICATORS

M&O Staff - Field Staff as Percent of All Staff  
 M&O Staff - Non-Exempt Workers as Percent of Field Staff  
 Building Square Footage by Ownership - Percent Leased  
**Building Square Footage by Type - Percent Modular**  
**Building Square Footage by Type - Percent Portable**  
**Building Square Footage by Type - Percent Site-Built**  
**Building Square Footage by Usage - Percent Academic**  
**Building Square Footage by Usage - Percent Non-Academic**  
**Building Square Footage by Usage - Percent Vacant**  
 Custodial Work - Cost per Square Foot, Contractor-Operated  
 Custodial Work - Cost per Square Foot, District-Operated  
**Custodial Work - Cost per Student**  
 Custodial Work - Proportion Contractor-Operated  
 Custodial Work - Staff Ratio - Field Workers per Office Staff  
 Custodial Work - Staff Ratio - Non-Exempt per Exempt Field Staff  
**Grounds Work - Cost per Acre**  
 Grounds Work - Cost per Acre, Contractor-Operated  
 Grounds Work - Cost per Acre, District-Operated  
**Grounds Work - Cost per Student**

## Grounds Work - Proportion Contractor-Operated

Grounds Work - Staff Ratio - Field Workers per Office Staff  
 Grounds Work - Staff Ratio - Non-Exempt per Exempt Field Staff  
 Routine Maintenance - Cost Per Student  
 Routine Maintenance - Cost Per Work Order, Contractor-Operated  
 Routine Maintenance - Cost Per Work Order, District-Operated  
**Routine Maintenance - Proportion Contractor-Operated, by Work Orders**  
 Routine Maintenance - Ratio of Field Workers to Office Staff  
 Major Maintenance - Supervisors/Support Staff Costs as Percent of Total Costs  
 Major Maintenance - Delivered Construction Costs as Percent of Total Costs  
 Major Maintenance - Staff Ratio - Field Workers per Office Staff  
 Major Maintenance - Staff Ratio - Non-Exempt per Exempt Field Staff  
 Renovations - Delivered Construction Costs as Percent of Total Costs  
 Renovations - Staff Ratio - Field Workers per Office Staff  
 Renovations - Staff Ratio - Non-Exempt per Exempt Field Staff  
 Renovations - Supervisors/Support Staff Costs as Percent of Total Costs  
 New Construction - Delivered Construction Costs as Percent of Total Costs  
 New Construction - Staff Ratio - Field Workers per Office Staff  
 New Construction - Staff Ratio - Non-Exempt per Exempt Field Staff  
 New Construction - Supervisors/Support Staff Costs as Percent of Total Costs  
 Deferred Maintenance - Average Cost per Project  
 Deferred Maintenance Resulting in Break-Downs  
**Green Buildings - Buildings Green Certified**  
**Green Buildings - Buildings Green Certified or Equivalent**  
 Green Buildings - Buildings with Energy Star Certificate  
 Recycling - Percent Regulatory  
**Utility Costs - Electricity Cost per Square Foot**  
**Utility Costs - Heating Fuel Cost per Square Foot**  
**Utility Costs - Sewer Cost per Square Foot**  
**Utility Costs - Water Cost per Square Foot**  
**Utility Usage - Electricity Usage per Square Foot (KWh)**  
**Utility Usage - Heating Fuel Usage per Square Foot (KBTU)**  
**Utility Usage - Water (Non-Irrigation) Usage per Square Foot (Gal.)**  
 Utility Usage - Water Usage for Irrigation  
 Work Order Cancel/Void Rate  
 Work Order Completion Rate

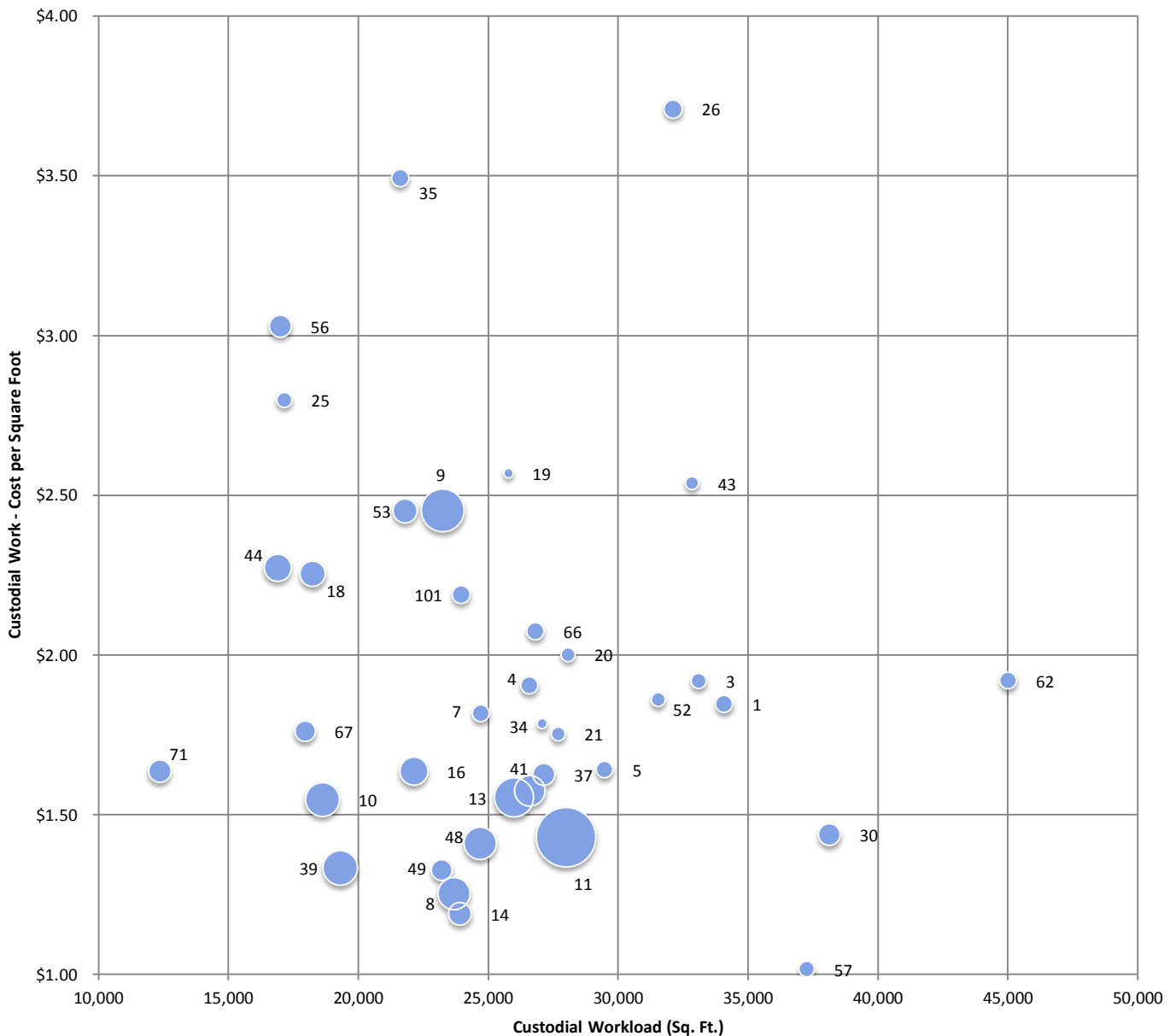
# FEATURED ANALYSIS

Figure 88  
**Custodial Workload vs. Cost per Square Foot**

This chart compares custodial staffing levels with total custodial cost. Districts to the top-left have high staffing levels and high costs, suggesting that the number of staff is driving up costs. Conversely, districts to the bottom-right have lower staffing levels and lower costs, suggesting that those districts have achieved cost savings through reduced staff levels.

However, rarely does this trend hold—many districts are in the bottom-left quadrant, meaning that they have reduced costs and also higher staffing levels. This may be due to other efficiencies and cost-savings that these districts have implemented.

This analysis also does not take into account the quality of the work done. Districts that are unsatisfied with the level of cleanliness in their facilities have good reason to want to invest more in custodial staff and supplies in order to provide clean, safe facilities.



OPERATIONS  
 MAINTENANCE & OPERATIONS

# DATA DISCOVERY

Figure 89  
Custodial Work - Cost per Square Foot

This is the total cost of custodial services relative to the total building square footage in the district.

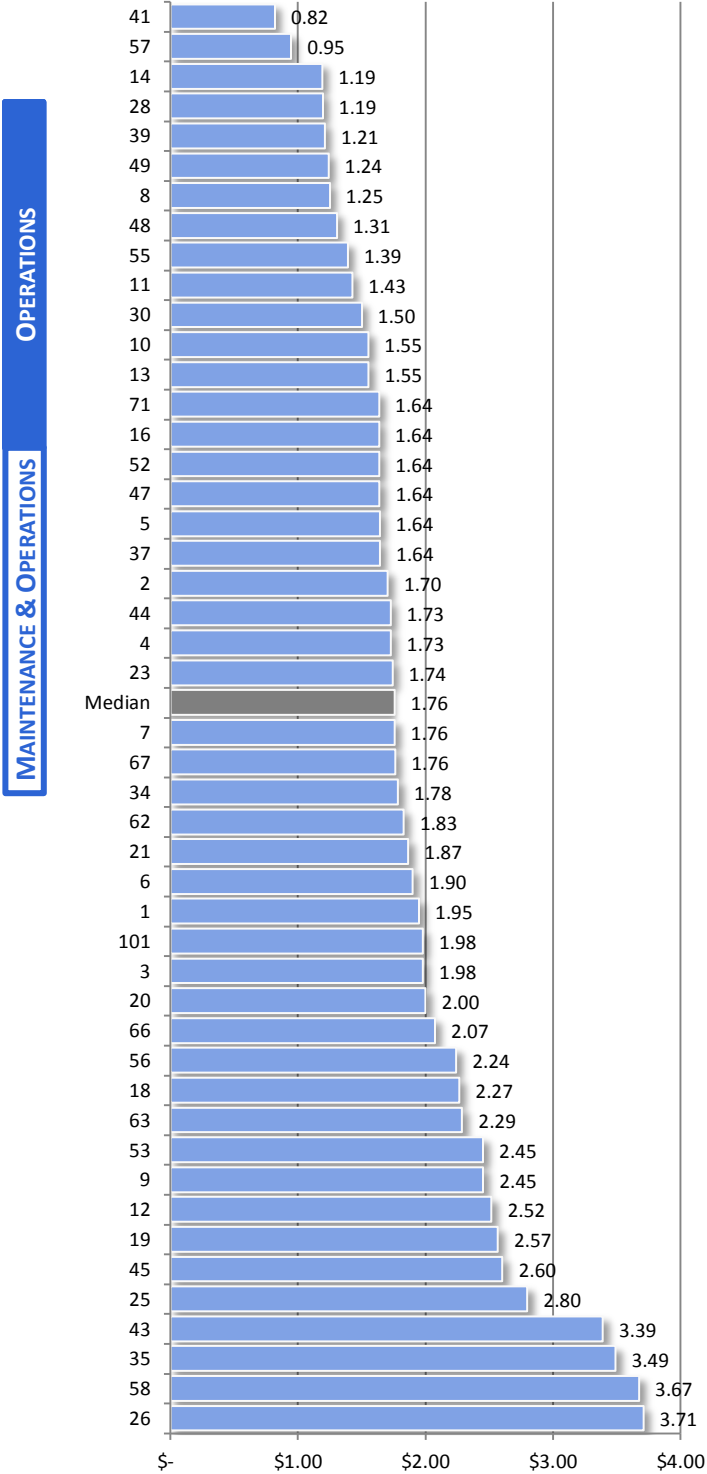
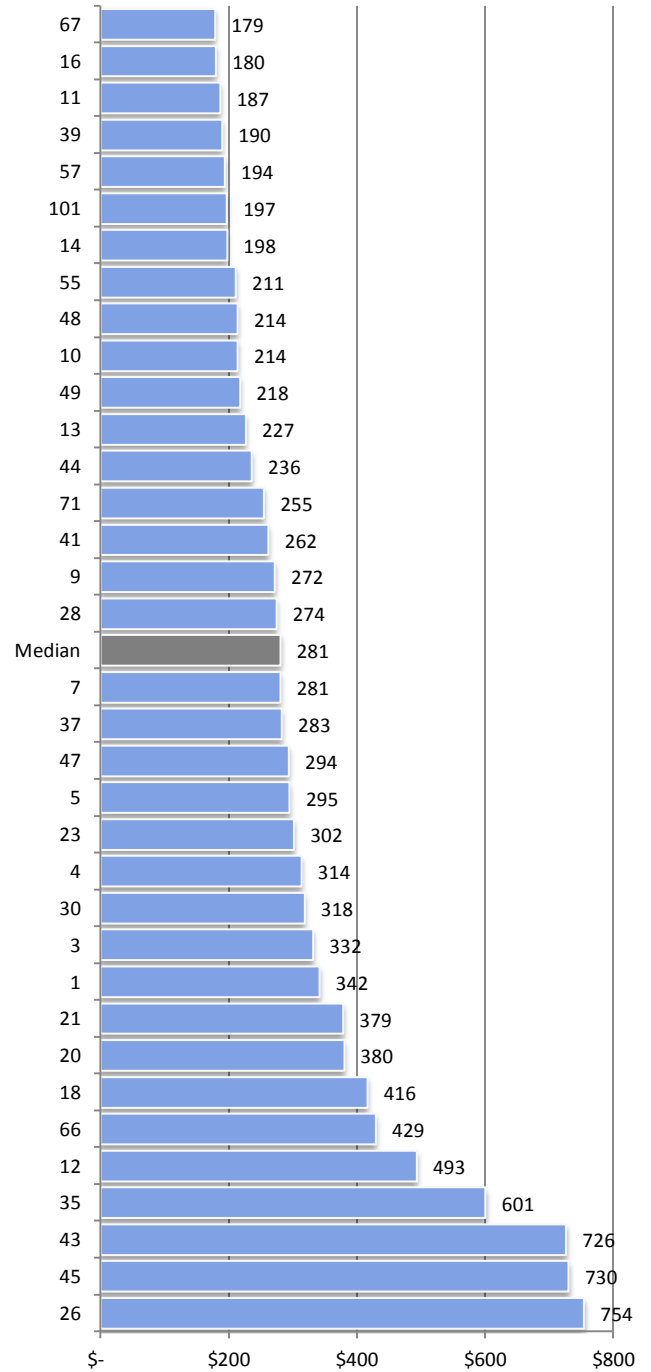


Figure 90  
Custodial Work - Cost per Student



Does this accurately reflect the cost-efficiency of your custodial operation? What kinds of factors are affecting this result? (See KPI Definitions at the end of this section.)

Figure 91  
Custodial Workload (Sq. Ft.)

This is a staffing-level measure. It represents the average square footage that each custodian would be responsible for if all district facilities were divided up evenly.

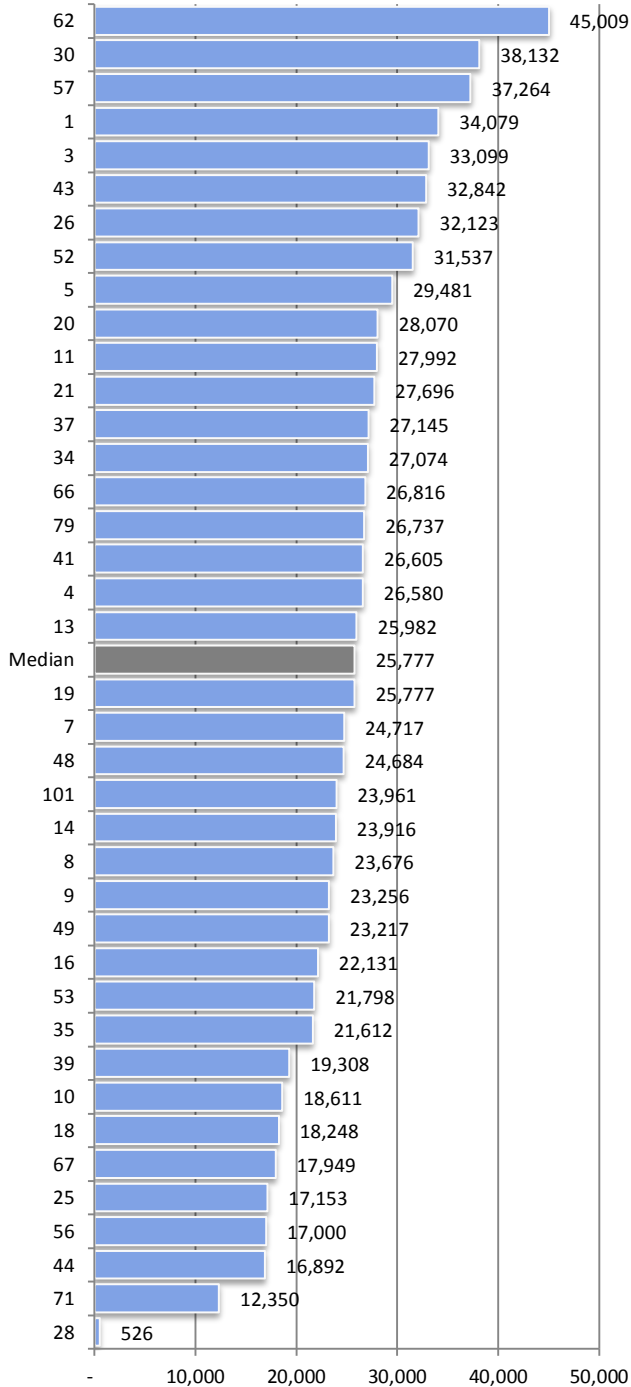
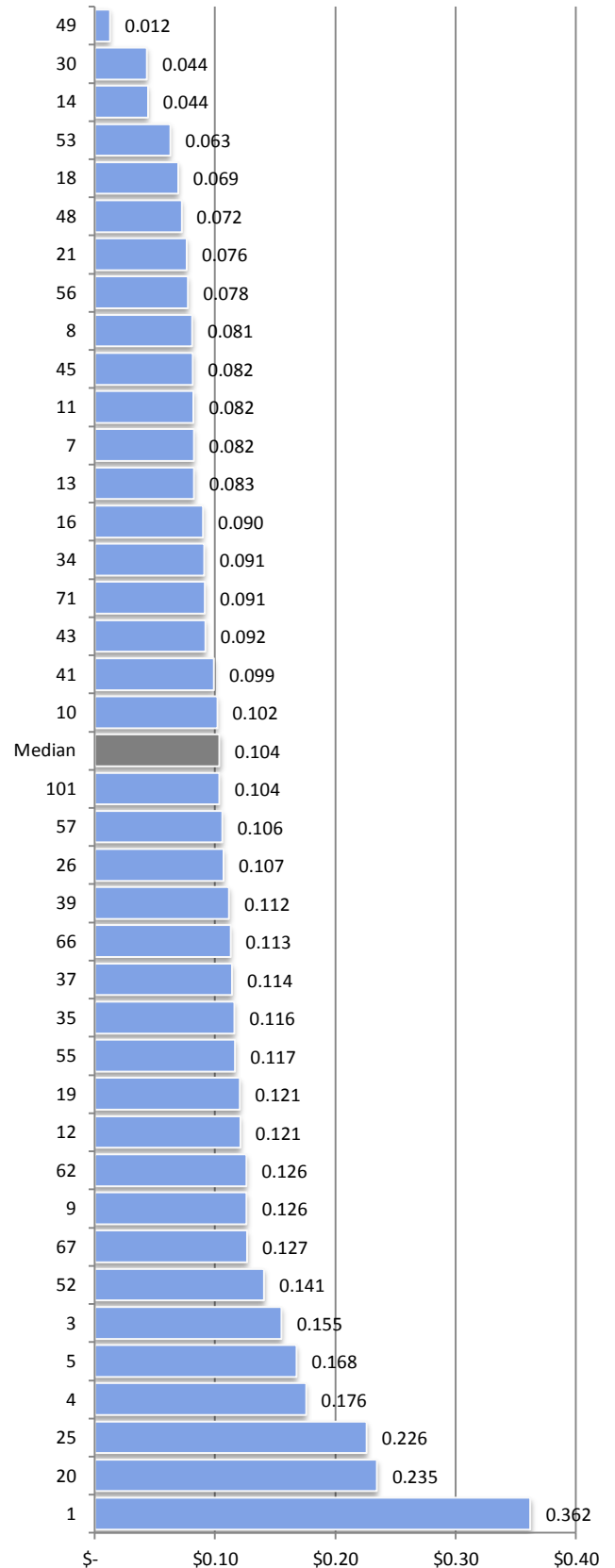


Figure 92  
Custodial Supply Cost per Square Foot



OPERATIONS  
MAINTENANCE & OPERATIONS

How might this relate to building cleanliness and cost efficiency?  
Which one of these is affected more by your result above?

Figure 93  
 Routine Maintenance – Cost per Square Foot

This is the total cost of routine maintenance relative to the total square footage.

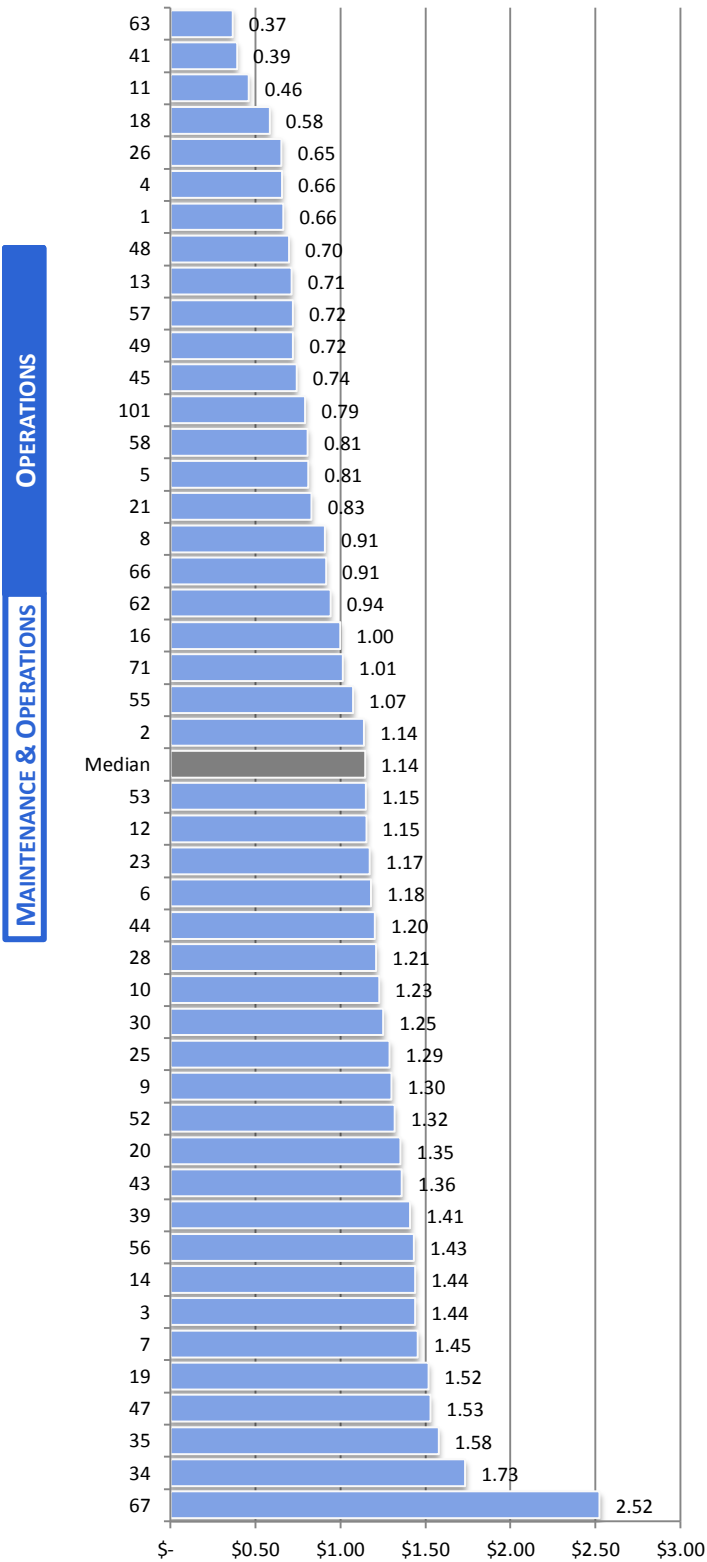


Figure 94  
 Routine Maintenance – Cost per Work Order

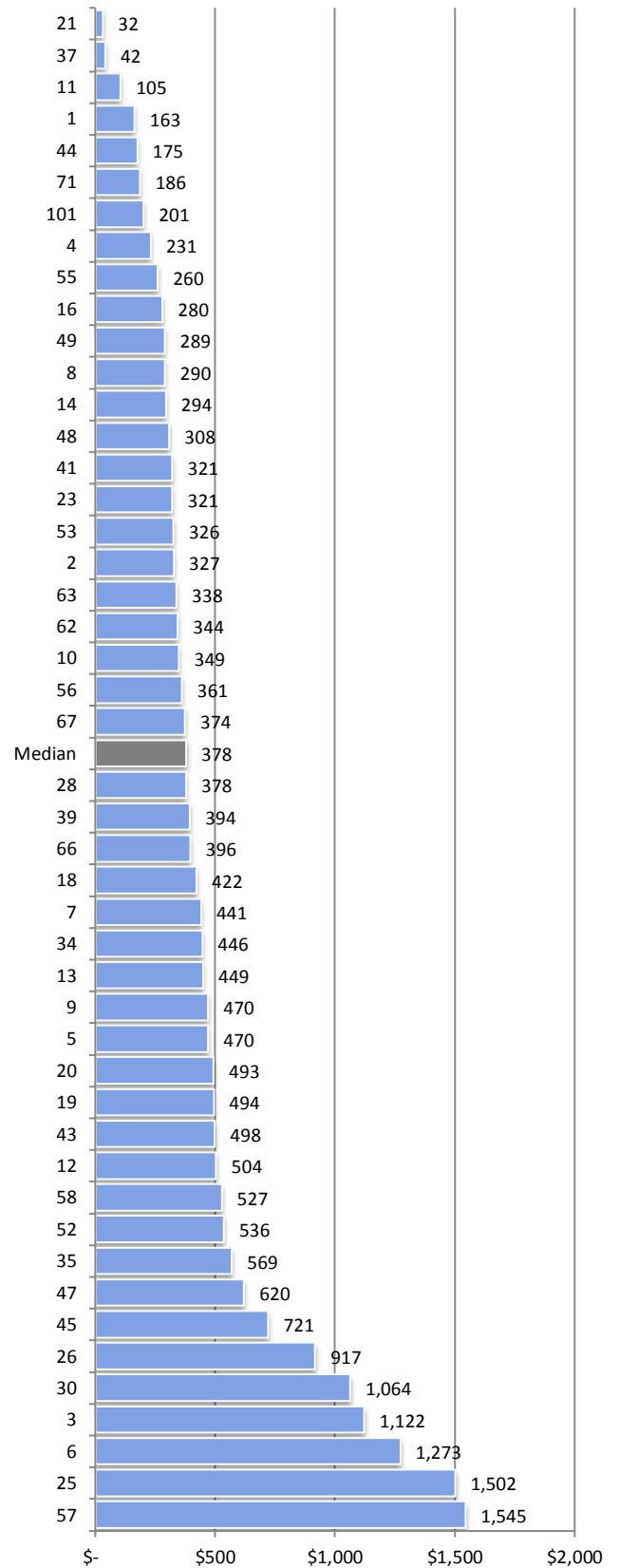


Figure 95  
 Routine Maintenance – Proportion Contractor-Operated, by Work Orders

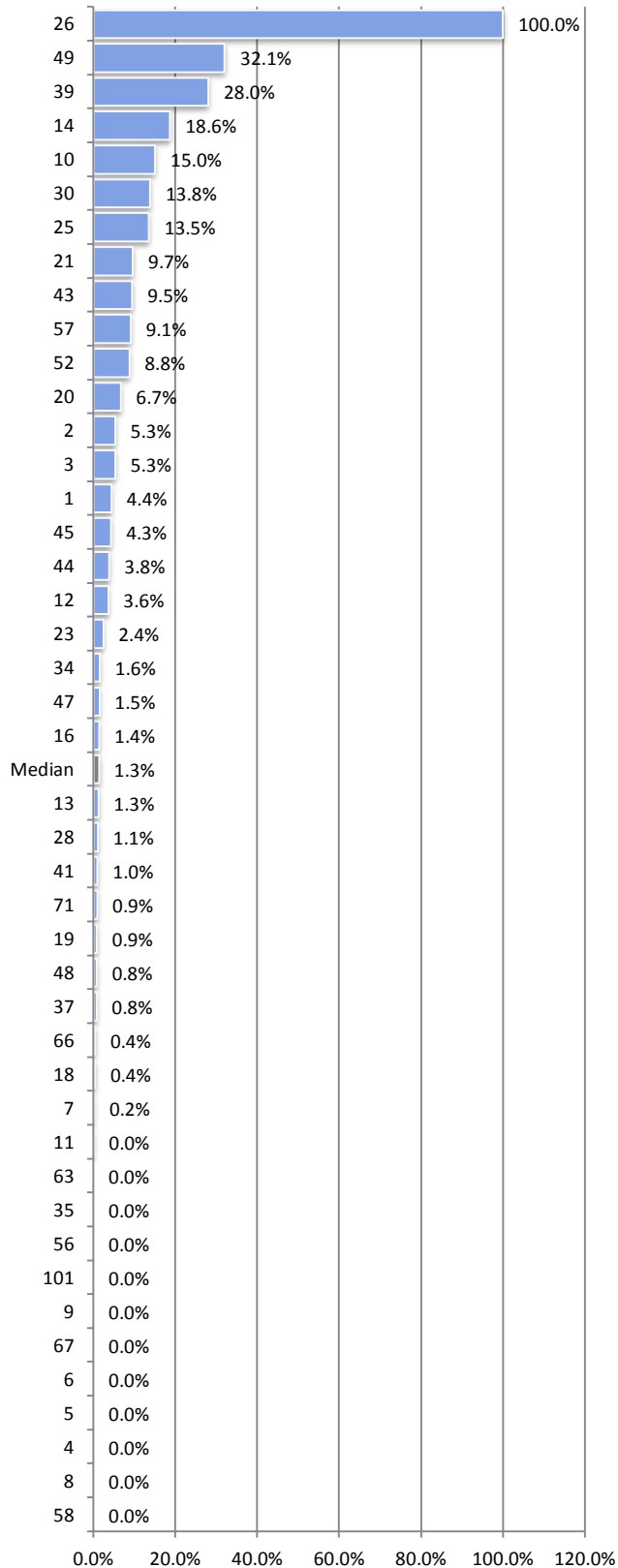
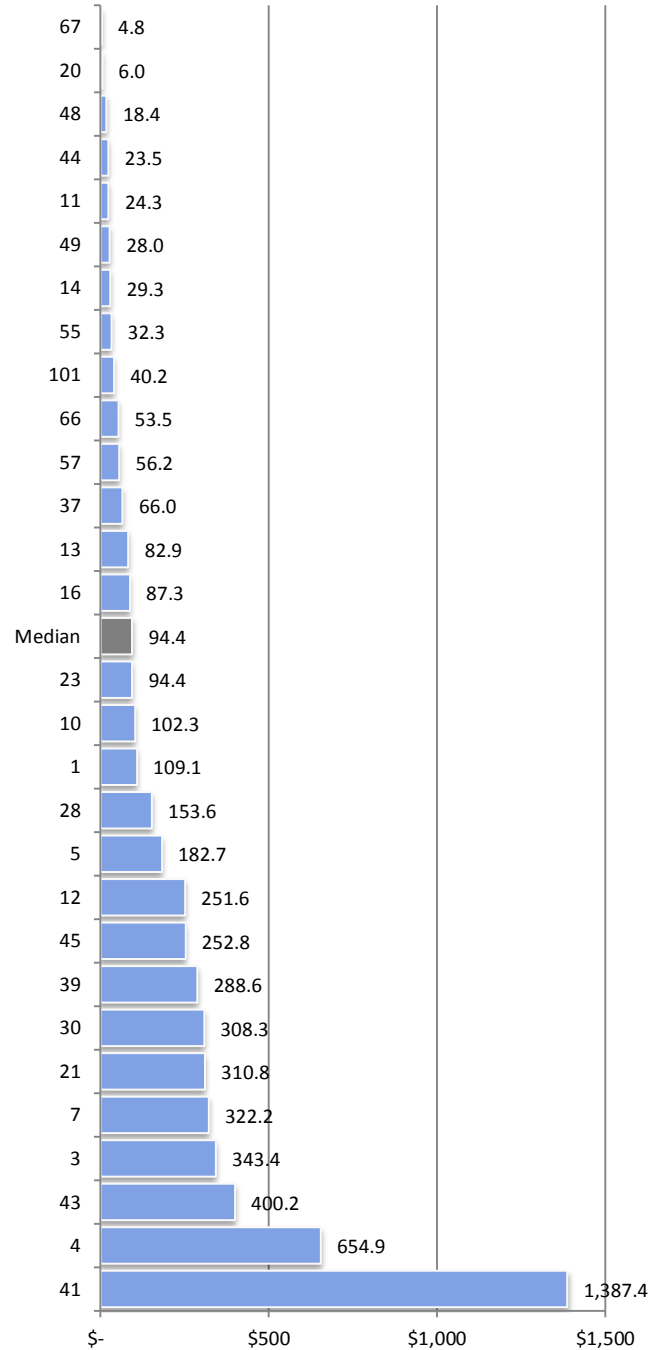


Figure 96  
 Major Maintenance – Cost per Student

This represents the per-student spending on major maintenance. While cost-efficiency is important, CGCS has found that many districts vastly underinvest in the maintenance of their facilities, increasing the total lifecycle cost of the facility.



Are you protecting your facilities assets through preventive maintenance?

Figure 97  
Major Maintenance – Delivered Construction Costs as Percent of Total Costs

Other cost categories include (1) design, pre-construction, and compliance costs, and (2) non-technical office staff (supervisors, support staff, and clerical staff).

OPERATIONS  
MAINTENANCE & OPERATIONS

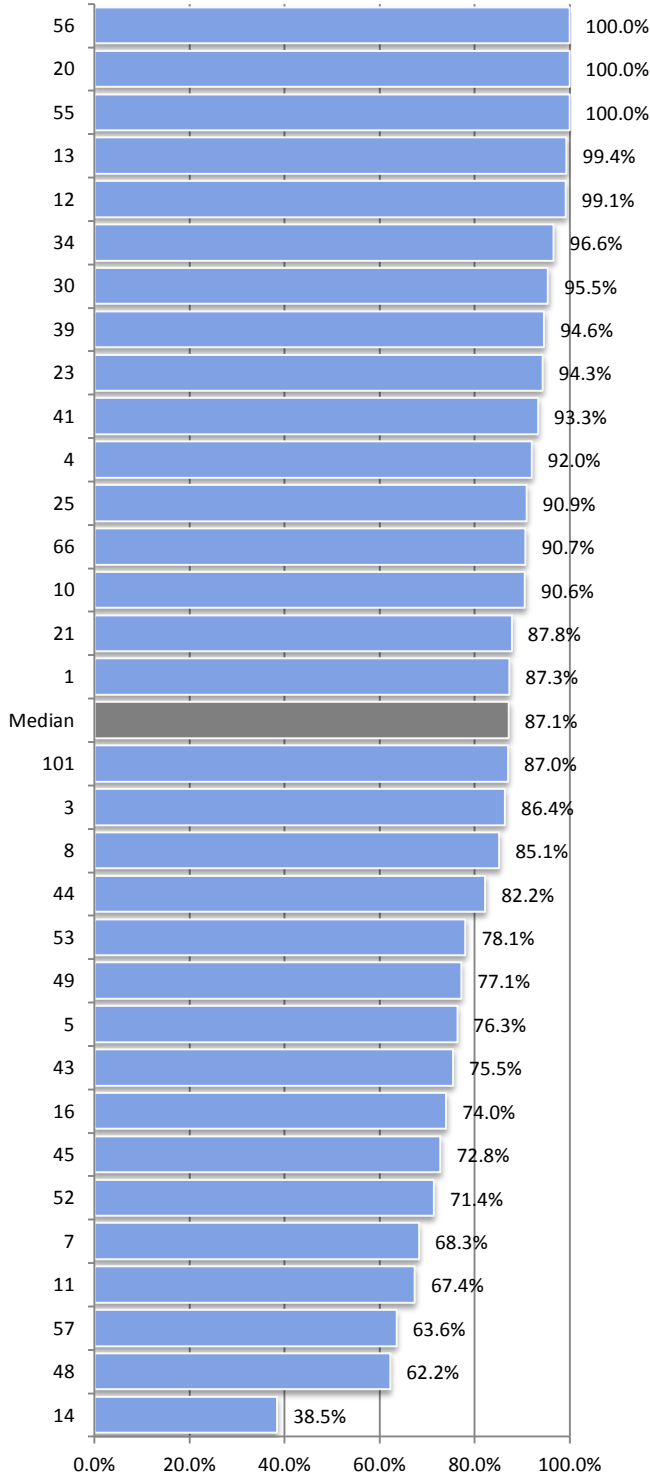


Figure 98  
Major Maintenance – Design to Construction Cost Ratio

Design costs include design, pre-construction, and compliance costs, such as architects, drafters and engineering consultants, including in-house drafters and designers. Delivered construction costs include personnel, material, and supply costs, including in-house and contracted work.

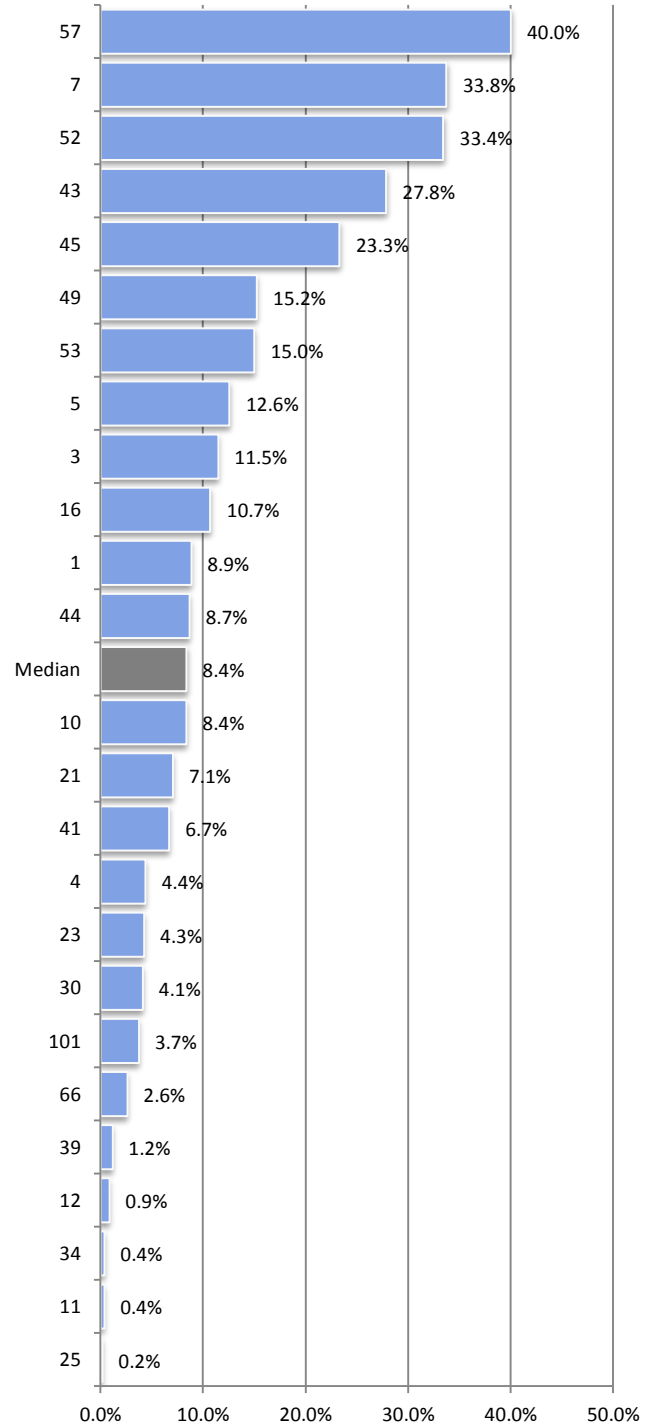




Figure 99  
Renovations – Cost per Student

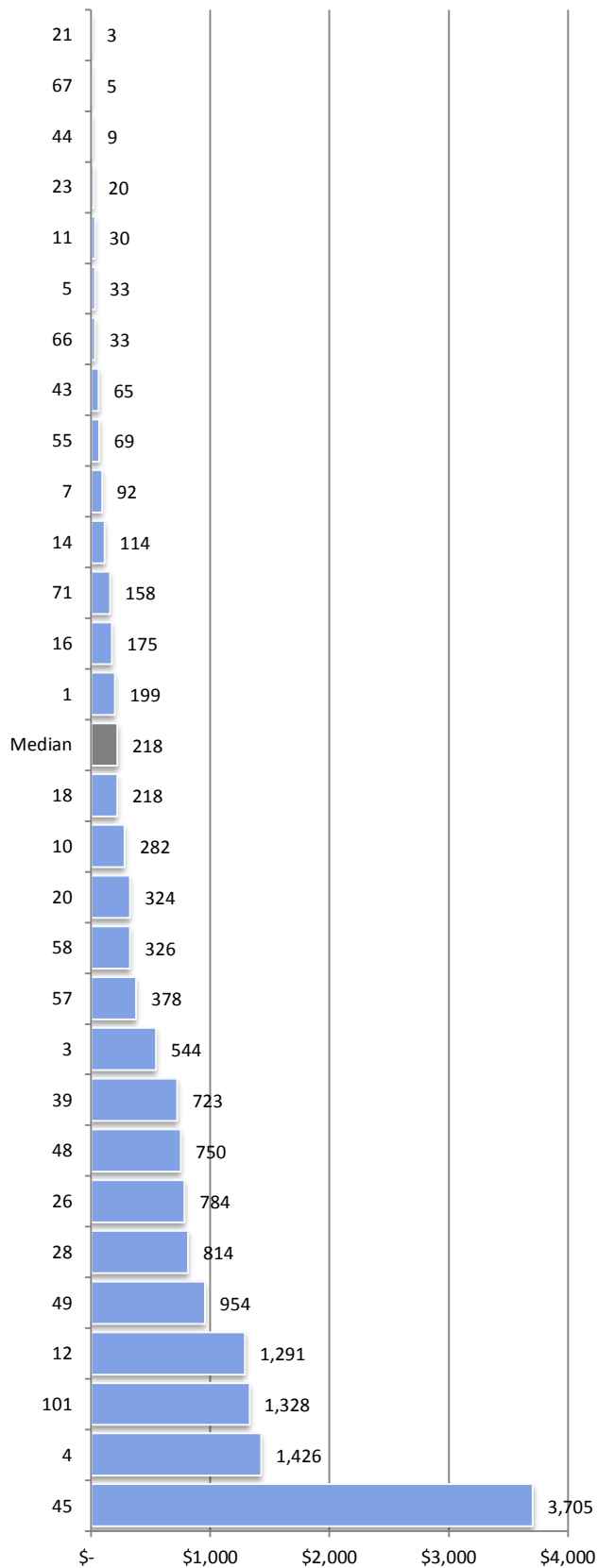
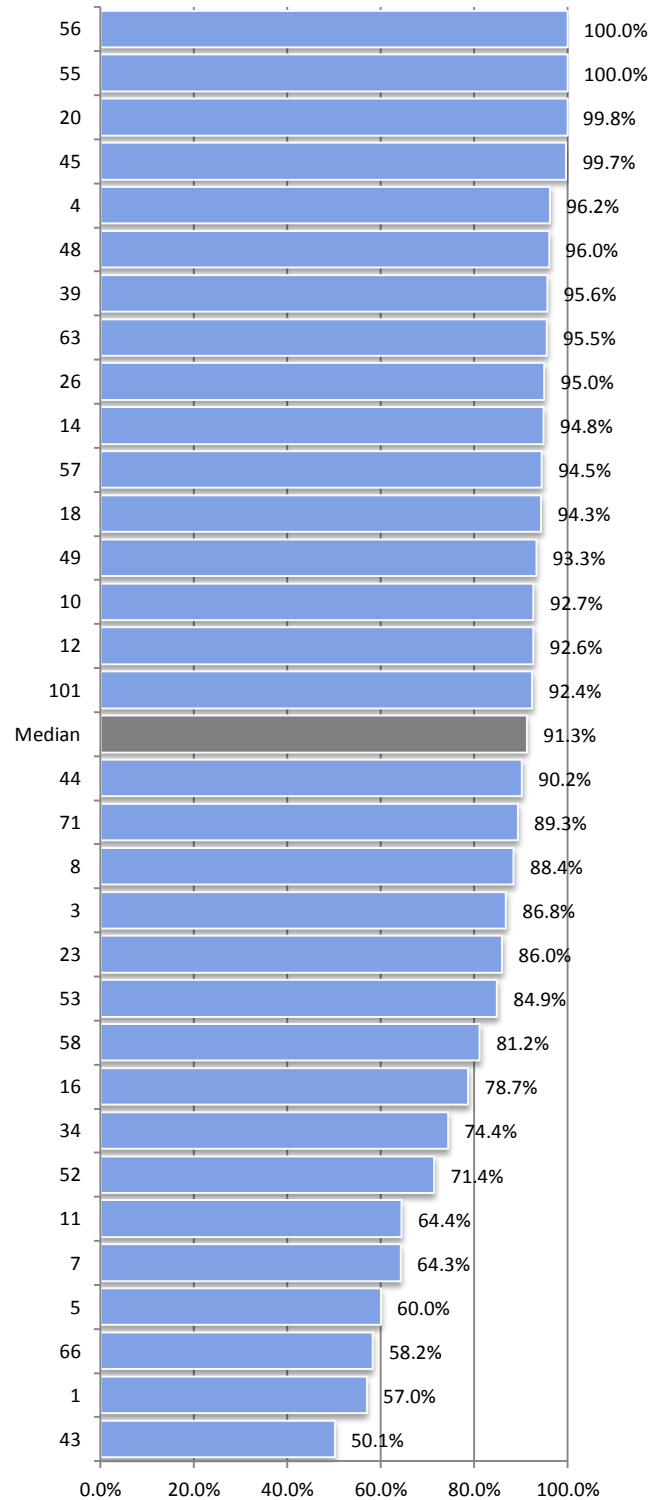


Figure 100  
Renovations – Delivered Construction Costs as Percent of Total Costs

Other cost categories include (1) design, pre-construction, and compliance costs, and (2) non-technical office staff (supervisors, support staff, and clerical staff).



OPERATIONS

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Figure 101  
Renovations – Design to Construction Cost Ratio

Design costs include design, pre-construction, and compliance costs, such as architects, drafters and engineering consultants, including in-house drafters and designers. Delivered construction costs include personnel, material and supplies costs, including in-house and contracted work.

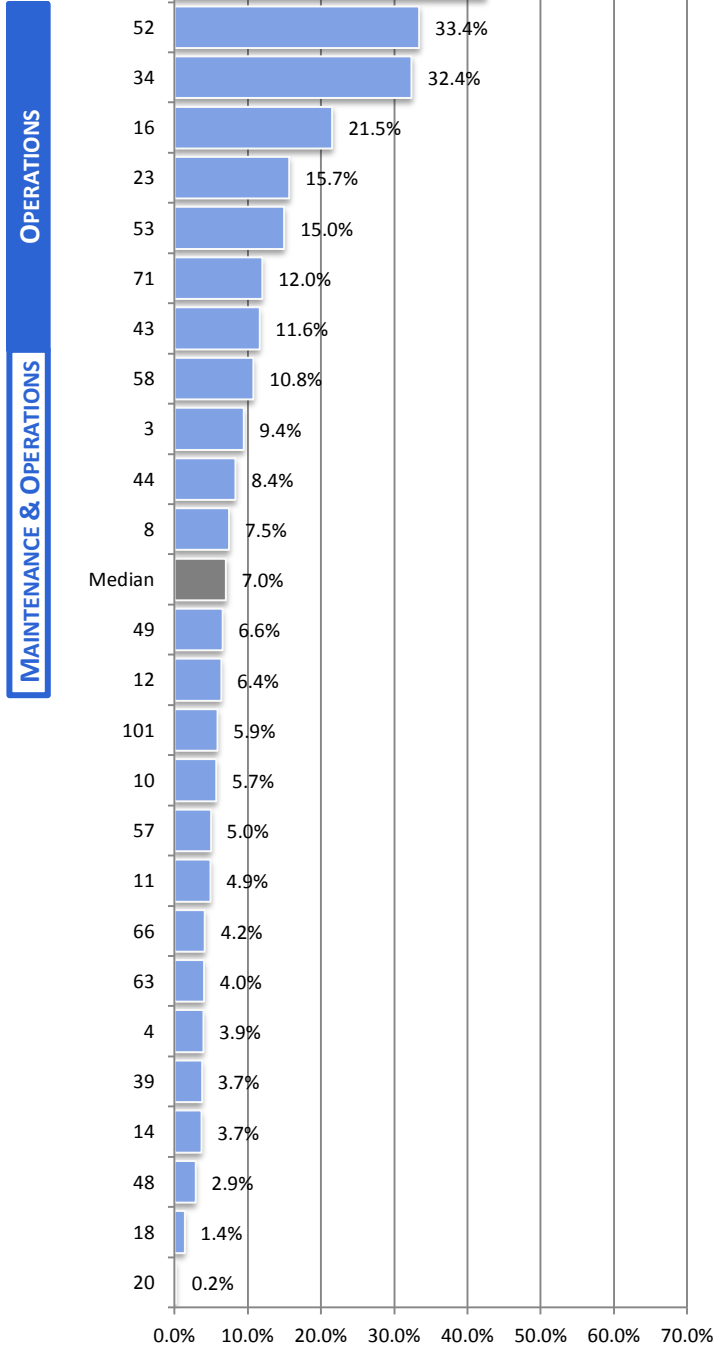


Figure 102  
New Construction – Cost per Student

This is the total per-student spending on new construction. This is heavily influenced by population patterns and construction funding such as bond measures.

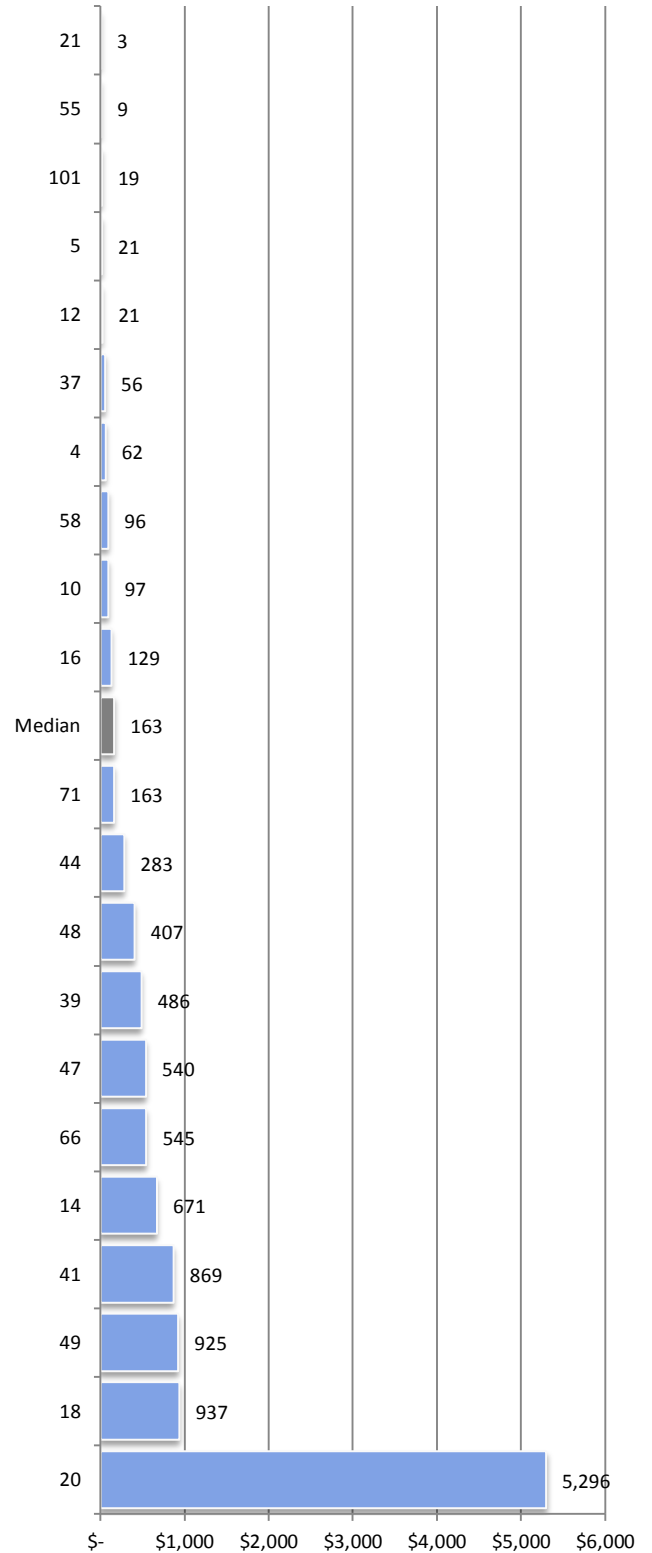


Figure 103  
New Construction – Delivered Construction Costs as Percent of Total Costs

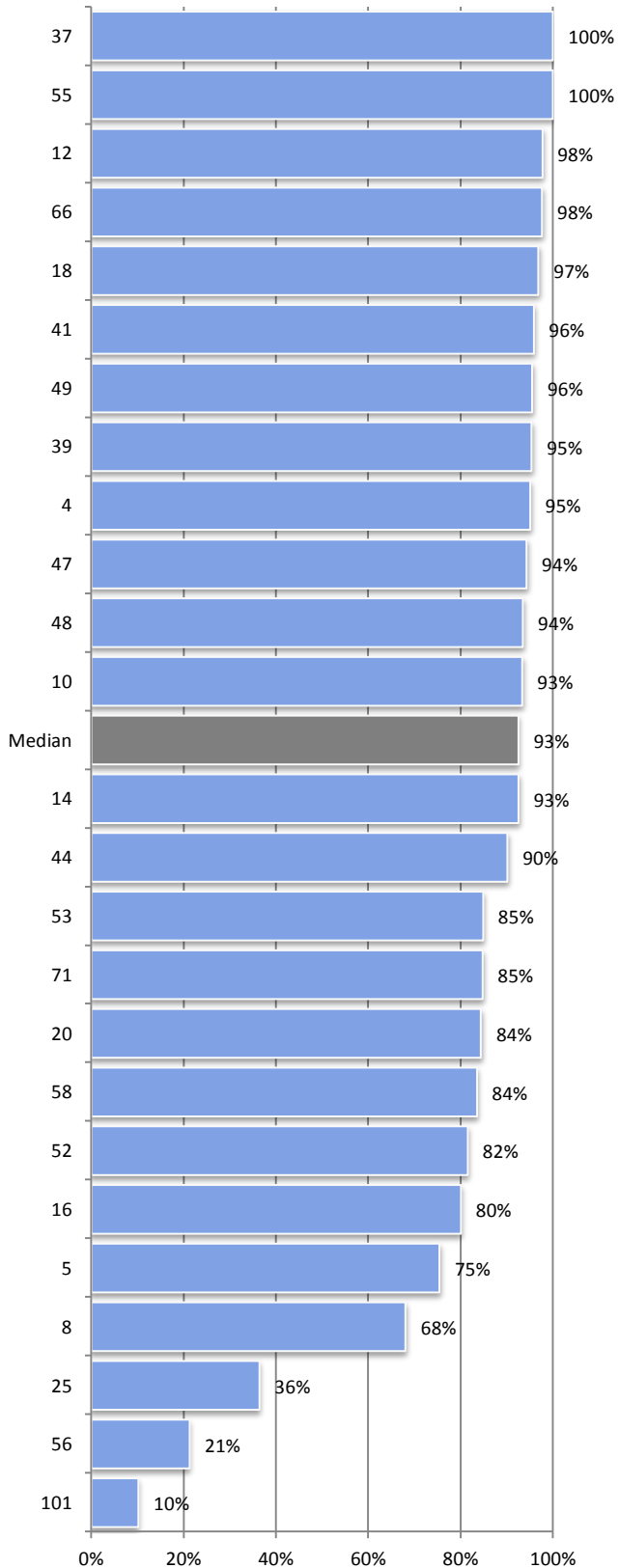
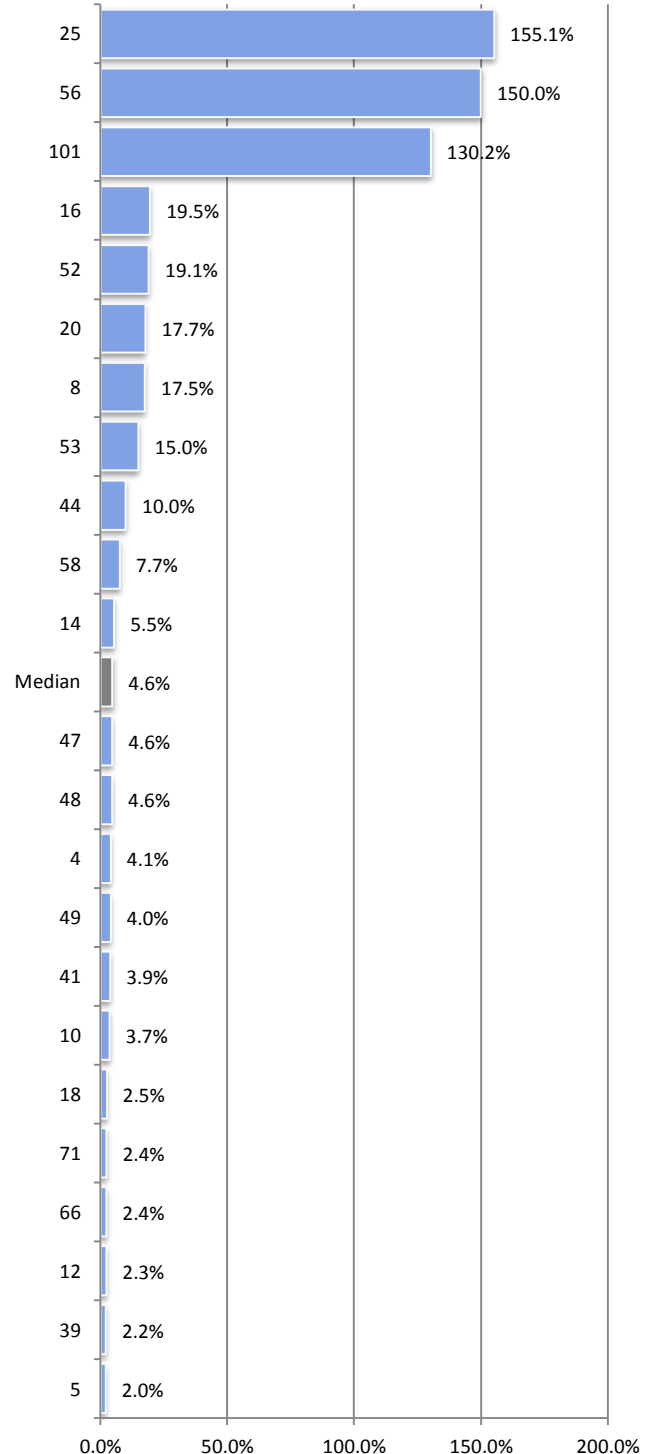


Figure 104  
New Construction – Design to Construction Cost Ratio

Design costs include design, pre-construction, and compliance costs, such as architects, drafters and engineering consultants, including in-house drafters and designers. Delivered construction costs include personnel, material and supplies costs, including in-house and contracted work.



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Figure 105  
M&O Cost per Student

This "catch-all" cost measure includes all the M&O categories that have been reported in the previous pages (custodial work, grounds work, routine maintenance, major maintenance, renovations and new construction) relative to total student enrollment.

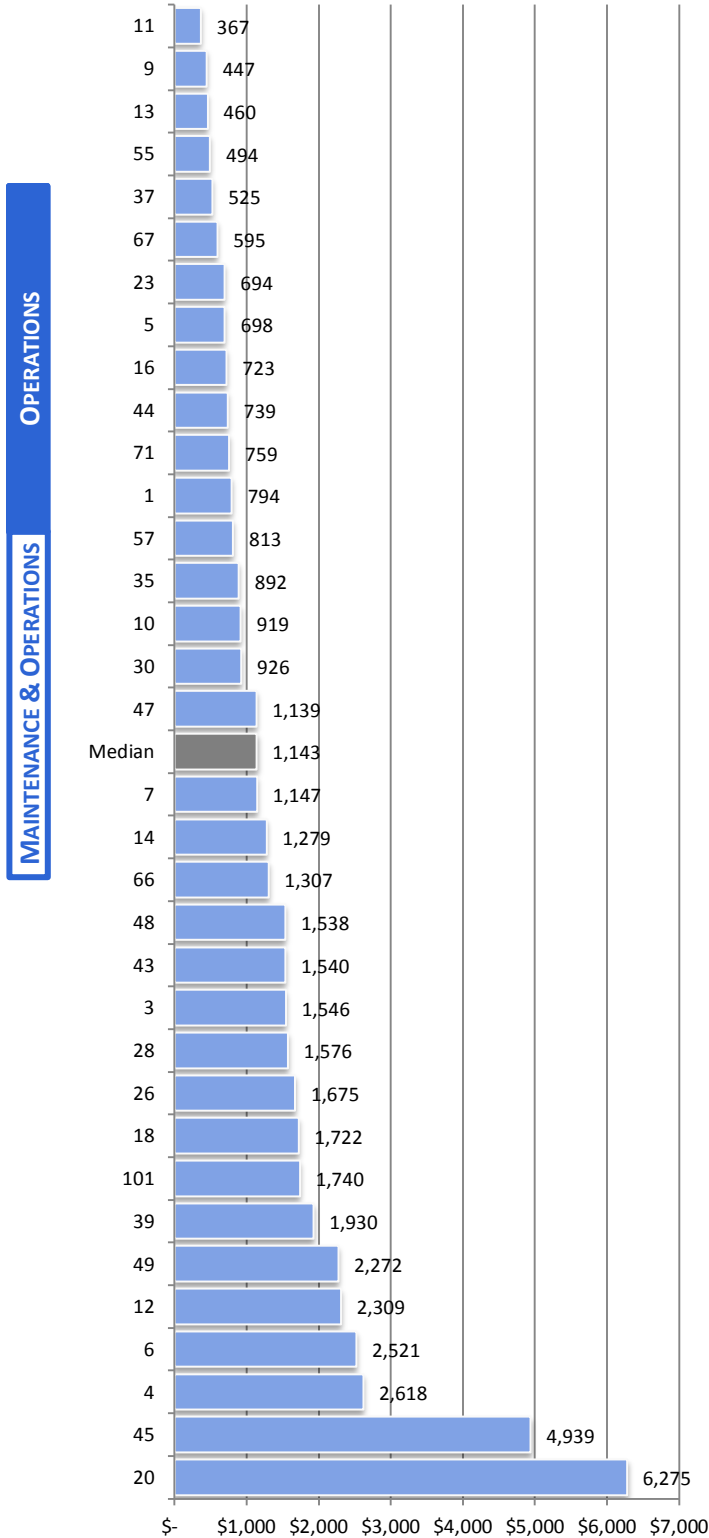


Figure 106  
M&O Cost Ratio to District Budget

This "catch-all" cost measure includes all the M&O categories that have been reported in the previous pages (custodial work, grounds work, routine maintenance, major maintenance, renovations and new construction) relative to the total district operating budget.

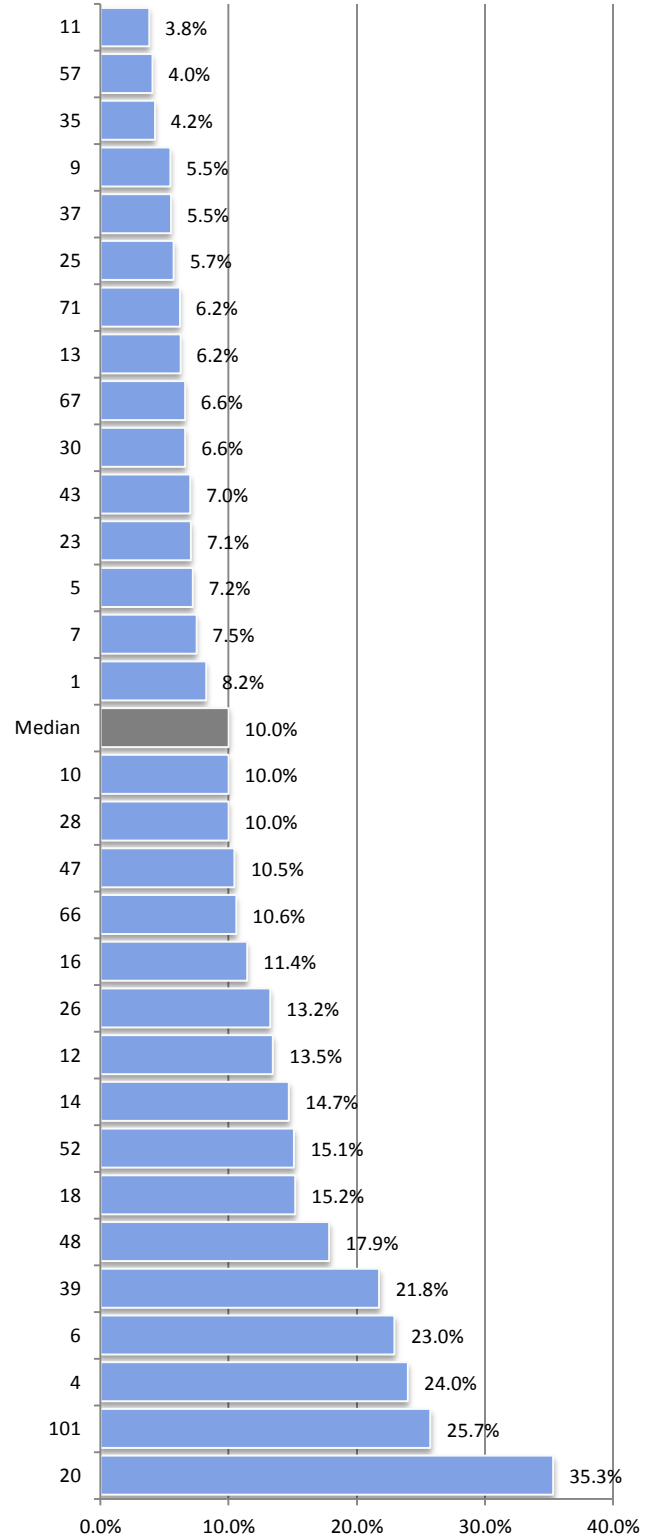


Figure 107  
 Work Order Completion Time (Days)

This is the average amount of time it takes to complete a work order.

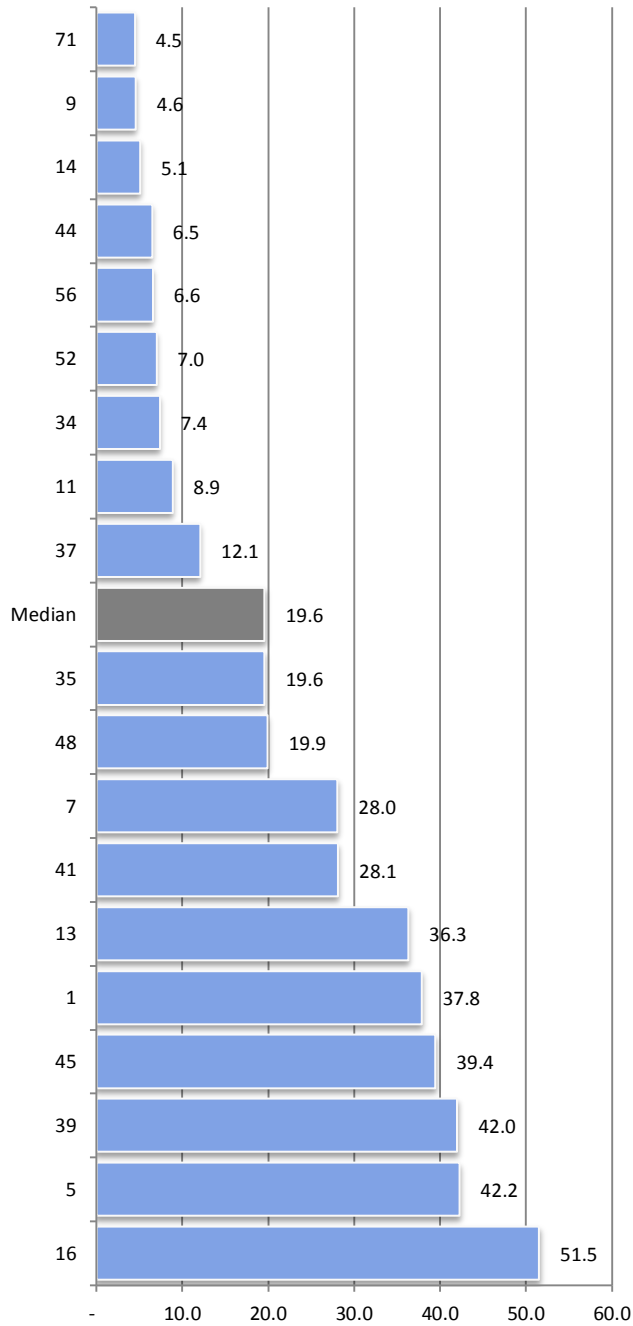
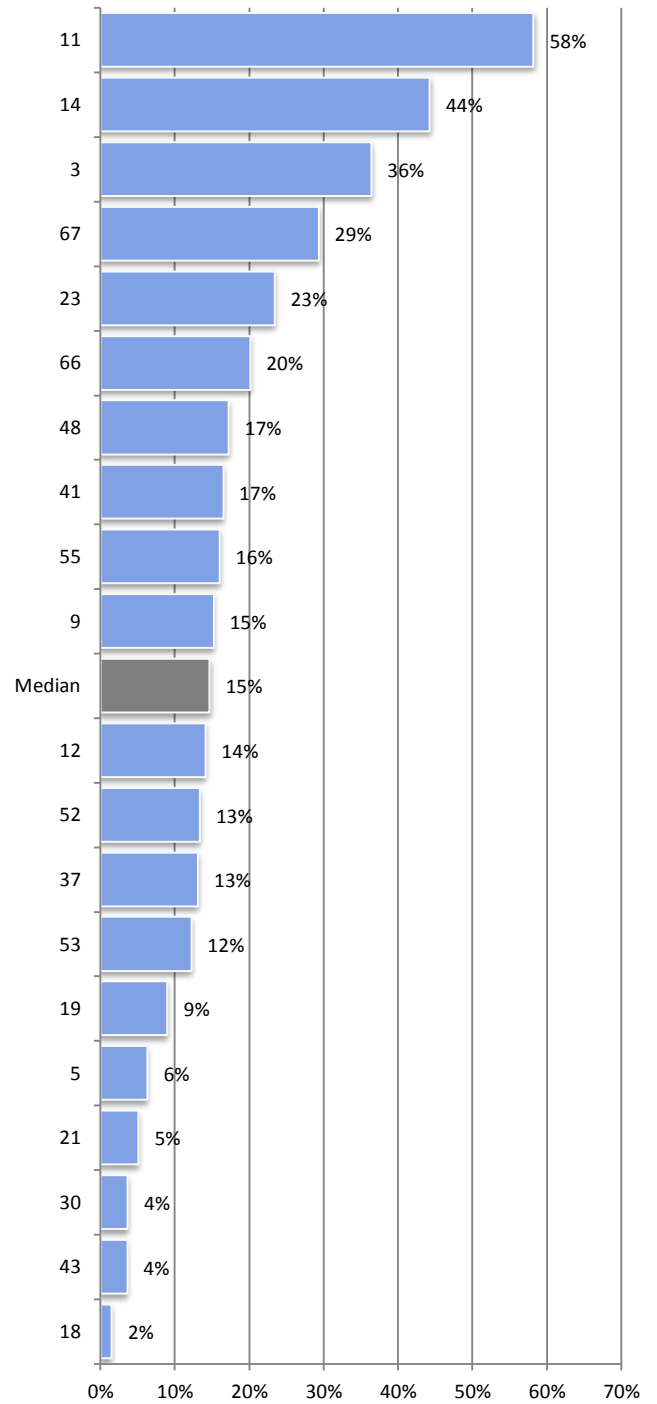


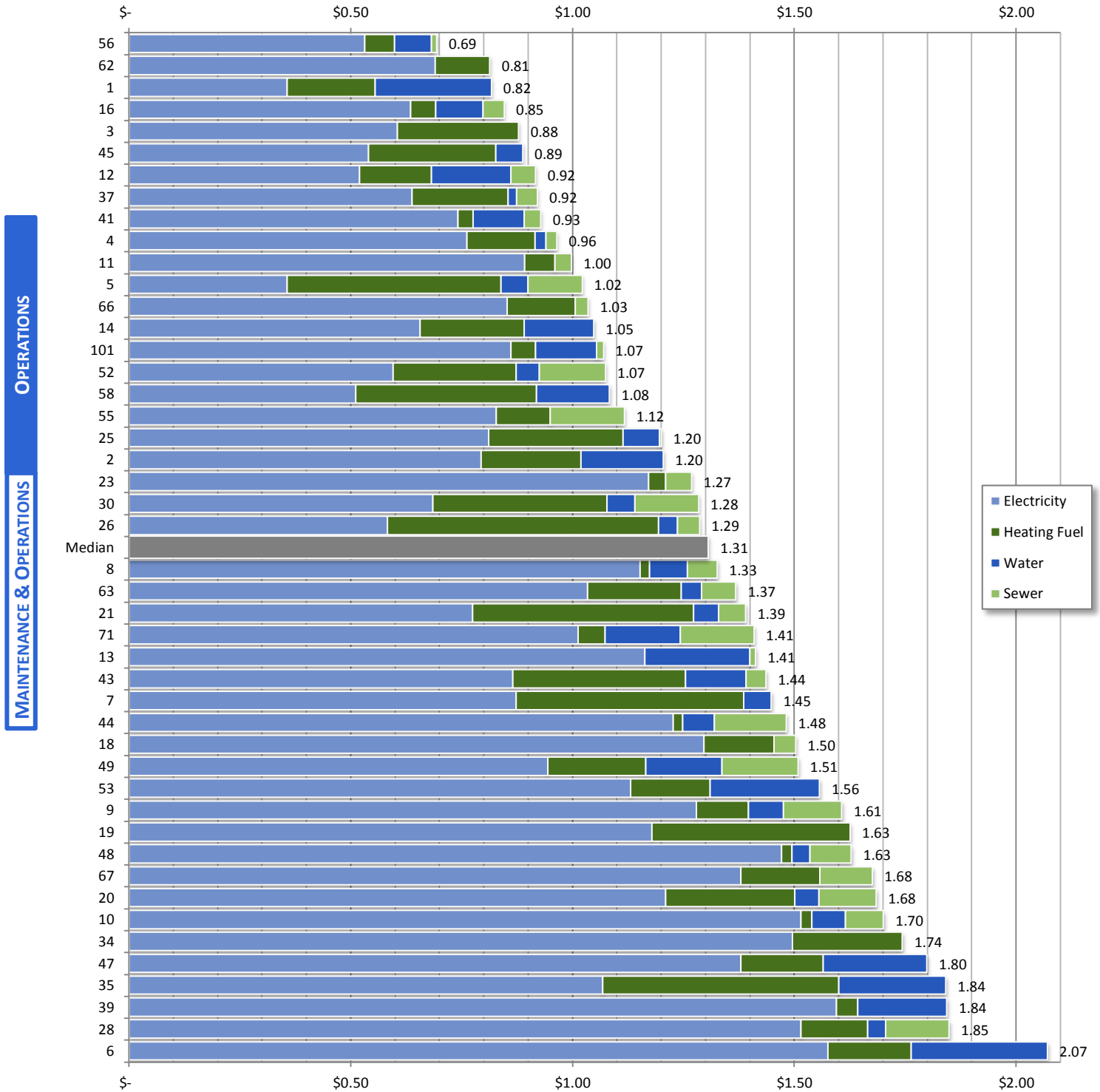
Figure 108  
 Recycling – Percent of Material Stream



OPERATIONS  
 MAINTENANCE & OPERATIONS

Figure 109  
Utility Costs per Square Foot

Adjusted for cost of living.



How much is this affected by regional factors? Which district(s) should you compare yourself to in the same region? Are there other businesses or agencies in your region that set an example for energy efficiency?

Figure 110  
Utility Usage – Electricity Usage per Square Foot (kWh)

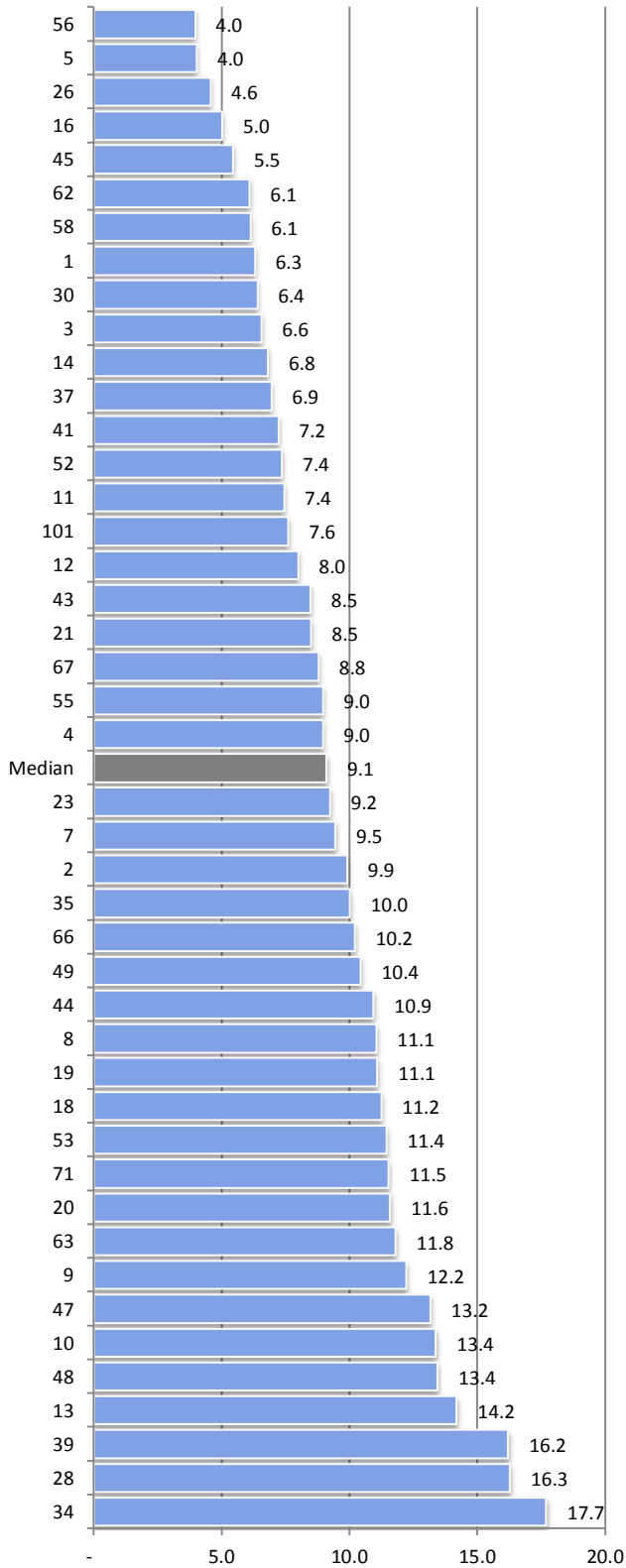
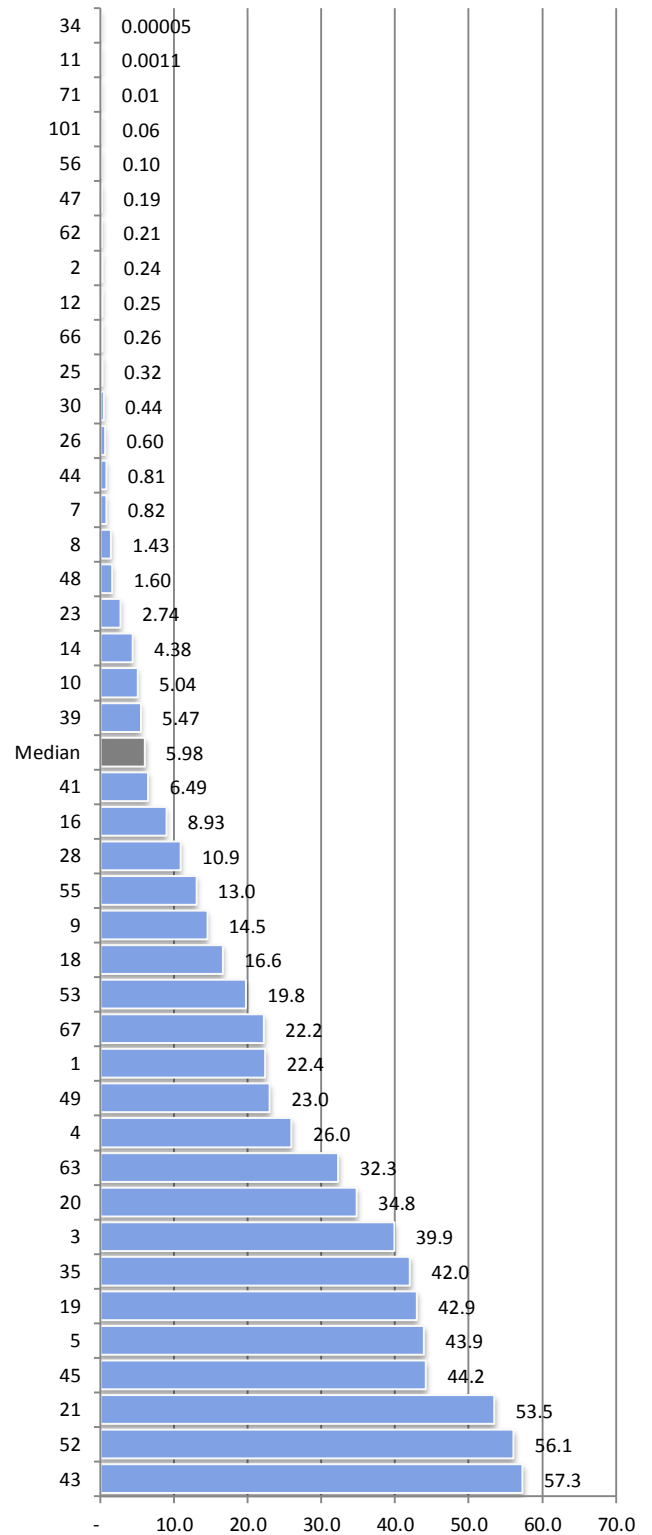


Figure 111  
Utility Usage – Heating Fuel Usage per Square Foot (kBTU)

This measure is heavily influenced by region.



OPERATIONS  
MAINTENANCE & OPERATIONS

Figure 112  
Utility Usage – Water (Non-Irrigation) Usage per Square Foot (Gal.)

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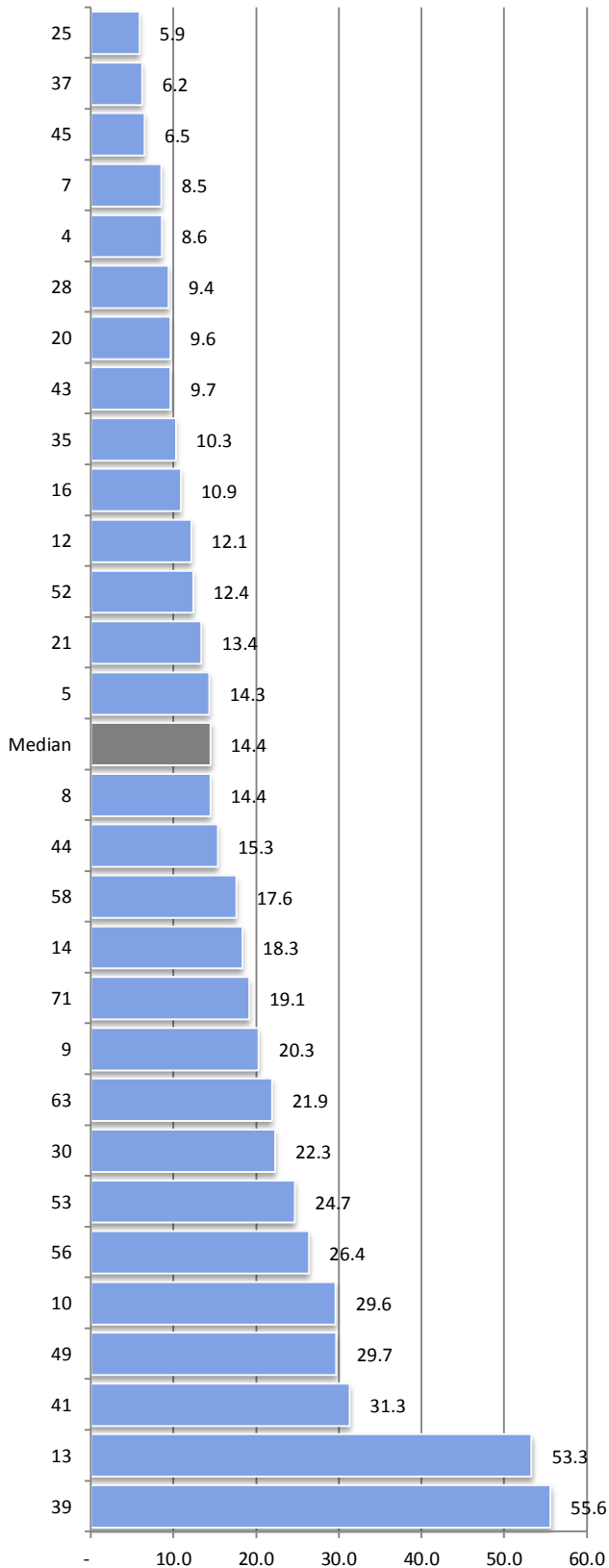
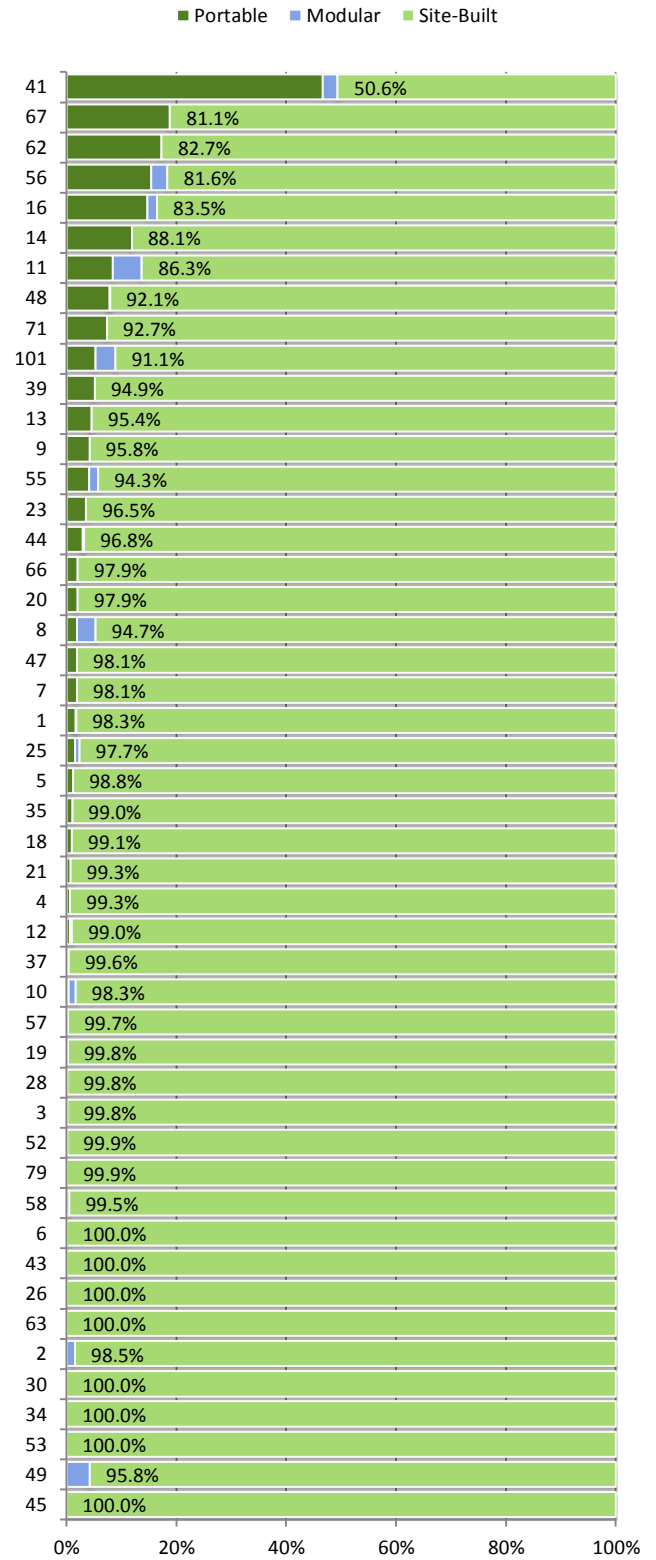


Figure 113  
Building Square Footage by Type

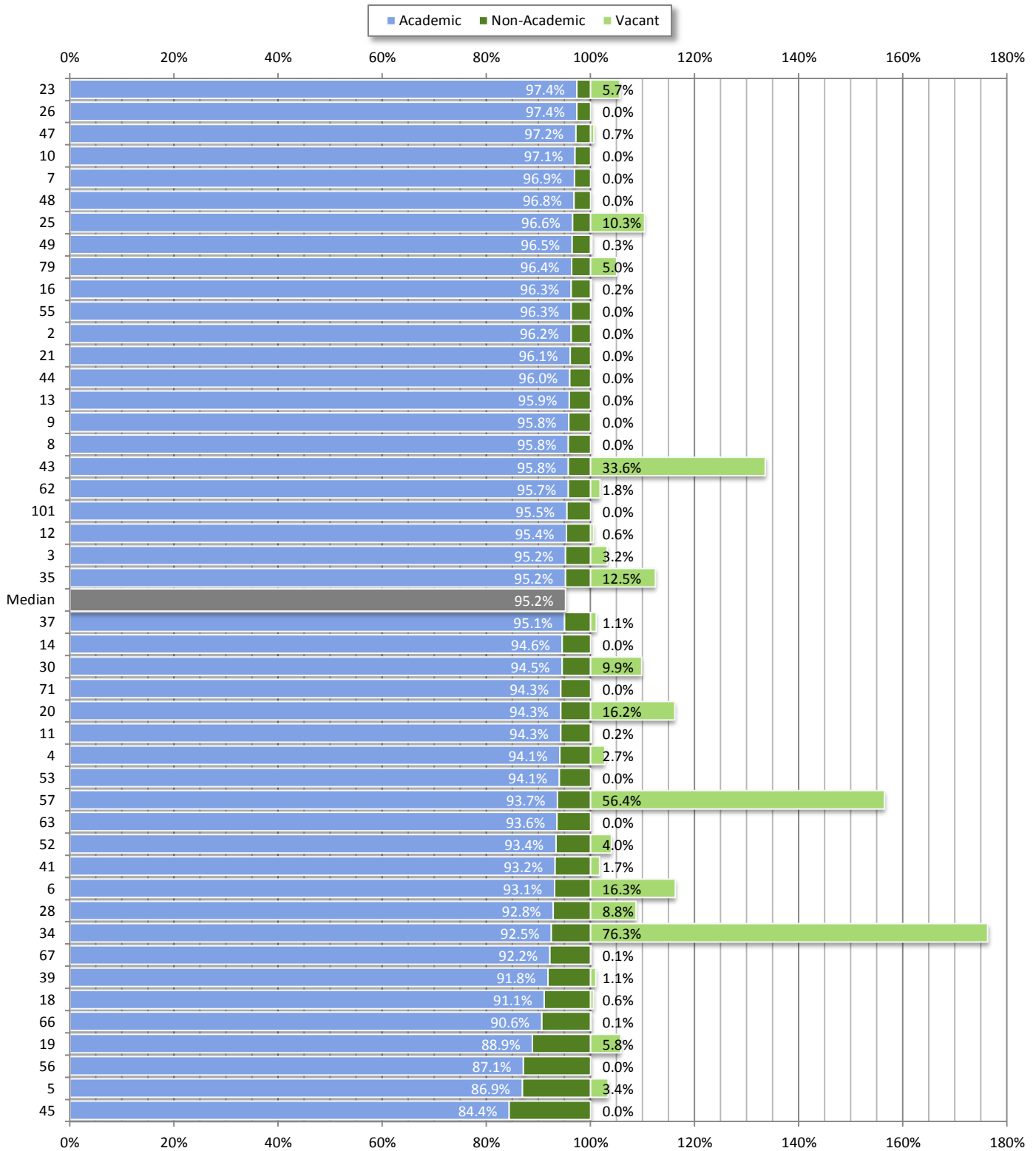


Do your facilities provide excellent spaces for learning?



Figure 114  
**Building Square Footage by Usage**

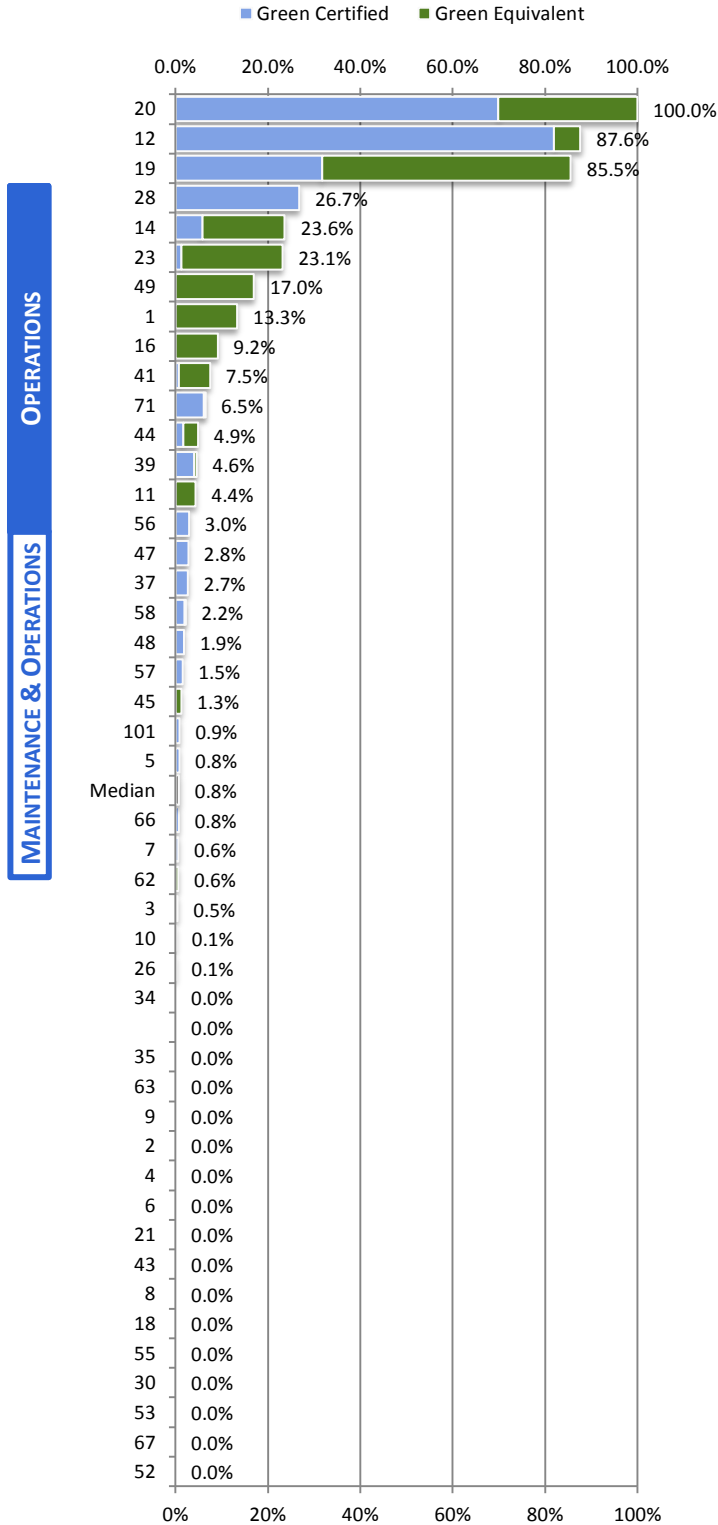
This shows the ratio of academic buildings to non-academic buildings. Additionally, it shows the ratio of vacant buildings to occupied buildings. Vacant buildings are often the result of shifting populations.



OPERATIONS  
MAINTENANCE & OPERATIONS

Figure 115  
 Green Buildings – Buildings Green Certified or Equivalent

This shows the proportion of facilities that have earned a green certificate, such as LEED, or are built in alignment with green certification criteria.



# KPI DEFINITIONS

## Custodial Work – Cost per Square Foot

**Importance** This measure is an important indicator of the efficiency of custodial operations. The value is impacted not only by operational effectiveness, but also by labor costs, material and supply costs, supervisory overhead costs as well as other factors. This indicator can be used as an important comparison with other districts to identify opportunities for improvement in custodial operations to reduce costs.

### Factors that Influence

- Cost of labor
- Collective bargaining agreements
- Cost of supplies and materials
- Size of school

**Calculation** Total cost of district-operated custodial work *plus* total cost of contract-operated custodial work *divided by* total square footage of all non-vacant buildings.

## Custodial Work – Cost per Student

**Importance** This measure is an important indicator of the efficiency of the custodial operations. The value is affected not only by operational effectiveness, but also by labor costs, material and supply costs, supervisory overhead costs as well as other factors. This indicator can be used as an important comparison with other districts to identify opportunities for improvement in custodial operations to reduce costs.

### Factors that Influence

- Cost of labor
- Cost of supplies and materials
- Scope of duties assigned to custodians

**Calculation** Total custodial work costs (contractor and district operated) *divided by* total student enrollment.

## Custodial Supply Cost per Square Foot

**Importance** This measure is an important indicator of the efficiency of the custodial operations. The value is affected not only by operational effectiveness, but also by labor costs, material and supply costs, supervisory overhead costs as well as other factors. This indicator can be used as an important comparison with other districts to identify opportunities for improvement in custodial operations to reduce costs.

### Factors that Influence

- Cost of labor
- Cost of supplies and materials
- Scope of duties assigned to custodians

**Calculation** Total custodial supply cost of district-operated custodial services *divided by* total square footage of buildings managed by the district. This measure only applies to district-operated sites.

## Routine Maintenance – Cost per Square Foot

**Importance** This provides a measure of the total costs of routine maintenance relative to the district size (by building square footage).

### Factors that Influence

- Age of infrastructure
- Experience of maintenance staff
- Training of custodial staff to do maintenance work

- Deferred maintenance backlog

**Calculation** Cost of district-operated maintenance work *plus* cost of contractor-operated maintenance work *divided by* total square footage of non-vacant buildings.

## Routine Maintenance – Cost per Work Order

**Importance** This provides a measure of the costs of each routine maintenance work order.

### Factors that Influence

- Age of infrastructure
- Experience of maintenance staff
- Training of custodial staff to do maintenance work
- Deferred maintenance backlog

**Calculation** Total costs of all routine maintenance work *divided by* total number of routine maintenance work orders.

## Routine Maintenance – Proportion Contractor-Operated

**Importance** Can be used to identify districts that utilize contractors to perform routine maintenance.

**Calculation** Number of routine maintenance work orders handled by contractors *divided by* total number of routine maintenance work orders.

## Major Maintenance – Cost per Student

**Importance** This looks at the cost of major maintenance projects relative to the size of the district (by student enrollment).

### Factors that Influence

- Number of capital projects
- Deferred maintenance backlog
- Passage of bond measures
- Age of infrastructure
- District technology plan

**Calculation** Total cost of major maintenance work *divided by* total student enrollment.

## Major Maintenance – Delivered Construction Costs as Percent of Total Costs

**Importance** This can be used to evaluate the cost of delivered construction relative to design costs and personnel costs.

**Calculation** Construction costs of major maintenance/minor renovation projects *divided by* total costs of all major maintenance/minor renovation projects.

## Renovations – Cost per Student

**Importance** This indicates the level of spending on major renovations relative to the size of the district (by student enrollment).

### Factors that Influence

- Number of capital projects
- Age of infrastructure
- District technology plan

**Calculation** Total cost of renovations *divided by* total student enrollment.

### Renovations – Delivered Construction Costs as Percent of Total

**Importance** This can be used to evaluate the cost of delivered construction relative to design costs and personnel costs.

**Calculation** Construction costs of major rehab/renovation projects *divided by* total costs of all major rehab/renovation projects.

### Renovations – Design to Construction Cost Ratio

**Importance** This can be used to evaluate the cost of delivered construction relative to design costs.

**Calculation** Design costs of all major rehab/renovation projects *divided by* construction costs of all major rehab/renovation projects.

### New Construction – Cost per Student

**Importance** This looks at the total amount of construction spending relative to district size (by student enrollment).

#### Factors that Influence

- Number of capital projects
- Population growth trends
- Quality of buildings

**Calculation** Total costs of new construction projects *divided by* total student enrollment.

### New Construction – Design to Construction Cost Ratio

**Importance** This can be used to evaluate the cost of delivered construction relative to design costs.

**Calculation** Design costs of all new construction projects *divided by* construction costs of all new construction projects.

### M&O Cost per Student

**Importance** This is a broad view of the costs of maintenance, operations, and facilities work. Expenditures may fluctuate drastically depending on the number of capital projects.

**Calculation** Total custodial costs (district and contractor) *plus* total grounds work costs (district and contractor) *plus* total routine maintenance costs (district and contractor) *plus* total major maintenance/minor renovations costs *plus* total major rehab/renovations all *divided by* total number of students.

### M&O Cost Ratio to District Budget

**Importance** This is a broad view of the costs of maintenance, operations and facilities work. Expenditures may fluctuate drastically depending on the number of capital projects.

**Calculation** Total custodial costs (district and contractor) *plus* total grounds work costs (district and contractor) *plus* total routine maintenance costs (district and contractor) *plus* total major maintenance/minor renovations costs *plus* total major rehab/renovations *plus* new construction *divided by* district budget.

### Recycling – Percent of Material Stream

**Importance** This measures the degree to which districts recycle.

#### Factors that Influence

- Placement of recycling bins near waste bins
- Number of recycling bins deployed
- Material collection contracts
- Commitment to environmental stewardship
- State requirements

**Calculation** Total material stream that was recycled (in tons) *divided by* total material stream (in tons).

### Utility Cost per Square Foot

**Importance** This measures the efficiency of the district's building utility operations. It may also reflect a district's effort to reduce energy consumption through conservation measures being implemented by building occupants as well as maintenance and operations personnel. Higher numbers signal an opportunity to evaluate fixed and variable cost factors and identify those factors that can be modified for greater efficiency.

#### Factors that Influence

- Age of buildings and physical plants
- Amount of air-conditioned space
- Regional climate differences
- Customer support of conservation efforts to upgrade lighting and HVAC systems
- Energy conservation policies and management practices

**Calculation** Total utility costs (including electricity, heating fuel, water, and sewer) *divided by* total square footage of all non-vacant buildings.

### Utility Usage – Electricity Usage per Square Foot (kWh)

**Importance** This measures the level of electricity usage. Districts with high usage should investigate ways to decrease usage in order to reduce costs.

#### Factors that Influence

- Use of high-efficiency light bulbs
- Automated light switches
- Shutdown policy during winter break
- Regulation of heating and air conditioning

**Calculation** Total electricity usage (in kWh) *divided by* total square footage of all non-vacant buildings.

### Utility Usage – Heating Fuel Usage per Square Foot (kBtu)

**Importance** This measures the level of heating fuel usage. Heating fuel can be in a variety of forms, such as fuel oil, kerosene, natural gas, propane, etc. This excludes electricity that is used for heating.

**Calculation** Total heating fuel usage (in kBtu) *divided by* total square footage of all non-vacant buildings.

### Utility Usage – Water (Non-Irrigation) Usage per Square Foot (Gal.)

**Importance** Can be used to evaluate water usage.

#### Factors that Influence

- Low-flow toilets and urinals
- Maintenance of faucet aerators
- Motion-sensor faucets to reduce vandalism

**Calculation** Total water usage (in gallons) excluding irrigation *divided by* total square footage of all non-vacant buildings.

### Building Square Footage by Type

**Importance** Can be used to evaluate ratios of building types. Modular buildings are made of prefabricated materials and constructed on-site. Portable buildings often lack full facilities and/or are lower quality than site-built buildings.

#### Calculation

Site-Built: Total square footage of all permanent site-built buildings *divided by* total square footage of all non-vacant buildings.

Modular: Total square footage of all modular buildings (i.e., buildings constructed on-site out of pre-manufactured components) *divided by* total square footage of all non-vacant buildings.

Portable: Total square footage of all portable buildings *divided by* total square footage of all non-vacant buildings.

### Building Square Footage by Usage

**Importance** Can be used to evaluate ratios of building usage.

**Calculation**

Academic: Total square footage of all academic buildings *divided by* total square footage of all non-vacant buildings.

Non-Academic: Total square footage of all non-academic buildings *divided by* total square footage of all non-vacant buildings.

Vacant: Total square footage of all vacant buildings *divided by* total square footage of all non-vacant district buildings.

### Green Buildings – Buildings Green Certified or Equivalent

**Importance** This measure compares the number of energy efficient or "green" buildings in the district.

**Factors that Influence**

- Community support for environmental and sustainability measures
- Grant availability
- District policy
- Environmental site assessment
- Local health issues

**Calculation** Square footage of all permanent buildings (academic and non-academic) with a green-building certificate *plus* square footage of all permanent buildings (academic and non-academic) that were built in alignment with a green building code but not certified.



# SAFETY & SECURITY

There are a number of performance metrics that can be used to determine a district's relative performance in the area of school safety. For instance, the *use of ID badges* and other *methods of access control* are important parts of security, as are measures of *use of alarm systems and Expenditures as a Percent of General Fund*. Additionally, personnel preparedness and capacity is measured by looking at **Hours of Training per District Security and Law Enforcement Member** and **District Uniformed Personnel**

Finally, **People Incidents per 1,000 Students** and **Assault/Battery Incidents per 1,000 Students** are baseline measures of incidents in a district.

The following influencing factors are likely to apply to these measures:

- Level of crime in the surrounding neighborhoods
- Configuration of school (office, front desk, etc.) to make access control a possibility
- Inclusion of security systems in a district's construction and modernization program
- Utilization of technology such as security cameras to offset the need for more staff
- Documented need for additional safety and security staff—for example, documented crime statistics and trends.



## *LIST OF KPIS IN SAFETY & SECURITY*

Below is the complete list of Power Indicators, Essential Few and other key indicators in Safety & Security. Indicators in bold are those included in this report. (See "KPI Definitions" at the back of this section for more complete descriptions of these measures.) All other KPIs are available to CGCS members on the web-based ActPoint® KPI system.

### POWER INDICATORS

**Incidents - Assault/Battery Incidents per 1,000 Students**  
**Incidents - People Incidents per 1,000 Students**  
**S&S Expenditures per 1,000 Students**  
**S&S Expenditures Percent of District Budget**  
**S&S Staff per 1,000 Students**  
**Training Hours per Safety/Security personnel**

Incidents - Assaults - Firearm Incidents per 1,000 Students  
 Incidents - Assaults - Robbery Incidents per 1,000 Students  
 Incidents - Assaults - Sexual Assault Incidents per 1,000 Students  
 Incidents - Assaults - Weapon (Excluding Firearm) Incidents per 1,000 Students  
 Incidents - Bullying Incidents Response Rate  
 Incidents - Larceny/Vandalism Incidents per Site  
 Incidents - Larceny/Vandalism Incidents Rate of Arrests  
 Incidents - People Incidents Rate of Arrests  
 Incidents, Threat - Incidents per Site  
 Intrusion/Burglary Alarm Systems - False Alarms per Site  
 Intrusion/Burglary Alarm Systems - Percent of Academic Sites  
 Intrusion/Burglary Alarm Systems - Percent of Non-Academic Sites  
 Intrusion/Burglary Incidents - Average Minutes to Respond to Alarm  
 Intrusion/Burglary Incidents - Percent at Non-Alarmed Sites  
 Intrusion/Burglary Incidents - Percent of Alarm Failures  
 Metal Detectors, Any Kind - Academic Sites  
 Metal Detectors, Any Kind - Non-Academic Sites  
 Metal Detectors, Hand-Held - Academic Sites  
 Metal Detectors, Walk-Through - Academic Sites  
 Real-Time Video Monitoring - Percent of Academic Sites  
 Real-Time Video Monitoring - Percent of Non-Academic Sites  
 S&S Expenditures - Percent for Contracted Services  
 S&S Expenditures - Percent for Personnel  
 Security Plans - Academic Sites with NIMS-Compliant Plan  
 Training Hours per Law Enforcement personnel, Contracted  
 Training Hours per Security personnel, Contracted  
 Training Hours per Security/Police personnel, District  
 Vulnerability Assessments of Construction/Renovation Designs - Percent of Projects

### ESSENTIAL FEW

**Crisis Response Teams - Drills per Team**  
**Crisis Response Teams - Teams per Academic Site**  
**Health/Safety Inspections - Sites Inspected Annually**  
**Health/Safety Violations per Site**  
**Incidents - Bullying/Harassment per 1,000 Students**  
**Incidents - Intrusion/Burglary Incidents per Site**  
**Intrusion/Burglary Alarm Systems - Percent of Sites**

### OTHER KEY INDICATORS

Armed Personnel - Percent of All Field Personnel  
 Armed Personnel - Percent of Law Enforcement Personnel, Contracted  
 Armed Personnel - Percent of Security Personnel, Contracted  
 Armed Personnel - Percent of Security/Police Personnel, District  
 Health/Safety Inspections - Percent of Academic Sites Annually  
 Health/Safety Inspections - Percent of Non-Academic Sites Annually  
 Health/Safety Violations - Average Number Days to Correct  
 ID Badge Required, Employees - Percent of Academic Sites  
 ID Badge Required, Employees - Percent of Non-Academic Sites  
 ID Check and Badge Required, Visitors - Percent of Academic Sites  
 ID Check and Badge Required, Visitors - Percent of Non-Academic Sites

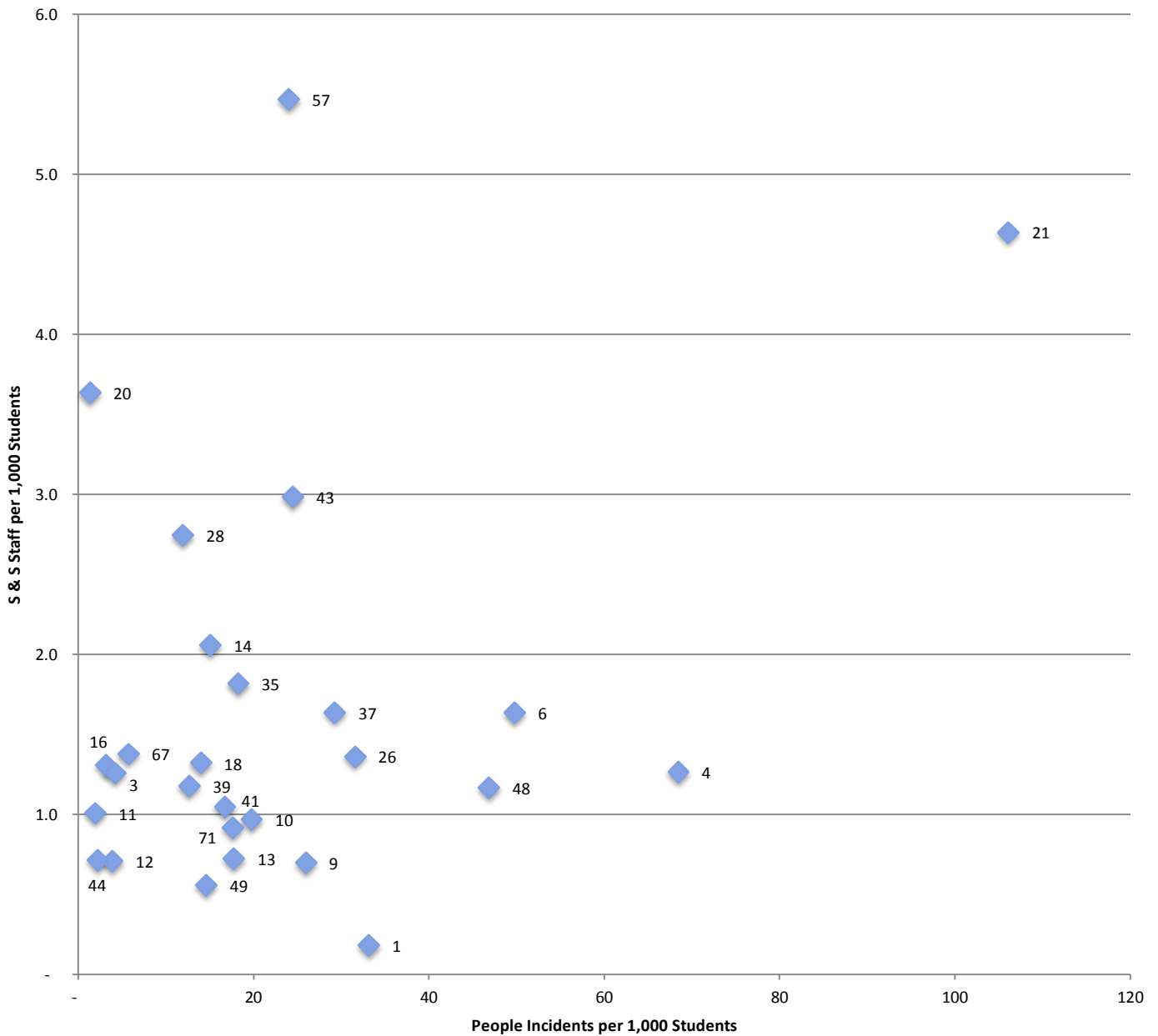


# FEATURED ANALYSIS

Figure 116  
Incident Rate vs. Staffing Level

This chart compares incident rates against the safety and security staffing levels. In theory, a district with a high number of incidents might want to address this issue with higher numbers of staff or other strategies.

(Not shown: District 7, 397 incidents, 1.6 staff; District 23, 1,242 incidents, 1.1 staff; District 47, 1,237 incidents, 0.3 staff.)



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# DATA DISCOVERY

Figure 117  
Incidents - Assault/Battery Incidents per 1,000 Students

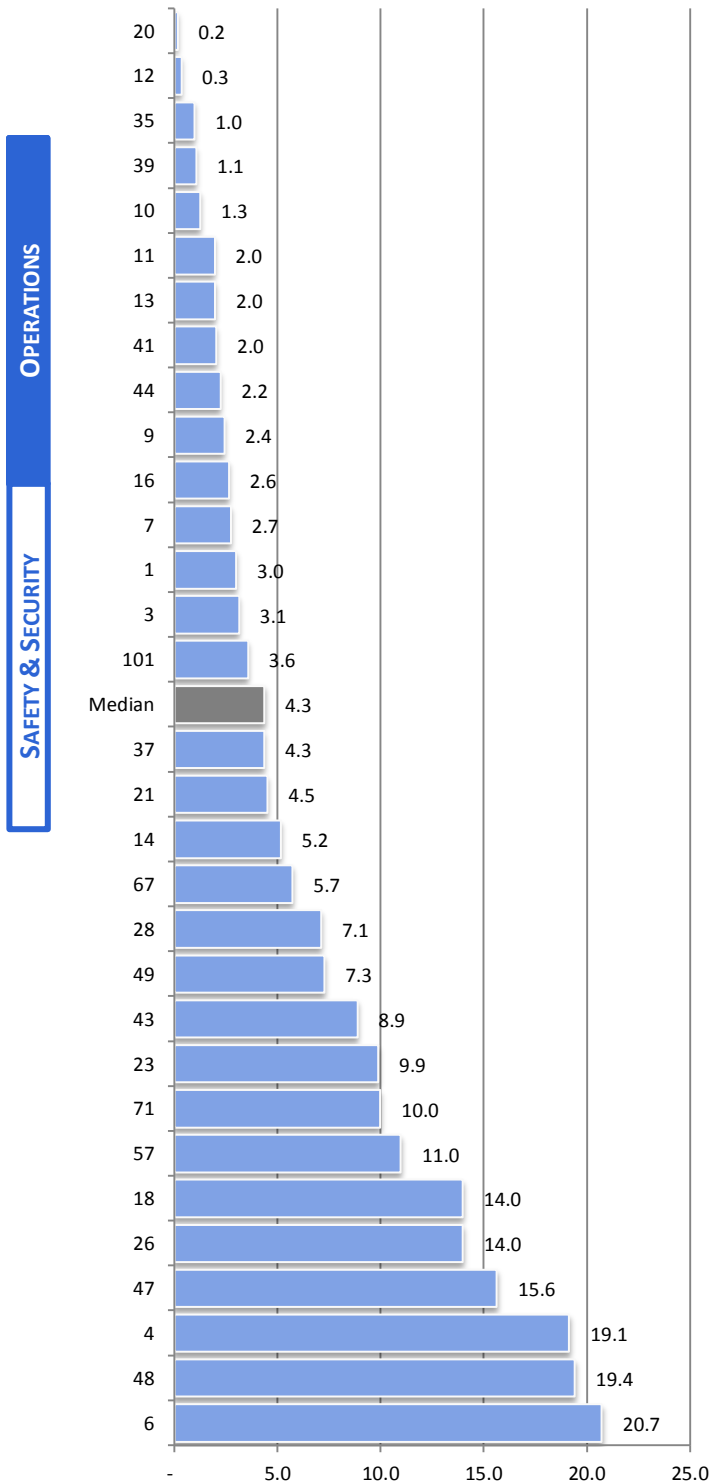


Figure 118  
Incidents - People Incidents per 1,000 Students

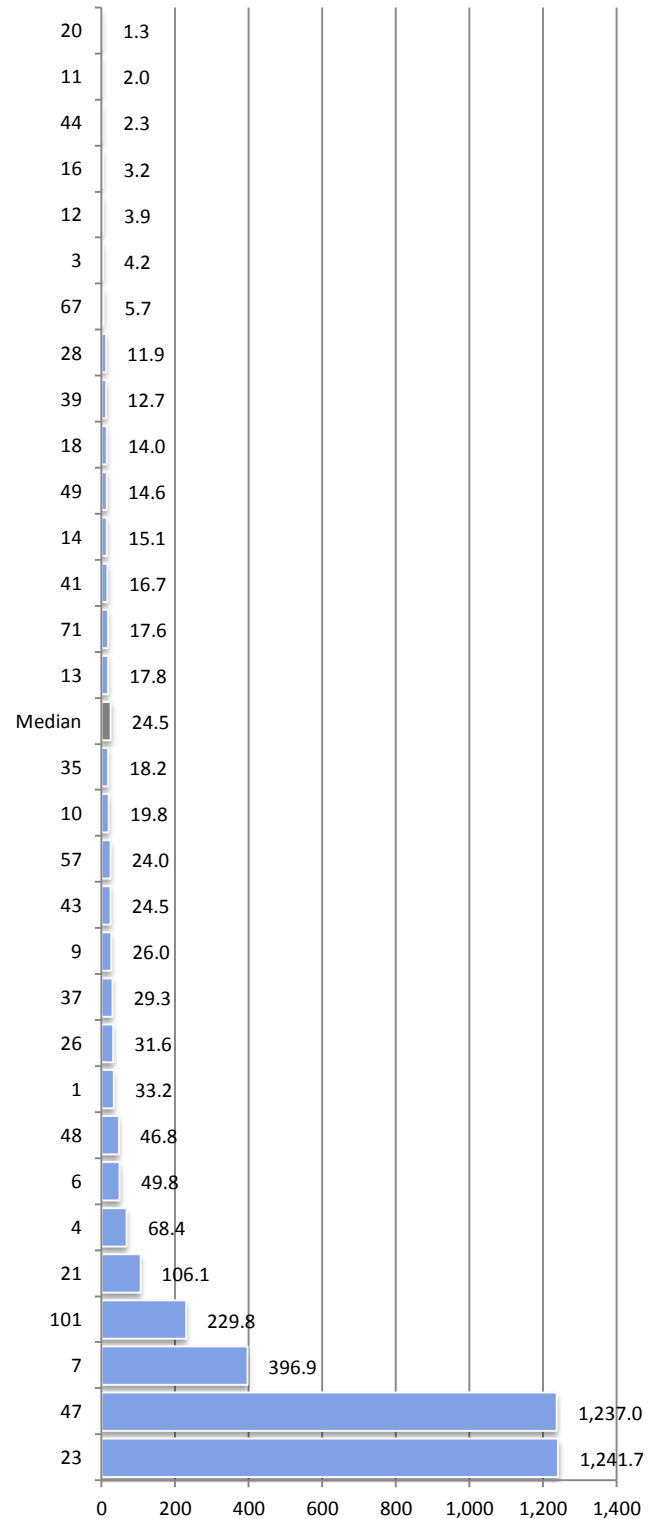


Figure 119  
S&S Expenditures per 1,000 Students

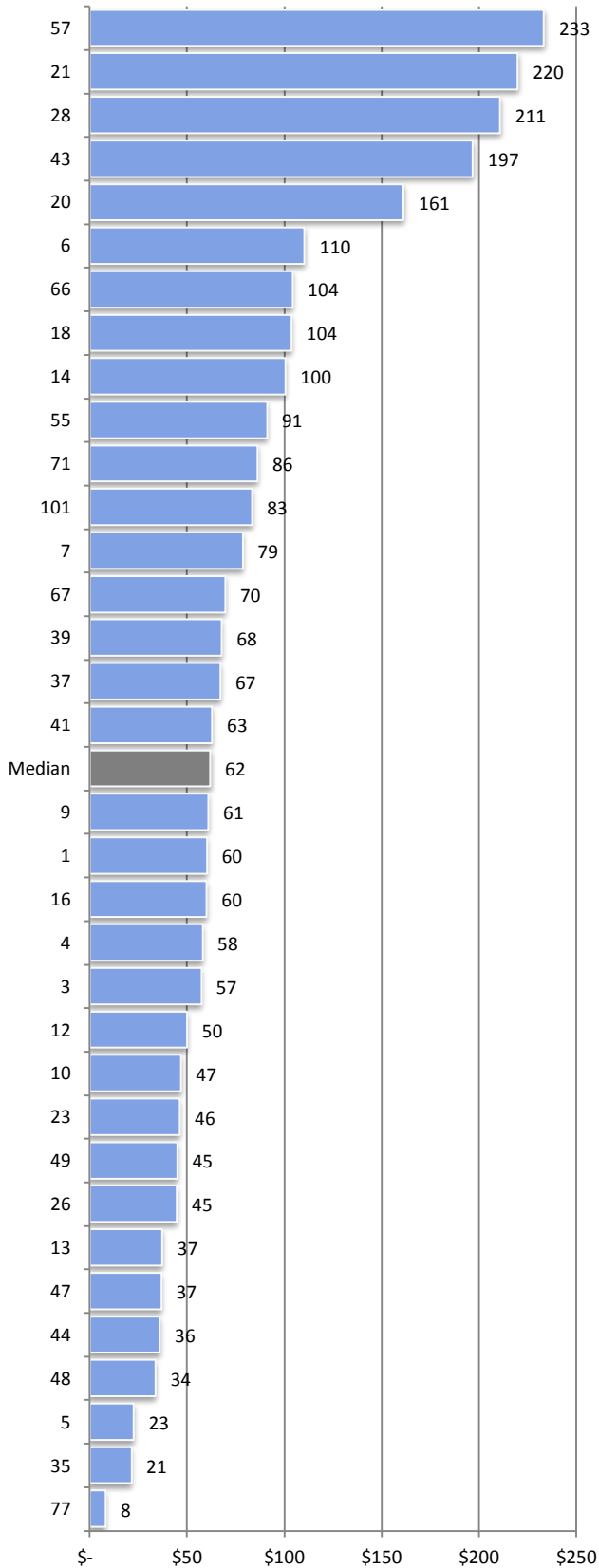


Figure 120  
S&S Expenditures as Percent of District Budget

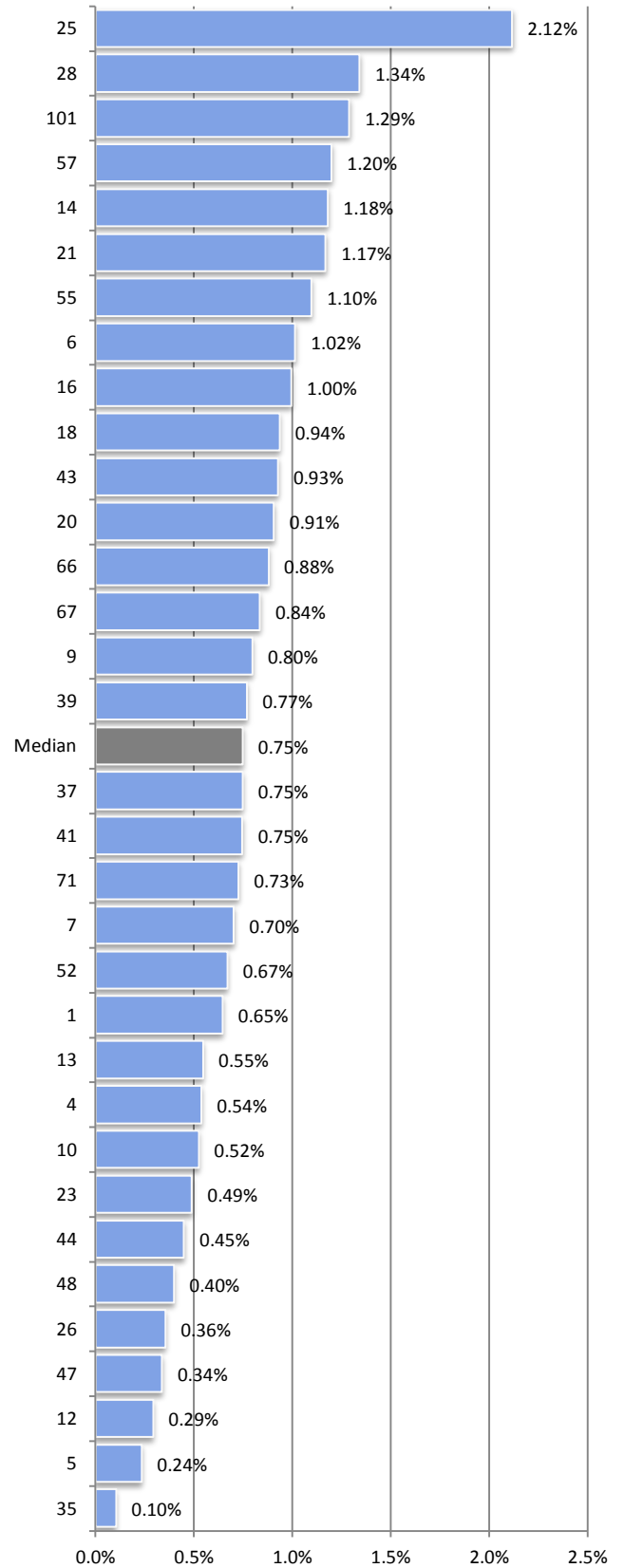


Figure 121  
S&S Staff per 1,000 Students

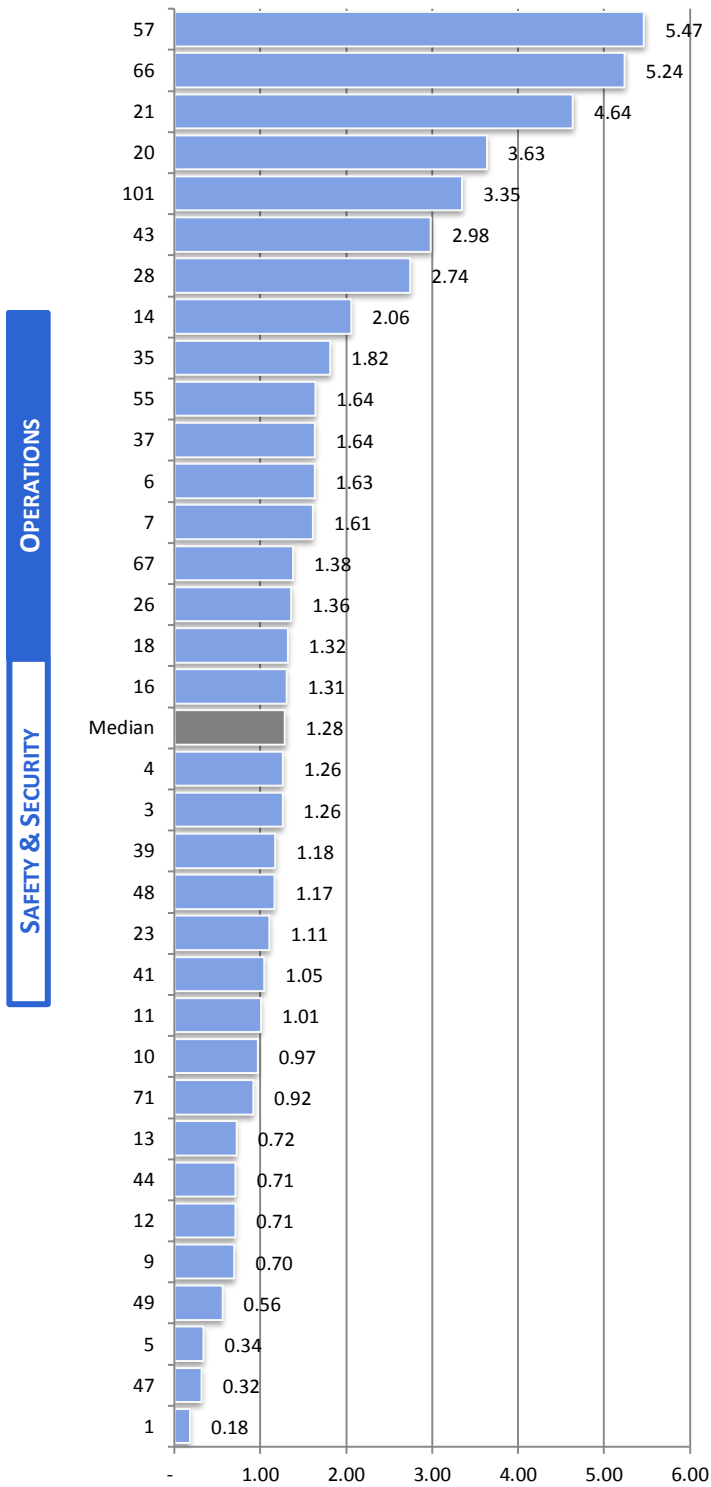
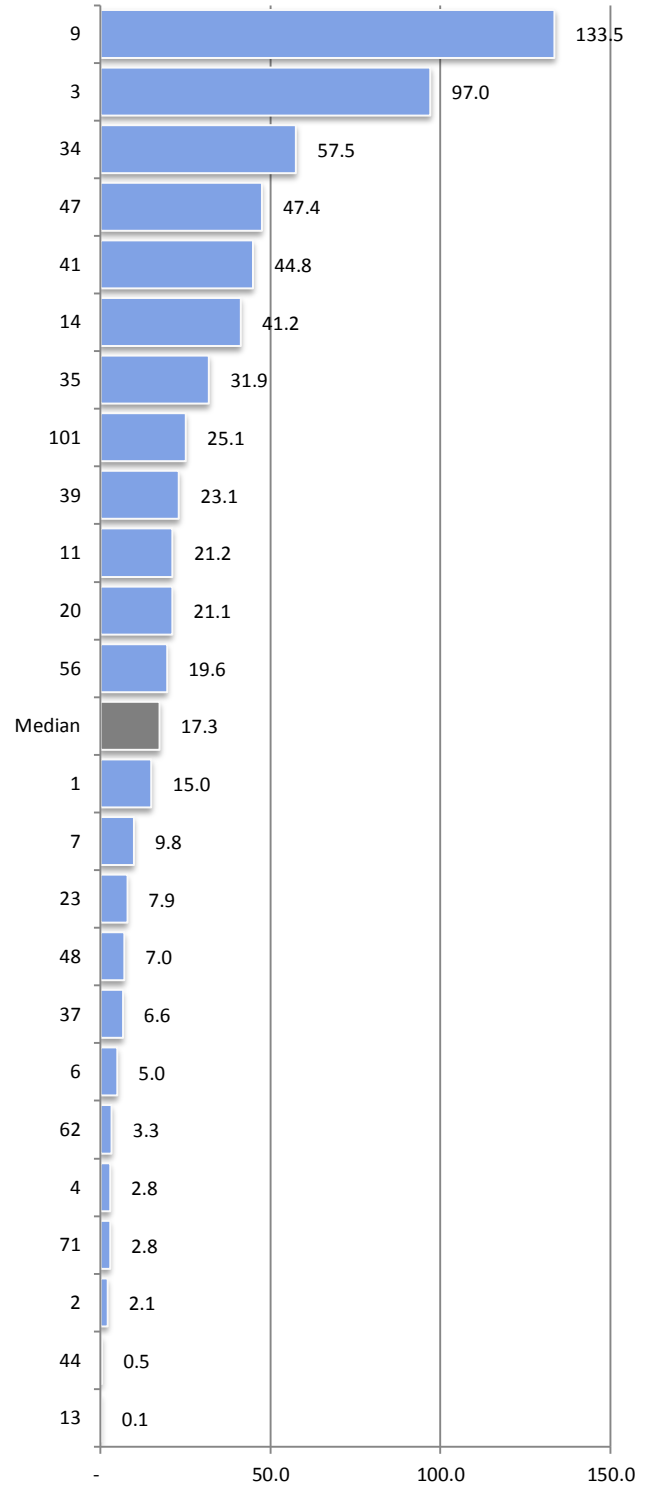


Figure 122  
Training Hours per Safety/Security Personnel



Is the number of safety/security staff in your district sufficient to address issues facing the district?

Do your safety/security staff members train enough to be effective during critical events?

Figure 123  
Crisis Response Teams - Drills per Team

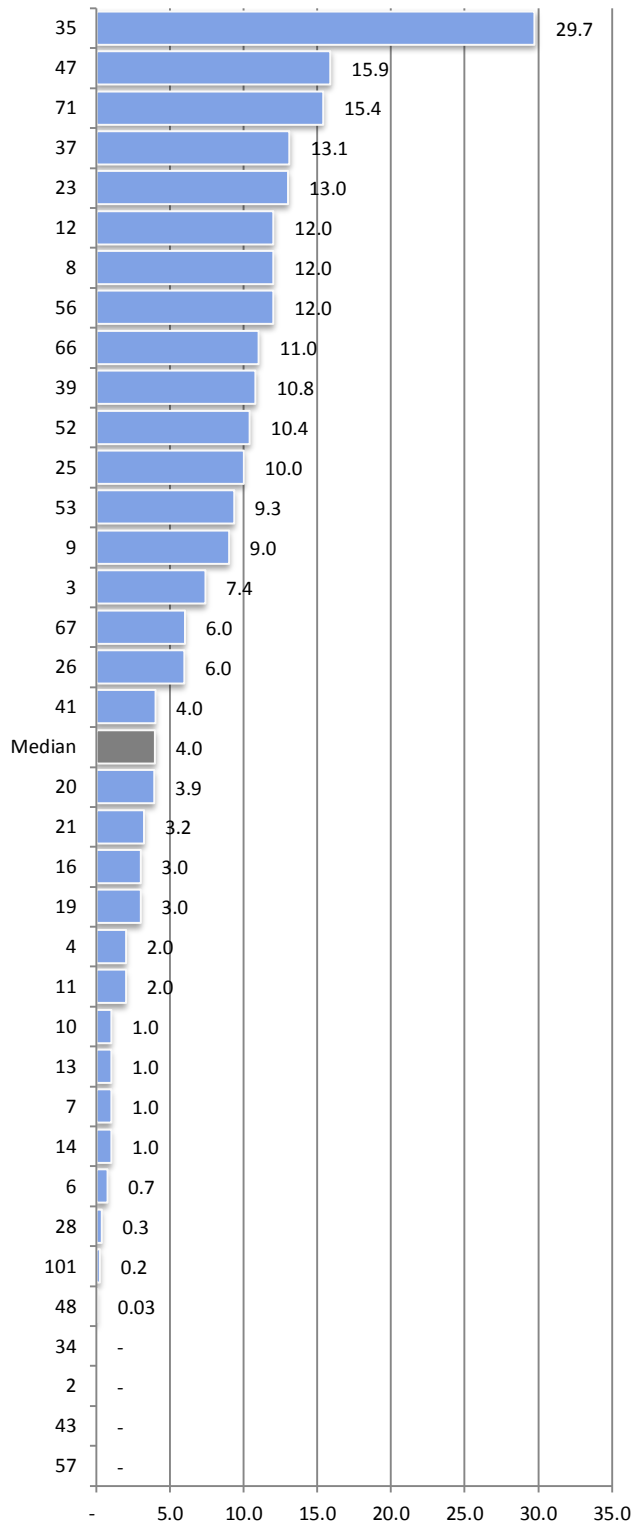
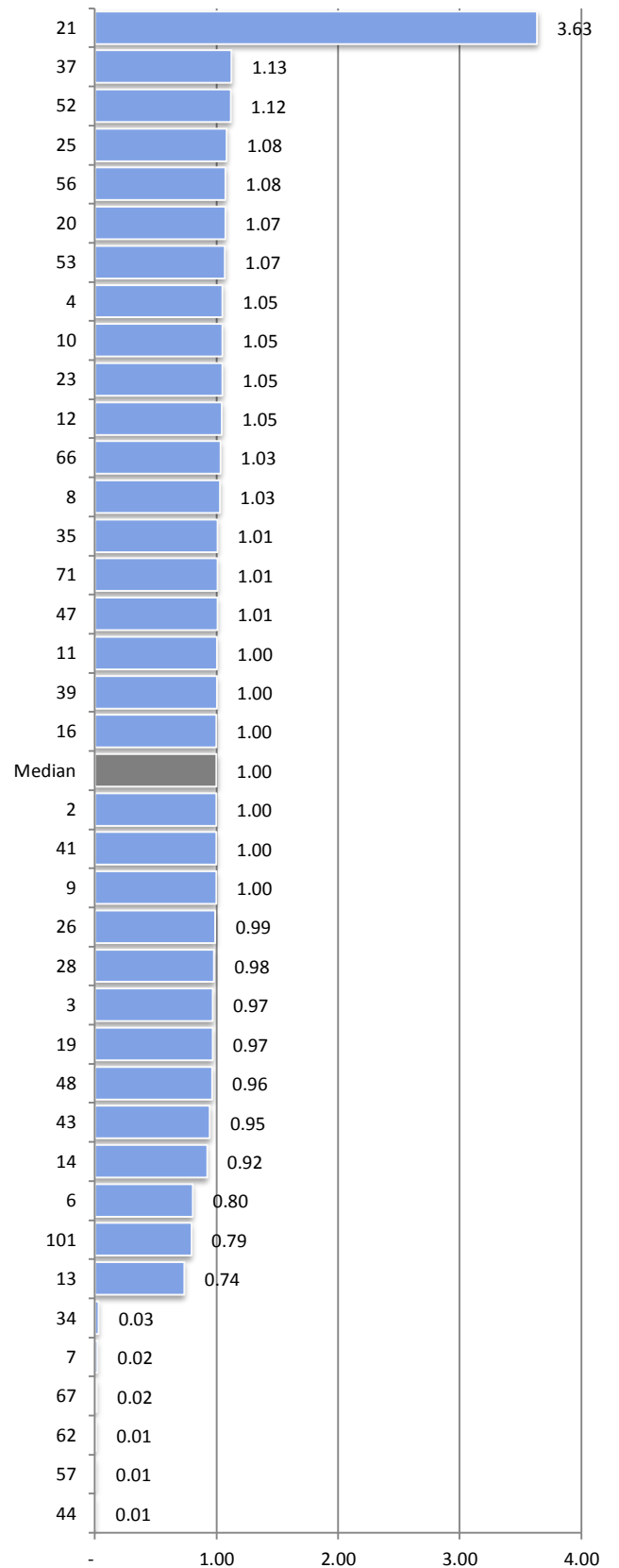


Figure 124  
Crisis Response Teams - Teams per Academic Site



OPERATIONS  
SAFETY & SECURITY

*Do your crisis response teams conduct enough drills to be effective in case of a real emergency?*

Figure 125  
Health/Safety Inspections - Sites Inspected  
Annually

OPERATIONS  
SAFETY & SECURITY

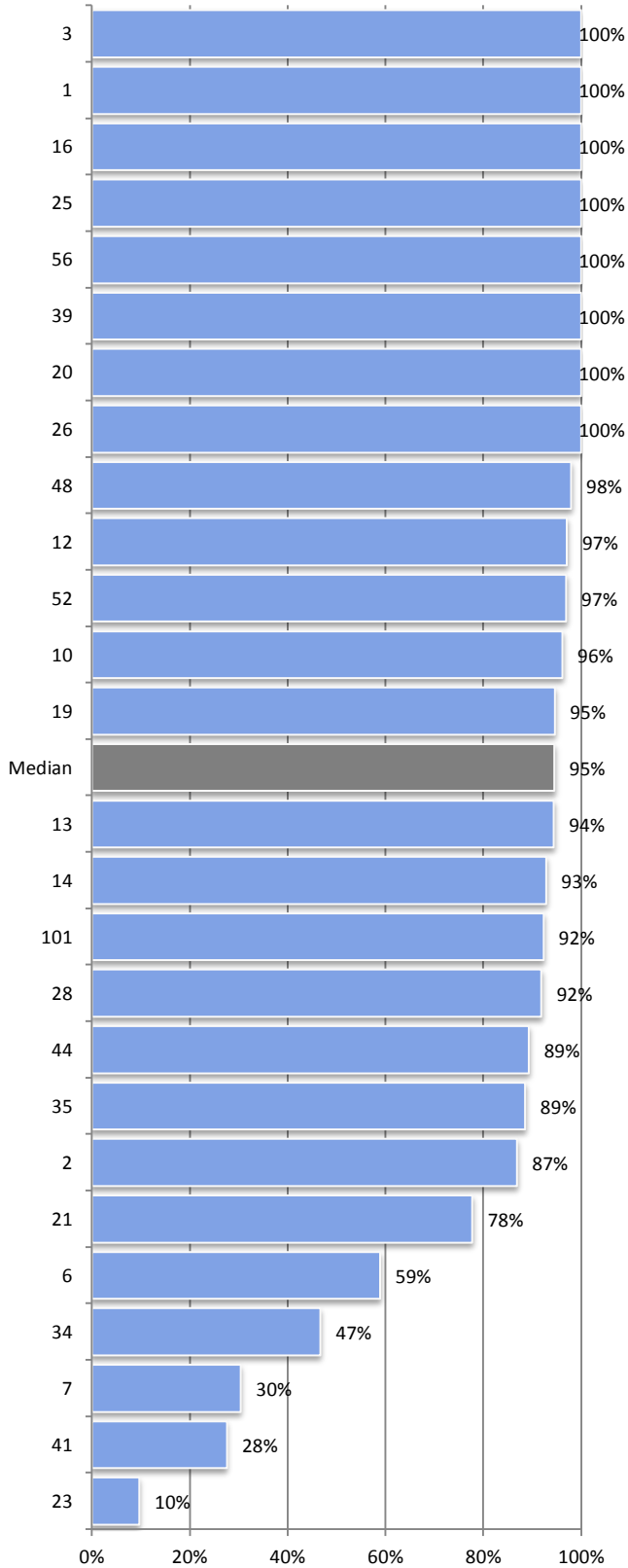


Figure 126  
Health/Safety Violations per Site

This is the total number of health and/or safety violations identified in the district divided by the total number of sites.

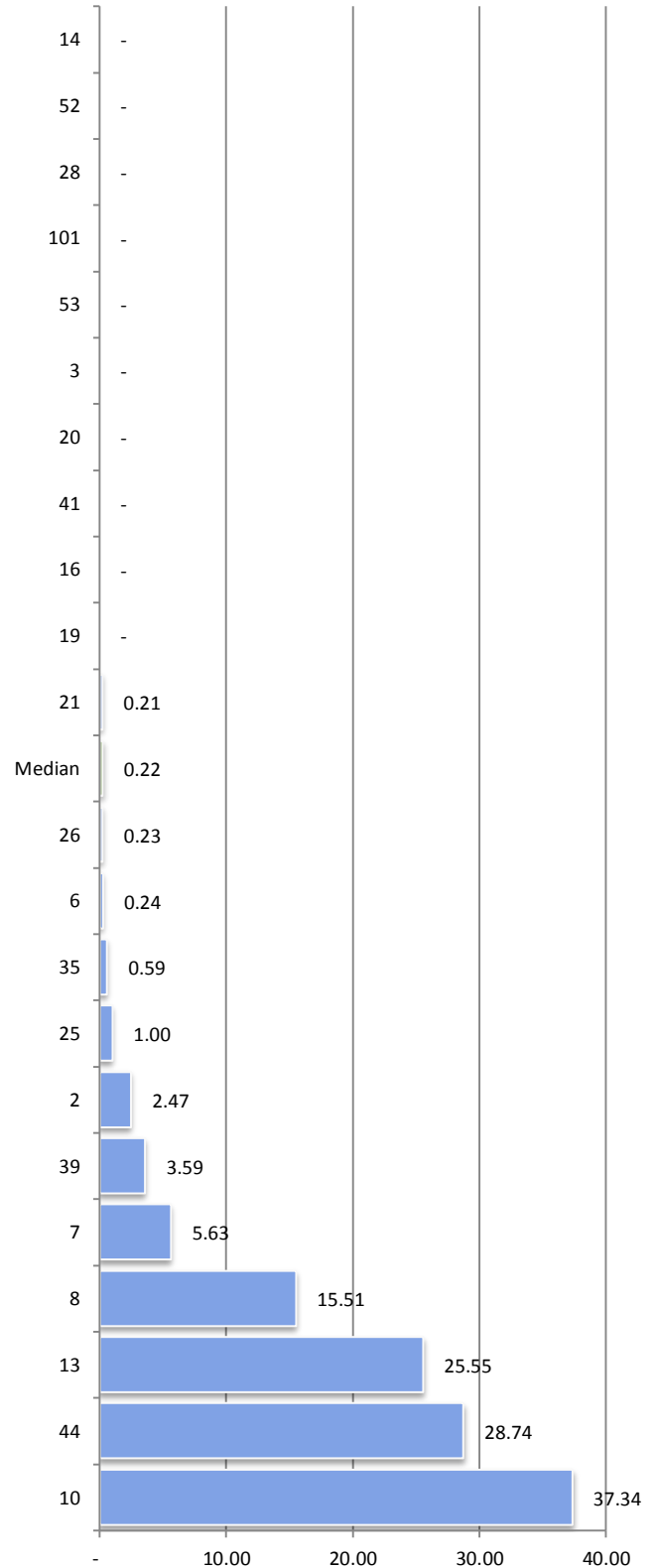


Figure 127  
Incidents - Bullying/Harassment per 1,000  
Students

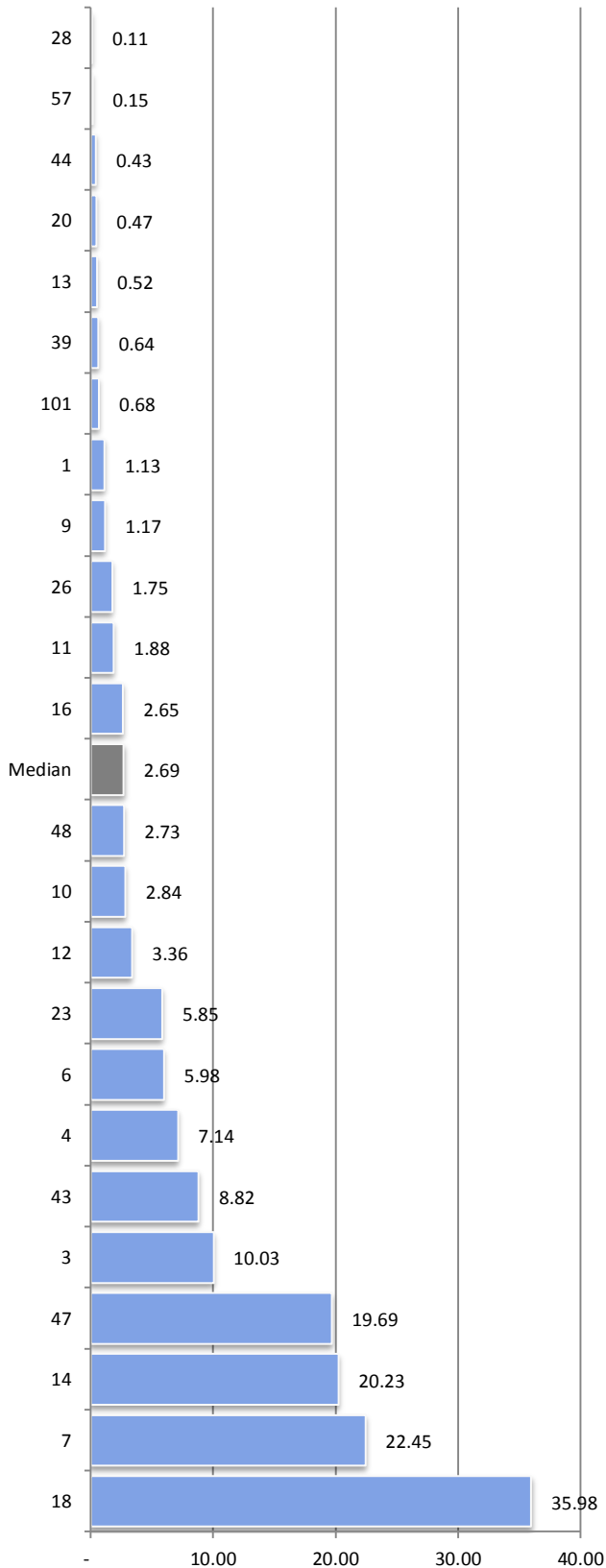
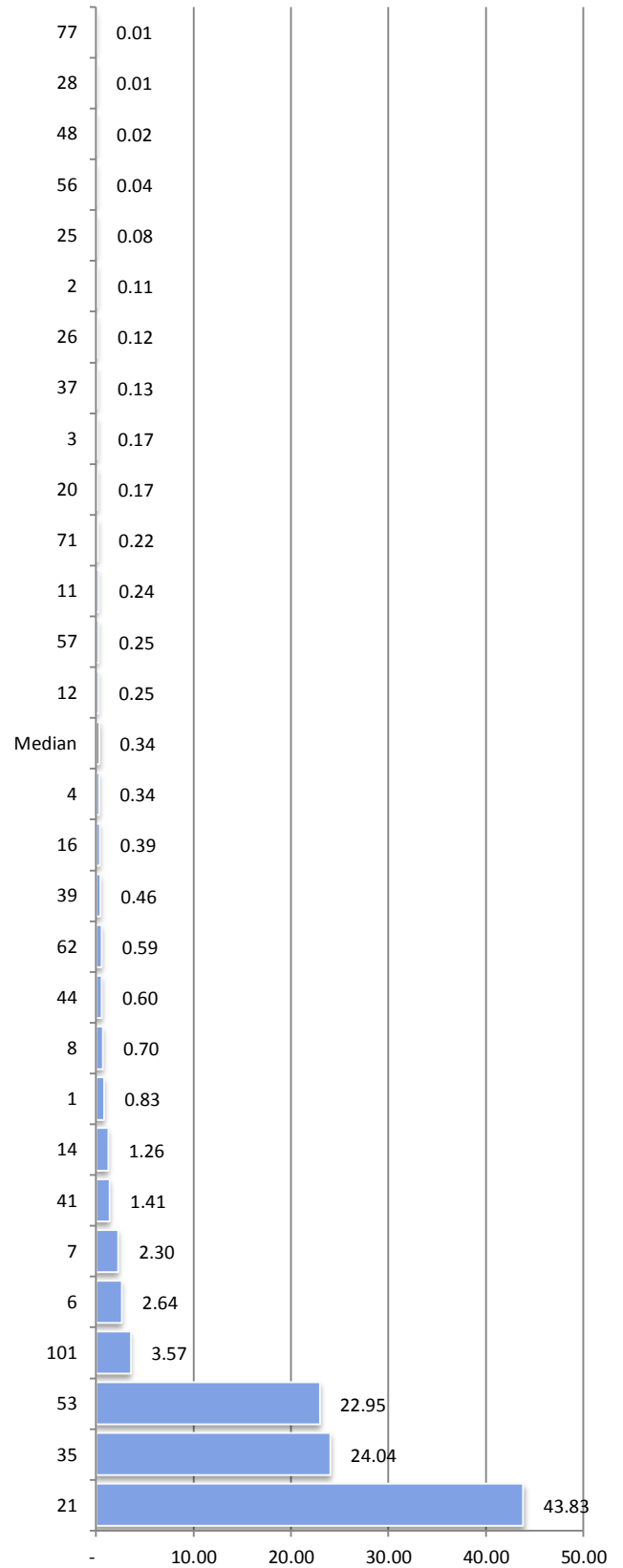


Figure 128  
Incidents - Intrusion/Burglary Incidents per Site

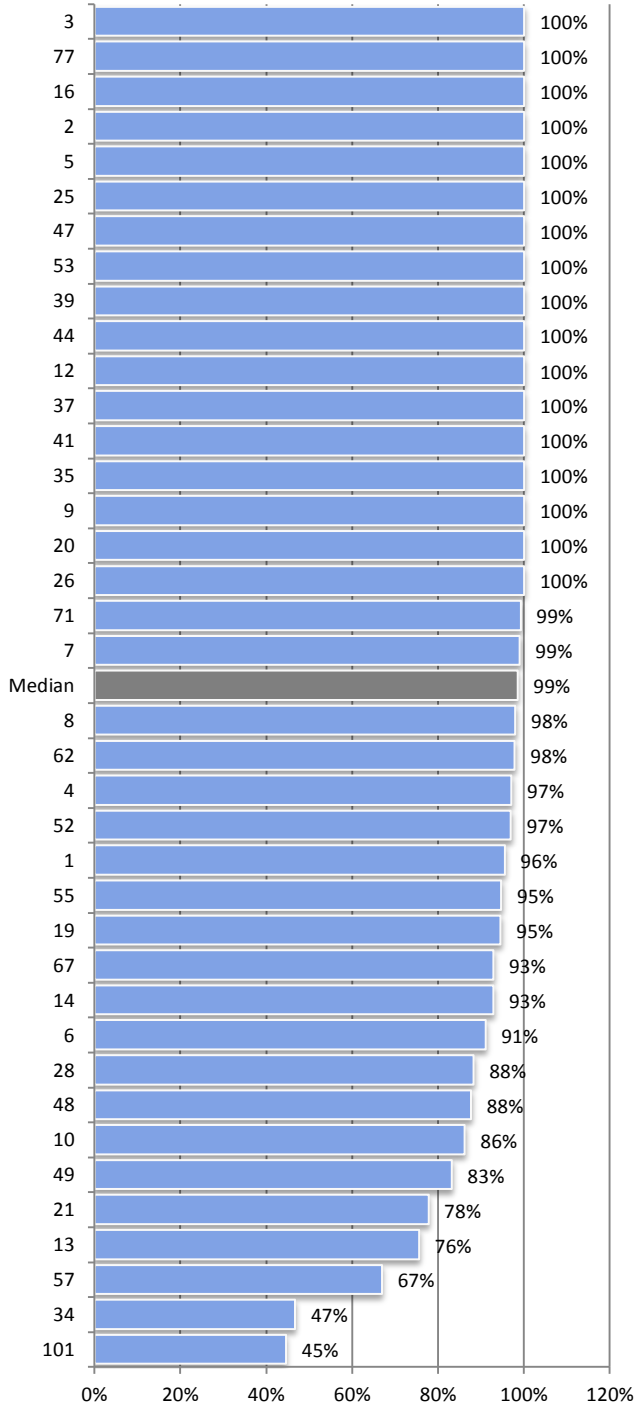


OPERATIONS  
SAFETY & SECURITY

Figure 129  
 Intrusion/Burglary Alarm Systems - Percent Of Sites

This is the proportion of sites that are equipped with an intrusion/burglary alarm system.

OPERATIONS  
SAFETY & SECURITY



*Are your sites equipped to prevent theft or vandalism? Are your alarm systems effective?*



# KPI DEFINITIONS

## Incidents - Assault/Battery Incidents per 1,000 Students

**Importance** This gives districts an idea of the density of incidents in each district, adjusted for the size of the district in terms of enrollment.

### Factors that Influence

- Available resources to allocate for safety and security
- Staffing formulas
- Documented need for additional safety and security staff through data such as crime statistics
- Utilization of technology such as security cameras to offset the need for more staff
- Enrollment

**Calculation** Total number of assault/battery incidents *divided by* total student enrollment in thousands.

## Incidents - People Incidents per 1,000 Students

**Importance** This gives districts an idea of the density of incidents in each district, adjusted for the size of the district in terms of enrollment.

### Factors that Influence

- Available resources to allocate for safety and security
- Staffing formulas
- Documented need for additional safety and security staff through data such as crime statistics
- Utilization of technology such as security cameras to offset the need for more staff
- Enrollment

**Calculation** Total number of people incidents *divided by* total student enrollment in thousands.

## S&S Expenditures per 1,000 Students

**Importance** This measure gives an indication of the level of support for safety and security operations as a percent of district general fund budget. A low percentage could be an indication that security needs are not being met by the district or that other revenue sources are needed to support security for district staff and students.

### Factors that Influence

- Overall general fund budget
- Level of crime statistics of surrounding neighborhoods
- District policy for security
- Budget allocations

**Calculation** Total safety and security expenditures *divided by* total student enrollment in thousands.

## S&S Expenditures Percent of District Budget

**Importance** This measure gives an indication of the level of support for safety and security operations as a percent of district general operating budget. A low percentage could be an indication that security needs are not being met by the district or that other revenue sources are needed to support security for district staff and students.

### Factors that Influence

- Overall general fund budget

- Level of crime statistics of surrounding neighborhoods
- District policy for security
- Budget allocations

**Calculation** Total safety and security expenditures *divided by* district operating expenditures.

## S&S Staff per 1,000 Students

**Importance** This measure gives an indication of the level of support for safety and security operations as a ratio to student enrollment. A low ratio could be an indication that security needs are not being met by the district or that other revenue sources are needed to support security for district staff and students.

### Factors that Influence

- Overall general fund budget
- Level of crime statistics of surrounding neighborhoods
- District policy for security
- Budget allocations

**Calculation** Total safety and security staff members *divided by* total student enrollment in thousands.

## Training Hours per Safety/Security Personnel

**Importance** Most school districts complete crisis response training prior to the opening of each school year.

### Factors that Influence

- Emergency response priority with school/district leadership
- Emergency response resources
- Thoroughness of school/district crisis response plan
- Weather
- Availability of outside agencies and personnel to participate

**Calculation** Total number of hours of safety-related drills and trainings for all safety and security personnel *divided by* total number of safety and security personnel.

## Crisis Response Teams - Drills per Team

**Importance** Ideally, district sites with a designated crisis response team have all conducted drills of some sort.

### Factors that Influence

- Geography of district
- Priorities of district leadership
- Previous traumatic events or crisis
- Emergency response resources
- Updated procedures and protocols

**Calculation** Total number of team drills conducted by crisis response teams *divided by* the total number of crisis response teams.

## Crisis Response Teams - Teams per Academic Site

**Importance** Districts should build capacity to respond to crises by having designated crisis response teams.

### Factors that Influence

- Geography of district
- Priorities of district leadership
- Previous traumatic events or crisis
- Emergency response resources
- Updated procedures and protocols

**Calculation** Total number of crisis response teams *divided by* the total number of academic sites.

**Health/Safety Inspections - Sites Inspected Annually**

**Importance** Regular health and/or safety inspections are important for compliance and risk mitigation.

**Calculation** Total number of sites/campuses (academic and non-academic) inspected annually *divided by* the total number of district sites.

**Health/Safety Violations per Site**

**Factors that Influence**

- Risk mitigation efforts
- Focus of leadership on health and safety

**Calculation** Total number of health/safety violations identified at site inspections *divided by* the total number of district sites that were inspected.

**Incidents - Bullying/Harassment per 1,000 Students**

**Importance** This gives districts an idea of the density of incidents in each district, adjusted for the size of the district in terms of enrollment.

**Factors that Influence**

- Available resources to allocate for safety and security
- Staffing formulas
- Documented need for additional safety and security staff through data such as crime statistics
- Utilization of technology such as security cameras to offset the need for more staff
- Enrollment

**Calculation** Total number of bullying/harassment incidents *divided by* total district enrollment in thousands.

**Incidents - Intrusion/Burglary Incidents per Site**

**Importance** This gives districts an idea of the density of incidents in each district, adjusted for the size of the district (by number of sites).

**Factors that Influence**

- Available resources to allocate for safety and security
- Staffing formulas
- Documented need for additional safety and security staff through data such as crime statistics
- Utilization of technology such as security cameras to offset the need for more staff
- Effectiveness of security alarm systems

**Calculation** Total number of intrusion/burglary incidents *divided by* total number of district sites.

**Intrusion/Burglary Alarm Systems - Percent of Sites**

**Importance** This gives districts an idea of the density of incidents in each district, adjusted for the size of the district (by number of sites).

**Factors that Influence**

- Available resources to allocate for safety and security
- Staffing formulas
- Documented need for additional safety and security staff through data such as crime statistics
- Utilization of technology such as security cameras to offset the need for more staff
- Effectiveness of security alarm systems

**Calculation** Total number of intrusion/burglary incidents *divided by* total number of district sites.

# TRANSPORTATION

Performance metrics in transportation cover a broad range of factors that affect service levels and cost efficiency. The broad summative measures are **Cost per Total Mile Operated** and **Transportation Cost per Rider**, and other measures include diagnostic tools to weed out inefficiencies and excessive expenses. A key measure of efficiency is **Daily Runs per Bus**, which reflects the daily reuse of buses; and important service-level measures include **On-Time Performance** and **Turn Time to Place New Students**.

Careful consideration of each measure and its impact on a district's transportation services is vital to the improvement of performance.

General factors that influence transportation measures and improvement strategies include:

- Types of transported programs served
- Bell schedule
- Effectiveness of the routing plan
- Spare bus factor needed
- Age of fleet
- Driver wage and benefit structure and labor contracts
- Maximum riding time allowed and earliest pickup time allowed
- Enrollment projections and their impact on transported programs



## *LIST OF KPIS IN TRANSPORTATION*

Below is the complete list of Power Indicators, Essential Few, and other key indicators in Transportation. Indicators in bold are those included in this report. (See "KPI Definitions" at the back of this section for more complete descriptions of these measures.) All other KPIs are available to CGCS members on the web-based ActPoint® KPI system.

### POWER INDICATORS

**Bus Fleet - Average Age of Fleet**  
**Cost Per Mile Operated**  
**Cost Per Rider**  
**On-Time Performance**

### ESSENTIAL FEW

**Accidents - Miles between Accidents**  
**Accidents - Miles between Preventable Accidents**  
**Bus Equipment - GPS Tracking**  
**Bus Fleet - Alternatively-Fueled Buses**  
**Bus Fleet - Daily Buses as Percent of Total Buses**  
 Bus Fleet in Service Daily  
**Bus Usage - Daily Runs Per Bus**  
**Cost Per Bus**  
**Fuel Cost as Percent of Retail - Diesel**  
**Fuel Cost as Percent of Retail - Gasoline**  
 Personnel - Buses per Mechanic  
 Turn Time to Place New Students - General Education  
 Turn Time to Place New Students - SWD Students

### OTHER KEY INDICATORS

Accidents - Miles between Accidents (Contractor-Operated)  
 Accidents - Miles between Accidents (District-Operated)  
 Accidents - Miles between Preventable Accidents (Contractor-Operated)  
 Accidents - Miles between Preventable Accidents (District-Operated)  
 Bus Equipment - AVL/GPS Links to Routing Software  
 Bus Equipment - Rider Harnesses, Lap  
 Bus Equipment - Rider Harnesses, Lap-And-Shoulder  
 Bus Equipment - Student Tracking Systems  
 Bus Equipment - Video Cameras  
 Bus Fleet - Maintenance Hours per Bus  
 Bus Fleet - Percent Contractor-Operated

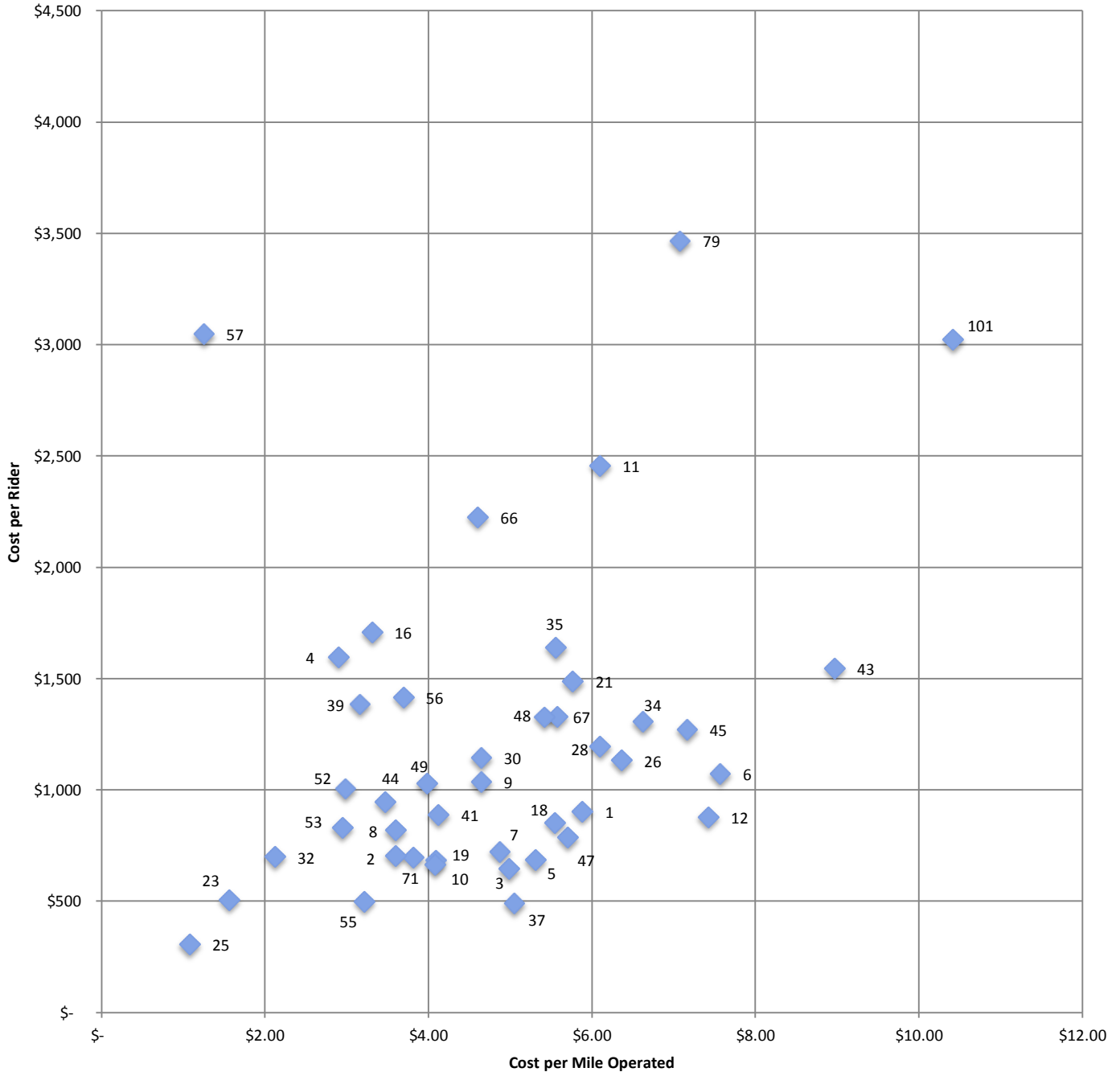
Bus Fleet - Percent District-Operated  
 Bus Inspections - Percent Passed On First Try  
**Bus Usage - Daily Seat Utilization**  
 Bus Usage - Daily Seat Utilization (Contractor-Operated)  
 Bus Usage - Daily Seat Utilization (District-Operated)  
 Bus Usage - Live Miles per Deadhead Mile  
 Bus Usage - Live Miles per Deadhead Mile (Contractor-Operated)  
 Bus Usage - Live Miles per Deadhead Mile (District-Operated)  
 Bus Usage - Miles per Bus  
 Bus Usage - Miles per Bus (Contractor-Operated)  
 Bus Usage - Miles per Bus (District-Operated)  
 Contract Buses - Percent of Ridership  
 Cost Per Bus (Contractor-Operated)  
 Cost Per Bus (District-Operated)  
**Daily Ride Time - General Education**  
**Daily Ride Time - Special Education**  
**Daily Ride Time, Maximum Allowed - General Education**  
**Daily Ride Time, Maximum Allowed - Special Education**  
 Fuel Cost as Percent of Retail - Bio-Diesel  
 Fuel Cost as Percent of Retail - Compressed Natural Gas  
 Fuel Cost as Percent of Retail - Propane  
 On-Time Performance (Contractor-Operated)  
 On-Time Performance (District-Operated)  
 Participation Rate - Alternative Transit  
 Participation Rate - Any Transportation Service  
 Participation Rate - Yellow Bus Service  
 Personnel - Driver Turnover Rate  
 Personnel - Drivers per Bus  
 Personnel - Drivers per Supervisor  
 Personnel - Drivers per Trainer  
 Personnel - Routes per Planner  
 Public Transit - Pass/Token Cost as Percent of Retail  
 Public Transit - Percent of Ridership  
 Students with Disabilities - Percent of Ridership  
 Students with Disabilities - Students on Dedicated SWD Buses  
 Students with Disabilities - Students with Neighborhood Pickup

# FEATURED ANALYSIS

Figure 130  
**Cost per Mile Operated vs. Cost per Rider**

This scatter plot compares two methods of expressing the cost-efficiency of a district’s transportation service—Cost per Mile Operated and Cost per Rider. (See next chart.)

The correlation coefficient of these two measures is a modest 0.35. This may be due to geographic differences (e.g., district size and population density), types of students transported (e.g., special education) and other factors. However, districts that are high in one or both measures may have reason to investigate their cost efficiency.

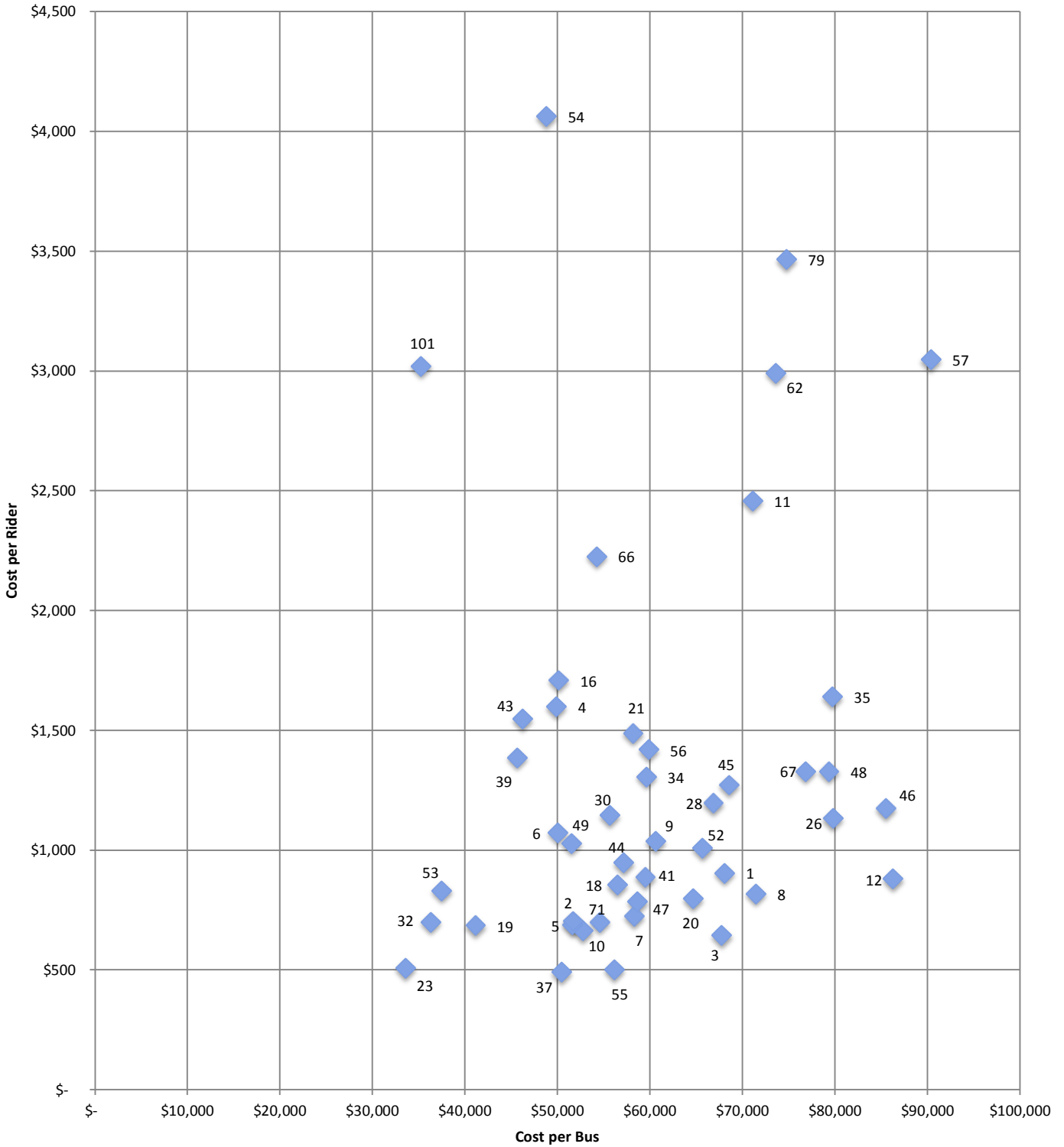


OPERATIONS  
TRANSPORTATION

Figure 131  
 Cost per Bus vs. Cost per Rider

This scatter plot adds another cost-efficiency measure—Cost per Bus—to the comparison in the previous chart. The correlation coefficient of these two measures is 0.19. (See previous chart.)

OPERATIONS  
TRANSPORTATION



# DATA DISCOVERY

Figure 132  
Bus Fleet - Average Age of Fleet

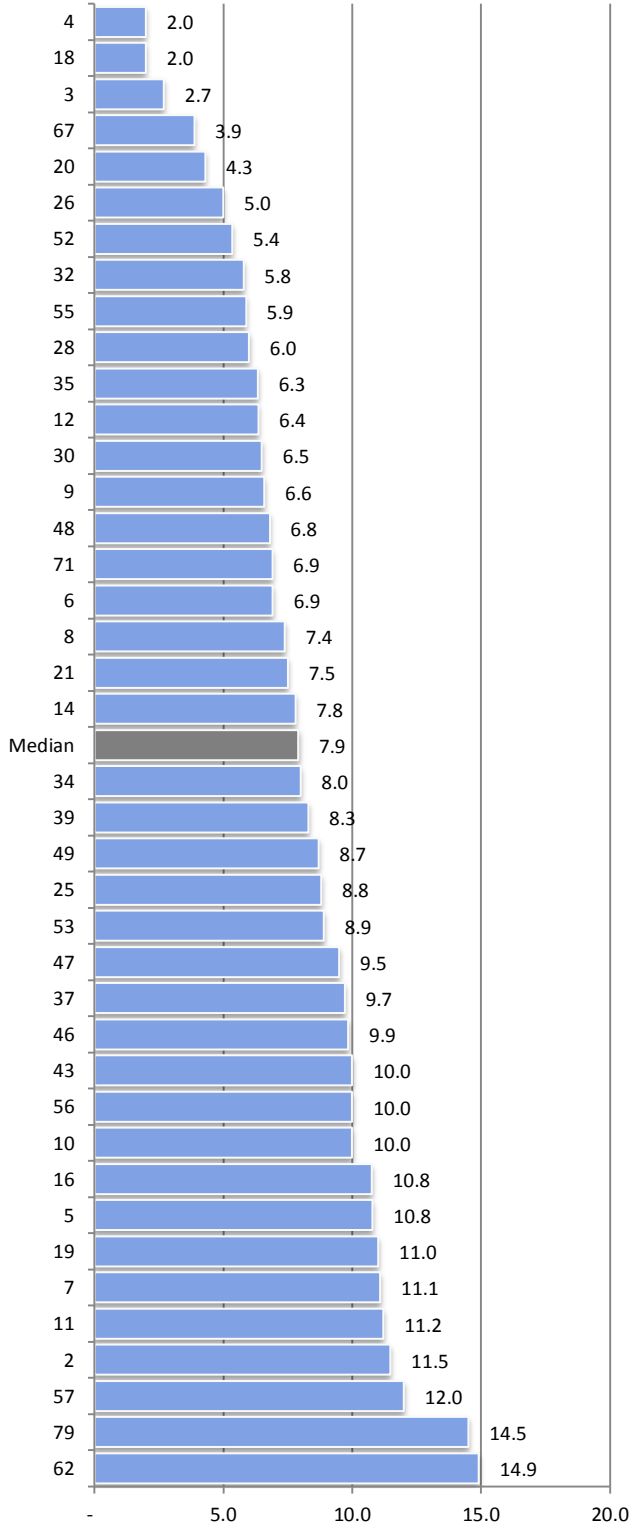
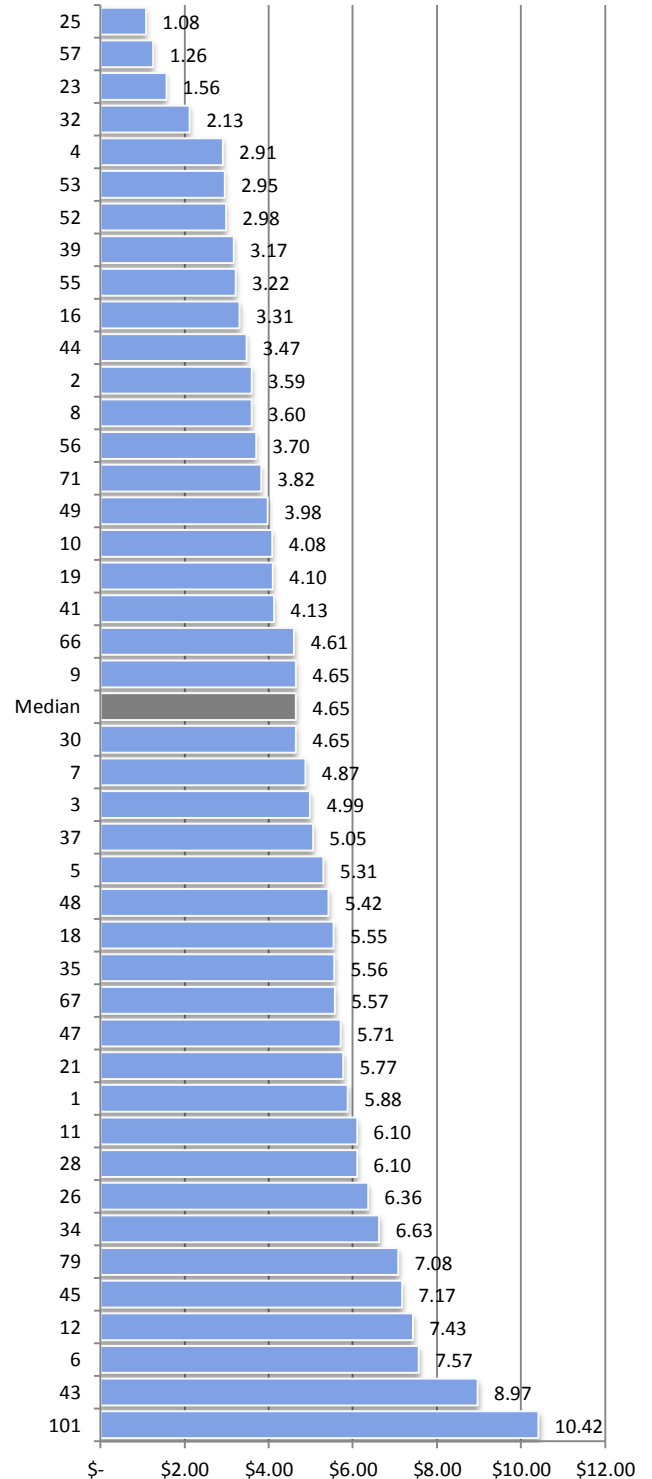


Figure 133  
Cost per Mile Operated

Adjusted for cost of living.



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Figure 134  
Cost per Rider

Adjusted for cost of living.

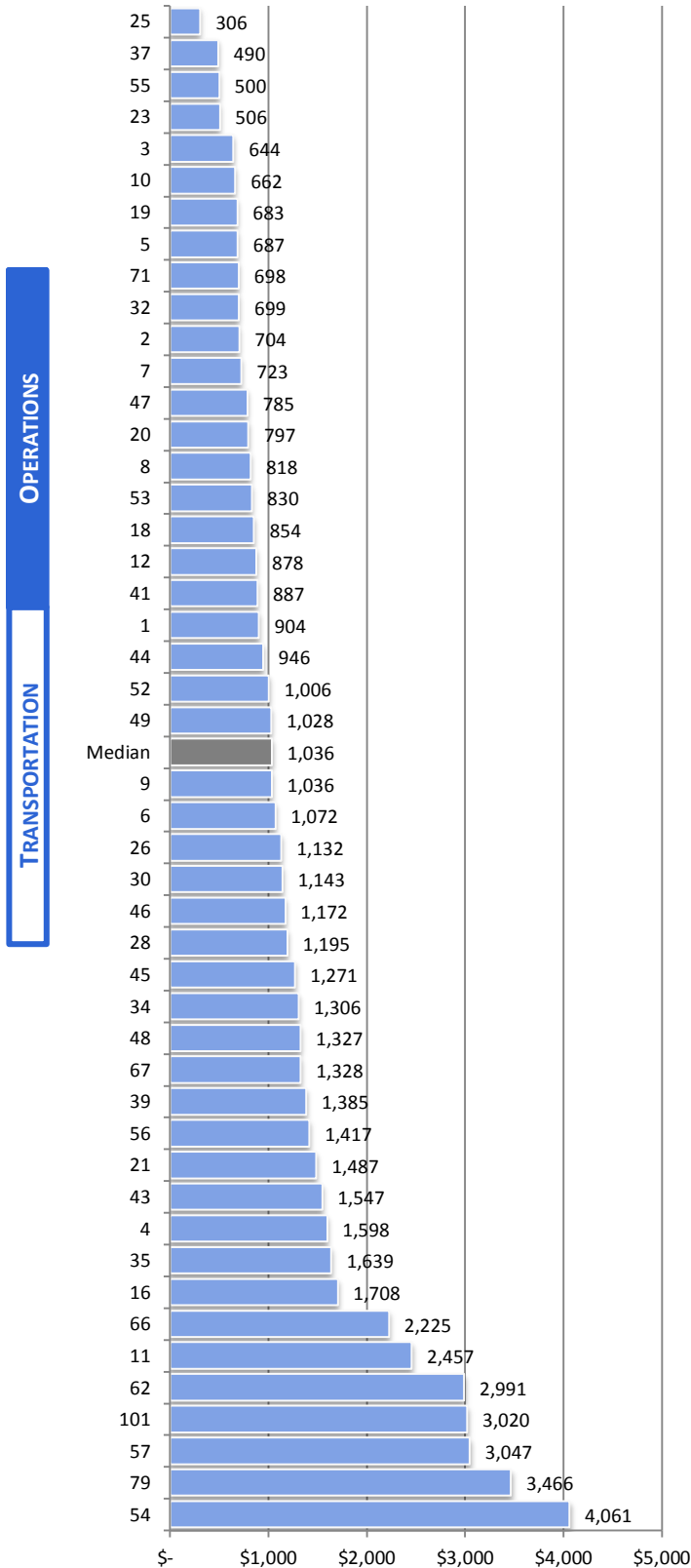


Figure 135  
Cost per Bus

Adjusted for cost of living.

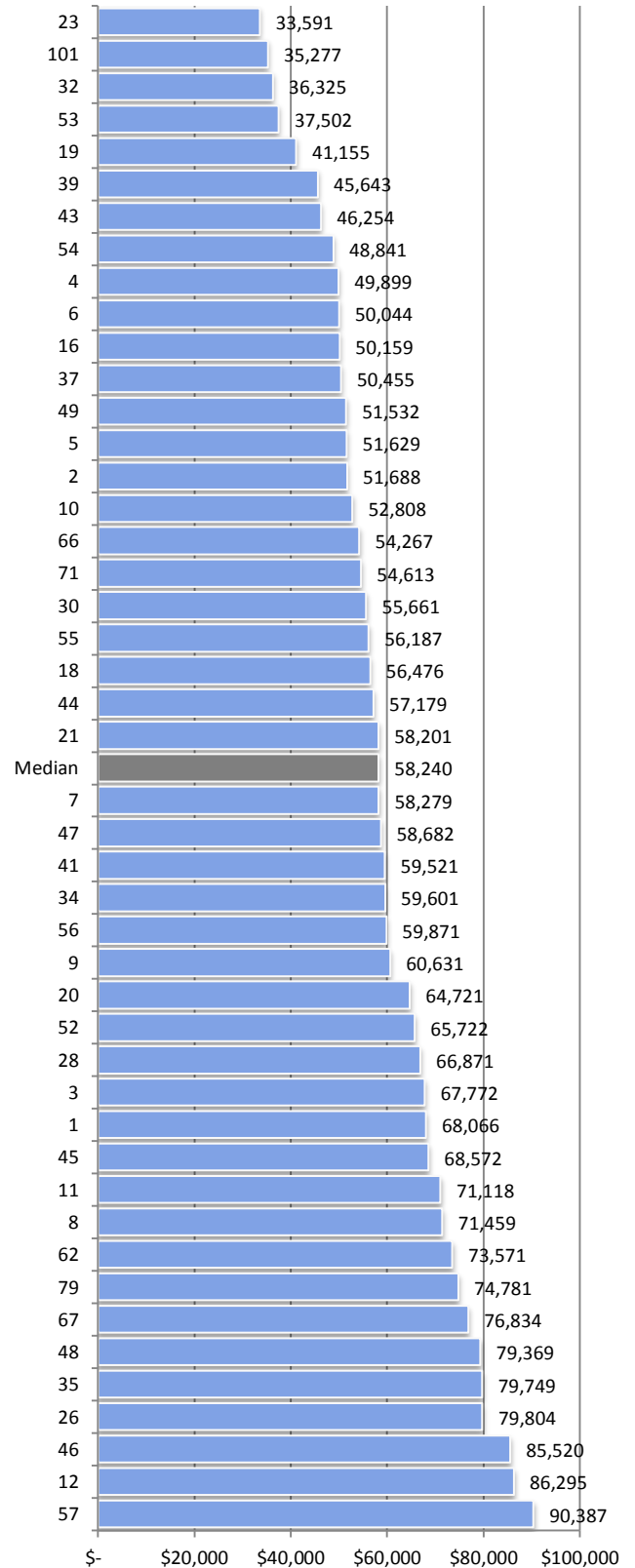




Figure 136  
On-Time Performance

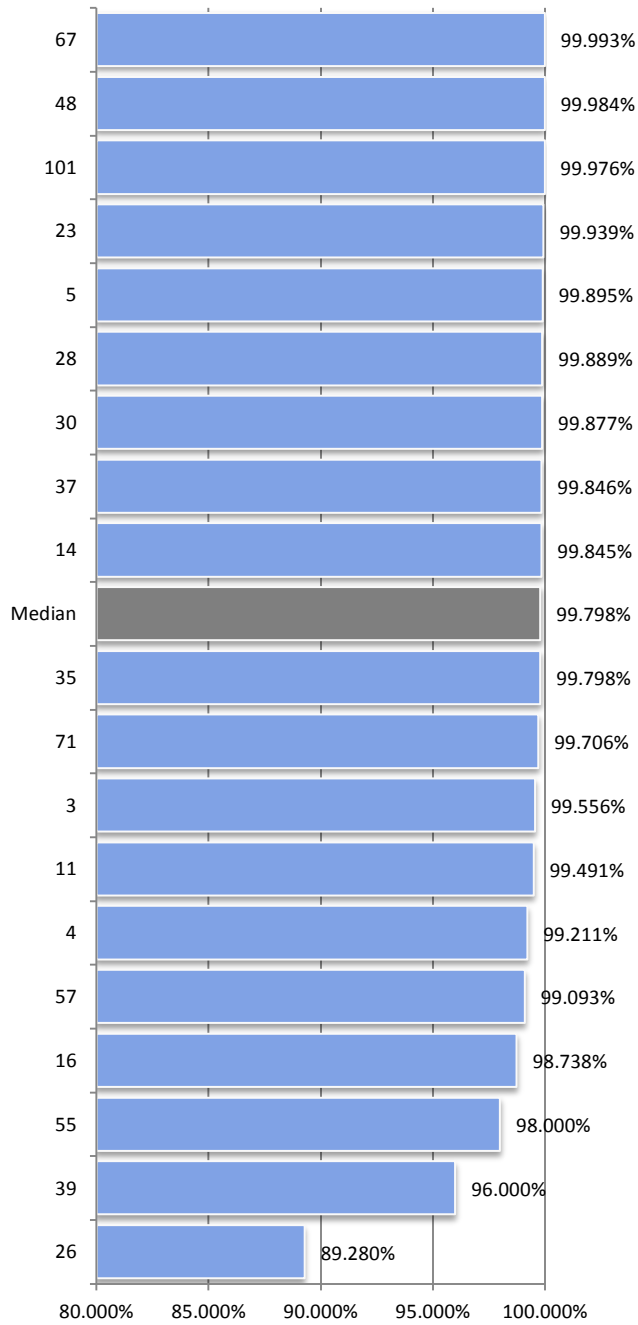
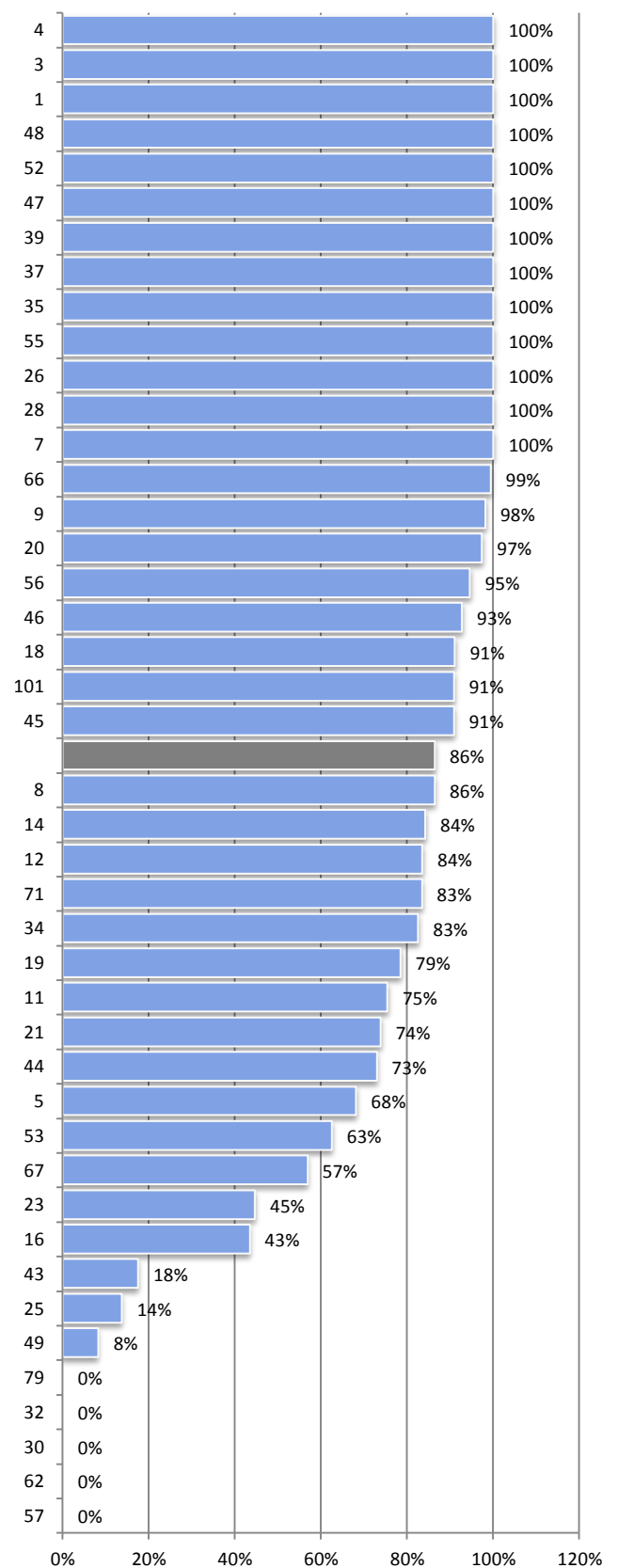


Figure 137  
Bus Equipment - GPS Tracking



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Figure 138  
Accidents - Miles between Accidents

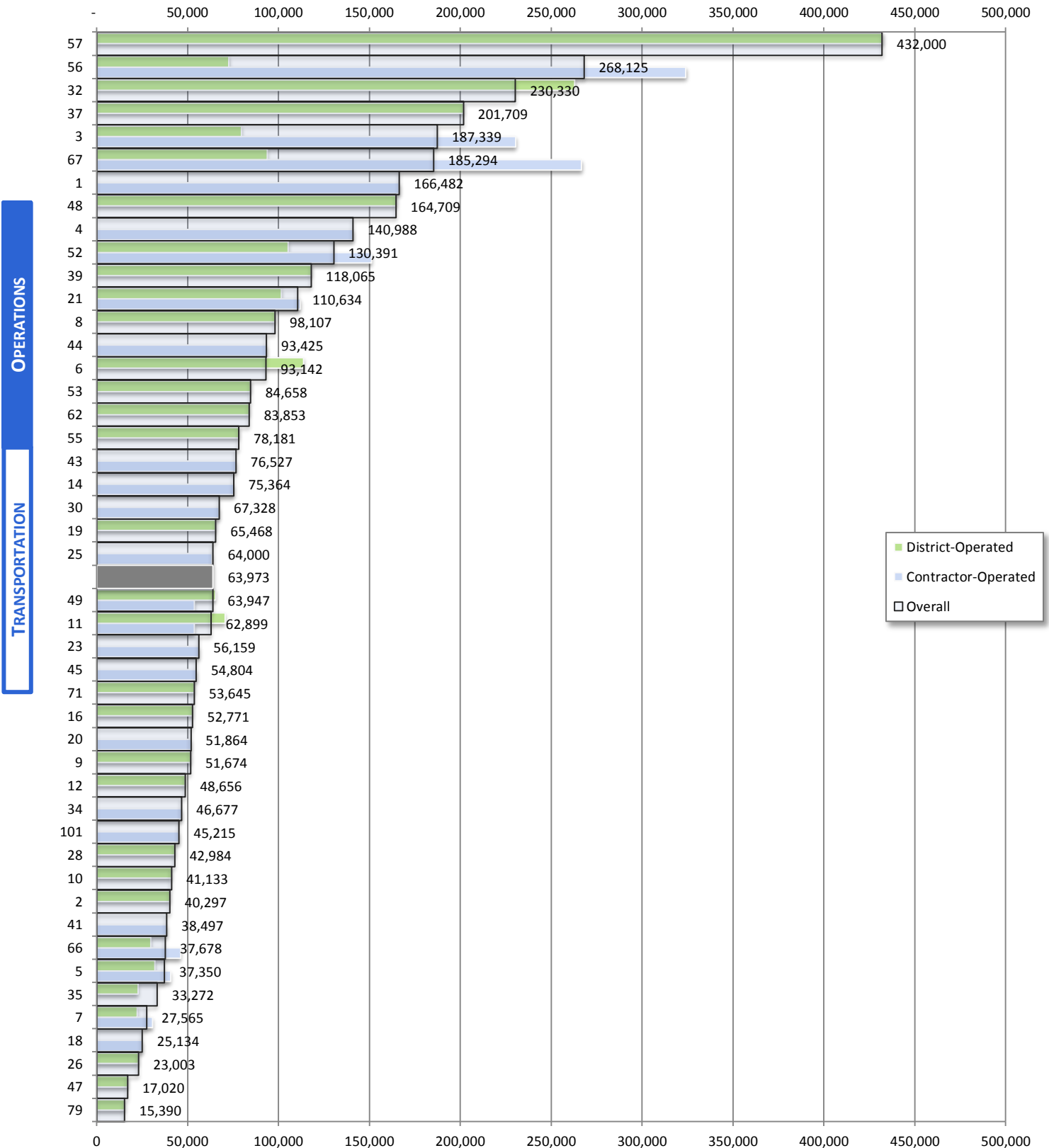


Figure 139  
Accidents - Miles between Preventable Accidents

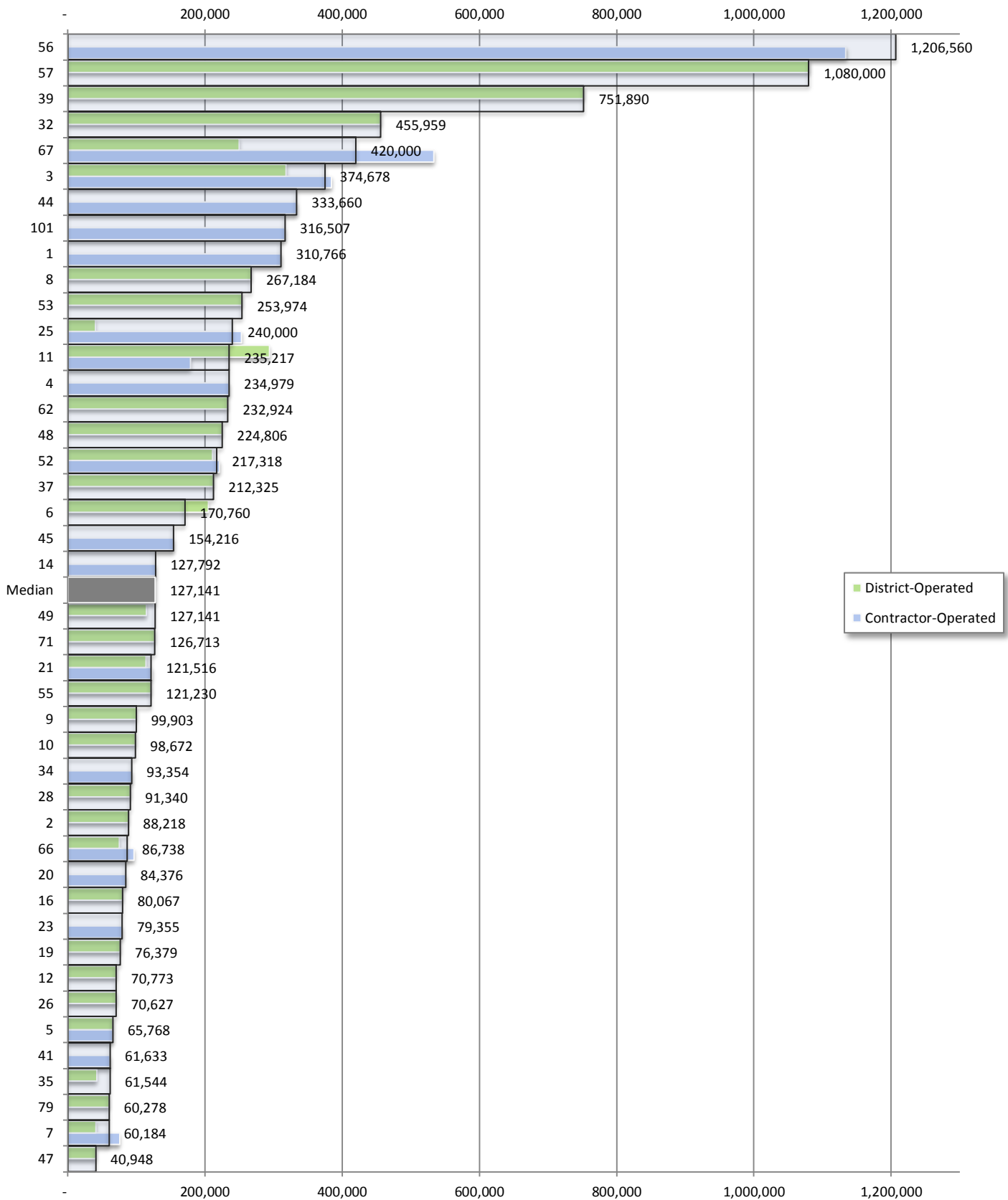


Figure 140  
Bus Fleet - Alternatively Fueled Buses

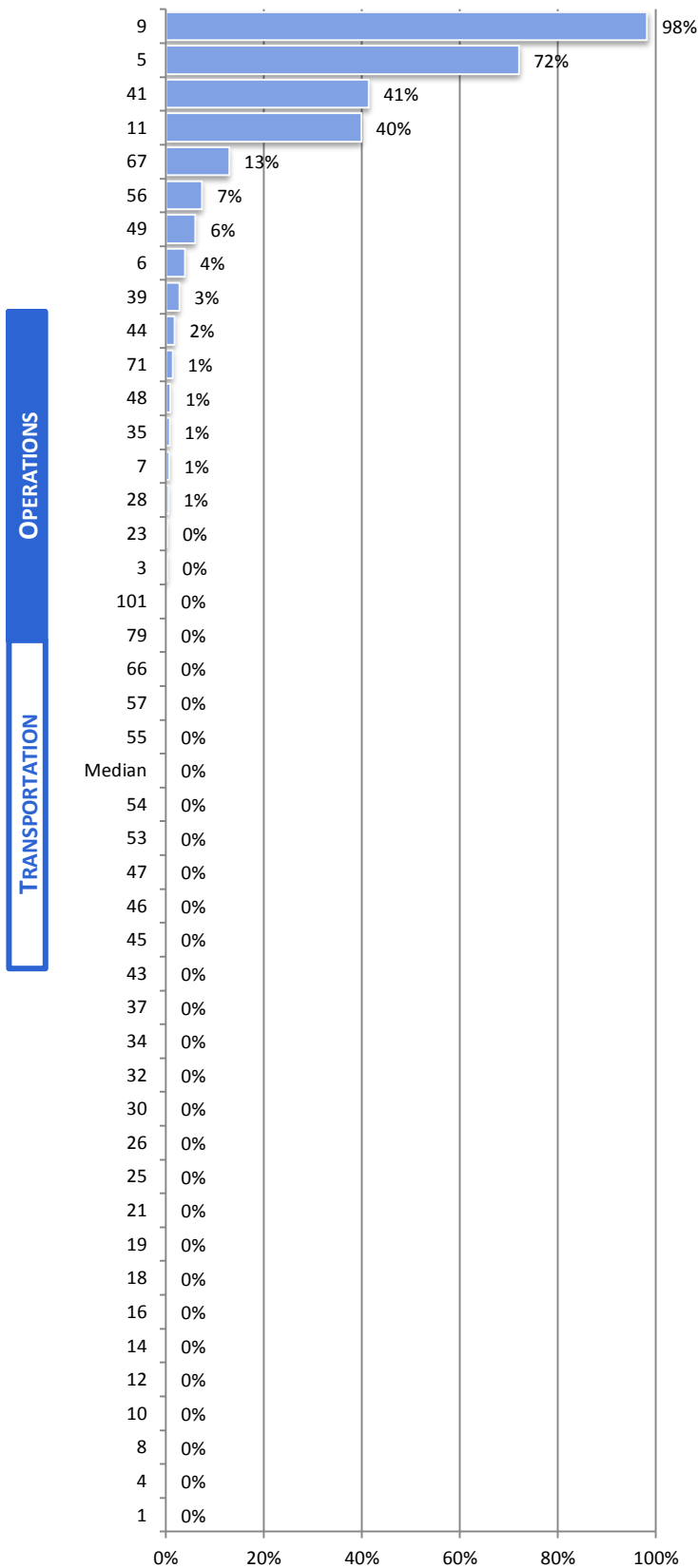


Figure 141  
Bus Fleet - Daily Buses as Percent of Total Buses

The inverse of this measure is the spare factor. This includes daily shuttles in addition to regular yellow buses.

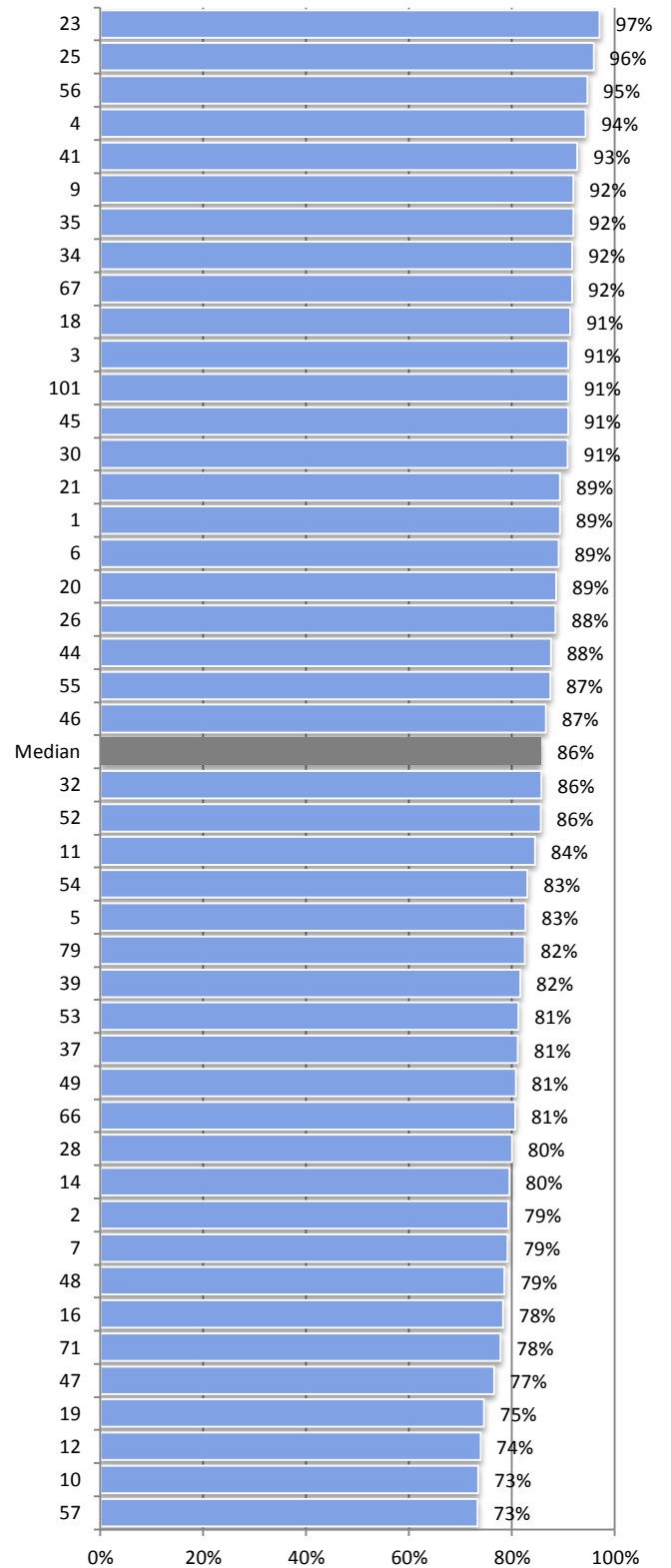


Figure 142  
 Bus Usage - Daily Runs per Bus

Increasing the number of daily runs per bus is a strategy to decrease costs and is achieved by establishing a tiered bell schedule that staggers the start and end times of the schools in the district so that each bus can serve multiple schools.

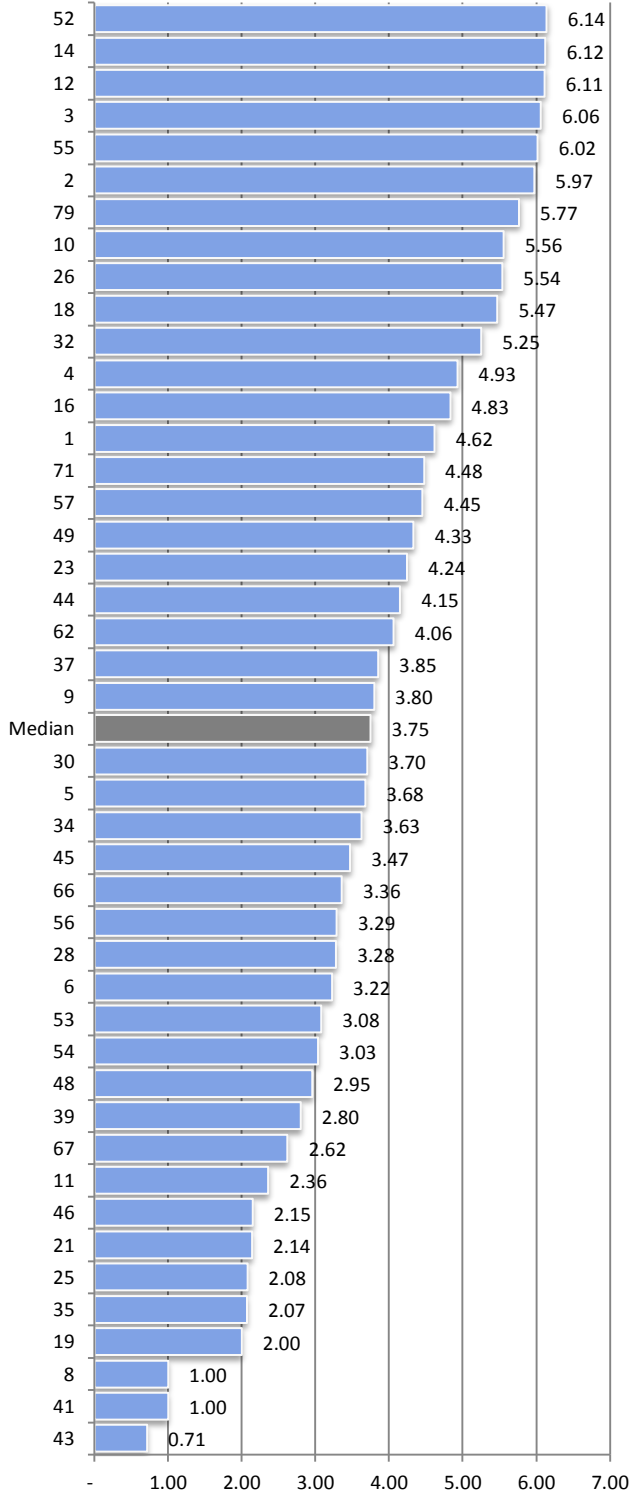


Figure 143  
 Bus Usage - Daily Seat Utilization

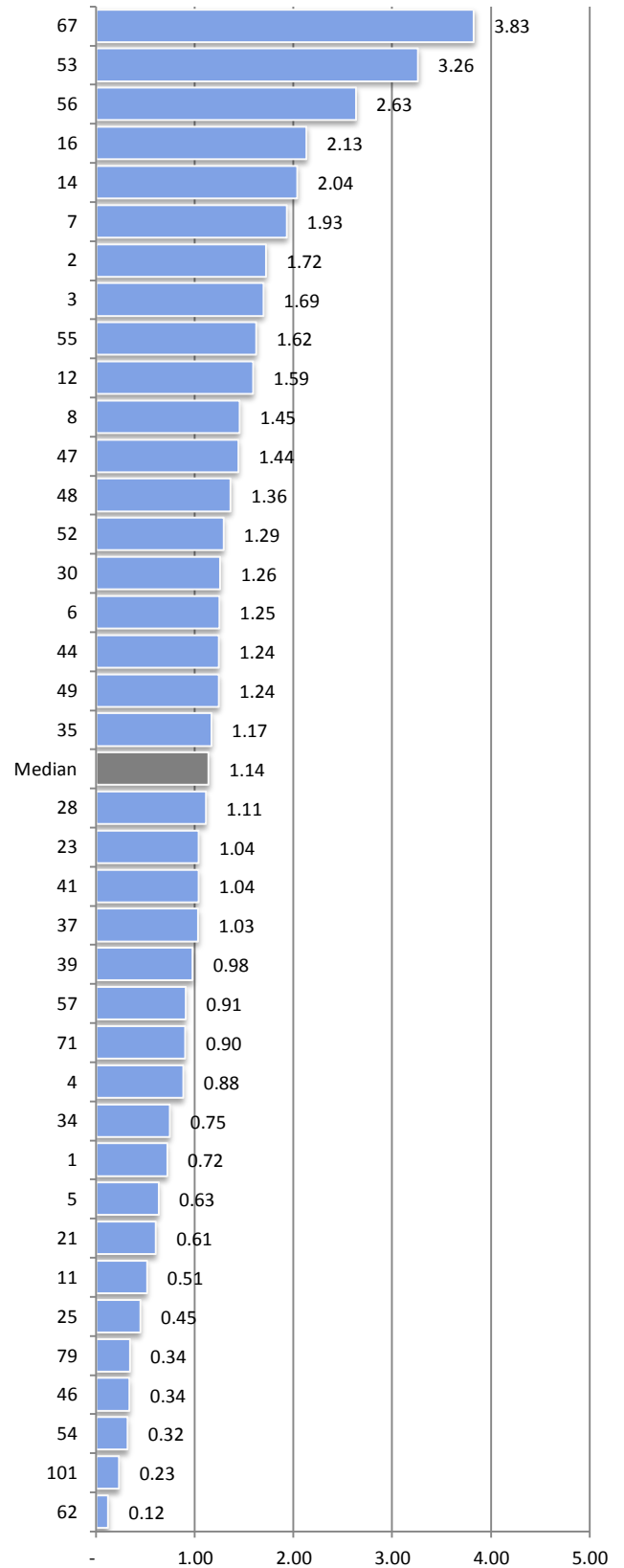


Figure 144  
 Fuel Cost as Percent of Retail – Diesel

Most districts use their purchasing power to negotiate discounts on fuel.

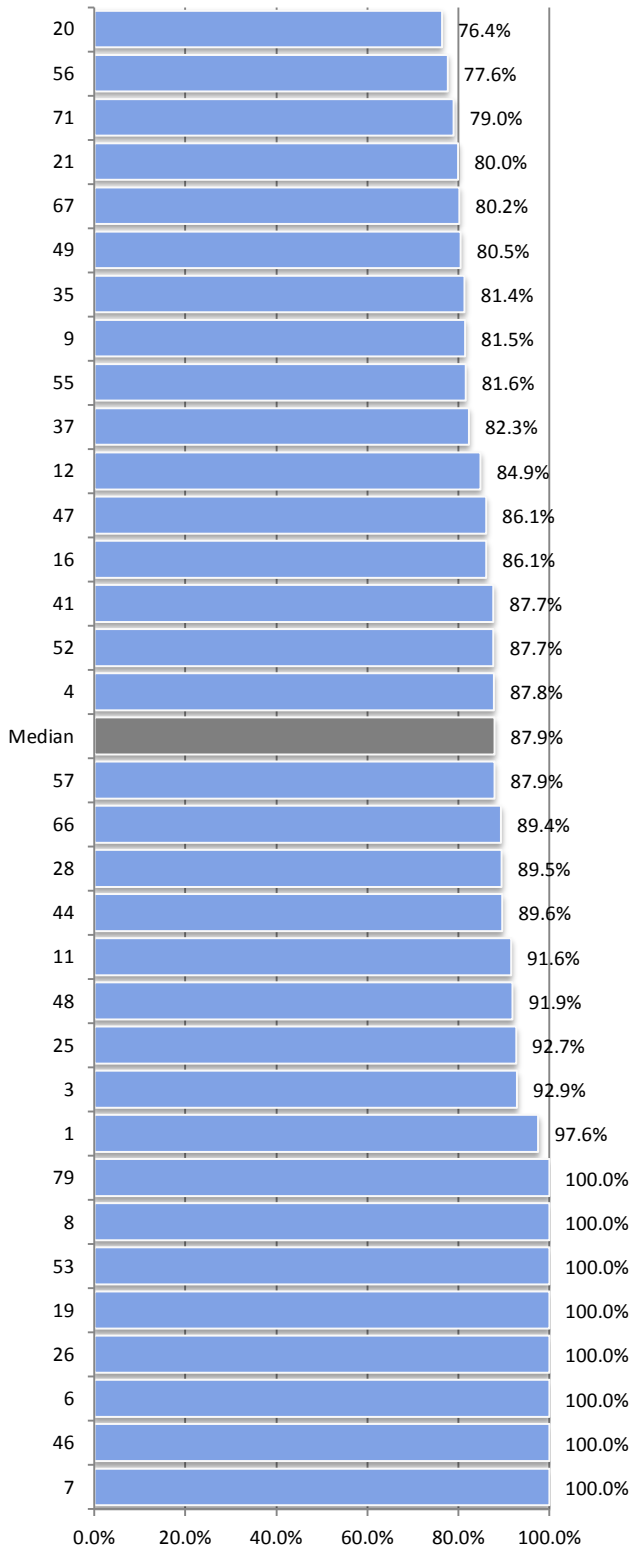


Figure 145  
 Fuel Cost as Percent of Retail – Gasoline

Most districts use their purchasing power to negotiate discounts on fuel.

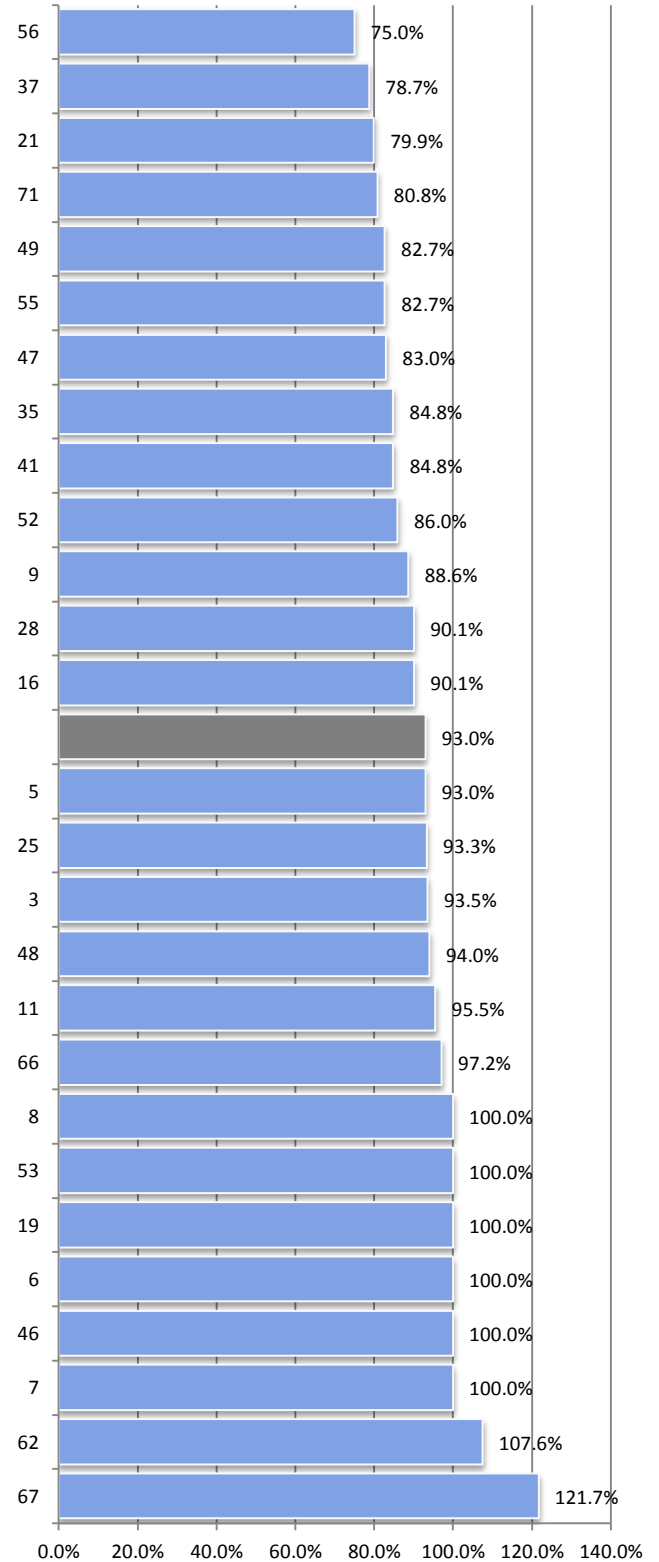


Figure 146  
Daily Ride Time - General Education

This is the estimated average daily ride time for a single trip (one-way).

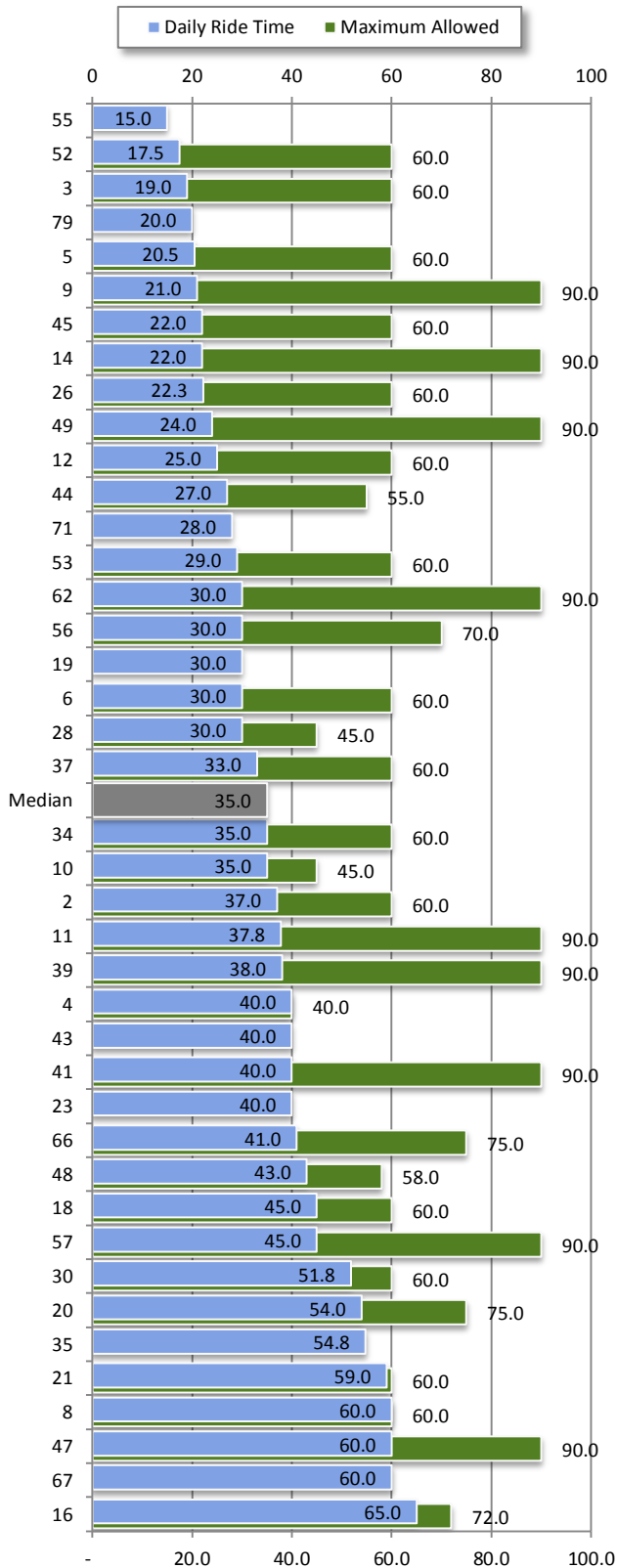
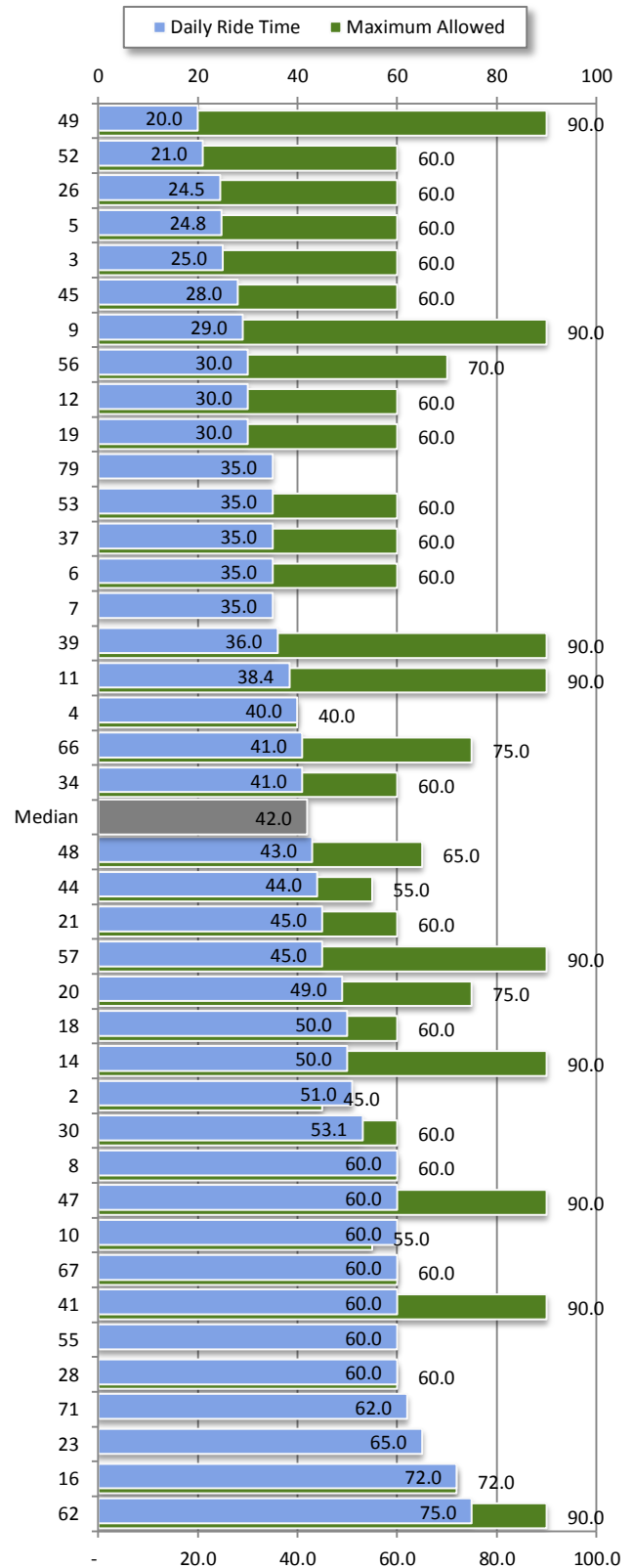


Figure 147  
Daily Ride Time - Special Education

This is the estimated average daily ride time for a single trip (one-way).



OPERATIONS  
TRANSPORTATION

# KPI DEFINITIONS

## Bus Fleet - Average Age of Fleet

### Importance

- Fleet replacement plans drive capital expenditures and on-going maintenance costs.
- Younger fleets require greater capital expenditures but reduced maintenance costs
- A younger fleet will result in greater reliability and service levels.
- An older fleet requires more maintenance expenditure but reduces capital expenses.

### Factors that Influence

- Formal district-wide capital replacement budgets and standards
- Some districts may operate in climates that reduce bus longevity
- Some districts may be required to purchase cleaner burning or expensive alternative-fueled buses
- Availability of state or local bond funding for school bus replacement

**Calculation** Average age of bus fleet.

## Cost per Mile Operated

**Importance** This is a basic measurement of the cost efficiency of a pupil transportation program. It allows a baseline comparison across districts that will inevitably lead to further analysis based on a district's placement. A greater than average cost per mile may be appropriate based on specific conditions or program requirements in a particular district. A less than average cost per mile may indicate a well-run program or favorable conditions in a district.

### Factors that Influence

- Driver wage and benefit structure; labor contracts
- Cost of the fleet, including fleet replacement plan, facilities, fuel, insurance and maintenance also play a role in the basic cost
- Effectiveness of the routing plan
- Ability to use each bus for more than one route or run each morning and each afternoon
- Bell schedule
- Transportation department input in proposed bell schedule changes
- Maximum riding time allowed and earliest pickup time allowed
- Type of programs served will influence costs

**Calculation** Total direct cost *plus* total indirect cost *plus* total contractor cost of bus services *divided by* total miles operated.

## Cost per Rider

**Importance** This is a basic measurement of the cost efficiency of a pupil transportation program. It allows a baseline comparison across districts that will inevitably lead to further analysis based on a district's placement.

### Factors that Influence

- Driver wage and benefit structure; labor contracts
- Cost of the fleet, including fleet replacement plan, facilities, fuel, insurance, and maintenance

- Effectiveness of the routing plan
- Ability to use each bus for more than one route or run each morning and each afternoon
- Bell schedule
- Transportation department input in proposed bell schedule changes
- Maximum riding time allowed and earliest pickup time allowed
- Type of programs served will influence costs

**Calculation** Total direct cost *plus* total indirect cost *plus* total contractor cost of bus services *divided by* number of riders.

## Cost per Bus

**Importance** This is a basic measurement of the cost efficiency of a pupil transportation program.

### Factors that Influence

- Driver wage and benefit structure; labor contracts
- Cost of the fleet, including fleet replacement plan, facilities, fuel, insurance, and maintenance
- Effectiveness of the routing plan
- Ability to use each bus for more than one route or run each morning and each afternoon
- Bell schedule
- Transportation department input in proposed bell schedule changes
- Maximum riding time allowed and earliest pickup time allowed
- Type of programs served will influence costs

**Calculation** Total direct transportation costs *plus* total indirect transportation costs *divided by* total number of buses (contractor and district).

## On-Time Performance

**Importance** This measure refers to the level of success of the transportation service remaining on the published arrival schedule. Late arrival of students at schools causes disruption in classrooms and may preclude some students from having school-provided breakfast.

### Factors that Influence:

- Automobile traffic
- Accident
- Detour
- Weather
- Increased ridership
- Mechanical breakdown
- Unrealistic scheduling

**Calculation** One minus the sum of bus runs that arrived late (contractor and district) *divided by* the total number of bus runs (contractor and district) over two.

## Bus Equipment - GPS Tracking

**Importance** GPS tracking greatly expands the capacity for routing management and reporting.

**Calculation** Number of buses with GPS tracking *divided by* total number of buses.



### Accidents – Miles between Accidents

#### Importance

- Whether a district provides internal service or contracts for its service, student safety is a primary concern for every student transportation organization.
- Tracking accidents by type allows for trending and designing specific training programs to reduce/prevent trends noted.
- Accident awareness and prevention can reduce liability exposure to a district

#### Factors that Influence

- Definition of accident and injury as defined by the survey vs. district definition
- Preventive accident training programs
- Experience of driving force

**Calculation** Total number of transportation accidents (contractor and district) *divided by* total number of miles driven (contractor and district).

### Accidents – Miles between Preventable Accidents

#### Importance

- Whether a district provides internal service or contracts for its service, student safety is a primary concern for every student transportation organization.
- Tracking accidents by type allows for trending and designing specific training programs to reduce/prevent trends noted.
- Accident awareness and prevention can reduce liability exposure to a district

#### Factors that Influence:

- Definition of accident and injury as defined by the survey vs. district definition
- Preventive accident training programs
- Experience of driving force

**Calculation** Total number of transportation accidents (contractor and district) that were preventable *divided by* total number of miles driven (contractor and district).

### Bus Fleet – Alternately-Fueled Buses

**Calculation** Number of alternately-fueled buses *divided by* total number of buses.

**Importance** Bus fleets using alternative fuels tend to be more eco-friendly, and depending on fuel prices they can be a cheaper alternative.

### Bus Fleet – Daily Buses as Percent of Total Buses

#### Importance

- A goal of a well-run transportation department is to procure only the number of buses actually needed on a daily basis, *plus* an appropriate spare bus ratio.
- Maintaining or contracting unneeded buses is expensive and unnecessary as these funds could be used in the classroom.

#### Factors that Influence

- Historical trends of the number of students transported
- Enrollment projections and their impact on transported programs
- Changes in transportation eligibility policies
- Spare bus factor needed
- Age of fleet

**Calculation** Number of daily buses *divided by* total number of buses.

### Bus Usage – Daily Runs per Bus

#### Importance

- There is a positive correlation between the number of daily runs a bus makes and operating costs.
- Efficiencies are gained when one bus is used multiple times in the morning and again in the afternoon.
- Using one bus to do the work of two buses saves dollars.

#### Factors that Influence

- District-managed or contractor transportation
- Tiered school bell times
- Transportation department input in proposed bell schedule changes
- Bus capacities
- District guidelines on maximum ride time
- District geography
- Minimum/shortened/staff development day scheduling
- Effectiveness of the routing plan
- Types of transported programs served

**Calculation** Total number of daily bus runs *divided by* the total number of buses used for daily yellow bus service (contractor and district).

### Bus Usage – Daily Seat Utilization

#### Importance

- This is a basic measurement of the cost efficiency of a pupil transportation program.
- Maximizing seat utilization reduces the number of buses needed.
- This data provides a baseline comparison across districts that will inevitably lead to further analysis based on a district's placement.

#### Factors that Influence

- Effectiveness of the routing plan
- Ability to use each bus for more than one run each morning and each afternoon
- Bell schedule
- Type of programs served

**Calculation** Average daily ridership for elementary, middle and high school *divided by* total number of passenger seats available for all daily buses used in the yellow bus home-to-school program (both district-operated and contractor-operated).

### Fuel Cost as Percent of Retail – Diesel

**Importance** Fuel discounts reflect the degree to which the district leverages its buying power when negotiating fuel procurements.

**Calculation** Per-gallon price paid by the district for diesel *divided by* the per-gallon price of diesel at retail.

### Fuel Cost as Percent of Retail – Gasoline

**Importance** Fuel discounts reflect the degree to which the district leverages its buying power when negotiating fuel procurements.

**Calculation** Per-gallon price paid by the district for gasoline *divided by* the per-gallon price of gasoline at retail

### Daily Ride Time – General Education

**Importance** Cost efficiency must be balanced with service considerations. Districts wish to maximize the loading of their buses but hopefully not at the expense of an overly long bus ride for the students.

**Factors that Influence:**

- Bus capacities
- State or district or state guidelines on maximum ride time and earliest pick up time
- District geography, attendance boundaries and zones
- Programs transported

**Calculation** Average one-way (single trip) daily ride time in minutes - General Education

**Daily Ride Time – Special Education**

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**Importance** Cost efficiency must be balanced with service considerations. Districts wish to maximize the loading of their buses but hopefully not at the expense of an overly long bus ride for the students.

**Factors that Influence**

- Bus capacities
- State or district or state guidelines on maximum ride time and earliest pick up time
- District geography, attendance boundaries and zones
- Programs transported

**Calculation** Average one-way (single trip) daily ride time in minutes - Students with Disabilities

# HUMAN RESOURCES

The measures in this section include such districtwide indicators as **Teacher Retention Rate** and **Employee Separation Rate**, as well as indicators that are focused more narrowly on the operation of the district's human resources department, such as **HR Cost per District FTE**, **HR Cost per \$100k Revenue**, **Exit Interview Completion Rate**, and **Substitute Placement Rate**. In addition, there are several measures that can be used to benchmark a district's health benefits and retirement benefits, including **Health Benefits Enrollment Rate** and **Health Benefits Cost per Enrolled Employee**.

The factors that influence these measures and that can guide improvement strategies may include:

- Identification of positions to be filled
- Diverse pool of qualified applicants
- Use of technology for application-approval process
- Site-based hiring vs. central-office hiring process
- Availability of interview team members
- Effectiveness of recruiting efforts
- Salary and benefits offered
- Employee satisfaction and workplace environment
- Availability of skills in local labor market
- Personnel policies and practices



## *LIST OF KPIS IN HUMAN RESOURCES*

Below is the complete list of Power Indicators, Essential Few, and other key indicators in Human Resources. Indicators in bold are those included in this report. (See "KPI Definitions" at the back of this section for more complete descriptions of these measures.) All other KPIs are available to CGCS members on the web-based ActPoint® KPI system.

### POWER INDICATORS

**Substitute Placement Rate**  
**Teacher Absences per Teacher**  
**Teacher Retention - Average for 1-5 Years**  
 Teacher Vacancies on First Day of School

### ESSENTIAL FEW

**Exit Interview Completion Rate**  
 HR Actions - Accuracy Rate  
 HR Actions - Days to Complete  
**Substitute Placements with A BA/BS or Higher**  
**Teacher Retention - Remaining After 1 Year**  
**Teacher Retention - Remaining After 2 Years**  
**Teacher Retention - Remaining After 3 Years**  
**Teacher Retention - Remaining After 4 Years**  
**Teacher Retention - Remaining After 5 Years**  
 Teachers Highly Qualified In All Assignments  
 Teachers with National Board Certificate  
 Time to Fill Vacancies - Instructional Support  
 Time to Fill Vacancies - Non-School Exempt  
 Time to Fill Vacancies - Non-School Non-Exempt  
 Time to Fill Vacancies - School-Based Exempt  
 Time to Fill Vacancies - School-Based Non-Exempt  
 Time to Fill Vacancies - Teachers

### OTHER KEY INDICATORS

**Employee Relations - Discrimination Complaints per 1,000 Employees**  
**Employee Relations - Misconduct Investigations per 1,000 Employees**  
**Employee Separation Rate**  
**Employee Separation Rate - Instructional Support Staff**  
**Employee Separation Rate - Non-School Exempt Staff**  
**Employee Separation Rate - Non-School Non-Exempt Staff**  
**Employee Separation Rate - School-Based Exempt Staff**  
**Employee Separation Rate - School-Based Non-Exempt Staff**  
**Employee Separation Rate - Teachers**  
**Health Benefits Cost Per Enrolled Employee**  
 Health Benefits Cost Per Enrolled Employee - Fully Insured Districts  
 Health Benefits Cost Per Enrolled Employee - Self-Insured Districts  
 Health Benefits Enrollment Rate  
**HR Cost per \$100K Revenue**  
**HR Cost per District FTE**  
 HR Staff - Benefits  
 HR Staff - Compensation  
 HR Staff - Employee Records and Staffing  
 HR Staff - Employee Relations  
 HR Staff - Employee Service Center  
 HR Staff - HR Information Systems  
 HR Staff - Labor Relations  
 HR Staff - Payroll  
 HR Staff - Recruitment  
 HR Staff - Risk Management  
 HR Staff - Training and Development  
 HR Staff per HR Senior Manager  
 Retirement Health Benefits Cost Per Enrollee  
 Retirement Health Benefits Cost Per Enrollee - Fully Insured Districts  
 Retirement Health Benefits Cost Per Enrollee - Self-Insured Districts

# FEATURED ANALYSIS

Figure 148

## Teacher Retention – Quartile Analysis of Employment Length

This chart shows quartiles in teacher retention rates based on how many years ago each teacher was hired. (This can include new teachers as well as experienced teachers.) There are sharp drops in retention from one year to two years, and two years to three years. At year four and five, teacher retention tends to flatten.

Note that each year represents a different group of teachers, i.e., this should not be interpreted as “longitudinal” data. Rather, it is a snapshot of all current teachers that were hired five or fewer years ago.

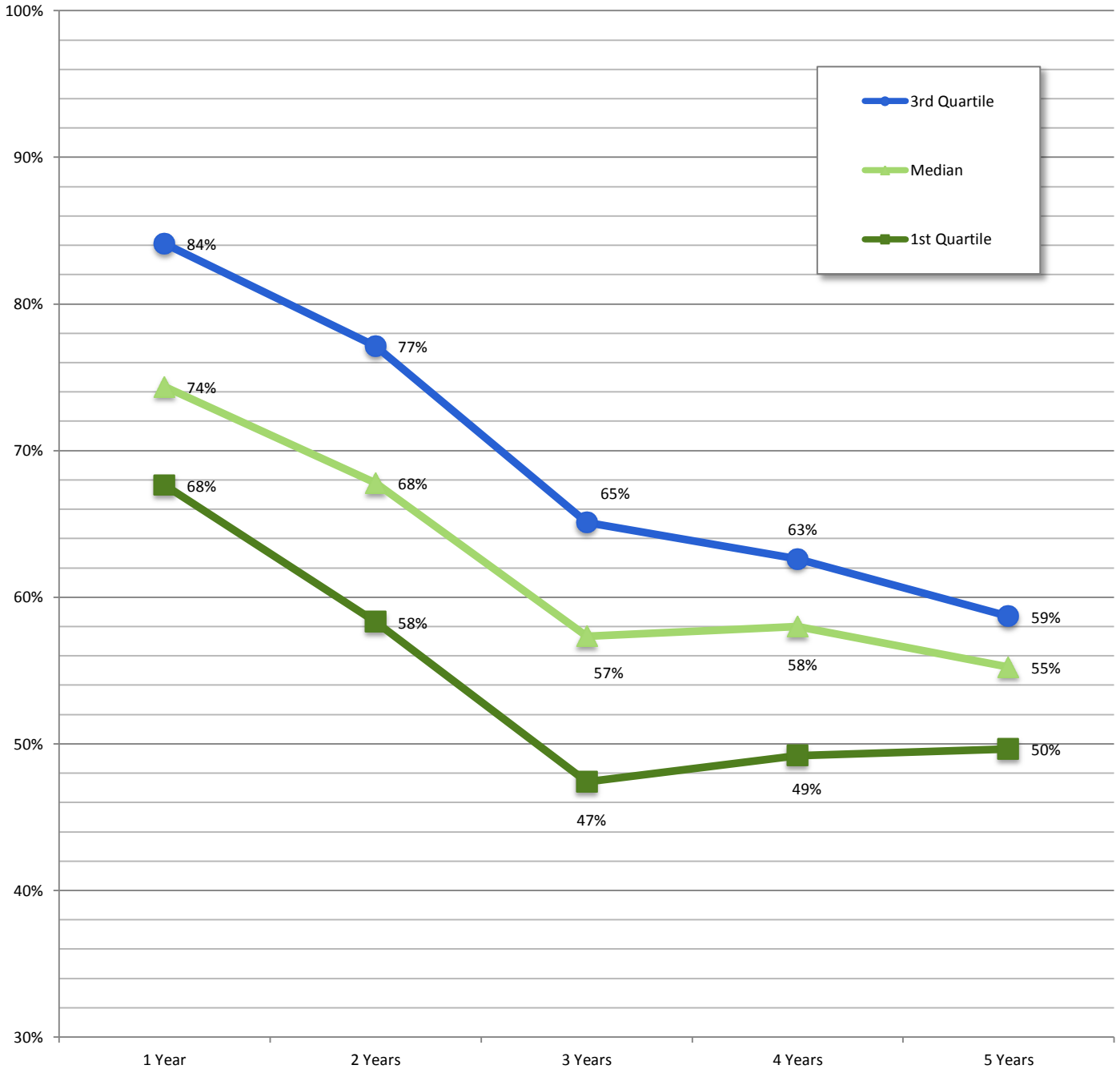


Figure 149

Teacher Retention – Variability across Employment Length Categories

This chart is intended to show the variability of teacher retention rates across a five-year span. Some districts have very consistent teacher retention rates from one year to the next—these districts show a progression from first year teacher retention rate (the widest bar in this chart) to the fifth-year teacher retention rate (the narrowest bar in this chart). Conversely, other districts have more erratic trends from one class of teachers (i.e., the group of teachers that were hired in the same year) to the next class of teachers.

Note that each year represents a different group of teachers based on how many years ago they were hired. This is not “longitudinal” data. The ordering of districts on this chart is by overall average retention over the five teacher classes.

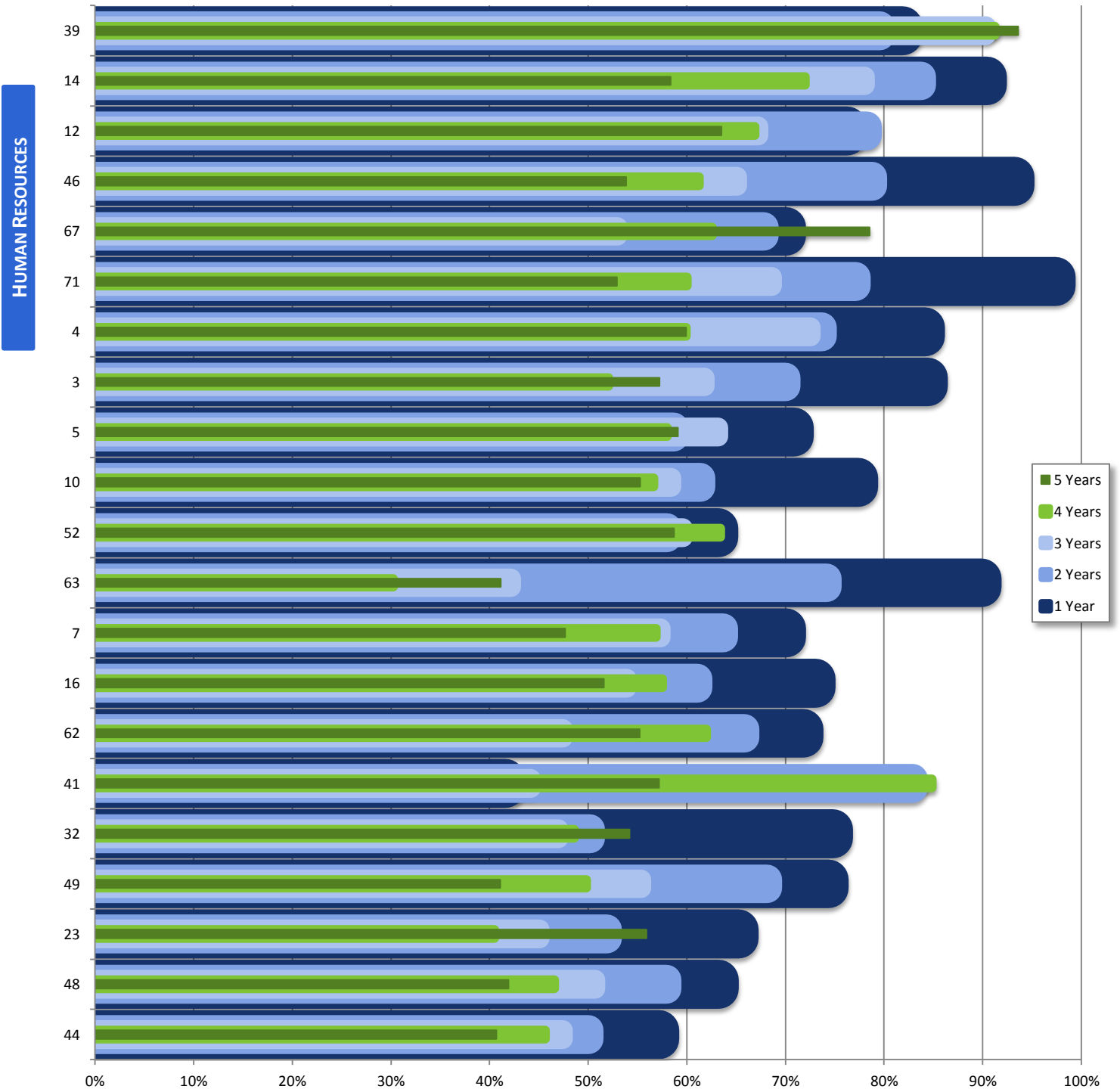


Figure 150  
**Employee Separation Rate – Quartiles by Employee Category**

This chart shows the quartiles of separation rates in the various employee categories. It is sorted from left to right by the median value. Exempt and non-exempt are employee categories.



HUMAN RESOURCES

# DATA DISCOVERY

Figure 151  
Teacher Retention - Teachers Hired 1 Year Ago

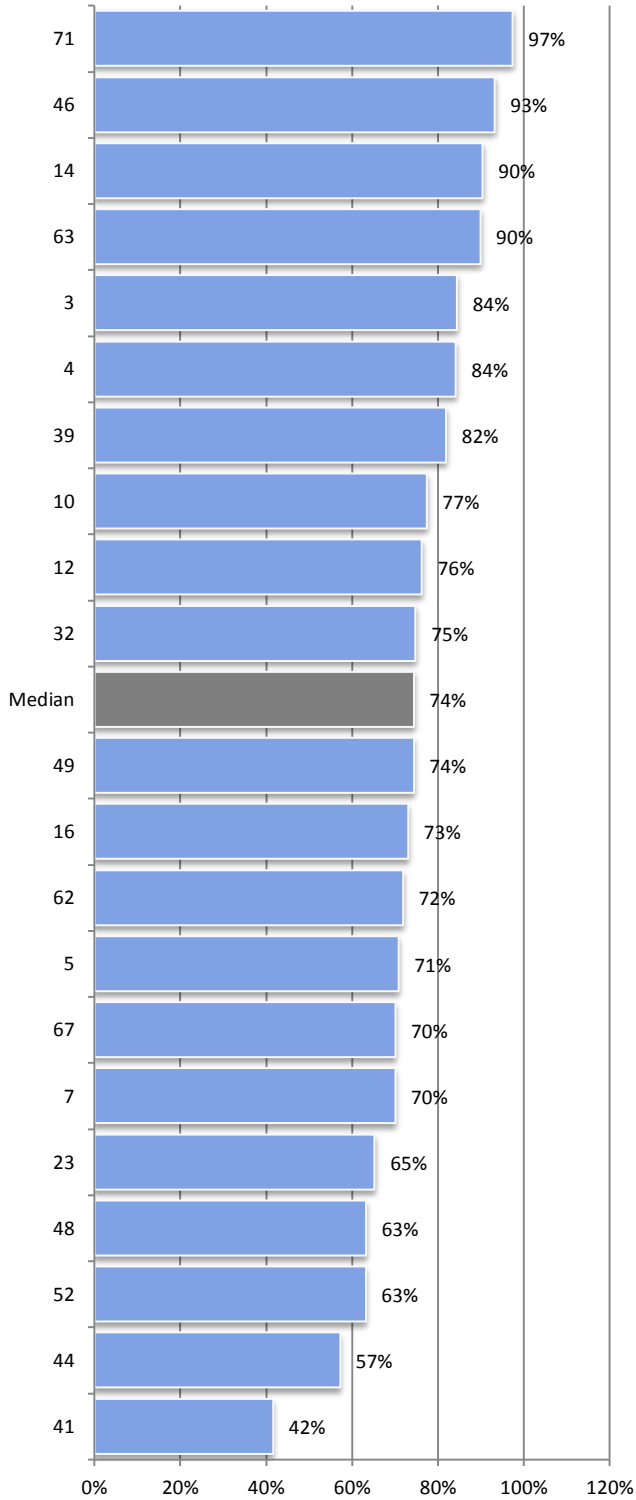
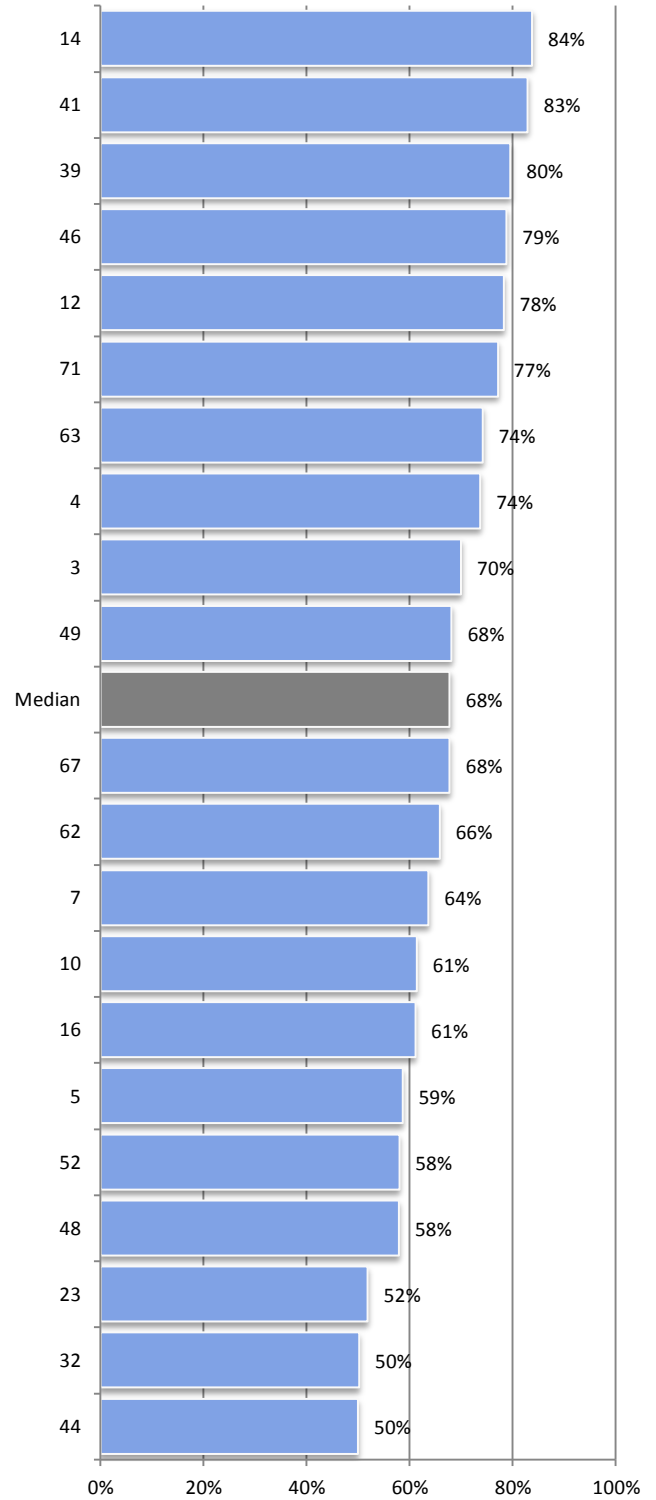


Figure 152  
Teacher Retention - Teachers Hired 2 Years Ago



HUMAN RESOURCES



Figure 153  
Teacher Retention - Teachers Hired 3 Years Ago

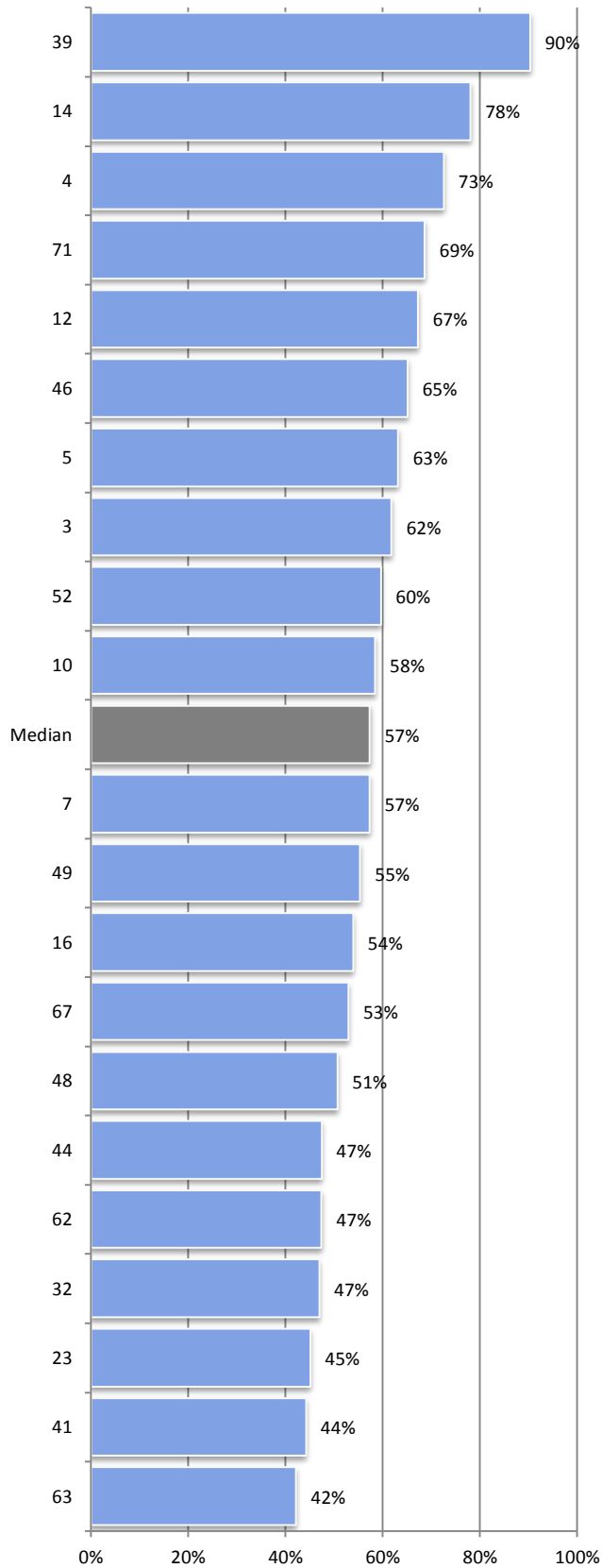
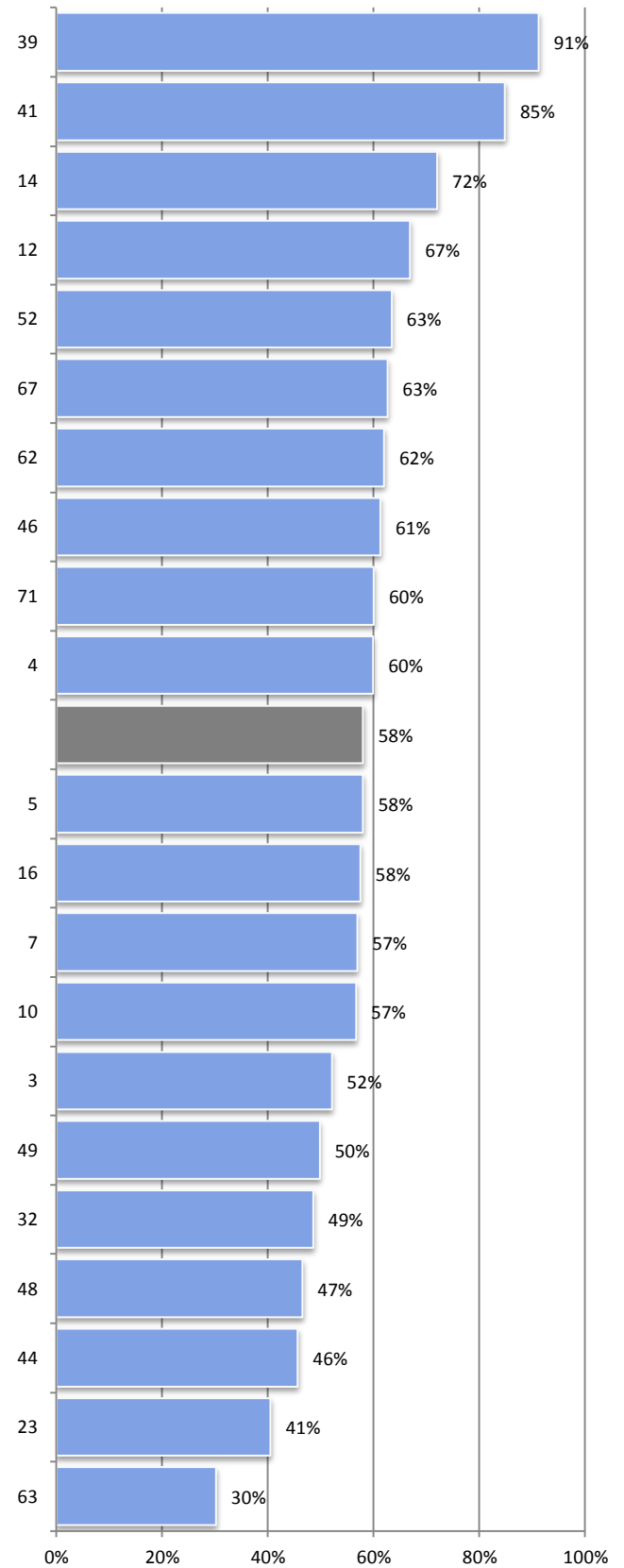


Figure 154  
Teacher Retention – Teachers Hired 4 Years Ago



HUMAN RESOURCES

Figure 155  
Teacher Retention – Teachers Hired 5 Years Ago

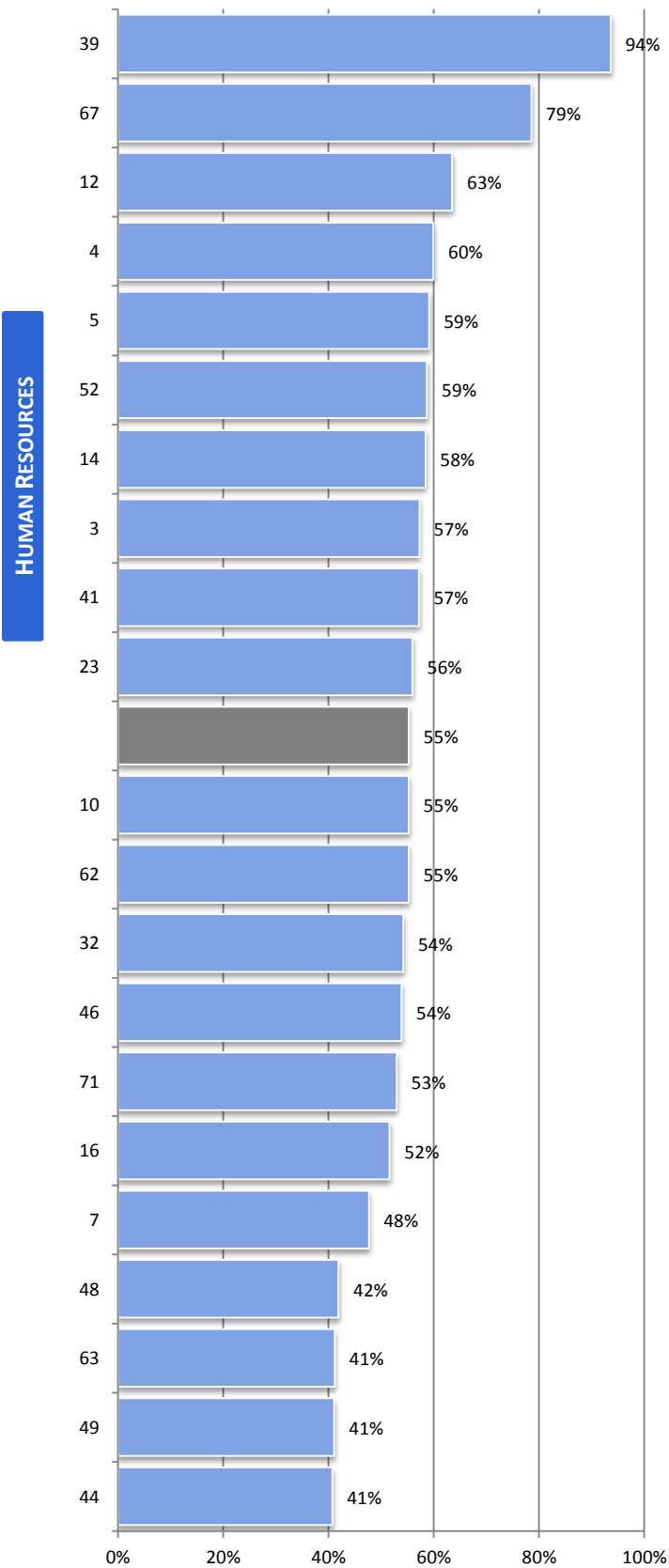


Figure 156  
Substitute Placement Rate

When a teacher is absent from the classroom, a substitute teacher is assigned to fill in.

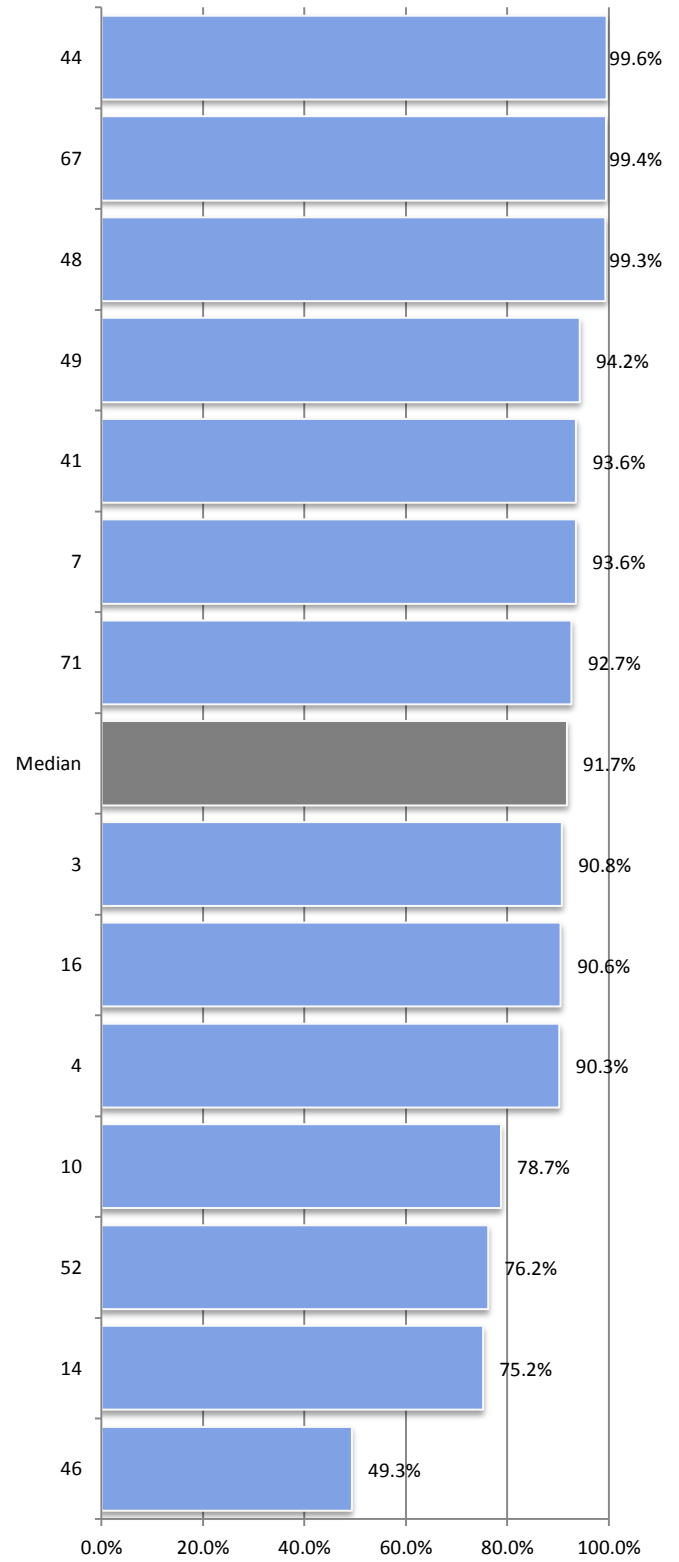


Figure 157  
Substitute Placements with BA/BS or Higher

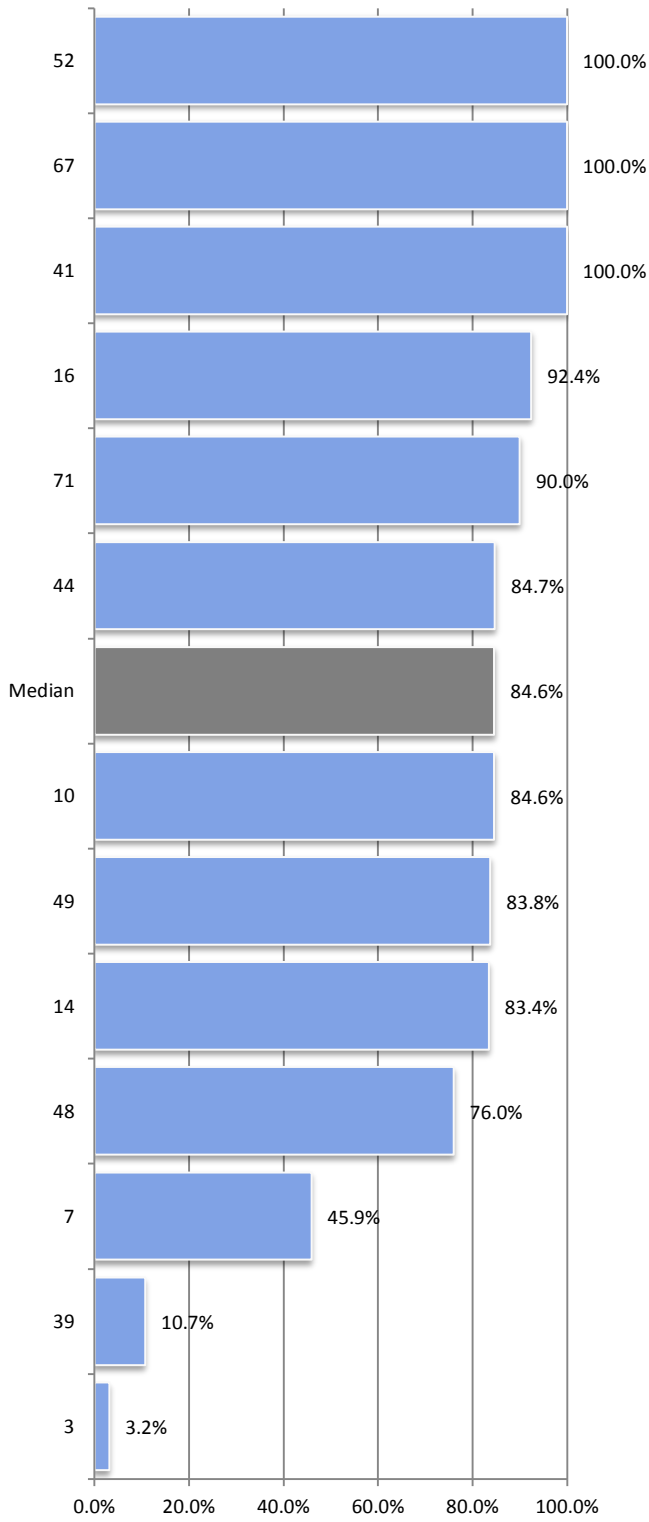
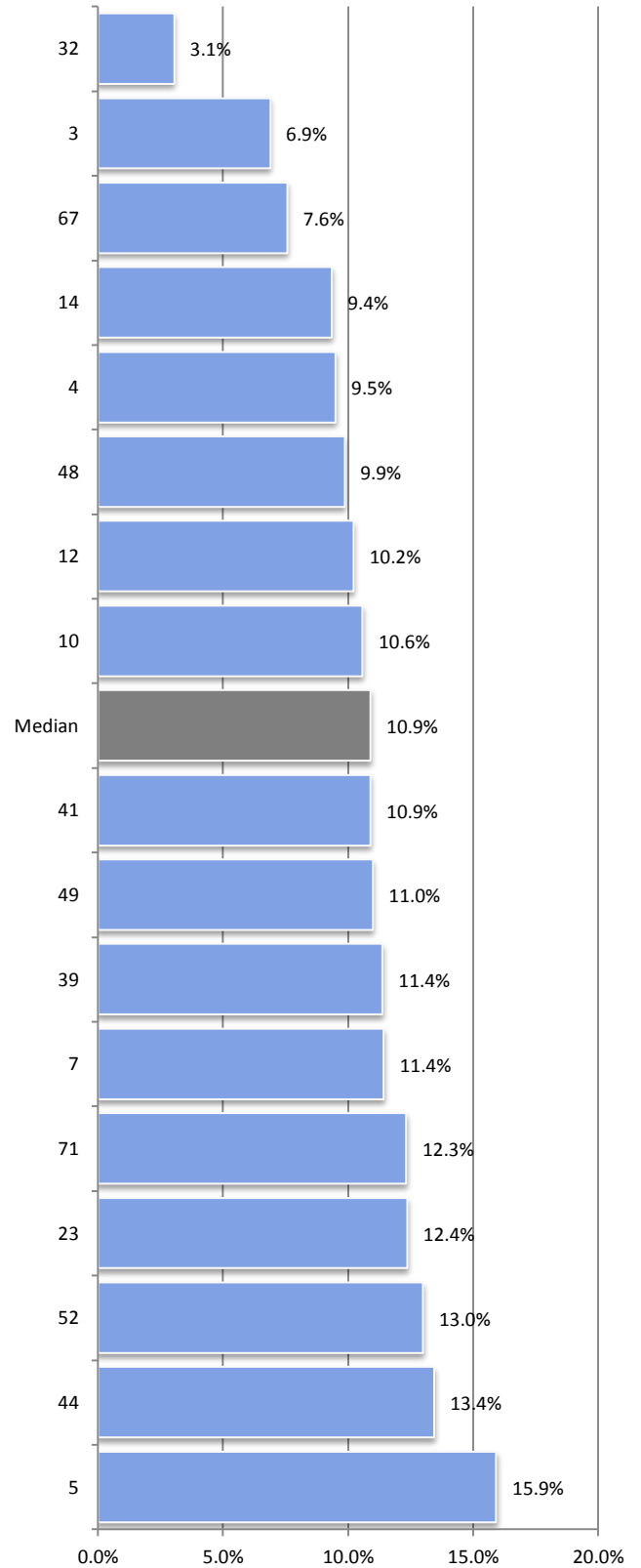


Figure 158  
Employee Separation Rate

This is the overall employee separation rate districts.



HUMAN RESOURCES

How does your substitute pool affect this measure?

Figure 159  
Employee Separation Rate - Teachers

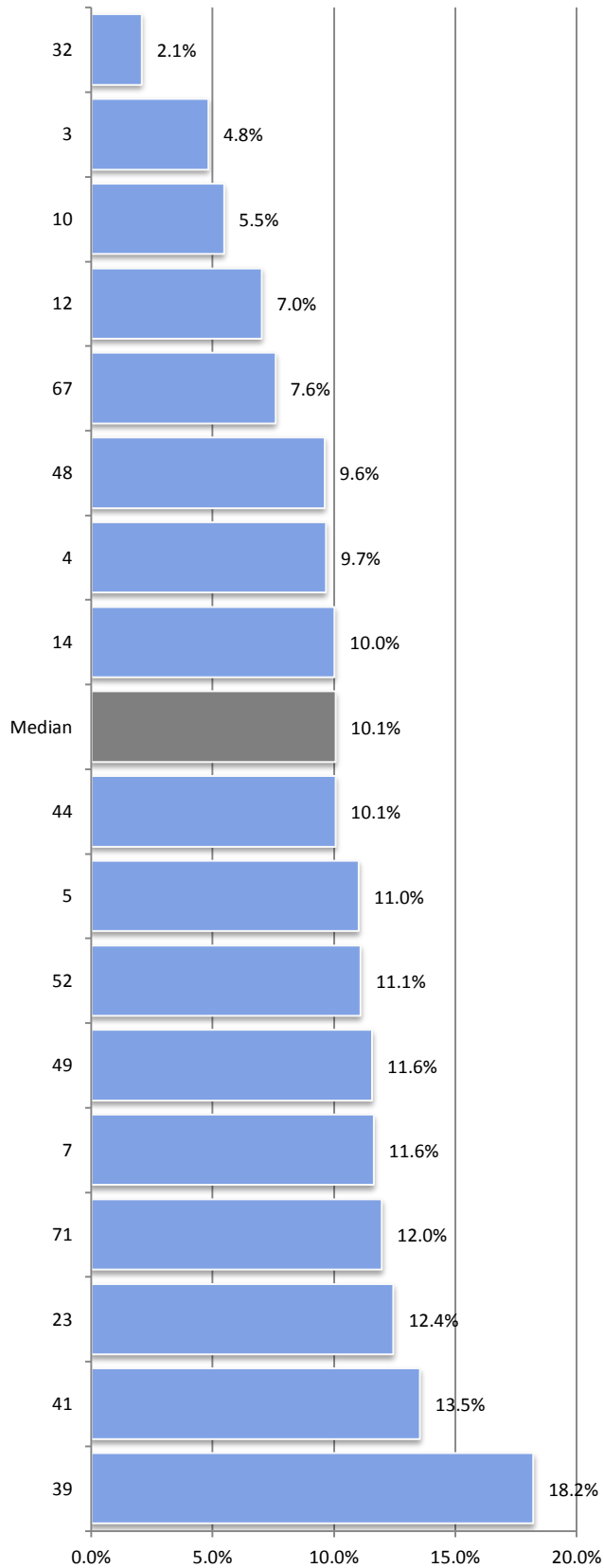
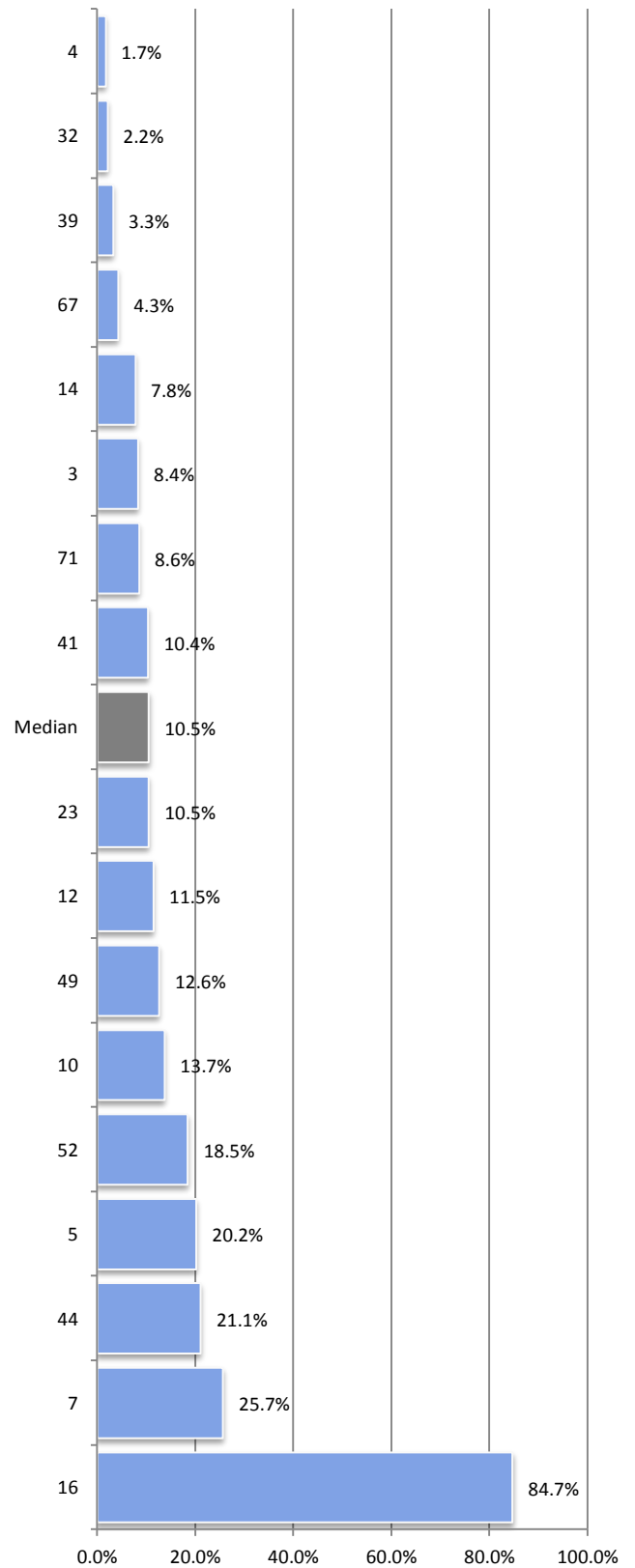


Figure 160  
Employee Separation Rate – Instructional Support Staff



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Figure 161  
Employee Separation Rate – School-Based Exempt Staff

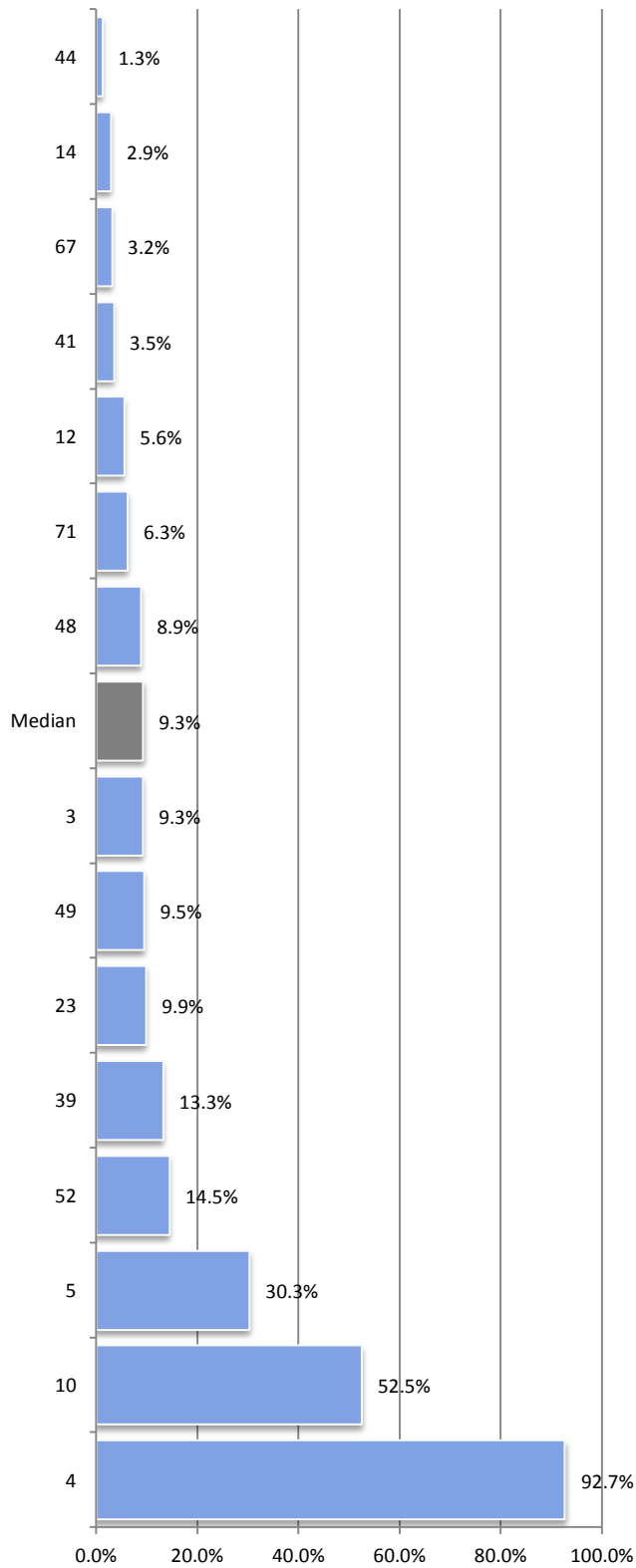
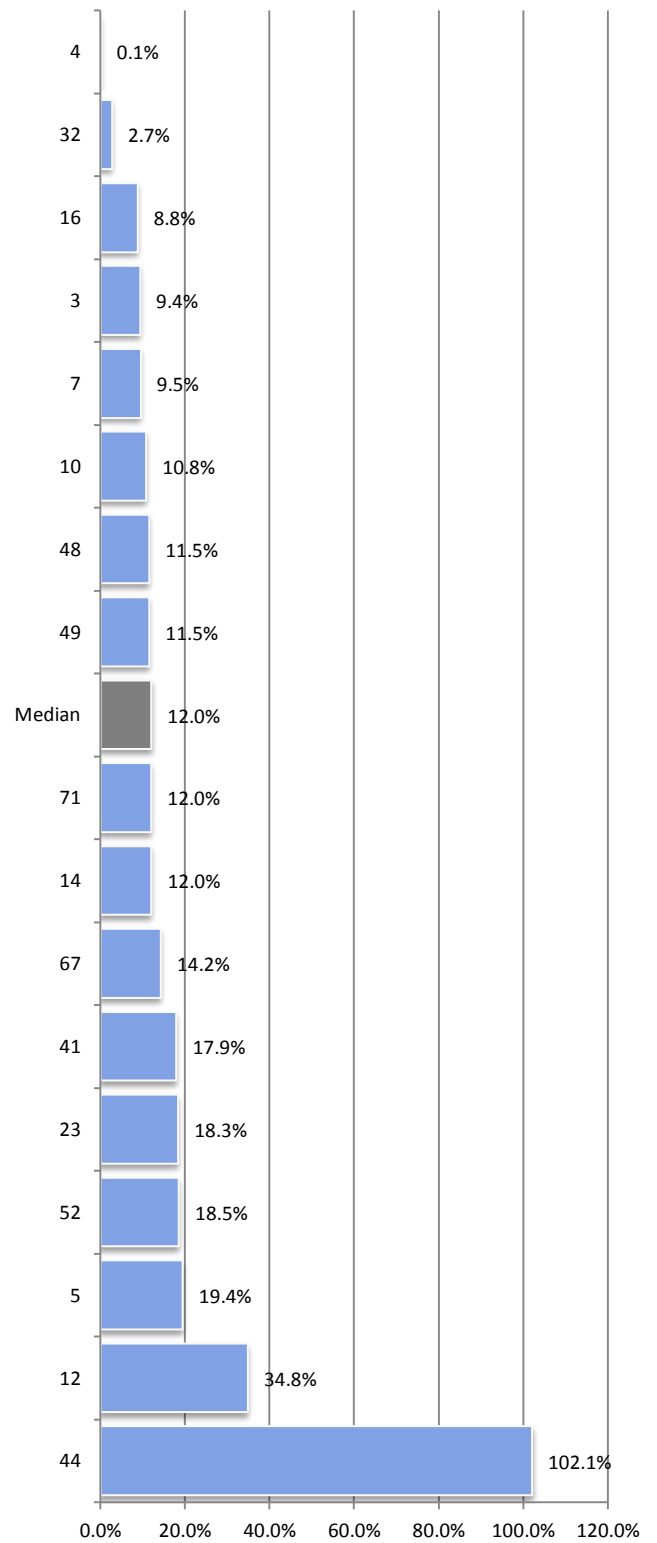


Figure 162  
Employee Separation Rate – School-Based Non-Exempt Staff



HUMAN RESOURCES

Figure 163  
Employee Separation Rate – Non-School Exempt Staff

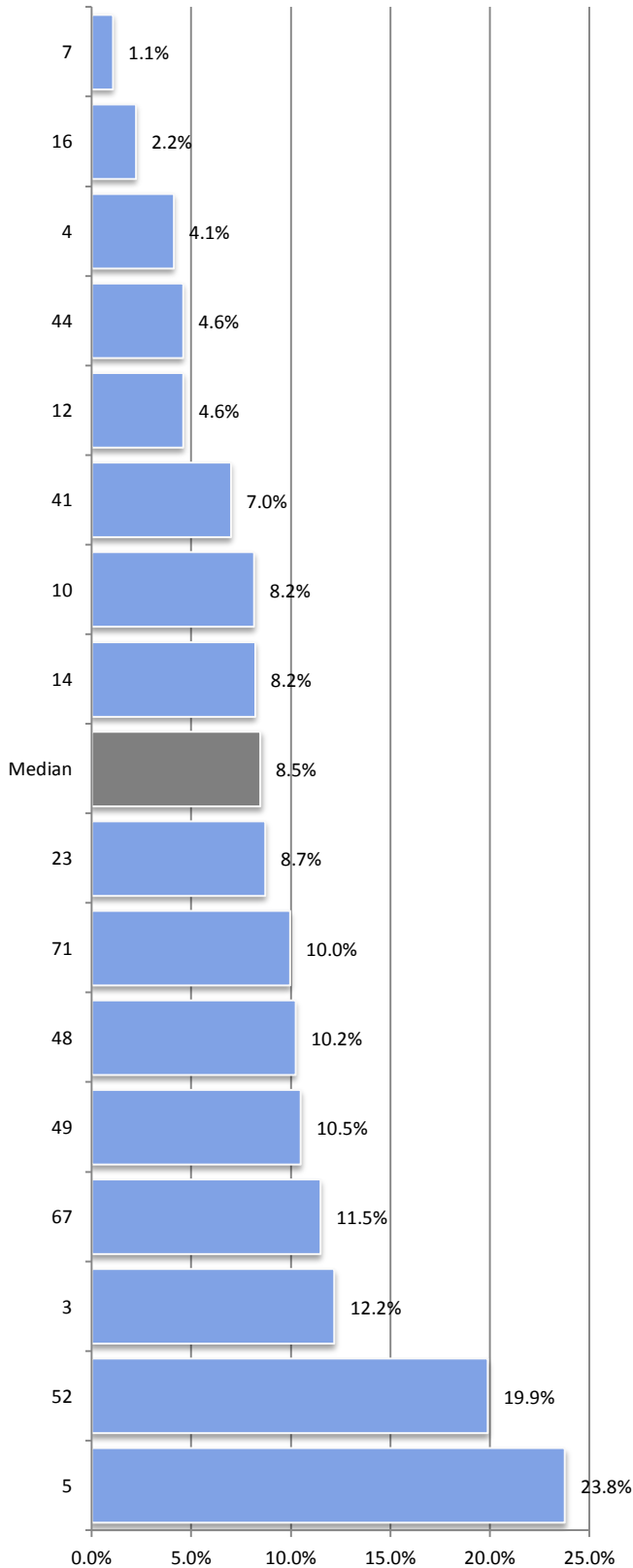


Figure 164  
Employee Separation Rate – Non-School Non-Exempt Staff

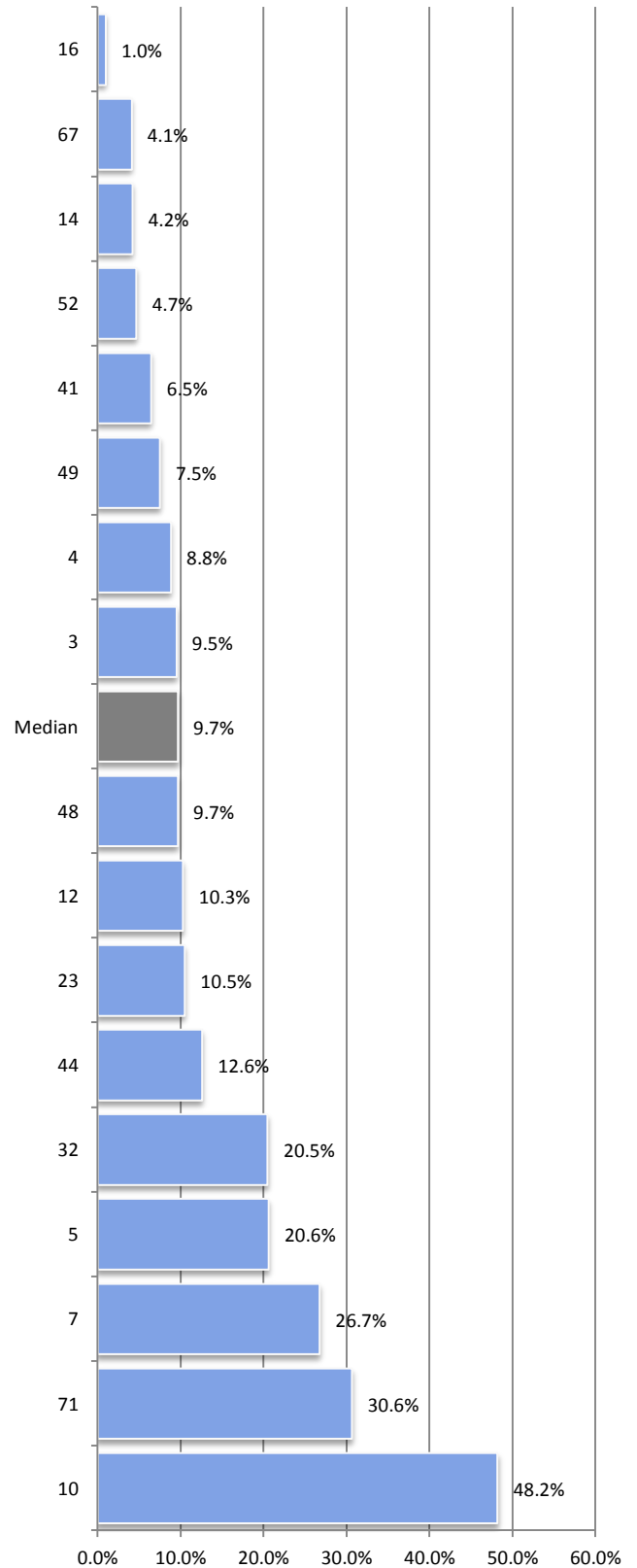


Figure 165  
Exit Interview Completion Rate

When employees leave the district, an exit interview (such as a survey form) can provide important insights into staff morale, and high-light potential problems that can subsequently be addressed.

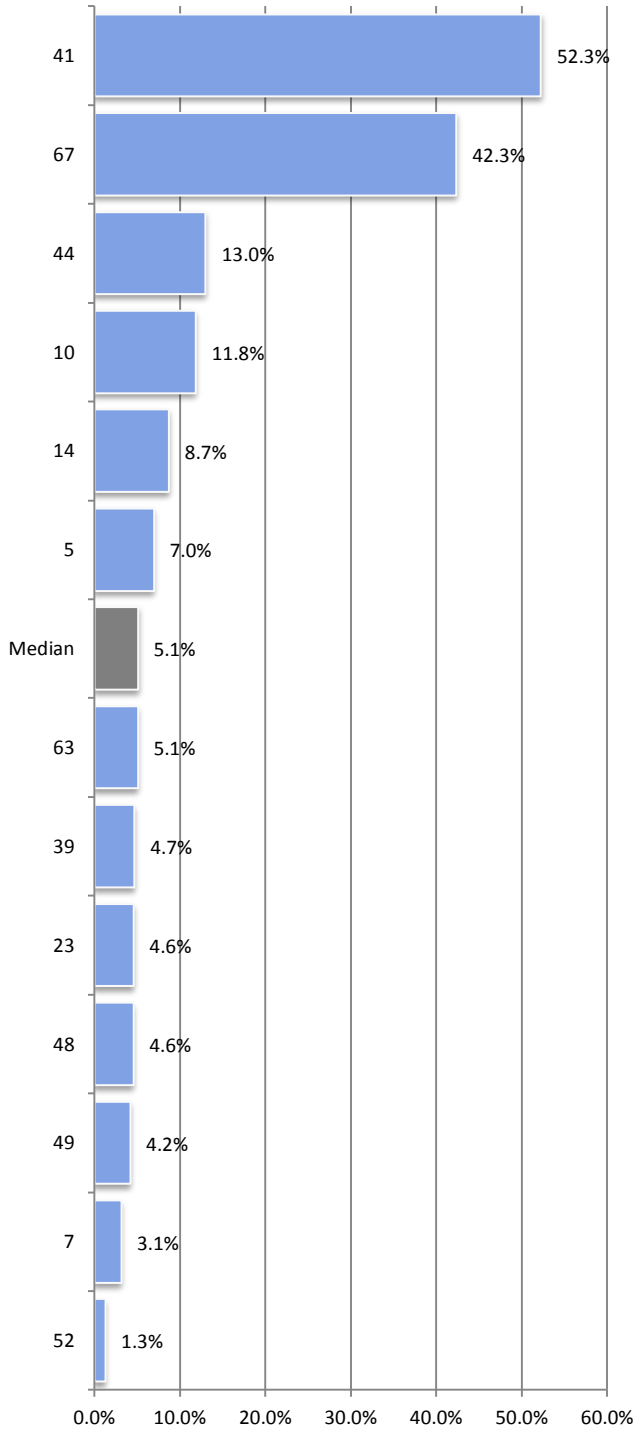
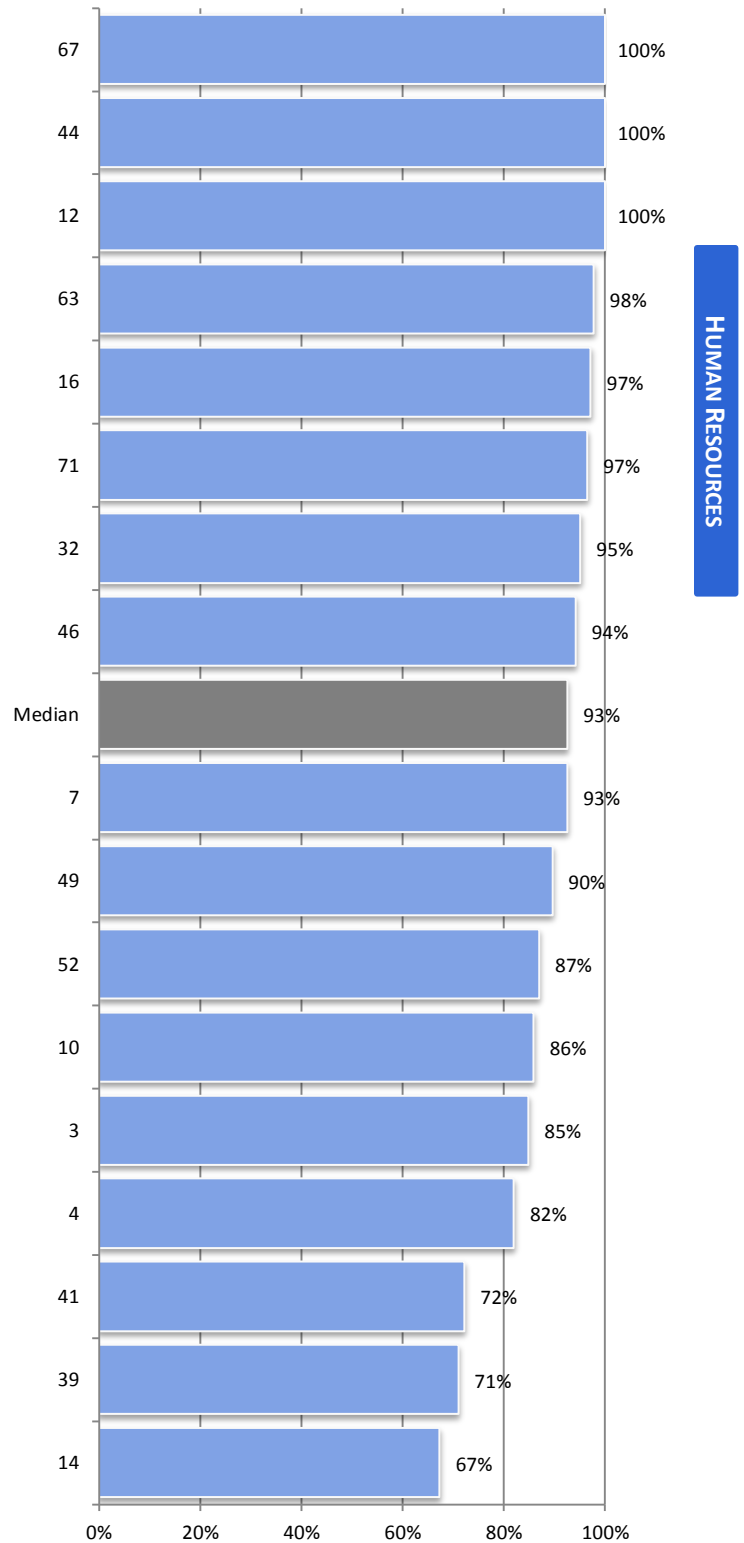


Figure 166  
Health Benefits Enrollment Rate

This is the proportion of employees that are eligible to receive health benefits who are actually enrolled.



*Do you know why employees decide to leave your district?*

Figure 167  
**Health Benefits Cost per Enrolled Employee**

This is the aggregate yearly premium costs (district-paid) or direct costs if a district is self-insured, relative to the number of enrolled employees. *Adjusted for cost of living.*

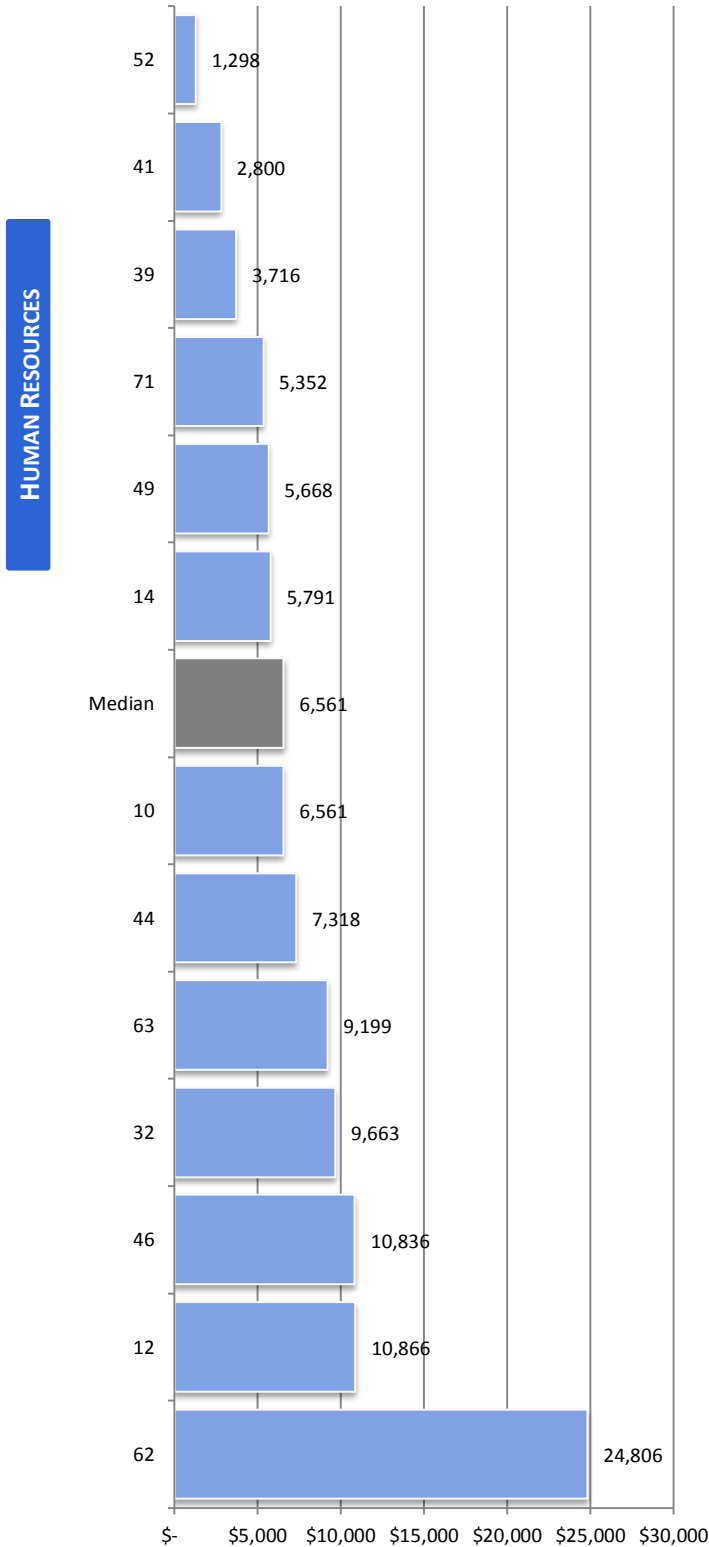


Figure 168  
**HR Cost per District FTE**

This is the total department costs of HR relative to the number of district employees. *Adjusted for cost of living.*

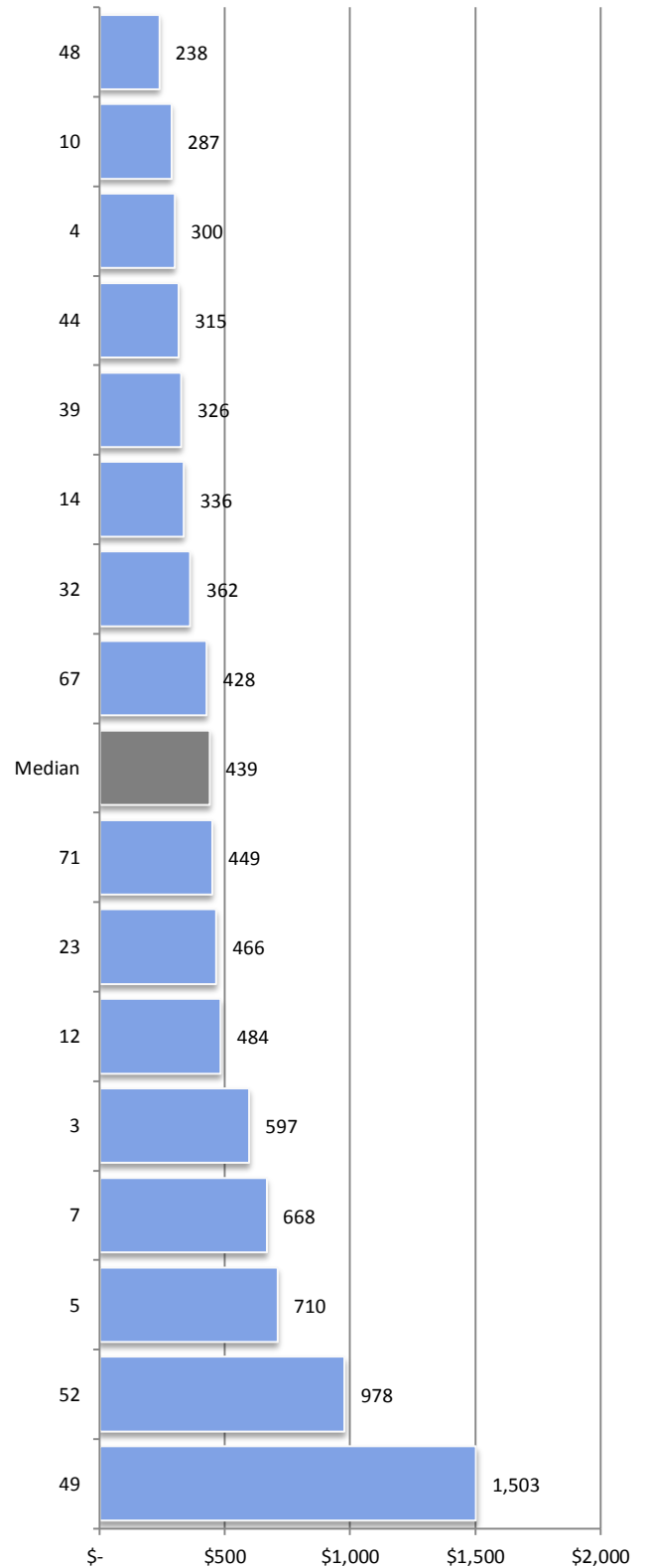




Figure 169  
**HR Cost per \$100K Revenue**

This is the total department costs of HR relative to the total district operating revenue. *Not adjusted for cost of living.*

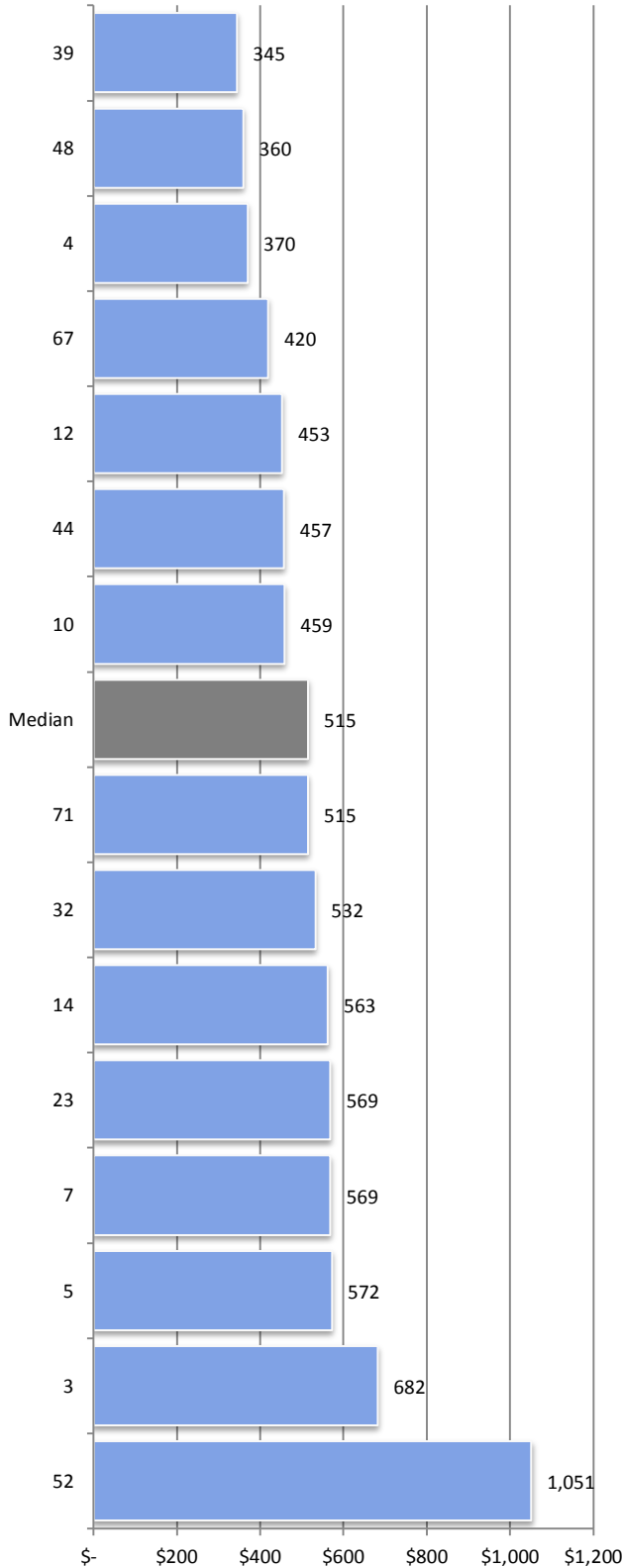
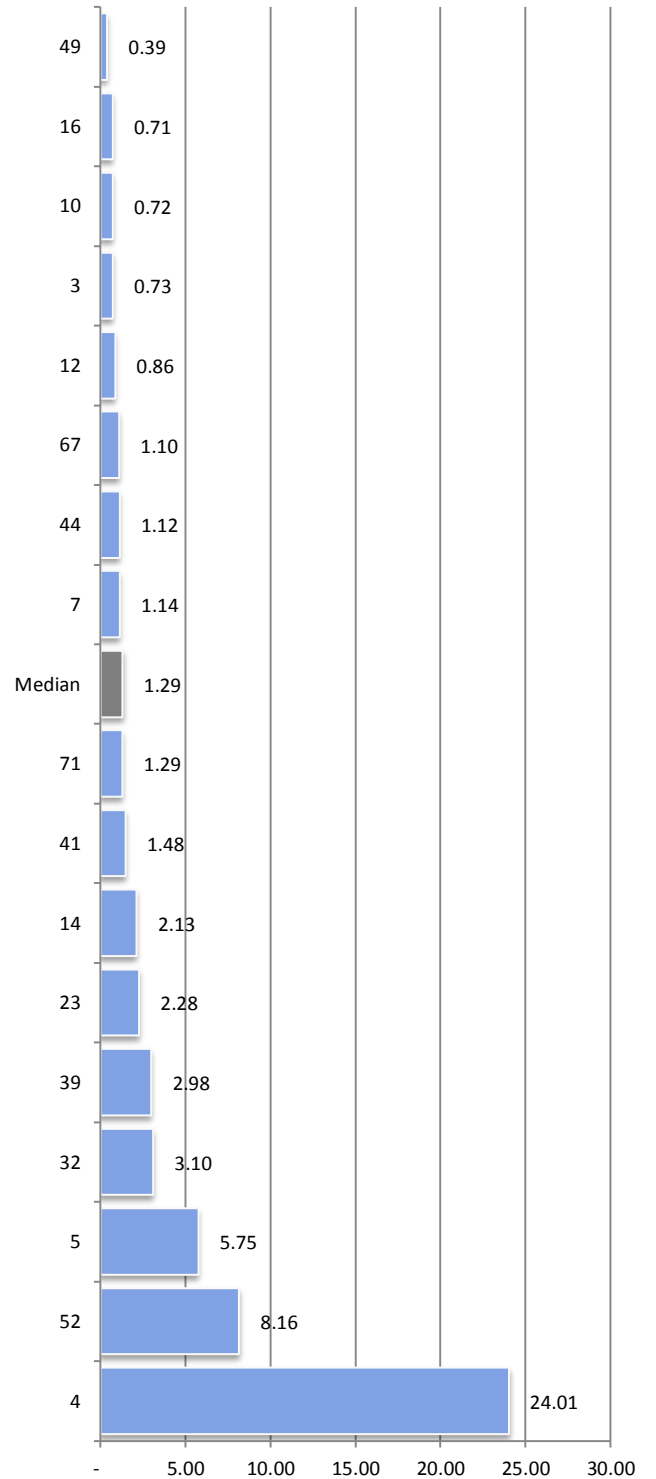


Figure 170  
**Employee Relations - Discrimination Complaints per 1,000 Employees**

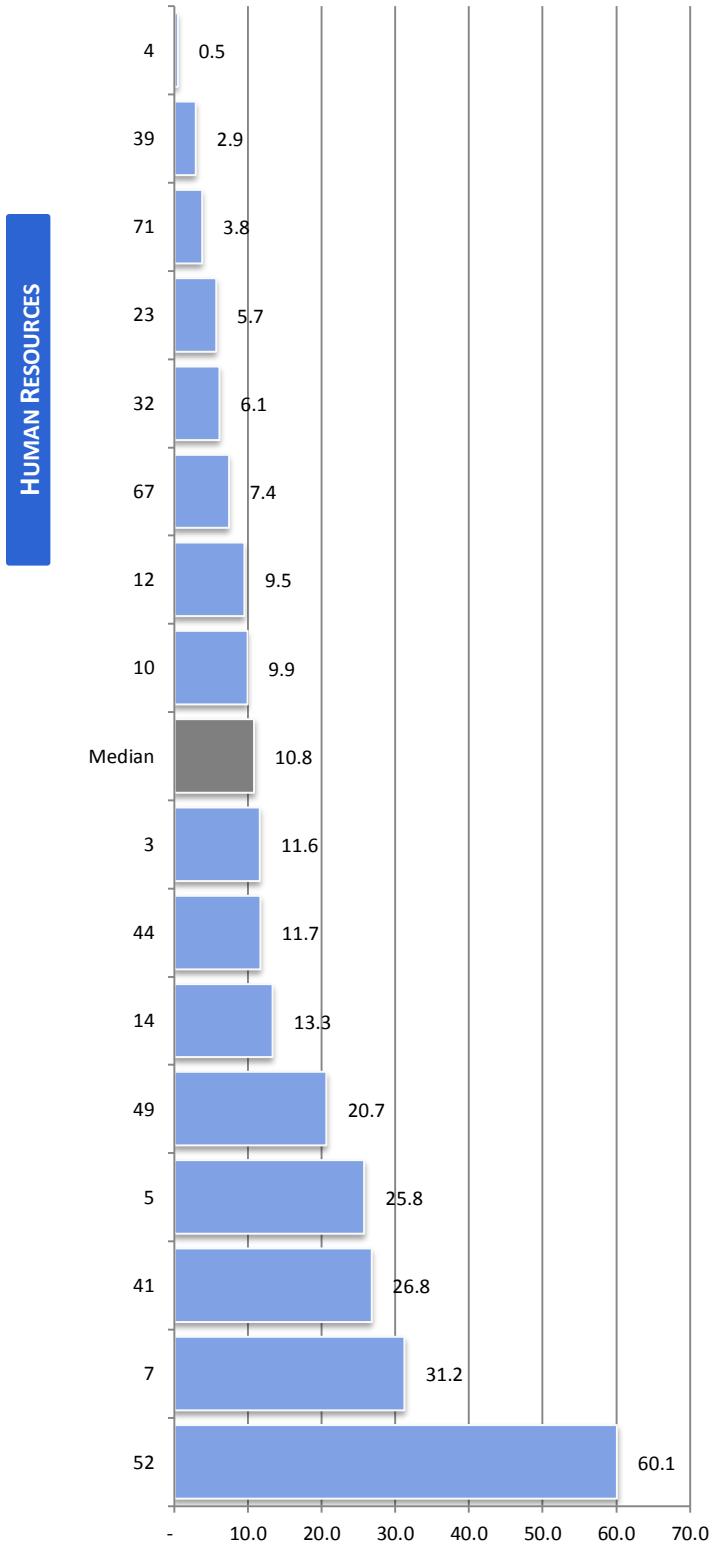
This is the relative number of complaints/charges of discrimination filed by employees with any governmental or regulatory agency, e.g., Equal Employment Opportunity Commission (EEOC).



HUMAN RESOURCES

Figure 171  
 Employee Relations - Misconduct Investigations  
 per 1,000 Employees

This is the number of formal internal investigations of alleged misconduct by employees relative to the number of employees.



# KPI DEFINITIONS

## Substitute Placement Rate

**Importance** Failure to place substitutes to fill teacher absences can adversely affect students, as well as school staff, and should be reduced to a minimum.

**Factors that Influence**

- Quality of substitute pool database
- Substitute back-up policy

**Calculation** Number of student attendance days where a substitute was successfully placed in a classroom *divided by* the total number of student attendance days that classroom teachers were absent from their classrooms.

## Substitute Placement with BA/BS or Higher

**Importance** Increasing the number of substitutes with a college degree improves a student's experience when a teacher is absent.

**Calculation** Number of teachers retained after one year *divided by* number of teachers that were newly hired one year ago.

## Exit Interview Completion Rate

**Importance** Exit interviews can provide important insight into problems and patterns.

**Factors that Influence**

- Placement of exit interview on separation/resignation forms
- Internal review processes
- Pro-active focus on customer service

**Calculation** Total number of exit interviews completed *divided by* the total number of employee separations (including retirement, resignation and termination) in the district.

## Teacher Retention

**Importance** Based on review of this measure, a district may re-allocate funds to adopt new mentor/induction programs or revise their current programs. Districts will also have data available to justify making changes in their selection process and engaging local universities regarding coursework designed to better prepare graduates for urban teaching. By tracking, monitoring, and examining retention of second year teachers, districts can measure early attrition rates and thereby manage the cost of bringing in new teachers, revised mentoring/induction program and maintain desired staff continuity.

**Factors that Influence**

- Culture
- Communication
- School leadership
- Professional development
- Selection and hiring process
- Support

**Calculation** Number of teachers retained after X number of years *divided by* number of teachers that were newly hired Y number of years ago.

## Employee Separation Rate

**Importance** These measures may serve as indicators of district policies, administrative procedures and regulations, and management effectiveness. Measuring these allows the district to further analyze its actions in terms of resources, allocation of funds, policy and support to its employees. They also may be measures of work-force satisfaction and organizational climate.

**Factors that Influence**

- Number of Equal Employment Opportunity (EEO) charges filed by employees *divided by* total number of employees
- State and local laws defining discrimination will impact
- Board Policy and organizational protocol for resolution
- Organizational climate
- Quality and level of supervisory training
- Quality and level of EEO Awareness training for all employees
- Indicator as to the effectiveness of supervisors and managers

**Calculation** Number of discrimination complaints *divided by* total number of district employees (FTEs) in 10,000s.

## Health Benefits Enrollment Rate

**Importance** Identifies the level of employee enrollment in the district health benefits plan.

**Calculation** Total number of employees enrolled in health benefits plan *divided by* total number of employees eligible for health benefits.

## Health Benefits Cost per Enrolled Employee

**Importance** It is important to have a competitive benefit package to attract and retain employees. However, health care costs represent an increasing percentage of overall employee costs. Rapid increases in health care costs make it even more critical for districts to ensure that their health care dollars are well spent and their benefits are competitive. Health care costs are an important component in the total compensation package of employees. While it is important to provide good benefits it is also equally important to do it at a competitive cost compared with other districts that are competing for the same applicants.

**Factors that Influence**

- Costs may be influenced by district wellness programs and promoting healthy lifestyles
- Plan benefits and coverage (individual, individual & spouse, family, etc.) are major factors in determining costs.
- Costs are influenced by availability and competitiveness of providers.
- Costs are influenced by geographic location (reasonable and customary charges for each location).
- Costs may vary based on plan structure (fully insured, self-insured, minimum premium etc.).
- Increased costs in health care will mean less money available for salary or other benefits.

**Calculation** Total health benefits cost (self-insured) *plus* total health benefits premium costs *divided by* total number of employees enrolled in health benefits plan.

**HR Cost per District FTE**

**Importance** This measure can help assess the size of the budget for the human resources department. Since districts often have different structures and priorities, this indicator should be used in conjunction with other measures that indicate actual performance.

**Calculation** Total HR department costs *divided by* total number of district employees (FTEs).

**Employee Relations - Discrimination Complaints per 1,000 Employees**

**Factors that Influence**

- State and local laws defining discrimination
- Board Policy and organizational protocol for resolution
- Organizational climate
- Quality and level of EEO Awareness training for all employees
- Indicator as to the effectiveness of supervisors and managers
- Quality and level of supervisory training

**Calculation** Number of discrimination complaints *divided by* total number of district employees (FTEs) in 1,000s.

Number of Equal Employment Opportunity (EEO) charges filed by employees *divided by* total number of employees in 1000s.

**Employee Relations - Misconduct Investigations per 1,000 Employees**

**Importance** This measure is an indicator of the effectiveness of hiring and supervisory practices within a district. Administrative costs associated with investigation and resolution diminish resources that could be used more productive educational purposes. High instances of alleged employee misconduct reflect a negative public image on the District.

**Factors that Influence**

- Organizational attitude and tolerance toward employee misconduct
- Quality of supervision
- Quality of training – understanding of expectations
- The hiring processes of the district

**Calculation** Number of misconduct investigations *divided by* total number of district employees (FTEs) in 1,000s.

# INFORMATION TECHNOLOGY

Performance metrics in information technology (IT) assess the productivity, cost efficiency, and service levels of the Information Technology Department. The metrics generally fall in the following categories:

- a) Network services
- b) Computers and devices
- c) Help desk and break/fix technical support
- d) Systems and software

Network-service measures examine such service-level indicators as **Bandwidth per Student** and **Number of Days Network Usage Exceeds 75% of Capacity** and such cost-efficiency indicators as **Network (WAN) Cost per Student**.

Measures of personal computers and devices include **Average Age of Computers**, which reflect the refresh goals of a district, as well as **Devices per Student**.

The cost effectiveness of technical support services such as the help desk and break/fix support are measured by **Help Desk Staffing Cost per Ticket** and **Break/Fix Staffing Costs per Ticket**.

Finally, the performance of systems and software is measured, in part, by the *downtime* of these systems, as high rates of interruption are likely to adversely affect district end-users. The operating cost of these systems is measured with **Business Systems Cost per Employee** and **Instructional Systems Cost per Student**.



# LIST OF KPIS IN INFORMATION TECHNOLOGY

Below is the complete list of Power Indicators, Essential Few and other key indicators in Information Technology. Indicators in bold are those included in this report. (See "KPI Definitions" at the back of this section for more complete descriptions of these measures.) All other KPIs are available to CGCS members on the web-based ActPoint® KPI system.

## POWER INDICATORS

**Devices - Average Age of Computers**

**Devices - Computers per Employee**

**Devices per Student**

**IT Spending per District FTE**

**IT Spending per Student**

**IT Spending Percent of District Budget**

**Network - Bandwidth per 1,000 Students (Mbps)**

Network - Bandwidth per 1,000 Users (Mbps)

## ESSENTIAL FEW

**Devices - Advanced Presentation Devices per Teacher**

**Network - Days Usage Exceeded 75% of Capacity**

**Network - Overflow Capacity**

**Support - Break/Fix Staffing Cost per Ticket**

**Support - First Contact Resolution Rate**

**Support - Help Desk Call Abandonment Rate**

**Support - Help Desk Staffing Cost per Ticket**

**Support - Mean Time to Resolve Tickets (Hours)**

## OTHER KEY INDICATORS

Devices - Tablets per Student (Student Use)

Devices per Teacher (Dedicated Teacher Use)

### IT Spending - Capital Investments

IT Spending - Hardware, Systems and Services

IT Spending - Personnel Costs

### Network - WAN Availability

Online Learning - Blended Courses Completed per Course Offering

Online Learning - Blended Courses Offered

Online Learning - Online Courses Completed per Course Offering

Online Learning - Online Courses Offered

Support - District Employees per Help Desk FTE

### Systems Cost - Business Systems Cost per Employee

### Systems Cost - Instructional Systems Cost per Student

Systems Downtime - E-Mail

Systems Downtime - ERP

Systems Downtime - Finance System

Systems Downtime - HR System

Systems Downtime - LCMS/IMS

Systems Downtime - Online Assessment System

Systems Downtime - Payroll System

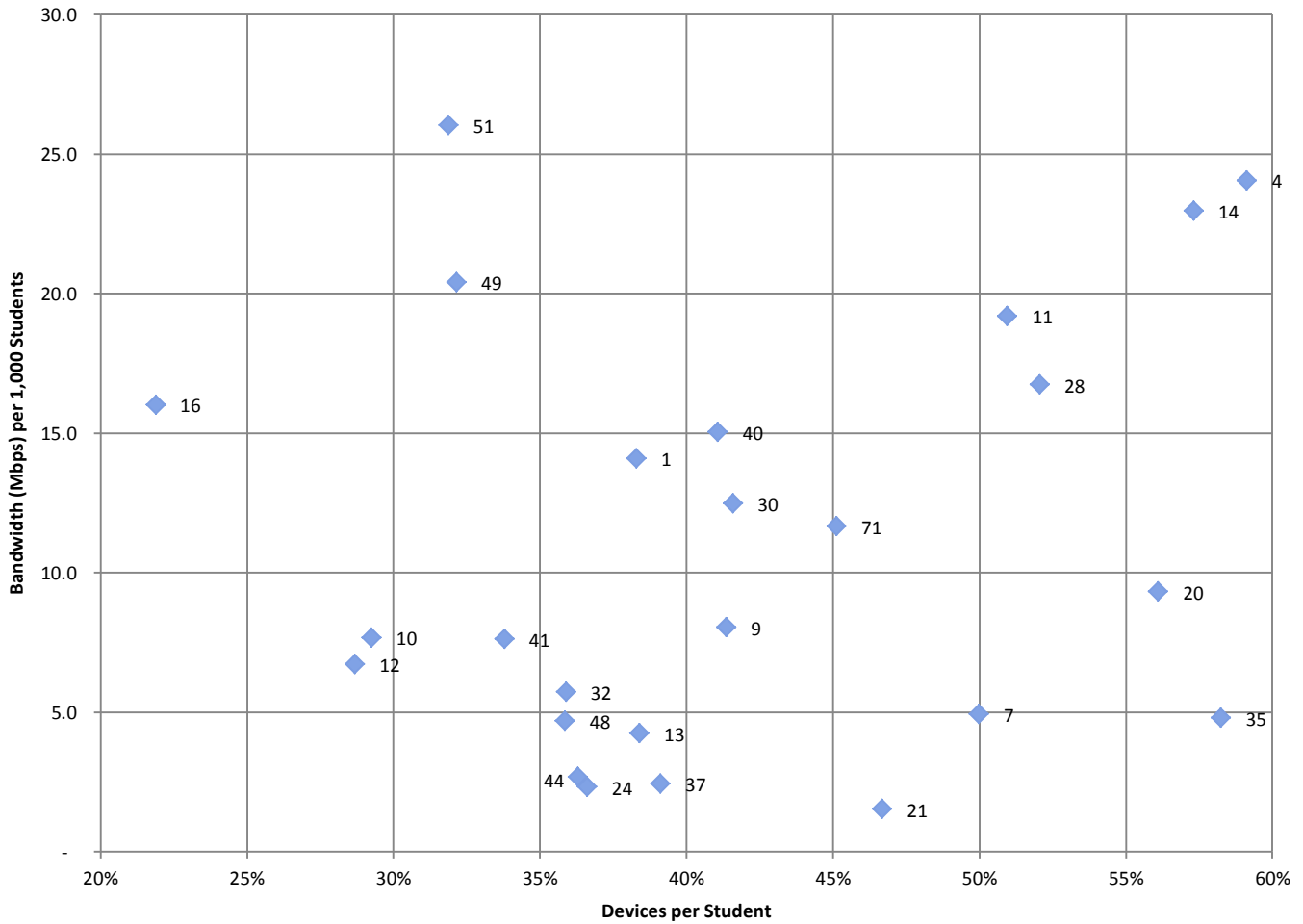
Systems Downtime - SIS

# FEATURED ANALYSIS

Figure 172  
**Devices per Student vs. Bandwidth per Student**

This chart compares the number of student-use devices with the total available bandwidth capacity for connecting to the Internet. The districts in the bottom-left quadrant have fewer devices and lower Internet connection bandwidth. Those districts in the top-right quadrant are ranked high in both the number of devices and Internet connection bandwidth.

The Devices per Student measure is an indicator of performance only so far as the district uses the devices effectively for academic purposes and makes them available for students to use. Bandwidth Capacity, on the other hand, is widely recognized as a must-have for 21<sup>st</sup> century classrooms, and as demand from teachers and students for web-based content and applications continues to increase, school districts have an essential imperative to keep pace.



*Is your district's technology meeting the demands of the 21<sup>st</sup> century?*

# DATA DISCOVERY

Figure 173  
Devices - Average Age of Computers

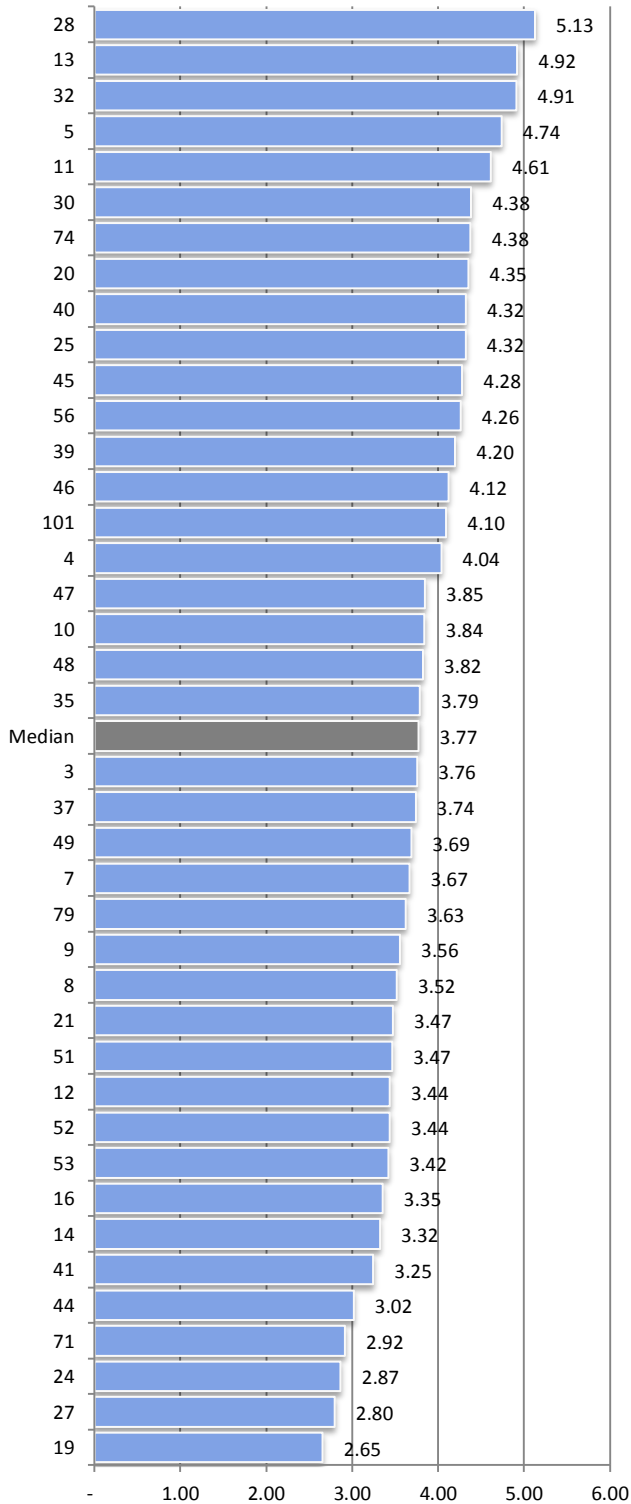


Figure 174  
Devices - Computers per Employee

This does not include computers for student use. Includes laptops and desktop computers for employees.

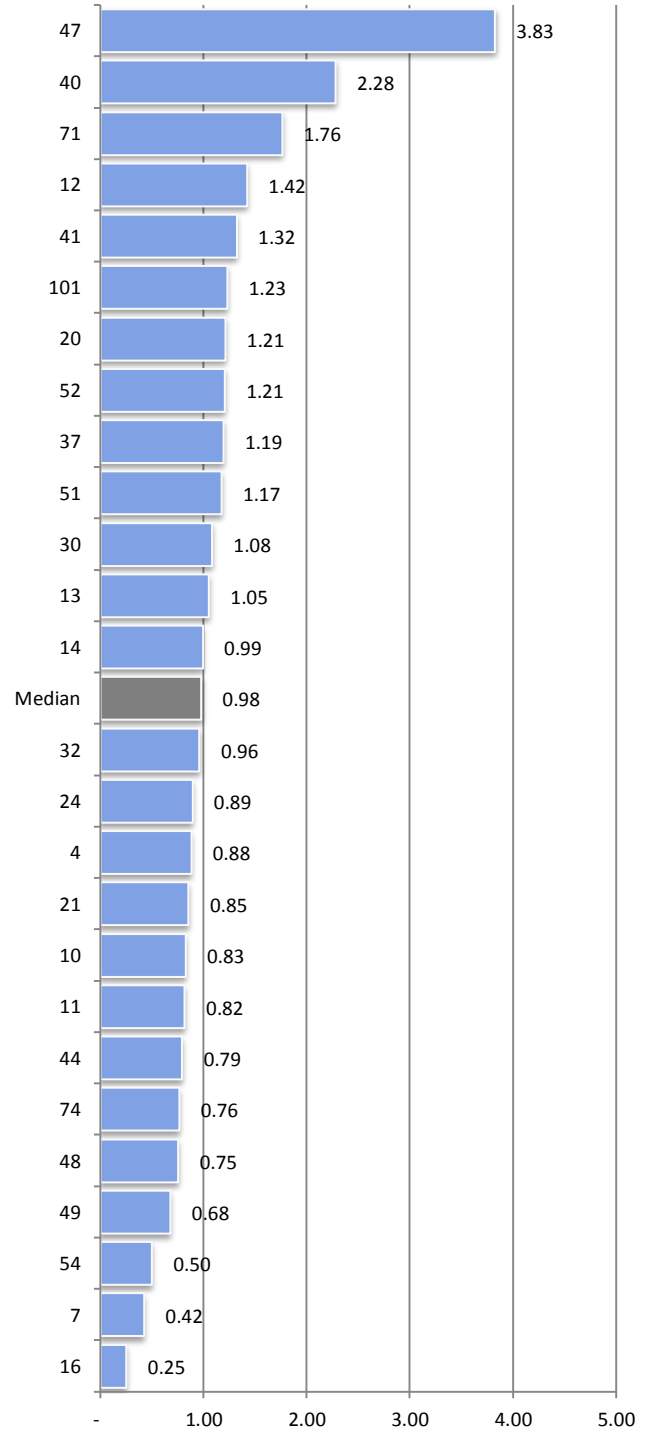




Figure 175  
**Devices per Student**

This includes student-use or mixed-use computers and tablets. It does not include staff-assigned devices.

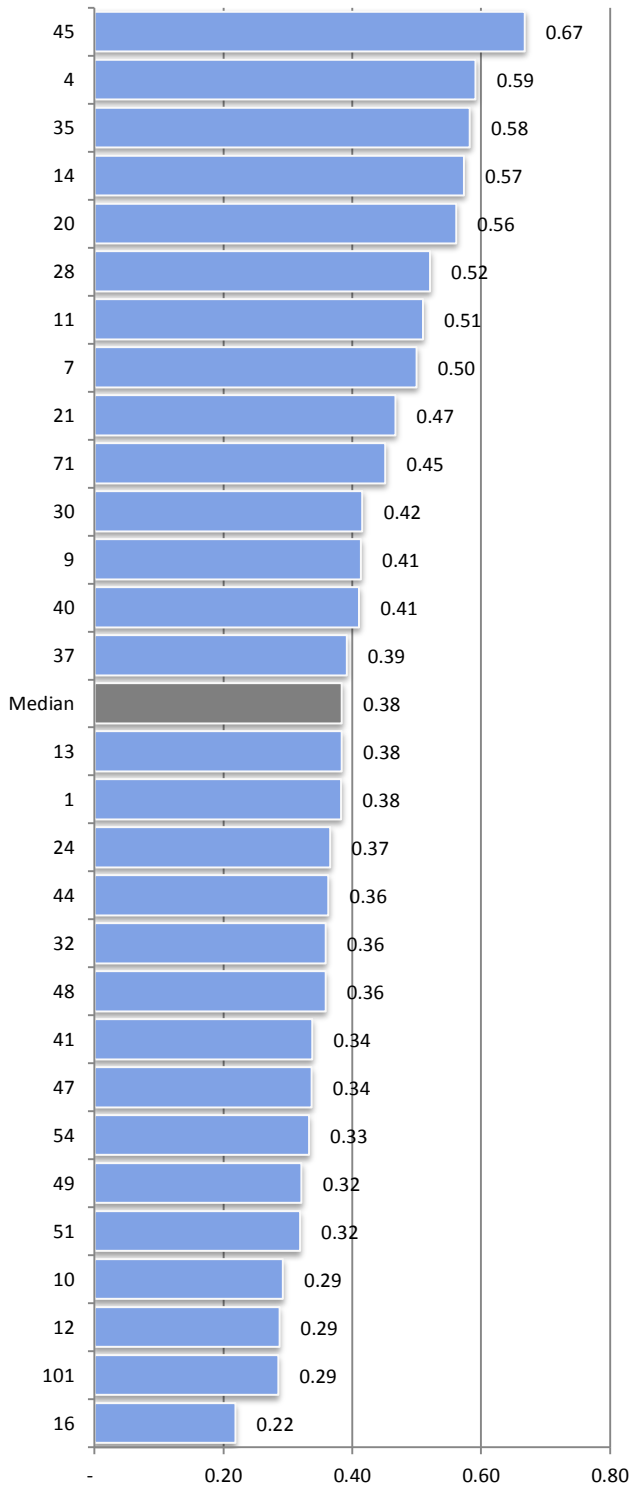


Figure 176  
**Devices - Advanced Presentation Devices per Teacher**

This may include video/data projectors, document cameras/digital overheads, and interactive whiteboards.

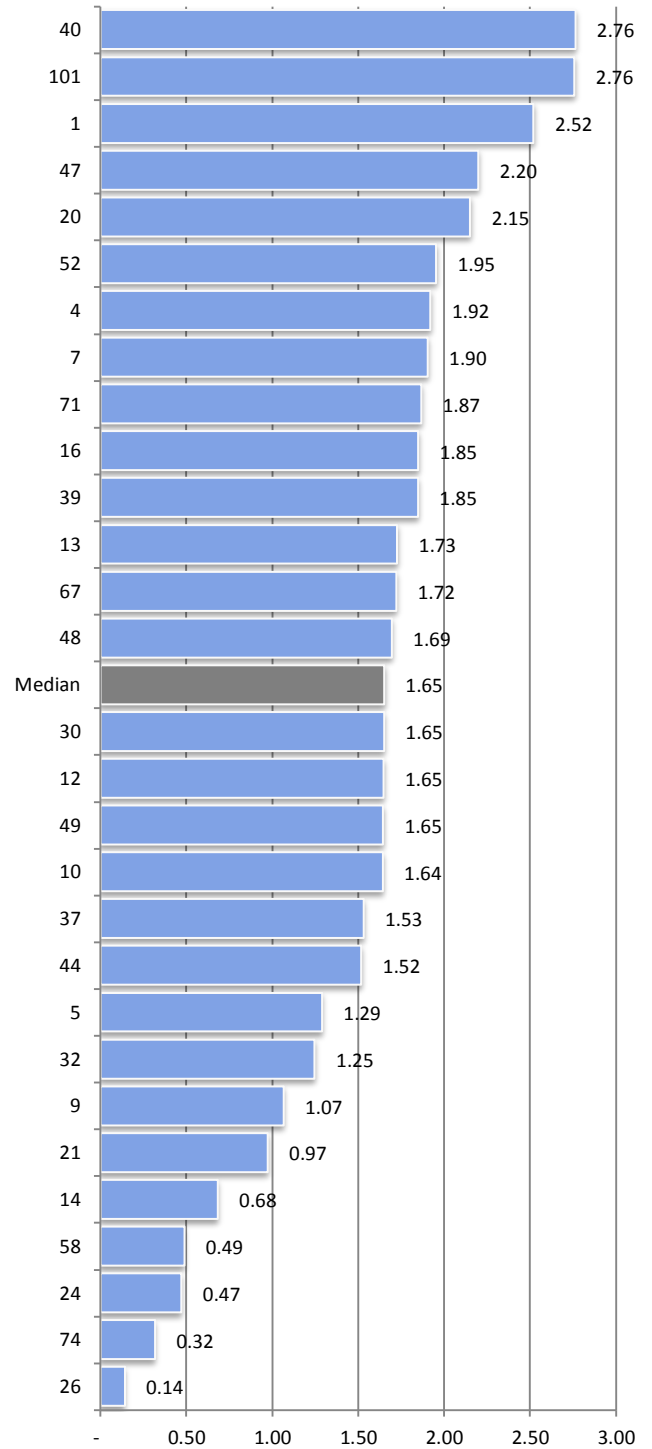


Figure 177  
IT Spending Percent of District Budget

This does not include capital expenditures, only operational costs of IT. (See figure to the right.)

INFORMATION TECHNOLOGY

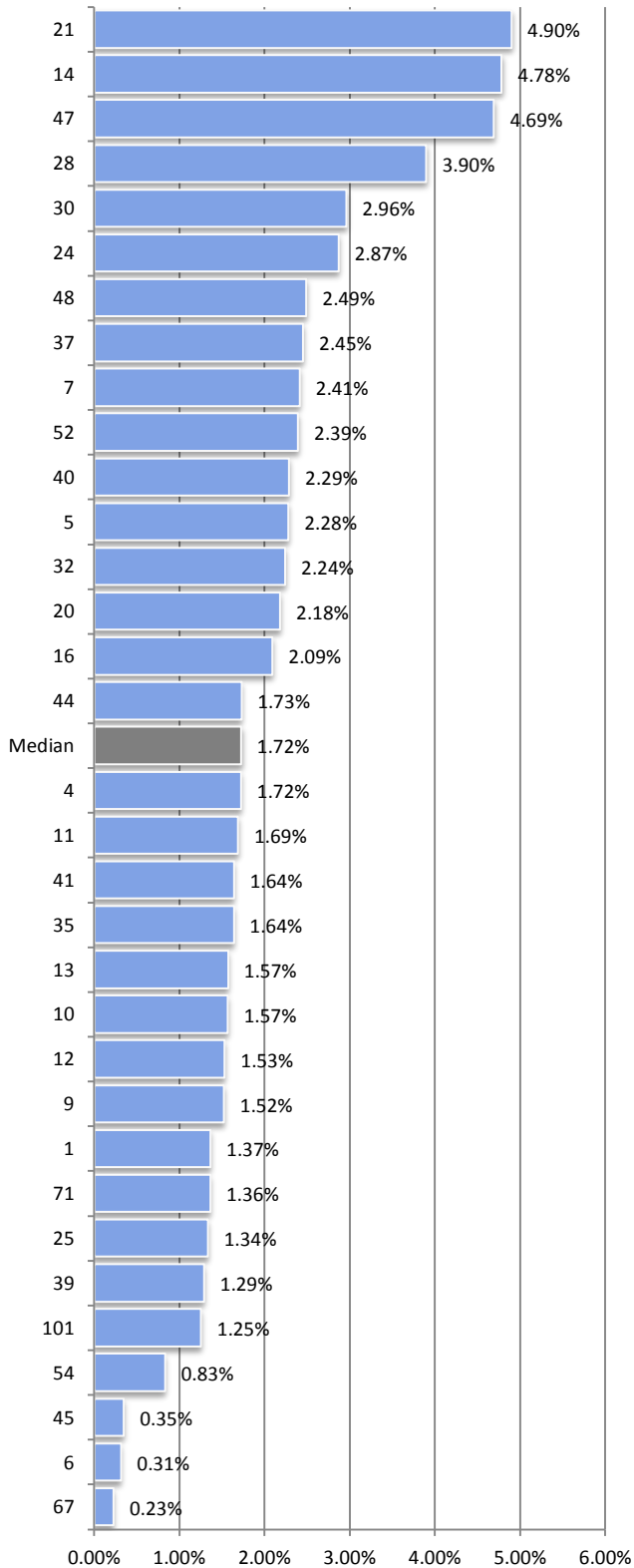


Figure 178  
IT Spending Percent of District Budget (Including Capital Investments)

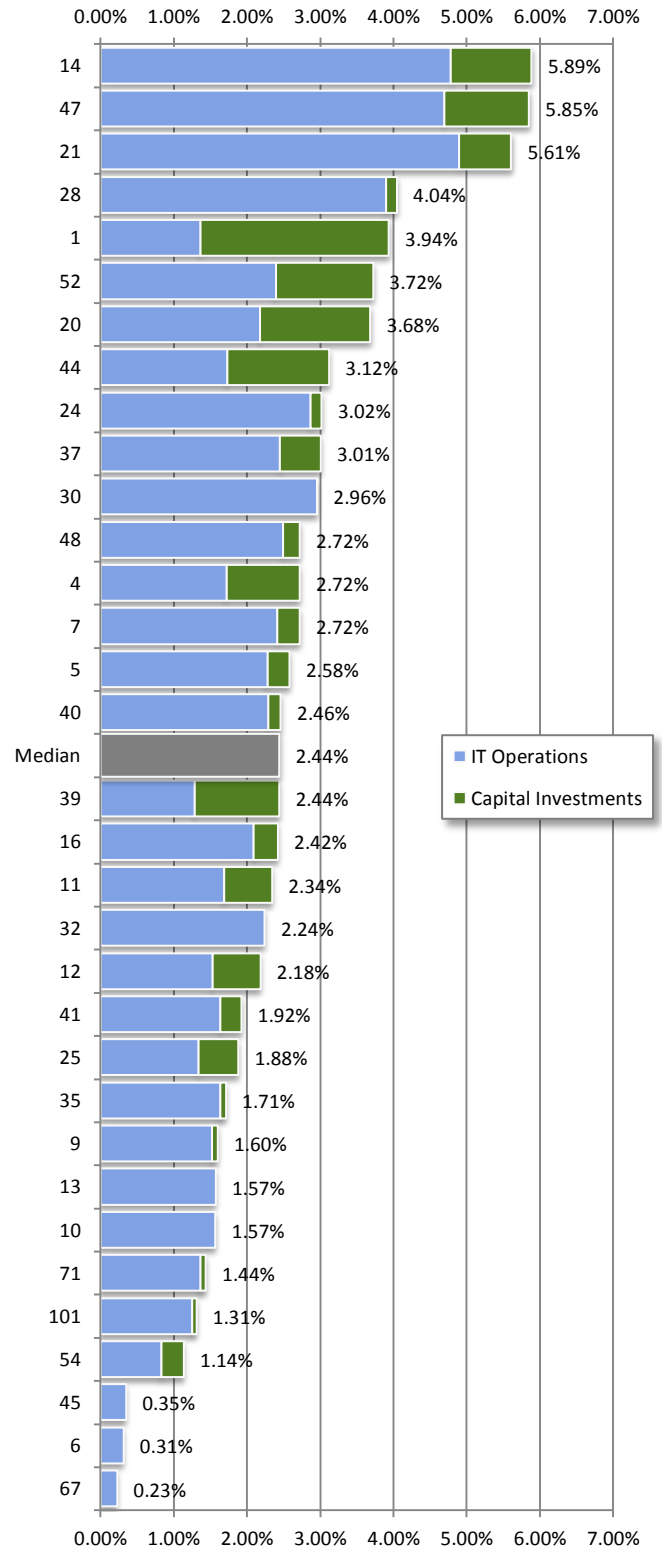
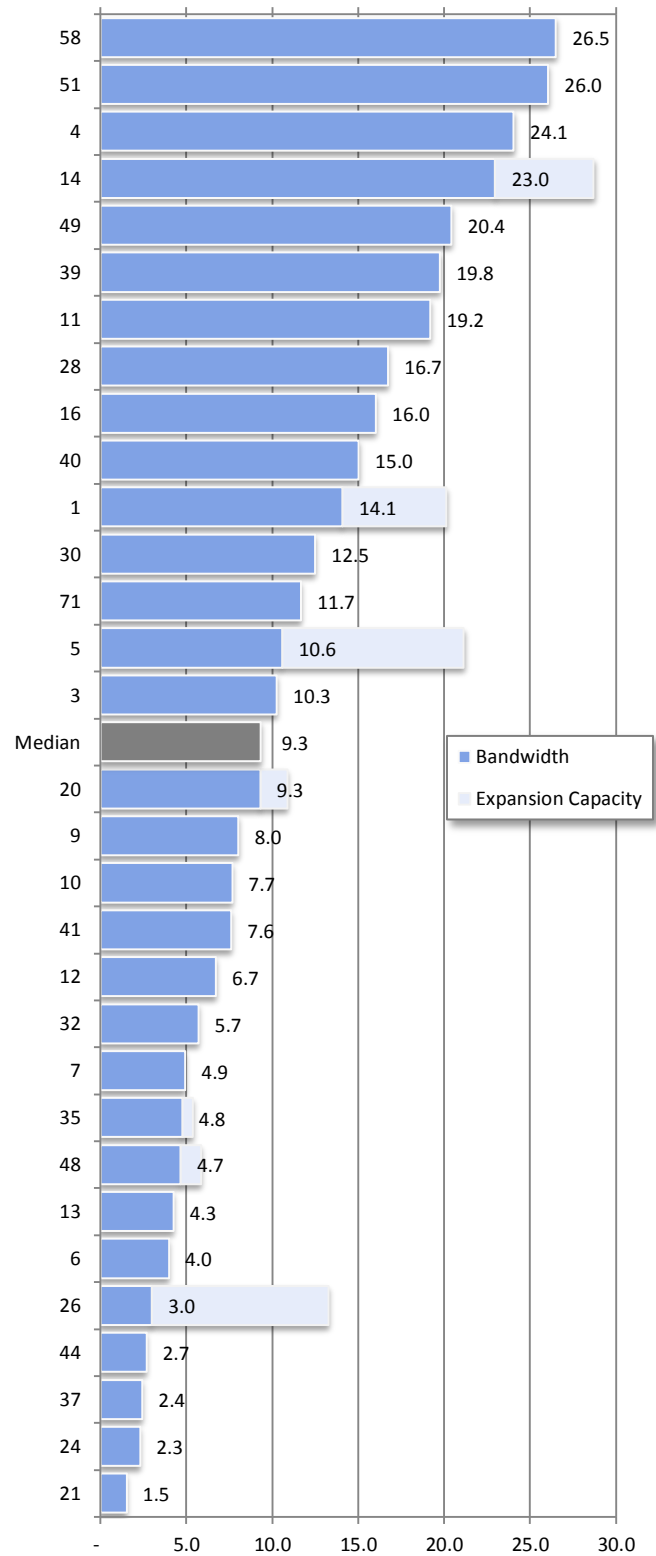


Figure 179  
IT Spending per Student



Figure 180  
Network - Bandwidth per 1,000 Students (Mbps)

This represents the bandwidth capacity for a district's connection to the Internet. SETDA recommends a target minimum of 100 Mbps per 1,000 students/staff by the 2014-15 school year.



INFORMATION TECHNOLOGY

Figure 181  
Network - Days Usage Exceeds 75% of Capacity

Increased demand by bandwidth-intensive web applications and tools means that school districts are often struggling to keep up their network infrastructure. With a median of 164 days, this measure suggests that more than half of school districts are near peak network capacity every day of the school year.

INFORMATION TECHNOLOGY

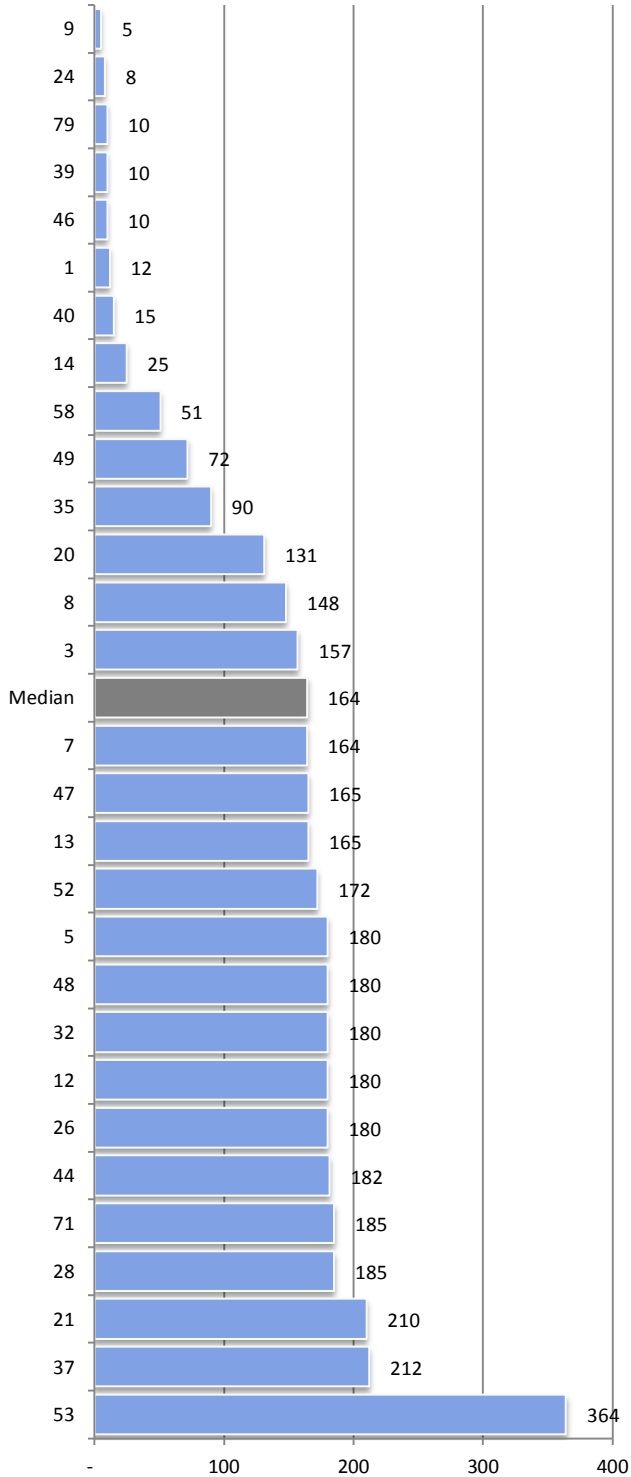


Figure 182  
Network - WAN Availability

This is the annual uptime for the Wide Area Network (WAN).

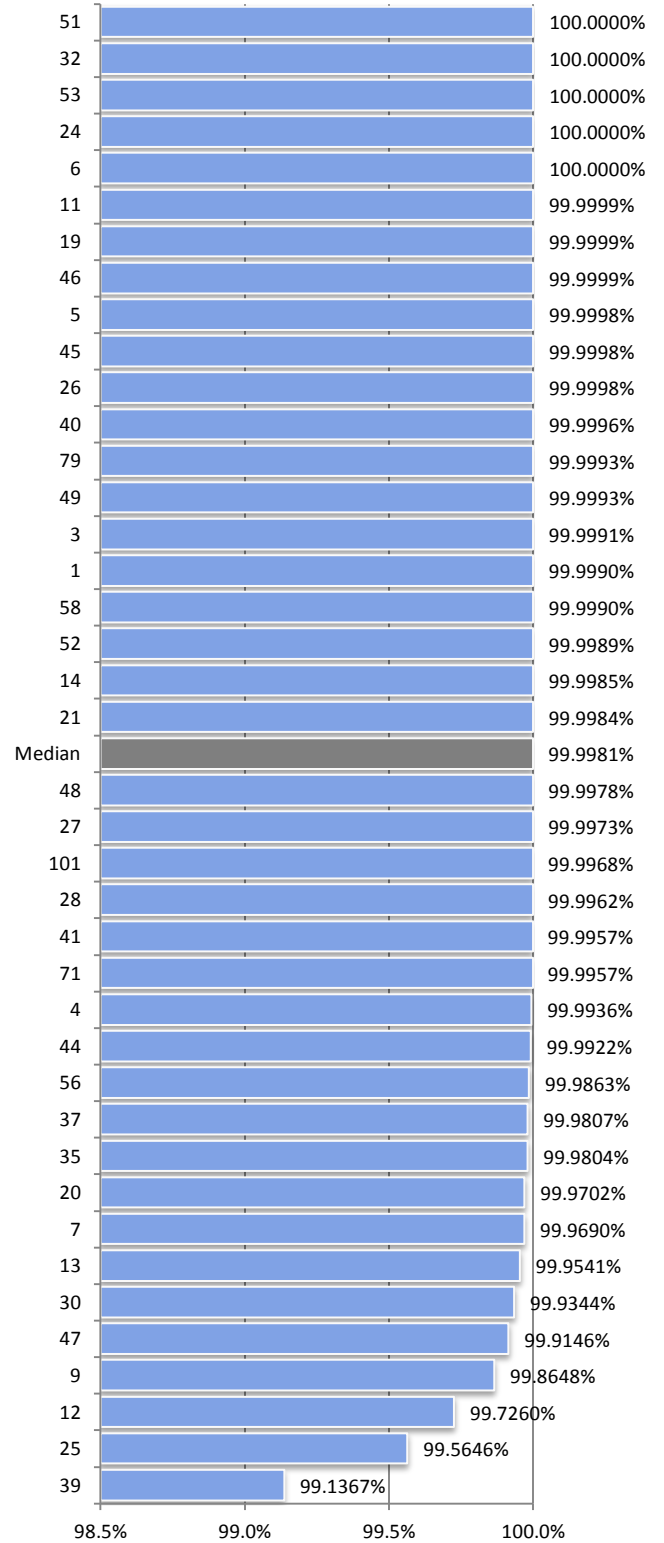


Figure 183  
Support - Break/Fix Staffing Cost per Ticket

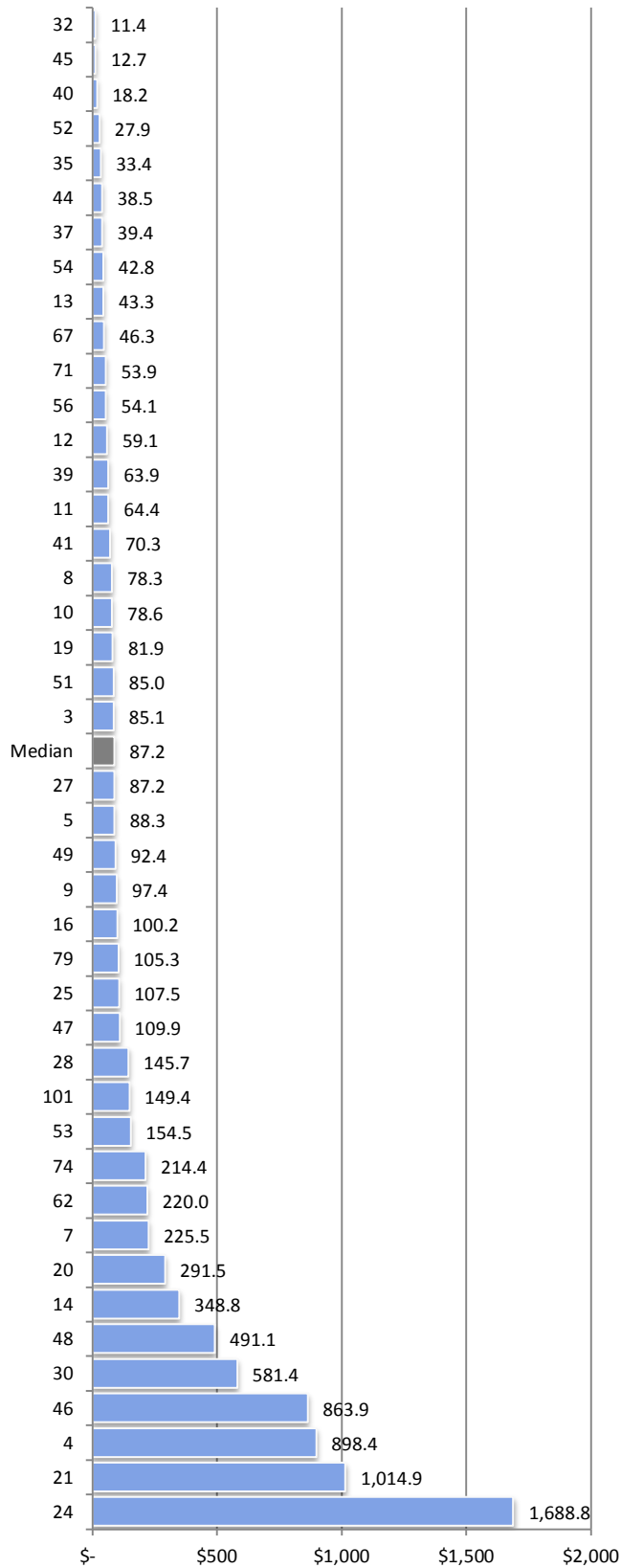


Figure 184  
Support - First Contact Resolution Rate

This is the proportion of support requests that were resolved on first contact with the help desk.

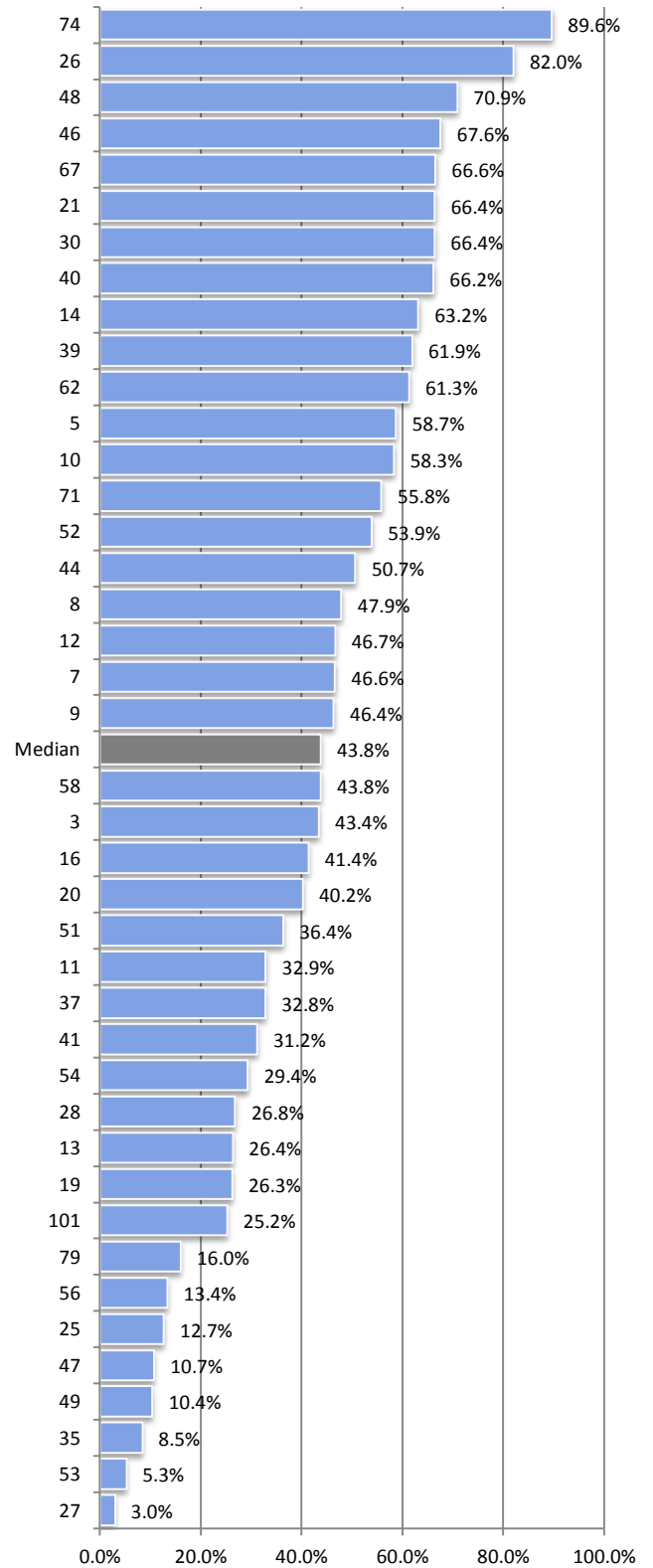


Figure 185  
Support - Help Desk Call Abandonment Rate

INFORMATION TECHNOLOGY

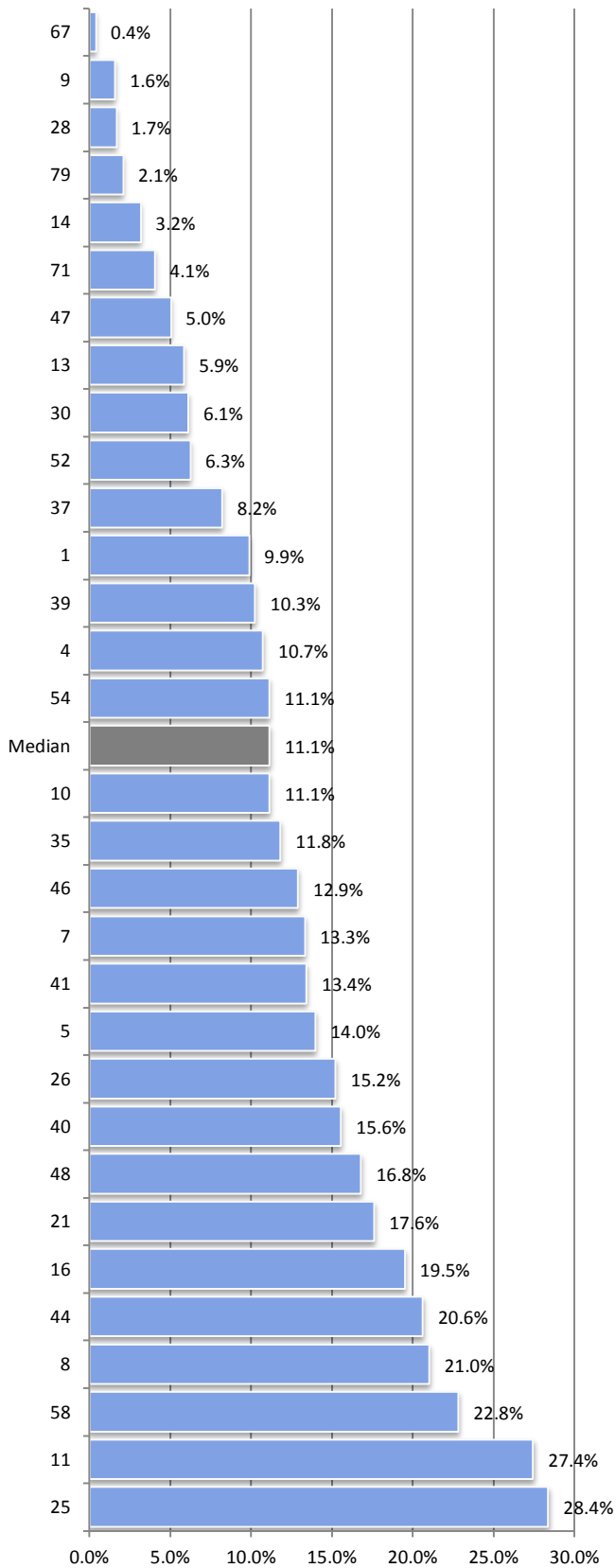


Figure 186  
Support - Help Desk Staffing Cost per Ticket

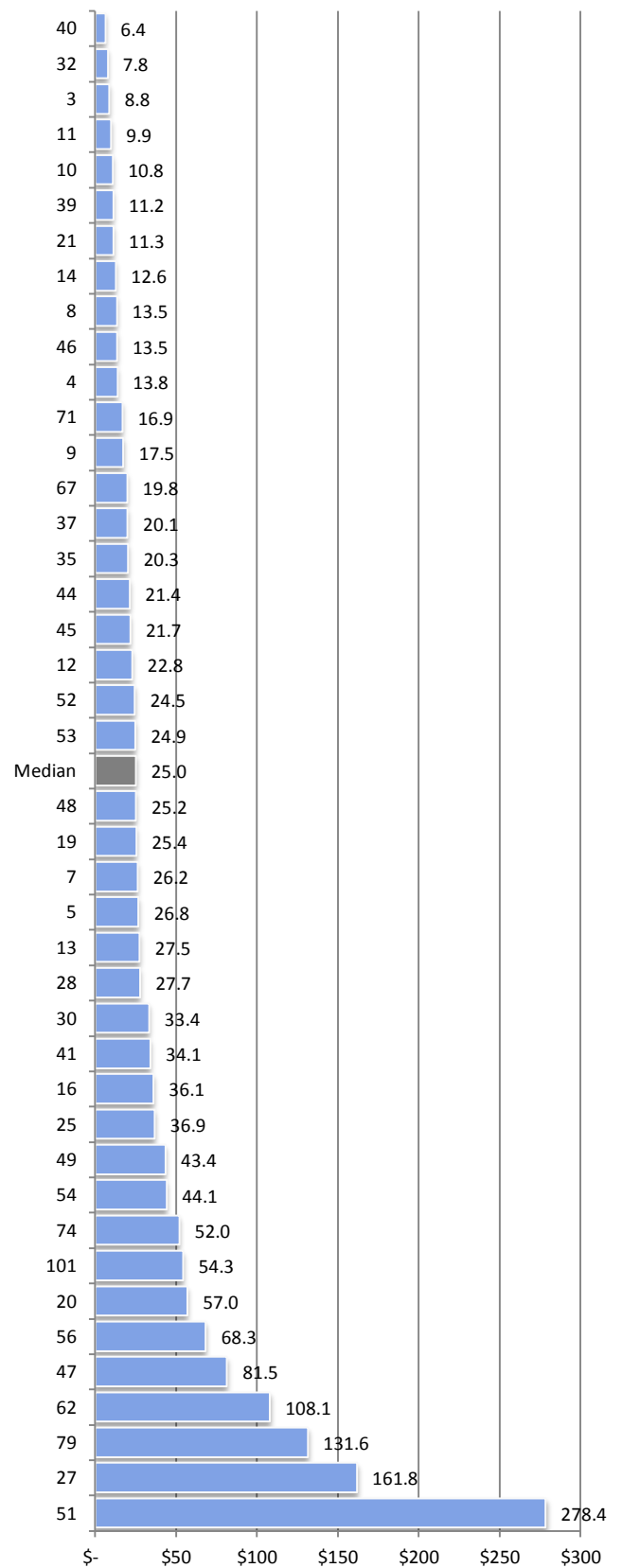


Figure 187  
Systems Cost - Business Systems Cost per Employee

This includes maintenance fees and staffing costs to maintain business systems such as ERP, finance, and payroll.

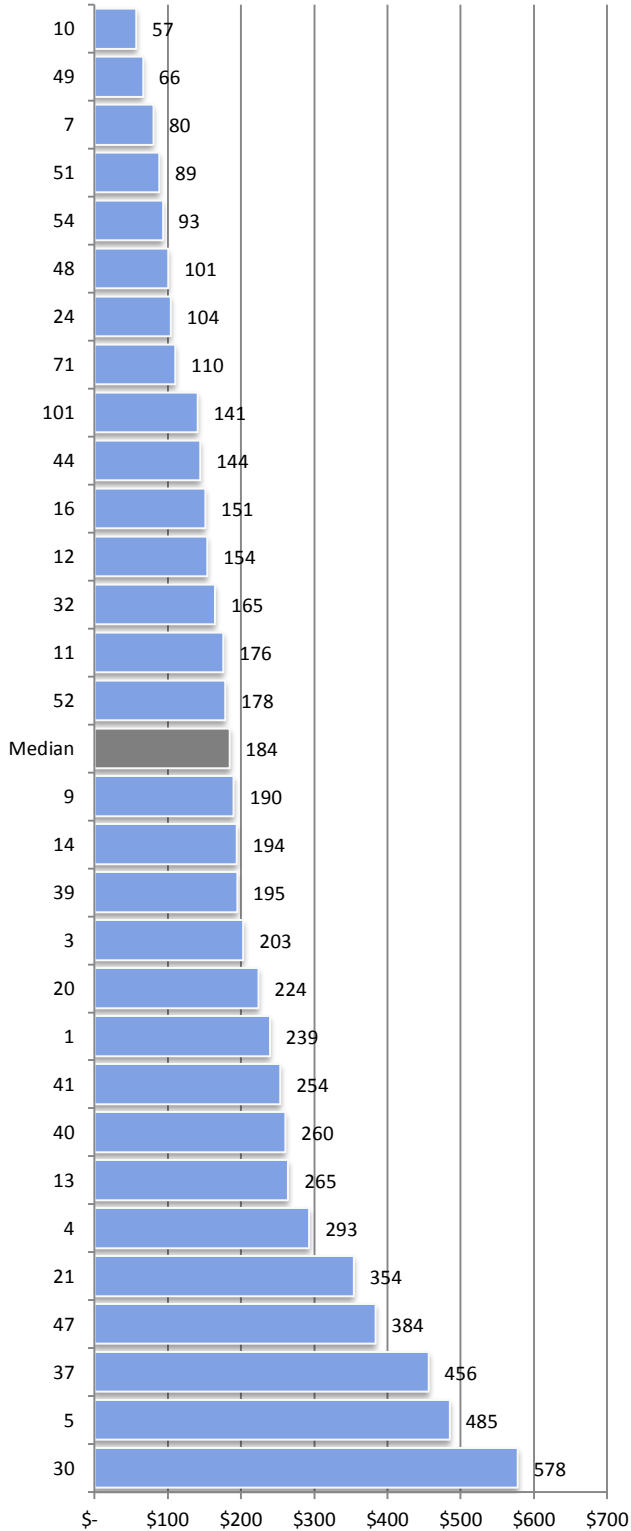
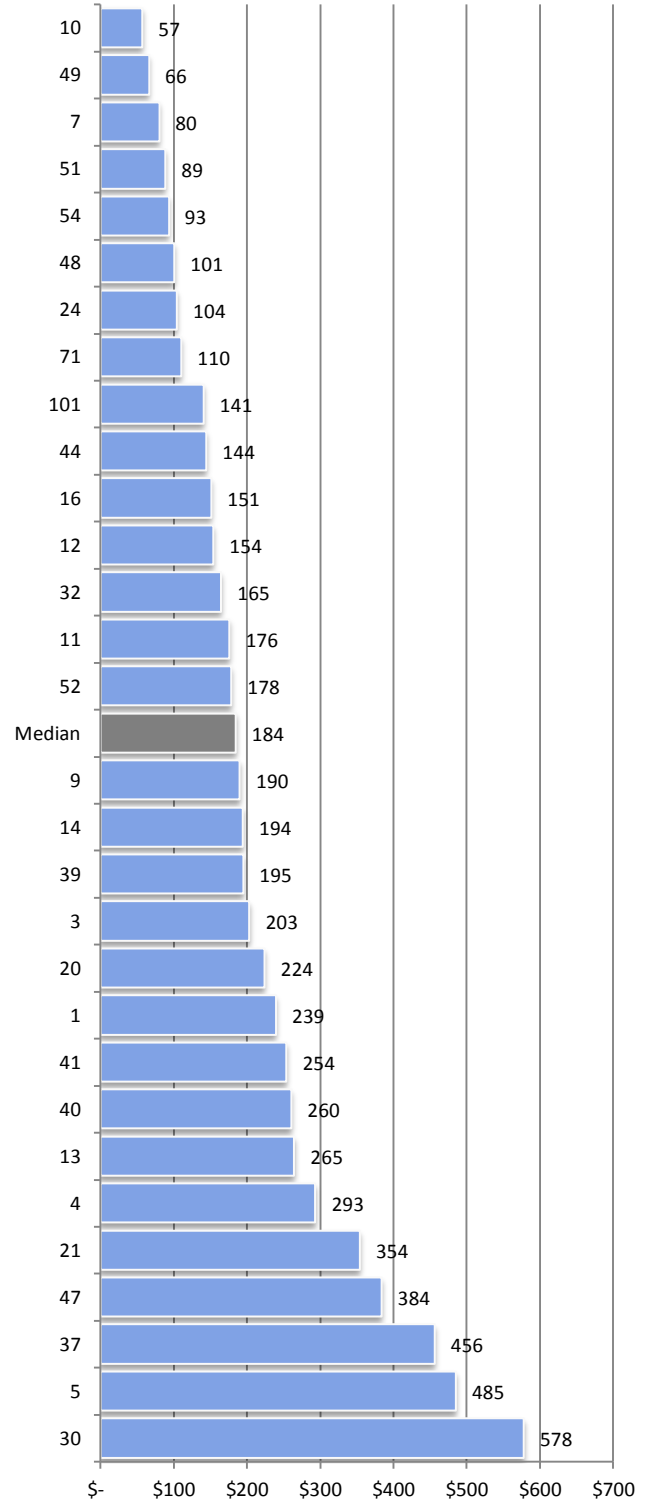


Figure 188  
Systems Cost - Instructional Systems Cost per Student

This includes maintenance fees and staffing costs to maintain systems such as student information systems (SIS), learning management systems (LMS), and content management systems (LMS).



# KPI DEFINITIONS

## Devices - Average Age of Computers

**Importance** The measure creates an aging index that counts the number of computers in the district by age. Understanding the average age of computers provides data for budget and planning purposes, and impacts break-fix support, supplies, and training. Aging of machines may differ between elementary and secondary schools as well as administrative offices. Implementation of new software applications has minimum standards that user machines must meet. Understanding computer aging will help identify district readiness as applications become available to staff and students. Developing comprehensive refresh cycles impacts not only the purchasing of equipment but also training cycles.

Many organizations in the private sector use a standard of three years for age of computers before they are replaced. Many school districts refresh their computers over a five-year period to get maximum benefits out of their equipment.

### Factors that Influence

- School board and administrative policies and procedures
- Budget development for capital, operational, and categorical funds
- Budget development for schools and department in refresh and computer purchasing
- Budget development in support, supplies, and maintenance.
- Implementation and project management for new software applications in both instructional and operations areas.
- Type of machine (i.e., desktop, laptop, netbook, etc.)

**Calculation** The weighted average age of all district computers, calculated as follows: number of one-year-old computers *plus* number of two-year-old computers times two *plus* number of three-year-old computers times three *plus* number of four-year-old-computers times four *plus* number of five-year-old computers times five *plus* number of computers older than five years old times six.

## Devices - Computers per Employee

**Importance** Indicates the number of computers used by employees.

**Calculation** Total number of office-use and teacher-use laptops and desktops *divided by* the total number of district employees (FTEs).

## Devices per Student

**Importance** This tracks the movement toward a one-to-one ratio of students to devices.

**Calculation** Total number of desktops, laptops and tablets that are for student-only use or mixed-use *divided by* total student enrollment.

## Devices - Advanced Presentation Devices

**Importance** Hi-tech presentation devices are useful for technology-enhanced instruction.

**Calculation** Total number of advanced presentation devices (video/data projectors, document cameras/digital overheads, and interactive whiteboards) *divided by* the total number of teachers (FTEs).

## IT Spending per Student / Percent of District Budget

**Importance** The measure provides a tool for districts to compare their IT spending per student with other districts. This measure must be viewed in relationship to other KPIs to strike the correct balance between the district's efficiency and its effective use of technology. If other KPIs such as customer satisfaction, security practices, and ticket resolution are not performing at high levels, low costs associated with IT spending may indicate an under-resourced operation.

### Factors that Influence

- Budget development and staffing
- IT expenditures can be impacted by new enterprise implementations
- The commitment of community for support technology investments in education
- IT Department standards and support model
- Age of technology and application portfolio
- IT maturity of district

### Calculation

Percent of Budget: Total IT staffing costs *plus* total IT hardware, systems and services costs *divided by* total district operating expenditures.

Per-Student: Total IT staffing costs *plus* total IT hardware, systems and services costs *divided by* total student enrollment.

## Network - Bandwidth per 1,000 Students (Mbps)

**Importance** This measure compares similarly situated districts and provides a quantifiable measure toward the goal of providing adequate bandwidth to support the teaching and learning environment. Bandwidth per Student provides a relative measure of the capacity of the district to support computing applications in a manner conducive to teaching, learning, and district operations. Some district and student systems are very sensitive to capacity constraints and will not perform well. Students and staff have come to expect certain performance levels based on their experience with network connectivity at home and other places in the community, and schools must provide performance on a par with that available elsewhere.

### Factors that Influence

- The number of enterprise network based applications
- The capacity demands of enterprise network based applications
- Fund availability to support network bandwidth costs
- Capacity triggers that provide enough time for proper build out and network upgrades
- Network monitoring systems and tools that allow traffic shaping, prioritization, and application restriction

**Calculation** Total standard available bandwidth (in Mbit/s) *divided by* total student enrollment in 1,000s. These data are expressed in Mbps.

## Network - Days Usage Exceeds 75% of Capacity

**Importance** Staying below the metric threshold is critical to application performance and user satisfaction. This metric may also provide justification for network expansion and capacity planning.



**Factors that Influence**

- The number of online applications sensitive to latency, digital video, and voice will all impact the amount of bandwidth a district needs.
- School districts may experience short periods of time with exceptional network demand and large portions of time with plenty of excess capacity.

**Calculation** The number of days that peak daily internet usage reaches more than 75% of the standard available bandwidth for five (5) minutes or longer.

**Network - WAN Availability**

**Importance** A high amount of downtime of the Wide Area Network (WAN) will likely disrupt the students, teachers and staff in the district.

**Factors that Influence**

- The number of online applications sensitive to latency, digital video, and voice will all impact the amount of bandwidth a district needs.

**Calculation** Total minutes of all outages on WAN circuits *divided by* the total number of WAN circuits.

**Support - Break/Fix Staffing Cost per Ticket**

**Importance** This measure assesses staffing cost per incident, which may indicate how responsive and how efficient the help desk is in making itself available to customers. The goal is to improve customer satisfaction through resolving incidents quickly, effectively, and cost efficiently. There are various costs that could be included in this metric such as hardware, software, equipment, supplies, maintenance, training, etc. Staffing cost per ticket was selected because data are easily understood and accessed and salary costs are typically the biggest cost factor in a help-desk budget.

**Factors that Influence**

- Software and systems that can collect and route contact information
- Knowledge management tools available to help desk staff and end users
- Budget development for staffing levels

**Calculation** Total personnel costs of Break/Fix Support costs (including managers) *divided by* the total number of tickets/incidents.

**Support - First Contact Resolution Rate**

**Importance** This measure calculates the percentage of user initiated contacts to the help desk, which generates a ticket that is resolved without escalation to the next higher support level. FCRR is an indicator of the number of exception contacts that a support center is receiving. It can be used as a management indicator to devise strategies to lower cost, improve operational ability and workflow, and improve customer satisfaction. It is more cost effective for the organization to resolve calls on first contact because the customer is returned to productive work more quickly. Private industry has recognized the cost-benefit of expecting that 85% of trouble calls are resolved on first contact. This measure can also be used as a tool to help guide quality improvement processes.

**Factors that Influence**

- Software and systems that can collect contact information at the help desk
- Automation tools for common help desk issues like password reset can improve performance and reduce costs – these numbers should be included in data collection

- Knowledge and training of help desk staff in enterprise applications
- Knowledge and training of end user of enterprise applications used
- New implementations will cause increase in service calls
- Permissions that are set for the help desk staff. If permissions are restricted, help desk staff will be able to resolve fewer types of problem calls.
- Capacity of the organization to respond to customer support requests
- Ability of help desk ticket application to track work tickets
- Tactical assignment of responsibilities may be different in each organization. The responsibilities of the help desk may vary from simply opening tickets to complete troubleshooting and problem resolution.

**Calculation** Number of tickets/incidents resolved on first contact *divided by* the total number of tickets/incidents.

**Support - Help Desk Call Abandonment Rate**

**Importance** This measure assesses the percentage of telephone contacts that are not answered by the service desk staff before the caller disconnects. CAR is an indicator of the staffing level of the service desk relative to the demand for service. The CAR can be used as a management indicator to determine staffing levels to support seasonal needs or during times of system issues (application or network problems). On an annual basis, it is a measurement of the effectiveness of resource management. This measure should be used as a tool to help guide quality improvement processes.

**Factors that Influence**

- Effective supervision to ensure that service desk team members are online to take calls
- A high percentage could indicate low availability caused by inadequate staffing, long call handling times and/or insufficient processes
- Length of time the caller is on hold
- Capacity of the organization to respond to customer support requests
- Proper staffing when implementing district-wide applications, which significantly increase calls
- Automation tools like password reset can reduce number of calls to the help desk and reduce overall call volume
- Increased training of help desk can reduce long handling time freeing up staff to take more calls

**Calculation** Number of abandoned calls to the Help Desk *divided by* total number of calls to the Help Desk.

**Support - Help Desk Staffing Cost per Ticket**

**Importance** This measure assesses staffing cost per incident, which may indicate how responsive and how efficient the help desk is in making itself available to customers. The goal is to improve customer satisfaction through resolving incidents quickly, effectively, and cost efficiently. There are various costs that could be included in this metric such as hardware, software, equipment, supplies, maintenance, training, etc. Staffing cost per ticket was selected because data are easily understood and accessed and salary costs are typically the biggest cost factor in a help-desk budget.

**Factors that Influence**

- Software and systems that can collect and route contact information

- Automation tools for common help desk issues like password reset can improve performance and reduce costs these numbers should be included in data collection
- Other duties performed by the help desk staff that restrict them from taking calls
- Knowledge management tools available to help desk staff and end users
- Budget development for staffing levels

**Calculation** Total personnel costs of the Help Desk (including managers) *divided by* the total number of support tickets/incidents.

#### Systems Cost - Business Systems Cost per Employee

**Importance** Can be used to evaluate total relative cost of systems. This includes recurring costs and maintenance fees only; it does not include capital costs or one-time implementation fees.

**Calculation** Personnel costs of staff for administration, development, and support of enterprise business systems *plus* annual maintenance fees for all enterprise business systems *plus* total outsourced services fees for enterprise business systems all *divided by* total number of district FTEs.

#### Systems Cost - Instructional Systems Cost per Student

**Importance** Can be used to evaluate total relative cost of systems. This includes recurring costs and maintenance fees only; it does not include capital costs or one-time implementation fees.

**Calculation** Personnel costs of staff for administration, development and support of instructional systems *plus* annual maintenance fees for instructional systems *plus* total outsourced services fees for instructional systems all *divided by* total number of students in the district.