Managing for Results in America's Great City Schools

A Report of the Performance Measurement and Benchmarking Project

Council of the Great City Schools

October 2011

To the Members of the Great City Schools—

The Council of the Great City Schools is pleased to present *Managing for Results in America's Great City Schools,* 2011 to the membership and the public. The report is the result of a multiyear effort begun in 2004 to develop performance measures that could be used to improve the business operations of urban public school districts across the nation.

Since its inception, the program has been led by the Council's task forces on governance and management, and finance, and has been conducted by a team of urban school managers and technical advisors with extensive expertise in various school district operations.

The Performance Measurement and Benchmarking Program behind the development of the indicators has now developed a full-fledged and completely automated on-line system that collects, calculates, and reports strategic-performance data to aid decision-making.

This year's report provides a compilation of key performance indicators based on 2009-10 data in business services, finances, and technology. The report focuses on the "value-add" proposition of using that data for spurring accountability; clarifying goals and priorities; measuring progress; enhancing transparency; reducing vulnerability to negative press; and improving policy options. The report also explains how the program's Performance Management System provides immediate strategic-performance data; helps school executives focus on needed areas of improvement; connects them to peers who are performing well; and provides a business-modeling tool for planning and validating targets.

The Council will be reorganizing its work in the coming year. We will redesign the performance measures on human resources and information technology to ensure they are more performance and outcomes based. We will be working with TransACT Communications to refine the automated Performance Management System, so it is easier to use and will provide more analytic and reporting functions. And we will be finishing case studies on the practices of top performing districts to identify causal variables behind the indicators.

Finally, we appreciate the generous support for this program from the William & Flora Hewlett Foundation and TransACT Communications. And we thank our membership for its expertise, time, and devotion to this work. We pay special tribute to Michael Eugene, Chief Operating Officer, Orange County Public Schools; Don Kennedy, former Chief Operations/Finance Officer, Seattle Public Schools; Frederick Schmitt, retired Chief Financial Officer, Norfolk Public Schools; Paul Mailloux, Chief Information Officer, Newark Public Schools; and Heidi Hrowal, Program & Policy Development Advisor, Los Angeles Unified School District. Their leadership and expertise has been pivotal in making this program work. Thank you.

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Background

America's Great City Schools are under enormous pressure to improve their academic performance, strengthen their leadership and operations, and regain the public's confidence. The Council of the Great City Schools has launched a series of initiatives over the last ten years to address these challenges, and this program to improve urban school district operations and efficiency is one of the organization's most important.

The Council of the Great City Schools, the nation's premier coalition of large urban public school systems, began its work to improve urban school district operations in 2004 with a major effort that became known as the "***Performance Measurement and Benchmarking Program.***" The purposes of the program, which was developed during the Council's annual meetings of its Chief Operating and Financial Officers, were to—

- Establish a common set of key performance indicators in a range of big-city school operations, including business services, finances, human resources, and technology.
- Benchmark and compare the performance of the nation's largest urban public school systems on these key performance indicators.
- Document effective management practices of the top-performing districts to help urban school districts improve their operations.
- Automate the performance data in a way that would allow districts to improve resource deployment and decision-making over time.
- Develop standards of excellence on each of the indicators.

The program is 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 program's work has been conducted by a team of member-district managers and technical advisors with extensive expertise in the following functional areas: business services (transportation, food services, maintenance and operations, safety and security, and procurement), budget and finance, information technology, and human resources.

Since its inception, the program has used a sophisticated research approach to collect, validate, and analyze school system data. And it has used a complex methodology to ensure the comparability, integrity, uniformity, reliability, and validity of data across cities.

As the program has evolved and matured, it has turned into a full-fledged Performance Management System with three major components:

- A mature and fully-tested set of Key Performance Indicators (KPIs) designed to report performance at three levels:

- Strategic and policy level (Power Indicators) for school boards and superintendents
- Management level (Essential Few) for senior managers
- Technical level (Performance Indicators) for managers and directors

❖ An automated performance-measurement tool with multiple features:

- An on-line survey instrument for data collection
- Automated calculations and analyses of performance-indicator data
- Presentation of data in a dashboard and graphic format that compares member districts and their operations on uniform benchmarks
- Business Intelligence (BI) tools that allow districts to ask "what/if" questions and conduct data modeling for validating the outcomes of action plans taken to improve results.

❖ Strategic Observations that allow districts to analyze comparable operational data to address national and local challenges, ensure districts have a clear picture of how they stack up against other similar urban school systems, and identify opportunities for improvement.

The Program's Value Add

❖ **Using Strategic Performance Data**

Collecting and analyzing performance data has intrinsic value, of course, but benchmarking or comparing data from city-to-city pays special dividends. Good data give school districts the ability to analyze how well they manage their resources in exactly the same ways that the private sector uses its data. Good data provide the evidence needed to identify best practices and the wherewithal to determine why some practices produce better results than others do. And good data enable school districts to build their knowledge about how large systems work and what it takes to improve them. Better data also enhance the effectiveness of non-instructional operations by spurring accountability for results, clarifying goals and priorities, measuring progress, enhancing transparency, reducing vulnerability to negative press, and improving policy options.

Moreover, the program's focus on automating the performance data has become a critical component of this work. Too often district executives indicate that their lack of usable and timely information foils their ability to see problems accurately or identify options for corrective action. Automating the indicators fills that void by allowing better data collection and analysis and permitting managers to create "what/if" scenarios around policy options that are most likely to produce a district's intended results.

If each non-instructional department in a school district were viewed as a business contracted to deliver services, then what would their deliverables be? How would the business be assessed to know whether they provided services at the level or quality desired by the customer? The way to answer these and other questions is found by identifying the "value-add" of functions within each department, and the benefits are realized from that department's activities. Once that value-add proposition is determined, strategic-performance data can quantify the degree to which the benefit is being attained and measures the most important elements of performance. This is known as Key Performance Indicators or KPIs.

Example 1: The Transportation Department's value-add is to provide safe, timely, and low cost transportation services. The data that quantifies that value includes--

1) *Preventable accidents per million miles,*
2) *On-time arrival rate, and*
3) *Cost per student*

By working from an "outcome perspective" and asking about the benefit a department provides to the entire organization, school districts can better determine the performance of a department or function based on the value-add it brings. This allows an organization, a department, or a function to clarify its priorities and better determine how and where to allocate its time and resources for better results. Strategic-performance data is an essential tool for assessing how departments and functions add value to the goals of the larger organization. Moreover, the data assists executives in moving the culture of their departments from an "efforts-driven" organization to a "results-driven" one. Strategic data show how specific actions "move the needle" toward desired goals and outcomes. If done properly, a program can identify not only what adds value but why.

❖ Using the Performance Management System (PMS)

Not only do executives need strategic performance data, they need it quickly. In the public sector—as in the private—issues must be headed off or responded to with immediate solutions. The Performance Measurement and Benchmarking Program (PMBP) now includes a Performance Management System that is completely automated for collecting, calculating, and reporting data, so strategic-performance information can be in the hands of district executives quickly and easily for timely action.

The PMBP process includes annual data collection to ensure executives have the most current data available. Executives need only provide raw data from an on-line survey to begin the process. The raw data are then run through a complex and standardized-calculation process to produce 340 performance measures. Once the performance measures are calculated, the data are placed into a data dashboard that graphically benchmarks performance of any individual urban school district against the performance of top districts nationwide. There are four core elements in the PMS:

PMS Key Performance Indicators (KPIs)

Since 2004, urban school executives from around the country have volunteered their time to identify areas of value-add within their departments; establish a common set of KPIs that quantify operational performance; and compare their districts on these indicators. The main value of the performance measures to executives rests in the calculation of raw data into a measure of performance and in how the resulting indicators inform decision-making. However, there is also a broader value to the KPIs. If a district has not paid attention to or measured a specific operational area before, it now has reason to do so with baseline data it may already have. If a district does not have data to report a measure, then the program suggests that a district should begin collecting this information in order to assess effectiveness. Many school executives around the country now have KPIs they didn't track before this program. And many other executives now have KPIs they didn't realize they should be tracking. There are now 340 measures in the PMS that add significant strategic value to the "tool belts" of big city school executives.

In addition, the KPIs are designed as a "hierarchy of measures." Long gone is the notion that an organization should only measure a handful of things at a single layer of the operation. The Performance Measurement and Benchmarking Program suggests districts need to have a system of indicators arranged in cascading fashion where lower-level measures are tracked in a way that drives higher level results. In the PMBP, the hierarchy is built on three levels:

- *Power Indicators*: Measures that should be reviewed by superintendents and school boards on a regular basis. Power Indicators provide an important view of the overall performance of the non-instructional side of a school district.

- *Essential Few*: Measures that, along with the Power Indicators, should be reviewed regularly by chief executives to assess the performance of individual divisions.

- *Performance Measures*: Measures that should be reviewed regularly by department heads. These indicators are more likely to be "drivers" of performance of higher-level measures, and should be reviewed regularly.

For example, one Power Indicator for food services involves meal participation rates. The Essential Few underneath that Power Indicator include meal participation rates by type and financial measures of performance. Lower-level performance measures that drive meal participation include use of Provision 2 programming, staff availability, point of sale computerization, and other measures.

PMS Dashboard

The PMS Dashboard is an essential tool for executives to see where their departments are doing well and where they have room for improvement. The PMS Dashboard provides a department-by-department and function-by-function "EKG" of sorts that shows the health of a

department or function's performance when compared to its peers. The value of presenting strategic-performance data through a dashboard format is that it allows executives to manage priorities rather than trying to manage "everything." When executives try to manage a mile wide and an inch deep, they will not be as effective or as strategic as they need to be. In addition, the PMS provides information about what factors influence performance, so executives know what to improve, but also where to start the improvement process. By using the dashboard, school executives can focus on areas that need to be addressed immediately.

PMS Benchmarking

The PMS allows executives to focus quickly on areas of greatest need, but identifying where improvement is needed is only a first step. Doing something to "move the needle" is a much larger task. Often, when a district identifies an area for improvement, it hires consultants to identify next steps. Such an approach can often be more costly than necessary, and it runs the risk of getting advice from individuals who have never actually produced results in a K12 environment. Consultant studies identify deficiencies, but they often cannot articulate a proven plan of action for ensuring improved performance. More often, districts themselves identify actions needed to improve operations, but they run the risk that the efforts are just that…efforts that do not produce better results. Here, districts get to the end of an improvement plan only to find the needle has not moved and desired outcomes have not been realized.

In contrast, the PMS system changes the paradigm for executives looking to identify actions that will produce better performance. The PMS takes the calculated performance measures, and benchmarks the districts on each of the 340 KPIs. Immediately, executives can identify top performing districts based on statistical performance data on any of the measures on which they would like to improve. From there a district can identify practices that have produced better outcomes in other city school systems. Executives can work through the Council of Great City Schools to connect to top-performing districts, and learn what practices they are using to drive statistically proven results. Previously, it would take significant time and money for executives to identify areas for improvement and design an action plan they hoped would produce better results. With the PMS, executives can identify continuous-improvement areas within minutes, and connect to top performing peers within a matter of hours or days.

The Data Modeling Tool

At this point in the use of the PMS, executives have quickly focused on areas of needed improvement, identified peers that are top performers in that area, and inventoried practices that produce better results. The next step is developing a sound business plan. It is unlikely that a district can turn itself into a nationally recognized top performer overnight. But the PMS helps a district identify the needed components of an effective plan and it helps sequence goals and targets for longer-term success.

Could you expect better results if you tried to triple your overall meal participation rate in a single year, for instance? It is unlikely. A district may need to make multiple changes

operationally to move the needle on this food service indicator. School board policy may need to change, re-organization and re-allocation of resources might be needed, new program plans may need to be designed, investments in professional development may be required, etc. It is also likely that interim or incremental targets will be needed over time, which raises the question about which targets should be set and what should the superintendent and board of education be looking at to gauge progress.

The PMS provides executives with a data modeling tool they can use to set targets, run calculations, and determine whether the plan is likely to work. For example, a district active in the KPI work used the PMS to identify that an increase in breakfast participation rates at the elementary-school level was needed. The district used the data modeling tool to determine it needed to serve 1 million additional breakfasts to reach the national average. That's a significant increase in breakfasts and the district set a long term goal with incremental year-by-year targets to put it on the right path. By connecting to its peer districts, the school system identified practices that have proven effective in increasing breakfast participation rates. The plan was then put into place.

The data modeling tool gives districts a better method for determining what initiatives are needed to make improvements. It is possible that a district may want to improve, but lacks the resources needed to get to "top performer" status. By using the data modeling tool, districts will be in a better position to balance needed investments against expected benefits or "Return-on-investment" (ROI). Many districts can then invest the right amount of time, resources, and dollars to achieve top performing levels. Some may be satisfied with making only the changes needed to attain average or median status. And some may have unique issues that result in remaining at current performance levels. No matter what, districts will now be making more informed decisions by using the strategic data and business modeling tools of the PMS.

The data modeling tool also serves as a way to validate the outcomes of action plans taken to improve results. The data modeling tool allows districts to enter results-based data and re-calculate their performance to see where the new data places them relative to their peers. The validation process will tell a district whether they hit their target, they are following the planned path for improvements, or they need to change strategies. For example, a district used the data modeling tool after it determined that it had too many schools buses. The district sold 271 buses, which moved them from the bottom quartile among its peers to well above the national average. The district also realized $1.7 million in revenue from the sale of the excess buses.

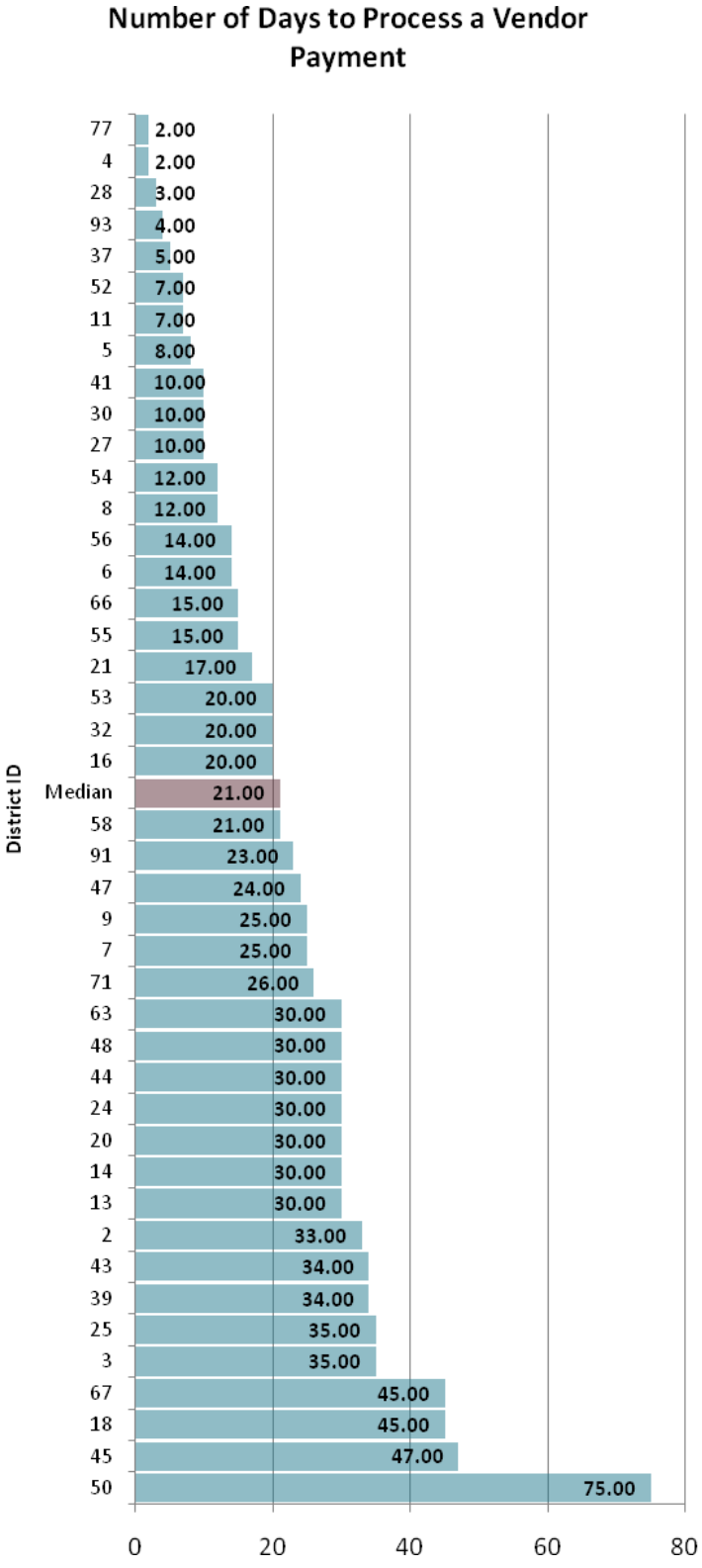
❖ Conclusion and Next Steps

The PMS is an essential strategic tool for non-instructional executives in elementary and secondary schools. It provides immediate strategic performance data, helps executives focus on improvement areas, connects them to high-performing peers, and provides a business modeling tool for planning and validating targets.

The Council of the Great City Schools and its member districts will be reorganizing some of its work in the coming year. We will redesign performance measures for human resources and information technology to ensure they are outcomes-based and have greatest value. We will also be working with TransACT Communications to refine the Performance Management System so it is easier to use, will provide more analysis and reporting, and become a better asset to executives. And we will be designing case studies to identify the practices among top-performing districts that help explain their exemplary results. The PMS continues to be one of the most innovative and promising developments in public education in many years.

FINANCE

Accounts Payable



Calculation

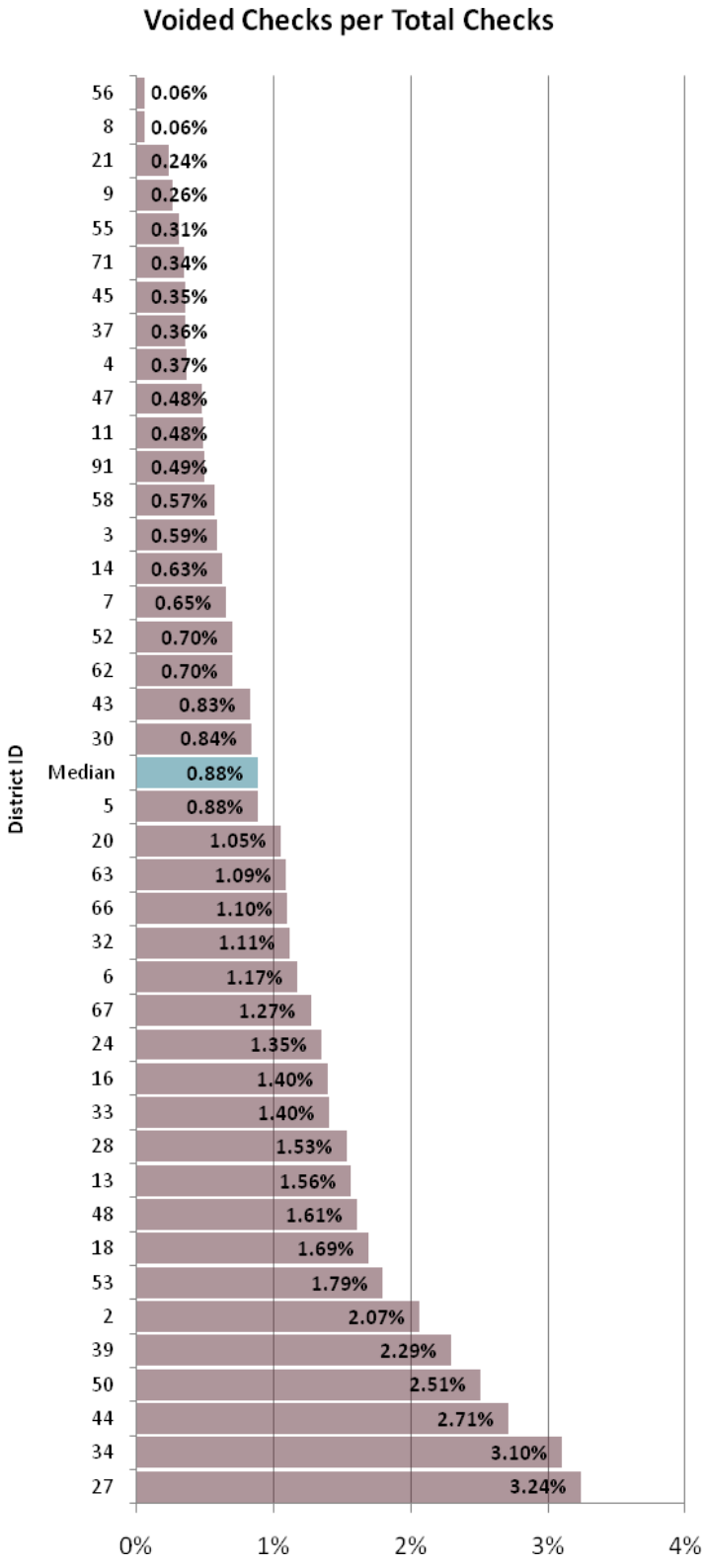
Total number of days equals the time span from date of invoice receipt within the Accounts Payable Department to the date of invoice payment to the vendor

Importance of Measure

- Measures the efficiency of the payment process

Influencing Factors

- Automation
- Size of district
- Administrative polices



Calculation

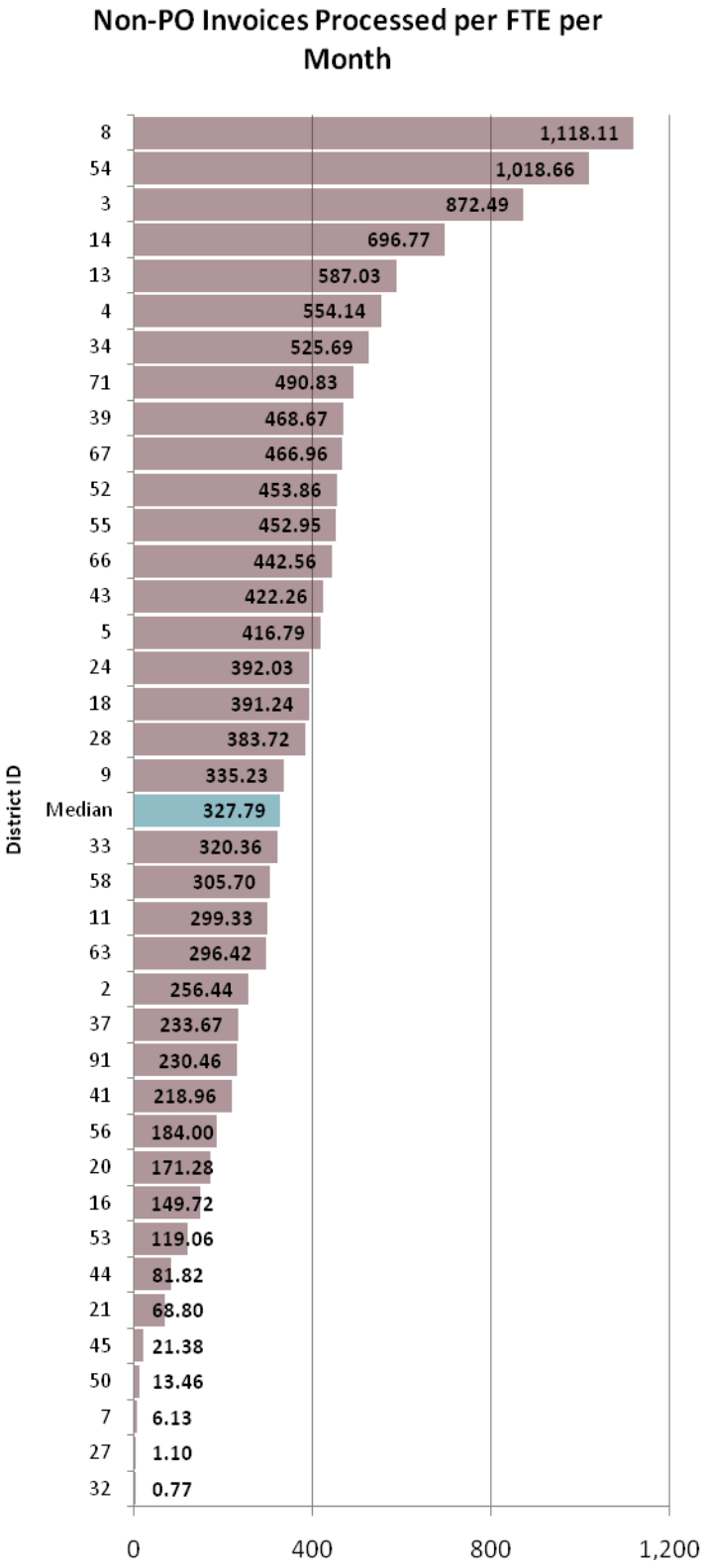
The total number of non-salary checks voided or reversed *divided by* the total number of non-salary checks processed

Importance of Measure

- The measure reflects processing efficiencies and the degree of accuracy
- Voided checks are usually the results of duplicate payments or errors
- A high percentage of duplicate payments typically indicates a lack of controls, or master vendor files that are in need of cleaning, and offer the potential for fraud

Influencing Factors

- Administrative policies and procedures, organizational structure, 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

Total number of non-PO invoices paid annually *divided by* the number of FTEs in the Accounts Payable Department *divided by* 12 months

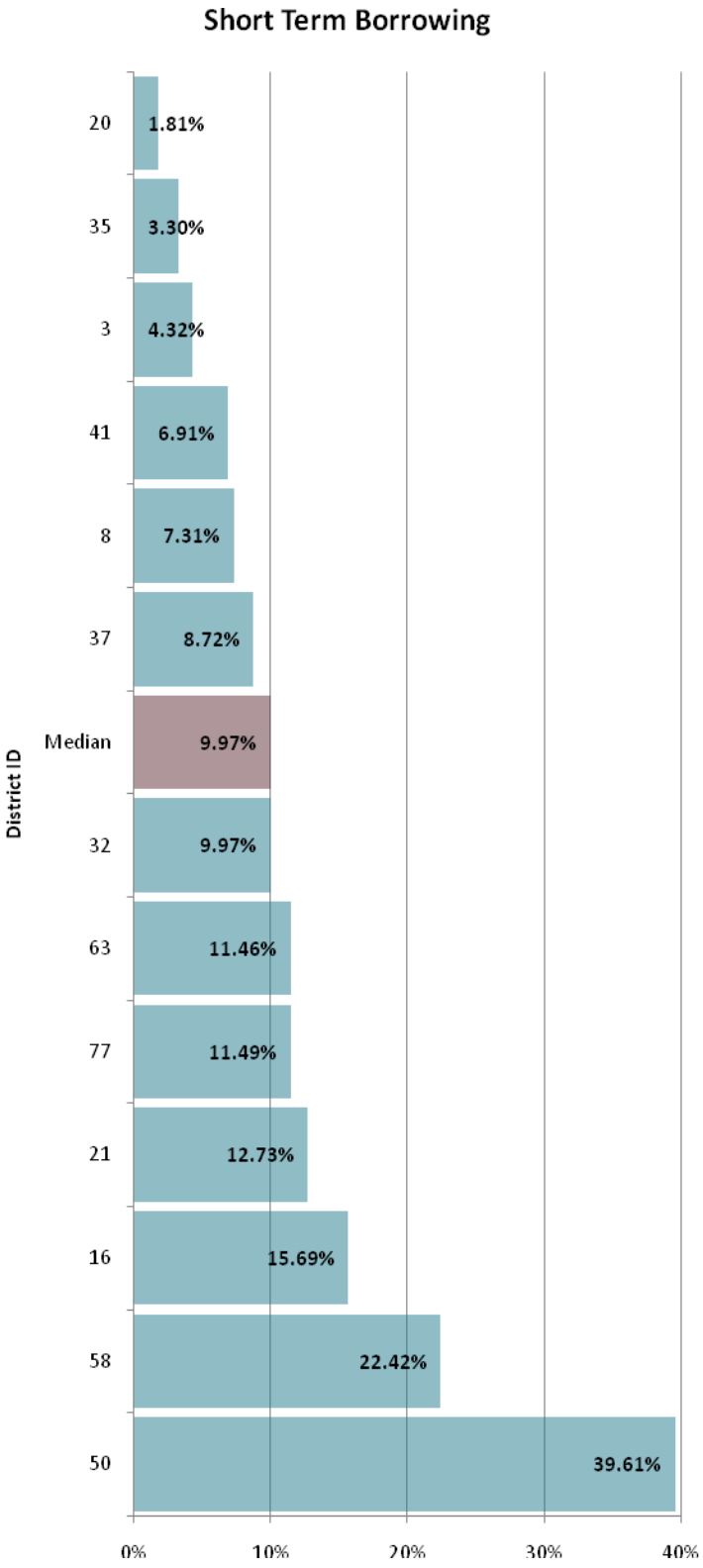
Importance of the Measure

- This measure is an indicator of the most used factor that drives the cost of accounts payable
- Moving to a high level of automation significantly boosts the number of payments made per month per staff member, which improves cost efficiency
- Studies have shown that world class performance requires a mix of high and low tech strategies

Influencing Factors

- Administrative policies and procedures, organizational structure, 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 non-purchase order invoices paid annually
- Level of automation

Cash Management



Calculation

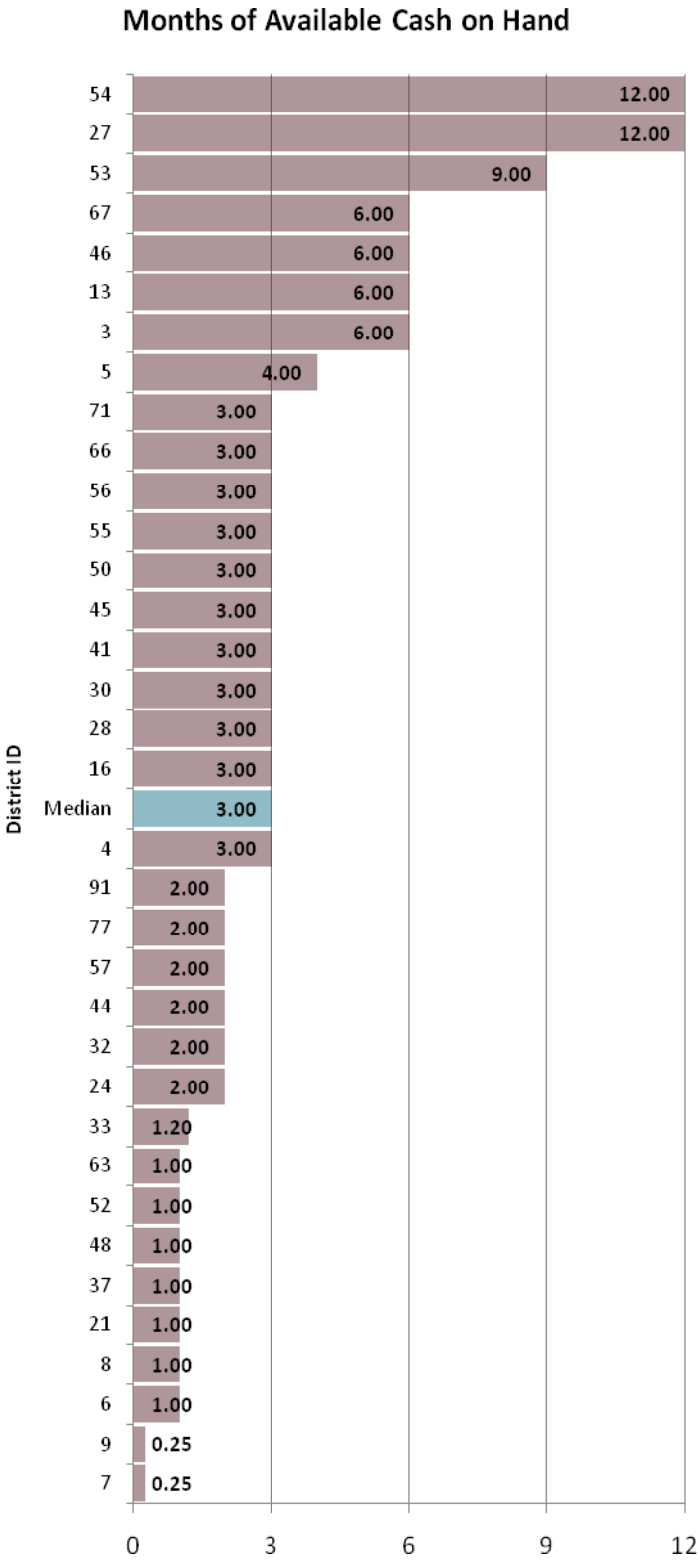
Total dollar amount of all short term borrowings for the year *divided* by the total amount of actual operating disbursements for the year

Importance of Measure

- To identify the degree districts need to borrow money to meet cash flow needs

Influencing Factors

- The timing of revenue inflows and timing of expenditure outflows and the arbitrage ability to cover the borrowing
- Ability to meet required spending for tax exempt borrowing eligibility



Calculation

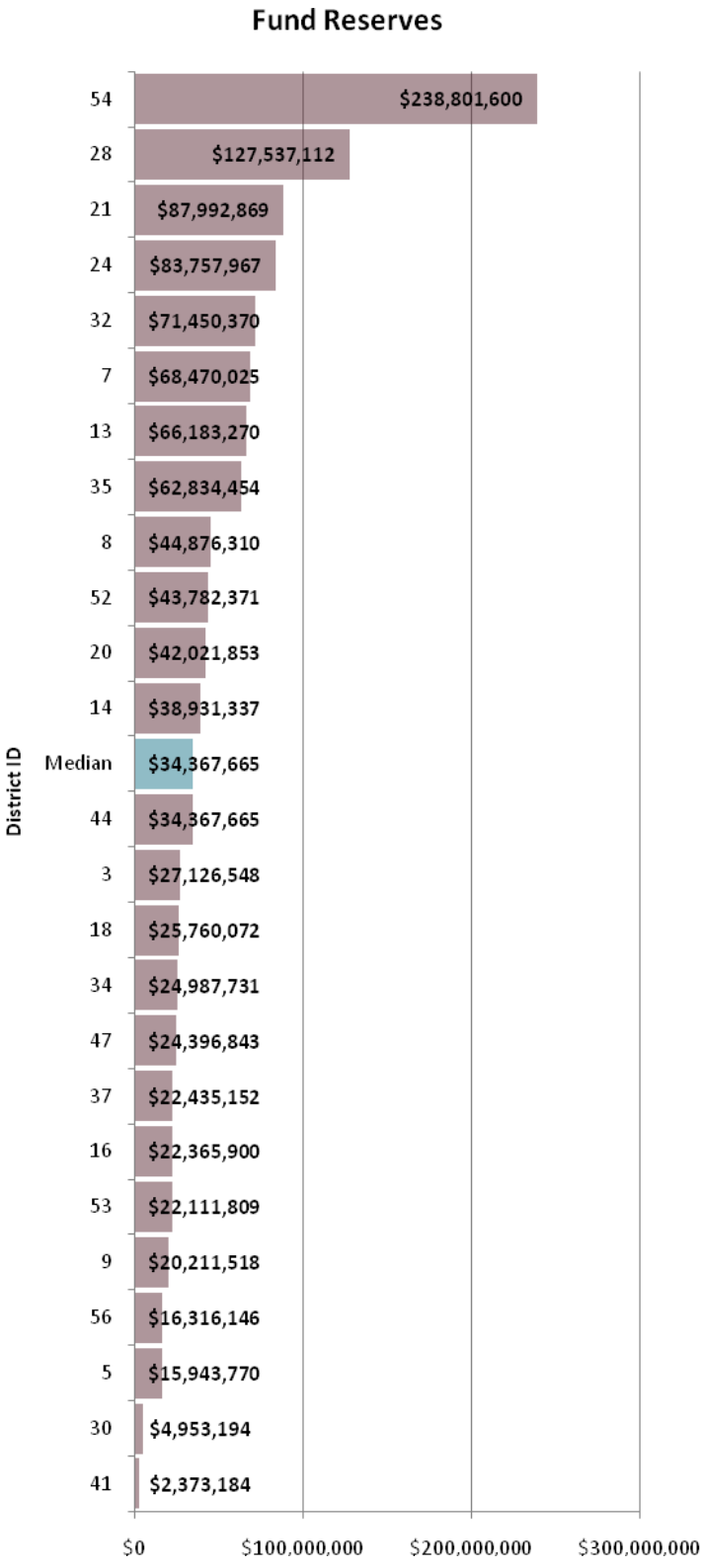
How many months of available cash do you like to have on hand?

Importance of Measure

- A good indicator of financial health
- Negative balances increase borrowing costs (interest rates)
- Determine district's ability to handle unexpected costs
- Ability to meet daily financial needs and supplement deficient fund reserves

Influencing Factors

- Timing of cash flows in consideration of revenue received
- Ability to obtain short term borrowing
- Economic environment
- Funding source (degree the district can control the timing of receipts) - this probably only applies to independent school districts, since districts run by cities or counties often don't manage their own cash



Calculation

Amount of operating revenue *times* the percentage of operating revenue required for fund reserve

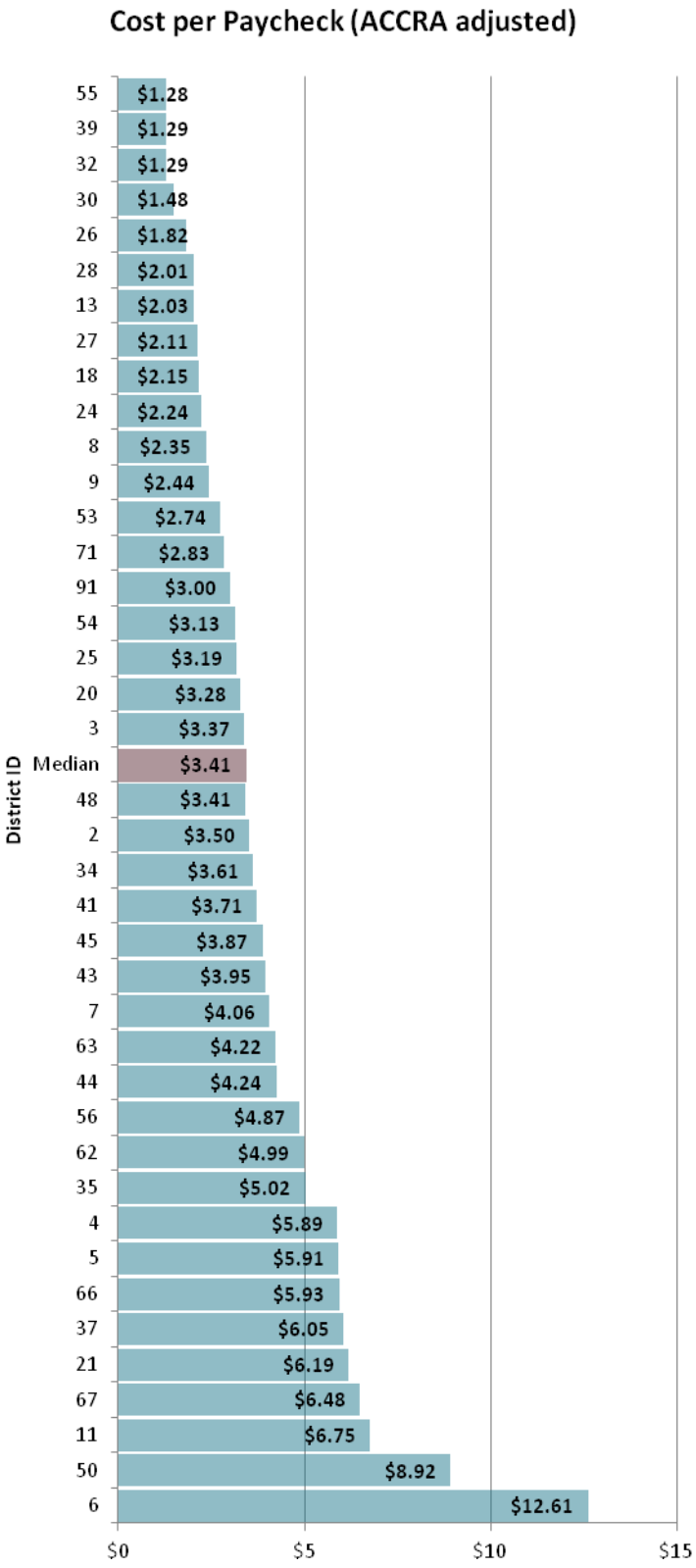
Importance of Measure

- To ensure you have sufficient cash to meet your spending needs
- Ensure school districts that are minimizing their financial risk by establishing fund reserves, which minimize the need for short-term borrowing by meeting unexpected costs due to expenditures or budget gaps

Influencing Factors

- District and public policy and accounting standards

Compensation



Calculation

The sum of the annual cost of payroll salaries, benefits, supplies, materials, licensing fees and postage *divided by* the number of paychecks issued annually (divided by ACCRA factor[1])

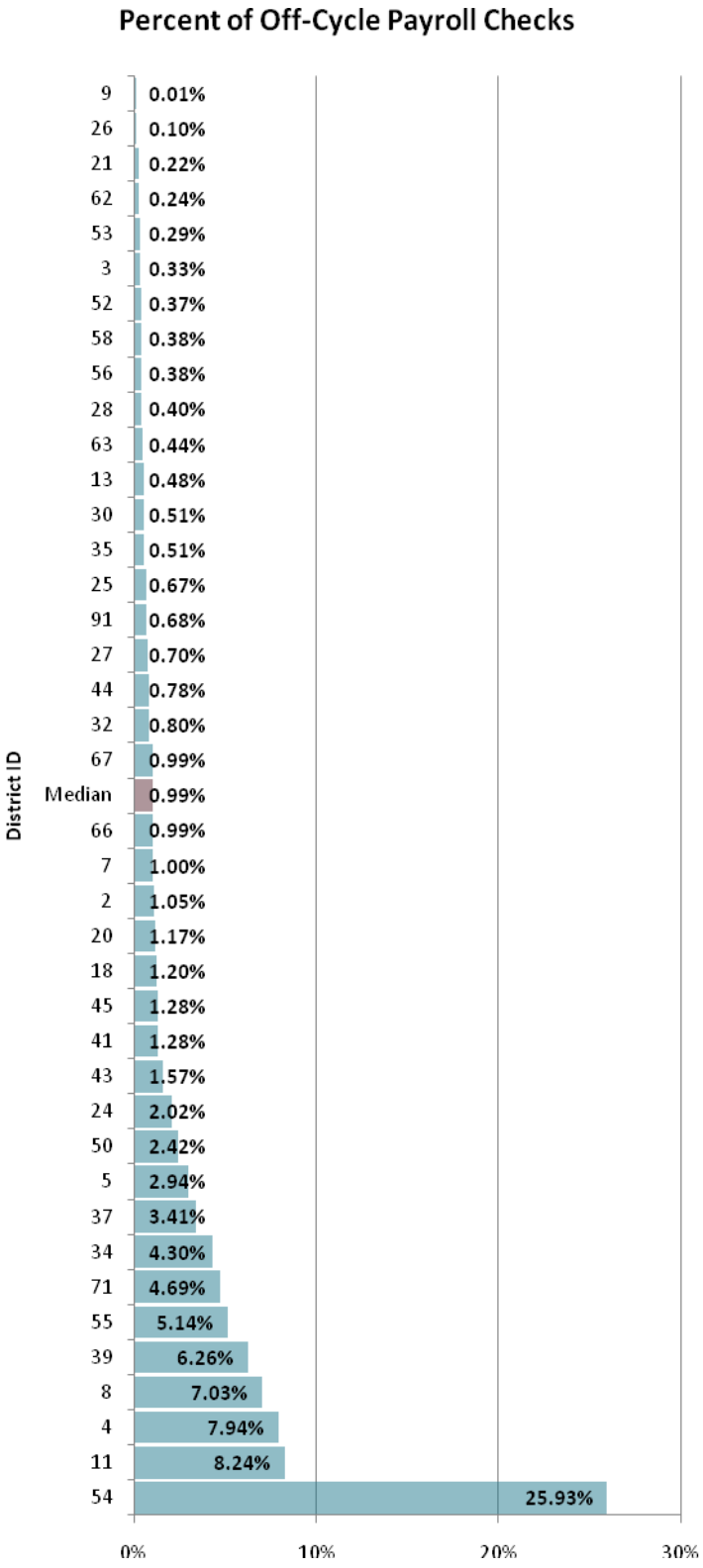
Importance of Measure

- This measure assesses 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

Influencing Factors

- Number of employees processing payroll
- Skill level of the employees processing payroll
- Types of software/hardware used to process 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

[1]ACCRA is an acronym for American Chambers of Commerce Research Association. This organization produces a Cost of Living Index to provide a useful and reasonably accurate measure to compare cost of living differences among urban areas. We divided all measures that resulted in a dollar amount by the ACCRA factor for the region in order to normalize data across regions. For additional information, please go to www.coli.org.



Calculation

Total number of off-cycle checks produced annually *divided by* the number of paychecks generated annually

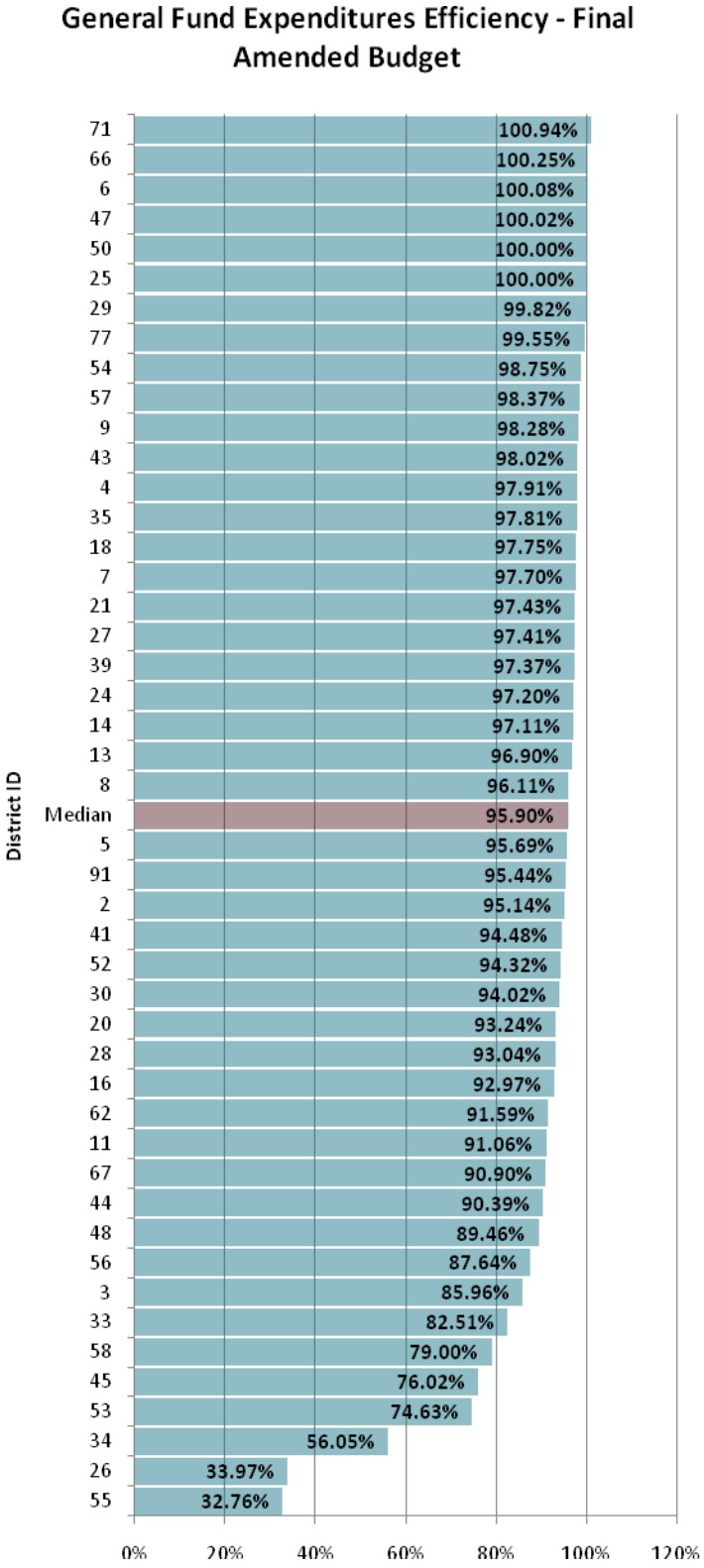
Importance of Measure

- This measure assesses the effectiveness and accuracy of the payroll processes
- Off-cycle checks are usually the result of errors in data received for payroll processing or errors in data input prior to payroll processing
- A higher number of off-cycle checks usually indicate a need to review processes and procedures to determine if the proper controls are in place to monitor payroll output

Influencing Factors

- Number of employees processing the payroll
- Skill level of the employees processing payroll
- Processes and procedures in place to collect payroll data
- Number of employees being paid
- Number of contracts requiring compliance
- Timeliness of the receipt of payroll data
- Accuracy of payroll data received
- Systems in place for collection of payroll data

Financial Management



Calculation

Total actual general fund expenditures and encumbrances *divided by* total final approved budget appropriated for general fund expenditures and encumbrances, before over/under liquidation of prior year encumbrances, reported in the Budgetary Comparison Schedule shown in the Required Supplementary Information section of the CAFR

Importance of Measure

- 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, significantly impacted by unforeseen factors, and/or potentially mismanaged

Influencing Factors

- Policies and procedures
- Budget development and management processes
- Administrative organizational structure, leadership styles, decision making processes, and distribution of authority
- Departmental employee responsibilities and competencies

Calculation

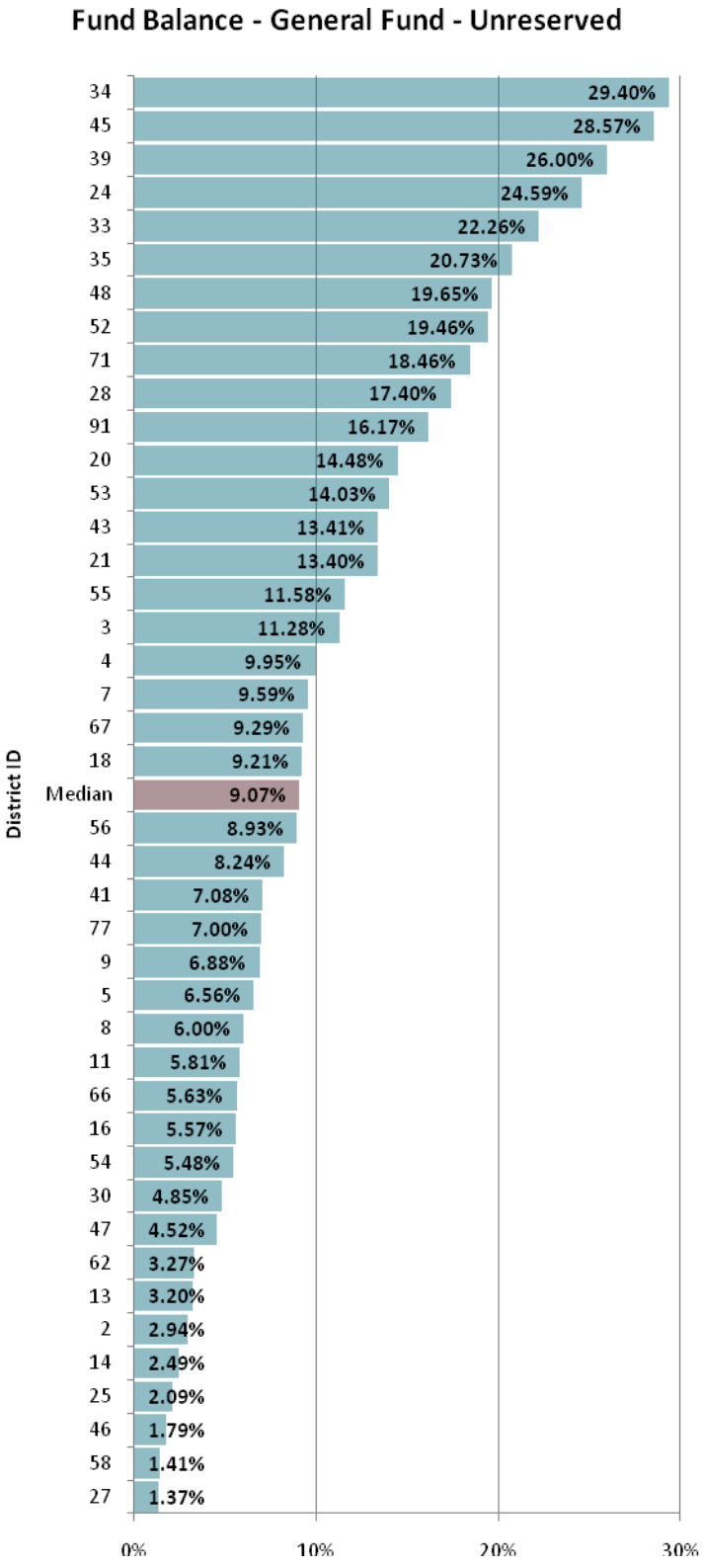
Total actual general fund revenues *divided by* Total Final Approved Budget appropriated for general fund revenues, before over/under liquidation of prior year encumbrances, reported in the Budgetary Comparison Schedule shown in the Required Supplementary Information section of the annual CAFR

Importance of Measure

- A percentage nearing 100% or above indicates efficiency in obtaining revenues to support final approved receipts
- 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, significantly impacted by unforeseen factors, and/or potentially mismanaged

Influencing Factors

- Policies and procedures
- Budget development and management processes
- Administrative organizational structure, leadership styles, decision making processes, and distribution of authority
- Departmental employee responsibilities and competencies



Calculation

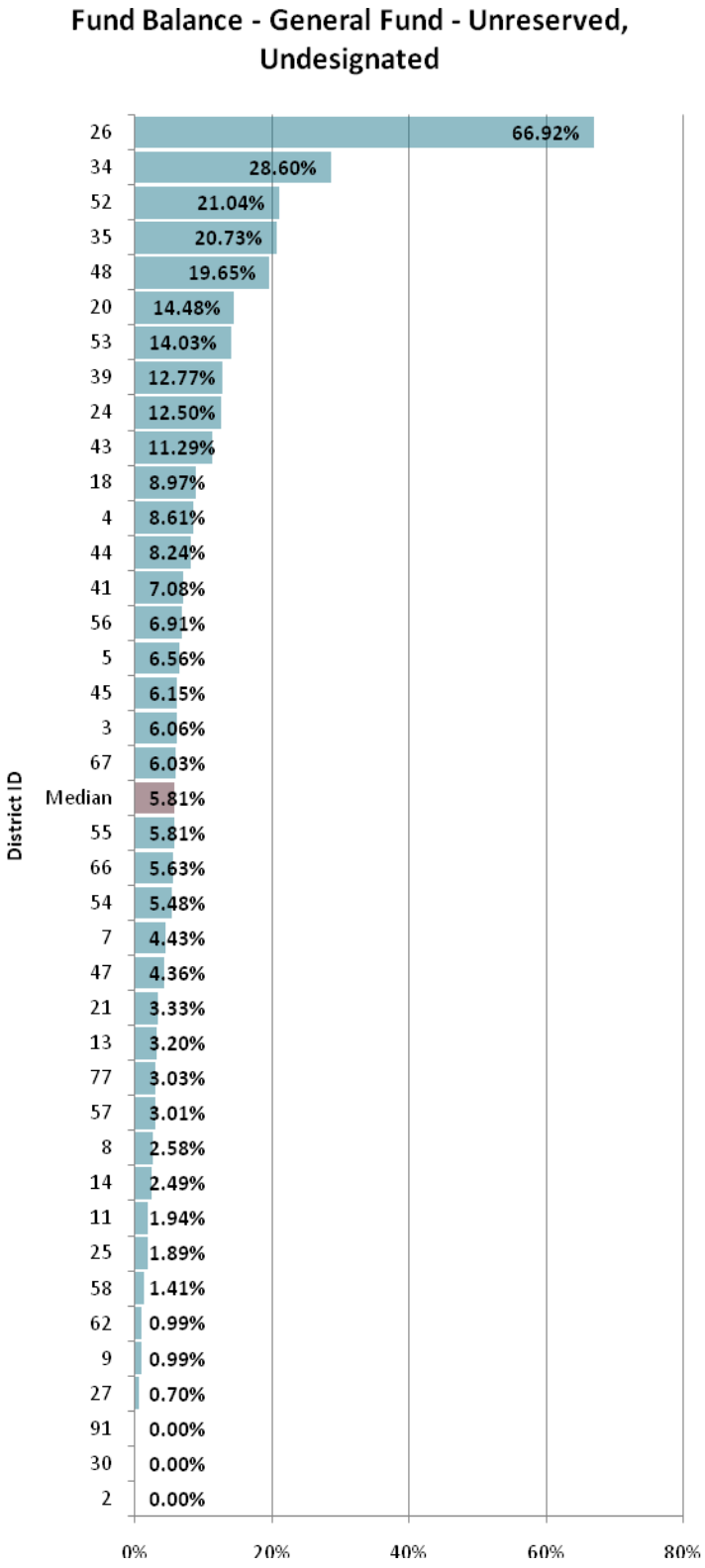
Actual unreserved general fund balance (including amounts designated within the unreserved fund balance total), reported for the General Fund in the Balance Sheet – Governmental Funds statement of the annual CAFR *divided by* total general fund expenditures (GAAP based), reported for the General Fund in the Statement of Revenues, Expenditures and Changes in Fund Balances – Governmental Funds of the annual CAFR

Importance of Measure

- 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
- GFOA recommends that governments maintain between 5% and 15% of regular general fund operating revenues

Influencing Factors

- Policies and procedures
- Budget development and management processes
- Administrative organizational structure, leadership styles, decision making processes, and distribution of authority
- Departmental employee responsibilities and competencies



Calculation

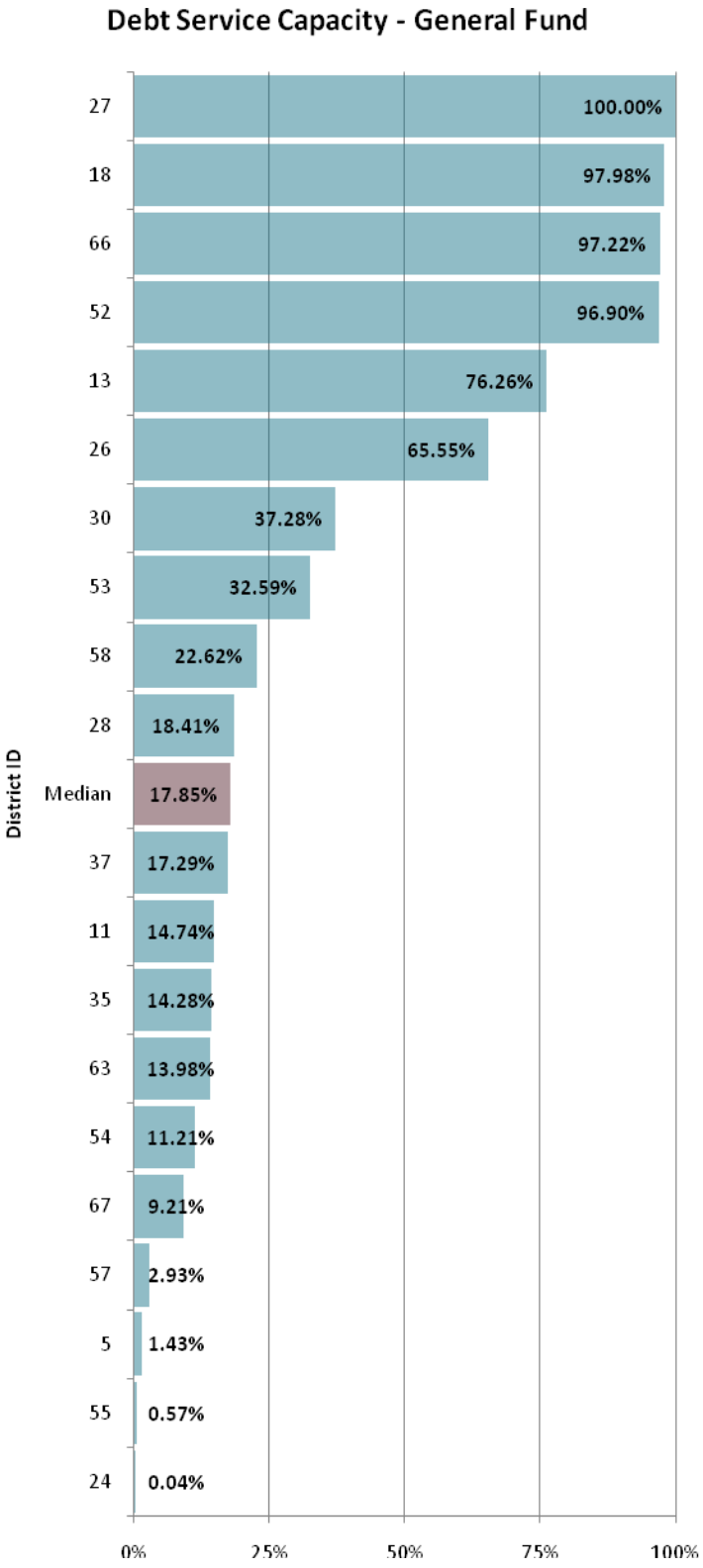
Total unreserved, undesignated general fund balance (excluding amounts designated within the unreserved fund balance total) reported for the general fund in the Balance Sheet – Governmental Funds statement of the annual CAFR *divided by* total general fund expenditures (GAAP based), reported for the general fund in the Statement of Revenues, Expenditures and Changes in Fund Balances – Governmental Funds of the annual CAFR

Importance of Measure

- This measure assesses the fiscal health of the district supported by the general fund, including financial capacity to meet unexpected or 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

Influencing Factors

- Policies and procedures
- Budget development and management processes
- Administrative organizational structure, leadership styles, decision making processes, and distribution of authority
- Departmental employee responsibilities and competencies



Calculation

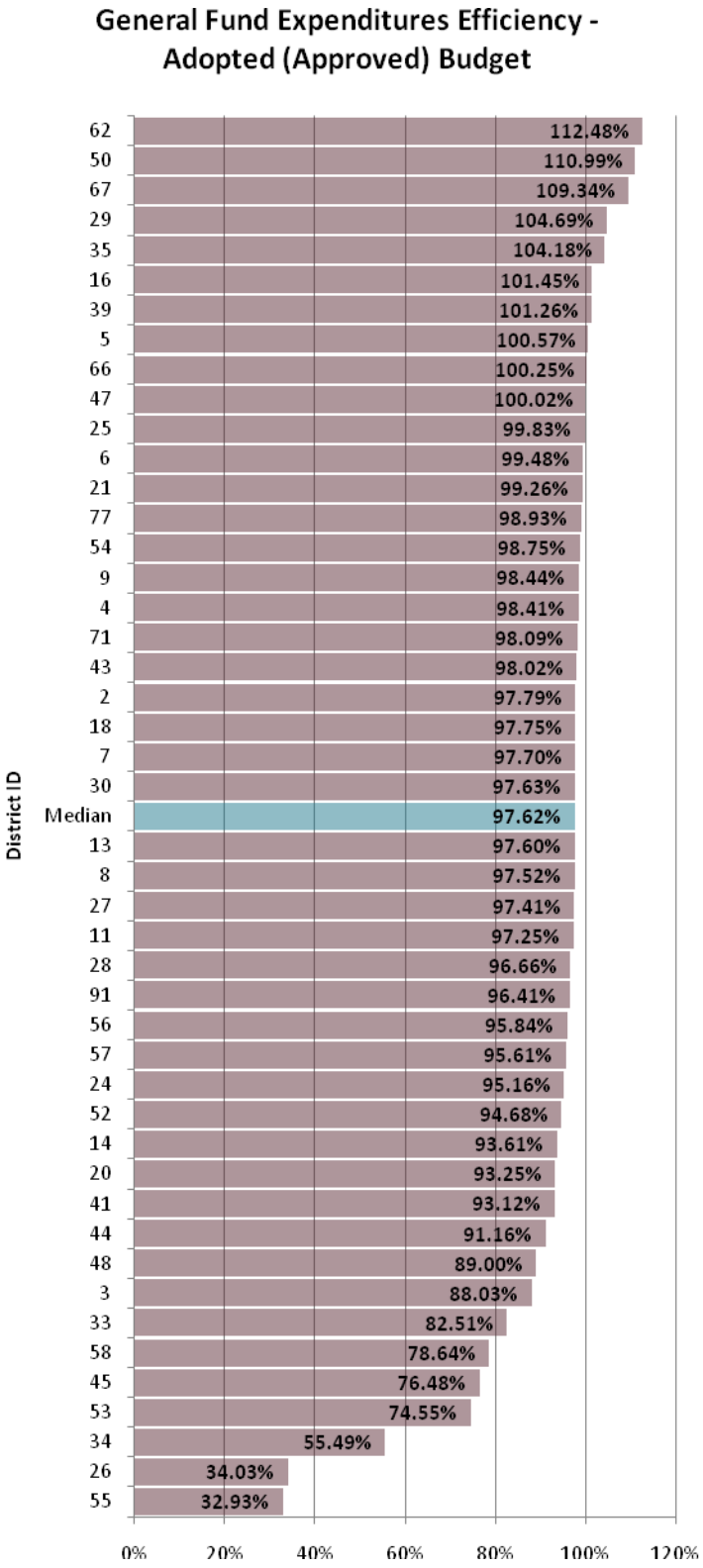
Amount of actual annual debt service payments (principal and interest) expended to repay long term debt obligations of the school system during the fiscal year *divided by* amount of unrestricted general fund revenues legally available to repay debt (GAAP based), reported in the Statement of Revenues, Expenditures and Changes in Fund Balances – Governmental Funds of the annual CAFR

Importance of Measure

- If a district reaches the point where it is unable to meet its annual long term debt obligations, the governing body and administration needs to take immediate steps to implement corrective financial management policies

Influencing Factors

- Policies and procedures
- Budget development and management processes
- Administrative organizational structure, leadership styles, decision making processes, and distribution of authority
- Departmental employee responsibilities, competencies



Calculation

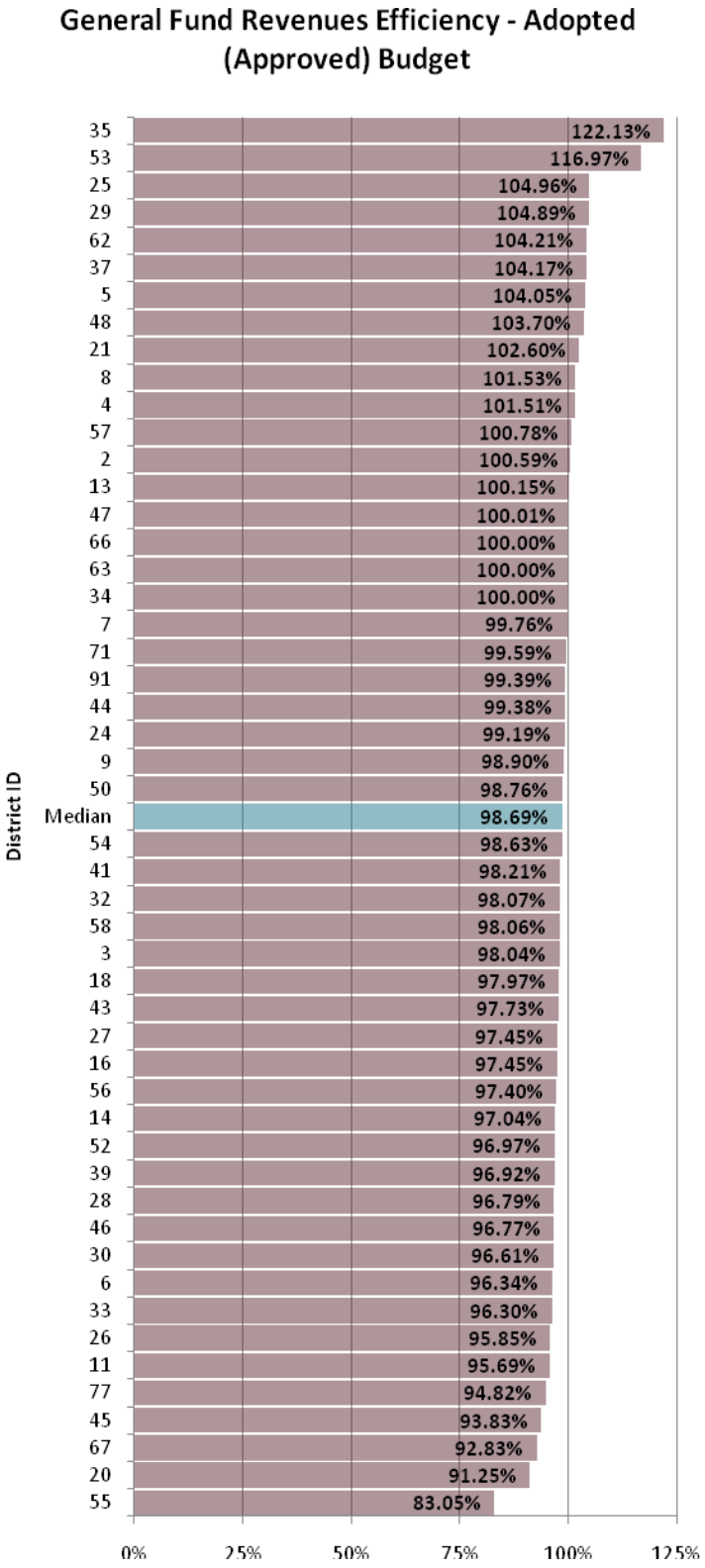
Amount for actual general fund expenditures and encumbrances, before over/under liquidation of prior year encumbrances, reported in the Budgetary Comparison Schedule shown in the Required Supplementary Information section of the annual CAFR *divided by* Original Approved Budget for general fund expenditures and encumbrances, before over/under liquidation of prior year encumbrances, reported in the Budgetary Comparison Schedule shown in the Required Supplementary Information section of the annual CAFR

Importance of Measure

- A percentage nearing 100% indicates alignment with actual expenditures
- A low percentage, or a percentage exceeding 100%, signifies the original budget was inaccurate, misaligned, and/or potentially mismanaged

Influencing Factors

- Policies and procedures
- Budget development and management processes
- Administrative organizational structure, leadership styles, decision making processes, and distribution of authority
- Departmental employee responsibilities, competencies



Calculation

Actual general fund revenues, before over/under liquidation of prior year encumbrances, reported in the Budgetary Comparison Schedule shown in the Required Supplementary Information section of the annual CAFR *divided by* amount appropriated in the Original Approved Budget for general fund revenues, before over/under liquidation of prior year encumbrances, reported in the Budgetary Comparison Schedule shown in the Required Supplementary Information section of the annual CAFR

Importance of Measure

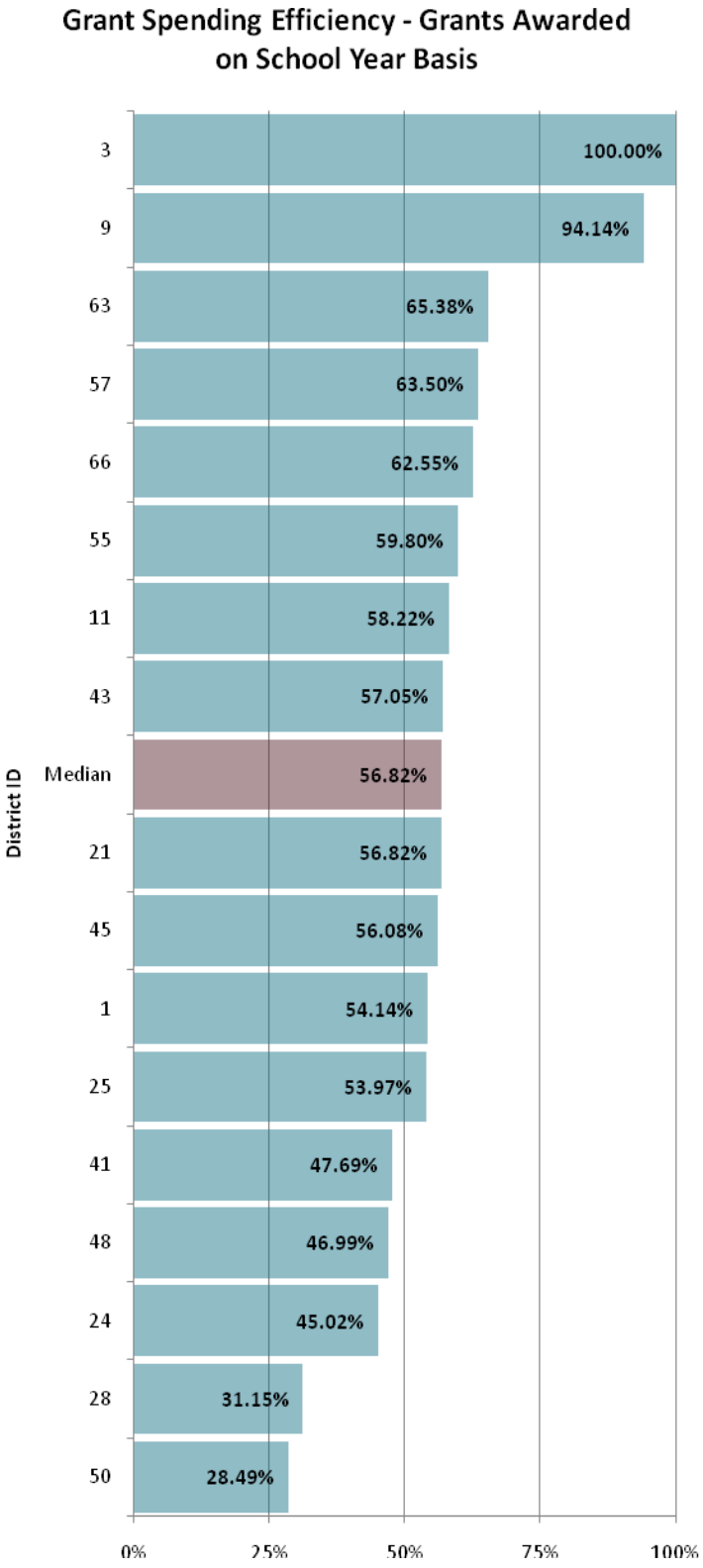
- A percentage nearing 100% indicates alignment with actual receipts
- A low percentage, or a percentage exceeding 100%, signifies the original budget was inaccurate, misaligned, and/or potentially mismanaged

Influencing Factors

- Policies and procedures
- Budget development and management processes
- Administrative organizational structure, leadership styles, decision making processes, and distribution of authority
- Departmental employee responsibilities, competencies

Grant Management

Power Indicator



Calculation

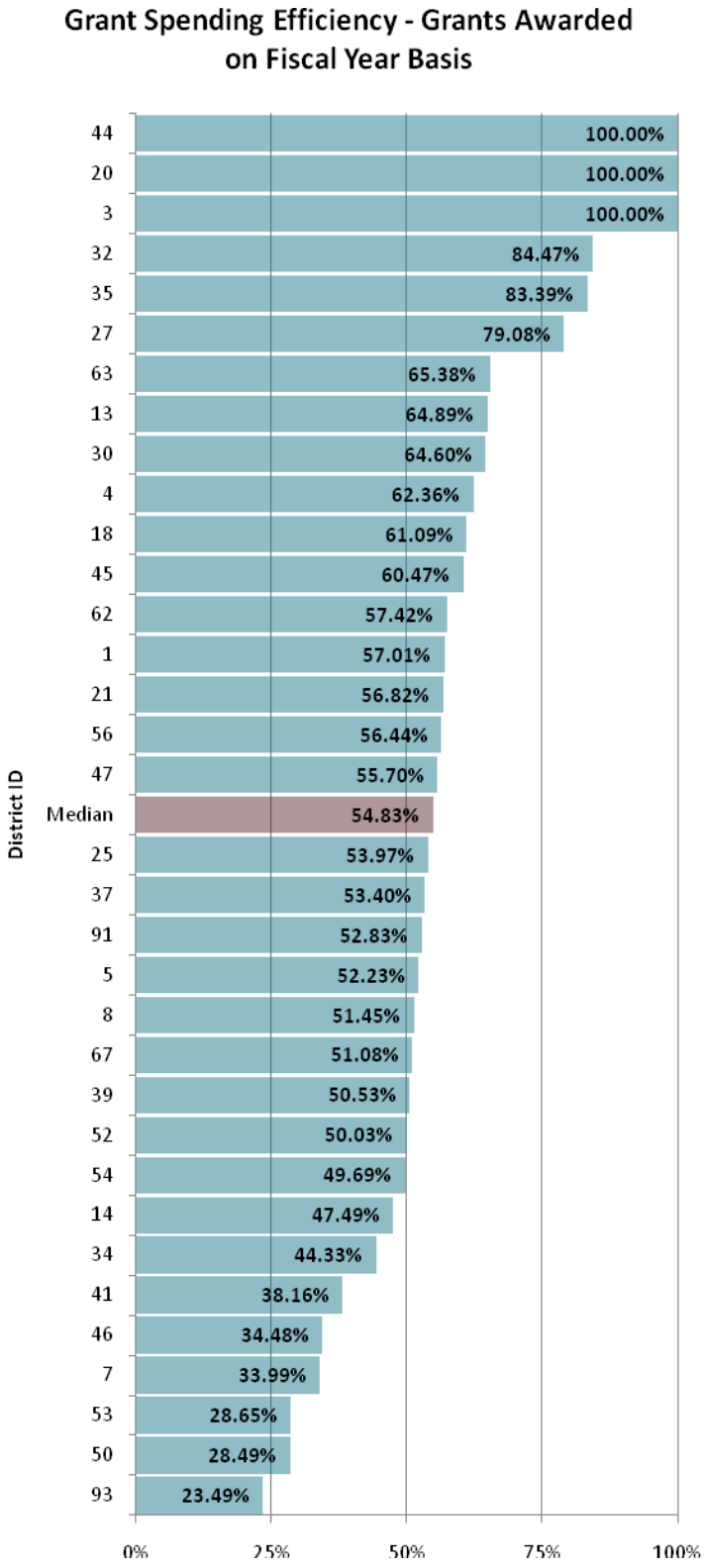
YTD grant expenditures as of end of 3rd quarter of the school year *divided* by total FY grant awards for grants awarded on a school year basis as of end of 3rd quarter

Importance of Measure

- Low percentage may indicate ineffective or inefficient use of grant resources

Influencing Factors

- Grant sources and program initiatives
- Automation
- Complexity of grants



Calculation

YTD grant expenditures as of end of 3rd quarter of the fiscal year *divided* by total FY grant awards for grants awarded on a fiscal year basis as of end of 3rd quarter

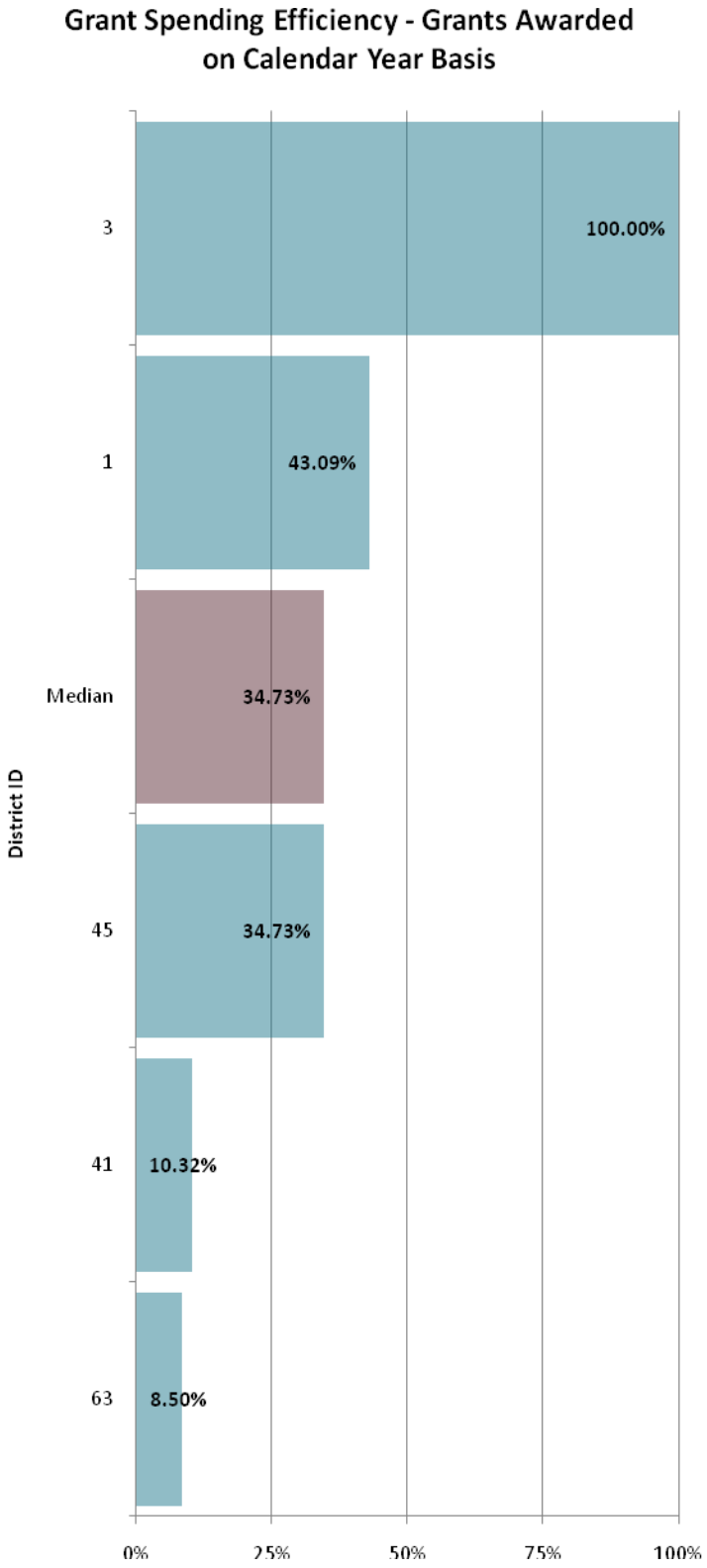
Importance of Measure

- Low percentage may indicate ineffective or inefficient use of grant resources

Influencing Factors

- Grant sources and program initiatives
- Automation
- Complexity of grants

Power Indicator



Calculation

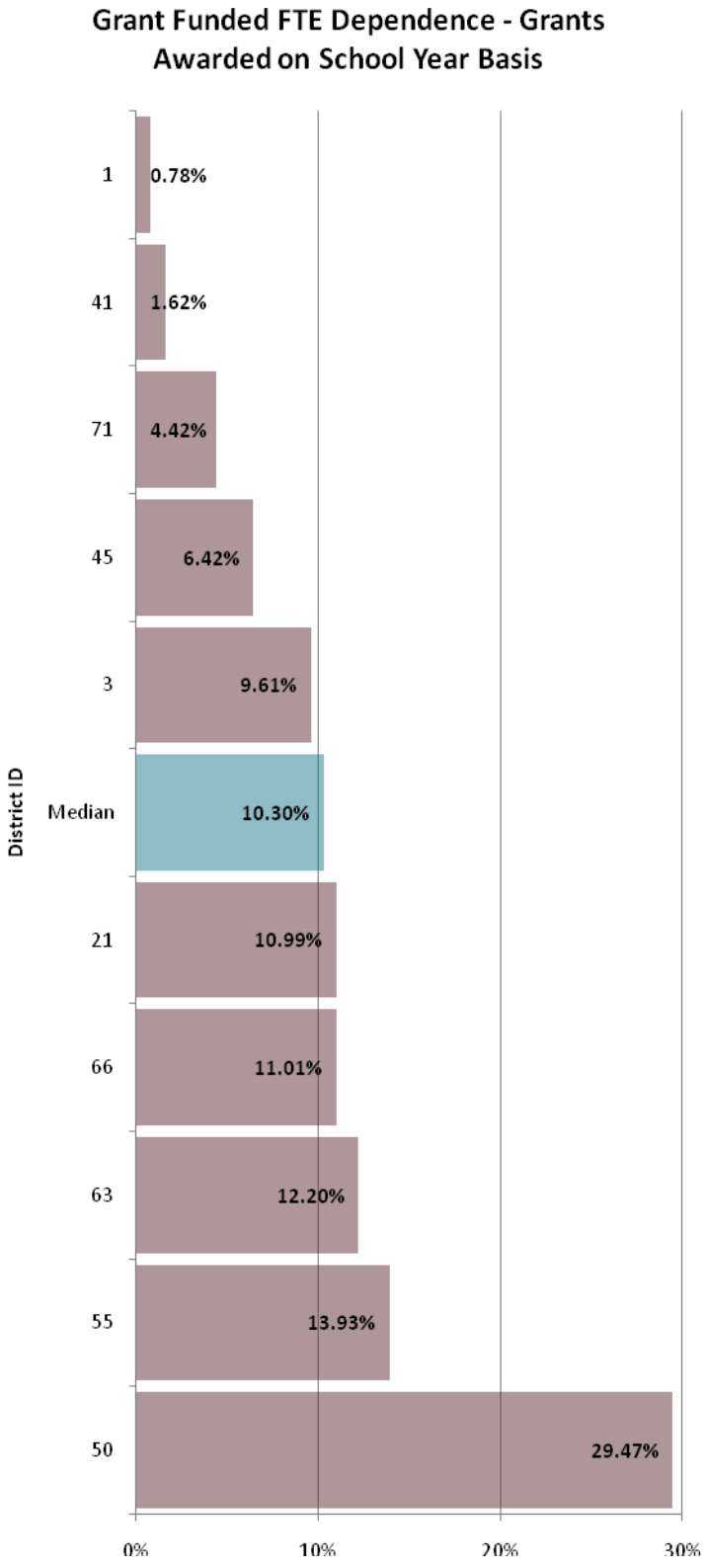
YTD grant expenditures as of end of 3rd quarter of the calendar year *divided* by total FY grant awards for grants awarded on a calendar year basis as of end of 3rd quarter

Importance of Measure

- Low percentage may indicate ineffective or inefficient use of grant resources

Influencing Factors

- Grant sources and program initiatives
- Automation
- Complexity of grants



Calculation

Number of employees (FTE) funded by grant resources for grants awarded on a school year basis *divided* by number of total employees (FTE) funded by all sources

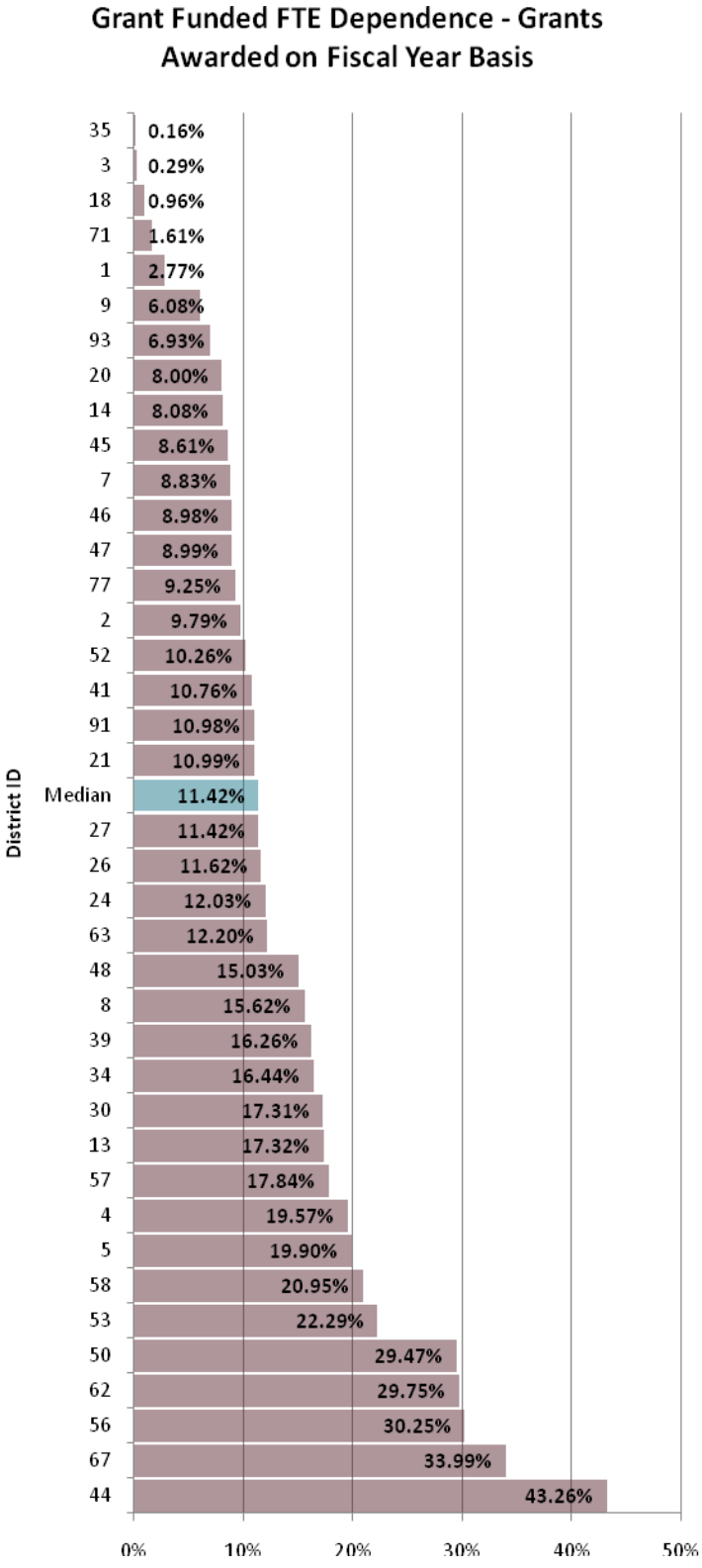
Importance of Measure

- Higher percentage may identify vulnerability to changes in grant funding

Influencing Factors

- Program strategies
- Eligibility criteria

Essential Few



Calculation

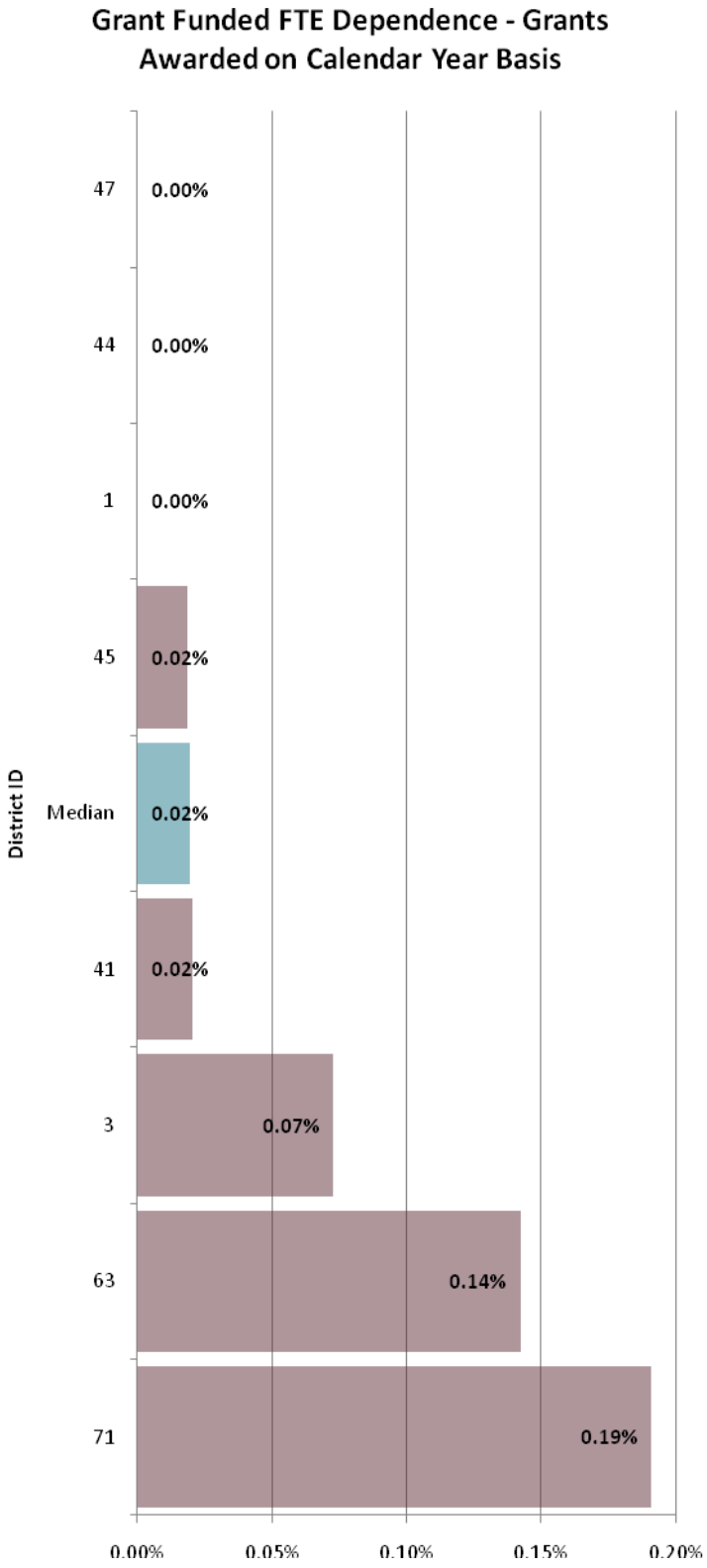
Number of employees (FTE) funded by grant resources for grants awarded on a fiscal year basis *divided* by number of total employees (FTE) funded by all sources

Importance of Measure

- Higher percentage may identify vulnerability to changes in grant funding

Influencing Factors

- Program strategies
- Eligibility criteria



Calculation

Number of employees (FTE) funded by grant resources for grants awarded on a calendar year basis *divided* by number of total employees (FTE) funded by all sources

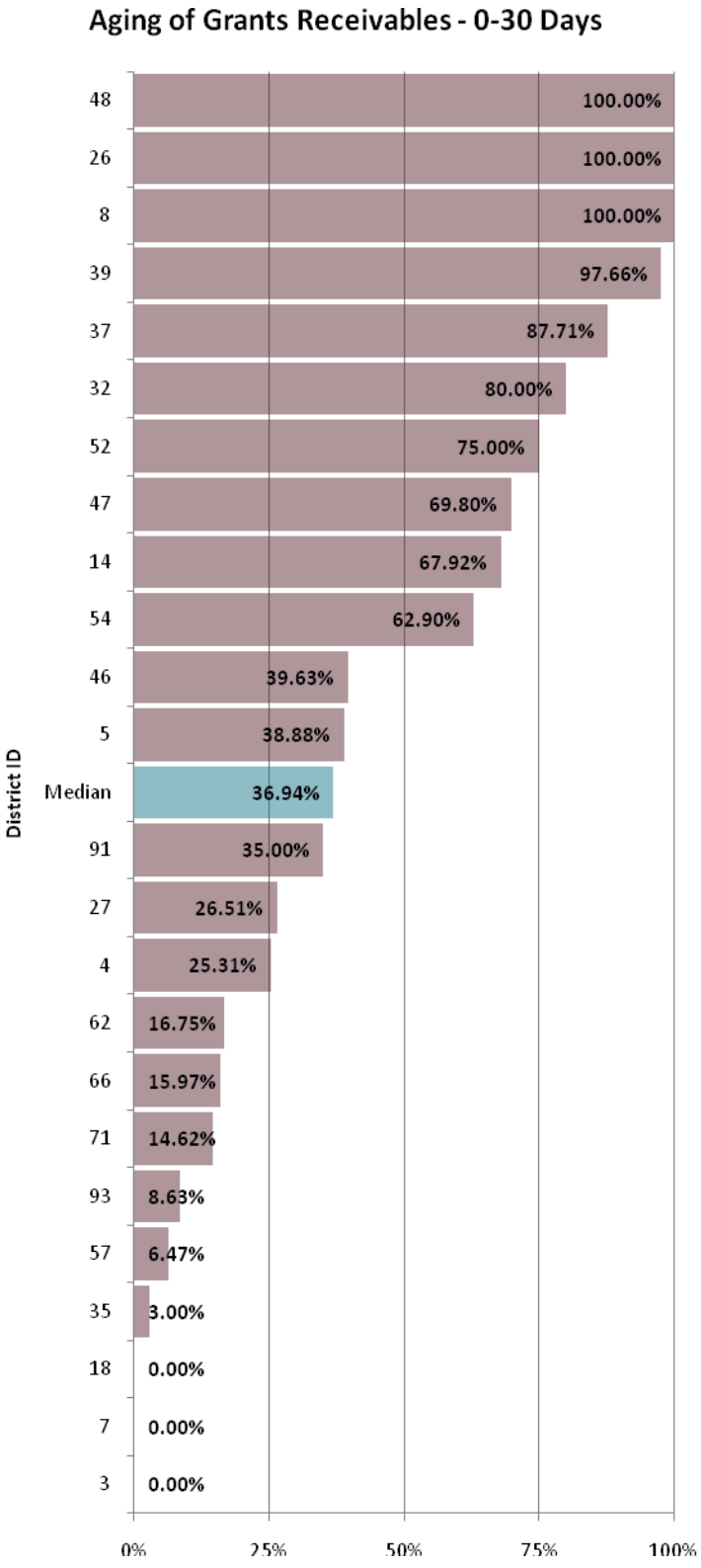
Importance of Measure

- Higher percentage may identify vulnerability to changes in grant funding

Influencing Factors

- Program strategies
- Eligibility criteria

Essential Few



Calculation

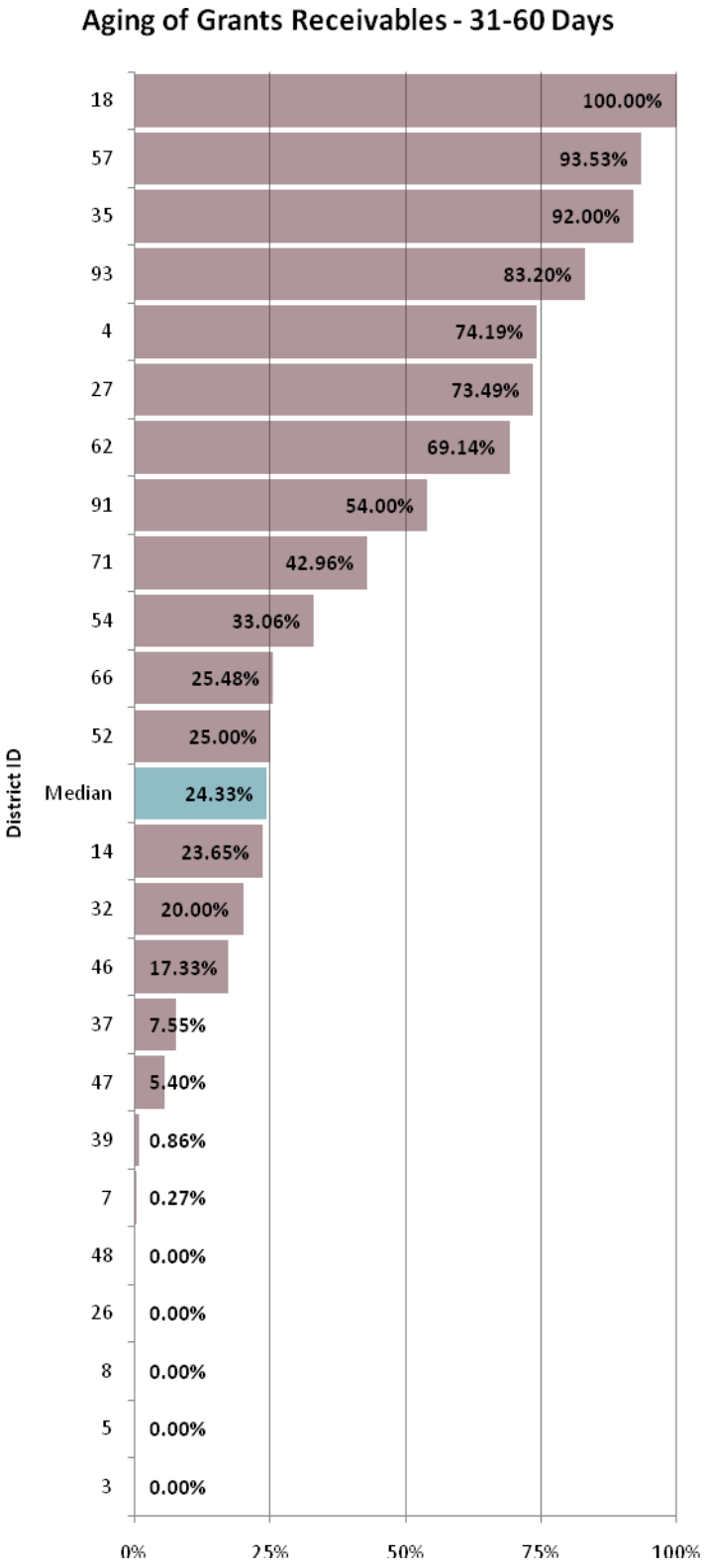
Number of expenditures submitted for reimbursement within 0-30 days *divided by* total amount

Importance of Measure

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

Influencing Factors

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



Calculation

Number of expenditures submitted for reimbursement within 31-60 days *divided by* total amount

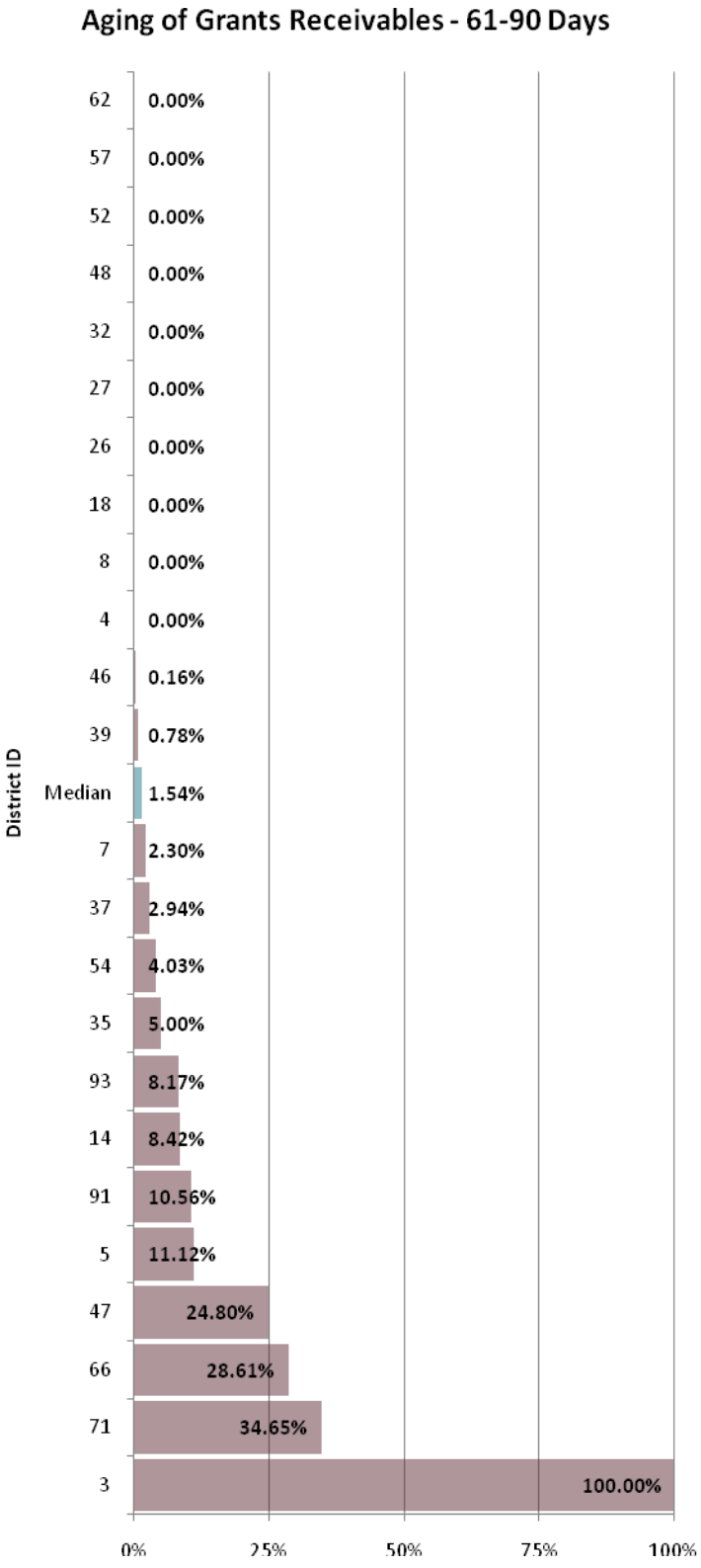
Importance of Measure

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

Influencing Factors

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

Essential Few



Calculation

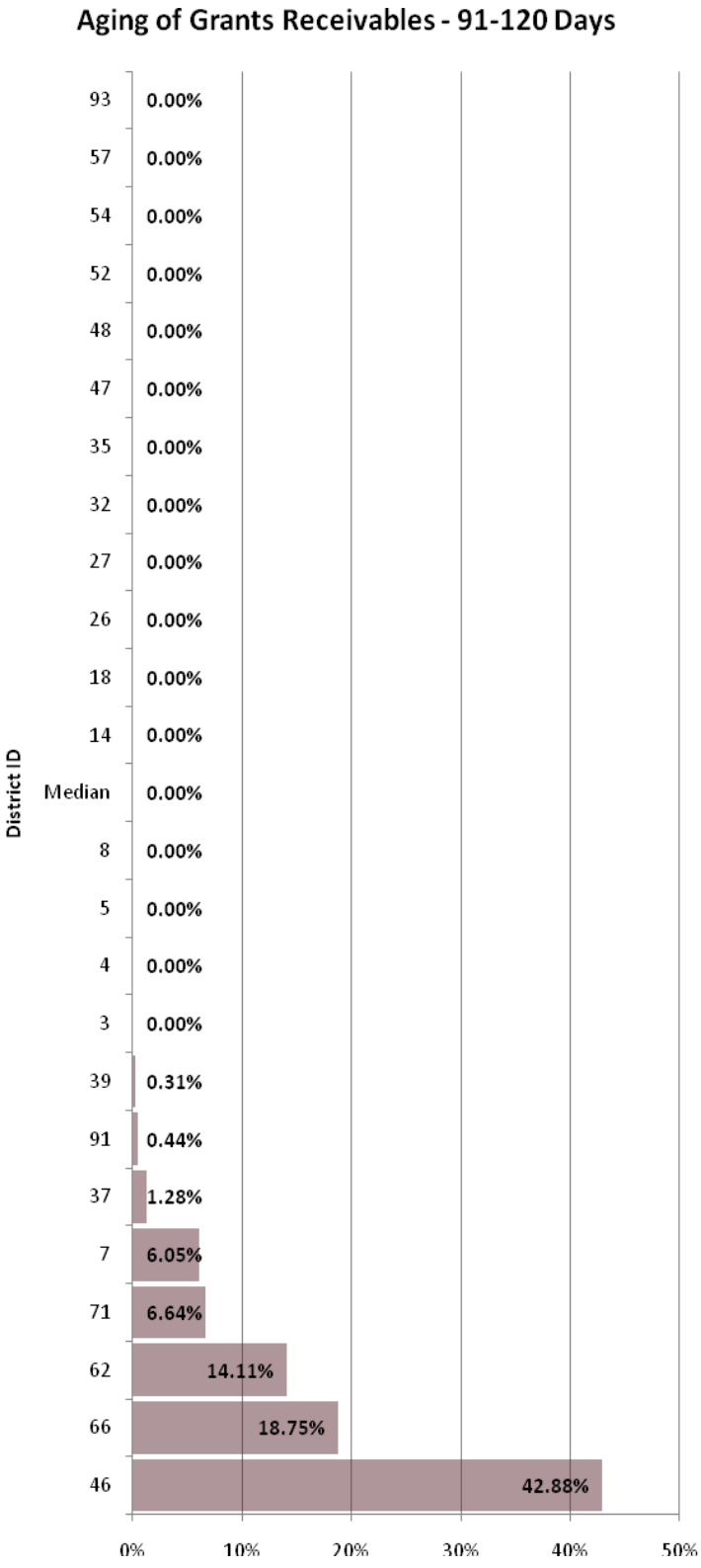
Number of expenditures submitted for reimbursement within 61-90 days *divided by* total amount

Importance of Measure

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

Influencing Factors

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



Calculation

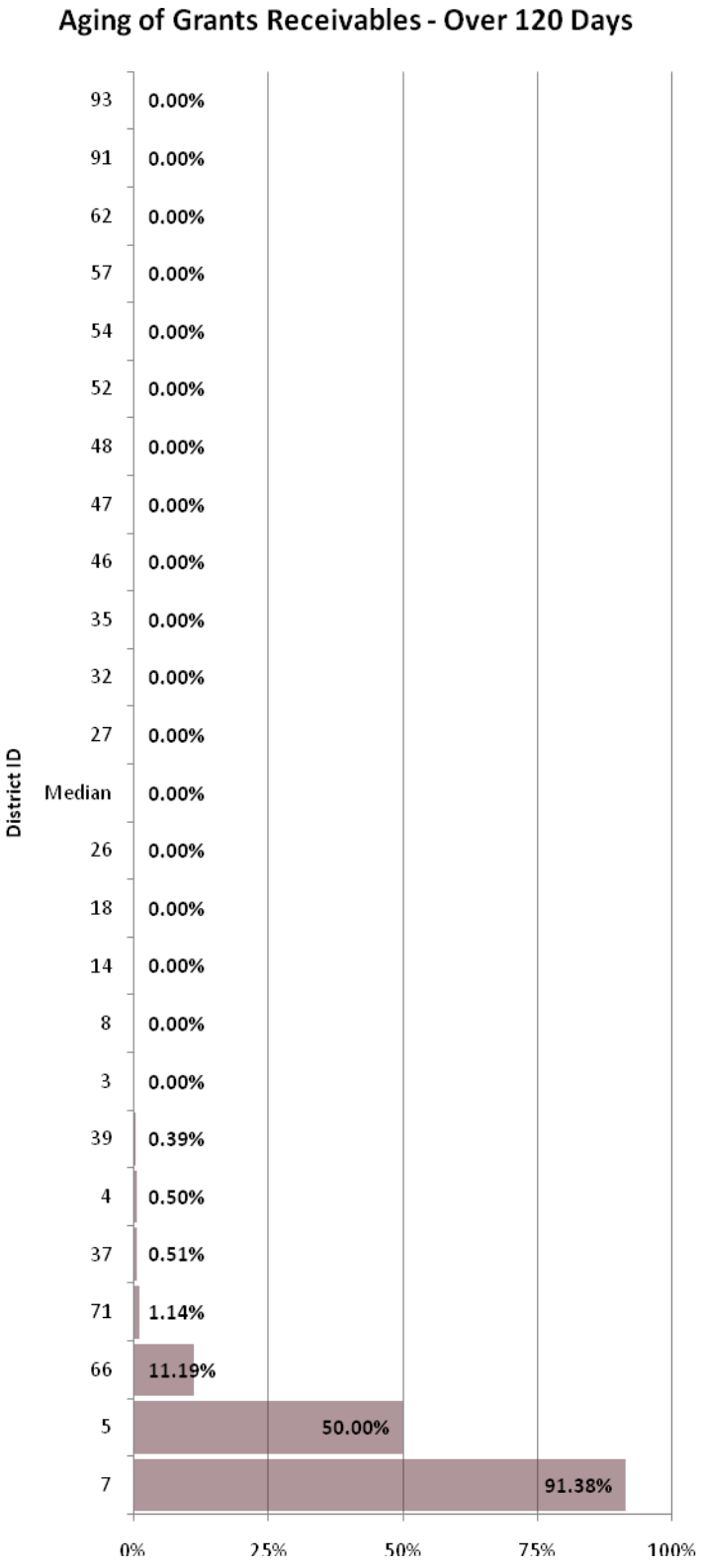
Number of expenditures submitted for reimbursement within 91-120 days *divided by* total amount

Importance of Measure

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

Influencing Factors

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



Calculation

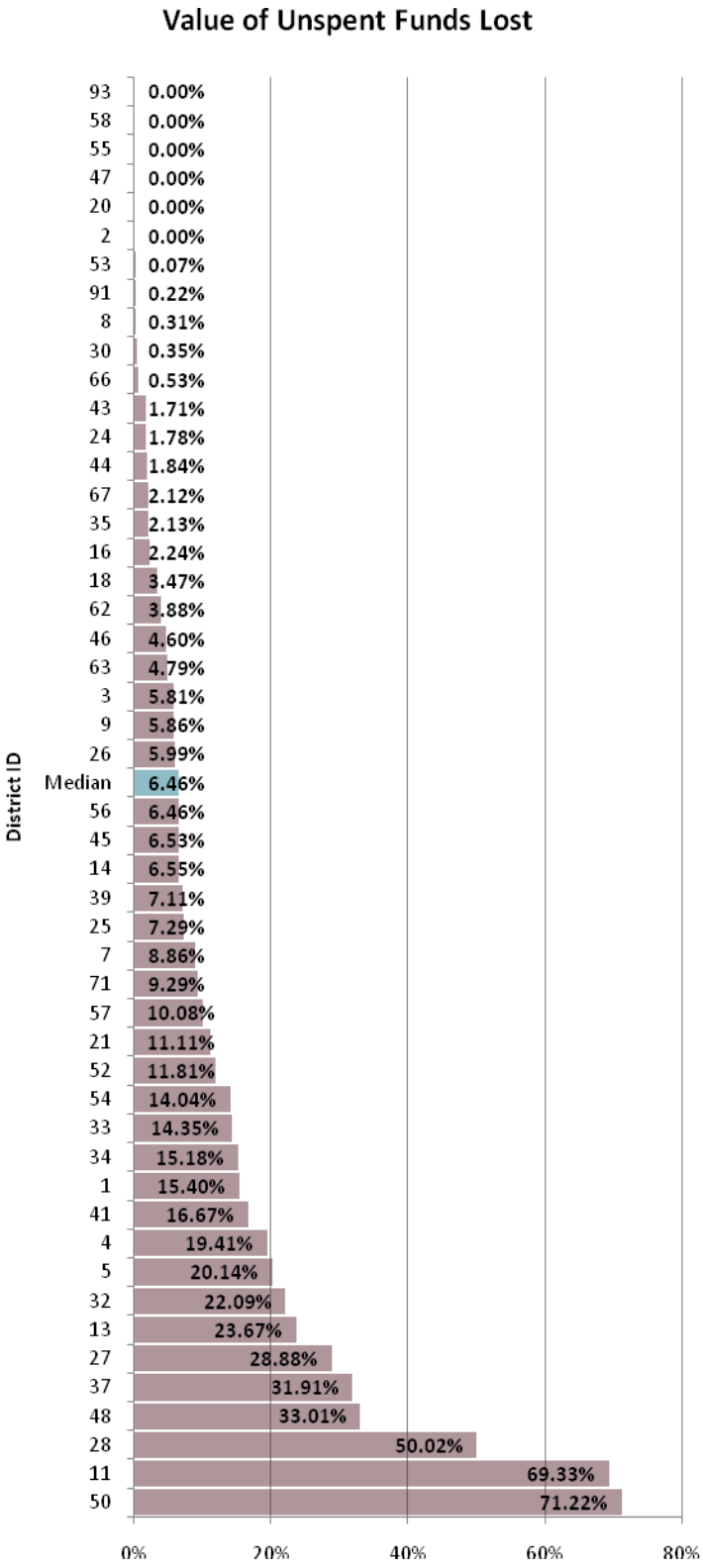
Number of expenditures submitted for reimbursement after 120 days *divided by* total amount

Importance of Measure

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

Influencing Factors

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



Calculation

Total grant awards *minus* total grant expenditures *divided by* the total grant awards

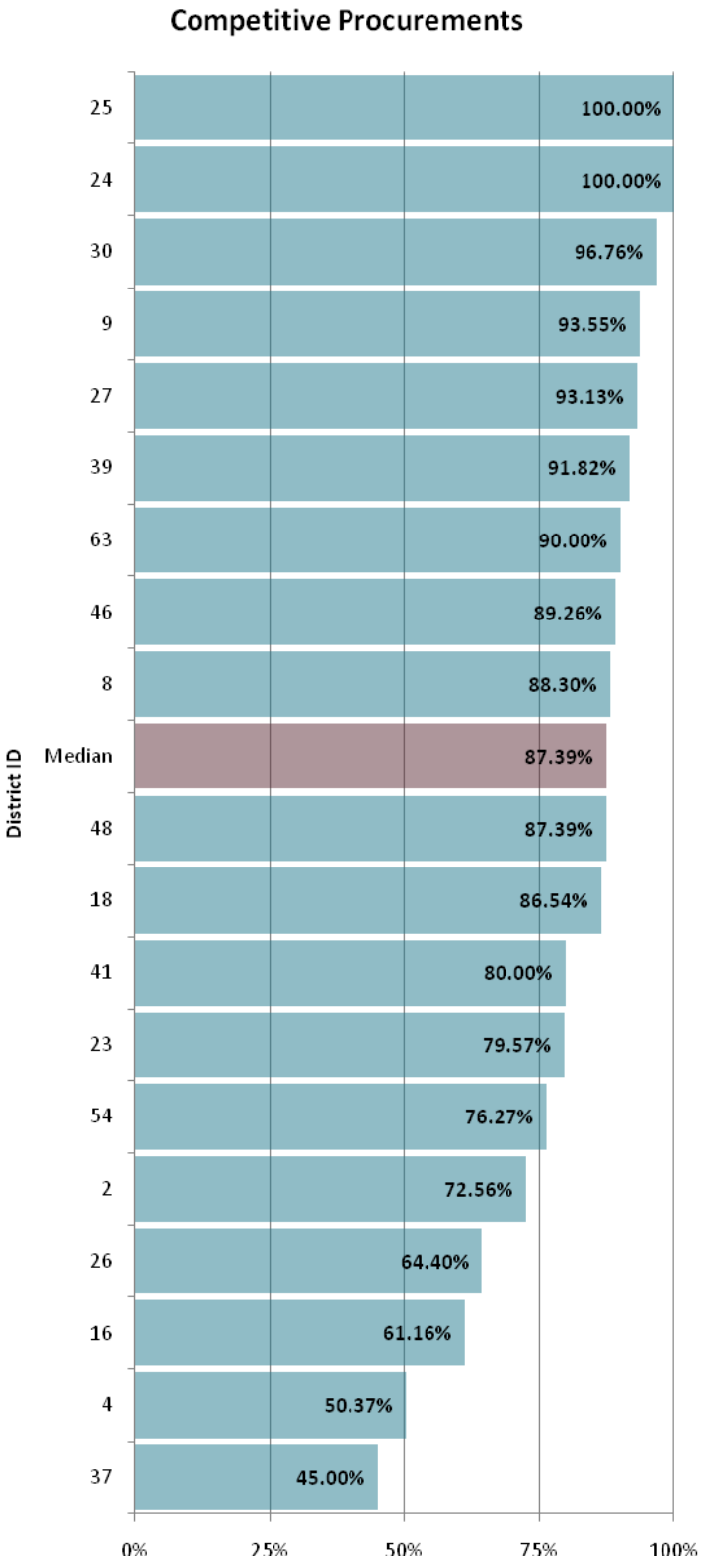
Importance of Measure

- This measure assesses efficiency in spending appropriated grant funds

Influencing Factors

- Escalation procedures may be necessary and federal and state agency may not have sent notice in a timely manner
- Timeliness of awards –award letter may be different than receipt date
- School board and administrative policies and procedures
- Budget development and management process
- 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

Procurement



Calculation

Total purchase dollars for purchases above the single quote limit that were competitive *divided* by total purchase dollars for purchases above the single quote limit

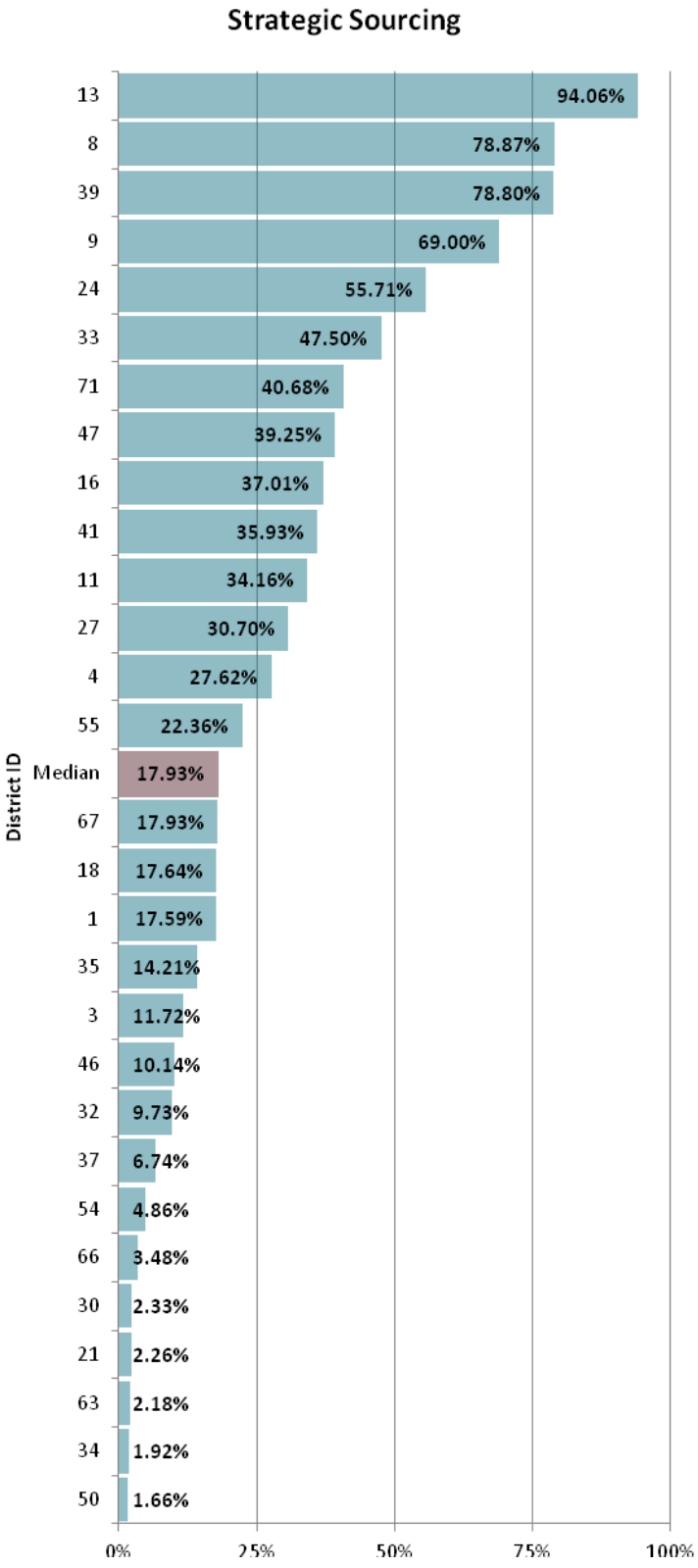
Importance of Measure

- Competition maximizes procurement savings to the district, provides opportunities for vendors, assures integrity, and builds school boards' and taxpayers' confidence in the process, which remain a cornerstone of public procurement

Influencing Factors

- Procurement policies governing procurements that are exempted from competition
- Degree of shared services that may be included in purchase dollars with other public agencies
- Vendor registration/solicitation procedures, which may determine magnitude of competition
- Professional services competition, which may be exempted from competition
- Selection criteria for certain programs, such as local preference, environmental procurement, M/WBE
- Utilization of technology and e-procurement tools
- Market availability for competition; e.g., utilities

Power Indicator



Calculation

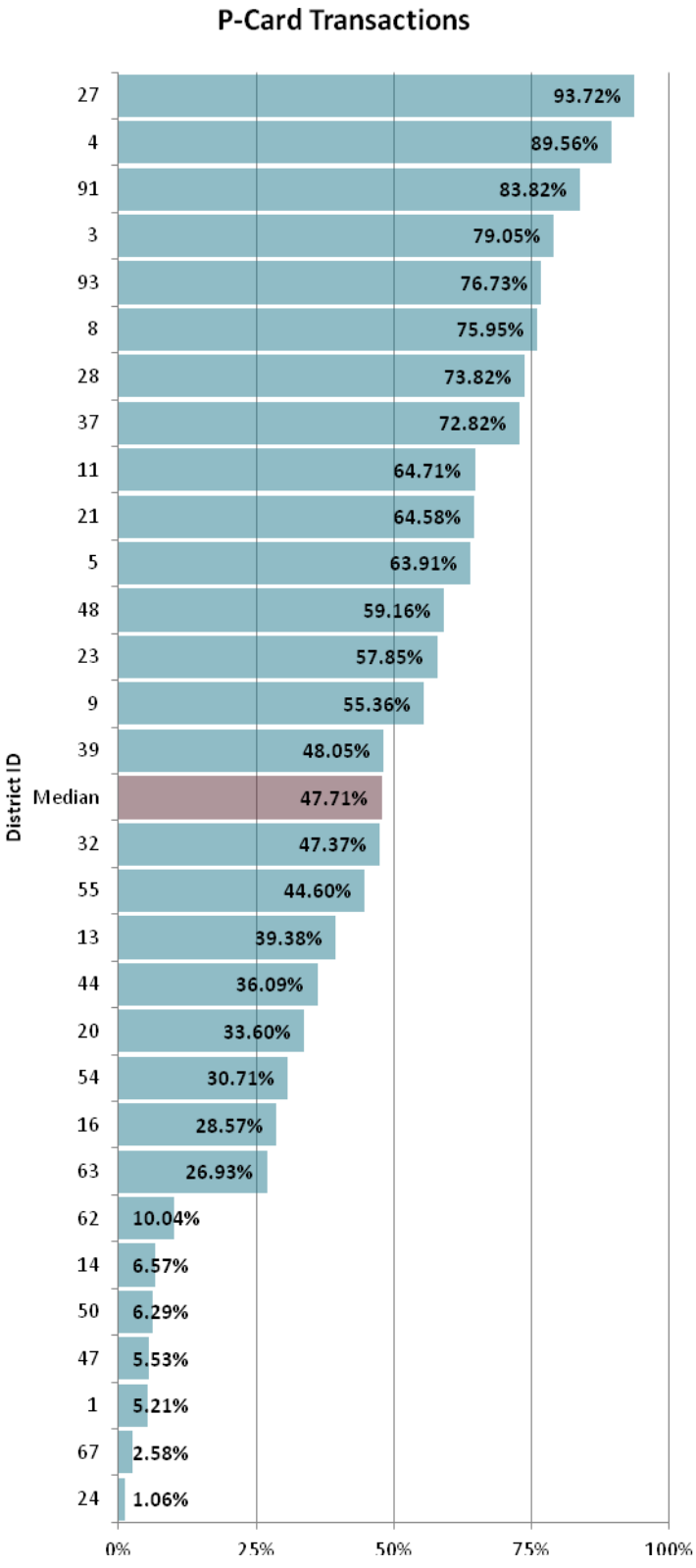
Total vendor dollar spend for strategically-sourced goods and services *divided* by total procurement dollars spent, less construction

Importance of Measure

- 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
- 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

Influencing Factors

- 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

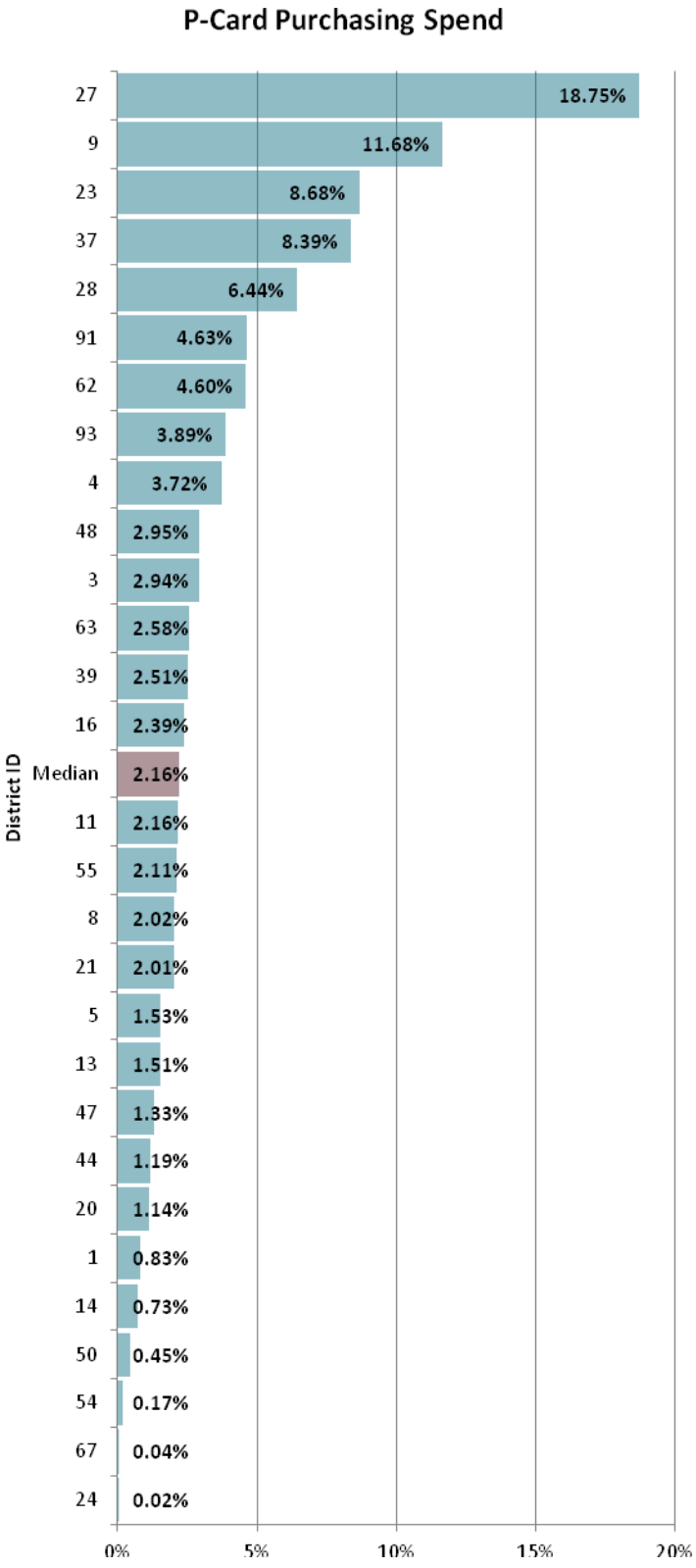
Total number of P-Card transactions *divided by* total number of procurement transactions

Importance of Measure

- It allows procurement professionals to concentrate efforts on the more complex purchases
- Significantly reduces Accounts Payable workload
- 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
- The decentralized nature of these purchases could have an impact on lost opportunity for savings, and requires diligent oversight to prevent inappropriate use

Influencing Factors

- Procurement policies, particularly those delegating purchase authority and P-Card usage
- Utilization of technology to manage a high volume of low dollar transactions
- Budget, purchasing, and audit controls, including P-Card credit limit controls on single transaction and monthly limits



Calculation

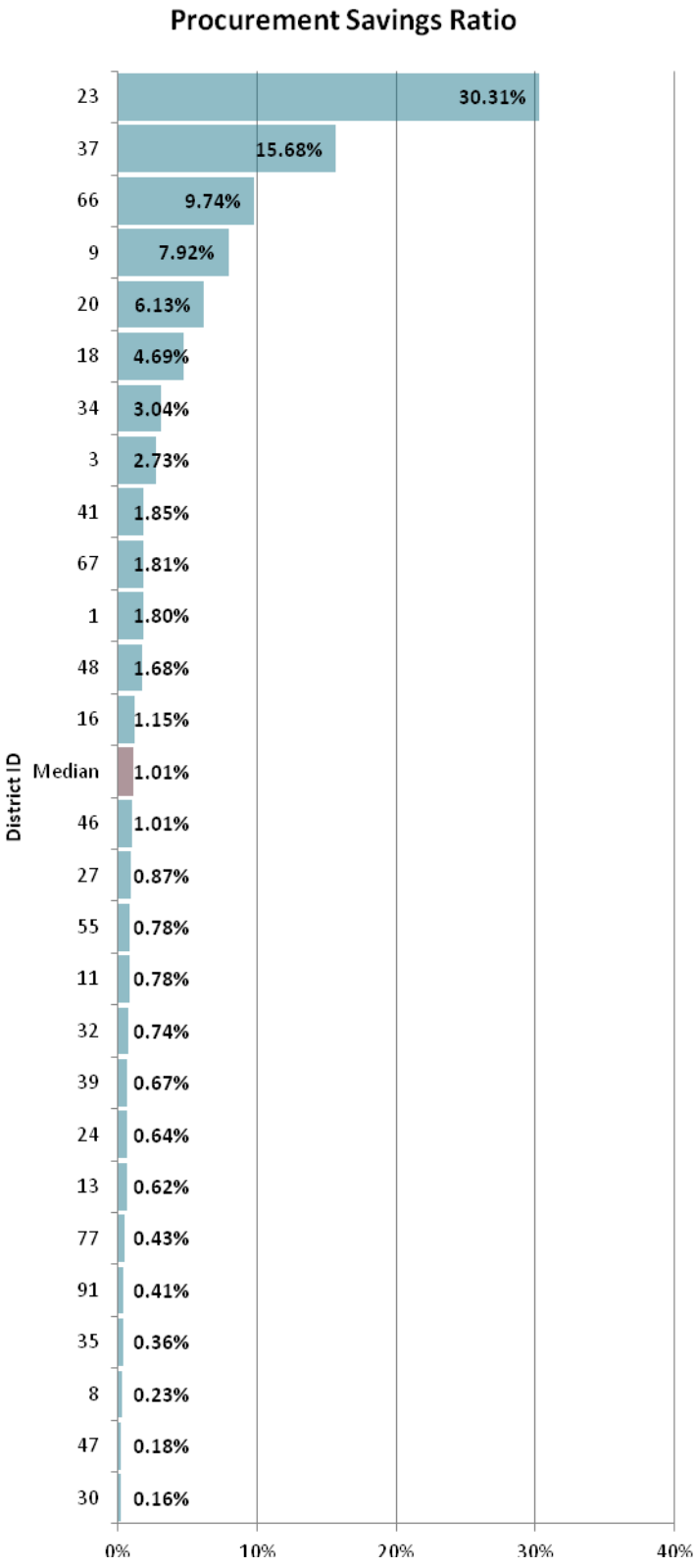
Total dollars spent by the district using P-Card *divided by* total procurement dollars spent by the district

Importance of Measure

- This measure shows the degree to which districts are utilizing this procurement method for savings, cost avoidance, decreasing cycle time, and improving overall procurement effectiveness and efficiency
- In this measure, the dollar value (versus the number of transactions) percentage is shown

Influencing Factors

- Procurement policies, particularly those delegating purchase authority and P-Card usage
- Utilization of technology to manage a high volume of low dollar transactions
- 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

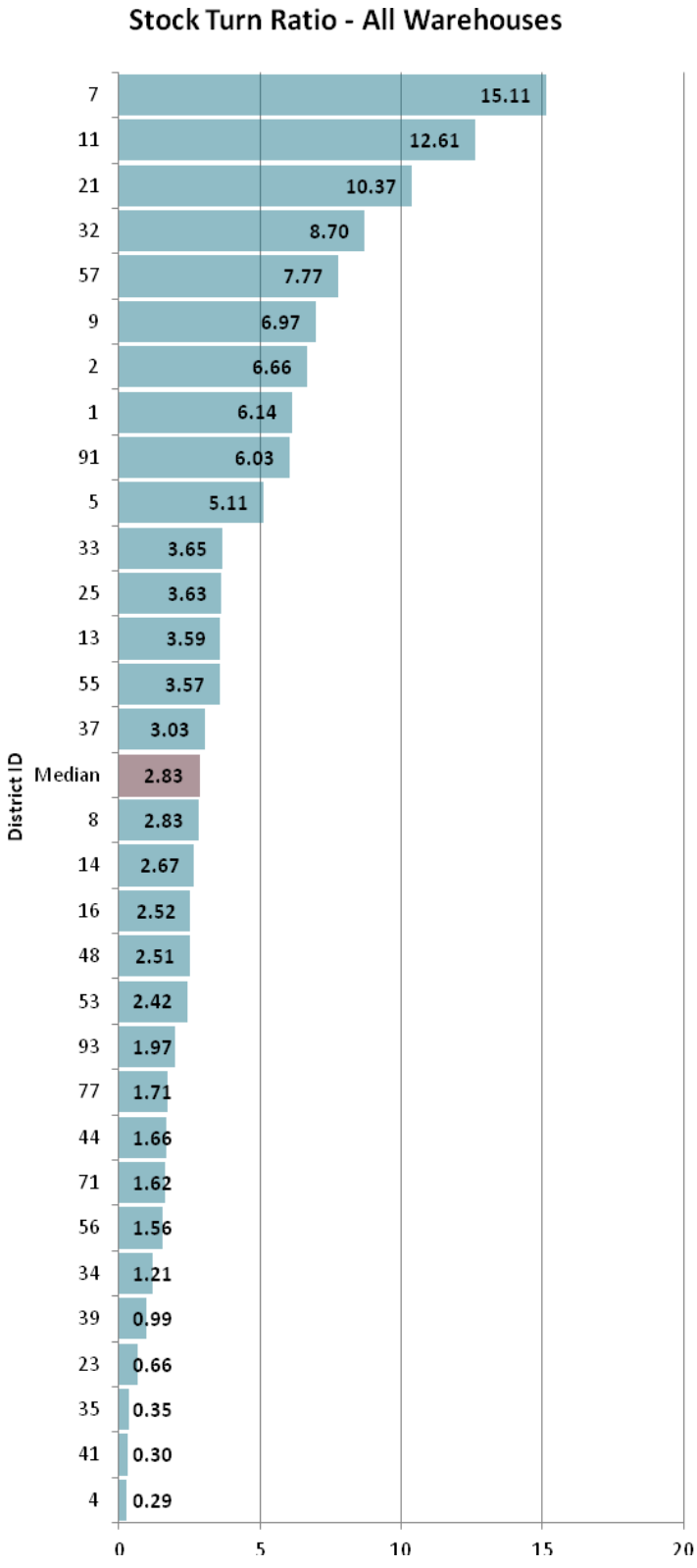
Savings/cost avoidance for ***formal bids*** - the difference between the average of all bids and the low bid, *plus* savings/cost avoidance for ***formal proposals*** - the difference between the initial proposal and the final proposal price, *plus* savings/ cost avoidance for ***informal quotes*** - the difference between the average of all quotes and the low/awarded quote *divided by* total procurement dollars spent by the district, less P-Card

Importance of Measure

- This captures savings/cost avoidance in a limited form since districts may realize other procurement savings that are not captured by this measure

Influencing Factors

- Procurement policies, e.g., delegated authority, procurements exempted from competition, minimum quote requirements, sole source policies, etc.
- Utilization of technology and e-procurement tools
- Use of national or regional vendor databases to maximize competition, use of on-line comparative price analysis tools, etc.
- Identification of alternative products/methodology of providing services



Calculation

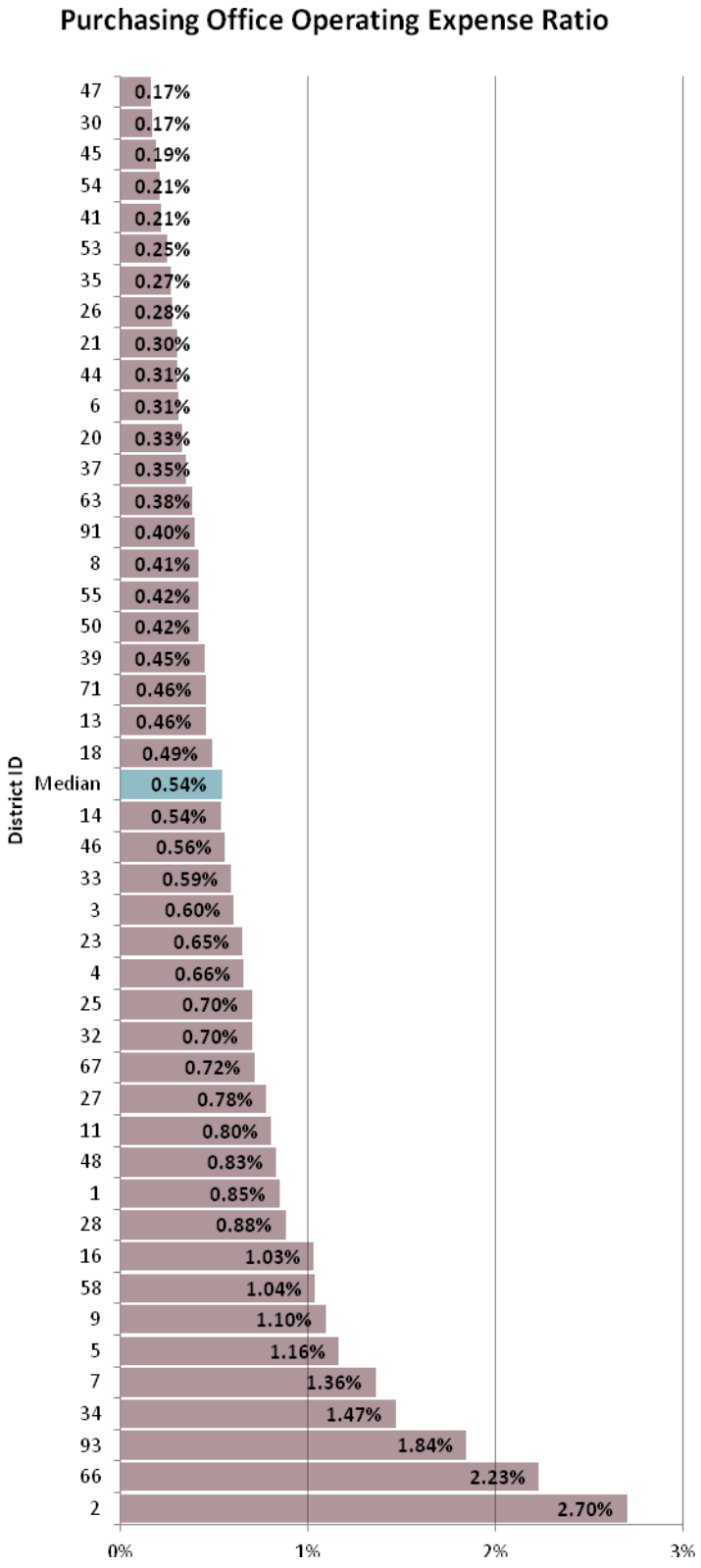
Total warehouse annual sales *divided by* total average inventory value

Importance of Measure

- Generally, total costs decline and savings rise when inventory stock turn increases
- After a certain point - typically 8-10 turns - the reverse occurs
- An inventory turn rate of 4-6 times per year in the manufacturing, servicing and public sector is considered acceptable
- Overall stock turn ratio should be broken down into types of commodities

Influencing Factors

- Inventory policy (e.g., safety/ emergency inventory requirements)
- Procurement policy (e.g., minimum order quantity and cycle) and use of direct delivery contracts (vs. warehouse asset)
- Budget allocation
- Commodity market (e.g., order & shipping time, seasonal items)
- Warehouse types (e.g., office supplies, textbooks, maintenance, food) may have different stock turns due to variations in safety levels, economic order quantities, carrying costs, cyclical nature of demand
- Pilferage, damage, shelf life



Calculation

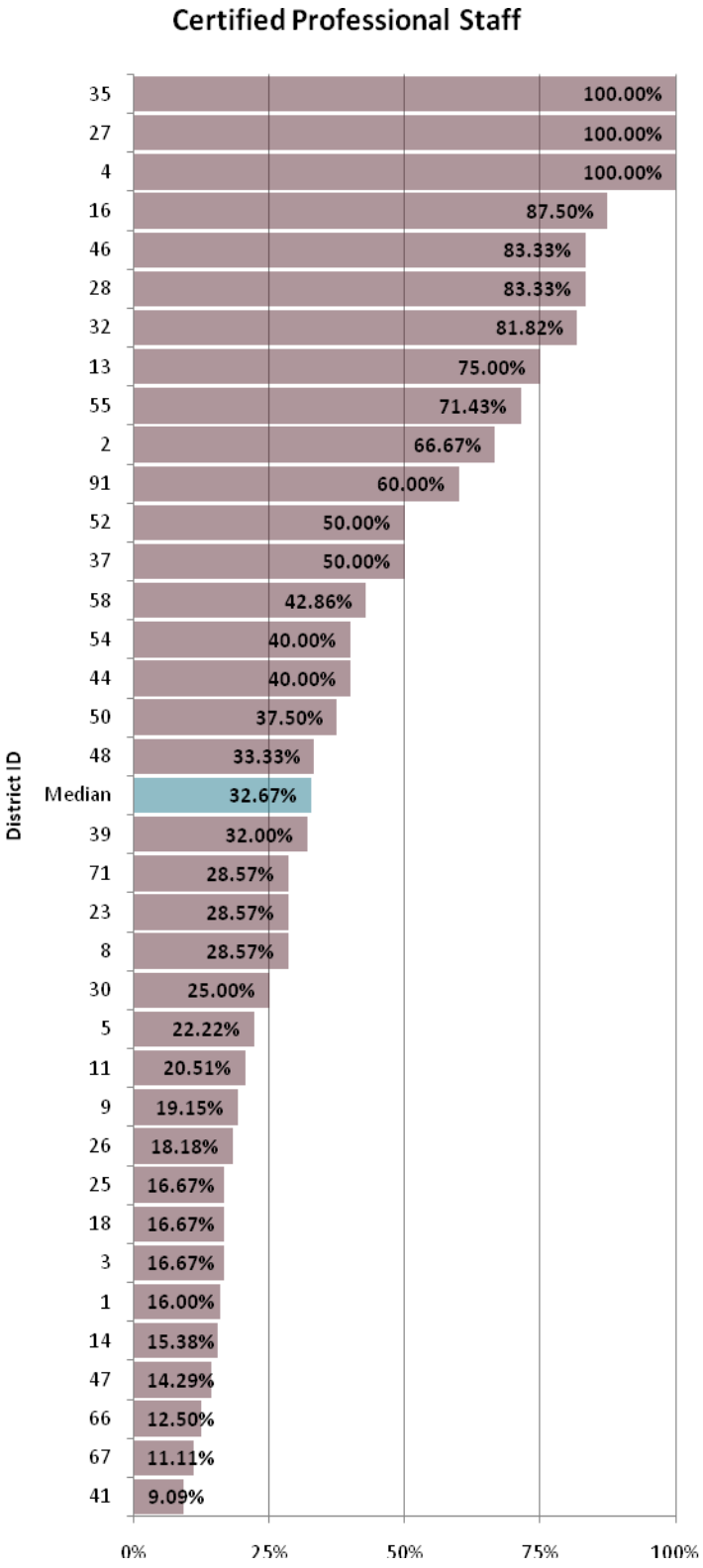
Total Procurement Department (payroll and non-payroll) expenditures, excluding warehouse operations *divided* by total procurement dollars spent by district including P-Card (all funds, less construction)

Importance of Measure

- 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 district's procurement operations

Influencing Factors

- 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

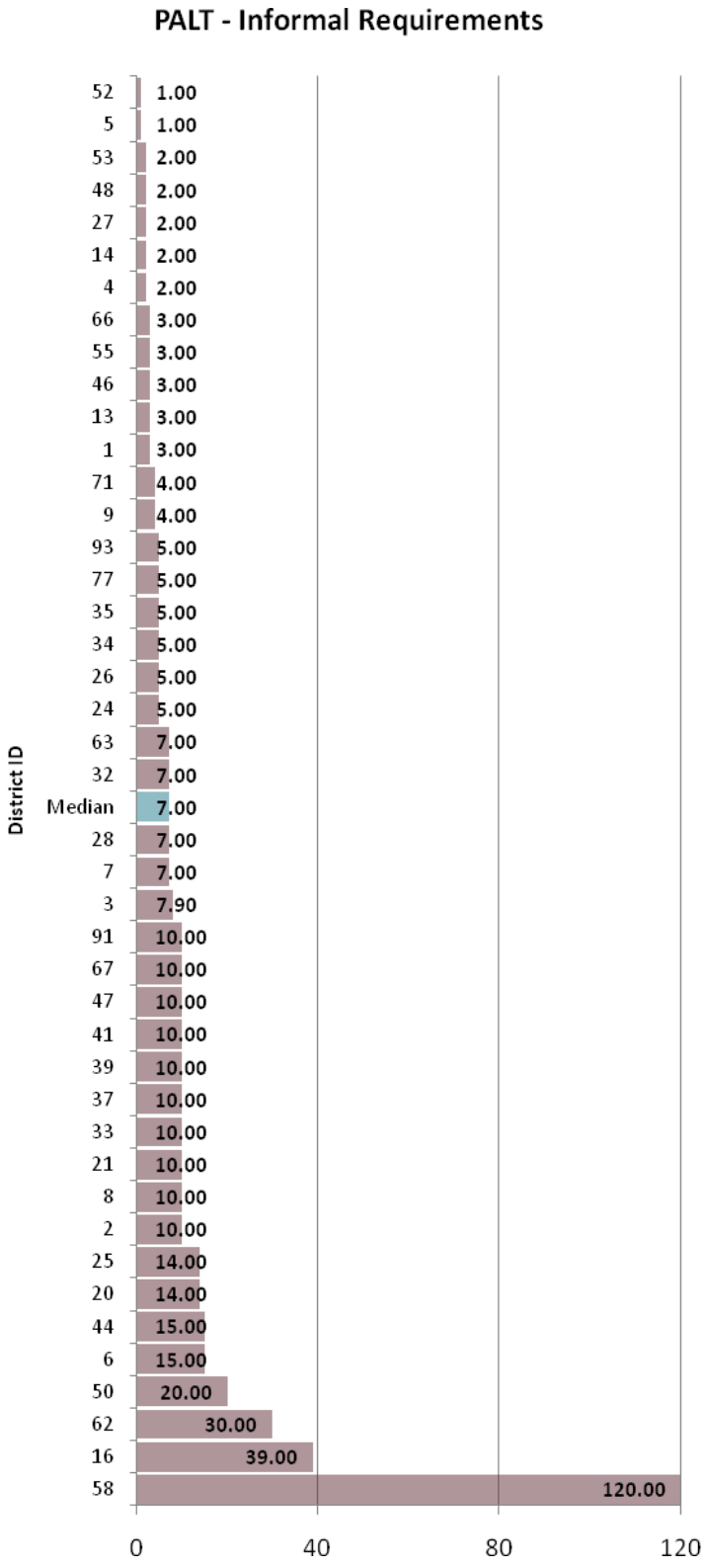
Number of professional procurement staff and supervisors with certifications *divided* by total number of professional procurement staff and supervisors

Importance of Measure

- The technical knowledge of the district's procurement staff directly affects processing time, negotiation, procedural controls, and strategies applied to maximize cost savings
- The procurement function has evolved to require procurement professional staff to focus on
  - strategic issues versus transactional processing
  - advanced business
  - balance of service with internal controls and compliance

Influencing Factors

- Budget/FTE allocations to central procurement functions and employee professional development
- Procurement policies
- Utilization of technology and knowledge required for e-procurement and e-commerce
- Value that an organization places on its procurement functions
- Policies favoring internal promotion over technical recruitment
- Incentive pay



Calculation

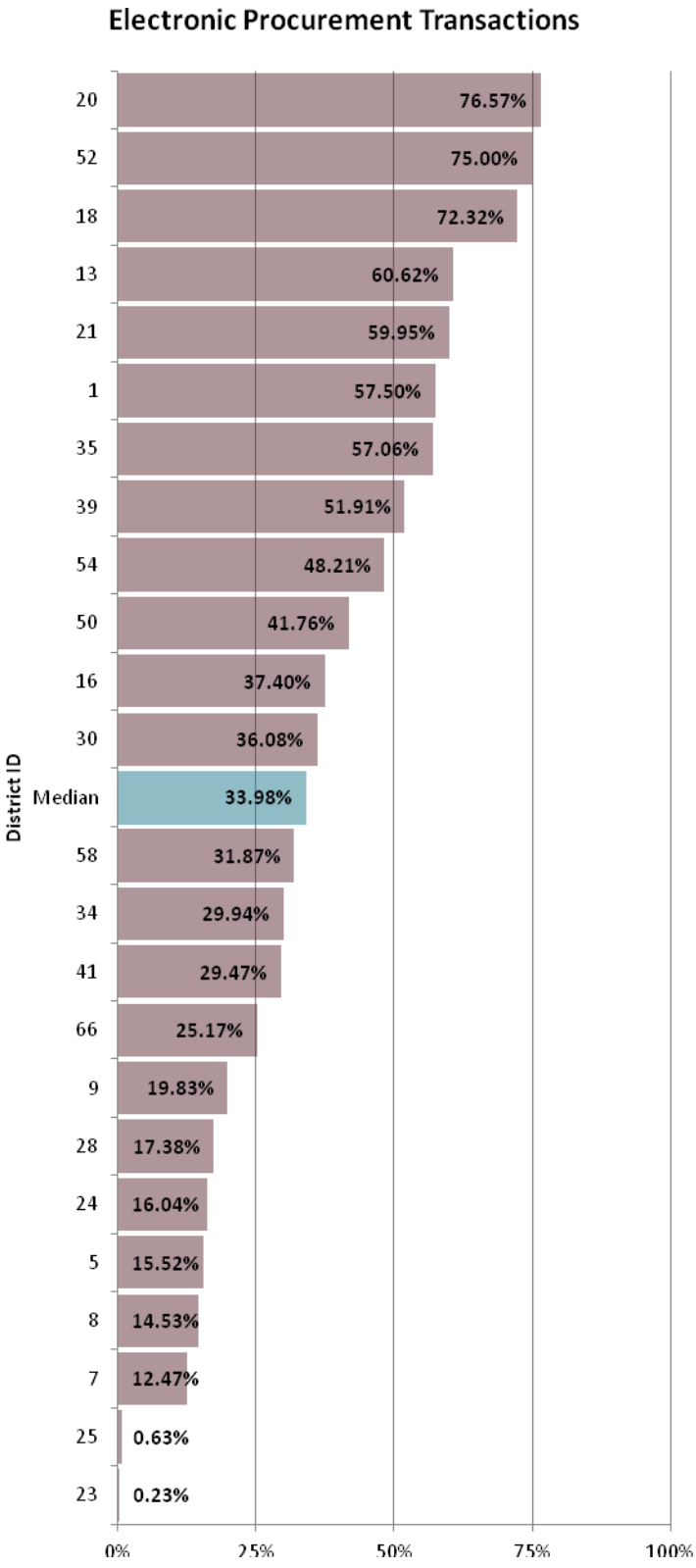
Average number of days to process all informal requirements

Importance of Measure

- 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

Influencing Factors

- 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

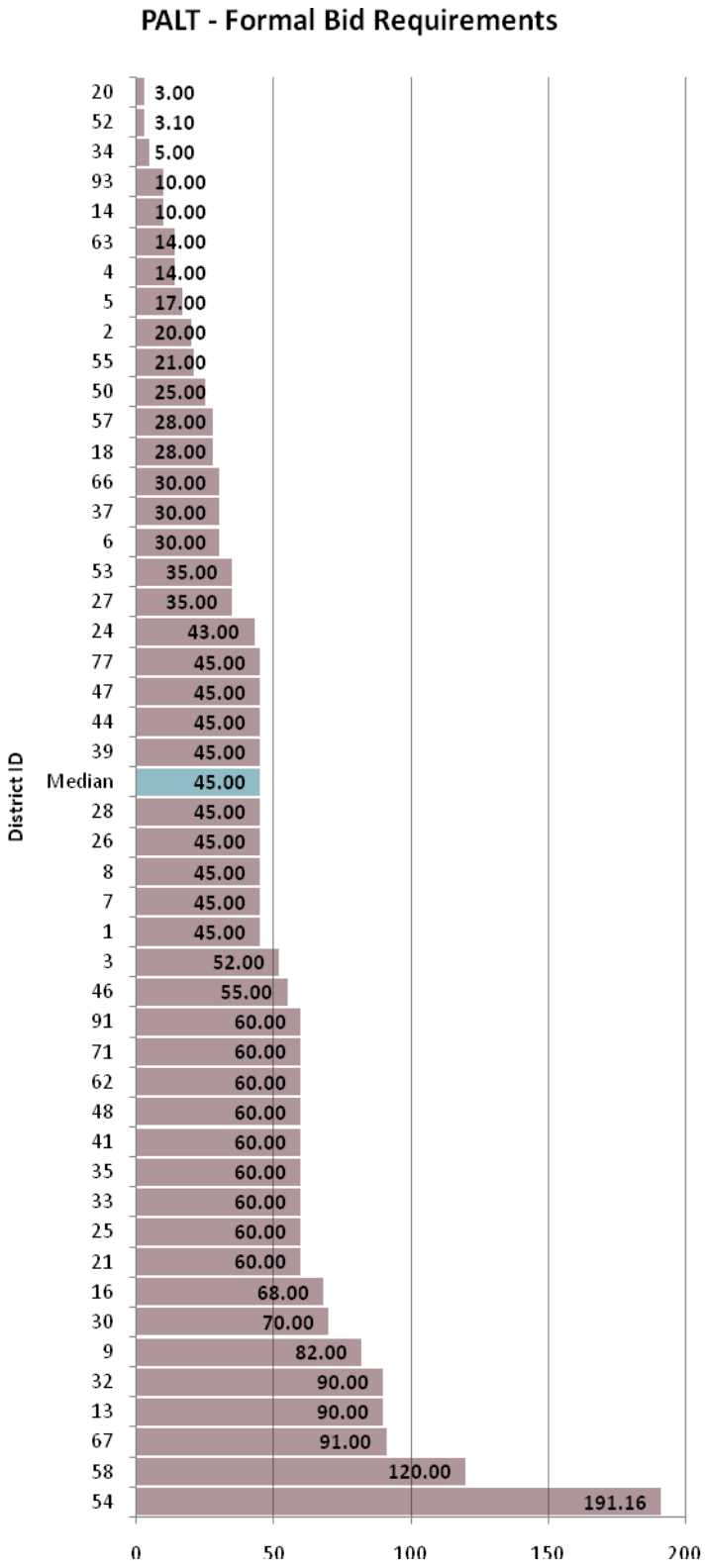
Total number of electronic procurement transactions *divided by* total number of procurement transactions, including P-Card transactions

Importance of Measure

- This measure assesses the use of sophisticated e-procurement tools that can increase purchasing efficiency and decrease maverick spending or more inefficient spot buys
- Electronic procurement is defined as a procurement requirement that is filled using an electronic shopping cart
- Typical shopping carts allow end-users to select items and fill a shopping cart from either a punch-out catalog at a vendor's web catalog or an electronic agency catalog
- These catalogs have set contract pricing and billing is usually done by PO or P-Card

Influencing Factors

- Use of e-procurement applications and P-cards
- Spend analysis to determine catalog selection
- District procurement policy
- Implementation of ERP or other best practice e-procurement applications



Calculation

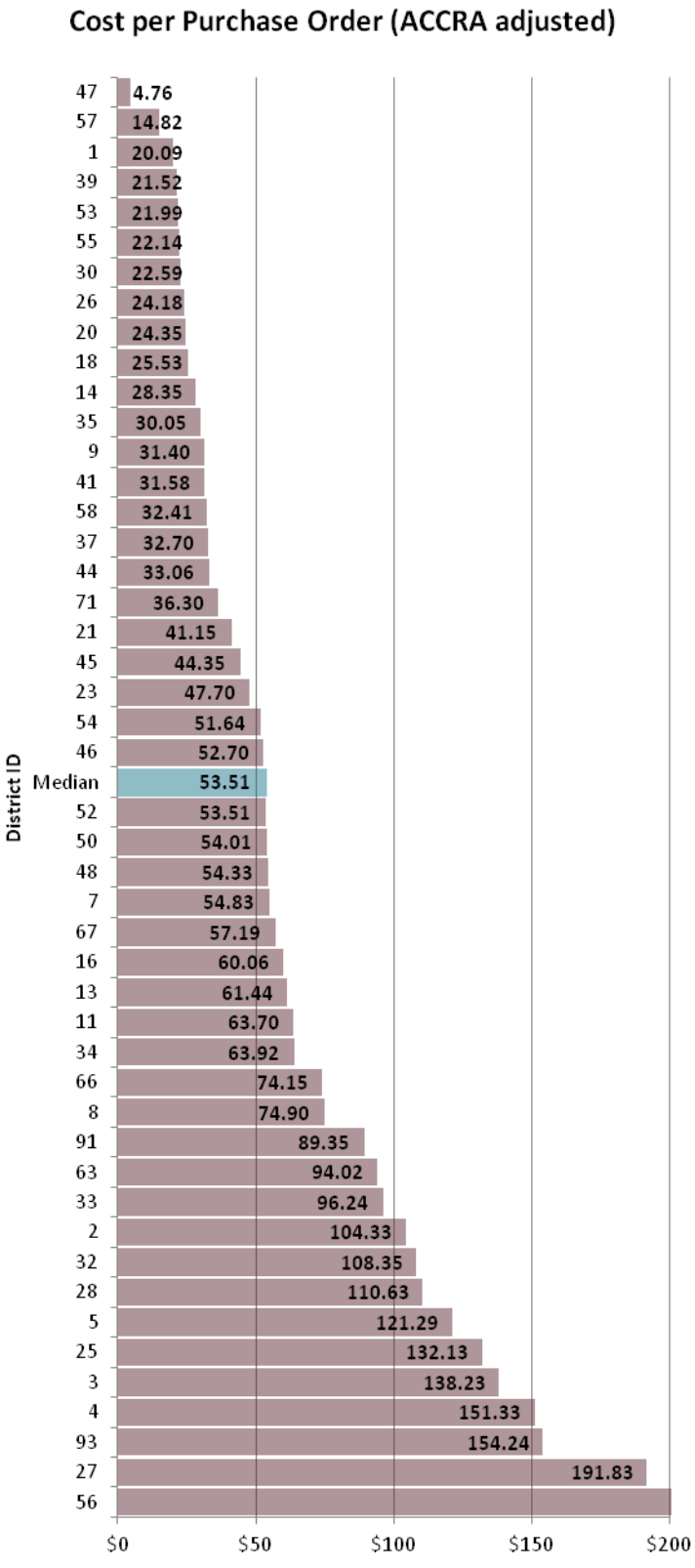
Average number of days to process all formal bid (IFB) requirements from receipt of requirement to contract award

Importance of Measure

- This measure establishes a cycle time benchmark for commencing and completing the acquisition process for 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

Influencing Factors

- Federal, State and local school board procurement policies and laws
- Frequency of school board meetings
- Budget/FTE allocation for professional procurement staff
- Training on scope of work and specification development
- The award process, including IFB evaluation, pre-bid conferences, site visit requirements, and vendor reference checks
- Use of ERP and e-procurement to streamline internal procurement processes and external solicitation/response process
- Frequency of vendor protests
- Complexity and size of procurement



Calculation

Purchasing department expenditures *divided by* number of total procurement transactions (number of POs and contracts, not line items) *plus* number of construction transactions (divided by ACCRA factor[1])

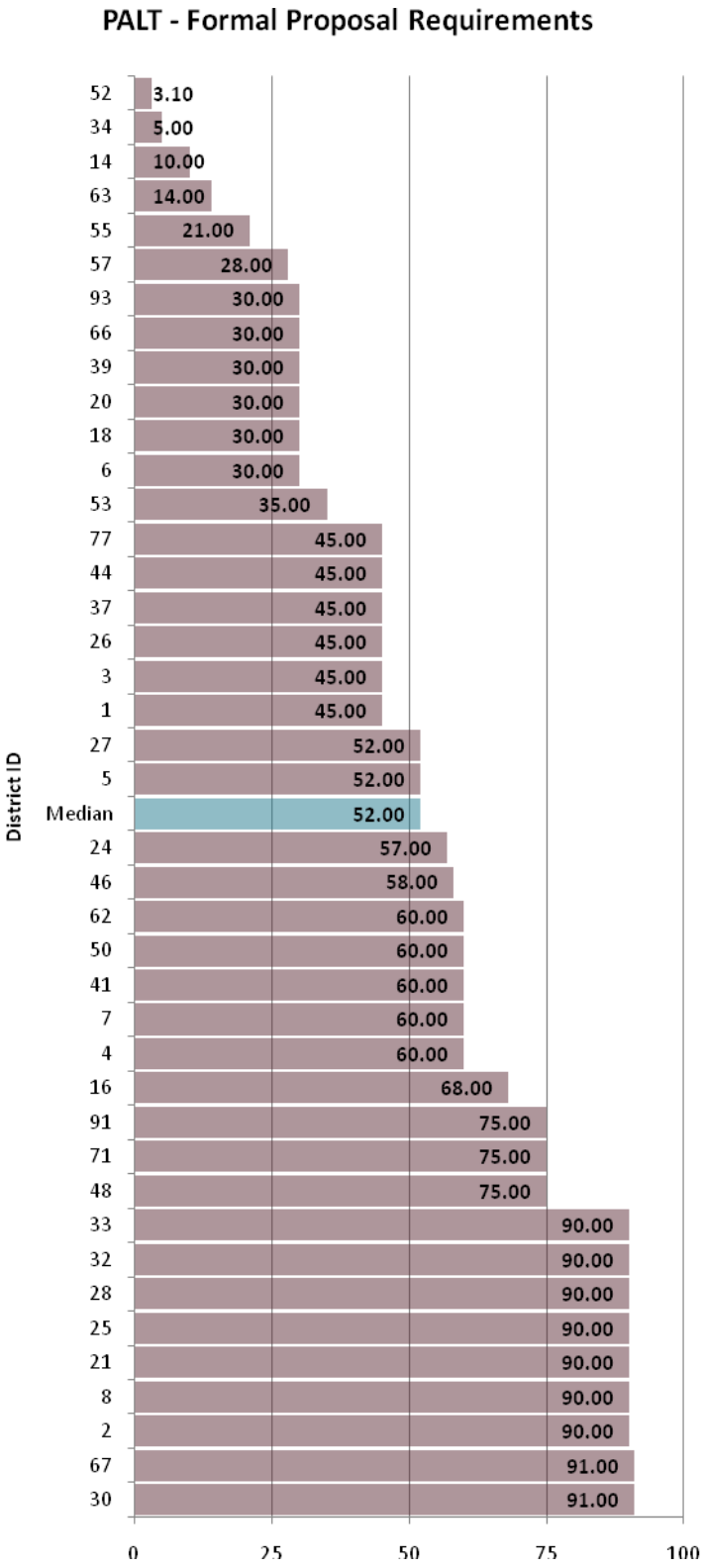
Importance of Measure

- 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)

Influencing Factors

- 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

[1] ACCRA is an acronym for American Chambers of Commerce Research Association. This organization produces a Cost of Living Index to provide a useful and reasonably accurate measure to compare cost of living differences among urban areas. We divided all measures that resulted in a dollar amount by the ACCRA factor for the region in order to normalize data across regions. For additional information, please go to www.coli.org.



Calculation

Average number of days to process all formal competitive proposal (RFP) requirements from receipt of requirement to contract award

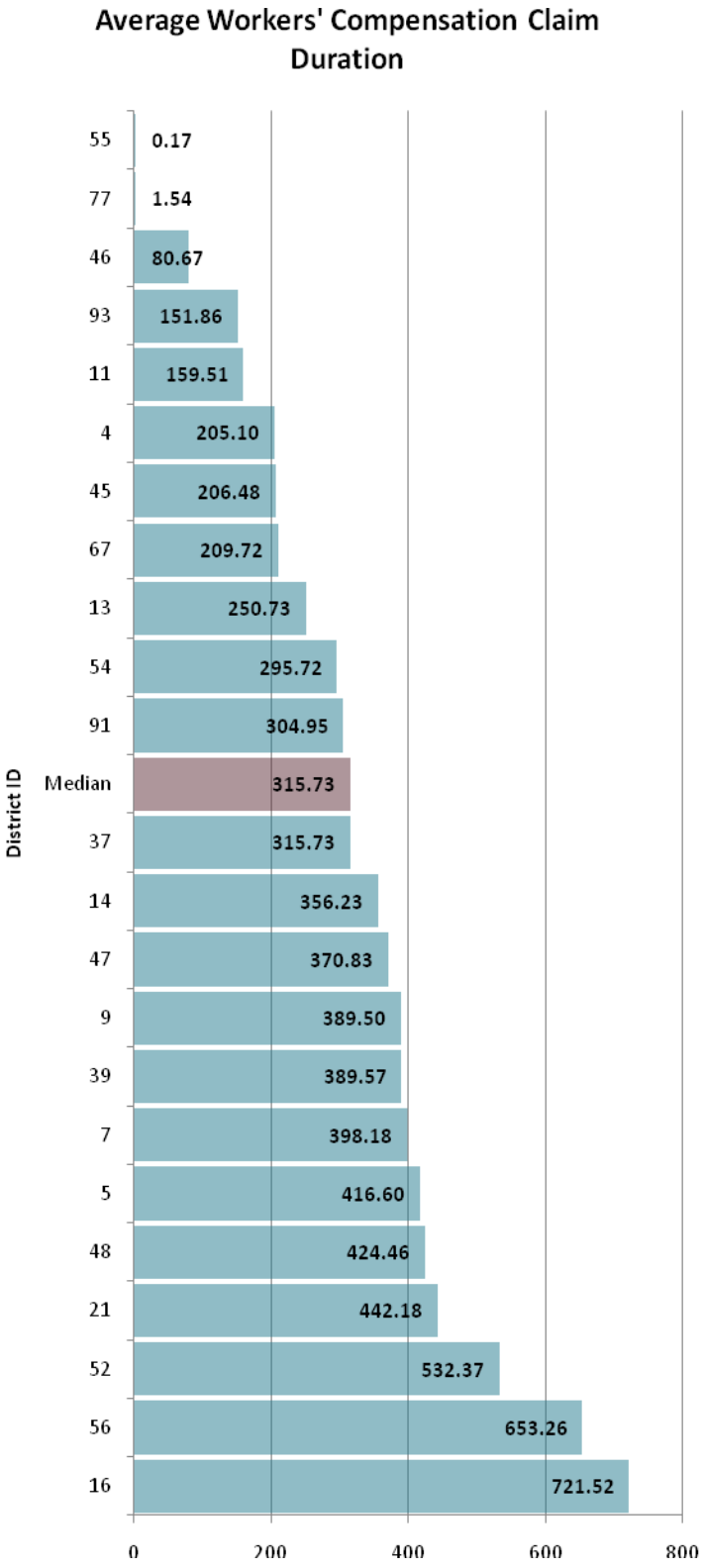
Importance of Measure

- This measure establishes a cycle time benchmark for commencing and completing acquisition through the RFP process
- It examines the balance between competition, procedural compliance using best value criteria, and the need to get products/services in place in a timely manner

Influencing Factors

- Federal, State and local school board procurement policies and laws
- Frequency of school board meetings
- Budget/FTE allocation for professional procurement staff
- Training on scope of work and specification development
- The award process, including evaluation, pre-bid conferences, site visit requirements, and vendor reference checks
- Use of ERP and e-procurement to streamline internal procurement processes and external solicitation/response process
- Frequency of vendor protests
- Complexity and size of procurement

Risk Management



Calculation

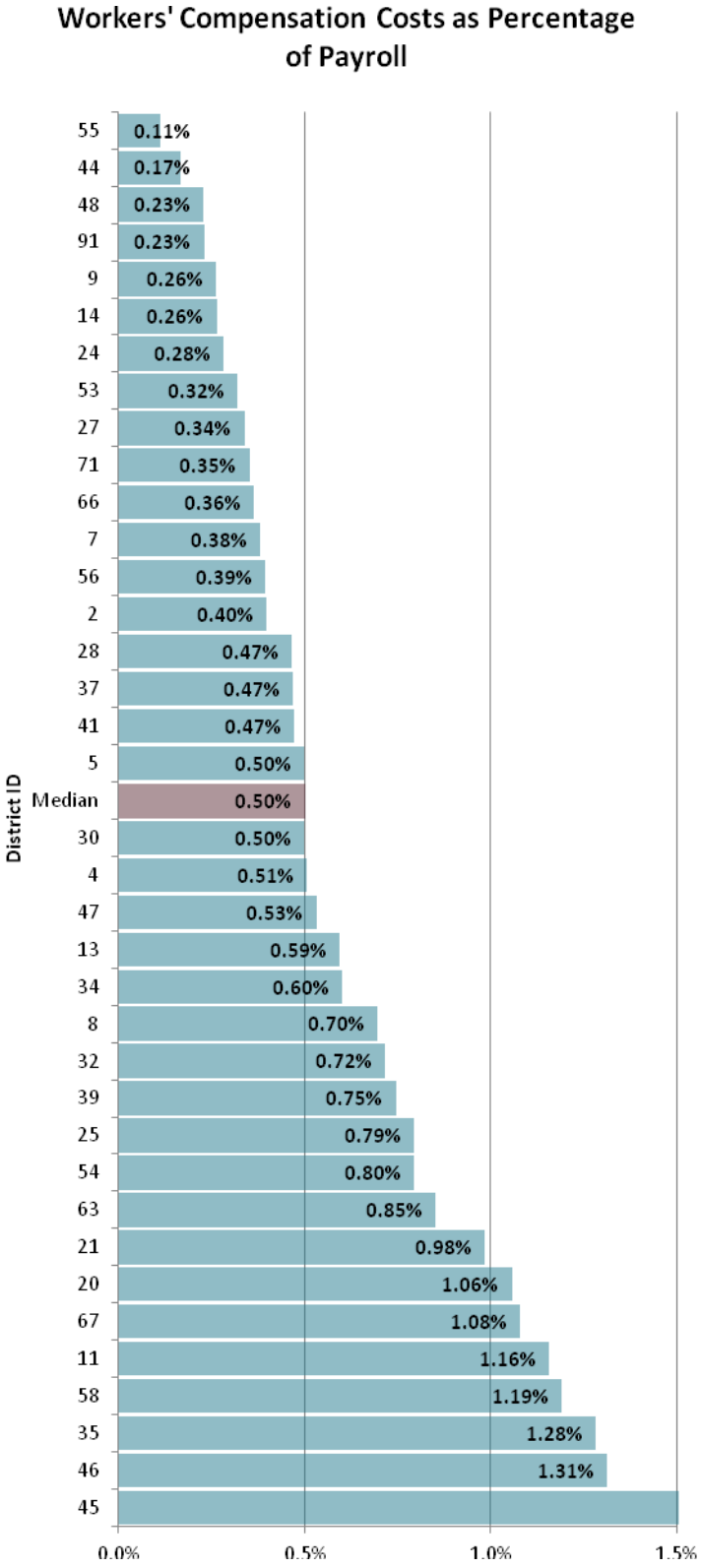
Total number of days for all medical-only workers' compensation claims closed *divided by* number of medical-only workers' compensation claims closed

Importance of Measure

- This measures how long it takes to bring a claim to closure
- It looks at average life of claim

Influencing Factors

- Legislation
- Aggressiveness of claims staff and defense attorneys in moving cases forward
- Quality and availability of appropriate medical care to bring injured workers to maximum medical improvement
- Customer service (or lack thereof) of claims staff will often affect an injured worker's decision to seek legal counsel
- Pending appellate decisions on issues that impact large number of cases



Calculation

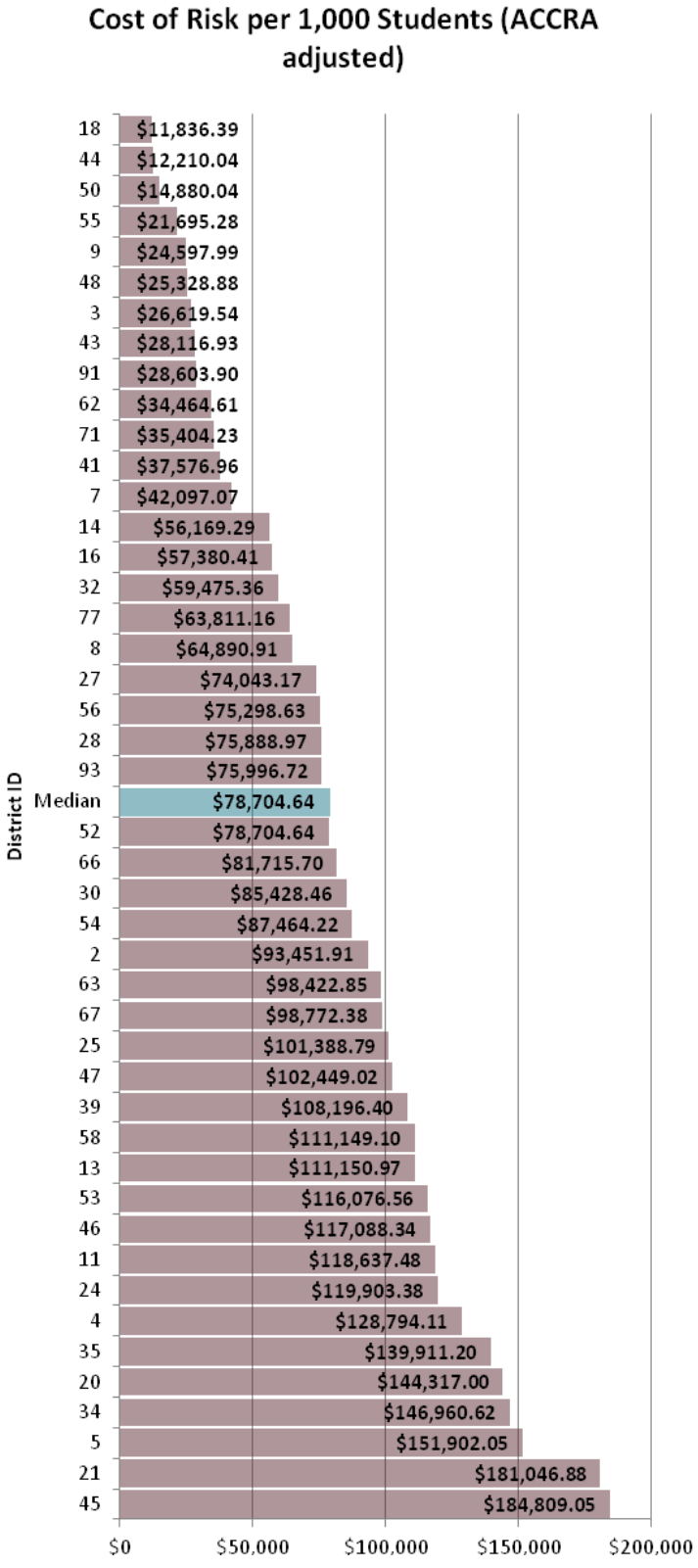
Total workers' compensation costs *divided by* total payroll

Importance of Measure

- This metric will provide a way to measure trends and benchmark against other employers

Influencing Factors

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



Calculation

Total annual workers' compensation expenditures *plus* total annual liability expenditures *divided by* student enrollment *divided by* 1,000 (divided by ACCRA factor[1])

Importance of Measure

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

Influencing Factors

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

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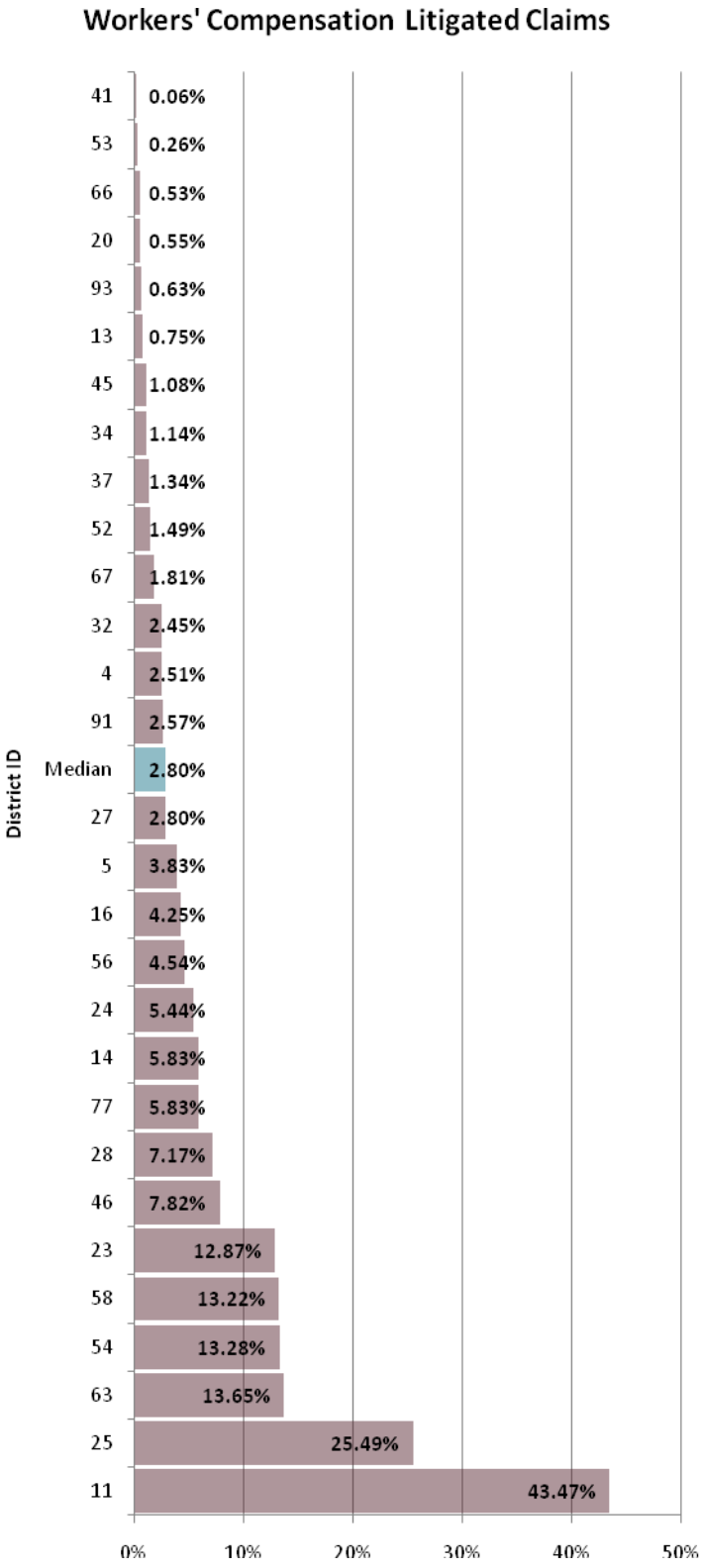


Calculation

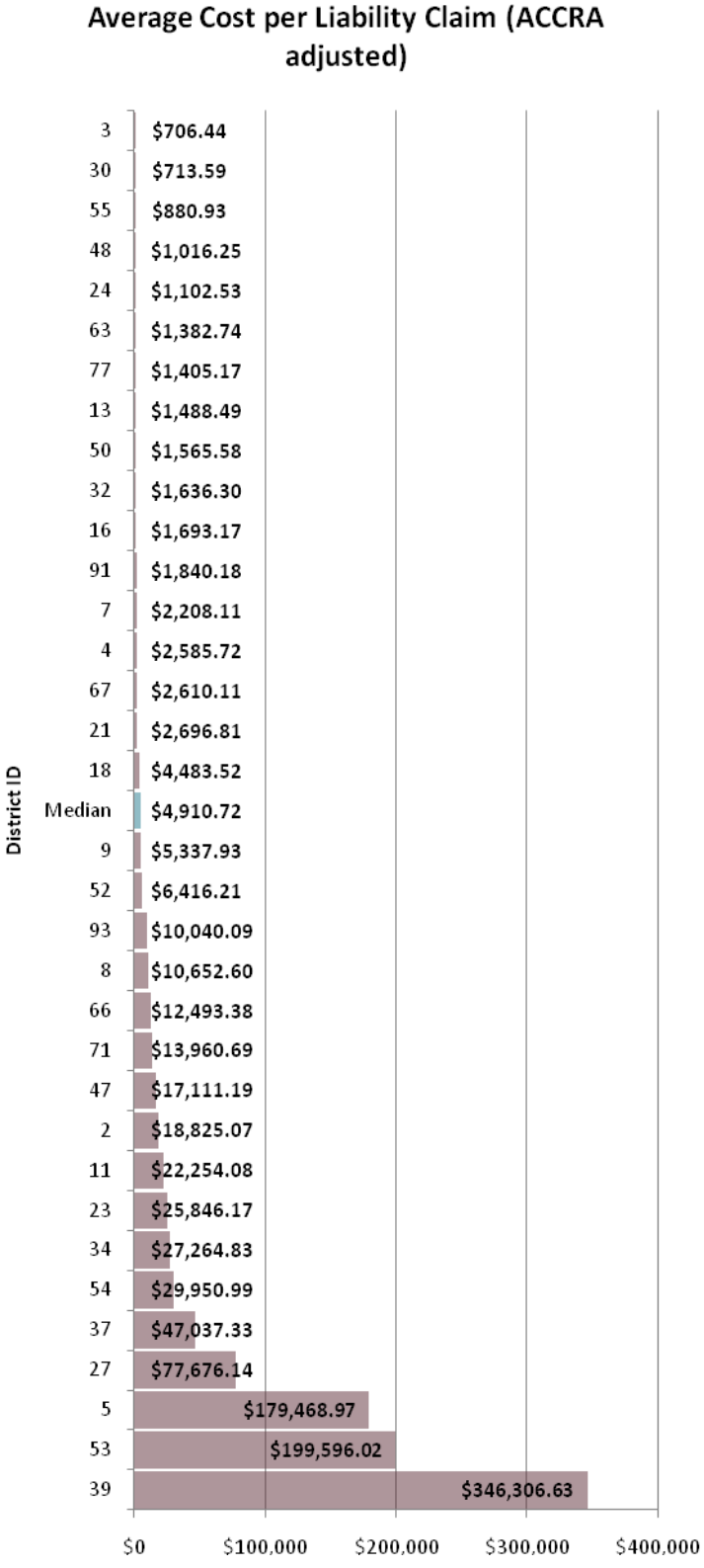
Number of workers' compensation claims litigated *divided by* total number of worker's compensation claims filed

Importance of Measure

- This is an important metric as litigation is expensive and increases the cost of claims
- If a claim can be kept out of litigation, it can be resolved much more quickly and inexpensively

Influencing Factors

- Injured employee's understanding of the workers' compensation system and benefits
- Effectiveness of claims adjuster's communication with the injured employee
- Union involvement
- Employer's timely reporting of injuries and provision of medical treatment



Calculation

Total cost of all liability claims *divided by* number of liability claims filed (divided by ACCRA factor[1])

Importance of Measure

- Used to determine estimated costs for claims referred to outside attorneys
- Can also be used to measure against other entities of similar size and with similar claims

Influencing Factors

- Litigation
- Frequency of claims
- Injury type

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Calculation

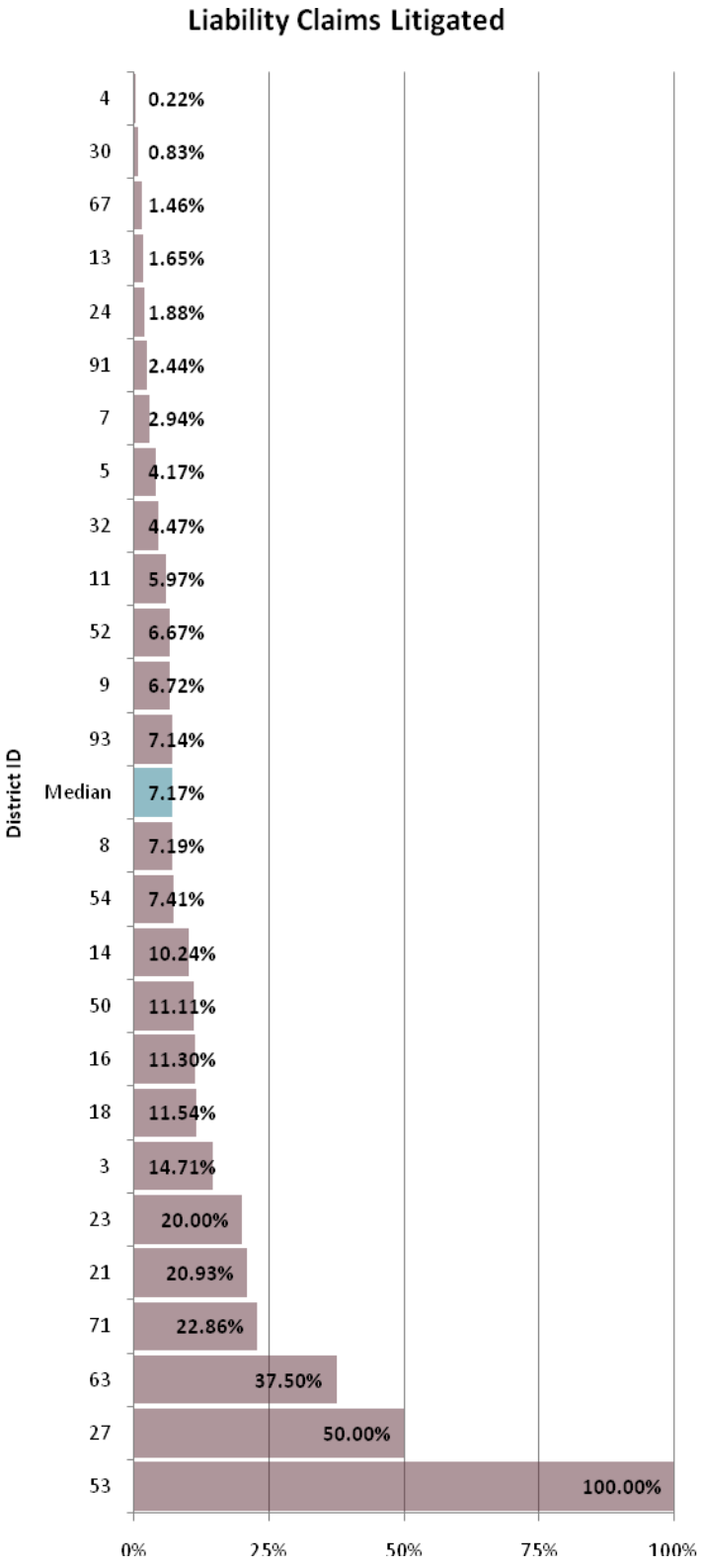
Number of liability claims filed *divided by* average daily attendance (ADA) *divided by* 1,000

Importance of Measure

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

Influencing Factors

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



Calculation

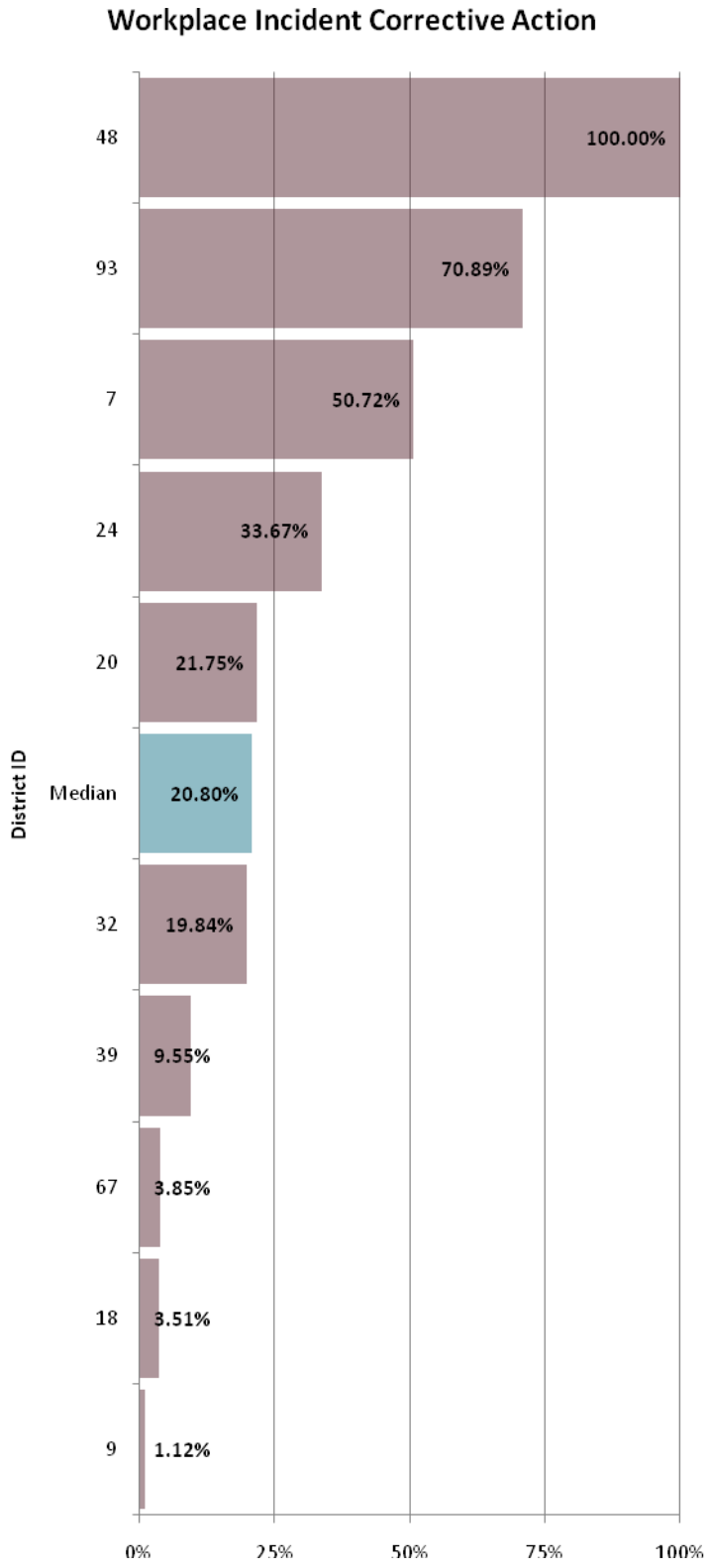
Number of liability claims litigated *divided by* number of all liability claims filed

Importance of Measure

- This is an important metric as litigation is expensive and increases the cost of the claim

Influencing Factors

- Severity of injuries
- Settlement rate
- Motivation of plaintiff



Calculation

Number of annual workplace incidents reported with resulting corrective action *divided by* total number of annual workplace incidents reported

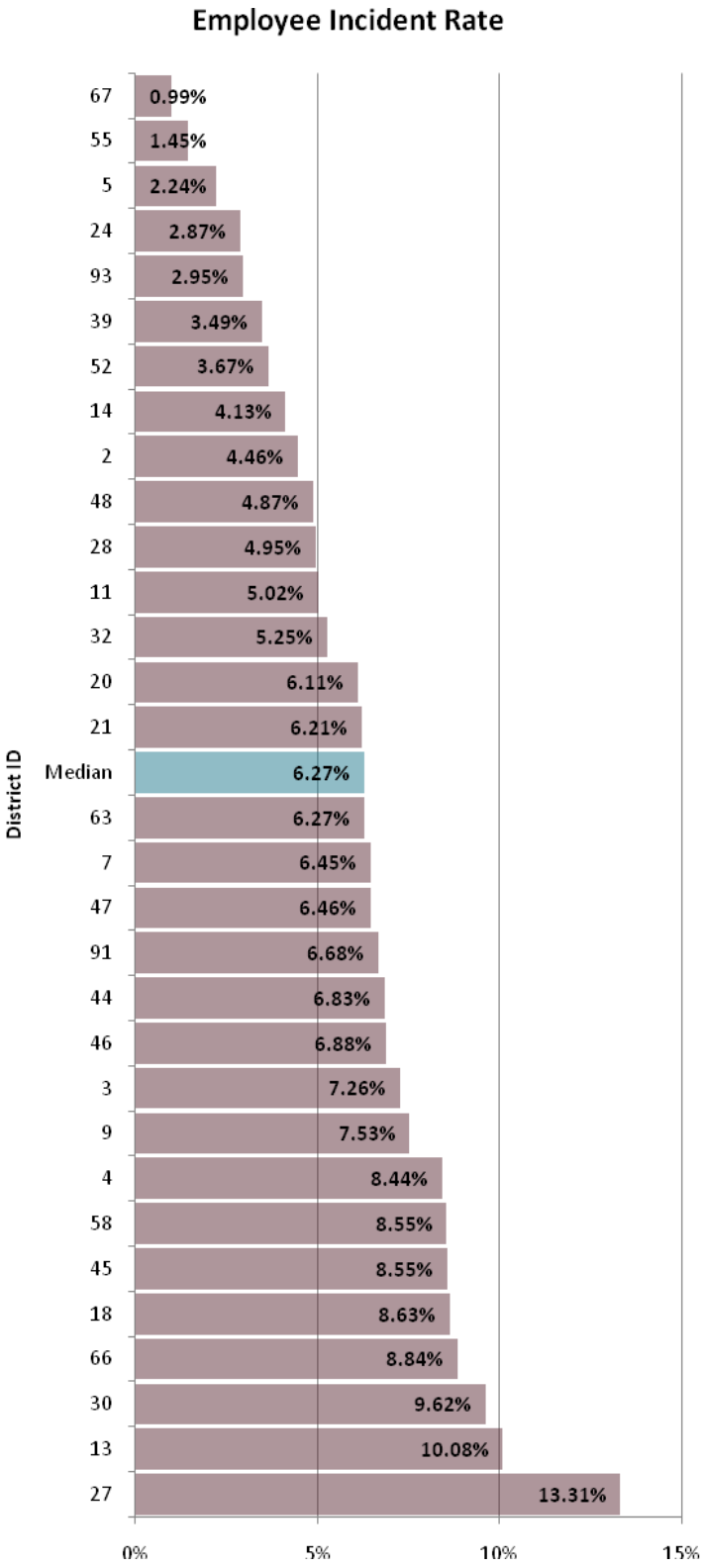
Importance of Measure

- This metric would be used to evaluate the level of follow-up action being taken following incidents - to determine if the appropriate corrective action is actually being taken

Influencing Factors

- Supervisory/management level training
- Effective investigation of incident
- Effective referral system for maintenance and repair
- Disciplinary action/training when incident results from unsafe act
- Effective documentation and tracking

Essential Few



Calculation

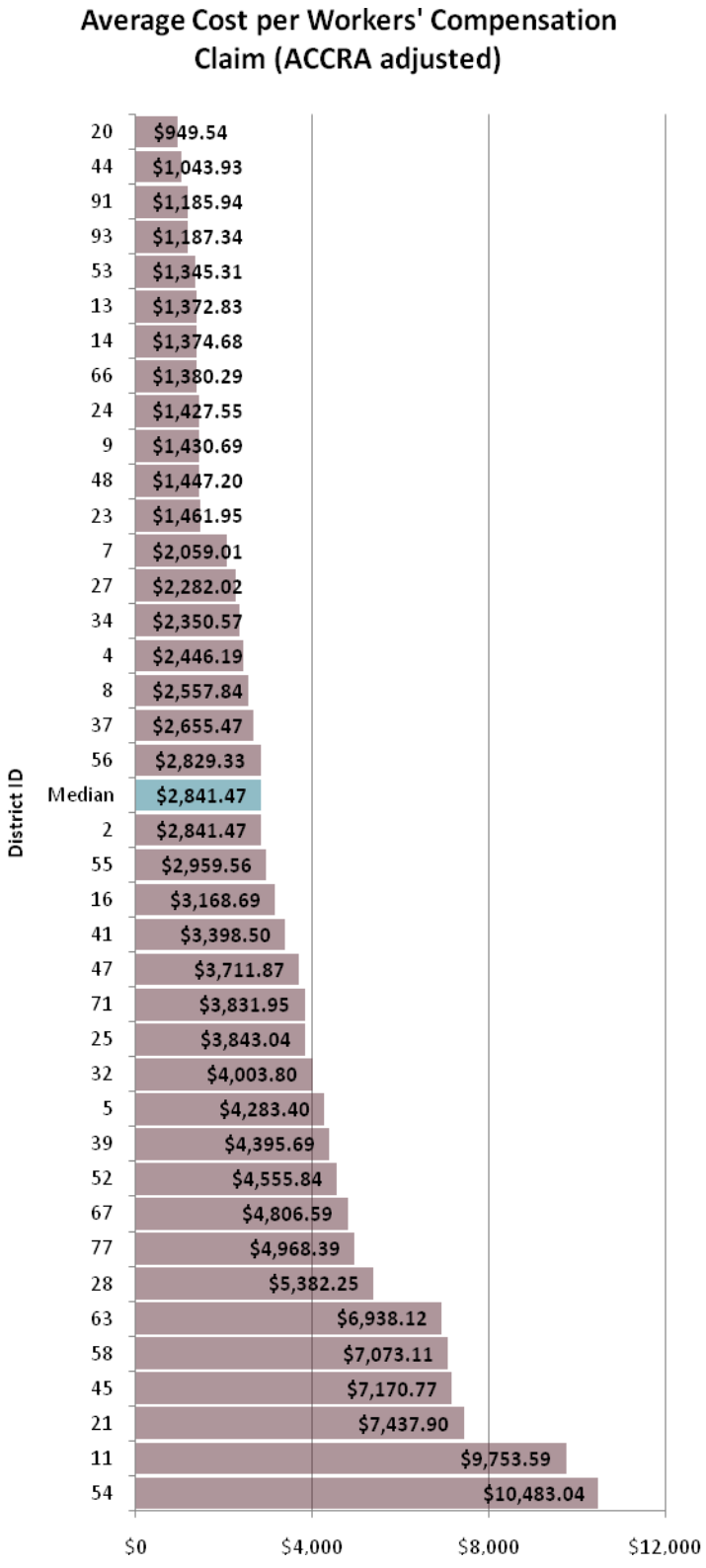
Number of annual employee workplace accidents/incidents reported *divided by* number of W2s issued during the year

Importance of Measure

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

Influencing Factors

- 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 cost of workers' compensation claims *divided by* number of workers' compensation claims filed (divided by ACCRA factor[1])

Importance of Measure

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

Influencing Factors

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

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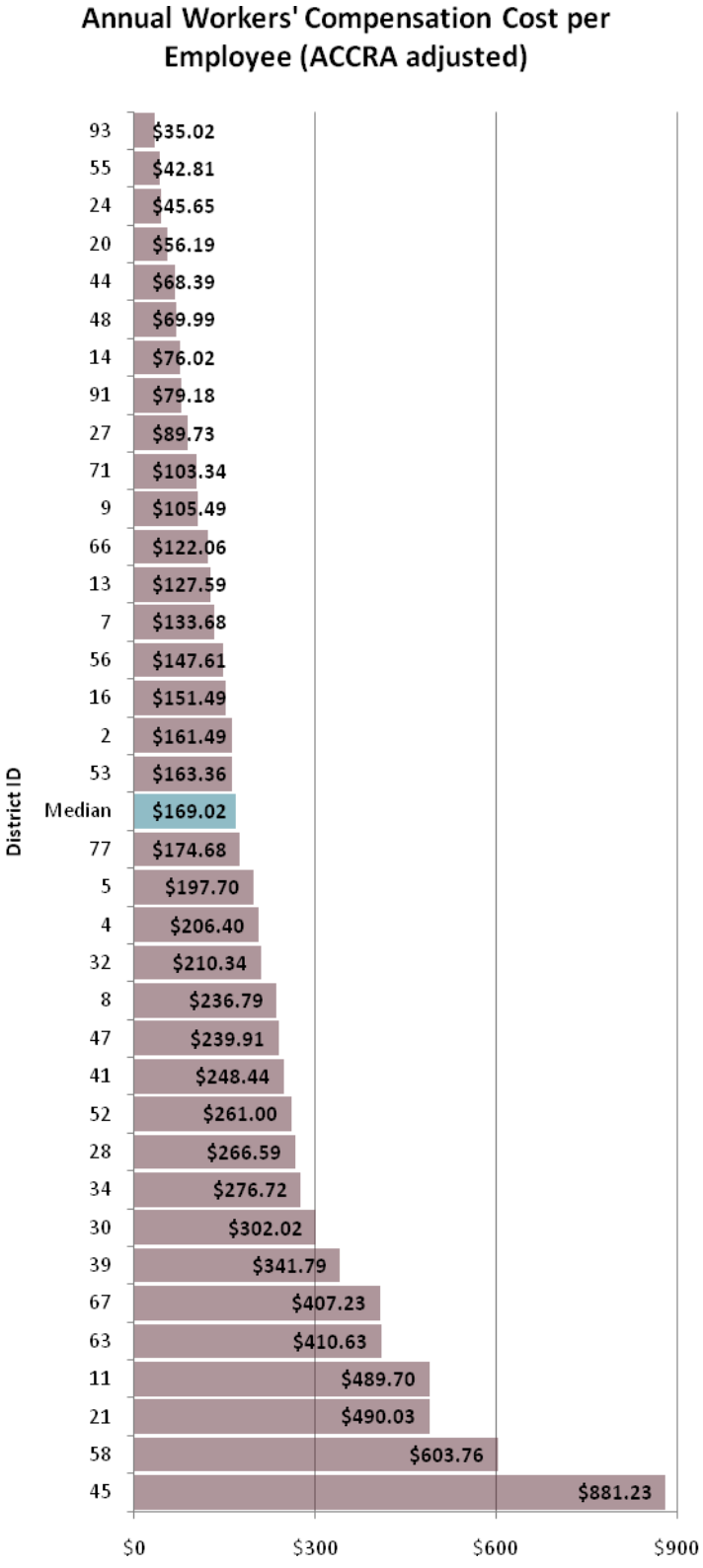

Calculation

Total dollar amount of annual workers' compensation claims paid *divided by* number of W2s issued during the year (divided by ACCRA factor[1])

Importance of Measure

- 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 benchmark against other employers

Influencing Factors

- Medical management programs
- Quality of medical care
- Litigation
- Timely provision of benefits
- Because some of the payments being made in this fiscal year will relate to claims filed in prior fiscal years, a sudden change in number of employees (due to reduction in force, etc.) could impact this metric

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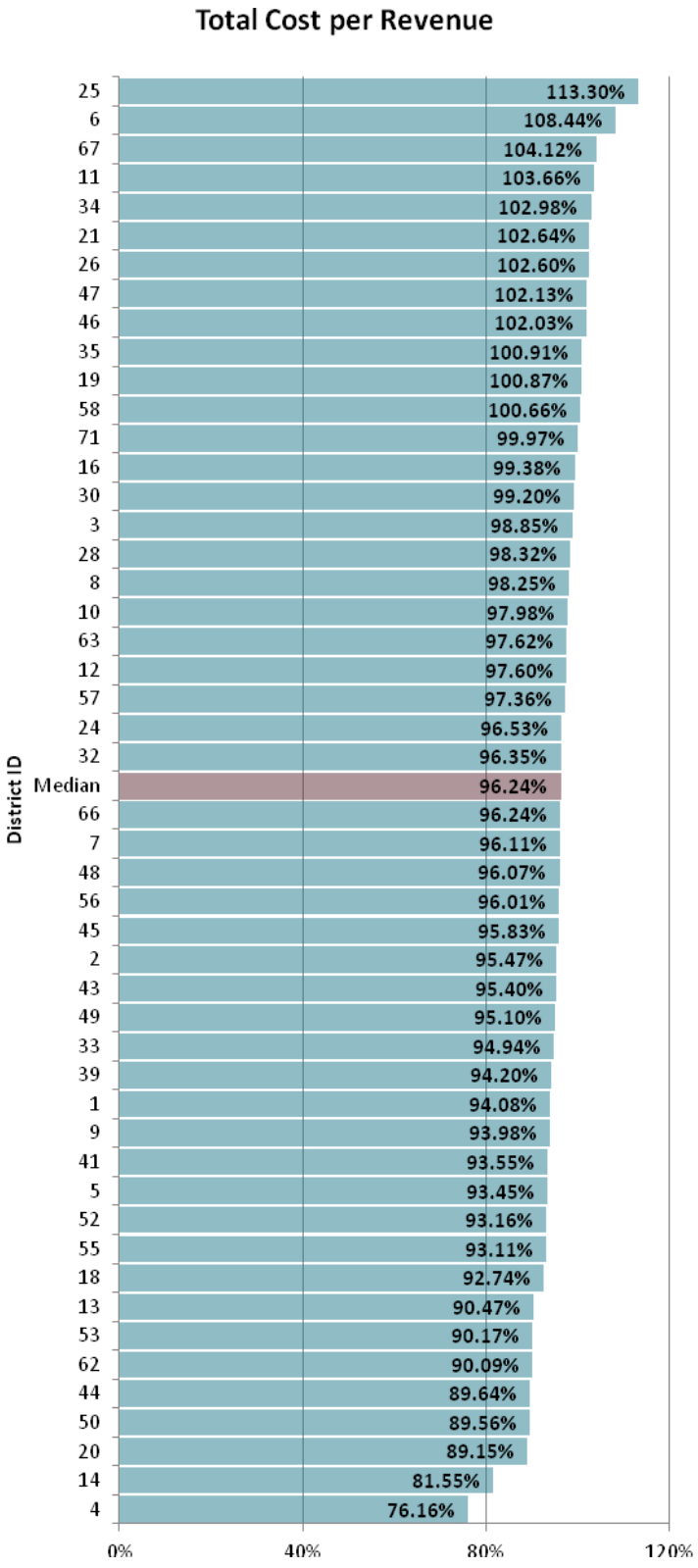
BUSINESS OPERATIONS

Food Services



Calculation

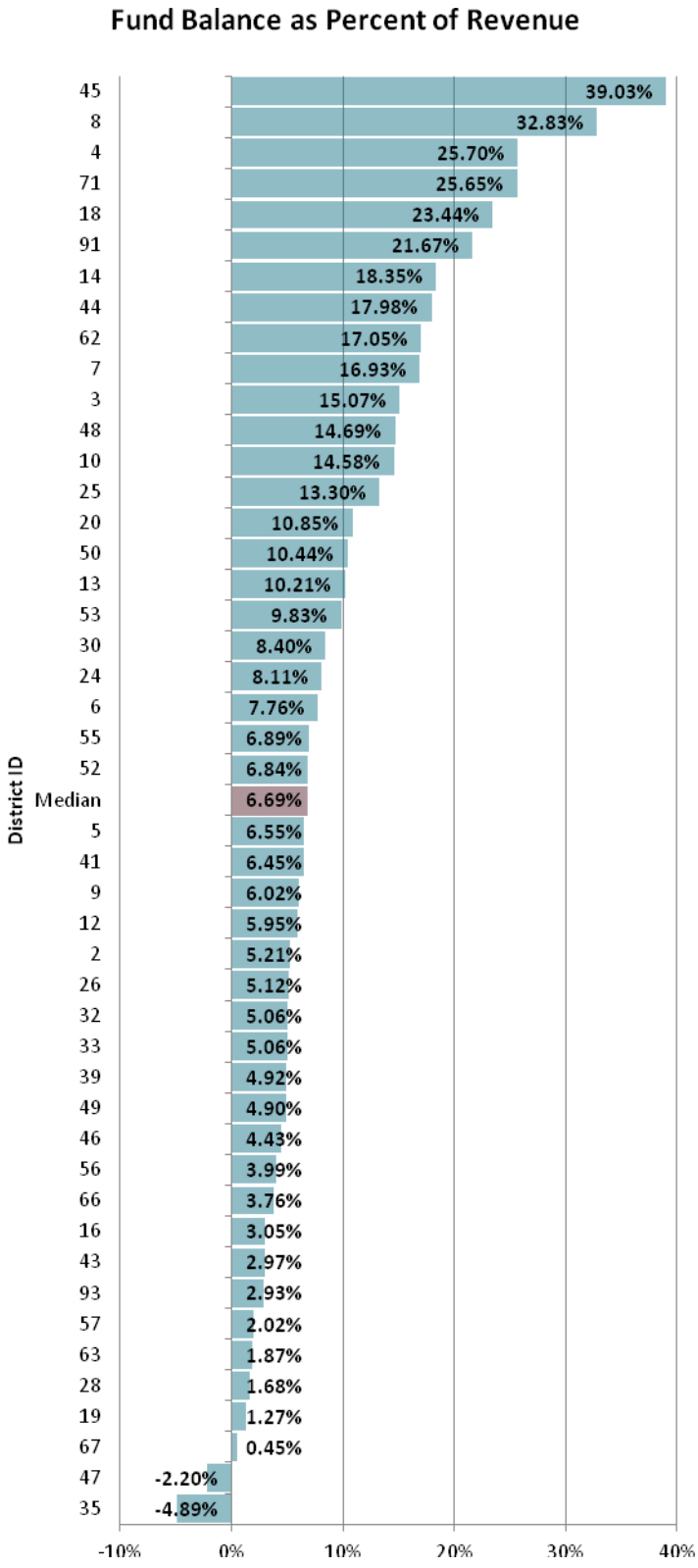
Total direct costs *plus* total indirect costs *divided by* total revenue

Importance of Measure

- 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

Influencing Factors

- The "charge-backs" 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,
- Meal quality
- Participation rates
- Purchasing practices
- Marketing
- Leadership expertise
- Meal prices
- Staffing formulas



Calculation

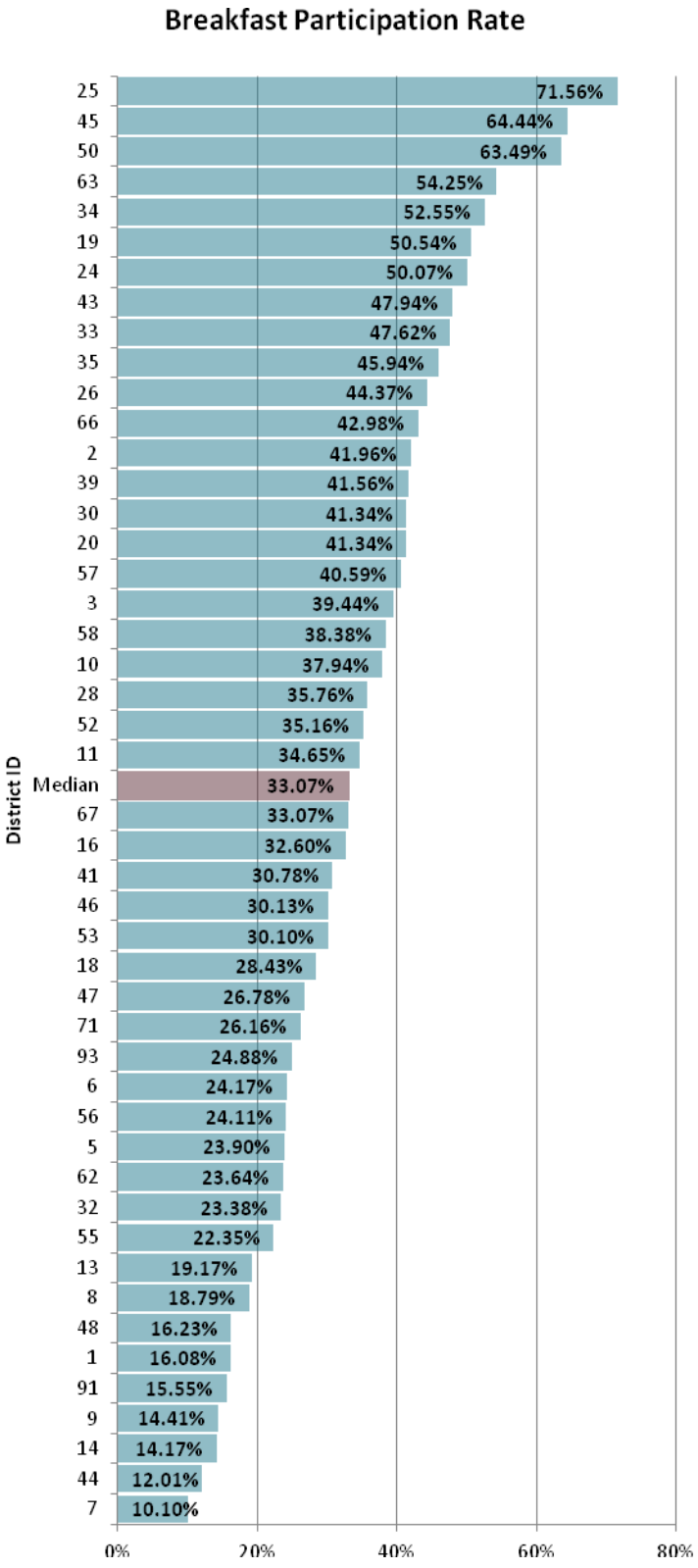
Fund balance *divided by* total revenue

Importance of Measure

- 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

Influencing Factors

- 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

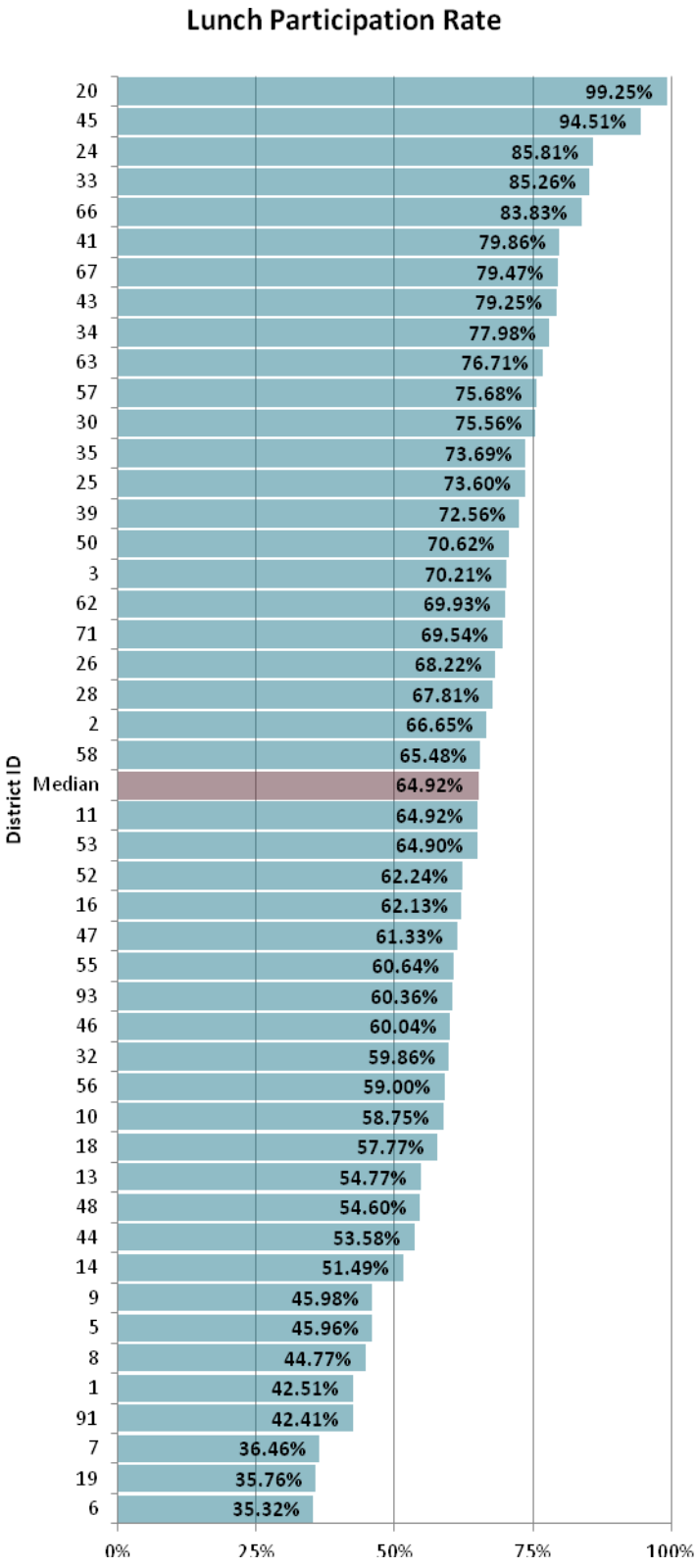
Total number of breakfasts served daily *divided by* average daily attendance

Importance of Measure

- 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 the district leadership to prepare students to be "ready to learn" in the classroom

Influencing Factors

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



Calculation

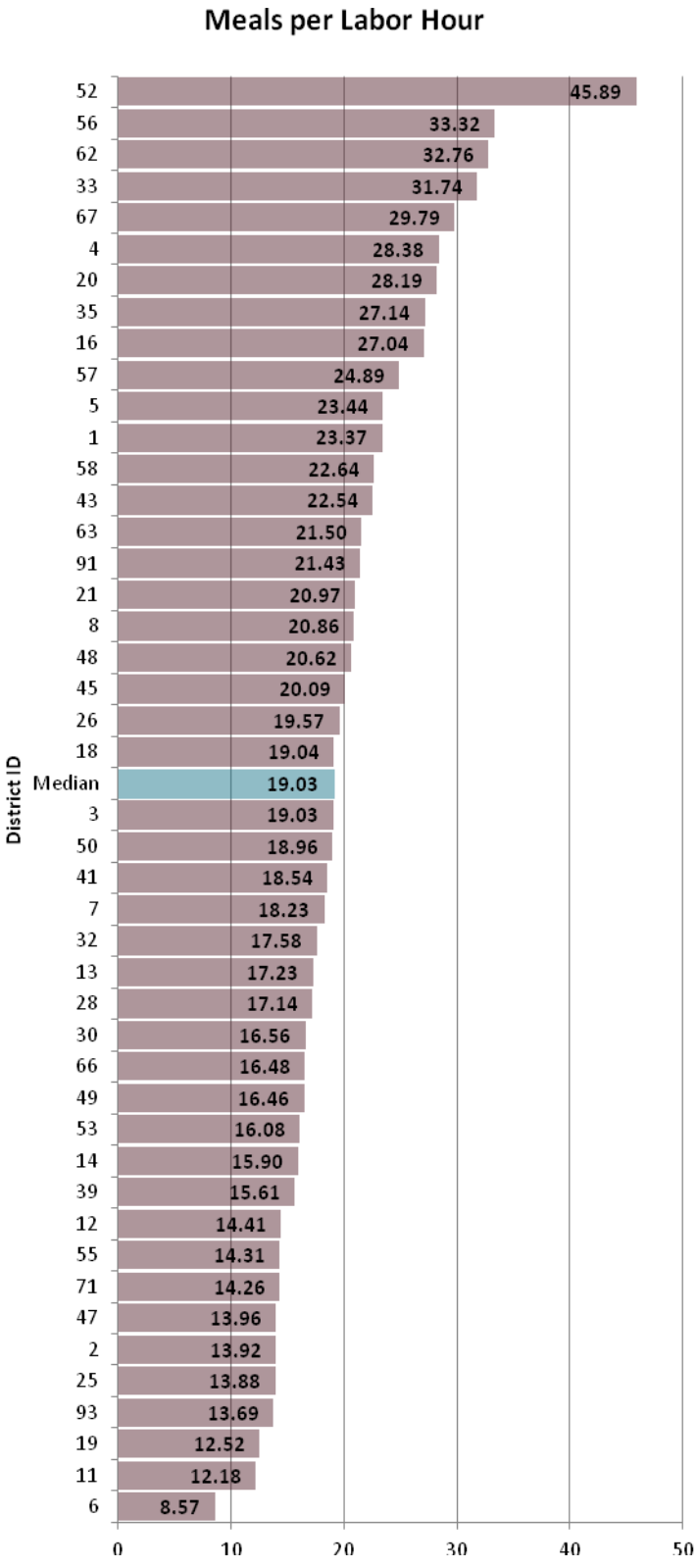
Total number of lunches served daily *divided by* average daily attendance

Importance of Measure

- High participation rates can indicate a high level of customer satisfaction with the school lunch program
- Student customers are attracted to quality food selections that are appealing, quick to eat, and economical
- High rates can also show that students get their food fast and have plenty of time to eat and socialize
- Program revenue can significantly increase when a large percentage of students participate in the lunch program

Influencing Factors

- 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



Calculation

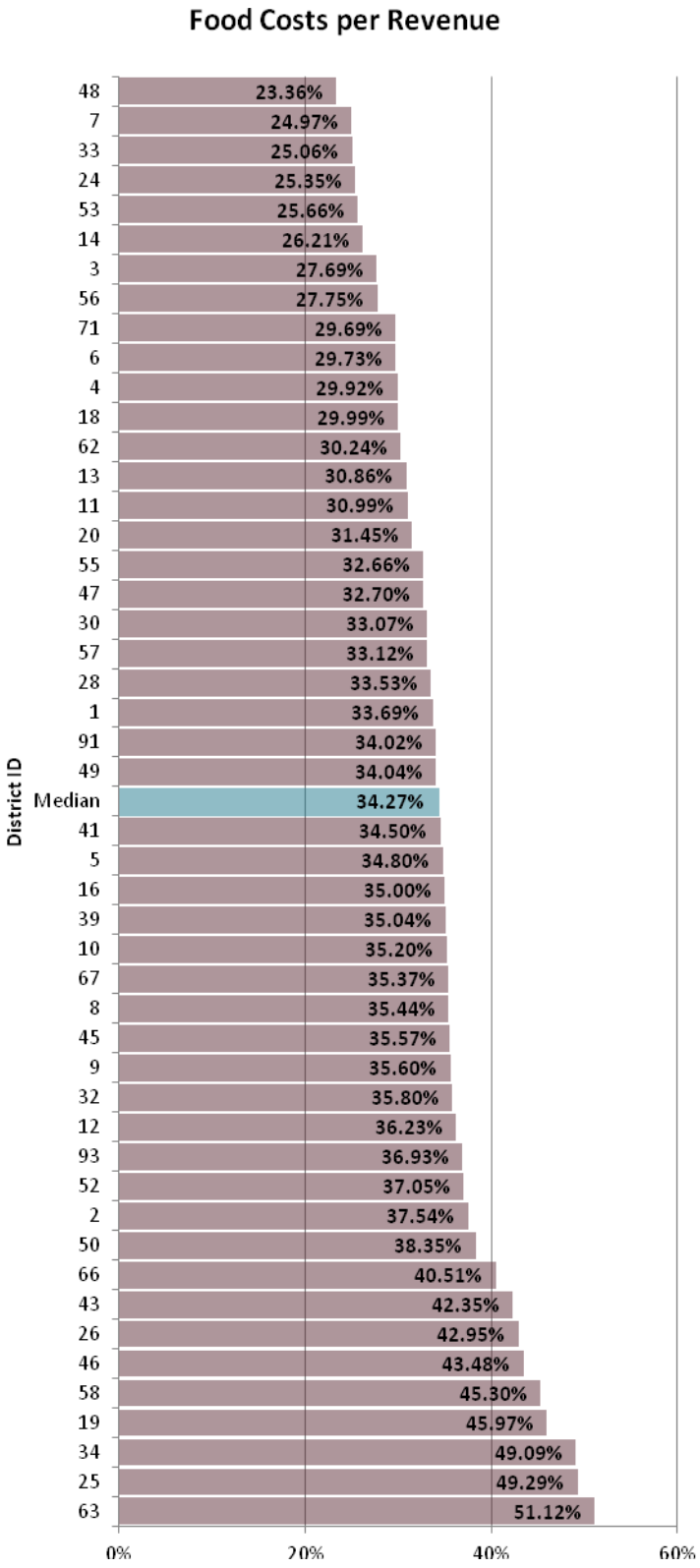
Total number of lunches served annually plus a percentage of the number of breakfasts, snacks, and a la carte and vending revenue *divided by* total labor hours paid by food service to cafeteria assigned staff

Importance of Measure

- Efficiency is important in making the best use of available food service funds

Influencing Factors

- Menu offerings
- Provision II and III programs
- Free/reduced percentage
- Food preparation methods
- Local nutrition standards for a la carte foods



Calculation

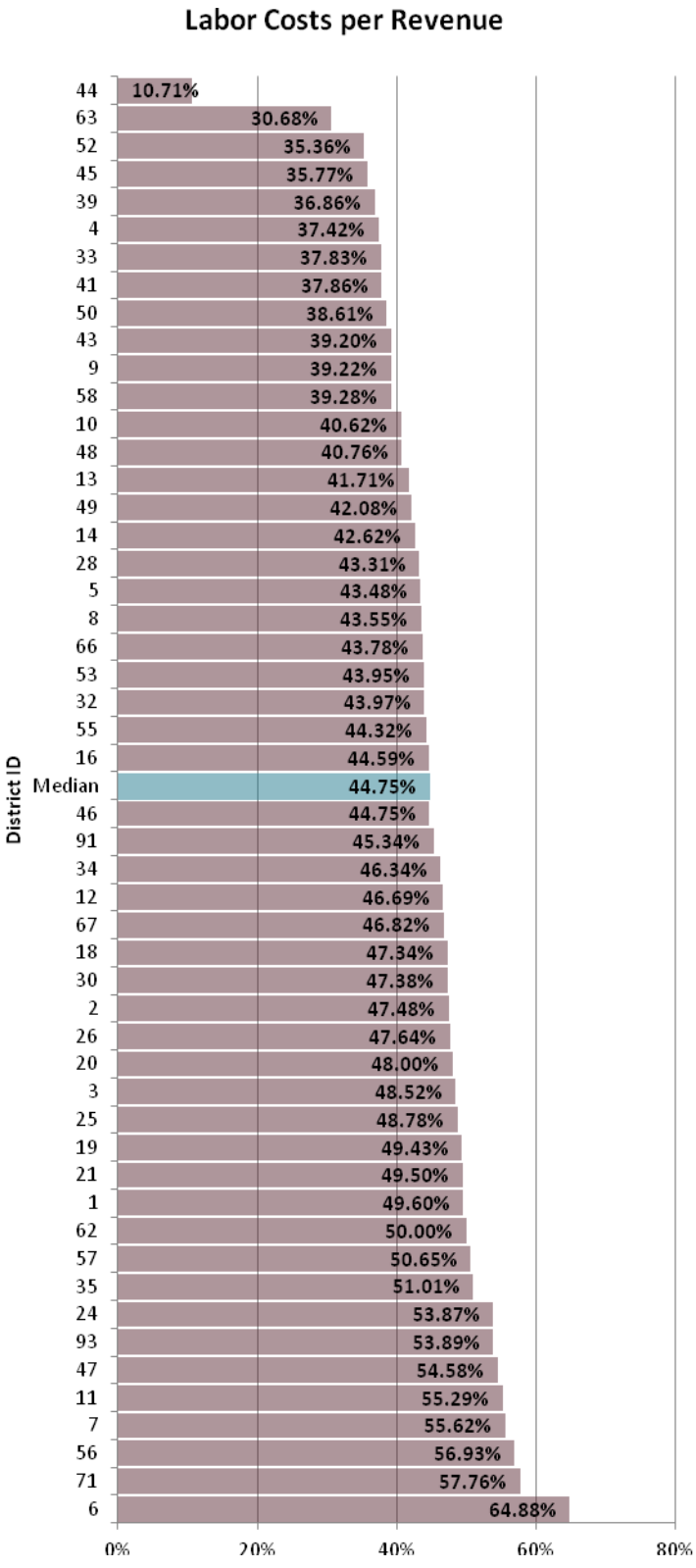
Total food costs *divided by* total revenue

Importance of Measure

- 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 the implementation of consistent production practices can control food costs
- Food cost as a percent of revenue can be reduced if participation revenue is high

Influencing Factors

- USDA menu and 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

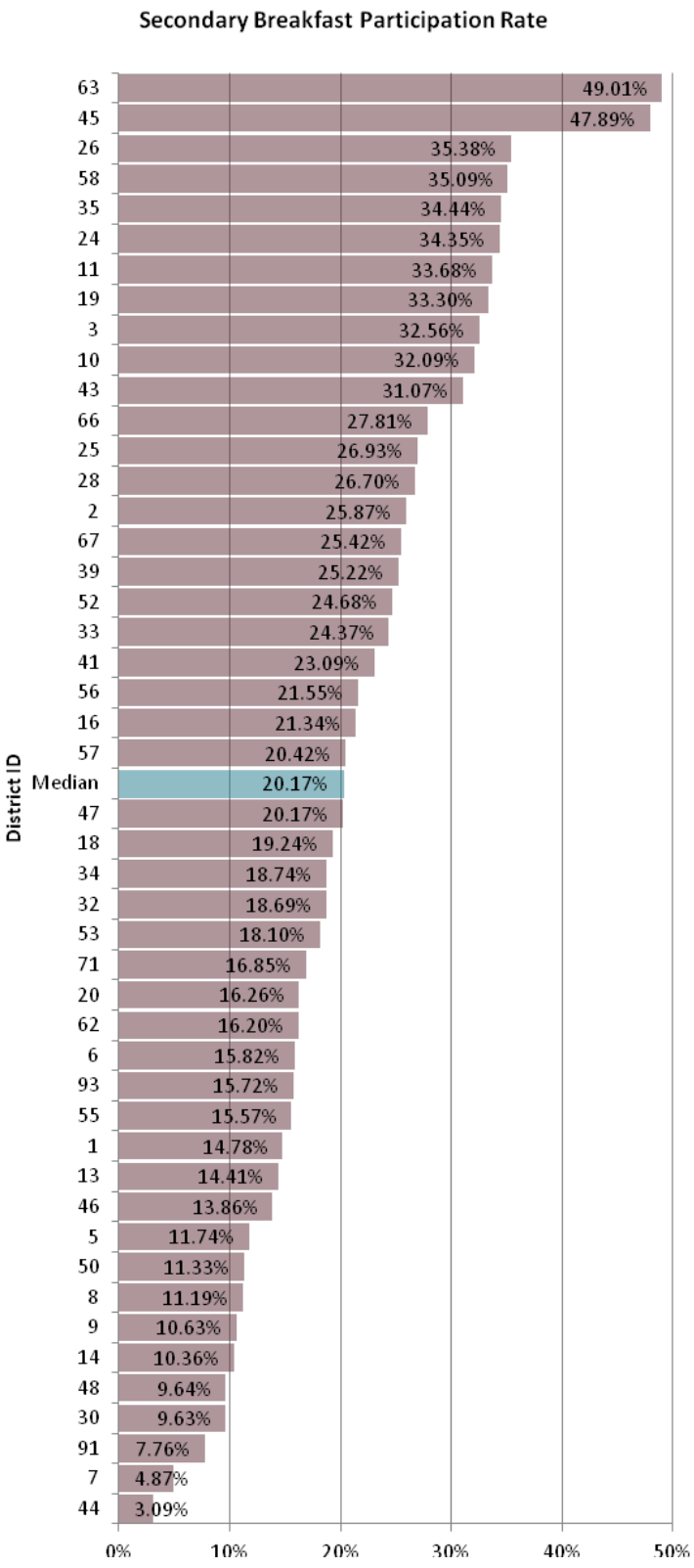
Total department labor expenses, plus benefits and taxes, plus workers' compensation costs *divided by* total revenue

Importance of Measure

- Labor contributes the largest expense that food service revenue must cover
- School boards can control labor costs by establishing salary schedules and benefit plans
- Directors can control labor cost by implementing productivity standards and staffing formulas

Influencing Factors

- 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

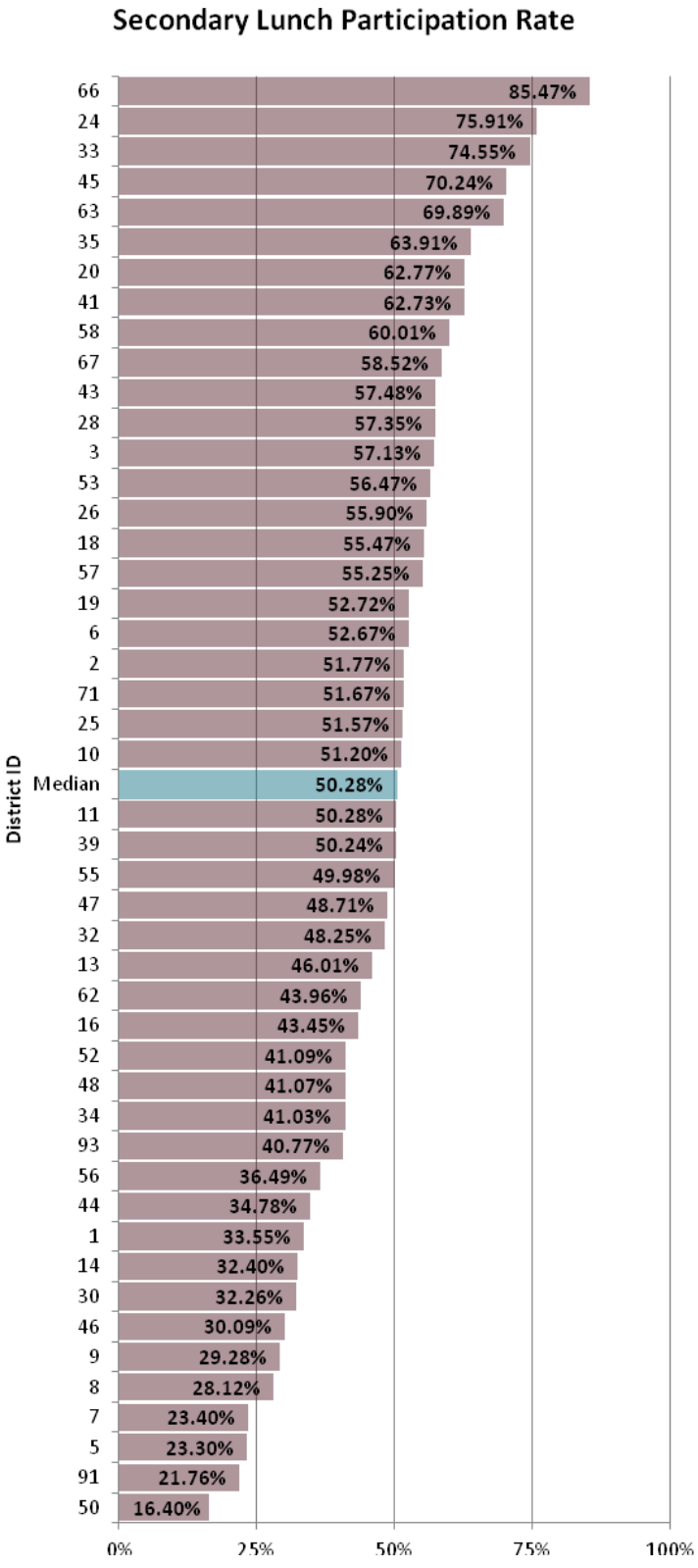
Total number of breakfasts served daily in grades 7 through 12 *divided by* average daily attendance in grades 7 through 12

Importance of Measure

- 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 the district leadership to prepare students to be "ready to learn" in the classroom

Influencing Factors

- Menu selections
- Clean, attractive cafeterias
- Alternative serving methods, such as classroom feeding



Calculation

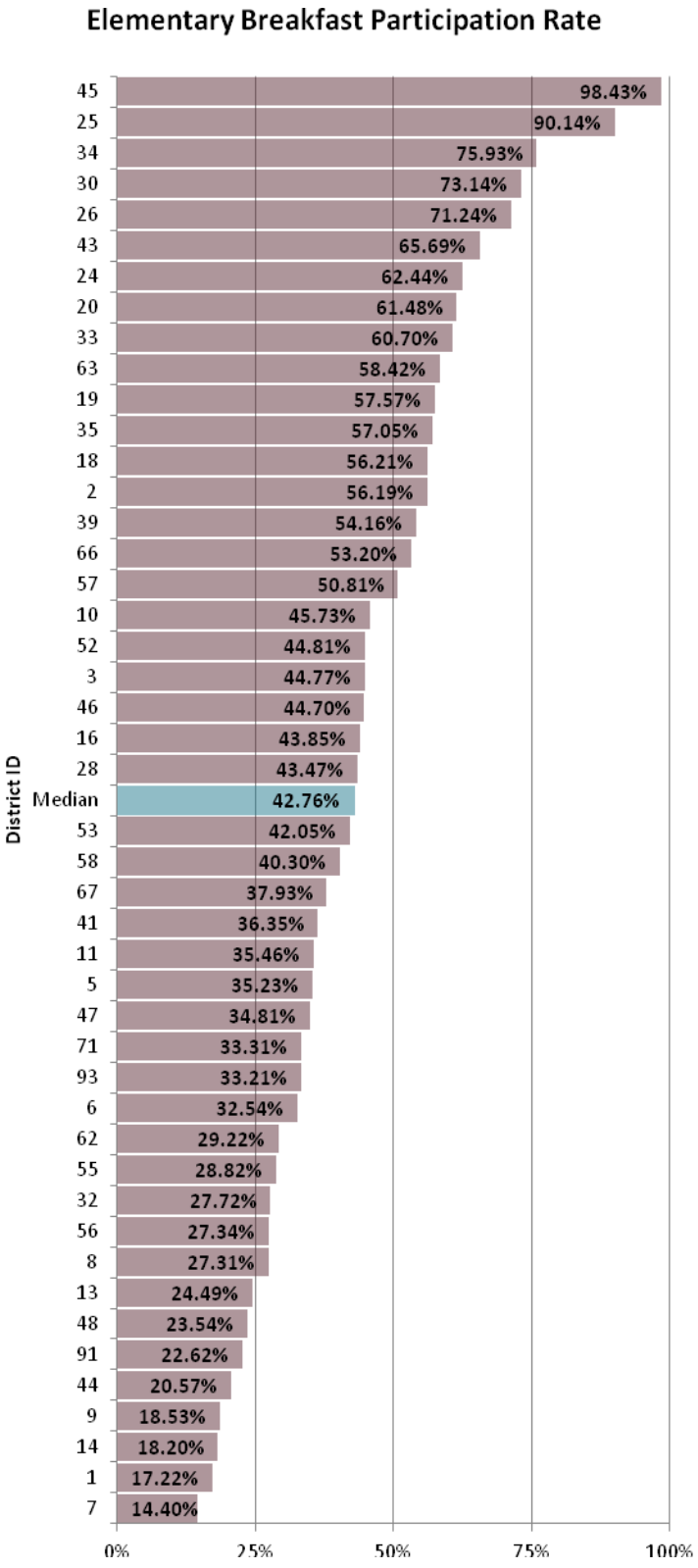
Total number of lunches served daily in grades 7 through 12 *divided by* average daily attendance in grades 7 through 12

Importance of Measure

- High participation rates indicate customer satisfaction because food selections are appealing, quick to eat, and economical
- High participation rates, including the participation of free and reduced-price students, can significantly contribute to program revenue

Influencing Factors

- Menu selections
- Clean, attractive dining areas with adequate seating capacity
- Number and length of meal times determined by school administration
- Adequate number of POS stations to help move lines quickly and efficiently so students have time to eat and socialize



Calculation

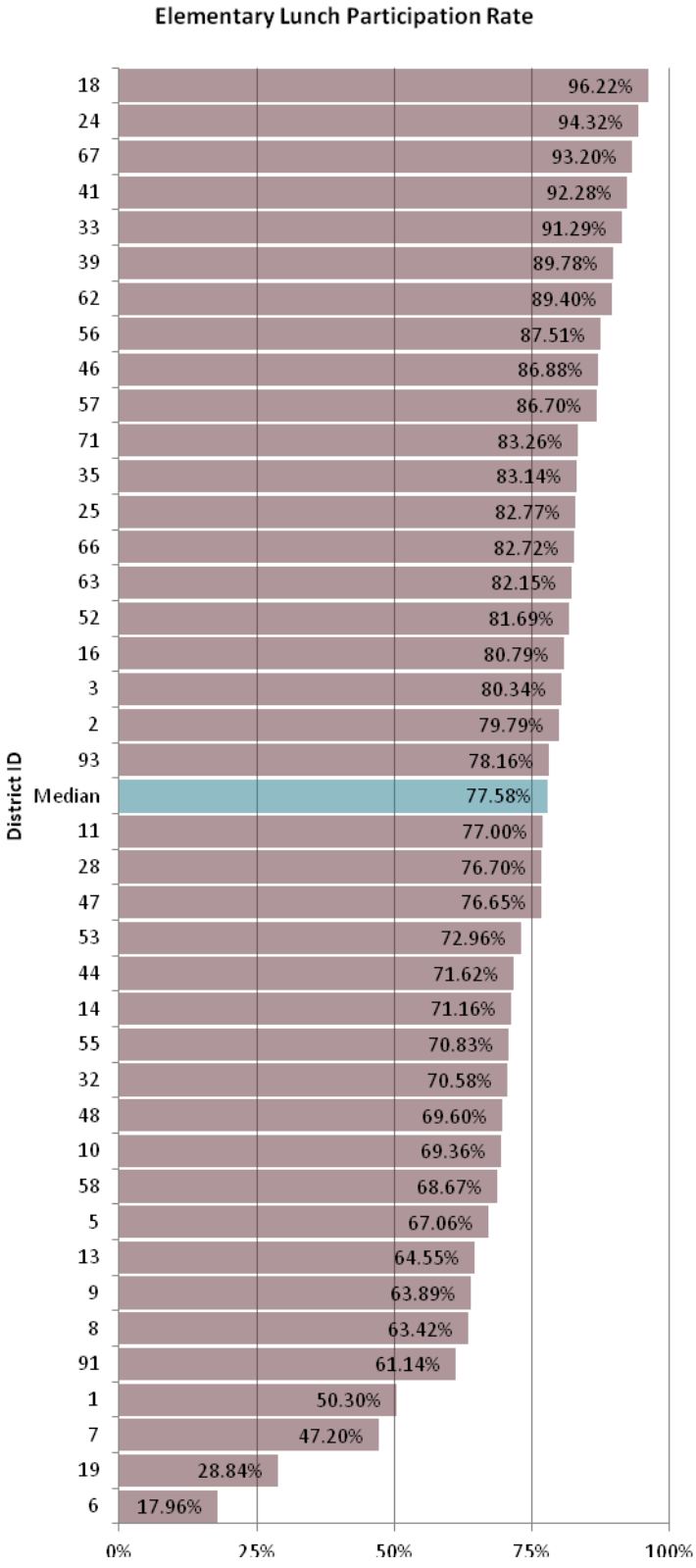
Total number of breakfasts served daily in grades Pre-Kindergarten through 6 *divided by* average daily attendance in grades Pre-Kindergarten through 6

Importance of Measure

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

Influencing Factors

- District policies
- USDA Provision II and III and Universal Free programs
- Free/reduced percentage
- Menu selections, food preparation and alternative serving methods (e.g., classroom feeding)
- Adequate number of POS stations so that all children have adequate time to eat



Calculation

Total number of lunches served daily in grades Pre-Kindergarten through 6 *divided by* average daily attendance in grades Pre-Kindergarten through 6

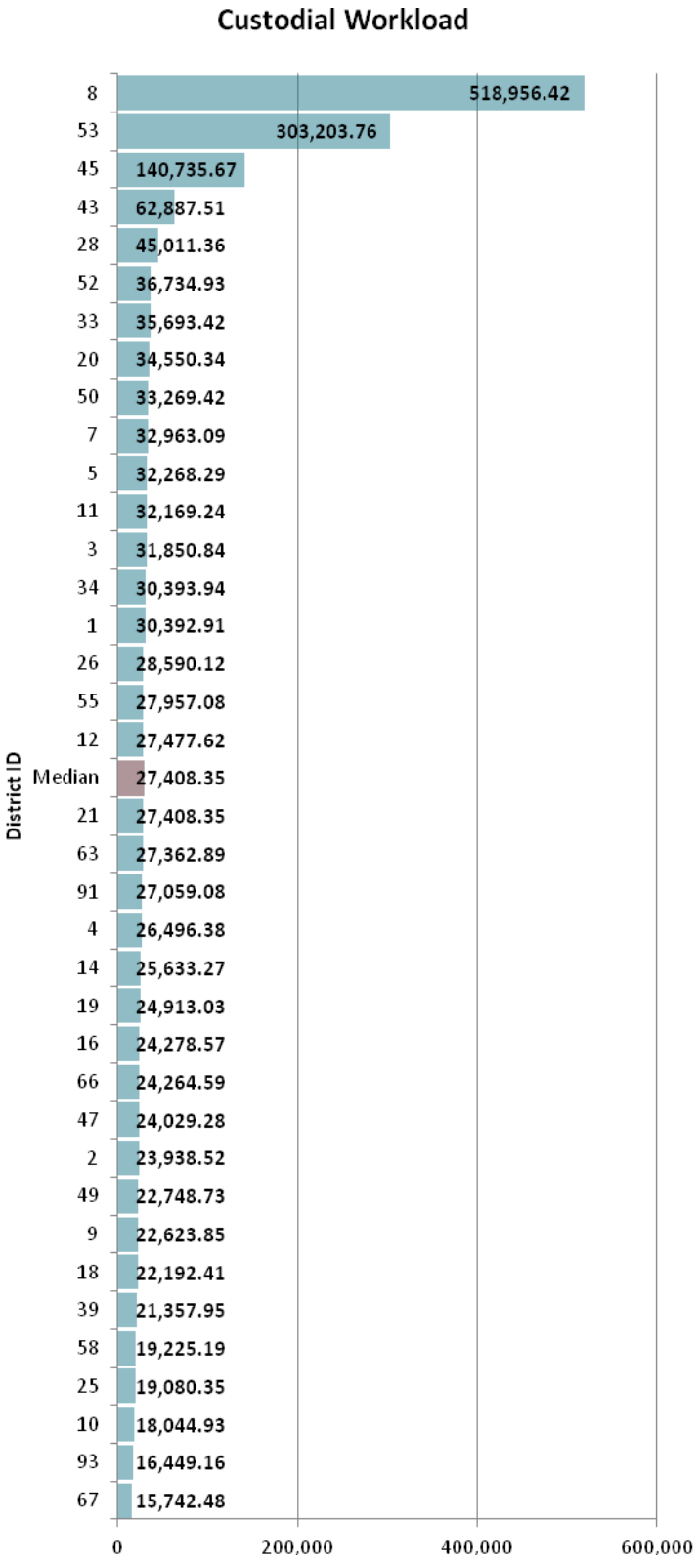
Importance of Measure

- High participation rates indicate customer satisfaction because food selections are appealing, quick to eat, and economical
- High participation rates, including the participation of free and reduced-price students, can significantly contribute to program revenue

Influencing Factors

- Menu selections
- Clean, attractive dining areas with adequate seating capacity
- Number and length of meal times determined by school administration
- Adequate number of POS stations to help move lines quickly and efficiently so students have time to eat and socialize

Maintenance & Operations



Calculation

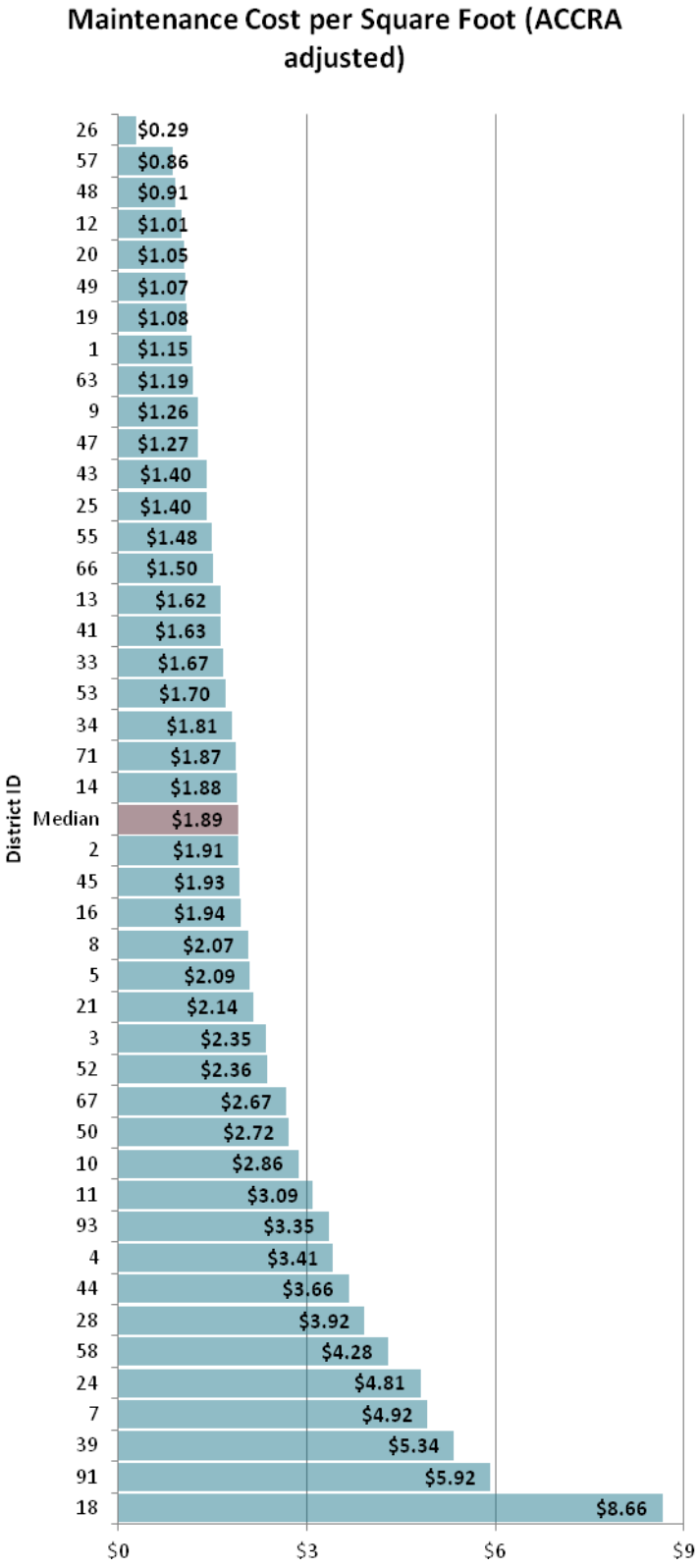
Total district square footage *divided by* total number of custodians

Importance of Measure

- This allows districts to compare their operations with others to evaluate the relative efficiency of the custodial employees
- A value on the low side could indicate that custodians may have additional assigned duties, or have opportunities for efficiencies as compared to districts with a higher ratio
- A higher number could indicate a well-managed custodial program or that some housekeeping operations are assigned to other employee classifications
- It is important for a district to examine what drives the ratio to determine the most effective workload

Influencing Factors

- Assigned duties for custodians
- Management effectiveness
- Labor agreements
- District budget



Calculation

Total maintenance expenditures – major and routine – including labor, benefits, supply and other expenditures *divided by* total district square footage (divided by ACCRA factor[1])

Importance of Measure

- This measure is an indicator of the relative cost for a district to maintain its buildings
- Regional labor and material cost differences will influence the measure
- A high number may indicate a large amount of deferred maintenance while a lower number could reflect newer buildings in a district

Influencing Factors

- Age of buildings
- Amount of deferred maintenance
- Labor costs
- Material costs and purchasing practices
- Layout of buildings

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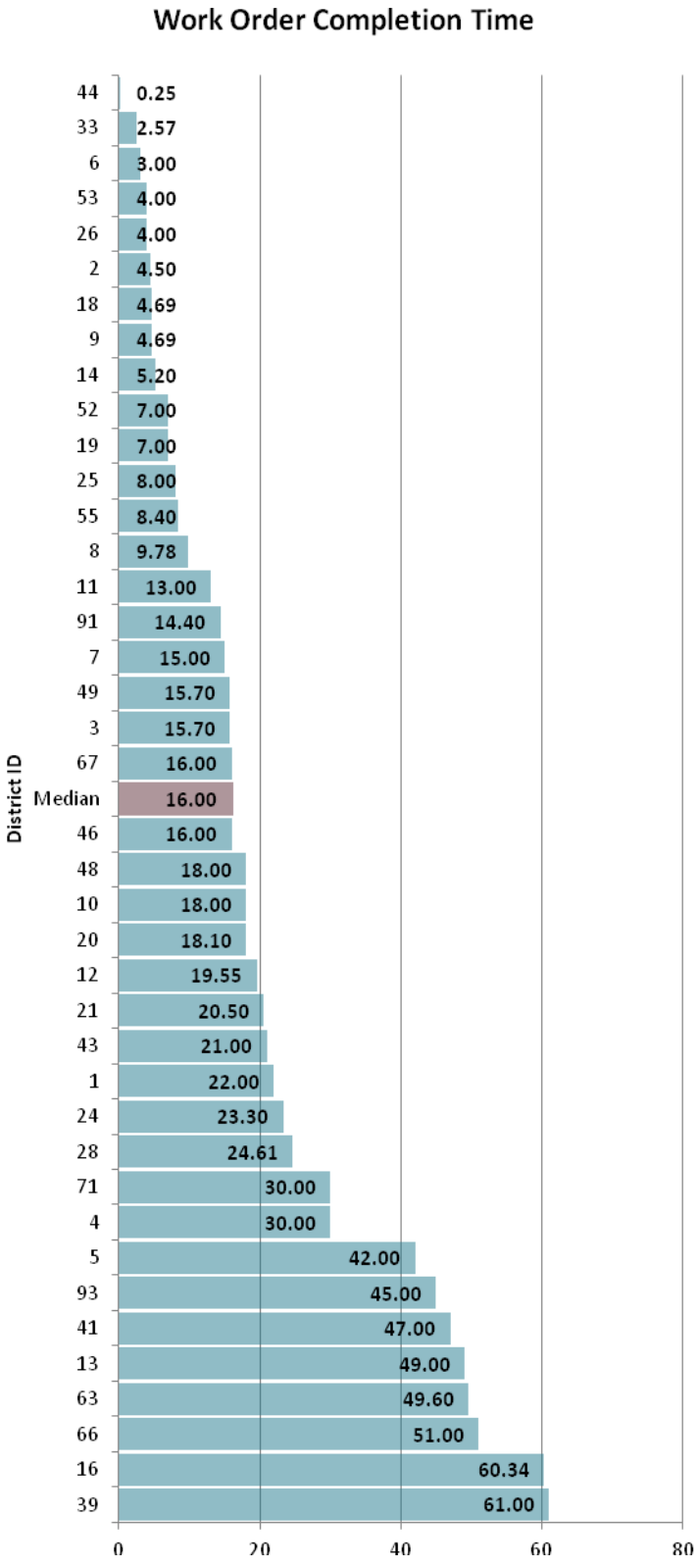


Calculation

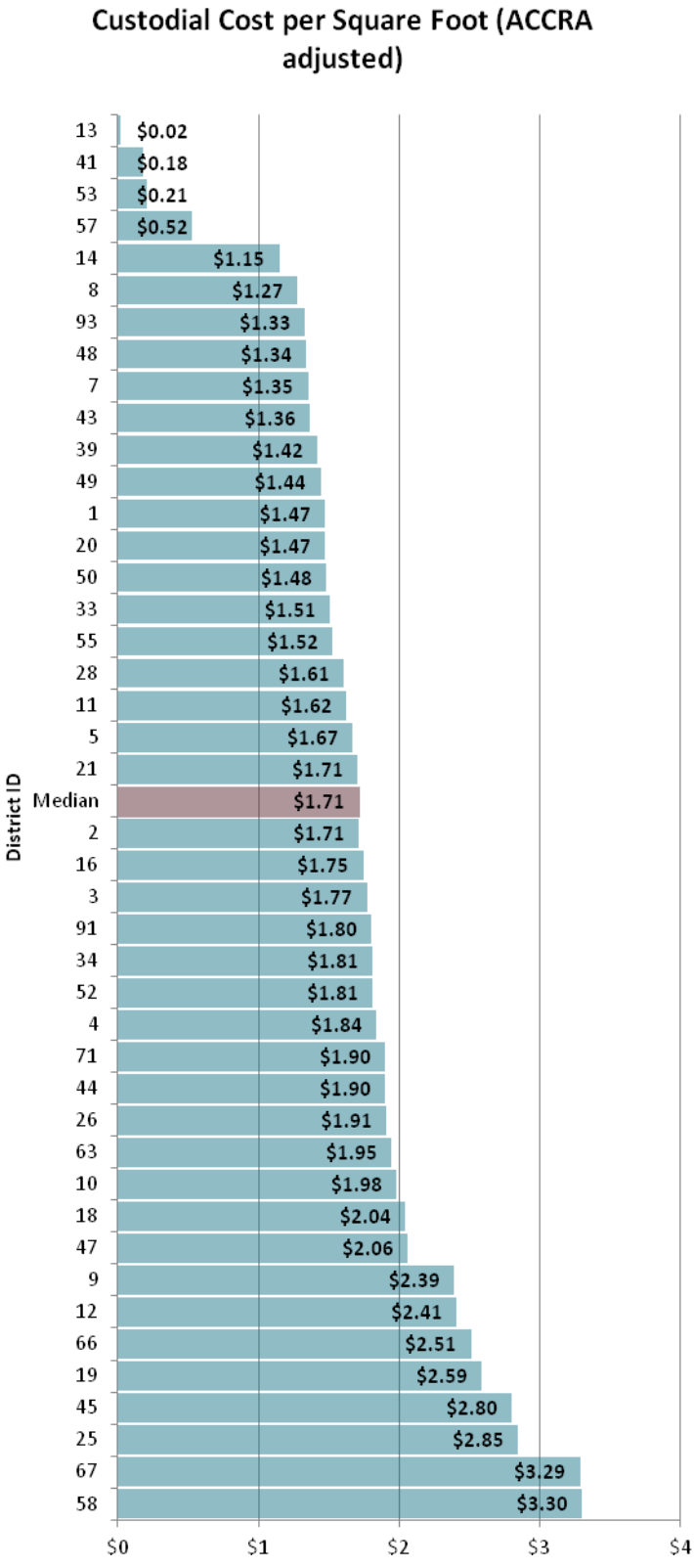
Average number of days to complete a work order

Importance of Measure

- This measure is an indicator of a district's timeliness in completing work orders
- Districts with lower completion times are more likely to have a management system in place with funding to address repairs

Influencing Factors

- Number of maintenance employees
- Management effectiveness
- Automated work order tracking
- Labor agreements
- Funding to address needed repairs
- Existence of work flow management process



Calculation

Total custodial expenditures including labor, benefits, supplies and other expenditures *divided by* total district square footage (divided by ACCRA factor[1])

Importance of Measure

- This measure is an important indicator of the efficiency of the 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

Influencing Factors

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

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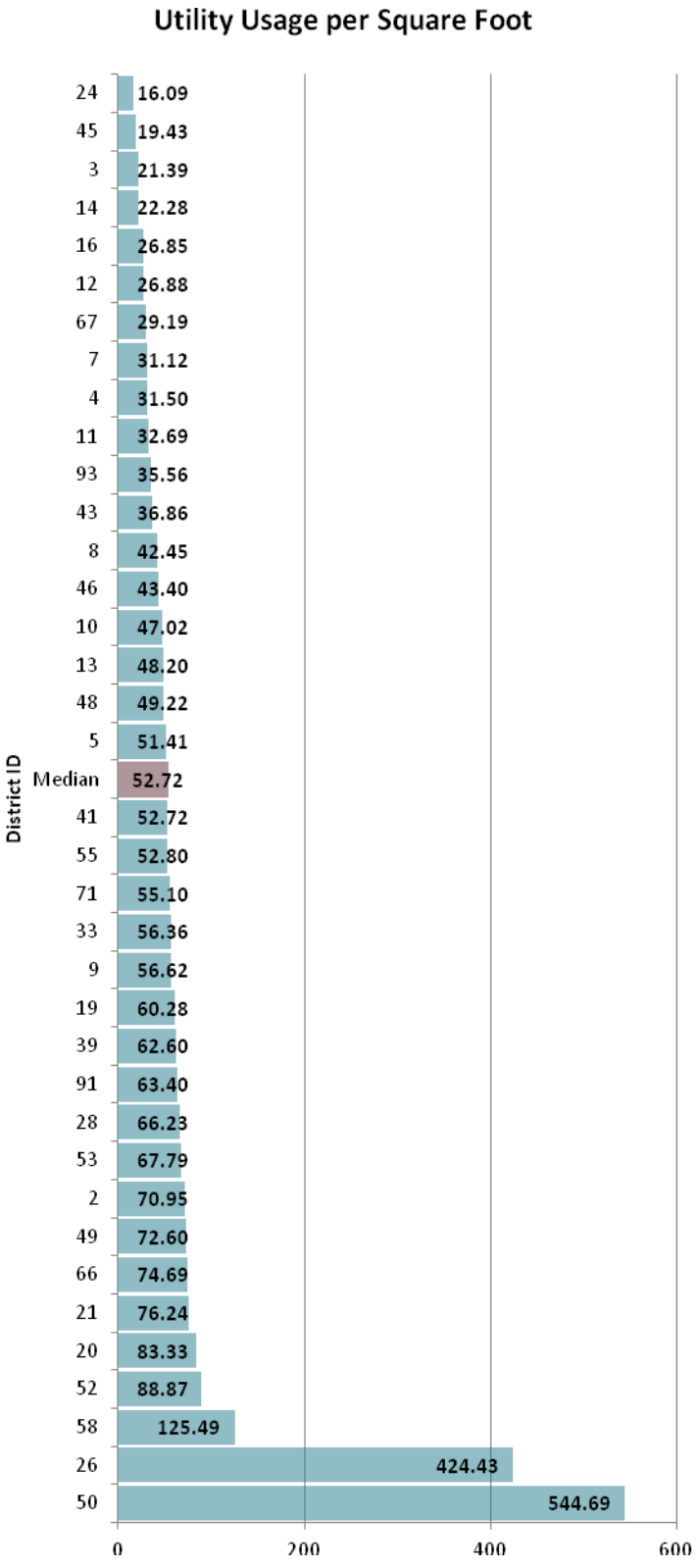


Calculation

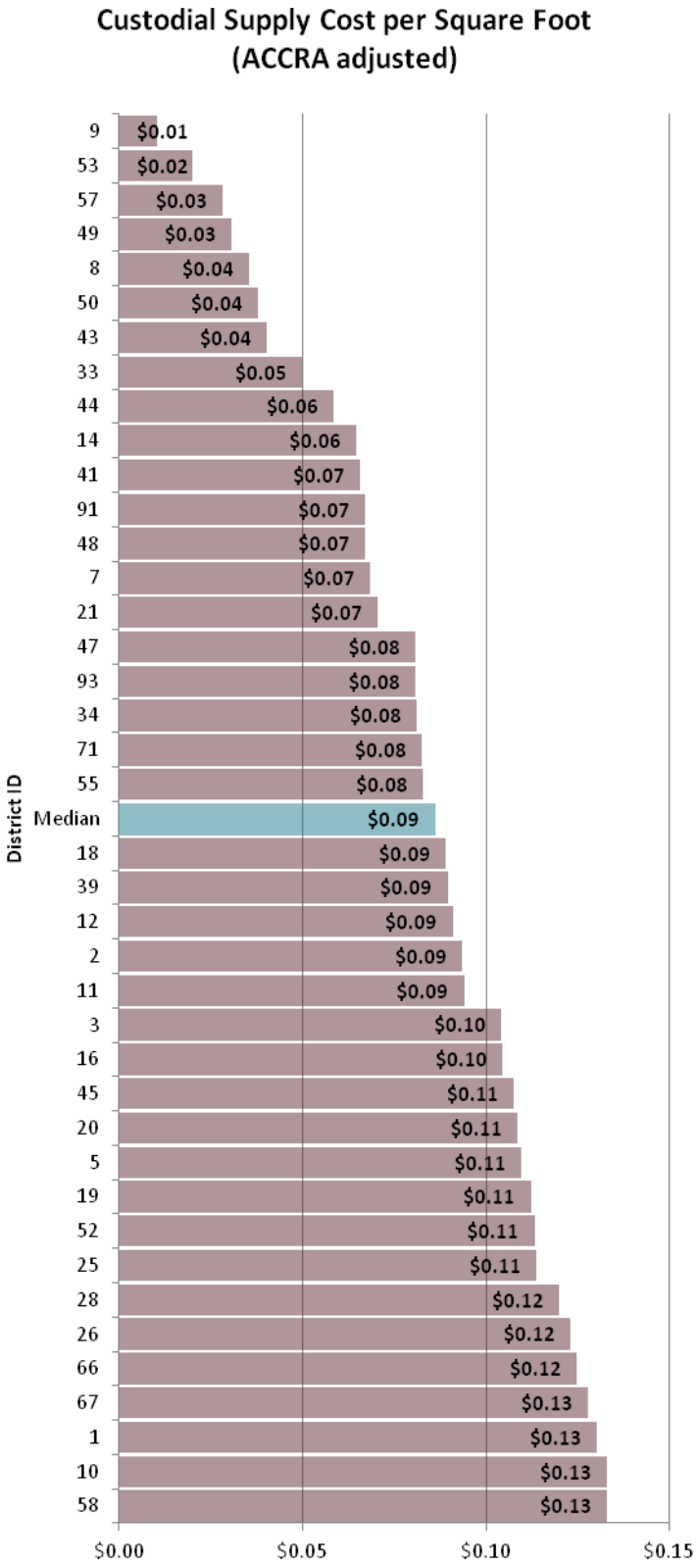
Annual electricity kWH usage *times* 3.412, *plus* annual heating fuel kBTU usage *divided by* total district square footage

Importance of Measure

- Measures the efficiency of the district's heating and cooling operations
- Reflects the effort to reduce energy consumption through conservation measures
- Higher numbers signal an opportunity to evaluate fixed and variable cost factors and identify those factors that can be modified for greater efficiency

Influencing Factors

- 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 custodial supply and equipment expenditures *divided by* total district square footage (divided by ACCRA factor[1])

Importance of Measure

- An indicator of the relative effectiveness of a district's use of custodial supplies and materials
- A higher number may indicate cost savings opportunities that can be gained by changes in policies or procedures

Influencing Factors

- Regional price differences for supplies and materials
- Student density in a building (more students per sq. ft.)
- Number of after-hours and community events in the building
- Purchasing practices

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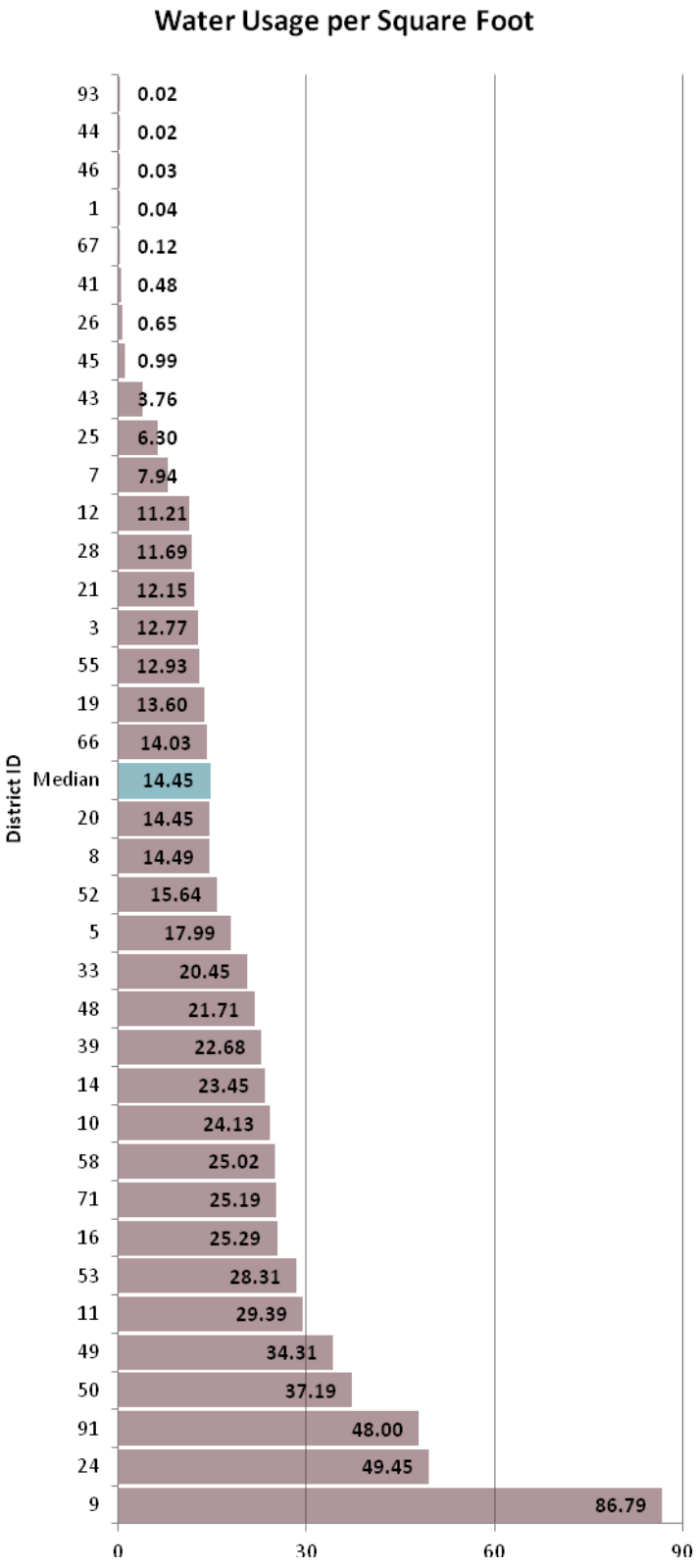


Calculation

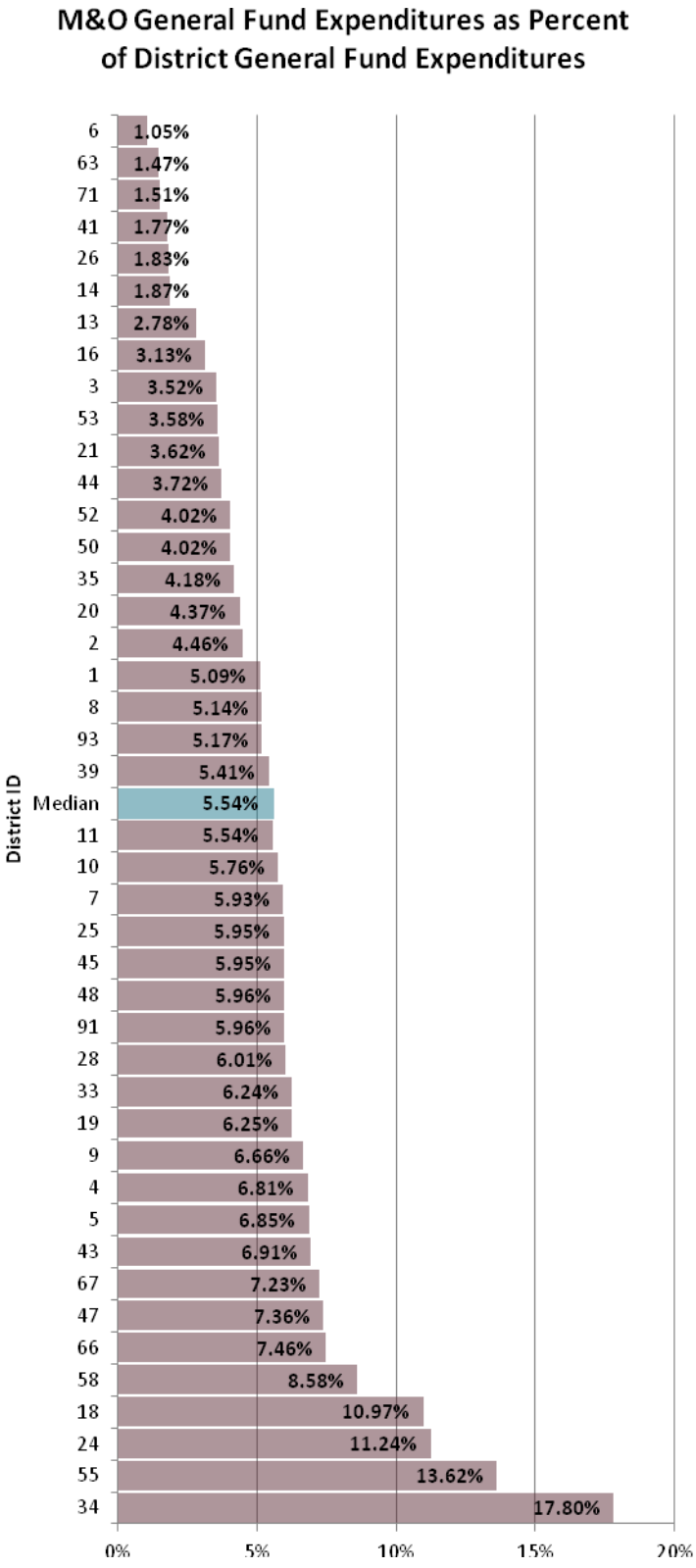
Total annual water usage (in gallons) *divided by* total district square footage

Importance of Measure

- A higher number might indicate a significant amount of exterior irrigation for grounds and sports facilities or an indication of a hot, arid environment requiring more water for irrigation or support of air conditioning systems
- A lower number could indicate the district has a very effective water conservation program

Influencing Factors

- Water conservation measures being implemented
- Geographic location
- District policy on watering grounds
- State and local laws



Calculation

Total Maintenance & Operations department general fund expenditures *divided by* total district general fund expenditures

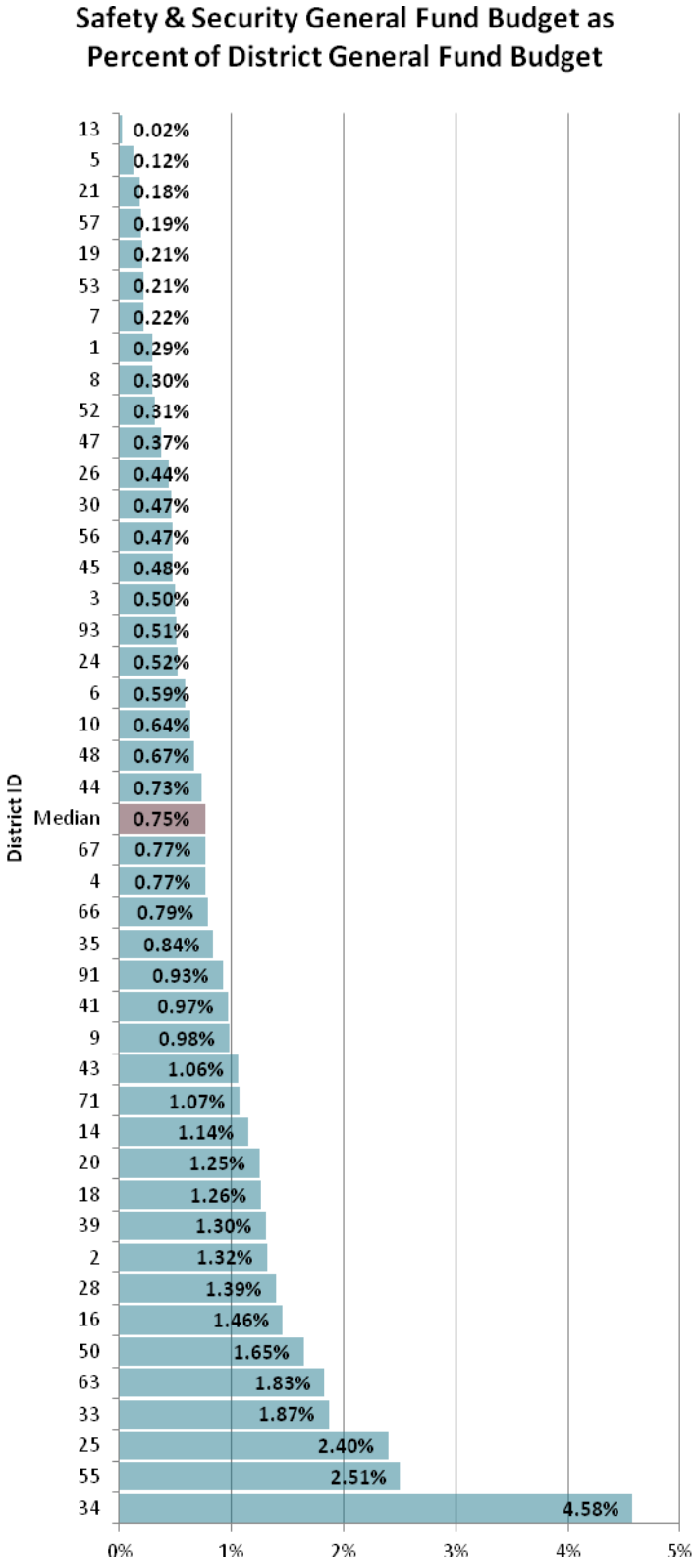
Importance of Measure

- This measure is an indicator of the level of support for maintenance operations being provided by the general fund
- A lower percentage would indicate that other sources of funds must be provided to meet the maintenance needs
- A low percentage could also be an indication that not all of the required maintenance is being performed resulting in a large amount of deferred maintenance

Influencing Factors

- Overall funding level for the general fund
- Availability of other funds sources to perform maintenance
- Age and condition of district buildings
- Deferred maintenance decisions

Safety & Security



Calculation

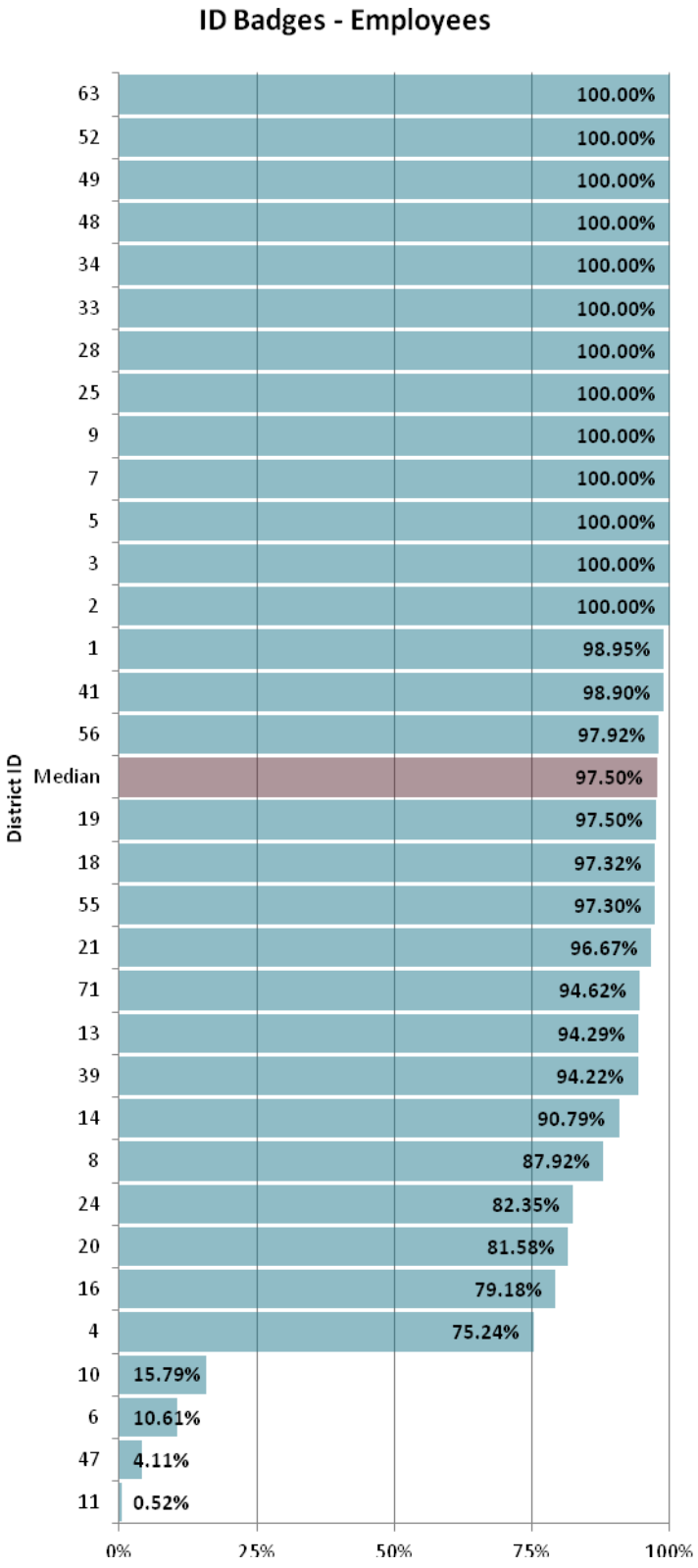
Total safety & security general fund budget *divided by* total district general fund budget

Importance of Measure

- This measure gives an indication of the level of support for safety and security operations being provided by the general fund
- A lower percentage would indicate that other sources of funds must be provided to meet the safety needs
- A low percentage could also be an indication that not all security needs are being met by the district

Influencing Factors

- Overall funding level for the general fund
- Availability of other funds sources to perform safety and security operations



Calculation

The extent to which employees badges are required in the district

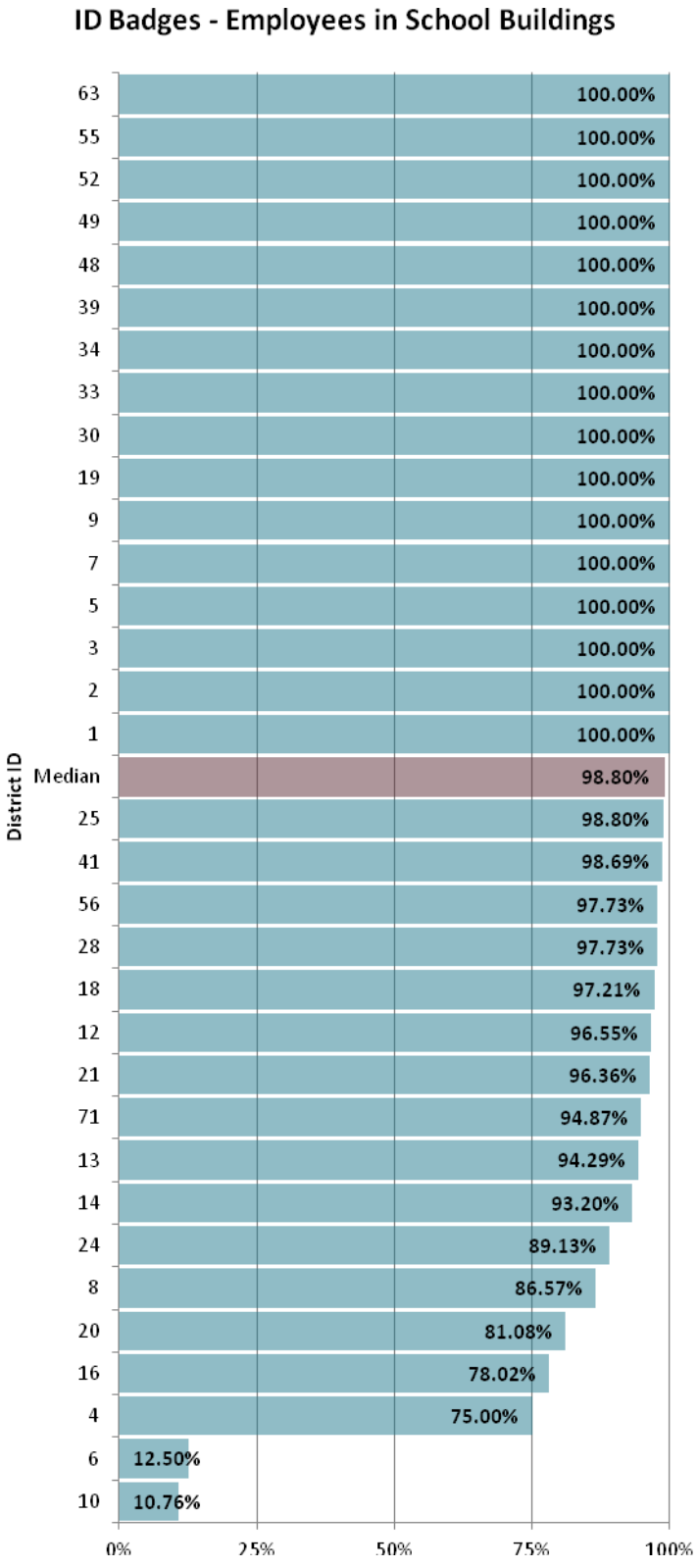
Importance of Measure

- This measure reflects the emphasis districts put on access control as a deterrent

Influencing Factors

- Level of crime statistics of surrounding neighborhoods
- District policy for security
- Configuration of school (office, front desk, etc.) to make access control a possibility
- Budget allocations

Power Indicator



Calculation

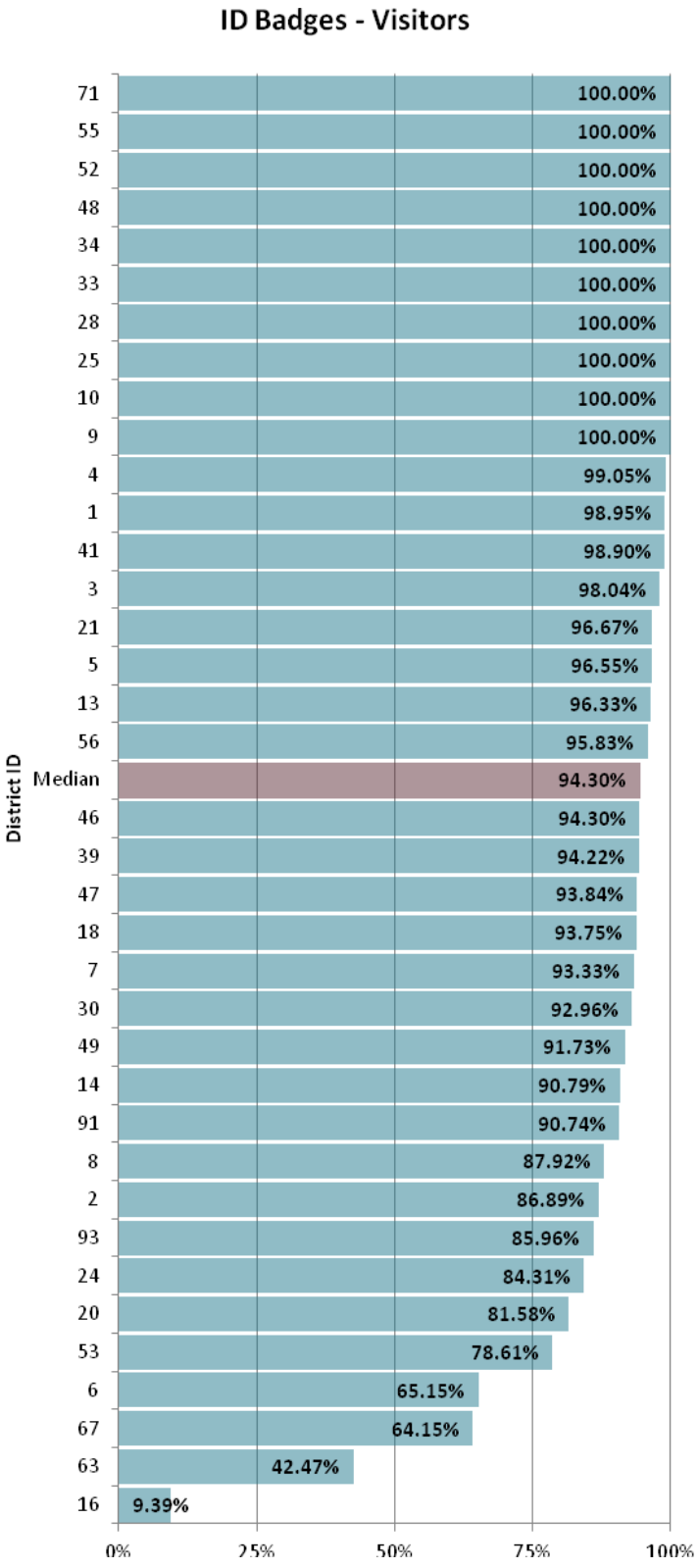
The extent to which employee badges are required in the district in district school buildings

Importance of Measure

- This measure reflects the emphasis districts put on access control as a deterrent

Influencing Factors

- Level of crime statistics of surrounding neighborhoods
- District policy for security
- Configuration of school (office, front desk, etc.) to make access control a possibility
- Budget allocations



Calculation

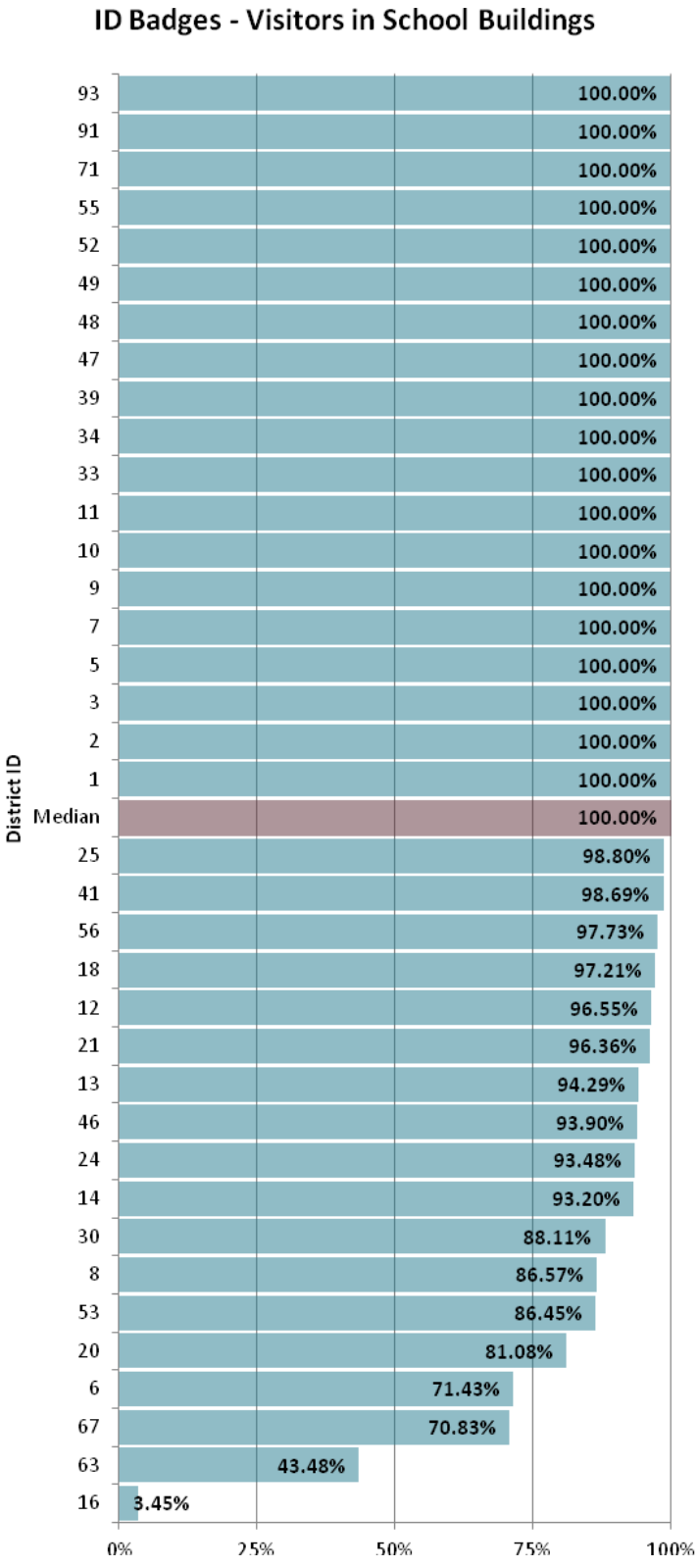
The extent to which visitor ID badges are required in the district

Importance of Measure

- This measure reflects the emphasis districts put on access control as a deterrent

Influencing Factors

- Level of crime statistics of surrounding neighborhoods
- District policy for security
- Configuration of school (office, front desk, etc.) to make access control a possibility
- Budget allocations



Calculation

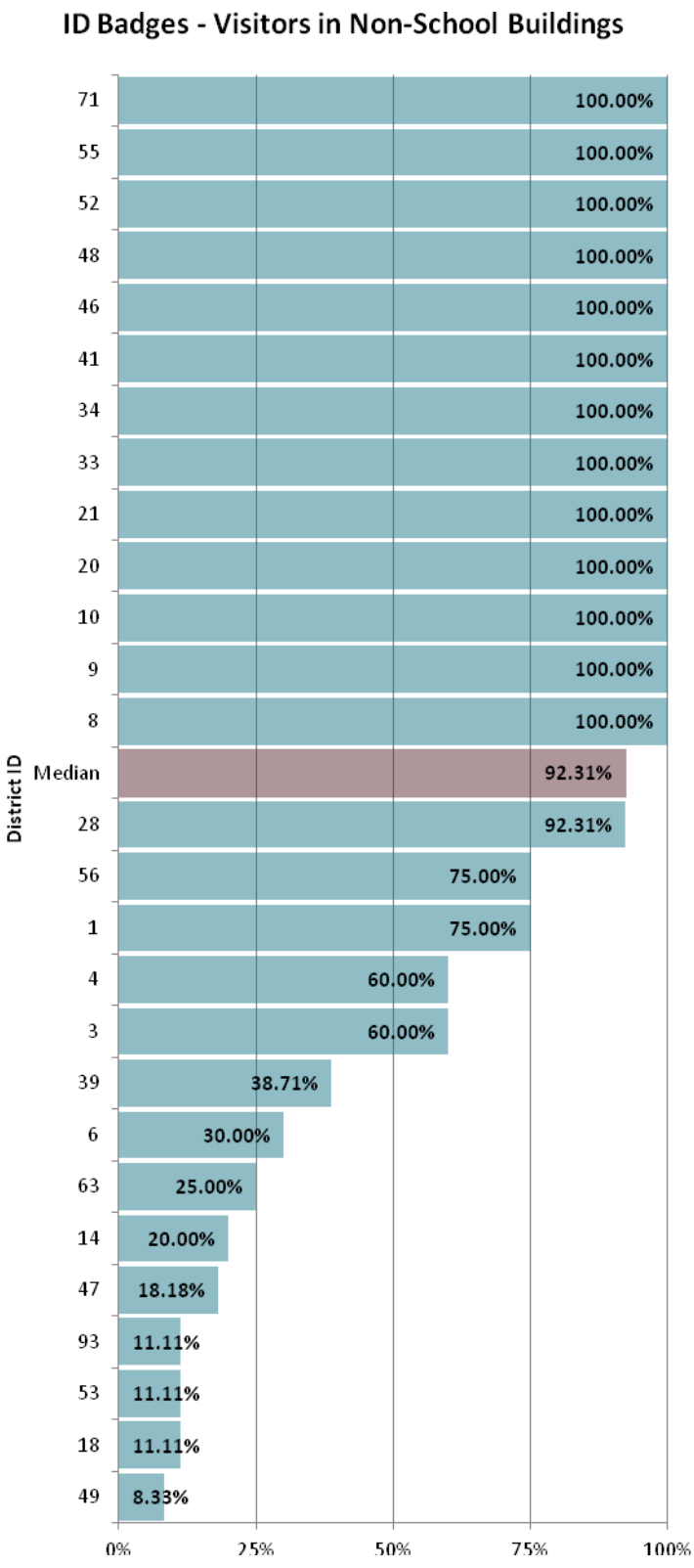
The extent to which visitors badges are required in the district in school buildings

Importance of Measure

- This measure reflects the emphasis districts put on access control as a deterrent

Influencing Factors

- Level of crime statistics of surrounding neighborhoods
- District policy for security
- Configuration of school (office, front desk, etc.) to make access control a possibility
- Budget allocations



Calculation

The extent to which visitor ID badges are required in the district in non-school buildings

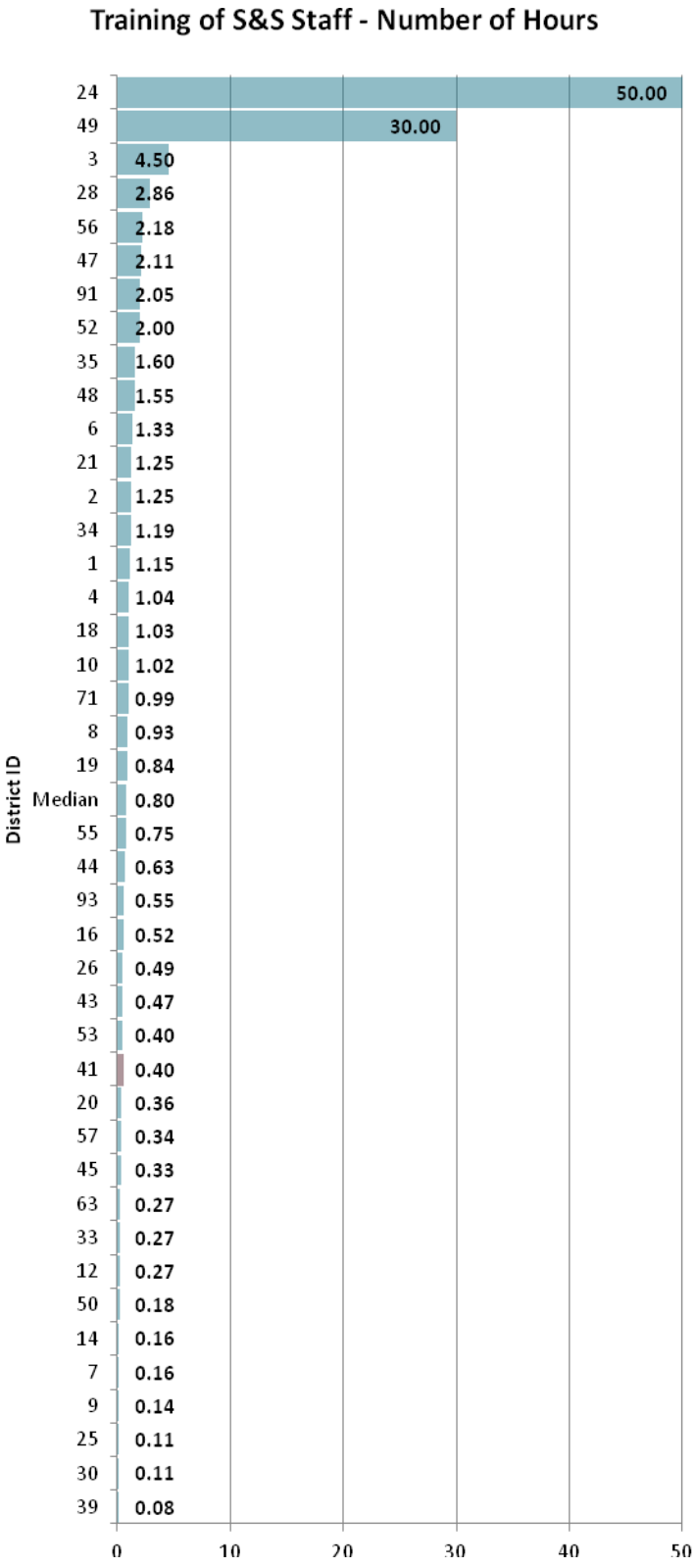
Importance of Measure

- This measure reflects the emphasis districts put on access control as a deterrent

Influencing Factors

- Level of crime statistics of surrounding neighborhoods
- District policy for security
- Configuration of building (office, front desk, etc.) to make access control a possibility
- Budget allocations

Power Indicator



Calculation

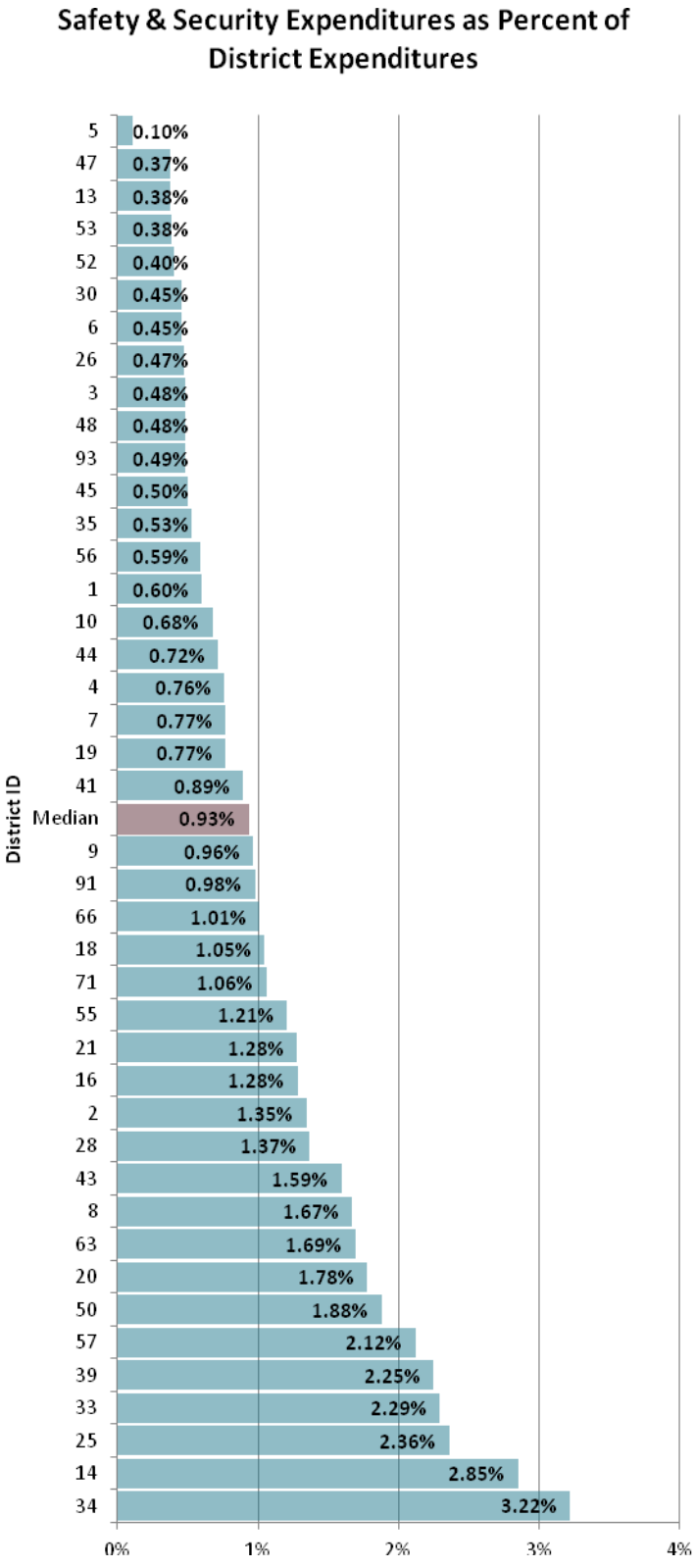
Number of annual training hours required for safety and security staff

Importance of Measure

- This measure reflects the priority district and school administrators place on training their security personnel

Influencing Factors

- District budgets
- Areas of responsibility for security staff
- Presence of dedicated law enforcement



Calculation

Total safety & security expenditures *divided by* total general fund expenditures

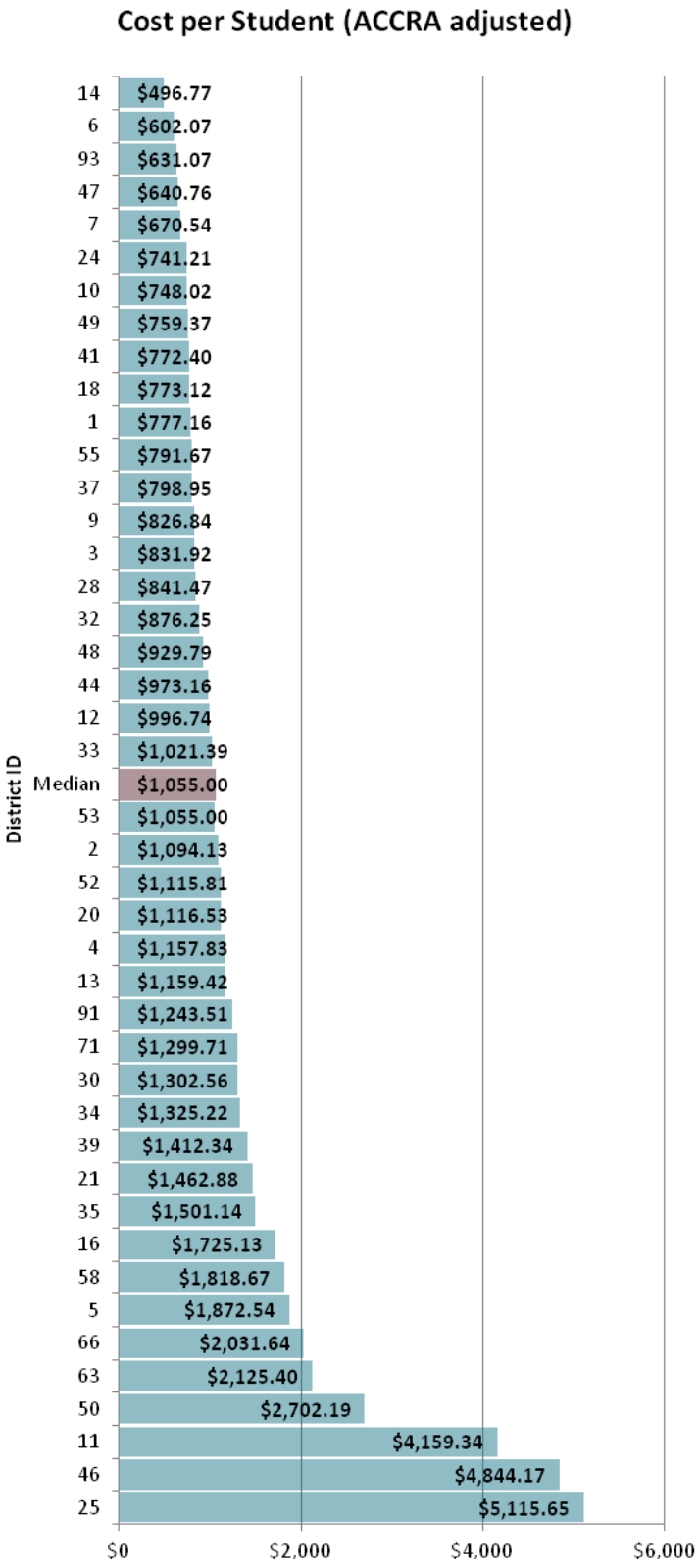
Importance of Measure

- This measure gives an indication of the level of support for safety and security operations being provided by the general fund
- A lower percentage would indicate that other sources of funds must be provided to meet the safety needs
- A low percentage could also be an indication that not all security needs are being met by the district

Influencing Factors

- Overall funding level for the general fund
- Availability of other funds sources to perform safety and security operations

Transportation



Calculation

All transportation expenditures – direct salaries, fuel, insurance-liability, insurance-workers' compensation, facility costs, capital/debt service, transportation contract costs *divided by* number of expected riders on a daily basis (divided by ACCRA factor[1])

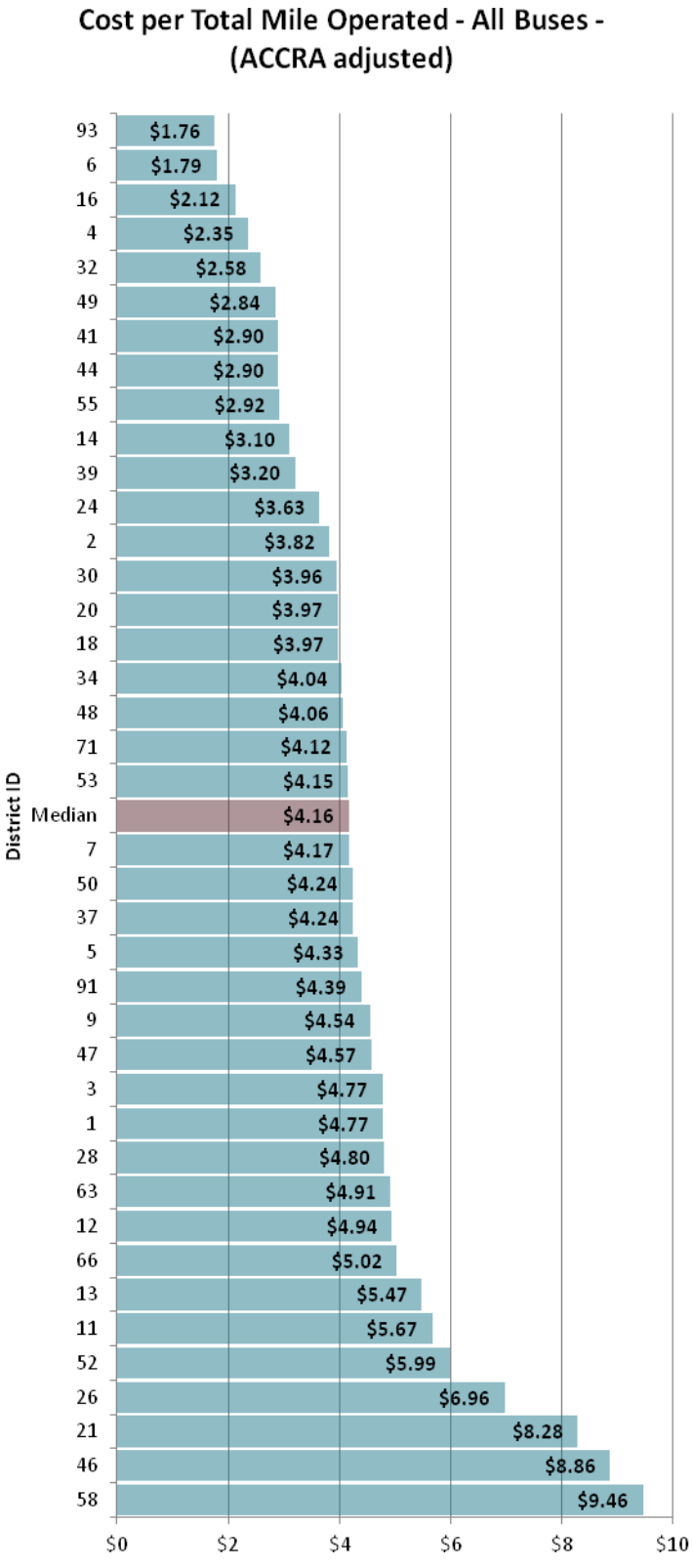
Importance of Measure

- This measure is an indicator of the cost efficiency of a pupil transportation program
- A greater than average cost per student may be appropriate based on specific conditions or program requirements in a particular district
- A less than average cost may indicate a well-run program, or favorable conditions in a district

Influencing Factors

- Cost of the fleet
- Effectiveness of the routing plan
- Ability to use each bus for more than one route or run
- Bell schedule

[1] ACCRA is an acronym for American Chambers of Commerce Research Association. This organization produces a Cost of Living Index to provide a useful and reasonably accurate measure to compare cost of living differences among urban areas. We divided all measures that resulted in a dollar amount by the ACCRA factor for the region in order to normalize data across regions. For additional information, please go to www.coli.org.



Calculation

Total expenditures for the transportation program *divided by* total annual miles – district and contract (divided by ACCRA factor[1])

Importance of Measure

- Measurement of the cost efficiency of a pupil transportation program
- Allows a baseline comparison across districts that will lead to further analysis
- Greater than average cost may be appropriate based on specific conditions/ program requirements
- Less than average cost may indicate a well-run program, or favorable conditions

Influencing Factors

- Driver wage and benefit structure; labor contracts
- Cost of fleet, including replacement, 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 bell schedule
- Maximum riding time and earliest pickup time allowed
- Type of programs served

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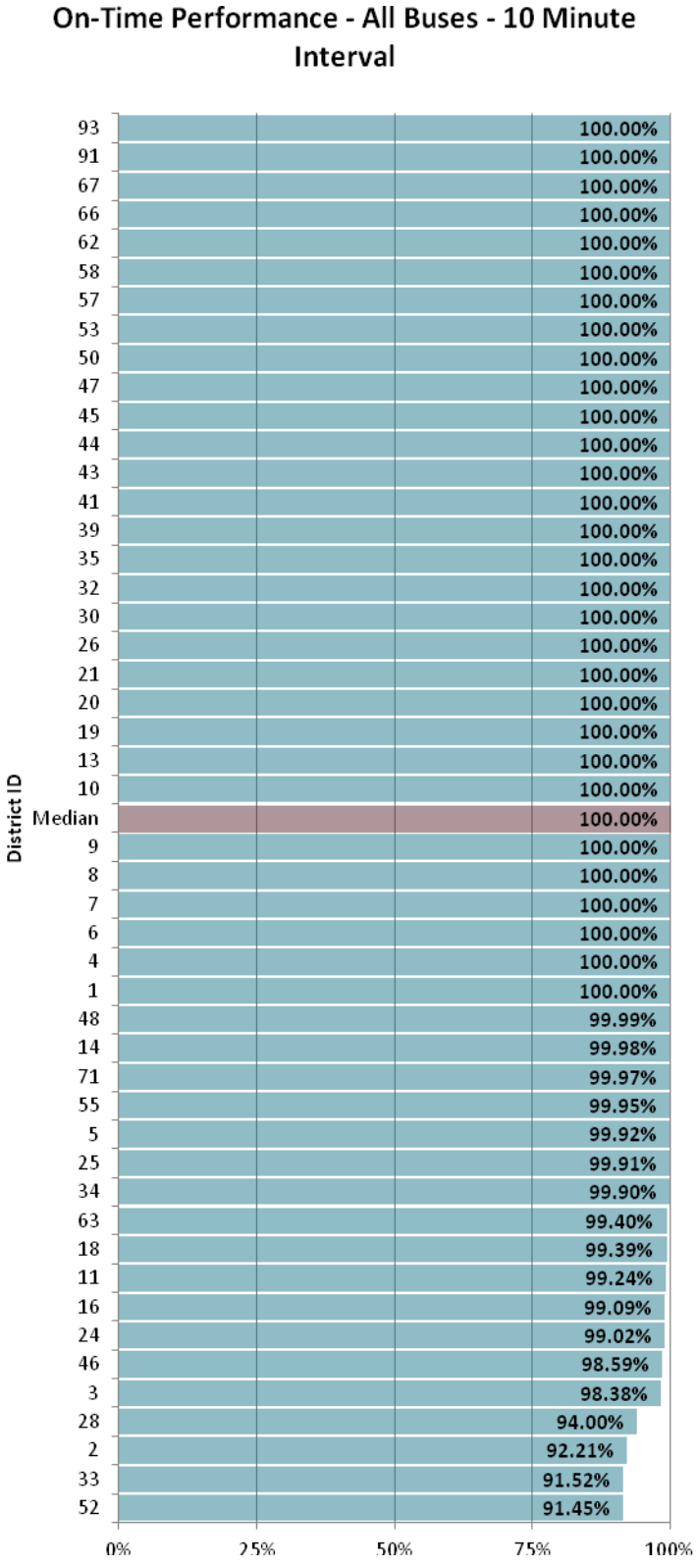


Calculation

Average number of buses arriving within scheduled arrival time – district and contract *divided by* total number of daily scheduled runs

Importance of Measure

- 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

Influencing Factors

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

Calculation

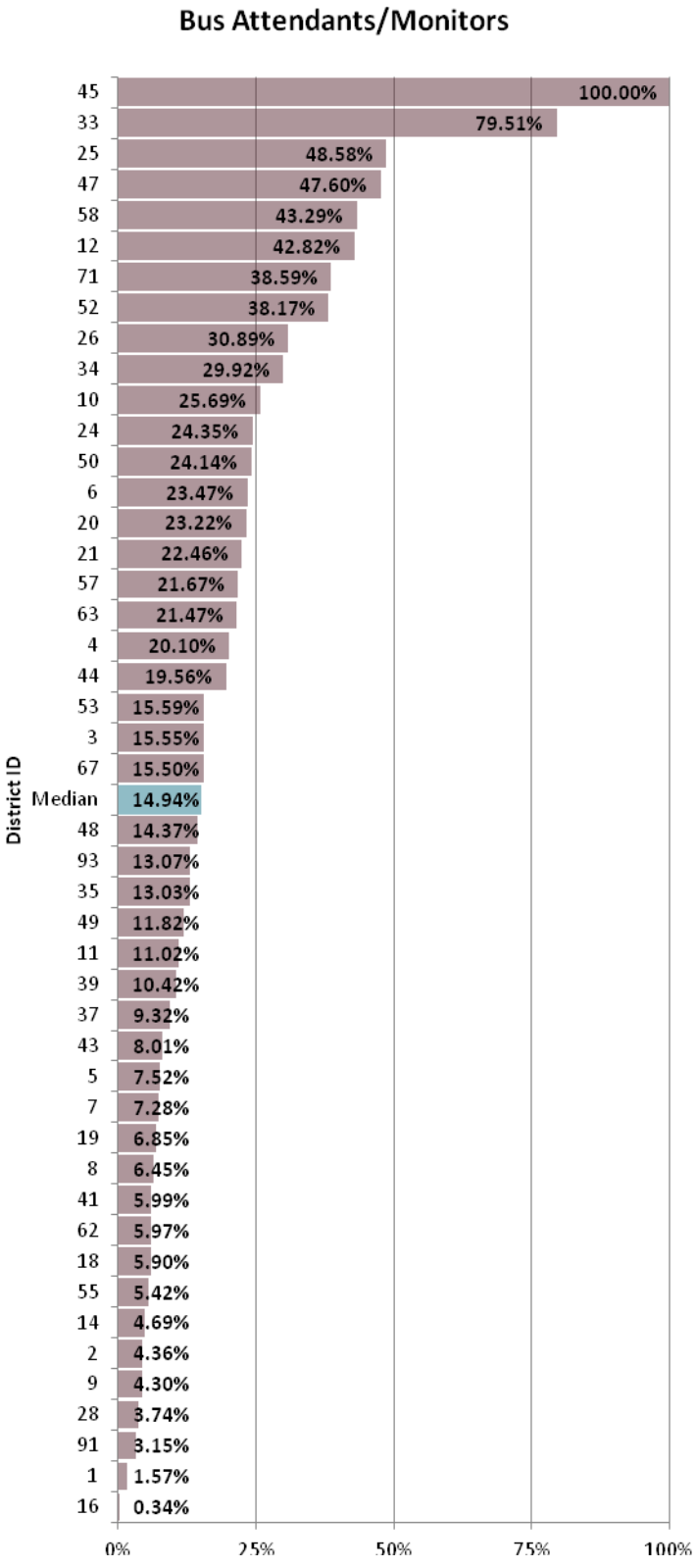
Weighted average age of fleet using a weighted average method

Importance of Measure

- 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

Influencing Factors

- 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

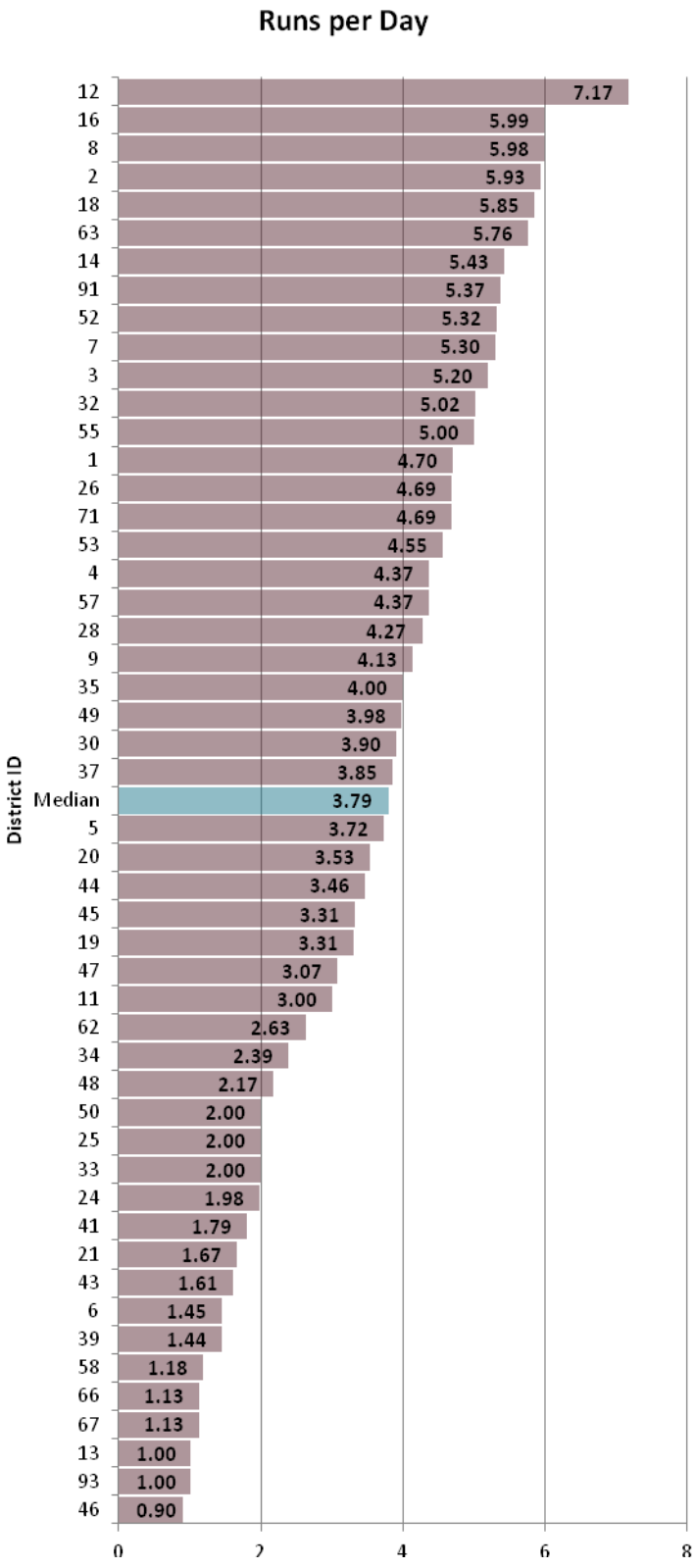
Number of daily SPED bus runs per day, district and contract, staffed by bus attendants/monitors *divided by* the total number of daily bus runs

Importance of Measure

- This measure helps identify transportation program impacts and can be used as a comparison to other districts

Influencing Factors

- State and local policy
- IEP mandates



Calculation

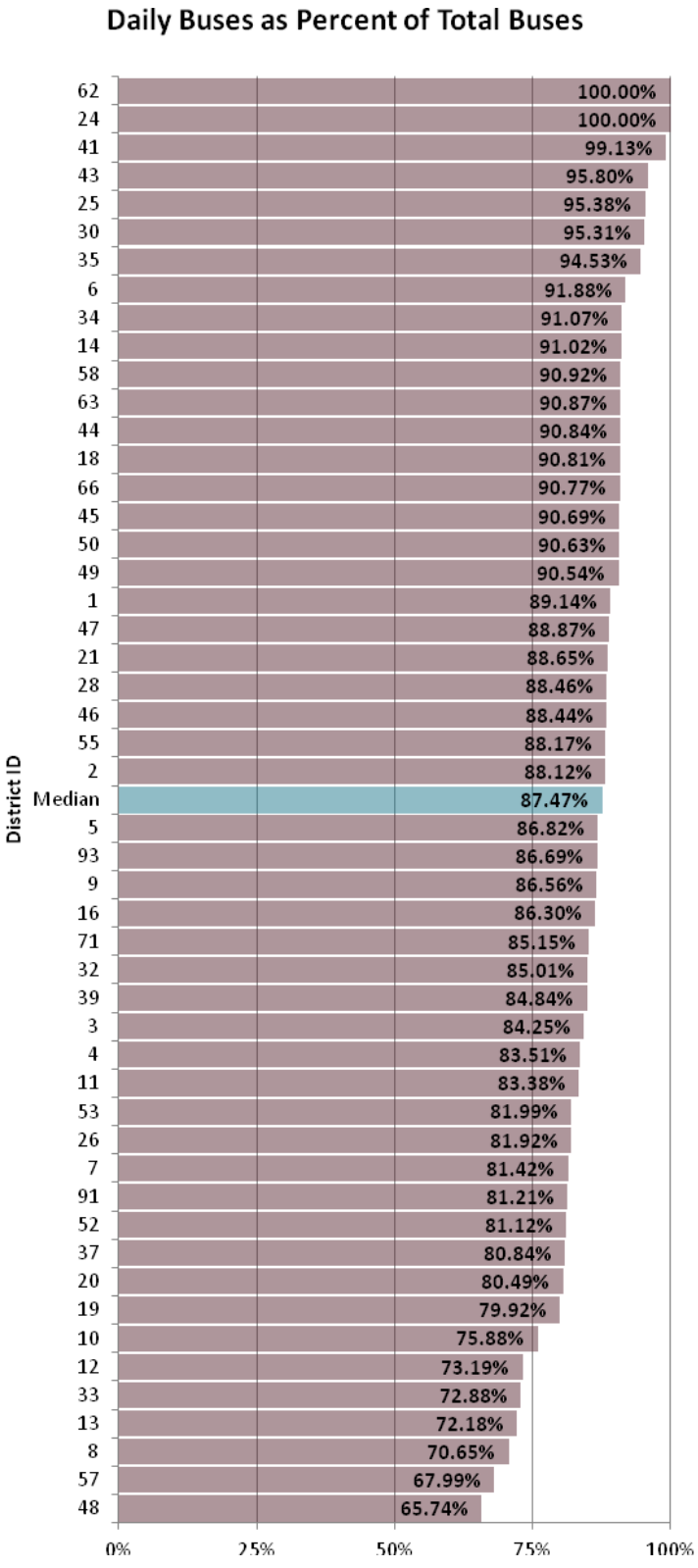
Total number of daily scheduled runs *divided by* total number of buses – district and contract

Importance of Measure

- This measure captures how well districts are using their buses.
- 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

Influencing Factors

- 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

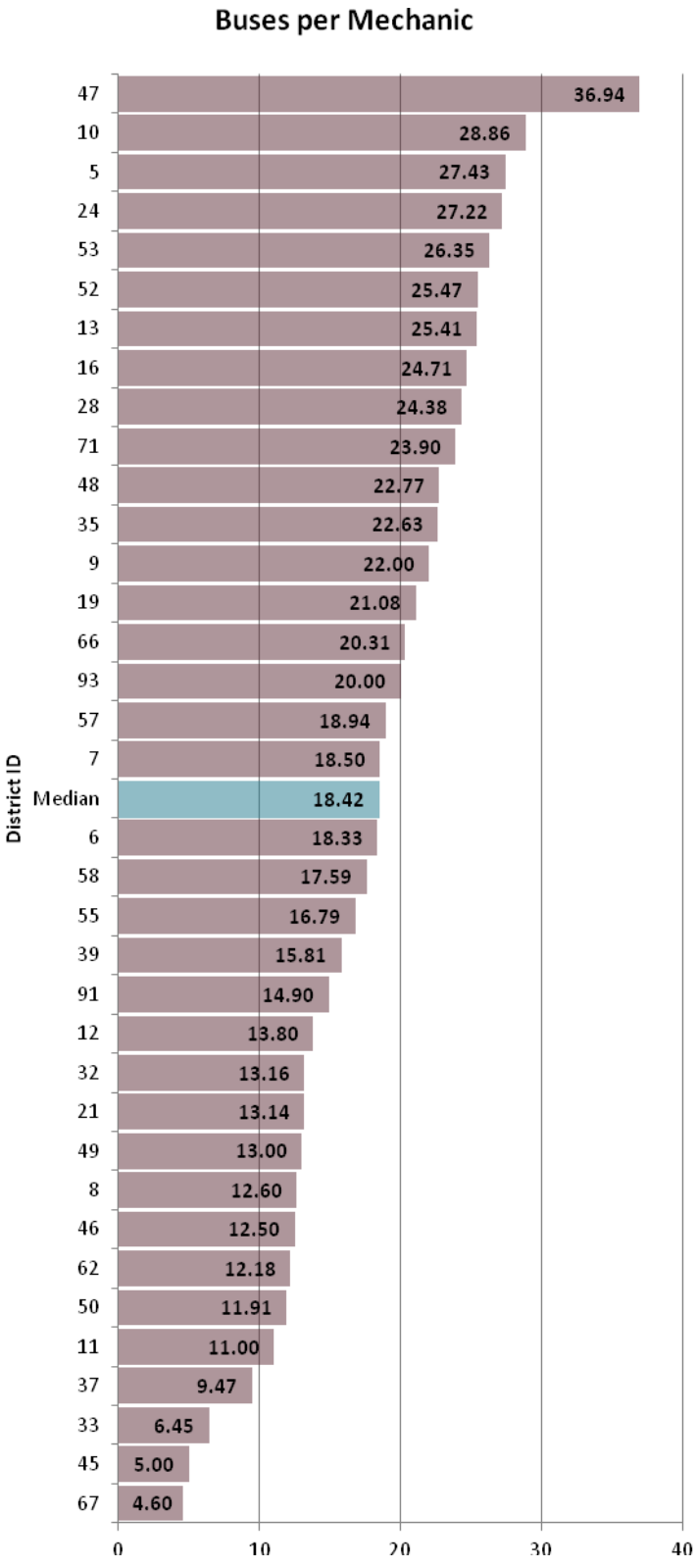
Number of daily buses – district and contract *divided by* total number of buses – district and contract

Importance of Measure

- 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

Influencing Factors

- 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

Total number of district buses *divided by* the total number of mechanics and mechanic helpers whose primary responsibility is to service the yellow bus fleet

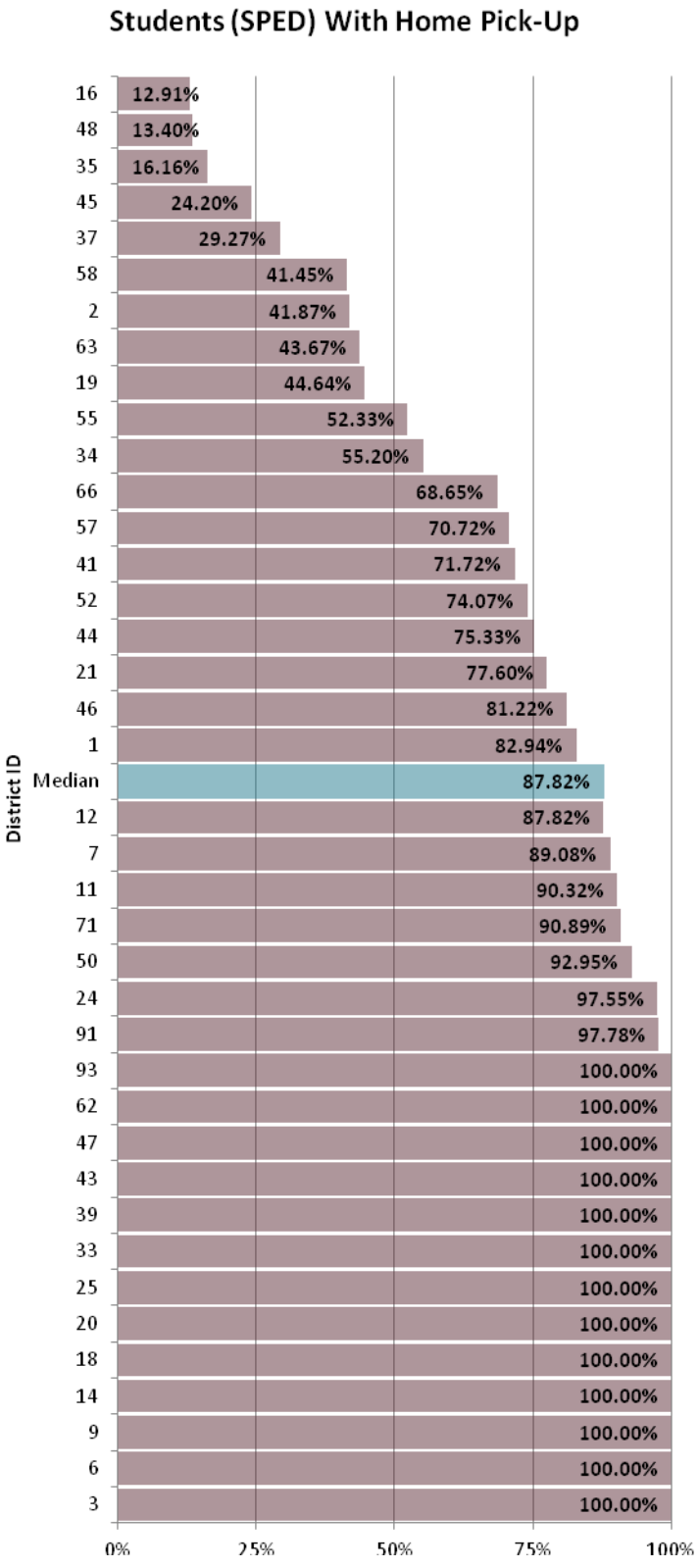
Importance of Measure

- This measure provides an indication of the level of all staffing for bus maintenance
- It allows districts to compare their staffing patterns to other similar operations

Influencing Factors

- Funds available to staff bus maintenance
- Level of in-house vs. contract maintenance
- Classification of individuals who perform various maintenance functions
- State inspection regulations for school buses

Essential Few



Calculation

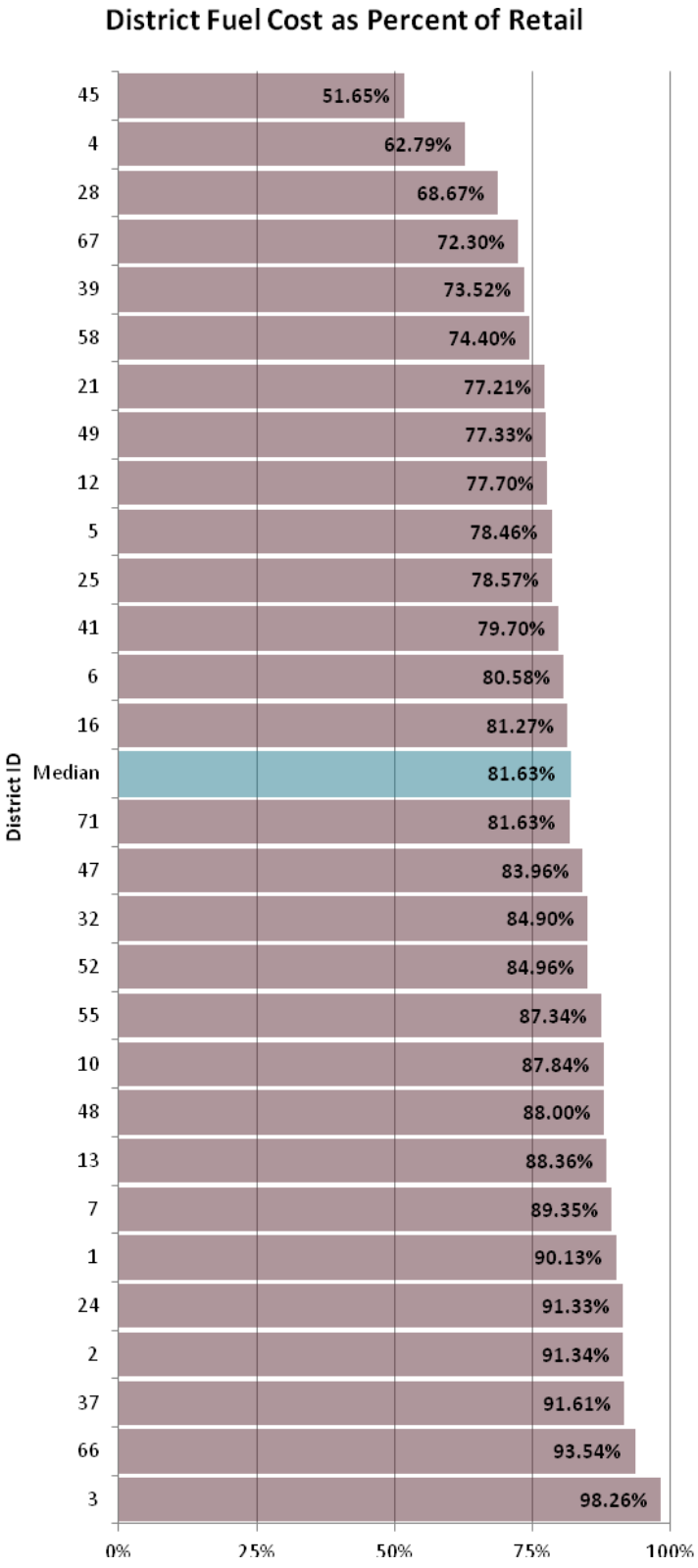
Number of IEP students picked-up/dropped-off curb-to-curb/door-to-door *divided by* SPED students transported with transportation as a related service

Importance of Measure

- There are greater costs for providing home pick-ups because busses travel greater distances and expend more time than is required for corner pick-ups
- There is also the factor of longer bus rides for students
- This is balanced with the services for a district's special needs population

Influencing Factors

- Special education service population
- Policies for transporting other students such as a district's youngest students, siblings, etc.



Calculation

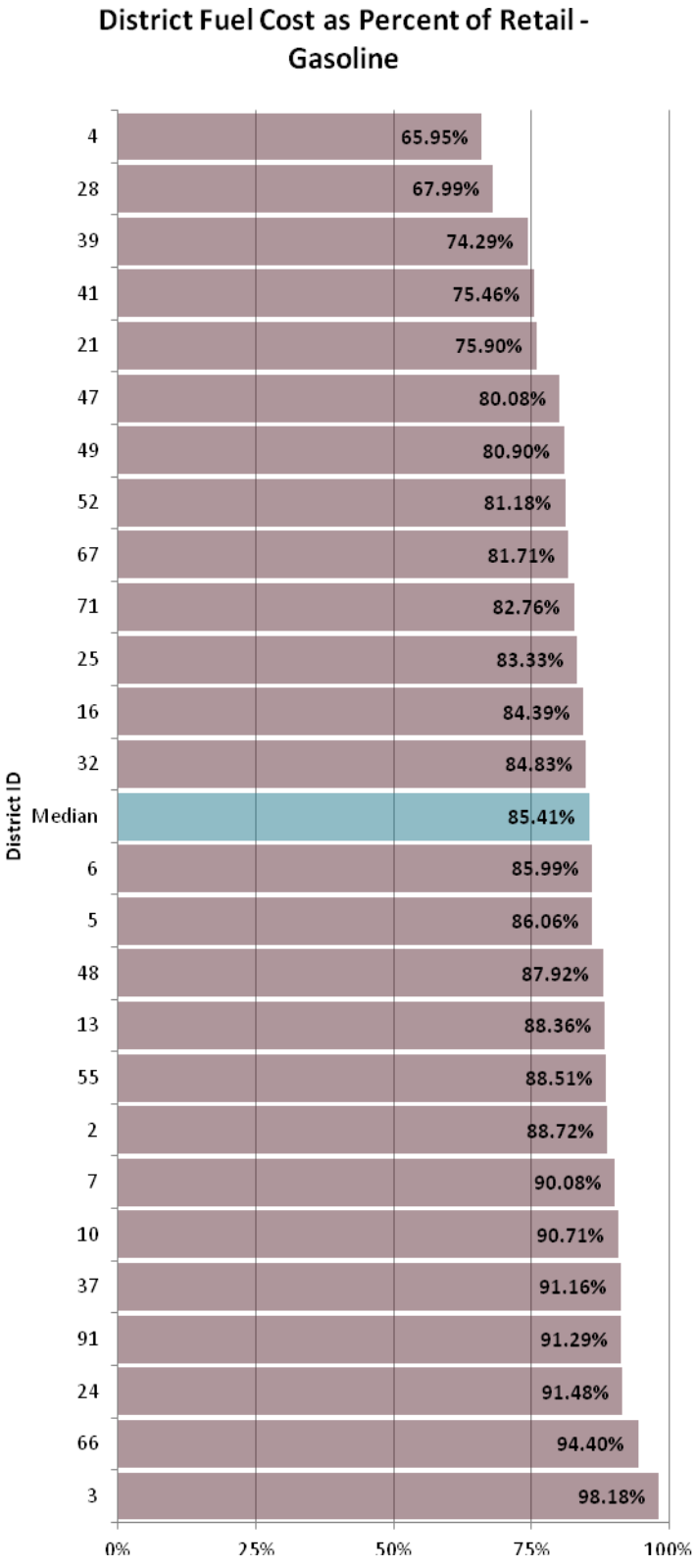
District paid per gallon fuel cost for all fuel types *divided by* retail per gallon fuel cost for all fuel types

Importance of Measure

- Allows comparison of district fuel procurement strategy to that of other districts and discounts negotiated

Influencing Factors

- State and local policy options for procurement of fuel
- Regional fuel cost differences
- Ability to negotiate discounts and leverage bulk purchasing



Calculation

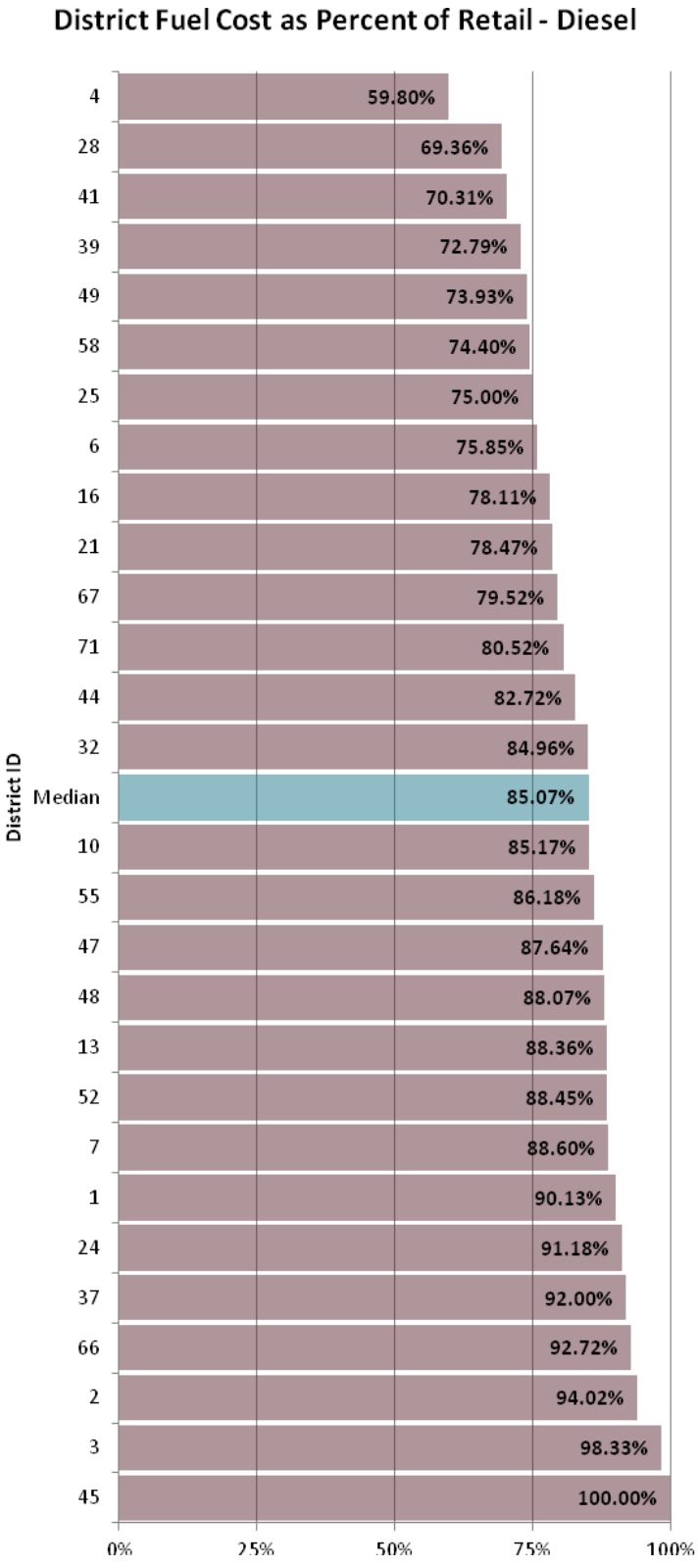
District paid per gallon fuel cost for gasoline *divided by* retail per gallon fuel cost for gasoline

Importance of Measure

- Allows comparison of district fuel procurement strategy to that of other districts and discounts negotiated

Influencing Factors

- State and local policy options for procurement of fuel
- Regional fuel cost differences
- Ability to negotiate discounts and leverage bulk purchasing



Calculation

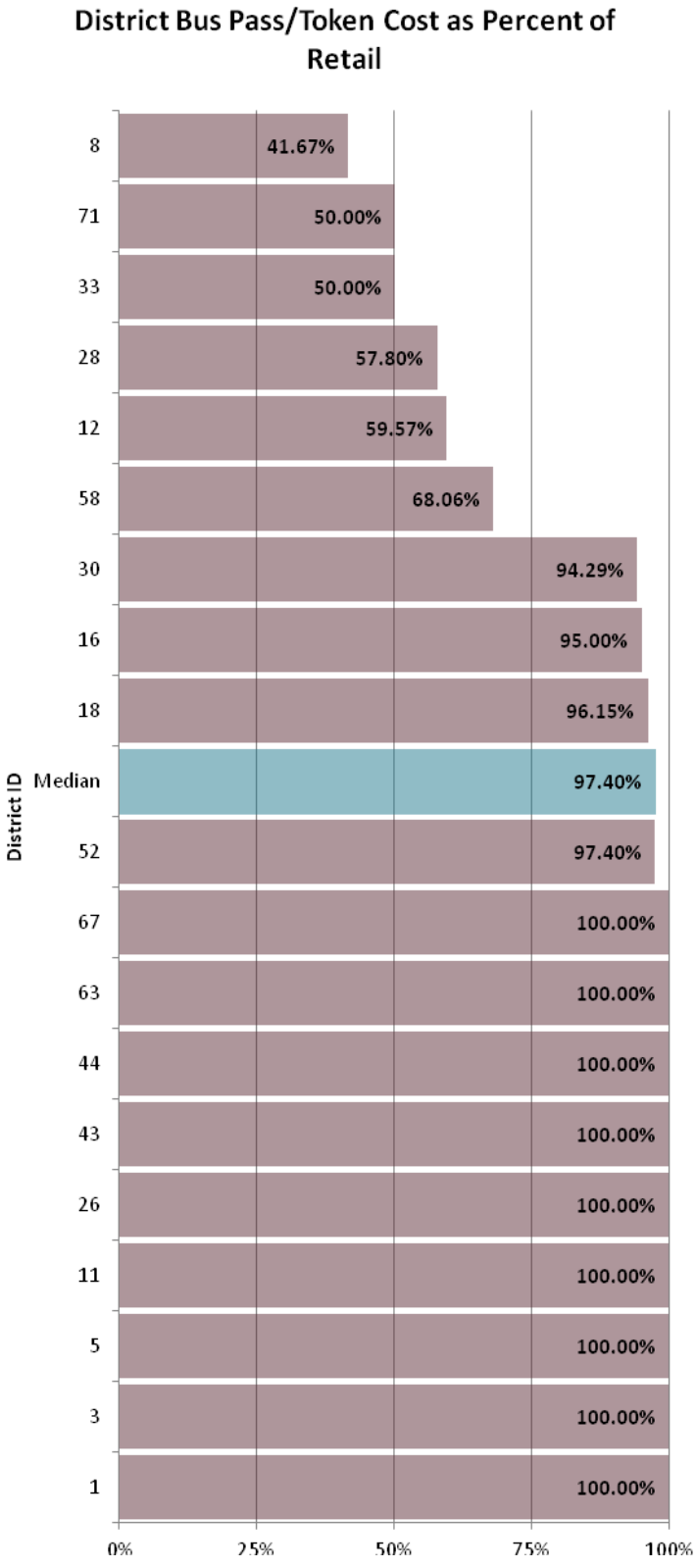
District paid per gallon fuel cost for diesel *divided by* retail per gallon fuel cost for diesel

Importance of Measure

- Allows comparison of district fuel procurement strategy to that of other districts and discounts negotiated

Influencing Factors

- State and local policy options for procurement of fuel
- Regional fuel cost differences
- Ability to negotiate discounts and leverage bulk purchasing



Calculation

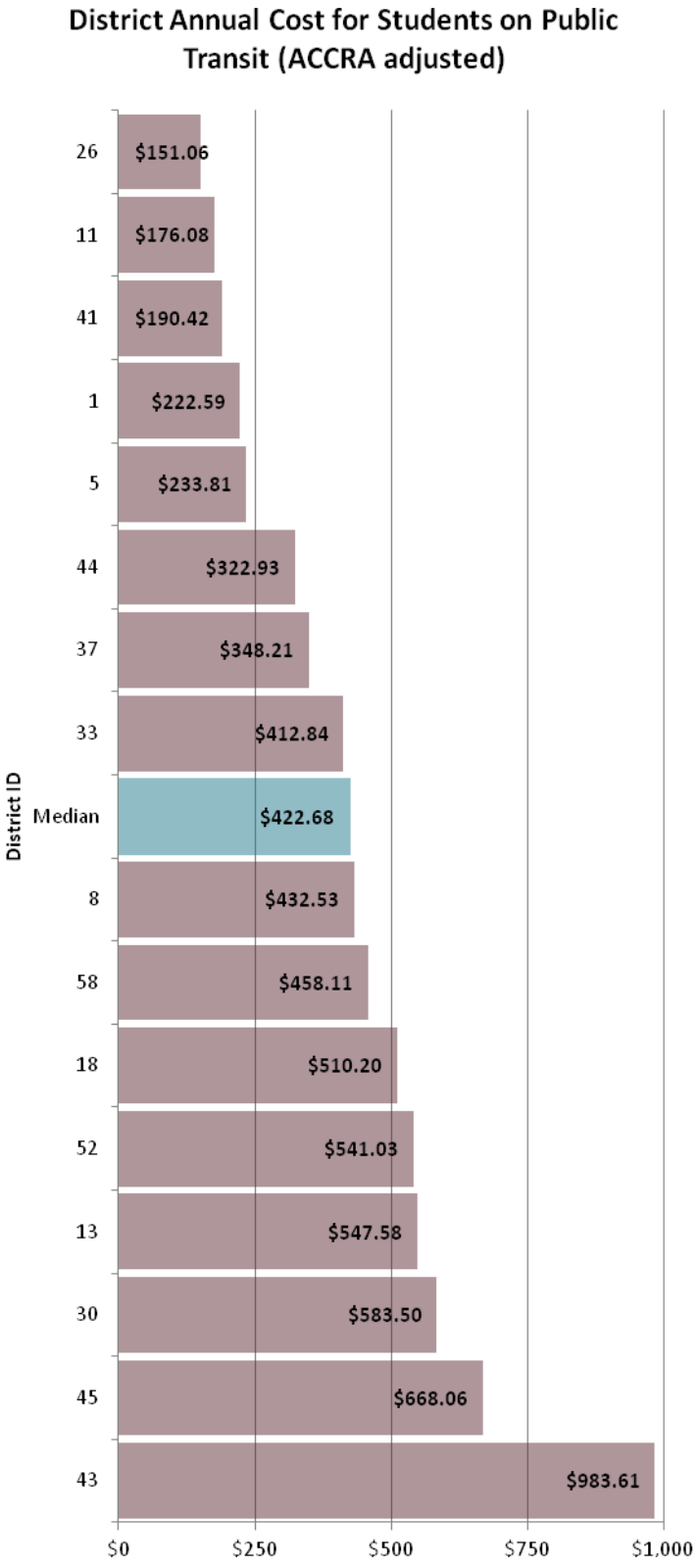
Annual district cost for an in-district home-to-school bus pass/token on public transportation *divided by* annual retail cost for bus pass/token on public transportation

Importance of Measure

- Compare discounts negotiated by districts for public transportation

Influencing Factors

- State and local policy
- Ability to negotiate discounts and leverage bulk purchasing



Calculation

Annual district cost for an in-district home-to-school bus pass/token on public transportation (divided by ACCRA factor[1])

Importance of Measure

- Compare discounts negotiated by districts for public transportation

Influencing Factors

- State and local policy
- Ability to negotiate discounts and leverage bulk purchasing

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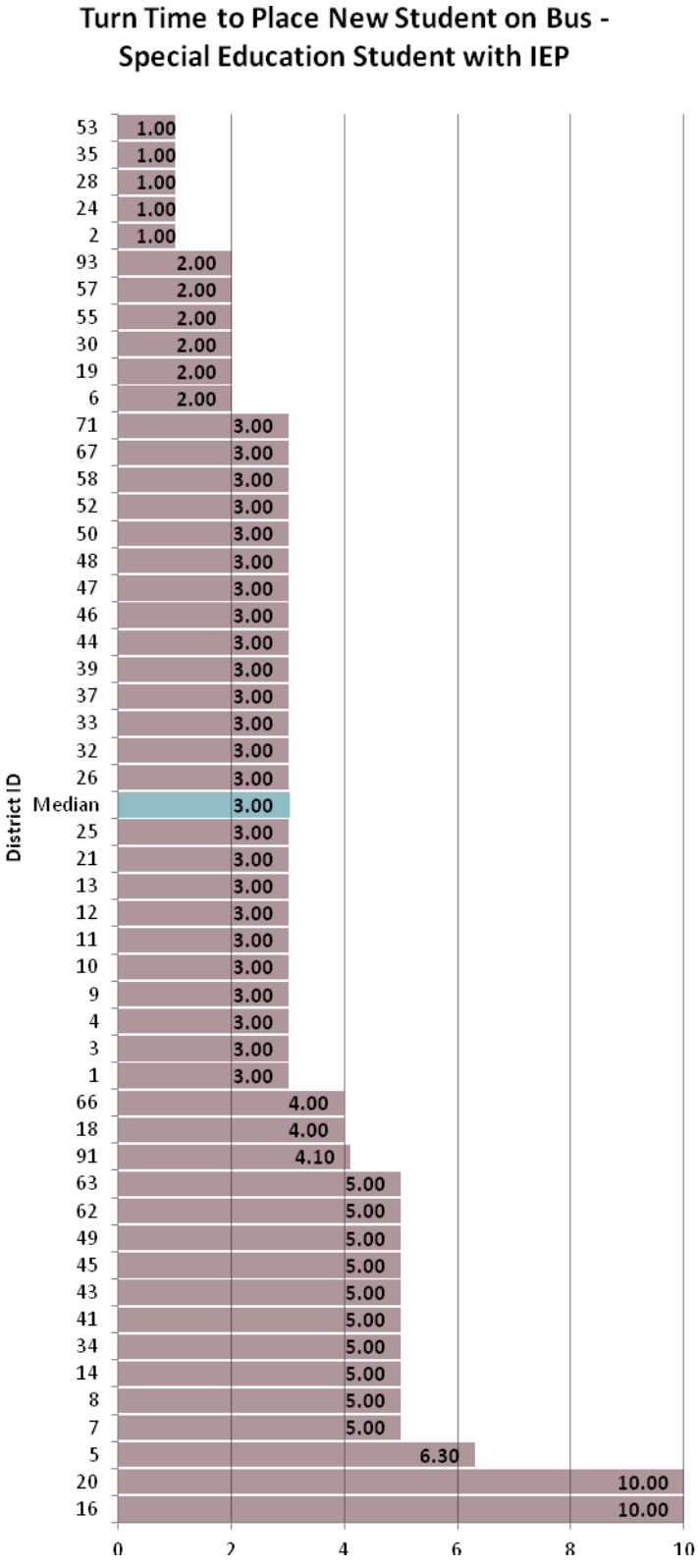


Calculation

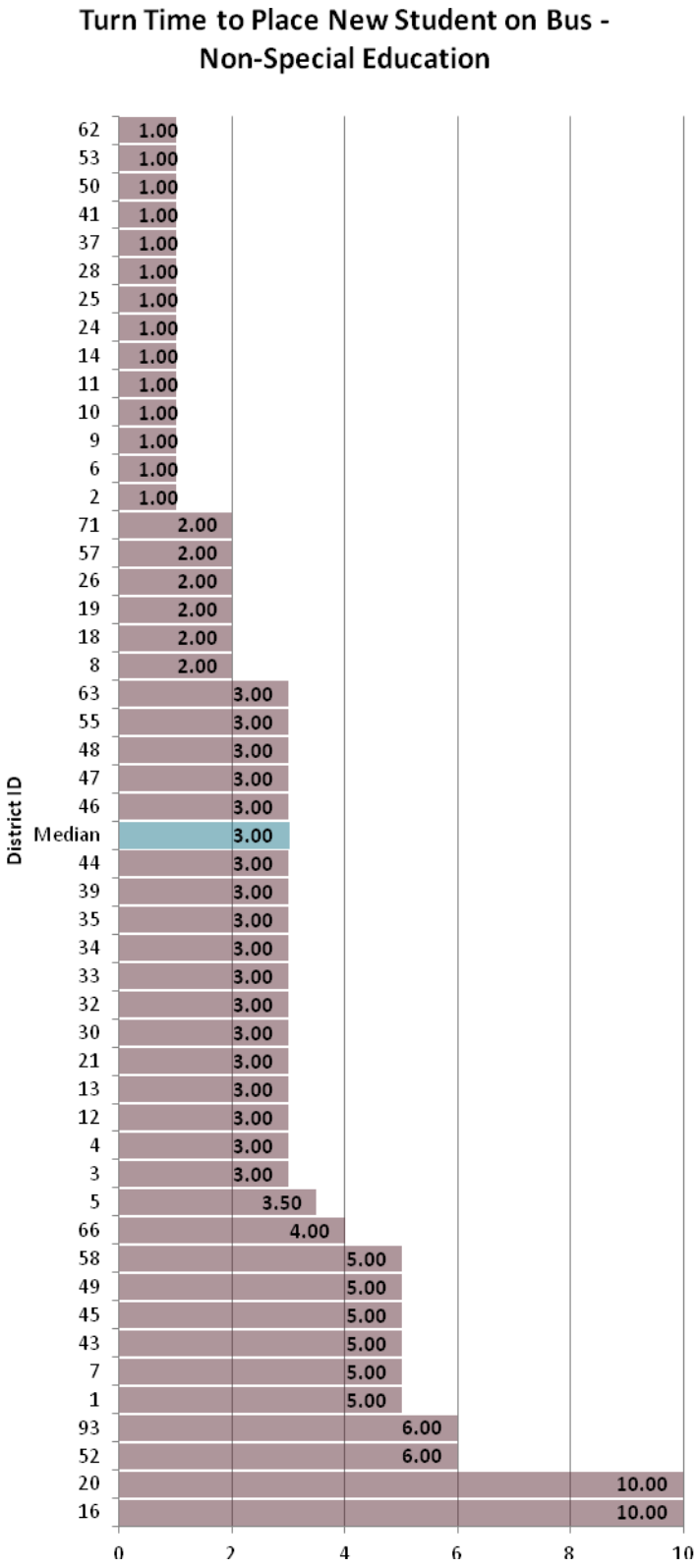
Number of school days from notification of student riding the bus - SPED student with IEP

Importance of Measure

- The timely placement of students on buses is critical to students' education
- This is often viewed as a factor of department efficiency

Influencing Factors

- Inter-department communication
- Space availability on buses
- Routing system used
- New stop safety review



Calculation

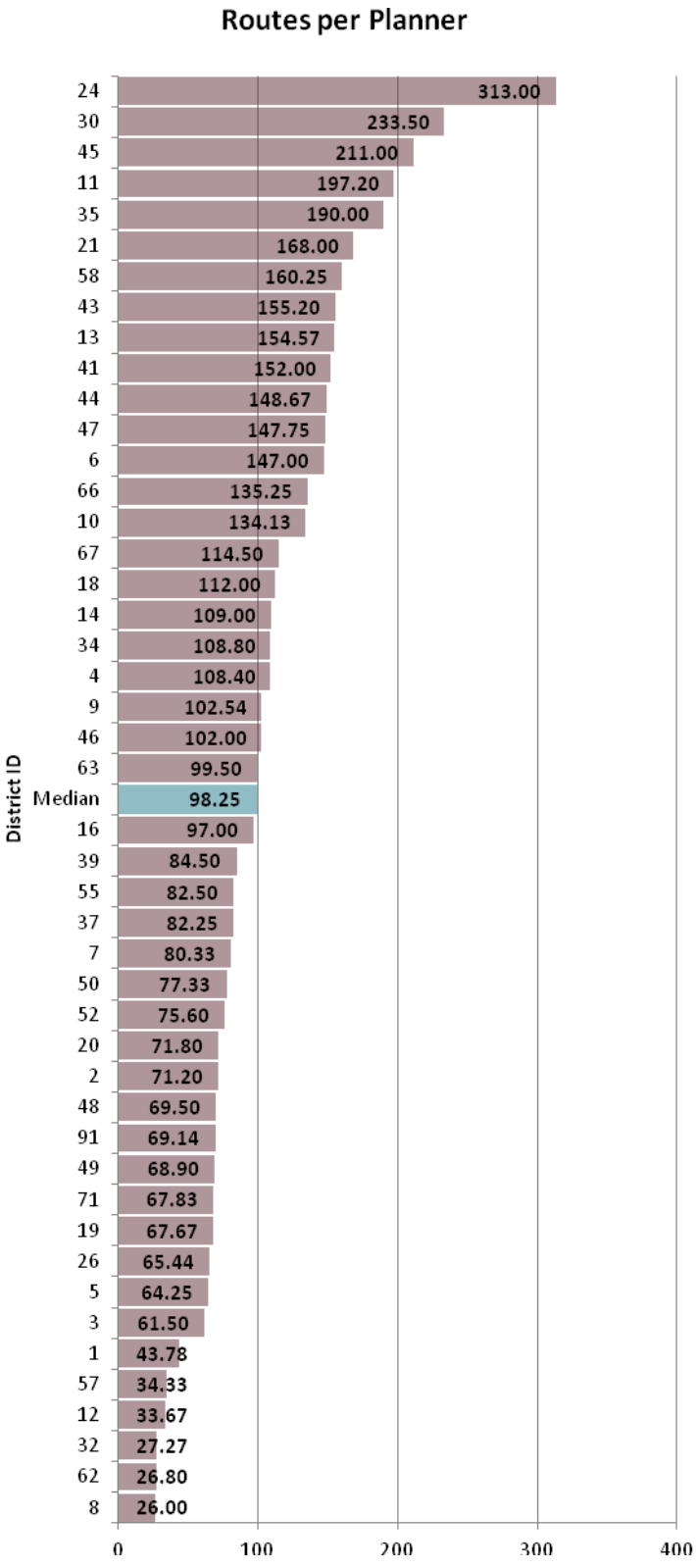
Number of school days from notification of student riding the bus - non-SPED student

Importance of Measure

- The timely placement of students on buses is critical to students' education
- This is often viewed as a factor of department efficiency

Influencing Factors

- Inter-department communication
- Space availability on buses
- Routing system used
- New stop safety review



Calculation

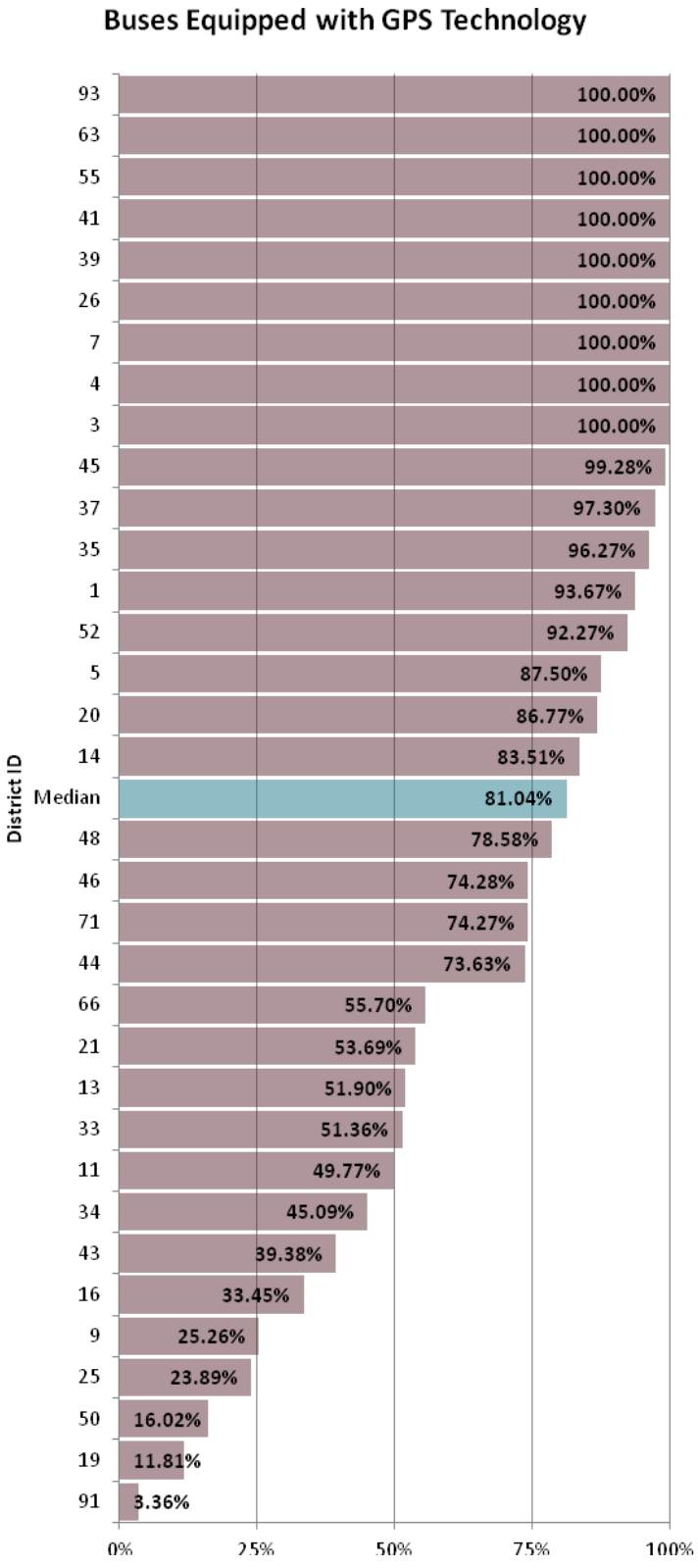
The total FTE of route planners/ routers whose primary responsibility is to plan, create, review, or maintain routing *divided by* the number of daily buses, district and contract

Importance of Measure

- This measure provides an indication of the level of all staffing for route planning
- It allows districts to compare their staffing patterns to other similar operations

Influencing Factors

- Type of routing and scheduling system used
- Number of annual routing changes
- Types of transportation programs served
- Numbers of students served
- Student transiency



Calculation

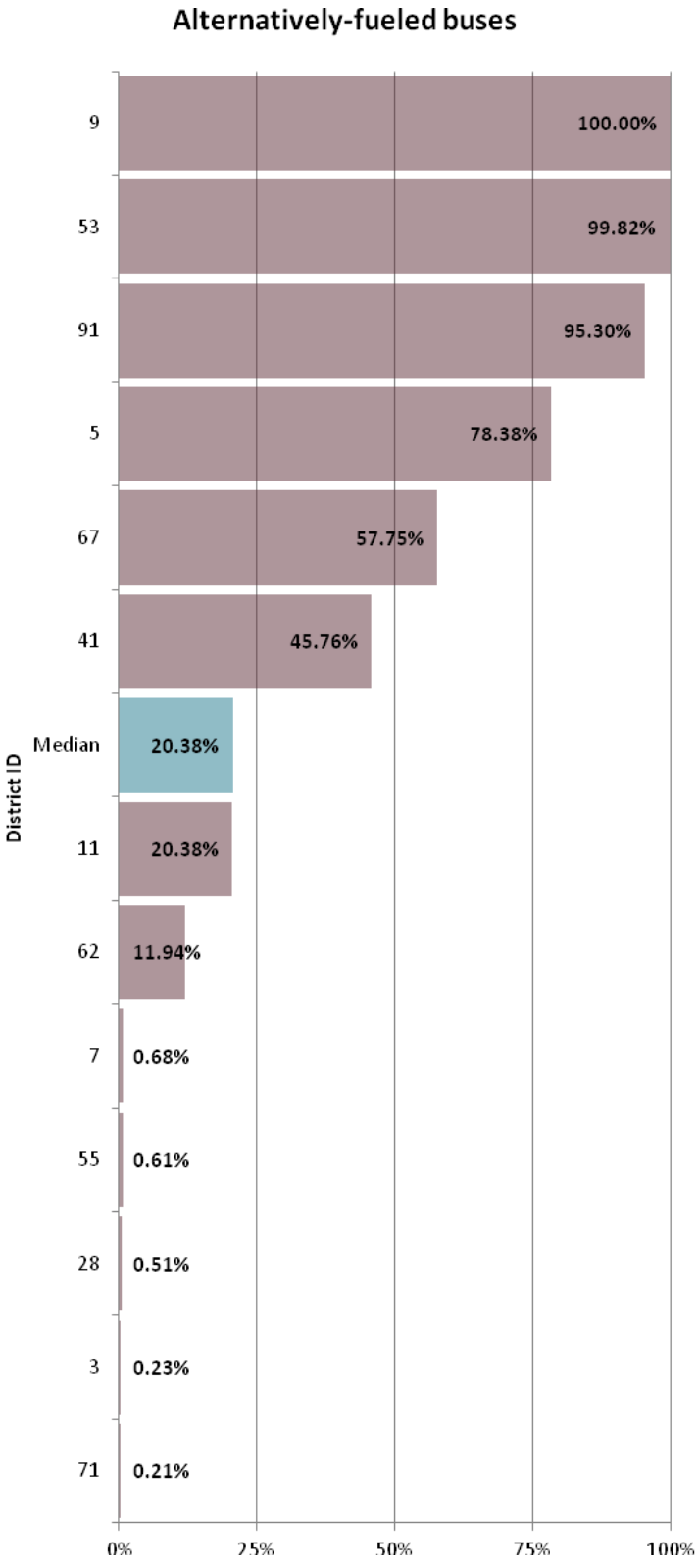
Total number of buses equipped with GPS technology *divided by* the total number of buses, district and contract

Importance of Measure

- Leveraging technology increases efficiency while providing an opportunity to reduce costs and increase student safety

Influencing Factors

- Strategic planning
- Local commitment
- Funding



Calculation

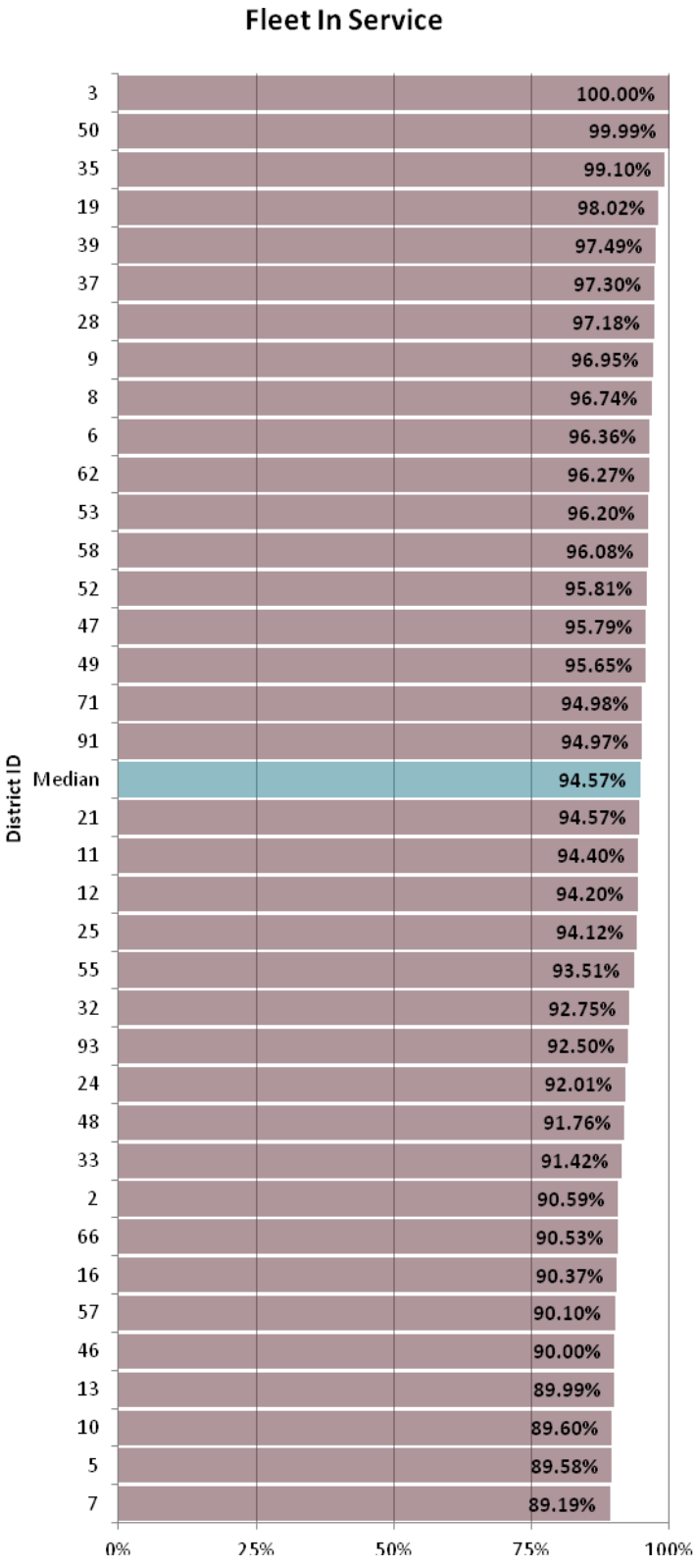
Total number of alternatively-fueled buses *divided by* the total number of buses, district and contract

Importance of Measure

- Leveraging technology increases efficiency while providing an opportunity to reduce costs and increase student safety

Influencing Factors

- Strategic planning
- Local commitment
- Funding



Calculation

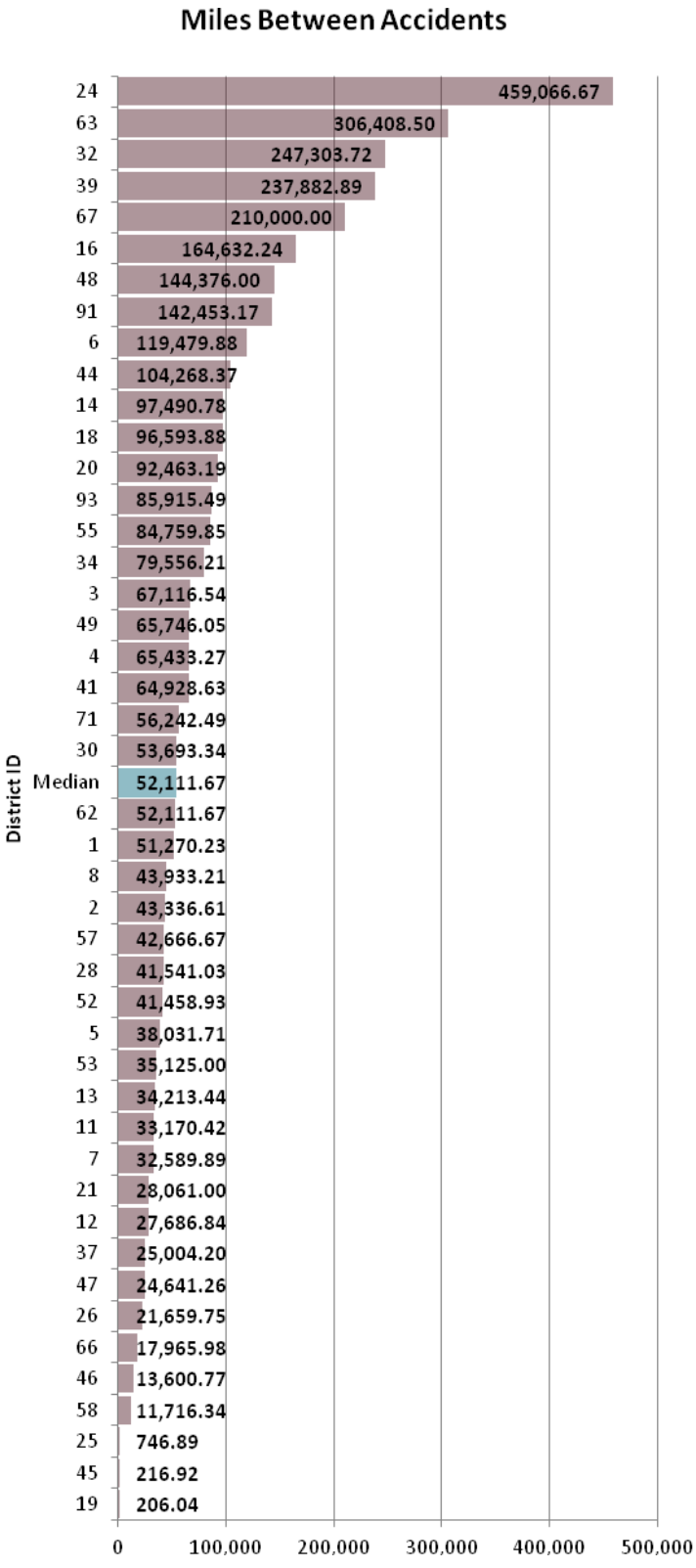
Number of buses in service on a daily basis *divided by* total number of buses – district and contract

Importance of Measure

- There is a correlation between school bus on-time performance and the fleet in-service rate
- In-service buses have a greater opportunity to leave the depot on time and thus pickup and deliver students on time
- Out of service buses require the driver to wait for repairs or delay departure due to inspecting/using a spare bus
- A lower in-service percentage can lead to a higher spare bus ratios and higher mechanic to bus ratios, which adds additional operating costs

Influencing Factors

- District vehicle maintenance program
- Mechanic to bus ratio
- District managed vs. contractor operated
- Age of fleet
- Contract language requiring vendors to maintain minimum in-service ratios



Calculation

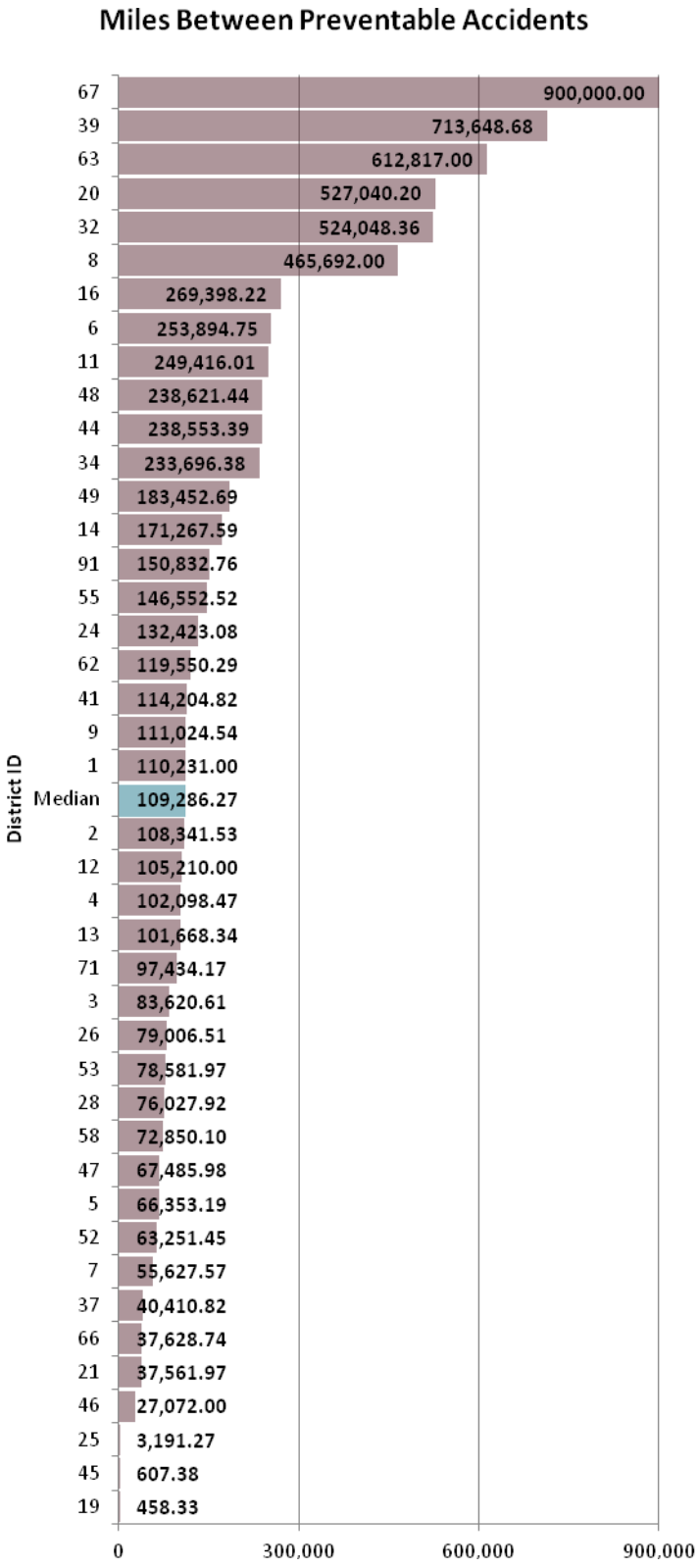
Total number of annual miles *divided by* number of annual accidents

Importance of Measure

- 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

Influencing Factors

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



Calculation

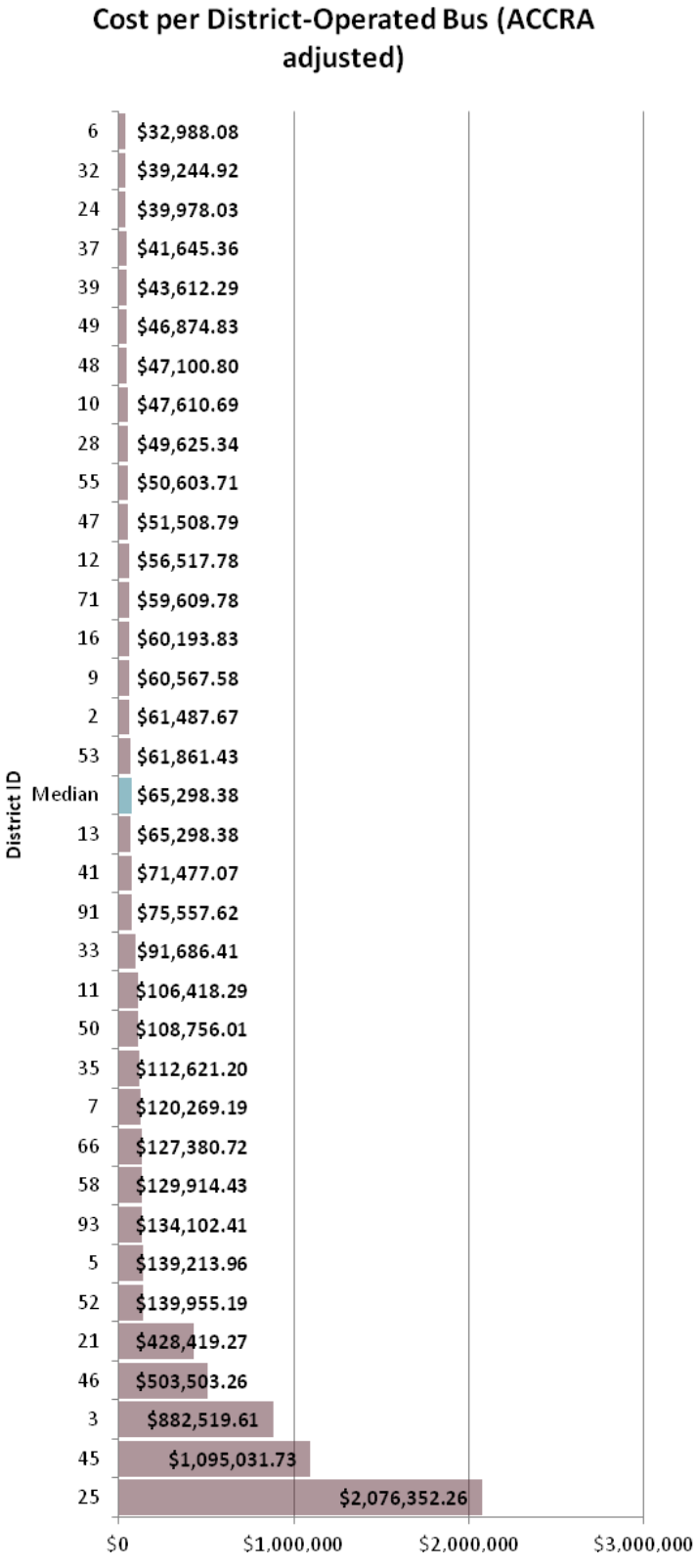
Total annual miles – district and contract *divided by* number of preventable accidents

Importance of Measure

- 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

Influencing Factors

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



Calculation

Total of individual components that create the overall cost of each bus (salaries, benefits, fuel and overhead) *divided by* the total number of district-operated busses that run on a daily basis (divided by ACCRA factor[1])

Importance of Measure

- There is a common perception that outsourced services are less expensive
- A decision to outsource transportation services can be a controversial policy decision

Influencing Factors

- Local factors such as the availability of competition, land, drivers and cost of living
- Competitiveness between contractor-operated and district-operated programs
- Contract requirements and performance standards

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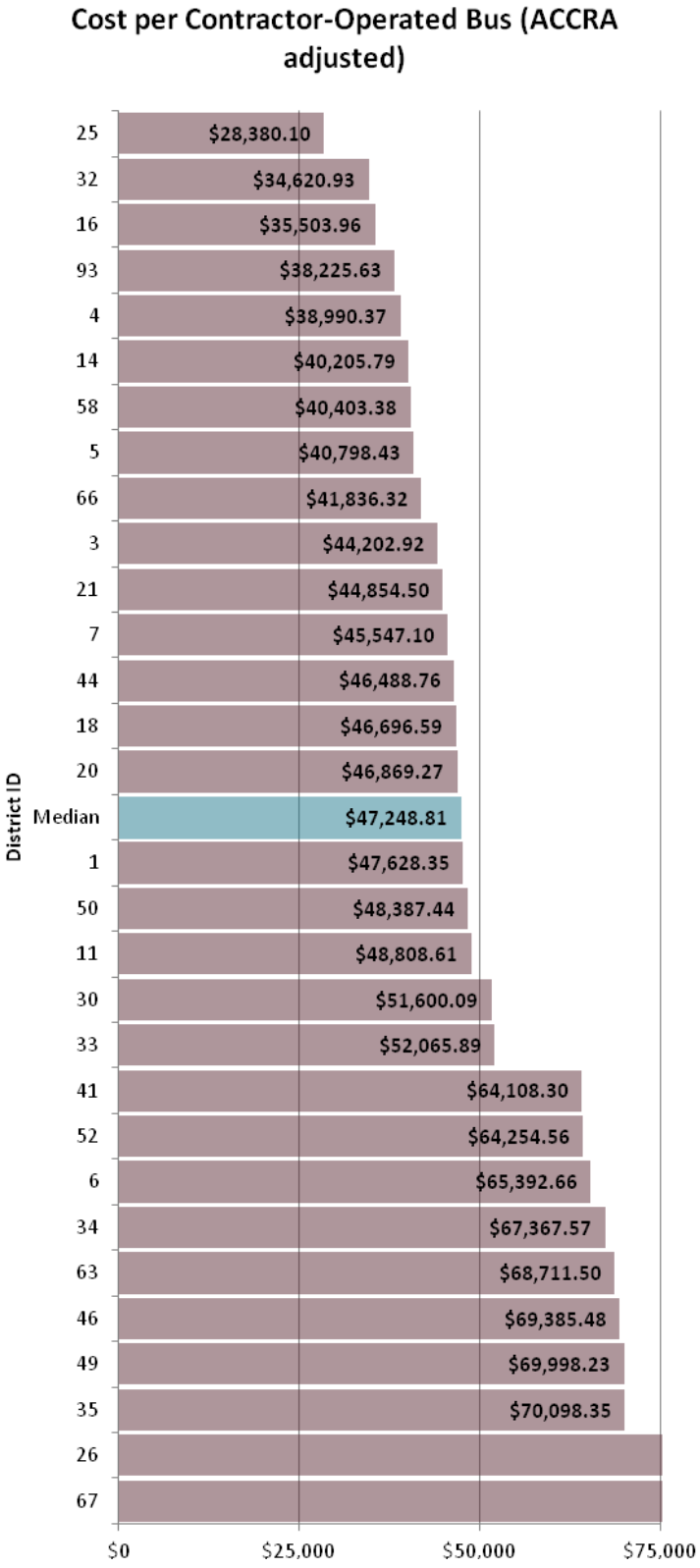

Calculation

Total spent on the contracted service including oversight and supervision, and fuel *divided by* the total number of contractor-operated buses that run on a daily basis (divided by ACCRA factor[1])

Importance of Measure

- A decision to outsource transportation services is usually balanced with the degree of priority for internal employment, contractor performance, and other factors that are considered in addition to cost

Influencing Factors

- Local factors such as the availability of competition, land, drivers and cost of living
- Competitiveness between contractor-operated and district-operated programs
- Contract requirements and performance standards
- The history and status (recent bidding versus contract extensions) of existing contracts

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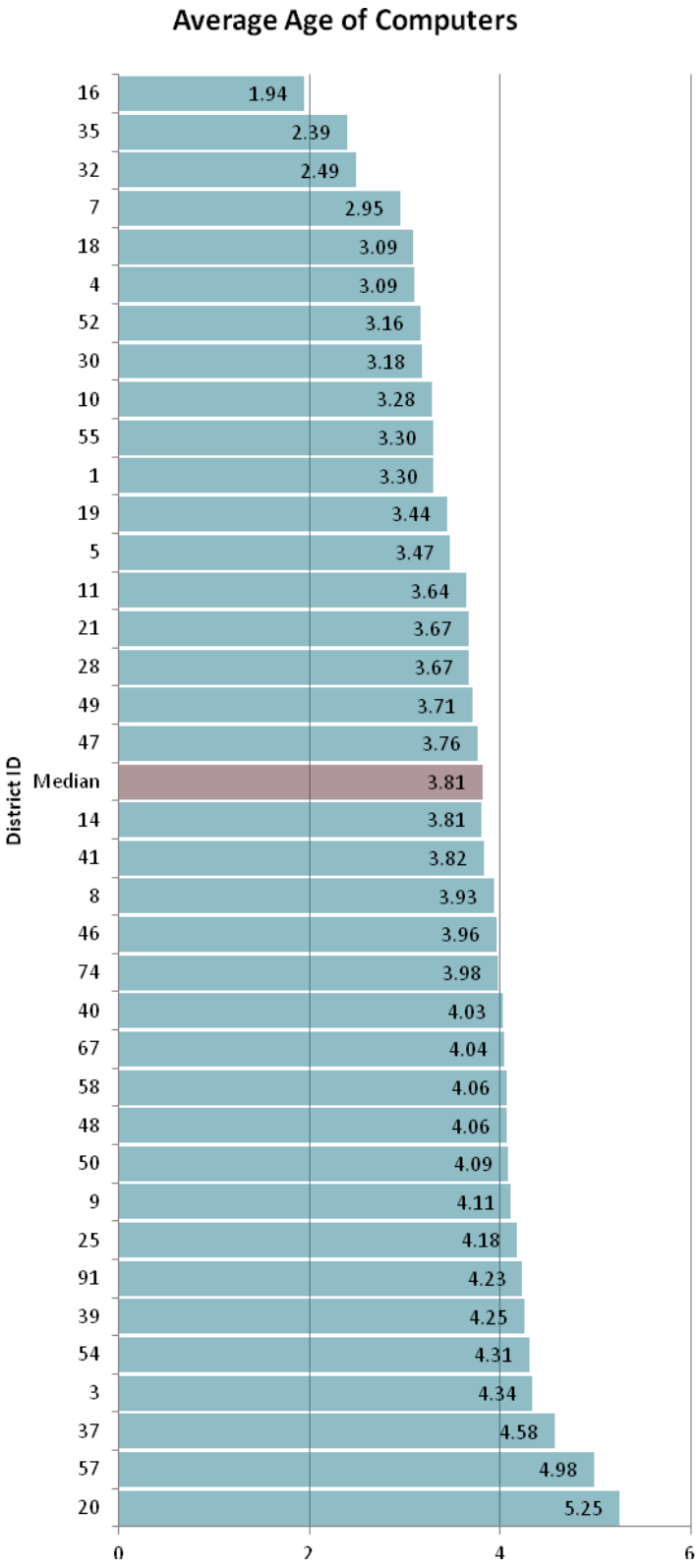
INFORMATION TECHNOLOGY

General Information Technology



Calculation

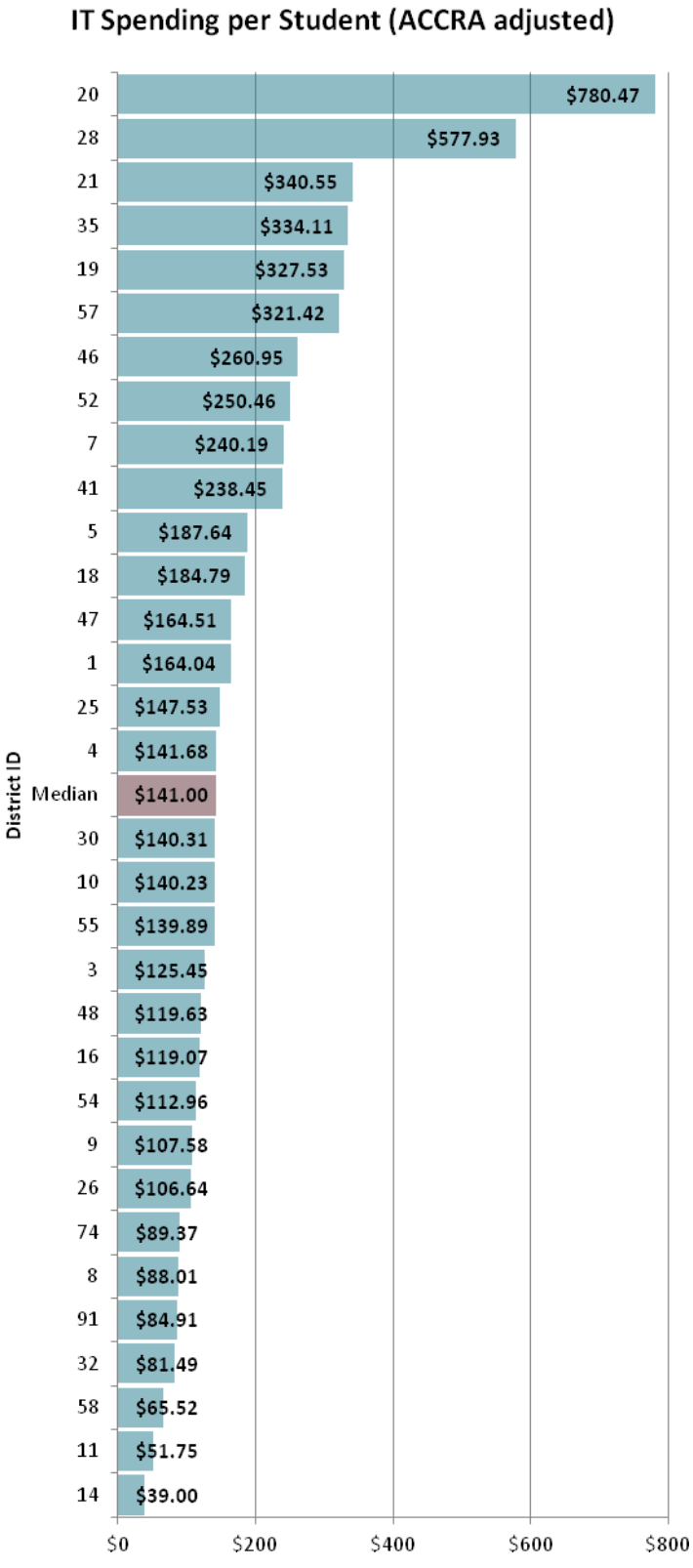
Computers aged 0 to 1 years *times* 1, *plus* computers aged 1 to 2 years *times* 2, *plus* computers aged 2 to 3 years *times* 3, *plus* computers aged 3 to 4 years *times* 4, *plus* computers aged 4 to 5 years *times* 5, *plus* computers aged 5 or more years *times* 6 *divided by* number of computers district-wide

Importance of Measure

- The measure provides data for budget and planning purposes, including refresh cycles, break-fix support, supplies, and training requirements
- The measure helps identify district readiness of administrative offices and elementary and secondary schools to adopt new software applications because of the different minimum standards that user machines must meet

Influencing Factors

- School board and administrative policies and procedures
- Budget support for capital, operational, and categorical costs for refresh and computer purchases; on-going support, supplies, and maintenance; and new software applications for both instructional and operations



Calculation

Total IT operations budget including salaries and benefits (network, help desk, break/fix, security, systems programmers - SIS/FIS/Pay); and telecommunications, network, production, system administration, data center, administration and support *divided by* the total number of students in the district (divided by ACCRA factor[1])

Importance of Measure

- Keeping IT costs as low as possible and maintaining support of academic and operational needs of the district is important
- 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

Influencing Factors

- Budget development and staffing
- Age of technology, applications portfolio, and new enterprise implementations
- District IT maturity, department standards, technology investments and support model

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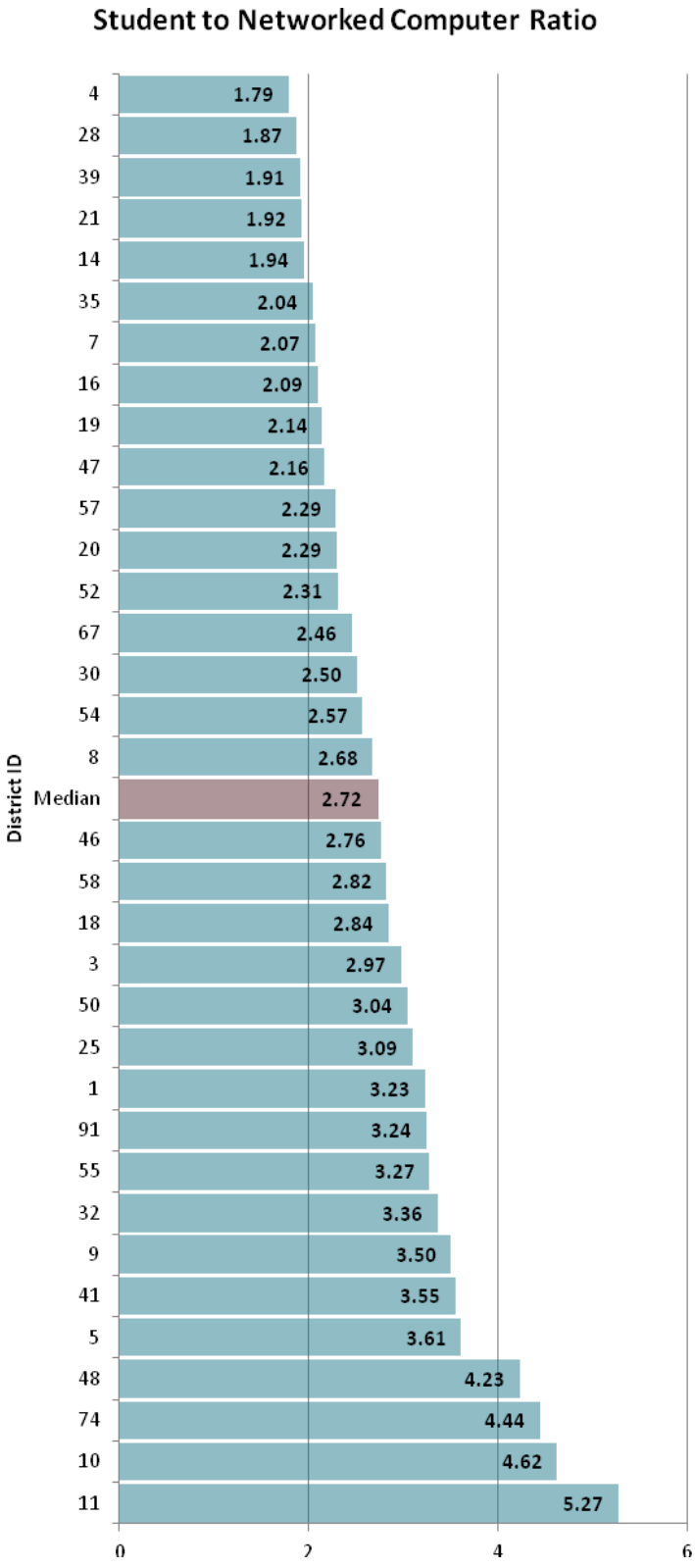
Power Indicator



Calculation

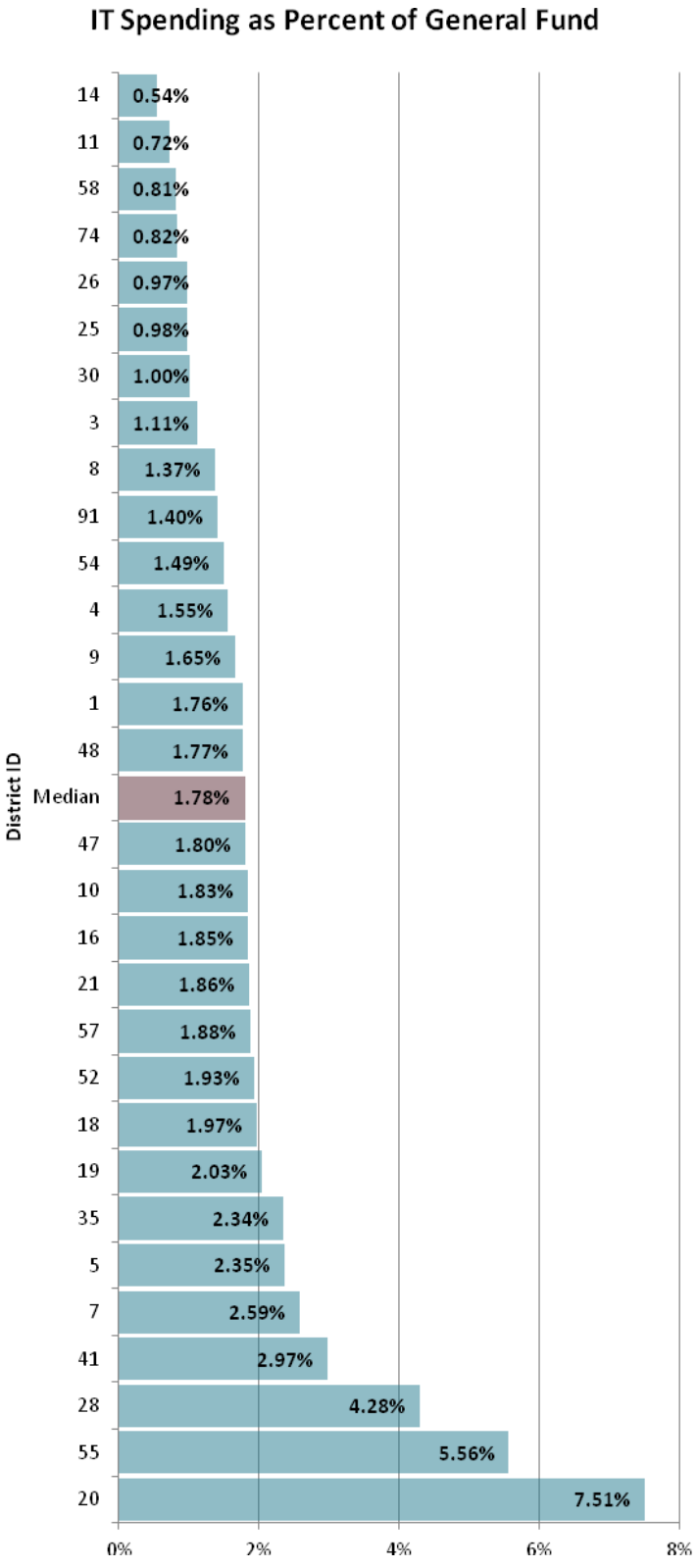
Total computers used by elementary, middle and high school staff, teachers and students *divided* by total number of students

Importance of Measure

- Networked computers provide access to differentiated instruction, online learning and assessment strategies, and other systems that are critical to school effectiveness and the instructional mission of school districts

Influencing Factors

- Policy and procedures for computers and users
- Capital and operational budgets
- Dispersion of computers throughout the district
- Teacher and staff support and training
- NCLB requirements for students technology performance
- Data and accountability demands have driven districts to 1 – 1 computing for teachers and administrators



Calculation

Total IT operating expenses *divided by* total district general fund expenditures

Importance of Measure

- This metrics provides a comparison between the amount of operating spending dedicated to IT between school districts

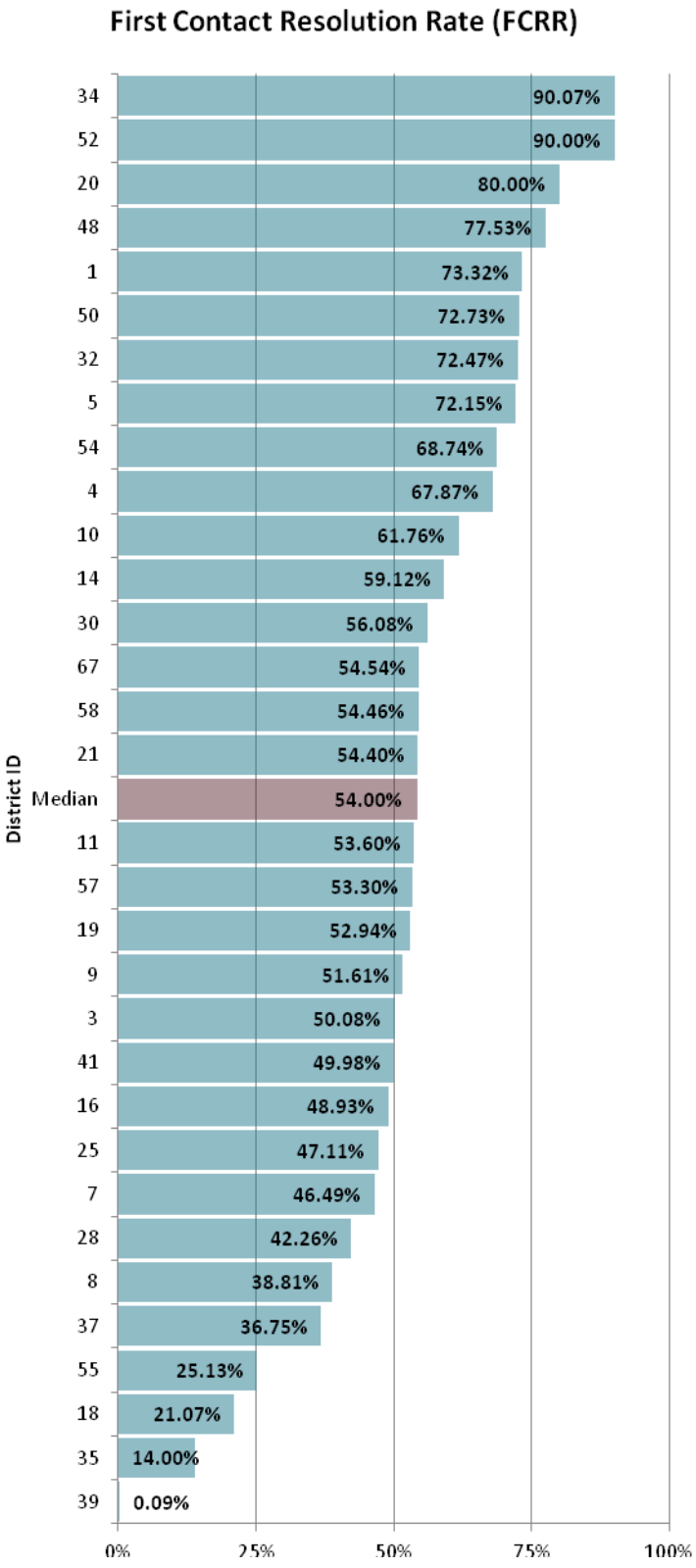
Influencing Factors

- IT expenditures tied to one-time construction projects could potentially skew the data
- These expenditures should be left out of both the IT and district operating expenses totals

Power Indicator

Help Desk

Power Indicator



Calculation

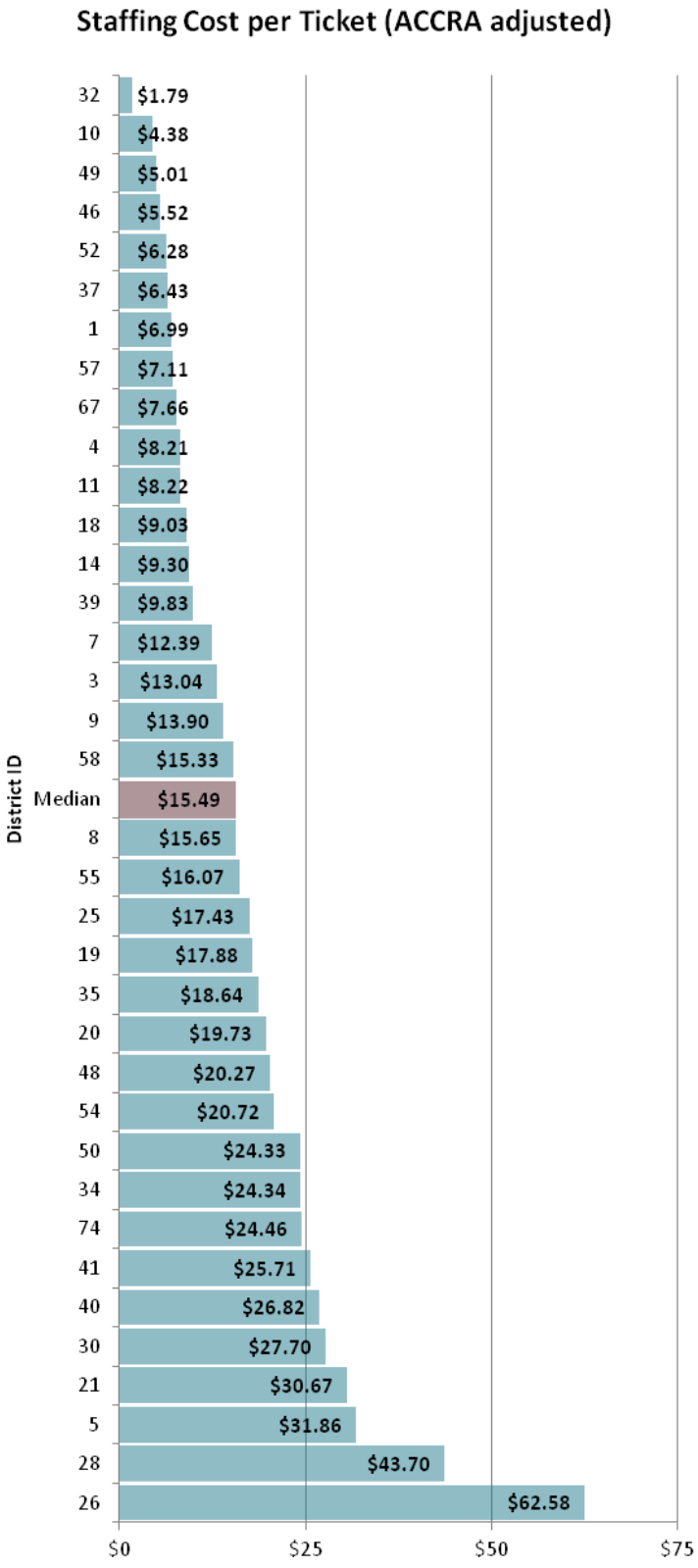
Number of tickets resolved on initial contact, not including voice mail, FAX, and e-mail contacts *divided by* total number of help desk tickets created during the year

Importance of Measure

- This measure calculates user-initiated contacts to the help desk that generate a ticket that is resolved without escalation to the next support level
- FCRR can be used as an indicator to devise strategies to lower cost, improve operational ability and workflow, and improve customer satisfaction
- It is more cost-effective for an organization to resolve calls on first contact because the customer is returned to productive work more quickly

Influencing Factors

- Automation tools for common help desk issues like password reset can improve performance and reduce costs
- Knowledge and training of help desk staff and end-users in enterprise applications
- New implementations will cause increase in service calls
- Capacity of the organization to respond to customer support requests



Calculation

Annual salary costs and benefits of the manager and all help desk staff *divided by* total number of Help Desk tickets created during the year (divided by ACCRA factor[1])

Importance of Measure

- This measure may indicate how responsive and how efficient the help desk is in making itself available to its customers
- The goal is to improve customer satisfaction through resolving incidents quickly, effectively, and cost efficiently

Influencing Factors

- Automation tools for issues like password reset can improve performance and reduce costs
- Duties performed by the help desk staff that may restrict them from taking calls
- Knowledge management tools available to help desk staff and end users
- Budget development for staffing levels
- The amount of training provided help desk staff to address issues with district systems

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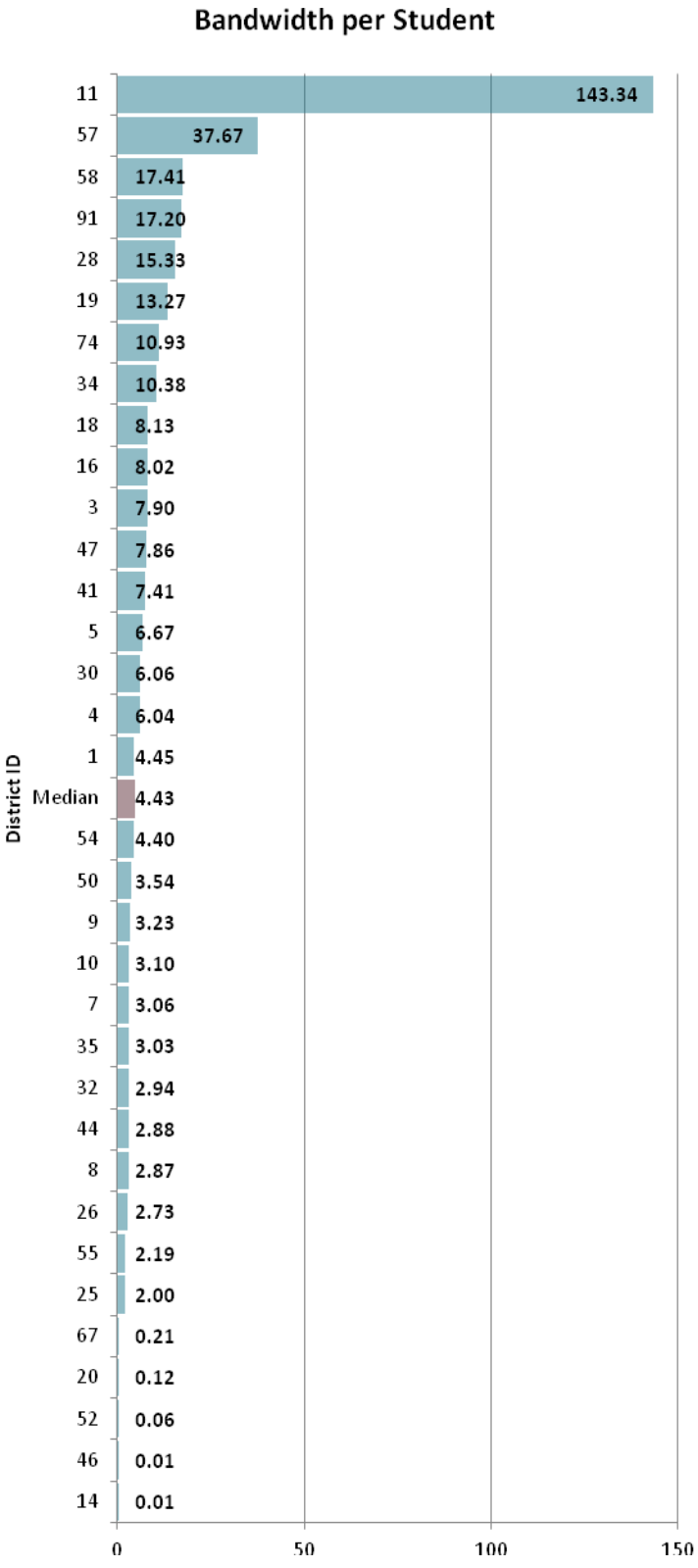
Network Operations

Power Indicator



Calculation

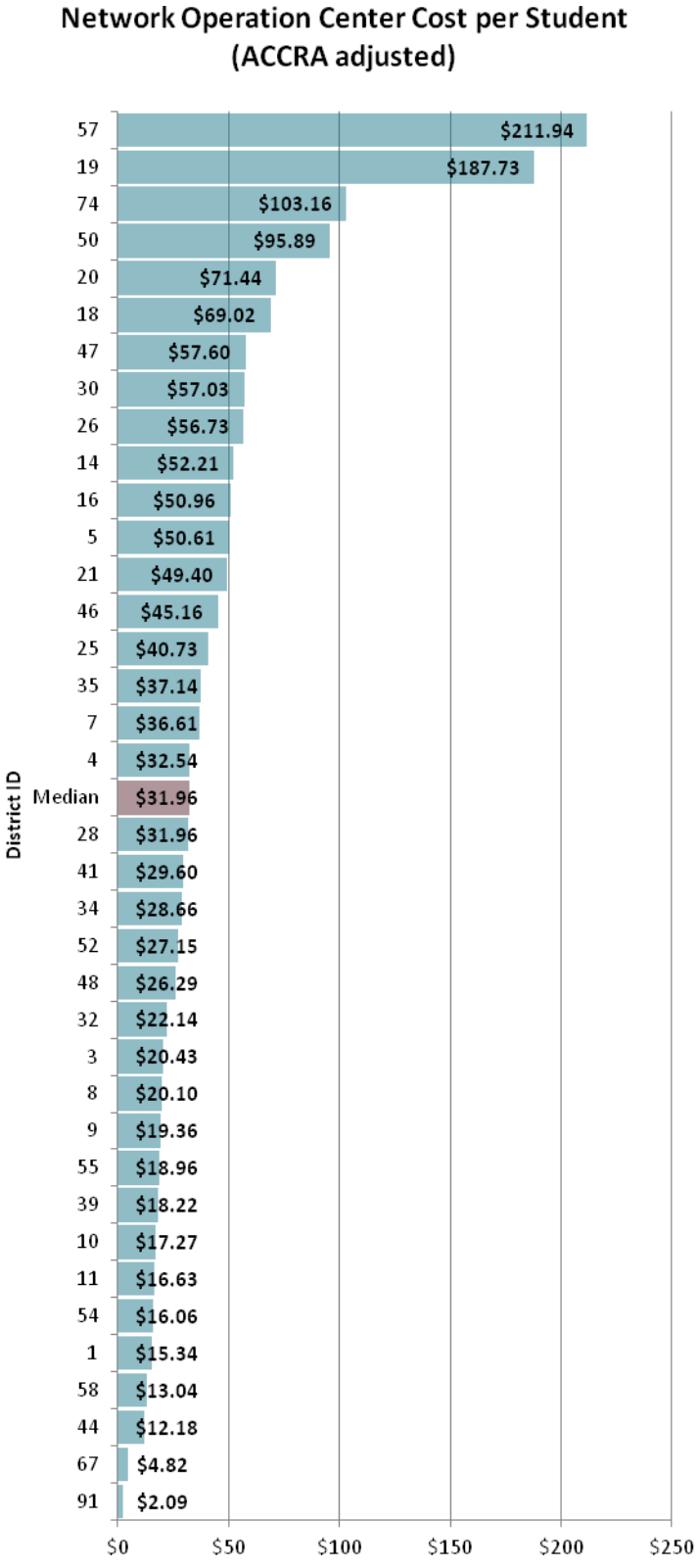
Total district internet bandwidth in bits per second *divided by* total number of students in the district

Importance of Measure

- This provides a relative measure of the capacity of the district to support computing applications in a manner conducive to teaching, learning and district operations
- Students and staff have come to expect certain performance levels based on their experience with network connectivity at home and other places, and schools must provide performance on a par with that available elsewhere

Influencing Factors

- 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 network operations center costs including total lease or rental for wide area network (WAN) data circuits, required district staff, contracted costs related to management and maintenance of WAN, forms and paper costs for centralized printing operations, internet access, internet filtering for objectionable content (CIPA filtering), and server maintenance *divided by* total district enrollment (divided by ACCRA factor[1])

Importance of Measure

- Efficient practices and high service levels ensure that district computing resources are available to students and faculty/staff

Influencing Factors

- Dependence on Internet, email, etc.
- Online educational resources
- The carrying capacity of the district's networks
- Use of outsourcing or remote management tools

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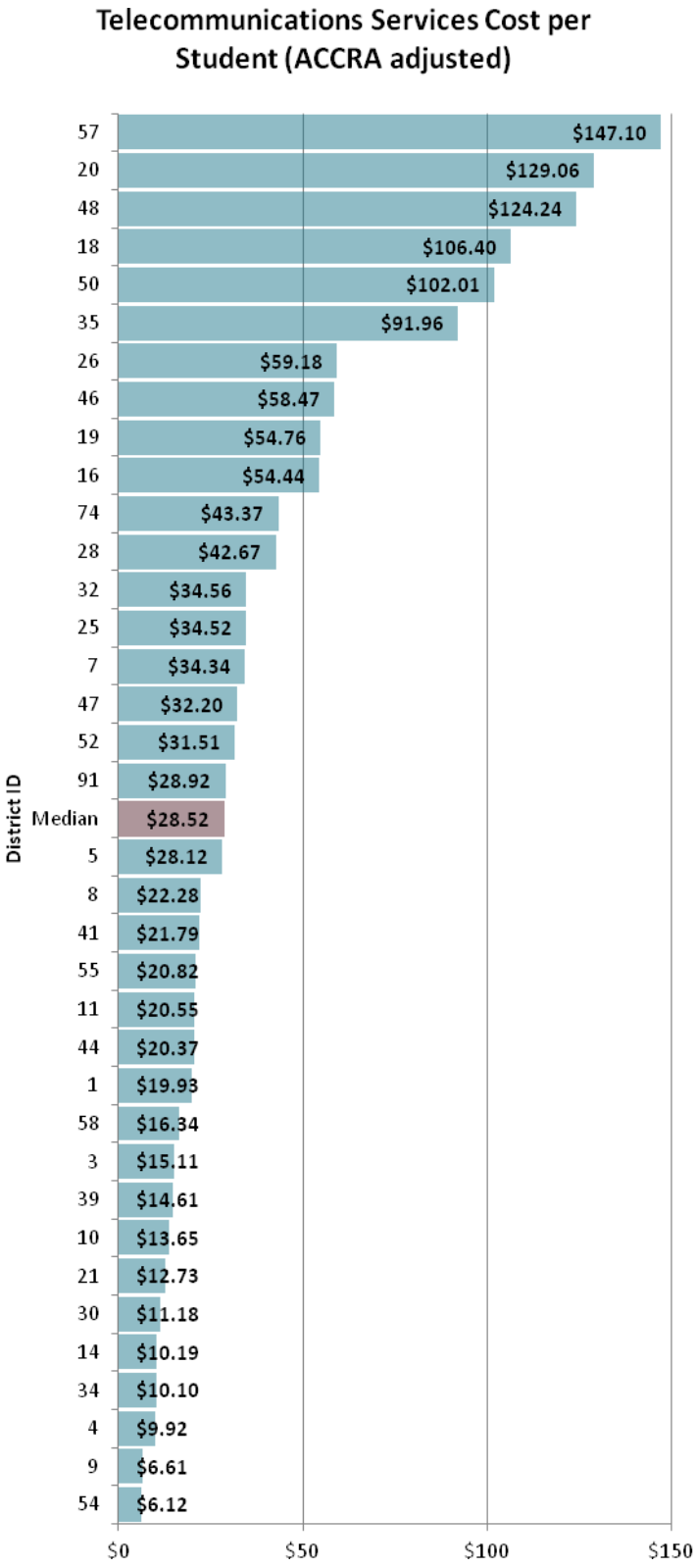
Power Indicator



Calculation

Total expenditures for telecommunications services eligible for E-Rate support as defined in USAC rules, regardless of whether E-Rate support was applied for or approved, and regardless of funding source *divided by* total number of students in the district (divided by ACCRA factor[1])

Importance of Measure

- This measure avoids misleading cost differences between districts due to large, infrequent equipment purchases that have a major cost impact in one year
- It also removes differences between districts capitalizing equipment purchases and those expensing them
- In order to use a comparable cost factor, E-Rate definitions of eligible telecommunications costs are used for this metric

Influencing Factors

- Use of owned or leased network data circuits
- Network capacity necessary to meet educational and programmatic needs
- Monitoring and reporting systems

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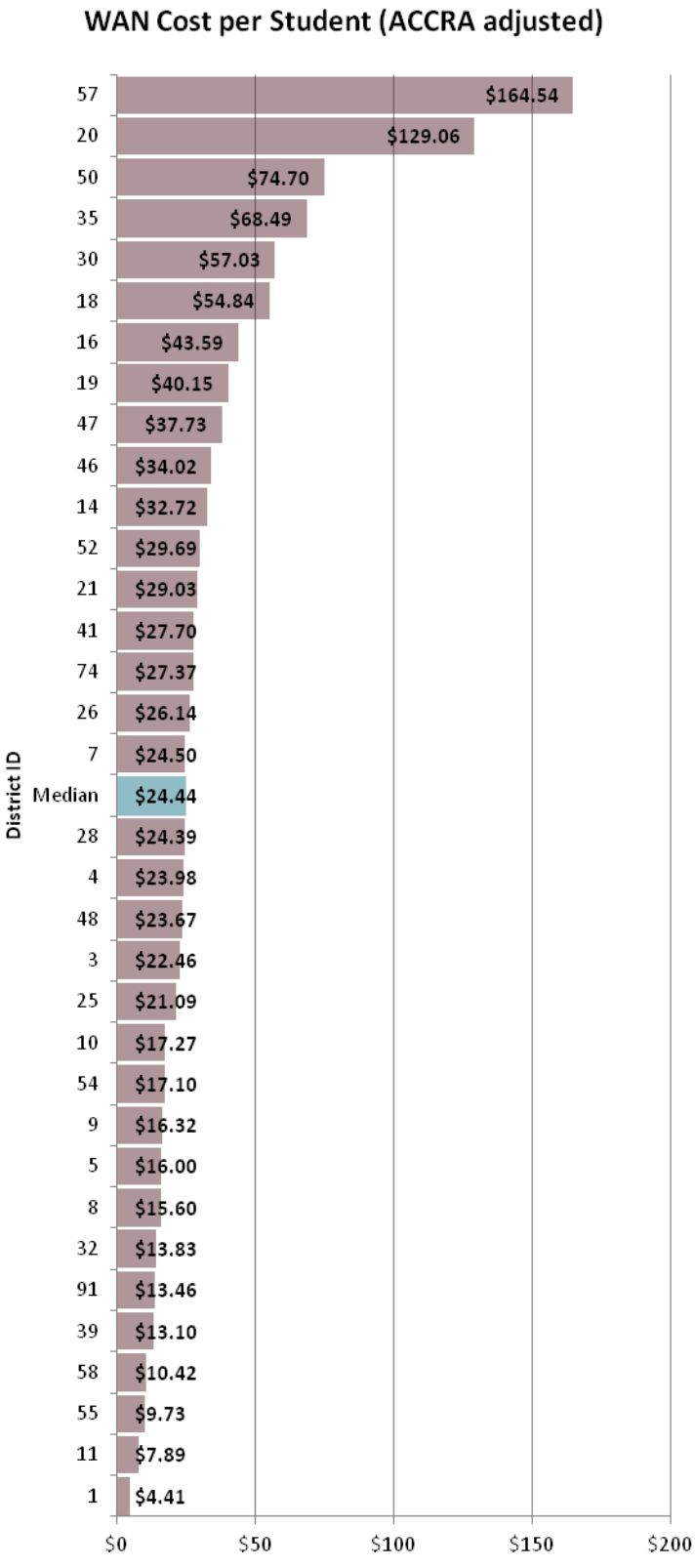

Calculation

Annual cost for wide area data circuits *divided by* total number of students in the district (divided by ACCRA factor[1])

Importance of Measure

- Students are now provided high quality online educational resources
- Managing the cost of technology and the costs associated with support as it ages is a big challenge to districts
- The success of many of the software applications is determined as much by training, implementation, and providing adequate support as it is by the carrying capacity of a district's local and wide area networks
- As additional software initiatives depend upon this environmental constraint it is necessary to budget and plan for upgrades to the supporting infrastructure

Influencing Factors

- Whether a district owns or leases WAN lines will impact costs
- Typically initial start-up costs for owned solutions are high but over time a ROI can be realized

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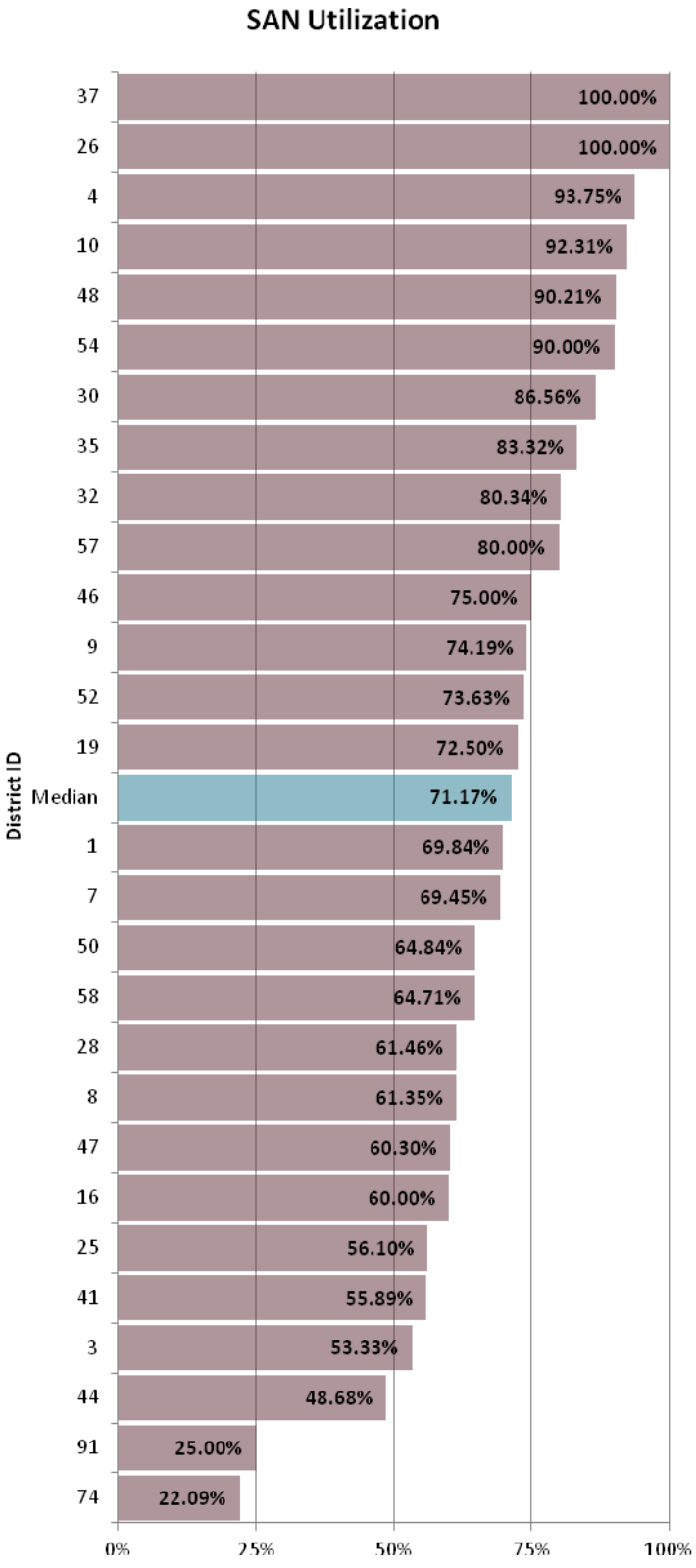

Calculation

Number of GBs in use for all district core SAN storage *divided by* usable capacity for all district core SAN storage

Importance of Measure

- Staying below the metric capacity threshold is critical to data integrity and enables additional EVA redundancy
- This metric may also provide justification for storage expansion and load balancing

Influencing Factors

- Number of disk groups per storage array
- Each storage group that is created offers an additional level of fault tolerance and isolation at the cost of over head disk space
- RAID levels for each logical disk also affect the overall capacity