

Managing for Results in America's Great City Schools:



**A Report of the Performance
Measurement and
Benchmarking Project**

Council of the Great City Schools

Managing for Results in America's Great City Schools:

A Report of the Performance Measurement and
Benchmarking Project

Of the

Council of the Great City Schools

By

Michael Eugene
Robert Carlson
Heidi Hrowal

With

John Fahey
Jean Ronnei
Steve Young
Joseph Gomez
Michael Thomas

April 2007

Leadership, Governance, and Management Task Force

Chair: Beverly Hall, Atlanta Superintendent

Co-chair: Bill Isler, Pittsburgh School Board Chair

Michael Casserly, Executive Director

Managing for Results in America's Great City Schools

To Great City School Members—

The Council of Great City Schools has initiated a major multiyear project to identify performance measures, key indicators, and best practices that can serve as guides to improve the financial and business operations of urban school districts. The goals, objectives, and structure of the ***Performance Measurement and Benchmarking Project*** were developed during the Council's annual meetings of Chief Operating and Chief Financial Officers. The Council also organized technical teams composed of executive administrators with extensive subject-matter expertise to develop and manage portions of the project. The project is using an agreed-upon research approach with standards and templates for analyzing and displaying data for top performance measures.

The following sections include detailed analyses and discussion of a robust set of key indicators—or measures—in four business areas: transportation, food services, maintenance and operations, and procurement and supply chain. Also included is an initial progress report on a fifth business area: safety and security.

Preliminary analysis is now being developed on measures for financial management and general accounting. With measures on these two major functions under way, the project will be extended to include human resources and information technology in the near future. The Council will continue to work with member districts to refine the project, establish trend lines, and share effective practices among districts. We will also prepare composite reports in the four operational areas—i.e., business operations, finance, human resources, and information technology—for the Leadership and Governance Task Force and the Board of Directors meetings at the Council's Annual Fall Meeting and its Legislative Policy Conference. We hope that the membership finds this effort useful and productive.

Michael Casserly
Executive Director

Executive Summary

This report describes 50 initial statistical indicators developed by the Council of the Great City Schools and its member districts to measure big-city school performance on a range of operational and business functions, and presents data city-by-city on those indicators. The analysis marks the first time that such indicators have been developed in education and data on them collected from the nation's largest urban school systems. The purpose of the project is to help the nation's urban public schools measure their performance, improve their operational decisions, and strengthen their practices.

Teams of school-district experts in transportation, food services, maintenance and operations, procurement, and safety and security developed the indicators. Preliminary data were collected from the major city school systems; the results were fine-tuned using Six Sigma quality-assurance procedures to ensure uniformity and rigor; additional data were collected using the fine-tuned measures; and the final data were analyzed and presented in this report.

The following is a sample of indicators and the data collected on them from 66 of the nation's largest urban school systems—

Transportation

- Median cost of transporting students: \$988 per child
- Percent of students transported by average district: 41.0 percent
- Average number of routes per bus: 4.2
- Percent of students with home pick-up: 10.1 percent
- Average age of bus fleet: 7.7 years

Food Services

- Average student-participation rate: 59.6 percent
- Average breakfast-participation rate: 24.6 percent
- Average secondary lunch-participation rate: 41.8 percent
- Average certified staff per meal site: 1.3
- Average costs per revenue dollar: 98.8 percent

Maintenance and Operations

- Average custodial workload: 23,501 square feet
- Maintenance & operations cost per square foot: \$3.22

- Percent of work orders on backlog: 9.2 percent
- Average custodial costs per square foot: \$1.75
- Average percent of buildings over 50 years old: 34.6 percent

Procurement

- Average percent of district budget spent through procurement process: 21.4 percent
- Average procurement administrative lead-time: 35 days
- Average number of transactions using p-cards: 36.9 percent
- Percent of total purchase dollars that were competitively bid: 88.9 percent
- Percent of professional procurement staff certified: 17.0 percent

Safety and Security

- Percent of all staff deployed for safety and security purposes: 1.1 percent
- Percent of safety and security staff required to participate in training: 70.4 percent
- Percent of safety and security staff in uniform: 78.7 percent
- Percent of school buildings with video surveillance monitoring: 8.7 percent
- Percent of school buildings with alarm systems: 23.5 percent

Each of the indicators in this report includes information about why the measure is important, how it is defined and calculated, what the range of responses were across the city school districts, and how the indicators' values are affected by other school district practices. The Council expects that school boards and superintendents in the major cities will be able to use these indicators and the data gathered on them to assess their own business operations, measure progress on operational reforms, and demonstrate greater transparency in district operations to the public. And they will be able to use the highest performing districts to set benchmarks and identify best practices in each of the business areas.

Subsequent steps in this project will include developing indicators and benchmarks in the areas of budget and finance, human resources, and information technology. Trends in the indicators will also be tracked. Finally, the project will look at best practices in districts with particularly positive indicators in each area.

Table of Contents

| | |
|---|----|
| Background | 1 |
| Project Development and Overview | 2 |
| Methodology | 4 |
| Transportation | 11 |
| ▪ Cost per Student | 12 |
| ▪ Students Receiving Transportation Services | 14 |
| ▪ Routes per Bus | 16 |
| ▪ Scheduled Students per Bus | 18 |
| ▪ District-Operated Fleet | 20 |
| ▪ Cost per District-Operated Bus | 22 |
| ▪ Drivers per Bus | 24 |
| ▪ Students with Home Pick-Up | 26 |
| ▪ Average Age of Fleet | 28 |
| Food Services | 31 |
| ▪ Participation Rate | 32 |
| ▪ Breakfast Participation Rate | 34 |
| ▪ Breakfast Participation in Non-Cafeteria Settings | 36 |
| ▪ Secondary Lunch Participation Rate | 38 |
| ▪ ServSafe or Equivalent Certified Staff per Site | 40 |
| ▪ Total Costs per Revenue | 42 |
| ▪ Direct Costs per Revenue | 44 |
| ▪ Indirect Costs per Revenue | 46 |
| ▪ Equipment Costs per Revenue | 48 |
| ▪ Sites Using Point-of-Sale (POS) to Upload Data | 50 |

- Maintenance & Operations** 53
 - Custodial Workload 54
 - Maintenance & Operations Cost per Square Foot..... 56
 - Backlogged Work Orders..... 58
 - Contract Work..... 60
 - Custodial Cost per Square Foot 62
 - Buildings Over 50 Years Old 64
 - Work Orders per School 66
 - Custodial Supply Cost per Square Foot..... 68
 - Workers per Supervisor..... 70
 - Utility Cost per Square Foot 72

- Procurement/Supply Chain** 75
 - District Procurement Spending..... 76
 - Procurement Transactions per Buyer 78
 - Procurement Administrative Lead Time – Formal Requirements..... 80
 - P-Card Transactions 82
 - Procurement Savings..... 84
 - Stock Turn Ratio 86
 - Competitive Procurements..... 88
 - Procurement Operating Expense Ratio..... 90
 - Certified Professional Procurement Staff..... 92
 - Strategic Sourcing..... 94

- Safety & Security** 97
 - Safety & Security Staff 98
 - Security Allocation Formula..... 100
 - Safety & Security Plan Training..... 102
 - Safety & Security Staff Training 104
 - Safety & Security Staff in Uniform 106
 - Buildings with Onsite Video Surveillance Monitoring..... 108
 - Buildings with Alarm Systems..... 110
 - Metal Detectors – Hand-Held vs. Walk-Through..... 112
 - Employee Identification Badges..... 114
 - Student Identification Badges 116

Managing for Results in America's
Great City Schools:
A Report of the Performance Measurement and Benchmarking Project
Of the
Council of the Great City Schools

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. In order to improve, the nation's big-city school systems have responded with a number of initiatives in each area. They have conducted extensive research on how some city school systems improve faster than others do; they have formed peer teams to review and analyze each other's practices; and they have launched public information campaigns. The efforts have helped spur both instructional and operational reforms, but these reforms have sometimes been hampered by the lack of data by which to compare each other's work and assess each other's progress. This situation has been particularly acute on the noninstructional side of house, where good data have been important for many years but comparable data from one system to another have been scarce.

The Council of the Great City Schools, the nation's coalition of large urban public school systems, began to address this shortcoming in 2003 by launching a major effort to identify, assess, and recognize excellence in the business and financial operations of its members. The purposes of this new effort were to—

- Establish a common set of key performance measures in business operations, finance, human resources, and information technology.
- Benchmark 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, so other member districts could utilize these practices.

Collecting and analyzing performance data in education has intrinsic value, but benchmarking or comparing that data from city-to-city pays special dividends. Good comparative data give school districts the ability to analyze how well they manage their resources. Good data also provide the evidence needed to identify best practices and the wherewithal to determine why some practices produce better results than others do. Good data, moreover, enable school districts to have a systematic way to build knowledge about how large systems work and what it takes to improve them.

Finally, better data have substantial benefits for school leaders. Better data allow superintendents, school boards, and staff members to identify practices that fail to produce the desired results for students and teachers. Better data also permit school administrators to identify and devote more resources to classroom instruction and instructional support. Better data can improve operational effectiveness and reduce a school district's vulnerability to negative press. And better data can spur accountability for results, clarify goals and priorities, measure progress, enhance transparency and public trust, and improve understanding of various policy options.

For these reasons, the Council of the Great City Schools and its member districts have embarked on this first-of-its-kind benchmarking effort to improve operational performance in America's urban public schools. This effort is significant not only because it represents a "first," but also because it was launched by the school districts themselves. The initiative signals clearly that urban school systems are serious about using data to inform and improve their operations.

Project Development and Overview

This Performance Measurement and Benchmarking Project began in 2003 at meetings of the Chief Financial and Chief Operating Officers of member districts of the Council of the Great City Schools. The effort began with the development of an initial project framework and continued through 2005 with the identification and definition of an initial set of Key Performance Indicators (KPIs) to assess urban school performance in critical operational areas.

The Council established work groups composed of Chief Operating Officers from member districts to develop and fine-tune the indicators, and invited staff from the Los Angeles Unified School District to develop a sample survey of performance measures and analyze the responses. Twenty districts responded to this initial survey with data in two operational areas—Food Services and Transportation. The preliminary results were presented to the Chief Operating Officers at their annual meeting in April 2006. The presentation prompted the Chief Operating Officers to agree to a broader national study that would develop key indicators and gather comparable data from the membership on core business operations of the nation's urban public schools. The Chief Operating Officers identified five major functional areas that would be the focus of the initial study—food services, maintenance and operations, procurement, safety and security, and transportation.

The Council then organized technical teams of subject-matter experts from the member districts. These teams developed an initial list of 208 potential measures. The teams narrowed the list down to 138, then 50, of the most important measures; developed a survey to gather data on the measures; and analyzed the results. The initial findings were presented to the Leadership and Governance Task Force of the Council of the Great City Schools in October 2006. Results were then finalized and compiled for this report.

The next steps will be to inventory management practices of the top-performing districts in each operating area highlighted in this report and to present the results at the Council's 2007 Fall Conference.

Over the long run, the Performance Measurement and Benchmarking Project will be implemented in four functional areas—

- Operations
- Finance
- Human Resources
- Information Technology

The work in each area will include five major phases: 1) identification of key performance measures, 2) establishment of a commonly accepted measurement methodology, 3) creation and implementation of a measurement survey, 4) analysis and reporting of comparative data, and 5) assessment of effective management practices that produce superior performance.

Following this report on business operations, a report will be developed based on an analysis of finance and budgeting operations. The Council's Chief Financial Officers launched this analysis in November 2006. Their project, upon completion, will focus on budget, compensation, financial management, and general accounting. Initial findings about budget and compensation were presented at the 2007 Legislative Conference in Washington. And final results will be presented at the Council's 2007 Fall Conference, alongside the results of the operational best-practices analysis.

Following the finance report, reports are planned on human resources and personnel. This work has already started with the March 2007 meeting of the Council's Chief Human Resources Officers. They selected employee relations, human resource operations, and recruiting and staffing as the functional areas that will be the focus of their study. Technical teams were formed to develop indicators, and a pilot survey will be launched this spring. Initial results of this work will be presented at the Council's 2008 Legislative Conference.

Finally, comparable efforts in information technology will be launched this summer at the annual meeting of the Council's Chief Information Officers. Members will decide on functional areas to emphasize, develop a survey of indicators, and present results in 2008. As work on each functional area is completed, the Council will collaborate with its member districts to sustain the data collection, establish trend lines, refine indicators, and share effective practices.

Methodology

To develop the indicators and gather the data for this report, the Council of the Great City Schools organized management and technical teams, surveyed members, fine-tuned definitions, conducted research, and analyzed data.

Project Teams

The Council of the Great City Schools organized teams of school-district experts in transportation, food services, maintenance and operations, procurement, and safety and security to develop the indicators and gather the data for this report. A project management team oversaw the effort.

Project Management Team

The project management team included Robert Carlson, Director of Management Services for the Council, and Michael Eugene, Business Manager for the Los Angeles Unified School District. Heidi Hrowal, Principal Administrative Analyst with the Los Angeles Unified School District, helped to coordinate the project managers' work with the technical teams and to keep the project on track, ensure progress, and provide technical assistance and quality assurance.

Technical Teams

The technical teams included subject-matter experts from member school districts. These technical teams were responsible for determining the key indicators/measures within their fields. Each technical team had a team leader who worked more closely with the project management team and reported on his or her technical team's progress. In addition, the technical teams were responsible for the final analysis of the data captured on the surveys. The technical teams consisted of the following individuals.

Transportation

John Fahey, Lead, Buffalo Public Schools

Richard Jacobs, Boston Public Schools

John Lombardi, School District of Philadelphia

Dan Roberts, Round Rock Independent School District

Alexandra Robinson, San Diego City Schools

Food Services

Jean Ronnei, Lead, St. Paul Public Schools
Linda Dieleman, St. Paul Public Schools
Phyllis Griffith, Columbus Public Schools (retired)
Wayne Grasela, School District of Philadelphia
Jim Groskopf, St. Paul Public Schools
Amy Thering, St. Paul Public Schools

Maintenance & Operations

Steve Young, Lead, Indianapolis Public Schools
Tom Brady, District of Columbia Public Schools
Joe Edgens, Metropolitan Nashville Public Schools
Bill Koelm, Albuquerque Public Schools
Mike Langley, Denver Public Schools
Richard Moore, Milwaukee Public Schools
Patrick Quinn, St. Paul Public Schools

Procurement/Supply Chain

Joseph Gomez, Lead, Miami-Dade County Public Schools
Christopher P. Steele, Norfolk Public Schools
Carolyn Bolen, St. Paul Public Schools
Heather Obora, Chicago Public Schools
Stephen Pottinger, Houston Independent School District
Earl Finley, Houston Independent School District
Kim Sangster, School District of Philadelphia
Bob Watkins, Metropolitan Nashville Public Schools

Safety & Security

Michael Thomas, Lead, Jackson Public Schools
David W. Friedberg, Hillsborough County Public Schools
John Blackburn, Houston Independent School District
Edward Ray, Denver Public Schools
Jim Kelly, Palm Beach County Public Schools
John Sisco, Boston Public Schools

Surveys and Data Analysis

Indicator Development

The development of indicators, the design of surveys, and the collection and analysis of data began at the annual meetings of the Council's Chief Operating Officers and proceeded through conference calls, e-mails, and discussions. The development of indicators began in brainstorming sessions in which potential performance measures were suggested, discussed, and winnowed down to manageable lists.

These potential indicators were included on an initial survey of the membership to determine feasibility and range of definitions and values. A research team headed by Katherine Blasik, Director of Research for the Broward County Public Schools, analyzed responses to the initial surveys and produced a report that presented outlier data and provided a framework for subsequent analyses.

The results of the initial survey were used to fine-tune how indicators were defined and which indicators would be included in the final surveys. For example, the initial survey results indicated that there were at least eight ways in which the 20 districts receiving the preliminary survey defined and measured on-time arrival of school buses. To standardize the definitions—a key goal of this project—the project team turned to Debra Ware, Performance Executive with the Dallas Independent School District's Quality and Performance Improvement Department and an expert in Six Sigma processes.

Ms. Ware developed a metric definition worksheet for each team. The worksheets became the building blocks for developing the surveys, and were designed to capture critical information about each potential measure, including the purpose, definition, data sources, equations, and any relevant notes needed to qualify or explain the measures. Districts were asked to provide raw data in order to exercise quality control in the calculation process. Eventually, every numerator and denominator on the worksheets became the basis for a question on the final survey. In some cases, a data point was used on more than one indicator (e.g., district budget). Ultimately, the

technical teams defined 10 measures in each functional area, and the project management team developed and organized survey questions from worksheet results.

Survey Development

Once the technical teams completed the process of fine-tuning indicators, the project management team used results to write final survey questions in each area. Surveys were then formatted—under a Memorandum of Understanding with *K12 Insight*, a company providing online survey capability for school districts—in order to collect data online. The decision to collect data electronically was made to minimize transcription errors, better track response rates, store data more effectively, analyze results more efficiently, and reduce errors caused by indecipherable handwriting. The company helped build the electronic versions of the surveys, and trained project management team members on using the data tool. In addition, the company used an electronic reminder feature to notify districts that had not responded to the surveys.

Before administering the final surveys, the technical teams also developed an overall survey to profile each district's broad characteristics. Included in this survey were data on district enrollment, average daily attendance, number of staff members, number of schools, budget and expenditures, free and reduced-price lunch eligibility, and the like. The administration of this general survey also allowed the project management team to work out kinks in the online survey process.

The final surveys in each of the functional areas—transportation, food services, maintenance and operations, procurement, and safety and security—were based on the results of the metric definition worksheets described above. In addition to the questions on each of 10 indicators in each area, the surveys asked questions on budget and expenditure data and staffing in each function.

Final surveys were then sent to the 66 member districts of the Council of the Great City Schools in July and August 2006. (See Appendix.) Because the surveys were administered before the books were closed on FY06, all data were collected on FY05 or school year 2004-05. Technical staff members in each district received and responded to the survey. Consequently, a given district could have six or more individuals

responding at any one time, one to the general indicators survey and five for each of the technical surveys. The number of districts responding to each survey differed from function to function—

- General indicators survey = 56 districts
- Food services survey = 48 districts
- Transportation survey = 44 districts
- Maintenance and operations survey = 36 districts
- Procurement survey = 35 districts
- Safety and security survey = 31 districts

Responses to each indicator could also be different. Higher rates can often be found with indicators that are more commonly used in public education or are more regularly collected federally. Fewer responses often signal that data are not routinely collected in the area. The survey was closed at the end of December 2006.

Data Analysis and Results

Respondents in the school districts were asked to report actual data on the survey forms rather than calculate their own rates. This approach allowed the teams to analyze the same data points across surveys and to calculate uniform performance rates. Doing so helped ensure the uniformity, reliability, and validity of results across cities. The technical teams used Six Sigma quality-control methodology to establish uniform, high-quality measurement procedures, wrote survey questions in sufficient detail to explain the measures, and provided technical assistance to responding districts when they needed clarification of survey items.

Nonetheless, there were instances in which calculations produced results that the technical teams determined could not be reliable, valid, or defensible. In such cases, the data were not included in this report. The process of assessing the quality of the data will be a key feature of this project as it moves forward.

The pages that follow include a brief discussion and analyses of the 50 key performance indicators in the five functional areas. The reader will also note that

responding districts are identified by code numbers, not by name. This approach was taken in the interest of providing a “safe” environment in which results could be gathered, reported, and used by the districts to reform and improve practice. For the moment, city-identifiable results will be held by the respective districts and the technical teams. Cities wishing to know their own codes should contact the Council for further information.

Each indicator on the subsequent pages has a brief description about why the measure is important. Information is also included about variables that influence the measure, that is, the factors that affect whether the indicator is high or low. Finally, the indicator and how it is calculated is defined; the range of results is presented; and response rates are provided.

TRANSPORTATION

Transportation – Cost per Student

Why this measure is important

This is a basic measurement of the cost efficiency of a pupil transportation program. A greater than average cost per student may be appropriate based on specific conditions in each district. A less than average cost per student may indicate a well-run program or favorable conditions in a district.

Factors that influence this measure

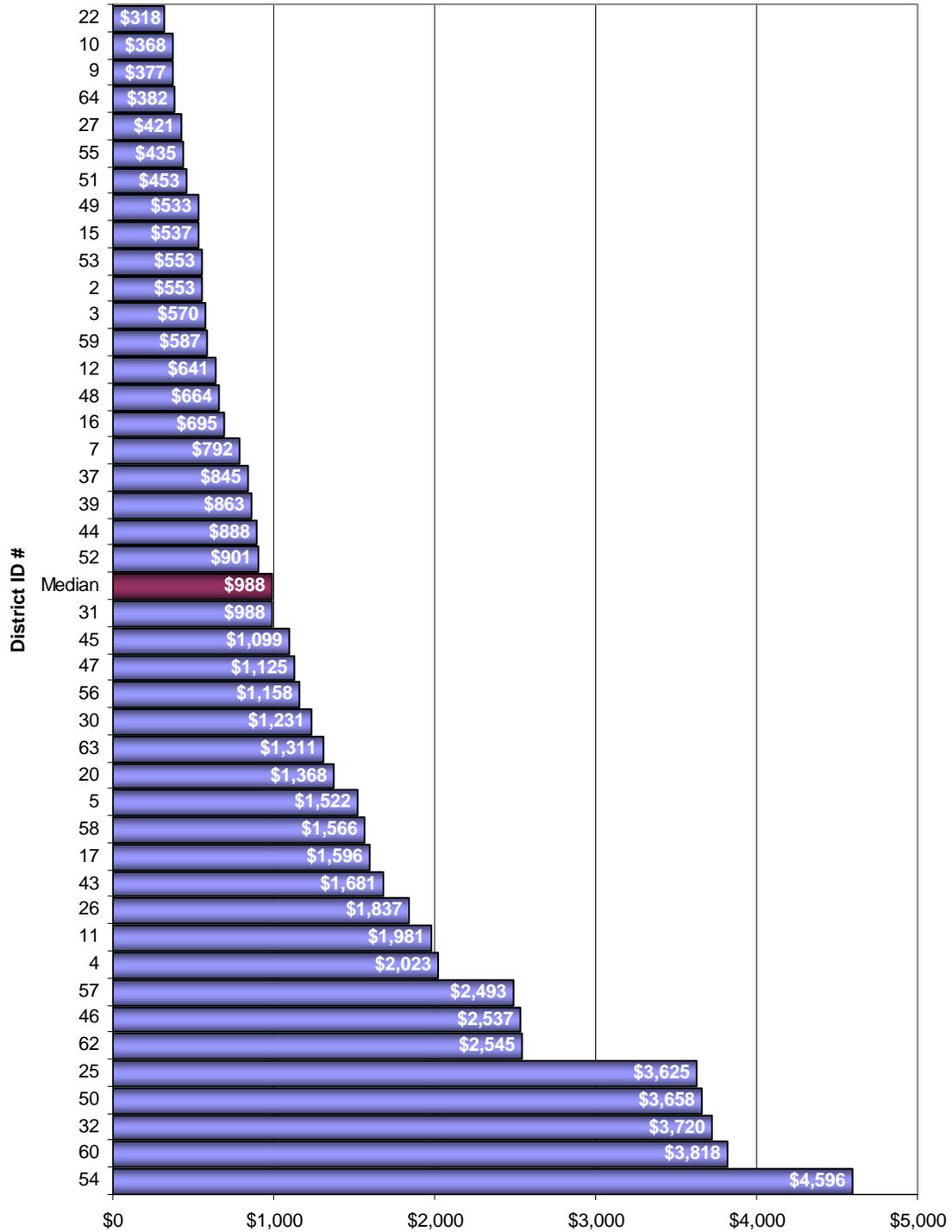
- Driver wages and labor contracts
- The cost of the fleet, including the fleet replacement plan, facilities, insurance and maintenance
- Effectiveness of the routing plan
- Bell schedules

Analysis of data

- The calculation used the following data points: total number of scheduled riders on a daily basis on yellow school buses *divided* by the total expenditures for the basic home-to-school transportation program, fuel, district-operated buses, and contractor-operated buses
- 43 districts provided reliable/valid responses to these data points
- Low = \$318, High = \$4,596, Median = \$988
- There was not an economy of scale evident as some of the largest districts had the highest costs
- Of the districts reporting, more than half (22) had programs costing between \$500 and \$1,500 per student
- Five districts reported costs significantly above the median.

Managing for Results in America's Great City Schools

Cost per Student



Transportation – Students Receiving Transportation Services

Why this measure is important

This measure allows a district to compare the level of standard service it offers with those of other comparable districts. This measure can help a district determine whether an increase or a reduction in the service levels is warranted.

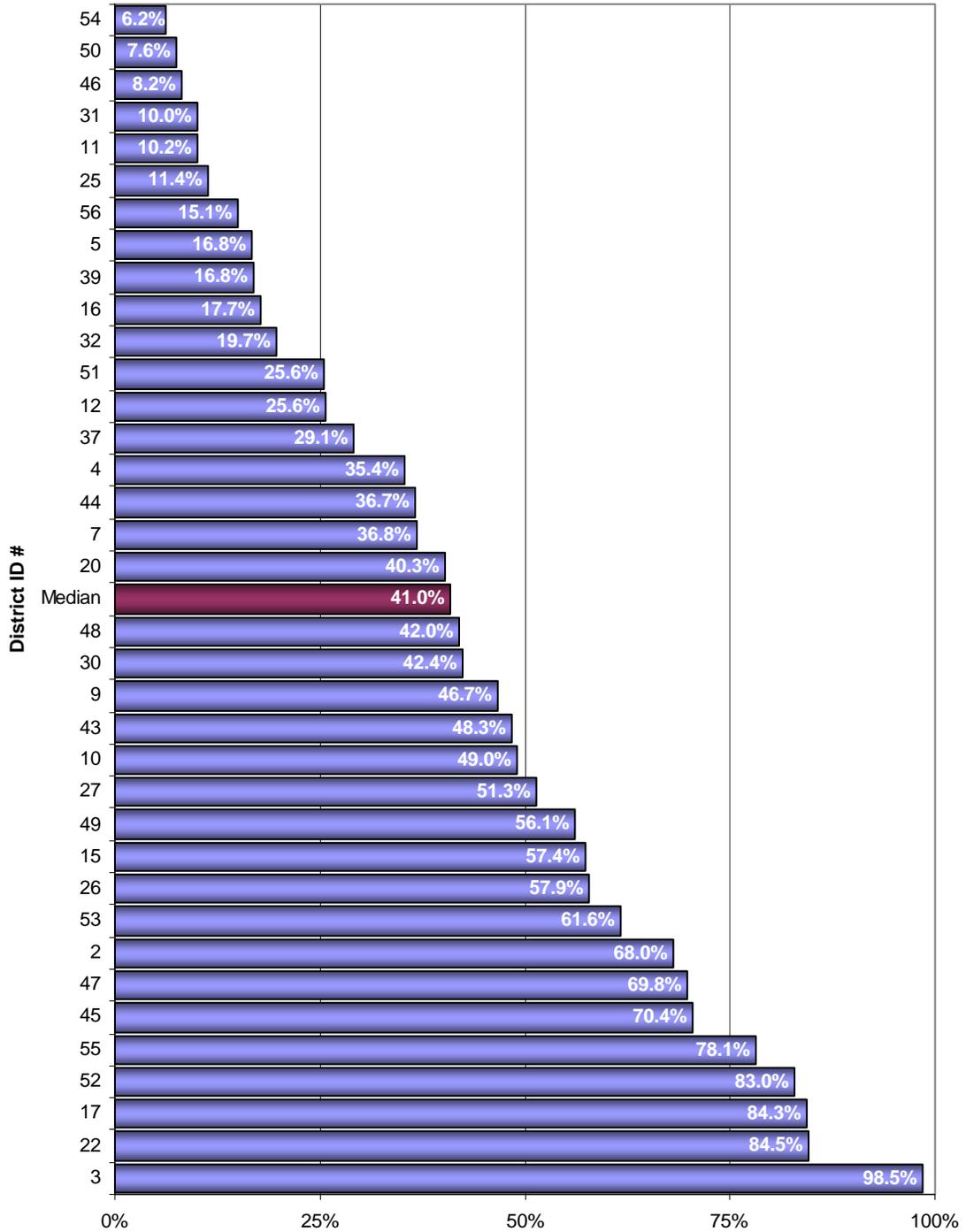
Factors that influence this measure

- The local history of busing including the desegregation requirements
- State regulations
- Local policies such as those related to instructional program support
- Local geography
- Availability of public transit
- Student assignment plan
- Local community priorities
- Transportation mode, e.g., if a district utilizes public transportation to service some of its students eligible for service

Analysis of data

- The calculation used the following data points: total number of scheduled riders on a daily basis on yellow school buses *divided* by district enrollment from the general survey
- 36 districts provided reliable/valid responses to these data points
- Low = 6.2 percent, High = 98.5 percent, Median = 41.0 percent
- Smaller districts tend to provide services for a greater percentage of students.

Students Receiving Transportation Services



Transportation – Routes per Bus

Why this measure is important

The measure provides a means by which school districts can help control their transportation costs. The cost of a yellow bus transportation program with home-to-school service is ultimately driven by the number of buses required. The number of buses governs the number of bus drivers, bus attendants, mechanics, and bus yards—all cost centers. The most efficient way to control the costs of a transportation program is to use each bus for multiple trips. This has the effect of lowering the "per student" cost of the program because the fixed cost of each bus is spread over more students.

Factors that influence this measure

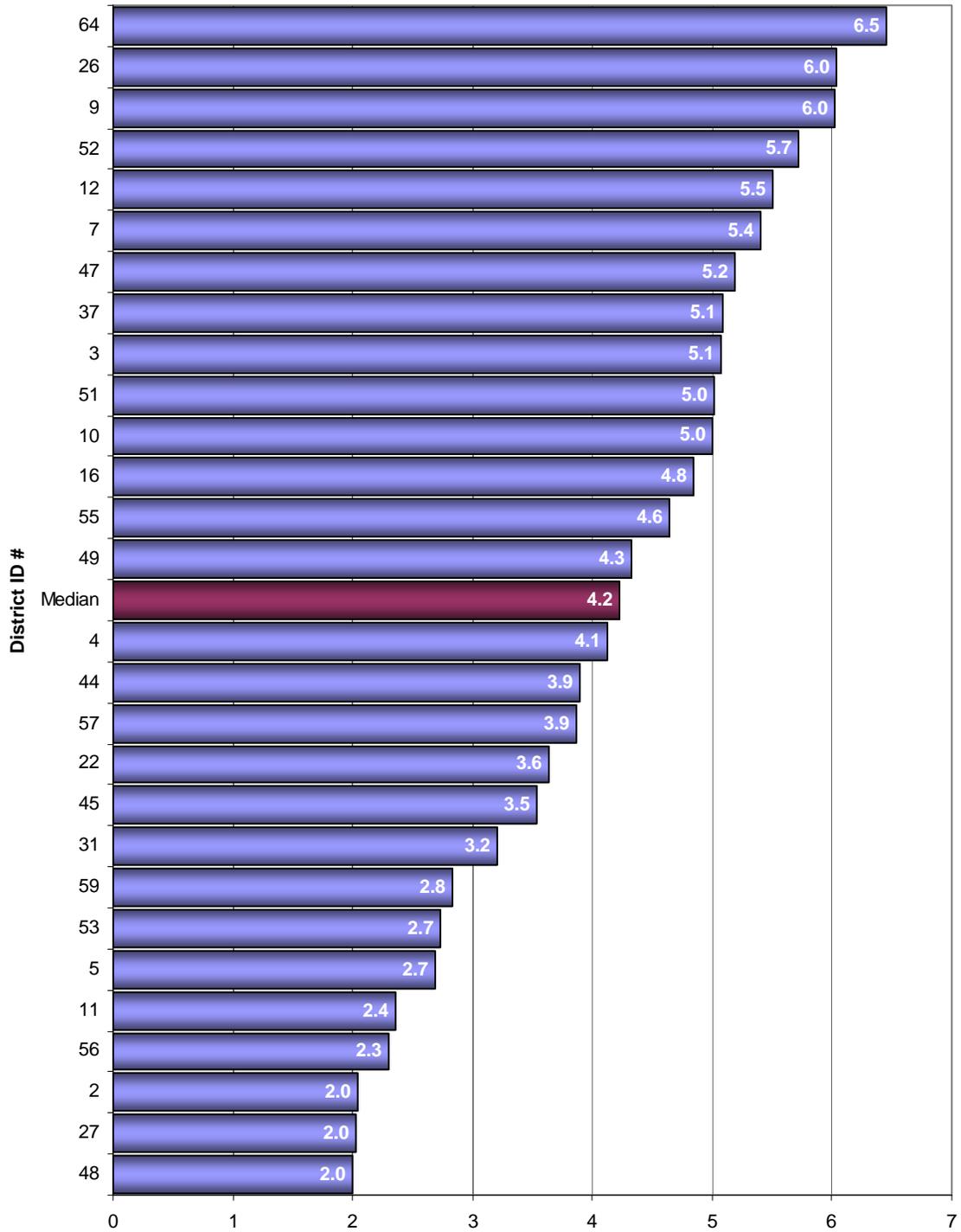
- Bell schedules that determine the number of routes that can be assigned to each bus
- The geography of the district
- Student assignment plans

Analysis of data

- The calculation used the following data points: total number of scheduled routes for the basic home-to-school yellow bus transportation program *divided* by the number of daily buses scheduled for the basic home-to-school transportation program
- 28 districts provided reliable/valid responses to these data points
- High = 6.5, Low = 2.0, Median = 4.2
- The eight districts with the fewest routes were from the South and West, although the South and West were also represented at or near the top
- There is no industry-standard definition of “route” or “run” even though it was defined in the survey question
- Data indicating usage of less than two trips per day (which would be achieved by running one trip each morning and one trip each afternoon) was not reported.

Managing for Results in America's Great City Schools

Routes per Bus



Transportation – Scheduled Students per Bus

Why this measure is important

This basic measurement provides a good baseline on the efficiency of a transportation program. The number of buses used affects most of the costs of a transportation program (drivers, mechanics, capital investment, facilities, insurance, etc.). One method to lower the cost of transportation in a district is to use each bus to transport more than one group of students each day.

Factors that influence this measure

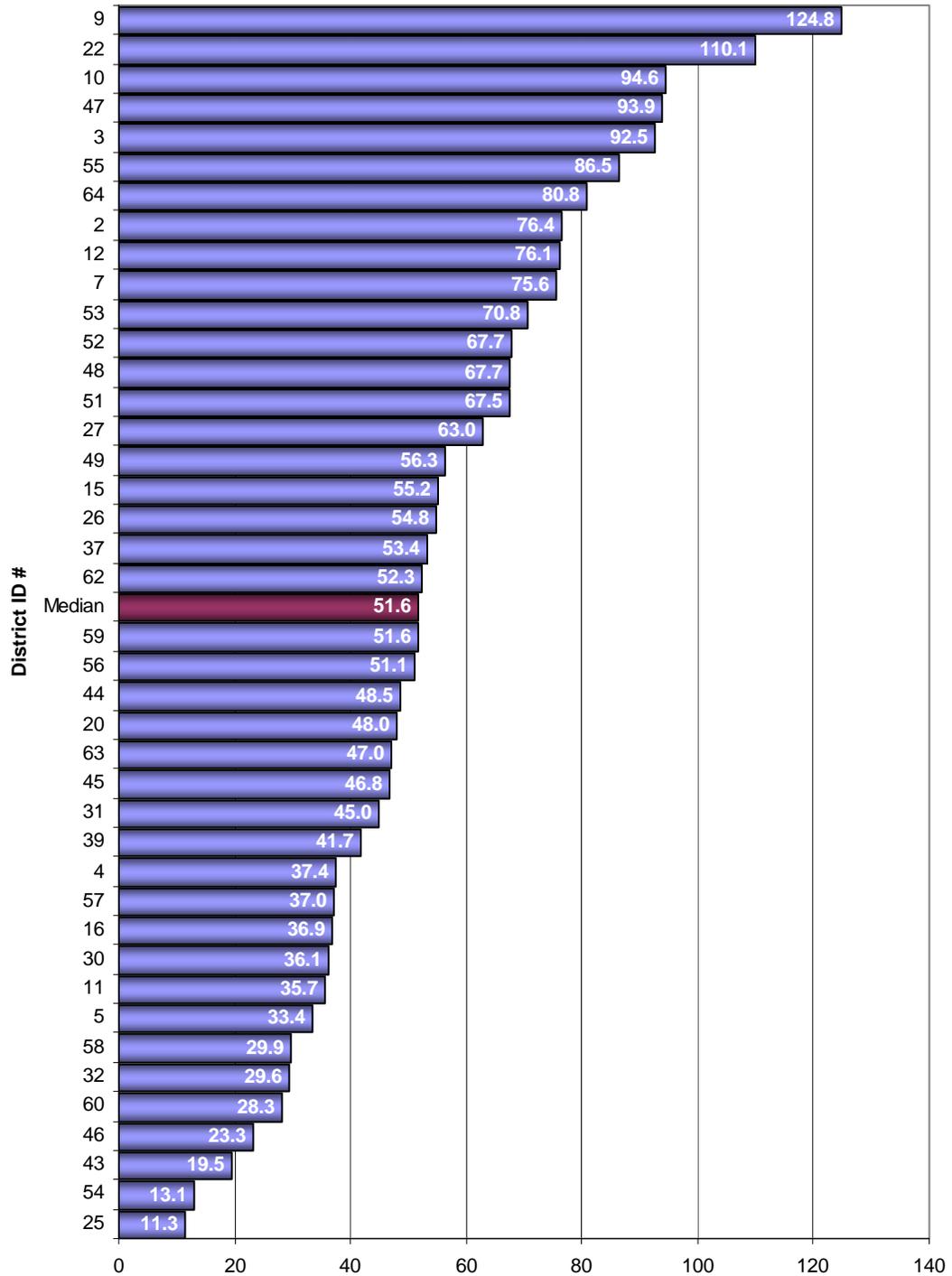
- Bell schedules that affect the number of students that can be assigned to each bus
- Efficiency of the routing plan that allows the multiple use of buses during each morning or afternoon segment of service
- Student assignment plans and other enrollment considerations

Analysis of data

- The calculation used the following data points: total number of scheduled riders on a daily basis on yellow school buses *divided* by the number of daily buses scheduled for the basic home-to-school transportation program
- 41 districts provided reliable/valid responses to these data points
- High = 124.8, Low = 11.3, Median = 51.6
- There was a large cluster of districts within close proximity to the median
- Of the districts responding from the Northeast, five were below the median and four were in the bottom eight.

Managing for Results in America's Great City Schools

Scheduled Students per Bus



Transportation – District-Operated Fleet

Why this measure is important

The indicator is a measure of the efficiency (e.g., reduced costs and increased savings) and effectiveness (e.g., levels of responsiveness to programmatic needs) of having non-core operations in-house or outsourced.

Factors that influence this measure

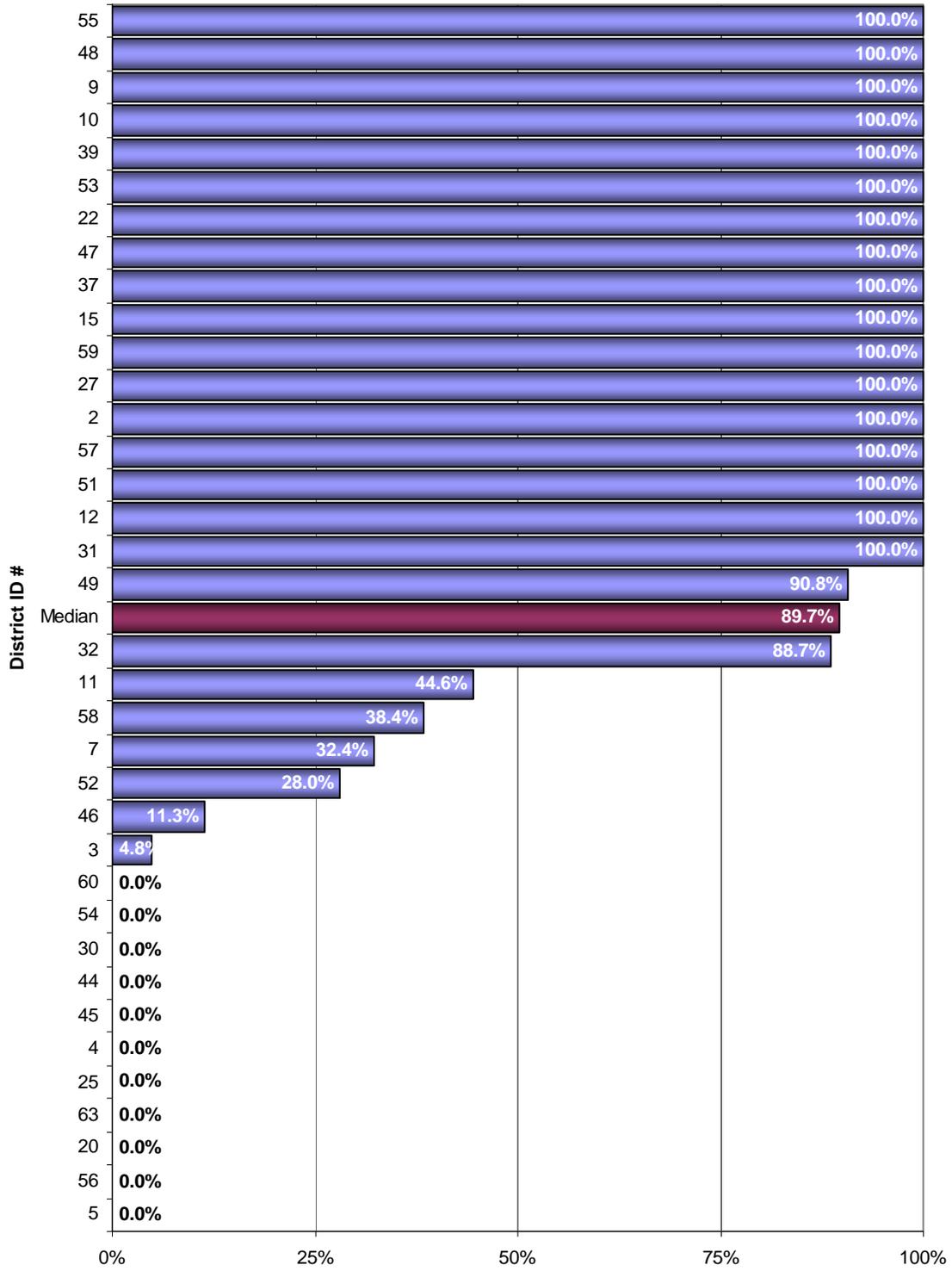
- Evolution or history of in-house or outsourced programming
- The availability of competition, land, and drivers

Analysis of data

- The calculation used the following data points: total number of district buses for the basic home-to-school transportation program *divided* by total number of district plus contract buses for the basic home-to-school transportation program
- 36 districts provided reliable/valid responses to these data points
- High = 100 percent, Low = 0 percent, Median = 89.7 percent
- 12 of the 16 responding districts from the South are 100 percent; three of four of the responding districts from the Northeast are 100 percent contract
- 17 districts (47 percent) run 100 percent district-operated fleets
- 11 districts (31 percent) do not operate any of their own buses
- 8 districts (22 percent) run a combination of district- operated and contracted buses
- 78 percent of responding districts are either 100 percent district or 100 percent contract.

Managing for Results in America's Great City Schools

District-Operated Fleet



Transportation – Cost per District-operated Bus

Why this measure is important

This is a measure of the overall cost-efficiency of a district's transportation program.

Factors that influence this measure

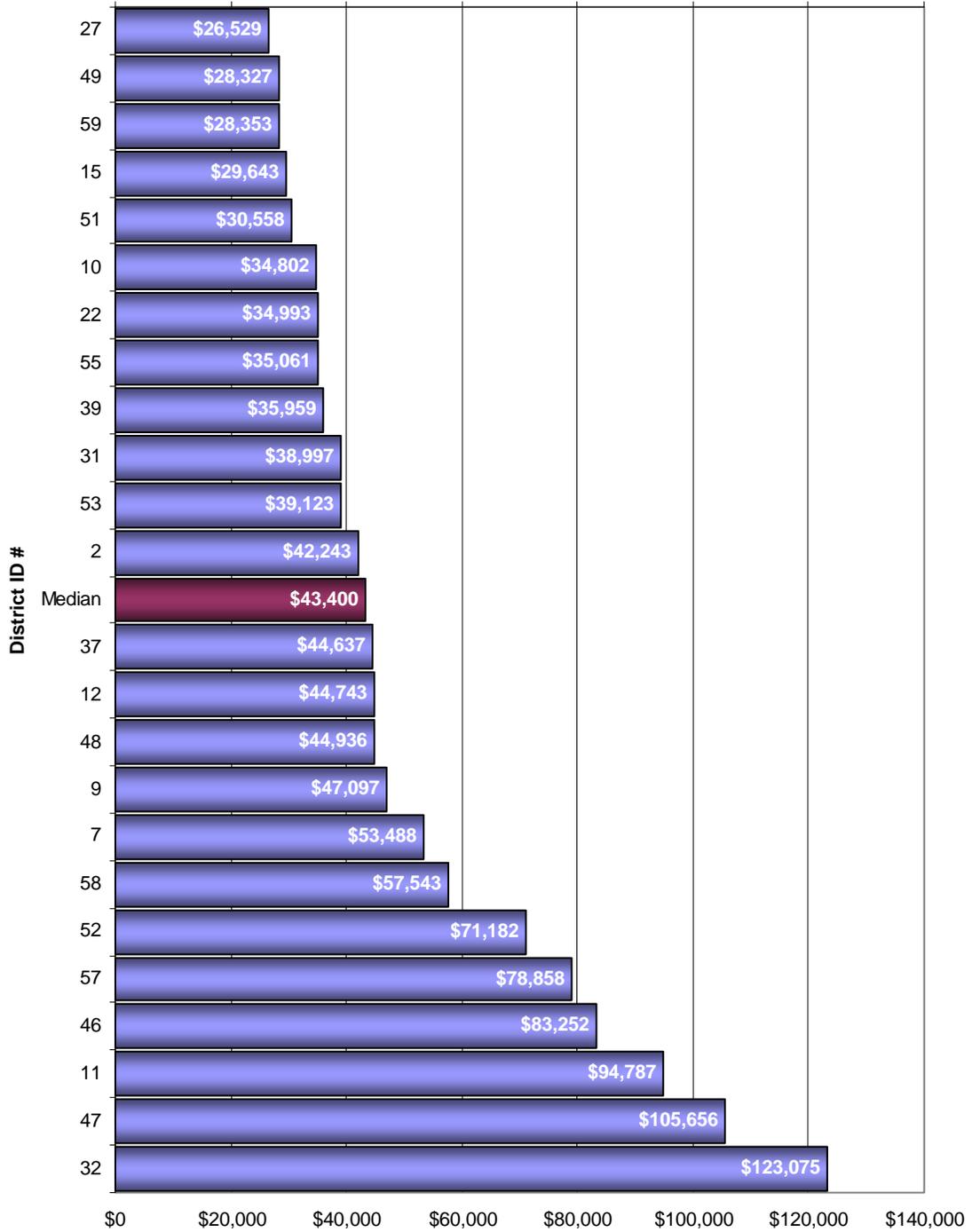
- Local cost of living
- Competitiveness among contractors and contractor-operated and district-operated programs

Analysis of data

- The calculation used the following data points: total number of district buses for the basic home-to-school transportation program *divided* by total expenditures for the basic home-to-school transportation program, fuel for district-operated buses, and overhead for district-operated buses
- 24 districts provided reliable/valid responses to these data points
- Low = \$26,529, High = \$123,075, Median = \$43,400.

Managing for Results in America's Great City Schools

Cost per District-Operated Bus



Transportation – Drivers per Bus

Why this measure is important

The measure examines the ratio of spare drivers used and/or are necessary for transportation operations to cover their daily runs and provide appropriate levels of service.

Factors that influence this measure

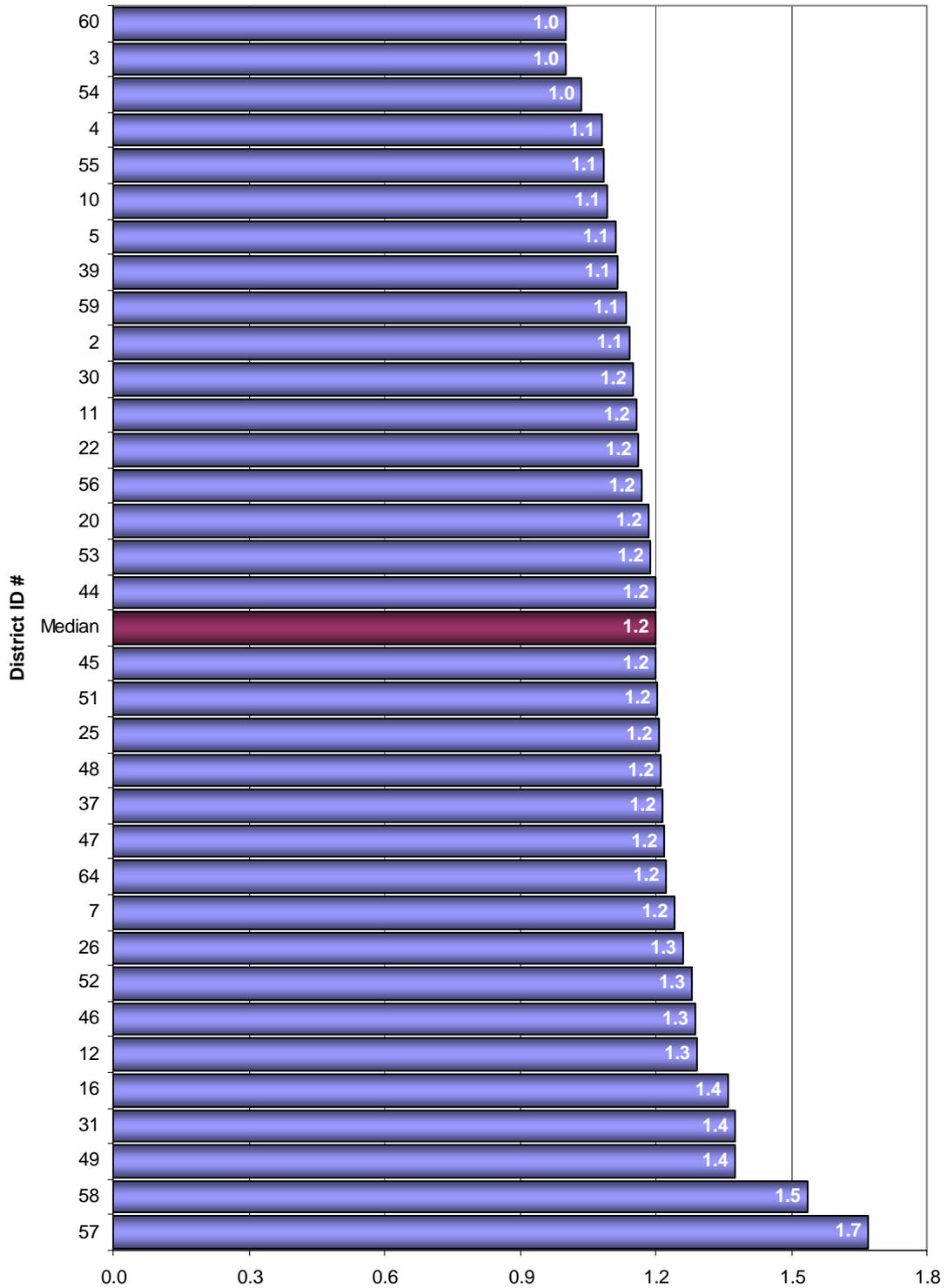
- The total number of bus drivers and substitutes that are scheduled for service for basic home-to-school transportation
- The average number of drivers absent per day for any reason

Analysis of data

- The calculation used the following data points: total number of regular district and contract drivers, substitute district and contract drivers, and district and contract drivers *divided* by the total number of district-operated and contract-operated general and special education buses
- 34 districts provided reliable/valid responses to these data points
- Low = 1.0, High = 1.7, Median = 1.2
- This statistic indicates that the degree of absenteeism among bus drivers, short term and long term, requiring districts to expend greater resources for adequate coverage.

Managing for Results in America's Great City Schools

Drivers per Bus



Transportation – Students with Home Pick-Up

Why this measure is important

There are greater costs to a district for providing home pick-ups because buses travel greater distances and expend more time than is required for corner pick-ups. This decision to do home pickups also adds to the length of bus rides for any individual child. This decision is balanced against services for a district's special needs population.

Factors that influence this measure

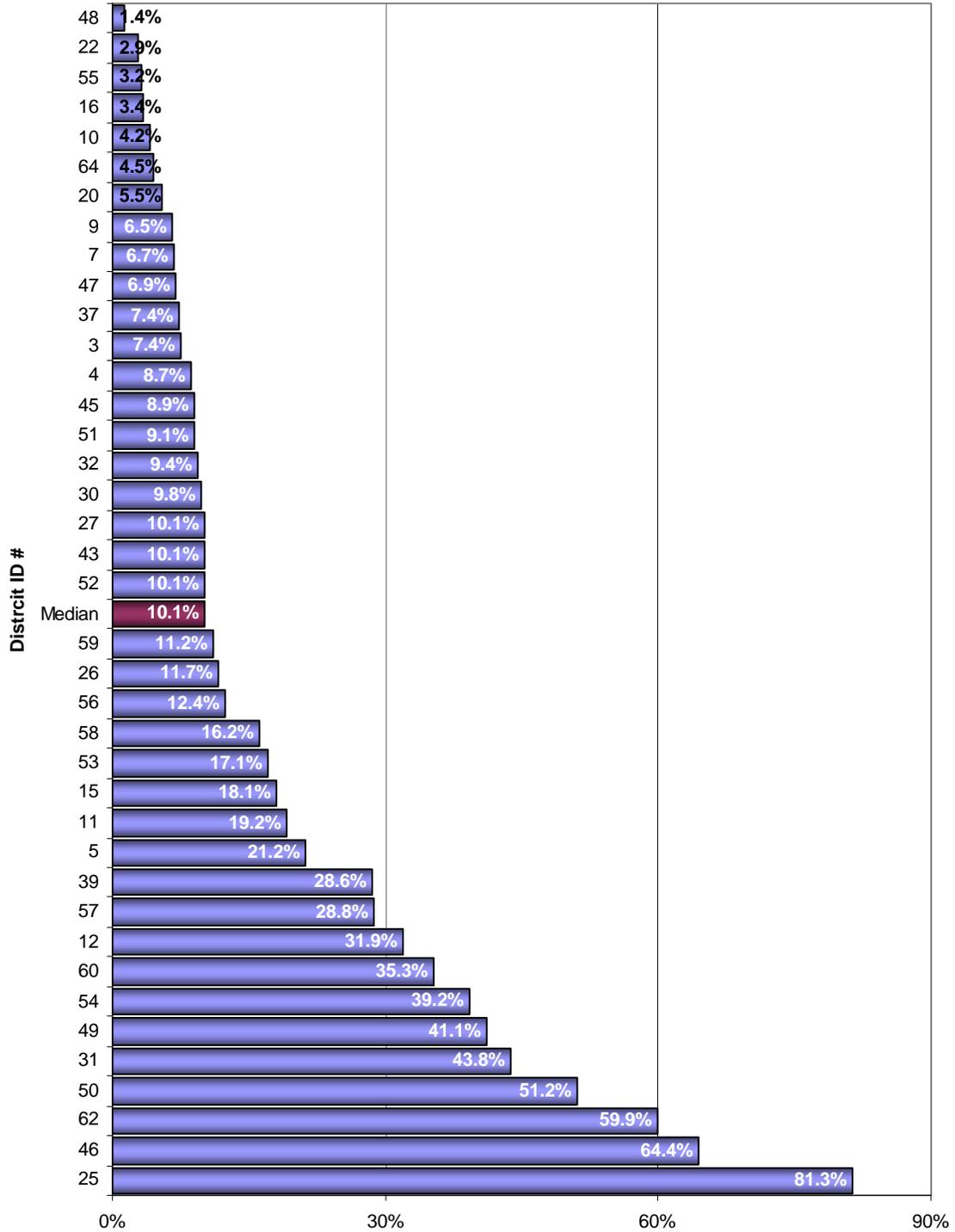
- Special education service population.
- Policies for transporting other students such as a district's youngest students, siblings, etc.

Analysis of data

- The calculation used the following data points: total number of students picked up at home *divided* by number of scheduled riders on a daily basis on yellow school buses
- 39 districts provided reliable/valid responses to these data points
- Low =1.4 percent, High = 81.3 percent, Median = 10.1 percent
- There was a significant cluster of districts within range of the median
- A quarter of the districts reporting are providing this service to a much larger percentage of students.

Managing for Results in America's Great City Schools

Students with Home Pick-Up



Transportation – Average Age of Fleet

Why this measure is important

A younger fleet will result in greater reliability and service levels, and fewer buses in repair. Capital expenditures and on-going maintenance costs are driven by fleet replacement decisions. Younger fleets require greater capital expenditures but incur reduced maintenance costs since many repairs are covered under warranty. Older fleets require greater expenditures on the maintenance side but lower costs for capital expenses. Careful life-cycle cost analyses will balance the two factors.

Factors that influence this measure

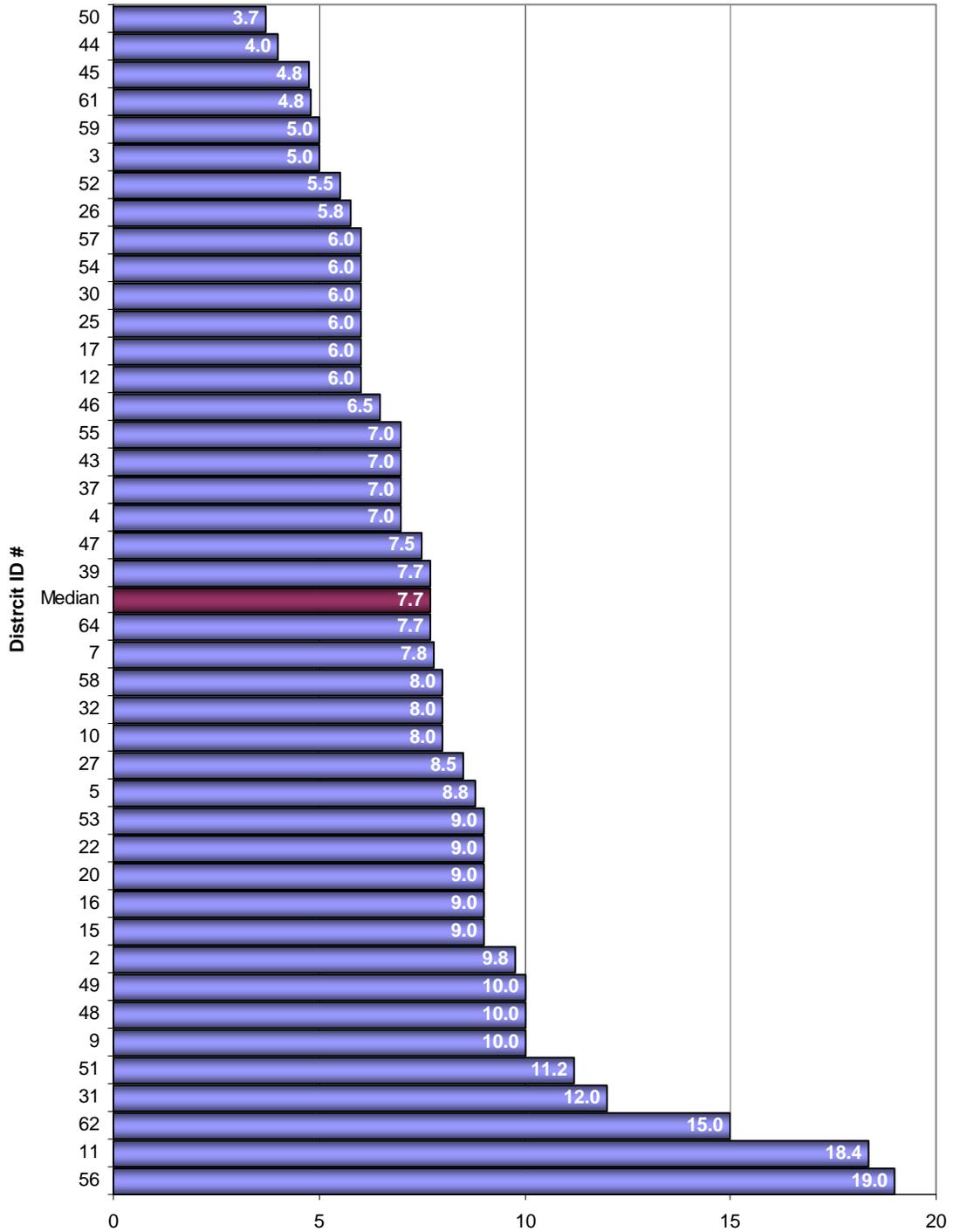
- A district's fiscal health
- Environmental factors also play a role in this measure since some districts operate in climates that are less conducive to bus longevity
- Specifications for buses can influence the "life expectancy"

Analysis of data

- The calculation used the following data points: average age of fleet
- 42 districts provided reliable/valid responses to this data point
- Low = 3.7, High = 19, Median = 7.7 years
- The three districts with the highest average age of their fleet operate in southern California
- A large number of districts in the Northeast have bus fleets with average ages less than the median level.

Managing for Results in America's Great City Schools

Average Age of Fleet



FOOD SERVICES

Food Services - Participation Rate

Why this measure is important

This measure gives an indication of student interest in the school meal program regardless of income, and the return rate of free/reduced applications. Results may correlate with school attendance, alertness, health, behavior, and academic success.

Factors that influence this measure

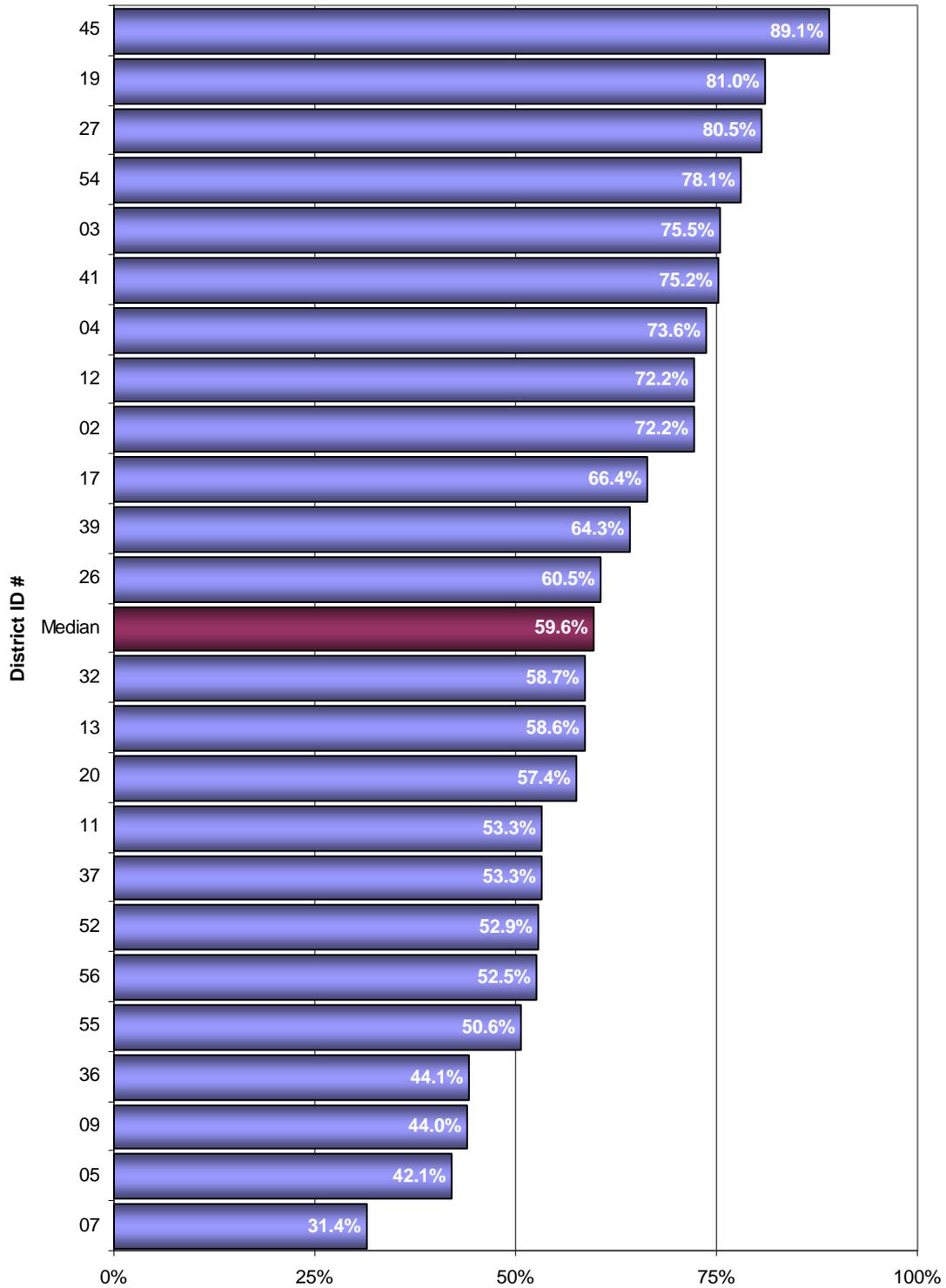
- Food quality and preparation
- Open or closed campuses
- Menu offerings
- The ability of sites to forgo applications if certain conditions are met
- Free and reduced meal eligibility percentages
- Attractiveness of dining areas
- Past cafeteria experiences

Analysis of data

- The calculation used the following data points: average daily number of students that eat lunch pre-k to 12th grade *divided* by district average daily attendance
- 24 districts provided reliable/valid responses to these data points
- High participation = 89.1 percent, Low participation = 31.4 percent, Median participation = 59.6 percent
- Most of the districts below the median are in the South and West; most of the districts above the median are in the Northeast and Midwest.
- There is a slight tendency for larger districts to fall below the median.

Managing for Results in America's Great City Schools

Participation Rate



Food Services – Breakfast Participation Rate

Why this measure is important

Breakfast participation rates contribute to the financial solvency of the food services program, reduce dependence on the general fund, and may correlate to school attendance, alertness, health, behavior, and academic success.

Factors that influence this measure

- The Universal School Breakfast program
- Quality and variety of menu offerings
- Space and time provided
- Attitude of school staff

Analysis of data

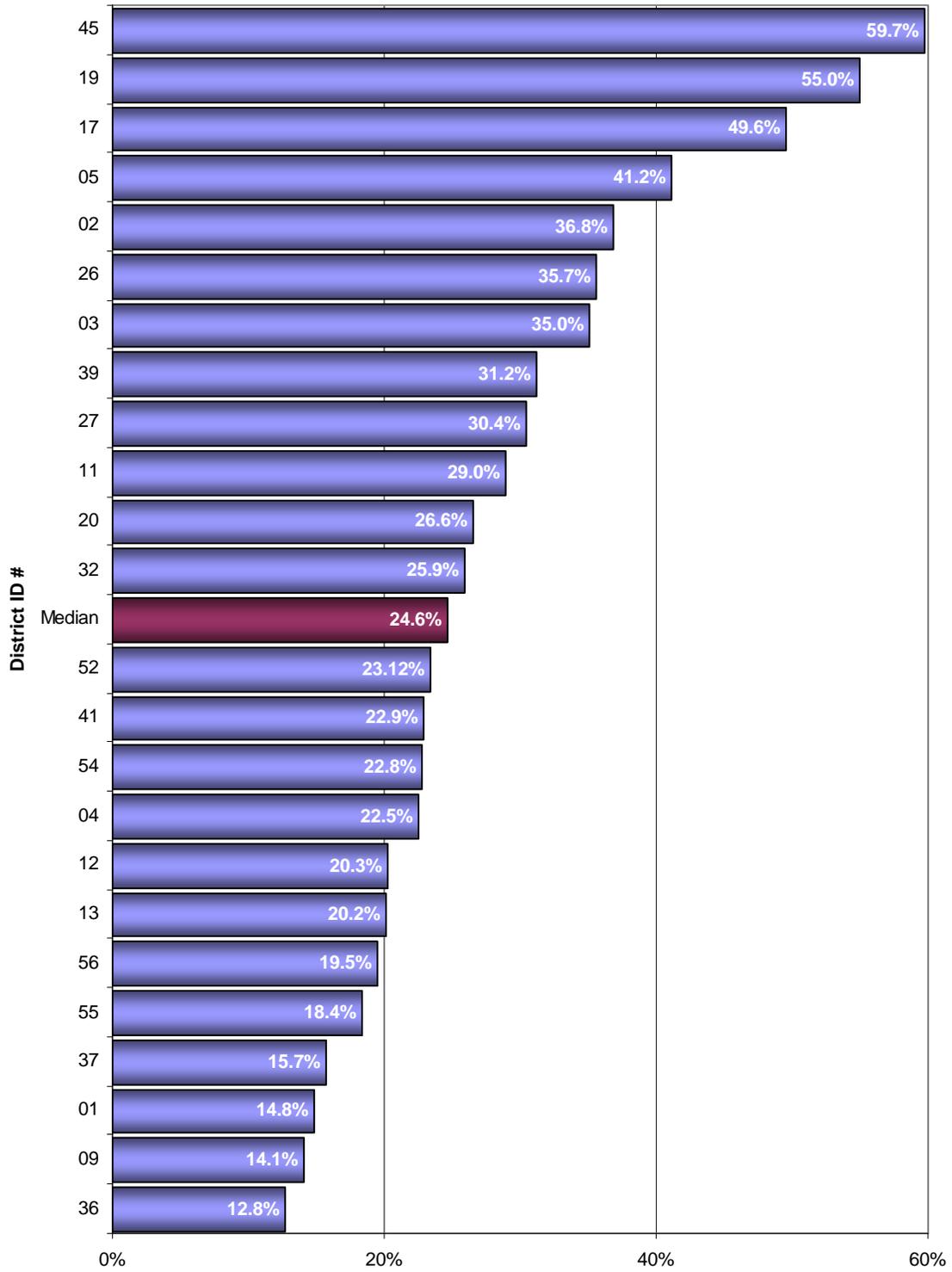
- The calculation used the following data points: total average number of students eating breakfast in pre-k to 12th grades *divided* by average daily attendance from general survey
- 24 districts provided reliable/valid responses to these data points
- High participation = 59.7 percent, Low participation = 12.8 percent, the Median participation = 24.6 percent
- Seven districts with participation higher than the median utilized non-cafeteria settings, such as classrooms, for breakfast service.

Comment

- The Universal School Breakfast may result in higher breakfast participation rates
- Schools in districts with high rates of free and reduced price meals make universal meals cost-effective, while districts with low rate incur costs.

Managing for Results in America's Great City Schools

Breakfast Participaton Rate



Food Services – Breakfast Participation in Non-Cafeteria Settings

Why this measure is important

Breakfast participation rates, even when provided in non-cafeteria settings, contribute to the financial solvency of the food services program, reduce dependence on the general fund, and may correlate to school attendance, alertness, health, behavior, and academic success.

Factors that influence this measure

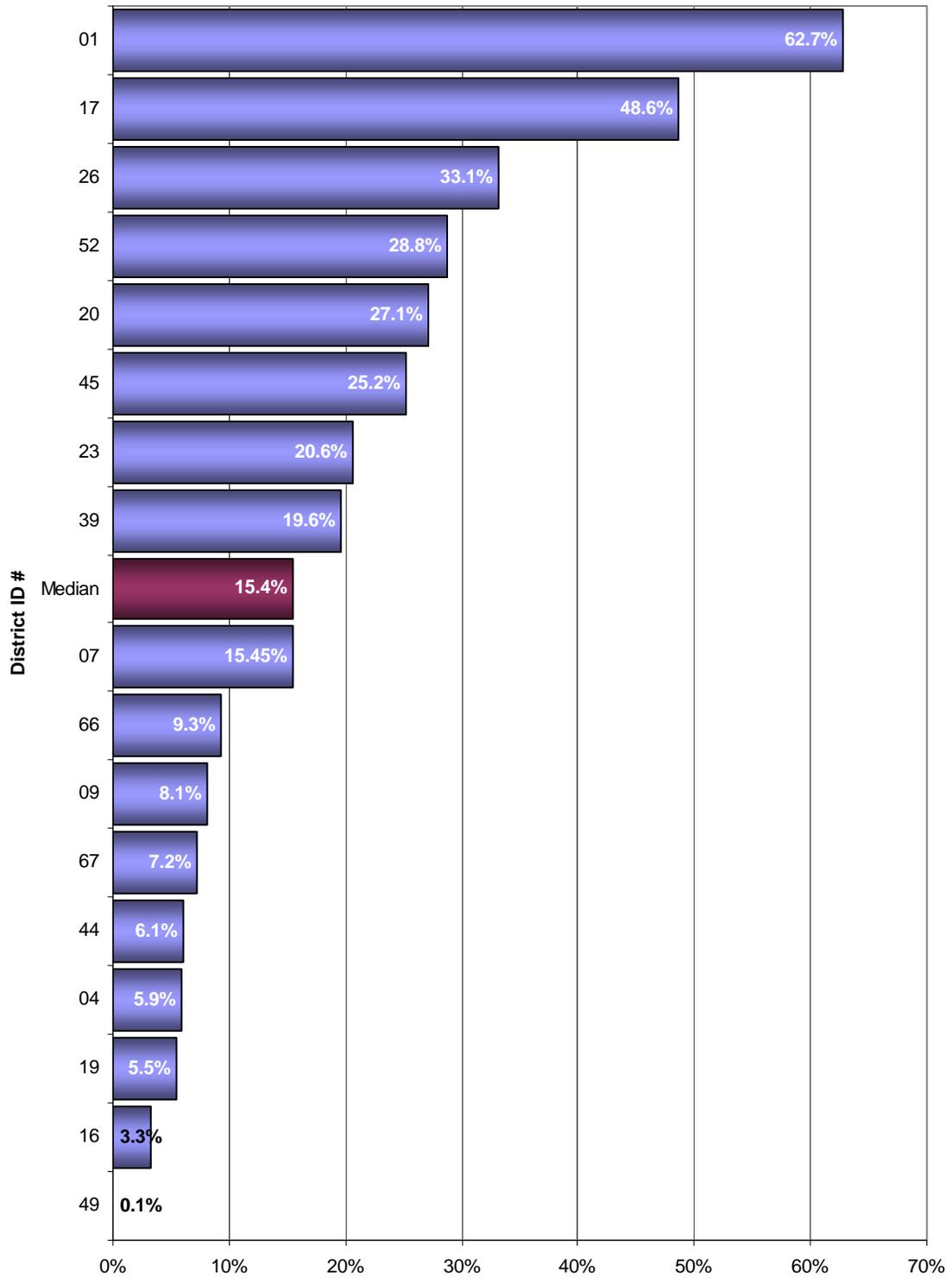
- School board and administration support
- Teachers required to be in the building “before bell time”
- Schools allowing classroom time for breakfast
- Bus arrival times
- The flexibility and approach of staff, including the food service and custodial staff, faculty and administration

Analysis of data

- The calculation used the following data points: total number of students with access to breakfast served in the classroom, plus served outdoors, plus served on the school bus, plus during a “breakfast break” after classes begin and before lunch (for districts that provide these options) *divided by* total average number of breakfasts served daily to students in pre-k to 12th grade
- 17 districts provided reliable/valid responses to these data points
- High participation = 62.7 percent, Low participation = 0.1 percent, Median participation = 15.4 percent
- 100 percent of districts from the Northeast are above the median, 80 percent of the districts from the South are below the median
- Larger districts tended to fall below the median.

Managing for Results in America's Great City Schools

Breakfast Participation in Non-Cafeteria Settings



Food Services – Secondary Lunch Participation

Why this measure is important

Secondary lunch participation rates contribute to the financial solvency of the food services program, reduce dependence on the general fund, and may correlate to school attendance, alertness, health, behavior, and academic success.

Factors that influence this measure

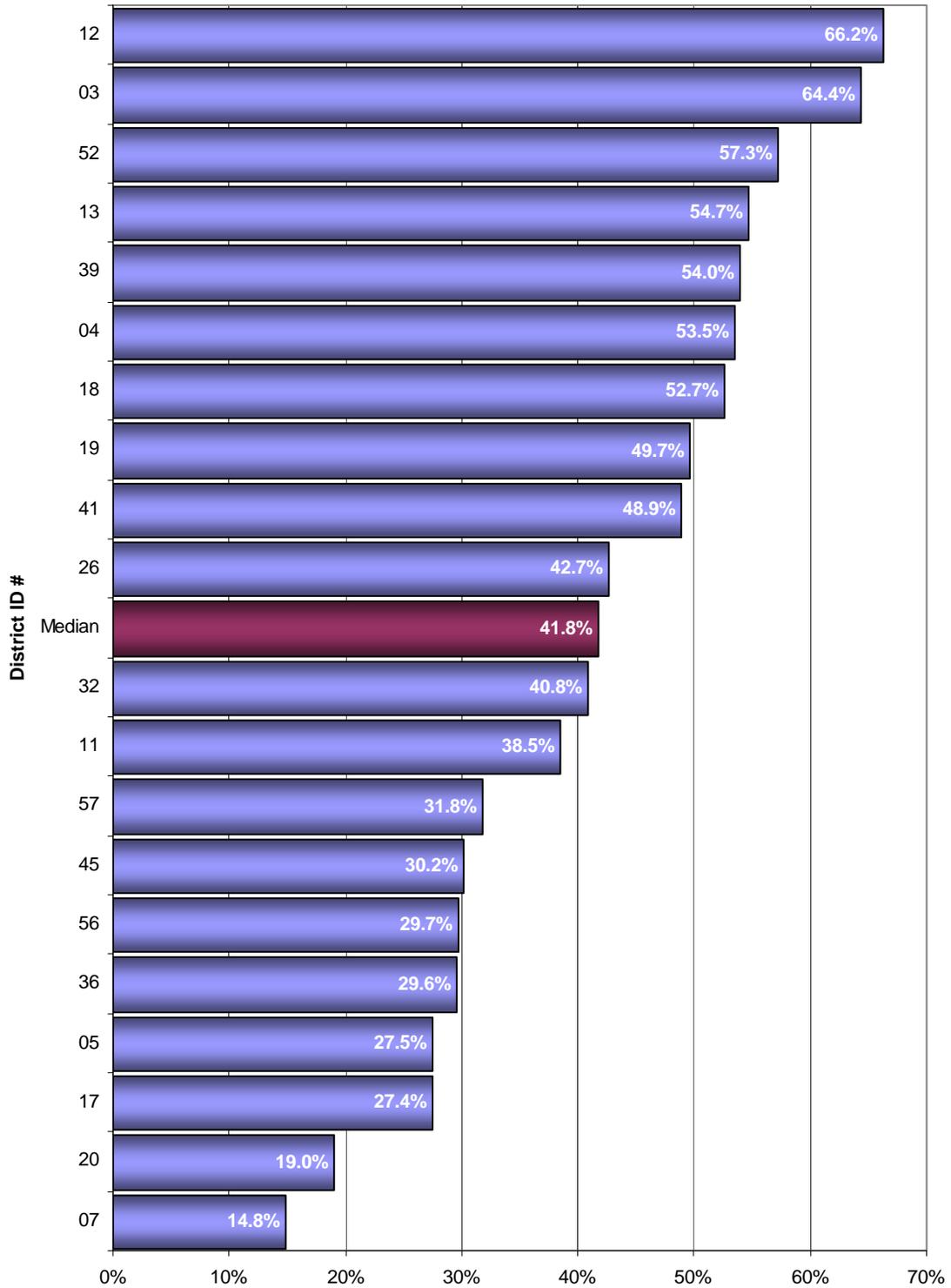
- Amount of time allowed for lunch
- The variety and quality of food
- Attitude of cafeteria staff
- Eating space
- Percentage of students approved for free and reduced price meals
- Open-campus policies and proximity to area competition
- School location
- Cafeteria experiences

Analysis of data

- The calculation used the following data points: total average number of students having lunch in 7th to 12th grade *divided* by average daily attendance from the general survey
- 20 districts provided reliable/valid responses to these data points
- High participation = 66.2 percent, Low participation = 14.8 percent, Median participation = 41.8 percent
- Larger districts tend to fall below the median
- 75 percent of the open-campus districts reported participation rates below 30 percent.

Managing for Results in America's Great City Schools

Secondary Lunch Participation Rate



Food Services – ServSafe or Equivalent Certified Staff per Site

Why this measure is important

Children are at greater risk than adults for serious food-borne illnesses that result from improper food handling and poorly trained staff. A district should have one certified staff per site to comply with requirements and to minimize risk and potential exposure.

Factors that influence this measure

- State laws and/or local regulations will determine type of site
- Commitment to food safety
- Financial constraints
- Program prioritization.

Analysis of data

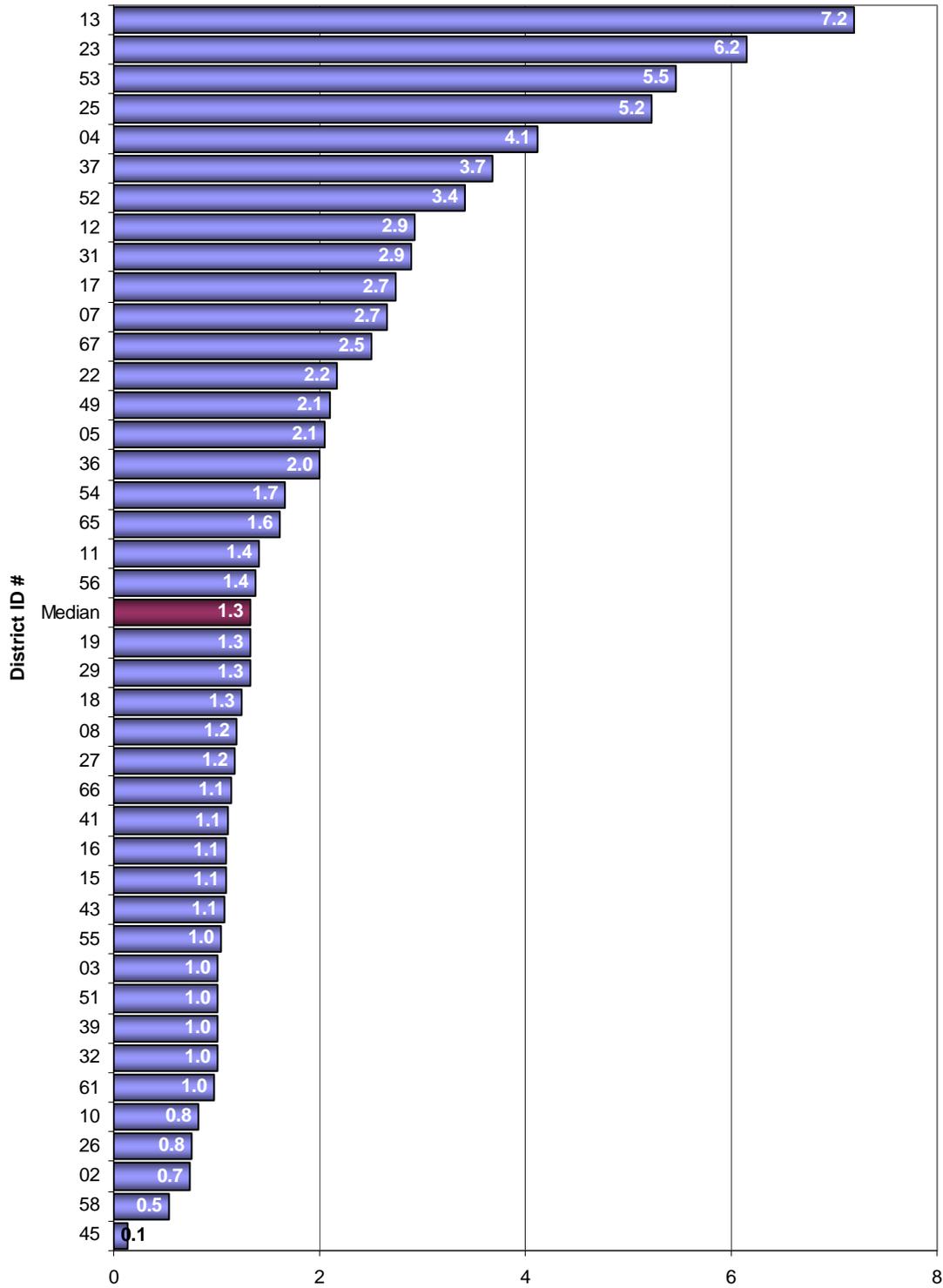
- The calculation used the following data points: The number of ServSafe or equivalent certified staff *divided* by the number of sites serving meals
- 41 districts provided reliable/valid responses to these data points
- High number of staff certified = 7.2, Low number of staff certified = 0.1, Median = 1.3 number of staff certified

Comment

- “Equivalent certified” needs to be defined in future data collection to insure it is comparable with ServSafe certification.

Managing for Results in America's Great City Schools

ServSafe or Equivalent Certified Staff per Site



Food Services – Total Costs per Revenue

Why this measure is important

This measure gives an indication of the direct and indirect costs of the food service program, including management-company fees.

Factors that influence this measure

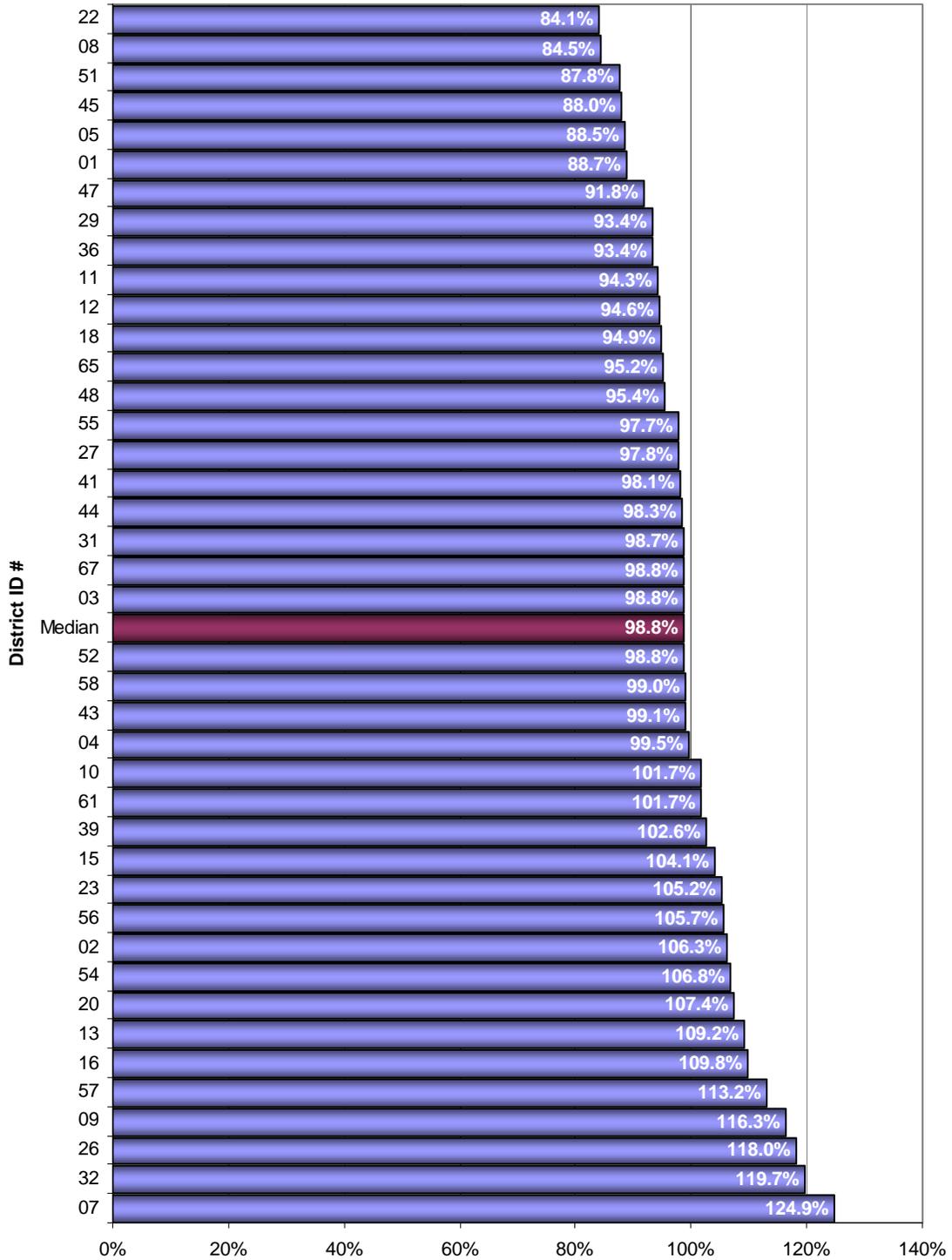
- “Chargebacks” to food service program, including energy, custodial, non-food service administrative staff, trash removal, etc.)
- Direct costs, including food, labor, supplies, equipment, etc.
- Meal quality
- Marketing
- Leadership expertise

Analysis of data

- The calculation used the following data points: total of all direct and indirect costs *divided* by total revenue
- 41 districts proved reliable/valid responses to these data points
- Low = 84.1 percent, High = 124.9 percent, Median = 98.8 percent
- 39 percent of districts report costs over 100 percent of revenue
- Southern districts tended to have lower total costs than districts from other regions. Seventy-five percent of Northeast districts that reported data have higher costs.

Managing for Results in America's Great City Schools

Total Costs per Revenue



Food Services – Direct Costs per Revenue

Why this measure is important

This measure gives an indication of the costs that are directly controlled by and attributed to the Food Services Departments, including food cost, labor costs, supplies, equipment purchased through food service funds, commodities, benefits, uniforms, fuel, etc. Direct costs need to be managed in order to have the resources to meet and/or exceed dietary guidelines, pay for the technology and equipment, and maintain a positive fund balance for cash flow and emergencies.

Factors that influence this measure

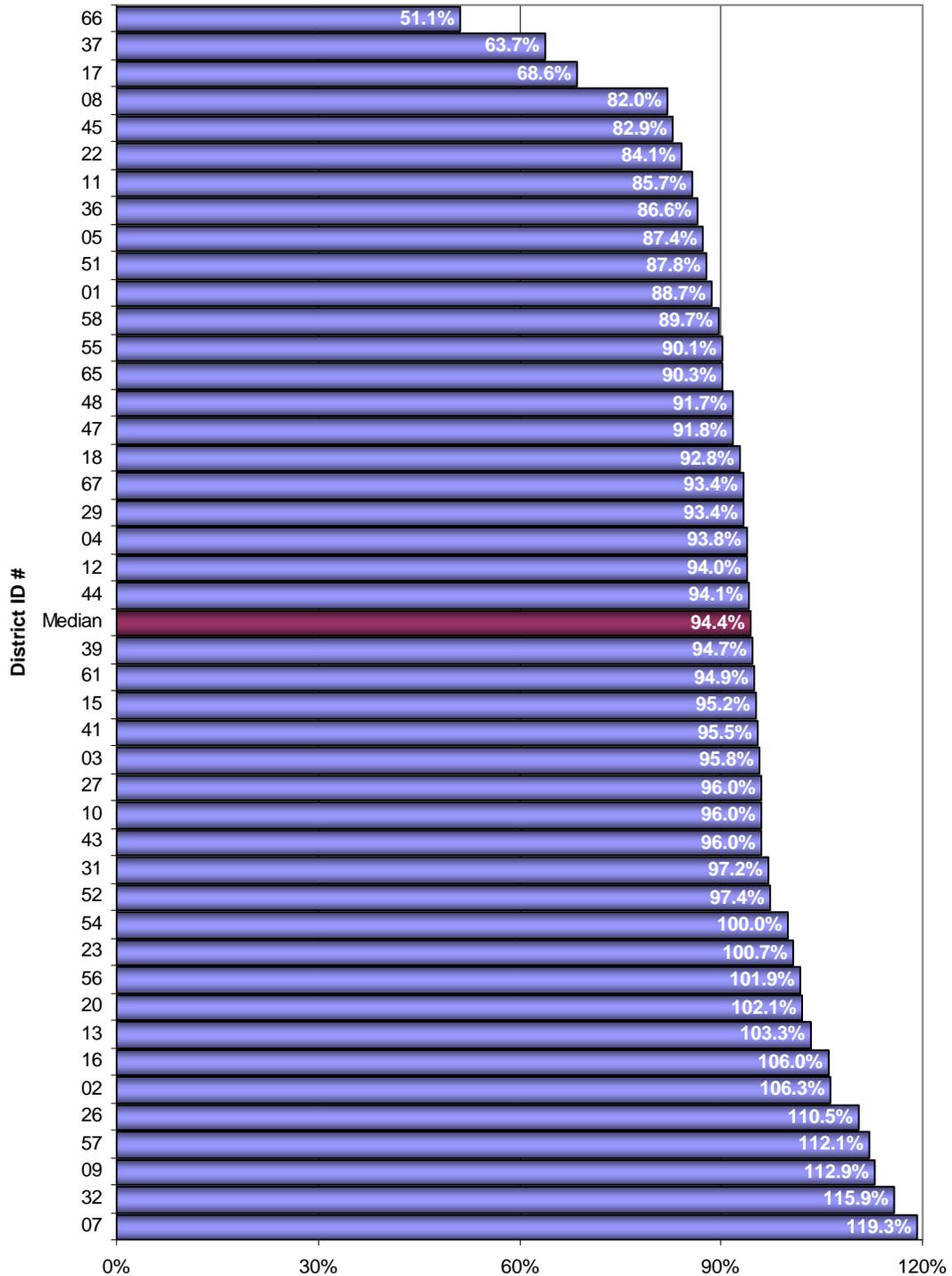
- Food and labor costs
- Technical expertise of leadership

Analysis of data

- The calculation used the following data points: Total of all direct costs *divided* by total revenue from the program
- 44 districts provided reliable/valid responses to these data points
- Low = 51.1 percent, High = 119.3 percent, Median = 94.4 percent
- Most districts are close to the median, but approximately 25 percent of the districts spend more than they bring in.

Managing for Results in America's Great City Schools

Direct Costs per Revenue



Food Services – Indirect Costs per Revenue

Why this measure is important

This measure gives an indication of the level and types of expenses that finance departments normally charge back to the food service departments, including custodial, trash removal, management fees, district-charged administration fees, utilities, and cafeteria tables. If the food service fund has high indirect costs, it can result in lower quality of service and food to break even. And poor quality results in lower participation rates and poorer nutrition. High indirect costs could also result in inadequate resources for replacing and upgrading food service equipment and technology.

Factors that influence this measure

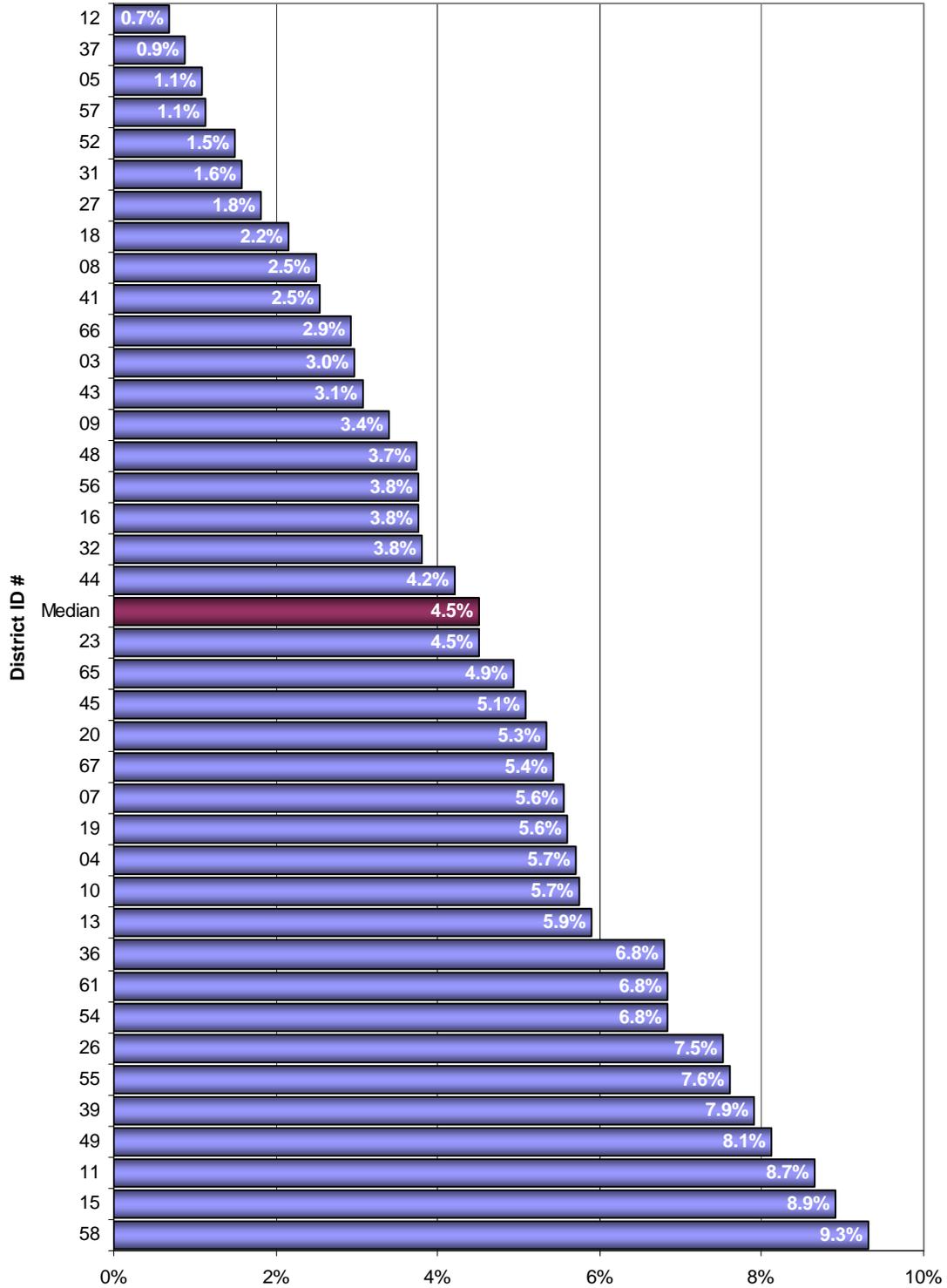
- Degree to which food service is seen as a revenue-generating mechanism that adds to the general fund
- Formulas for allowable indirect chargebacks to the general fund

Analysis of data

- The calculation used the following data points: total of all indirect costs *divided by* total revenue
- 39 districts provided reliable/valid responses to these data points
- Low = 0.7 percent, High = 9.3 percent, Median = 4.5 percent
- Most districts with indirect costs that are no more than 3.4 percent do not always charge food service fees in all categories (chargeback fees, custodial, trash removal, and/or utility costs).

Managing for Results in America's Great City Schools

Indirect Costs per Revenue



Food Services – Equipment Costs per Revenue

Why this measure is important

This measure gives an indication of equipment costs, including “brick and mortar” and design fees for kitchen/cafeteria remodeling projects and equipment purchases (e.g., computer hardware, carts, refrigeration, vehicles, freezers, ovens, steamers, microwaves, etc.). Software, smallwares, cafeteria tables, or equipment purchased from the General Fund for Food Services are not included. In order for food services to stay on top of food safety, provide attractive serving lines, develop production efficiencies, produce high-quality food, and have the technology to drive participation and meal accountability, a food service department must allocate adequate resources to equipment purchases.

Factors that influence this measure

- Board and/or administrative support
- Technical expertise of leadership
- Processes that expedite projects/purchases through the system

Analysis of data

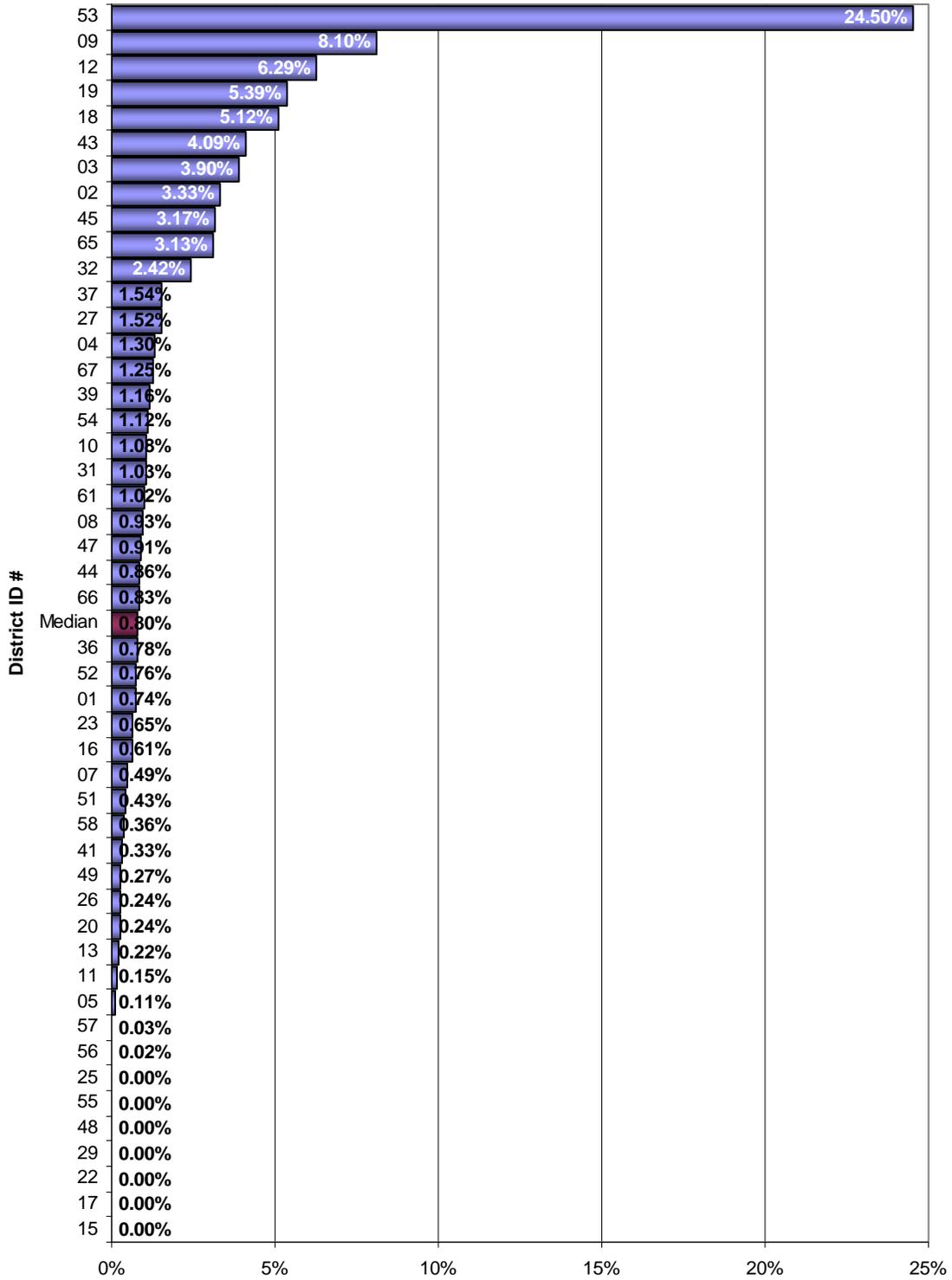
- The calculation used the following data points: total dollars spent from the food services budget for equipment *divided* by total revenue
- 48 districts provided reliable/valid responses to these data points
- High = 24.5 percent, Low = 0.0 percent, Median = 0.8 percent.

Comment

- Equipment costs may vary from year to year depending on fund balance, equipment needs, and district projects. There is a need to complete multi-year analysis to determine trends.

Managing for Results in America's Great City Schools

Equipment Costs per Revenue



Food Services – Sites Using Point-of-Sale (POS) to Upload Data

Why this measure is important

This measure gives an indication of the degree to which technology is used to manage the business, maintain accurate meal claims, and ensure confidentiality of student status. Districts that do not use computer-based POS technology may have inefficient manual processes for tracking student eligibility and for reporting meal counts. This lack of technology may result in inefficient use of staff resources, improper claiming of meals, and potential fraud and abuse. Food service departments with fully functioning student accountability software systems that integrate with district student data systems are able to ensure meals are properly claimed for reimbursement.

Factors that influence this measure

- Board and/or administrative support
- Technical expertise of leadership
- Financial constraints
- Technology infrastructure, including hardware and software

Analysis of Data

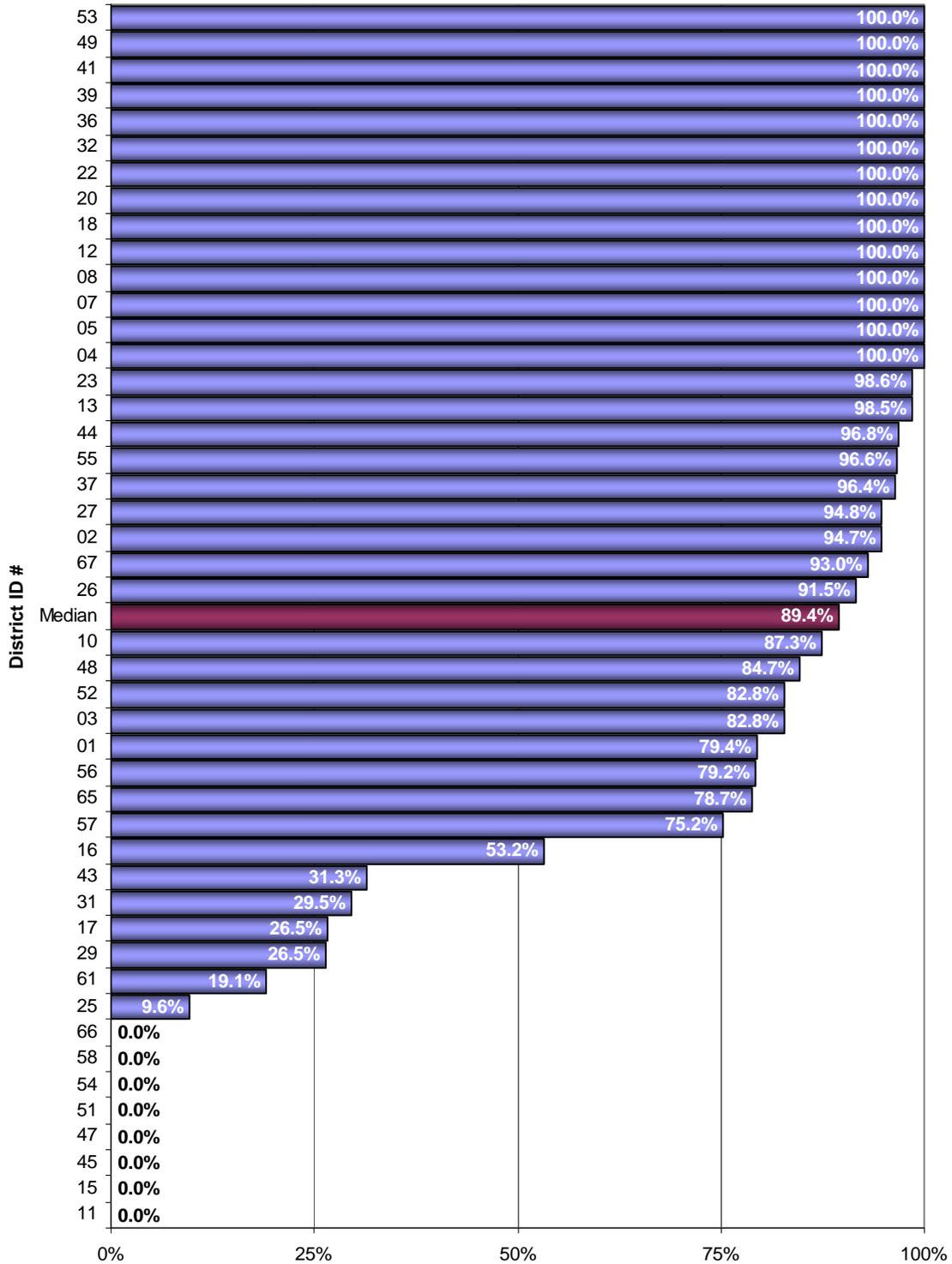
- The calculation used the following data points: number of sites that use point of sale technology that electronically upload data daily to the central office from the site *divided* by number of sites that serve free/reduced/paid meals to students
- 46 districts provided reliable/valid responses to these data points
- High = 100 percent, Low = 0 percent, Median = 89.4 percent
- Nine of the 14 districts with 100 percent of their sites using POS technology are in the South
- 88 percent of districts have a POS system.

Comment

- Data may be more meaningful in the future if it is based on students enrolled in sites using POS uploads.

Managing for Results in America's Great City Schools

Sites Using POS to Upload Data



MAINTENANCE & OPERATIONS

Maintenance & Operations – Custodial Workload

Why this measure is important

This measurement gives a good indication of the workload of each custodian. It allows districts to compare their operations with others and evaluate the relative efficiency of custodial employees. A low value could indicate that custodians may have additional assigned duties, compared with districts with high ratios. A higher number could also indicate a well-managed custodial program or that some housekeeping operations are assigned to other employee classifications.

Factors that influence this measure

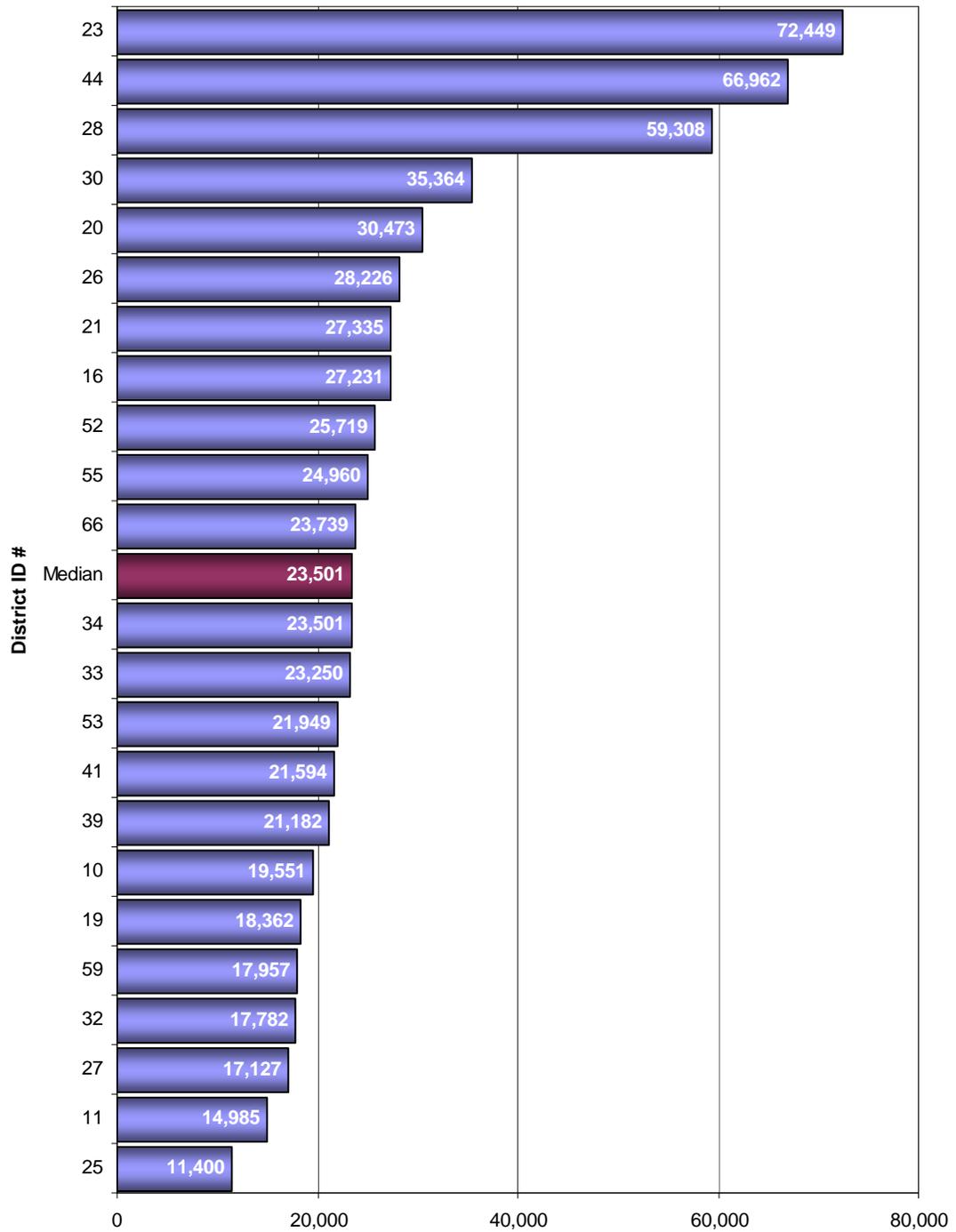
- Assigned duties for custodians
- Management effectiveness
- Labor agreements
- District budget

Analysis of data

- The data were calculated using the following data points: total square footage owned and leased *divided* by total number of custodians
- 23 districts provided reliable/valid responses to these data points
- High = 72,449, Low = 11,400, Median = 23,501
- The data do not yield any trends related to district size
- There is a wide variation among districts that may indicate a data collection issue or other variations.

Managing for Results in America's Great City Schools

Custodial Workload



Maintenance & Operations – Cost per Square Foot

Why this measure is important

This measure gives an indication of the relative cost for a district of operating and maintaining 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.

Factors that influence this measure

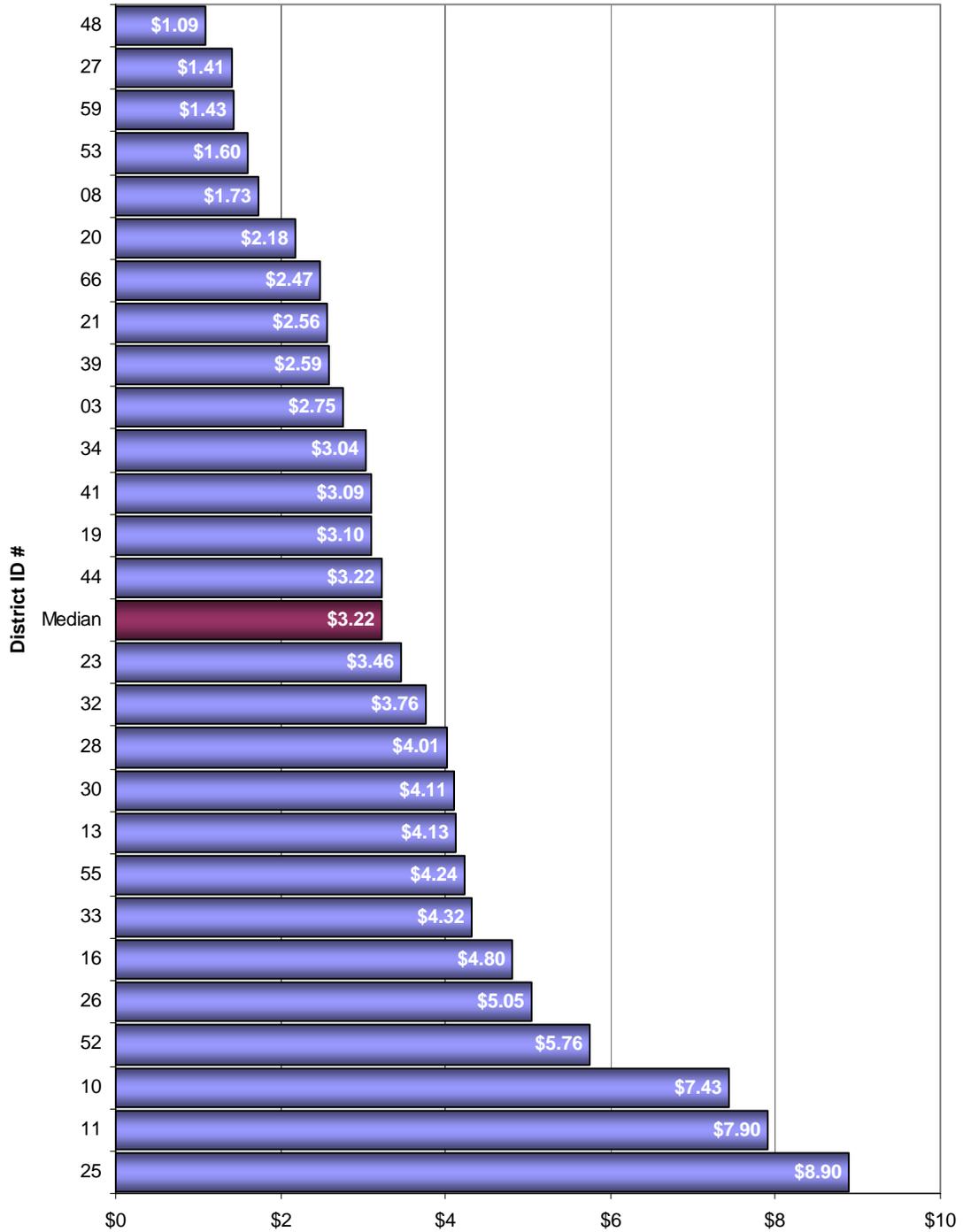
- Age of buildings
- Amount of deferred maintenance
- Labor costs
- Materials costs
- Layout of buildings

Analysis of data

- The data were calculated using the following data points: total maintenance and operations expenditures for all work *divided* by total square footage owned and leased
- 27 districts provided reliable/valid responses to these data points
- Low = \$1.09, High = \$8.90, Median = \$3.22
- Five districts with the lowest costs were in the South
- Five of the seven districts above the median in cost per square foot were also above the median for custodial workload.

Managing for Results in America's Great City Schools

Maintenance & Operations Cost per Square Foot



Maintenance & Operations – Backlogged Work Orders

Why this measure is important

This measurement is a good indication of the workload of each custodian. It allows districts to compare their operations with others in order to evaluate the relative efficiency of the custodial employees. A value on the low side could indicate that custodians may have other assigned duties, compared with districts with higher ratios. A higher number could indicate a well-managed custodial program or that some housekeeping operations are assigned to other employee classifications.

Factors that influence this measure

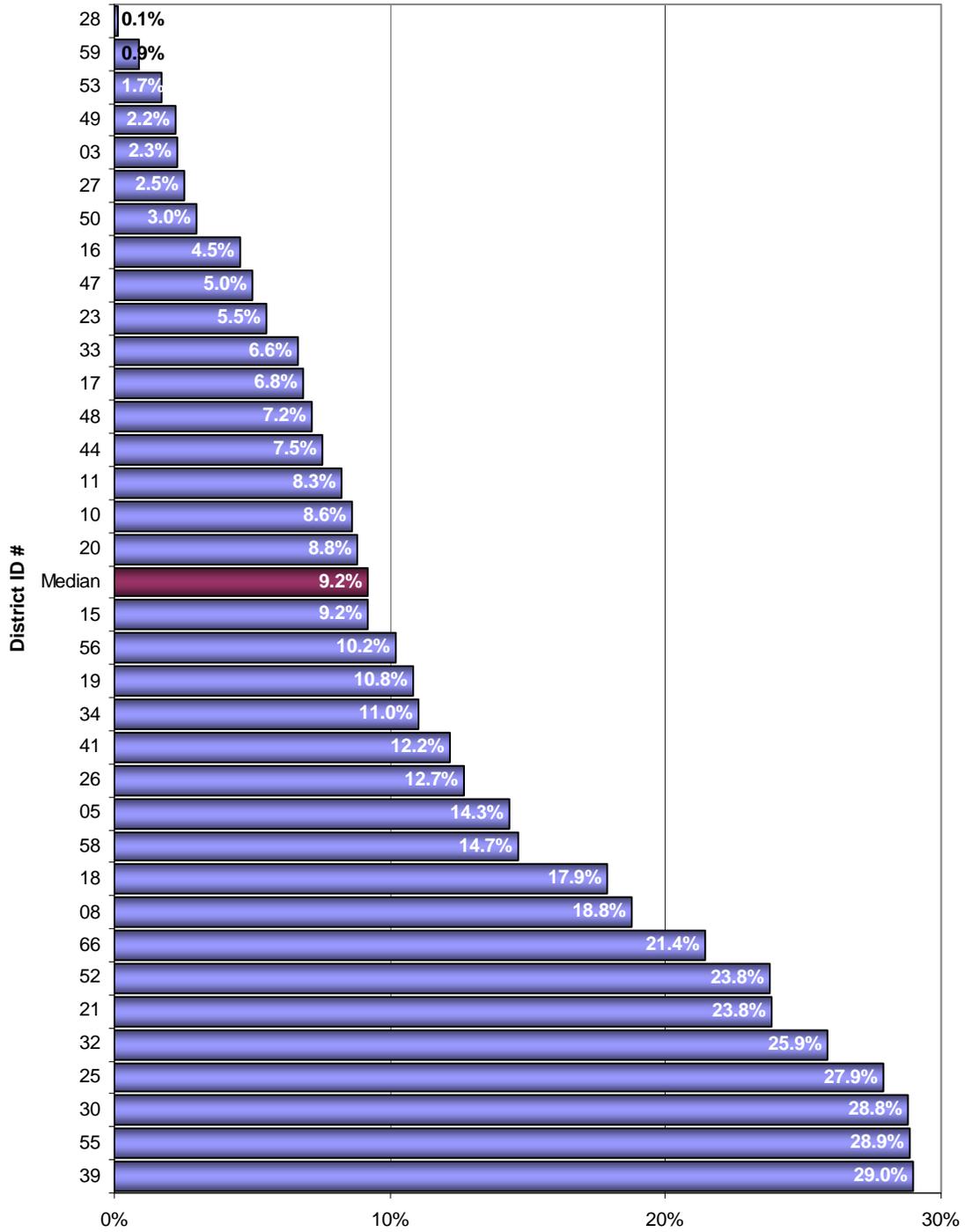
- Assigned duties for custodians
- Management effectiveness
- Labor agreements

Analysis of data

- The calculation used the following data points: total number of backlogged work orders for all buildings *divided* by total annual number of work orders for all buildings
- 35 districts provided reliable/valid responses to these data points
- Low = 0.1 percent, High = 29.0 percent, Median = 9.2 percent
- The amount of backlogged work orders varies widely among these districts.

Managing for Results in America's Great City Schools

Backlogged Work Orders



Maintenance & Operations – Contract Work

Why this measure is important

This measure can provide an indication of the cost effectiveness of in-house work, compared with contract services. A larger percentage of contract work can be due to several factors and is not necessarily an indicator of the effectiveness of the service.

Factors that influence this measure

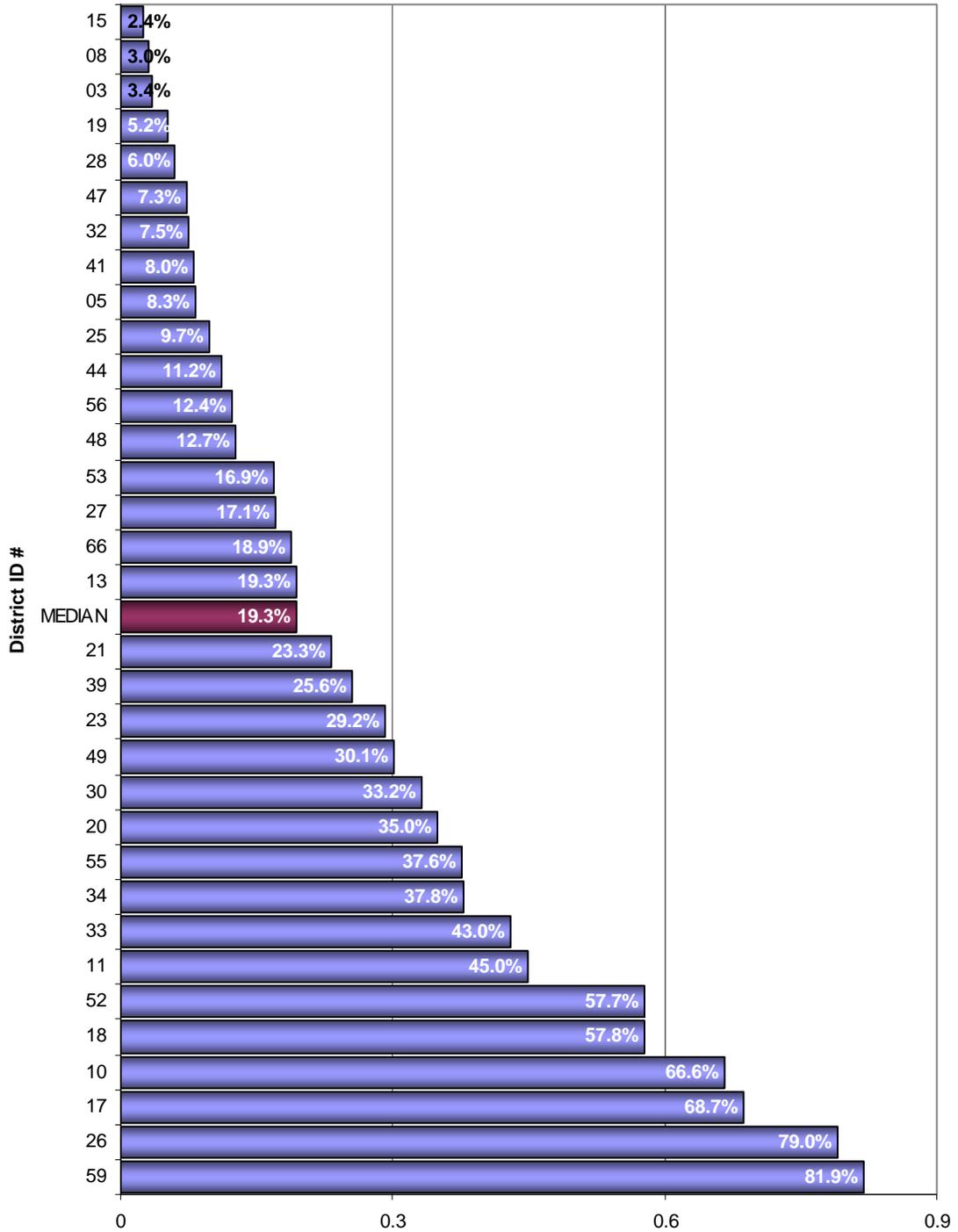
- Staffing levels of in-house maintenance personnel
- Availability of skilled crafts to staff in-house positions
- Policy decisions affecting the level of contract work employed by the district

Analysis of data

- The data were calculated using the following data points: total maintenance expenditures for contract work *divided* by total maintenance expenditures
- 33 districts provided reliable/valid responses to these data points
- Low = 2.4 percent, High = 81.9 percent, Median = 19.3 percent
- The data indicate that there are a large number of factors influencing this measure
- Seven of the 11 districts reporting both contract work and M&O cost per square foot are above the median on both indicators.

Managing for Results in America's Great City Schools

Contract Work



Maintenance & Operations – Custodial Cost per Square Foot

Why this measure is important

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

Factors that influence this measure

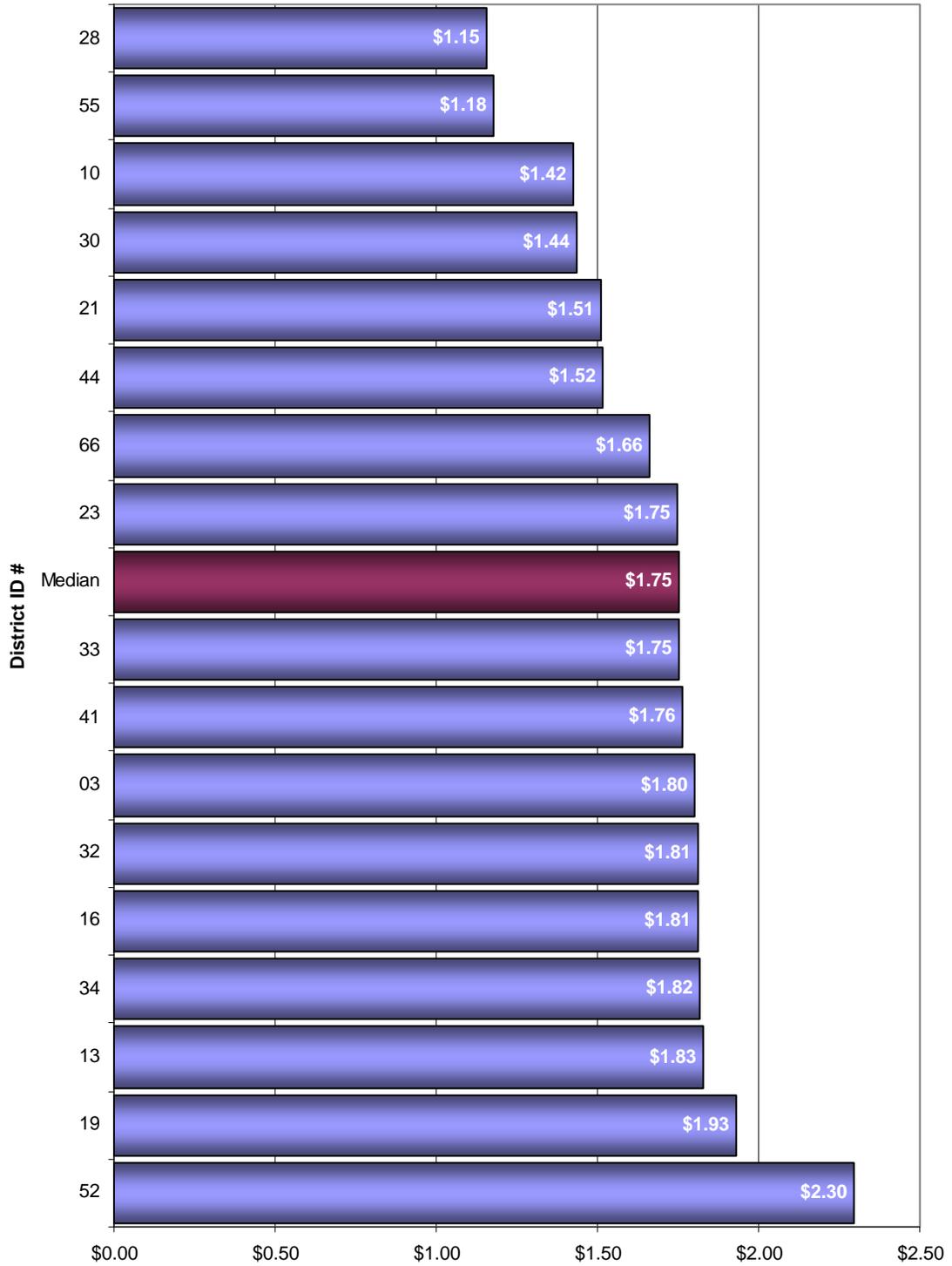
- Cost of labor
- Cost of supplies and materials
- Scope of duties assigned to custodians

Analysis of data

- The data were calculated using the following data points: total expenditures for custodial work *divided* by total square footage owned and leased in all buildings
- 17 districts provided reliable/valid responses to these data points
- Low = \$1.15, High = \$2.30, Median = \$1.75
- More than half of the districts are within 10 percent of the median
- Three of the four highest-cost districts are in the Midwest; the three lowest cost districts are in the South
- Savings of 20 to 30 percent are possible, if districts can match the best performers.

Managing for Results in America's Great City Schools

Custodial Cost per Square Foot



Maintenance & Operations – Buildings Over 50 Years Old

Why this measure is important

This measure is important because it can affect many other indicators. Building age can contribute to deferred maintenance, level of maintenance required, availability of repair materials, cost to comply with ADA, and safety and other mandated requirements. Building age, in many instances, also impacts educational suitability and can result in lost educational effectiveness.

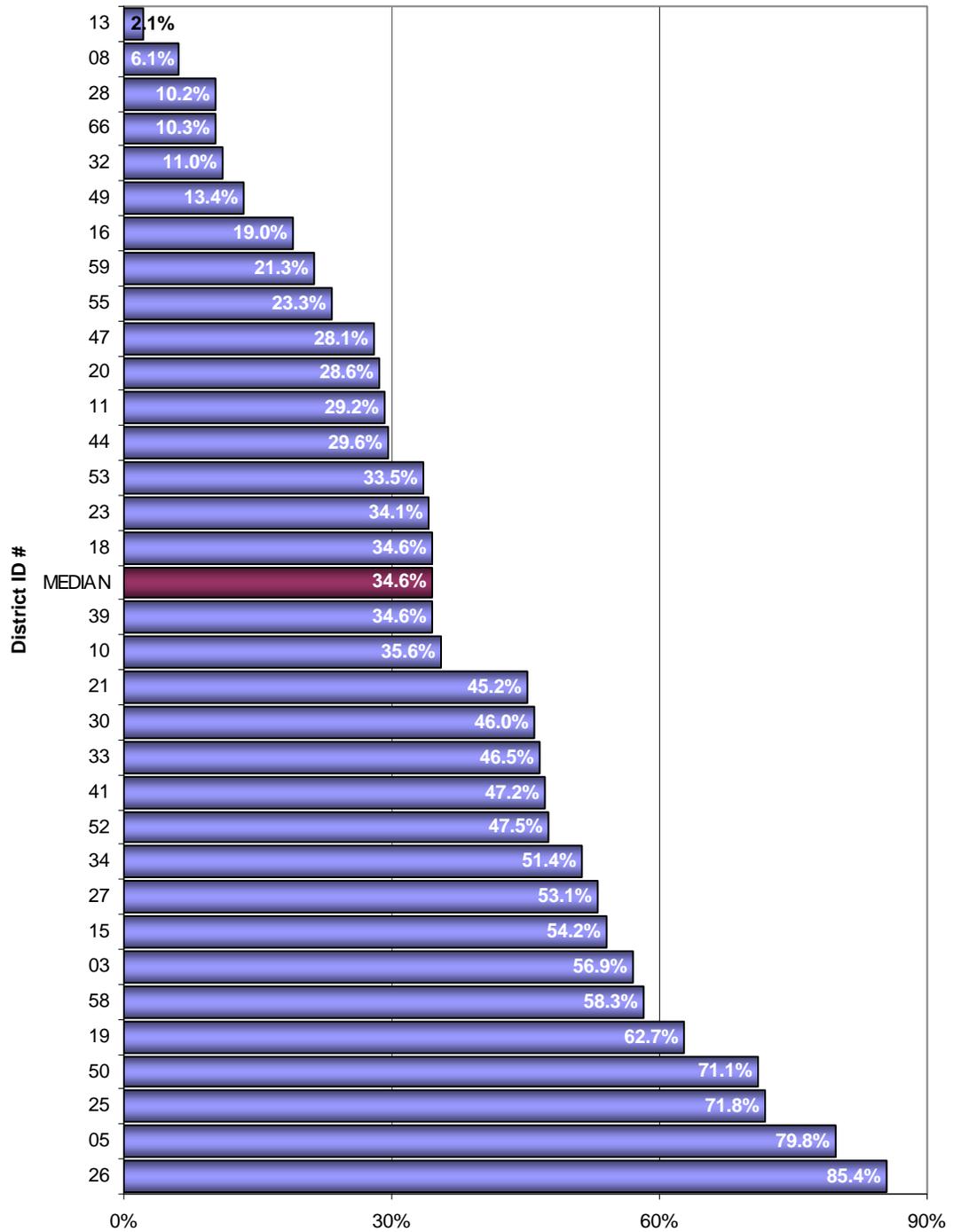
Factors that influence this measure

- Capital funds available for new construction
- District population trends, whether growing or declining
- Policy decisions to renovate or replace aging buildings

Analysis of data

- The data were calculated using the following data points: total number of buildings over 50 years old *divided* by total number of buildings owned and leased
- 33 districts provided reliable/valid responses to these data points
- Low = 2.1 percent, High = 85.4 percent, Median = 34.6 percent
- Eleven of 16 districts with age above the median are relatively small in size.

Buildings Over 50 Years Old



Maintenance & Operations – Work Orders per School

Why this measure is important

This indicator is a measure of the level of maintenance support required to meet the needs of schools. It can be impacted by the scope of duties assigned to personnel in the schools (custodians, building engineers, building maintenance staff, etc.). It is also influenced by policies regarding the submission of work orders, such as multiple repairs on one order, a separate order for each item of work, reporting of preventive maintenance, and other factors.

Factors that influence this measure

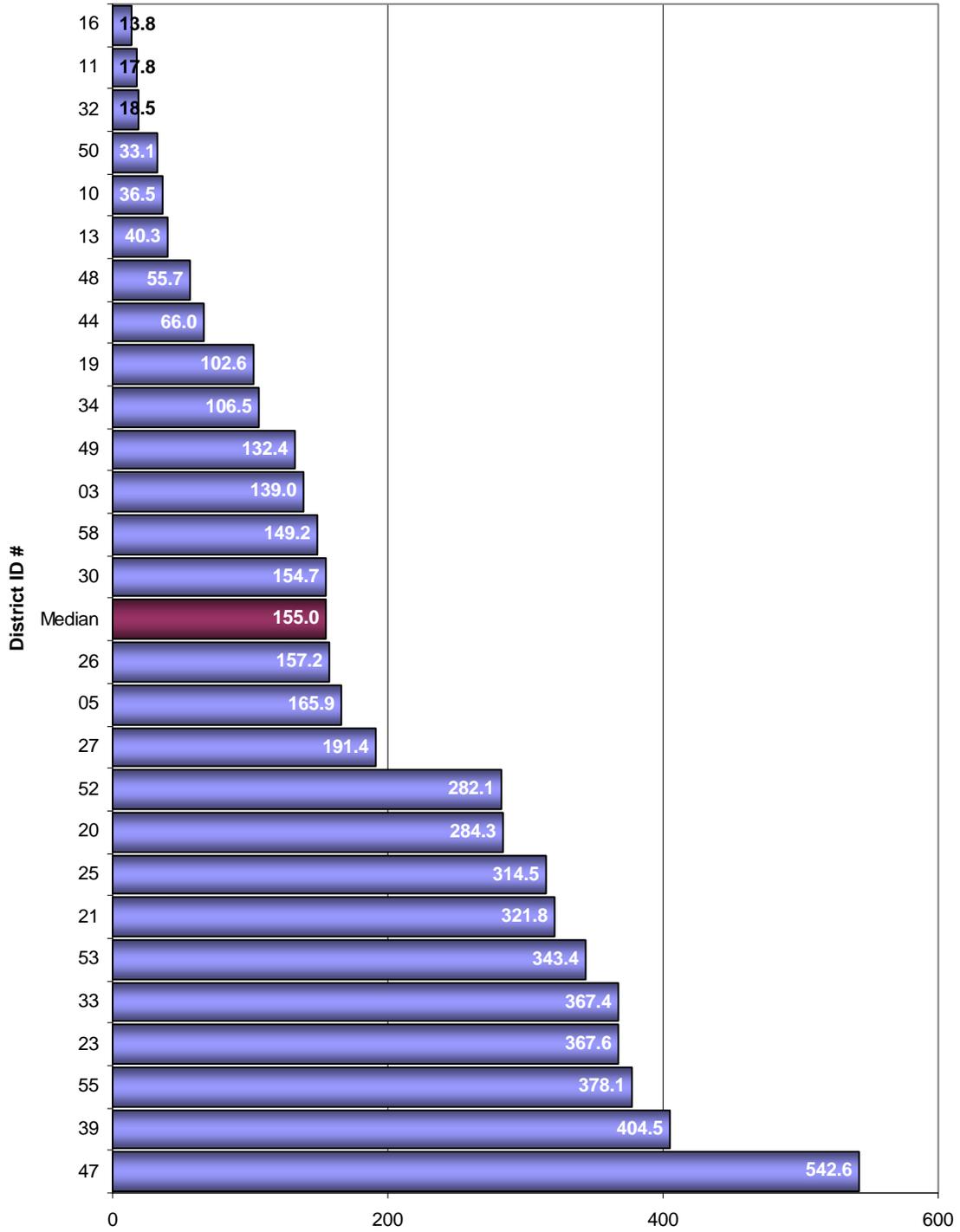
- Number of repairs allowed on each work order. Multiple jobs per work order can influence the number of work orders per school
- Reporting of portable buildings
- Level of routine maintenance assigned to building personnel
- Age and condition of buildings

Analysis of data

- The data were calculated using the following data points: total annual number of work orders for academic buildings *divided* by total number of buildings minus the number of non-academic buildings
- 27 districts provided reliable/valid responses to these data points
- Low = 13.8, High = 542.6, Median = 155
- Larger districts tend to have fewer work orders per school
- This indicator represents a very wide range of values
- 65 percent of districts fall in the range of 100 to 400 work orders per building.

Managing for Results in America's Great City Schools

Work Orders per School



Maintenance & Operations – Custodial-Supply Cost per Square Foot

Why this measure is important

This measure can give an indication of the relative effectiveness of a district's use of custodial supplies and materials. A higher number may indicate cost-savings opportunities that could be realized with changes in policies or procedures.

Factors that influence this measure

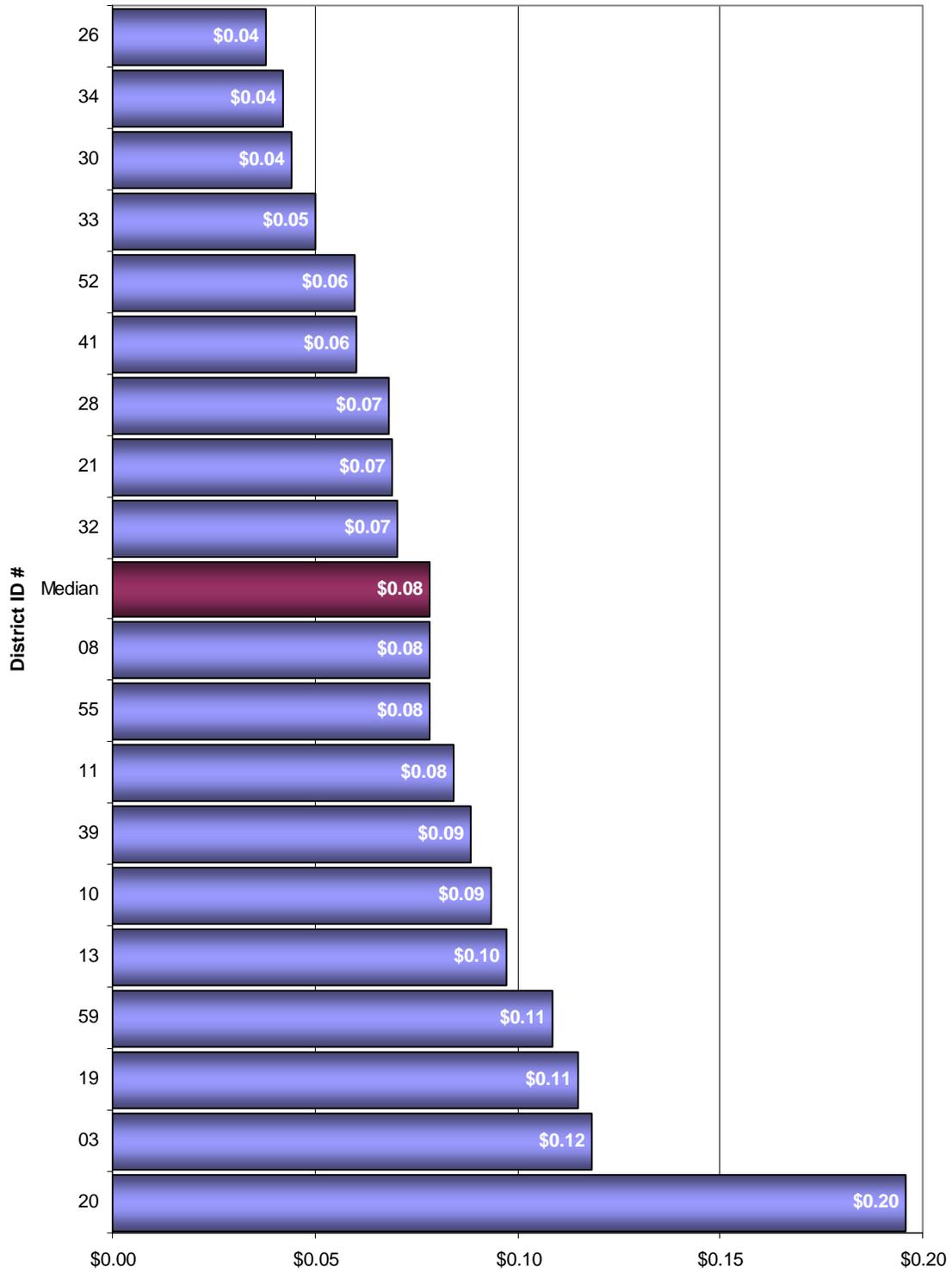
- Regional price differences for supplies and materials
- Student density in a building (more students per sq. ft.)
- Number of after-hours and community events in the building
- Purchasing practices

Analysis of data

- The data were calculated using the following data points: total maintenance and operations expenditures for materials and supplies for custodial work *divided* by the total number of buildings owned and leased
- 19 districts provided reliable/valid responses to these data points
- Low = \$0.04, High = \$0.20, Median = \$0.08
- Larger districts tend to fall below the median (higher cost), but not consistently
- Over 60 percent of districts are in the range of \$0.05 to \$0.10 per sq. ft.
- The data indicate that savings may be available for districts with higher values.

Managing for Results in America's Great City Schools

Custodial Supply Cost per Square Foot



Maintenance & Operations – Workers per Supervisor

Why this measure is important

This measure gives an indication of the supervisory overhead in district operation. Higher numbers could signal an opportunity to realize efficiencies by restructuring the organization to reduce the number of supervisory personnel. A lower number might be an indication that a district has a large number of “working” supervisors and foremen.

Factors that influence this measure

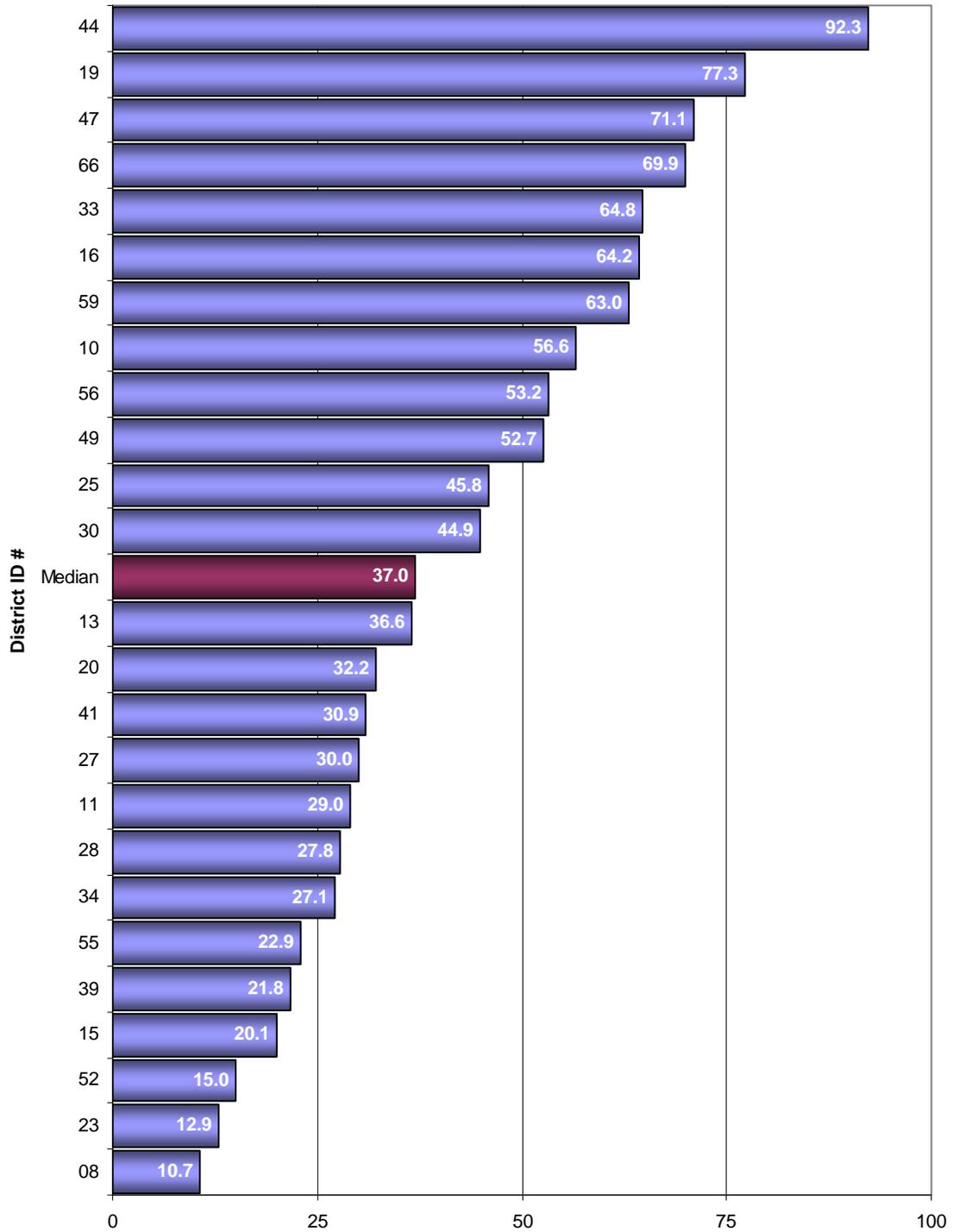
- Structure of the organization
- Degree of decentralization of responsibility
- Classification of individuals who have supervisory responsibility
- Effectiveness of training and adherence to standard operating procedures

Analysis of data

- The data were calculated using the following data points: total number of maintenance and operations workers, support staff and clerical staff *divided* by the total number of maintenance and operations supervisors
- 25 districts provided reliable/valid responses to these data points
- High = 92.3, Low = 10.7, Median = 37
- There is wide variation among districts in the number of workers per supervisor
- Almost 50 percent of districts have 45 or more workers per supervisor.

Managing for Results in America's Great City Schools

Workers per Supervisor



Maintenance & Operations – Utility Cost per Square Foot

Why this measure is important

This indicator is a measure of the efficiency of districts' heating and cooling operations. Higher numbers signal an opportunity to evaluate fixed and variable cost factors and identify those factors that can be modified for greater efficiency.

Factors that influence this measure

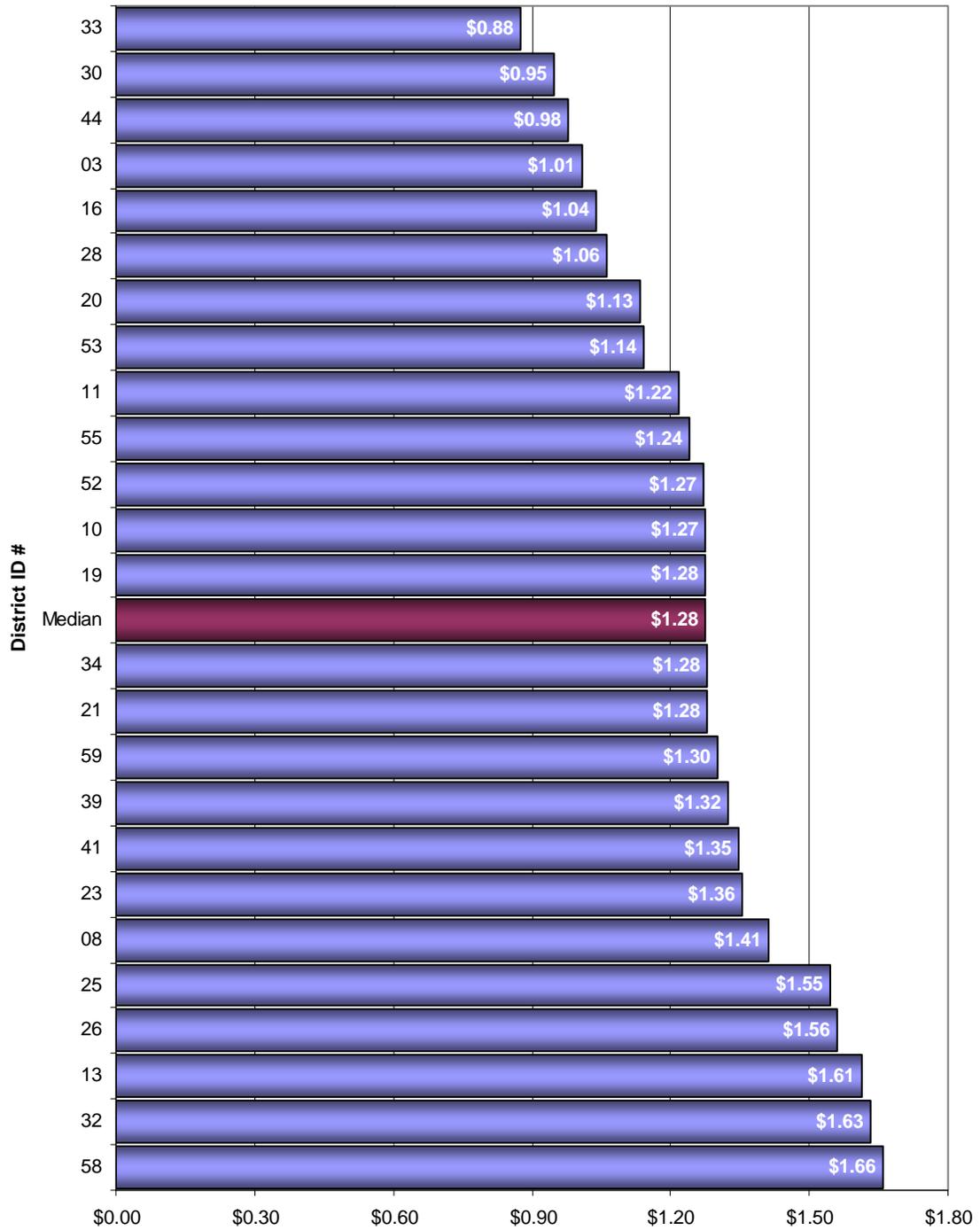
- Local utility costs
- Age of physical plants
- Amount of air-conditioned space
- Regional climate differences
- Customer support of conservation efforts

Analysis of data

- The data were calculated using the following data points: total utility cost for electricity, heating fuel, water and sewer *divided* by the total number of buildings owned and leased
- 25 districts provided reliable/valid responses to these data points
- Low = \$0.88, High = \$1.66, Median = \$1.28
- All four districts reporting from the Northeast fall below the median (higher cost)
- Over 60 percent of districts have a cost of \$1.00 to \$1.40 per sq. ft.
- Several districts appear to have the opportunity to improve efficiencies and costs by taking advantage of the EPA's Energy Star and similar programs.

Managing for Results in America's Great City Schools

Utility Cost per Square Foot



PROCUREMENT/SUPPLY CHAIN

Procurement/Supply Chain – District Procurement Spending

Why this measure is important

Delays in spending, especially grant funds or term-ending funds, result in the redirection of dollars away from procurement-type expenses. If the financial condition of the district requires adjustments, procurement budget/opportunities decline. Acquisition of goods and services should be timely to ensure students receive the benefit of the full year.

Factors that influence this measure

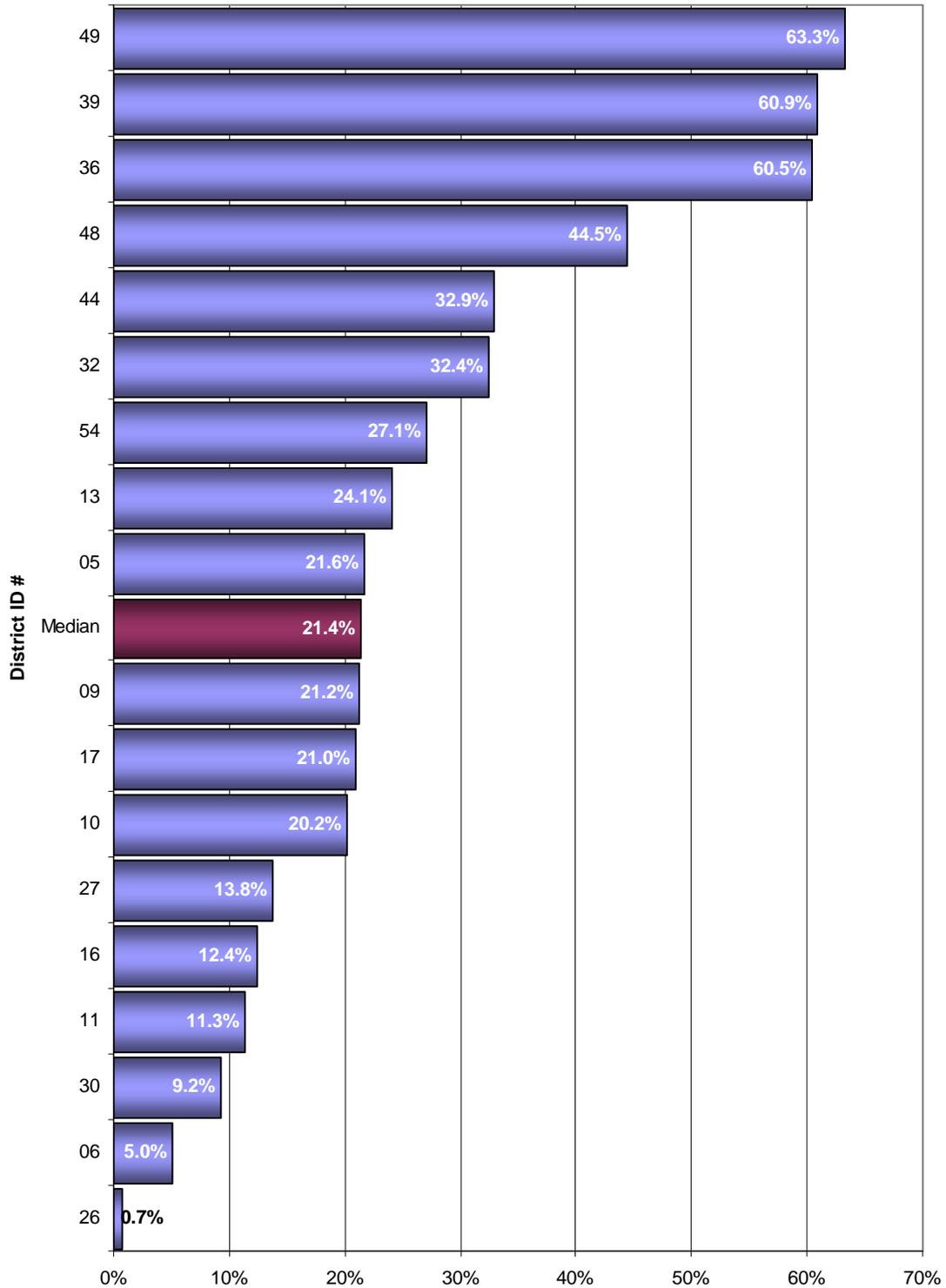
- Funding availability for procurement directly affects the learning programs that districts are willing to implement, i.e. software, equipment, consultants, etc.
- When budgets are stressed, items and programs that include large procurement acquisitions are likely to be cut. The savings can be identified immediately, unlike personnel cuts (which have a lag time), and procurement opportunities are easily deferred.
- Vendors are less likely to respond to opportunities when overall procurement spending is limited. They prefer to maintain performance and insurance bonds at levels that allow for the established full return on their proposal or bid.

Analysis of data

- The data were calculated using the following data points: total procurement dollars spent by the district excluding P-card and construction *divided* by district budget from the general survey
- 18 districts provided reliable/valid responses to these data points
- High = 63.3 percent, Low = 0.7 percent, Median = 21.4 percent
- Seven of nine districts above the median, including the six highest, are in the South; all four Western districts are at or below the median
- Larger districts tend to be near the top, but not consistently.

Managing for Results in America's Great City Schools

District Procurement Spending



Procurement/Supply Chain – Procurement Transaction per Buyer

Why this measure is important

In order for procurement staff to maximize savings, ensure competition, minimize processing times, and exercise adequate compliance and internal controls, staff members must be *strategic* instead of *transactional* in their workloads.

Factors that influence this measure

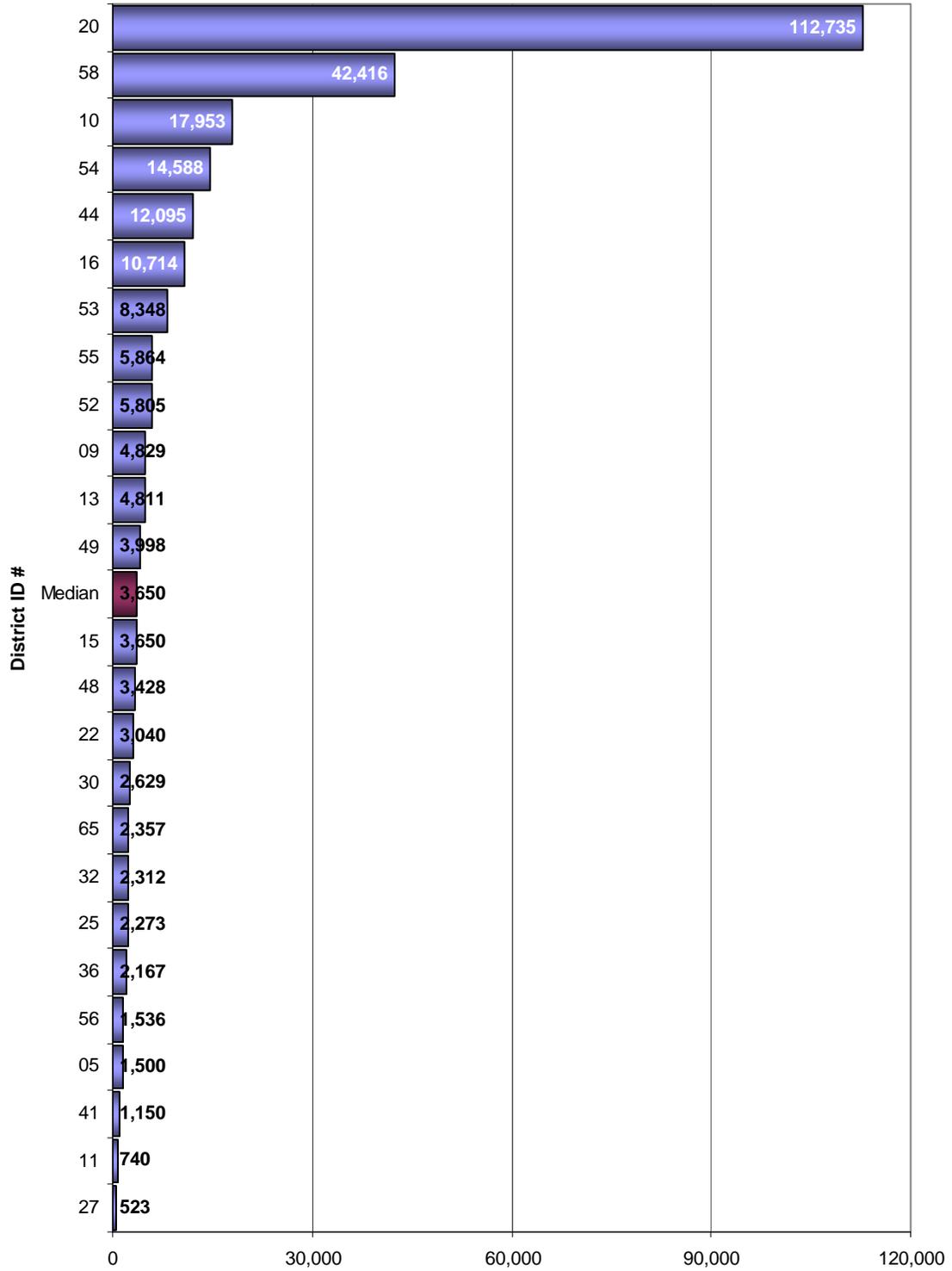
- Budget allocation
- Procurement policies
- Technical leadership in procurement management
- Utilization of technology, e-procurement tools

Analysis of data

- The data were calculated using the following data points: total number of procurement transactions, excluding P-card *divided* by the number of professional procurement staff
- 25 districts provided reliable/valid responses to these data points
- High = 112,735, Low = 523, Median = 3,650
- Two thirds of the districts are close to the median but the range varies greatly, particularly at the high end
- Less P-Card and strategic sourcing utilization appears to significantly increase this measure, indicating professional procurement staff members are more involved in transactional versus strategic procurement.

Managing for Results in America's Great City Schools

Procurement Transactions per Buyer



Procurement/Supply Chain – PALT - Formal Requirements

Why this measure is important

This measure establishes a benchmark for beginning and completing the acquisition process of formal-competitive bidding. Other critical factors affecting the quality of product/services include potential savings, partnerships, and repeat competitors.

Factors that influence this measure

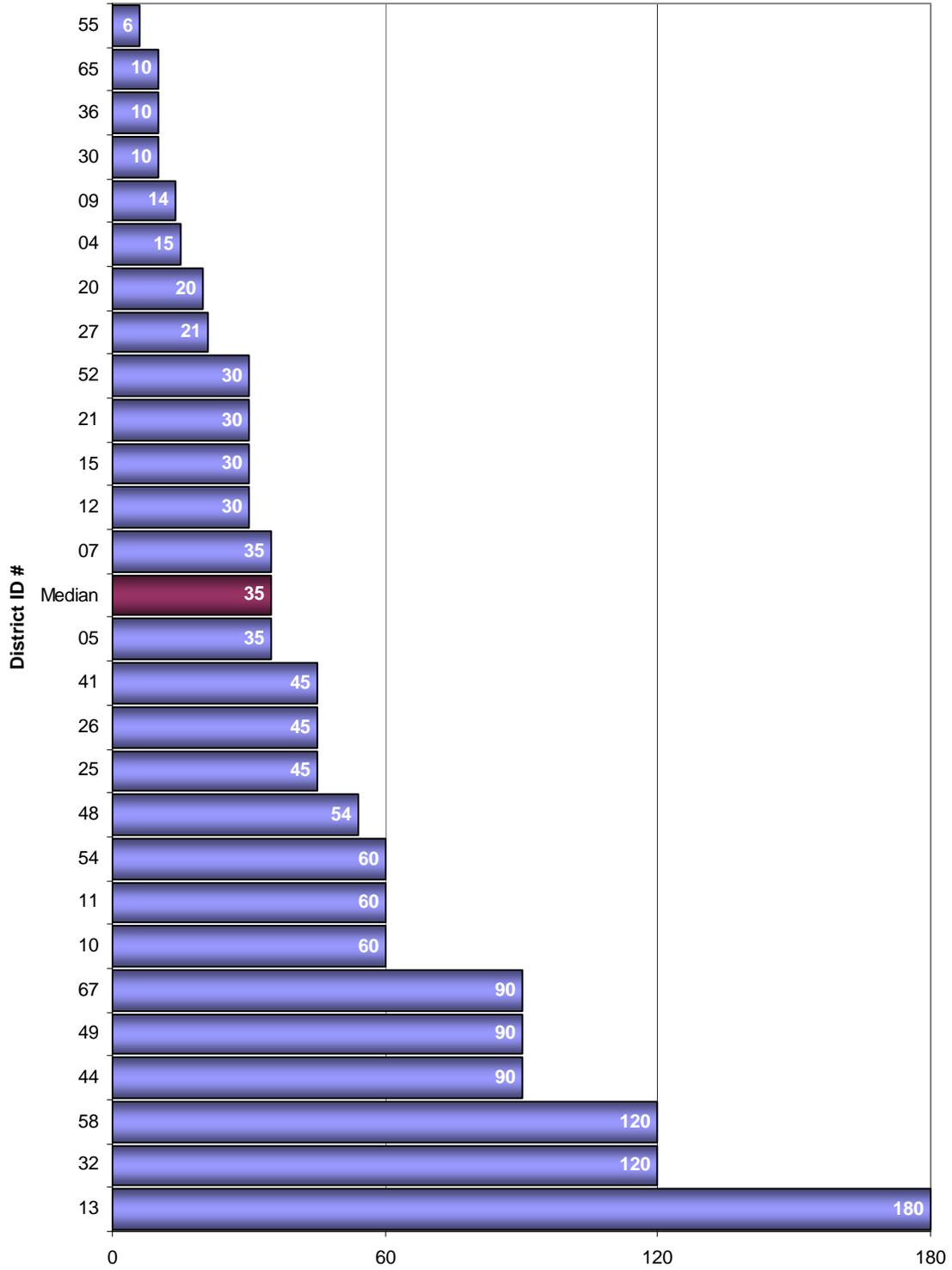
- Federal, state and local procurement policies and laws, including formal solicitation requirements, minimum advertising times and procurement dollar limits
- Board policy
- Frequency of board meetings
- Budget/FTE allocation for professional procurement staff
- Training on scope of work and specification development for contract sponsors
- The award process, including RFP proposal evaluation and negotiations
- Use of standard boilerplate bid and contract documents
- Use of current ERP and e-procurement technology to streamline internal procurement processes and external solicitation process with vendors

Analysis of data

- The data were calculated using the following data points: procurement administrative lead time for formal requirements
- 27 districts provided reliable/valid responses to these data points
- Low = 6, High = 180, Median = 35
- Six of seven districts in the Midwest were above the median (shorter PALT)
- Larger districts tend to fall below the median (longer PALT)
- There are higher PALTs in districts with smaller P-card programs and in districts with more non-P-card transactions per staff. This pattern may indicate that staff members are spending more time processing transactions that are less complex and have less time for complex transactions.

Managing for Results in America's Great City Schools

Procurement Administrative Lead Time - Formal Requirements



Procurement/Supply Chain – P-Card Transactions

Why this measure is important

P-Card utilization significantly improves cycle times for schools and decreases transaction costs. It allows procurement professionals to concentrate their efforts on the more complex purchases, significantly reduces Accounts-Payable workloads, and gives schools a shorter cycle time to receive purchased items. Increased P-Card spending can provide higher-rebate revenues, which in turn can pay for the management of the program.

Factors that influence this measure

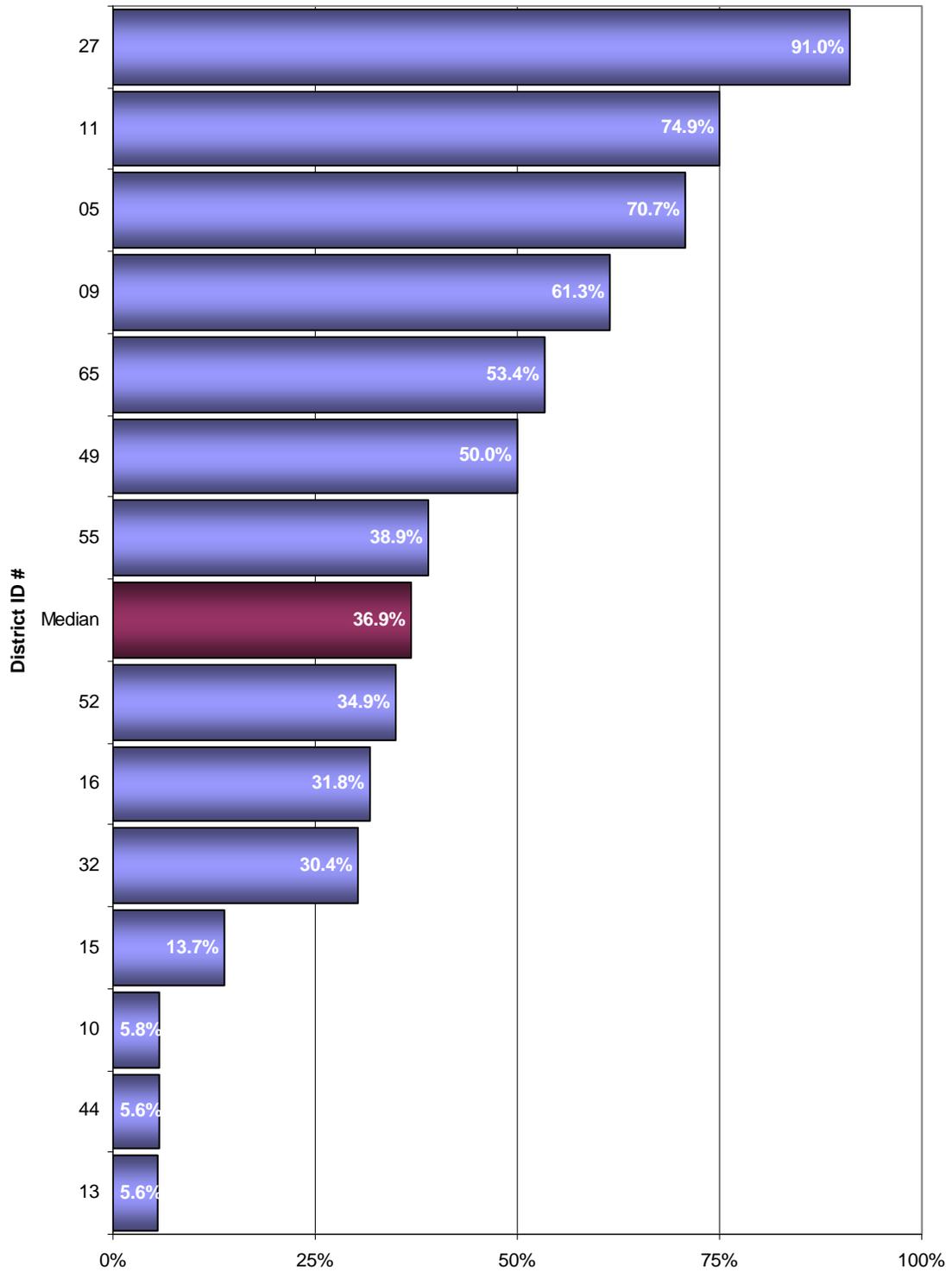
- Procurement policies, particularly those involving the delegating of purchase authority and the usage of P-Cards
- Utilization of technology to manage high-volume, low-dollar transactions
 - e-Procurement and e-Catalog processes utilized by district
 - P-Card software applications for spending analysis, internal controls, and P-Card database interface with a district's ERP system
- Budget, purchasing, and audit controls
- Accounts Payable policies for P-Cards, compared with other payment methods

Analysis of data

- The calculations used the following data points: total number of P-card transactions *divided* by the total number of procurement transactions, excluding P-card, plus the total number of P-card transactions
- 14 districts provided reliable/valid responses to these data points
- High = 91.0 percent, Low = 5.6 percent, Median = 36.9 percent
- Four of five districts in the West are above the median; the five districts with the lowest rates are in the South
- 40 percent of the responding districts use P-Cards for more than 50 percent of their procurement transactions
- There appears to be a correlation between increased overall centralized procurement savings and the increased use of P-Cards, which may indicate that procurement professionals have more time to focus on complex, higher value procurements that are more strategic in nature.

Managing for Results in America's Great City Schools

P-Card Transactions



Procurement/Supply Chain – Procurement Savings

Why this measure is important

One of the primary objectives of centralized purchasing is to realize significant savings or cost avoidance for the district. This measure compares the savings produced from centralized purchasing to the total procurement spending, less P-Card spending.

Factors that influence this measure

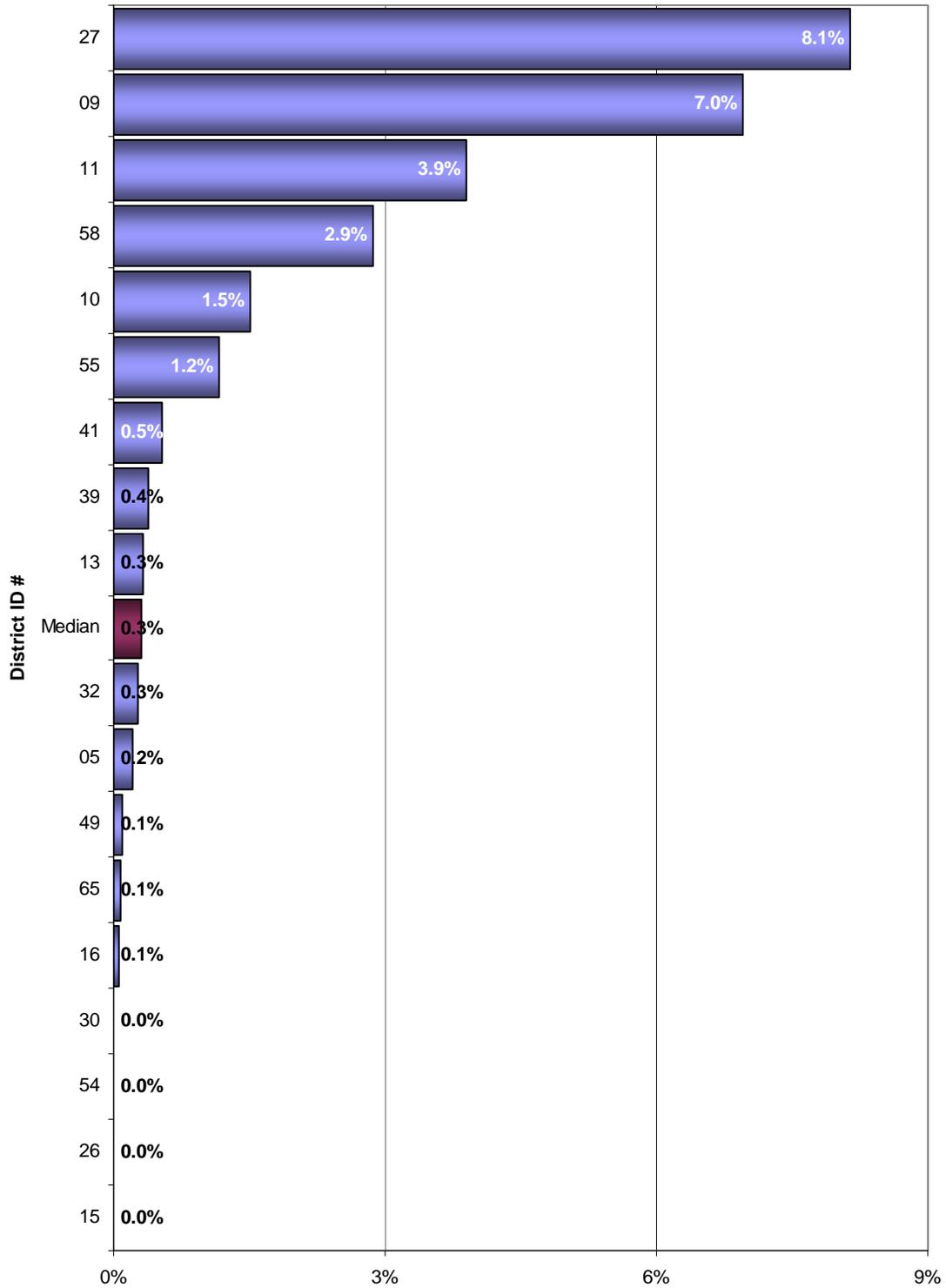
- Procurement policies, e.g., delegated purchase authority, procurements exempted from competition, minimum-quote requirements, sole-source policies, vendor registration/solicitation procedures (may determine magnitude of competition)
- Utilization of technology and e-procurement tools, e.g., use of national or regional vendor databases (versus district only) to maximize competition, use of on-line comparative price-analysis tools (comparing e-catalog prices), etc.

Analysis of data

- The calculation used the following data points: total procurement savings *divided by* total procurement dollars spent by the district
- 18 districts provided reliable/valid responses to these data points
- High = 8.1 percent, Low = 0.0 percent, Median = 0.3 percent
- Only 25 percent of districts responding (many had no savings recorded) exceeded 1 percent in procurement savings
- 10 percent of districts responding had procurement savings of 7 percent or above
- Most districts did not save more than the cost of the centralized procurement function (FTE and non-payroll operational costs)
- There appears to be a correlation between increased overall Centralized Procurement Savings and increased P-Card usage. This pattern may indicate procurement professionals have more time to work on complex, higher value procurements
- Based on other survey questions related to savings, districts used different methodologies to determine savings. The lack of industry standardization could explain the significant variation in results.

Managing for Results in America's Great City Schools

Procurement Savings



Procurement/Supply Chain – Stock-Turn Ratio

Why this measure is important

As a general rule, total costs decline and savings rise when inventory stock-turn increases. After a certain point, however, the reverse occurs (typically after 8 – 10 stock turns).^{*} Inventory-turnover ratios, however, indicate how much use districts are getting from the dollars invested in inventory. Stock-turn measures inventory health and may provide an indication of--

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

Factors that influence this measure

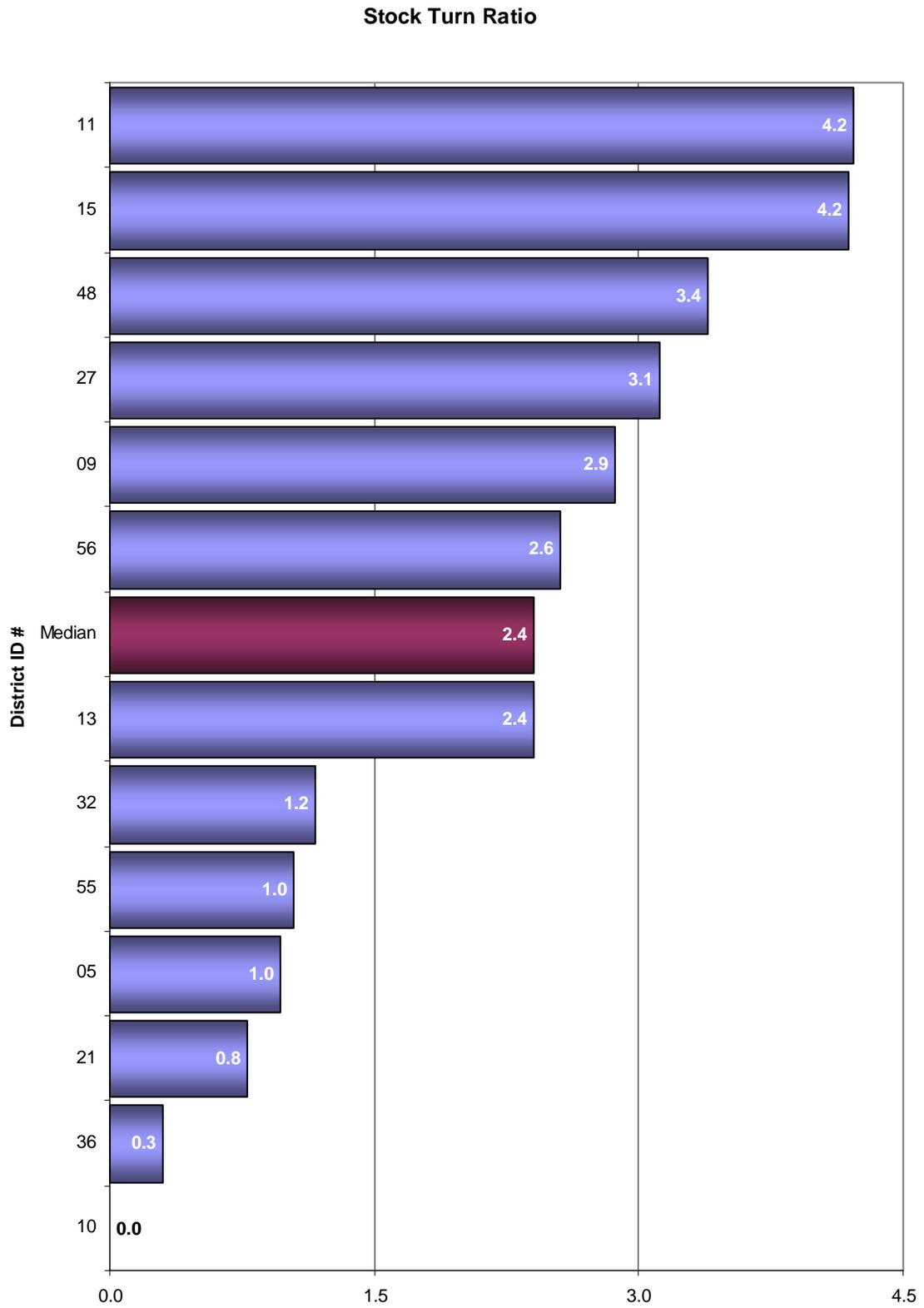
- Inventory policy (e.g., safety or emergency inventory-level requirements)
- Procurement policy (e.g., minimum-order quantity and cycle)
- Budget allocation
- Market (e.g., shipping time, seasonal items)

Analysis of data

- The calculation used the following data points: total dollars spent on products purchased from the warehouse *divided* by the total average inventory value of school/office supplies, food service items, facilities maintenance items, transportation maintenance items, textbooks, and other warehouse items
- 7 districts provided reliable/valid responses to these data points
- High = 4.2, Low = 0.0, Median = 2.4
- Three of four districts from the West are above the median
- The lowest stock-turns may indicate high inventory carrying-costs and “dead inventory” items that should be evaluated for reduction. A reduction in inventory to an optimum level may also provide additional funds for upcoming cycles
- An inventory-turnover rate of four to six times per year in the manufacturing, servicing, and public-sector types of activities is considered acceptable.

** National Institute for Government Purchasing.*

Managing for Results in America's Great City Schools



Procurement/Supply Chain – Competitive Procurements

Why this measure is important

As the cornerstone of public procurement, competition maximizes procurement savings to the district, opportunities for vendors, and integrity assurance for school boards and taxpayers at large. It also improves public confidence in the purchasing process.

Factors that influence this measure

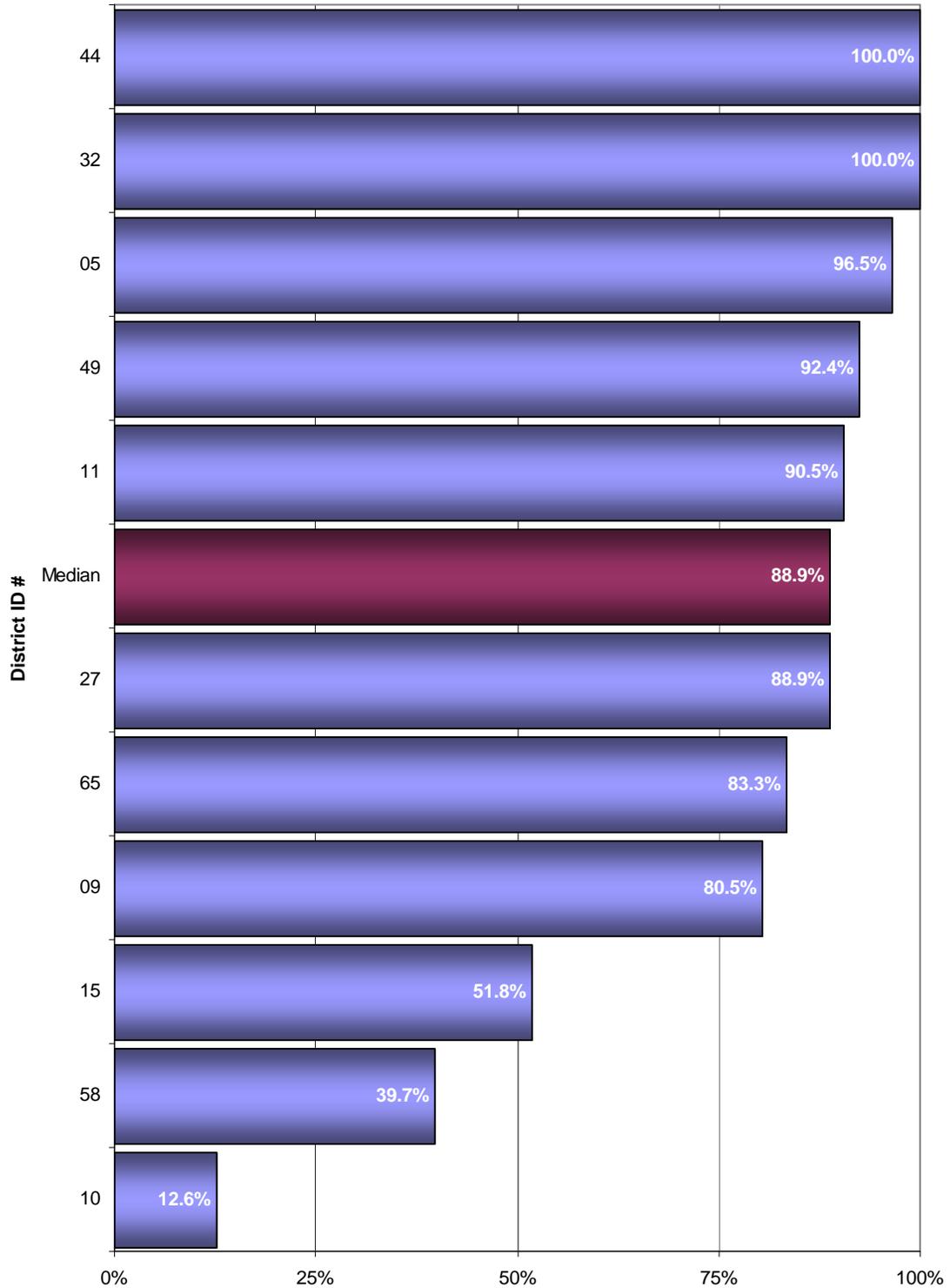
- Procurements that are exempt from competition, emergency or urgent-requirement procurements, direct payments (purchases without contracts or POs), minimum-quote levels and requirements, sole sourcing, vendor registration/solicitation procedures (which may determine magnitude of competition), professional services competition (which may be exempted from competition)
- In some instances, districts may have selection criteria for certain programs, such as local preference, environmental procurement, M/WBE, etc. that result in less competition
- Utilization of technology and e-procurement tools

Analysis of data

- The calculation used the following data points: total purchase dollars for purchases above the single-quote limit that were competitive *divided* by total purchase dollars for all purchases above the single quote limit
- 22 districts provided reliable/valid responses to these data points
- High = 100 percent, Low = 12.6 percent, Median = 88.9 percent
- 75 percent of the districts exceeded 80 percent competitive procurements
- Some districts with the highest P-Card usage also had the highest competition levels.

Managing for Results in America's Great City Schools

Competitive Procurements



Procurement/Supply Chain – Procurement Operating Expense Ratio

Why this measure is important

This measure provides a dollar breakdown of procurement activity handled in department. It illustrates the potential efficiency and effectiveness of procurement workload through return-on-investment (savings) from the procurements they handle.

Factors that influence this measure

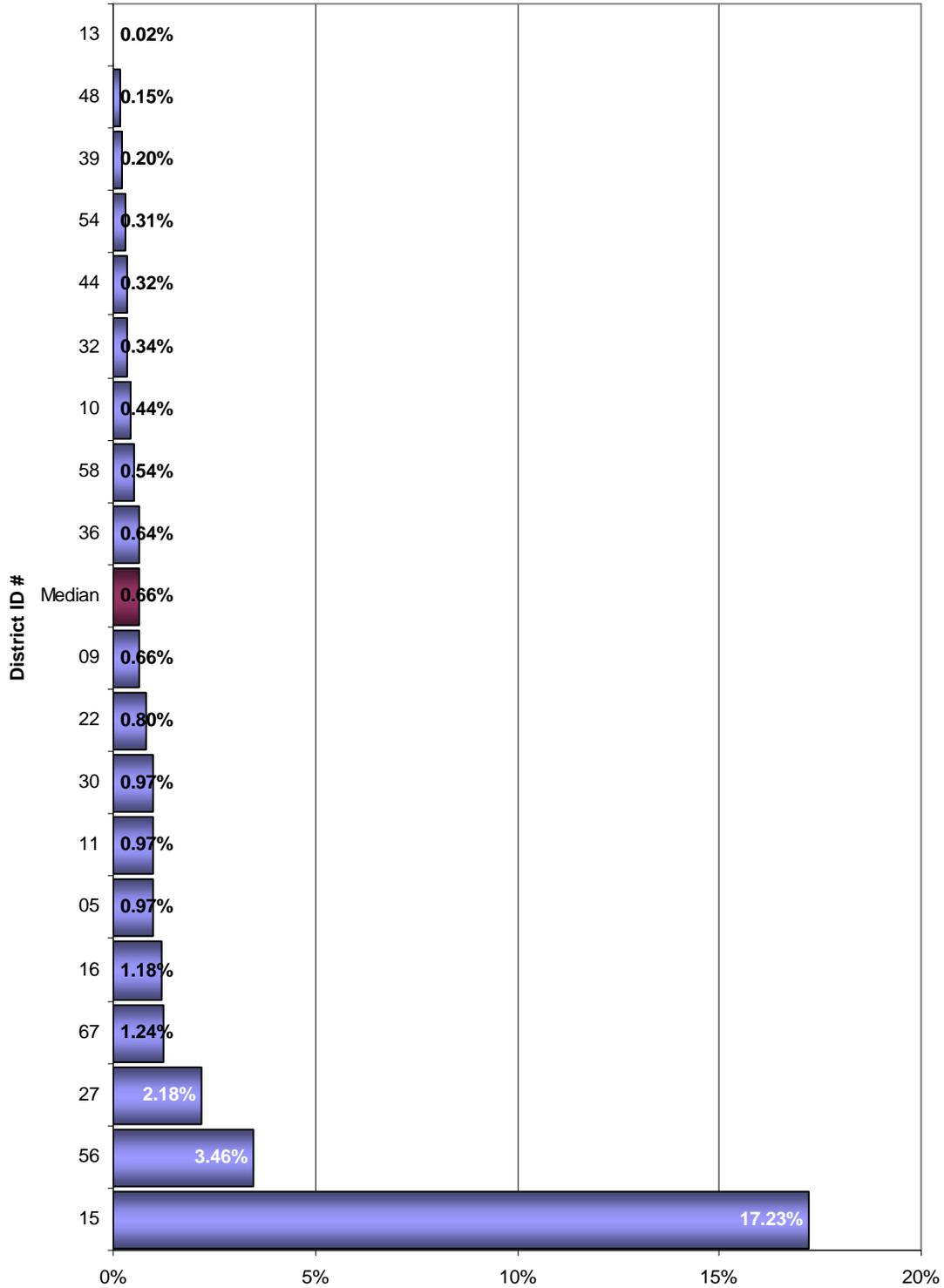
- Inefficient ERP or procurement systems
- Applicable laws and board-procurement policies
- Technical expertise and experience of staff
- Approval processes and dollar limits, retainage rate of assets, contract term and rollover periods

Analysis of data

- The calculation used the following data points: total procurement department budget (revenue), excluding warehouse operations *divided* by total procurement dollars spent by the district, excluding P-card and construction
- 19 districts provided reliable/valid responses to these data points
- Low = 0.02 percent, High = 17.23 percent, Median = 0.66 percent
- Eight of ten districts with ratios less than the median are in the South; all six districts from the West have ratios higher than the median.

Managing for Results in America's Great City Schools

Procurement Operating Expense Ratio



Procurement/Supply Chain – Certified Professional Procurement Staff

Why this measure is important

This measure sets a standard for procurement staff that directly impacts processing time, negotiations, procedural controls, and strategies applied to maximize cost savings.

The procurement function now requires professional procurement staff to focus on:

- Strategic issues versus transactional processing
- Advanced business functions, including agency supply chain, logistics optimization, total cost of ownership evaluations, make-versus-buy analysis, leveraging cooperative procurements, and agency-spend analyses

Factors that influence this measure

- Budget/FTE allocations to central procurement functions
- Procurement policies such as delegated-purchasing authority, formal procurement dollar threshold, small purchase procedures, P-card utilization, etc.
- Newer technology requires greater knowledge of e-procurement and e-commerce
- Understanding of procurement and the complexities within the bidding process
- Value that an organization places on its procurement functions and procedures
- Policies favoring internal promotion over technical recruitment

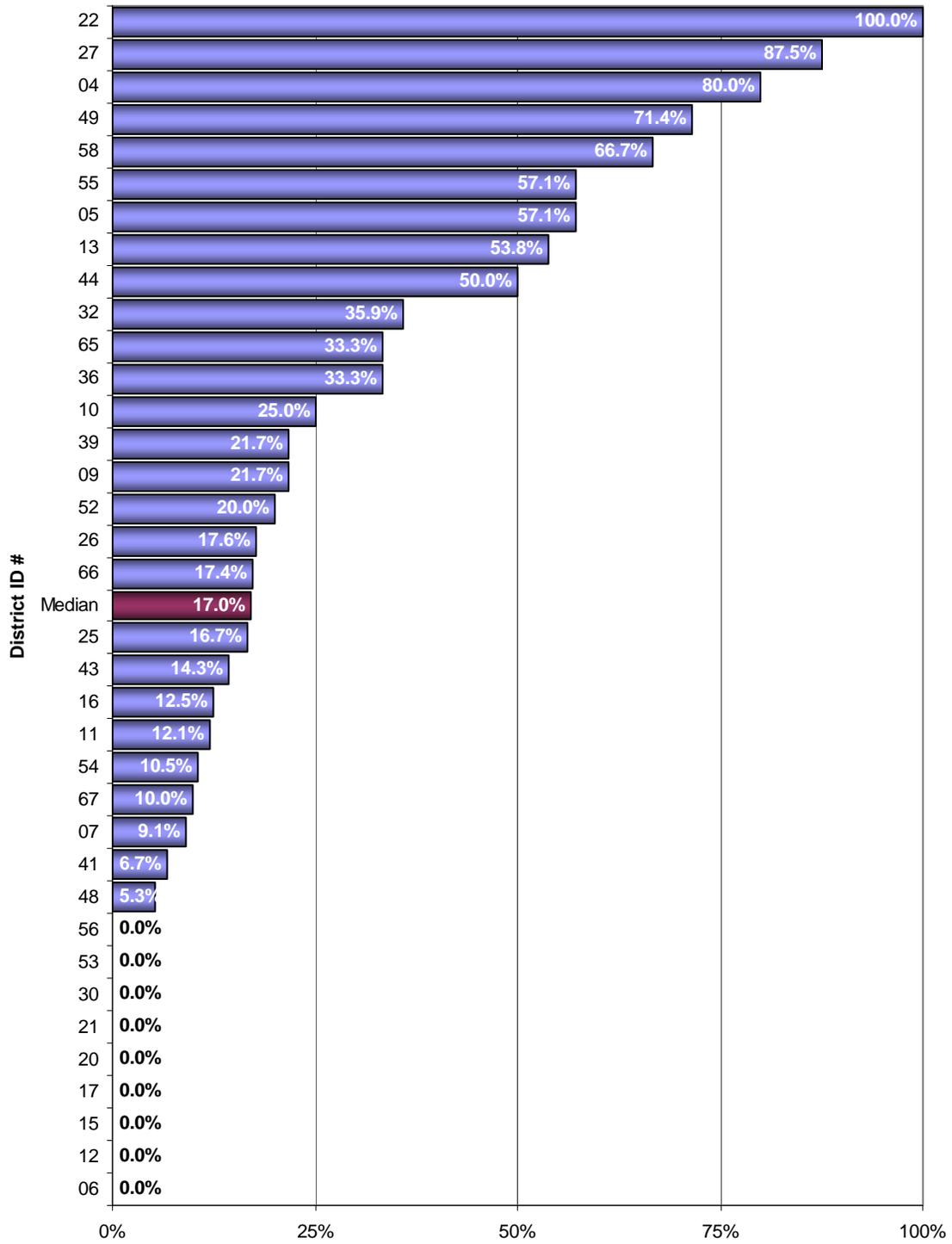
Analysis of data

- The calculation used the following data points: number of professional procurement staff members with certification *divided* by the total number of professional procurement staff and supervisors
- 36 districts provided reliable/valid responses to these data points
- High = 100 percent, Low = 0 percent, Median = 17.0 percent
- Only 25 percent of districts meet the NPI Benchmark, i.e., more than 50 percent of professional procurement staff certified meet excellence criteria*
- There is some correlation between high certification rates and high dollar savings.

* National Purchasing Institute (NPI) Achievement in Excellence in Procurement (AEP) Award

Managing for Results in America's Great City Schools

Certified Professional Procurement Staff



Procurement/Supply Chain – Strategic Sourcing

Why this measure is important

Strategic sourcing directly affects available contracts for goods and services, i.e., items under contract are readily accessible, while others are not. It is a strong indicator of potential-cost savings from competitive procurements. Quality and product guarantees are better accounted for in the bidding process than is true in no-bid situations.

Factors that influence this measure

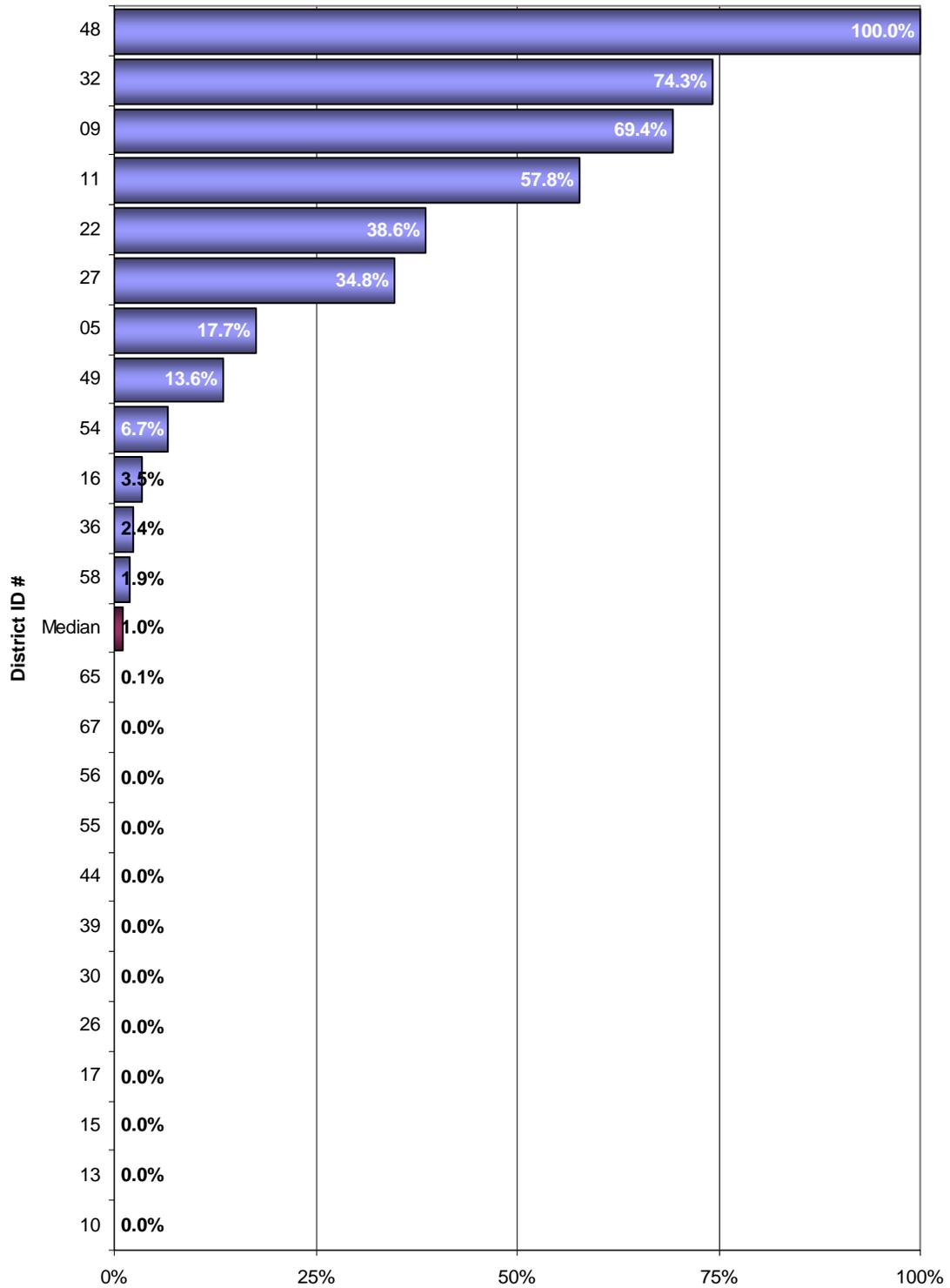
- Technical training of procurement leadership
- Effectiveness of data analysis of frequently purchased items
- Policies on centralization of procurement
- Balance between choice and cost savings
- Dollar-approval limits without competitive bids

Analysis of data

- The calculation used the following data points: total dollars spent for strategically sourced goods and services *divided* by total procurement dollars spent by the district excluding P-cards and construction
- 24 districts provided reliable/valid responses to these data points
- High = 100 percent, Low = 0 percent, Median = 1.0 percent
- Larger districts appear to have a higher level of strategic sourcing.

Managing for Results in America's Great City Schools

Strategic Sourcing



SAFETY & SECURITY

Thanks to the work and diligence of the technical team, the project generated information that will be useful to districts as they look at their safety and security operations--although the data are not yet as detailed or final as indicators in other sections of the report. Project management and the technical team will move to redesign and reissue their survey to generate additional baseline data meeting the standards of the project's other indicators.

Safety & Security – Safety & Security Staff

Why this measure is important

This indicator presents data on the number and concentration of safety officers. The number of officers play a large role in the effectiveness of security efforts.

Factors that influence this measure

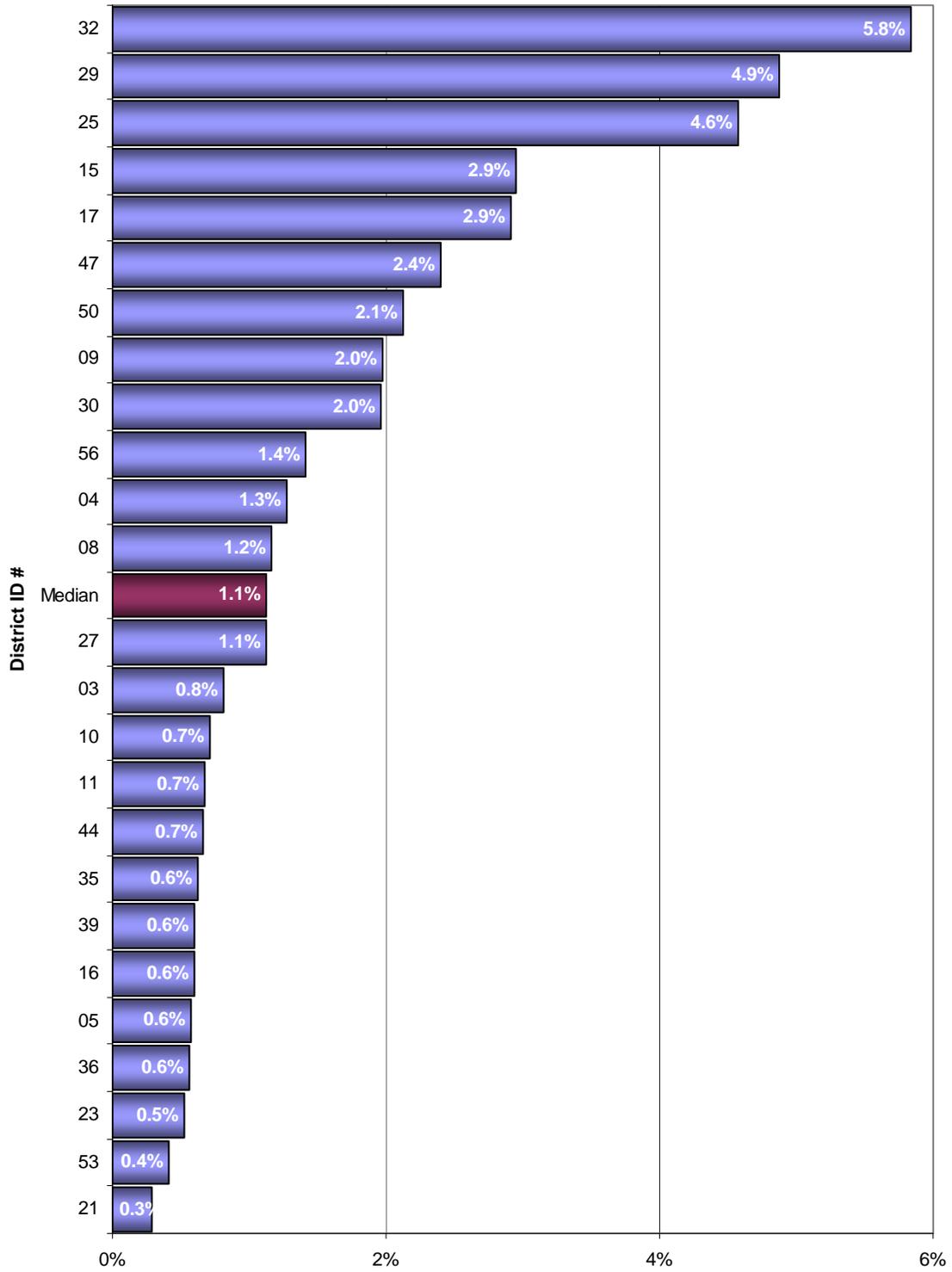
- Budget - available resources to allocate to safety and security
- Documented needs for additional safety and security staff through such statistics as crime incidents
- Utilization of technology, including security cameras to offset the need for more safety and security staff

Analysis of data

- The calculation used the following data points: total number of safety and security staff at all levels *divided* by the total number of district staff from the general survey
- 25 districts provided reliable/valid responses to these data points
- High = 5.8 percent, Low = 0.3 percent, Median = 1.1 percent.

Managing for Results in America's Great City Schools

Safety & Security Staff



Safety & Security – Security Allocation Formula

Why this measure is important

This measure establishes a basis for allocating safety personnel to sites that would otherwise be allocated on a more random or political basis.

Factors that influence this measure

- Knowledgeable staff making the allocation
- Crime statistics for each school or location
- The knowledge and training of staff
- Well-trained officers can recognize security weaknesses and threats, and can lessen the need for additional officers

Analysis of data

- The calculation used the following data points: the presence or absence of a district allocation formula, and nature of the formula
- 30 districts provided reliable/valid responses to these data points
- 47 percent (14) of the reporting districts use an allocation formula; the remaining 53 percent (16) of districts did not
- Larger districts tended to have an allocation formula, while smaller districts do not.

Managing for Results in America's Great City Schools

Security Allocation Formula

| District ID # | School crime stats | Neighborhood crime stats | School population/enrollment | School level (high, middle, elementary) | Student expulsions/suspensions | Building square footage | Building structure | Campus size (acreage) | Location of office |
|---------------|--------------------|--------------------------|------------------------------|---|--------------------------------|-------------------------|--------------------|-----------------------|--------------------|
| 03 | X | X | X | | | | | | X |
| 08 | | | | X | | | | | |
| 09 | | | X | X | | | | | |
| 11 | X | X | X | | | | | | |
| 15 | X | X | X | | | | | | |
| 16 | X | X | | | X | | | | |
| 25 | | | X | | | | | | |
| 29 | X | | X | | | | | | |
| 32 | X | | X | X | | | | X | |
| 35 | X | | | X | | | | | |
| 44 | | | X | X | | | | | |
| 47 | | | X | | | | | | |
| 50 | X | X | X | | | X | X | | |
| 53 | X | X | | | X | | | | |
| | 9 | 6 | 10 | 5 | 2 | 1 | 1 | 1 | 1 |

Safety & Security – Safety & Security Plan Training

Why this measure is important

This measure reflects the level of safety awareness of district staff. The goal is to have building-level staff personnel know what protocols are in place at the site level should a threat arise. This training should also include periodically testing the protocols listed in the district's security plan.

Factors that influence this measure

- Requirements for training on the safety and security plan
- Allocation of time for training
- Board and department policies
- Regional environmental factors

Analysis of data

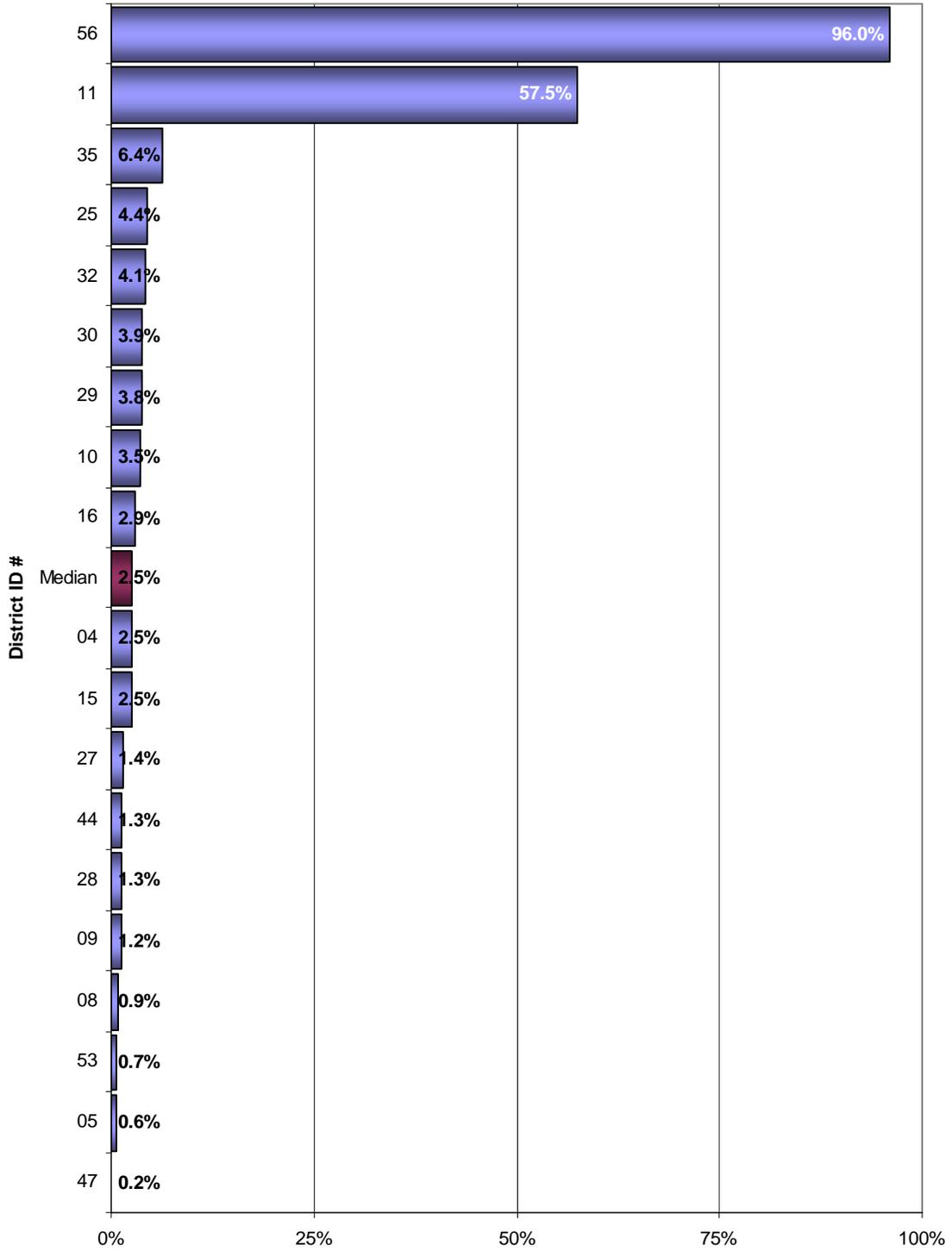
- The calculation used the following data points: annual number of district staff members required to attend Safety & Security Plan training *divided* by the total number of district staff from the general survey
- 19 districts provided reliable/valid responses to these data points
- High = 96.0 percent, Low = 0.2 percent, Median = 2.5 percent
- Larger districts tended to have a higher percentage of staff attending training

Comment

- The high range in the data may reflect a misunderstanding of the data requested. Follow up will be required.

Managing for Results in America's Great City Schools

Safety & Security Plan Training



Safety & Security – Safety & Security Staff Training

Why this measure is important

This measure reflects the level of expertise of safety and security personnel. Training as defined by this measure includes professional development for safety officers on securing an assailant, quieting a disturbance, breaking up a fight, etc. This training should lower a district's potential liability in regards to the actions of safety officers.

Factors that influence this measure

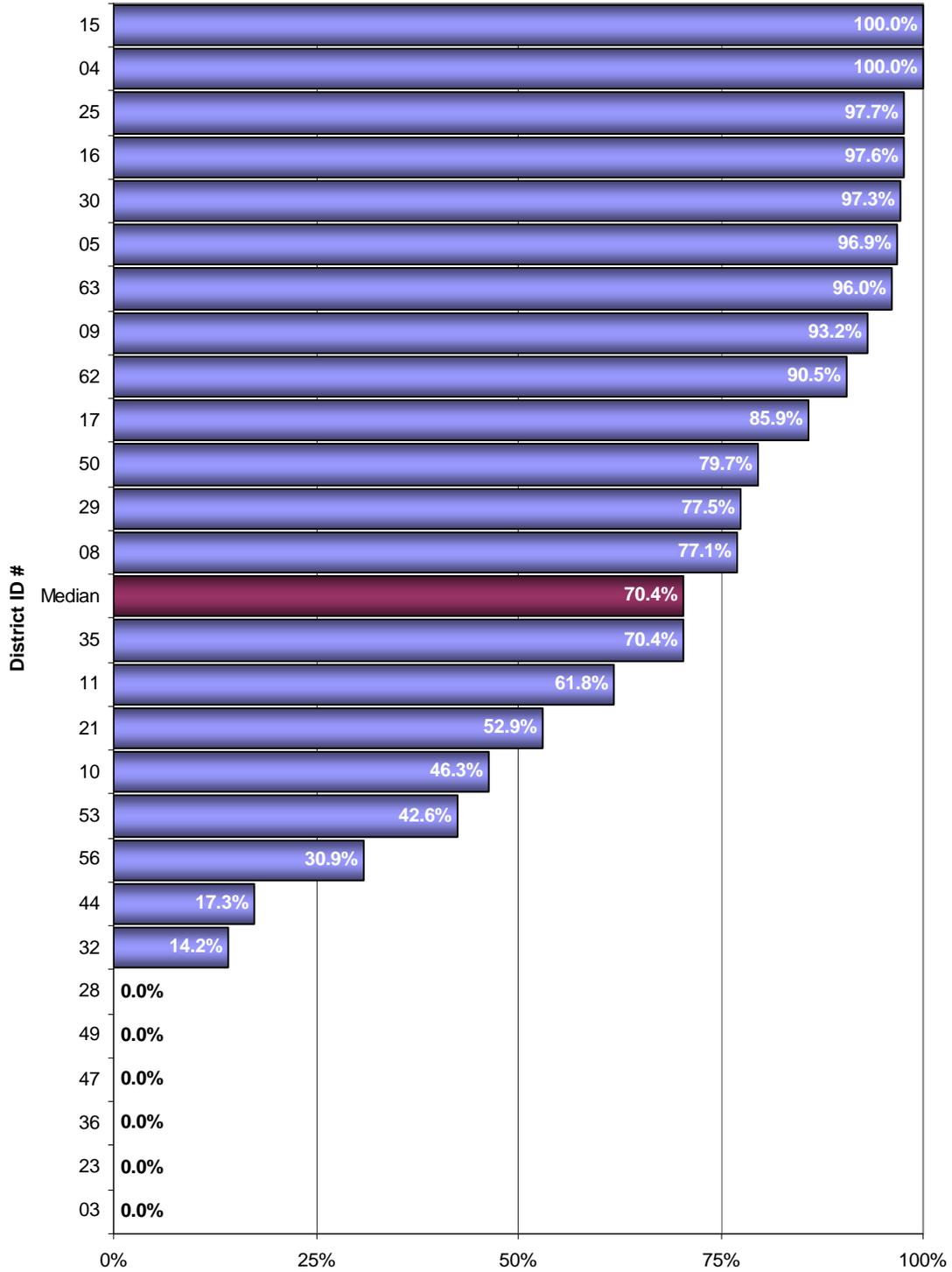
- Type of security staff
- Armed vs. unarmed staff
- Requirements and hours allocated to training
- Policies on hiring
- State or local statues on school safety officers

Analysis of data

- The calculation used the following data points: annual number of safety and security staff members required to attend training *divided* by the total number of safety and security staff at all levels
- 27 districts provided reliable/valid responses to these data points
- High = 100 percent, Low = 0 percent, Median = 70.4 percent
- 9 of 12 districts from the South are below the median
- Larger districts tend to have a lower percentage of safety and security staff training requirements.

Managing for Results in America's Great City Schools

Safety & Security Staff Training



Safety & Security – Safety & Security Staff in Uniform

Why this measure is important

Recognizable and easily identifiable safety officers are a deterrent to student-disciplinary incidents.

Factors that influence this measure

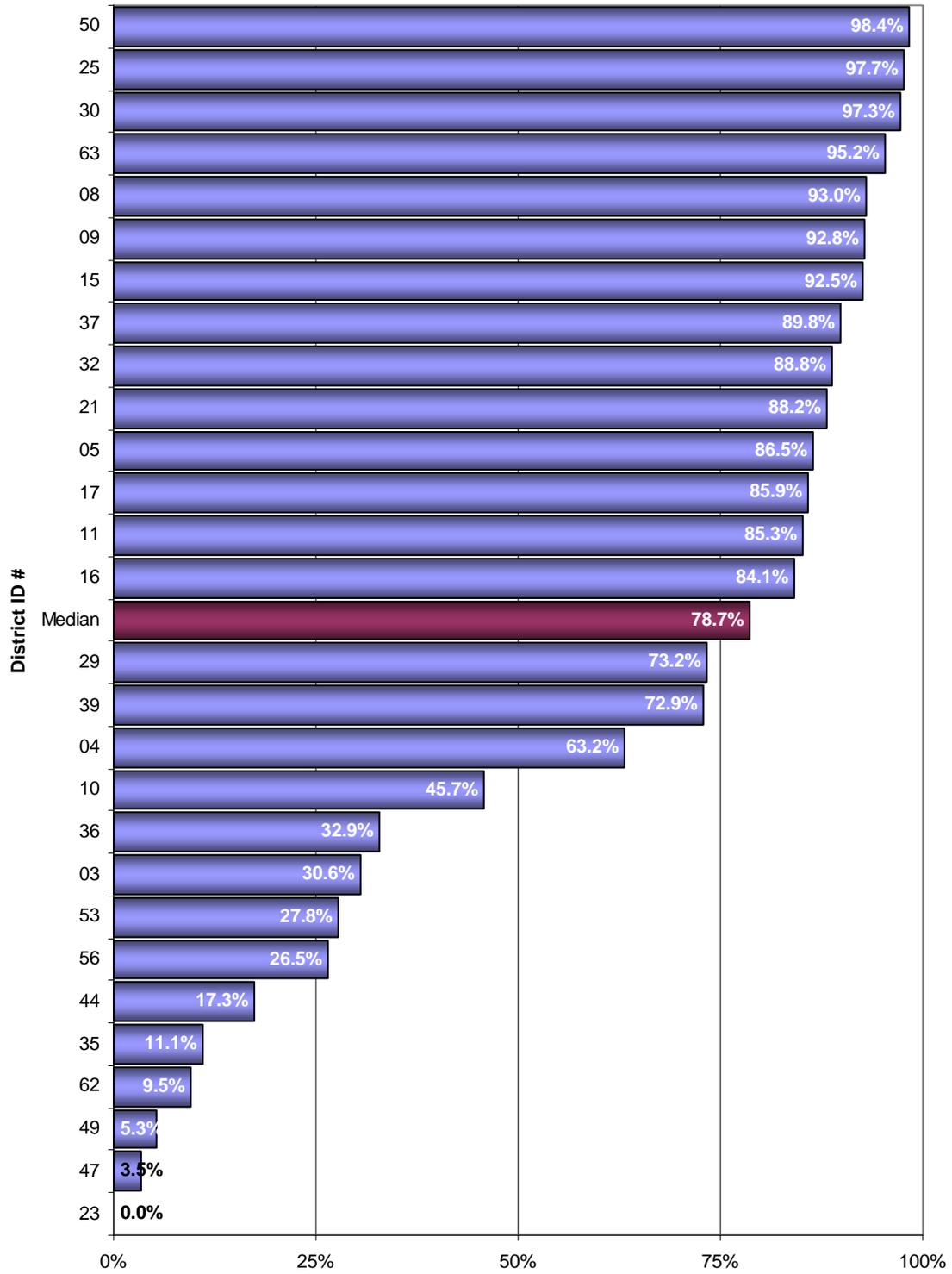
- Policies on uniformed presence
- Type of safety staff at school sites
- Whether uniforms are clearly identifiable

Analysis of data

- The calculation used the following data points: total numbers of security personnel that wear a uniform *divided* by the total number of safety and security staff members at all levels
- 29 districts provided reliable/valid responses to these data points
- High = 98.4 percent, Low = 0 percent, Median = 78.7 percent
- Larger districts tend to have a higher percentage of uniformed security staff than other districts have.

Managing for Results in America's Great City Schools

Safety & Security Staff in Uniform



Safety & Security – Buildings with Onsite Video Surveillance Monitoring

Why this measure is important

The benefits of video imaging in crime prevention and the solving of crimes are enormous. This indicator measures the prevalence of video imaging technology in the schools.

Factors that influence this measure

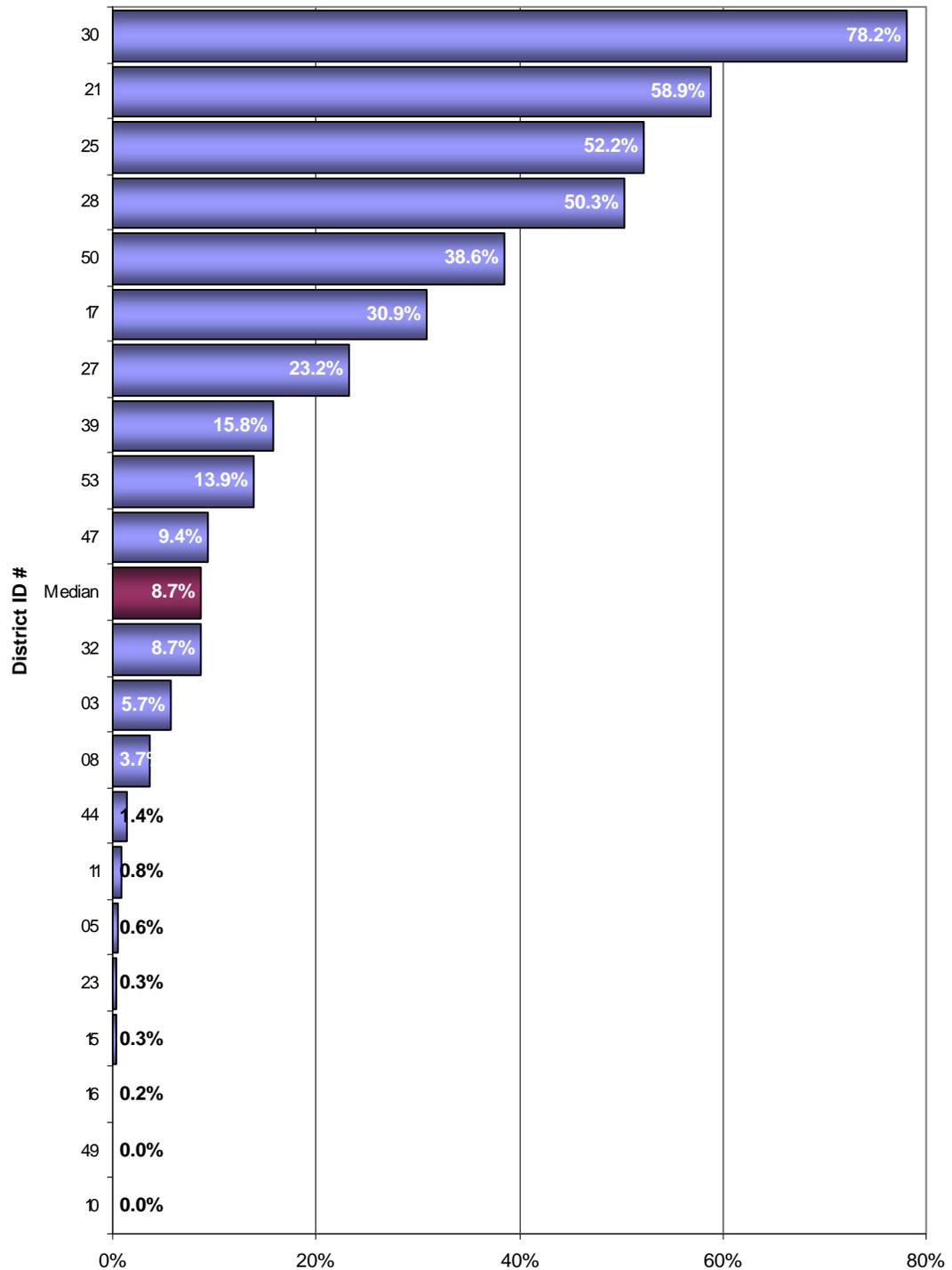
- System monitoring
- Frequency of monitoring
- Location of cameras
- Capture rate of cameras
- Privacy issues - How are images used? Can news media get copies if student images are on them? If images are used in disciplinary cases, is the district required to allow parents to view the footage? Can parents get copies?

Analysis of data

- These data were calculated using the following data points: total number of buildings with video surveillance monitoring onsite *divided* by the total number of buildings from maintenance & operations survey
- 21 districts provided reliable/valid responses to these data points
- High = 78.2 percent, Low = 0 percent, Median = 8.7 percent
- Districts were also asked to report if they had remote and/or onsite remote staff monitoring – a greater percentage of sites were monitored with onsite monitoring
- Larger districts have a lower percentage of buildings with video surveillance monitoring than smaller districts
- Most districts do not have video surveillance in a majority of their buildings.

Managing for Results in America's Great City Schools

Buildings with Onsite Video Surveillance Monitoring



Safety & Security – Buildings with Alarm System

Why this measure is important

The indicator provides a measure of the districts' ability to safeguard their physical assets.

Factors that influence this measure

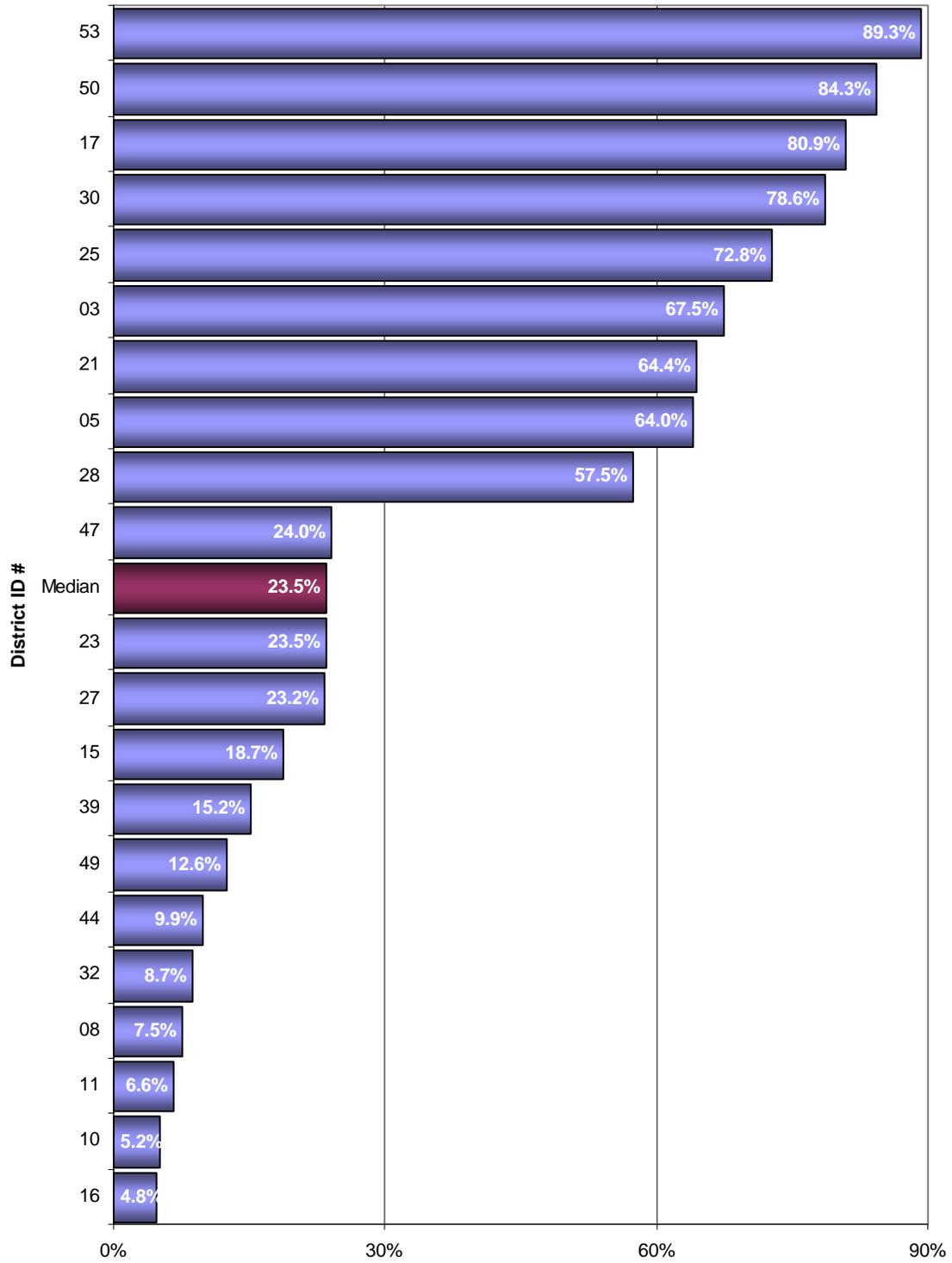
- Reliability of alarm system
- Response time of monitors
- Configuration of the alarm system
- Budget allocation

Analysis of data

- These data were calculated using the following data points: total number of buildings with alarm systems *divided* by total number of buildings from maintenance & operations survey
- 21 districts provided reliable/valid responses to these data points
- High = 89.3 percent, Low = 4.8 percent, Median = 23.5 percent
- All but two of the districts below the median are from the South
- Larger districts tend to fall below the median
- All but two of the districts reporting alarm systems indicated that they used alerts to central monitoring or law enforcement
- Most buildings do not have an alarm system and most are not monitored.

Managing for Results in America's Great City Schools

Buildings with Alarm System



Safety & Security – Metal Detectors – Hand-held vs. Walk-through

Why this measure is important

This measure provides an additional indicator of the ability of staff and students to deter crime

Factors that influence this measure

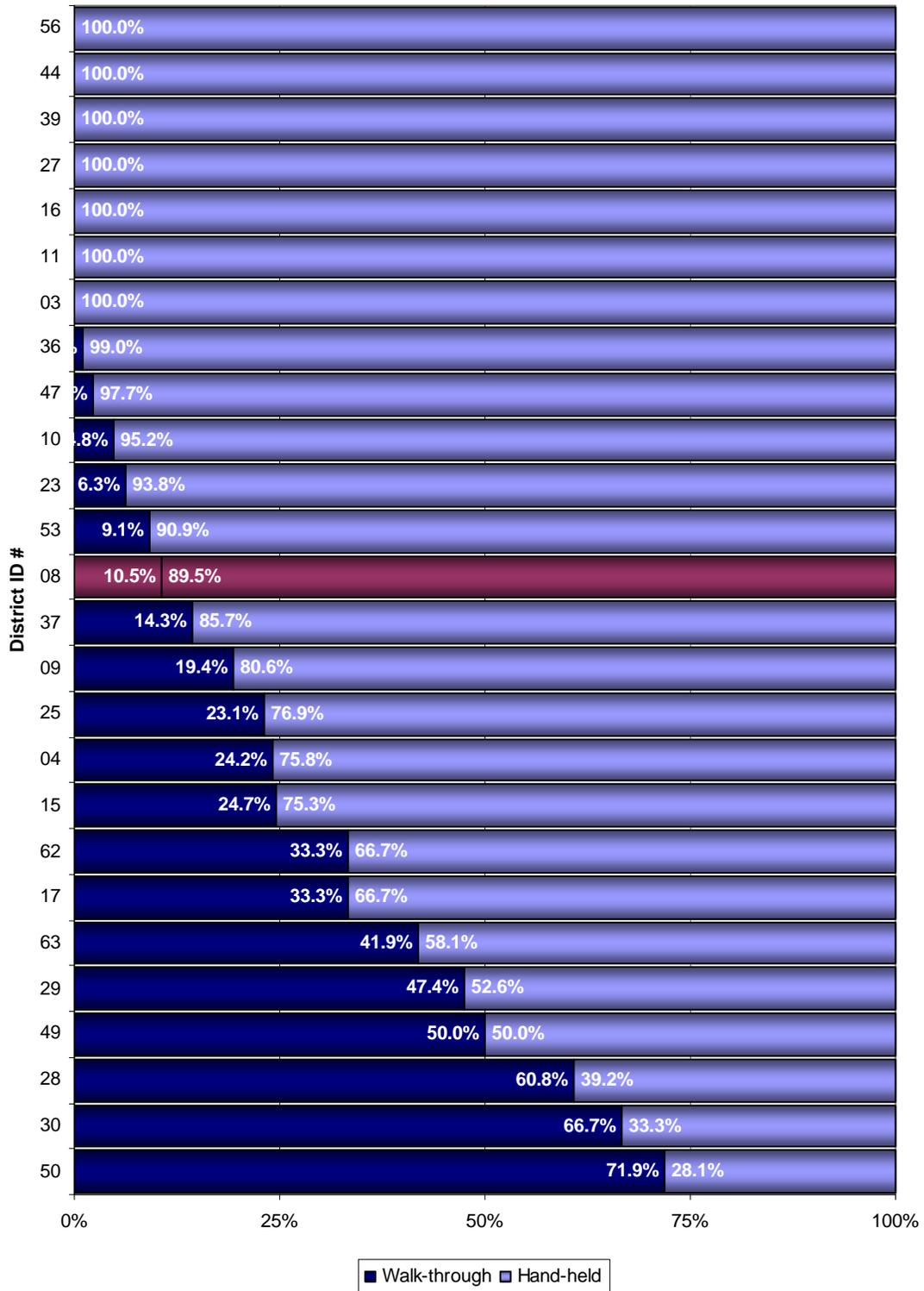
- Quality of equipment
- Frequency on “checks”
- Discipline measures for violators
- Budget allocation

Analysis of data

- The calculation used the following data points: number of hand-held metal detectors *divided* by the total number of metal detectors; number of walk-through metal detectors *divided* by the total number of metal detectors
- 26 districts provided reliable/valid responses to these data points
- The median is 10.5 percent walk-through, 89.5 percent hand-held
- High = 100 percent hand-held, Low= 28.1 percent hand-held.

Managing for Results in America's Great City Schools

Metal Detectors - Hand-held vs. Walk-through



Safety & Security – Employee Identification Badges

Why this measure is important

Staff members with identification badges are more easily distinguished from visitors

Factors that influence this measure

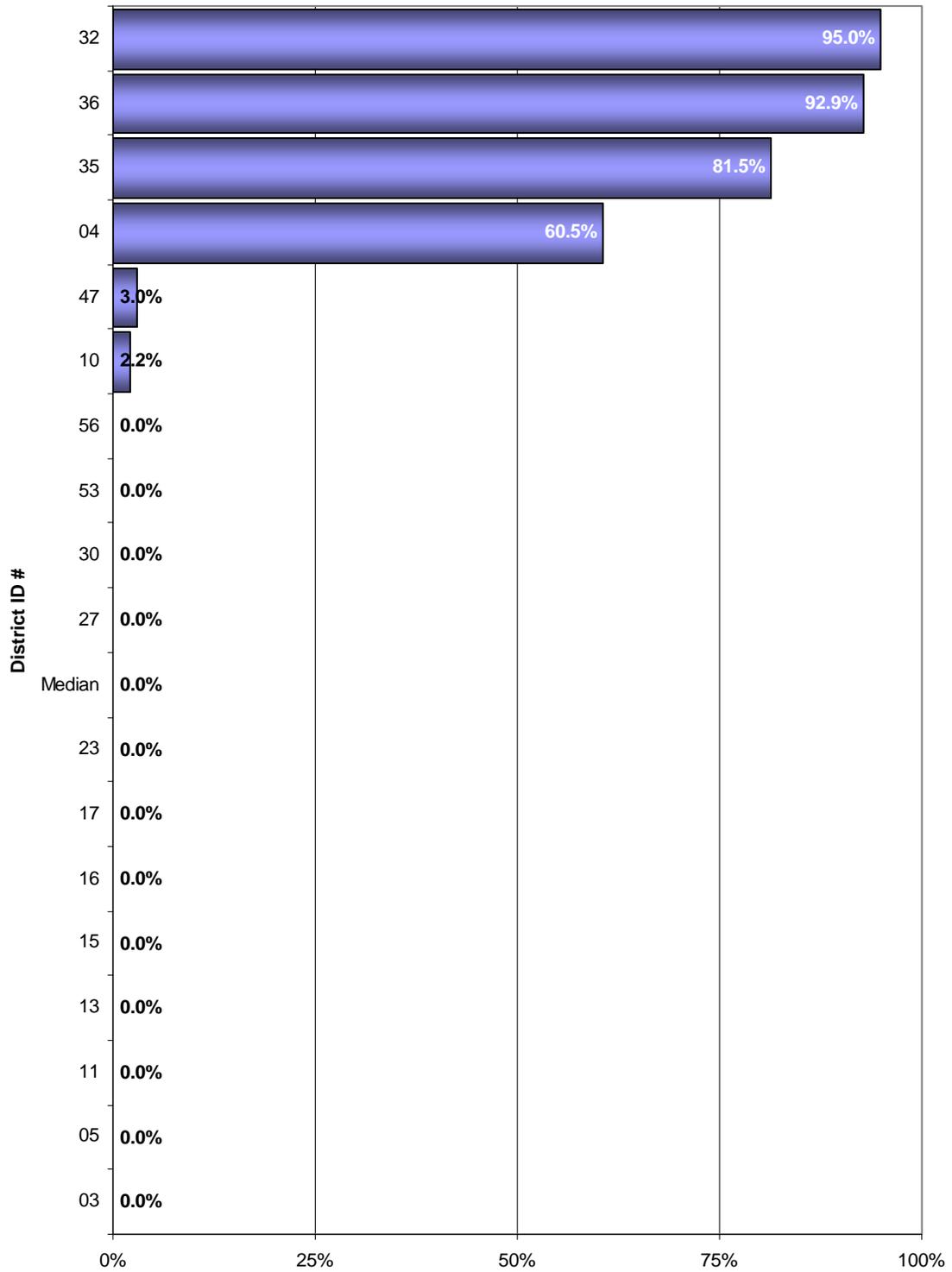
- Visibility of badges
- Requirement to wear badges everyday
- Effectiveness Of school-property monitoring to check badges

Analysis of data

- The calculation used the following data points: number of school-based, administrative, and contract employees required to have identification badges on a daily basis *divided* by the total number of employees from general survey
- 18 districts provided reliable/valid responses to these data points
- High = 95 percent, Low = 0 percent
- Only five of the 18 respondents required employees to wear badges.

Managing for Results in America's Great City Schools

Employee Identification Badges



Safety & Security – Student Identification Badges

Why this measure is important

Students with identification badges are easily distinguished from individuals who should not be on campus.

Factors that influence this measure

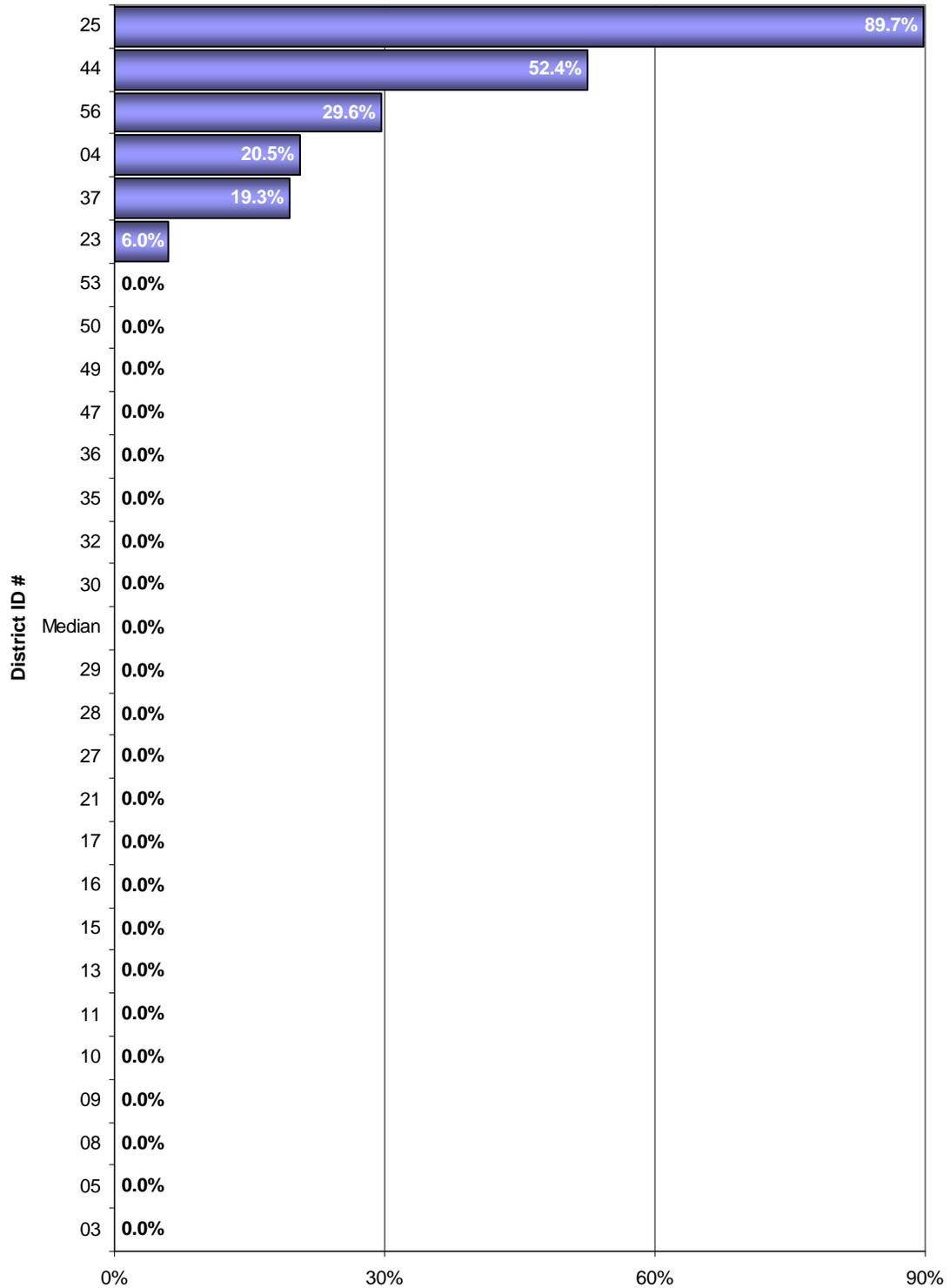
- Visibility of the badge
- District policy on student identification badges
- Multiple uses for a student-identification card such as cafeteria, library, public transportation, etc.

Analysis of data

- The calculation used the following data points: total number of students required to wear identification badges on a daily basis *divided* by the total number of students from general survey
- 28 districts provided reliable/valid responses to these data points
- High = 89.7 percent, Low = 0 percent.

Managing for Results in America's Great City Schools

Students Identification Badges



APPENDIX

Districts Receiving Surveys

- Albuquerque Public Schools
- Anchorage School District
- Atlanta Public Schools
- Austin Independent School District
- Baltimore City Public School System
- Birmingham City Schools
- Boston Public Schools
- Broward County Public Schools
- Buffalo Public Schools
- Caddo Public Schools District
- Charleston County School District
- Charlotte-Mecklenburg Schools
- Chicago Public Schools
- Christina School District
- Cincinnati Public Schools
- Clark County School District
- Cleveland Municipal School District
- Columbus Public Schools
- Dallas Independent School District
- Dayton Public Schools
- Denver Public Schools
- Des Moines Public Schools
- Detroit Public Schools
- District Of Columbia Public Schools
- Duval County Public Schools
- East Baton Rouge Parish School System
- Fort Worth Independent School District
- Fresno Unified School District
- Guilford County Schools
- Hillsborough County Public Schools
- Houston Independent School District
- Indianapolis Public Schools
- Jackson Public Schools
- Jefferson County Public Schools
- Kansas City, Missouri School District
- Long Beach Unified School District
- Los Angeles Unified School District
- Memphis City Schools
- Metropolitan Nashville Public Schools
- Miami-Dade County Public Schools
- Milwaukee Public Schools
- Minneapolis Public Schools
- New York City Department Of Education
- Newark Public Schools
- Norfolk Public Schools
- Oakland Unified School District
- Oklahoma City Public Schools
- Omaha Public Schools
- Orange County Public Schools
- Palm Beach County School District
- Pittsburgh Public Schools
- Portland Public Schools
- Providence Public Schools
- Richmond Public Schools
- Rochester City School District
- Sacramento City Unified School District
- Salt Lake City School District
- San Diego City Schools
- San Francisco Unified School District
- School District Of Philadelphia
- Seattle Public Schools
- St. Louis Public Schools
- St. Paul Public Schools
- Toledo Public Schools
- Wichita Public Schools

