



Dave Yost • Auditor of State

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Dave Yost • Auditor of State

To the residents, elected officials, management, and stakeholders of the Cincinnati City School District,

In consultation with the Ohio Department of Education, the Auditor of State's Ohio Performance Team conducted a performance audit of the District to provide an independent assessment of operations and management. Functional areas selected for review were identified with input from District administrators and were selected due to strategic and financial importance to the District. Where warranted, and supported by detailed analysis, this performance audit report contains recommendations to enhance the District's overall efficiency and effectiveness. This report has been provided to the District and its contents have been discussed with the appropriate elected officials and District management.

The District has been encouraged to use the management information and recommendations contained in the performance audit report. However, the District is also encouraged to perform its own assessment of operations and develop alternative management strategies independent of the performance audit report. The Auditor of State has developed additional resources to help Ohio governments share ideas and practical approaches to improve accountability, efficiency, and effectiveness.

SkinnyOhio.org: This website, accessible at <http://www.skinnyohio.org/>, is a resource for smarter streamlined government. Included are links to previous performance audit reports, information on leading practice approaches, news on recent shared services examples, the Shared Services Idea Center, and other useful resources such as the Local Government Toolkit. The Shared Services Idea Center is a searchable database that allows users to quickly sort through shared services examples across the State. The Local Government Toolkit provides templates, checklists, sample agreements, and other resources that will help local governments more efficiently develop and implement their own strategies to achieve more accountable, efficient, and effective government.

This performance audit report can be accessed online through the Auditor of State's website at <http://www.ohioauditor.gov> and choosing the "Search" option.

Sincerely,

A handwritten signature in black ink that reads "Dave Yost".

Dave Yost
Auditor of State
September 2, 2016

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Executive Summary

Purpose and Scope of the Audit

In consultation with the Ohio Department of Education (ODE), the Auditor of State (AOS) determined that it was appropriate to conduct a performance audit of the Cincinnati City School District (Cincinnati Public Schools, CPS, or the District) pursuant to Ohio Revised Code (ORC) § 3316.042. The purpose of this performance audit was to improve the financial condition of CPS through an objective assessment of economy, efficiency, and/or effectiveness of staffing levels and select areas of operations. See **Background** for a full explanation of the District's financial condition.

The following scope areas were selected for detailed review and analysis in consultation with the District, including Staffing and Treasurer's Office Operations. See **Appendix: Scope and Objectives** for detailed objectives developed to assess operations and management in each scope area.

Due to the size and complexity of CPS, the performance audit pinpointed select areas that could result in actionable recommendations to create efficiencies. The appropriateness of staffing levels was selected as the primary scope area due to the significant impact on the District's budget and financial condition (e.g., personnel costs accounted for 58.5 percent of General Fund expenditures in fiscal year (FY) 2014-15). Objectives were developed to determine the efficiency of District staffing as well as how collective bargaining agreement provisions affect total staffing levels.

Treasurer's Office operations, with a primary focus on the Payroll and Accounts Payable departments, was selected as a secondary scope area due to recent turnover and restructuring that occurred. In FY 2014-15, CPS spent approximately \$500,000 in personnel costs to issue payroll to over 6,000 regular and temporary employees. Analyses focused on examining key performance indicators and processes in the Payroll Department to identify opportunities to improve the efficiency and effectiveness of administering compensation to District employees. Additionally, the Accounts Payable Department issued over 44,000 non-payroll disbursements to vendors in FY 2014-15. Analyses for this area focused on the examination of key performance indicators and processes to identify opportunities to improve the efficiency and effectiveness of processing vendor invoices. Although in many instances a direct financial impact could not be identified, the implementation of recommendations contained from these analyses could have significant impact on District expenditures.

Performance Audit Overview

Performance audits provide objective analysis to assist management and those charged with governance and oversight to improve program performance and operations, reduce costs, facilitate decision making by parties with responsibility to oversee or initiate corrective action, and contribute to public accountability.

The United States Government Accountability Office develops and promulgates Government Auditing Standards that establish a framework for performing high-quality audit work with competence, integrity, objectivity, and independence to provide accountability and to help improve government operations and services. These standards are commonly referred to as Generally Accepted Government Auditing Standards (GAGAS).

OPT conducted this performance audit in accordance with GAGAS. These standards required that OPT plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for findings and conclusions based on the audit objectives. OPT believes that the evidence obtained provides a reasonable basis for our findings and conclusions based on the audit objectives.

Audit Methodology

To complete this performance audit, auditors gathered data, conducted interviews with numerous individuals associated with the areas of District operations included in the audit scope, and reviewed and assessed available information. Assessments were performed using criteria from a number of sources, including:

- Peer districts;
- Surrounding districts;
- Industry standards;
- Leading practices;
- Statutes; and
- Policies and procedures.

In consultation with the District, two sets of Ohio school districts were selected for comparisons contained in this report. A “Peers” set was selected for the staffing analysis, collective bargaining agreement provision comparison, and Treasurer’s Office operation comparison. This peer set is comprised of the five other large urban school districts in Ohio. Also, a “Surrounding Districts” set was selected for a comparison of compensation. This comparison set was selected specifically to provide context for local labor market conditions.

Table 1 shows the Ohio school districts included in these comparison groups.

Table 1: Comparison Group Definitions

Peers (Staffing, Collective Bargaining Provisions, and Treasurer's Office Operations)
<ul style="list-style-type: none"> • Akron City School District (Summit County) • Cleveland Municipal School District (Cuyahoga County) • Columbus City School District (Franklin County) • Dayton City School District (Montgomery County) • Toledo City School District (Lucas County)
Surrounding Districts (Compensation) ¹
<ul style="list-style-type: none"> • Forest Hills Local School District • Indian Hill Exempted Village School District • Northwest Local School District • Norwood City School District • Oak Hills Local School District • Reading Community School District • St. Bernard–Elmwood Place City School District • Wyoming City School District

¹ All surrounding districts are in Hamilton County.

Where reasonable and appropriate, peer districts were used for comparison. However, in some operational areas industry standards or leading practices were used for primary comparison. Sources of industry standards or leading practices used in this audit include: the Ohio Administrative Code (OAC), the Government Finance Officers Association (GFOA), the Council of Great City Schools (CGCS), the National Automated Clearing House Association (NACHA), the National Performance Management Advisory Commission (NPMAC), Wells Fargo, and SurePayroll.

The performance audit involved information sharing with the District, including drafts of findings and recommendations related to the identified audit areas. Periodic status meetings throughout the engagement informed the District of key issues impacting selected areas, and shared proposed recommendations to improve operations. The District provided verbal and written comments in response to various recommendations, which were taken into consideration during the reporting process.

AOS and OPT express their appreciation to the elected officials, management, and employees of the District for their cooperation and assistance throughout this audit.

Issues for Further Study

Issues are sometimes identified by OPT that are not related to the objectives of the audit, but could yield economy and efficiency if examined in more detail. The following issues for further study were identified during the course of the audit:

- **Special Education:** CPS employs educational, professional, and support staff including teachers, instructional paraprofessionals, attendants, psychologists, therapists, and social workers to provide education and support services to approximately 6,000 students with disabilities. In FY 2014-15, the District spent approximately \$336.9 million on instruction costs, 17.1 percent (\$57.6 million) of which was dedicated directly to the instruction of special education students. These instructional costs consisted primarily of salaries and benefits of employees directly responsible for the education and support of students with disabilities.

Baseline comparisons to the peer districts showed that CPS had more students with disabilities per special education teacher than the peer average (see **Chart B-5** in **Appendix B**) and expended less per special education pupil in FY 2014-15. Because special education staffing and the related costs are directly tied to the individual needs and individualized education programs (IEPs) of the special education student population, OPT did not analyze this area further. However, due to the District's financial condition, CPS is encouraged to further examine the special education program in greater detail to determine if opportunities for greater efficiency are able to be realized.

- **Payroll:** A baseline analysis of key performance indicators using FY 2014-15 data was performed, which showed that the District's payroll function was more efficient than the peers (see **Chart B-12** in **Appendix B**). In 2015, however, CPS purchased comprehensive, office-wide software that, when fully implemented, has the potential to further streamline the payroll process. Because of the newness of this software (full implementation of the payroll module is not scheduled to occur until January 2017), post-implementation data was not available. Therefore, a determination of the impact of this software on the workforce needs could not be made. CPS should periodically measure and assess key workload indicators related to the payroll function to determine the appropriateness of future state staffing, once sufficient data is available.

Summary of Recommendations

Table 2 summarizes performance audit recommendations and financial implications, where applicable.

Table 2: Summary of Recommendations

	Recommendations	Savings
R.1	Increase the negotiated class size limit for K-3 classrooms	\$7,005,300
R.2	Restructure overload in order to reduce the total cost of the provision	\$5,890,200
R.3	Decrease the overload payment amount for high school teachers	\$283,500
R.4	Eliminate obligatory staffing provisions within collective bargaining agreements	\$3,808,800
R.5	Require direct deposit for all employees	\$62,800
R.6	Formalize written receiver confirmation procedures and guidance	N/A
R.7	Transition invoices to electronic format	\$29,200
R.8	Transition vendor payments to electronic format	N/A
R.9	Develop internal tracking and benchmarking metrics to assess performance	N/A
	Cost Savings Adjustments¹	(\$5,757,000)
	Total Cost Savings from Performance Audit Recommendations	\$11,322,800

¹ This cost savings adjustment reflects the portion of savings from the implementation of **R.2** that would be achieved if **R.1** was also implemented.

Background

Financial Condition

Table 3 shows total revenues, total expenditures, results of operations, beginning and ending cash balances, and ending fund balances, including without renewal/replacement levies as well as with, as projected by CPS in its May 2016 five-year forecast. This information is an important measure of the current and projected financial health of the District.

Table 3: CPS Financial Condition Overview (May 2016)

	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Total Revenue	\$527,593,970	\$512,599,023	\$516,132,845	\$493,138,987	\$472,041,916
Total Expenditure	\$536,971,539	\$556,035,893	\$579,370,086	\$598,240,816	\$617,862,681
Results of Operations	(\$9,377,569)	(\$43,436,870)	(\$63,237,241)	(\$105,101,829)	(\$145,820,765)
Beginning Cash Balance	\$58,681,138	\$49,303,569	\$5,866,699	(\$57,370,542)	(\$162,472,371)
Ending Cash Balance	\$49,303,569	\$5,866,699	(\$57,370,542)	(\$162,472,371)	(\$308,293,136)
Outstanding Encumbrances	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000
Ending Fund Balance w/o Renewal/Replacement Levies	\$36,803,569	(\$6,633,301)	(\$69,870,542)	(\$174,972,371)	(\$320,793,136)
Cumulative Balance of Renewal/Replacement Levies	\$0	\$0	\$0	\$26,265,000	\$77,765,000
Ending Fund Balance w/ Renewal/Replacement Levies	\$36,803,569	(\$6,633,301)	(\$69,870,542)	(\$148,707,371)	(\$243,028,136)

Source: ODE

As shown in **Table 3**, CPS projects sizable deficits beginning in FY 2016-17 and increasing considerably throughout the forecast period. By FY 2019-20, CPS is projecting a deficit of over \$243.0 million, a level that exceeds 50.0 percent of expected revenues for that year. This deficit condition is a direct result of a steady decline in expected revenues coupled with annualized expenditure growth of approximately 3.0 percent.

Staffing

Initial data used to analyze staffing levels was from FY 2014-15 as reported to the Ohio Department of Education (ODE) through the Education Management Information System (EMIS). Preliminary baseline comparisons were made using this data; however, CPS provided FY 2015-16 data during the course of the audit. Year-over-year comparisons were performed on this data to ensure that any material staffing changes did not occur at CPS in FY 2015-16 that could alter conclusions drawn from the analysis using the prior year's data. **Table 4** shows this analysis, identifying the change in total full-time equivalent (FTE) employees by category for CPS between FY 2014-2015 and FY 2015-16.

Table 4: FTEs by Category Year-over-Year Change

Positions	FY 2014-15		FY 2015-16		Change	
	FTEs	% of Total	FTEs	% of Total	FTEs Change	% Change
Administrative	183.9	4.0%	186.6	4.0%	2.7	1.5%
District Administrators	91.9	2.0%	93.1	2.0%	1.2	1.3%
Building Principals/Assistant Principals	92.0	2.0%	93.5	2.0%	1.5	1.6%
Educational	2,197.6	48.0%	2,277.4	48.5%	79.8	3.6%
Teachers	2,045.2	44.7%	2,222.2	47.4%	117.0	8.7%
Other Educational Positions	152.4	3.3%	55.2	1.2%	(97.2)	(63.8%)
Professional & Technical	275.9	6.0%	313.6	6.7%	37.7	13.7%
Library Staff (Librarians & Aides)	15.5	0.3%	14.0	0.3%	(1.5)	(9.7%)
Counseling & Social Workers	36.0	0.8%	44.8	1.0%	8.8	24.4%
Nurses (Registered & Practical)	26.0	0.6%	33.1	0.7%	7.1	27.3%
Psychologists & Therapists	143.6	3.1%	163.2	3.5%	19.6	13.7%
Other Professional Positions	37.8	0.8%	39.5	0.8%	1.7	4.5%
Computer & Technical Positions	17.0	0.4%	19.0	0.4%	2.0	11.8%
Office/Clerical	339.6	7.4%	340.9	7.3%	1.3	0.4%
Office/Clerical Staff	339.6	7.4%	340.9	7.3%	1.3	0.4%
Non-Certificated Student Support	937.1	20.5%	927.9	19.8%	(9.2)	(1.0%)
Instructional Paraprofessionals	905.8	19.8%	893.8	19.0%	(12.0)	(1.3%)
Attendants	31.3	0.7%	34.1	0.7%	2.8	9.0%
Operational	646.4	14.1%	646.5	13.8%	0.1	0.0%
Custodian	211.6	4.6%	205.6	4.4%	(6.0)	(2.8%)
Maintenance & Facilities	115.0	2.5%	120.0	2.6%	5.0	4.3%
Guard/Watchman (Security Assistants)	129.0	2.8%	124.2	2.6%	(4.8)	(3.7%)
Transportation	4.0	0.1%	4.0	0.1%	0.0	0.0%
Food Service	186.8	4.1%	192.7	4.1%	5.9	3.2%
Total Staff FTEs	4,580.5	100.0%	4,692.9	100.0%	112.4	2.5%

Source: CPS and ODE

Note: Staffing categories are based on the position codes and categories defined in the *FY 2015 EMIS Reporting Manual* (ODE, 2015).

As shown in **Table 4**, although CPS added approximately 112.0 FTEs in FY 2015-16 (an increase of 2.5 percent), staffing additions were added proportionally to FY 2014-15 levels. As a result, only slight changes can be seen in the categorical allocation percentages. Therefore, conclusions drawn on the initial staffing analysis completed using FY 2014-15 data are still valid.

To determine the appropriateness of staffing levels, FY 2014-15 staffing data was compared to the peer set relative to student population, where applicable. Analyzing staffing using student population data is necessary as staff levels are partially dependent on the number of students served, and presenting staffing data in this manner decreases variances attributable to the size of the peers.

The following is a breakdown of each of the six staffing categories shown in **Table 4**, including an explanation of the staffing strategies used by CPS and details of the results of the analyses and peer comparisons performed, where applicable.

- **Administrative Positions:** This category of positions accounted for 4.0 percent of total staff at CPS in both FY 2014-15 and FY 2015-16 and includes district and building administrators responsible for the planning, management, evaluation, and operations. District administrators include the Superintendent, Treasurer, and District-wide directors, coordinators, and supervisors. In FY 2014-15, CPS employed 91.9 District administrator FTEs, 36.1 percent below the peer average per 1,000 students comparison (see **Table B-2** in **Appendix B**).

Building administrators include principals, assistant principals, and other building-level program directors and supervisors. In FY 2014-15, CPS employed 2.7 building administrator FTEs for every 1,000 students, 48.5 percent below the peer average of 5.3 FTEs per 1,000 students (see **Table B-2** in **Appendix B**). As the total building administrators needed by a district are more dependent on number of school buildings rather than total students¹, additional comparisons were completed of building administrators per building and assistant principals to principals between CPS and the peer districts. These comparisons showed CPS to be 29.2 and 18.2 percent below the peer average, respectively (see **Charts B-1** and **B-2** in **Appendix B**).

- **Educational Positions:** This category of positions accounted for the majority of the District's staff, at 48.0 and 48.5 percent in FY 2014-15 and FY 2015-16, respectively. Educational positions consist of certificated employees responsible for providing educational instruction to students and include general education teachers, special education teachers, gifted teachers, art, music, and physical education teachers, remedial specialists, and other educational positions.

Planning for educational staff at CPS is a very intricate process. Each of the District's school buildings is budgeted for staffing needs based on enrollment (a method known as "student based budgeting"). After the start of a school year, actual classroom enrollment data is analyzed and the District's administrative team completes a budget staffing review resulting in recommended adjustments. The Teacher Allocation Committee (TAC)² reviews the actual staffing and enrollment data as well as the recommendations made by the budget staffing review before any adjustments are made. The certificated staff collective bargaining agreement (CBA)³ includes provisions that restrict staffing decisions for educational staff at the District. Specifically, it includes detailed class size limits for different grade levels (i.e., K-3, 4-6, and 7-12); different types of elementary

¹ Ohio Administrative Code (OAC) 3301-35-05 requires every school be provided the services of a principal regardless of building enrollment.

² TAC is responsible for overseeing the District's class size requirements and includes administrators appointed by the Superintendent and teachers appointed by the President of the Cincinnati Federation of Teachers.

³ CBA between CPS and the Cincinnati Federation of Teachers Local 1520 AFT, OFT, AFL-CIO (effective from July 1, 2014 to June 30, 2017).

schools (i.e., neighborhood, magnet, and Montessori); and different high school class types (i.e., academic or elective). These class size limits (see **Table B-3** in **Appendix B**) affect staffing decisions in regard to classroom teachers.

FY 2014-15 students-to-teacher ratios (see **Charts B-3, B-4, and B-5** in **Appendix B**) were compared to the peer districts. These comparisons showed CPS to have higher students-to-teacher ratios. This staffing condition is a result of the use of overload payments and instructional paraprofessionals (see **R.2**), allowing CPS to exceed its class size limits and thus, employ fewer teachers.

- **Professional & Technical Positions:** This category of positions accounted for 6.0 and 6.7 percent of total staff in FY 2014-15 and FY 2015-16, respectively. The majority of professional employees within this grouping provide services to students with IEPs. Specifically, psychologists, therapists, social workers, and interpreters provide specialized services tailored to the individualized needs of students at the District. With the exception of a high level students-to-teacher ratio comparison (see **Chart B-5** in **Appendix B**), staff dedicated to special education population through IEPs were not evaluated to the peer average or any staffing benchmark. As with the special education teaching staff, a large percent of District expenditures are dedicated to providing these specialized services to students with IEPs, and CPS should continually evaluate its special education program and all associated costs (see **Issues for Further Study**). The District's technical positions consisted of 17.0 FTEs in FY 2014-15 including computer operators and technology positions. Due to the small allocation of staffing to this category (0.4 percent of total staffing), it was not analyzed in further detail.
- **Office/Clerical Positions:** This category of positions accounted for 7.4 and 7.3 percent of total staff in FY 2014-15 and FY 2015-16, respectively. This category includes District clerical employees and building school secretaries. The District clerical staff includes administrative secretaries, accounting and finance positions, human resource technicians, and many other non-certificated employees providing clerical services at the District-wide level. Analyses showed FY 2014-15 District clerical FTEs to be below the peer average at CPS, while building school secretaries were above (see **Table 5**). Further analysis was completed to evaluate specific CBA provisions requiring clerical positions within each school building (see **R.4**).
- **Non-Certificated Student Support Positions:** This category of positions encompasses staff employed to provide education related support services to students and accounted for 20.5 and 19.8 percent of total staff in FY 2014-15 and FY 2015-16, respectively. With 937.1 FTEs, non-certificated support staff per 1,000 students at CPS was 32.7 percent above the peer average in FY 2014-15. This variance is examined in conjunction with the students-to-teacher ratio comparisons (see **Charts B-3, B-4, and B-5** in **Appendix B**) because the employment of non-certificated support is a common practice used to allow a district to provide supplementary attention and instruction to students while avoiding the need to hire additional teachers.

While the District's 34.1 attendant FTEs were dedicated to specialized services for students with IEPs in FY 2015-16, instructional paraprofessional FTEs serve a number of different job functions. Specifically, 334.8 instructional paraprofessional FTEs in FY 2015-16 provided support services to individual students with IEPs and 316.0 FTEs are referred to as "overload paraprofessionals" hired to assist teachers in classrooms which exceed the District's stated classroom limits (see **R.1**). The remaining 243.0 instructional paraprofessional FTEs are dedicated to classroom support in the Montessori schools, preschool aides, and other support functions (see **Chart B-7** in **Appendix B** for a breakdown and description of the District's FY 2015-16 instructional paraprofessionals).

- **Operational Positions:** This category accounted for 14.1 and 13.8 percent of total staff in FY 2014-15 and FY 2015-16, respectively. CPS contracts with a third-party to provide transportation services to eligible students and therefore does not employ its own bus drivers. The 4.0 transportation FTEs reported reflect other vehicle operators which are lunchroom warehouse truck drivers. Custodians and maintenance employees are responsible for the continuous upkeep of school buildings and the District uses building square footage to determine the appropriate staffing levels for custodians (see **Chart B-8** in **Appendix B**). Maintenance employees are assigned based on building needs and collective bargaining agreement provisions (see **R.4**). Many of the maintenance and facility employees are centrally located and are dispatched to specific locations across the District as needed.

Also included in this category are guards/watchmen who are responsible for security services to students and on school grounds. These positions are included in the school budgets and building principals are responsible for determining the appropriate FTEs based on the individual school/neighborhood needs. Finally, food service employees are responsible for providing breakfast and lunch service to students. ORC § 3313.81 requires a food service fund⁴ be established and kept separate from all other funds. In FY 2014-15 the District's Food Service Fund was fiscally solvent and did not require any a subsidy from the General Fund. As the compensation of all food service employees was supported from this fund, staffing levels in this category were not analyzed as adjustment or reductions would not alleviate any projected General Fund deficit.

⁴ The Food Service Fund is classified as an enterprise fund. The *Uniform School Accounting System User Manual* (Auditor of State of Ohio, 2013) indicates that "enterprise operations are financed and operated in a manner similar to private business enterprises where the stated intent is that the costs are financed or recovered primarily through user charges."

Collective Bargaining Agreement Provisions

Contractual provisions can impact management's ability to staff various staffing categories. The District's collective bargaining agreements include compulsory provisions in the following areas:

- **Class Size Limits:** Class size limits impact staffing levels in regard to the number of teachers needed to meet requirements. Collective bargaining agreements often include class size limits as means to formally guarantee teachers a maximum level of responsibility in regard to the number of students within each instructional classroom. While small elementary class sizes have been a longstanding goal at CPS, recent enrollment increases, building capacity issues, and financial constraints have not allowed for these small class size goals to realistically be met (see **R.1**).
- **Overload:** Collective bargaining agreements between school districts and teachers typically include provisions defining the actions to be taken if class size limits are surpassed. These can include hiring another teacher and splitting the classroom into two, adding a teaching aide or instructional paraprofessional to assist in the classroom, or providing the teacher with a monetary stipend contingent on the number of students over the respective classroom maximum, often referred to as overload (see **R.2** and **R.3**).
- **Staffing Minimums:** Staffing levels can be impacted by collective bargaining agreement provisions that stipulate specific minimums in certain staffing categories. These mandatory staffing provisions can result in higher than needed staffing levels and restrict managements' ability to control costs (see **R.4**).

Treasurer's Office Operations

In February 2015, the Cincinnati Board of Education appointed a new Treasurer. Along with this change came a number of internal alterations including reorganization of the departments within the Treasurer's Office. Specifically, the Purchasing Department was moved from the Treasurer's Office to the Operations Office and the Benefits Department was moved from the Treasurer's Office to the Human Resource Office. The Assistant Treasurer and Treasurer's span of control over the remaining departments was restructured so that each position now supervises fewer departments, rather than the Assistant Treasurer supervising all departments and reporting to the Treasurer. In total, the Treasurer's Office consists of nine departments and 55 employees.

In FY 2015-16, CPS purchased SunGard BusinessPlus, an integrated software solution for managing various data, including financial and human resource information. Because of the hiring of the new Treasurer, the reorganization of Treasurer's Office, and implementation of the new system, the Payroll and Accounts Payable department operations within the Treasurer's Office were examined to ensure that staffing and select processes and procedures aligned with the revised operating structure.

- **Payroll Department (Payroll):** Payroll processed over 163,400 payroll checks for approximately 6,000 regular, temporary, and substitute employees throughout FY 2014-15. Payroll was staffed with 1.0 FTE Payroll Supervisor and 7.0 FTE intermediate

accounting technicians (IAT's) in FY 2015-16. Payroll FTE's are twelve month employees that typically work 37.5 hours per week (or 7.5 hours per day). Each technician has a list of duties with primary responsibility being the completion of payroll for assigned school buildings within the District. Completing building-level payroll includes checking and processing "normal"⁵ pay; manual processing of certificated and civil service extended time pay, manual processing of certificated leave and substitute pay, and manual updating of personnel action notifications (PANs). Other duties include calculating retirements, leave payouts, deductions, refunds, dues, tax shelter annuities, and verification of employments.

The District uses Oracle Time & Labor (OTL) to process payroll.⁶ Normal pays are set up in the system, but any leave or extended time pay are typically manually entered into OTL. Other systems used that require manual processing into OTL include Kronos (time clock feature) and the Absence Management and Substitute Placement (AESOP) system which tracks employee absences.

- **Accounts Payable Department (Accounts Payable):** Accounts Payable is responsible for ensuring timely payments to vendors or other parties. Accounts Payable processes invoices for multiple payment types to internal and external parties, including vendor invoices, insurance payments, prescription reimbursements, employee travel reimbursements, and other miscellaneous employee reimbursements using a staff of 7.0 FTE technicians.⁷ Payments are primarily processed manually (paper check) or through electronic payments. In addition to processing payments, technicians are responsible for customer service for vendors, District employees, and other stakeholders in regards to non-payroll disbursements.

The District uses the ERPOhio system to process invoices and to track all purchase orders and receiver confirmations. Accounts Payable also uses the Uniform School Accounting System (USAS) software to account for the payments, and to process the files needed to generate payments. The EPROhio system routinely loads processed invoice information into the USAS software.⁸ The E-Vendor Auditing System (EVAS) is also used to conduct background checks on vendors. The processed invoices run through this system to ensure the District is funding vendors with a clear business background with the Ultimate Edge system used to process and print the paper checks.

⁵ Normal pay refers to processing payroll using the exception-based system which is preprogrammed to pay employees for a full work schedule unless an exception (e.g., leave, overtime, etc.) is entered.

⁶ OTL will be replaced by SunGard BusinessPlus once implemented during FY 2016-17.

⁷ CPS hired 2.0 FTE Accounts Payable technicians during FY 2014-15. As a result, Accounts Payable had an average of 6.0 FTE staff for the year. This staffing number is used as a key metric throughout this report.

⁸ The Accounts Payable module of SunGard BusinessPlus will replace these systems in FY 2016-17.

Recommendations

Staffing

R.1: Increase the negotiated class size limit for K-3 classrooms

State Minimum Staffing

Ohio Administrative Code (OAC) 3301-35-05 requires the ratio of general education teachers to students, district-wide, to be at least 1.0 FTE classroom teacher for every 25 students in the regular student population. General education teachers do not include teaching staff in areas such as gifted, special education, art, music, and physical education.

District Student-to-Teacher Ratio

The District's certificated staff CBA establishes a teacher/pupil ratio of 51.0 or 51.5 teachers (subject to final review and agreement, including educational service personnel) per 1,000 regular program pupils, based on an average daily membership.

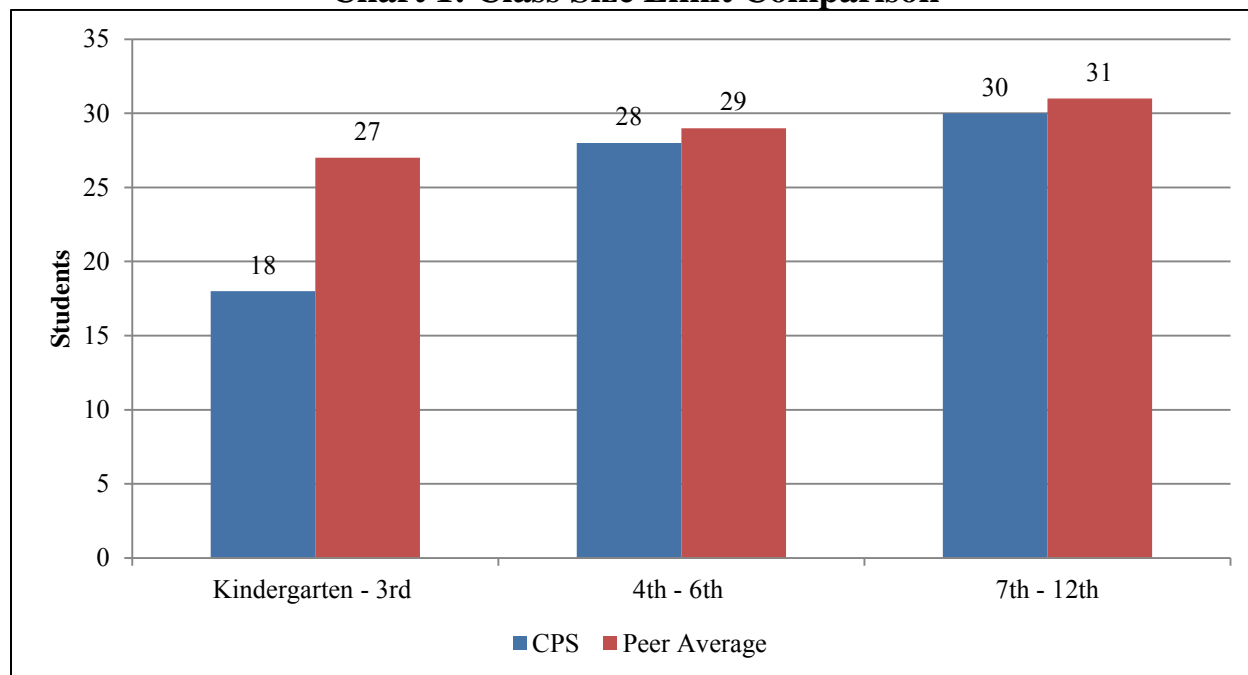
District Maximum Class Sizes

In addition to State guidelines and district-wide teacher/pupil goals, many districts include individual grade focused class size limits, also referred to as classroom maximums, within collective bargaining agreements. The purpose is often to guide staffing levels and/or to formally guarantee teachers a maximum level of responsibility in regard to the number of students within each instructional classroom.

The District's certificated staff CBA includes class size limits for various classroom conditions. CPS class size limits are set for different grade levels (i.e., K-3, 4-6, and 7-12), different types of elementary schools (i.e., neighborhood, magnet, and Montessori), and different class types for high schools (i.e., academic or elective).

Chart 1 shows a comparison of class size limits for CPS and the peer average.⁹ This analysis provides an initial indication of how class sizes will affect over all staffing levels.

⁹ Akron is not included in the peer average as it does not have classroom maximums.

Chart 1: Class Size Limit Comparison

Source: CPS and peer districts

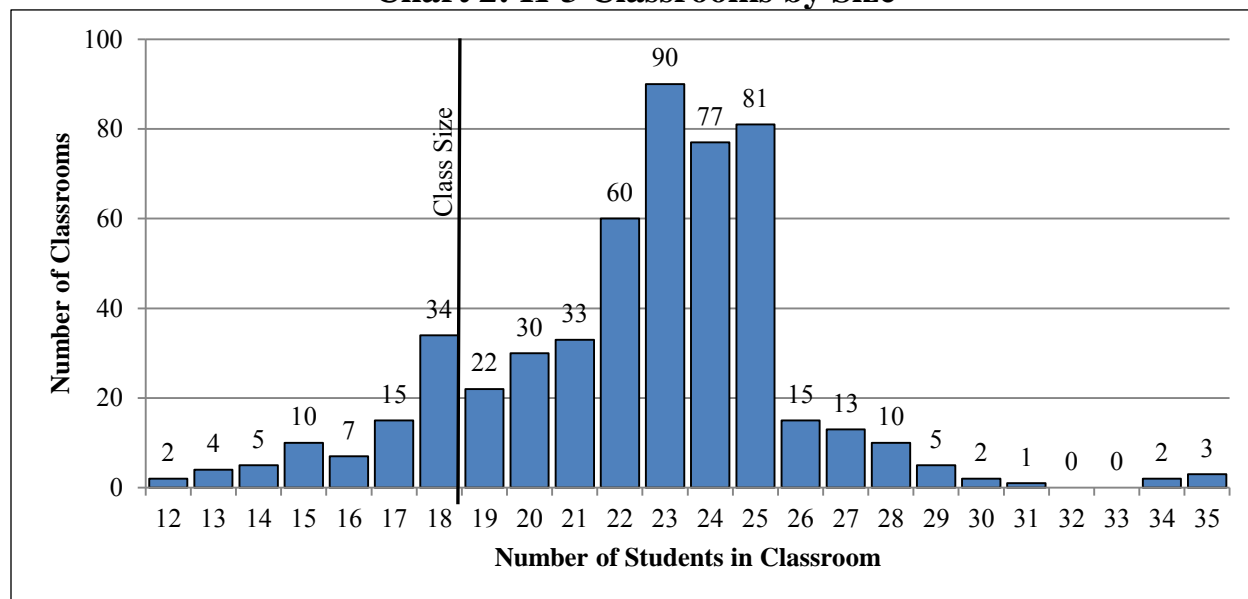
Note 1: The three grade ranges shown in **Chart 1** reflect school and class size structure used by CPS. Class size maximums are allocated by these grade ranges within the certificated staff CBA. As the peer districts structure and CBAs differed in this respect, the peer average was calculated determining each individual grade class maximum using the respective range for each peer district.

Note 2: The class maximums shown reflect regular academic classes and exclude other circumstances such as elective class maximums

As shown in **Chart 1**, CPS classroom maximums for grades 4-6 and 7-12 are in line with the peer average, however, the class size limit of 18 students for grades K-3 is nine students or 33.3 percent below the peer average. According to certificated staff CBA, “The Cincinnati Public Schools respect the research that suggests that small classes in early grades have lasting benefits on student achievement.” Because of this, CPS emphasized that small class size is a prominent educational focus of stakeholders and an ongoing District effort.

In FY 2015-16, CPS had 521¹⁰ K-3 classrooms within 42 school buildings. **Chart 2** shows classification of these classrooms by the number of students. Examining a distribution of classrooms by size provides an indication of actual enrollment per class in relation to the class size limit.

¹⁰ Of these 521 classrooms, 85 were within Montessori school buildings and 436 were within neighborhood or magnet school buildings. Classroom size limits differ in Montessori classrooms at CPS as each classroom includes an instructional paraprofessional, regardless of the number of students.

Chart 2: K-3 Classrooms by Size

Source: CPS

Note: Class size data was provided in February 2016 and reflects FY 2015-16 third-quarter class sizes.

As shown in **Chart 2**, the majority of K-3 classrooms at CPS exceed the class limit of 18 students, with only 77, or 14.8 percent, of the 521 classrooms at or under this class size limit. In FY 2015-16, the average class size at CPS was 22.4 with the most common class size at 23 students.¹¹

The certificated CBA¹² states that once a K-3 classroom exceeds the limit of 18 students, the respective teacher is provided the choice between receiving a monetary overload payment or having a paraprofessional (a non-certificated support position) assigned to assist in the classroom. The District should increase the negotiated class size limit for K-3 classrooms. Aligning the class size limit for this grade classification with the peer average will not require CPS to increase its current class sizes; rather it would provide the District with more control and less obligation in regard to the use of instructional aides and overload stipends (see **R.2**).

Financial Implication: Increasing K-3 class size limits from 18 to the peer average of 27 could save **\$7,005,300** annually, including \$784,800 in overload payments¹³ and \$6,220,500 in overload aides' compensation including salaries and benefits.¹⁴ This was calculated based on the number of actual classroom teachers receiving overload and the number and cost of overload aides in K-3 classrooms in FY 2015-16.

¹¹ Of the 436 neighborhood and magnet school K-3 homerooms at CPS, 83.9 percent (or 366 classrooms), exceeded the classroom limit of 18 students in FY 2015-16. This high percentage of over limit classrooms is a direct result the significantly lower than average class size limit in **Chart 1**.

¹² CBA between CPS and the Cincinnati Federation of Teachers Local 1520 AFT, OFT, AFL-CIO (effective from July 1, 2014 to June 30, 2017).

¹³ Overload payments are fully explained in **R.2**.

¹⁴ This change in class size limit and corresponding savings would require CPS to remove the provisions regarding when a new classroom is added and new teachers are hired (see **Table B-3** in **Appendix B**).

R.2: Restructure overload in order to reduce the total cost of the provision

Overload refers to the contractual obligation to provide teachers with a paraprofessional (classroom teaching assistant) and/or overload payment when a class size exceeds the respective limit (see **Table B-3** in **Appendix B**). Class size limits and overload eligibility at CPS are as follows:

- **Grades K-3:** The academic class size limit is 18 students for this grade classification. As a result, when an academic class period is assigned 19 or more students, the teacher is provided the choice between having a paraprofessional in the classroom or receiving an overload payment. Once an academic class size reaches 26 students in the first semester, or 29 students in the second semester, a new teacher is added. The class size limit for a K-3 specialist class (also referred to as non-academic class)¹⁵ is 28 students. A teacher of a specialist class who is assigned 29 or more students is eligible for overload payment.
- **Grades 4-6:** The academic class size limit is 28 students for this grade classification. Resulting overload payments are made when an academic class period is assigned 29 or more students; however, once the classroom reaches 31 students, the teacher is provided the choice between having a paraprofessional in the classroom or receiving an overload payment. If an academic classroom reaches 33 students a new teacher is added. The class size limit for specialist classes in grades 4-6 is 34 students.
- **Grades 7-12:** The academic class size limit is 30 students and the specialist/elective class size limit is 34 students for this grade classification.¹⁶ Academic classes are defined as English, math, science, social studies, and foreign language while specialist/elective classes are additional courses chosen by the student from a number of optional subjects. Teachers qualify for overload payment when academic classes are assigned 31 or more students and specialist/elective classes are assigned 35 or more students.

CPS general education teachers qualify for overload compensation if his/her class size exceeded the respective limit for at least a half quarter. Overload compensation is paid quarterly and is calculated based on overload claim forms submitted by the qualifying teacher four times a year. Any teacher whose class is assigned an overload paraprofessional and is above the paraprofessional class size limit¹⁷ also receives overload payment until a new teacher is hired. Payment is calculated at \$135 per approved overload student per class per quarter that the overload occurred, up to a maximum of four periods per day for students in self-contained classes.¹⁸

¹⁵ Specialists include art, music, physical education, health, drama, dance, media specialist, and technology teachers.

¹⁶ Class size limits do not apply to band and choir.

¹⁷ Teachers with an overload paraprofessional in the classroom receive overload payment beginning at student 26 for grades K-3 and at student 32 for grades 4-6. This overload payment is made until a new teacher is added.

¹⁸ Self-contained classrooms refer to those classrooms where one teacher covers all academic subjects and the students therefore do not move from one classroom to another for departmentalized instruction.

In October 2014, the Cincinnati Federation of Teachers filed a grievance contesting the manner in which CPS planned to pay overload compensation. Without making any concession with respect to the proper interpretation of the respective provision in the CBA, the grievance was resolved as both parties agreed that through June 30, 2017, the Board will calculate overload compensation at \$135 per quarter for each qualifying overload student, payable quarterly, but subject to system-wide and individual maximum caps included in the resolution. As a result, no individual teacher shall receive overload payments for any one school year in excess of \$9,800. Additionally, the resulting agreement includes system-wide maximum caps for overload compensation each year. In FY 2015-16, CPS had a system-wide maximum overload cap of \$440,000 per quarter, a maximum of \$1.76 million annually.¹⁹ Overload payments to teachers can be reduced proportionality by CPS as required to stay within the maximum cap.²⁰

In FY 2014-15, CPS had a higher students-to-teacher ratio than four of the five peer districts (see **Chart B-3** in **Appendix B**). While overload can be used as a stopgap measure that is less expensive than hiring new teachers, significant deficits projected by CPS force the District to evaluate all potential operations where savings can be achieved. The District's non-certificated support staff (including overload paraprofessionals) per 1,000 students was 32.7 percent above the peer average in FY 2014-15. In addition, the cost of the overload program is significantly higher than similar programs offered by the peer districts (see **Chart 3**). With increasingly limited financial resources, CPS must focus on reducing expenditures within costly operations, including overload.

The total financial impact of an overload program is dependent on a number of factors and how they simultaneously function. These factors play a part in how the overload compensation is calculated and include:

- **Class size limit:** The level at which a teacher is awarded overload is based on the class size limit (see **R.1**) and usually is dependent on the grade level and/or class type (academic, elective). The lower the class size limit, the sooner overload is awarded.
- **Dollar amount:** The dollar amount paid for each qualifying student over the class size limit.
- **Overload calculation:** The calculation used for overload payment is calculated by multiplying the dollar amount by the number of students over the class size limit. In addition, the equation can be based on the number of students over the class limit for each class period and can be paid daily, quarterly, or annually.

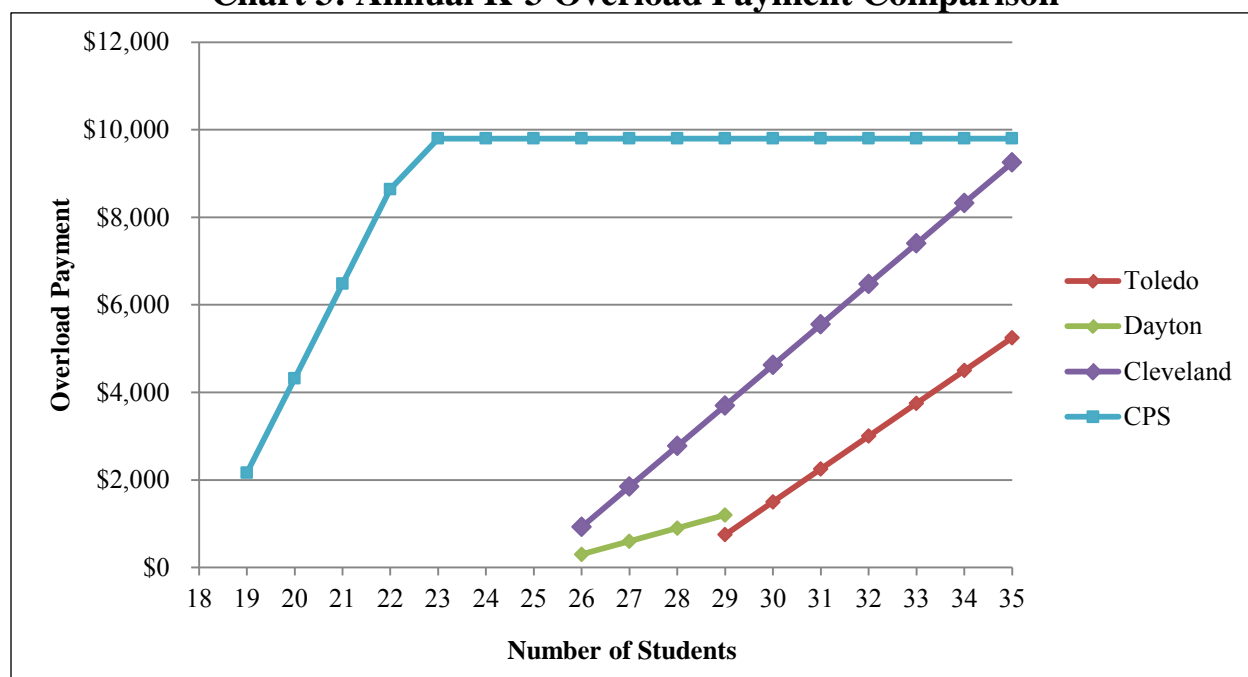
¹⁹ For FY 2014-15, the cap was \$400,000 per quarter, for a maximum of \$1.6 million annually and for FY 2016-17, the cap is \$475,000 per quarter, for a maximum of \$1.9 million annually.

²⁰ While overload payments provide a supplementary compensation to teachers in addition to regular salaries, a comparison of the District's step schedules showed regular teacher salaries to be slightly above the peer district average (see **Chart B-9a** and **Chart B-9b** in **Appendix B**).

In addition to higher than average K-3 class sizes (see **R.1**) and higher than average overload dollar amounts for high school students (see **R.3**), the District's overload program is more generous than the peers in regard to the components of the calculation used to determine the respective compensation. Specifically, teachers are compensated for each class period (or bell) when overload occurs. In addition, the overload dollar amount of \$135 is paid for each qualifying student each quarter of the school year. These factors of the calculation significantly enhance the total annual payment for each qualifying student.

Chart 3 shows a comparison of K-3 overload payments for CPS and the peer districts that offer overload. This provides a visual of how the total cost of overload changes as each overload factor is considered simultaneously (i.e., the limit at which overload is received, the dollar amount per student, and the calculation). While one factor can be in line with the peer average, another may appear excessive. Comparing all factors together provides a fair comparison of the annual overload payment.

Chart 3: Annual K-3 Overload Payment Comparison



Source: CPS and peer district bargaining agreements

Note 1: Akron and Columbus do not offer overload and therefore are not included in the comparison.

Note 2: Dayton's bargaining agreement stipulates a maximum of four overload students and is the only collective bargaining agreement that formally caps the number of overload students.

As shown in **Chart 3**, K-3 teachers at CPS are eligible to receive an overload payment at a much lower student level, beginning at 19 students, compared to Cleveland and Dayton at 26 students and Toledo at 29 students. This is due to the District's significantly lower than average negotiated class size limits (see **R.1**). In addition, **Chart 3** shows the dollar amount paid by CPS to be above each of the three peer districts shown. CPS compensates teachers \$135 for each eligible overload student. Because compensation is paid for each class period (up to a maximum of four periods), however, this equates to \$540 per student.

Payments at CPS are provided each quarter, bringing the initial total overload payment for just one eligible K-3 student to \$2,160 per year. In comparison:

- Toledo provides an overload payment of \$125 per student per instructional hour per year. With a maximum of six instructional hours, this equates to \$750 per student per year. Toledo spent \$131,000 in overload payments in FY 2014-15.
- Dayton's overload is compensated each semester based on \$300 per student per year.²⁰
- Cleveland calculates overload payments at \$5 per student per day. At 185 school days, this equates to \$925 per student per year. Cleveland spent \$1.1 million in overload payments in FY 2014-15.

While it is a relatively common practice to provide overload payments and utilize instructional paraprofessionals when class sizes exceed limits, it is not a common practice to provide the individual teacher with the decision between these two options.²¹ This practice not only makes it difficult for CPS to effectively plan for the financial liability, but it also allows for significant variance in services students may be receiving from one classroom to another. For example, one teacher with 25 students may opt for the overload payment while another may choose the services of instructional paraprofessional.

While overload and use of instructional paraprofessionals allows CPS to employ fewer teachers (see **Chart B-3** in **Appendix B**), the components and methodology used to calculate the overload payments exceed the practices of peer districts. Specifically, the lower class size limits at CPS, higher overload dollar amounts, per class period multipliers, and quarterly payments result in significantly higher stipend amounts. Many options exist to reduce the financial liability imposed by the current overload program at CPS and restructuring specific aspects of the overload program will result in savings.

The following represents potential adjustments to each factor of the provision that would bring them more closely in line the peers:

- Increase the K-3 class size limit from 18 to 23 students.
- Eliminate the option for K-3 teachers to decide between receiving an overload payment or the assistance of an overload instructional paraprofessional. In doing so, provide overload payment for each student over 23 up to a maximum of 25 and provide teachers with the assistance of an instructional paraprofessional when class sizes reach 26 students.²²
- Calculate elementary and intermediate overload at \$135 per student per quarter, eliminating the "per period" portion of the equation.²³

Implementing the above changes to the overload payment program could result in savings of approximately \$5,890,200 annually. A greater financial impact, however, is possible if changes

²⁰ Dayton did not provide data on the total cost of overload payments made.

²¹ No peer district provides teachers the choice between overload payments and instructional paraprofessionals.

²² This adjustment would require CPS to also remove the provisions regarding when a new classroom is added and new teachers are hired (see **Chart B-3** in **Appendix B**).

²³ Eliminating the per period component of the calculation would reduce the annual payment for one student from \$2,160 to \$540.

are made to the factors that exceed the peer levels. For example, increasing class size limits to 25 students.

Financial Implication: Adjusting overload factors to a level closer to the peer districts could save approximately **\$5,890,200** annually based on actual FY 2015-16 overload costs.

R.3: Decrease the overload payment amount for high school teachers

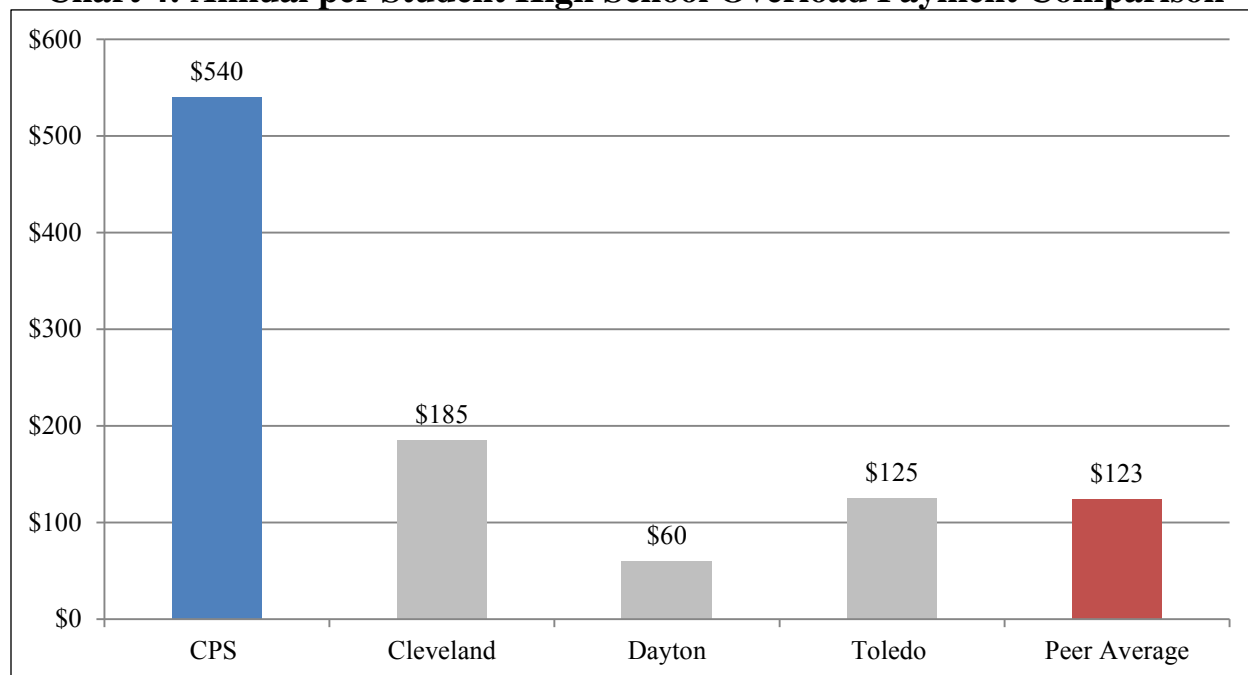
According to the certificated staff CBA, teachers of grades 7-12 qualify for an overload payment when academic and elective class sizes exceed the respective class size limits (see **Chart B-3** in **Appendix B**). The amount due is calculated at \$135 per student over the class size limit for each class period and is paid each quarter. For example, if a 10th grade math teacher is assigned five class periods each day and three of the five periods exceed the academic class size limit by two, three, and four students, respectively, this would result in eligibility of nine overload students. This math teacher is compensated a total of \$1,215 in overload for the first quarter. The overload payment is then recalculated each quarter based on student enrollment per class period with overload payments subject to an annual maximum cap of \$9,800 per teacher per year.

Three of the five peers offer an overload stipend to teachers when high school class sizes exceed respective limits. These overload stipends are calculated as follows:

- **Cleveland:** Teachers assigned students beyond a limit of 30 for grades 9-12 results in one of the following: the student or teacher is reassigned, an additional classroom teacher is added, an educational aide is assigned, or an overload payment is made to the teacher. This is a collective decision made with input from the building principal, union chair, and teacher. In the situation where an overload payment is made, the teacher is paid \$1.00 per student per instructional period per day for each student above the limit.
- **Dayton:** High school teachers receive an overload payment of \$60 per student per period per year for each student over the class size limit of 35. If the teacher has the extra student(s) less than five periods per week and/or less than a full school year, the per student amount is pro-rated. Classroom aides are not generally used in Dayton's high school classes.
- **Toledo:** High school teachers receive an overload payment of \$125 per student per instructional hour per year for each student over the limit of 26. Once the class size reaches 34 students, the teacher is entitled to the services of a classroom aide.

Chart 4 shows a comparison of the annualized overload payment per high school student for CPS and the peer districts. This analysis is important as it applies the differing payment factors for each district and provides an annual per student payment amount that can be used for comparative purposes.

Chart 4: Annual per Student High School Overload Payment Comparison



Source: CPS and peer district bargaining agreements

Note: Akron and Columbus do not provide employee overload payments.

As shown in **Chart 4**, the annual overload payments at CPS for each high school student over the corresponding class size limit is \$540; \$417, or 339.0 percent, more than the peer average of \$123.²⁵

In FY 2015-16, 125 high school teachers at CPS received overload payments. Based on individual class enrollment and actual overload paid during the first and second quarters at CPS, the total overload amount dedicated to high school teachers in FY 2015-16 was approximately \$370,000.

While the method for calculating CPS' high school teacher overload is in line with the peer districts in regard to the per student and per class period components of the equation, CPS calculates overload compensation based on a dollar amount per semester, rather than per year. This variance in the equation results in a higher overload payment shown in **Chart 4**.

²⁵ Class size limits for 7-12 is 30 students for academic classes and 34 students for specialist/elective classes.

Decreasing the annual high school overload payment to the peer level could bring high school overload expenditures per student in line with peer districts. CPS could accomplish this by reducing the quarterly amount from \$135 to \$30.75 per student per class period or by changing the overload program to provide teachers with \$123 per year, rather than \$135 per quarter.

Financial Implication: Decreasing the overload amount paid to CPS high school teachers to a level in line with the peer average could result in a savings of approximately **\$283,500** annually. This is based on the difference between CPS and the peer average overload payment per student, per year and multiplied by the District's actual number qualifying high school overload students in FY 2015-16.

R.4: Eliminate obligatory staffing provisions within collective bargaining agreements

Custodial and Maintenance Staffing

The CBA covering building engineers²⁶ requires that at least one building engineer be assigned to each school building within the District. This assignment does not take into consideration student enrollment, building size, or other related staffing assignments. According to CPS, each building engineer functions as building-level operational manager, supervising food service, custodial and maintenance operations, and other non-education related functions.

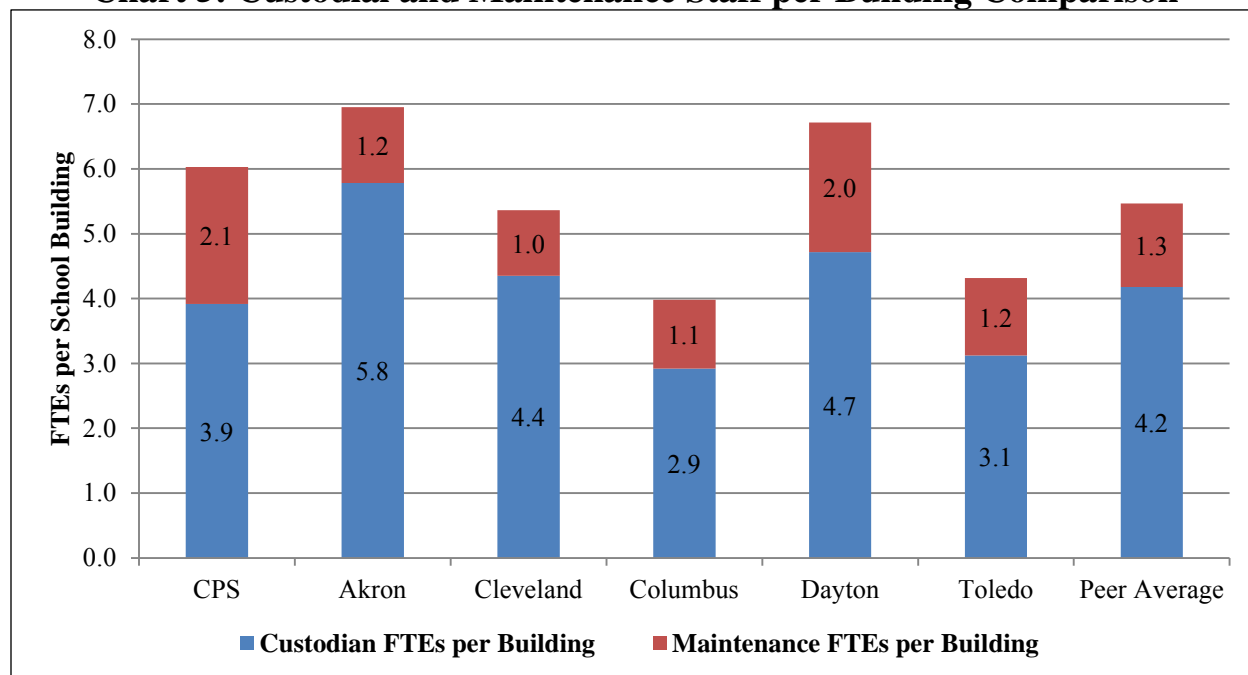
While building engineers at CPS are formally classified as maintenance personnel²⁷, many of the duties of this position extend past a maintenance function. Specifically, CPS indicated that building engineers often assist with custodial duties within the buildings.²⁸ Consequently, custodians and maintenance personnel were analyzed together in order to accurately capture the staffing levels responsible for operational functions within the District's buildings.

Chart 5 shows a comparison of custodial and maintenance FTEs per building for CPS and the peer districts for FY 2014-15. Custodial and maintenance functions are required regardless of the number of students, therefore FTEs per building is a more appropriate workload indicator than per 1,000 students.

²⁶ CBA between CPS and Local 20 of the International Union of Operating Engineers (effective from July 1, 2014 to June 30, 2017).

²⁷ Maintenance employees include 76.0 general maintenance FTEs (i.e., plant operators/building engineers), 9.0 carpenter FTEs, 8.0 electrician FTEs, 7.0 plumbing FTEs, 7.0 foreman FTEs, and 7.0 other FTEs.

²⁸ According to CPS, approximately 50.0 percent of the building engineers' time is allocated toward custodial work while the remaining 50.0 percent is a maintenance/building management function.

Chart 5: Custodial and Maintenance Staff per Building Comparison

Source: CPS and ODE

As shown in **Chart 5**, total custodial and maintenance FTEs per building at CPS are slightly above the peer average. Specifically, CPS employs 6.0 FTEs per building, compared to the peer average of 5.5 FTEs. Applying this ratio to the 54 school buildings²⁹ at CPS results in a staffing level that is 27.0 FTEs above the peer average.

No peer district bargaining agreement contractually requires staffing of any type of operation building manager, building engineer, or maintenance supervisor. Because the building engineers also perform custodial work functions, this variance in maintenance personnel could be the result of the CBA requirement to staff 1.0 building engineer FTE per building. The elimination of this contractual obligation would allow CPS to better manage the need of these positions, potentially assigning 1.0 FTE to multiple school buildings where applicable.

²⁹ CPS had 55 schools, but 54 school buildings in FY 2015-16, as the Virtual High School and Cincinnati Digital Academy are located in the same building.

Office/Clerical Staffing

The CBA covering clerical staff³⁰ requires that K-8 school buildings with 300 students or more must have at least two office professionals (e.g., secretaries, clerks, administrative assistants, etc.). **Table 5** shows a comparison of office/clerical staff per 1,000 students for CPS and the peer average for FY 2014-15.³¹ Staffing comparisons on a per 1,000 student basis are meaningful as staffing levels are partially dependent on the number of students served.

Table 5: Office/Clerical Staff Comparison

Students ¹	CPS		Peer Average	Difference	
	FTEs	FTEs Per 1,000 Students	FTEs Per 1,000 Students	FTEs Per 1,000 Students	FTEs ²
	33,679		29,012		4,667
Total Office/Clerical	339.6	10.1	9.2	0.9	30.0
District-Level Office/Clerical	166.5	4.9	5.1	(0.2)	(6.4)
Building-Level Office/Clerical	173.1	5.1	4.1	1.1	36.4

Source: CPS and ODE

¹ Reflects the number of students receiving educational services from the District in FY 2014-15, as provided by ODE.

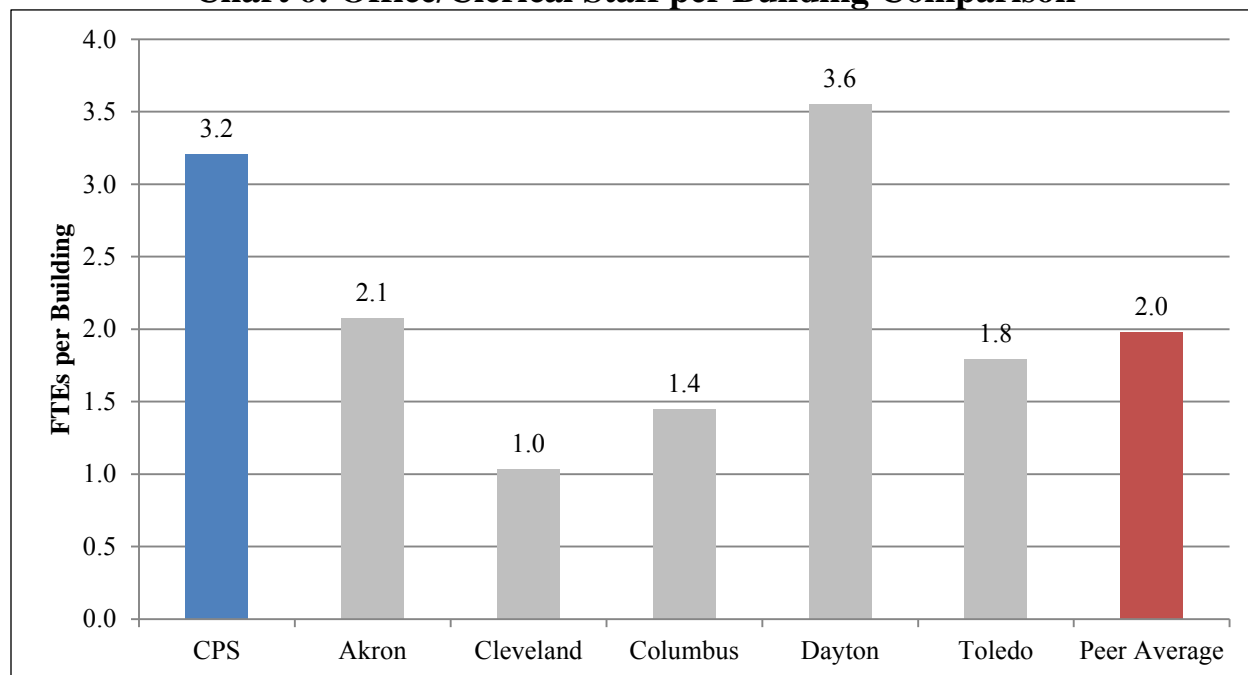
² Represents the number of FTEs that, when added or subtracted, would bring the District's number of office/clerical FTEs per 1,000 students in line with the peer average.

As shown in **Table 5**, total office/clerical employees at CPS exceeded the peer average by 0.9 FTEs per 1,000 students, equating to 30.0 FTEs when applied to the total student population. When examining office/clerical positions on a district-level versus building-level, CPS was slightly below the peer average on a district-level but had a total of 36.4 more building-level clerical FTEs.

As building secretaries are partially dependent on the number of buildings in a district, **Chart 6** shows a comparison of building secretaries and other building assigned clerical staff per building for CPS and the peer districts using FY 2014-15 data.

³⁰ CBA between CPS and the Federation of Cincinnati Office Professionals/CFT Local 1520, OFT, AFT, AFL-CIO (effective from July 1, 2014 to June 30, 2017).

³¹ FY 2014-15 data was used in this analysis to ensure an accurate breakout of the District and building clerical FTEs. FY 2014-15 staffing data includes the EMIS reporting elements used to examine the specific position descriptions and building assignments. It should be noted that FY 2015-16 secretaries and other clerical FTE total was 340.9 FTEs (see **Table 4**), indicating no significant change from the prior year data used in the analysis.

Chart 6: Office/Clerical Staff per Building Comparison

Source: CPS and ODE

Note: This category includes employees coded to a school building with an EMIS staffing position code of 301 (accounting), 501 (bookkeeping), 502 (clerical), 503 (messenger), 504 (records manager), 510 (family and community liaison), and 599 (other office/clerical).

As shown in **Chart 6**, the District's staffing level of 3.2 FTEs per building³² was 1.2 FTEs, or 60.0 percent, above the peer average. When examining building secretaries and excluding the other building assigned clerical staff, CPS employed approximately 2.5 FTEs per building compared to the peer average of 1.8. If CPS operated at the peer district level it could reduce approximately 37.5 building secretary FTEs. This conclusion is consistent with the variance in **Table 5**.

Two of the five peer districts, Akron³³ and Toledo³⁴, have similar CBA provisions regarding clerical staffing. Mandatory staffing provisions within CBAs may potentially result in higher than necessary staffing levels. While building engineers undoubtedly provide an important function in managing the non-educational operations within the District's school buildings, CPS should evaluate the necessity of having a full time position in each of its schools. Eliminating

³² This total includes building secretaries/clerks (131.8 FTEs), bookkeeping (11.0 FTEs), records managing (3.0 FTEs), and family community liaisons (27.3 FTEs).

³³ The CBA between Akron Public Schools and the Association of Classified Personnel/Ohio Education Association requires each high school to staff at least three secretaries, each middle school at least two secretaries, and each elementary and special program school at least one secretary.

³⁴ According to Toledo Public Schools' CBA with Local 272 Ohio Council 8, AFSCME, AFL-CIO, "elementary schools must have at least one full-time secretary, middle schools with six hundred students or more must have at least two full-time secretaries, one ten-month clerk, one ten-month secondary cashier, and one full-time clerical staff member in the library and high schools must each have at least three full-time secretaries, two ten-month secretaries, and one part-time nurse's assistant."

mandatory staffing provisions would allow the District to seek more flexible options while still meeting workload and/or coverage needs. For example, there may be opportunities to share a single full time building engineer across multiple, smaller school buildings. Similarly, the elimination or adjustment of the CBA's office/clerical staffing provision would allow the District to make adjustments to school secretaries where applicable.

Financial implication: Reducing 27.0 building engineer FTEs and 37.0 building office/clerical FTEs could save at least **\$3,808,800** annually. This was calculated based on the entry-level salaries of these positions in FY 2015-16 and includes an additional 36.2 percent to account for benefits.³⁵

³⁵ The FY 2015-16 average salary of an entry-level, middle-tier building engineer is \$49,964 while the entry-level clerical salary for a senior support specialist is \$32,122.

Treasurer's Office Operations

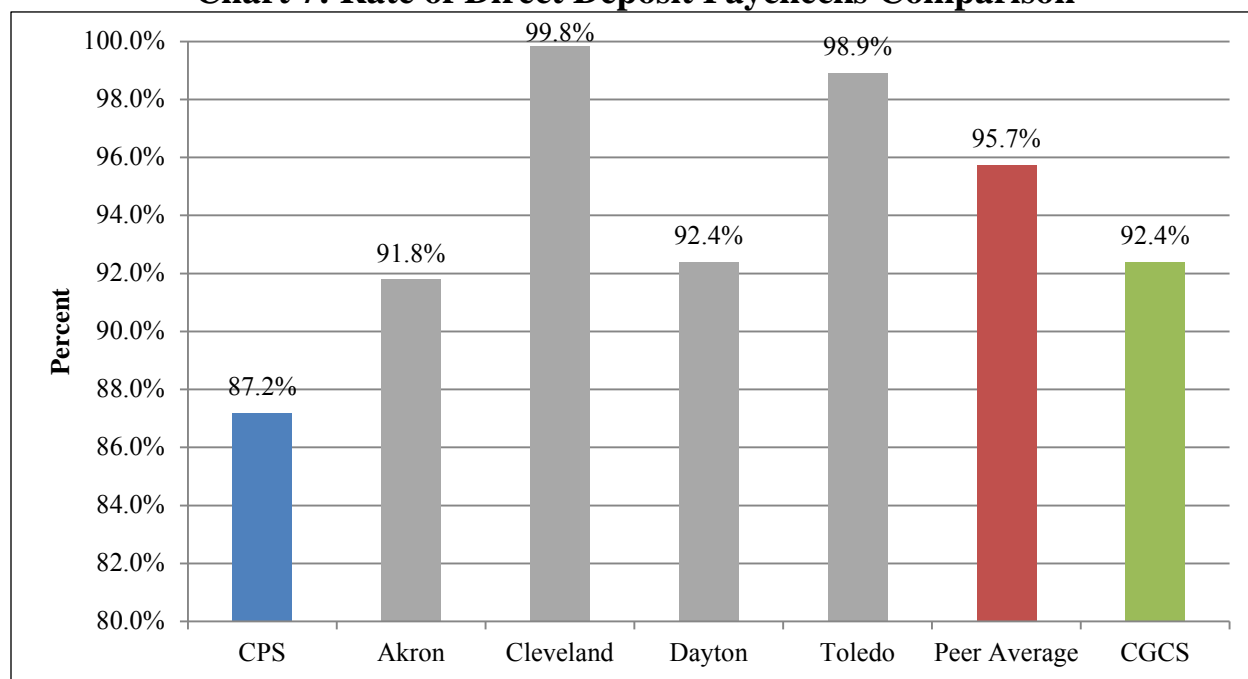
R.5: Require direct deposit for all employees

Direct Deposit and Direct Payment via ACH (National Automated Clearing House Association (NACHA), 2016) states that the benefits of direct deposit include improved efficiency, less manual check preparation, and increased employee satisfaction as well as payments that are made on time, every time, without any concern about losing a check. Despite the benefits, CPS does not require that all employees use direct deposit. Specifically, employees covered under the following three CBA's are not required to receive pay via direct deposit:

- **CAAS** – Cincinnati Association of Administrators and Supervisors;
- **CRAFTS** – Greater Cincinnati Building and Construction Trades Council; and
- **IUOE** – International Union of Operating Engineers.

Chart 7 shows direct deposit rates for CPS compared to the peer districts for FY 2014-15 and the Council of Great City Schools (CGCS)³⁶ FY 2013-14 survey median. Examining the rate of direct deposit usage provides an indication of the efficiency of the payroll process as districts with higher direct deposit rates likely have lower per paycheck costs.

Chart 7: Rate of Direct Deposit Paychecks Comparison



Source: CPS, peer districts, and CGCS

³⁶ CGCS includes 70 urban school districts across the county. In 2002, CGCS developed a performance measurement system that could be used to improve business operations in urban public schools. The purpose was to develop key performance indicators in a range of school operations to benchmark and compare performance of the nation's largest urban public school systems and to use the results to improve operational performance. *Managing for Results in America's Great City Schools* (GCCS, 2015) reflects results from FY 2013-14 and is the most recent published report.

As shown in **Chart 7**, CPS had a direct deposit rate that is 8.5 percentage points less than the peer average and 5.2 percent less than the CGCS median. Having a lower direct deposit rate can increase payroll employee time to process a paper check, increase possibility of lost or stolen checks, requiring reissued replacements, and increase timing of checks to be cashed and clear the bank.

According to *Benefits of Direct Deposit to Employers and Employees* (Paychex, 2015), cost savings is one benefit of offering direct deposit.³⁷ Writing, signing, and folding the checks, stuffing them into envelopes, and delivering the checks can be very labor intensive. These paper costs are reduced as checks and envelopes are no longer required. Direct deposit also saves money by reducing costs associated with re-issuing checks due to lost or stolen checks, stop payment charges that may be levied by a bank, and investigating when a check has gone missing. Paychex estimates that switching to direct deposit saves from \$2.87 to \$3.15 per check, depending on the efficiency of existing process.

Table 6 shows the financial impact of requiring all employees to receive pay checks via direct deposit. Savings are calculated using an estimated cost of \$3.00 per paper check, based on the midpoint of the estimated range of savings.

Table 6: Financial Impact of Requiring Direct Deposit

Payroll Checks – Issued	163,491
Payroll Checks - Direct Deposit	142,545
Payroll Checks – Paper	20,946
Estimated Cost per Check Cost – Paper Check	\$3.00
Savings	\$62,838

Source: CPS and Paychex

Financial Implication: Requiring direct deposit for all employees could save approximately **\$62,800** annually in processing physical checks.

R.6: Formalize written receiver confirmation procedures and guidance

Accounts Payable uses a three-way match system to confirm that goods or services pertaining to the respective invoices have been delivered, and that the invoices are justified by purchase orders prior to payment. The three-way match system is a payment verification technique which requires that Accounts Payable technicians ensure that the details on the invoice, the purchase order, and the receiver confirmation match before they can process the invoice for payment. At CPS, a staff member who submits an initial request for a purchase of goods and services is referred to as the "requestor". In order to process invoice, a party external to Accounts Payable referred to as the "receiver"³⁸ must confirm that the goods or services have been rendered and

³⁷ Other benefits of direct deposit according to Paychex include employee convenience and more environmentally friendly processes.

³⁸ Commonly, the receiver is a school building secretary, principal, treasurer, or a department head, but may be another administrative staff member with authority to receive goods and services on the EPROhio system.

record that information in EPROhio (i.e., the District’s system to track all purchase orders and receiver confirmations). In most cases, goods and services are rendered at the appropriate place and time to either the requestor or the receiver, after which, an invoice is sent to Accounts Payable to be processed for payment.

In order for Accounts Payable technicians to be able to process invoices for payment, the receivers must confirm the receipt of goods or services in the EPROhio system. If this does not happen before the Accounts Payable technicians receive the invoice from the vendor, the technicians cannot process the invoice for payment. According to CPS, delays in the invoice payment process often occur due to the absence of receiver confirmation. A “receiver-hold” is the term used to describe this type of stoppage in the invoice payment process.

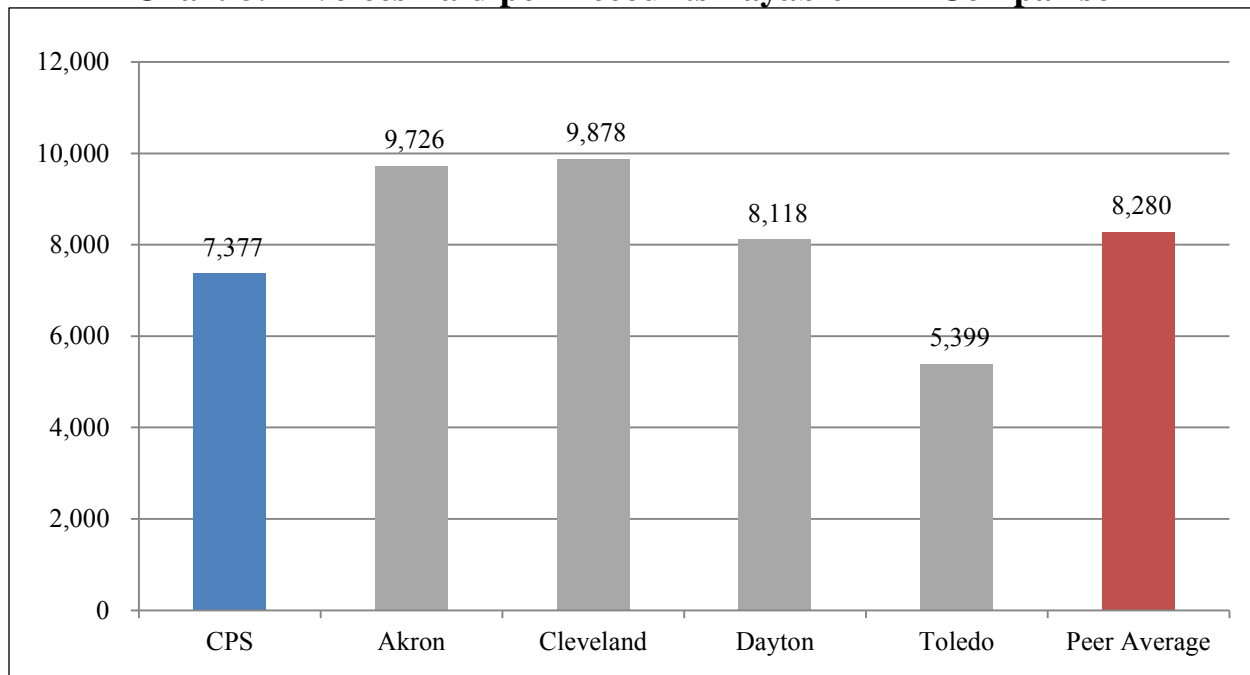
The Accounts Payable Supervisor provides annual orientation training for new principals and secretaries who are receivers, but there is no published guidance from Accounts Payable about receiver protocol. As a result, receivers do not always confirm the receipt of goods or services in a timely manner. On those occasions,³⁹ Accounts Payable technicians cannot pay the invoice within 30 days, after which the invoice becomes overdue. This happens because goods or services are provided for the requestor, and the receiver is not notified by the requestor that the goods or services have been rendered.

The District does not have a consistent receiver confirmation procedure or protocol between school buildings, and practices for receiver confirmation between buildings are also not consistent. Detailed receiver process information collected at the building-level⁴⁰ showed that the most common procedure involved the goods or services being sent directly to the building receivers, and then delivery being communicated to Accounts Payable via EPROhio and the requestor afterward. Building receivers from other buildings noted that goods and services were most often sent to the requestor directly, resulting in the receiver waiting until there was notification or receipt from the requestor before posting the receiver on EPROhio.

Chart 8 shows a comparison of the number of invoices paid per accounts payable FTE for CPS and the peer districts for FY 2014-15. Comparing workload indicators across districts provides a relative measure of the efficiency of the accounts payable process.

³⁹ The number of FY 2014-15 invoices subject to receiver-hold was not available.

⁴⁰ Detailed information regarding the receiver process was collected from 10 CPS school secretaries. The information was collected to provide examples and additional context as necessary rather than to conduct statistical sampling. Regardless, in order to ensure detailed information would be an accurate representation, secretaries were selected to ensure both elementary and high school buildings were covered, but randomly thereafter.

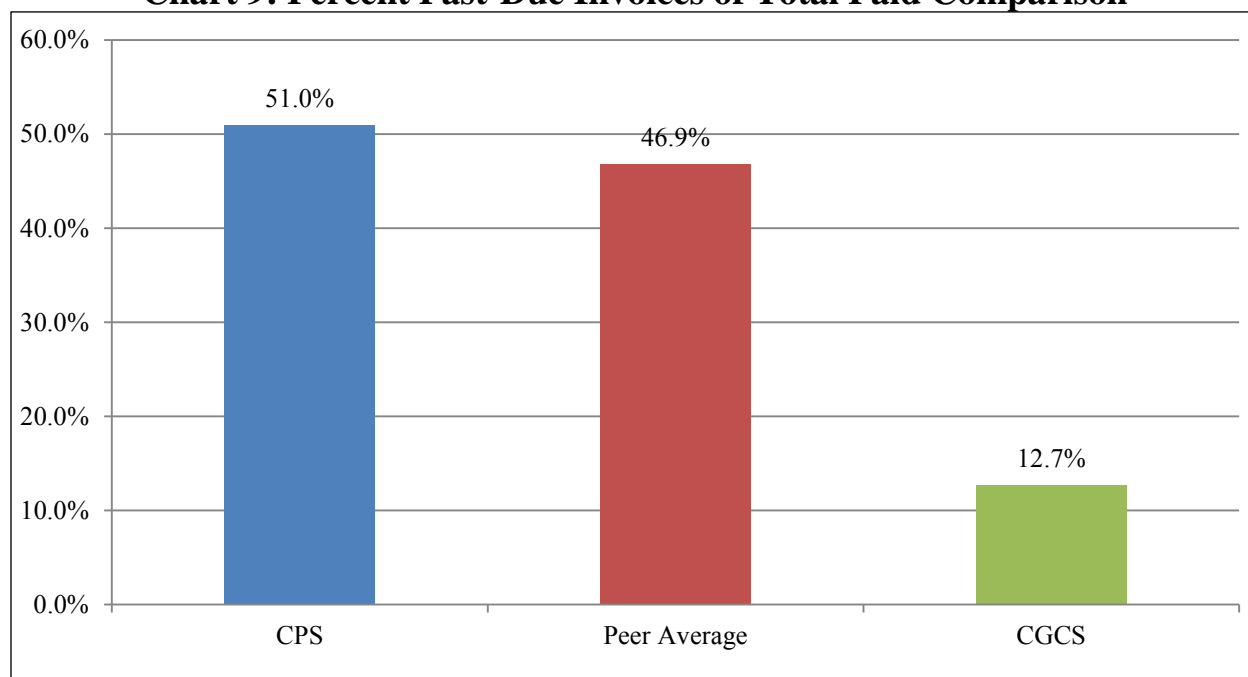
Chart 8: Invoices Paid per Accounts Payable FTE Comparison

Source: CPS and peer districts

As shown in **Chart 8**, CPS processed an average of 7,377 invoices for each Accounts Payable FTE, 903, or 10.9 percent, fewer than the peer average of 8,280 invoices per FTE.

The District's current receiver confirmation process results in delays, which causes Accounts Payable to hold off on paying those invoices. Because of the method used to track invoice data in Accounts Payable, there is no data showing the precise effects of this increased receiver hold time. However, when invoices are entered into the EPROhio system by the technicians, a separate follow-up process must be carried out if the receiver does not confirm the receipt of goods and services. This follow-up process adds time to the original invoice process and lowers the amount of invoices that can be processed each month.

Chart 9 shows a comparison of the percentage of invoices that were paid past 30 days for CPS, the peer districts using FY 2014-15 data, and the CGCS FY 2013-14 median. Analyzing the percentage of invoices paid past 30 days provides a relative indication on the timeliness of the accounts payable process.

Chart 9: Percent Past-Due Invoices of Total Paid Comparison

Source: CPS, peer districts, and CGCS

As shown in **Chart 9**, CPS had a slightly higher percentage of invoices paid past 30 days than the peer average. CPS significantly lagged the CGCS median, however, having a rate of past due invoices that was 38.3 percentage points higher.

In comparison to the peer districts, Akron, Dayton, and Toledo have written, district-wide procedures for receivers which specify the process used to confirm the receipt of goods or services, and a timeline in which to do it. These three peer districts provide accounts payable related staff and the receiver party with a formal procedure for verifying the goods or services, and a specific time line for reporting the receipt to the accounts payable department.

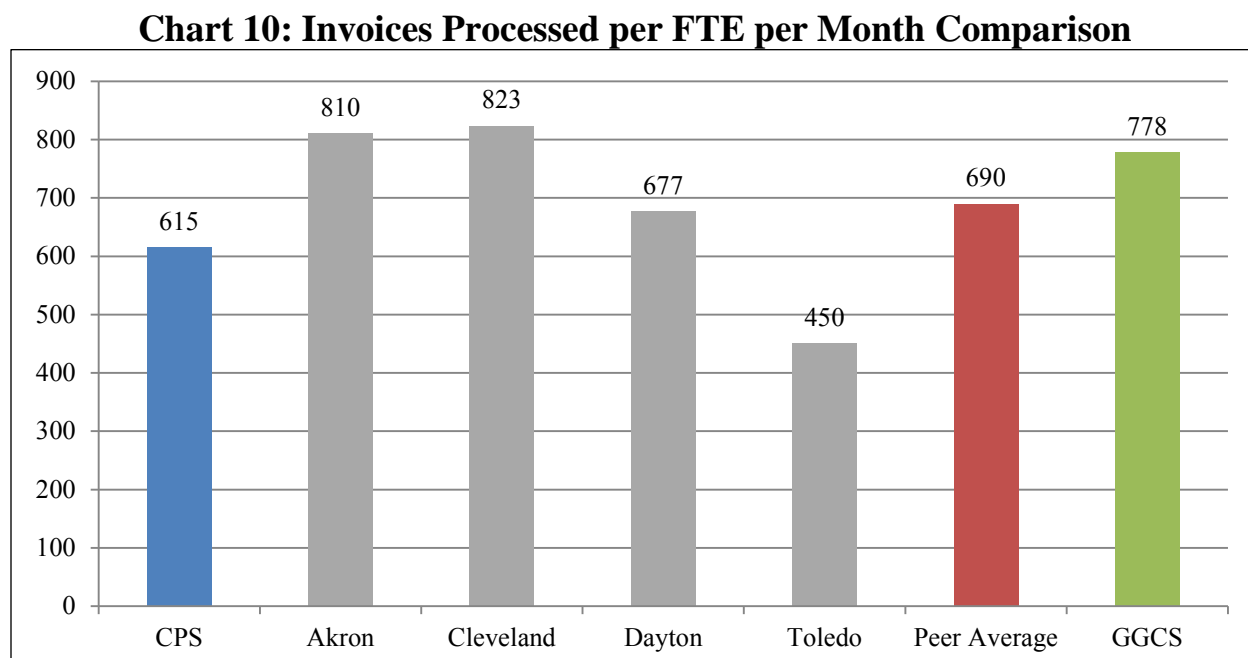
The District should formalize written receiver confirmation procedures and guidance so that all receivers will have immediate access to protocol, and so that the process will be consistent. This formal receiver policy should include procedures for receiving goods or services, processes for receiving and confirming receipt, and timeframes for completing the receiver confirmation process. Formalizing and standardizing the receiver confirmation process will encourage effective communication between the receivers and the requestors, which should result in timelier receiver confirmation. Better communication between receivers and requestors will also allow Accounts Payable to mitigate the receiver-hold problem, and save time with invoice processes. In addition, lowering the amount of receiver-hold instances will allow technicians to process more invoices.

R.7: Transition invoices to electronic format

During the course of the performance audit, the District began implementation of a new system that, if fully utilized, will provide this functionality.

Accounts Payable does not use electronic invoices in the payment process.⁴¹ Instead, a paper-based process is used whereby data from a paper invoice is manually entered by technicians into the EPROhio System, in order to process it for payment. Depending on the vendor, invoices may be sent by traditional mail or emailed to the technicians. Regardless of the method, the District's internal process requires that each be converted to a paper version then scanned back into the EPROhio system as an attachment, after which the data is manually input into the system. Because of how the system is configured, technicians cannot attach an invoice directly from an external electronic file to the EPROhio system. The District's records retention policies mandate that Accounts Payable store all paper invoices for 10 years. As a result, one room in the administrative building is dedicated storage for recent invoice paperwork while an additional offsite storage location is used for older invoice paperwork.

Chart 10 shows a comparison of invoices processed per FTE per month for CPS, the peer districts using FY 2014-15 data, and the CGCS FY 2013-14 median. Examining invoices processed per FTE provides a relative workload indicator across districts.



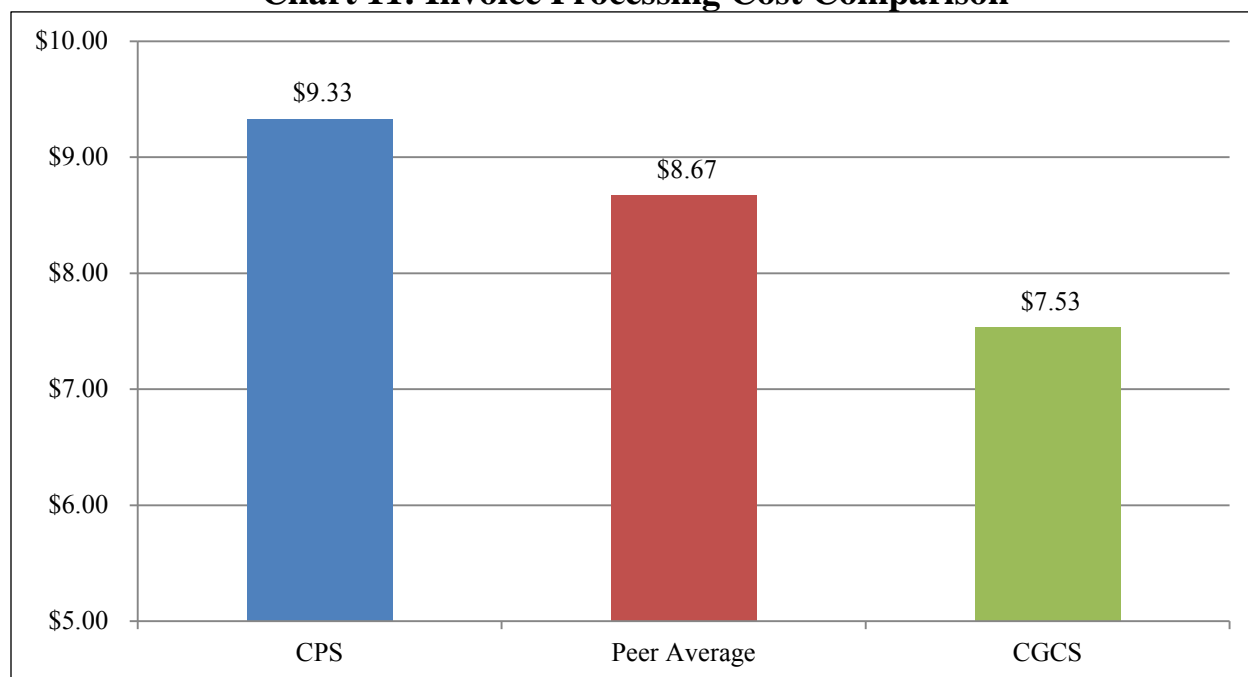
Source: CPS, peer districts, and CGCS

⁴¹ An electronic invoice is one that is sent to an accounts payable department from a vendor via email or other means of software (e.g., shared-document website, shared hard-drive, CD ROM, flash-drive, etc.). A paper-based invoice is one that is printed on paper and sent from a vendor via traditional mail, or manually entered into a payment system from paper. Organizations may use electronic invoices, paper-based invoices, or a mix of both forms in their invoice payment processes.

As shown in **Chart 10**, the paper based process used by CPS resulted in a comparatively lower number of invoices processed per month. Specifically, CPS technicians processed 615 invoices per FTE per month which was 75 invoices, or 10.8 percent, below the peer average, and 163 invoices, or 20.9 percent, below the CGCS median.

The level of efficiency in the invoice payment process ultimately manifests itself in a cost per invoice paid. **Chart 11** shows a comparison of total accounts payable costs per invoice paid between CPS, the peer districts using FY 2014-15 data, and the CGCS FY 2013-14 median.

Chart 11: Invoice Processing Cost Comparison



Source: CPS, peer districts, and CGCS

As shown in **Chart 11**, CPS expended \$0.66, or 7.6 percent, more per invoice paid than the peer average and \$1.80, or 23.9 percent, more than the CGCS median.

According to *Electronic Invoicing and Payment: Best Practices and Strategies for Recruiting Suppliers* (Wells Fargo, 2009), organizations using electronic invoicing (e-invoicing) experience a lower cost than those that do not use e-invoicing. Furthermore, manual paper-based invoice practices inhibit organizations by adding process steps and rising costs for printing and storing of those invoices. E-invoices shorten the review process and reduce the turnaround time for payment approval so that fewer employee hours are required to input and manage the accounts payable process

The District should implement measures which allow the invoice processing systems to accept electronic invoices, in order to avoid the more burdensome process of printing and handling hard copies of electronic invoices. Completely discontinuing the use of paper invoices could be aided by offering a policy- or financial-based incentive in order to encourage the District's vendors to

send invoices exclusively via electronic means Changing the invoice payment process from an exclusively paper-based invoice format to one that is exclusively digital-based will enable each Accounts Payable technician to process invoices more quickly and would also allow vendors to send invoices more quickly, enabling CPS to process more timely payments.

Financial Implication: Switching to electronic invoices could save approximately **\$29,200** annually based on \$0.66 per invoice. This was calculated based on the difference between the FY 2014-15 average costs per invoice of CPS and the peer average, \$9.33 and \$8.67, respectively.⁴²

R.8: Transition vendor payments to electronic format

While the District has electronic payment capabilities already in place, the implementation of its new system will make it easier to fully transition vendor payments to electronic format.

CPS estimates that 90.0 percent of invoices are paid using a paper check process.⁴³ This process requires that a separate electronic file be generated in order to print and clear the checks with the bank, and the checks be folded and mailed by Accounts Payable personnel. Supplies used to prepare checks must be purchased and restocked, which is also done by an Accounts Payable technician. Because of the differences between processing paper checks and processing automated clearing house (ACH)⁴⁴ payments in Accounts Payable, the ACH payment process uses fewer resources. Accounts Payable has not dedicated resources to analyzing the effects of a transition to ACH payments and resources have not been allotted to create a plan for transition.

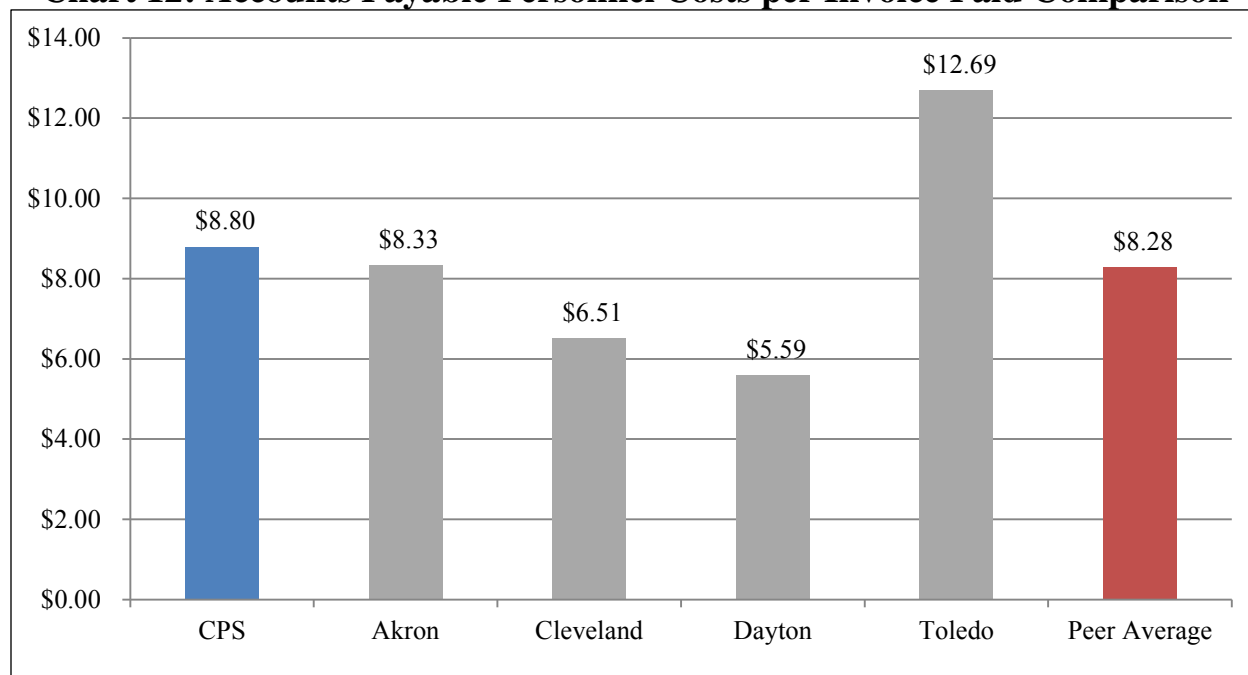
In FY 2014-15, personnel salaries and benefits accounted for 94.0 percent of Accounts Payable costs, compared to the peer average of 92.0 percent. An analysis of average personnel costs per FTE was completed for CPS and the peer districts which showed that CPS expended lower personnel costs per Accounts Payable FTE signifying that compensation for employees was not the cause of higher than average personnel expenditures at CPS. As a result, further analysis was completed assessing Accounts Payable costs per invoice paid to determine the extent that staffing levels had on personnel costs.

Chart 12 shows this analysis, comparing personnel costs per invoice paid for CPS and the peer districts using FY 204-15 data. This assessment serves to provide an indication of the labor intensity of the Accounts Payable process.

⁴² CPS could achieve savings of up to \$292,000 based on the average invoice cost of \$2.73 as reported by Wells Fargo. This was calculated based on the difference between the District's cost per invoice (\$9.33) and the Wells Fargo reported cost and the number of CPS invoices in FY 2014-15 (44,259).

⁴³ This figure is an estimate provided by CPS and could not be confirmed as the exact percentage of ACH payments to paper checks is not tracked by the District.

⁴⁴ Automated clearing house is an electronic network for financial transactions in the US that processes large volumes of credit and debit transactions.

Chart 12: Accounts Payable Personnel Costs per Invoice Paid Comparison

Source: CPS, peer districts, and CGCS

As shown in **Chart 12**, CPS expended \$0.52, or 6.3 percent, more per invoice on Accounts Payable personnel costs than the peer average.

When paying invoices, organizations have options in how to deliver the payment to the vendor. One of those options is by paper check, which is printed, folded, cleared by the bank, and mailed via traditional mail avenues. Another popular option is the ACH. This is an electronic network for financial transactions, and an electronic payment alternative to paper checks. ACH processes large volumes of credit and debit transactions in batches, and ACH transfers can include direct deposit, payroll payments, and vendor payments. ACH payments are cleared by the bank and electronically transferred out of the payer's account, into the receiver's account. No paper or ink is used.

According to the *Electronic Payment and Collection Systems* (GFOA, 2014), governments are increasingly using electronic payments to provide more ease and accessibility to government services for citizens and taxpayers. ACH is a batch payment process with a significantly shorter settlement time than paper check payments: usually one to two days. The cost per transaction is lower than paper checks, and it is designed for high-volume transactions. ACH payments eliminate the handling, processing, and storage of paper checks, and reduce time spent on reconciliation. They also eliminate the occurrence of lost or stolen checks and the cost of check reissuance. The GFOA suggests that all State and local government entities perform a cost/benefit analysis in regards to electronic payments, and evaluate opportunities to make and receive electronic vendor payments.

As CPS already processes a portion of payments as ACH, it has the opportunity to transition a greater share to this payment process. Continuing to pay the majority of invoices by paper check will result in loss of opportunity to reduce expenditures through a shorter process duration and more efficient use of human capital. A transition of all payments to ACH could eliminate the paper check process, which would provide more time for Accounts Payable technicians to pay more invoices, reducing expenditures on supplies and materials.

R.9: Develop internal tracking and benchmarking metrics to assess performance

Payroll and Accounts Payable do not use measurement, evaluation, and/or internal tracking processes and procedures to identify areas that are labor intensive, ineffective, and/or inefficient. In addition, not all existing flowcharts of processes and procedures were consistency followed by all employees.

According to *A Performance Management Framework for State and Local Government: From Measurement and Reporting to Management and Improving* (National Performance Management Advisory Commission⁴⁵ (NPMAC), 2010), “performance management in the public sector is an ongoing, systematic approach to improving results through evidence-based decision making, continuous organizational learning, and a focus on accountability for performance.” NPMAC also states that “performance management uses evidence from measurement to support governmental planning, funding, and operations. Better information enables elected officials and managers to recognize success, identify problem areas, and respond with appropriate actions – to learn from experience and apply that knowledge to better serve the public.”

Specific to payroll, *Business Metrics: You Can't Manage It If You Can't Measure It* (SurePayroll, 2015) states by defining the metrics that are important to your business and monitoring them closely, you gain three key benefits:

- **Focus** – Defining the metrics that are most important to your business allow to tune out everything that isn't related to those key measurements.
- **Better Vision** – Companies that monitor metrics can spot threats and opportunities faster than companies that don't. Metrics will give [an organization] keen insights into what's happening.
- **Better Decisions** – Metrics provide framework for making decisions. With the numbers in black and white, you can make well-reasoned decisions on how to proceed. If it improves your key metrics, consider it. If not, move on.

⁴⁵ The National Performance Management Advisory Commission includes, but is not limited to, organizations such as the National Association of State Budget Officers, Government Finance Officers Association, National Association of State Auditors, Comptrollers, and Treasurers, and National Conference of State Legislatures. NPMAC has “developed a conceptual performance management framework to help governments move beyond measuring and reporting those measures to managing performance toward improved results.”

In developing a performance measurement system, CPS should first establish a clear definition of which metrics are most important. Examples of common metrics are as follows:

- Number of payroll inquires and type of questions/issues related to pay issues;
- Number and type of manual time sheets processed;
- Time to complete manual time sheets, including gathering information on why some take longer than others;
- Number of personnel action notifications (PAN) processed;
- Number of certificated leave forms processed;
- Number/time of “other duties” for AP staff, including time spent processing retirements, leave payouts, deductions, refunds, dues, tax shelter annuities, verification of employment);
- Number of electronic and paper based payments;
- Time to complete the Accounts Payable invoices; and
- Number and duration of receiver hold instances.

Developing internal tracking and benchmarking metrics to effectively assess performance will help to ensure that efficiency is tracked over time and decisions and strategies are developed using measured, data driven decisions.

Appendix A: Scope and Objectives

Generally accepted government auditing standards require that a performance audit be planned and performed so as to obtain sufficient, appropriate evidence to provide a reasonable basis for findings and conclusions based on audit objectives. Objectives are what the audit is intended to accomplish and can be thought of as questions about the program that the auditors seek to answer based on evidence obtained and assessed against criteria.

In consultation with ODE and CPS, OPT identified the following scope areas for detailed review: Staffing and Treasurer’s Office Operations. Based on the agreed upon scope, OPT developed objectives designed to identify improvements to economy, efficiency, and/or effectiveness. **Table A-1** illustrates the objectives assessed in this performance audit and references the corresponding recommendation when applicable. See **Appendix B** for additional information including comparisons and analyses that did not result in recommendations.

Table A-1: Audit Objectives and Recommendations

Objective	Recommendation(s)
Staffing	
How do contractual provisions within the District’s collective bargaining agreements (CBAs) govern management’s ability to staff the various groups of personnel? How do these contractual provisions regarding staffing levels compare to peer districts and/or industry standards?	R.1, R.2, R.3, and R.4
Treasurer’s Office Operations	
How efficient and cost effective is CPS’s payroll process and what opportunities for greater economy, efficiency, and/or effectiveness could be realized through optimization of this process?	R.5 and R.9
How efficient and cost effective is CPS’s accounts payable process and what opportunities for greater economy, efficiency, and/or effectiveness could be realized through optimization of this process?	R.6, R.7, R.8, and R.9

Note: Although assessment of internal controls was not specifically an objective of this performance audit, they were considered and evaluated when applicable to scope areas and objective.

Appendix B: Supplemental Analyses

Staffing Comparisons

Staffing comparisons to the peer districts are presented on a per 1,000 student basis as staffing levels are partially dependent on the number of students served. In addition, presenting staffing data in this manner decreases variances attributable to the size of the peers. Multiple sources for student population were used depending on the category examined. For example, special education teachers were compared in relation to the number of students with disabilities. **Table B-1** shows the FY 2014-15 student populations(s) for CPS and peers used in the comparisons.

Table B-1: Student Population(s) Used in Staffing Analyses

	CPS	Akron	Cleveland	Columbus	Dayton	Toledo	Peer Average
Total Students	33,679	21,330	38,146	49,969	14,241	21,374	29,012
Students with Disabilities	6,311	3,948	8,647	8,116	2,676	4,371	5,552
Regular Student Population	26,504	17,450	29,173	42,193	11,229	17,258	23,461

Source: CPS and ODE

Note: The students with disabilities and regular student population numbers are not meant to equal total students. These are each separate student populations provided by ODE for the specific purpose of various staffing analysis.

Total students shown in **Table B-1**, is the most common denominator used in the staffing comparisons within this performance audit. This number reflects the full time equivalents of the students being educated within the District's buildings, regardless of residence. It excludes those District students being educated elsewhere, such as another district or a community school.

Administrative Staffing

Table B-2 shows a comparison of administrators per 1,000 students for CPS and the peer average using FY 2014-15 data.

Table B-2: Administrator Staffing Comparison

	CPS		Peer Average			Difference
	FTEs	FTEs Per 1,000 Students	FTEs Per 1,000 Students	FTEs Per 1,000 Students	% FTEs Per 1,000 Students	Total FTEs ¹
Total Administrators	183.9	5.5	9.6	(4.1)	(42.7%)	(138.4)
District Administrators	91.9	2.7	4.3	(1.5)	(37.2%)	(51.9)
Building Administrators	92.0	2.7	5.3	(2.6)	(49.1%)	(86.6)

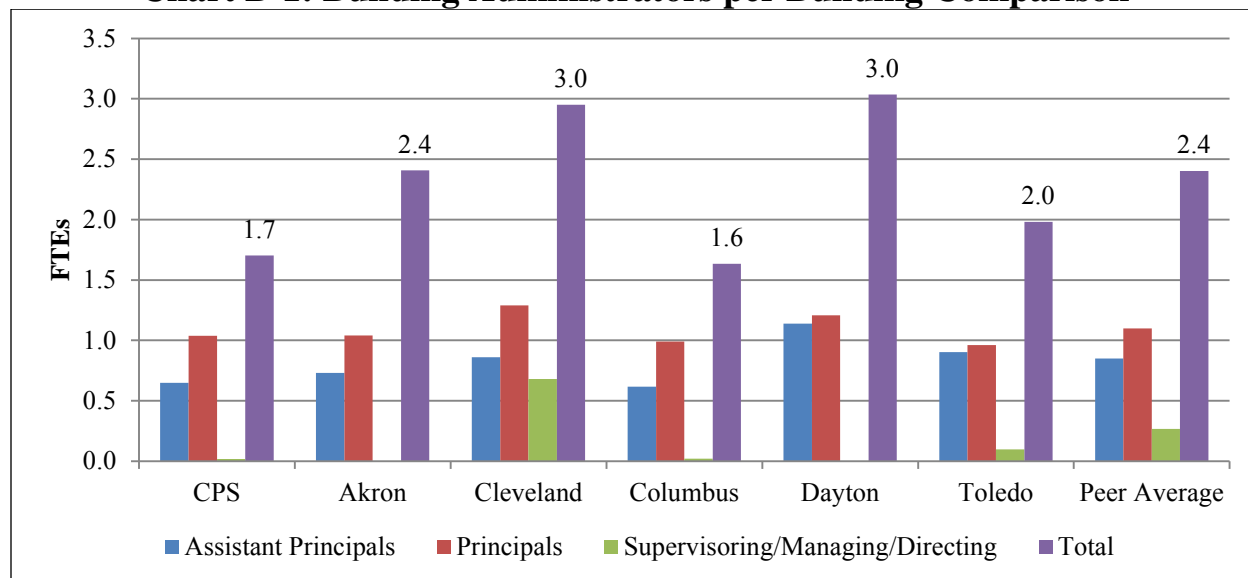
Source: CPS and ODE

¹ Represents the number of FTEs that, when added or subtracted, would bring the District's number of administrator FTEs per 1,000 students in line with the peer average.

As shown in **Table B-2**, CPS employed 138.4 fewer administrative FTEs per 1,000 students than the peer average. This was 42.7 percent below the peer average.

Chart B-1 shows a comparison of building-level administrators per building for CPS and the peer districts using FY 2014-15 data. Building administrators, including principals and assistant principals, are more likely dependent on number of school buildings than number of students.

Chart B-1: Building Administrators per Building Comparison

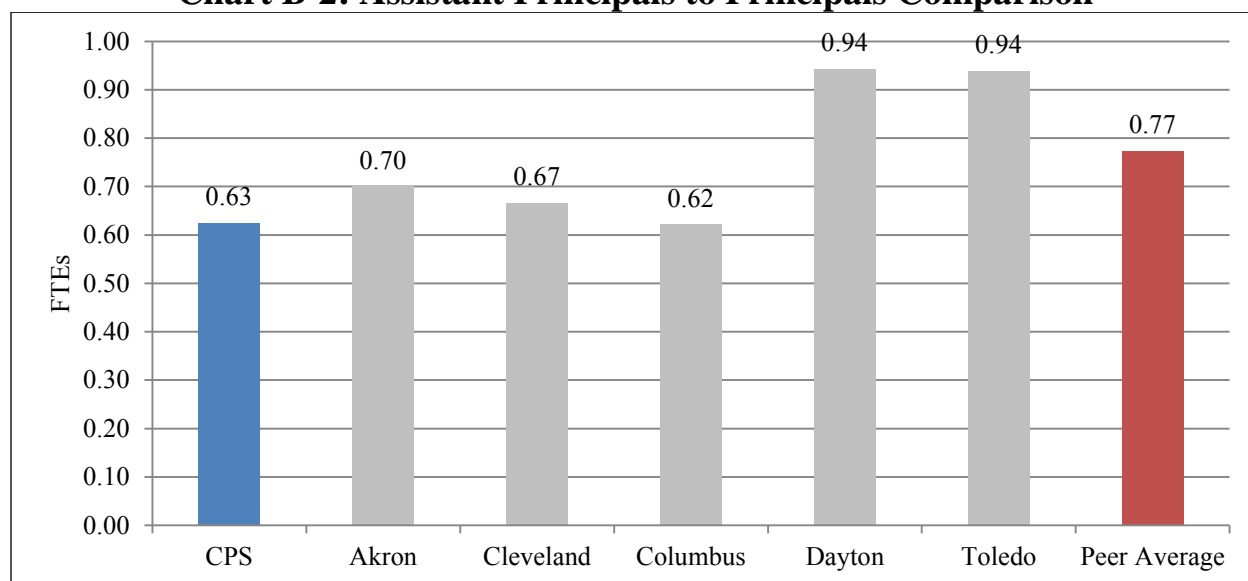


Source: CPS and ODE

As shown in **Chart B-1**, CPS had fewer building-level administrators per building than the peers average.

Chart B-2 further breaks down building-level administrator staffing, showing a comparison of assistant principal to principal ratios for CPS and the peers for FY 2014-15.

Chart B-2: Assistant Principals to Principals Comparison



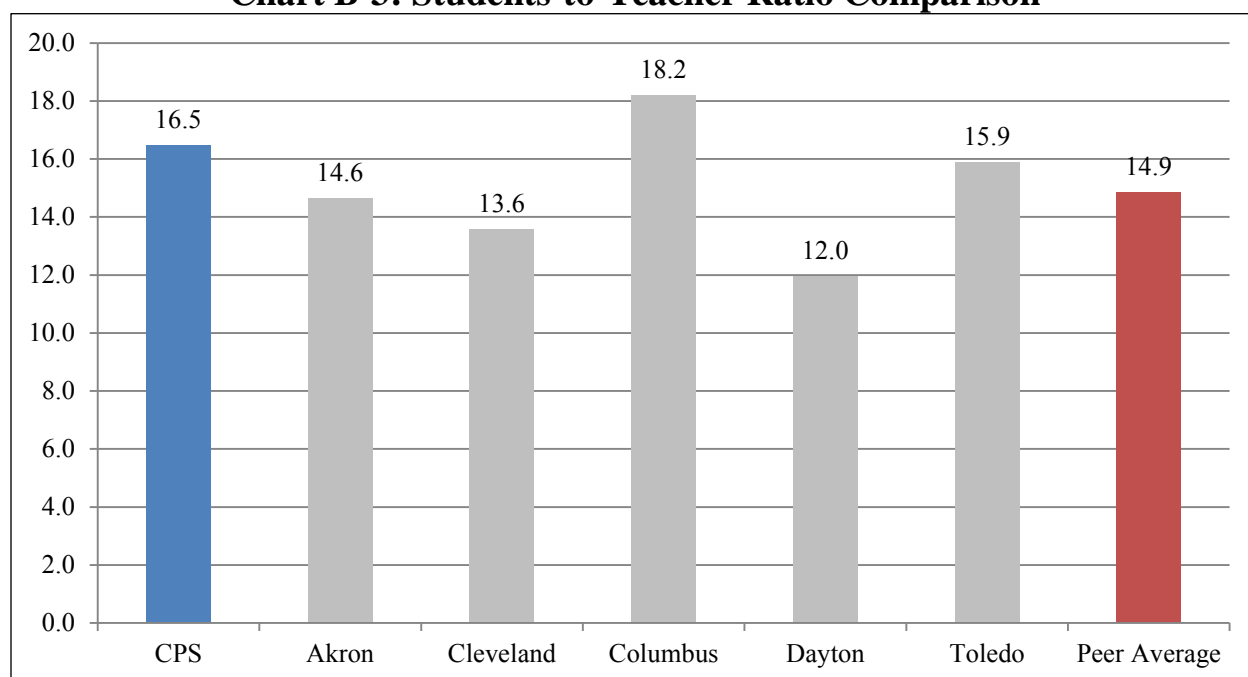
Source: CPS and ODE

As shown in **Chart B-2**, CPS has a ratio of assistant principals to principals 0.14, or 18.2 percent, below the peer average.

Student Teacher Ratios

Charts B-3 shows a comparison of the students-to-teacher ratio for CPS and the peer districts using FY 2014-15 data. This ratio reflects all K-12 students educated and all certificated teachers employed and provides an indication of staffing efficiency using student population as a workload indicator.

Chart B-3: Students-to-Teacher Ratio Comparison



Source: CPS and ODE

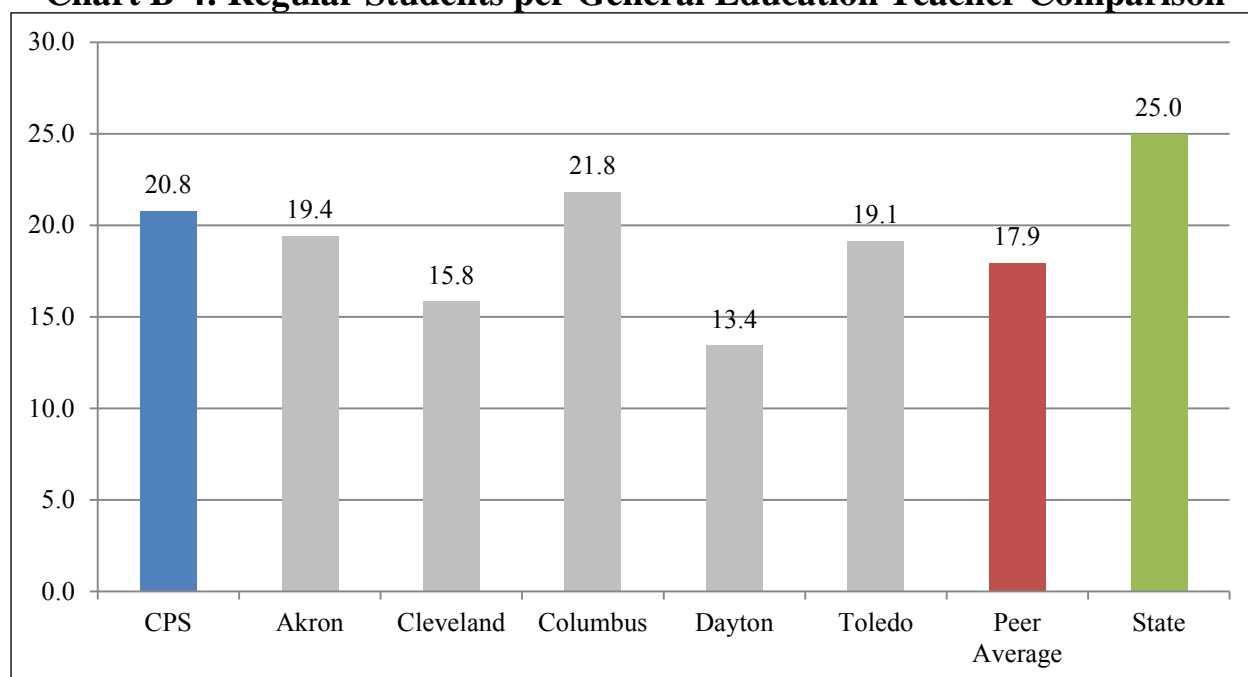
Note: Includes all teachers (general education, art, music, physical education, special education, preschool, gifted, career-tech, LEP, and supplemental service teachers).

As shown in **Chart B-3**, CPS had an average of 16.5 students for every 1.0 teacher. This ratio is higher than four of the five peer districts and was 10.7 percent above the peer average. Based on the District's respective student population and teacher staffing level in FY 2014-15, it could staff an additional 223.0 teachers and still operate at the peer average of 14.9 students to every teacher. However, as previously noted, the District is not in a position to add staff as its financial condition (see **Table 3**) requires the reduction of expenditures or increase of revenue in order to avoid projected deficits.

In addition to financial conditions, other factors impact the number of teachers within each school district including school structure, capacity and available classrooms within buildings, negotiated class size limits (see **R.1**), the use of classroom support and instructional paraprofessionals (see **R.2**), and the individual needs and desires of district stakeholders.

In addition to the students-to-teacher ratio comparison in **Chart B-3**, a comparison of regular student to general education teacher⁴⁶ ratio for CPS, the peer districts, and the State minimum requirement was conducted. OAC 3301-35-05 requires the district-wide ratio of general education teachers to students to be at least 1.0 FTE classroom teacher for every 25 students in the regular student population.⁴⁷ This teaching category excludes teaching staff in other areas such as special education, gifted, educational service personnel (e.g., art, music, and physical education), and career-tech. **Chart B-4** shows a comparison of regular students per general education teacher for CPS, the peer districts, and the State minimum requirement using FY 2014-15 data.

Chart B-4: Regular Students per General Education Teacher Comparison



Source: CPS, ODE, and OAC

As shown in **Chart B-4**, CPS had an average of 20.8 regular students for every general education teacher FTE, a higher ratio than four of the five peer districts and 16.2 percent above the peer average. Also, CPS was below the State minimum requirement by 16.8 percent. This equates to

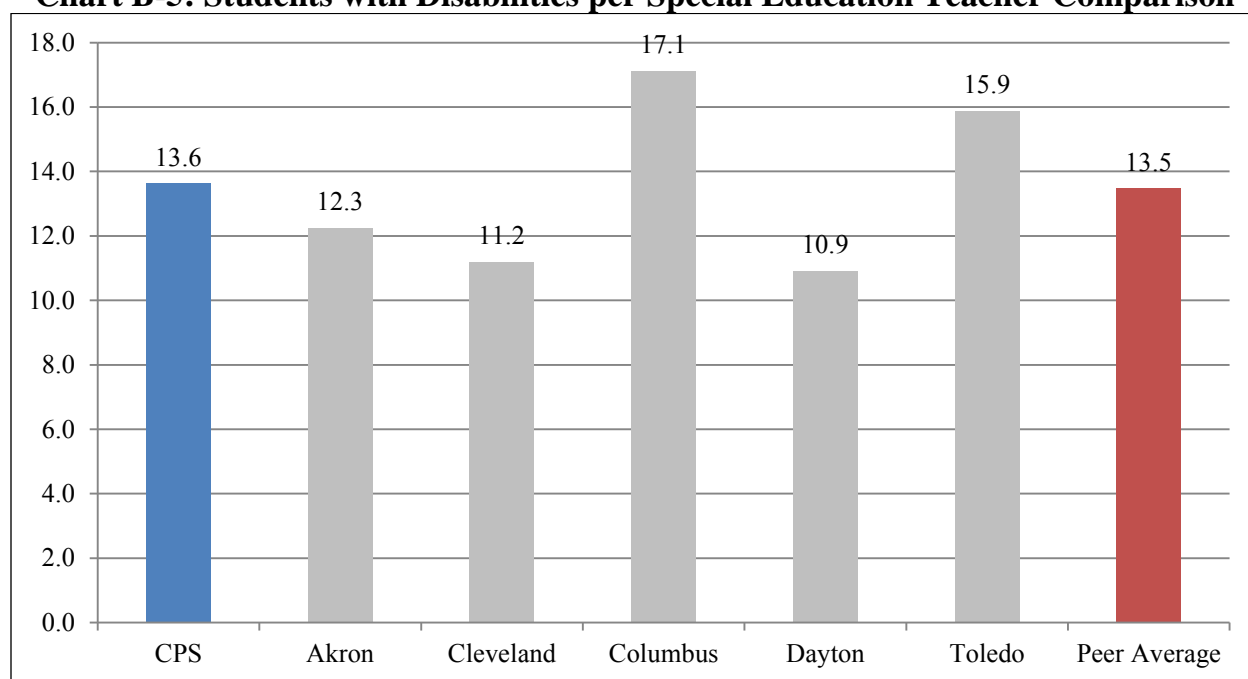
⁴⁶ General education teachers instruct students in a regular classroom environment.

⁴⁷ Regular student population is calculated by ODE. This calculation is based on a formula that begins with average daily membership (ADM) with adjustments made by subtracting out students leaving the district through open enrollment, JVS, and community schools as well as students within the district identified as special education students in specific categories. Non-resident students are added in to the total if attending the district through open enrollment.

approximately 214.0 FTE classroom teachers above the State minimum requirement. Even if negotiated class size limits were eliminated, reducing the general education teaching staff to the State minimum requirement is likely impossible based on building/grade structure. While it is not a common practice in Ohio to operate at or near State minimums, CPS may need to make significant staffing reductions to address potential deficits if savings cannot be identified and achieved in other areas of operation and revenue sources stabilized. Reductions to teaching staff may negatively affect student achievement.

Although special education staffing was not analyzed in detail, **Chart B-5** shows a comparison of special students with disabilities per special education teacher ratio for CPS and the peer average using FY 2014-15 data.

Chart B-5: Students with Disabilities per Special Education Teacher Comparison



Source: CPS and ODE

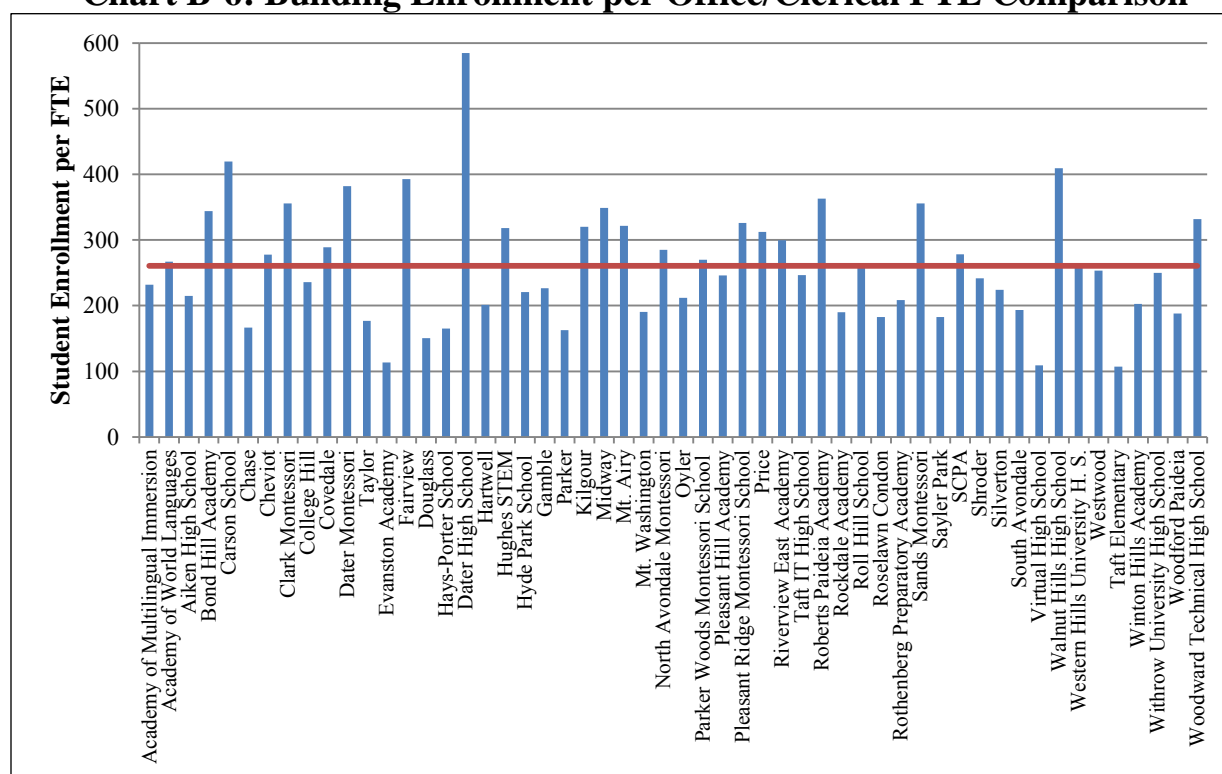
Note: Includes special education and supplemental service teachers.

As shown in **Chart B-5**, CPS had an average of 13.6 students with disabilities for every special education teacher, a staffing level in line with the peer district average. The need for special education teachers is directly related to the specific conditions of a district's special education population. Any effective evaluation of staffing in this category would need to take multiple factors into consideration; mainly the IEP process and specific program structure and assessment features (see **Issue for Further Study**).

Office/Clerical Staffing

A comparison of office/clerical employees showed that the District’s staffing exceeded the peer average (see **R.4**). However, the District’s office/clerical staffing levels are partially governed by the collective bargaining agreement that stipulates specific levels of clerical staff within school buildings. Specifically, the office/clerical CBA⁴⁸ stipulates that K-8 schools with 300 students or more must have at least two “office professionals” (e.g., secretaries, clerks, administrative assistants, etc.). **Chart B-6** shows a comparison of building enrollment per building secretary for all CPS buildings using FY 2014-15 data. The red horizontal line represents the average of 260 students to one office/clerical FTE across all buildings.

Chart B-6: Building Enrollment per Office/Clerical FTE Comparison



Source: CPS and ODE

Note: Reflects building secretaries classified using EMIS position 502; 131.8 FTEs in FY 2014-15.

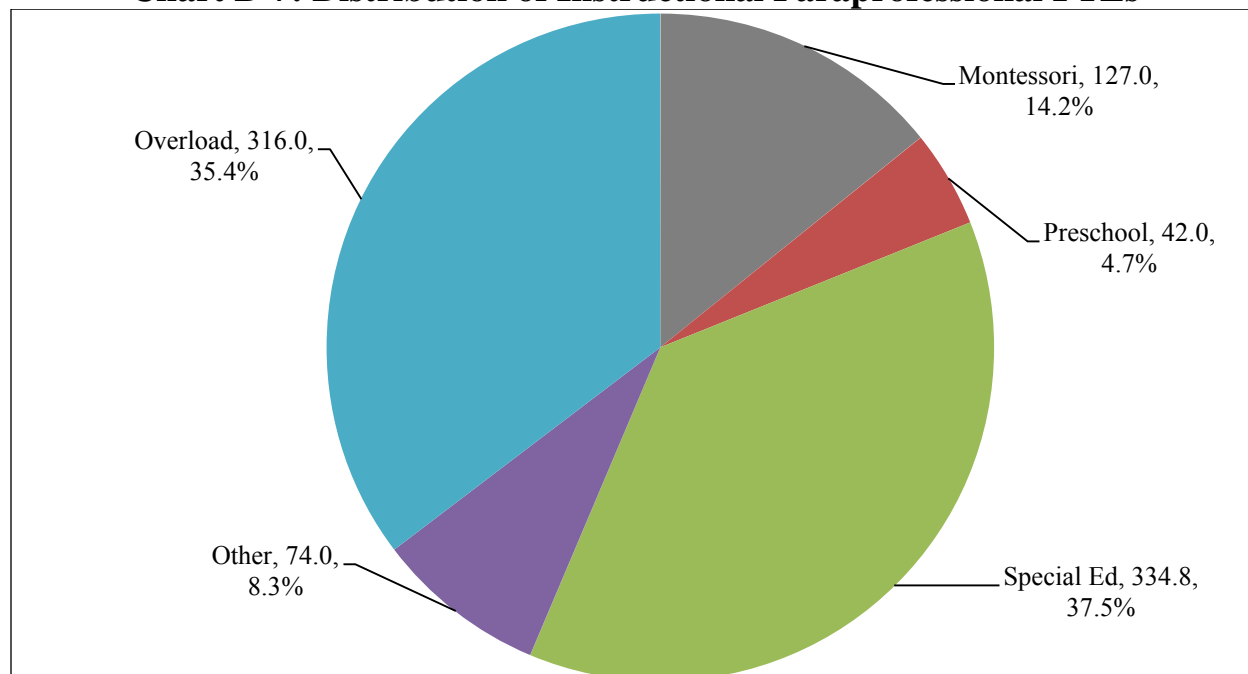
As shown **Chart B-6**, of the District’s 54 school buildings, 30 were below the average of 260 students while 24 were above.

⁴⁸ CBA between CPS and the Federation of Cincinnati Office Professionals/CFT Local 1520, OFT, AFT, AFL-CIO (effective from July 1, 2014 to June 30, 2017).

Non-Certificated Student Support Staffing

As shown in **Table 4**, CPS employed 937.1 non-certificated student support FTEs in FY 2014-15 and 927.9 FTEs in FY 2015-16, making up 20.5 percent and 19.8 percent of total staff, respectively. Non-certificated support staff per 1,000 students at CPS was 32.7 percent above the peer average in FY 2014-15. The majority of this category is made up of the District's instructional paraprofessionals, who serve in various job assignments. **Chart B-7** illustrates the distribution of the 893.8 instructional paraprofessional FTEs for CPS in FY 2015-16.

Chart B-7: Distribution of Instructional Paraprofessional FTEs



Source: CPS

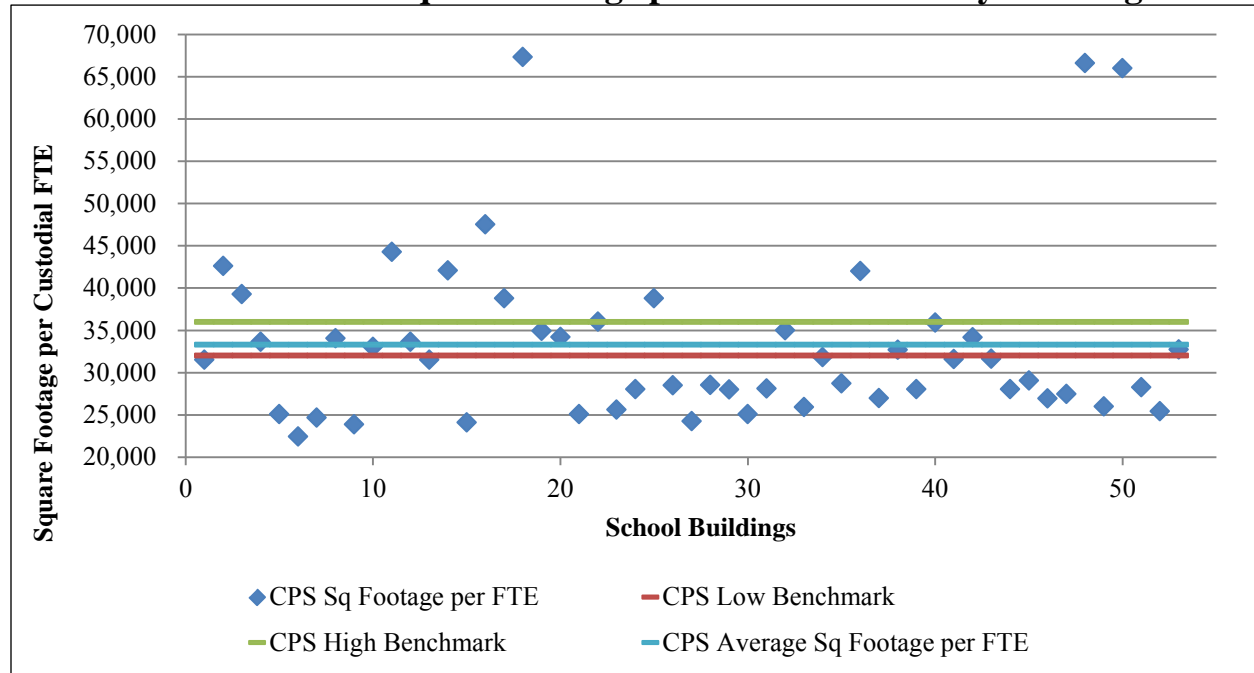
Note: Other includes in-school suspension and all those categories as other instructional paraprofessionals.

As shown in **Chart B-7**, the largest portion of instructional paraprofessionals at CPS are assigned to special education functions, providing services to students with IEPs. Slightly below this category are overload paraprofessionals, assigned to classrooms which have exceeded negotiated class size limits (see **R.2**).

Operational Staffing

A comparison of custodial staffing per building showed CPS to be in line with the peer district average (see **Chart 5**). As an alternative to this analysis, the District’s custodial staffing levels were also evaluated based on a workload indicator of square footage cleaned per FTE. CPS specified that it employs custodians using a square footage benchmark of 1.0 FTE to every 32,000 to 36,000 square feet. **Chart B-8** shows a comparison of square footage per custodian per school building at CPS in FY 2015-16.

Chart B-8: CPS Square Footage per Custodial FTE by Building



Source: CPS

As shown in **Chart B-8**, CPS averaged approximately 33,000 square feet per custodial FTE in FY 2015-16. Understanding that the large spread is due to variations in conditions and cleaning duties from one school building to another, the average assigned square footage was still in between the District’s high and low benchmarks. While custodial staffing was in line with the peer average and internal benchmarks, some maintenance employees at CPS (building engineers) also perform custodial type functions and are not accounted for in these comparisons (See **R.4**). If these staff are included at the estimated 50.0 percent of the time for custodial effort, the average square foot per custodial FTE would be 27,772.

Class Size Limits

Table B-3 shows negotiated class size limits as stipulated in the certificated staff CBA.

Table B-3: CPS Class Size Limits

Teacher	Limit
K-3 Academic	18
K-3 Academic with Paraprofessional or Overload (1st Semester) ¹	19-25
New Teacher Added (1st Semester)	26
K-3 Academic with Paraprofessional or Overload (2nd Semester)	19-28 (2nd Semester, 26-28 overload pay)
New Teacher Added (2nd Semester)	29
K-3 Specialist	28
Montessori Schools, K-3	
Montessori Schools, K-3	18-25 w/Paraprofessional
Montessori Schools, Intermediate	28-32 w/Paraprofessional
4-6 Academic	
4-6 Academic	28
4-6 Academic with Overload Pay	29
4-6 Academic with Paraprofessional/Overload ²	31
New Teacher Added	33
4-6 Specialist	34
7-12 Academic	
7-12 Academic	30
7-12 Specialist/Elective	34

Source: CPS

Note: Academic classes are defined as English, math, science, social studies, and foreign language.

¹ Teacher chooses having a paraprofessional or overload beginning with student 19 in grade K-3.

² Teacher chooses having a paraprofessional or overload beginning with student 31 in grades 4-6.

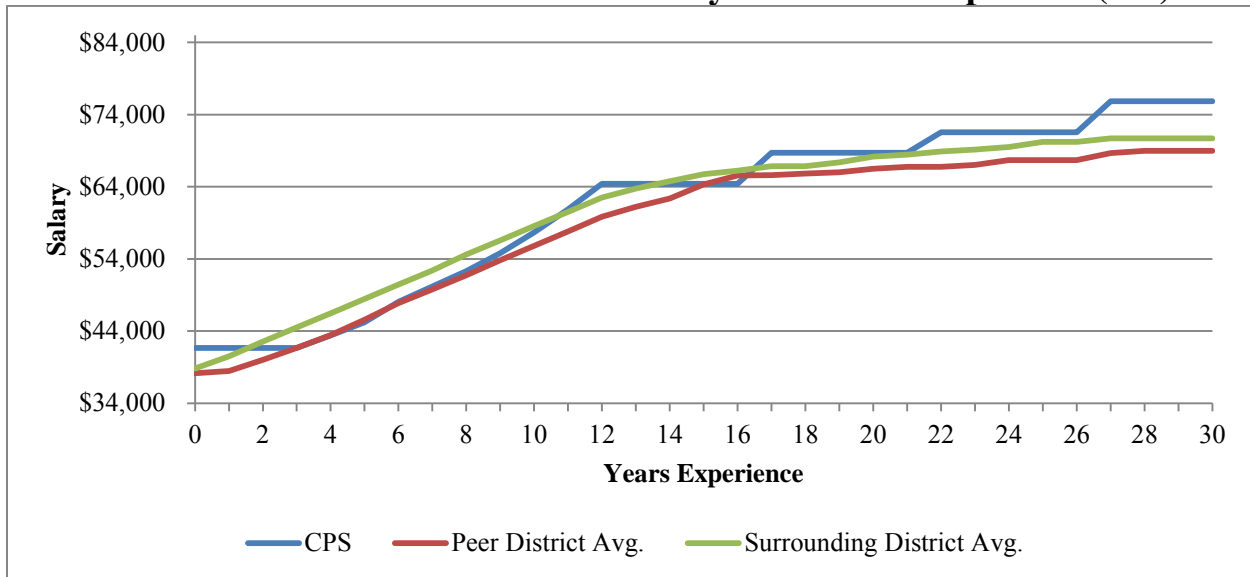
As shown in **Table B-3**, CPS class size limits range from 18 to 34 students, depending on the grade level and type of class.

Teacher Salaries

An analysis of students-to-teacher ratios showed that CPS employs fewer teachers when compared to the peer districts (see **Chart B-3**). Consequently, teacher salaries were examined to determine if compensation was in line with peer and surrounding districts. Employee compensation can be impacted by factors outside management's direct control, such as geographic location and surrounding competition. For this reason, employee salaries were also compared to an additional group of eight districts in Hamilton County referred to as the surrounding districts. The surrounding districts include: Forest Hills Local School District, Indian Hill Exempted Village School District, Northwest Local School District, Norwood City School District, Oak Hills Local School District, Reading Community School District, St. Bernard–Elmwood Place City School District, and Wyoming City School District.

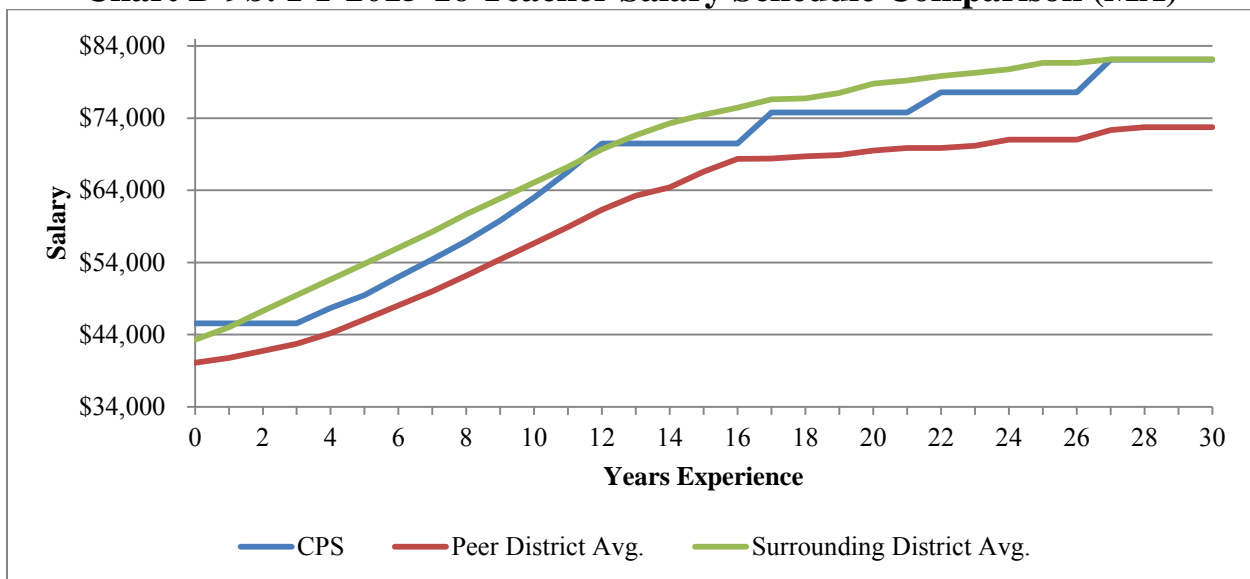
Charts B-9a and **B-9b** show the District’s starting wages and step increases for teachers compared to the peer district average and the surrounding district average. These comparisons were completed using negotiated salary schedules within employee bargaining agreements from FY 2015-16.

Chart B-9a: FY 2015-16 Teacher Salary Schedule Comparison (BA)



Source: CPS, peers, and surrounding districts

Chart B-9b: FY 2015-16 Teacher Salary Schedule Comparison (MA)



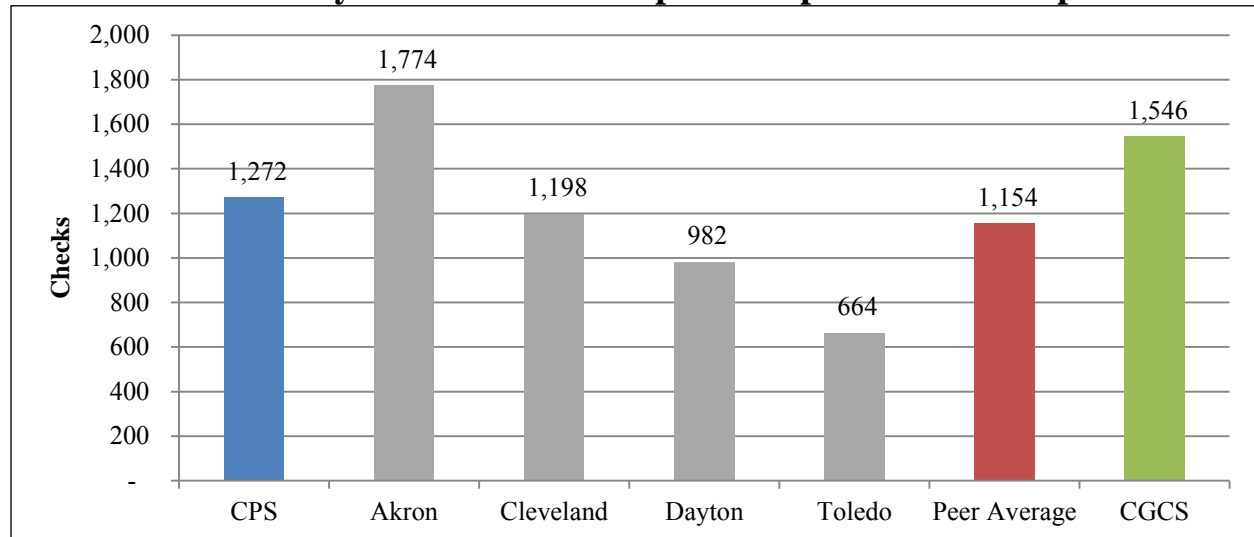
Source: CPS, peers, and surrounding districts

As shown in **Chart B-9a** and **Chart B-9b**, the District’s teachers’ salaries, both BA and MA schedules, are in line with the peer district and surrounding district averages.

Treasurer’s Office

Chart B-10 shows a comparison of pay checks processed per FTE per month between CPS and the peer districts using FY 2014-15 data, and CGCS using the FY 2013-14 median.

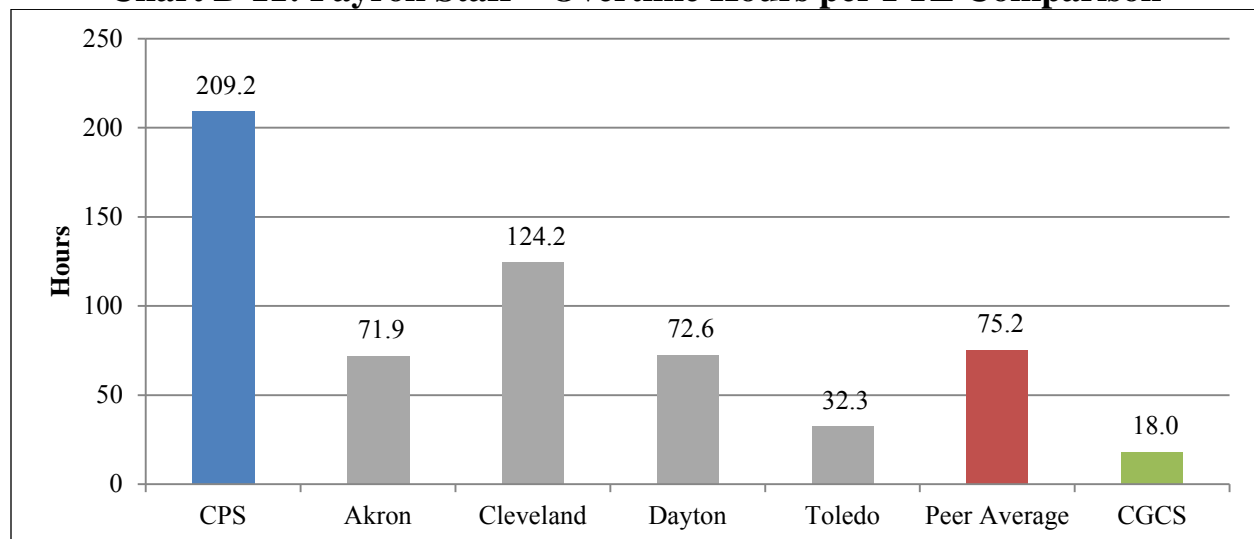
Chart B-10: Pay Checks Processed per FTE per Month Comparison



Source: CPS, peer districts, and CGCS

As shown in **Chart B-10**, CPS processed more paychecks per FTE per month compared to the peer average. This higher relative productivity of CPS is somewhat misleading, however, as it does not include overtime hours worked by payroll employees. Because the productivity ratios presented are based on FTEs, those districts that utilize overtime could staff fewer employees, resulting in higher paychecks processed per employee. **Chart B-11** shows a comparison of payroll staff overtime hours per FTE for CPS and the peer districts using FY 2014-15 data and the CGCS FY 2013-14 median.

Chart B-11: Payroll Staff – Overtime Hours per FTE Comparison

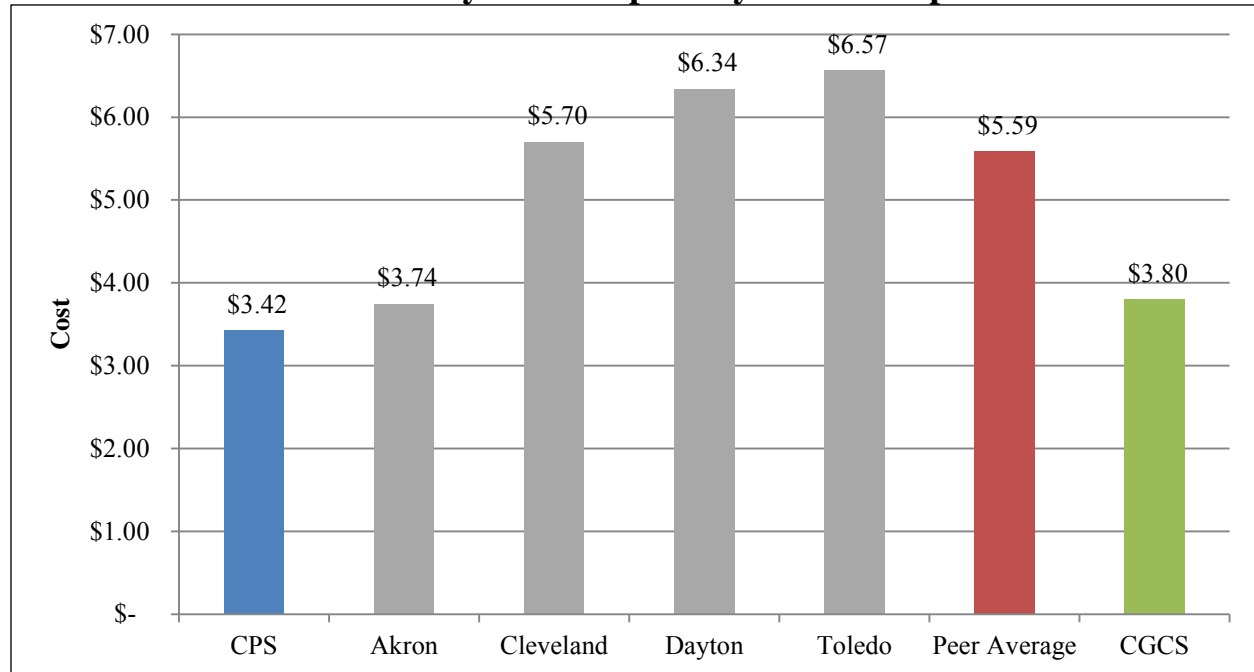


Source: CPS, peer districts, and CGCS

As shown in **Chart B-11**, the use of Payroll related overtime at CPS was nearly triple the peer average.

Despite the level of man hours involved (full time versus overtime), the efficiency of the payroll process can be assessed by examining the cost per paycheck processed. **Chart B-12** shows a comparison of payroll cost per pay check for CPS and the peer average using FY 2014-15 data, and the CGCS FY 2013-14 median.

Chart B-12: Payroll Cost per Paycheck Comparison



Source: CPS, peer districts, and CGCS

As shown in Chart B-12, CPS payroll cost per pay check was significantly lower than the peer average and CGCS.

Appendix C: Five-Year Forecast

Chart C-1 shows the District's May 2016 Five-Year Forecast.

Chart C-1: CPS May 2016 Five-Year Forecast

Line	Actual			Forecasted				
	2013	2014	2015	2016	2017	2018	2019	2020
1.010 General Property (Real Estate)	225,811,879	228,992,222	224,078,567	230,708,316	228,439,117	229,446,323	208,114,145	188,826,839
1.020 Tangible Personal Property Tax	21,380,132	23,821,094	26,294,459	28,577,303	28,223,075	28,458,609	26,807,175	25,168,688
1.035 Unrestricted Grants-in-Aid	146,130,296	147,416,397	153,470,415	159,978,883	165,546,078	168,340,548	171,162,609	173,851,030
1.040 Restricted Grants-in-Aid	1,476,408	9,922,508	19,655,078	27,983,739	28,248,153	28,515,212	28,784,941	29,057,367
1.050 Property Tax Allocation	35,681,580	36,995,366	37,704,872	29,060,543	27,473,713	26,698,604	23,591,859	20,454,978
1.060 All Other Operating Revenue	13,360,502	17,535,156	24,932,878	30,464,271	20,668,887	20,673,549	20,678,258	20,683,014
1.070 Total Revenue	443,840,797	464,682,743	486,136,269	506,773,055	498,599,023	502,132,845	479,138,987	458,041,916
2.040 Operating Transfers-In		10,677,804						
2.050 Advances-In	12,025,488	23,764,764	26,182,275	17,288,115	10,500,000	10,500,000	10,500,000	10,500,000
2.060 All Other Financial Sources	3,706,961	1,991,514	1,242,097	3,532,800	3,500,000	3,500,000	3,500,000	3,500,000
2.070 Total Other Financing Sources	15,732,449	36,434,082	27,424,372	20,820,915	14,000,000	14,000,000	14,000,000	14,000,000
2.080 Total Revenues and Other Financing Sources	459,573,246	501,116,825	513,560,641	527,593,970	512,599,023	516,132,845	493,138,987	472,041,916
3.010 Personnel Services	172,309,504	191,538,663	216,950,183	92,389,792	98,577,228	100,548,773	102,559,748	104,610,943
3.020 Employees' Retirement/Insurance Benefits	64,744,399	74,185,232	70,056,843	28,631,597	33,566,801	34,933,859	36,529,809	38,220,541
3.030 Purchased Services	152,545,506	163,134,420	171,529,900	180,841,157	182,144,178	189,241,771	196,650,575	204,384,841
3.040 Supplies and Materials	4,062,817	4,059,275	6,035,331	6,861,787	8,854,836	9,043,057	9,235,599	9,432,576
3.050 Capital Outlay	4,457,931	4,147,763	6,273,870	3,714,000	2,890,820	3,035,361	3,187,129	3,346,486
4.050 Debt Service: Principal - HB 264 Loans	1,701,072		2,671,072	3,176,072	3,235,072	3,235,072	3,235,072	3,235,072
4.055 Debt Service: Principal - Other	4,325,000		4,620,000	4,820,000	5,060,000	5,060,000	5,060,000	5,060,000
4.060 Debt Service: Interest and Fiscal Charges	5,445,461		7,471,206	7,471,296	8,090,709	8,090,709	8,090,709	8,090,709
4.300 Other Objects	4,876,613	6,443,428	4,907,031	5,731,715	6,032,821	6,032,821	6,032,821	6,032,821
4.500 Total Expenditures	414,468,303	443,508,781	490,515,436	333,637,416	348,452,465	359,221,423	370,581,462	382,413,989
5.010 Operational Transfers - Out	919,234	34,925,633	1,217,353	192,834,123	197,083,428	209,648,663	217,159,354	224,948,692
5.020 Advances - Out	24,346,567	26,601,867	17,288,115	10,500,000	10,500,000	10,500,000	10,500,000	10,500,000
5.030 All Other Financing Uses	8,790,645		(1,162,230)					
5.040 Total Other Financing Uses	34,056,446	61,527,500	17,343,238	203,334,123	207,583,428	220,148,663	227,659,354	235,448,692
5.050 Total Expenditure and Other Financing Uses	448,524,749	505,036,281	507,858,674	536,971,539	556,035,893	579,370,086	598,240,816	617,862,681
6.010 Excess Rev & Oth Financing Sources over(under) Exp & Oth Financing	11,048,497	(3,919,456)	5,701,967	(9,377,569)	(43,436,870)	(63,237,241)	(105,101,829)	(145,820,765)
7.010 Beginning Cash Balance	45,850,130	56,898,627	52,979,171	58,681,138	49,303,569	5,866,699	(57,370,542)	(162,472,371)
7.020 Ending Cash Balance	56,898,627	52,979,171	58,681,138	49,303,569	5,866,699	(57,370,542)	(162,472,371)	(308,293,136)
8.010 Outstanding Encumbrances	12,367,811	21,272,539	13,622,917	12,500,000	12,500,000	12,500,000	12,500,000	12,500,000
10.010 Fund Balance June 30 for Certification of Appropriations	44,530,817	31,706,632	45,058,221	36,803,569	(6,633,301)	(69,870,542)	(174,972,371)	(320,793,136)
11.020 Property Tax - Renewal or Replacement							26,265,000	51,500,000
11.300 Cumulative Balance of Replacement/Renewal Levies							26,265,000	77,765,000
12.010 Fund Bal June 30 for Cert of Contracts, Salary Sched, Oth Obligations	44,530,817	31,706,632	45,058,221	36,803,569	(6,633,301)	(69,870,542)	(148,707,371)	(243,028,136)
15.010 Unreserved Fund Balance June 30	44,530,817	31,706,632	45,058,221	36,803,569	(6,633,301)	(69,870,542)	(148,707,371)	(243,028,136)

Source: CPS and ODE

Client Response

The letter that follows is the District's official response to the performance audit. Throughout the audit process, staff met with District officials to ensure substantial agreement on the factual information presented in the report. When the District disagreed with information contained in the report, and provided supporting documentation, revisions were made to the audit report.



August 8, 2016

Mr. David Yost
Auditor of State
88 East Broad Street, 5th floor
Columbus, Ohio 45215

Dear Auditor Yost,

On behalf of the Cincinnati Public School's Board of Education and Administration, we would like to thank you and the Performance Audit Team for the time and effort in preparing the audit report for our district. The team, led by Melissa Rohr, was friendly, efficient and exhibited a high level of professionalism.

We analyzed your recommendations and will strive to implement as many as possible. The staffing recommendations are similar to cost savings suggestions noted in a recent Financial Efficiency study conducted by Parthenon, a division of Ernst & Young. All of our staffing formulas are defined by our collective bargaining agreements which are scheduled to begin negotiations in December 2016.

With regards to the recommendations related to the performance of the Treasurer's department, most if not all recommendations will be implemented by December 31st. Your recommendations confirmed our decision to upgrade our financial and human resource software, thus allowing us to take advantage of more electronic transactions.

Further, recently our board of education adopted a resolution to be on the ballot for a new 7.93 mill Emergency levy in November 2016. When passed, this new levy will generate an annual revenue stream of \$48 million to the general fund.

Once again we would like to thank you and your team for their time and effort spent on our district. We are fully committed to providing excellent instruction in a fiscally responsible manner.

Sincerely,

Mary A. Ronan
Superintendent

Jennifer M. Wagner
Treasurer/Chief Financial Officer

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Dave Yost • Auditor of State

CINCINNATI CITY SCHOOL DISTRICT

HAMILTON COUNTY

CLERK'S CERTIFICATION

This is a true and correct copy of the report which is required to be filed in the Office of the Auditor of State pursuant to Section 117.26, Revised Code, and which is filed in Columbus, Ohio.

Susan Babbitt

CLERK OF THE BUREAU

**CERTIFIED
SEPTEMBER 2, 2016**