



School District Key Performance Indicators (KPIs): Values and Trends

An Analysis by Performance Management

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Executive Summary

- BCPS uses key performance indicators (KPIs) published by the Council of Great City Schools to inform its operational practices and drive performance improvements.
- There are many limitations to the CGCS KPI report, but it is the best available source. Member districts have several essential demographic characteristics in common with BCPS; their KPIs provide reasonable benchmarks.
- Context matters. Performance Management consulted with department heads to understand the broader context—historical and current—behind the reported KPIs.
- Across focus areas, BCPS KPIs are **STABLE TO IMPROVING** in Transportation, Food Services, Grants Management, Finance, Accounting, and Risk Management.
- Across focus areas, BCPS Procurement KPIs are **MIXED**. Cost-related KPIs are **STABLE**, while procurement administrative lead times are not—and in some cases are **DECLINING**.
- Across focus areas, BCPS Information Technology KPIs are **IMPROVING**.
- The focus area in Human Resources—teacher retention after 5 years—is **DECLINING** amid challenging fundamentals around the staffing pipeline, starting salary, benefits coverage for dependents, support for new teachers, and career incentives.
- Safety and Security KPIs are not presented here due to significant changes in the KPIs tracked and the absence of trend data.
- Districts that have sequentially ranked in the best quartile may be good sources for best practice guidance. They are identified at the end of this report.
- An Excel-based data book with source data accompanies this report.



Introduction

- Performance Management compiled key performance indicators (KPIs) published by the Council of Great City Schools (CGCS) in five separate reports published between October 2012 and November 2016.
- The reported KPIs are around district operations, not academics.
- Departments at BCPS were requested to identify a subset of one-to-four KPIs—referred to here as “focus KPIs”—that most inform their work.
- Across the focus KPIs a trend analysis, which includes a comparison against other large Florida districts, was performed.
- In addition, across all KPIs reported by BCPS consistently over at least the past three years, an index analysis was completed to understand how KPI values have fluctuated over time relative to their baseline value.*
- Finally, across all KPI families, the districts that perform consistently in the best quartile are identified. Further research into the contexts of those districts is recommended, as it might yield best practices that can be implemented at BCPS.

* Baseline values are the KPI values first reported by BCPS to CGCS. Typically, they are from the 2011/12 or 2012/13 school year.



The 70 CGCS member districts share several common characteristics



Large Scale

Most have more than 50,000 students



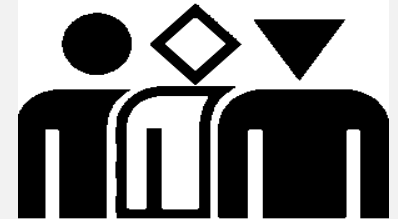
Urban

All serve metropolitan areas with >250,000 residents



Economically Diverse

All serve large population of students on free or reduced lunch



Racially Diverse

Minorities represent a significant proportion of the student population



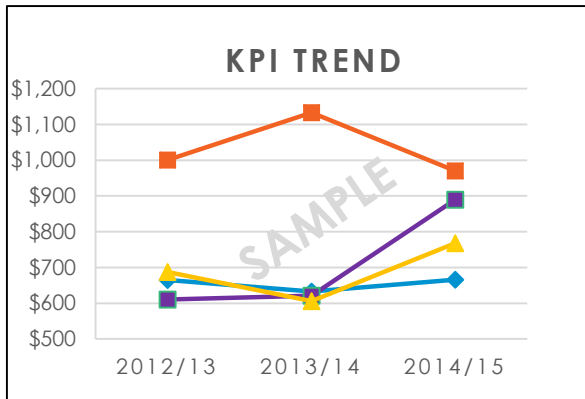
Limitations of CGCS's "Managing for Results" Report

- The data used in this report are pulled from the **CGCS "Managing for Results"** report, published annually in October or November.
- The published **KPIs are 12 months old** or more by the time they are published. For example, KPIs in the latest (2016) report are from the 2014/15 school year.
- Trend analysis and comparisons with other districts depend on the extent of transparency and regularity of reporting.
 - **KPIs are selectively reported** by districts. We cannot compare what's not reported.
 - **Levels of transparency often vary** from year to year. Some districts report a wide range of KPIs consistently, some do not.
- **The set of KPIs collected by CGCS is somewhat stable**, but each year there are changes. Some KPIs once tracked are no longer reported.
- **KPI definitions and underlying calculations can (and do) change.** Past values cannot always be mapped to later values.
- **Wide fluctuations in reported KPIs by districts are not uncommon.** They can result from miscalculations, policy changes, State legislative changes, errors in CGCS's reporting, etc.



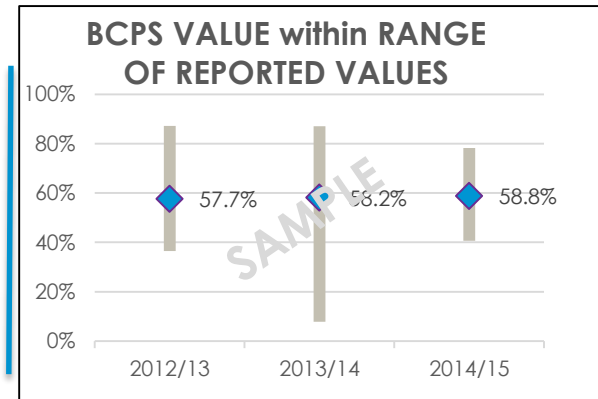
How this report is structured

Trend Analysis and Benchmarking for 1 to 4 select KPIs per Metric Family:

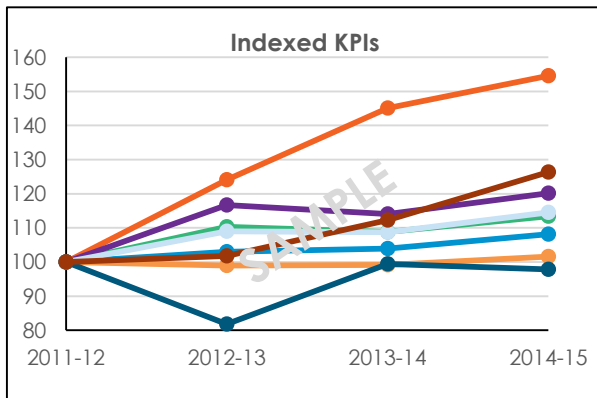


3-year trend with comparison to other large Florida districts where data is reported.

3-year view of BCPS's value within full range of values reported by all districts (national).



Index Analysis for KPIs within a Metric Family:



- Across all (or most) KPIs within a metric family, **BCPS's baseline values were set to a value of 100** to develop an index.
- Why use an index? **To accentuate change over time.**
 - Regardless of unit of measure (e.g., dollars, people, days, percentage), **all KPIs can be shown on the same graph.**
 - By viewing all related KPIs on one graph, **themes emerge and relationships between KPIs can be better understood.**
- Some measures come from a small base; **wide fluctuations are sometimes normal.** A few KPIs with especially wide variations in values are reported separately in a table.

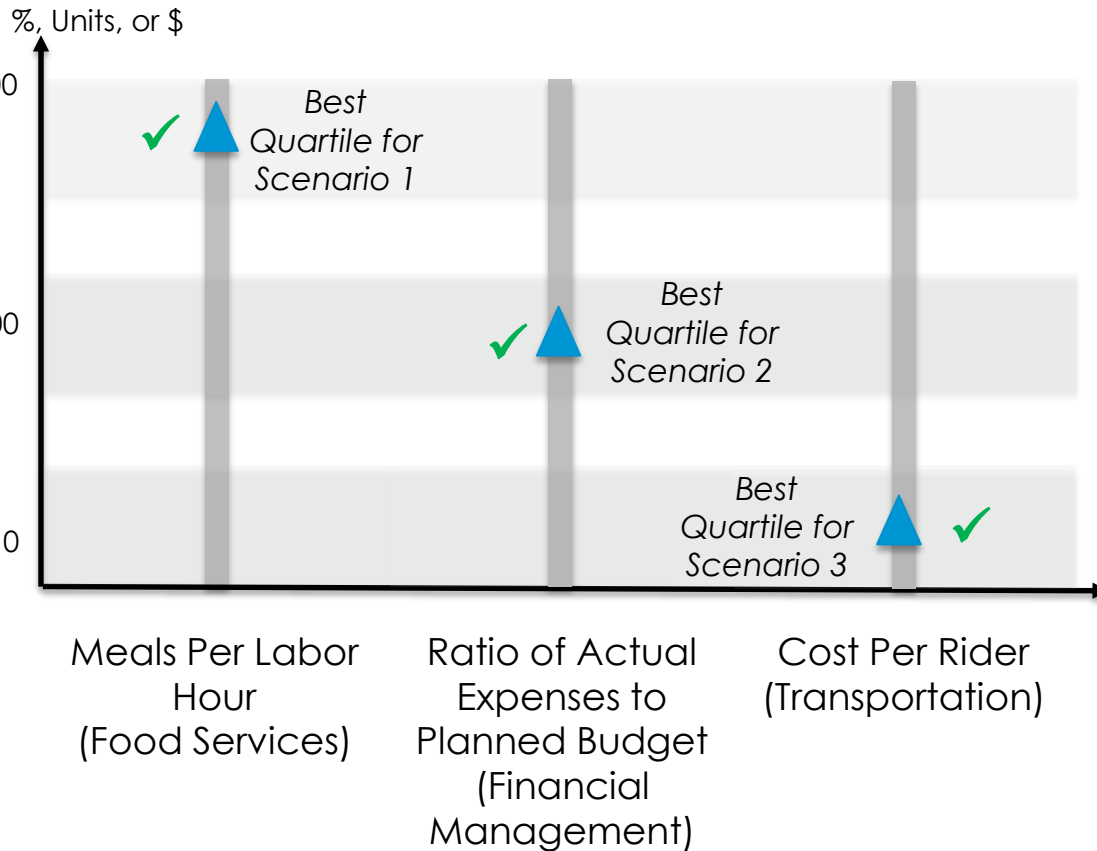


Context Matters: Depending on what is being measured, a high, mid-range or low value KPI can fall in the best quartile

Examples for Illustrative Purposes

Scenarios

1. High values are typically good when associated with revenue or units of production.
2. Mid-range values are typically good when associated with budget variances or utilization rates.
3. Low values are typically good when associated with cost items or defects.



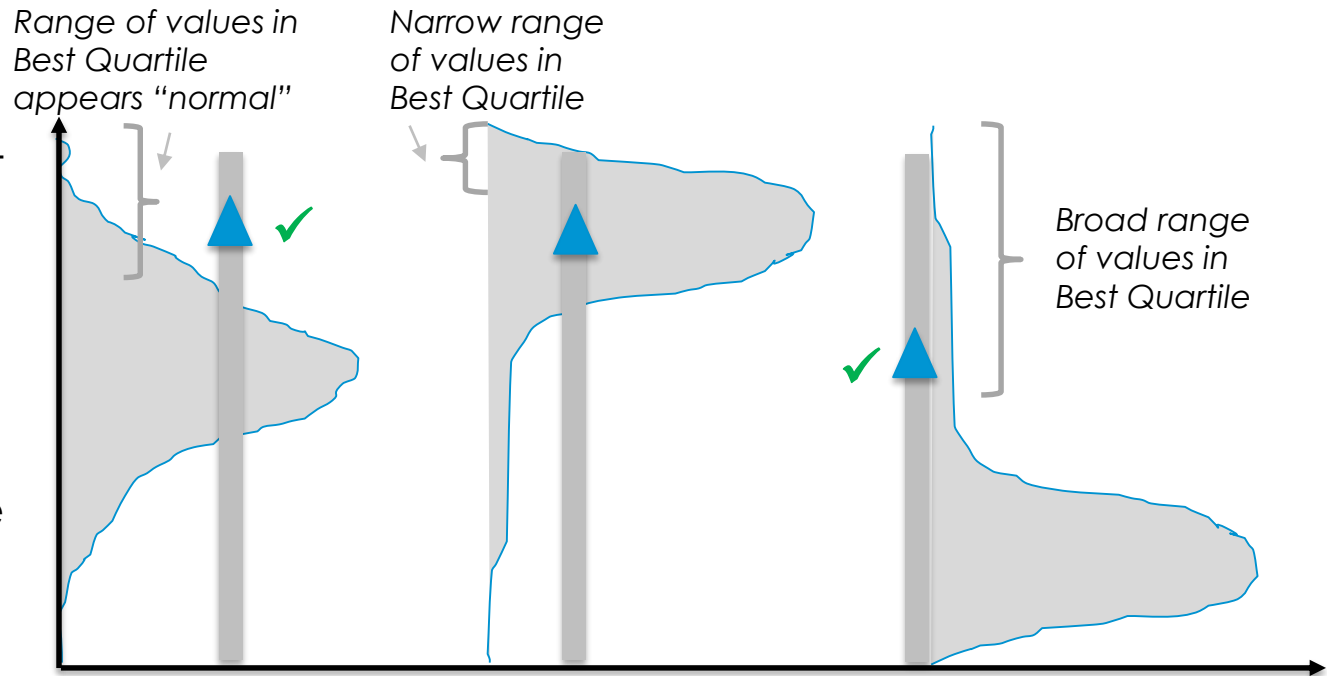
✓ = Best Quartile



Context Matters: The number and distribution of reported KPIs will affect the breadth of the range in values that fall in the best quartile

Examples for Illustrative Purposes

Note: Placement in the best quartile is more meaningful when many districts report the KPI. For some KPIs, only a few districts report a value.



1. KPI appears to be in the best quartile and is in the best quartile

2. KPI appears to be in the best quartile—but is not

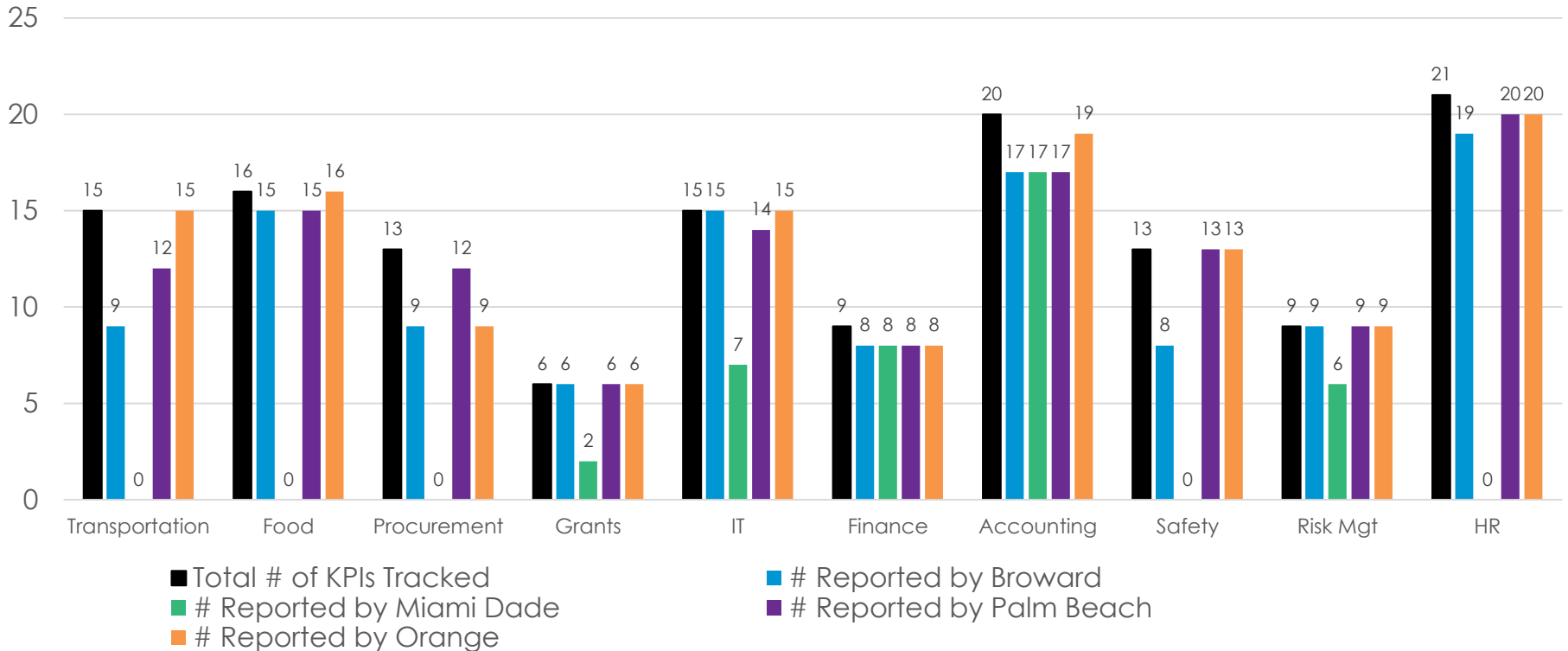
3. KPI does not appear to be in the best quartile—but actually is.

✓ = Best Quartile



Transparency Across Large Districts in Florida

CGCS KPI Reporting by Metric Family (2016)



Broward, Palm Beach and Orange counties consistently provide high levels of transparency across KPIs.



Benchmarking: Highlights (1 of 2)

| Division | CGCS Metric Family | Focus KPIs |
|-------------------------------------|----------------------------|---|
| Strategy and Continuous Improvement | Transportation | Cost per Rider |
| | | Daily Runs per Bus |
| | Food and Nutrition | Meals per Labor Hour |
| | | Lunch Participation Rate |
| | Procurement and Supply | Procurement Cost per Purchase Order |
| | | Procurement Savings Ratio |
| | | Procurement Administrative Lead Time (PALT), Requests for Proposals |
| | | P-Card Purchasing Ratio |
| | Grants Management | Competitive Grant Funds as a Percent of Total Budget |
| | Information and Technology | Information Technology |
| Devices per Student | | |



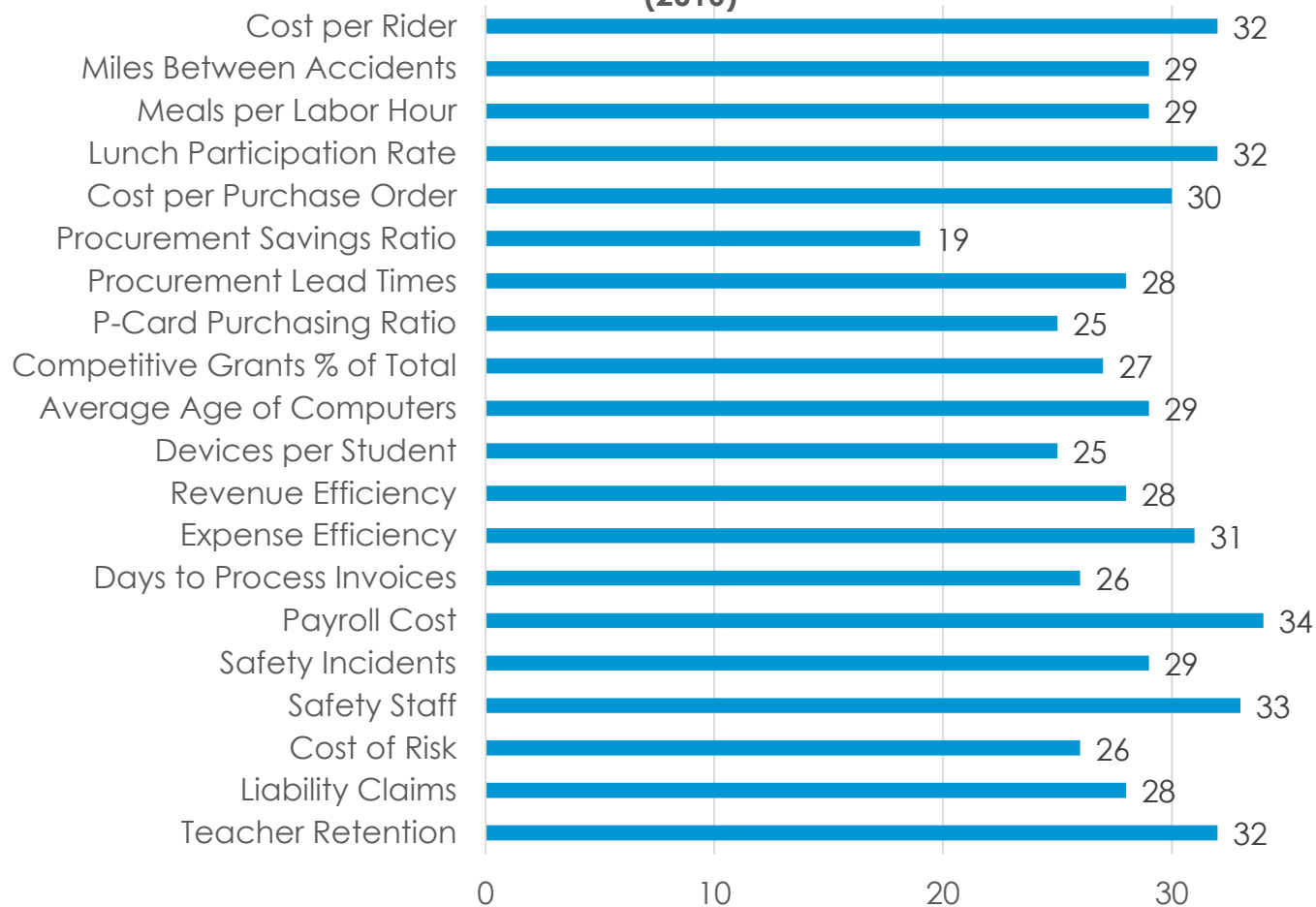
Benchmarking: Highlights (2 of 2)

| Division | CGCS Metric Family | Focus KPIs |
|---------------------------------------|----------------------|---|
| Office of the Chief Financial Officer | Financial Management | Revenue Efficiency: Adopted Budget Difference from Actual |
| | | Expense Efficiency: Adopted Budget Difference from Actual |
| | Accounts Payable | Invoices, Days to Process |
| | Compensation | Payroll Cost per Paycheck |
| Office of the Chief of Staff | Safety and Security | KPIs are not presented in this report due to significant changes in CGCS reporting and the absence of trend data. They are, however, included in the data file. |
| | Risk Management | Cost of Risk per Student |
| | | Liability Claims per 1,000 Students |
| | | Workplace Incidents per 1,000 Employees |
| | | Workers' Compensation Cost per Employee |
| Human Resources and Equity | Human Resources | Teacher Retention after Five (5) Years |



While there are 70 CGCS member districts, on average only 40% report focus KPIs

Number of CGCS Member Districts Reporting “Focus” KPIs (2016)



Average number of participating districts = 28



CGCS KPIs in the Broward Context

TRANSPORTATION

- Student Transportation and Fleet has limited control over fuel cost or the introduction of new services (e.g., magnet programs, VPK, etc.), which influence several KPIs. Better collaboration with Portfolio Services and OSPA has enhanced cost-awareness and helped contain cost per rider.
- A much needed increase in the hourly wage has helped attract and retain new drivers. However, a decline in the miles between preventable accidents may be correlated to having larger proportion of new, less experienced drivers on staff.
- Larger capacity buses help drive utilization improvements but are also more difficult for drivers to maneuver, which can lead to more accidents.
- An increase in “depot” bus stops, better routing and scheduling have driven improvements in daily runs per bus and daily buses as a percent of total buses.

FOOD SERVICES

- Shift of some custodial responsibilities over to Food and Nutrition Services (FNS) staff has put downward pressure on meals per labor hour.
- New menu adoptions drive trade-offs in KPIs around meal participation, revenue and cost.
- Scheduling of meal-times is not controlled by FNS but affects meal participation rates and labor-related KPIs.
- CGCS participation KPIs are based on enrollment vs. attendance. Attendance is a more accurate measure.
- Large fund balance is earmarked for future renovations.



CGCS KPIs in the Broward Context

PROCUREMENT AND SUPPLY

- Several procurement KPIs reported by CGCS require more sophisticated tracking capabilities than currently exist at BCPS. Those KPIs must be collected manually or estimated (e.g., Procurement Savings Ratio).
- The proportion of contracts >\$500k heavily influences procurement administrative lead times, since existing policy requires lengthy Board approval process.
- Current staff is introducing improved discipline into the collection and live-tracking of KPIs, as well as proposing system enhancements to improve reporting capabilities.

GRANTS MANAGEMENT

- KPIs reported by CGCS (i) combine administrative models (centralized vs decentralized) and (ii) consider the full life-cycle of all grant types (continuation, formula, competitive, and school-based).
- Grants Administration at BCPS is decentralized and controls only the pre-award status of competitive and school-based grants.
- KPIs showing the quantity of applications submitted and win-rates as a percentage of the available number and pool of funds would be more informative but are not reported by CGCS



CGCS KPIs in the Broward Context

INFORMATION TECHNOLOGY

- Reported KPIs reflect the district's growing investment in IT as a percentage of overall budget.
- In concert with those investments, the average age of computers has steadily declined while the number of devices per student has risen.
- Wide scale technology introduction drives Help Desk usage; fluctuations in Help Desk call abandonment rates are a result. Trend data shows that spikes in call abandonment are temporary.

FINANCE, ACCOUNTING, AND PAYROLL

- Budget KPIs across districts are highly reliable; they utilize publicly disclosed data and can be easily verified.
- BCPS' existing budget policies and procedures have resulted in high levels of consistency year-to-year across KPIs.
- Fluctuations in BCPS data that have occurred over time can be traced back to systems issues (e.g., Number of Payments Voided), changes in staffing levels (e.g., Treasury Staffing Cost), or the behavior of financial markets vis-à-vis risk profiles (e.g., Investment Earnings)



CGCS KPIs in the Broward Context

RISK MANAGEMENT

- Drivers of Risk Management KPIs are impacted by insurance market conditions, location of risk, population, loss history and socio-economic factors.
- There can be a significant time lag from the time a claim is opened until it matures through the settlement process—and that can impact KPI metrics.
- Cost KPIs are impacted by a District's decision to carry excess coverage above sovereign immunity caps (as does BCPS).
- BCPS' Risk Management department has launched a loss prevention program focused on school-by-school assessments to help mitigate claim occurrences.

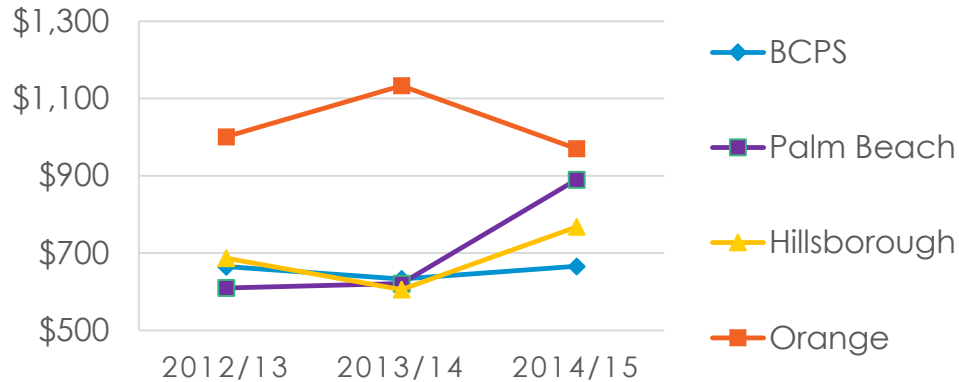
HUMAN RESOURCES

- Colleges of education—the main instructional staffing pipeline—are in decline with fewer students seeking teaching careers.
- 25-30% of new BCPS teachers are career changers who need more formal on-boarding.
- Lack of pedagogical support and few career-path incentives are leading drivers of attrition. BCPS' NESS/Tier and i3 grant programs are helping, but coverage is limited to TIF schools.
- BCPS's benefits package is competitive. However, dependent care coverage is very expensive.

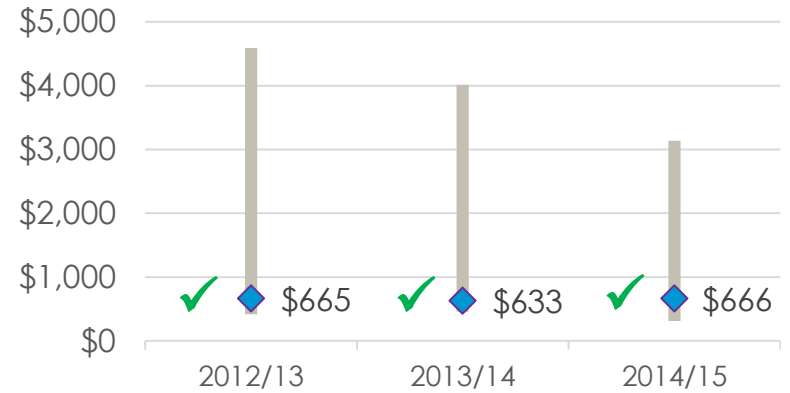


Transportation: Trend analysis and benchmarking for focus KPIs

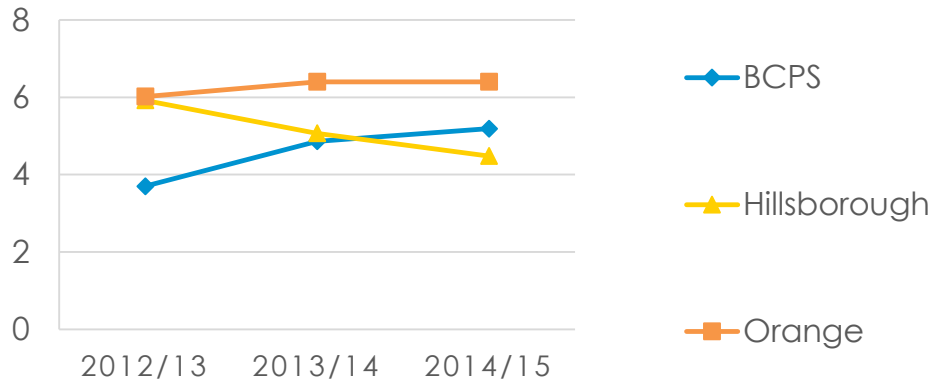
COST PER RIDER



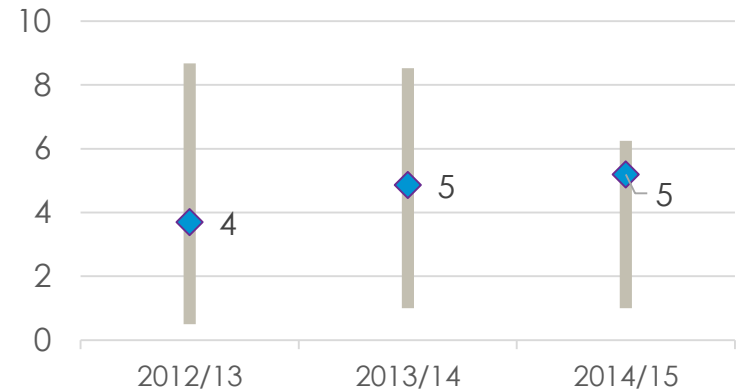
BCPS COST PER RIDER WITHIN RANGE OF REPORTED VALUES



DAILY RUNS PER BUS



BCPS DAILY RUNS PER BUS W/I RANGE OF REPORTED VALUES

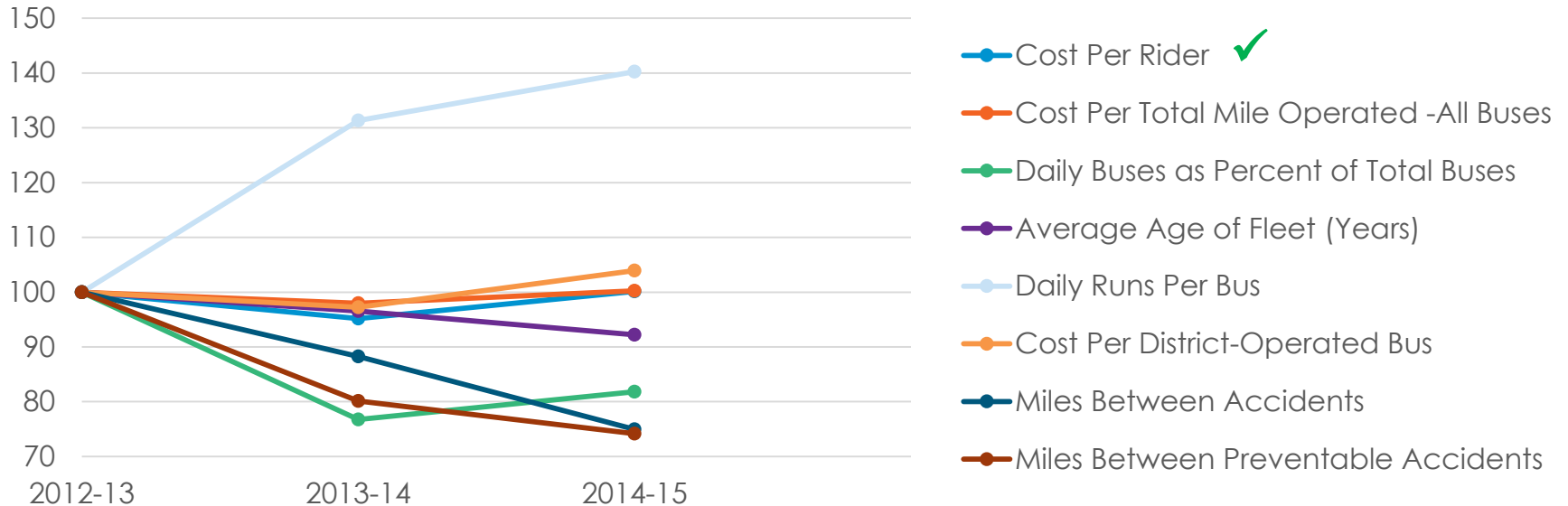


✓ = Best Quartile



Transportation: Index Analysis

Indexed Transportation KPIs (Broward only)



Increase in Daily Runs per Bus from 3.7 (2012/13) to 5.2 (2014/15)



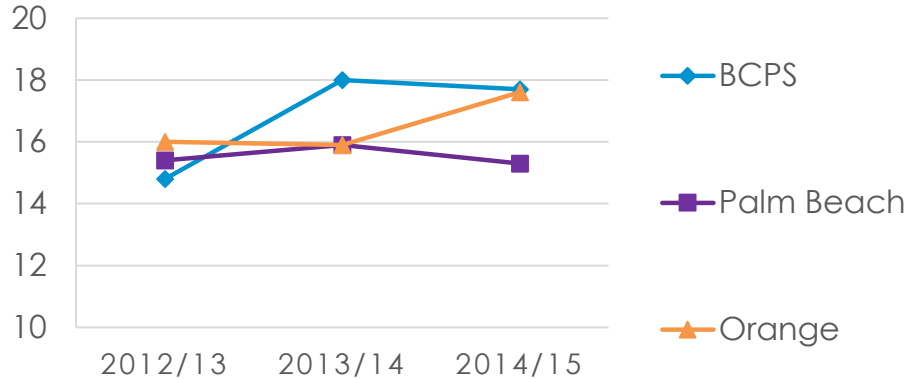
Decrease in Miles Between Accidents

✓ = Best Quartile

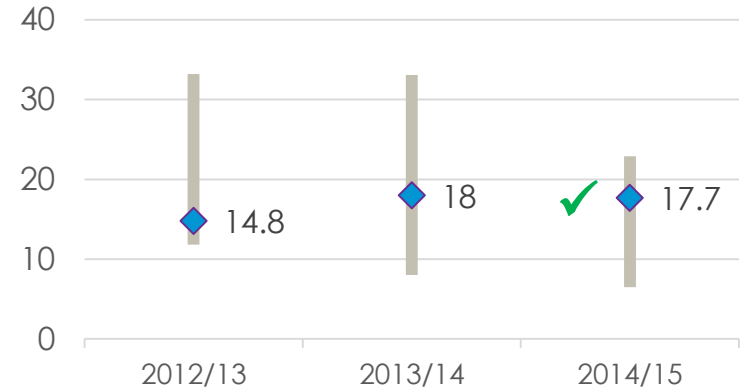


Food Services: Trend analysis and benchmarking for focus KPIs

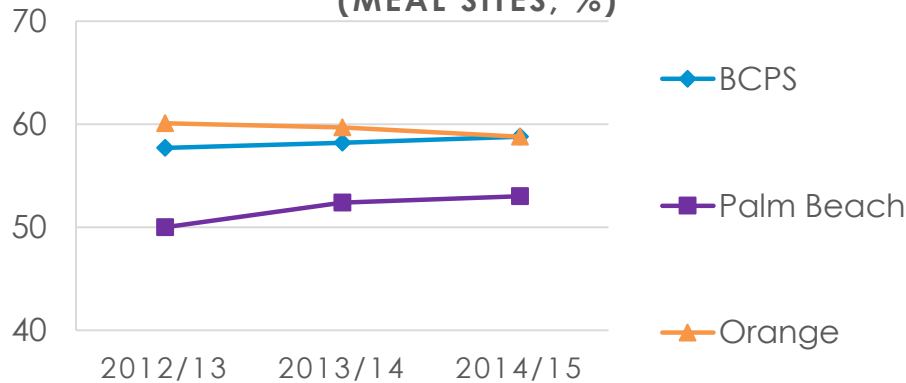
MEALS PER LABOR HOUR



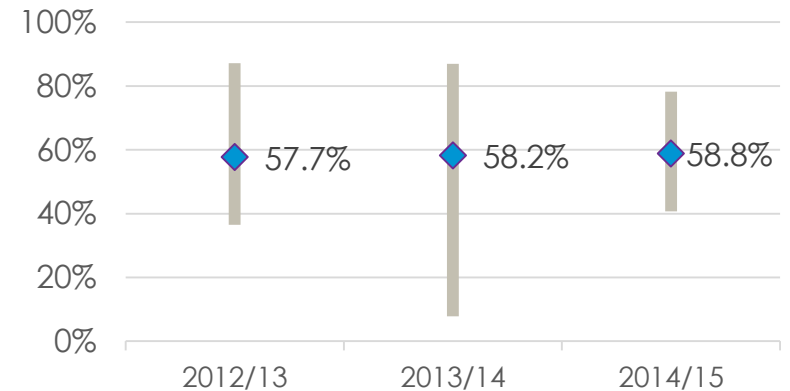
BCPS MEALS PER LABOR HOUR WITHIN RANGE OF REPORTED VALUES



LUNCH PARTICIPATION RATE (MEAL SITES, %)



BCPS LUNCH PARTICIPATION RATE WITHIN RANGE OF REPORTED VALUES

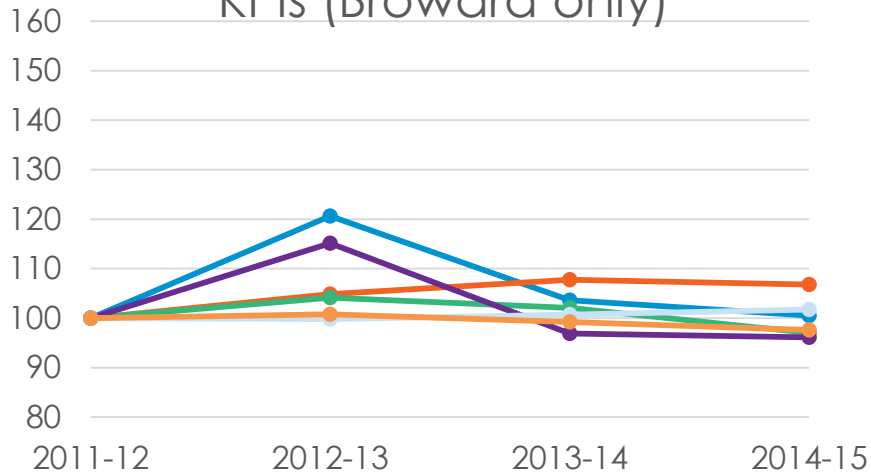


✓ = Best Quartile



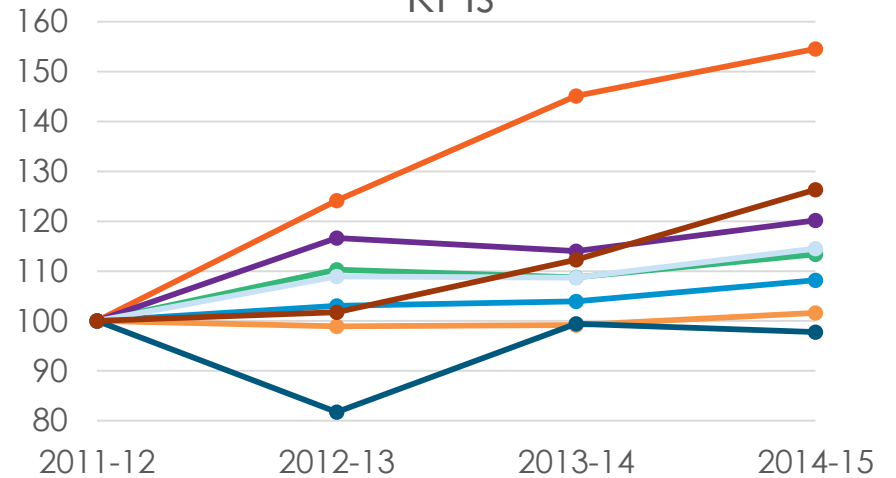
Food Services: Index Analysis

Indexed Meal Participation KPIs (Broward only)



- Breakfast Participate Rate (Districtwide)
- Breakfast Participation Rate (Meal Sites)
- Breakfast F/RP Participation Rate
- Lunch Participation Rate (Districtwide)
- Lunch Participation Rates (Meal Sites)
- Lunch F/RP Participation Rate

Indexed Revenue and Cost KPIs



- Total Cost as a Percent of Revenue
- Fund Balance per Revenue ✓
- Cost Per Meal
- Food Cost per Meal
- Food Cost per Revenue
- Labor Cost per Revenue
- Meals per Labor Hour ✓
- USDA commodities as Percent of Revenue ✓

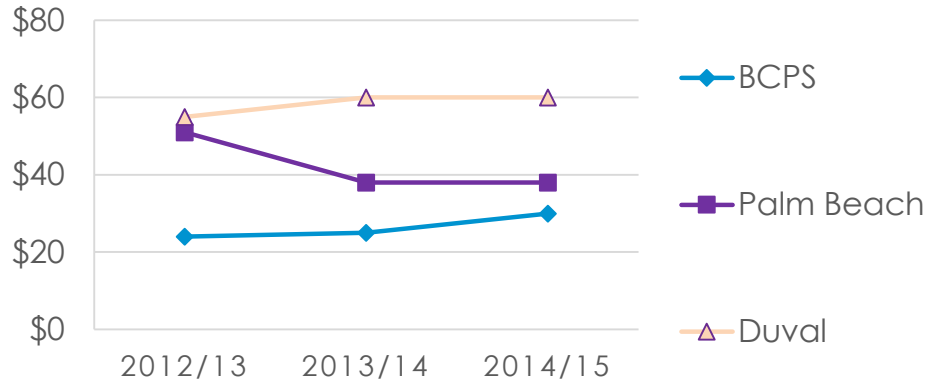
✓ = Best Quartile

↑ Breakfast Participation Rate (Meal Sites)

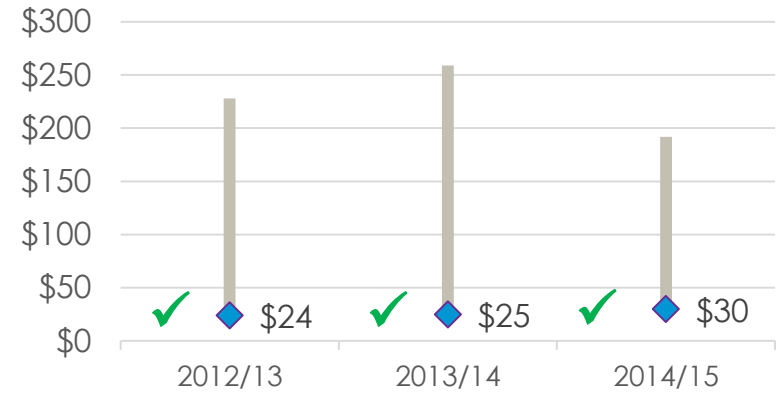


Procurement and Supply: Trend analysis and benchmarking for focus KPIs

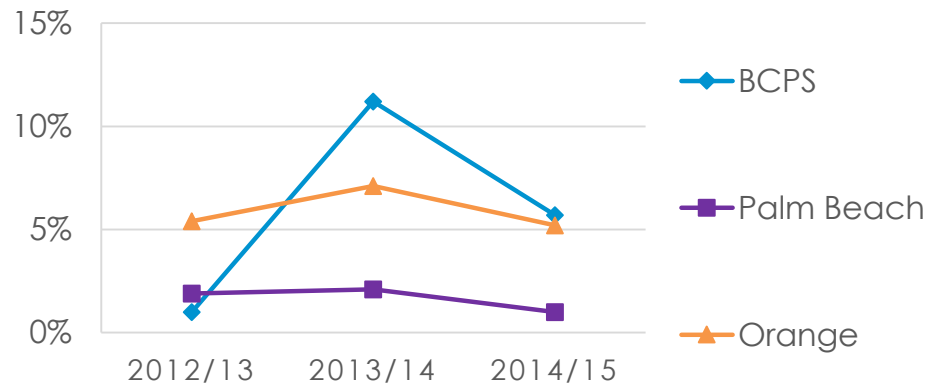
COST PER PURCHASE ORDER



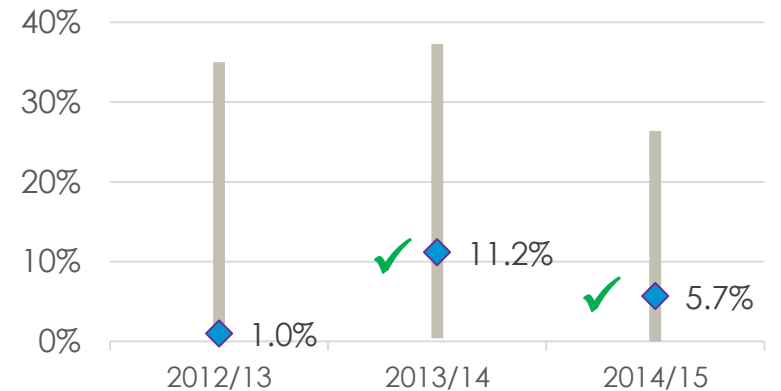
BCPS COST PER PURCHASE ORDER WITHIN RANGE OF REPORTED VALUES



PROCUREMENT SAVINGS RATIO



BCPS PROCUREMENT SAVINGS RATIO WITHIN RANGE OF REPORTED VALUES

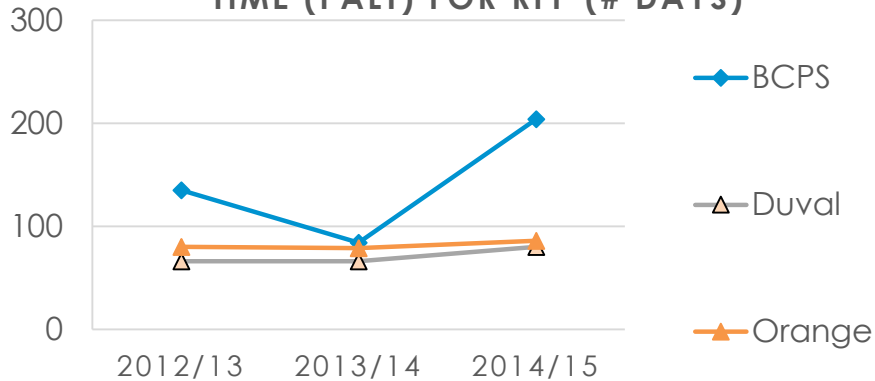


✓ = Best Quartile

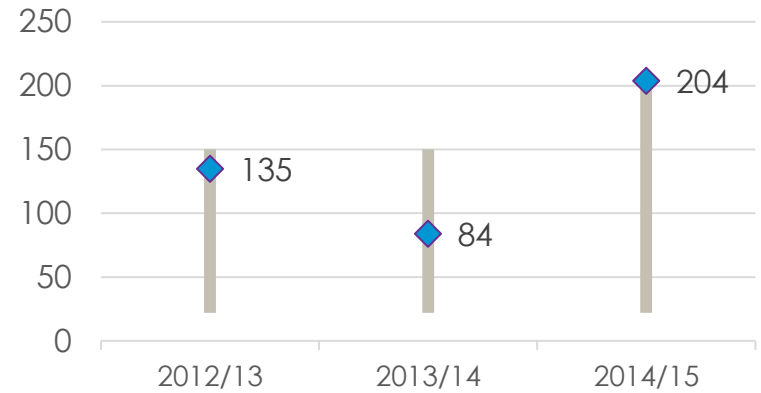


Procurement and Supply: Trend analysis and benchmarking for focus KPIs, continued

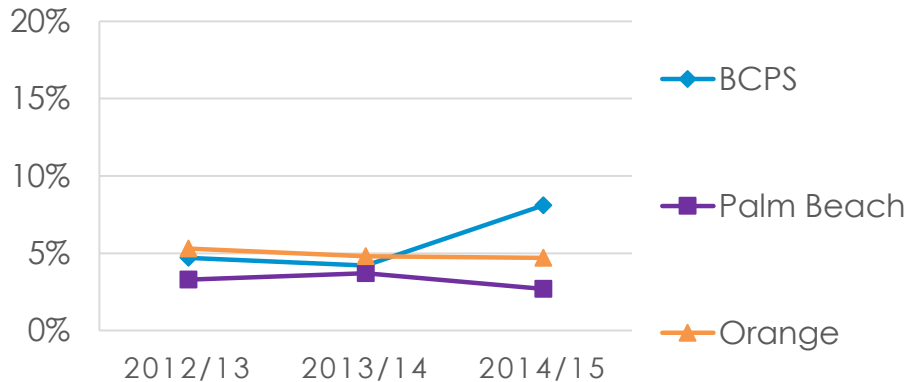
PROCUREMENT ADMINISTRATIVE LEAD TIME (PALT) FOR RFP (# DAYS)



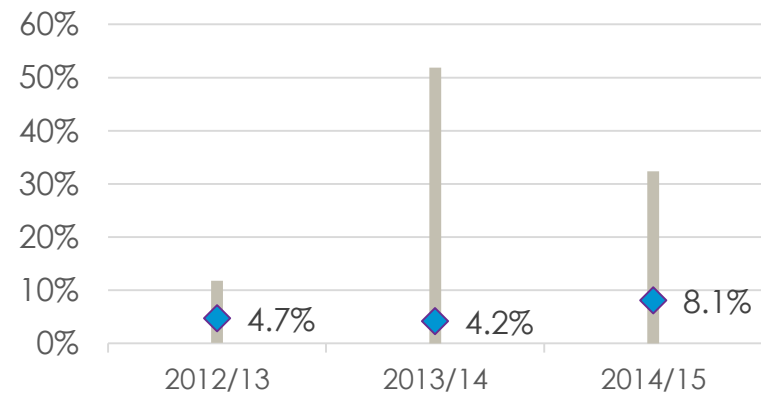
BCPS PALT FOR RFPs WITHIN RANGE OF REPORTED VALUES



P-CARD PURCHASING RATIO

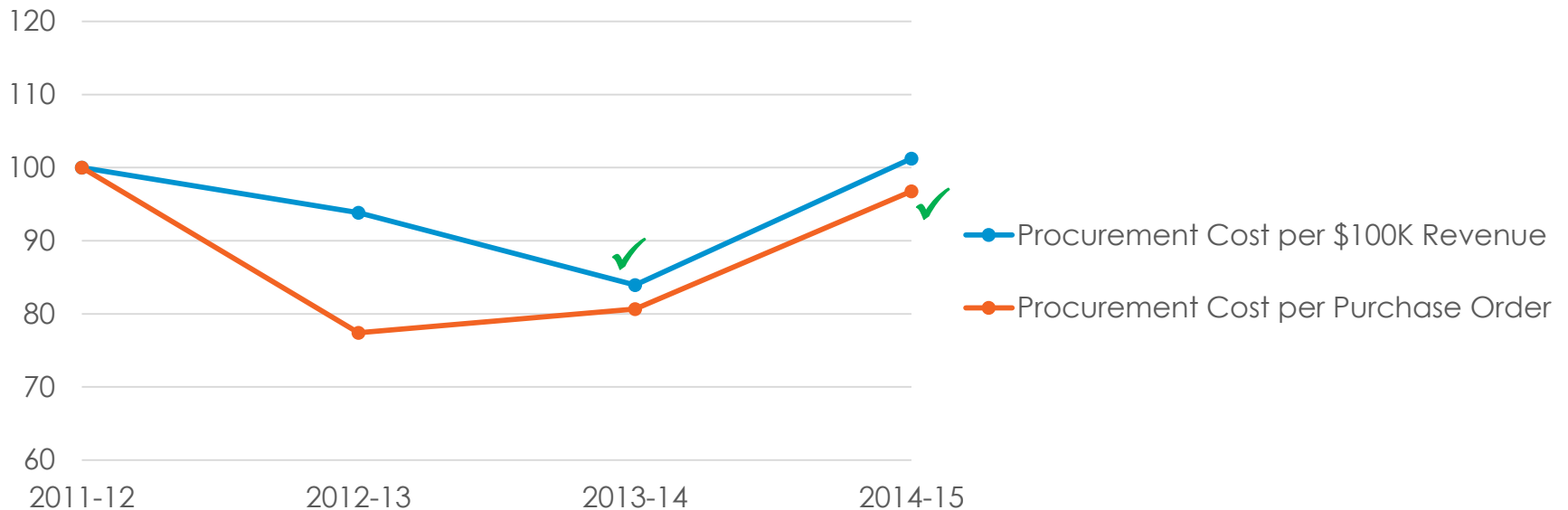



BCPS P-CARD PURCHASING RATIO WITHIN RANGE OF REPORTED VALUES



Procurement and Supply: Index Analysis

Indexed Procurement KPIs (Broward only)



- 
- Cost-related KPIs are driven by personnel costs. 2014/15 values remain near 2011/12 levels, and are near (or within) best quartile.
 - However, lean staffing can create tradeoffs in other KPIs, such as administrative lead times for RFPs, informal solicitations, and bids.

✓ = Best Quartile



Procurement and Supply KPIs (not indexed)

NOTE: The values below were not indexed due to wide variations from base year values in reported figures.

| KPI | 2011/12 | 2012/13 | 2013/14 | 2014/15 |
|---|---------|---------|---------|---------|
| Procurement Savings Ratio ✓ | 0.8% | 1.0% | 11.2% | 5.7% |
| Strategic Sourcing Ratio | 71.8% | 17.0% | 2.1% | 2.0% |
| P-Card Purchasing Ratio | 3.2% | 4.7% | 4.2% | 8.1% |
| PALT* for Informal Solicitations (# of Days) | 3 | 4 | 7 | 7 |
| PALT* for Requests for Proposals | 135 | 135 | 84 | 204 |
| PALT* for Invitations for Bids | 165 | 165 | 67 | 113 |
| Procurement Staff with Professional Certificate | 24% | 4% | 16% | 17% |

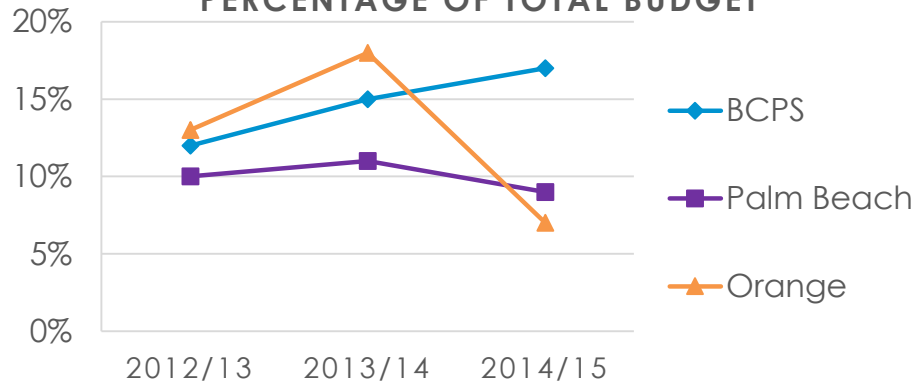
*Procurement Administrative Lead Time

✓ = Best Quartile

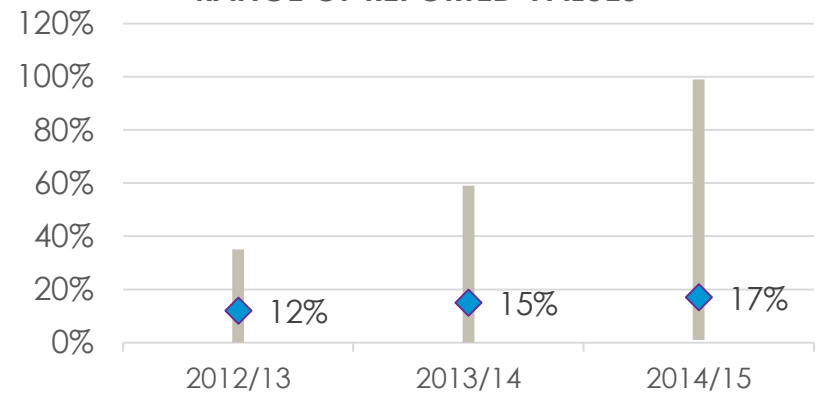


Grants Management: Trend analysis and benchmarking for focus KPIs

COMPETITIVE GRANT FUNDS AS A PERCENTAGE OF TOTAL BUDGET



BCPS COMPETITIVE GRANT FUNDS WITHIN RANGE OF REPORTED VALUES

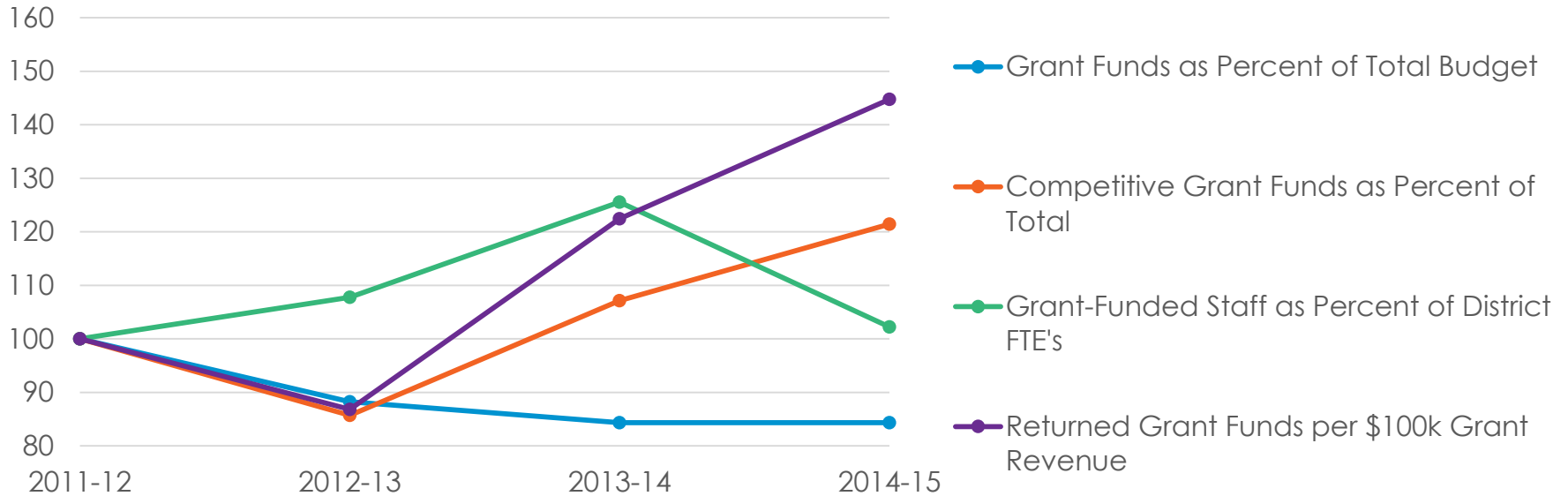


- BCPS has steadily increased funding from competitive grants.
- The number of grant applications submitted and win rate are meaningful KPIs that are not reported by CGCS.



Grants Management: Index Analysis

Indexed Grants Management KPIs (Broward only)



▪ Marked improvement in competitive grant funds as a percent of total

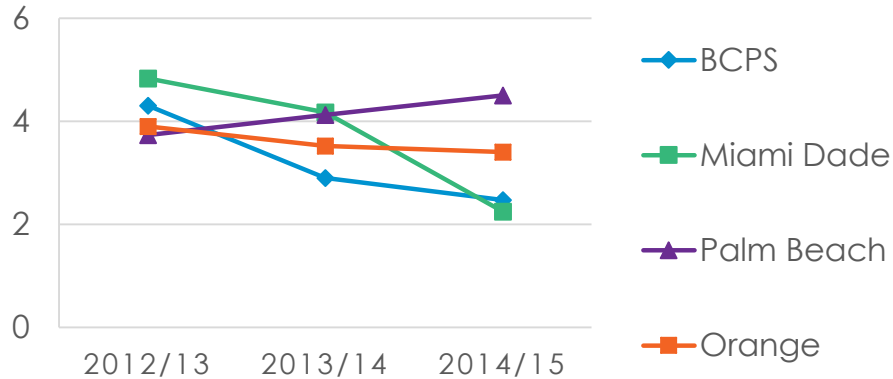


▪ Returned grant funds per \$100k grant revenue has increased. (Note: post-award grant funds are not managed centrally by BCPS' Grants Administration department.)

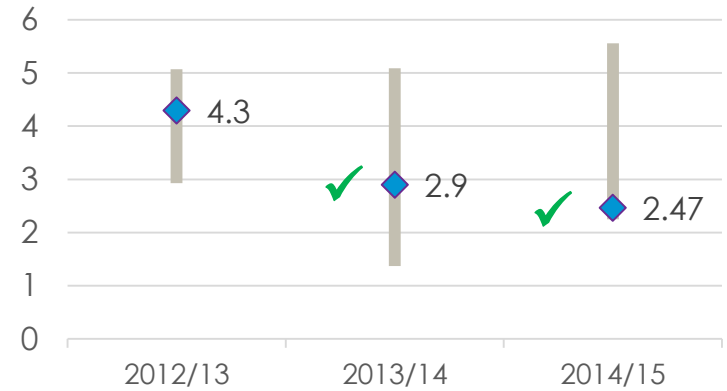


Information Technology: Trend analysis and benchmarking for focus KPIs

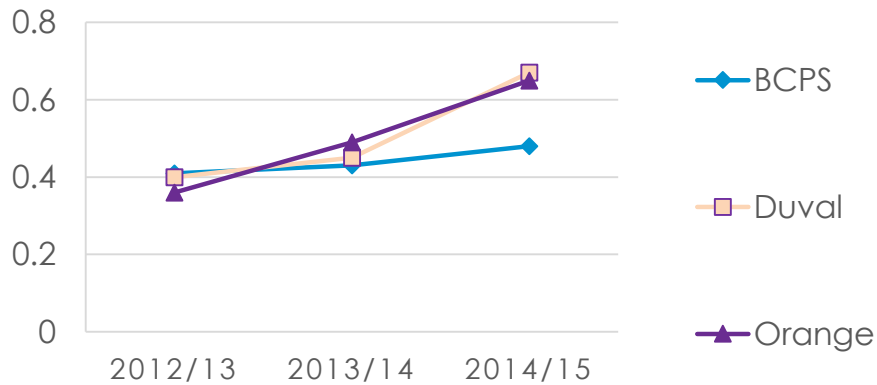
AVERAGE AGE OF COMPUTERS - YEARS



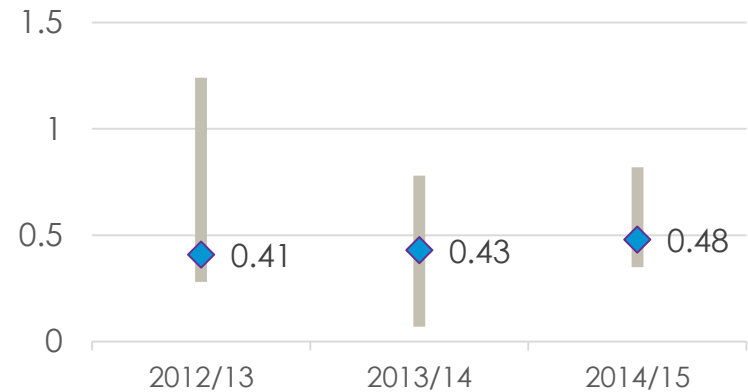
BCPS AVERAGE AGE OF COMPUTERS WITHIN RANGE OF REPORTED VALUES



DEVICES PER STUDENT



BCPS DEVICES PER STUDENT WITHIN RANGE OF REPORTED VALUES

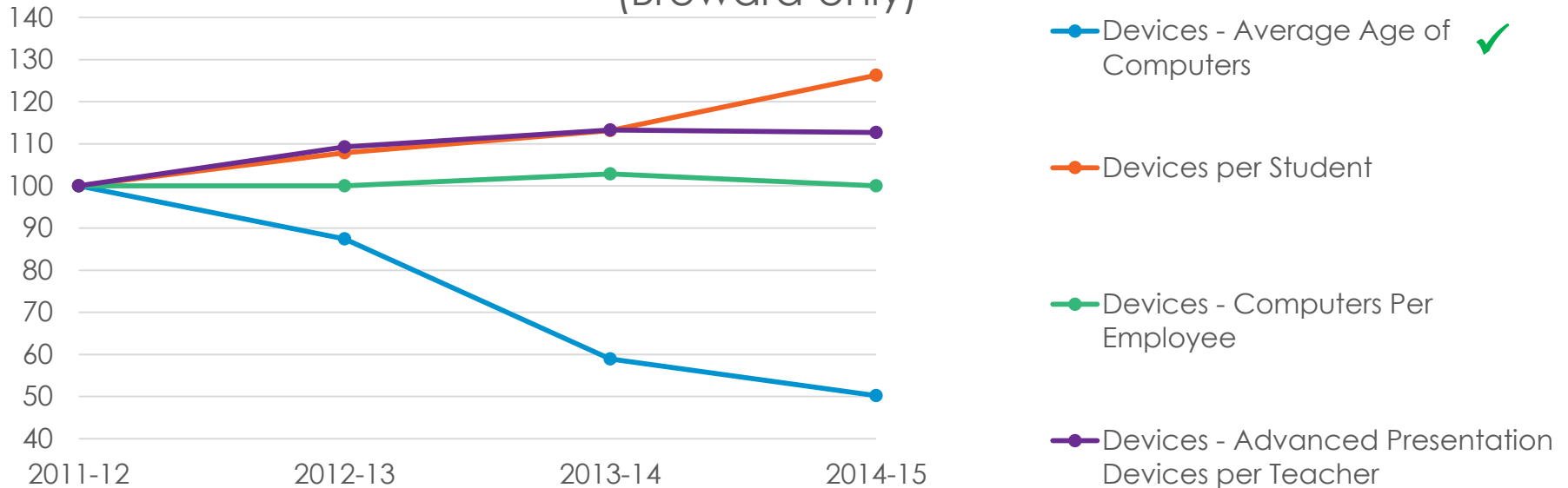


✓ = Best Quartile



BCPS Information Technology: Index Analysis

Indexed Information Technology KPIs – Devices (Broward only)



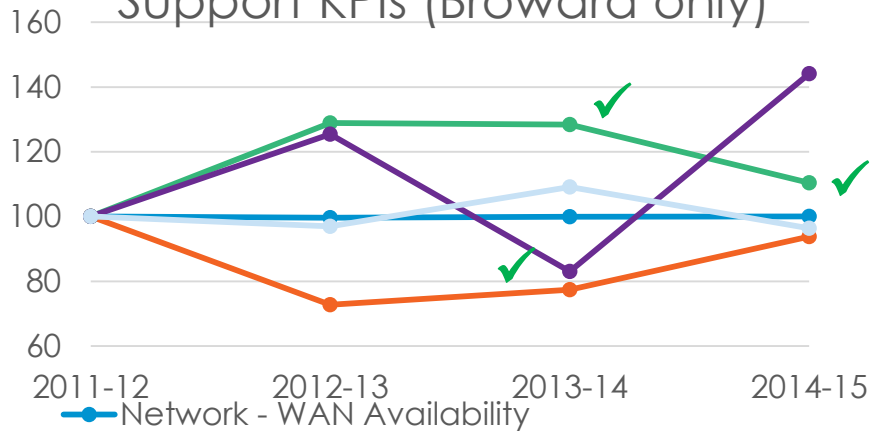
Significant increases in Student Devices and declining Average Age of Computers

✓ = Best Quartile



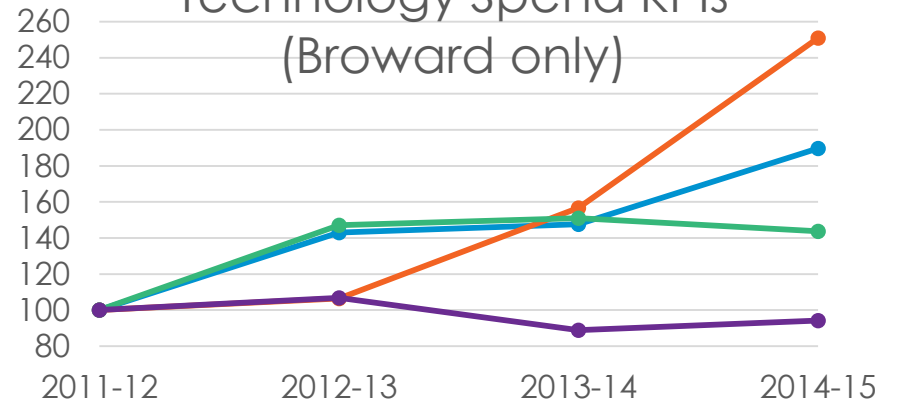
Information Technology: Index Analysis

Indexed Network and Support KPIs (Broward only)



- Support - Help Desk Staffing Cost per Ticket
- Support - Break/Fix Staffing Cost per Ticket
- Support - Help Desk Call Abandonment Rate
- Network - Days Usage Exceeds 75% of Capacity

Indexed Information Technology Spend KPIs (Broward only)



- IT Spending Per Student
- IT Spending Percent of District Budget
- Systems Cost - Business Systems Cost per Employee
- Systems Cost - Instructional Systems Cost per Student



Increase in Help Desk Call Abandonment Rate

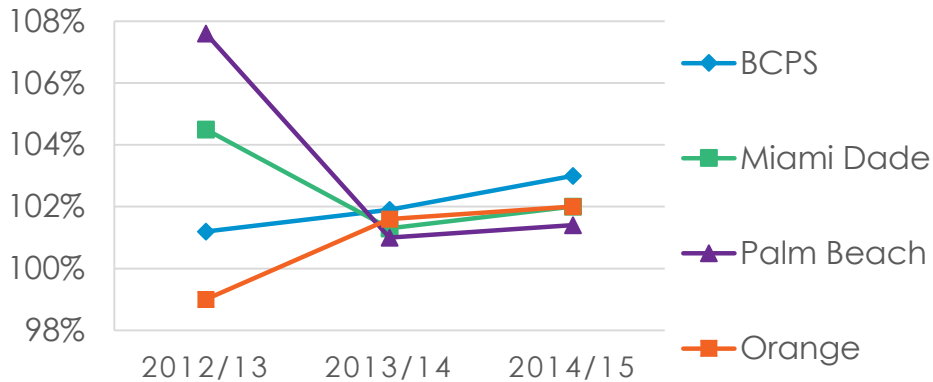


Increase in IT Spending per Student

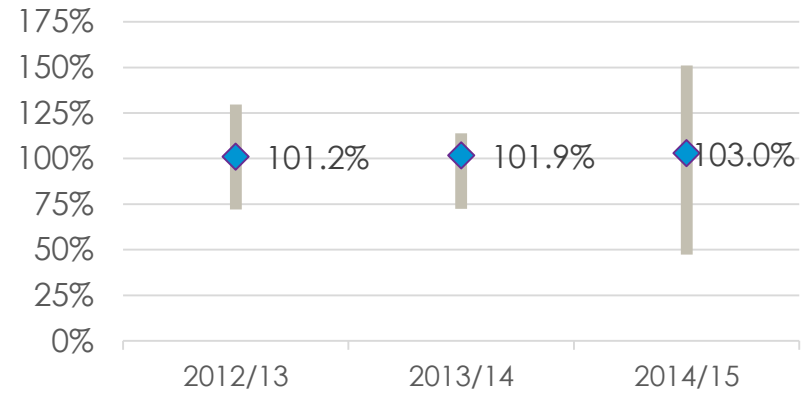


Financial Management: Trend analysis and benchmarking for focus KPIs

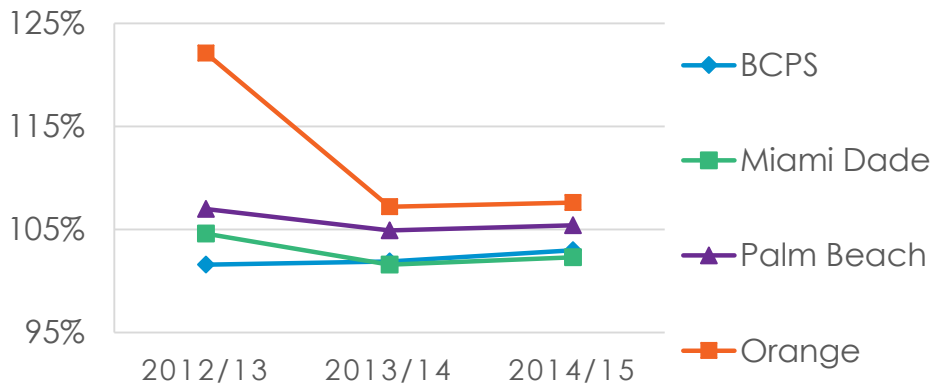
REVENUE EFFICIENCY



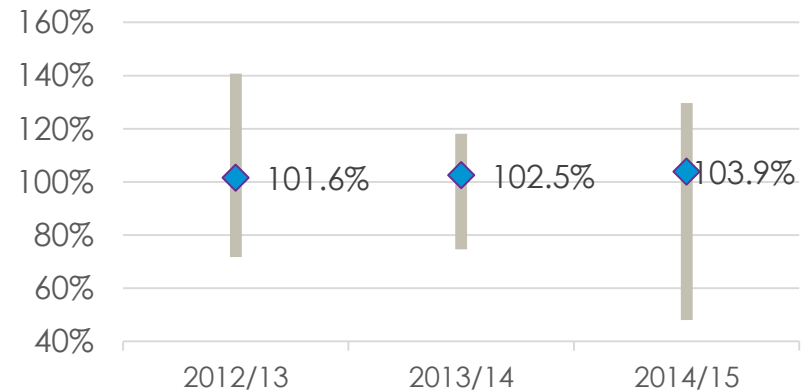
BCPS REVENUE EFFICIENCY WITHIN RANGE OF REPORTED VALUES



EXPENSE EFFICIENCY

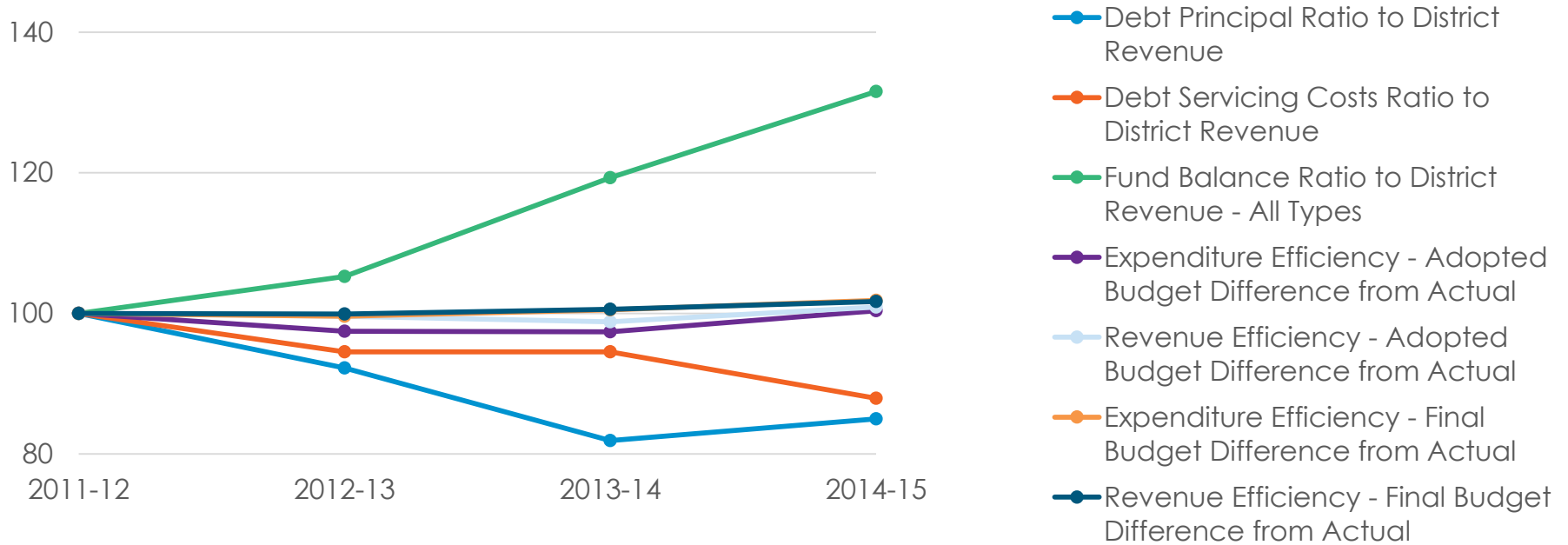


BCPS EXPENSE EFFICIENCY WITHIN RANGE OF REPORTED VALUES



Financial Management: Index Analysis

Indexed Financial Management KPIs (Broward only)

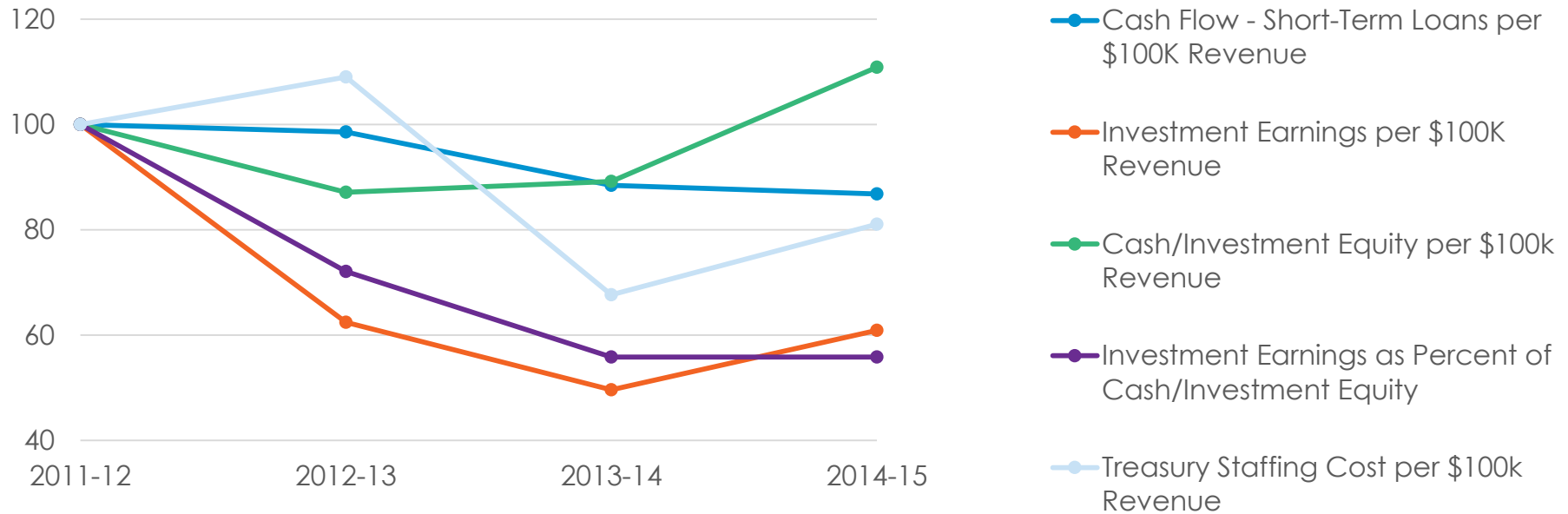


- Increase in Fund Balance Ratio to District Revenue
- Decrease in Debt Servicing Costs and Debt Principal



Financial Management (Cash Management) Index Analysis

Indexed Cash Management KPIs (Broward only)

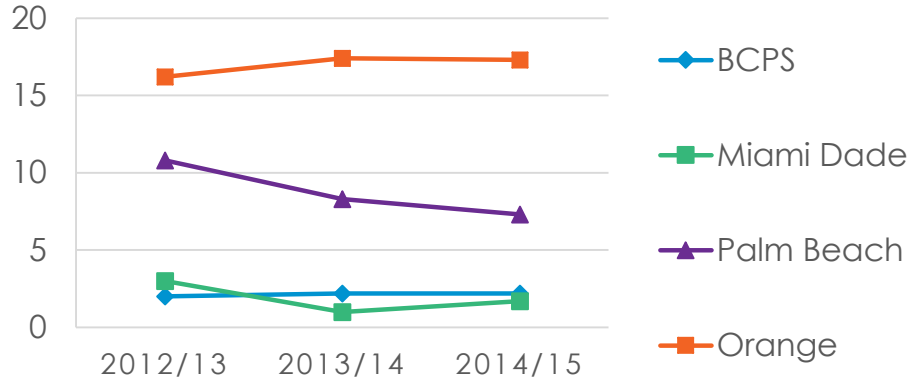


The behavior of financial markets vis-à-vis BCPS' investment risk profiles is the main lever influencing earnings KPIs

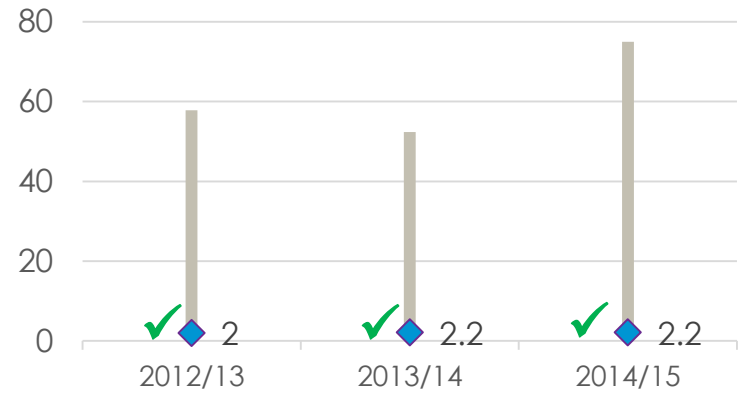


Accounting: Trend analysis and benchmarking for focus KPIs

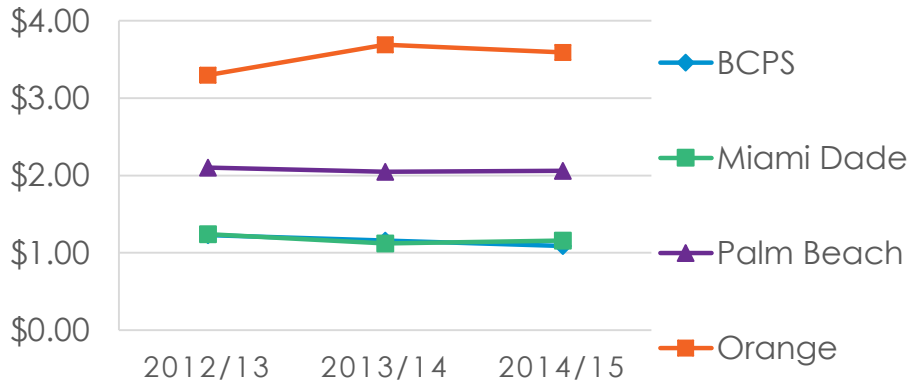
DAYS TO PROCESS INVOICES



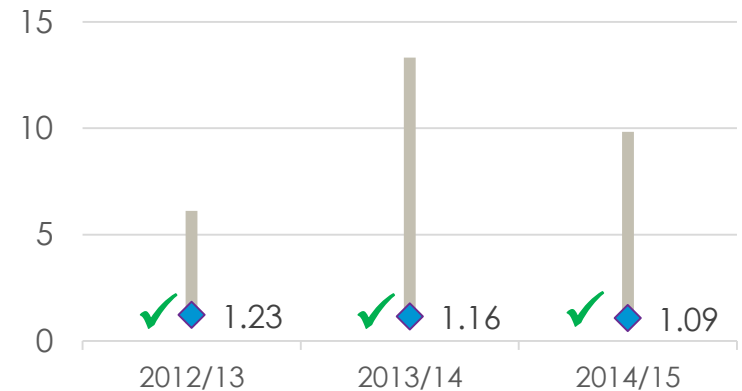
BCPS DAYS TO PROCESS INVOICES WITHIN RANGE OF REPORTED VALUES



PAYROLL COST PER PAYCHECK



BCPS PAYROLL COST PER PAYCHECK WITHIN RANGE OF REPORTED VALUES

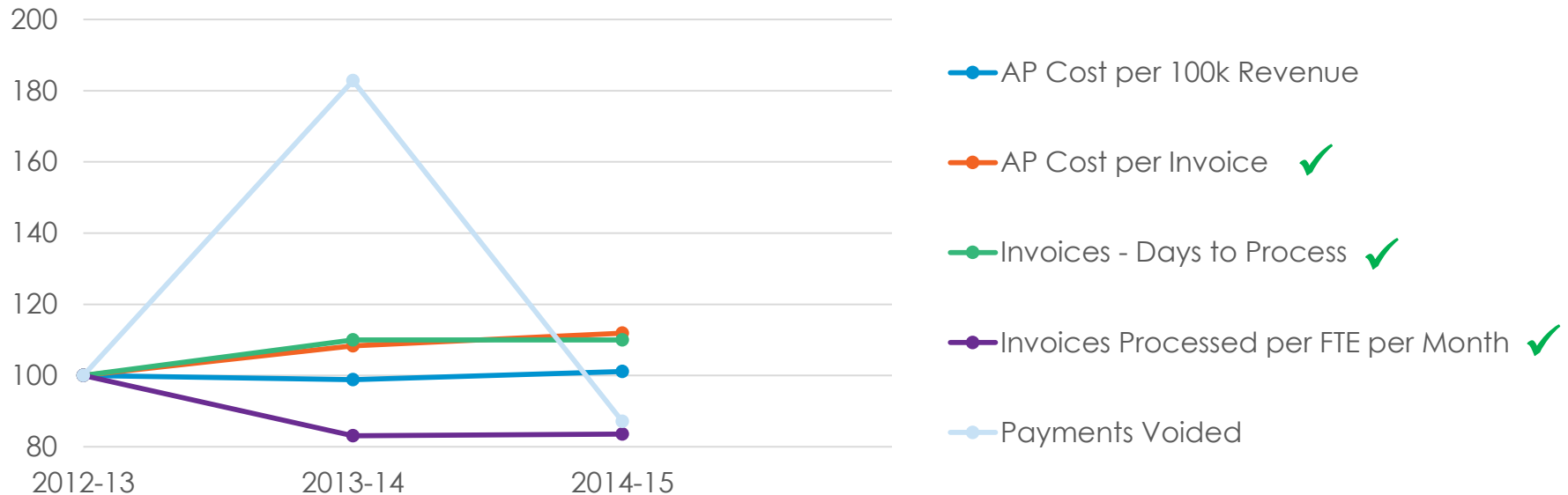


✓ = Best Quartile



Accounting: Index Analysis

Indexed Accounts Payable KPIs (Broward only)



↑ Decrease in number of Payments Voided following a spike in 2013-14 that resulted from systems issues

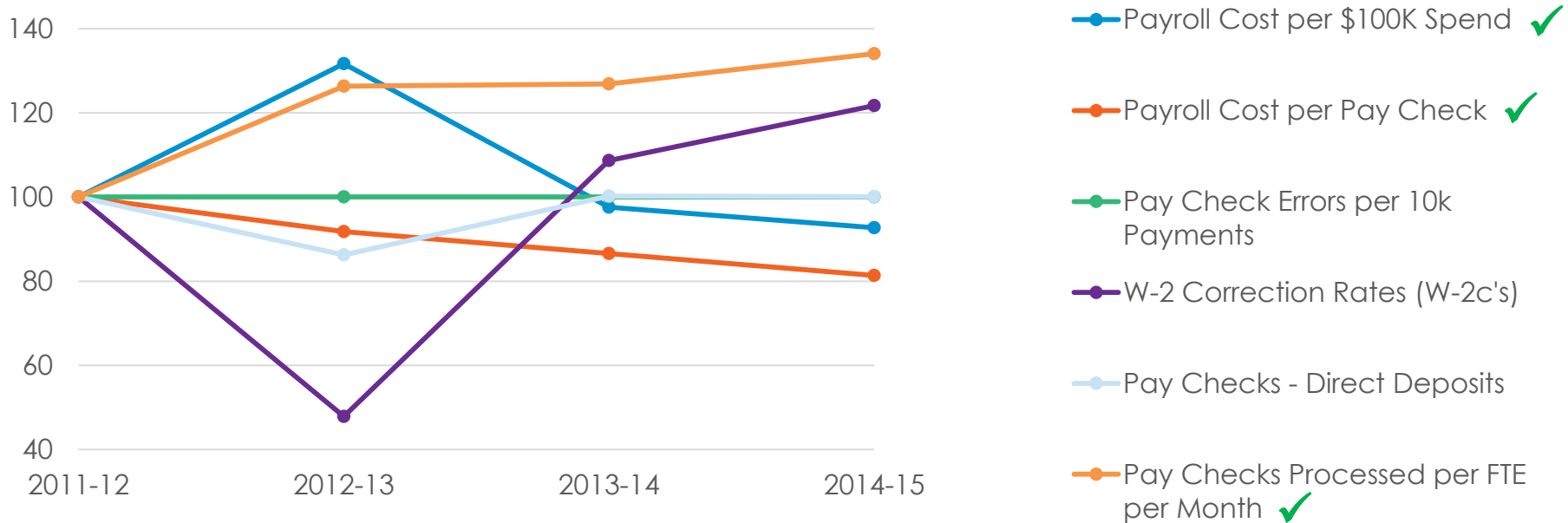
↓ Increase in Cost per Invoice, Days to Process, and Invoices Processed per FTE per month. However, BCPS is in top quartile for these KPIs

✓ = Best Quartile



Accounting (Compensation): Index Analysis

Indexed Compensation KPIs



- Increase in Pay Checks processed per FTE per month
- Decrease in Payroll Cost per Pay Check



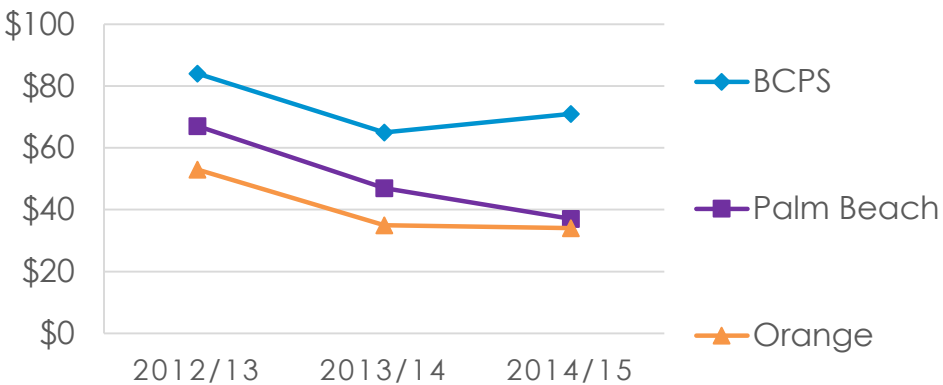
- W-2 Correction rates have fluctuated widely, but from a small base

✓ = Best Quartile

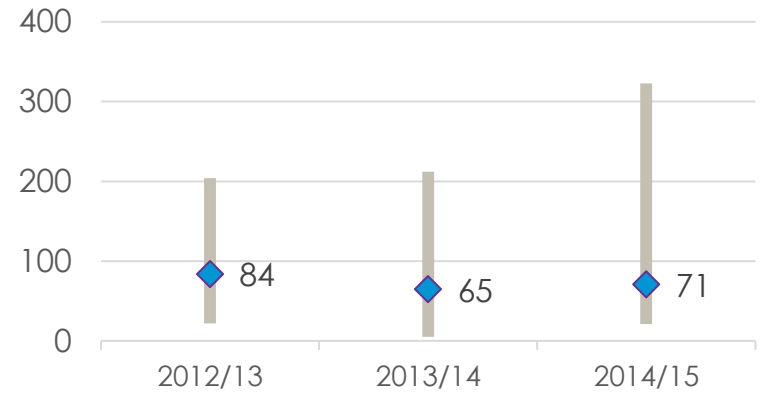


Risk Management: Trend analysis and benchmarking for focus KPIs

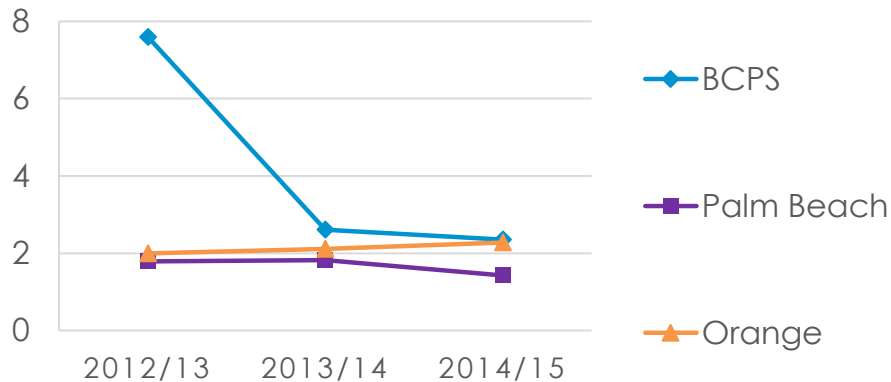
COST OF RISK PER STUDENT



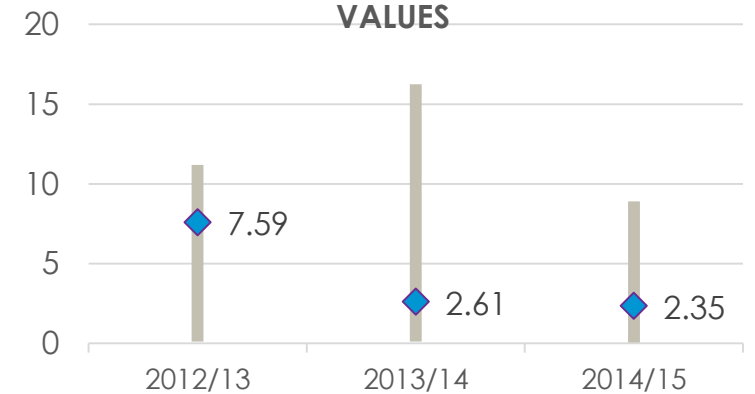
BCPS COST OF RISK PER STUDENT WITHIN RANGE OF REPORTED VALUES



LIABILITY CLAIMS PER 1,000 STUDENTS

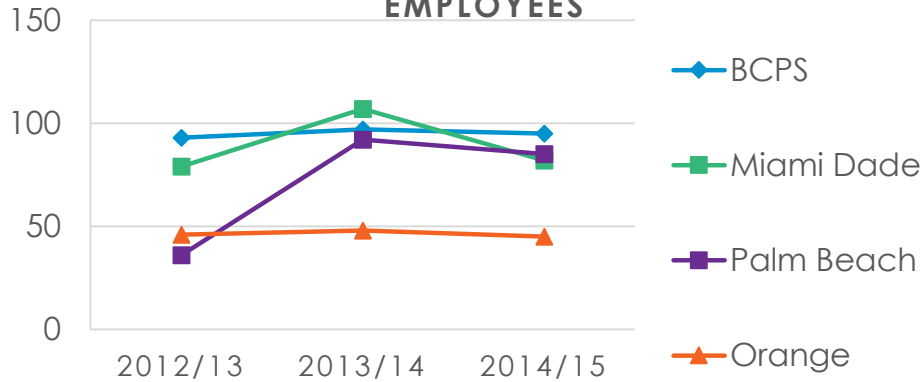


BCPS LIABILITY CLAIMS PER 1,000 STUDENTS WITHIN RANGE OF REPORTED VALUES

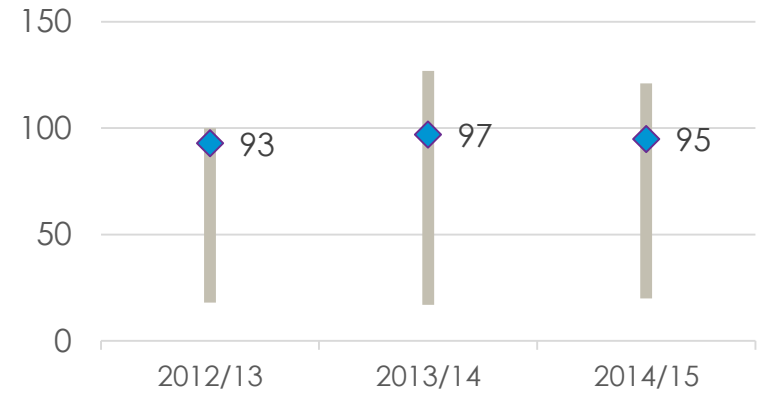


Risk Management: Trend analysis and benchmarking for focus KPIs, continued

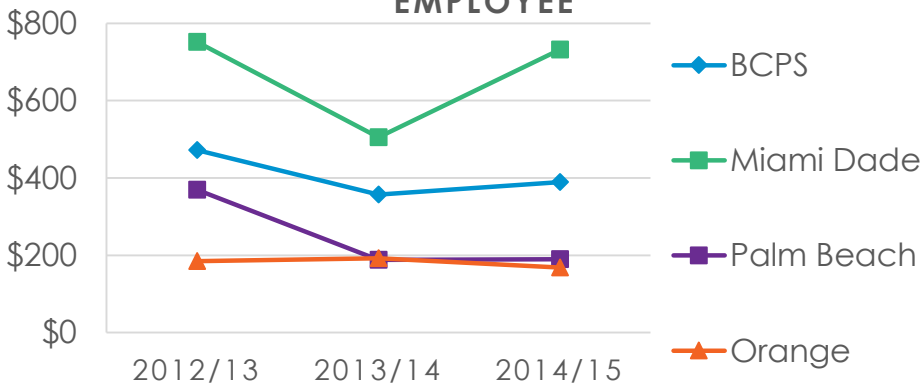
WORKPLACE INCIDENTS PER 1,000 EMPLOYEES



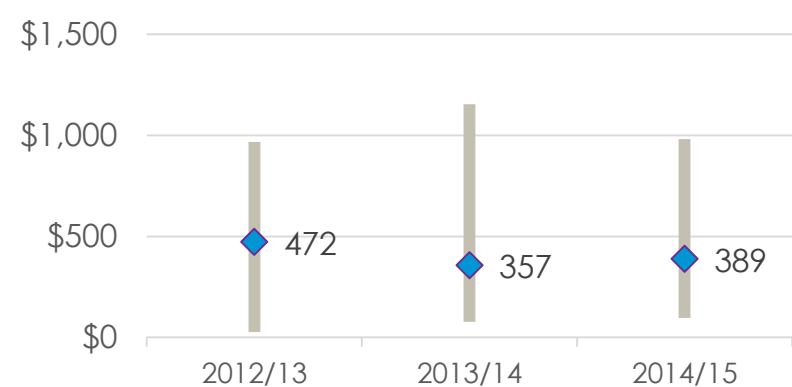
BCPS WORKPLACE INCIDENTS WITHIN RANGE OF REPORTED VALUES



WORKERS' COMPENSATION COST PER EMPLOYEE

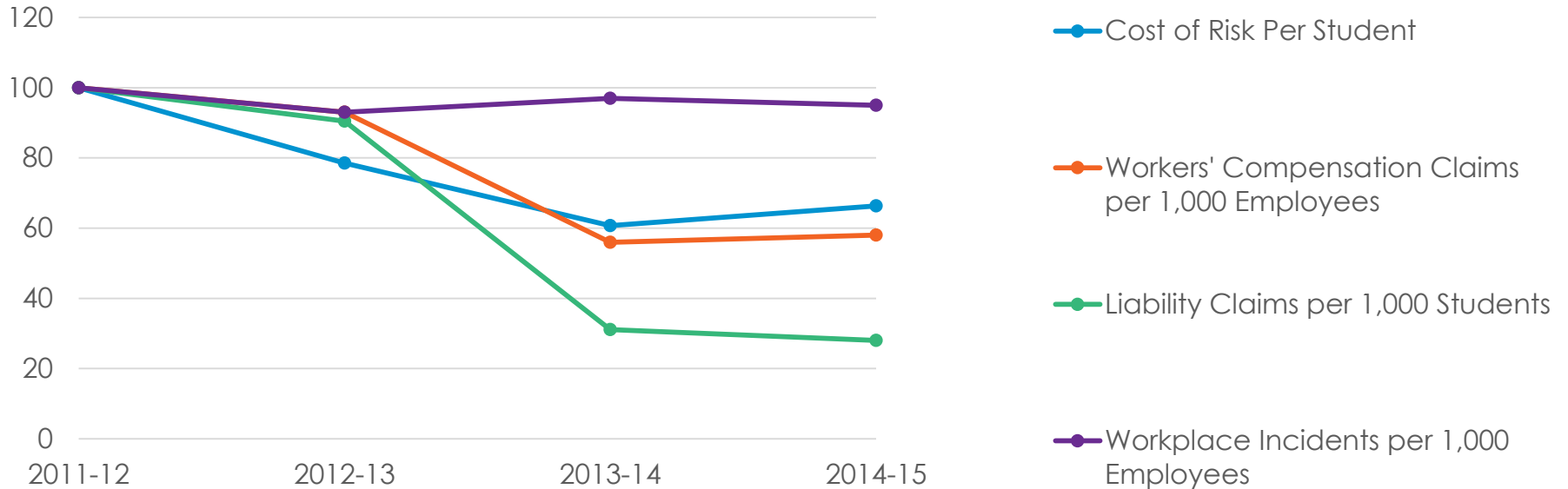


BCPS WORKERS' COMPENSATION COST WITHIN RANGE OF REPORTED VALUES



Risk Management: Index Analysis

Indexed Risk Management KPIs



Cost of Risk, Workers' Compensation Claims, Liability Claims, and Workplace Incidents have all decreased

✓ = Best Quartile



Risk Management: Non-Indexed KPIs

NOTE: The values below were not indexed due to wide variations from base year values in reported figures.

| KPI | 2011/12 | 2012/13 | 2013/14 | 2014/15 |
|--|---------|---------|---------|---------|
| Workers' Compensation Cost per Employee | \$256 | \$472 | \$357 | \$389 |
| Workers' Compensation Cost per \$100k Payroll Spend | \$616 | \$1,391 | \$967 | \$1,073 |
| Workers' Compensation Lost Work Days per 1,000 Employees | 124 | 174 | 180 | 174 |
| Liability Cost per Student | \$73 | \$19 | \$17 | \$18 |
| Liability Claims (Percent Litigated) ✓ | 1.0% | 1.6% | 2.6% | 2.6% |

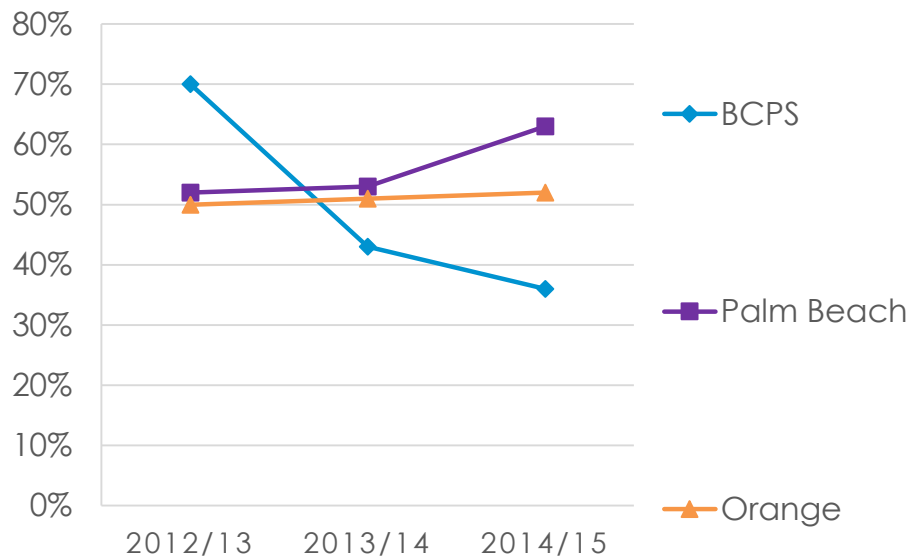
*Procurement Administrative Lead Time

✓ = Best Quartile

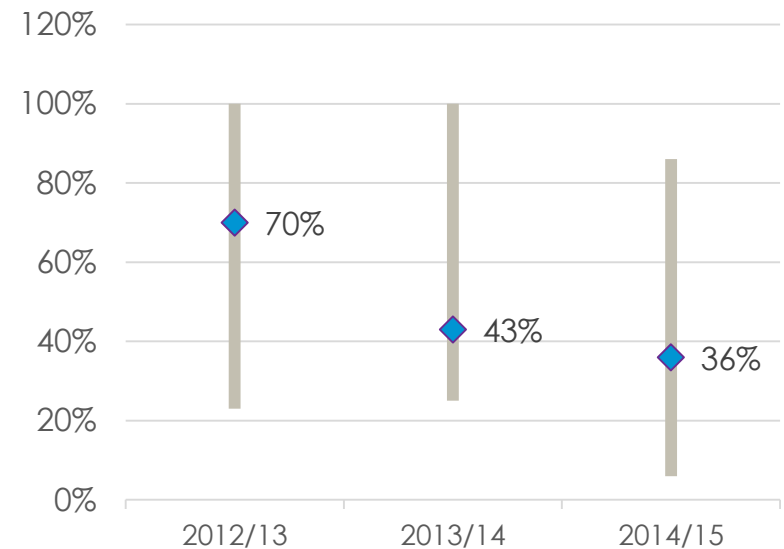


Human Resources: Trend analysis and benchmarking for focus KPIs

TEACHER RETENTION AFTER 5 YEARS



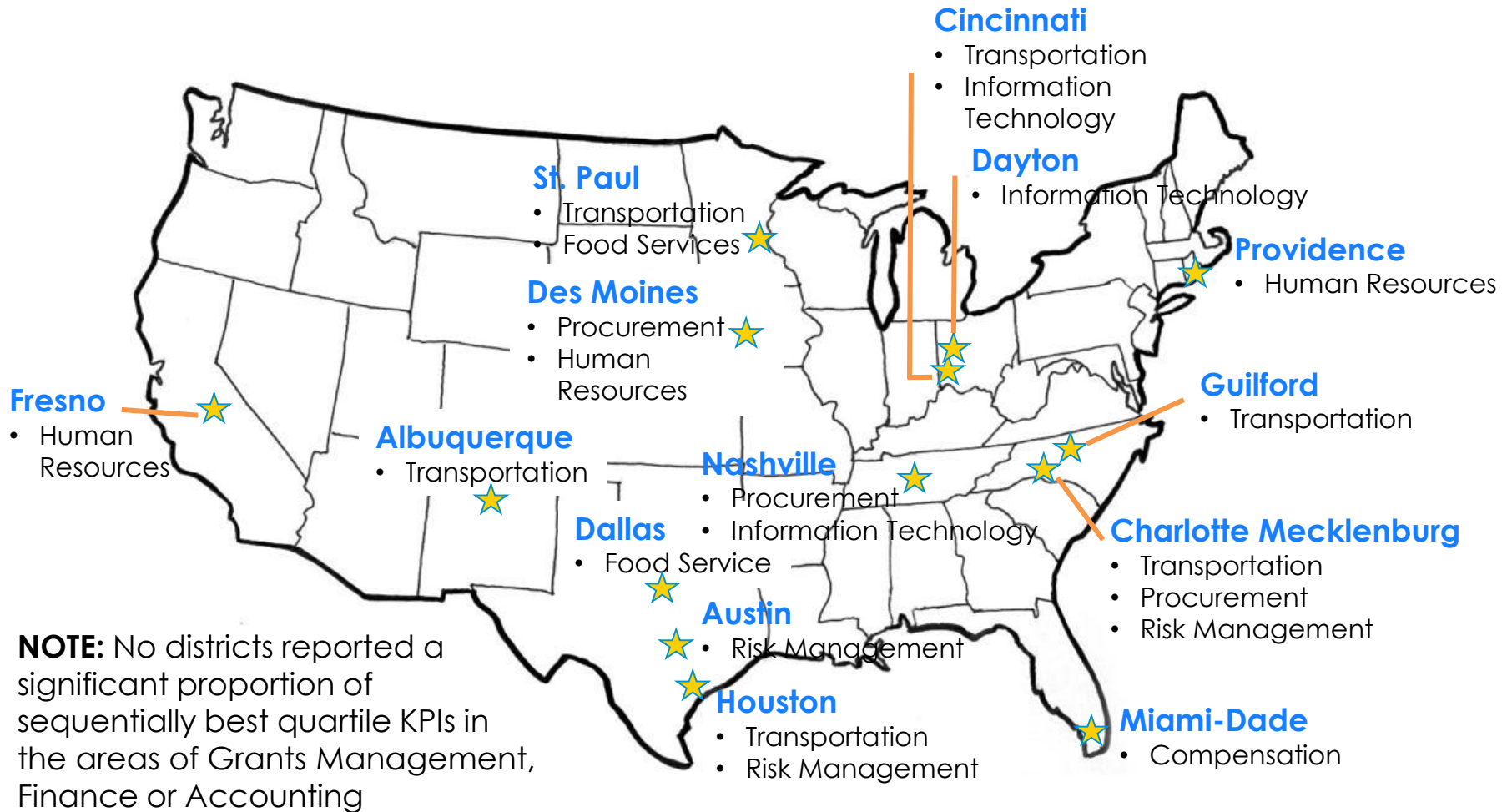
BCPS TEACHER RETENTION AFTER 5 YEARS WITHIN RANGE OF REPORTED VALUES



- Decline in Teacher Retention after 5 years reflects wide scale dismissal of instructional staff that occurred as a result of prior years' budget cuts.
- Apart from budget cuts, leading drivers of attrition include dissatisfaction with school-based administration, lack of support, and low salary.



CGCS member districts that sequentially* report best quartile KPIs may be sources of best practice guidance



*These districts had the largest proportion of best quartile KPIs in the indicated metric families for both 2013/14 and 2014/15 school years.



Recommendations

- BCPS should leverage its membership in the CGCS to help drive quality improvements in the annual “Managing for Results” report.
- BCPS should consider centralizing the reporting of its KPIs to CGCS. A single point of contact could improve transparency, continuity, synchronization of reporting, and documentation around the values we report.
- An overlay to this report that documents key events over time (such as new legislation, changes to policy, changes to procedure, organizational redesign, implementation of new technology, etc.) could help BCPS assess the impact of those events on operational metrics and better inform future decision-making.
- Across most metric families, this report has identified districts that have sequentially reported KPIs in the best quartile. Department heads are strongly encouraged to reach out to these districts and learn about their operational practices.

The recommendations here relate to our participation in CGCS, our process for reporting BCPS’ KPIs to CGCS, and how we utilize the data they report. Individual departments will determine how to improve their own measures.



BACK UP



Mapping of CGCS metric families to BCPS organizational set-up (1 of 2)

CGCS METRIC FAMILY

BCPS DEPARTMENT

Transportation

Student Transportation and Fleet

Food Services

Food and Nutrition Services

Procurement and Supply

Procurement & Warehousing Services

Grants Management

Grants Administration

Information Technology

Information and Technology

Not in the scope of this report, but included in data file.

Safety and Security

Office of the Chief of Staff

Special Investigative Unit

Risk Management

Risk Management



Mapping of CGCS metric families to BCPS organizational set-up (2 of 2)

