PARTHENON

Prince George's County Public Schools Continuous Business Process Improvement Study: Appendix

April 2017

EY

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List of All Acronyms Used in Report

- **AP:** Accounts Payable
- **BIA:** Business Implication Analysis
- **CDL:** Commercial Driver's License
- **CIP:** Capital Improvement Plan
- **CIPA:** Children's Internet Protection Act
- **CPM:** Cyber Program Management
- **CRM:** Customer Relationship Management
- **DPSS:** Department of Purchasing and Supply Services
- **DR:** Disaster Recovery
- **EBS:** E-business Suite
- **ERBAC:** Enterprise Role Based Access Controls
- **ERP:** Enterprise Resource Planning
- **ESC:** Energy Service Contracts
- **FTE:** Full Time Equivalent
- **I/C:** Investigative Counselors
- **IAM:** Identity and Access Management
- **KPIs:** Key Performance Indicators
- **LAN:** Local Area Networks
- **OLA:** Office of Legislative Audits
- **OSHA:** Occupational Safety and Health Administration
- **P2P:** Procure to Pay
- **PAM:** Privileged Access Management
- **PO:** Purchase Order
- **RACI:** Responsible, Accountable, Consulted, and Informed
- **RBAC:** Role Based Access Controls
- **RFP:** Request for Proposal
- **ROI:** Return on Investment
- **SLA:** Service Level Agreements
- **SoD:** Segregation of Duties
- **SOPs:** Standard Operating Procedures
- **TDC:** Location responsible for IT asset management
- **WAN:** Wide Area Networks

Appendix A: Budget

Appendix A-1: List of Individual Interviews

Budget Office

Title
CFO
Budget Director
Supervising Budget Analyst
Supervising Budget Analyst
Senior Budget Analyst
Budget Analyst
Fiscal Compliance Officer

Program Managers or Specialty Program Staff

Title
Director of Curriculum and Instruction
Director of Academic Programs
Director of Special Education
Early Childhood Office, Program Supervisor
Officer, College and Career Readiness Office
Program Directors, Immersion
Program Directors, Arts
TAG Office Directors
IB Program Directors

Cabinet Members

Title
Chief Operating Officer (now Deputy Superintendent for Teaching and Learning)
Deputy Superintendent for Teaching and Learning
Chief Information Officer (now COO)

Appendix B: Building Services and Maintenance

Appendix B-1: PPGCPS Continuous Business Process Improvement for Building Services and Maintenance — Workplan

Activity	Inputs	Time Frame	Progress Reporting
PRELIMINARY ANALYSIS: Identify and meet with list of designated management and staff in order to assess current practices and programs using organizational chart, current comprehensive maintenance plan, maintenance records, logs, and program documentation.	• Dept. Heads, Mgmt. Staff & other key stakeholders. • Cross Section of Staff as identified. • Building Services Dept. Head	2/1/16 - 3/15/16	Interviews with Maintenance Staff including: Dept. Head and Facility Coordinators
PRIMARY RESEARCH: **Analysis of existing program, policies, and procedures for accountability using the checklist of key performance indicators (KPI) for data collection.**	• Access Database Reports & evaluations • Strategic Plan • Budgets • Master Plan for Building Services • Automated Systems & Inventory • Conduct assessments for sampling if needed • IT Support • Staffing/Organizational Chart • Focus Groups • Operational Logs	3/11/16 - 4/1/16	The team met with a cross section of executive leadership and management personnel to assess the Building Services and Maintenance Department's current policies and practices.
SECONDARY RESEARCH: Conduct research on Leading Practices & SOP's.	• Research and define relevant markets • Assessment of Program components: Facilities Maintenance Plan, building assessment logs, budget plans, records of building specs and inventory.	4/1/16 – 4/30/16	After preliminary meetings and focus group sessions, the team provided feedback and data requests for the Building Services and Maintenance Department
DATA ANALYSIS: **Analyze results/quality of current Facilities Maintenance Program**	• Based on all data collection, budget, internal controls, and current processes.	4/30/16 – 5/30/16	Discussions on preliminary findings are on – going at this point.
RECOMMENDATIONS: **Development of Final**	• Follow up meeting with key stakeholders to	6/1/16	Group Collaboration and

Quality Recommendations for Comprehensive Maintenance Plan. (CMP)		provide information on the gap between current program and new recommendations.		Buy - In by the Maintenance Staff
RECOMMENDATIONS: SYNTHESIS OF FINAL RESULTS	•	The Business Process Improvement study team and major stakeholders.	6/15/16 – 7/15/16	Group Collaboration and Buy - In by the Maintenance Staff
RECOMMENDATIONS: DRAFT FINAL REPORT	•	The Business Process Improvement study team & key staff.	7/15/16	Group Collaboration and Buy - In by the Maintenance Staff
EVALUATION PLAN:	•	Training of Staff & Implementation of new recommendations.	Ongoing.	

Appendix B-2: Strategic Solutions Center PGCPS Building Services and Maintenance Assessments (Field Notes)

School Name	Ardmore Elementary School
School Built	1960. Additions were added in 1965, 1967, and 2000.
Enrollment	508
Number of Cameras	27 (20 Inside/7 Outside)(30 day storage) - 2 never worked.
Maintenance Staff	2 1/2 (night/day) Bldg. Eng. Just arrived on Mon. 4/4/16
Maintenance Log	Appears to be maintained
Cleaning Type	Zone Cleaning - (Individual Cleaning)
Cafeteria	Piping is not that old. This piping works better. No signs of water.
Gymnasium	No issues noted
HVAC	Hot Water System w/ Boiler.
Work Orders - Backlog	56
Other	Cameras installed in 1997. Getting ready to install new refrigerators and freezers. Handicapped door locked.

School Name	Barack Obama Elementary School
School Built	2010
Enrollment	629
Number of Cameras	34 (25 Inside/ 9 Outside)(90 day storage)
Maintenance Staff	4 (3 night/ 1 day)
Maintenance Log	Updated
Cleaning Type	Zone Cleaning (Individual Cleaning)
Cafeteria	No sink and piping issues or overflow problems noted
Gymnasium	Recommend new floor and new bleachers
HVAC	Turbines Geo - Thermo Syst. Outside for Heat.

Work Orders - Backlog	37
Other	Walk - in freezer. Separate Roof top units for A/C. Plumbing issues are a problem.

School Name	Benjamin Stoddert Middle School
School Built	1988
Enrollment	645
Number of Cameras	41 (36 Inside/ 5 Outside)(90 day storage)
Maintenance Staff	5 (3 night/ 2 day)
Maintenance Log	Updated
Cleaning Type	Green Cleaning (Team Cleaning)
Cafeteria	Sometimes sink leaks with overflow problems
Gymnasium	Heat and Central A/C. Air handlers in the closet
HVAC	2 Cleaver Brooks Steam Boilers & 1 Chiller (A/C) outback
Work Orders - Backlog	103
Other	Units in the ceiling & condensation drips through the ceiling. Maintenance has to put pans down to collect the water.

School Name	Bladensburg High School
School Built	School Renovated in 2005 - (5 Floors)
Enrollment	1891
Number of Cameras	103 (93 Inside/10 Outside)(30 day storage)
Maintenance Staff	17 (7 night/10 day)
Maintenance Log	Appears to be maintained
Cleaning Type	Zone Cleaning (Individual)
Cafeteria	Grease traps and equipment not installed properly with covers
Gymnasium	A problem with leaks and mold
HVAC	Steam Boilers - 6 - 7yrs. old. School requires a new Chiller
Work Orders - Backlog	50 -(Timeframe of backlog is about one year or more)
Other	Portable A/C. - CIP trying to get the money for permanently installed A/C units. The current Boilers were purchased overseas and both units are not working now. Outsourced contract to get the work done but unsuccessful. Both units went out 3 years ago. Recommend demolishing the tennis courts - CIP Project above the gymnasium to eliminate condensation.

School Name	Bowie High School
School Built	1964
Enrollment	2389 (Annex - 551 Included in the total)
Number of Cameras	45 - (Includes BCPA) - Annex - 36 (30 day storage)

Maintenance Staff	10 1/2 (6 night/ 4 day/ 1 part - time)
Maintenance Log	Appears to be maintained up until mid- April
Cleaning Type	Zone Cleaning (Individual Approach)
Cafeteria	Sinks currently not leaking. Have old system & old piping.
Gymnasium	New floor - few yrs. old. Hoping to get Cent.A/C & a few new units
HVAC	Steam Boilers. New A/C Systems installed recently.
Work Orders - Backlog	157 - at least 60 are multi - year
Other	2 Security School Offices. 1 Police Sec. Offc. adjacent to the main office School requires more cameras. Cameras in some stairwells, but not all. Have one broken stove at the bottom of the double unit. Difficult to regulate temperature - controlled by Sam's office. 2 Heating units on work order because they leak. No training. Have 4 total Recco systems. Central controls require attention. Handicapped door stays locked.

School Name	Crossland High School
School Built	1966
Enrollment	1100
Number of Cameras	64 (57 Inside/ 7 Outside)(90 day storage)
Maintenance Staff	19 (11 night/ 4 day)
Maintenance Log	Updated
Cleaning Type	Green Cleaning (Zone Cleaning)
Cafeteria	Minimal Flooding with old system
Gymnasium	Has Central A/C. Light valances out in the Gym
HVAC	2 Boiler Rooms. 5 Steam Boilers - 2007. Chillers - 3 years old.
Work Orders - Backlog	205
Other	Steam Boiler logs appear to be maintained. 2nd Boiler Room for the vocational wing. New boilers are smaller and more efficient, although they are not synchronized and controlled by Johnson Controls. This outsourcing causes the temperatures not to be regulated well in the school.

School Name	Deerfield Run Elementary School
School Built	1975
Enrollment	700
Number of Cameras	25 (18 Inside/ 7 Outside) (30 day storage)
Maintenance Staff	2 (1 night/ 1 day)
Maintenance Log	Appears to be maintained well
Cleaning Type	Zone Cleaning - (Individual)& Collaboration for cleaning of rooms
Cafeteria	Issue with inadequate drains installed that cause overflowing
Gymnasium	In good shape.
HVAC	Hot Water System Boilers - 10 years old. Changes filters regularly.
Work Orders - Backlog	37

Other	Building renovated 2 years ago. Building shared with MNCPPC. Building Supervisor picks up the responsibility to clean and do repairs if needed.

School Name	Dr. Henry A. Wise Jr. High School
School Built	2006
Enrollment	2700
Number of Cameras	172 (157 Inside/ 15 Outside)(90 day storage)
Maintenance Staff	12 (5 night/ 7 day)
Maintenance Log	Updated
Cleaning Type	Zone Cleaning (Individual Cleaning)
Cafeteria	Sinks - no overflow. Walk - in refrigerator.
Gymnasium	Large. Weight Rm., Fitness Rm., Dance Rm.
HVAC	Turbines Geo - Thermo Syst. Outside for Heat. A/C Side Chiller.
Work Orders - Backlog	168
Other	Security Staff - 8.

School Name	Dwight D. Eisenhower Middle School
School Built	1969
Enrollment	923
Number of Cameras	16 (Inside/ Outside)(30 day storage) Has some dead spots.
Maintenance Staff	2 (1 night/1 day)
Maintenance Log	Appears to be maintained
Cleaning Type	Zone Cleaning (Individual)
Cafeteria	Grease traps and equipment not installed properly with covers.
Gymnasium	Recommended new bleachers this year
HVAC	Steam Boilers - 6 - 7yrs. old. School needs a new Chiller.
Work Orders - Backlog	84 - (Timeframe of backlog is about one year or more.)
Other	Front door locked automatically at 9am. Night Supervisor maintains logs for buffing floors. Building Engineer does daily maintenance.

School Name	Eleanor Roosevelt High School
School Built	1976
Enrollment	2596
Number of Cameras	70 (65 Inside/ 5 Outside) (30 day storage)
Maintenance Staff	11 (5 day /6 night)
Maintenance Log	Logs kept in the Boiler Rm but could not locate March 2016
Cleaning Type	Zone (Individual Cleaning)
Cafeteria	Has inadequate draining system
Gymnasium	Original.

HVAC	Equip. 15 yrs. old. Filters changed in the roof every 30 - 60 days.
Work Orders - Backlog	399 (200 are Electrical - 8 - 9 yrs old)
Other	The HVAC Equipment has defective tubes that they are going to replace. Hot Water Heaters installed 5 years ago. 9 Security Glass Houses for monitoring. Three on each level.

School Name	Gwynn Park High School
School Built	1956
Enrollment	1040
Number of Cameras	89 (73 Inside/ 16 Outside)(60 day storage) - 1 out of service
Maintenance Staff	10 (night/ day) Bldg. Engineer. Has been there 15 years
Maintenance Log	Appears to be updated and maintained
Cleaning Type	Zone Cleaning (Individual Cleaning)
Cafeteria	Sinks can overflow. Need the drainage line cleaned out
Gymnasium	No issues
HVAC	Hot Water System with Boiler
Work Orders - Backlog	76
Other	None

School Name	Gwynn Park High School
School Built	1956
Enrollment	1040
Number of Cameras	89 (73 Inside/ 16 Outside)(60 day storage) - 1 out of service
Maintenance Staff	10 (night/ day) Bldg. Engineer. Has been there 15 years
Maintenance Log	Appears to be updated and maintained
Cleaning Type	Zone Cleaning (Individual Cleaning)
Cafeteria	Sinks can overflow. Need the drainage line cleaned out
Gymnasium	No issues
HVAC	Hot Water System with Boiler
Work Orders - Backlog	76
Other	None

School Name	Heather Hills Elementary School
School Built	1966
Enrollment	385
Number of Cameras	34 (27 Inside/ 7 Outside)(90 day storage)
Maintenance Staff	3 (2 night/ 1 day)
Maintenance Log	Appears to be well maintained
Cleaning Type	Zone Cleaning (Individual Cleaning)

Cafeteria	Sinks overflow
Gymnasium	Removing old and installing new bleachers.
HVAC	Steam Boilers
Work Orders - Backlog	25
Other	Suppose to get new Central A/C installed this year in the Gym. School requires 16 more cameras. Monitors are dying and are very dark. Images are distorted. Emergency lighting in the stairwells required.

School Name	High Point High School
School Built	1955
Enrollment	2450
Number of Cameras	63 (58 Inside/ 7 Outside) (30 day storage)
Maintenance Staff	5 (3 night/ 2 day)
Maintenance Log	Appears to be maintained
Cleaning Type	Zone Cleaning - (Individual Cleaning)
Cafeteria	Overflow problems with one sink
Gymnasium	No Central A/C. "See Something, Say Something Signage"
HVAC	3 Hurst Steam Boilers . 1 New Boiler rec'd at the end of last year.
Work Orders - Backlog	124. (Over 100 are 3 - 4 years old)
Other	Total of 7 Security Team members, 1 Security Assistant. 1 more female security team member recommended. Handicapped door stays locked. Front door entrance not clearly marked or visible. No fencing around the temporaries.

School Name	Hyattsville Elementary School
School Built	1935
Enrollment	570
Number of Cameras	8 (6 Inside/ 2 Outside) (30 day storage)
Maintenance Staff	3 (2 night/ 1 day)
Maintenance Log	Appears to be maintained well
Cleaning Type	Zone Cleaning - (Individual Cleaning)
Cafeteria	Has a deep well with pipe no leakage. Oven top not working
Gymnasium	Down the road will switchover to LED's to make it potentially cost effective
HVAC	Hot Water Boiler Operations System
Work Orders - Backlog	67 - (Only a few because Bldg. Engineer does maint. himself)
Other	Server is not large enough to accommodate any more cameras. School on the list for renovations in 2018. They have a new oven but it is not connected.

School Name	Hyattsville Middle School
School Built	1938
Enrollment	830

Number of Cameras	41 (35 Inside/ 6 Outside) (30 day storage)
Maintenance Staff	5 1/2 (4 night/ 1 1/2 day)
Maintenance Log	Appears to be maintained
Cleaning Type	Zone Cleaning - (Individual Cleaning)
Cafeteria	Overflow problems from sink with piping. Removed old stoves.
Gymnasium	Brand new floor. Has a Dance Floor. Has leak in ceiling.
HVAC	Hot Water Boiler System. Staff maintains Boilers and drains them.
Work Orders - Backlog	114
Other	Drains Boilers M, W - F, 3 days per week. If temperature gets too warm, the Boilers are turned off. Handicapped elevator just installed. Cafeteria has one new stove. Trying to update outlets in the classroom. More outlets recommended. 1 Heating unit is smashed in the Boiler Room. Security in the school is not visible. The gym is the only original structure remaining from the renovation and addition done in 1973.

School Name	John Bayne Elementary School
School Built	1961
Enrollment	460
Number of Cameras	20 (14 Inside/ 6 Outside)(90 day storage)
Maintenance Staff	3 (2 night/ 1 day)
Maintenance Log	Appears to be updated
Cleaning Type	Green Cleaning (Team Cleaning)
Cafeteria	Staff uses only one sink at a time to avoid overflow problems
Gymnasium	Space shared with the Cafeteria. No issues
HVAC	2 Hurst steam boilers (7 years old)
Work Orders - Backlog	55
Other	New boilers are smaller and more efficient, although they are not synchronized and controlled by Johnson Controls. This outsourcing causes the temperatures not to be regulated well in the school.

School Name	Largo High School
School Built	1969
Enrollment	900 (110 Students - International School)
Number of Cameras	50 - 1 does not appear functioning (38 Inside/ 12 Outside)(90 day storage)
Maintenance Staff	13 (4 night/ 9 day)
Maintenance Log	Appears to be maintained everyday
Cleaning Type	Zone Cleaning (Individual Cleaning)
Cafeteria	They use one sink at a time to avoid flooding
Gymnasium	Removing old and installing new bleachers.
HVAC	2 small/compact Hurst Boilers. 1 year old A/C Chiller.
Work Orders - Backlog	52 - mainly plumbing and HVAC

Other	Suppose to get new Central A/C installed this year in the Gym. Monitors are dying and are really dark. Images are distorted. Recommend more emergency lighting in the stairwell. The field has Friday night lights for games. 15 Security Team Members. 16 more cameras have been ordered to be installed this summer plus 3 more for security.

School Name	Northwestern High School
School Built	1951
Enrollment	2500
Number of Cameras	112 Inside/ 8 Outside
Maintenance Staff	18 Total with night crew . There are 3 shifts.
Maintenance Log	Appears to be maintained
Cleaning Type	Zone Cleaning. (Individual)
Cafeteria	Sink has not problems with piping. One sink has leakage problems
Gymnasium	Air Quality is good but no A/C.
HVAC	Hot Water Boiler System. Pressure must be checked by Bldg. Eng.
Work Orders - Backlog	197
Other	Have big chiller and small chiller. Small Chiller compressor just replaced. On gas now - older unit, going to be replaced. Bathrooms door off. There are continued issues with negative bathroom activity. Had a Maintenance Medic program that became a union issue and was discontinued.

School Name	Oxon Hill Elementary School
School Built	1975
Enrollment	339
Number of Cameras	30 (18 Inside/ 12 Outside)(90 day storage)
Maintenance Staff	3 (2 night/ 1 day)
Maintenance Log	Updated
Cleaning Type	Green Cleaning (Team Cleaning)
Cafeteria	Old system with no overflow problems
Gymnasium	Heat only. Air handlers in the ceiling.
HVAC	2 Hurst Hot Water System Boilers - 2009 & Chiller - 3 years old
Work Orders - Backlog	23
Other	Staff appears to use I.D. Raptor System very effectively. Have Central A/C and Hot Water System. 2 Panic Buttons in main office & in Principal's office. Media Ctr./Lab has Dell computers less than 1 year. Have had Cyber Bully Training & Cyber Safety Training.

School Name	Potomac Landing Elementary School
School Built	1977
Enrollment	430
Number of Cameras	27 (24 Inside/3 Outside) 60 Day Storage
Maintenance Staff	3 (Night/Day) - Bldg. Eng. Has been there for 4 years.

Maintenance Log	Appears to be maintained
Cleaning Type	Green Cleaning - (Team Cleaning)
Cafeteria	No issues.
Gymnasium	Original and no issues.
HVAC	Hot Water System with Boiler
Work Orders - Backlog	49
Other	Front Door was not locked

School Name	Samuel Ogle Middle School
School Built	1966
Enrollment	835
Number of Cameras	25 - (24 Inside/1 Outside) - 90 day storage
Maintenance Staff	7 (2 night/5 day)
Maintenance Log	Appears to be kept on the wall and well maintained
Cleaning Type	Green Cleaning (Team Approach)
Cafeteria	Sinks use to leak but they were repaired
Gymnasium	Has heat only
HVAC	Burnham Commercial Steam Boilers - 4 -5 years. No Central A/C.
Work Orders - Backlog	60
Other	Individual Air Conditioning Units. Need more outside cameras. Had an incident a few weeks ago and was unable to identify anyone due to lack of cameras. They only drain a couple of sinks at a time because using all 3 will cause an overflow problem.

School Name	Springhill Lake Elementary School
School Built	1966. Additions were added in 1969, 1978, and 1998.
Enrollment	857
Number of Cameras	(12 Inside/ Outside)(30 day storage) - Uncertain of the exact #
Maintenance Staff	Short Staff needs at least one more person.
Maintenance Log	Appears to be maintained
Cleaning Type	Zone Cleaning - (Individual Cleaning) & Green cleaning
Cafeteria	Has inadequate installation so draining is not an issue
Gymnasium	Have 2 Wet Vacuum Machines - trying to get more.
HVAC	Hot Water Boiler System. Equipment is about 15 years old.
Work Orders - Backlog	55
Other	Front door unlocked. Side door unlocked near the front office that is not monitored. Indicated must leave unlocked to allow students coming from the temporaries. Checks the water & Changes filters.

School Name	Thomas Johnson Middle School
School Built	1966

Enrollment	1088
Number of Cameras	45 (37 Inside/8 Outside)(30 day storage)
Maintenance Staff	6 1/2 (night/day)
Maintenance Log	Appears to be maintained and up to date
Cleaning Type	Zone Cleaning - (Individual Cleaning)
Cafeteria	Small pipe in kitchen. Grease trap overflowing. Work order in place
Gymnasium	Have Heat. No A/C.
HVAC	2 Steam Hurst Boiler Units.
Work Orders - Backlog	71
Other	Radiators work in the hallways. Boiler Room clean.

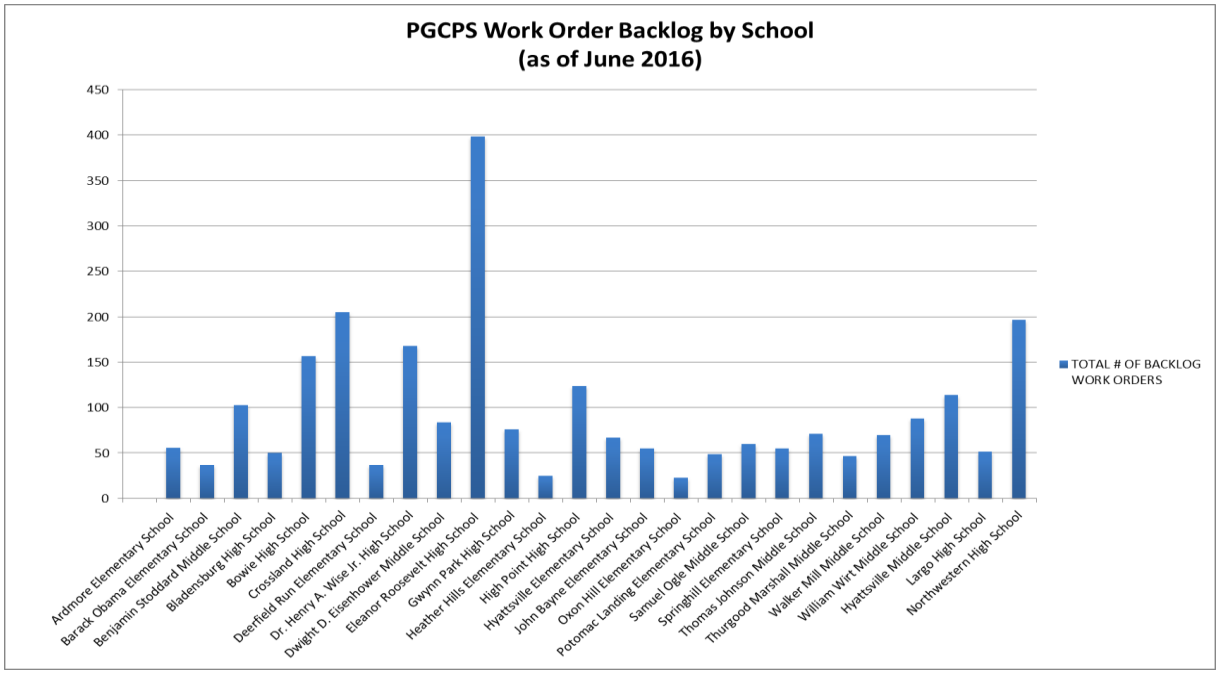
School Name	Thurgood Marshall Middle School
School Built	1961
Enrollment	561
Number of Cameras	48 (42 Inside/ 6 Outside)(90 day storage)
Maintenance Staff	5 1/2 (4 night/ 1 1/2 day)
Maintenance Log	Appears to be updated regularly
Cleaning Type	Zone Cleaning (Individual Cleaning)
Cafeteria	Yes overflow problems with grease traps
Gymnasium	Original floor. No central A/C. Heat only.
HVAC	2 Hurst steam boilers (7 years old)
Work Orders - Backlog	47
Other	2 on staff in Security. Training on occasion in Middleton Valley. Loss capability with the Maintenance Medic Training for preventative maintenance. Started training but not consistent. Chemical treatment tank for water.

School Name	Walker Mill Middle School
School Built	1969
Enrollment	751
Number of Cameras	32 (18 Inside/ 12 Outside)(90 day storage)
Maintenance Staff	5 (3 night/ 2 day)
Maintenance Log	None - new person hasn't started yet.Updated
Cleaning Type	Zone Cleaning (Individual Cleaning)
Cafeteria	They use one sink at a time to avoid flooding
Gymnasium	Need floor and new bleachers
HVAC	2 small/compact Hurst Boilers. 1 year old A/C Chiller.
Work Orders - Backlog	70
Other	Staff appears to use I.D. Raptor System very effectively. Have Central A/C and Hot Water System. 2 Panic Buttons in main office & in Principal's office. Media Ctr./Lab has Dell computers less than 1 year. Have had Cyber Bully Training & Cyber Safety Training.

School Name	William Wirt Middle School
School Built	1964
Enrollment	1078 (Capacity is 735) School is over capacity.
Number of Cameras	More than 18. Unsure of exact number. (30 day storage)
Maintenance Staff	2 (1 night/ 1 day)
Maintenance Log	Appears to be maintained
Cleaning Type	Zone Cleaning - (Individual)& Collaboration for cleaning of rooms
Cafeteria	Sinks overflow with current equipment
Gymnasium	Original
HVAC	Equipment in Boiler Room is 10 - 15 years old
Work Orders - Backlog	88
Other	Leaky Roofs, leaky windows. Work orders are a year and a half behind. Poor security with old doors. Scheduled for a new building in 2019. Elevator not working. LED's are old. Roof has a lot of leaks in the classrooms especially with heavy rain.

Appendix B-3: PGCPS Work Order Backlog by School

Prince George's County Public Schools	Total of Backlog Work Orders
Ardmore Elementary School	56
Barack Obama Elementary School	37
Benjamin Stoddard Middle School	103
Bladensburg High School	50
Bowie High School	157
Crossland High School	205
Deerfield Run Elementary School	37
Dr. Henry A. Wise Jr. High School	168
Dwight D. Eisenhower Middle School	84
Eleanor Roosevelt High School	399
Gwynn Park High School	76
Heather Hills Elementary School	25
High Point High School	124
Hyattsville Elementary School	67
John Bayne Elementary School	55
Oxon Hill Elementary School	23
Potomac Landing Elementary School	49
Samuel Ogle Middle School	60
Springhill Elementary School	55
Thomas Johnson Middle School	71
Thurgood Marshall Middle School	47
Walker Mill Middle School	70
William Wirt Middle School	88
Hyattsville Middle School	114
Largo High School	52
Northwestern High School	197



Appendix B-4: Strategic Solutions Center Regional School System Interview Summaries

School District: Fairfax County Public Schools **Date** 5/26/16

Phone Interview

1. Were you able to use School Dude effectively across the county (in your school district) and provide use of the facilities with school-wide support?
   Yes.. We started using School Dude in 2004 as a pilot with 8 schools. Now we currently use School Dude for all of our 192 schools in the district.

2. What observations do you have about the effectiveness of School Dude?
   We provided some good recommendations to improve their product. We wish that they would do the upgrades that we proposed. From 2004 – 2011 we used paper applications for the public. Now the public piece is alive and well. We actually had no control over our calendars until 2004. However, there are schools that will sometimes forget to schedule activities and send to us. Fairfax County Recreation Dept. actually schedules all of our field athletic events (550) and all of our basketball events in the gymnasium. (250). School Dude actually created a manual on the website called "New users getting started." Anyone can request to be a user once you are registered and approved.

3. How is this working for you if fully implemented?
   I would rate the software a 8.5 out of 10 if fully implemented. It is better than the paper applications. We have been able to reduce the workload, connect the schedules and create the interface. We actually use FSS Direct (School Dude) in conjunction with a financial system called "Focus" like Fairfax County Government. Our IT Group actually created the interface between FSS Direct and "Focus", not School Dude. It works perfect together.

4. Additional Comments:
   We also introduced an energy initiative with a company called Synergistic. By working with this company, we are saving a few million dollars per year. We get 50% of the savings and Synergistic also gets 50% of the savings on an energy contract that we have.

School District: Chesterville County Public Schools **Date** 5/26/16

1. Were you able to use School Dude effectively across the county (in your school district) and provide use of the facilities with school wide support?
   Yes. We have been using School Dude since 2007, (9 years). We purchased the software in 2006. The purchase price is based on the total number of students and varies per school district. The initial start fee includes training. There is an annual fee to be paid with School Dude.

2. What observations do you have about the effectiveness of School Dude?
   All of our schools and communities are online. It is great! It is also great across the board with customer service. Very little downtime. The response is within 24 hours and so the response time is great. The benefits are that everything is online. In less than 48 hrs, you can process paperwork. It used to take a minimum of 2 weeks or more. Cost recovery has increased.

3. How is this working for you if fully implemented?
   Cost savings. Response time is quick. You have knowledge as to what is going on in the schools after school days end. HVAC needs to run and heat more efficiently. Through School Dude, we can now go to one calendar to know exactly what is going on in the schools.

4. Additional comments:

School District: Prince William County Public Schools **Date** 5/26/16

1. Were you able to use School Dude effectively across the county (in your school district) and provide use of the facilities with school-wide support?
   Yes. We did a small pilot initially in 2001 with some schools. Then we implemented School Dude and have been using since 2002. We have training regularly. Felt user friendly.

2. What observations do you have about the effectiveness of School Dude?
   Our revenue doubled with the use of School Dude for activities. Schools are much more accountable and more transparent for outside groups using our facilities. HVAC working more efficiently. There is better accountability, increased revenue, and we now have knowledge of who is in the building.

3. How is this working for you if fully implemented?
   Wonderfully! School Dude personnel are quick to respond to assist with any issues related to the software. School Dude support staff has been very helpful and they solicit feedback from their customers to better improve their product. This is a very user-friendly system, and is easy to teach to the staff. Don't see any comparisons.

4. Additional comments:
   Fairfax Public School System is our "go to" school system for support. I am the Administrator for School Dude and there is a fee for the training. There is School Dude University where one can attend a 5-day conference. School Dude offers 2 separate training packages for a different fee. I was fully trained and I conduct any training of all staff. We did utilize training in the beginning. The first year we had a pilot program to determine how our schools would handle the workloads. We used a total of 5 schools: 3 Elementary Schools, 1 Middle School, and 1 High School.

Appendix C: Physical Security of Facilities

Appendix C-1: Physical Security of Facilities Checklist

The checklist below was developed by the PGCPS Business Process Improvement Study Team to assess the physical security of Prince George's County Public schools. The checklist is comprised of national leading practices and PGCPS policies and leading practices. All responses are point-in-time assessments.

Prince George's County Public Schools
2016 Facility Security Checklist

School Name			
Assessor Name			
Assessor Title			
Date			
School in Session During Assessment?			
Assessment Start Time		**Assessment End Time**	
Number of Buildings Assessed		**Number of Temporary Buildings on Site**	

Please return scanned (preferred) or paper form to Rex Barrett immediately upon completion of assessment.

INSTRUCTIONS: Please note details on any security issues that need to be addressed.

Location	Description of Issue	Status
e.g., Bldg. 4 - Auditorium	e.g., Crash bar on exit door to exterior does not open door	e.g., reported to Building Services

ACCESS CONTROL & CAMERAS

Access Control

The facility limits building access points.	☐Yes ☐No
The facility has two doors that are equipped with electronic access control.	☐Yes ☐No
Is access through the main entrance controlled by a person or via intercom?	☐Pers. ☐Int.
Exterior doors are locked to limit public access.	☐Yes ☐No
Employees and emergency responders are able to access doors with scan cards.	☐Yes ☐No
Signs direct visitors to the main office for sign-in.	☐Yes ☐No
Each door has a push button device that alerts office staff.	☐Yes ☐No
Employees are able to view visitors on a camera screen on their office phone.	☐Yes ☐No
Employees are able to communicate with the visitor using an intercom.	☐Yes ☐No
Visitors are required to check in and out with the front office upon arrival and departure.	☐Yes ☐No
Visitor management system (Raptor) is installed and functioning.	☐Yes ☐No
Visitor IDs are scanned and checked in the Raptor system before visitors are provided with school-issued identification badges when on school grounds.	☐Yes ☐No
Panic buttons are installed and functioning.	☐Yes ☐No
All security staff wear uniforms and identification.	☐Yes ☐No
Students do not have access to the school without direct staff supervision.	☐Yes ☐No
NOTES	

Cameras/Security Equipment

Number of interior cameras installed	
Number of interior cameras functioning	

Number of exterior cameras installed	
Number of exterior cameras functioning	
Cameras provide coverage of interior and exterior of buildings	☐Yes ☐No
CCTV footage is appropriately monitored, stored	☐Yes ☐No
Camera security systems are connected to the building's emergency power supply	☐Yes ☐No

BUILDING INTERIOR

Building Interior

Exterior doors to gyms, maintenance areas, kitchen, and delivery areas are secured when not in use.	☐Yes ☐No
Custodial and storage closets, utility rooms, and offices are secured and locked.	☐Yes ☐No
Roof access doors are secured and locked.	☐Yes ☐No
All lockers are secured.	☐Yes ☐No
Doors and locks are in good condition.	☐Yes ☐No
Doors and stairwells are numbered.	☐Yes ☐No
Stairwells, hallways, and restrooms are adequately lit.	☐Yes ☐No
Hallways, stairways and common areas are free of clutter that obstructs lines of sight.	☐Yes ☐No
Enclosed stairwells are monitored, either electronically or by security personnel.	☐Yes ☐No
Smoke detectors have vandal-resistant features (e.g., tamper alarms or cages).	☐Yes ☐No
Fire extinguisher cases are installed in good visible locations.	☐Yes ☐No
Fire extinguisher cases are locked.	☐Yes ☐No
Easy access to fire extinguishers.	☐Yes ☐No
Cameras are tamper-resistant or sufficiently inaccessible (e.g., mounted beyond easy reach) to as not to be easily obscured or vandalized.	☐Yes ☐No
"See Something Say Something" posters are present.	☐Yes ☐No
Property is free of vandalism and graffiti.	☐Yes ☐No
School is equipped with a PA system audible in all classrooms and common areas.	☐Yes ☐No
School is equipped with motion detectors as part of a security system.	☐Yes ☐No
NOTES	

Classroom Security

Classroom has access to two-way communication system.	☐None	☐Some	☐Most	☐All
All areas of the classroom are visible from the classroom door.	☐None	☐Some	☐Most	☐All
Classroom doors can be locked from the inside.	☐None	☐Some	☐Most	☐All
Classroom doors with windows can be covered.	☐None	☐Some	☐Most	☐All
Classrooms have adequate aisle space for quick exits.	☐None	☐Some	☐Most	☐All
Valuable items (e.g., computers, video equipment) are secured, stored, or locked away.	☐None	☐Some	☐Most	☐All
NOTES				

BUILDING EXTERIOR AND GROUNDS

Building Exterior

Signage clearly indicates entrances, exits, bus loading, fire zones, and parking.	☐Yes	☐No
Entryways and commonly accessed walkways are free of hidden areas, alcoves, and hiding places.	☐Yes	☐No
Windows are locked securely.	☐Yes	☐No
External lighting is present, functioning, and of sufficient illumination to light all walkways and common areas.	☐Yes	☐No
External lighting is present, functioning, and of sufficient illumination to light all parking lots.	☐Yes	☐No
Property is free of vandalism and graffiti.	☐Yes	☐No
Mechanical, electrical, and other equipment are surrounded by protective enclosures to prevent unauthorized access.	☐Yes	☐No
Athletic facilities have adequate lighting and fencing	☐Yes	☐No
Secure fencing is installed around temporary classrooms (ES, K8 only).	☐Yes	☐No
Fencing allows pathways to connect temporary classrooms to buildings.	☐Yes	☐No
Students and staff are able to exit fenced areas using crash bars.	☐Yes	☐No
Fencing is standard 6-foot chain link fencing.	☐Yes	☐No
NOTES		

Roadways and Sidewalks

Access to bus-loading and unloading zones is restricted.	☐Yes	☐No

Bus-loading, unloading, drop off zones, and fire zones are clearly marked.	☐Yes	☐No
Bus-loading, unloading, drop off zones and fire zones conflict with pedestrian walkways.	☐Yes	☐No
Pedestrian routes through vehicular areas are marked and provide high visibility.	☐Yes	☐No
Additional sidewalks are needed. If yes, note where in Notes section.	☐Yes	☐No
Pathways to school (on school property) provide safe access routes.	☐Yes	☐No
School designates areas for use of parking lots (e.g., staff lot, student lot, visitors).	☐Yes	☐No
Parking system incorporates an identification system (e.g., placards in windshields).	☐Yes	☐No
Speed limits are posted.	☐Yes	☐No
Fire hydrants are clearly visible.	☐Yes	☐No
NOTES		

TRAINING AND POLICIES

Emergency Preparedness Training

School has developed a comprehensive school Emergency Operations Plan.	☐Yes	☐No
The Emergency Operations Plan contains a method for reporting incidents internally to faculty, students, and staff (e.g., mass notification system.) and considers necessary equipment and supplies to respond to a crisis.	☐Yes	☐No
The Emergency Operations Plan contains an updated map of the school's floor plan that includes room numbers, evacuation routes, and utility shut offs.	☐Yes	☐No
School has held 3 lockdown drills to date (4 scheduled per year).	☐Yes	☐No
All staff view the lockdown video prior to the drill.	☐Yes	☐No
Faculty, students, and staff are all provided with security information and training.	☐Yes	☐No
A notification protocol is developed that outlines who should be contacted in emergencies and how.	☐Yes	☐No
All security staff have been trained in conflict resolution.	☐Yes	☐No
Staff have been trained in use of the panic button.	☐Yes	☐No
Panic buttons are tested regularly.	☐Yes	☐No

Policies and Procedures

Faculty and staff monitor hallways, stairwells, and restrooms during school hours.	☐Yes	☐No
Staff are trained to operate points of access control and communications equipment.	☐Yes	☐No

School provides Cyber safety and cyberbullying programs for students.	☐Yes	☐No
School has and maintains, assesses, and updates a code of conduct/school handbook.	☐Yes	☐No
Procedure is in place to manage keys or access cards so that personnel no longer assigned to the facility or employed by PGCPS do not have access to the facility or restricted spaces within the facility.	☐Yes	☐No
An exterior assessment of the building for security, graffiti, vandalism, litter is conducted daily. By whom and how often:	☐Yes	☐No
Is security staff adequate? If no, provide detail in notes.	☐Yes	☐No

Appendix C-2: Physical Security of Facilities Checklist Results

Checklist Questions	Response	All Schools	Elem. Schools	Middle Schools	High Schools	K-8 Schools	Centers / Charter Schools
Number of schools assessed*		196	118	24	25	14	15
Access control							
The facility limits building access points.	Yes	54.1%	61.0%	50.0%	52.0%	42.9%	20.0%
The facility has two doors that are equipped with electronic access control.	Yes	96.4%	99.2%	100.0%	96.0%	85.7%	80.0%
Is access through the main entrance controlled by a person or via intercom?	Yes	49.0%	47.9%	41.7%	43.5%	30.4%	78.6%
Exterior doors are locked to limit public access.	Yes	89.2%	92.2%	83.3%	72.0%	100.0%	93.3%
Employees and emergency responders are able to access doors with scan cards.	Yes	62.6%	71.8%	66.7%	52.0%	42.9%	20.0%
Signs direct visitors to the main office for sign-in.	Yes	94.3%	94.9%	91.3%	100.0%	100.0%	80.0%
Each door has a push button device that alerts office staff.	Yes	74.9%	79.7%	69.6%	56.0%	78.6%	73.3%
Employees are able to view visitors on a camera screen on their office phone.	Yes	96.9%	100.0%	100.0%	88.0%	100.0%	80.0%
Employees are able to communicate with the visitor using an intercom.	Yes	97.4%	100.0%	100.0%	88.0%	100.0%	86.7%
Visitors are required to check in and out with the front office upon arrival and departure.	Yes	99.0%	99.1%	100.0%	100.0%	100.0%	93.3%

Visitor management system (Raptor) is installed and functioning.	Yes	96.9%	98.3%	100.0%	100.0%	100.0%	73.3%
Visitor ids are scanned and checked in the Raptor system before visitors are provided with school-issued ID badges when on school grounds.	Yes	96.4%	98.3%	95.7%	96.0%	100.0%	80.0%
Panic buttons are installed and functioning.	Yes	94.3%	98.3%	95.7%	96.0%	85.7%	66.7%
All security staff wear uniforms and identification.	Yes	45.0%	25.3%	91.3%	91.7%	71.4%	0.0%
Students do not have access to the school without direct staff supervision.	Yes	93.3%	93.1%	100.0%	88.0%	92.9%	93.3%
Cameras/security equipment							
Average total number of cameras per school	#	32	22	41	76	32	21
Average number of interior cameras per school	#	25	16	35	66	26	14
Average number of exterior cameras per school	#	6	5	6	10	6	7
Number of interior cameras installed	#	4911	1919	849	1591	367	185
Percent of interior cameras functioning	%	96.0%	96.8%	92.9%	96.3%	99.7%	92.4%
Number of exterior cameras installed	#	1191	637	133	240	85	96
Percent of exterior cameras functioning	%	93.7%	93.9%	95.5%	92.1%	100.0%	88.5%
Cameras provide coverage of interior and exterior of buildings	Yes	85.9%	86.8%	83.3%	96.0%	78.6%	71.4%
CCTV footage is appropriately monitored, stored	Yes	85.9%	85.2%	95.7%	88.0%	78.6%	78.6%
Camera security systems are connected to the building's emergency power supply	Yes	80.3%	80.7%	81.8%	70.8%	85.7%	85.7%
Building interior							
Exterior doors to gyms, maintenance areas, kitchen, and delivery areas are secured when not in use.	Yes	97.9%	98.3%	100.0%	95.8%	100.0%	93.3%
Custodial and storage closets, utility rooms, and offices are secured and locked.	Yes	92.3%	94.0%	100.0%	91.7%	92.9%	66.7%
Roof access doors are secured and locked.	Yes	95.8%	97.5%	100.0%	100.0%	92.9%	69.2%

All lockers are secured.	Yes	58.4%	46.1%	87.5%	91.3%	78.6%	26.7%
Doors and locks are in good condition.	Yes	92.1%	94.8%	83.3%	86.4%	85.7%	100.0%
Doors and stairwells are numbered.	Yes	72.6%	70.2%	62.5%	83.3%	69.2%	93.3%
Stairwells, hallways, and restrooms are adequately lit.	Yes	98.5%	98.3%	100.0%	95.8%	100.0%	100.0%
Hallways, stairways and common areas are free of clutter that obstructs lines of sight.	Yes	97.4%	98.3%	100.0%	95.8%	100.0%	85.7%
Enclosed stairwells are monitored, either electronically or by security personnel.	Yes	68.2%	69.0%	75.0%	87.5%	69.2%	20.0%
Smoke detectors have vandal-resistant features (e.g., tamper alarms or cages).	Yes	77.8%	74.6%	79.2%	87.5%	76.9%	86.7%
Fire extinguisher cases are installed in good visible locations.	Yes	98.9%	100.0%	95.7%	95.7%	100.0%	100.0%
Fire extinguisher cases are locked.	Yes	40.4%	47.5%	34.8%	41.7%	30.8%	0.0%
Easy access to fire extinguishers.	Yes	98.4%	100.0%	100.0%	87.5%	100.0%	100.0%
Cameras are tamper-resistant or sufficiently inaccessible to as not to be easily obscured or vandalized.	Yes	97.9%	99.1%	100.0%	95.8%	100.0%	86.7%
"See Something Say Something" posters are present.	Yes	17.1%	7.6%	26.1%	66.7%	15.4%	0.0%
Property is free of vandalism and graffiti.	Yes	94.2%	95.8%	87.5%	87.5%	100.0%	100.0%
School is equipped with a PA system audible in all classrooms and common areas.	Yes	98.4%	98.3%	95.8%	100.0%	100.0%	100.0%
School is equipped with motion detectors as part of a security system.	Yes	99.0%	99.2%	95.8%	100.0%	100.0%	100.0%
Classroom security							
Classroom has access to two-way communication system.	All/Most	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All areas of the classroom are visible from the classroom door.	All/Most	66.1%	70.6%	70.0%	66.7%	64.3%	28.6%

Classroom doors can be locked from the inside.	All/Most	11.3%	12.2%	10.0%	0.0%	7.1%	26.7%
Classroom doors with windows can be covered.	All/Most	97.7%	100.0%	100.0%	95.2%	92.9%	86.7%
Classrooms have adequate aisle space for quick exits.	All/Most	96.0%	99.0%	100.0%	95.5%	100.0%	66.7%
Valuable items are secured, stored, or locked away.	All/Most	73.8%	81.2%	90.0%	68.2%	71.4%	13.3%
Building exterior							
Signage clearly indicates entrances, exits, bus loading, fire zones, and parking.	Yes	89.2%	91.5%	87.5%	70.8%	100.0%	93.3%
Entryways and commonly accessed walkways are free of hidden areas, alcoves, and hiding places.	Yes	94.4%	94.9%	95.8%	84.0%	100.0%	100.0%
Windows are locked securely.	Yes	98.5%	98.3%	95.8%	100.0%	100.0%	100.0%
External lighting is present, functioning, and of sufficient illumination to light all walkways and common areas.	Yes	91.2%	93.1%	91.3%	80.0%	100.0%	86.7%
External lighting is present, functioning, and of sufficient illumination to light all parking lots.	Yes	87.7%	89.7%	82.6%	76.0%	100.0%	86.7%
Property is free of vandalism and graffiti.	Yes	91.8%	94.0%	78.3%	84.0%	100.0%	100.0%
Mechanical, electrical, and other equipment are surrounded by protective enclosures to prevent unauthorized access.	Yes	97.9%	97.4%	100.0%	100.0%	100.0%	92.9%
Athletic facilities have adequate lighting and fencing	Yes	51.7%	52.8%	52.4%	75.0%	46.7%	7.1%
Secure fencing is installed around temporary classrooms (ES, K8 only).	Yes	29.7%	43.4%	14.3%	0.0%	23.1%	0.0%
Fencing allows pathways to connect temporary classrooms to buildings.	Yes	34.1%	45.8%	20.0%	10.0%	21.4%	13.3%
Students and staff are able to exit fenced areas using crash bars.	Yes	30.9%	44.0%	14.3%	0.0%	23.1%	6.7%
Fencing is standard 6-foot chain link fencing.	Yes	39.8%	50.9%	28.6%	30.0%	21.4%	6.7%
Roadways and sidewalks							

Access to bus-loading and unloading zones is restricted.	Yes	79.6%	83.1%	83.3%	64.0%	78.6%	73.3%
Bus-loading, unloading, drop off zones, and fire zones are clearly marked.	Yes	84.1%	83.8%	87.5%	66.7%	93.3%	100.0%
Bus-loading, unloading, drop off zones and fire zones conflict with pedestrian walkways.	Yes	27.7%	27.7%	41.7%	13.0%	14.3%	40.0%
Pedestrian routes through vehicular areas are marked and provide high visibility.	Yes	83.2%	88.9%	75.0%	60.0%	86.7%	86.7%
Additional sidewalks are needed. If yes, note where in Notes section.	Yes	25.5%	27.1%	25.0%	33.3%	26.7%	0.0%
Pathways to school (on school property) provide safe access routes.	Yes	96.4%	98.3%	100.0%	87.0%	86.7%	100.0%
School designates areas for use of parking lots (e.g., staff lot, student lot, visitors).	Yes	85.3%	85.6%	87.5%	88.0%	80.0%	80.0%
Parking system incorporates an identification system (e.g., placards in windshields).	Yes	31.8%	33.6%	25.0%	60.0%	13.3%	0.0%
Speed limits are posted.	Yes	50.3%	56.0%	56.5%	56.0%	35.7%	0.0%
Fire hydrants are clearly visible.	Yes	93.4%	92.4%	95.7%	100.0%	93.3%	86.7%
Emergency preparedness training							
School has developed a comprehensive school Emergency Operations Plan.	Yes	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
The Emergency Operations Plan contains a method for reporting incidents internally to faculty, students, and staff and considers necessary equipment and supplies to respond to a crisis.	Yes	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
The Emergency Operations Plan contains an updated map of the school's floor plan that includes room numbers, evacuation routes, and utility shut offs.	Yes	94.4%	92.4%	100.0%	95.8%	93.3%	100.0%
School has held 3 lockdown drills to date (4 scheduled per year).	Yes	96.4%	96.6%	91.7%	96.0%	100.0%	100.0%

All staff view the lockdown video prior to the drill.	Yes	99.5%	100.0%	95.8%	100.0%	100.0%	100.0%
Faculty, students, and staff are all provided with security information and training.	Yes	97.5%	97.5%	95.8%	100.0%	93.3%	100.0%
A notification protocol is developed that outlines who should be contacted in emergencies and how.	Yes	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All security staff have been trained in conflict resolution.	Yes	53.1%	44.2%	83.3%	84.0%	73.3%	0.0%
Staff have been trained in use of the panic button.	Yes	91.3%	93.2%	95.8%	92.0%	86.7%	73.3%
Panic buttons are tested regularly.	Yes	39.7%	45.3%	39.1%	44.0%	26.7%	0.0%
Policies and procedures							
Faculty and staff monitor hallways, stairwells, and restrooms during school hours.	Yes	92%	90%	92%	96%	100%	100%
Staff are trained to operate points of access control and communications equipment.	Yes	97%	98%	92%	100%	100%	93%
School provides Cyber safety and cyberbullying programs for students.	Yes	73%	74%	79%	80%	67%	47%
School has and maintains, assesses, and updates a code of conduct/school handbook.	Yes	99%	100%	100%	100%	100%	87%
Procedure is in place to manage keys or access cards so that personnel no longer assigned to the facility or employed by PGCPS do not have access to the facility or restricted spaces within the facility.	Yes	95%	97%	92%	100%	87%	87%
An exterior assessment of the building for security, graffiti, vandalism, litter is conducted daily. By whom and how often:	Yes	96%	96%	96%	96%	93%	100%
Is security adequate?	Yes	21%	12%	44%	25%	47%	13%

The following schools were not assessed for the Physical Security of Facilities Checklist assessment:

All other schools were assessed except schools that are in buildings not owned or maintained by PGCPS (e.g., Imagine Andrews Public Charter located at Andrews Air Force Base).

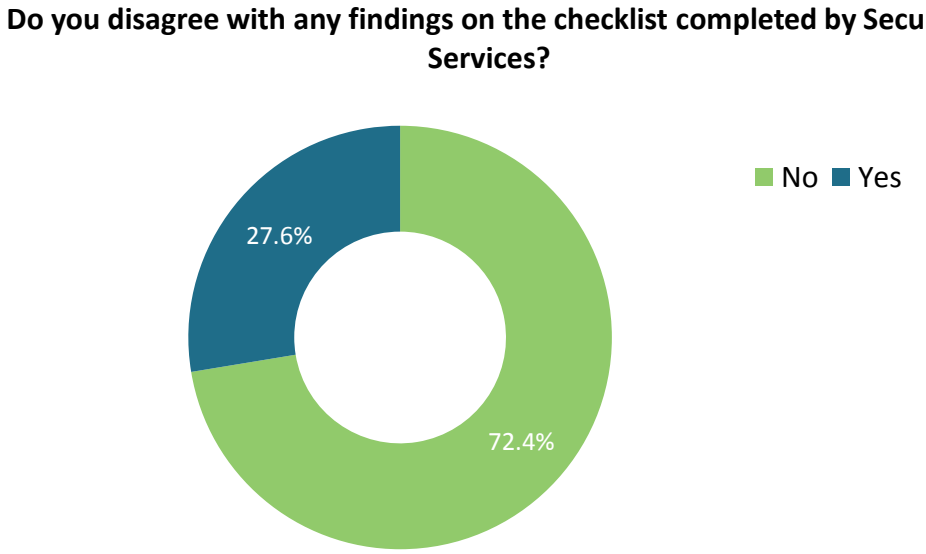
- Academy of Health Sciences at PGCC
- Junior Achievement® Finance Park
- Chesapeake Math and IT PC - North
- Chesapeake Math and IT PC – Elementary
- EXCEL Academy Public Charter
- Imagine Andrews Public Charter
- Imagine Lincoln Public Charter

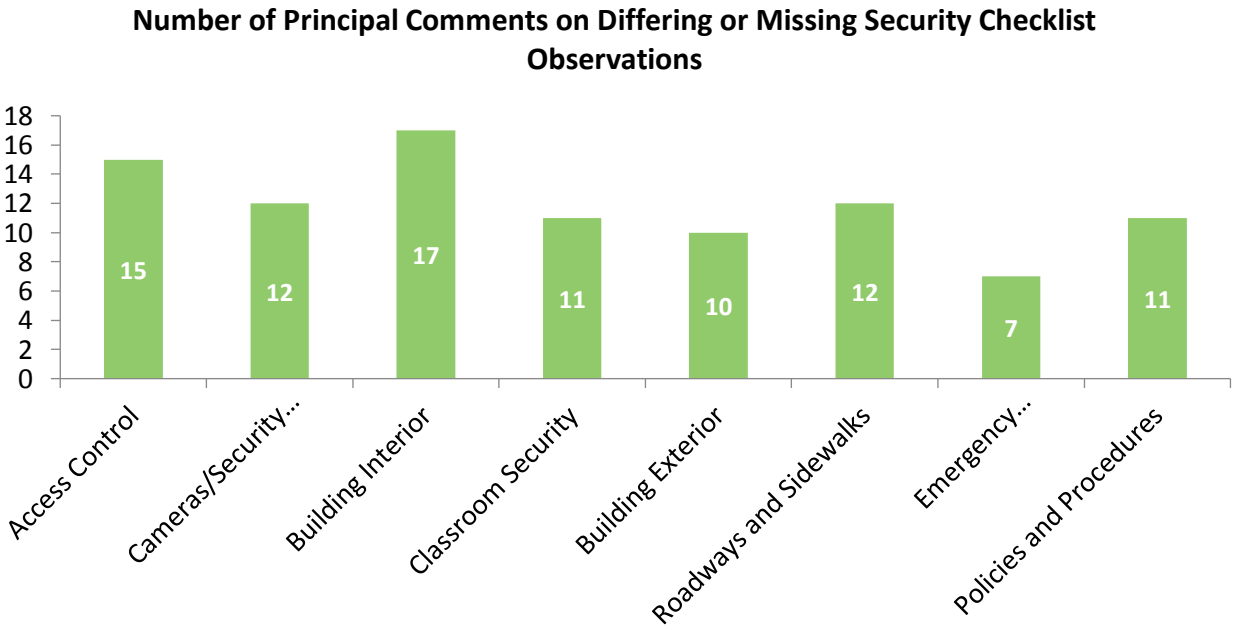
Buildings with multiple schools or centers within them were assessed as one building (e.g., International School at Largo was assessed as part of the Largo HS assessment). The following schools were therefore not assessed as individual schools:

- Community Based Classroom - attached to Annapolis Road Academy
- Glenarden Woods Elementary @ Robert Goddard - part of Goddard Montessori
- Infants and Toddlers Program - Judith P. Hoyer Early Childhood Center
- Crossland Evening High
- International High School at Langley Park
- International High School at Largo
- Northwestern Evening High

Appendix C-3: Summary of Principal Security Survey

Below is a summary of principals' survey responses to the results from their security assessment.





Principal Comments on Differing or Missing Security Checklist Observations

The following comments are directly from principals from the survey data. The comments have been grouped by common themes and school information has been redacted.

Access Control Section

- Common Theme: Concerns around doors being left open by people or from lack of repair:
  - Because we have temporary buildings, I am concerned about having to leave the back doors unlocked so that there is access to the building.
  - Door panel frequently breaks causing us to have to physically open the door and call for service, which takes (sometimes) several days.
  - Only [our] employees have access to the building. Panic buttons were not installed at the time of installation of Security System in 2014. The Security Officer from DuVal HS checks on us daily. A work order was submitted to correct the front door not closing securely.
  - Parents will open back and side doors to other parents in the morning and afternoon; playground is completely accessible at all times.
- Common Theme: Issues with badge screening panels:
  - Badge access has since been repaired.
  - Our entry identification screen is impaired.
  - We do scan and check ID 's of employees. They are very resistant and say it is not necessary.

Cameras/Security Equipment

- Common Theme: Concerns about number/functionality of cameras:
  - Cameras (some) frequently go out causing us to have to call for services, which takes (sometimes) several days
  - Our cameras are outdated and we need more to provide for the safety of our staff and students.
  - The vantage points are not appropriate (more needed) and the quality of the video footage is poor. There is not office camera and we have had a few thefts.
  - We have purchased and added more security cameras inside and outside the building.
  - We need additional cameras.
  - Cameras do not function properly- go out frequently.
  - Not all cameras are working.
  - Need camera on the exterior of the side of the building. The public has access to coming on the playground which needs monitoring.

Building Interior Section

- Common Theme: See Something/Say Something Posters:

  - "See something, Say something" poster has been received and is posted in the front hallway.
  - [Our school] does not have a gym nor a cafeteria. Keeping all closets and roof doors locked has been corrected. The Fire Extinguishers have no locks on them. They were also inspected by the Fire Marshall. Because we are not listed as a school, [we] did not receive the "See Something, Say Something" posters. Please send posters to us.
  - I did not receive "See Something Say Something" posters to display.

- Common Theme: Unrepaired Security Related Issues:
  - Fire alarms need to be installed in the temporary buildings because the main building alarm cannot be heard in the temporaries. For fire drills, staff members are assigned to bang on the temporary building doors to alert the teachers and students. When I requested the alarms, I was told that it was too expensive and that the temporaries had to be a certain distance from the building to qualify for an alarm.
  - The layout of the cafeteria leaves open access from a hall with no door; an intruder could pass the interior doors, walk around to the back hall and still enter the cafeteria
  - Cafeteria Exit Door is hard to open (a work order has been placed)
  - Exit doors do not properly lock after entry and exiting the building
  - Not all of the doors will close enough to lock on their own. We have submitted work orders.
  - The availability to lock the cafeteria doors during Lockdown. Blinds in the main office for Lockdown.

Classroom Security

- Common Theme: Ability to lock classroom doors:
  - All doors need to be rekeyed so that the teacher may lock the door from the inside.
  - Computers are located in the "Great Rooms" at the Center. We have one Library (not a classroom).
  - Doors do not lock from inside as stated in survey.
  - During the day when students are using laptops and IPads, there is no way to fasten them to anything. Teachers are instructed to lock their doors when they leave the room. At night, the laptops and IPad are placed in a heavy locked cart.
  - Repeated work orders have been submitted to secure classrooms in case of an emergency lockdown; not being able to secure ALL classroom doors is a great concern to staff.
  - Trying to replace lost keys have been a problem. The charge is unreal.
  - Classrooms are not locked during the day, unless indicated by front office.

Building Exterior Section

- Various Themes:
  - Several key areas lack cameras. Under the overhang where students assemble should have camera loading area should also have a camera.

  - The work order to repair the unsafe steps was submitted a long time ago. When the status is checked, we are told that we are on the list.
  - We are not encouraging people to play Basketball at night. Lighting is fine in that area.
  - Windows need to be replaced.
  - Need camera on the exterior side of the building. The public has access to walking on the playground.
  - There are some fenced areas where the gates do not close and lock.

Roadways and Sidewalks

- Common Theme: Improvement on Pedestrian Walkways:
  - Additional sidewalk is needed where we have the crosswalk.
  - Our student walk way in the front of the building is buckling and hazardous. The walkway in the back of our school floods and parents complain of impossible access to our school from the back of the building. Many students utilize this path.
  - Paving, curb designations (lines) is lacking.
  - Staff parking is painted on parking lot; there were signs in the parking lot to direct traffic but they were knocked down by snow plows and have not been put back up; work order was submitted.
  - The bus loading zones are not clearly marked. There are no lines on the pavement and very few signs posted. We also need addition traffic cones/barriers to guide traffic.
  - This is also a major concern for all parent and scholar pedestrians.
  - Pedestrian crosswalks need to be added.
- Common Theme: Panic Buttons
  - [Our] Security Officer checks on us daily. There are no Panic Buttons
  - How do we test the panic buttons without calling the police?
  - The necessary has been trained re: the panic button – see notes.

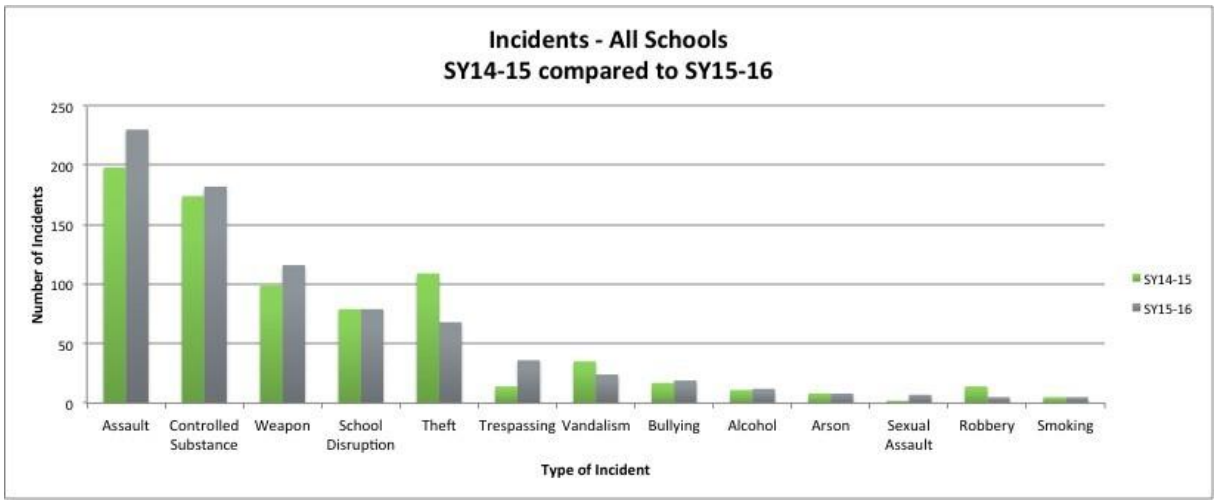
Policies and Procedures Section

- Common Theme: Security Staffing/Student Monitoring:
  - As we move about the building we monitor the hallways, etc., we do not have a building monitor at this time.
  - Safety and security of staff is not addressed, particularly in the elementary school. We are told to keep customer service in the front of our minds; however, we are consistently threatened, verbally abused, and otherwise made to feel unsafe. Again, this is not being addressed (to my knowledge). Calling the police garners a response time of close to 30-45 minutes.
  - Students are monitored in the hallways and restrooms during the school hours. 5th grade students who use the restrooms have to has permission to use the gang restrooms. Only 1 student at a time.

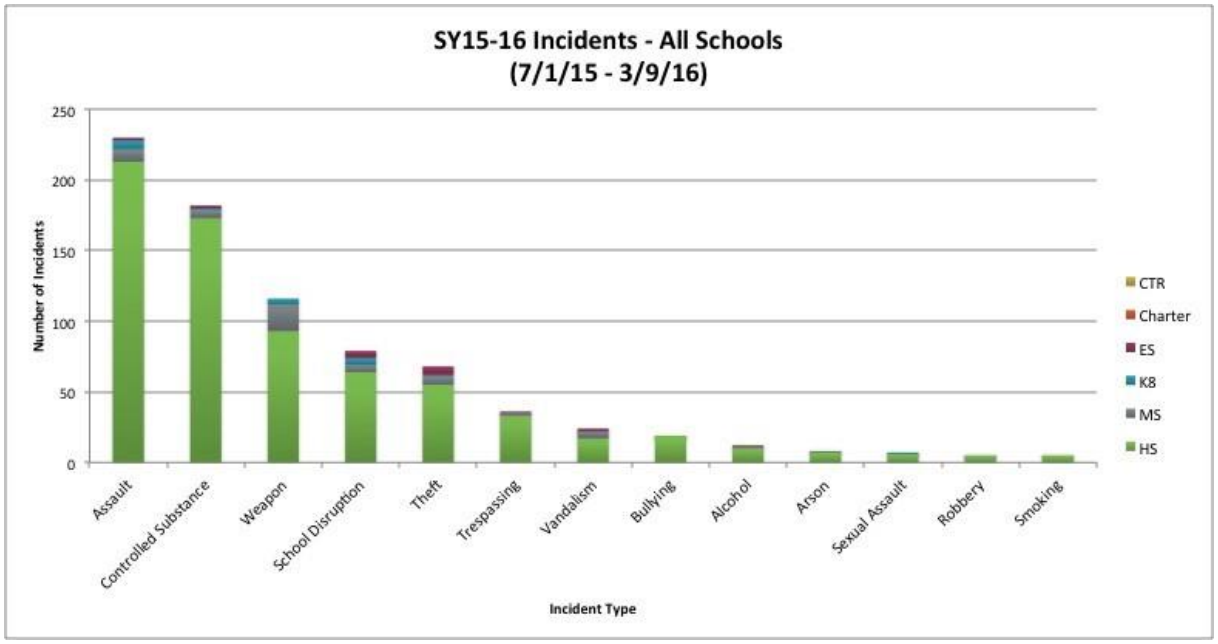
- Students who arrive early are not escorted to location is not accurate. Morning club sponsors gather students in lobby. Only if students arrive after the club start time are they sent to the club unsupervised.
- Not all schools receive a fair amount of security staff based on the size of the school.

Appendix C-4: School Incident Data for SY2014-2015 and SY2015-2016

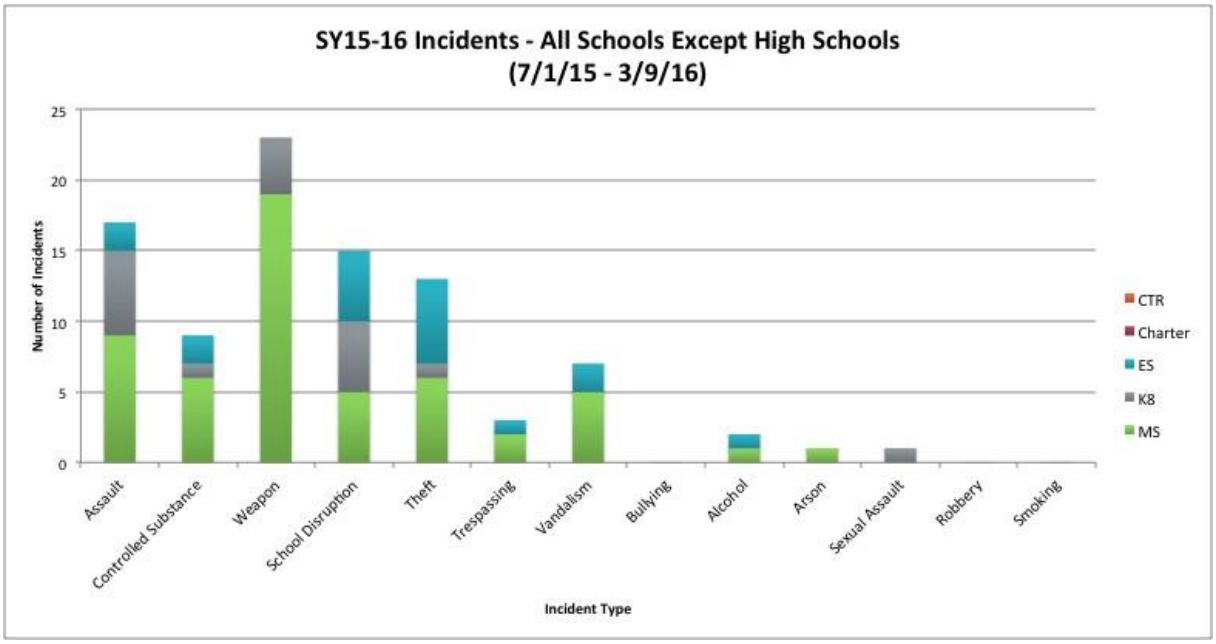
The Department of Security Services provided incident data for 132 schools for the period of July 1 to March 9 of SY 2014-15 and SY 2015-16. The top five incident types, comprising 85% of all incidents in SY 2015-16, across all schools in both years were: assault, controlled substance, weapon, school disruption, and theft.



Of all incidents in SY 2015-16, 88.5% took place in high schools, with an average of 27 total incidents at each high school and ranging from a low of 0 to a high of 92 total incidents at one high school.



Middle schools had the second highest number of incidents, with 54 total incidents—or 6.8% of all incidents. More than half of all middle school incidents took place at two schools. While the top five incident types are the same as for all schools, weapon was the most common incident type for middle schools.



Appendix C-5: Pictorial Evidence of Window Covers

The pictures below represent window cover options in classrooms, for quick coverage during lockdown drills and other emergency situations.

Appendix C-6: Listing of School Visits

Below is a list of the schools where the concurrent walkthroughs occurred. As previously stated, the consultant and I/C conducted simultaneous assessments and normed answers at the conclusion of the checklist. The 18 schools the consulting team conducted concurrent site visits are:

- Barack Obama Elementary
- Bowie High
- Carroll Middle School
- Catherine T. Reed Elementary
- Dr. Henry A. Wise Jr. High
- DuVal High
- Gwynn Park High
- Gwynn Park Middle
- Heather Hills Elementary
- High Point High
- John H. Bayne Elementary
- Largo High
- Northwestern High
- Oxon Hill Elementary
- Parkdale High
- Potomac Landing Elementary
- Samuel Ogle Middle
- Walker Mill Middle

Appendix C-7: Physical Security of Facilities Interview List

The list below details all Prince George's County employees the consulting team interviewed for Physical Security of Facilities.

Title	Department	Assessment Area
Director	Department of Security Services	Physical Security of Facilities
Assistant Director	Department of Security Services	Physical Security of Facilities
Special Assistant to the Safety Office	Safety Office	Physical Security of Facilities/ Transportation: Pedestrian and bus lot safety

Director	Building Services and Maintenance	Physical Security of Facilities
Principal	Catherine T. Reed Elementary	Physical Security of Facilities
Principal	DuVal Senior High School	Physical Security of Facilities
Assistant Principal	Isaac J. Gourdine Middle School	Physical Security of Facilities
Principal	Northwestern High School	Physical Security of Facilities
Principal	Parkdale High School	Physical Security of Facilities
Principal	Charles Carroll Middle School	Physical Security of Facilities
Assistant Principal	Friendly High School	Physical Security of Facilities
Principal	University Park Elementary	Physical Security of Facilities

Appendix C-8: Town Hall Community Meeting Debrief—Physical Security of Facilities

Town Hall Meeting Community Feedback

Date: April 19, 2016

Time: 7-9 PM

Facilitators: Business Process Improvement Study Team

Community Attendee Count: 100+

Process

Participants in the Town Hall were asked to write the individual issues they wanted to discuss on sticky notes at the beginning of the session. The facilitators grouped these sticky notes into common themes for discussion and those comments, verbatim, are included at the end of this document. The purposes of this methodology is to: (1) give everyone in attendance a chance to contribute their comments without advantaging the first or loudest people to speak (2) focus the conversation on the most prevalent issues to the community (as evidenced through the note collection) and (3) allow for all ideas from the community gathered at the Town Hall to be captured.

Objective of the Town Hall

Our primary objective for the Town Hall was to gather insights from the community that could be used to direct their assessment inquiries and overall analysis. As a secondary outcome, however, the consulting firms were able to collect additional, specific concerns from the community, which are reflected in the sticky note summaries at the end of the document. Users of this document are encouraged to read, reflect, and take action (where appropriate) on these specific comments.

Discussion Highlights

Physical Security

- **Entrance Security is Inconsistent:** Participants reported inconsistency across schools (and even at the same school, depending on the day) in whether they need to provide ID in order to enter the building.
- **Insufficient Sidewalks:** Parents reported insufficient sidewalk coverage (and thus threat to safely walking to school) for the following schools – Friendly, Crossland, Potomac Landing, Port Washington, and South County.

- **Lighting is Insufficient in Some Parking Lots:** Andrew Jackson was specifically named as school with insufficient exterior lighting.

- **Security Cameras:** Participants believe that there is an inconsistent policy on how and where security cameras are used and what type of camera equipment is installed (newer installations are of better quality and have more server capacity for longer storage). They would like a universal set of standards to be equitably applied.

- **Early-Arriving Students Must Wait Outside:** Parents were concerned that some schools make children wait outside if they arrive early. Parents indicated the window of time for drop-off before school is too narrow to work with the variety of work schedules and care-giver options. They wondered if the gym or cafeteria could be opened up with a set of aides to watch the students before school officially opened. Note: These aides could be parent volunteers.

Sticky Note Comments (Language Taken Directly from Participant Comments)

Physical Security

- School should have a higher standard across the board on security consistency

- Many schools in Northern Area are beyond overcapacity

- Will the installation of cameras help with school safety? Are the cameras assessed on a continual basis for issues and problems?

- Sometimes doors are propped open by students and staff, how can we prevent is & how can we make sure the sign in system that is electronic. Also are all cameras used as grant doors now?

- Sometimes students/youth that don't belong in school get into schools by wearing the uniform and the school belonging. But then they cause problems with students. How can this be assessed & what procedure and approach?

- Badge readers at all facilities security

- Historical/ continued neighborhood walkers exist between Forestville HS and Suitland HS – what type of security measures will be put into place

- The needs to be a real plan vs. just showing is to make around bldg. – once someone gets in they can do whatever that want regardless of ID

- Building access is still open anyone. Front offices not always staffs well

- All school should have security desk officer

- Security is not standard from high school to high school

- Can always be improved – more intense volunteer vetting before they are allowed to volunteer not just background checks

- We secure buildings, but outside playgrounds are unfenced and may be supervised by only 2 staff

- School policies are inconsistent for security (Do parents need "badges" for Honor Roll assemblies?)

- Lack of across the board standards. Lock door and ID requirements in some, open access in others

- Thomas G Pullen does not secure the facility consistently

- How does each school prepare to shelter in place for an emergency or disaster?
- Create a proactive approach to security and safety at schools by having a team that works together to help this process. Have the guidance counselors, PPW, parent teams?
- Protection of younger students who may be afraid to speak up
- More security cameras are needed in our schools
- School security task force should hold a public meeting to get input prior to providing their report/findings?
- Are staff "checked" on Raptor database as often as parents are required to?
- Background checks + fingerprinting provide false sense of security
- All facilities should be required to have locked access and visitors are buzzed in to the building
- Increased security presence outside school building (parking lot)
- Need a single PGCPS database for volunteers that have background checks, when they volunteer, and a liability of staff to flag concerns. Especially if fingerprinting lasts "as long as you are volunteer annually"
- At Ardmore Elementary the principal uses the size of the facility as justification for why students have to wait outside in the morning at a door to get in w/o supervision, what can be done?
- Wifi/RAPTOR system is not reliable to scan IDS

Appendix D: Capital Program

Appendix D-1: PGCPS Continuous Business Process Improvement for Capital Program-Workplan

Activity	Inputs	Time Frame	Progress Reporting
PRELIMINARY ANALYSIS: Identify and meet with list of designated management and staff in order to assess current practices and programs using utilization study, organizational chart, and program documentation.	• Dept. Heads, Mgmt. Staff & other key stakeholders. • Cross Section of Staff as identified. • Capital Program Officer	2/1/16 - 3/15/16	Interviews with CIP Staff, including Director, Program Director, and a cross-section of departmental staff
PRIMARY RESEARCH: **Analysis of existing programs and materials for accountability using checklist of key performance indicators (KPI) for data collection. .**	• Access Database Reports & Evaluations • Strategic Plan • Budgets • Master Plan of Projects • Automated Systems & Inventory • IT Resources and Support • Potential Effectiveness of Software • Change Order Threshold & Process • Staffing/Organizational Chart • Focus Groups	3/11/16 - 4/1/16	The team met with a cross section of executive leadership and management personnel to assess the Capital Programs department's current policies and practices.
SECONDARY RESEARCH: Conduct research on Leading Practices & SOP's.	• Research and define relevant markets • Assessment of Program components: Planning, Construction & Design, Contracting & Procurement, Quality of Scope of Work & Incident of Change Orders, Vendor Renewal, Evaluation & Quality Control, Project Mgmt., Cost monitoring & Budgeting.	4/1/16 – 4/30/16	After preliminary meetings and focus group sessions, the team provided feedback and data requests for the Capital Programs Department.
DATA ANALYSIS: **Analyze results/quality of current CIP Program**	• Based on all data collection, budget, and current processes.	4/30/16 - 5/30/16	Discussions on preliminary findings

	• Based on Brailsford and Dunlavey Master Plan. • Based on O.L.A. Audit Report.		are on – going at this point. .
RECOMMENDATIONS: **Development of Final Quality Recommendations for Capital Program.**	• Follow up meetings with key stakeholders to provide information on the gap between current program and new recommendations based on leading practices.	6/1/16	Group Collaboration and buy - in by CIP Group.
RECOMMENDATIONS: SYNTHESIS OF FINAL RESULTS	• Business Process Improvement Study team and major stakeholders.	6/15/16 – 7/15/16	Group Collaboration and buy - in by CIP Group.
RECOMMENDATIONS: DRAFT FINAL REPORT	• Business Process Improvement Study team & key staff.	7/15/16	Group Collaboration and buy-in by CIP Group.
EVALUATION PLAN:	• Training of Staff & • Implementation of new recommendations.	Ongoing.	

Appendix D-2: Response to Study Information Request from (Director of Capital Programs)

May 17, 2016

RE: Response to the Continuous Process Improvement Study Information Request

Thank you for the chance to provide our responses to the Information Request received for the Continuous Process Improvement Study. We welcome the opportunity for advancement in the delivery of sustainable, safe and supportive educational environments. Please find the requested responses highlighted in blue below.

1. **How do you think that you can be better served by Primavera to get more work completed through the system?**

   The Department of Capital Programs (DCP) convened a Primavera Committee of staff across our four functional areas to ensure the implementation of this system would advance our performance of core services. The committee identified a full integration with the E-Business Suite (EBS) applications used by our Accounting Office as key to a successful deployment of Primavera. Consequently, we meet weekly with staff from Information Technology and the Accounting Office to finalize all processes that will integrate with EBS; this work is expected to complete for an integrated system launch in the fall of 2016.

   A secondary integration with the Department of Purchasing and Supply Services (DPSS) has also been identified as a tool that would streamline the many procurement processes that are critical to successful and timely project delivery. This recommended integration with Purchasing is not currently being pursued.

2. **What are the occasions during FY '2015 where change orders exceeded the 2.5% state limit? Please provide a general explanation regarding when change orders that exceeded 2.5% occurred.**

   To clarify, there is no State limit for change order occurrence. The State does participate in a 2.5% construction contingency that is allocated at contract award approval but this contingency participation is not a limit of allowable change orders or a limit to the percentage of change orders that the State will participate in funding.

Prince George's County Public Schools - Department of Capital Programs
13300 Old Marlboro Pike, Upper Marlboro, MD 20772 **Phone:** 301-952-6548 **Website:** www.PGCPS.org **Follow Us:** @PGCPS, Facebook, Youtube

DCP projects have been consistently below industry standards for average change order occurrence. For all capital projects closed within the last eighteen months, our average final change order percentage is -5.12% when treating the credit of unused allowances within the base contract amount as a change order and is 0.29% excluding any allowance credits.

The majority of our projects are systemic replacement projects and these incurred an average change order percentage of -7.17% with allowance credits and -0.89% without allowance credits. In other words, our final contract amount is less than the original contract amount for systemic projects.

Our renovation projects incurred an average change order percentage of 4.71% which is reflective of the unforeseen conditions inherent in renovating an inventory of buildings built, on average, in the 1960s; this rate is within standards and is anticipated in a system with deferred maintenance costs estimated to be, at minimum, $2.5B.

3. Is the current threshold still remaining at $25,000 for change orders as required by PGCPS?

As it relates to contract modification limits that trigger Board approval, does the threshold still stand at $25,000?

Per PGCPS Board of Education policy 7430, all construction-related change orders greater than $25K that are incurred on any capital project require Board approval.

4. How long does it take to receive a contract modification from the Board from the time that the request is made from the beginning of the process? Please describe the full process and include the length of time.

Can you provide the current approval process for change orders? How would a higher threshold assist in the change order process?

The DCP construction change order process reflects Board policy 7430 and the length of time to receive Board approval and modify the construction contract varies between 8-12 weeks.

As a simplified example of the change order process, a capital project that encountered the existing condition of soil contamination on February 5, 2016 received formal Board approval of the change order work for remediation on April 4, 2016 and the contract (or purchase order) was modified on April 13, 2016. These dates reflect the following process and timeline:

1. February 5, 2016: Soil contamination discovered.
2. February 8, 2016: The Contractor submits a proposed change order.
3. February 10, 2016: Negotiation of the change order amount is concluded between the DCP Project Manager, the Architect of Record and the Contractor.
4. February 15, 2016: The Architect of Record submits a notarized AIA G701 to DCP with their signature and approval.
5. February 16, 2016: The DCP Project Manager submits a BAS for approval at the next Board meeting open for a new budget consent agenda item which is on March 22, 2016.
6. March 22, 2016: The Board votes to approve the change order.

7. April 4, 2016: The signed BAS is received by DCP.
8. April 5, 2016: The Project Manager submits a Purchase Order Revision Request to DPSS.
9. April 13, 2016: The Contractor receives an increase to their Purchase Order for the change order work.

Raising the change order authorization threshold to that of comparable school systems would streamline project delivery, save money and improve construction schedules. We recommend a threshold of at least $250,000 with the provision of quarterly project reports to the school board that itemize all change orders for transparency and accountability. The policies of neighboring counties are as follows:

- Fairfax County Public Schools: Change Orders above $250,000 require Board approval.
- Baltimore County Public Schools: Change Orders above $1,000,000 require Board approval.
- Montgomery County Public Schools: Change Orders above $100,000 require Board approval.
- Howard County Public Schools: Change Orders are approved at the discretion of the Purchasing Department and the Chief of Facilities.

5. Is there a plan for the water leaks, structural problems, and mold issues at Bladensburg High School?

Is there a plan to remove the non – functioning boilers with new boilers to replace the temporary mobile tractor-trailer units? There appears to be potential risks for vandalism that can cause shut downs of mobile units.

Our Building Services Department has a plan to address these conditions at Bladensburg High School scheduled to start this summer. However, there are no related capital projects and this corrective work is not being managed by DCP staff.

6. Do you have a dedicated buyer that understands your purchase needs to assist with the efficiency and the effectiveness of your programs and the acquisition of contract services?

There are no purchasing staff members dedicated to construction-related procurement activities and there are no purchasing staff members with significant construction-related procurement experience. This current system is markedly substandard for a program of our size and is a major factor in our ability to deliver projects.

To improve in this essential function, we have met with neighboring systems to review their procurement practices and organizational structure. As a typical example, the Anne Arundel County Public Schools (AACPS) Purchasing Department has a Construction Unit with a Senior Buyer and a Senior Purchasing Technician dedicated solely to procurements for the capital program. These positions are additionally supported by three Buyers: one procures services related to systemic projects; one procures services for energy and service projects; and one procures all consultant services.

These dedicated Buyers can not only evaluate and issue standard solicitations more quickly but can expertly address and reduce the common construction-related occurrences that often

result in legal fees and actions (e.g., contract deficiencies, bid irregularities, etc.). Additionally, they work to attract a wide range of qualified vendors to participate in all AACPS solicitations and maintain robust on-call and pre-qualified lists of prime contractors, major trades, design and consulting services.

While AACPS is just half the size of PGCPS in number of students, buildings and capital projects, an adoption of a similar structure would be a significant advancement to the delivery of the PGCPS capital program.

7. Can you please describe the process of how contractors are selected?

There are a few options available under the Code of Maryland Regulations (COMAR) for public school construction procurement. The most commonly used method is Design-Bid-Build which follows the below steps.

1. Bid documents are published for open competition for a minimum of 20 business days.
2. A public bid opening is held.
3. The bid tabulation and all submitted bid packages are sent from DPSS to the DCP Director
4. The DCP Director and Project Manager review and evaluate the bids and submit a recommendation to award (usually to the lowest qualified bidder) to DPSS.
5. DPSS issues a Notice of Intent to Award.
6. DCP submits a Board Action Summary recommending the Board approve the contract award at the next meeting with an opening on the budget consent agenda.
7. Board approval occurs at that Board meeting.
8. DPSS issues a Notice of Award.

Other methods used are provided for in COMAR 23.03.04 which also dictates the full process we are required to follow for award selection. For construction services, these include Construction Management at Risk, Design-Build and Job Order Contracting.

8. What circumstances are currently used for sole source procurements?

There are only a few circumstances where sole source procurement is acceptable and these are outlined in COMAR 23.03.03.13. DCP rarely finds occasion to utilize a sole source but the process would require Board approval and the submission of a justification to the Interagency Committee on Maryland Public School Construction. There is an exception in the acquisition of utility services as there frequently exists only one available provider.

9. Internal Program Managers were brought on in place of 3rd party monitors to oversee contracts. It appears that Capital Programs has enhanced the management team and brought on an engineer to eliminate the use of 3rd party monitors. If not, please explain.

At the time of this response, we have 341 open capital projects (with another 65 capital projects to be assigned in the next few months) and 11 project managers. Therefore, we do not foresee the complete elimination of external design and project management support but it will be used to augment our in-house capacity and capability.

10. **Please provide staffing complements per position type both funded and approved as of Jan. 1, 2016.**

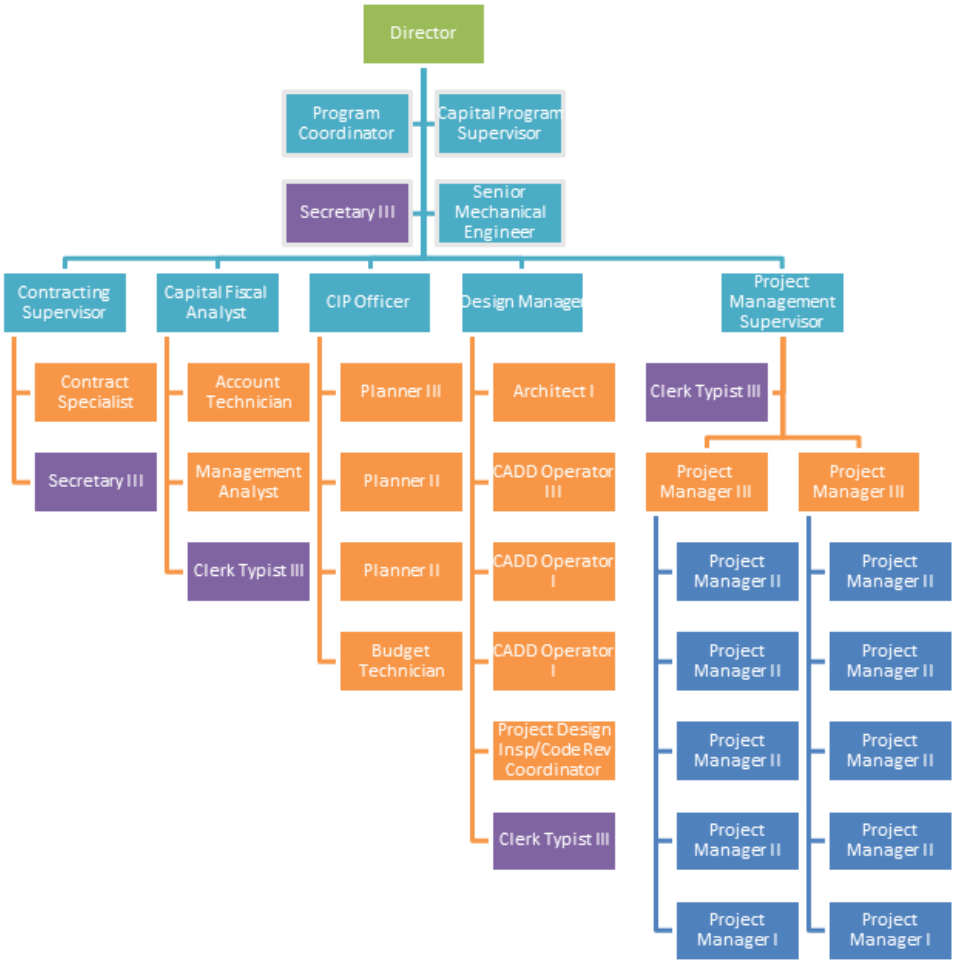
    Please see the attached organizational chart.

11. **A few parents mentioned that Forestville High School was closing during the Town Hall meeting on April 19, 2016 and that there was no formal briefing and notification process to officially announce the closing of Forestville High School. The parents stated that they were notified through their children, the students. Is there a process? Please describe what process was used and please explain if this is the regular process used for school closings.**

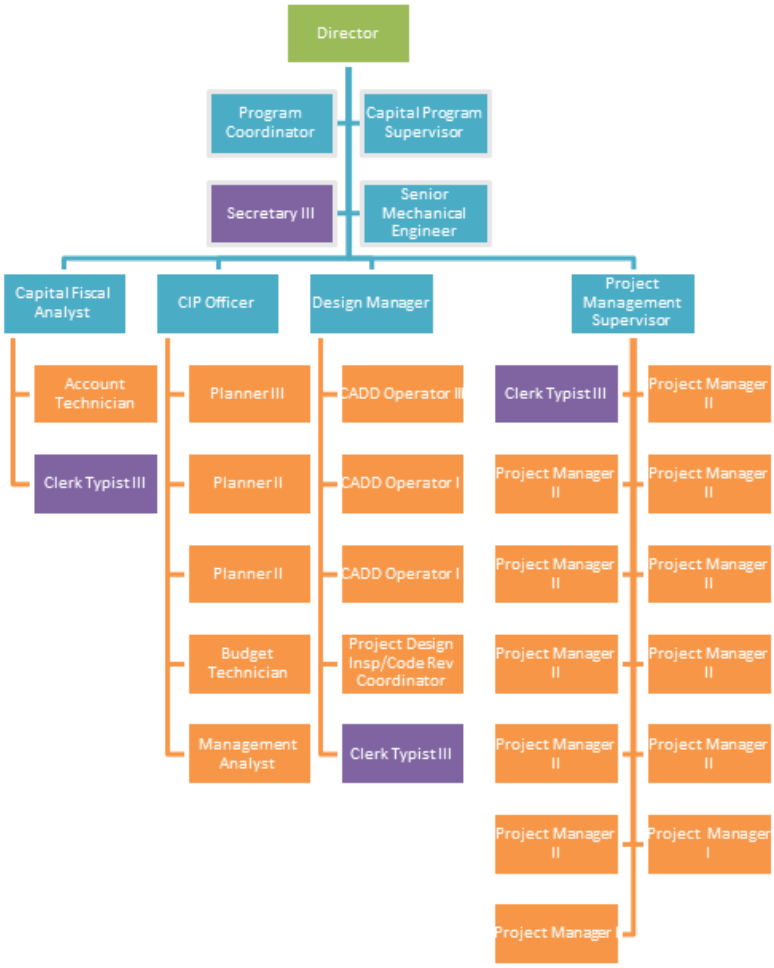
    This process is run by a different department, Pupil Accounting and School Boundaries and not by the Department of Capital Programs.

Appendix D-3: Capital Programs Proposed Organization versus Current Organization

Department of Capital Programs: Proposed Organization



Current Organization



Appendix E: Transportation Methodologies

Appendix E-1: Town Hall Community Meet Debrief—Transportation

Town Hall Meeting Community Feedback

Date: April 19, 2016

Time: 7-9 PM

Facilitators: Business Process Improvement Study Team

Community Attendee Count: 100+

Process

Participants in the Town Hall were asked to write the individual issues they wanted to discuss on sticky notes at the beginning of the session. The facilitators grouped these sticky notes into common themes for discussion and those comments, verbatim, are included at the end of this document. The purposes of this methodology is to: (1) give everyone in attendance a chance to contribute their comments without advantaging the first or loudest people to speak (2) focus the conversation on the most prevalent issues to the community (as evidenced through the note collection) and (3) allow for all ideas from the community gathered at the Town Hall to be captured.

Objective of the Town Hall

Our primary objective for the Town Hall was to gather insights from the community that could be used to direct their assessment inquiries and overall analysis. As a secondary outcome, however, the consulting firms were able to collect additional, specific concerns from the community, which are reflected in the sticky note summaries at the end of the document. Users of this document are encouraged to read, reflect, and take action (where appropriate) on these specific comments.

Discussion Highlights

Bus Transportation

- **Late Bus Notification System:** Parents indicated that buses are inconsistent in their pick-up and drop-off times on a regular basis. Some parents reported that their child waited at the bus stop for buses that were over an hour late. They indicated that it was not only inconvenient but a safety concern. Contacting the PGCPS call center is reportedly not an effective way to get updated information. The wait time to speak to someone can be lengthy and the Parents brought up the idea of an automated communication system to alert parents/caregivers if the bus will be late and give an estimated new time for pick-up or drop-off.

  Note: PGCPS's current routing vendor, Tripspark, was contacted to provide an estimate of the cost of their bus notification system, but they declined to estimate a cost for the purposes of this report.

- **Bus Driver Behavior:** While bus driver performance, both operating the bus and managing the students, is out of the scope of this assessment, the community wanted to voice that student management was inconsistent across bus drivers. These issues include the items listed below. No specific concern was recognized universally by the community and these observations can be considered anecdotal at this point.

  – Drivers not obeying traffic laws (i.e., not coming to a full stop at a stop sign)

  – The perception that the drivers have not passed their criminal background check (or have since engaged in criminal behavior)

  - Drivers not adhering to Individual Education Plans
  - Drivers rushing to get children off the bus to make time requirements
  - Drivers punishing special education students for behavior (i.e., bathroom accidents) that are beyond students' control
  - Safety rules, such as staying seated while driving, are not being enforced with students

- **Utilize Public Transportation (WMATA):** One participant asked why WMATA was not used to transport some students, particularly in more urban areas, as is offered to DC students. Note: The Transportation recommendations section of the report addresses the potential of WMATA use.
- **After-School Activities:** Some parents are concerned that students whose parents cannot pick them up from after-school activities (transportation only occurs directly after school) are prevented from participating in these enrichment activities. Note: the WMATA option could address this issue for older students in parts of the county with high WMATA bus and train coverage.

Sticky Note Comments (Language Taken Directly from Participant Comments)

Bus Transportation

- I actually don't have any issues with my child's transportation. But improvement can be made across the county.
- Buses are late, continuously and while they are improved at time we go back to the same routine
- Late pick up and changing bus stops
- Making more fund raisers for more buses by the American Public school funding system.
- Sub drivers do not follow routes. Stops missed or too late/early pickups.
- Automated bus trans notification system
- Bus transportation needs to have a late bus notification system for parents and special need children.
- Street where traffic is too heavy.
- Buses need to drop the children off at their streets, not on the main
- In Ft Washington students walk a long distant to get bus
- Buses should not be allowed to idle in neighborhoods
- Is it possible to have separate buses for special education students + a bus monitor?
- Is it possible to have walkie-talkie so buses can communicate with the call center and the bus lot?
- Bus system does not have enough supervision for student safety
- Bus system is "late or too early"
- The Spanish immersion at Cesar Chavez is only two-year-old meaning only 1st kinder attending. However, school starts at 7:45 meaning the young students have to wake very early
- What is going to be done since school buses are already late about closing Forestville?

- Need to expand IB bus service for FDHS
- Need activity buses to encourage student participation
- Severe shortage of bus drivers
- Fewer drivers, little funds to pay them names as reasons for school start times
- Amount of students on the bus, under use
- I have read that there is a possibility that public transportation may be merged into the PGCPS
- Is there a way to reduce the number of late buses by increasing the number of specialty schools across the county to reduce the commute time?
- Is it possible to sub-contract to a reliable, dependable transportation company to help with this issue of the "complicated transportation system"?
- Building new transportation depots
- Age of bus fleet relates to maintenance
- Unsafe driving- like 3 point/U-turns with a bus of kids
- Hiring new CDL drivers
- Is there a way to cut down of bus fights, knowing that sometimes students take a non-assigned bus to watch fights then walk home after the fight?
- Total process breakdown when regular driver doesn't show- driver gets lost, skips stops
- Bus drivers are not complying with their duties
- The supervisor of transportation is not following up with incidents
- Behaviors of students while on the bus
- Shortage of drivers = bus has to run multiple routes for same school
- Bus driving aides
- Better security needed for bus drivers
- professional development for bus drivers to deal effectively with children
- Will findings be made available to the public?
- Bus drivers and bus aides need to learn sign language to communicate with deaf students
- Bus aides what are the background checks done especially for those who work with disabled students
- Staffing of bus drivers
- Paying bus drivers
- Train bus drivers on the overview of top issues of aged groups and how to deal with those issues

- Bus drivers not following policy- i.e., telling kids to cross street behind bus
- What is the timeline for completion of the business process assessment?

Appendix E-2: Transportation Interview List

The list below details all Prince George's County employees the consulting team interviewed for Transportation.

Title	Department	Assessment Area
Director	Transportation and Central Garage	Transportation (all areas)
Operations Supervisor (North)	Transportation and Central Garage	Transportation (all areas)
Supervisor of Central Garage	Transportation and Central Garage	Transportation (all areas)
Operations Supervisor (South)	Transportation and Central Garage	Transportation (all areas)
Assistant Foreman (Douglass)	Transportation and Central Garage	Transportation (all areas)
Transportation Scheduler	Transportation and Central Garage	Transportation: Routing and scheduling
Transportation Scheduler	Transportation and Central Garage	Transportation: Routing and scheduling
Transportation Scheduler	Transportation and Central Garage	Transportation: Routing and scheduling
Computer System Analyst	Transportation and Central Garage	Transportation: Routing and scheduling
Transportation Scheduler	Transportation and Central Garage	Transportation: Routing and scheduling
Transportation Scheduler	Transportation and Central Garage	Transportation: Routing and scheduling
Transportation Scheduler	Transportation and Central Garage	Transportation: Routing and scheduling
Transportation Scheduler	Transportation and Central Garage	Transportation: Routing and scheduling
Assistant Supervisor of Central Garage	Transportation and Central Garage	Transportation: Pedestrian and bus lot safety
Maintenance Tech	Building, Services and Maintenance	Transportation: Pedestrian and Bus lot safety
Special Assistant to the Safety Office	Safety Office	Physical Security of Facilities/ Transportation: Pedestrian and bus lot safety
Foreman (Fairmont)	Transportation and Central Garage	Transportation: Payroll/ Transportation: Pedestrian and bus lot safety
Foreman (Forestville)	Transportation and Central Garage	Transportation: Payroll/ Transportation: Pedestrian and bus lot safety
Foreman (Crossland)	Transportation and Central Garage	Transportation: Payroll/ Transportation: Pedestrian and bus lot safety
Transportation Lead Data Entry	Transportation and Central Garage	Transportation: Payroll
Payroll Team Leader	Transportation and Central Garage	Transportation: Payroll

Transportation/Central Garage Staff HR Partner	Human Resources Operations and Staffing	Transportation: Payroll
Human Resources Operations and Staffing	Human Resources Operations and Staffing	Transportation: Payroll

Appendix E-3: Transportation Benchmarking Summary

The consulting team interviewed four benchmark districts for all areas of Transportation: routing and efficiency, pedestrian and bus lot safety and payroll management. The chart below provides a summary of the questions and responses from those district.

The districts were selected for their similar fleet size and demographic make-up in comparison to Prince George's County Transportation Department. The district fleet information is listed below. [1]

District Name	Number of Routed Buses 2015	Number of Routed Buses 2014	Students Transported Daily	Annual Mileage	Rank within top 100 fleet sizes, nationally
Prince George's County (Maryland)	1,084	1,104	85,000	19,605,431	10
Montgomery County (Maryland)	1,134	1,120	103,000	19,000,000	8
Fairfax County (Virginia)	1,117	n/a	139,050	17,700,000	9
Jefferson County (Kentucky)	955	955	66,000	19,000,000	15
Hillsborough County (Florida)	994	948	87,000	16,900,000	13

Benchmarking Question	Hillsborough County (FL)	Jefferson County (KY)	Montgomery County (MD)	Fairfax County (VA)
Opt in: Does your district use an "opt-in" system to route students or do all students get routed?	Most are automatically routed	Automatically routed	Students are automatically routed	Students are automatically routed
Hiring: Does your district use attendance bonuses to cut down on the need for substitute drivers/double shifts? If so, how is the program structured?	No	This county is considering the bonus, but does not have one.	No, do not use attendance bonus.	No, do not use attendance bonus.

[1] "The Biggest Fleets Get Bigger." School Bus Fleet. Ed. Thomas McMahon. N.p., Oct. 2015. Web. 29 June 2016. <http://files.schoolbusfleet.com/stats/SBF-Top100Fleets-2015-1.pdf>.

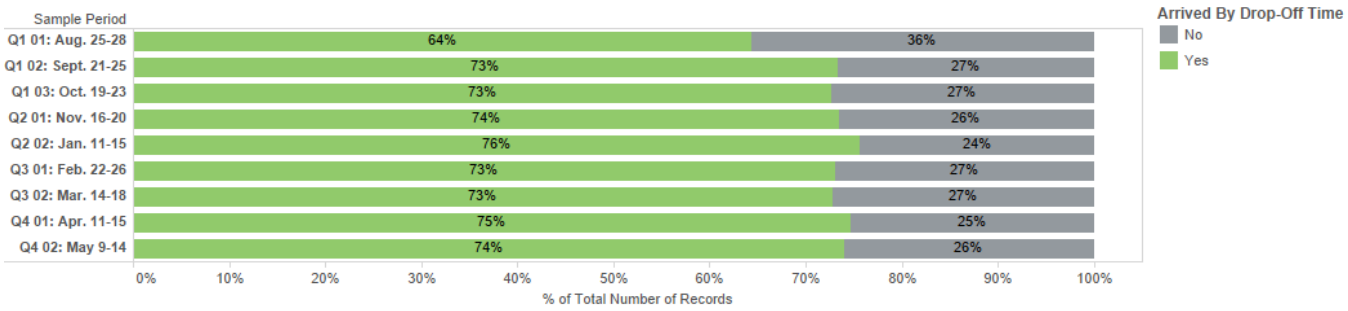
Bus Lots: How many bus lots and buses does your district have per lot?	Some buses are parked at schools and some are parked at homes. The main Carney Road bus lot is the main place for buses. There are 1,300 buses in total and 5-20 buses parked at each lots.	13 bus compounds. 85-100 at each location.	A total of six bus lots with approximately 200 buses per lot.	There are approximately 130 bus parking locations across the county. The number of buses at each lot vary from 30 to 100.
Bus Lots: Do your mechanics work out doors or do you have indoor facilities? How many bays at your facilities?	There are three main service hubs where buses are checked every two months. Bay totals are: 20 bays at Harney, two to four at Easy Bay and three at Plant City.	Mechanics, do not work outside only for an occasional bulb stuff. Mechanics work in two shifts (5-9:30) in a total of 35 bays.	No, the mechanics work at the six indoor garages around the county. They were unsure of the number of bays for each garage.	No, Fairfax has three indoor garages. Two of the three garages conduct most of the repairs.
Payroll: Does your district use transportation-specific time-tracking system for payroll tracking (e.g., TIMS)?	Driver payrolls is managed with paper. They do use Senovia, a GPS product to tracks buses locations and speed.	No. Looked at a number of systems, including Zonar, but are not using one at the moment.	There is a combination of a paper process and the use of TIMS.	Driver payroll is all done via a paper process.
Payroll: Does your district use scan cards or other electronic timecard system for bus lot staff (drivers, attendants, office staff) sign-in and sign-out? Yes/No (if yes, which one)	No	No	No	No

Appendix F: Transportation: Routing and Efficiency

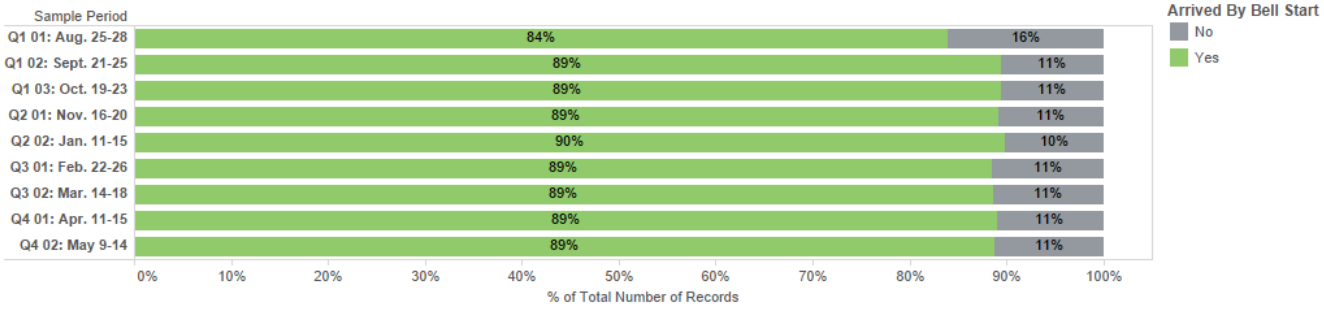
Appendix F-1: Additional Data Analysis

On-Time Delivery Analysis:

Percent of buses arriving before or at drop-off times (10 min prior to bell start) during sample periods:

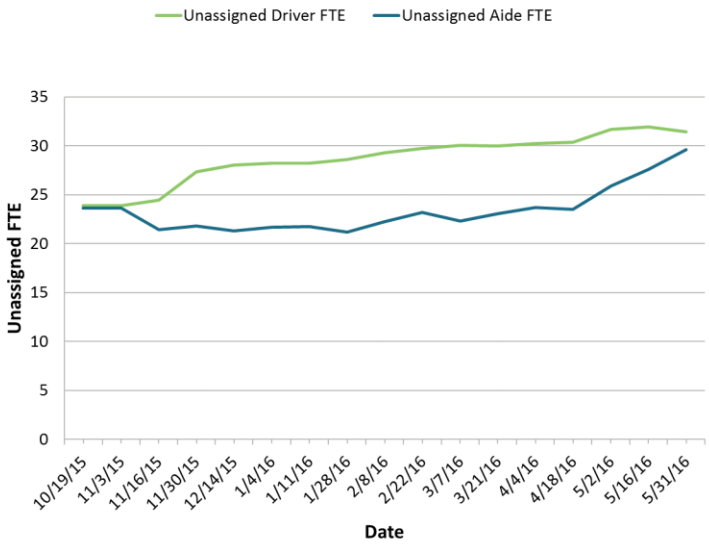


Percent of buses arriving before or at bell times during sample periods:

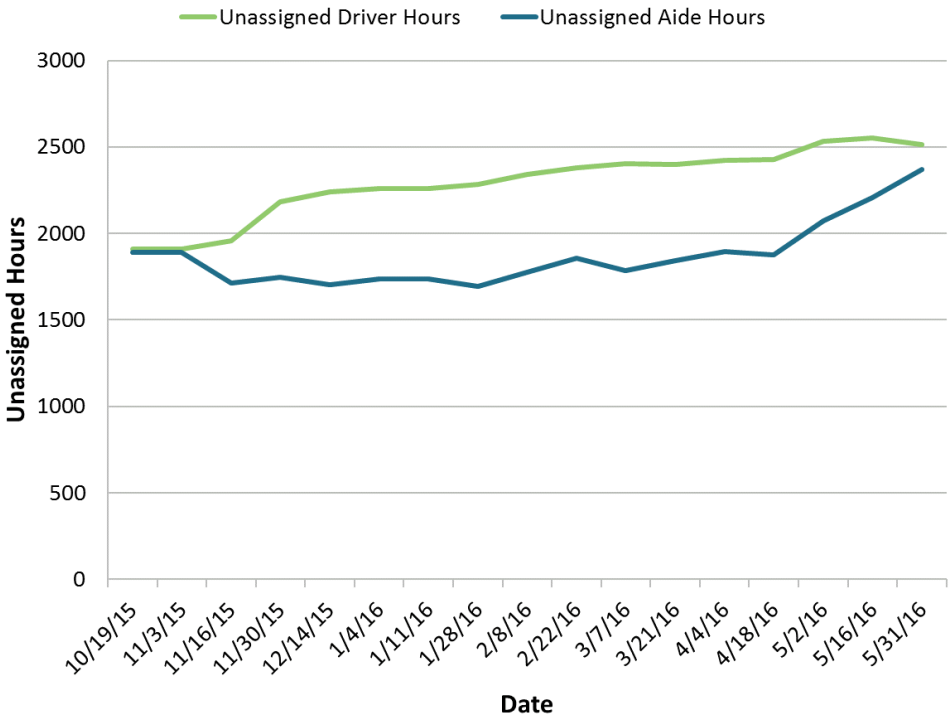


Unassigned FTE for SY 2015-16 by Two Week Period

The unassigned aide FTE rate is lower than the unassigned driver throughout the school year.



Unassigned Hours for SY 2015-16 by Two Week Period



Appendix F-2: Data Analysis Methodology Summary for Transportation: Routing and Efficiency

GPS Data Analysis: While the new VEO will allow PGCPS to tie GPS data to routing data, the current system only contains GPS data. Thus, the consultant team took the following steps to approximate a baseline bus on-time arrival rate. It should be noted that this was an estimate and not an exact number.

- Zonar, the fleet management and GPS data system utilized, provides a "schedule report" which reports the time when buses enter or leave a school zone (perimeter around a school where pickup or drop-off occurs). This schedule report can be pulled via Zonar's Application Programming Interface (API).
- Due to the volume of data, a sample of eight typical weeks (and additionally the first week of school) was selected and a script was written to pull schedule reports for each school zone.
- Because GPS data cannot currently be tied to a specific routing event (i.e., bus arrival at a school to drop students off for the start of the day), an assumption was made that the first entry into the school zone by each bus was the time at which the bus arrived. A bus was considered to be bringing children to school for the start of the day if it entered the school zone between prior to or up to one hour after bell start time. This assumption was based on the time provided by the district about field-trip start times.
- This arrival time was compared to the desired drop-off time (10 min prior to the bell time) as well as the bell time to determine whether that bus arrived on time. The percent of on-time arrival was then approximated by summing the number of on-time arrivals divided by the total number of arrivals in the timeframe described above.
- The aggregate on-time arrivals data was disaggregated sample period, by bus lot and by bus lot and sample period.

- The accuracy of this metric will be significantly improved with the implementation of the new VEO software next school year.

Payroll and Leave Data Analysis Methodology: The consultant team requested, and PGCPS provided, employee date-level leave and payroll data for AY2013-2014, AY2014-2015 and AY2015-2016 to date (through April). This allowed the team to conduct a detailed analysis of pay to transportation employees and of leave taken.

- Data Preparation: Payroll and leave data were not directly tied to job type and bus lot placement. Core HR exports were used to match employees to their job type and bus lot placement. Unfortunately, these exports were incomplete (i.e., some employees with pay and leave events during a fiscal year may not have been included in an export for a particular year). Thus, the consultant team used the most recent job type and/or bus lot placement available for these employees.

- Analysis: After merging the data provided, the data were loaded into Tableau and exploratory descriptive analyses focusing on total/average pay and leave hours were produced. Data were disaggregated by pay/leave type, calendar date, employee occupation, employee bus lot placement and many combinations of these groupings. Averages aggregated at the employee level were also calculated. A full team assessment of key exploratory visualizations was conducted to interpret the data and compare the data against key findings from other analysis methods.

Regular Bus Driver FTE Gap Analysis Methodology: The consultant team requested and PGCPS' Transportation Department provided data on the assigned regular hours of drivers to routes during the academic year. This document was updated by pay period to reflect assigned hours to drivers. Routes that were unable to be assigned to a regular driver were marked as assigned to a vacant driver.

- Analysis: The data was analyzed in Excel using pivot tables. Assignments were delineated by position, so all driver positions were grouped and all aid positions were grouped. Date-time fields were truncated to just dates. Total hours and vacant hours were analyzed using pivot tables and graphs of the results created. A team assessment of data was conducted to select the analysis that most clearly communicated the unassigned FTE.

Appendix G: Transportation: Pedestrian and Bus Lot Safety

Appendix G-1: OSHA Restroom standards

OSHA Standard: 1910.141(c)(1)(i)

Occupational Safety and Health Administration Definition of Standard: Except as otherwise indicated in this paragraph (c)(1)(i), toilet facilities, in toilet rooms separate for each sex, shall be provided in all places of employment in accordance with table J-1 of this section. The number of facilities to be provided for each sex shall be based on the number of employees of that sex for whom the facilities are furnished. Where toilet rooms will be occupied by no more than one person at a time, can be locked from the inside, and contain at least one water closet, separate toilet rooms for each sex need not be provided. Where such single-occupancy rooms have more than one toilet facility, only one such facility in each toilet room shall be counted for the purpose of table J-1.

Reference Link: https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9790

Number of Employees	Minimum number of Water Closets
1-15	1
16-35	2
36-55	3
56-80	4
81-110	5
111-150	6
Over 150	6 + 1 additional fixture for each additional 40 employees.

Appendix G-2: Bus lot safety checklist Results

The chart below summarizes the questions (bus lot checklist criteria) and results from the safety checklist findings from all Prince George's County bus lots.

Bus Lot Safety Checklist Criteria	Number of "Yes"	Number of "No"
Grounds/Security:		
Security fencing around the perimeter?	13	0
Bus Lot Hours	0	0
Is there a security system for the lot?	3	7

Are there lot entry and exit signs?	2	7
Are there directional signs? Note if signs are faded below	0	12
Are Cameras on the property working?	5	4
Visible damage to surface areas (e.g., potholes)? Note damage below	10	2
Designated pedestrian walkways?	0	12
Drive lanes clearly marked with paint?	2	11
Signage for drive lanes?	2	11
Do drive lanes accommodate a two-way passing?	4	9
Do private vehicles use the same drive lanes as buses?	11	2
Provide a lighting Rating: (Excellent/Adequate/Insufficient)	8 (Adequate)	4 (Insufficient)
Number of lights	Varied by lot	
Any dark areas on the due to lack of lighting?	11	1
Electrical capacity to expand lighting?	7	4
Any obstructions to vision in drive lanes (e.g., shrubbery)?	5	7
Visible water/sewage drainage system?	3	10
Are buses parked on asphalt? Note the type of concrete below	12	1
Building Facilities:		
Office for Operational staff?	13	0
Lounge for bus driver staff? Note observations on facilities below	13	0
Bathroom facilities for operational/mechanical/bus driver staff? Note number of facilities above	13	0
Is there at least one ADA accessible restroom per gender?	5	8
Kitchen Facilities for operational/mechanical/bus driver staff?	4	9
Distinct kitchen sinks available?	2	11
Drinking Water fountains available?	12	1
MOSHA poster mounted in visible location?	7	6
OSHA poster mounted in visible location?	7	6
Are fire code building capacity signs visible?	0	13
Parking:		
Enough parking for all buses? Route and Spare?	7	6
Enough parking for private vehicles?	3	9
Are bus parking lines clearly marked?	9	4
Are route bus parking spaces 15 ft. x 40 ft.?	3	9
Parking available for service vehicles?	10	2
Are private, state, visitor and operational parking spaces clearly marked with paint?	2	11
Are private, state, visitor and operational parking spaces clearly marked with signage?	1	12
Clearly marked ADA accessible parking spaces?	0	13
Emergency Related Items:		

Emergency Phone #' and evacuation map posted?	3	8
Emergency eyewash and/or shower units accessible?	5	7
Hand washing amenities?	9	3
First aid kit and BBP (blood born pathogen) kit available at work site?	11	1
First aid trained competent person available?	7	2
Portable Fire extinguishers readily available? Note the number below	12	0
An up-to-date listing of the location of all portable fire extinguishers?	0	12
Is there signage for a location of a fire extinguisher?	5	7
Supplies available for incidental chemical spills?	12	0
Automatic Sprinklers?	0	12
Service/Mechanics Facilities:		
Are mechanics onsite?	13	0
Does maintenance repair facility provide weather protection? Note: If no, indicate mechanic working location below	3	10
Are alternative maintenance work areas around the bus lot clearly marked?	1	11
Does maintenance facility have a ventilation system?	2	11
Maintenance repair facility/location have visible drainage system?	3	10
Combustible and Flammable liquids are stored in a separate area?	9	3
Visible tire storage?	7	6
Visible used oil storage containers? Note location of oil storage below and type of storage container (i.e., drum or drank)	13	0
Bus lot inventory storage available?	13	0
Bus Lot Inventory easily accessible by mechanics?	13	0
Is there a designated bus washing stations? Note location of bus washing below	12	1
Are tools properly stored? Note if tools are laying around	11	2
Are there visible oil and grease stains? Note is stains have not been treated or addressed	9	4
Fueling Access:		
Is there a fuel dispensing station at this lot?	12	1
Is there a fuel user access system?	12	1
Is there an emergency fuel disconnect switch? Note below how spills are cleaned up/managed	12	1
Is the fuel tank above ground? If no, note location below	7	6
Clearly marked, designated area for fueling?	7	6
Is there a fire extinguisher present in the vicinity of the fueling station?	11	1

Appendix G-3: Bus Lot Photographs

		
P1. Forestville: Mechanics repairing a bus engine outdoors	P2. Forestville: Mechanics using jack stands to lift and repair bus outdoors	P3. Forestville: Mechanics' outdoor repair area

	
P4. Forestville: Mechanics' three-sided shed use for oil storage	P5. Forestville: Double Painting of Parking lines

	
P6. Forestville: Broken parking back stops in bus parking space	P7. Forestville: Potholes on bus parking lot grounds space

P8. Douglas: Bus parking on an unpaved hill

P9. Crossland: Broken bus parking back stops

P10. Crossland: Mechanic repairing a bus outside

P11. Greenbelt: Unrepaired potholes

P12. Greenbelt: Unrepaired potholes

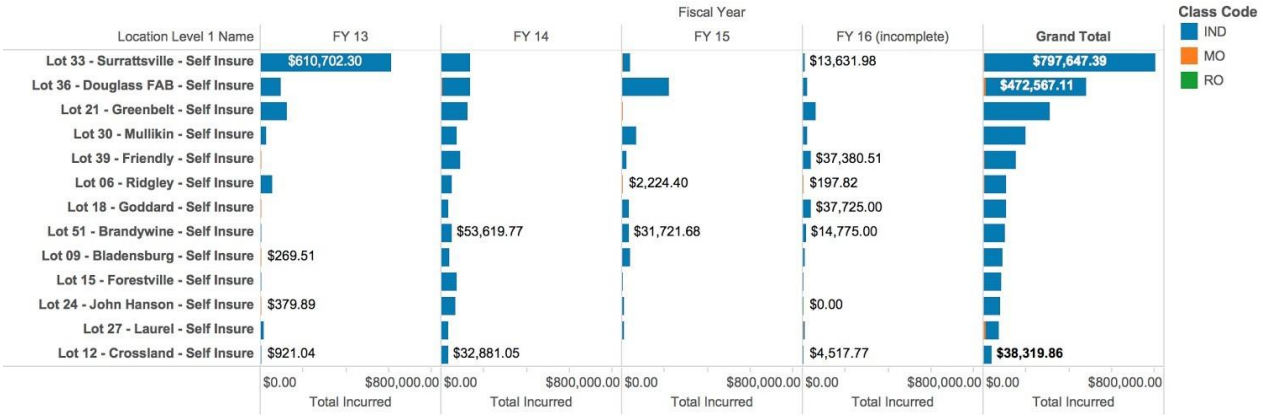
P13. Greenbelt: Repainted bus parking lines

	
P14. Greenbelt: Pothole at the entrance of the bus lot	P15. Laurel: Rotted trailer floor

Appendix G-4: Additional Workers' Compensation Data Analysis

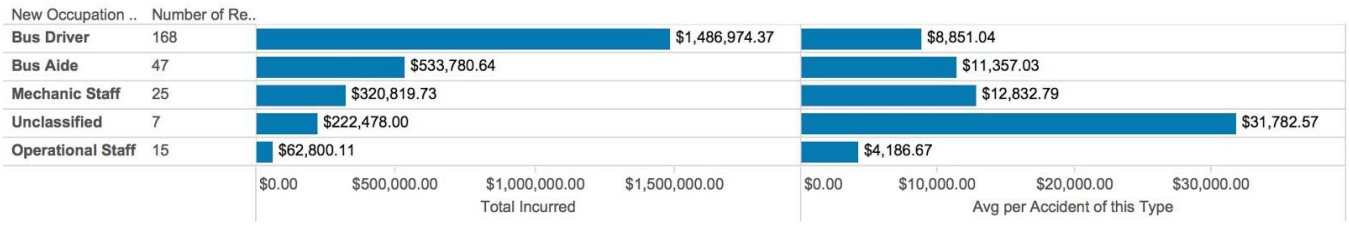
Total claim payouts by lot

The most total payouts came from Surrattsville but the cause was incidents that occurred during AY12-13. More recent payments were led by Douglass.



Total and average claim payouts by Occupation Type:

While the average payout per claim for bus drivers was the second-lowest, the large number of bus drivers led to the total payout for bus drivers to be highest.



Appendix G-5: Data Analysis Methodology Summary for Transportation: Pedestrian and Bus Lot Safety

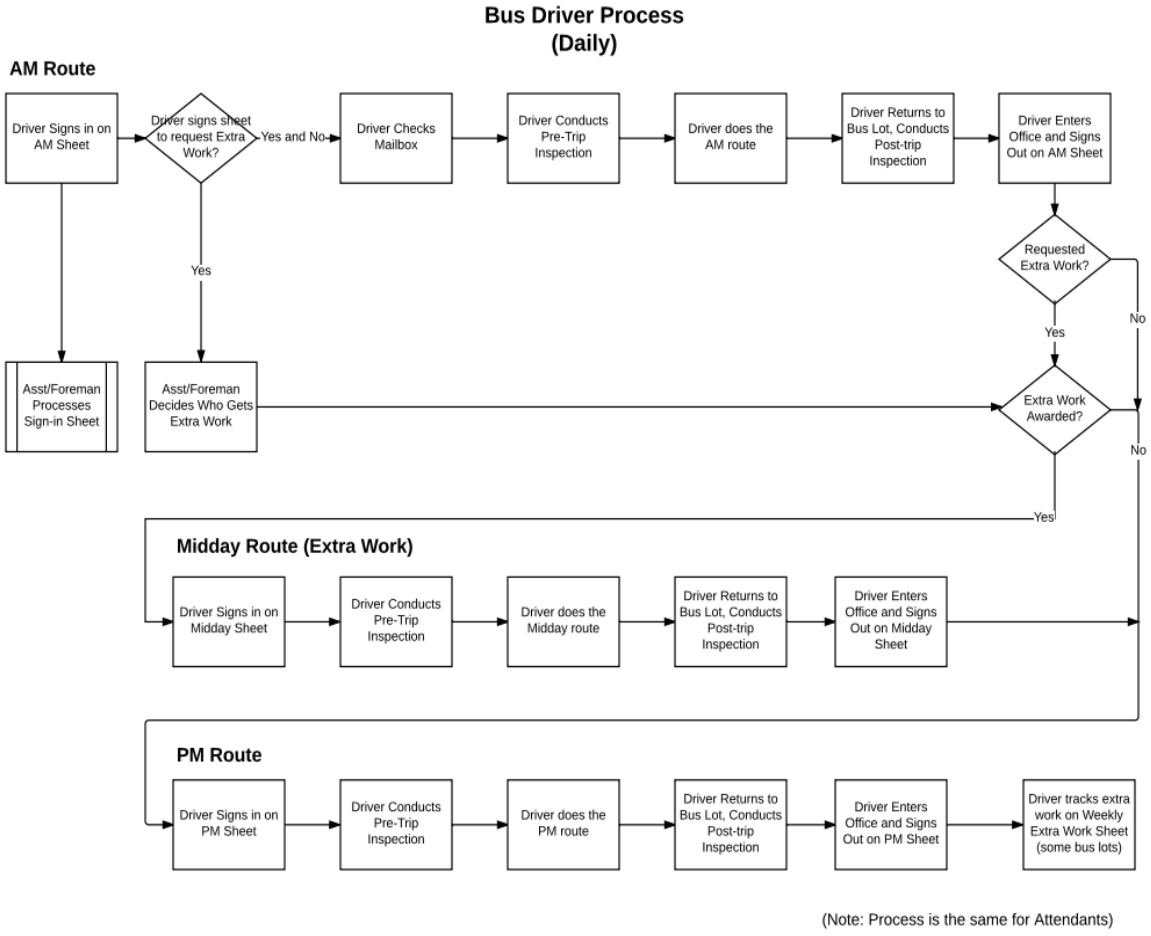
Workers' Compensation Data Analysis: The consultant team requested, and PGCPS provided, workers' compensation claim data and OSHA safety incident data for AY2013-2014, AY2014-2015 and AY2015-2016 to date (through April). The data included report only, medical only and indemnity (medical + lost wages) claims.

- Data Preparation: Accident types in the source data were too granular to provide insight into accident trends, so accidents were manually grouped into broader categories. The accident location data provided was insufficient to restrict accidents assessed to the specified scope of accidents on bus lots only, so incident descriptions were manually assessed to isolate incidents that occurred on bus lots rather than on route or other locations.

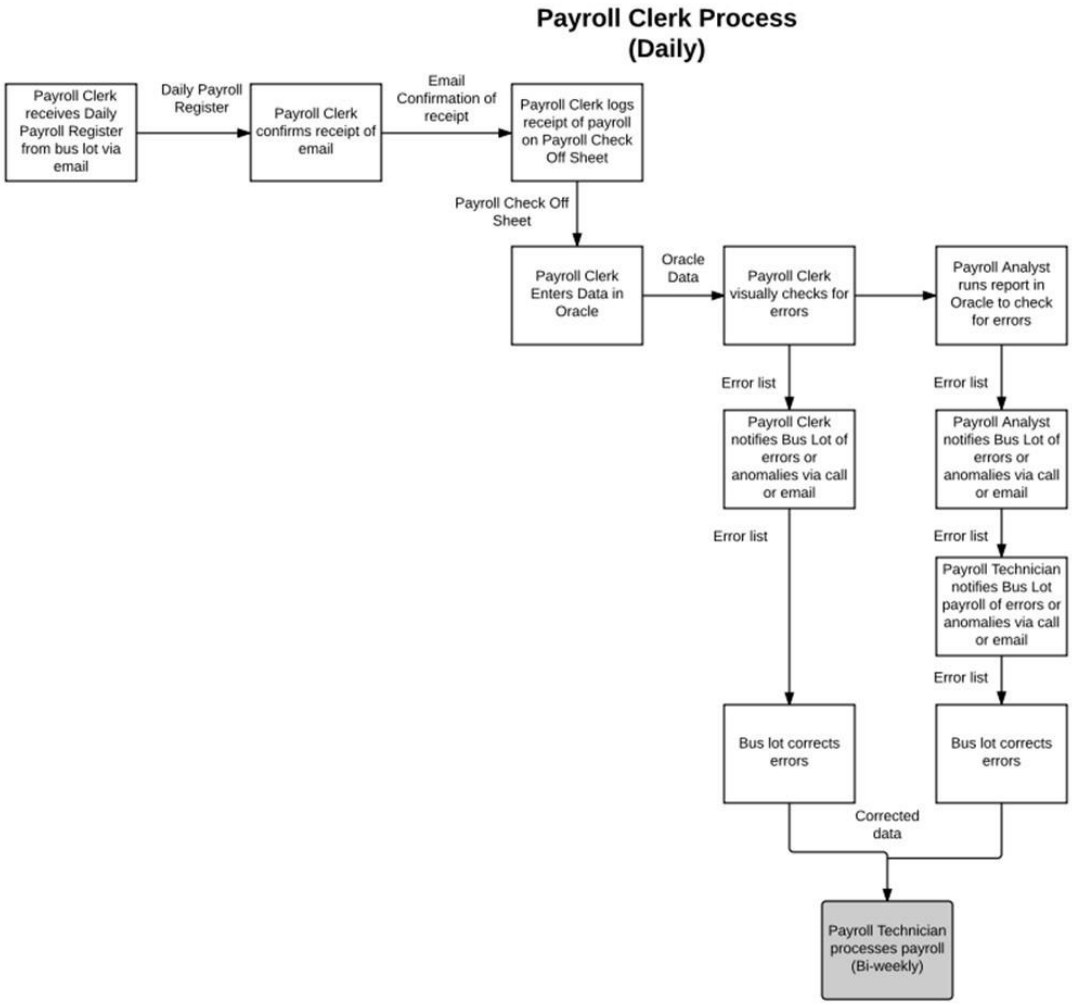
- Analysis: Descriptive visualizations were produced by loading the data into Tableau and examining total and average number of incidents and total cost (actual for closed claims and estimated in the for open claims). Data was disaggregated by claim type, bus lot, employee occupation, date and many combinations of these groupings. A full team assessment of key exploratory visualizations was conducted to interpret the data and compare the data against key findings from other analysis methods.

Appendix H: Transportation: Inadequate Records for Time Reporting and Salary Payments

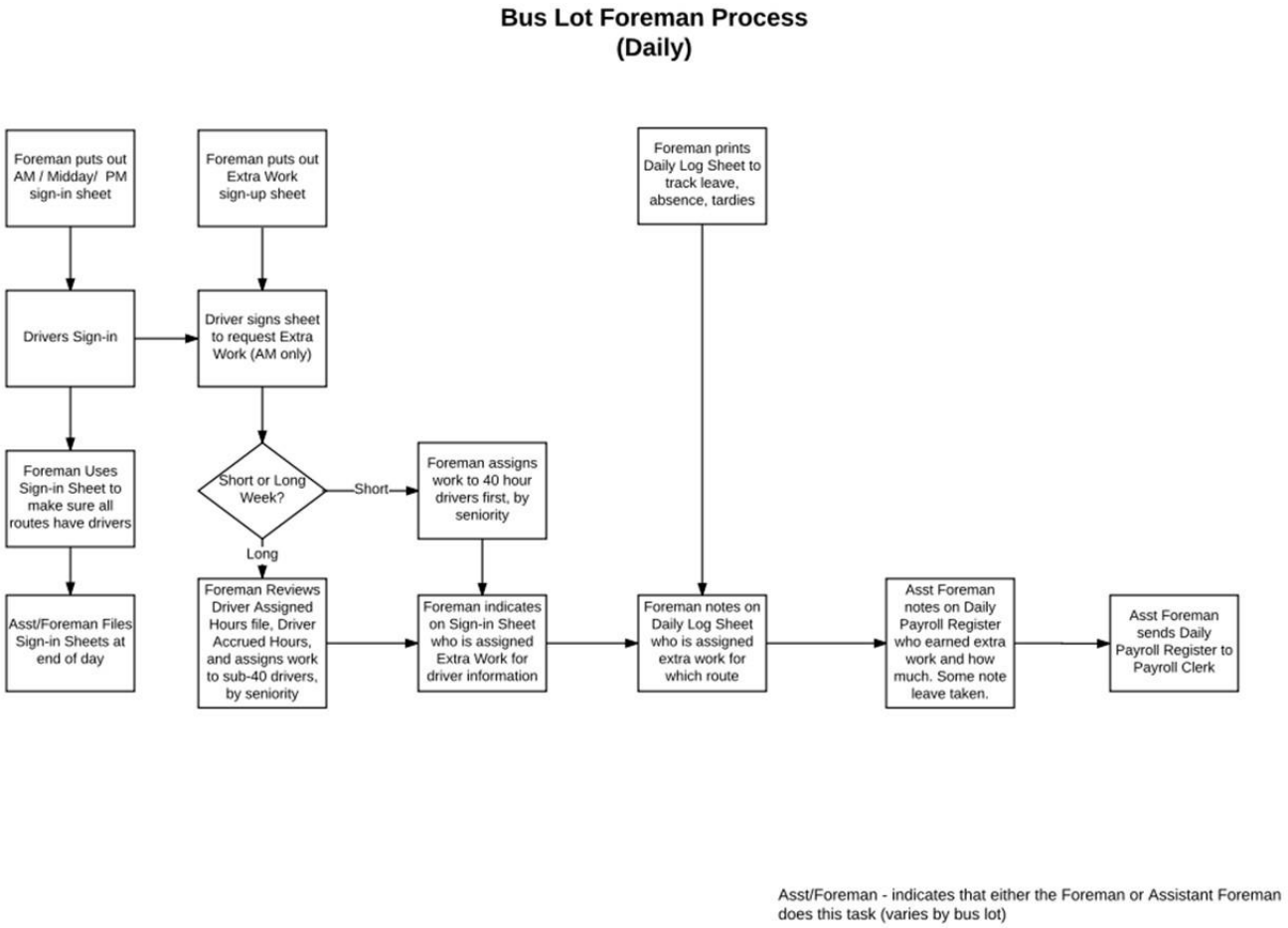
Appendix H-1: Bus Driver Payroll Process Map



Appendix H-2: Payroll Clerk Process Map



Appendix H-3: Bus Lot Foreman Process Map



Appendix H-4: Payroll Documents Summary Chart

Document Name	Description	Users	Owner	Type	Standardized across all lots (i.e., does a universal version of the form in use at each lot? No indicates each lot uses their own version of this form):
AM Sign-in Sheet	• The AM Sign-in Sheet is required by all bus drivers to sign when they report to the bus lot office. • The sheet is pre-populated with drivers' names and has signature columns for their morning arrival and post-route check that no students are on the bus.	Bus Drivers, Substitute Bus Drivers, Attendants, Substitute Attendants	Assistant Foreman	Paper Document	No
PM Sign-in Sheet	• The PM Sign-in Sheet is required by all bus drivers to sign when they report to the bus lot office. • The sheet is pre-populated with drivers' names and has signature columns for their morning arrival and post-route check that no students are on the bus.	Bus Drivers, Attendants, Substitute Attendants	Assistant Foreman	Paper Document	No
Extra Work Sign-Up Sheet	• The extra work sign-up sheet is an optional form for all bus drivers. • The form is available during AM sign-in times for bus drivers to indicate if they would like to work an extra shift (usually uncovered midday runs or activity runs). Drivers sign the sheet before going on the AM route. • If extra work is assigned, drivers can check this form upon their return to the office for the assignment.	Bus Drivers, Substitute Bus Drivers	Assistant Foreman	Paper Document	No
Extra Work Sheet	• The extra work sheet details the extra work hours completed. Drivers fill the form out and return it to the Foreman upon completion of the assignment. • There is no consistency on the timeframe for completion. Some lots	Bus Drivers, Attendants	Assistant Foreman	Paper Document	No

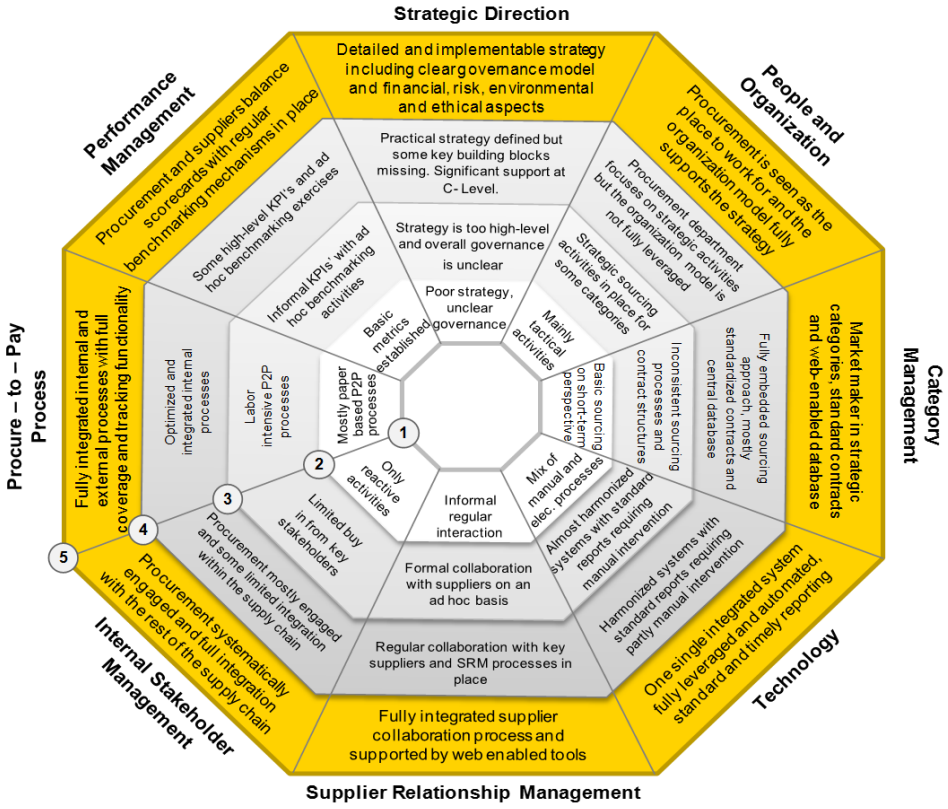
	complete the form daily and some complete the form on a weekly basis.				
Daily Log Sheet	• The Daily Log Sheet is the Foreman/Assistant Foreman's master tracking document for daily bus driver and attendant activity. • The document details any unscheduled activity related to attendance, timeliness and extra work assignments for all drivers and attendants.	Foreman/ Assistant Foreman	Foreman	Paper Document	No [PILOT FORM]
Daily Payroll Register	• The Daily Payroll Register is an excel spreadsheet that captures all of the extra work for every driver or attendant completed for that day. • The Foreman uses information from the AM/PM Sign-in Sheets, the Extra Work Sheet, and the Daily Log Sheet to input hours into the excel file. • This file is emailed to the payroll clerks for input into the ERP system	Assistant Foreman/ Payroll Clerks	Assistant Foreman	Excel File	Yes
Activity Invoice	• The Activity Invoice captures the invoicing details for special events, field trips, and athletic trips, etc. • Drivers submit this form with their extra work forms for invoicing in a system external to the ERP system.	Assistant Foreman/ Bus Drivers	Assistant Foreman	Paper Document	Yes
Weekly Driver's Log/ Weekly Time Sheet	• The Weekly Driver's Log captures all of the hours worked by a driver (or attendant) for a given week. • Drivers are responsible for completing this form at week's end and submitting it to the Assistant Foreman.	Bus Drivers	Assistant Foreman	Paper Document	No [PILOT FORM]
Seniority Report	• The Seniority Report lists all the drivers in order of Seniority, with start date and hire number on that date • The Foreman uses this document when assigning extra work by seniority • Seniority is listed on the Extra Work Sign-up sheets at some bus lots	Foreman/ Assistant Foreman	ERP System	Paper Document	No

Driver Attendance Log	• The Driver Attendance Log is a calendar format sheet showing a full year of school days for each driver. Logs for all drivers appear to be maintained in a binder for that school year. • The Foreman/assistant format manually marks leave time on the log for each employee	Foreman/ Assistant Foreman	Assistant Foreman	Paper Document	No
Time Verification Sheet	• The Time Verification Sheet is completed by drivers requesting that time be added to a run • Drivers use the form to track actual times for AM and PM runs over the course of one week • If needed, the Foreman uses the GPS system to verify the information provided by the driver • This form is used primarily at the beginning of the school year when runs are first completed.	Bus Driver	Foreman	Paper Document	No [PILOT FORM]

Appendix I: Accounts Payable

Appendix I-1: Procure to Pay Maturity (Leading Practices)

Procure-to-Pay Maturity Model



Appendix I-2: Invoice Processing Maturity (Leading Practices)

1 - Informal	2 - Developing	3 - Defined	4 – Advanced/Leading
• All invoices are manual with no electronic invoices used. Invoices are keyed in manually. • Manual documentation / cash or check used for payment. • Multiple and sometimes iterative number of approvals are required throughout the process.	• Invoice automation solution exists to scan and process manual invoices. • Some electronic invoicing is used. • Decentralized invoice receipt. • Check processing utilized. • Multiple and sometimes iterative approvals are required at the time of purchasing and at the time of payment.	• All invoices are routed directly to AP and a standard numbering convention is used. • Negative assurance is used for invoice authorization i.e. digitized copies of invoices are sent to delegated authorities in the company and paid when due unless the delegated authorities advise of issues. • Advanced check payment mechanisms are employed - manual check payment has been eliminated. • A defined number of approvals are required at the time of purchasing and at the time of payment.	• Majority of invoices are submitted centrally via EDI, supplier portal, PO flip, exchange, XML, email, or OCR scanning process. • Automatic reconciliation and integration with cash management and General Ledger (GL). • E-procurement supports automatic orders system to system and invoices raised automatically system to system to support VAT compliance. • Payment of repetitive invoices are automated. • Approval is limited to a single event or document; where possible, such approval occurs for the order (i.e. before receipt of the supplier invoice).

Appendix J: Finance and Treasury

Appendix J-1: Fixed Asset Management, Inventory Control Maturity (Leading Practices)

1 - Informal	2 - Developing	3 - Defined	4 - Advanced
• Treat every item the same, no inventory segmentation • No communication with customers on what is stocked / not stocked • No analytics or view of inventory use or demand • Have not identified any critical spares • No understanding of optimum delivery schedule • No understanding of delivery costs or customer service levels • Planned inventory replenishments cannot be committed to meet customer orders • No proactive communications with customers to manage expectations regarding supply constraints	• Infrequent communication with all customers, regardless of importance, to determine stocked / not stocked • Limited inventory segmentation, enabled by manual documentation • Very limited view of inventory use or demand • Have a limited, unevaluated, and dated list of critical spares • Limited understanding of optimum delivery schedule • Some prioritization applied to allocation of inventory during periods of short supply	• Regular communication with all customers, regardless of importance, to determine stocked / non stocked items • Basic inventory segmentation and categories, enabled by manual documentation • Segmentation not actively managed, and infrequently assessed / analyzed • Baseline view of inventory use and demand Segmentation not actively managed, and infrequently assessed/analyzed • Proactive, but often late communications with customers regarding potential supply issues	• Work with customers and analytics to optimize customer services, reduce working capital, and determine what is stocked and non/stocked. • Analyzing and identifying high-use, important items, informed by sophisticated data analytics • Segmentation actively managed and regularly analyzed • Identify and actively manage list of Critical Spares • Actively manage location of critical spares • Utilizing ABC segmentation: A = Critical, B = Important, C = Day-to-Day, enabled by sophisticated data analytics • Determining optimum delivery schedule based on cost and customer service level • Inventory automatically allocated to customer orders well in advance of shipment, hard and soft allocations available and based on confidence level on the order

Appendix K: HR Technology

Appendix K-1: Transition Plan Tracker

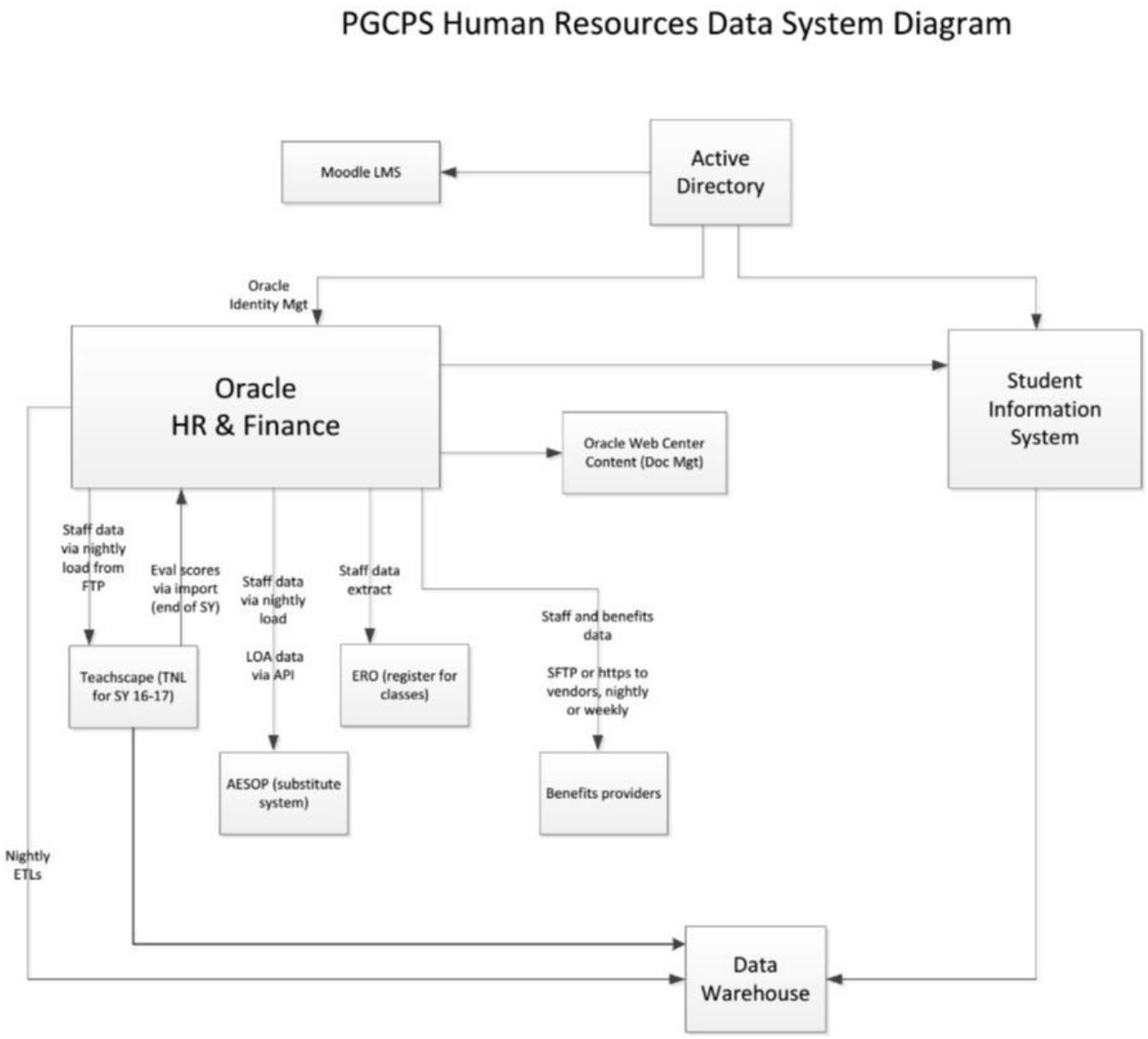
Transition Plan Tracker

PGCPS provided a Transition Plan Tracker, which includes the status of transition team recommendations. The first column (Transition Team Recommendation) below contains the HR Technology-related items from this document, last updated March 9, 2016. The second and third columns (Observations and Commentary) contain our commentary on the status of these items and supporting comments.

Transition Team Recommendation	Commentary
Transition Plan Tracker Items	
AESOP/ ERP LOA Only integration status (Allow teachers to enter leave thru the ERP system Self Service Leave Management ONLY. Teachers today enter leaves on Aesop and ERP System Self Service Leave Management). COMPLETE	Teachers now enter leave in the ERP system and this data is transferred via API to the substitute system. This also appears to enable better analysis on leave that teachers are taking.
A of the online application to make fields mandatory, assign posting to HR staff, filtering of applicants and provide better monitoring of open positions. COMPLETE	Enhancements appear to have been made to iRecruitment to address this. In phase 2 (go live planned June 2016), there are additional plans to create more fields as mandatory, to limit the data that HR staffers have to enter. They are planning to automate as much of the data migration.
Improve communication with candidates through the hiring process (initial application, assessment of resumes, interview candidate, and selection of applicant). COMPLETE	Through updates to iRecruitment, candidates receive communications regarding their status and next steps.
HR is developing a questionnaire for applicants to confirm they meet minimum qualifications to help filter applications for specific jobs.	This update is planned for phase 2 (go live June 2016) in order to support what management believes will be an improved screening process.
Integration of Gallup into the application process	This update is planned for phase 2 (go live June 2016) in order to support hiring decisions. Although the Gallup data will need to be accessed outside of the system as it is not integrated with iRecruitment.
Online candidate references – FY17	This update is planned for phase 2 (go live June 2016), though it will be after the hiring season for teachers so will be utilized for FY17.
Data security assessment for personal identifiable information COMPLETE (Dec/Jan 2015)	Verified as completed. There was a team from the ERP system that came in to assess.
Implementation of the ERP system Self-Service to an increased number of employment related functions (Time and Attendance, Direct Deposit sign up, Completion of tax forms, address change, pay slip analysis, W-2 printing, etc.)	A new hire to the system is able to complete many of the onboarding functions via self-service. For example: • Benefits enrollment • Direct Deposit • Beneficiaries

COMPLETE	• Change of Address • Life events Documentation for verification has to be submitted in person.
Assisted with creating and implementing an on-line resignation process for improved tracking and data collection. COMPLETE (Spring 2014)	This appears to be in place and allows for immediate alerts to come to HR from an employee. There is an exit survey that is attached, though currently have low response rates, and looking to improve the response rate.
HR Document Management implementation (close to completion)	This is an ongoing process. The document management team has worked with HR and scanned most of the paper files. The objective is to allow employees to go into the document management system and have access to the documents.
Implement Form 1095 (Health Insurance) (Expected completion 4/1/2016)	This appears to be in place.
The Divisions of Human Resources and Information Technology are partnering to enhance the iRecruitment applicant tracking system.	Significant progress appears to have been made through the Phase 1 upgrade and additional improvements are planned for Phase 2. Recommendations on further improvements are included in this report.

Appendix K-2: PGCPS Human Resource Technology System Diagram



Appendix K-3: Human Resource Interview List

The list below details all Prince George's County employees the consulting team interviewed for HR Technology.

Title	Department	Assessment Area
Coordinating Manager, HRMS Applications	Information Technology, Sasscer Admin. Building	Human Resource Technology
Director	Technology Training & Support	Human Resource Technology
Enterprise Systems Officer	Division of Information Technology	Human Resource Technology
Director	Technology Applications	Human Resource Technology
Executive Director	Division of Human Resources	Human Resource Technology
Senior HR Partner, HR Staffing Office - Centrally Managed Support Staffing	Human Resources Division	Human Resource Technology
Senior Human Resources Partner	Human Resources Operations and Staffing	Human Resource Technology
Director	Human Resources Operations and Staffing	Human Resource Technology
Senior Data Operations Partner	Human Resources Strategy and Workforce Planning	Human Resource Technology
Director	Compensation, Benefits, and HRIS	Human Resource Technology
Director	Payroll Services	Human Resource Technology
Executive Data Strategy Coordinator	Human Resources Strategy & Workforce Planning	Human Resource Technology
Recruitment Partner	Human Resources Strategy & Workforce Planning	Human Resource Technology
Recruitment Partner	Human Resources Strategy & Workforce Planning	Human Resource Technology
Principal	Concord Elementary School	Human Resource Technology
Principal	Benjamin Stoddard Middle School	Human Resource Technology
Principal	Lake Arbor Elementary School	Human Resource Technology

Appendix L: Payroll

Appendix L-1: Meetings and Methodology

Meeting	Attendees	Meeting Date
High Level Process Assessment of Payroll and Time management	PGCPS: Director of Payroll, Supervisor for Operations and Procedures, and Supervisor in Payroll and Time Management EY Team	Monday, April 4; 9:00 – 11:00AM
Follow up of Payroll and Time management	PGCPS: Director of Payroll, Supervisor for Operations and Procedures, and Supervisor in Payroll and Time Management EY Team	Wednesday, April 6; 2:00-3:00PM
HR time inputs	PGCPS: Director of HR Operations and Staffing EY Team	Thursday April 7; 5:00-5:30PM
Payroll Validation	PGCPS: Director of Payroll EY Team	Friday April 22; 11:00-12:00PM
Findings Validation	HR Leaders	TBD

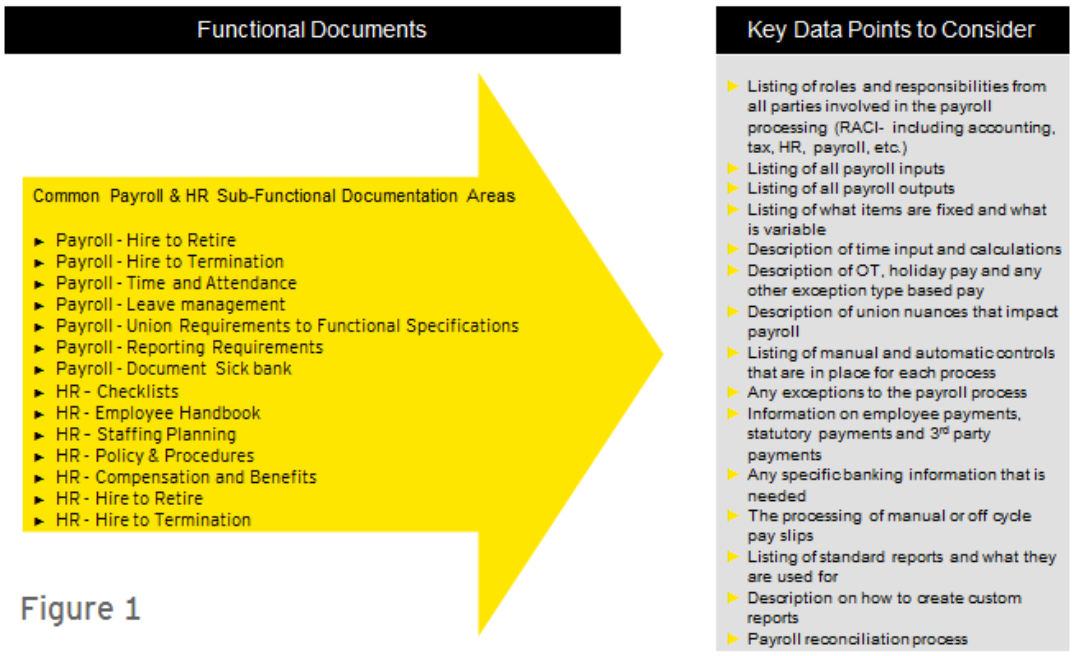
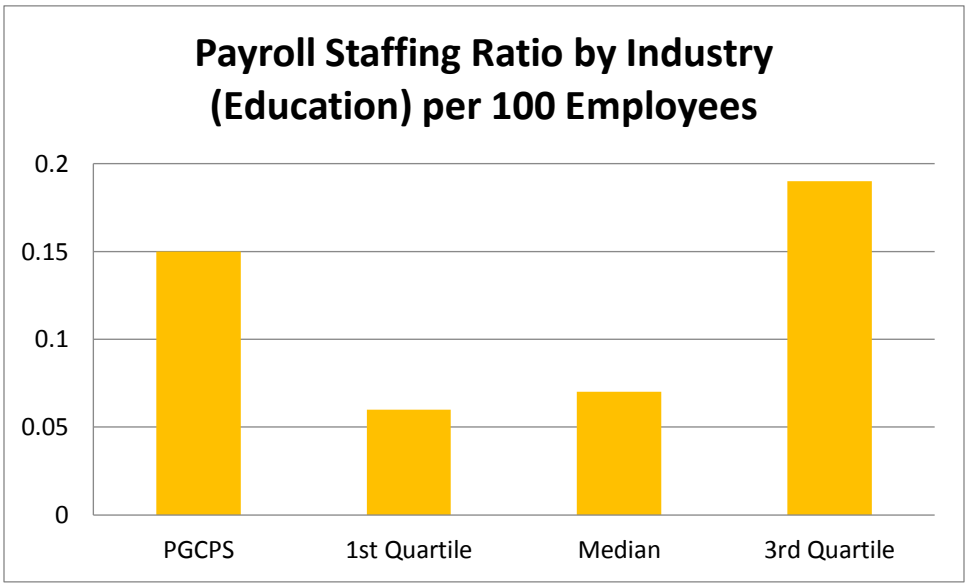
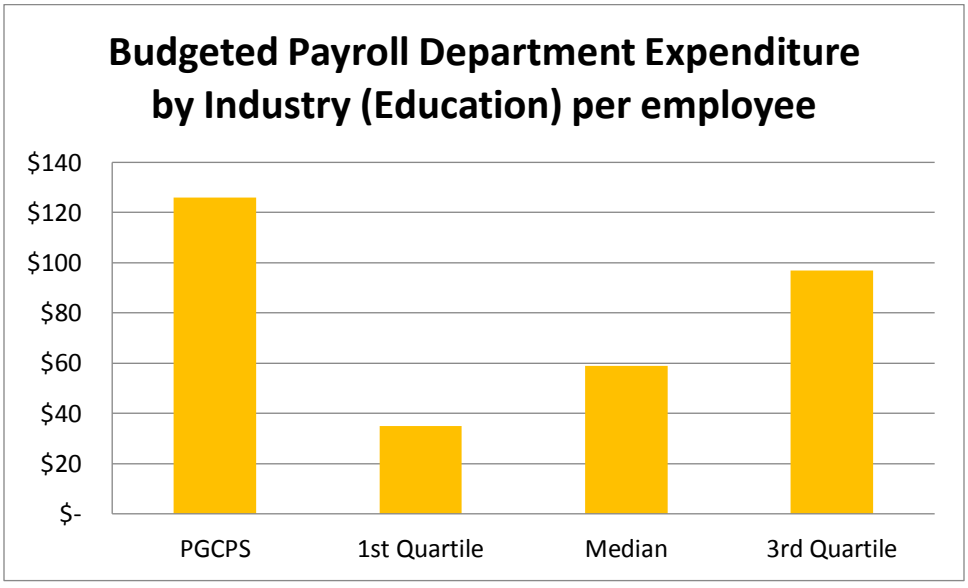


Figure 1

Appendix L-2: Payroll Staffing Ratio by Industry



Appendix L-3: Budgeting Payroll Department Expenditure by Industry



Appendix M: Access and Security Controls

Appendix M-1: Explanation of IAM Domains

Domain	Descriptions
Governance	• The Governance component is the foundation of the IAM program, which provides an overall oversight and management framework for IAM people, processes, and technology. This domain addresses the strategic alignment of organizational goals, roles and responsibilities, and the management and operations of the IAM infrastructure.
Identity & Credentials	• The Identity and Credential component refers to the tools and processes required to manage the identity and credentials of users and addresses the administration of identities and authentication across platforms.
Access	• The Access (Request and Approve) component of IAM leading practices framework refers to the process of requesting new access to systems (e.g., IT applications, information assets, etc.) and the determination of the request appropriateness. This domain addresses the processes and tools for routing the access request to the appropriate approver, registering their decision, and forwarding the request to the next stage of processing based on the actions of the approver. • The Access (Provisioning) component of the IAM leading practices framework refers to granting of access on a target system to the user while the de-provisioning component addresses the revocation of access to systems for a user. This domain addresses the process and tools to provision/de-provision user application and system access based on the related triggers, including: – Provisioning and de-provisioning based on submitted and approved access requests – Provisioning and de-provisioning based on other triggers (automated and manual), such as termination of employment, employee transfer, retirement of an application, etc. • The Access (Enforce) component of the IAM leading practices framework refers to the access capabilities in place to enforce authorization and authentication decisions for users. It addresses the processes and business rules in place surrounding the authorization and authentication of access. • The Access component of the IAM leading practices framework refers to the process of assessing who has what access to systems and certifying that user access is still appropriate for their job function. • The Access (Reconcile) component of the IAM leading practices framework addresses the process of detecting and correcting discrepancies of actual access to end-point provisioned access. • The Access component of the IAM leading practices framework refers the ability to query IAM related metrics and data sources, and present the results in an organized manner. It addresses the reporting ability to aid operational processes, support compliance efforts, and present key information to senior management.
Authoritative Sources	• The Authoritative Sources domain of the IAM leading practices framework refers to the authoritative sources (relied upon identity data & entitlement data) implemented across the organization that support key access management processes and controls.
Administration & Intelligence	• The Administration and Intelligence domain refers to management of identity data on multiple systems and the creation and maintenance of an inventory of an organization's IT resources.

Appendix M-2: Interview Log

#	Interview	PGCPS Stakeholders	Date

1	Planning interview	Director, Enterprise Systems Office and Director of Technology Operations	May 2nd
2	Workshop 1 : Governance	Director, Enterprise Systems Office	May 3rd
3	Workshop 2 : Identity & Credentials	Director, Enterprise Systems Office	May 4th
4	Workshop 3 : Access, Authoritative source and Administration	Director, Enterprise Systems Office	May 6th

Appendix M-3: Documents Assessed

#	Document	Description	File Name	Source
1	PGCPS ERP system Access Guidelines	Document outlining OAM guidelines		Director, Enterprise Systems Office
2	PGCPS IDM SDD V1.5	OIM Implementation Solution Design – January 2009		
3	PGCPS Operations Guide	OIM operations guideline – Date January 2010		
4	Project Chartner – IDM Phase 2	OIM implementation project charter for Phase 2		
5	Schoolmax Access Guidelines	Document explains how user access is granted to the SchoolMax Student Information System.		
6	Disa Roles Listing	TBD		
7	Finanical Management Practice – Audit Report (OLA)	OLA audit report dated February 2014		Department of Legislative Services – Maryland General Assembly

Appendix M-4: Maturity Assessment Framework

Assessment ranking	Maturity level	Maturity Description	Leading Practices Framework Equivalent
1	Initial	IAM processes are ad-hoc, completely undocumented and over use of manual processes.	Significant need for improvement
2	Repeatable	IAM processes are partially documented and there are repeatable processes in use with some being automated.	Need for improvement
3	Defined	IAM processes are well defined and confirmed by management.	Approaching Leading Practices
4	Managed	IAM processes are well defined, established, quantitatively managed and measured.	Reflective of Leading Practices
5	Optimized	IAM processes are well established with processes in place for continuous optimization and improvement.	

Appendix N: Disaster Recovery

Appendix N-1: Leading Practices in Disaster Recovery

The diagram above depicts a DR Assessment methodology leading practices framework which we used as the foundation for the PGCPS Information Technology Department assessment. The pyramid view highlights how each component of the disaster recovery program builds on the other.

Appendix N-2: Methodology

The assessment of the PGCPS Information Technology Department disaster recovery program, including an assessment of the following areas:

- Program foundations — (Governance): Assessment of organizational sponsorship, ownership, objectives, scope, funding, policies, management processes, and training & awareness underlying the Disaster Recovery program.
- Organization structure — (Governance): Assessment of the organization's governance structure to support disaster recovery program initiatives at all levels of the enterprise to confirm consistency and alignment of recovery priorities and strategies.
- Program roles and responsibilities — (Governance): Assessment of the extent to which business and executive roles and responsibilities have been defined to support the implementation and sustainability of the Disaster Recovery Program.

- Operating principles — (Governance): Assessment of the Disaster Recovery Program's processes, policies and procedures.
- Governance and oversight — (Governance): Assessment of existing disaster recovery governance and framework.
- Potential business continuity program exposures — (Risk Assessment): Determination of any specific threats, vulnerabilities, or potential vulnerabilities.
- Strategic alignment and roadmap against leading practices and standards — (Entire Maturity/Leading Practices Framework): Assess existing disaster recovery processes and procedures relative to standards to determine high-level gaps.
- Processes for design and execution of:
  - Risk analyses (Risk Assessment)
  - Business impact analysis (Business Impact Analysis)
  - Alignment of business and technology recovery requirements (Recovery Strategy and Plan Development)
  - Plan structure and development (Plan Development)
  - Testing and exercises (Maintain)
  - Training and awareness (Maintain)

Appendix N-3: DR Assessment Points of Contact

Title
Director of Technology Operations
Director of Technology Applications & Business Support, PGCPS
Enterprise System Officer, PGCPS

Appendix O: IT Security and Student Cybersecurity

Appendix O-1: Stakeholder List

Throughout the course of our engagement fieldwork, EY met with the following PGCPS stakeholders:

Title
Chief Information Officer
Directory of Technology Applications & Business Support
Director of Technology Operations
Enterprise Systems Officer
Sr. Network and Systems Engineer
Director of Information Technology
Director of Technology Training & Support
Director Purchasing & Supply Service

Appendix O-2: Student Cybersecurity Supporting Documentation

Children's Internet Protection Act Requirements

EY utilized the following set of requirements outlined in the Children's Internet Protection Act (CIPA) to support our assessment of Student Cybersecurity.

Requirement 1: A technology protection measure that blocks or filters internet access to visual depictions that are:

- Obscene
- Child pornography
- Harmful to minors

Note: Filtering is required on all computers, whether used by adults or minors. However, filtering may be disabled for adult users when requested.

Requirement 2: An internet safety policy must be in place and address the following:

- Access by minors to inappropriate matter on the internet
- The safety and security of minors when using electronic mail, chat rooms and other forms of direct electronic communications
- Unauthorized access, including so-called "hacking" and other unlawful activities by minors online
- Unauthorized disclosure, use and dissemination of personal information regarding minors
- Restricting minors' access to harmful materials

- Education of minors about appropriate online behavior, including interacting with other individuals on social networking websites and in chat rooms and cyberbullying awareness and response
- Monitoring of online activities for minors

PGCPS controls aligned to the identified CIPA requirements

EY identified and evaluated the following controls within the PGCPS environment which map to the CIPA requirements.

Domain	Control
Technology protection measure	Web content filtering is configured on all PGCPS-owned endpoints.
	Web content filtering is configured to block access to obscenity, child pornography and content harmful to minors.
	Administrative access to the web content filtering tool is restricted to appropriate personnel.
	Web browsing by minors is monitored on a periodic basis.
Internet safety policy	An internet safety policy is in place and communicated to PGCPS end users.
	An internet monitoring policy has been established to outline the process in place for the monitoring of the use of the internet by minors.

Appendix O-3: IT Security Supporting Documentation

Assessment Methodology

The following maturity descriptions were utilized to assess the current capabilities of the cybersecurity program.

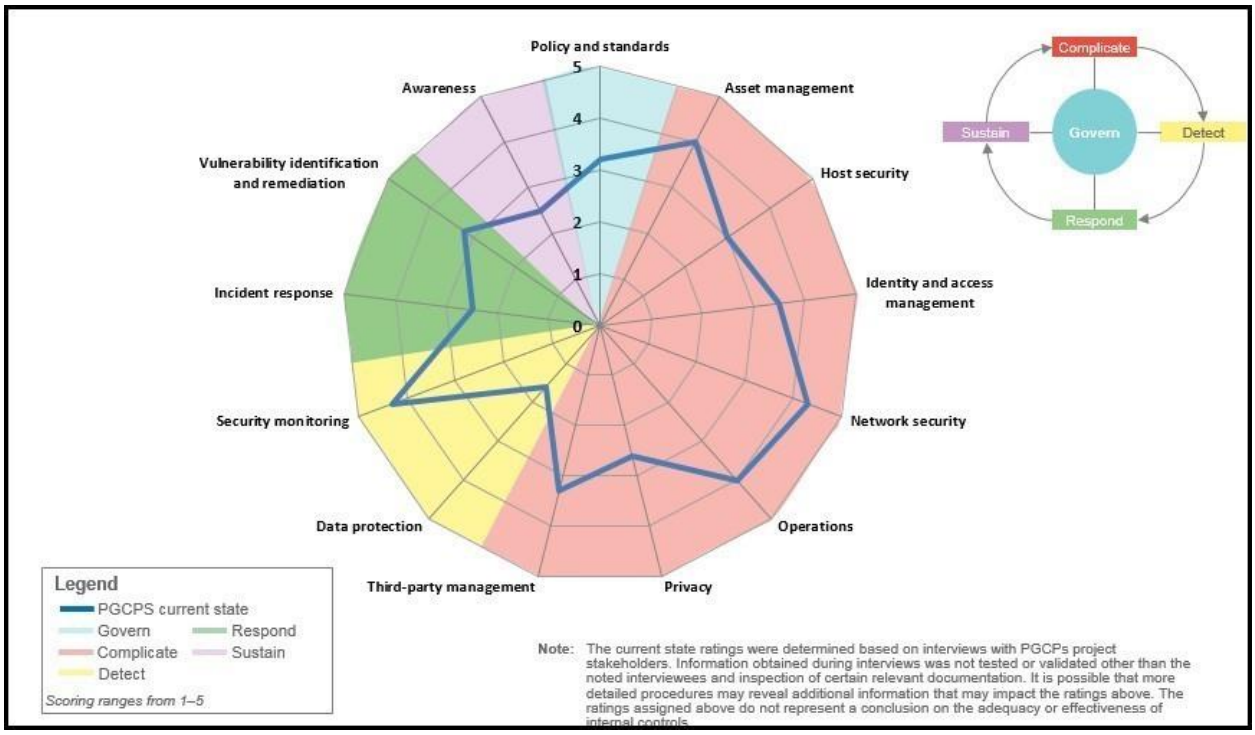
Maturity descriptions	
1	**Initial** Basic, undocumented, changing capability is in place with some technology and tools; limited local processes, and limited organizational support
2	**Repeatable** A partial capability is in place with a combination of some technology and tools; local processes covering some regions/business units or processes are repeatable but may not be good practice or maintained; and limited organizational arrangement to support good practice
3	**Defined** A defined capability is in place with significant technology and tools for some key resources and people; processes defined for some regions and/or business units; and organizational guidance is in place for some key regions and/or business units

4	**Managed** A mature capability is in place with advanced technology and tools for some key resources and people, consistent processes exist for some regions and/or business units; and some governance is in place (accountability/responsibility/metrics) for some key regions and/or business units
5	**Optimizing** An advanced capability is in place, which is leading-edge technology and tools* for all key resources and people; consistent process across regions, business units; and potentially effective governance is in place (accountability/responsibility/continual monitoring for improvement)

Maturity Assessment by in-scope domain

Domain Name	Current State Assessment
Policy and Standards Framework	3.2
Asset Management	4
Host Security	3
Identity and Access Management	3.5
Network Security	3.8
Operations	4
Privacy	2.6
Third party management	3.3
Data protection	1.6
Security Monitoring	4.3
Incident Response	2.5
Vulnerability Identification and Remediation	3.2
Awareness	2.5

Appendix O-4: Spider Diagram Current State Summary



Appendix O-5: Definition of in-scope domains

Domain	Definition
Asset management	• IT Asset Management (ITM) encompasses the infrastructure and processes necessary for the potential effective management, control and protection of the hardware and software assets within an organization, throughout all stages of their life cycle.
Awareness	• The scope for a security awareness program consists of all staff within an organization, including self-employed staff, contractors and third-party service providers. Special attention is given to employees with security responsibilities, for example, developers, service desk personnel, control room personnel, physical security guards, receptionists, information security and IT security staff, and management. • Security awareness is typically a program with a long-term shift and direction following a wave pattern – on a regular basis, new trainings and campaigns are launched as people typically require repetition to learn. • It is important to protect information throughout its life cycle – creation, distribution, storage, usage and destruction should receive equal attention.
Data protection	• EY takes a holistic view of data security. While data governance and management are foundational elements, the business is the driver for these elements. Security's focus is on protection, and a major component of this view relates to data loss prevention (DLP) with the program's goal to more effectively manage data loss risks. Data includes, for example, intellectual property, customer data, transaction data, privacy data as well as client-specific sensitive data. DLP is concerned with data throughout the data lifecycle; data at rest, data in motion and data in use. DLP requires an understanding of what data you have, the value of that data, your obligations to protect that data, where the

	data resides, who has access to the data, where the data is going, how you protect the data, the gaps and risks in your current protection and how you respond to data leaks.
Host security	• This domain covers the protection mechanisms and controls in place at the host level. Topics in scope for this section are: – Antivirus – Full disk encryption – Malware protection – Hardware access control – Patch management
Identity and access management	• Identity and access management can be described by defining its core components – identity management and access management. • Identity management refers to the processes associated with managing the entire lifecycle of digital identities and profiles for people, processes and technology. It typically includes: – Establishing unique identities and associated authentication credentials – Provisioning new user accounts – Managing identity data and credentials (e.g., self-service password reset) – Creating workflow processes for approving account creation and modification – Providing the ability to modify, suspend or remove accounts – Assessment and reporting of user identity information Access management refers to the processes used to control who has access to specific information assets, including: – Providing the capability to request specific entitlements and/or roles – Implementing workflow processes for approving the granting of entitlements and/or roles to a user – Providing the ability to modify or remove the entitlements and/or roles assigned to a user – Managing the association of entitlements to roles – Associating entitlements and roles with job functions – Providing the ability to assess, remove, approve and certify the entitlements and/or roles assigned to users – Providing the ability to assess historical access – Identifying, reporting and preventing inappropriate combinations of access
Incident response	• Incident response is defined as the formal function for reporting and responding to incidents that may adversely impact the organization's assets, operations, reputation, financial position, intellectual capital or confidential information. It serves as a critical component of an organization's overall information security structure and provides a foundation for identifying and responding to incidents in a consistent and well-organized manner.
Privacy	• The privacy domain focuses on data that is collected, disclosed to third parties, retained, used and shared across an organization.
Network security	• The network security domain captures the policies, processes, tools and technologies that are used to maintain security at the network level and includes access management (e.g., network devices, remote access, access to logs, third-party access), vulnerability management, incident identification and notification, device configuration and patch management, and network architecture, including wireless networks. • Although there is an overlap, we have attempted to not include topics related to host security, non-network architecture, security monitoring, and threat and vulnerability management.

Operations	•	The operations scope for the CPM framework is: 1. Change management 2. Configuration management 3. Communications and operations management 4. Backup 5. Physical and environment security 6. System planning and acceptance 7. Operations access control
Policy and standards framework	•	This domain encompasses the formal development, documentation, assessment and approval of the information security policies, standards and guidelines that define the information security requirements, processes and controls to be implemented for protection of an organization's information and IT assets. This domain also includes periodic assessment of PSGs, life cycle management processes, IT and business stakeholder engagement, and compliance monitoring for PSGs.
Security monitoring	•	Security monitoring includes the capabilities to successfully capture and monitor logs from network devices, hosts, files, databases and privileged user access so as to identify or be alerted of events that require further investigation due to the potential of being security events that trigger the incident response process.
Third-party management	•	This domain includes the process for managing third parties and the transfer and exchange to, or storage of information/data by, the third parties. This domain includes contract requirements and obligations with third parties, monitoring processes and compliance/assess checks for third parties.
Vulnerability identification and remediation	•	Vulnerability identification and remediation is the programmatic approach for an organization to identify, communicate, remediate and track vulnerabilities.

Appendix P: IT Investment

Appendix P-1: Methodology and Information Collection

Meetings and Interviews	Meeting/Interview Date
Kick off meeting	March 7, 2016
Interview with Purchasing Director	March 24, 2016
Interview with CFO	March 25, 2016
Interview with CIO	April 7, 2016

Documentation	Date provided
Original RFP issued by PGCPS	February 24, 2016
The Transition Team Report	February 24, 2016
PGCPS OLA Report	February 24, 2016
EY Proposal	February 24, 2016
EY Proposal Presentation to the County Counsel	February 24, 2016
Kick off deck	March 7, 2016
Consolidated Workplan	March 7, 2016
OLA Tracker	March 11, 2016
Transition Plan Tracker	March 11, 2016
PGCPS Purchasing Guidelines	March 25, 2016
PGCPS ITG Framework Final	April 18, 2016
Project One Pager Template	April 18, 2016
Business Case Template	April 18, 2016

Appendix P-2: IT Investment Management Leading Practices and Maturity Framework