#### **Broward County Public Schools**

#### **SMART Program Technology SBBC Schools & Infrastructure**

#### For the Bond Oversight Committee



Quarter Ended March 31, 2016

As of March 31, 2016, the SMART technology deployment for the 2015-16 school year is on schedule. The District has successfully delivered the following devices across 135 schools:

Description	Ordered	Installed
Student Laptops	41,203	29,319
Teacher Laptops	8,327	6,690
Student/Teacher Desktops	3,664	3,278
Tablet Computers	439	368
Computer Carts for Laptops	596	353
Wireless Access Points	6,100	4,251
Category 6 Cable Drops	4,658	4,658

As a part of each deployment, District staff meet with school leadership to determine instructional needs and device requirements prior to placing the orders. The Instructional Technology team along with Information & Technology have worked diligently to assist each school in their transition to the new computers by providing project management, order tracking, professional development, and other assistance as needed by the schools.

Additionally, the District issued a new bid for computers which was approved by the Board of Education at the February 9, 2016 meeting. The end result of this bidding process was a significant reduction in unit cost of computers which will allow schools to exceed their 3.5 to 1 student to computer ratio. This is great news as the real need is to get as close to 1 to 1 as possible.

The FY 2015-16 core infrastructure projects have focused in the following areas:

- Perimeter Defense and Traffic Management
- Load Balancing of traffic across the network
- Upgrading & Expansion of core network services
- Increased capacity and speed of core network switches
- Improved backup and restoration capabilities for critical business systems

At this time, all core infrastructure projects are on schedule, and will be completed throughout the 2016-17 school year.

Plans are currently underway to start the planning meetings with schools for the 2016-17 school year.

	Infrastructure	Comput	er Devi	ces	Stude Compute		Cat6	Wireless Ac	cess Po	ints**
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst
1631 Annabel C Perry Elementary	Complete	Complete	246	246	6.3:1	2.3:1	56	Complete	63	63
		Stud Laptops	181	181						
		Tch Laptops	60	60						
		Desktops	5	5						
		Tablets	0	0						
		Carts***	0	0						
2221 Atlantic Technical High	In Process	Meets Std	0	0	0.9:1	MS	108	In Process	132	132
		Stud Laptops	0	0						
		Tch Laptops	0	0						
		Desktops	0	0						
		Tablets	0	0						
		Carts***	0	0						
2511 Atlantic West Elementary	Meets Std	Complete	231	231	5.4:1	2:1	53	Complete	65	65
		Stud Laptops	189	189						
		Tch Laptops	20	20						
		Desktops	22	22						
		Tablets	0	0						
		Carts***	5	5						
2001 Banyan Elementary	In Process	Complete	269	269	5.5:1	1.6:1	0	In Process	69	0
		Stud Laptops	216	216						
		Tch Laptops	50	50						
		Desktops	3	3						
		Tablets	0	0						
		Carts***	0	0						
2041 Beachside Montessori Village	Not Started	In Process	567	0	9.0:1	IP	0	Not Started	0	0
		Stud Laptops	488	0						
		Tch Laptops	62	0						
		Desktops	7	0						
		Tablets	10	0						
		Carts***	12	0						
0201 Bennett Elementary	Meets Std	Complete	116	116	6.5:1	2.6:1	40	In Process	42	0
		Stud Laptops	53	53						
		Tch Laptops	38	38						
		Desktops	5	5						
		Tablets	20	20						
		Carts***	2	2						
0361 Blanche Ely High	Not Started	In Process	1,132	0	5.0:1	IP	0	Not Started	0	0
		Stud Laptops	968	0						_
		Tch Laptops	113	0						
		Desktops	51	0						
		Tablets	0	0						
		Carts***	30	0	l					

<sup>\*</sup>Student to computer ratio standard is 3.5:1

<sup>\*\*</sup>Wireless access point standard is 1 access point per classroom

<sup>\*\*\*</sup>Carts ordered/received are not included in the total count for computer devices, since it does not effect the student count ratio.

	Infrastructure	Comput	er Devi	ces	Stude Compute		Cat6	Wireless Acc	cess Po	ints**
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst
0871 Bright Horizons	Meets Std	Complete	29	29	6.6:1	1.5:1	0	Not Started	0	0
		Stud Laptops	0	0						
		Tch Laptops	23	23						
		Desktops	6	6						
		Tablets	0	0						
		Carts***	0	0						
0811 Broadview Elementary	Complete	In Process	302	302	8.1:1	IP	61	Complete	69	69
		Stud Laptops	232	232						
		Tch Laptops	68	68						
		Desktops	2	2						
		Tablets	0	0						
		Carts***	15	15			_			
1461 Castle Hill Elementary	Complete	Complete	371	371	9.1:1	1.2:1	39	Complete	18	18
		Stud Laptops	357	357						
		Tch Laptops	14	14						
		Desktops	0	0						
		Tablets	0	0						
		Carts***	0	0						
2641 Central Park Elementary	In Process	Complete	229	229	4.6:1	2.1:1	0	In Process	76	0
		Stud Laptops	169	169						
		Tch Laptops	58	58						
		Desktops	1	1						
		Tablets	1	1						
		Carts***	0	0						
3771 Challenger Elementary	Meets Std	Complete	341	341	5.7:1	2.2:1	70	Complete	72	72
		Stud Laptops	271	271						
		Tch Laptops	68	68						
		Desktops	2	2						
		Tablets	0	0						
		Carts***	0	0						
2961 Chapel Trail Elementary	Complete	Complete	324	324	9.3:1	1.3:1	58	Complete	71	71
		Stud Laptops	266	266						
		Tch Laptops	52	52						
		Desktops	6	6						
		Tablets	0	0						
		Carts***	0	0						
3391 Charles W Flanagan High	Complete	In Process	589	589	3.1:1	IP	120	Complete	152	152
		Stud Laptops	405	405						
		Tch Laptops	95	95						
		Desktops	83	83						
		Tablets	6	6						
		Carts***	0	0						

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	Infrastructure	Comput	er Devi	ces	Stude Compute		Cat6	Wireless Acc	cess Po	ints**
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst
1681 Coconut Creek High	Complete	Complete	526	526	5.3:1	1.8:1	119	Complete	121	121
		Stud Laptops	432	432						
		Tch Laptops	85	85						
		Desktops	9	9						
		Tablets	0	0						
		Carts***	14	14						
3741 Coconut Palm Elementary	Complete	Complete	300	300	4.6:1	1.6:1	0	Meets Std	0	0
		Stud Laptops	245	245						
		Tch Laptops	52	52						
		Desktops	3	3						
		Tablets	0	0						
		Carts***	0	0						
0331 Collins Elementary	Meets Std	In Process	151	0	6.3:1	IP	0	Not Started	0	0
		Stud Laptops	110	0						
		Tch Laptops	33	0						
		Desktops	8	0						
		Tablets	0	0						
		Carts***	0	0						
1211 Cooper City Elementary	Complete	Complete	198	198	4.2:1	2.1:1	0	Meets Std	0	0
		Stud Laptops	127	127						
		Tch Laptops	46	46						
		Desktops	25	25						
		Tablets	0	0						
		Carts***	0	0						
2011 Coral Cove Elementary	Not Started	In Process	536	0	8.3:1	IP	0	Not Started	0	0
		Stud Laptops	476	0						
		Tch Laptops	60	0						
		Desktops	0	0						
		Tablets	0	0						
		Carts***	10	0						
3861 Coral Glades High	Complete	Complete	829	829	6.7:1	2:1	126	Complete	1	1
		Stud Laptops	511	511						
		Tch Laptops	101	101						
		Desktops	211	211						
		Tablets	6	6						
		Carts***	2	2						
3041 Coral Park Elementary	In Process	Complete	185	185	8.2:1	3.5:1	0	In Process	59	0
		Stud Laptops	138	138						
		Tch Laptops	47	47						
		Desktops	0	0						
		Tablets	0	0						
		Carts***	0	0						

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	Infrastructure	Comput	er Devi	ces	Stude Compute		Cat6	Wireless Acc	cess Po	ints**
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst
2551 Coral Springs Elementary	In Process	Complete	194	194	7.3:1	2.1:1	62	In Process	64	0
		Stud Laptops	141	141						
		Tch Laptops	52	52						
		Desktops	1	1						
		Tablets	0	0						
		Carts***	0	0						
1151 Coral Springs High	Complete	Complete	659	659	4.5:1	2.8:1	101	Complete	8	8
		Stud Laptops	385	385						
		Tch Laptops	120	120						
		Desktops	154	154						
		Tablets	0	0						
		Carts***	14	14						
3111 Country Hills Elementary	Not Started	Complete	385	385	10.9:1	1.9:1	0	Not Started	0	0
		Stud Laptops	330	330						
		Tch Laptops	55	55						
		Desktops	0	0						
		Tablets	0	0						
		Carts***	0	0						
0901 Cresthaven Elementary	Not Started	In Process	538	0	12.0:1	IP	0	Not Started	0	0
		Stud Laptops	487	0						
		Tch Laptops	45	0						
		Desktops	6	0						
		Tablets	0	0						
		Carts***	15	0						
0221 Croissant Park Elementary	Meets Std	In Process	605	0	10.7:1	IP	0	Not Started	0	0
		Stud Laptops	538	0						
		Tch Laptops	60	0						
		Desktops	7	0						
		Tablets	0	0						
		Carts***	10	0						
3222 Cross Creek	Meets Std	Complete	36	36	5.9:1	1.9:1	28	In Process	32	0
		Stud Laptops	0	0						
		Tch Laptops	33	33						
		Desktops	1	1						
		Tablets	2	2						
		Carts***	0	0						
3623 Cypress Bay High	In Process	In Process	1,367	1,367	5.4:1	IP	158	In Process	159	159
		Stud Laptops	930	930						
		Tch Laptops	219	219						
		Desktops	147	147						
		Tablets	71	71						
		Carts***	37	37						

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	Infrastructure	Comput	er Devi	ces	Stude Compute		Cat6	Wireless Acc	cess Po	ints**
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst
1781 Cypress Elementary	Not Started	In Process	693	0	14.2:1	IP	0	Not Started	0	0
		Stud Laptops	622	0						
		Tch Laptops	66	0						
		Desktops	5	0						
		Tablets	0	0						
		Carts***	15	0						
0101 Dania Elementary	Meets Std	In Process	365	0	7.7:1	IP	0	Not Started	0	0
		Stud Laptops	298	0						
		Tch Laptops	53	0						
		Desktops	14	0						
		Tablets	0	0						
		Carts***	0	0						
2801 Davie Elementary	Meets Std	In Process	308	300	11.3:1	IP	52	Complete	55	55
		Stud Laptops	224	220						
		Tch Laptops	75	75						
		Desktops	9	5						
		Tablets	0	0						
		Carts***	8	8						
0011 Deerfield Beach Elementary	Meets Std	In Process	566	0	11.3:1	IP	0	Not Started	0	0
		Stud Laptops	500	0						
		Tch Laptops	61	0						
		Desktops	5	0						
		Tablets	0	0						
		Carts***	11	0						
0391 Deerfield Park Elementary	Meets Std	In Process	460	0	12.8:1	IP	0	Not Started	0	0
		Stud Laptops	410	0						
		Tch Laptops	47	0						
		Desktops	3	0						
		Tablets	0	0						
		Carts***	10	0						
3962 Discovery Elementary	In Process	Complete	434	434	16.6:1	2:1	0	In Process	38	0
		Stud Laptops	315	315						
		Tch Laptops	68	68						
		Desktops	7	7						
		Tablets	44	44						
		Carts***	12	12						
3221 Drew Elementary	Meets Std	In Process	277	0	5.2:1	IP	0	Not Started	0	0
		Stud Laptops	223	0						
		Tch Laptops	49	0						
		Desktops	5	0						
		Tablets	0	0						
		Carts***	11	0						

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	Infrastructure	Comput	er Devi	ces	Stude Compute		Cat6	Wireless Acc	cess Po	ints**
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst
0721 Driftwood Elementary	Meets Std	Complete	197	197	6.3:1	1.7:1	35	Complete	48	48
		Stud Laptops	155	155						
		Tch Laptops	42	42						
		Desktops	0	0						
		Tablets	0	0						
		Carts***	0	0						
3461 Eagle Point Elementary	In Process	Complete	355	355	6.7:1	2.8:1	81	In Process	82	0
		Stud Laptops	269	269						
		Tch Laptops	86	86						
		Desktops	0	0						
		Tablets	0	0						
	_	Carts***	0	0						
3441 Eagle Ridge Elementary	Not Started	In Process	413	0	6.1:1	IP	0	Not Started	0	0
		Stud Laptops	352	0						
		Tch Laptops	59	0						
		Desktops	2	0						
		Tablets	0	0						
		Carts***	2	0						
3191 Embassy Creek Elementary	In Process	Complete	477	477	9.5:1	2:1	51	In Process	72	0
		Stud Laptops	369	369						
		Tch Laptops	102	102						
		Desktops	6	6						
		Tablets	0	0						
	1	Carts***	4	4						
2942 Everglades Elementary	In Process	Complete	448	448	8.1:1	1.9:1	39	In Process	69	0
		Stud Laptops	387	387						
		Tch Laptops	53	53						
		Desktops	8	8						
		Tablets	0	0						
	T	Carts***	0	0	<u> </u>					
3731 Everglades High	Not Started	In Process	1,308	0	6.4:1	IP	0	Not Started	0	0
		Stud Laptops	977	0						
		Tch Laptops	251	0						
		Desktops Tablets	08 0	0						
		Carts***	16	0						
1641 Fairway Elementary	Meets Std	Complete	202	202	6.1:1	2:1	69	Complete	64	64
	1	Stud Laptops	133	133			1	10.000		
		Tch Laptops	50	50						
		Desktops	19	19						
		Tablets	0	0						

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	Infrastructure	Comput	er Devi	ces	Stude Compute		Cat6	Wireless Acc	cess Po	ints**
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst
2541 Flamingo Elementary	Complete	Complete	250	250	6.0:1	1.7:1	43	Complete	52	52
	-	Stud Laptops	202	202						
		Tch Laptops	46	46						
		Desktops	2	2						
		Tablets	0	0						
		Carts***	0	0						
0851 Floranada Elementary	Not Started	Complete	400	400	13.6:1	1.5:1	0	Not Started	0	0
		Stud Laptops	335	335						
		Tch Laptops	58	58						
		Desktops	7	7						
		Tablets	0	0						
		Carts***	0	0						
3531 Fox Trail Elementary	Complete	Complete	513	513	6.1:1	1.3:1	76	Complete	82	82
		Stud Laptops	386	386						
		Tch Laptops	88	88						
		Desktops	29	29						
		Tablets	10	10						
		Carts***	0	0						
3642 Gator Run Elementary	In Process	Complete	471	471	10.5:1	1.9:1	45	In Process	87	0
		Stud Laptops	389	389						
		Tch Laptops	69	69						
		Desktops	13	13						
		Tablets	0	0						
		Carts***	10	10						
2851 Griffin Elementary	In Process	Complete	257	257	8.5:1	1.8:1	0	In Process	47	0
		Stud Laptops	184	184						
		Tch Laptops	44	44						
		Desktops	28	28						
		Tablets	1	1						
		Carts***	0	0						
0592 Hallandale Adult	Complete	Meets Std	0	0	1.5:1	MS	78	Complete	70	70
		Stud Laptops	0	0						
		Tch Laptops	0	0						
		Desktops	0	0						
		Tablets	0	0						
		Carts***	0	0						
0131 Hallandale Elementary	Not Started	Complete	336	336	5.2:1	2.4:1	0	Not Started	0	0
		Stud Laptops	256	256						
		Tch Laptops	73	73						
		Desktops	3	3						
		Tablets	4	4						
		Carts***	0	0						

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	Infrastructure	Comput	er Devi	ces	Stude Compute		Cat6	Wireless Acc	cess Po	ints**
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst
0491 Harbordale Elementary	In Process	Complete	182	182	14.3:1	2.2:1	13	In Process	33	0
	-	Stud Laptops	141	141						
		Tch Laptops	37	37						
		Desktops	3	3						
		Tablets	1	1						
		Carts***	0	0						
3131 Hawkes Bluff Elementary	Complete	Complete	300	300	5.7:1	2:1	47	Complete	62	62
		Stud Laptops	292	292						
		Tch Laptops	8	8						
		Desktops	0	0						
		Tablets	0	0						
		Carts***	0	0						
3961 Heron Heights Elementary	Meets Std	In Process	836	0	20.9:1	IP	0	Not Started	0	0
		Stud Laptops	747	0						
		Tch Laptops	80	0						
		Desktops	9	0						
		Tablets	0	0						
		Carts***	15	0						
0121 Hollywood Central Elementary	Not Started	In Process	337	0	5.3:1	IP	0	Not Started	0	0
		Stud Laptops	287	0						
		Tch Laptops	44	0						
		Desktops	6	0						
		Tablets	0	0						
		Carts***	0	0						
0111 Hollywood Hills Elementary	Meets Std	In Process	537	0	15.1:1	IP	0	Not Started	0	0
		Stud Laptops	473	0						
		Tch Laptops	53	0						
		Desktops	11	0						
		Tablets	0	0						
		Carts***	7	0						
1761 Hollywood Park Elementary	Meets Std	Complete	202	202	8.5:1	1.9:1	45	In Process	45	42
		Stud Laptops	163	163						
		Tch Laptops	39	39						
		Desktops	0	0						
		Tablets	0	0						
		Carts***	0	0						
2531 Horizon Elementary	Meets Std	Complete	195	195	5.1:1	1.7:1	0	In Process	56	0
		Stud Laptops	152	152						
		Tch Laptops	40	40						
		Desktops	2	2						
		Tablets	1	1						
		Carts***	1	1						

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	Infrastructure	Compu	ter Devi	ces	Stude Compute		Cat6	Wireless Access Points**		
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst
3471 Indian Ridge Middle	Complete	Not Started	0	0	3.3:1	N/S	0	Meets Std	0	0
		Stud Laptops	0	0						
		Tch Laptops	0	0						
		Desktops	0	0						
		Tablets	0	0						
		Carts***	0	0						
2751 J P Taravella High	Complete	In Process	1,252	1,252	7.4:1	IP	147	Complete	184	184
		Stud Laptops	940	940						
		Tch Laptops	168	168						
		Desktops	144	144						
		Tablets	0	0						
		Carts***	33	33						
1971 James S Hunt Elementary	Meets Std	Complete	320	320	10.9:1	1.9:1	58	In Process	58	0
		Stud Laptops	263	263						
		Tch Laptops	53	53						
		Desktops	4	4						
		Tablets	0	0						
		Carts***	3	3						
3591 Lakeside Elementary	In Process	Complete	372	372	9.0:1	1.7:1	53	In Process	54	0
		Stud Laptops	314	314						
		Tch Laptops	55	55						
		Desktops	2	2						
		Tablets	1	1						
		Carts***	0	0						
1381 Lauderhill Paul Turner Elementary	Meets Std	In Process	225	225	10.0:1	IP	59	Complete	26	26
		Stud Laptops	162	162						
		Tch Laptops	63	63						
		Desktops	0	0						
		Tablets	0	0						
		Carts***	0	0						
3821 Liberty Elementary	Complete	Complete	394	394	8.9:1	2.1:1	76	Complete	79	79
		Stud Laptops	277	277						
		Tch Laptops	72	72						
		Desktops	45	45						
		Tablets	0	0						
		Carts***	4	4						
1091 Lloyd Estates Elementary	Meets Std	Complete	253	253	12.3:1	1.5:1	0	Not Started	0	0
		Stud Laptops	195	195						
		Tch Laptops	44	44						
		Desktops	4	4						
		Tablets	10	10						
		Carts***	4	4						

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	Infrastructure	Comput	er Devi	ces	Stude Compute		Cat6	Wireless Acc	cess Po	ints**
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst
3101 Lyons Creek Middle	In Process	Complete	351	351	3.1:1	3:1	0	In Process	9	0
		Stud Laptops	220	220						
		Tch Laptops	74	74						
		Desktops	54	54						
		Tablets	3	3						
		Carts***	1	1						
3841 Manatee Bay Elementary	In Process	Complete	512	512	7.9:1	1.8:1	71	In Process	81	0
		Stud Laptops	394	394						
		Tch Laptops	79	79						
		Desktops	19	19						
		Tablets	20	20						
	_	Carts***	9	9						
2741 Maplewood Elementary	Complete	Complete	229	229	9.7:1	2.1:1	46	Complete	61	61
		Stud Laptops	168	168						
		Tch Laptops	57	57						
		Desktops	4	4						
		Tablets	0	0						
		Carts***	0	0						
1161 Margate Elementary	Complete	Complete	391	391	6.4:1	1.8:1	56	Complete	79	79
		Stud Laptops	299	299						
		Tch Laptops	70	70						
		Desktops	22	22						
		Tablets	0	0						
		Carts***	0	0			_			
0341 Mary M Bethune Elementary	Complete	Complete	356	356	7.7:1	1.6:1	39	In Process	64	64
		Stud Laptops	300	300						
		Tch Laptops	56	56						
		Desktops	0	0						
		Tablets	0	0						
		Carts***	0	0						
0841 McNab Elementary	Complete	Complete	203	203	5.4:1	1.9:1	0	Meets Std	0	0
		Stud Laptops	156	156						
		Tch Laptops	42	42						
		Desktops	5	5						
		Tablets	0	0						
		Carts***	0	0						
0761 Meadowbrook Elementary	Meets Std	In Process	472	0	7.9:1	IP	0	Not Started	0	0
		Stud Laptops	410	0						
		Tch Laptops	57	0						
		Desktops	5	0						
		Tablets	0	0						
		Carts***	15	0						

<sup>\*</sup>Student to computer ratio standard is 3.5:1

<sup>\*\*</sup>Wireless access point standard is 1 access point per classroom

<sup>\*\*\*</sup>Carts ordered/received are not included in the total count for computer devices, since it does not effect the student count ratio.

	Infrastructure	Compu	ter Devi	ces	Stude Compute		Cat6	Wireless Ac	cess Po	ints**
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst
4772 Millennium Middle	Meets Std	Complete	473	473	5.5:1	1.7:1	61	Complete	94	94
		Stud Laptops	275	275						
		Tch Laptops	57	57						
		Desktops	135	135						
		Tablets	6	6						
		Carts***	11	11						
0531 Miramar Elementary	Meets Std	Complete	335	335	7.1:1	1.3:1	64	Complete	63	63
		Stud Laptops	281	281						
		Tch Laptops	49	49						
		Desktops	5	5						
		Tablets	0	0						
		Carts***	0	0						
1751 Miramar High	Meets Std	Complete	1,035	1,035	5.5:1	1.6:1	126	Complete	156	156
		Stud Laptops	872	872						
		Tch Laptops	137	137						
		Desktops	26	26						
		Tablets	0	0						
		Carts***	30	30						
3541 Monarch High	In Process	In Process	856	180	7.9:1	IP	0	In Process	2	0
		Stud Laptops	464	0						
		Tch Laptops	170	68						
		Desktops	192	82						
		Tablets	30	30						
		Carts***	15	1						
2671 Nob Hill Elementary	In Process	Complete	317	317	9.4:1	1.3:1	0	In Process	57	0
		Stud Laptops	261	261						
		Tch Laptops	46	46						
		Desktops	6	6						
		Tablets	4	4						
		Carts***	0	0						
0561 Norcrest Elementary	Complete	Complete	396	396	7.5:1	1.6:1	52	Complete	71	71
		Stud Laptops	396	396						
		Tch Laptops	0	0						
		Desktops	0	0						
		Tablets	0	0						
		Carts***	0	0						
0521 North Andrews Gardens Elementary	Meets Std	Complete	382	382	8.4:1	1.8:1	0	Not Started	0	0
		Stud Laptops	257	257						
		Tch Laptops	64	64						
		Desktops	10	10						
		Tablets	51	51						
		Carts***	4	4	]					

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	Infrastructure	Comput	er Devi	ces	Stude Compute		Cat6	Wireless Ac	cess Po	ints**
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst
1241 Northeast High	Complete	In Process	586	586	5.9:1	IP	117	In Process	126	126
		Stud Laptops	240	240						
		Tch Laptops	97	97						
		Desktops	239	239						
		Tablets	10	10						
		Carts***	1	1						
1282 Nova Blanche Forman Elementary	In Process	Complete	289	289	8.7:1	1.5:1	0	In Process	55	0
		Stud Laptops	230	230						
		Tch Laptops	54	54						
		Desktops	5	5						
		Tablets	0	0						
		Carts***	0	0						
1281 Nova High	In Process	Complete	799	799	5.9:1	1.8:1	128	In Process	128	128
		Stud Laptops	508	508						
		Tch Laptops	154	154						
		Desktops	136	136						
		Tablets	1	1						
		Carts***	5	5						
1311 Nova Middle	In Process	Complete	113	113	2.3:1	1.4:1	53	In Process	78	78
		Stud Laptops	80	80						
		Tch Laptops	6	6						
		Desktops	23	23						
		Tablets	4	4						
		Carts***	0	0						
0031 Oakland Park Elementary	Not Started	Complete	259	259	7.7:1	1.8:1	0	Not Started	0	0
		Stud Laptops	210	210						
		Tch Laptops	46	46						
		Desktops	2	2						
		Tablets	1	1						
		Carts***	0	0				r		
0461 Oakridge Elementary	Not Started	In Process	455	0	7.6:1	IP	0	Not Started	0	0
		Stud Laptops	406	0						
		Tch Laptops	44	0						
		Desktops	5	0						
		Tablets Carts***	0	0						
0711 Orange Brook Elementary	Meets Std		421	421	9.1:1	1.4:1	0	In Process	22	
Of 11 Orange brook Elementary	I weeks Sta	Complete			3.1.1	1.4.1	1 0	IIIFIOCESS		0
		Stud Laptops	364	364						
		Tch Laptops	50	50						
		Desktops	6	6						
		Tablets Carts***	1	1						
		Carts	0	0						

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<sup>\*\*\*</sup>Carts ordered/received are not included in the total count for computer devices, since it does not effect the student count ratio.

	Infrastructure	Comput	er Devi	ces	Stude Compute		Cat6	Wireless Access P		ints**
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst
1831 Oriole Elementary	Complete	Complete	328	328	10.7:1	1.5:1	54	Complete	22	22
	-	Stud Laptops	273	273						
		Tch Laptops	49	49						
		Desktops	6	6						
		Tablets	0	0						
		Carts***	9	9						
1131 Palmview Elementary	Not Started	In Process	599	0	14.0:1	IP	0	Not Started	0	0
		Stud Laptops	548	0						
		Tch Laptops	40	0						
		Desktops	10	0						
		Tablets	1	0						
		Carts***	11	0						
3571 Panther Run Elementary	Complete	Complete	213	213	9.8:1	2.1:1	28	Complete	57	57
		Stud Laptops	156	156						
		Tch Laptops	46	46						
		Desktops	10	10						
		Tablets	1	1						
		Carts***	0	0						
1951 Park Ridge Elementary	Complete	Complete	216	216	8.8:1	1.8:1	47	Complete	43	43
		Stud Laptops	163	163						
		Tch Laptops	44	44						
		Desktops	9	9						
		Tablets	0	0						
		Carts***	2	2						
3171 Park Springs Elementary	In Process	Complete	462	462	11.6:1	2:1	0	In Process	74	0
		Stud Laptops	385	385						
		Tch Laptops	72	72						
		Desktops	5	5						
		Tablets	0	0						
		Carts***	0	0						
3781 Park Trails Elementary	Not Started	In Process	867	0	15.1:1	IP	0	Not Started	0	0
		Stud Laptops	695	0						
		Tch Laptops	97	0						
		Desktops	15	0						
		Tablets	60	0						
		Carts***	24	0						
3631 Parkside Elementary	Complete	In Process	236	145	5.6:1	IP	21	Complete	65	65
		Stud Laptops	190	105						
		Tch Laptops	45	40						
		Desktops	1	0						
		Tablets	0	0						
		Carts***	0	0						

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<sup>\*\*\*</sup>Carts ordered/received are not included in the total count for computer devices, since it does not effect the student count ratio.

	Infrastructure	Comput	er Devi	ces	Stude Compute		Cat6	Wireless Acc	cess Po	ints**
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst
2661 Pembroke Lakes Elementary	Complete	Complete	130	130	5.1:1	2.3:1	36	Complete	42	42
		Stud Laptops	78	78						
		Tch Laptops	39	39						
		Desktops	13	13						
		Tablets	0	0						
		Carts***	0	0						
1221 Pembroke Pines Elementary	Meets Std	Complete	153	153	6.3:1	2.4:1	39	Complete	53	53
		Stud Laptops	104	104						
		Tch Laptops	46	46						
		Desktops	3	3						
		Tablets	0	0						
		Carts***	0	0						
0931 Peters Elementary	Meets Std	Complete	278	278	5.5:1	1.5:1	0	Not Started	0	0
		Stud Laptops	232	232						
		Tch Laptops	45	45						
		Desktops	1	1						
		Tablets	0	0						
		Carts***	0	0						
2861 Pines Lakes Elementary	Meets Std	Complete	264	264	7.3:1	1.6:1	48	In Process	64	0
		Stud Laptops	190	190						
		Tch Laptops	48	48						
		Desktops	6	6						
		Tablets	20	20						
		Carts***	0	0						
2571 Pioneer Middle	Complete	Complete	382	382	4.8:1	1.4:1	76	In Process	4	0
		Stud Laptops	129	129						
		Tch Laptops	77	77						
		Desktops	176	176						
		Tablets	0	0						
		Carts***	4	4						
1901 Piper High	In Process	Complete	698	698	4.3:1	2.6:1	0	In Process	167	0
		Stud Laptops	494	494						
		Tch Laptops	134	134						
		Desktops	70	70						
		Tablets	0	0						
		Carts***	18	18						
1451 Plantation High	Not Started	Complete	849	849	6.5:1	2.2:1	0	Not Started	0	0
		Stud Laptops	540	540						
		Tch Laptops	74	74						
		Desktops	235	235						
		Tablets	0	0						
		Carts***	18	18						

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	Infrastructure	Comput	er Devi	ces	Stude Compute		Cat6	Wireless Access Points		
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst
0751 Pompano Beach Elementary	Meets Std	In Process	380	0	19.2:1	IP	0	Meets Std	0	0
		Stud Laptops	335	0						
		Tch Laptops	40	0						
		Desktops	5	0						
		Tablets	0	0						
		Carts***	4	0						
0185 Pompano Beach High	Complete	Complete	305	305	3.9:1	1.9:1	69	Complete	1	1
		Stud Laptops	244	244						
		Tch Laptops	60	60						
		Desktops	0	0						
		Tablets	1	1						
		Carts***	8	8						
3121 Quiet Waters Elementary	Complete	Complete	380	380	8.1:1	1.8:1	0	Meets Std	0	0
		Stud Laptops	276	276						
		Tch Laptops	92	92						
		Desktops	11	11						
		Tablets	1	1						
		Carts***	0	0						
2721 Ramblewood Elementary	Complete	Complete	282	282	5.7:1	1.9:1	64	Complete	64	64
		Stud Laptops	218	218						
		Tch Laptops	59	59						
		Desktops	5	5						
		Tablets	0	0						
		Carts***	0	0						
2891 Riverglades Elementary	Complete	Complete	287	287	6.5:1	1.7:1	0	Meets Std	0	0
		Stud Laptops	240	240						
		Tch Laptops	46	46						
		Desktops	0	0						
		Tablets	1	1						
		Carts***	0	0						
3031 Riverside Elementary	Complete	Complete	214	214	5.5:1	2.6:1	5	Complete	5	5
		Stud Laptops	199	199						
		Tch Laptops	14	14						
		Desktops	1	1						
		Tablets	0	0						
		Carts***	0	0						
1671 Robert C Markham Elementary	Complete	Complete	282	282	7.6:1	1.5:1	44	Complete	48	48
		Stud Laptops	239	239						
		Tch Laptops	38	38						
		Desktops	5	5						
		Tablets	0	0						
		Carts***	0	0						

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<sup>\*\*\*</sup>Carts ordered/received are not included in the total count for computer devices, since it does not effect the student count ratio.

	Infrastructure	Comput	er Devi	ces	Stude Compute		Cat6	Wireless Acc	cess Po	ints**
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst
1851 Royal Palm Elementary	Complete	Complete	191	191	5.1:1	2.7:1	62	Complete	63	63
	•	Stud Laptops	159	159						
		Tch Laptops	25	25						
		Desktops	6	6						
		Tablets	1	1						
		Carts***	0	0						
3061 Sandpiper Elementary	In Process	Complete	303	303	8.0:1	1.4:1	0	In Process	63	0
		Stud Laptops	251	251						
		Tch Laptops	45	45						
		Desktops	7	7						
		Tablets	0	0						
		Carts***	0	0						
3401 Sawgrass Elementary	Not Started	Complete	338	338	5.2:1	1.7:1	0	Not Started	0	0
		Stud Laptops	266	266						
		Tch Laptops	64	64						
		Desktops	8	8						
		Tablets	0	0						
		Carts***	0	0						
3431 Sawgrass Springs Middle	Complete	Not Started	0	0	3.8:1	N/S	0	Not Started	0	0
		Stud Laptops	0	0						
		Tch Laptops	0	0						
		Desktops	0	0						
		Tablets	0	0						
		Carts***	0	0						
1321 Sheridan Park Elementary	Complete	Complete	309	309	8.9:1	1.7:1	56	Complete	56	56
		Stud Laptops	251	251						
		Tch Laptops	55	55						
		Desktops	3	3						
		Tablets	0	0						
		Carts***	0	0						
0422 Sheridan Tech High @ Sunset Learning	Meets Std	Meets Std	0	0	MS	MS	30	Complete	38	38
		Stud Laptops	0	0						
		Tch Laptops	0	0						
		Desktops	0	0						
		Tablets	0	0						
		Carts***	0	0						
1051 Sheridan Technical College	Complete	Meets Std	0	0	0.0:1	MS	82	Complete	91	91
		Stud Laptops	0	0						
		Tch Laptops	0	0						
		Desktops	0	0						
		Tablets	0	0						
		Carts***	0	0						

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	Infrastructure	Comput	er Devi	ces	Stude Compute		Cat6	Wireless Acc	cess Po	ints**
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst
3371 Silver Lakes Elementary	Not Started	Complete	260	260	34.1:1	1.4:1	0	Not Started	0	0
		Stud Laptops	202	202						
		Tch Laptops	45	45						
		Desktops	3	3						
		Tablets	10	10						
		Carts***	1	1						
3491 Silver Palms Elementary	Complete	Complete	306	306	23.0:1	1.7:1	0	Meets Std	0	0
		Stud Laptops	248	248						
		Tch Laptops	44	44						
		Desktops	14	14						
		Tablets	0	0						
		Carts***	4	4						
3081 Silver Ridge Elementary	Complete	Complete	420	420	8.3:1	1.4:1	43	Complete	71	71
		Stud Laptops	299	299						
		Tch Laptops	80	80						
		Desktops	40	40						
		Tablets	1	1						
		Carts***	0	0						
3331 Silver Trail Middle	Complete	Complete	547	547	5.3:1	2:1	36	Complete	106	106
		Stud Laptops	461	461						
		Tch Laptops	85	85						
		Desktops	0	0						
		Tablets	1	1						
		Carts***	13	13						
2351 South Plantation High	Complete	Complete	844	844	5.9:1	1.8:1	113	Complete	143	143
		Stud Laptops	476	476						
		Tch Laptops	226	226						
		Desktops	142	142						
		Tablets	0	0						
		Carts***	9	9						
0691 Stirling Elementary	Meets Std	Complete	313	313	12.7:1	1.3:1	0	Complete	54	54
		Stud Laptops	261	261						
		Tch Laptops	49	49						
		Desktops	3	3						
		Tablets	0	0						
		Carts***	0	0						
3011 Stoneman Douglas High	Not Started	Complete	1,504	1,504	8.1:1	1.7:1	0	In Process	1	0
		Stud Laptops	1245	1245						
		Tch Laptops	153	153						
		Desktops	106	106						
		Tablets	0	0						
		Carts***	17	17						

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	Infrastructure	Comput	er Devi	ces	Stude Compute		Cat6	Wireless Access Points**			
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst	
0211 Stranahan High	Not Started	Not Started	0	0	4.6:1	N/S	0	Not Started	0	0	
		Stud Laptops	0	0							
		Tch Laptops	0	0							
		Desktops	0	0							
		Tablets	0	0							
		Carts***	0	0							
3661 Sunset Lakes Elementary	Not Started	In Process	549	0	10.6:1	IP	0	Not Started	0	0	
		Stud Laptops	484	0							
		Tch Laptops	57	0							
		Desktops	8	0							
		Tablets	0	0							
		Carts***	8	0			_				
1171 Sunshine Elementary	Meets Std	Complete	335	335	11.1:1	1.6:1	54	Complete	58	58	
		Stud Laptops	260	260							
		Tch Laptops	47	47							
		Desktops	28	28							
		Tablets	0	0							
		Carts***	0	0							
2621 Tamarac Elementary	Complete	In Process	268	268	11.4:1	IP	88	Complete	88	88	
		Stud Laptops	200	200							
		Tch Laptops	65	65							
		Desktops	3	3							
		Tablets	0	0							
		Carts***	0	0							
3291 Thurgood Marshall Elementary	Meets Std	In Process	282	0	5.2:1	IP	0	Not Started	0	0	
		Stud Laptops	242	0							
		Tch Laptops	40	0							
		Desktops	0	0							
		Tablets	0	0							
		Carts***	0	0							
3481 Tradewinds Elementary	In Process	Complete	536	536	8.3:1	2.1:1	0	In Process	91	0	
		Stud Laptops	432	432							
		Tch Laptops	93	93							
		Desktops	11	11							
		Tablets	0	0							
		Carts***	0	0							
1621 Village Elementary	Meets Std	Complete	321	321	8.2:1	1.9:1	0	Not Started	0	0	
		Stud Laptops	262	262							
		Tch Laptops	55	55							
		Desktops	3	3							
		Tablets	1	1							
		Carts***	0	0							

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	Infrastructure	Comput	er Devi	ces	Stude Compute		Cat6	Wireless Acc	cess Po	ints**
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst
0321 Walker Elementary	Meets Std	Complete	141	141	3.4:1	2.9:1	72	Complete	36	36
	•	Stud Laptops	140	140						
		Tch Laptops	0	0						
		Desktops	1	1						
		Tablets	0	0						
		Carts***	4	4						
0511 Watkins Elementary	Not Started	In Process	288	10	8.2:1	IP	0	Not Started	0	0
		Stud Laptops	255	0						
		Tch Laptops	19	0						
		Desktops	4	0						
		Tablets	10	10						
		Carts***	1	1						
2881 Welleby Elementary	In Process	Complete	308	308	5.4:1	1.7:1	0	In Process	63	0
		Stud Laptops	266	266						
		Tch Laptops	40	40						
		Desktops	2	2						
		Tablets	0	0						
		Carts***	0	0						
3971 West Broward High	Meets Std	In Process	752	752	7.4:1	IP	101	Complete	145	145
		Stud Laptops	375	375						
		Tch Laptops	135	135						
		Desktops	242	242						
		Tablets	0	0						
		Carts***	15	15						
2681 Westchester Elementary	In Process	Complete	309	309	5.2:1	2.5:1	74	In Process	79	0
		Stud Laptops	241	241						
		Tch Laptops	68	68						
		Desktops	0	0						
		Tablets	0	0						
		Carts***	0	0						
2831 Western High	Complete	In Process	893	893	5.2:1	IP	139	Complete	192	192
		Stud Laptops	425	425						
		Tch Laptops	175	175						
		Desktops	282	282						
		Tablets	11	11						
		Carts***	0	0						
1291 William T McFatter High	Complete	Meets Std	0	0	1.4:1	MS	98	Complete	95	95
		Stud Laptops	0	0						
		Tch Laptops	0	0						
		Desktops	0	0						
		Tablets	0	0						
		Carts***	0	0						

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<sup>\*\*</sup>Wireless access point standard is 1 access point per classroom

<sup>\*\*\*</sup>Carts ordered/received are not included in the total count for computer devices, since it does not effect the student count ratio.

	Infrastructure	Compute	er Devid	ces	Stude Compute		Cat6	Wireless Acc	ess Po	ints**
School / Site Name	Status	Status	Ord	Rec	Nov 2014	Final	Count	Status	Ord	Inst
0191 Wilton Manors Elementary	Meets Std	Complete	222	222	7.5:1	1.9:1	0	Meets Std	0	0
		Stud Laptops	160	160						
		Tch Laptops	49	49						
		Desktops	13	13						
		Tablets	0	0						
		Carts***	0	0						
3091 Winston Park Elementary	In Process	Complete	669	669	22.6:1	1.7:1	0	In Process	76	0
		Stud Laptops	586	586						
		Tch Laptops	74	74						
		Desktops	9	9						
		Tablets	0	0						
		Carts***	0	0						

OrdRecOrdInstSchool / Site Total:135Computer Devices Total:53,63339,655Wireless Access Points:6,1004,251

 Stud Laptops
 41203
 29319

 Tch Laptops
 8327
 6690

 Desktops
 3664
 3278

 Tablets
 439
 368

 Carts\*\*\*
 596
 353

Count Total CAT6 Wiring: 4,658

<sup>\*</sup>Student to computer ratio standard is 3.5:1

<sup>\*\*</sup>Wireless access point standard is 1 access point per classroom

#### SMART Core Infrastructure Upgrades BOC 3<sup>rd</sup> Quarter Ended 3/31/2016

Since the initiation of the SMART project, Technical Support Services has undertaken work in five areas of core infrastructure operation. These areas include the replacement and/or implementation of systems that provide improved network security perimeter defense and traffic management, load balancing of Internet and internal network traffic, IP address management and Domain Name Systems (DNS) operations, core network capacity and speed, and back-up and recovery. In every case, the work done was driven by greatly increased demand for network capacity and reliability that results from the:

- shift from print to digital instructional resources including increased use of "rich media" (video, audio, advanced graphics, animation, interactivity)
- increased reliance on online assessments
- move toward personalization of instruction: more modern computers and the move toward to 1:1 computing
- increasing use of cloud-based resources (Office 365, LMS, etc)
- heightened concern for IT security and privacy protection
- enhancements to business continuity and disaster recovery solutions

The impact of the dynamics noted above can be seen in the fact that in the District's demand for Internet bandwidth is four times the 2013 level, the number of wirelessly connected devices has doubled over the same period, and the District's network now provides connectivity to over 235,000 unique devices each day (including all of the District's wired and wireless computers, printers, VoIP phones, and BYOD devices in the hands of staff and students).

<u>Project</u>	<u>Description</u>	SMART Encumbrance / Expenditure
Perimeter Defense and Traffic Management	Funds were spent to implement a new "Next Generation Firewall" (NGFW) at the District's Internet perimeter. As a part of that project, the previous system was repositioned to serve as an internal firewall between the Data Center (and it's critical systems) and the rest of the District's internal network. The Next Generation Firewall, in addition to securing the perimeter, provides content filtering, applications control, and traffic analysis and reporting; all at vastly increased speeds and capacity levels.	\$1,519,323.14
Load Balancing systems	Funds were spent on systems that manage and balance the traffic pattern and load distribution of the District's two connections to the Internet at higher speeds and at with greater	\$564,591.02

	capacity. This project included as a part of its design strategy the load balancing of the District's web based application services.	
Core Network Services	Expenditures were made to improve advanced network services including DNS, DHCP & IPAM. Expenditures in this area were done to improve the reliability of critical networks services and systems while further enhancing IP security and reporting.	\$612,320.76
Core Network Speed and Capacity	Investments were made in the network switching fabric of the network core and the District's Data Center. In addition to providing fourfold increased speed and capacity, the new network infrastructure supports the implementation of advanced "software defined networking".	\$836,056.04
Data-Center Tape Drive Virtualization	A project to replace the District's out-of- service tape back-up system with a Virtual Tape Back-up solution was implemented. This allows for the expedited recovery of a number of systems in the event of an emergency and propositions critical data at the District's off-site disaster recovery location out of state.	\$393,593.00
TOTAL		\$3,925,883.96

Additional SMART investment projects are scheduled to achieve the following outcomes:

- Meet growing network bandwidth requirements and increase network reliability
- Improve network traffic management and reporting
- Enhance IT security and identity management systems
- Increase systems storage capacity
- Expand and refresh the District's virtualized server environment
- Extend and enhance core telecommunications routing and application systems