

National Secondary School Computer Fund - Reckoner		SOLUTIONS	
Students 9-12	131917		
Number of Schools	272		
Current Number of computers yr 9-12	36979		
COMPUTERS		COMPUTERS + FIXED DATA POINTS	
Potential number of Computers to supply	94938	Computers	\$ 64,273,026.00
Median Computer Cost Desktop (EDPSA)	\$ 677.00	Data outlets	\$ 11,867,250.00
Median Computer Cost Laptop (EDPSA)	\$ 843.00	Data Switches	\$ 19,778,750.00
Total Computer Cost - Desktop	\$ 64,273,026.00	Servers	\$ 2,848,140.00
Total Computer Cost - Laptop	\$ 80,032,734.00	Data racks	\$ 544,000.00
Additional Server costs (\$15K server @500 devices)	\$ 2,848,140.00	Electrical upgrades	\$ 99,388,912.00
DATA OUTLETS		MEA/SAV Annual	\$ 9,493,800.00
Data outlet cost (dual)	\$ 250.00	Power annual	\$ 2,887,034.20
Total Data outlet cost	\$ 11,867,250.00	Support Costs	\$ 1,020,000.00
DATA SWITCHES		Physical Security/ Surv.	\$ 4,500,000.00
Switch cost (24 port)	\$ 5,000.00	Total	\$ 216,600,912.20
Total switch cost	\$ 19,778,750.00	Laptops + WIRELESS	
DATA RACKS		Computers	\$ 80,032,734.00
Rack cost (+ patch panels etc)	2000	Data outlets	\$ 2,966,812.50
Total Rack cost	\$ 544,000.00	Wireless Switches	\$ 23,734,500.00
WIRELESS		Wireless Aps	\$ 11,867,250.00
Wireless AP Cost	\$ 1,000.00	Servers	\$ 2,848,140.00
Total Wireless AP Cost	\$ 11,867,250.00	Data racks	\$ 544,000.00
Wireless Switch Cost (48 Port)	\$ 12,000.00	Electrical upgrades	\$ 90,274,864.00
Total Wireless Switch Cost	\$ 23,734,500.00	MEA/SAV Annual	\$ 9,493,800.00
Data outlets for wireless cost	\$ 2,966,812.50	Power annual	\$ 635,461.33
Power Points for wireless Aps	\$ 1,424,070.00	Support Costs	\$ 1,020,000.00
POWER OUTLETS & ELECTRICAL UPGRADES		Insurance Costs	\$ 4,936,776.00
Power Point cost (dual)	\$ 120.00	Physical Security/ Surv.	\$ 4,500,000.00
Total Power Point cost - Desktop	\$ 11,392,560.00	Total	\$ 232,854,337.83
Total Power Point cost - Laptop	\$ 2,278,512.00		
Avg School Cost - Add. Electrical Circuits	\$ 27,575.00		
Avg School Cost - Add. Switchboard, safety switches	\$ 193,000.00		
Avg School Cost - Add. Airconditioning	\$ 102,941.00		
Total Electrical Infrastructure Upgrades - Desktop	\$ 99,388,912.00		
Total Electrical Infrastructure Upgrades - Laptop	\$ 90,274,864.00		
MEA/SAV ANNUAL COST			
MEA + SAV cost (annual)	\$ 100.00		
MEA + Save Total Cost (annual)	\$ 9,493,800.00		
POWER ANNUAL COST			
Wattage per Desktop	90		
Wattage per Laptop	30		
Average daily operation hours	5		
Average school days per year	196		
Cost per Kwh	\$ 0.16		
Average annual cost per Desktop	\$ 13.88		
Average annual cost per Laptop	\$ 4.63		
Total annual power cost increase - Desktop	\$ 1,317,993.87		
Total annual power cost increase - Laptop	\$ 439,331.29		
POWER ANNUAL COST - SWITCHES			
Wattage per switch	300		
Average daily operation hours	24		
Operational Days per year	350		
Cost per Kwh	\$ 0.16		
Average annual cost per switch	\$ 396.65		
Total annual electrical cost increase- wireless	\$ 196,130.04		
Total annual electrical cost increase- switch	\$ 1,569,040.33		
SUPPORT ANNUAL COST			
Computer Warranty Failure rate	0.17		
Switch Warranty / Failure rate	0.05		
Average No of non-warranty support requests	0.258		
Total expected additional support requests	24675		
Additional 1st Level Staff (HDAA Calculator)	8		
Additional 2nd Level Staff	4		
Salary with oncosts - \$80,000 per person	\$ 1,020,000.00		
Annual Insurance increase (\$52)	\$ 4,936,776.00		