**Deployment Plan**
**For Natick Public Schools**
**Digital Conversion**

The Natick Public Schools is well on its way of under going a digital conversion and using technology in a variety of ways to support teaching and learning and streamline many administrative functions.

The next chapter of our digital conversion involves deploying technology directly in the hands of our students.  The plan below is high level and outlines some of the major steps being taken over the next couple of years:

**Fall 2011**
**Phase I - One to One Initiative**

In the fall of 2011 the Natick Public Schools will be implementing a pilot of our 1 to 1 initiative for all 8th grade students.  The district has purchased a number of Apple Macbooks computers (see Attachment A for details on Middle School order) that will be issued to all 8th graders.

In addition, a number of MacBook laptops have also been purchased for the High School (see Attachment B for details of the High School Order).  These laptops will be used to give High School students and teachers a jump start of what a 1 to 1 environment will look like a year before our new High School opens in the fall of 2012. (see Attachment C for an estimate of this order).

While there are many things being done behind the scenes to prepare for this fall's pilot, here are a few additional tasks being done this summer to be ready for the one to one project;

- Our internet bandwidth for the school district was upgraded from 30MB to 100MB.

- A roaming internet filter has been put in place to filter student internet content no matter where they use the Natick Public School issued laptop.

- Google Docs accounts have been created for all students and email accounts have been created for students in grades 8 – 12. Teachers and students will use email to communicate and collaborate with one another to support teaching and learning. All email will be filtered and archived to address any legal concerns or those regarding appropriate use.

- Lan School, a classroom management solution allowing teachers to keep students on task while using laptops in school, has also been deployed.  Professional development has been offered to teachers this summer and will continue throughout the school year.

**Fall 2012**
**Phase II - One to One Initiative**

In the Fall of 2012 when our new High School opens all High School students will join the 1 to 1 initiative and be given a district issued computing device.

**Fall 2011 - Deployment Plan for Middle Schools**
**Requirements & Assumptions:**
- Students - Estimated Enrollment for 8th graders in August 2011 (400 students and laptops)

- Teachers & Staff - Estimated 8th Grade Teachers, Specialists and SSFs (90 staff and laptops).  All teachers receiving new equipment at the middle schools will have their old equipment repurposed within their building to retire something else which has reached its end of life.

- Spare Equipment - 1 Cart with 30 laptops per school (60 laptops & 2 carts). This equipment will be used to handle any breakage and minimize disruptions to students by providing immediate service.

- Charging & Storage - 22 Charging carts to support 400 student laptops (Wilson 17) (Kennedy 5) This will offer students a secure place to leave their laptops in school and also a place to charge if the battery runs low.  Power strips will also be provided around the room perimeter as needed.

- Software – Includes district wide licenses for Apple OS, Ilife and Iwork (Apple requires us to license all hardware capable of running this software district wide.  The cost for this is included in the Middle School 8th grade 1 to 1 order as the funding source was from the school department's operating budget.

**Deployment:**
- Over the summer bags, laptops, backup drives and battery chargers will be labeled with each student's name and a bar code representing their student number to ensure accuracy.

- All student equipment will organized and inventoried over the summer and delivered to each middle school by the start of school in the fall in individual

bags identified for each student based on enrollment data in our student information system.

- All bags of student computer equipment will be organized by home room when delivered to each middle school so deployment may be done during home room time.

- Faculty and staff will discuss appropriate use and care of devices with students before equipment is deployed.

- Technical staff on-site will help distribute student equipment with teaching staff assistance.

- Any changes to enrollment will require new student labels to be made and inventory updated before equipment deployed.

**Fall 2011 - Deployment Plan for High School**
**Requirements & Assumptions:**
- 12 Modular Classrooms (30 laptops & 1 cart for each) – (360 laptops & 12 carts)

- Laptops for HS Faculty & Staff, including SSFs, Tech Staff and spares (200 laptops). All teachers receiving new equipment at the high school will have their old equipment repurposed within the district to either retire something else which has reached its end of life or serve a new educational purpose.

- 90 Laptops and 3 carts for Science Dept to be used on a mobile basis within the Science labs.

**Deployment:**
- Over the summer student laptops, have been assigned to a cart that will be assigned to a specific classroom.   Since these will be shared computers for one year they will be labeled to identify their room and secured there by the classroom teacher.  These laptops will never leave the classroom.

- These computers will be added to our inventory over the summer.

- All equipment will be delivered to each classroom by the start of school in the fall.

**Fall 2012 - Deployment Plan for Middle Schools**

Repeat previous plan with same equipment used in the previous year.

All equipment needs to be relabeled over the summer and inventory updated with new student assignments.

**Fall 2012 - Deployment Plan for High School**

In the spring of 2012, a second order of computer equipment will be made to accommodate the anticipated student enrollment at the new High School for the opening in the fall of 2012.  (Attach C is an estimate that was prepared in the spring of 2011.  It assumes the same MacBooks and same pricing would be available.)  Both the device and pricing is an estimate and subject to change based on availability.

**Requirements & Assumptions:**

Assume student enrollment of 1300 students and needing spares to handle repairs, loaners and enrollment fluctuations.

All student equipment purchased for the High School in spring 2011 will be re-used in the new High School.

 (Estimated enrollment of 1300 students – 450 from students devices purchased in Phase I = 850 additional student laptops needed. Add 50 extras for loaners and spares for HS)  Need to order 900 more laptops for students and loaners.

Add 1350 backup drives for 1300 students with some spares.

**Deployment:**

Will be finalized during this school year as we collect feedback from the 1 to 1 pilot in the 8th grade and make any necessary adjustments.

## Attachment A
## Middle School
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| Quantity | Item Description | Unit Price | Total Cost |
|---|---|---|---|
| 550 | MacBook Laptop (Z0JQ) 13-inch, 2.4GHz Intel Core 2 Duo - White, 2.4GHz Intel Core 2 Duo, 320GB Serial ATA Drive @ 5400 rpm, 4GB 1066MHz DDR3 SDRAM - 2x2GB, SuperDrive 8x (DVD±R DL/DVD ±RW/CD-RW) | 964.76 | 530,618.00 |
| 550 | Apple Care for 3 Years Warranty Coverage of manufacturer defects and battery | 61.41 | $33,775.50 |
| 1300 | Apple's Software License Bundle  (Operating System – Snow Leopard, ILife Suite, IWork Suite)  - Needed for district wide use | 29.35 | 38,156.08 |
| Full Bundled Cost | | 1,055.52 | |
| 550 | External 500GB Drive to backup laptop data | 89.96 | 48,925.53 |
| 90 | VGA Adapters for teachers to hookup laptop to classroom projector | 25.81 | 2,322.90 |
| 550 | Integration Services – 3rd Party Vendor to install our software image on all laptops | 34.23 | 18,826.17 |
| 22 | Mobile Charging Carts for use at Middle Schools for secure storage and charging (Wilson 17, Kennedy 5) | 1601.96 | 35,243.02 |
| 3 | Power Adapters for Charging Carts (5 Packs) | 250 | 750 |
| 27 | Power Adapters for Charging Carts (25 Packs) | 1000 | 27,000 |
| 1 | Delivery Charge | | 6.95 |
| | | | |
| Total Order | | | **$735,624.15** |
| | | | |
| Annual Lease Amount | 3 Years (Lease to Own) | | **$254,138.15** |

# Attachment B
## High School - Phase One
### ====================

| Quantity | Description | Unit | Total Cost |
|---|---|---|---|
| 650 | MacBook Laptop (Z0JQ) 13-inch, 2.4GHz Intel Core 2 Duo - White, 2.4GHz Intel Core 2 Duo, 320GB Serial ATA Drive @ 5400 rpm, 4GB 1066MHz DDR3 SDRAM - 2x2GB, SuperDrive 8x (DVD±R DL/DVD ±RW/CD-RW) | 964.76 | 627,094.00 |
| 650 | Apple Care for 3 Years Warranty Coverage of manufacturer defects and battery | 61.41 | 39,916.50 |
| 650 | Apple's Software License Bundle (Operating System – Snow Leopard, ILife Suite, IWork Suite) | 29.35 | 19,078.04 |
| **Unit Cost  - Fully Bundled** | | **1,055.52** | |
| 200 | External 500GB Backup Drives to backup laptop data | 88.96 | 17,792 |
| 200 | VGA Adapters for teachers to hookup laptop to classroom projector | 25.81 | 5,162 |
| 650 | Integration Services – 3rd Party Vendor to install our software image on all laptops | 34.23 | 22,249.49 |
| 15 | Mobile Charging Carts for use in Mobile Classrooms for secure storage and charging | 1601.96 | 24,029.40 |
| **Total Order** | | | **$755,321.43** |

# Attachment C
## High School - Phase Two - Estimate Only
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| Quantity | Description | Unit | Total Cost |
|---|---|---|---|
| 900 | MacBook Laptop (Z0JQ) 13-inch, 2.4GHz Intel Core 2 Duo - White, 2.4GHz Intel Core 2 Duo, 320GB Serial ATA Drive @ 5400 rpm, 4GB 1066MHz DDR3 SDRAM - 2x2GB, SuperDrive 8x (DVD±R DL/DVD ±RW/CD-RW) | 964.76 | 868,284 |
| 900 | Apple Care for 3 Years Warranty Coverage of manufacturer defects and battery | 61.41 | 55,269 |
| 900 | Apple's Software License Bundle (Operating System – Snow Leopard, ILife Suite, IWork Suite) | 29.35 | 26,415 |
| **Unit Cost - Fully Bundled** | | **1,055.52** | |
| 1350 | External 500GB Backup Drives to backup laptop data | 88.96 | 120,096 |
| 0 | VGA Adapters for teachers to hookup laptop to classroom projector | 25.81 | 0 |
| 900 | Integration Services – 3rd Party Vendor to install our software image on all laptops | 34.23 | 30,807 |
| 0 | Mobile Charging Carts for use in Mobile Classrooms for secure storage and charging | 1601.96 | 0 |
| 1350 | Student Bags | 40 | 54,000 |
| **Phase II Total Order** | | | **$1,154,871** |

| | | | |
|---|---|---|---|
| **Phase I Total** | | | $    755,321 |
| **Grand Total** | | | $ 1,910,192 |