Shrewsbury Public Schools
Instructional Technology and Media Services
Jonathan Green, Director

Memorandum

Date: January 29, 2014
To: School Committee
From: Jon Green
Re: Overview of technology budget for 2015

The initial technology budget recommendation for FY 2015 will include a $1,028,727 increase for technology and library services for a total of $2,116,914. Without adequate funding in FY 2015, refresh and new projects to benefit student learning will be completed more slowly or will be deferred. That risks incurring additional monetary, service level, and opportunity costs as we must stretch the life of the equipment still further, lose the ability to coordinate dependent and mutually reinforcing projects, and fail to realize benefits from technology we do not have.

For example, the 1:1 program is scheduled to start up at the high school in FY 2016, requiring a large initial purchase of equipment to get it started. However the WiFi at the high school needs an investment to make it 1:1 ready. Not having adequate WiFi will jeopardize the program so if sufficient funds are not allocated in the FY 2015 budget to build out the WiFi, we'll be forced to put other projects on hold and use their funds for the WiFi instead. Due to the startup costs for the 1:1 program at SHS in FY 2016, it will likely be FY 2017 before we would be able to consider resuming those deferred projects.

Table 1 shows estimated needs for deferred and current projects and one-time expenditures from 2014-2019, and Table 2 shows the projected needs to sustain the program for 2015 alongside 2014 levels.

Table 3 shows projected budget needs for the next 5 years. The largest contributor for the sustained level of spending in 2016 is the introduction of the 1:1 program for grades 9-12 and the large outlay it will require. It is important to note that technology fees paid by families will recover the significant majority of the 1:1 program costs over time, but the district will need to make a significant initial investment to purchase the devices.

Table 4 shows 2005-2012 expenditures for instructional materials, equipment, and technology for districts within the Assabet Valley Collaborative and so-called DART districts, those districts identified by the Department of Elementary and Secondary Education (DESE) as those that we have the most in common with demographically.

Table 5 shows the additional funding for instructional materials, equipment, and technology the schools would have received under three scenarios; 1) Shrewsbury's per pupil expenditures were equal to the median of the AVC and DART districts, 2) Shrewsbury's per pupil expenditures were equal to the mean of the AVC and DART districts, and 3) Shrewsbury's per pupil expenditures were equal to the state average.

While the budget request for technology may seem large, the increase is being driven mostly by one-time costs that address projects that were deferred due to chronic inadequate funding. When the projects are completed, the steady-state per-pupil spending for technology will still be below the state average.

Table 1 - Current and planned projects

Projects	2014	2015	2016	2017	2018	2019
Middle School 1:1 Program	$126,000	$95,000	$0	$0	$0	$0
Elementary Interactive Digital Classrooms	$0	$0	$0	$0	$0	$0
Oak and SHS Wireless	$59,000	$50,000	$0	$0	$0	$0
Expand 1:1 Program to HS*	$2,000	$0	$490,000	$0	$0	$0
Oak classroom projectors	$0	$52,500	$52,500	$52,500	$52,500	$0
SHS interactive projectors	$0	$0	$87,500	$87,500	$87,500	$87,500
Elementary Wireless	$0	$92,000	$0	$0	$0	$0
Deferred Oak Lab refresh	$0	$38,000	$0	$0	$0	$0
SHS & OMS 10G uplink	$0	$80,000	$0	$0	$0	$0
Restore Media Center Collection	$0	$60,000	$60,000	$60,000	$0	$0
ETS Studio HD Upgrade	$0	$20,000	$20,000	$20,000	$0	$0
SHS Language Lab	$25,000	$0	$0	$0	$0	$0
Tech for new hires	$0	$109,000	$0	$0	$0	$0
Additional faculty laptops	$0	$23,000	$0	$0	$0	$0
Deferred Elementary Classroom Device Refresh	$0	$75,000	$0	$0	$0	$0
Deferred SpEd Classroom Device Refresh	$0	$75,000	$0	$0	$0	$0
Resources for PARCC test	$0	$20,000	$10,000	$10,000	$0	$0
Total	**$212,000**	**$789,500**	**$720,000**	**$230,000**	**$140,000**	**$87,500**

* Significant majority of costs for 1:1 program will be recovered through family technology fees.

Table 2 - Annual recurring costs

Annual Sustaining	FY 2014	FY 2015
Faculty Technology	*$113,000	$151,750
High School Labs refresh	$100,000	$76,000
Middle School Lab refresh	$0	$38,000
Sustain Middle School 1:1	$50,000	$50,000
Elementary classroom device refresh	*$11,000	$30,000
Printer refresh	$4,000	$5,000
Classroom projector refresh	$2,000	$12,000
Lab Projector refresh	$0	$3,000
Media Center collections	$0	$27,000
Network Maintenance & Support	$12,000	$44,000
Educational Television Studio audio visual equipment	$7,500	$7,500
Internet and Networking	$51,000	$68,000
Software Maintenance & Support	$40,000	$40,000
Database subscriptions	$12,000	$13,000
Contracted Repair Services	$50,000	$37,000
Technology, media, & audio visual supplies	$33,500	$35,500
Professional Development	$7,000	$15,000
Total (not counting *)	**$369,000**	**$652,750**

*Portion funded through insurance reimbursement - SHS flood

Table 3 - Projected budget resources 2015-2019

Fiscal Year	Annual Sustaining	Projects	Tech Support & Teaching Personnel	Total	Change from previous year
2014	$ 369,000	$ 212,000	$ 507,187	$ 1,088,187	$ 0
2015	$ 652,750	$ 789,500	$ 674,664	$ 2,116,914	$ 1,028,727
2016	$ 669,069	$ 720,000	$ 688,157	$ 2,077,226	$ (39,688)
2017	$ 685,795	$ 230,000	$ 701,920	$ 1,617,716	$ (459,510)
2018	$ 702,940	$ 140,000	$ 715,959	$ 1,558,899	$ (58,817)
2019	$ 720,514	$ 87,500	$ 730,278	$ 1,538,292	$ (20,607)

Table 4 - Per pupil expenditure on instructional materials, equipment, and technology

	2005	2006	2007	2008	2009	2010	2011	2012	Mean
Westborough	$333	$289	$424	$714	$302	$487	$430	$343	$415
Nashoba	$350	$354	$350	$434	$432	$400	$348	$299	$371
State Avg	**$337**	**$360**	**$356**	**$362**	**$357**	**$394**	**$422**	**$377**	**$371**
Berlin-Boylston	$389	$517	$558	$314	$387	$302	$250	$230	$368
Berlin	$187	$201	$558	$533	$403	$349	$305	$301	$355
Milbury	$204	$374	$397	$268	$336	$398	$329	$293	$325
Northborough	$230	$240	$301	$281	$332	$464	$279	$279	$301
Nrth/Southboro	$221	$488	$431	$231	$278	$273	$271	$157	$294
Marlborough	$447	$321	$272	$365	$241	$342	$239	$116	$293
Natick	$401	$242	$244	$222	$212	$306	$331	$325	$285
Mean	**$257**	**$278**	**$303**	**$299**	**$275**	**$294**	**$282**	**$261**	**$281**
Southborough	$161	$165	$214	$278	$262	$400	$333	$419	$279
Median	**$228**	**$254**	**$273**	**$271**	**$267**	**$288**	**$284**	**$286**	**$269**
Walpole	$227	$302	$259	$274	$315	$242	$217	$214	$256
Chelmsford	$251	$204	$207	$185	$227	$200	$289	$450	$252
Hudson	$182	$266	$273	$222	$198	$197	$228	$302	$234
Boylston	$224	$187	$282	$278	$271	$153	$231	$213	$230
Maynard	$263	$224	$173	$174	$231	$270	$307	$162	$226
Grafton	$168	$201	$184	$201	$170	$236	$362	$155	$210
Arlington	$228	$271	$122	$157	$153	$144	$156	$328	$195
Shrewsbury	**$155**	**$153**	**$209**	**$247**	**$204**	**$135**	**$172**	**$115**	**$174**

Table 5 - Instructional materials, equipment, and technology funding comparisons: Shrewsbury vs. AVC and DART Districts

Year	Shrewsbury enrollment	Additional funding Shrewsbury would have received if at AVC & DART Median	Additional funding Shrewsbury would have received if at AVC & DART Mean	Additional funding Shrewsbury would have received if at State Average
2005	5876	$426,010	$597,720	$1,069,432
2006	5901	$596,001	$735,986	$1,221,507
2007	5895	$374,333	$555,440	$866,565
2008	5905	$141,720	$305,748	$679,075
2009	5841	$365,063	$416,009	$893,673
2010	5943	$906,308	$946,918	$1,539,237
2011	5947	$666,064	$654,500	$1,486,750
2012	6007	$1,027,197	$878,023	$1,573,834
Total		**$4,502,695**	**$5,090,344**	**$9,330,073**