

### Legislative Services Office Idaho State Legislature

Eric Milstead Director Serving klaho's Citizen Legislature

February 17, 2015

To: Joint Finance and Appropriation Committee of the Idaho State Legislature

House Bill No. 643 passed during the 2014 Legislative Session and included legislative intent which required the Idaho State Department of Education (SDE) to collaborate with the Legislature in performing service audits to determine compliance and district satisfaction with the wireless technology infrastructure offered through a statewide contract. Additionally, House Bill No. 651 provided funding; Section 2 provided guidance for the Legislative Audits Division to manage the contract for the service audit.

On July 17, 2014, we entered into a contract with Eide Bailly, LLP to complete an **Agreed Upon Procedures Report on the Idaho Department of Education Wi-Fi Project** (Report) for the years ended June 30, 2013 and 2014. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The report is **not intended to provide an opinion** about the sufficiency of any procedures completed, but rather it is **intended to provide information to address questions raised during the budget process** of the 2014 Legislative Session.

The procedures completed by Eide Bailly, LLP included establishing an understanding of the Wi-Fi service contract, participation process, vendor payment process, participant compliance with established Wi-Fi standards, and a survey of technology directors to gather information about participant satisfaction with the provided services.

Eide Bailly, LLP began the process by reviewing applicable Idaho Code sections authorizing the Wi-Fi program and providing technology standards and the Wireless Requirements Policy published by the SDE. They also reviewed the contract issued by the SDE to Education Networks of America (ENA) to identify participation requirements and payment methods.

Wireless Tracking reports were obtained from the Wi-Fi Program at the SDE to determine which school districts and charter schools were utilizing the ENA provided services. Eide Bailly, LLP was also tasked with determining which districts may have chosen to opt out of the statewide contract for the 2014/2015 school year and self-install a certified wireless system to receive \$21 per student in reimbursement from the SDE. The results of these procedures are included in the findings under section 1 and 2 of the Report on pages 2 and 3, respectively.

A survey was also sent to 147 individuals comprised of Technology Directors and Administrators for public high schools. The survey had questions about participation in the ENA provided services and satisfaction with that service. Those results are included in section 3 of the Report on page 4, and exhibit 2 contains all the questions, responses, and comments. It is important to note that only 48 individuals responded, and those responses were not analyzed based on size of district or their geographic location. Analysis of those factors could impact how the responses are interpreted.

Attached please find the Agreed Upon Procedures Report for the Wi-Fi Project as of June 30, 2014.

Mike Nugent, Manager Research & Legislation Cathy Holland-Smith, Manager Budget & Policy Analysis April Renfro, Manager Legislative Audits

Glenn Harris, Manager Information Technology



Idaho State Department of Education Wi-Fi Project Agreed-Upon Procedures Report June 30, 2014

Legislative Services Office, Legislative Audits Division

# Legislative Services Office, Legislative Audits Division Table of Contents June 30, 2014

Independent Accountant's Report on Applying Agreed-Upon Procedures	. 1
Description of Procedures and Summary of Findings	2
Exhibit 1: Wireless Tracking Detail Report	. 5
Exhibit 2: Wi-Fi Satisfaction Survey Results and Comments	9



#### **Independent Accountant's Report on Applying Agreed-Upon Procedures**

To the Division Manager Legislative Audits Division Boise, Idaho

We have performed the procedures enumerated in the accompanying Description of Procedures and Summary of Findings which were agreed to by the Legislative Services Office (LSO) of the State of Idaho solely to assist you with respect to the State Department of Education Wi-Fi project for the years ended June 30, 2013 and 2014 as provided by House Bill No. 651. The State of Idaho, Department of Education is responsible for the records associated with these services.

This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of those parties specified in the report. Consequently, we make no representation regarding the sufficiency of the procedures described in the accompanying Description of Procedures and Summary of Findings either for the purpose for which this report has been requested or for any other purpose.

The procedures and findings are set forth in the accompanying Description of Procedures and Summary of Findings, both of which are an integral part of this report.

We were not engaged to, and did not, conduct an audit, the objective of which would be the expression of an opinion on the records associated with these services. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the information and use of the State of Idaho and the Legislative Services Office and is not intended to be and should not be used by anyone other than these specified parties.

Cade Sailly LLP Boise, Idaho

February 17, 2015

## Legislative Services Office, Legislative Audits Division Description of Procedures and Summary of Findings June 30, 2014

This section of the report summarizes a description of our procedures, findings and any recommendations as a result of our work for each procedural area identified below. Recommendations are only included for findings that warrant additional discussion or a more complex solution than resolving the immediate finding.

#### **State Wi-Fi Project Procedures**

- 1. Eide Bailly reviewed the Wi-Fi project standards as established in Idaho Code or by the State Board of Education's administrative rules and performed the following:
  - Obtained an understanding of the process for participation in the Wi-Fi project by district
  - Obtained and reviewed relevant sections of Idaho Code related to the Wi-Fi project, including IC 33-1025
  - Obtained and reviewed any administrative rules established by the State Board of Education related to the Wi-Fi project

Findings: Eide Bailly contacted representatives from the Legislative Services Office and the Department of Education to gain an understanding of the Idaho High School Wireless Managed Service Project (Wi-Fi program) and how districts participate in the Wi-Fi program. The Wi-Fi program began in 2013 and is operated by the Idaho State Department of Education (SDE) and is available to any public school in the state serving high school students in grades 8 through 12, which includes middles schools serving students in grade 9. The program is designed to help provide Idaho high schools with high-speed wireless internet access for students, teachers and administrators. Districts can choose to opt in or out of the Wi-Fi program by completing the necessary forms and submitting them to the SDE no later than the end of June prior to the upcoming school year.

The SDE contracted with Education Networks of America (ENA) to provide and manage the infrastructure necessary establish a wireless network in Idaho schools. ENA will provide, maintain, install and service all the equipment necessary to facilitate a wireless network at each location and retains ownership in these assets at the end of the contract. The contract with ENA is a firm/fixed price contract with invoice submitted according to the Project Management Plan. The total proposed annual cost from ENA for managed wireless and content filtering services was \$2,111,655 per year based on total users of 100,555 as listed in the RFP. Additional services outside the scope or in addition to those proposed in the contract are billed at a fixed price as per the cost schedule included in ENA proposal.

For the 2014/2015 academic year in place of the managed wireless services provided by ENA the State Legislature authorized a reimbursement of \$21.00 per student for school districts that choose to install their own wireless networks. Districts choosing to install their own wireless networks must meet all the standards and requirements established for wireless technology and have their network certified by the Department of Education to be eligible. Districts that had previously opted into the ENA provided wireless solution were also allowed to opt-out, install their own wireless networks, and receive the \$21 per student reimbursement for certified networks.

Eide Bailly also reviewed Idaho Code 33-1025 that established wireless technology standards for funding purposes and obtained the Wireless Requirements Policy published by the SDE and noted that the policy included all the requirements and more than those required in IC 33-1025.

Eide Bailly obtained the Wireless Tracking Detail from the SDE compiled in August 2014 and January 2015 to determine school district participation in the Wi-Fi program as of June 30, 2014 for both the 2013/2014 and the 2014/2015 school year.

We noted that 93 school districts and 19 charter schools, representing 183 schools in total or 76% of eligible schools (242), that had elected to participate in the program for the 2013/2014 school year. There were 21 districts or charter schools, representing 59 schools in total or 24% of eligible schools that did not elect to opt in to the program for the 2013/2014 school year.

For the 2014/2015 school year there were 80 school districts and 21 charter schools, representing 178 schools in total that had elected to opt in to the program, which represent 74% of the 242 eligible schools. There were 2 districts and 3 charter schools, representing 22 schools in total that opted in to the program for the first time for the 2014/2015 school year. Of the 178 schools that had opted in to the program ENA had installed wireless networks in 175 with the installation for 3 schools on hold at the request of the school.

There were 29 school districts and 3 charter schools representing 64 schools in total or 26% of eligible schools that were not participating in the program for the 2014/2015 schools year. There were 14 school districts and 2 charter school, representing 26 schools in total or 11% of eligible schools that elected to opt out of the program for the 2014/2015 school year. Of those districts opting out for 2014/2015 school year, only 7 already had ENA Air installed and had to have that de-installed prior to installing their own solution. There were 15 districts and 1 charter school, representing 37 schools in total or 15% of those eligible that did not opt in to the program for either school year.

#### As of January 15, 2015

		7 15 01 54114	a., 15, 2015	
	2013/2014 School Year		2014/2015 Sch	<u>ool Year</u>
	School Districts/ Charter Schools	Eligible Schools	School Districts/ Charter Schools	Eligible Schools
In the Program	112	183	101	178
Out of the Program	21	59	32	64
Not Applicable	27	0	27	0
	160	242	160	242

See Exhibit 1: Wireless Tracking Detail Report from January 15, 2015 for more information on participation by school district or charter school, the number of eligible schools and the current status.

- 2. Eide Bailly evaluated the Wi-Fi participant's compliance with standards as established by the Department of Education and performed the following procedures:
  - Obtained a listing of Wi-Fi project participants for the 2014/2015 school year noting that one district and
    one charter schools that opted out for the 2014/2015 year had received certification on the installation of
    their own wireless network.

Findings: Eide Bailly obtained the Wireless Tracking list from the State Department of Education and noted that one district and one charter school that had opted out of the program and received certifications for installation of their own wireless network. The certification process for schools electing the \$21.00 per student reimbursement option and payment to certified schools was completed after field work was performed. Based on the information provided by the State Department of Education subsequent to the date of this report we did note that there were 13 districts that opted in for the 2013/2014 school year then opted out of the program for 2014/2015 school year with the intention of installing their own wireless networks, having it certified and receiving the \$21.00 reimbursement available from the SDE.

## Legislative Services Office, Legislative Audits Division Description of Procedures and Summary of Findings June 30, 2014

3. Conduct a survey of the Technology Directors for all Idaho school districts designed to gather information on if and how Idaho schools are participating in the State Department of Education administered Wi-Fi program.

*Findings:* Eide Baily sent survey requests to 147 individuals comprised of district technology coordinators and administrators for all public high schools in the state, including charter schools and other educational facilities providing classes to high school seniors. We received 48 responses, or 32.7% of the surveys respondents, of which 38 or 25.9% completed the entire survey and 10 or 6.8% completed a portion of the survey.

More than 54% of survey respondents indicated they were most satisfied with the service provided by ENA. More than 88% of survey respondents indicated that their school district or charter school participated in the Wi-Fi program during the 2013/2014 school year. Of those districts that indicated participation, 97% indicated that they were utilizing the managed wireless services provided by ENA, rather than installing their own solution.

All of the survey questions, results and respondent comments are included in Exhibit 2: Wi-Fi Satisfaction Survey Results and Comments.

#### **EXHIBIT 1: WIRELESS TRACKING DETAIL REPORT**

District		# OF ELIGIBLE	Opted in 2013/2014	Status 2014/2015
Number	District Name	SCHOOLS	School Year	School Year
002	MERIDIAN JOINT DISTRICT	12	YES	IN
011	MEADOWS VALLEY DISTRICT	1	YES	IN
013	COUNCIL DISTRICT	1	YES	IN
021	MARSH VALLEY JOINT DISTRICT	1	YES	IN
033	BEAR LAKE COUNTY DISTRICT	1	YES	IN <sup>1</sup>
041	ST MARIES JOINT DISTRICT	2	YES	IN
052	SNAKE RIVER DISTRICT	1	YES	IN
055	BLACKFOOT DISTRICT	2	YES	IN
058	ABERDEEN DISTRICT	1	YES	IN
059	FIRTH DISTRICT	1	YES	IN
060	SHELLEY JOINT DISTRICT	1	YES	IN
071	GARDEN VALLEY DISTRICT	1	YES	IN
072	BASIN SCHOOL DISTRICT	1	YES	IN
073	HORSESHOE BEND SCHOOL DISTRICT	1	YES	IN
083	WEST BONNER COUNTY DISTRICT	2	YES	IN
084	LAKE PEND OREILLE SCHOOL DISTRICT	3	YES	IN
101	BOUNDARY COUNTY DISTRICT	1	YES	IN
121	CAMAS COUNTY DISTRICT	1	YES	IN
131	NAMPA SCHOOL DISTRICT	7	YES	IN
132	CALDWELL DISTRICT	3	YES	IN
133	WILDER DISTRICT	1	YES	IN
134	MIDDLETON DISTRICT	2	YES	IN
135	NOTUS DISTRICT	1	YES	IN
136	MELBA JOINT DISTRICT	1	YES	IN
139	VALLIVUE SCHOOL DISTRICT	3	YES	IN
148	GRACE JOINT DISTRICT	1	YES	IN
149	NORTH GEM DISTRICT	1	YES	IN
150	SODA SPRINGS JOINT DISTRICT	1	YES	IN
151	CASSIA COUNTY JOINT DISTRICT	5	YES	IN
161	CLARK COUNTY DISTRICT	1	YES	IN
171	OROFINO JOINT DISTRICT	2	YES	IN
181	CHALLIS JOINT DISTRICT	1	YES	IN
182	MACKAY JOINT DISTRICT	1	YES	IN

\_

<sup>&</sup>lt;sup>1</sup> Bear Lake County District has two eligible schools but only 1 school participating in the program as of January 2015.

District Number	District Name	# OF ELIGIBLE SCHOOLS	Opted in 2013/2014 School Year	Status 2014/2015 School Year
192	GLENNS FERRY JOINT DISTRICT	1	YES	IN
193	MOUNTAIN HOME DISTRICT	2	YES	IN
201	PRESTON JOINT DISTRICT	2	YES	IN
202	WEST SIDE JOINT DISTRICT	1	YES	IN
215	FREMONT COUNTY JOINT DISTRICT	3	YES	IN
221	EMMETT INDEPENDENT DIST	3	YES	IN
231	GOODING JOINT DISTRICT	1	YES	IN
234	BLISS JOINT DISTRICT	1	YES	IN
242	COTTONWOOD JOINT DISTRICT	1	YES	IN
243	SALMON RIVER JOINT SCHOOL DIST	1	YES	IN
244	MOUNTAIN VIEW SCHOOL DISTRICT	2	YES	IN
252	RIRIE JOINT DISTRICT	1	YES	IN
253	WEST JEFFERSON DISTRICT	1	YES	IN
261	JEROME JOINT DISTRICT	1	YES	IN
274	KOOTENAI DISTRICT	1	YES	IN
281	MOSCOW DISTRICT	2	YES	IN
282	GENESEE JOINT DISTRICT	1	YES	IN
285	POTLATCH DISTRICT	1	YES	IN
287	TROY SCHOOL DISTRICT	1	YES	IN
288	WHITEPINE JT SCHOOL DISTRICT	1	YES	IN
291	SALMON DISTRICT	2	YES	IN
292	SOUTH LEMHI DISTRICT	1	YES	IN
302	NEZPERCE JOINT DISTRICT	1	YES	IN
304	KAMIAH JOINT DISTRICT	1	YES	IN
305	HIGHLAND JOINT DISTRICT	1	YES	IN
316	RICHFIELD DISTRICT	1	YES	IN
322	SUGAR-SALEM JOINT DISTRICT	1	YES	IN
331	MINIDOKA COUNTY JOINT DISTRICT	2	YES	IN
340	LEWISTON INDEPENDENT DISTRICT	4	YES	IN
341	LAPWAI DISTRICT	3	YES	IN
342	CULDESAC JOINT DISTRICT	1	YES	IN
351	ONEIDA COUNTY DISTRICT	2	YES	IN
365	BRUNEAU-GRAND VIEW JOINT DIST	1	YES	IN

District Number	District Name	# OF ELIGIBLE SCHOOLS	Opted in 2013/2014 School Year	Status 2014/2015 School Year
370	HOMEDALE JOINT DISTRICT	1	YES	IN
371	PAYETTE JOINT DISTRICT	2	YES	IN
372	NEW PLYMOUTH DISTRICT	1	YES	IN
373	FRUITLAND DISTRICT	2	YES	IN
381	AMERICAN FALLS JOINT DISTRICT	2	YES	IN
392	MULLAN DISTRICT	1	YES	IN*
401	TETON COUNTY DISTRICT	2	YES	IN
411	TWIN FALLS DISTRICT	4	YES	IN
415	HANSEN DISTRICT	1	YES	IN
417	CASTLEFORD DISTRICT	1	YES	IN
422	CASCADE DISTRICT	1	YES	IN
431	WEISER DISTRICT	2	YES	IN
451	VICTORY CHARTER SCHOOL	1	YES	IN
453	RICHARD MCKENNA CHARTER HIGH SCHOOL	1	YES	IN
455	COMPASS CHARTER SCHOOL	2	YES	IN
458	LIBERTY CHARTER	1	YES	IN
461	TAYLORS CROSSING CHARTER SCHOOL	1	YES	IN
465	NORTH VALLEY ACADEMY	1	YES	IN
470	KOOTENAI BRIDGE ACADEMY	1	YES	IN*
475	SAGE INTERNATIONAL SCHOOL OF BOISE	1	YES	IN
476	ANOTHER CHOICE VIRTUAL CHARTER DISTRICT	1	YES	IN
555	CANYON-OWYHEE SCHOOL SERVICE AGENCY	1	YES	IN
559	THOMAS JEFFERSON CHARTER	1	YES	IN
596	IDAHO SCHOOL FOR THE DEAF AND BLIND	1	YES	IN
768	MERIDIAN TECHNICAL CHARTER DISTRICT	1	YES	IN
771	IDAHO DIGITAL LEARNING ACADEMY	1	YES	IN
774	COEUR D'ALENE CHARTER ACADEMY	1	YES	IN
783	NORTH STAR CHARTER SCHOOL	1	YES	IN
786	IDAHO DISTANCE EDUCATION ACAD	4	YES	IN
795	IDAHO ARTS CHARTER SCHOOL	1	YES	IN
001	BOISE INDEPENDENT DISTRICT	18	NO	IN
382	ROCKLAND DISTRICT	1	NO	IN
469	IDAHO CONNECTS ONLINE CHARTER	1	NO	IN*
482	AMERICAN HERITAGE CHARTER DISTRICT	1	NO	IN
485	IDAHO STEM ACADEMY INC.	1	NO	IN

				Status
District Number	District Name	# OF ELIGIBLE SCHOOLS	Opted in 2013/2014 School Year	2014/2015 School Year
003	KUNA JOINT DISTRICT	2	YES	OUT
044	PLUMMER-WORLEY JOINT DISTRICT	1	YES	OUT
093	BONNEVILLE JOINT DISTRICT	6	YES	OUT
232	WENDELL DISTRICT	2	YES	OUT
233	HAGERMAN JOINT DISTRICT	2	YES	OUT
251	JEFFERSON COUNTY JT DISTRICT	2	YES	OUT
265	FORREST M. BIRD CHARTER	1	YES	OUT
273	POST FALLS DISTRICT	2	YES	OUT
283	KENDRICK JOINT DISTRICT	1	YES	OUT
391	KELLOGG JOINT DISTRICT	1	YES	OUT
393	WALLACE DISTRICT	1	YES	OUT
412	BUHL JOINT DISTRICT	1	YES	OUT
413	FILER DISTRICT	1	YES	OUT
418	MURTAUGH JOINT DISTRICT	1	YES	OUT
432	CAMBRIDGE JOINT DISTRICT	1	YES	OUT
462	XAVIER CHARTER SCHOOL	1	YES	OUT
025	POCATELLO DISTRICT	5	NO	OUT
061	BLAINE COUNTY DISTRICT	3	NO	OUT
091	IDAHO FALLS DISTRICT	6	NO	OUT
111	BUTTE COUNTY JOINT DISTRICT	1	NO	OUT
137	PARMA DISTRICT	1	NO	OUT
262	VALLEY DISTRICT	1	NO	OUT
271	COEUR D'ALENE DISTRICT	4	NO	OUT
272	LAKELAND DISTRICT	3	NO	OUT
312	SHOSHONE JOINT DISTRICT	2	NO	OUT
314	DIETRICH DISTRICT	1	NO	OUT
321	MADISON DISTRICT	3	NO	OUT
363	MARSING JOINT DISTRICT	1	NO	OUT
414	KIMBERLY DISTRICT	1	NO	OUT
421	MCCALL-DONNELLY JT. SCHOOL DISTRICT	2	NO	OUT
433	MIDVALE DISTRICT	2	NO	OUT
463	VISION CHARTER SCHOOL	1	NO	OUT
	Total number of eligible schools	242		
	Number of eligible schools opted in		182	178
	Number of eligible schools opted out		59	64

<sup>\* -</sup> indicates that as of the date of this report installation of the wireless network by ENA was on hold at request of the respective school

#### **EXHIBIT 2: Wi-Fi SATISFACTION SURVEY RESULTS AND COMMENTS**

As mentioned in the report, Eide Bailly sent survey requests to district technology coordinators and administrators for all public high schools in the state, including charter schools and other education facilities providing classes to high school seniors. Responses were received from 47 individuals out of 147 contacted, for a 32.7% response rate. Additionally, only 38, or 25.9%, answered all eleven questions included in the survey.

The following table includes the questions asked, results, and number of responses for each question. Additionally, respondents were asked to provide any additional comments they had about the Wi-Fi program. Those responses are included following the table, anonymously and verbatim. Any references to specific schools, school districts, or individuals has been removed.

The results of the survey questions were as follows:

### 1. Did your school district opt in to the Idaho State Department of Education (SDE) Wi-Fi project for the 2013/2014 school year?

<b>Answer Options</b>	Response	Response
	Percent	Count
Yes	88.6%	31
No	11.4%	4
	answered question	35
	skipped question	13

### 2. For the 2013/2014 school year what method of participation in the Wi-Fi program did your district choose?

<b>Answer Options</b>	Response Percent	Response Count
Education Networks of America (ENA) provided Wi-F	Fi 96.8%	30
\$21.00 per student reimbursement	3.2%	1
	answered question	31
	skipped question	17

### 3. Did your school district opt in to the Idaho State Department of Education (SDE) Wi-Fi project for the 2014/2015 school year?

<b>Answer Options</b>	Response	Response
	Percent	Count
Yes	40.0%	2
No	60.0%	3
	answered question	5
	skipped question	43

### 4. For the 2014/15 school year which method of participation in the Wi-Fi Program did your district choose?

Answer Options	Response	Response	
Answer Options	Percent Co		
Education Networks of America (ENA) provided Wi-Fi	90.9%	30	
\$21.00 per student reimbursement	9.1%	3	
Opted out of SDE Wi-Fi program for 2014/2015 school	0.0%	0	
an	swered question	33	3
	skipped question	15	5

## 5. On a scale from 1 to 5, 1 being least satisfied and 5 being most satisfied, please rate your overall satisfaction with the SDE Wi-Fi program service provider, Education Network of America (ENA).

<b>Answer Options</b>	Response	Response
	Percent	Count
1 (least satisfied)	3.0%	1
2	6.1%	2
3	3.0%	1
4	33.3%	11
5 (most satisfied)	54.5%	18
	answered question	33
	skipped question	15

### 6. Please provide any additional feedback or thoughts about the State Department of Education Wi-Fi Program that you wish to share.

#### Respondent comments

- 1. It has been a great benefit and excellent tech support.
- 2. A small school could not afford the equipment at \$21 per student allowance. The ENA contract is the most cost effective route.
- 3. The wi-fi implemented flawlessly and has been easy to managed along with our separate system in the other schools throughout the district. The system is robust, reliable and ENA has done a very good job supporting it. We are happy with it.
- 4. Again, we would love to know the Cost of our wireless, per year? We had a good wireless infrastructure before, which was moved to Grade Schools. But at what cost? We would like to have full control of our network back. But hate to have wasted so much money...... It's is a shame that the \$21 per student wireless was not offered until after the ENA installation was complete. Doubling the costs.
- 5. I would like to see the program expand for K-8 schools as well.

- 6. We were told when this was being developed that we would have the ability to see and manage the system. We do not. yes we can pull some reports but there is little of real value in the reports. I would much have preferred you give me the \$21 per student to begin with and let me install and manage my own technology.
- 7. Great roll out and reliable service.
- 8. We need more access to the Wireless Controllers for trouble shooting etc.
- 9. The ENA provided WiFi has worked great. I receive very few complaints about students not being about to connect.
- 10. for a rural district having a managed system allows us to have continued seamless access to the wifi network.
- 11. We were unable to take SBAC tests in several classrooms due to wireless connectivity issues. The feedback was that we had too many clients connected -- 30 students in a room. We opted out this year and installed a system that performs better, costs less, and can be diagnosed and repaired locally for a quicker problem resolution time.
- 12. Questions on ENA Air were confusing. We opted out at the end of last year. 13-14 and this year 14-15. One of the questions asked if we went with ENA Air, Opted out, or chose 21.00 per student. Two of those are the same thing aren't they? We have chosen to opt out and pursue the \$21/student to sustain & bolster our current solution.
- 13. The WiFi analysis tools provided by ENA Air are very limited. I am certain that many more powerful use and analysis tools come with the AeroHive system. These tools can be useful in tracking utilization as well as intrusion issues. e.g. the ability to see what client devices (by IP and/or MAC address) are currently connected/using which AP, AP utilization (# of devices on the AP and the amount of traffic the AP is handling), etc. We routinely used such tools with our prior (Aruba) WiFi system and feel that that the tools provided through the ENA Air interface are a big step backwards for us. The WiFi has been working reliably and seems to handle our WiFi bandwidth needs. Our bottle next now is the ENA provided broadband connection. The ENA support folks have been working on a glitch for us, but the overall bandwidth allocated to us 3-4 years ago is no longer adequate for our needs as out student to computer ratio has dramatically improved. We have not found out how to get more bandwidth without paying a rather extreme charge to ENA (\$75/Mbps/month as quoted to us on 5/23/2014). We wish we could have convinced the state and ENA that our needs were greater than 18Mbps back in 2011. It seems we are stuck with this number now and it is not keeping up with our changing needs or the bandwidth changes that naturally occur from year to year, like standard-of-living changes for the consumer/economy. Note: this was established as follows according to an email we received on Sept. 26, 2011 "The 18Mbps is correct. The 15.18 is the computed bandwidth . . . identified using . . . formula based on the number of students and the State standard of bandwidth per student. Since this more than 15Mbps, we ordered the next increment which is 18Mbps. We are not privy to this formula or whether it has been updated. I do know that our enrollment in 2011 was less than it is today. I also know that as schools push toward 1:1 computing, as we are, that the "bandwidth per student" number needs to be revised upward to keep up with real needs for 2014 and subsequent years. However, we have not heard anything about a motion at the state to revise and update these bandwidth allocations for schools, and must foot the bill for more bandwidth at a cost far above commercial market value.

### Legislative Services Office, Legislative Audits Division Exhibit 2: Wi-Fi Satisfaction Survey Results and Comments June 30, 2014

14. I was struggling to find funding to meet the increased need for wireless resulting from an influx of mobile devices on my network. I would not have been able to provide the necessary coverage without the infrastructure provided by the SDE.