Independent serving the citizens of Oklahoma by promoting the accountability and fiscal integrity of governmental funds.

Oklahoma State Auditor & Inspector
Gary A. Jones, CPA, CFE
Audit Report of the Board of Nursing

For the Period
July 1, 2009 through June 30, 2013
September 23, 2013

TO THE OKLAHOMA BOARD OF NURSING AND CITIZENS OF OKLAHOMA

The Oklahoma Board of Nursing (OBN) appears to be led by capable management, demonstrating high standards and a proactive approach. This state agency elected to consolidate its information technology (IT) services with the Information Services Division of the Office of Management Enterprise Services (OMES ISD) with the goal of better securing its IT resources and to serve as an example for other self-sustaining state agencies that choose to consolidate.

Our audit of the Board of Nursing shows that OMES ISD has not met its IT service quality obligations to this agency such as reliable access, timely responses and resolutions to help desk requests, and guaranteed updates to agency IT policies and disaster recovery plans. The extent of these service standard deficiencies was illustrated when several unauthorized OBN employees were inexplicably granted access to secured files, creating the opportunity for a security breach of licensee information and undermining agency policies.

Management is concerned with the written OMES ISD agreement and overall communication with OMES ISD staff. Moreover, instead of reducing costs, the consolidation has actually increased related IT expenses by 14% from FY 2011 to FY 2013. Similar concerns were raised in a recent Senate subcommittee report, recounting complaints of increased costs and frustrations in other IT service consolidated state agencies.

Our objective examination suggests that if OMES ISD was a private vendor, the substandard service level provided to OBN quite possibly would result in termination of the IT service agreement. If the Board and agency management opt to continue the agreement, the responsibility to correct service quality deficiencies clearly rests with OMES ISD.

As all current IT consolidated state agencies could benefit from appropriate improvements in OMES ISD service quality, prospective candidates would be well served to carefully consider this audit, as OBN’s experience does not appear to be an isolated case.

From a broader perspective, current and future OMES ISD users would gain from an independent performance audit to validate that quality performance measures are developed and maintained and that progress toward achieving the stated IT consolidation goals of increasing the effectiveness and efficiency of the state’s technology services is meeting expectations.

An unbiased evaluation of the IT consolidation process will provide transparency and accountability of the initiative’s true progress and will determine if the related legislative policies are producing the intended results.

Sincerely,

GARY A. JONES, CPA, CFE
OKLAHOMA STATE AUDITOR & INSPECTOR
Background

The mission of the Oklahoma Board of Nursing (the Agency) is to safeguard the public's health, safety, and welfare through the regulation of nursing practice and nursing education. The Agency is responsible for regulating the practice of nursing and establishing minimum standards for education programs, and is self-sustaining through collection of licensing and renewal fees.

Oversight is provided by a board of eleven members (the Board): six registered nurses, three practical nurses, and two members representing the public, all appointed by the governor.

Board members as of August 2013 are:

Joni Jeter, RN, MS ................................................................................ President
Lauri Jones, RN, BSN.................................................................. Vice-President
Madonna Newcomer, RN, MS, NE-BC...................................... Secretary/Treasurer
April Merrill, APRN-CNS, DNP................................. Member
Lynn Korvick, RN, PhD, CNE............................................ Member
Jana Martin, RN, MS, CNE ...................................................... Member
Jean Winter, LPN ........................................................................... Member
Marilyn Turvey, LPN, BS.......................................................... Member
Sandi Hinds, LPN, MBEC........................................................ Member
Renee Collingwood, CFP ........................................................ Public Member
Cori Loomis, JD ................................................................ Public Member

Table 1 summarizes the Agency’s sources and uses of funds for state fiscal years 2011 and 2012 (July 1, 2010 through June 30, 2012).

<table>
<thead>
<tr>
<th>Sources:</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing Registration License/ Fee</td>
<td>$2,799,855.32</td>
<td>$2,851,890.72</td>
</tr>
<tr>
<td>Other Fines, Forfeits, Penalties</td>
<td>256,429.96</td>
<td>223,352.00</td>
</tr>
<tr>
<td>Other (Cost Recovery and Refunds)</td>
<td>17,294.07</td>
<td>413.80</td>
</tr>
<tr>
<td><strong>Total Sources</strong></td>
<td>$3,073,579.35</td>
<td>$3,075,656.52</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Uses:</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel Services</td>
<td>$2,035,382.68</td>
<td>$1,960,081.38</td>
</tr>
<tr>
<td>Professional Services</td>
<td>530,163.96</td>
<td>531,601.27</td>
</tr>
<tr>
<td>Miscellaneous Administrative</td>
<td>168,026.24</td>
<td>217,653.99</td>
</tr>
<tr>
<td>Rent</td>
<td>103,052.10</td>
<td>91,880.59</td>
</tr>
<tr>
<td>Travel</td>
<td>63,970.71</td>
<td>65,212.08</td>
</tr>
<tr>
<td>Office Furniture and Equipment</td>
<td>46,171.65</td>
<td>59,486.98</td>
</tr>
<tr>
<td>Maintenance and Repair</td>
<td>30,913.67</td>
<td>41,507.93</td>
</tr>
<tr>
<td>General Operating</td>
<td>1,022.60</td>
<td>1,171.57</td>
</tr>
<tr>
<td><strong>Total Uses</strong></td>
<td>$3,009,338.44</td>
<td>$3,020,778.83</td>
</tr>
</tbody>
</table>

Source: Oklahoma PeopleSoft Accounting System (unaudited, for informational purposes only)
This audit was conducted at management’s request in accordance with 74 O.S. § 213.2.B.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

In planning and conducting objective I of our audit, we focused on the major financial-related areas of operations based on assessment of materiality and risk for the period July 1, 2009 through June 30, 2012. Our audit procedures included inquiries of appropriate personnel, inspections of documents and records, and observations of the Board of Nursing’s operations. We also tested a sample of transactions to achieve our objective.

To ensure the samples were representative of the population and provided sufficient, appropriate evidence, the random sample methodology was used. We identified specific attributes for testing each of the samples and when appropriate, we projected our results to the population. Additional methodology and an alternate audit period related to objective II are discussed later in the report.

Because of the inherent limitations of an audit, combined with the inherent limitations of internal control, errors or fraud may occur and not be detected. Also, projections of any evaluation of internal control to future periods are subject to the risk that conditions may change or compliance with policies and procedures may deteriorate.

**Objective I**

Determine whether the Agency’s internal controls provide reasonable assurance that revenues and expenditures (including payroll) were accurately reported in the accounting records, and financial operations complied with 62 O.S. § 211, 74 O.S. § 3601.2.A, and 59 O.S. § 567.4.F.

**Conclusion**

The Agency’s internal controls provide reasonable assurance that revenues and expenditures (including payroll) were accurately reported in the accounting records.
Financial operations complied with the following statues:

- 62 O.S. § 211 – 10% of gross fees charged, collected, and received were transferred to the state general revenue fund as required by statute.
- 74 O.S. § 3601.2.A – executive director’s salary does not exceed the maximum set forth in state statute.
- 59 O.S. § 567.4.F – board member meeting stipends are paid in accordance with state statute.

No exceptions were noted as a result of our procedures.

In 2011, the Information Technology Consolidation and Coordination Act (HB 1304) charged Oklahoma’s chief information officer with increasing the effectiveness and efficiency of the state’s technology services by consolidating all information technology (IT) services and personnel into a single department, through the Office of Management Enterprise Services, Information Services Division (OMES ISD). This mandate applied to agencies whose revenues are appropriated by the legislature. As a self-sustaining agency that does not receive appropriations, the Board of Nursing elected to participate in IT consolidation.

The Agency’s reasons for volunteering to consolidate included the following objectives:

- Improved security of data and equipment in case of a disaster (as the server would now be housed at OMES ISD)
- Improved continuity of business in case of disaster
- Handling of IT contracts by a more experienced, expert, and continuous staff
- The chance to serve as a model for other agencies who might volunteer to consolidate

Planning for consolidation of the Agency began in October 2011. Implementation occurred in January 2012 and included most IT services other than telephone. The Agency also retained possession of the majority of its equipment, such as desktop and laptop computers.
During the consolidation process and in the time that has elapsed since consolidation, management has experienced issues regarding the quality and reliability of service received from OMES ISD. In this section we will address significant areas of the Agency’s written agreement with OMES ISD as well as management’s other concerns, followed by our conclusion and recommendations.

Methodology

To accomplish our objective, we performed the following:

- Developed an understanding of the Agency’s Information Technology consolidation process, services provided by OMES ISD, and related management considerations, through discussion with Agency management and staff, discussion with OMES ISD staff, and review of documentation.

- Reviewed the Service Level Agreement (SLA) between the Agency and OMES ISD and identified significant aspects of the agreement. This is the main agreement governing IT services provided as a result of consolidation. Because the language in these agreements changed significantly from FY 2012 to FY 2013, we have included details on both documents in our observations.

- Assessed the significant aspects of the SLA to determine compliance with those aspects and overall adequacy of the agreement. This included analyzing all help desk tickets submitted by the Agency from consolidation in January 2012 through June 2013. (Note that help desk data was provided by OMES ISD and Board of Nursing staff and is those agencies’ representation of the full body of help desk ticket data for the Agency.)

- Reviewed the Consolidation Plan developed by OMES ISD to implement the consolidation, identified key topics, and reviewed these topics along with significant SLA provisions.

- Compared relevant Agency IT costs in FY 2011 and FY 2013 to determine whether consolidation appears to have been in the financial best interest of the Agency (related to identifying opportunities for potential improvements).

- Compiled and considered management’s remaining issues not related to provisions of written agreements.
The FY 2012 service-level agreement (SLA) between the Agency and OMES ISD states that OMES ISD will provide reliable and secure access to networks, file and print services, and e-mail services, with 99% uptime. The FY 2013 SLA mentions these same services, but excludes the statistical guarantee. Because OMES ISD does not have a method in place to track uptime, we interpreted the SLA language to mean generally that OMES ISD promises to be “very reliable.” Board of Nursing management does not believe the Agency receives “very reliable” uptime based upon connectivity problems Agency employees have experienced.

We reviewed all help desk tickets for the Board of Nursing since consolidation occurred (January 2012 through June 2013) and noted a variety of uptime and access-related issues reported by Board of Nursing staff. These included issues related to accessing the AS400 database system, PeopleSoft (the state’s accounting system), the Agency’s network, the internet, and e-mail, as well as unique issues such as trouble with logins and specific software access problems. Overall, in 651 help desk tickets we identified at least 84 access issues. These issues sometimes affected multiple people and took varying lengths of time to resolve. It stands to reason that anyone using IT services will have occasional access problems or questions, but overall it appears the Nursing Board staff experienced a variety of access issues.

Because these cases take varying lengths of time to resolve, quantifying “uptime” is difficult. If we consider each year to have 260 working days, and assume that consolidation began January 1, 2012 and is examined through June 30, 2013, we see at least 84 access issues in 390 work days, or an access issue on 21.5% of work days. It appears OMES ISD has not been providing reliable access as indicated in the SLA.

The consolidation plan developed by OMES ISD for the Board of Nursing’s consolidation explains that help desk staff is expected to close 62% of issues on its own, so Agency administrative staff is freed of these duties. The FY 2013 SLA also includes the 62% first-contact closure target.

Agency management is concerned that help desk responses and handling of help desk tickets are slow and, at times, inefficient. OMES ISD has a dashboard system in place and available online that illustrates its performance in relation to various targets outlined in their recent service-
level agreements (including response and resolution times for various help desk case priority levels). The following are statistics from that dashboard on the number of help desk cases closed on first contact for January 2012 through June 2013.\(^1\) According to OMES ISD, this data is drawn from the PeopleSoft system used by help desk staff to track cases.

**Oklahoma Board of Nursing:**

<table>
<thead>
<tr>
<th>Contact Center First Call Resolution **</th>
<th>Target 62%</th>
<th>2012 Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>50%</td>
<td>44%</td>
<td>26%</td>
<td>25%</td>
<td>18%</td>
<td>35%</td>
<td>34%</td>
<td>32%</td>
<td>20%</td>
<td>21%</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>44%</td>
<td>17%</td>
<td>55%</td>
<td>33%</td>
<td>38%</td>
<td>38%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Overall for State Agencies:**

<table>
<thead>
<tr>
<th>Contact Center First Call Resolution **</th>
<th>Target 62%</th>
<th>2012 Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>53%</td>
<td>51%</td>
<td>51%</td>
<td>55%</td>
<td>55%</td>
<td>53%</td>
<td>57%</td>
<td>52%</td>
<td>52%</td>
<td>51%</td>
<td>54%</td>
<td>54%</td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>58%</td>
<td>52%</td>
<td>54%</td>
<td>51%</td>
<td>50%</td>
<td>50%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With regard to state agencies overall and the Nursing Board specifically, it appears that help desk staff is not able to reach its goal of 62% of cases handled by the first contact. One quarter of the Agency’s help desk tickets considered were password resets, which are generally resolved quickly and should help bolster the 62% figure.

OMES ISD staff members suggested these metrics and overall problem solving response time suffer when new agencies are consolidated, increasing help desk workload, and indicated that help desk employee turnover may contribute to the problem. Moreover, OMES ISD plans to continue adding agencies, which could place additional strain on their limited resources.

According to its HB 1304 Quarterly Progress Report on Consolidation, dated January 31, 2013, OMES ISD plans to consolidate the following agencies in FY 2014:\(^2\)

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2. OMES CIO website, HB 1304 Quarterly Report, FY-2013 Year 2, Quarter 2, page 1-14, accessed 07/16/13; http://www.ok.gov/cio.
While the consolidation plan suggests that OMES ISD services are intended to free agency administrators of IT-related duties, Board of Nursing management estimates that the time spent on IT issues has actually increased, due to the fact that staff must not only submit help desk tickets but often must monitor issues to ensure they are promptly and appropriately managed.

Management also expressed a concern that Agency staff has difficulty verifying that work requested from OMES ISD has been completed. We identified four examples of help desk tickets closed before resolution. However, it is possible that more cases exist, as help desk tickets that are closed prematurely are often reopened rather than creating a new ticket. This practice makes it difficult to identify initially unresolved cases in archived help desk records. OMES ISD staff explained that this issue is not unique to the Board of Nursing and OMES ISD is attempting to address the issue for all customers.

As discussed in more detail in the next section, we found numerous cases for which the OMES ISD response and resolution time periods did not meet the response and resolution periods promised by the SLA.
It appears OMES ISD is not meeting its obligation to close 62% of help
desk cases on first contact and OMES ISD responses to help desk requests
and resolutions of those requests are not reliably on-time. In addition,
Agency administrative staff members do not believe they are freed of IT-
related duties, and lack assurance that all IT questions or concerns have
been addressed when the related help desk tickets are closed.

Help desk cases submitted by the Agency are ranked according to
priority level, and the priority level assigned determines how timely desk
staff is intended to respond to Agency personnel and resolve the issue.
The FY 2012 SLA, FY 2013 SLA, and consolidation plan all address
priority ranking of help desk cases. The following is a summary of the
priority levels and associated goal time periods for *response* (when the
assigned help desk employee responds to the Agency’s open help desk
ticket) and *resolution* (when the Agency’s IT problem is fully resolved):

<table>
<thead>
<tr>
<th>Priority Classification</th>
<th>Response</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority 1 (high)</td>
<td>90% of responses</td>
<td>90% of resolutions</td>
</tr>
<tr>
<td></td>
<td>within 15 minutes</td>
<td>within 2 hours</td>
</tr>
<tr>
<td>Priority 2 (medium)</td>
<td>85% of responses</td>
<td>85% of resolutions</td>
</tr>
<tr>
<td></td>
<td>within 2 hours</td>
<td>within 4 hours</td>
</tr>
<tr>
<td>Priority 3 (low)</td>
<td>85% of responses</td>
<td>85% of resolutions</td>
</tr>
<tr>
<td></td>
<td>within 24 hours</td>
<td>within 7 days</td>
</tr>
<tr>
<td>Routine</td>
<td>85% of responses</td>
<td>85% of resolutions</td>
</tr>
<tr>
<td></td>
<td>within 1 business day</td>
<td>within 5 business days</td>
</tr>
<tr>
<td>Password</td>
<td>90% of responses</td>
<td>90% of resolutions</td>
</tr>
<tr>
<td></td>
<td>within 10 minutes</td>
<td>within 20 minutes</td>
</tr>
</tbody>
</table>

Agency management expressed concerns that some help desk requests
may be ranked too low in priority. During our analysis of Board of
Nursing help desk tickets we were unable to conduct an exhaustive
comparison of all descriptions to priority level assignments, but reviewed
the descriptions of various cases in each of the priority categories and
noted that the priority levels seemed to be generally categorized
appropriately. Because help desk records do not contain detailed, step-
by-step descriptions and Agency needs are subjective, our review could
not capture the complexity of the true process.

Using these help desk records, we calculated the time it took for help
desk staff to respond to the Agency and to resolve reported problems. We
compared these time periods to the priority-based goal times listed in the
SLA and noted that the actual response and resolution times sometimes
did not meet the SLA times:
Overall, it appears the anticipated response times and resolution times in the SLA are not met on a reliable basis. (Password cases are not included but are generally completed on time.)

We also noted cases for which, according to the help desk system data, the response occurred before the ticket was opened or the case was resolved before OMES ISD responded to the Agency. These “negative times” suggest problems or errors may exist in the data, whether caused by the system or help desk staff.

Agency management explained that in order to increase priority status for important cases, they sometimes make calls and “back end” requests. OMES ISD staff commented that they are attempting to better educate agencies on including adequate information with their help desk requests in order to assure that an accurate priority level is initially assigned. Regardless of these explanations, Agency management is currently concerned with the timeliness of services received.

The FY 2012 SLA states that OMES ISD will provide support for acquisition and implementation of software and one-person systems such as desktop and laptop computers. The FY 2013 SLA includes workstation support and consulting in its list of services. We encountered two issues related to personal computing.

In July 2012, the Agency paid for access to SkillSoft, an online e-learning site provided by OMES Human Capital Management. After two months OMES ISD was able to configure Agency computers to access the site. However, the Agency was unable to use the service until January 2013 due to difficulties with the state’s internet security system, and was not refunded the cost of six months in lost training services. According to
OMES ISD staff, the Agency was not required to consult with OMES ISD to implement this training system. Because the SkillSoft program was marketed and provided by OMES, management expected it would be compatible with the Agency’s IT system. We identified 23 help desk tickets related to SkillSoft and the state’s internet security system. OMES ISD staff indicated that during this period of time no security officer was in place, which likely contributed to these issues.

The Agency also experienced difficulties and delays in having a computer installed to perform federal background checks. Per federal regulations, the computer was required to be isolated from the Agency’s network, with its own internet connection. Repeated help desk tickets were submitted to have this computer correctly installed and functional, a process which continued in excess of a month. Following this delay, cabling issues were recognized and had to be addressed. We identified six related help desk tickets, all of which were resolved late. Management discussed the Agency’s needs with OMES ISD staff beginning in early November, and submitted a summary help desk ticket as requested by OMES ISD the same month. It seems some needs were misunderstood, were not adequately communicated, or were not passed on to appropriate personnel. As a result, the Agency missed its planned implementation date of January 1, 2013.

It appears the Agency has experienced difficulties implementing personal computing projects with OMES ISD assistance. While the projects were eventually completed, management had to spend additional time working with OMES ISD staff and monitoring their progress.

**Security**

The FY 2012 SLA states that OMES ISD will provide support and infrastructure to keep Agency data processing equipment and systems operational and secure. Security, data center, and server services are also listed in the FY 2013 SLA. The consolidation plan states that OMES ISD will conduct vulnerability scans, policy review, and disaster recovery plan review and refinement.

According to management, Agency employees were granted inappropriate access to certain files during the consolidation process. While management requested that all file access changes be approved by the executive director, and OMES ISD staff acknowledged that this approval process should have been followed by help desk staff, unapproved file access issues persisted. Using help desk ticket data, we identified two cases in which employees had unapproved access to files
in 2013. Inappropriate employee access could undermine the Agency’s internal controls and data security, allowing unauthorized staff to read or edit file content such as licensing information, payment details, and social security numbers. OMES ISD staff was unable to explain why unapproved employees were allowed access to files.

The guaranteed updates to the Agency’s disaster recovery plan and IT-related policies and procedures have not been completed. OMES ISD staff explained that disaster recovery plan updates were planned but did not provide any timeline of when these updates would occur. The vulnerability scans were conducted.

It appears OMES ISD has not met its obligations to ensure the security of data in the Agency’s systems or to update related documentation. The Agency’s electronic files may be susceptible to access by unapproved internal parties, with no clear cause. Such inappropriate access could compromise the Agency’s controls. OMES ISD has also failed to update the Board of Nursing’s policies and disaster recovery plan, possibly leading to inadequate safeguards and communication in the event of a disaster impacting Agency data or equipment.

**Back-ups and Contract Management**

The FY 2012 SLA states that OMES is responsible for performing backups of network components and servers it administers. The FY 2013 SLA includes data center and security services in its list of services.

The FY 2012 SLA also states that OMES will provide contract oversight for the agency’s existing contractor. The FY 2013 SLA outlines AS400-related costs, and the Consolidation Plan states that OMES will contract with Advancia for AS400 server support and for application support related to licensing, investigation, and peer assistance.

It appears OMES ISD has met its obligations regarding these provisions.

**Adequacy of Written Agreements**

Board of Nursing management has discussed various concerns and requirements with OMES ISD and requested that the results of those discussions be placed in a written form such as the SLA. However, management does not believe these discussions have been adequately documented or formulized in writing. Failure to place key approvals and agency-specific information in writing could lead to improper execution or enforcement of important processes.
The lack of documented Agency needs and expectations is compounded by staffing turnover at OMES ISD. For example, the Agency’s original contact separated from OMES ISD in January 2013, and any Agency-specific information he had learned but not documented may no longer be available to OMES ISD.

Agency management cited two key areas that have not been formally documented by OMES ISD, but have been requested of OMES ISD staff:

- **File access and security**: Any new file access is supposed to be approved by the executive director, but this requirement has not been formalized.
- **Critical incidents**: Nursing management would like OMES ISD to document what incidents are considered critical to the Agency’s operations, so top priority can be assigned to key problems that impede the Agency’s main functions (such as licensing).

Formalization of security requirements and agency-specific prioritization would likely be important issues for any consolidated agency. During our interview, OMES ISD staff noted that the FY 2014 template SLA includes an “Appendix D” which is intended to incorporate these types of agency-specific needs. However, we reviewed the Board of Nursing’s signed FY 2014 SLA and noted that the appendix was not used for this purpose. The executive director stated that she was not informed this was an option.

It appears the current written agreements are inadequate from the Agency’s perspective. While a variety of requirements are embodied in the annual SLA between the Agency and OMES ISD, Board of Nursing management has reasonable needs and expectations beyond the basic information in this agreement.

### Future Aspects of Consolidated Services

During our procedures we learned that OMES ISD plans to move state licensing agencies to a shared licensing platform called Amanda. OMES ISD staff explained that Amanda is a piece of enterprise licensing software intended to replace licensing agencies’ legacy database systems as they become antiquated. We received mixed information about how well the platform is working for the few agencies currently using it. OMES ISD staff reported that the system is working well. However, management at one agency using Amanda explained that the agency had suffered numerous problems at implementation but is now slowly seeing improvements.
At the moment, Board of Nursing management has asked that any provisions related to Amanda be removed from the Agency’s FY 2014 SLA. The Agency, when considering this potential transition to Amanda as a licensing system, should take note that the OMES ISD staff responsible for the transition is already strained by consolidating additional agencies and by employee turnover.

Financial Effects

In order to determine whether IT consolidation has been in the financial best interest of the Agency, we compared the Agency’s relevant IT costs before and after consolidation. Any costs not related to consolidation or OMES ISD services were removed in order to help ensure a fair comparison. For example, because the Agency handles its telephone services independently, telephone costs are not included. We also excluded one-time equipment costs, such as purchases of new laptops.

<table>
<thead>
<tr>
<th>Expense Category</th>
<th>Fiscal Year 2011</th>
<th>Fiscal Year 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custom Computer Program Services</td>
<td>$130,943.06</td>
<td>$0.00</td>
</tr>
<tr>
<td>Computer Systems Design</td>
<td>0.00</td>
<td>141,485.17</td>
</tr>
<tr>
<td>Other Computer Related Services</td>
<td>495.00</td>
<td>30,126.83</td>
</tr>
<tr>
<td>Information Services</td>
<td>20,577.00</td>
<td>36,978.48</td>
</tr>
<tr>
<td>ERP - CORE</td>
<td>2,732.16</td>
<td>2,732.16</td>
</tr>
<tr>
<td>DP Equip Rental</td>
<td>0.00</td>
<td>972.00</td>
</tr>
<tr>
<td>HW Maintenance</td>
<td>4,640.11</td>
<td>16,038.48</td>
</tr>
<tr>
<td>SW Maintenance</td>
<td>25,432.07</td>
<td>2,853.72</td>
</tr>
<tr>
<td>DP Supplies</td>
<td>14,158.00</td>
<td>1,382.94</td>
</tr>
<tr>
<td>DP Software</td>
<td>5,418.95</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Fiscal Year Total</strong></td>
<td><strong>$204,396.35</strong></td>
<td><strong>$232,569.78</strong></td>
</tr>
<tr>
<td><strong>Increase in Cost</strong></td>
<td><strong>$28,173.43</strong></td>
<td></td>
</tr>
<tr>
<td><strong>% Increase</strong></td>
<td><strong>13.78%</strong></td>
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</table>

Most categories of expenditure changed markedly due to consolidation, including the following:

- Responsibilities such as Software Maintenance, Data Processing Supplies, and Data Processing Software were primarily taken over by OMES ISD and as a result, related costs shifted to Other Computer Related Services.

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3 This total includes $79,560.32 in estimated FY 2013 costs not yet paid by the agency at the time of comparison. Estimates are based on previous months' amounts, number of months remaining, and pending adjustments.
• The Agency’s database maintenance contract did not change significantly in cost, but was moved from the Custom Computer Program Services category to Computer Systems Design, and is now paid through OMES ISD.
• Information Services increased by $16,401 due to enhanced cabling and a change in account code for network services.
• Hardware Maintenance increased by $11,398 due mainly to the cost of consolidated printer maintenance.
• Data Processing Equipment Rental was added at $972 due to firewall and switch lease costs.

IT expenses relevant to the consolidation process increased by $28,173.43, or approximately 14%. Note that this does not include less quantifiable costs, such as those associated with management’s increased time spent addressing shortcomings of the SLA.

During the consolidation process OMES ISD projected that the Board of Nursing would experience a financial loss due to consolidation for the foreseeable future. Therefore, the Agency was aware that it would not immediately derive a financial benefit from consolidation. Management voluntarily entered into consolidation with other goals in mind, including improved IT expertise, additional free time for management, improved security of IT assets, and serving as a test case for other potential consolidating agencies.

In order for management to believe that voluntary consolidation was in the financial best interest of the Agency, they would need to realize other benefits that outweigh the increase in cost. The information detailed throughout this objective indicates that this has not been the case and, that while IT costs have risen for the Agency, the benefits from consolidation may not exceed the cost.

**Other Issues**

During our meetings and procedures, Agency management shared some concerns that were not directly comparable to the Agency’s contractual agreement with OMES ISD, or were not readily verifiable during an audit of the Board of Nursing (versus, for example, an audit of OMES ISD). These issues included:

• Slow responses to Agency administrative needs regarding the consolidation process and overall IT service. For example, management discussed file access security issues with OMES ISD
contacts in July 2012, and did not believe the issue was resolved in September 2013. Management also discussed not feeling confident that help desk ticket requests were fulfilled when the tickets were closed with OMES ISD contacts in January 2013. OMES ISD management promised to look into this and other issues soon, but Board of Nursing management still did not have confirmation that these issues had been addressed in September 2013.

- OMES ISD moving the Agency to a different server during consolidation, which resulted in the Agency losing its ability to access one employee’s work station on another employee’s computer (referred to as “floating profiles”). The lack of floating profiles caused inefficiencies for Agency staff until OMES ISD implemented a work-around. This server arrangement also suggests that if the Agency were to discontinue its relationship with OMES ISD, it may be difficult to return to the same server used prior to consolidation.

- Poor communication on the part of OMES ISD staff. Board of Nursing management believes that OMES ISD staff has a difficult time communicating with Agency staff, and may also lack adequate internal communication, for instance in communicating the file permissions process for Nursing Board employees.

Overall, these subjective concerns and experiences have led management to believe that the IT expertise and level of service the Agency was originally seeking when it chose to consolidate are not being provided by OMES ISD. These are valid issues for management and the Board to take into account during any internal assessment of the Agency-vendor relationship.

**Conclusion**

The Agency’s IT consolidated services are not consistent with the SLA in a number of areas, including reliable access, timely responses and resolutions to help desk requests, internal file access security, and disaster recovery plan updates. They are in line with the SLA regarding back-ups, contract management, and some aspects of personal computing services and security. Management also has other concerns about its dealings with the vendor, not directly tied to SLA provisions, including the adequacy of the written agreement itself.

Potential opportunities for vendor improvements are included in our recommendations.
Agency management and the Board should consider all of the information in this report, along with management’s concerns and experiences, and other information that can be directly provided by OMES ISD, to determine whether it is in the Agency’s best interest to continue this vendor relationship. Retaking control of its IT services could enable management to better ensure its vendors meet the Agency’s high standards of service and timeliness. Further financial analysis could determine whether costs savings might be realized.

The Board and management should also consider potential negative aspects of severing the vendor relationship. This could include the cost of reestablishing support contracts, possibly losing their current, trusted database contractor, and the fact that the server they owned before consolidation has been absorbed by OMES ISD. It is also possible that future state consolidation or statewide electronic licensing efforts could impact the necessity and convenience of using OMES ISD as an IT services vendor.

Overall, if the Agency decides to continue its relationship with OMES ISD, improvements need to be made on the part of the vendor – or the Agency must be willing to compromise on its standards and expectations.

If the Agency chooses to continue using OMES ISD for IT services, we recommend management should perform the following in the interest of improving this vendor relationship:

- Continue to discuss any unique IT acquisitions or other IT-related situations with an OMES ISD contact in advance and in detail in order to plan implementation and ensure that the Agency’s needs are understood and can and will be met.
- Continue to work with OMES ISD to get as much of the Agency’s expectations and needs formally documented as possible. This could potentially include the use of Appendix D to modify the SLA in the future.
- Work with OMES ISD staff to determine a future fee structure the Agency believes is commensurate with the level of service being provided.
- Continue to maximize communication efforts with OMES ISD staff.
The recommendations will be considered by the Board and Agency management to determine an appropriate course of action.

Because this is an audit of the Board of Nursing, we have focused on management’s role in implementing these recommendations. However, in order for the vendor relationship to be more effective, improvements must also be made by OMES ISD. Areas in which the vendor will be most responsible for making improvements include:

- Increasing the reliability of Agency access to the network, internet, e-mail services, etc.
- Improving the timeliness of responses and resolutions on the part of help desk staff.
- Ensuring that internal deadlines for help desk ticket responses and resolutions are in line with SLA requirements, and that help desk data is accurate and complete.
- Meeting the specific SLA obligations still due to the Agency, such as policy and disaster recovery plan updates, in a timely manner.
- Ensuring file access is properly secured and tracked in order to avoid compromising the Agency’s internal controls and confidentiality. One method for assuring proper access might be to develop a report that could regularly inform management about the access currently granted to each employee.
- Determining the root causes of issues such as the granting of inappropriate file access, and improving internal processes to ensure these problems no longer occur.
- Working with Agency management to implement the changes and improvements recommended in the previous section. This includes documenting the Agency’s specific needs and expectations to the extent possible.
- Improving the vendor relationship by addressing management’s concerns and improving overall communication efforts.

Serious service improvements such as these will likely benefit not only the Board of Nursing, but all agencies receiving IT services from OMES ISD, now and in the future.