DISCUSSION ON BUDGET REQUEST FOR IT SYSTEM NEEDS

Since the 2010-2011 Award Year, the Commission has fully utilized a home-grown Microsoft Access Database, which replaced the previously used COBOL database. Through the use of an outside contractor, the current database system was built and updated annually to continue to serve the needs of the Commission with the administration of the SC Tuition Grants Program. In 2017, Zachary Christian, Commission Financial Aid Counselor and IT Director, completed a certificate program at Midlands Technical College to obtain the skillset needed to bring database changes/enhancements back in-house and eliminated the need for outside contracted help in maintaining the Commission’s database. While the current database has served the Commission well over the years, because of the growing needs of the SC Tuition Grants Program and the limitations of Microsoft Access databases, the current system is not sustainable and would no longer be of use within the next five Award Years, as needed to administer the Program.

The following limitations are being taken into consideration when looking at longevity of a database system:

• File size limitations; a single Access database file can only hold a maximum of 2 gigabytes of data. Currently, the Commission’s database utilizes 7 different Access database files at one time for only one Award Year. Within the next 2-3 years, that will need to increase to at least 9 separate database files to hold the required data tables to administer the Program. An increase to linked database files will lead to longer delays in processing and decreased efficiency of the overall database.

• Data security; all database files used when accessing the Commission’s database are housed on off-site servers, located at the State’s Data Center in Columbia. While the Commission’s networked drives have security monitoring through the state’s Division of Technology Offices (DTO), there is no additional data security available with the database, as Microsoft Access does not record Transactional SQL strings, nor does it allow user-specific limitations/security like other database software (i.e. Microsoft SQL Server, Oracle, etc.). If someone were to gain access to the Commission’s data, there is no way to determine what data from the database was accessed, causing the Commission to need to notify hundreds of thousands of SC Residents in the event of a data breech.

• Functionality Limitations; the Commission’s current student database system does not allow for any outside access or user functionality for the colleges’ financial aid offices. Any inquiries regarding student eligibility must be filtered through Commission staff.

Commission staff are currently looking at two potential options that could be used to replace the current database when it will no longer meet the needs of the Commission. One option would be to create another home-grown system with the underlying back-end database being a Microsoft SQL Server database hosted by DTO. The other option would be to acquire an “off the shelf” application designed specifically for state grant agencies.
Commission staff are currently still waiting to receive the full cost estimates of what the Commission would need to pay to DTO annually for hosting, a virtual server OS, licensing fees, and increased internet bandwidth, if the Commission decides to utilize the first option. In addition to having to pay DTO annually for the listed fees, the Commission would also be required to hire two new FTE positions. The Commission currently has one authorized, but unfunded, vacant FTE that could be filled with appropriate funding from the Legislature. Another FTE position would be required as the Commission would need a full-time staff member to specialize in database management and another to specialize in server application/management. Each position would be a fully burdened cost to the Commission at over $60,000 annually (over $120,000 total, annually). Lastly, the Commission would need to hire an outside contractor to develop and build a front-end application if increased functionality was desired. This would be strictly optional, as the Commission’s IT Director could re-build the current Microsoft Access database to properly link and work with a Microsoft SQL Server database back-end; however, no additional functionality would available (i.e., college user access to review student eligibility, self-generate reports when needed, etc.). The Commission would essentially be paying to maintain a student database system that would not offer the Commission anything beyond additional security and longevity.

Commission staff have completed an informal survey of potential vendors, and for planning purposes, have requested an informal price estimate. The cost of an “off the shelf” application would include a one-time set-up fee of $200,000.00, and an annually recurring cost of $270,000.00. The recurring costs include all of the listed fees the Commission would have to pay to DTO, as well as: help-desk support, custom query/reports at request, an online portal for college aid administrators, an online portal for students, data security that meets all state and federal data privacy requirements, and support for changes to the SC Tuition Grants program (i.e., new eligible non-traditional programs of which our current system is limited to two).

The South Carolina Tuition Grants Commission needs to discuss this matter and vote on whether to allow Commission Staff to include in the State Budget Request one-time funds in the amount of $200,000 and annual recurring funds in the amount of $270,000 for a fully supported third-party vendor solution. If this request is not approved, the alternate option is to allow Commission Staff to go through the process of requesting one additional FTE, along with the budget to fully fund it and an existing FTE at a cost of $120,000, in addition to all required DTO and other third-party costs associated with hosting and licensing, which are currently unknown but are estimated to be over $70,000.