STUDENT INFORMATION SYSTEM (SIS) PROJECT UPDATE

"For surely I know the plans I have for you, says the Lord, plans for your welfare and not for harm, to give you a future with hope." Jeremiah 29:1

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Steve Camacho, Chief Information Officer

INFORMATION REPORT

Vision:
At Toronto Catholic we transform the world through witness, faith, innovation and action.
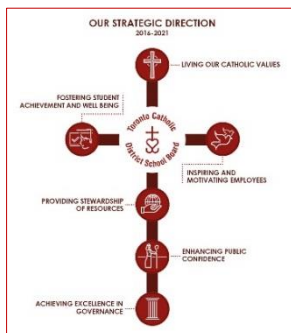
Mission:
The Toronto Catholic District School Board is an inclusive learning community uniting home, parish and school and rooted in the love of Christ.
We educate students to grow in grace and knowledge to lead lives of faith, hope and charity.

Rory McGuckin
Director of Education

D. Koenig
Associate Director
of Academic Affairs

L. Noronha
Associate Director of Facilities,
Business and Community
Development, and
Chief Financial Officer

A. EXECUTIVE SUMMARY

A Student Information System (SIS) is mission-critical organization wide system that stores and manages all student records for current and past students. Beyond managing student records, the SIS is critical for to the TCDSB as a data source for funding and for staffing. The TCDSB currently uses an older (legacy) Student Information System called Trillium, which it has operated since 2001.

In 2016, PowerSchool, a large SIS vendor, purchased the Trillium SIS business in Ontario and subsequently announced that it will no longer add new functionality to Trillium; PowerSchool indicated that they would like to see school boards "upgrade" to the PowerSchool SIS, their core SIS product.

In response to Trillium's uncertain future, several school boards participated in a RFP issued by Ontario Education Collaborative Marketplace (OECM) on behalf of all school boards in Ontario for a new SIS. In January 2019, OECM announced the winning Bidder as the joint bid from Fujitsu and Follett using the Aspen SIS software. Four bidders responded to the RFP, including PowerSchool.

The OECM award to Fujitsu/Follett does not force the TCDSB to implement the Aspen SIS. The TCDSB needs to sign a sub-agreement known as Client Services Agreement (CSA) to take advantage of the overall agreement completed by OECM. TCDSB staff have met with both Powerschool and Fujistu/Follet in order to ensure that the TCDSB accepts the offer with the best overall value to the TCDSB within established procurement rules.

Although the implementation of a new modern SIS has many benefits, the implementation work is typically among the most complex IT projects an organization can undertake because it affects many core business processes. To manage such a large and complex IT project, the TCDSB will need to form a dedicated project team that will include experienced staff and administrators from within the TCDSB ranks as well as experts from the vendor team.

The project costs and schedule are not yet known, however, staff estimate the project will take between 3 to 4 years and cost between $10M to $15M to implement.

Staff anticipate that a final contract, project budget, funding plan, and high-level schedule will be ready for Board review and approval by December 2019.

The cumulative staff time required to prepare this report was 15 hours

B. PURPOSE

1. The purpose of this report is to provide the Board with background information on the TCDSB's use of the student information system and work completed so far to select a new SIS. The report also provides updated estimates to trustees on the most critical aspects of a future SIS project.

C. BACKGROUND

1. A Student Information System (SIS) is a mission-critical organization wide system that stores and manages all student records for current and past students. The SIS is often the "source of truth" for student information and holds a significant amount of key information such as student demographic data, grades, transcripts, parent information, attendance, and medical information just to name a few.

2. The SIS is critical to the TCDSB for funding because the information within it is used to gather enrolment totals, class sizes, and other information. This information is also sent regularly to the Ministry of Education to calculate the total amount of Grants for Student Needs (GSNs) that the TCDSB will receive in any given year.

3. Because the SIS holds classroom data, it is also used as a key data source to calculate staffing allocations. The data from the SIS is used to calculate staffing levels for student facing position such as teachers, Early Childhood Educators, Educational Assistants, and other similar groups, which in turn account for most of the TCDSB's daily operating costs.

4. The TCDSB currently uses an older (legacy) Student Information System called Trillium. The Trillium SIS is also used by approximately 44 schools boards across the province of Ontario including the TDSB. The software is not used in any other province or state.

5. The Trillium software was originally developed by the Ministry in partnership with school boards in the late 1990s. The government and schools boards in 1996 abandoned the Trillium product development and subsequently sold the unfinished product to an independent software development firm called SRB.

6. SRB developed Trillium into a viable product and subsequently licenced the product back to school boards in the early 2000s. TCDSB implemented Trillium around 2001.

7. SRB continued to develop and maintain Trillium until 2016, when Trillium was purchased by PowerSchool. PowerSchool is a large private firm that specializes in Student Information Systems among other products. The core product, the PowerSchool SIS, is installed in many schools across North America.

8. In 2017 PowerSchool announced that it will no longer be adding new functionality to Trillium; However, they would continue to support security and Ministry reporting compliance updates for the near future. PowerSchool, also indicated that they would like to see school boards "upgrade" to the PowerSchool SIS over time.

9. In response to Trillium's uncertain future, in late 2017, several school boards participated in a Request for Information (RFI) process to learn about the overall SIS market. The RFI was conducted by the Educational Computing Network of Ontario (ECNO) on behalf of most school board in Ontario including the TCDSB.

10. Also in late 2017, the TCDSB set aside $5M in one-time funding for a future SIS project. The funds were taken from in 2016/17 in year surplus. The Board also agreed to increase the base IT budget over 5 years to cover new anticipated operating costs of a new SIS. Since the SIS project has not been started, these funds have not been used and have accumulated. In addition, the project was not started pending the hiring of a new CIO, which occurred in March 2018.

11. In 2018, the unused budget from SIS project was placed into a strategic IT systems reserve as part of an overall reserve strategy that was approved by the Board. The intention of this reserve is to support major systems modernization projects such as a new SIS. The current strategic IT system reserve balance is $7.95M.

12. In April 2018, the Ontario Education Collaborative Marketplace (OECM) issued an RFP for new SIS on behalf of all school board in Ontario. The TCDSB was heavily involved in the RFP process from the beginning and

contributed to the RFP criteria, bid response scoring, and master contract negotiations with the top bidder.

13. In January 2019, OECM announced the winning Bidder as the joint bid from Fujitsu and Follett using the Aspen SIS software. Follett will provide the Aspen SIS software while Fujitsu will provide implementation and on-going support services under a single contract. There were four bidders who responded to the RFP including the TCDSB incumbent vendor, PowerSchool. While the exact scoring cannot be released, staff are aware that the bid from Aspen/Fujitsu was the highest scoring bidder by a significant margin.

14. The Aspen SIS is also one of the most popular student information systems in North America. It is used by several schools, states and provinces. In Canada the Aspen SIS, is deployed to all school boards in British Columbia and Saskatchewan. In the USA, some notable large clients include Miami-Dade County Public Schools and Chicago Public Schools.

D.   EVIDENCE/RESEARCH/ANALYSIS

1. The OECM award to Fujitsu/Follett does not force the TCDSB to implement the Aspen SIS software. As with all OECM procurements, the TCDSB needs to sign a sub-agreement known as Client Services Agreement (CSA) to take advantage of the overall agreement completed by OECM. The CSA allows boards to negotiate additional terms that are important to them as well as allows for additional pricing discounts.

2. Recent changes to public sector procurement rules set out by the Government encourage the use of central procurement contracts such the SIS software contract offered through OECM. Although the TCDSB does not have to choose the Aspen SIS software, not selecting it will likely mean the TCDSB would need to start its own separate lengthy RFP process and justify its reasons for doing so to the Ministry of Education.

3. The TCDSB has recently received a letter from PowerSchool with a proposal to "upgrade" Trillium to PowerSchool SIS under the existing contract. The TCDSB and other boards have engaged with the Ministry of Education to determine the viability of this offer by PowerSchool.

4. TCDSB staff have met with both Powerschool and Fujistu/Follet to understand the specifics of their offers and contract. Staff are speaking to both vendors in order to ensure that the TCDSB accepts the offer with the best overall value to the TCDSB within established procurement rules.

5. The TCDSB uses Trillium for core functionality such as student demographic data and transcripts, but has built dozens of custom applications around Trillium to cover functionality that originally was not included in Trillium. These applications require extensive on-going maintenance work and are more prone to IT security threats. A new SIS could potentially eliminate some of these custom applications. Some examples of applications that TCDSB has built over the last 20 years include:

   - Individuals Education Plan (IEP) App to track plans for special needs students
   - Data Integration Platform (DIP) to track and report achievement data including EQAO
   - Report Card Creation App for teachers to create final report cards
   - Electronic data links to the Ontario College Application System (OCAS) and the Ontario University Application Centre (OUAC)
   - Progressive Discipline/Safe Schools application to manage student incidents, threats, and expulsions.
   - OnSIS report dashboard to track the data submission work to the Ministry
   - School Online Admissions and Registration (SOAR) software for parents and students to apply and register for their local school online.

6. In addition to all the custom software needed to support Trillium, the core Trillium system is built on older technology that is hosted in the TCDSB data centre and is only accessible via a software package installed on individual TCDSB computers. Most modern systems are built on cloud infrastructure and accessible via a web browser from any computer or device without the need to manage applications on each individual computers.

7. A new modern SIS will have a number of built functions not included in the core Trillium SIS such as a reporting and analytics engine, and IEP management function, case management functionality, electronic classroom attendance, and a parent access portal.

8.   In addition to the reduction in custom software and better long-term viability of a supported off commercials systems, the implementation of new modern SIS brings with it a number of other benefits including:

- improved access for teachers and principals on any device
- simplified and streamlined Ministry compliance report
- improved data security and privacy controls
- the reduction of data centre hardware as the new software is hosted by the vendor
- improved data integration with future software products such as a case management system
- simplified reporting tool for teachers, principals, and central staff

9.   The implementation of the new SIS is part of the draft I&T Strategic plan being presented to Board later this fall.

10. Although the implementation of a new modern SIS has many benefits, the implementation work is typically among the most complex IT projects an organization can undertake. There are a number of factors that drive this complexity such as the number of core business process affected by the system, the need to maintain operations while in transition to a new system, the number of staff that need to be trained on the new system, and the significant amount of data that needs to be transferred from the existing system to the new system.

11. In addition to the implementation complexity, it should be noted that an SIS is used by many staff on a day-to-day basis. Changing the system will likely disturb personal practices and working routines developed by staff over the last 20 years. As a result of this disruption, the project will require significant training, communications, and organizational change management effort in order to be completed and the software to be adopted successfully.

12. To manage such a large IT project the TCDSB will need to form a dedicated project team that will include experienced staff and administrators from within the TCDSB ranks as well as experts from the vendor team.

13. Although the exact costs and schedule are unknown until the final contract and project plan are completed, staff generally believe the project will take between 3 to 4 years to complete with an implementation cost of between $10M and $15M. Staff currently do not expect additional operating budget to

support the new system as this has already been planned within the current ICT operating budget.

14.   Staff anticipate that a final contract, project budget, funding plan, and high-level schedule will be ready for Board review and approval by December 2019.

E.   CONCLUDING STATEMENT

This report is for the consideration of the Board and.