THAMES VALLEY DISTRICT SCHOOL BOARD
PLANNING AND PRIORITIES ADVISORY COMMITTEE AGENDA

October 9, 2018, 6:00 p.m.

Board Room, Education Centre

<u>Presenters</u>:

If you are presenting a power point and require a clicker, please contact Corporate Services in advance of the meeting.

The Board room is available the day of the meeting for any required setup. See Corporate Services or Reception for access to the room.

Pages

    The next meeting is scheduled for 2018 November 13.

REPORT OF THE PLANNING AND PRIORITIES ADVISORY COMMITTEE

Members: Trustees J. Bennett, R. Campbell, C. Goodall, G. Hart, P. Jaffe, B. McKinnon, A. Morell, S. Polhill, M. Reid (by phone), J. Skinner, R. Tisdale, Student Trustees N. Bajaj, S. Chun (-6:57), I. Frick

Regrets: Trustees P. Schuyler, J. Todd

Administration: L. Elliott (Director), J. Pratt (Associate Director), R. Culhane (Associate Director), C. Beal (Superintendent), S. Builder (Superintendent), S. Mark (Superintendent), S. Powell (Superintendent), D. Macpherson (Superintendent), M. Moynihan (Superintendent), C. Glaser (Manager), B. Williams (Supervisor), C. Stager (Manager, -6:20), N. Rayfield (Research and Assessment, -6:20)

1. **APPROVAL OF AGENDA –** The agenda was approved on motion.

2. **CONFLICTS OF INTEREST –** none declared

3. **MINUTES OF PREVIOUS MEETING**
   The minutes of the 2018 June 12 meeting were provided for information.

4. **BUSINESS ARISING** - none

5. **IN CAMERA**
   On motion the committee moved in camera at 6:00 p.m. reconvening in public session at 6:50 p.m.

6. **OTHER BUSINESS**
   a. **Video Surveillance System**
      Administration will be bringing forward, at the 2018 September 25 Board meeting, an in-year budget request to support the implementation of a proof of concept for a new centralized video surveillance solution.

      In response to a question concerning the anticipated cost to fully implement the system, Administration responded that the proof of concept approach with 5 locations will ensure the solution is the correct solution and will allow for a more accurate estimation of costs.

      Trustees requested the report include information regarding the costs incurred by the board to address vandalism at schools.

      Discussion considered the selection of the sites for the proof of concept approach. C. Glaser advised a committee will be selecting sites and in response to a question advised the Ontario Principal's Council will be approached to identify an elementary and a secondary school principal to join the committee.

      It was noted the proposal shifts responsibility of funding video surveillance from a school-based approach to a board-based approach. Administration noted the current model is not sustainable.

   b. **Communications Technology Initiative**
      Administration will be bringing forward, at the 2018 September 25 Board meeting, an in-year budget request to support the initial phase of a communications technology initiative. Funds will be used to hire a project manager to lead the procurement and multi-year implementation of a new communications solution for the board. Funding also will be used to purchase equipment as an interim measure.

A further in-year budget request will come forward to Trustees in January to support the implementation of the system noting it will be a phased in approach.

Discussion considered alternate avenues for funding. It was confirmed the Ministry does not directly fund communication systems. School Renewal funding may not be used to buy new equipment only to replace existing equipment. L. Elliott advised on provincial efforts to lobby the Ministry to fund technology needs. It further was noted the Attorney General currently is surveying school boards regarding technology.

In response to a question it was noted a budget request was approved approximately 10 years ago to deploy equipment at school sites. Not all hardware issues were addressed at that time.

7. **QUESTIONS AND COMMENTS BY MEMBERS**
Trustees were reminded to take out their nameplate when leaving the meeting so everyone is aware they have left the meeting. Students were reminded to shred confidential documents.

Trustee Goodall reported the transition at Kettle Creek Public School has been very positive noting the staff has done an excellent job.

8. **FUTURE AGENDA ITEMS**
The next meeting is scheduled for October 9, 2018 at 6:00 p.m.

9. **ADJOURNMENT**
On motion, the committee adjourned at 7:26 p.m.

RECOMMENDATIONS: None

C. Goodall
Committee Chair

	Date of Meeting:	2018 October 9
	Item #:	4.0

REPORT TO:	☐ Administrative Council	☐ Program and School Services Advisory Committee	☒ Planning and Priorities Advisory Committee
	☐ Board	☐ Policy Working Committee	
	☒ PUBLIC	☐ IN-CAMERA	

TITLE OF REPORT:	ELECTRONIC DOCUMENT MANAGEMENT SYSTEM UPDATE

PRESENTED BY:	L. Elliott, Director B. Williams, Supervisor, Corporate Services

PRESENTED FOR:	☐ Approval	☐ Information	☒ Advice
Recommendation(s):	n/a		

Purpose:

To provide Trustees with an overview of the milestone achievements/outcomes of the Electronic Document Management System initiative resulting from the Board's 2017 investment.

To gather feedback from Trustees regarding the 2019-2020 budget and the funding of this initiative going forward.

Content:

The implementation of the Electronic Document Management System (EDMS) initiative was envisioned in three phases over 9 years. This is the final year of phase I.

As per the Business Case, the EDMS is intended to serve the needs of TVDSB as follows:

1. Improve transparency and accountability by:
   - Providing increased protection of privacy in accordance with legislation.
   - Providing an effective means of adhering to retention practices and demonstrating they are routinely carried out.
2. Increase efficiencies by:
   - Reducing the staff time associated with inefficient search and retrieval activities.
   - Reducing time spent filing.
   - Reducing storage costs.
   - Reducing the physical footprint required to maintain hard copies.
3. Protect corporate memory by:
   - Providing consistent, corporate-wide access points to staff permitted to view records.
   - Reducing the loss or tampering of records – ensuring records are reliable and trustworthy of the business they document.
4. Mitigate corporate risk by:
   - Ensuring long-term preservation and access to Boards' permanent records.
   - Increasing record retrievability in the event of a corporate disaster.
   - Enhancing document and record security; maintaining the integrity of records throughout their life cycle in order to ensure their admissibility into evidence if required.
   - Ensuring records are destroyed at a time and in a manner prescribed by legislation and/or policy.

In 2017, Trustees approved $115,000 from the contingency fund and $85,000 in each of two years for the hiring of a project manager to lead the implementation of the Electronic Document Management System initiative.

We build each student's tomorrow, every day

	Building on the achievements and successes of the last year, we are preparing for phase II of the initiative. Continued investment is required.
Cost/Savings:	n/a
Timeline:	Presentation to Trustees at the 2018 October 9 Planning and Priorities
Communications:	
Appendices:	Power point presentation Business Case

Relation to Commitments:

☐ Putting students first.

☐ Recognizing and encouraging leadership in all its forms.

☐ Ensuring safe, positive learning and working environments.

☐ Actively engaging our students, staff, families and communities.

☐ Being inclusive, fair, and equitable.

☐ Inspiring new ideas and promoting innovation.

☒ Taking responsibility for the students and resources entrusted to our care.

ELECTRONIC DATA MANAGEMENT SYSTEM (EDMS) IMPLEMENTATION UPDATE

Planning and Priorities Advisory
October 9, 2018

Thames Valley District School Board

We build each student's tomorrow, every day.

July 6, 2012
District School Board
Ontario North East

Thames Valley District School Board

We build each student's tomorrow, every day.

Project Scope: Phase 1 (2016-2019)
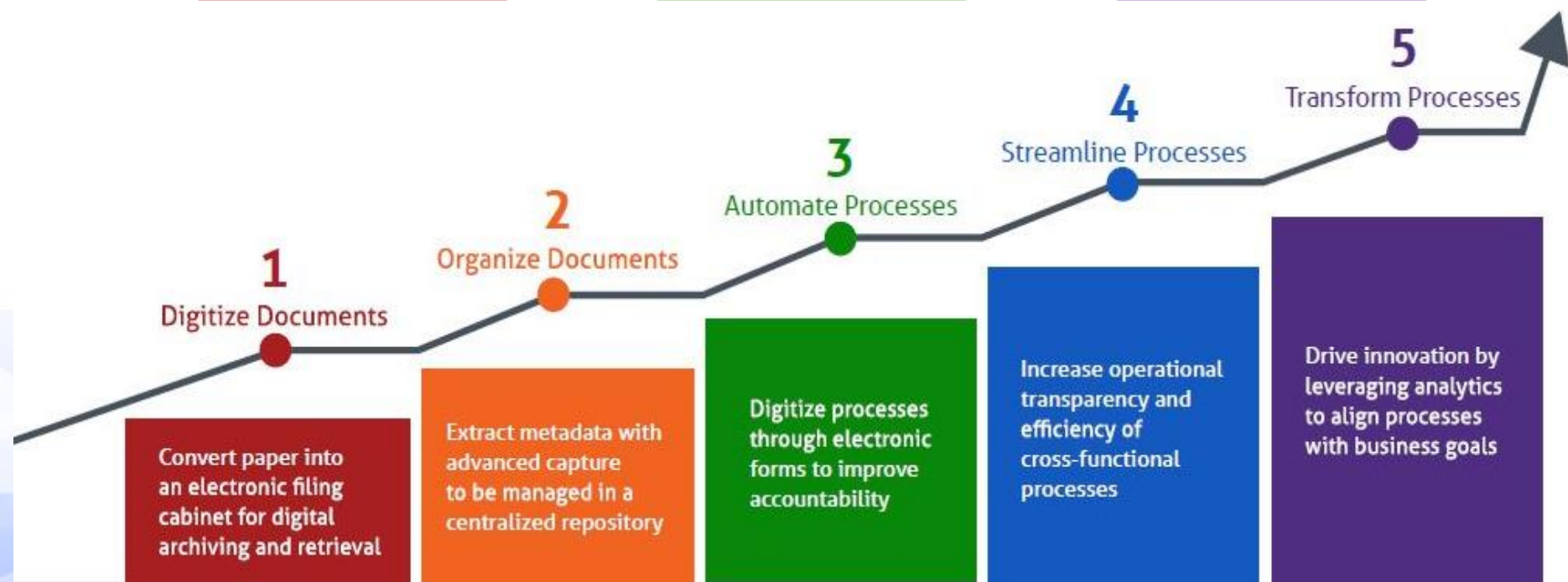
- Implement a scalable EDM system starting in Director's Services, Finance, and HR.

- Digitize longer term records.

- Begin to replace paper-based forms with electronic forms; create workflows (takes a manual process and automates that process).

- Map out the next phases of the initiative.

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Digital Transformation Model

Start → **Automate** → **Transform**

1 Digitize Documents
Convert paper into an electronic filing cabinet for digital archiving and retrieval

2 Organize Documents
Extract metadata with advanced capture to be managed in a centralized repository

3 Automate Processes
Digitize processes through electronic forms to improve accountability

4 Streamline Processes
Increase operational transparency and efficiency of cross-functional processes

5 Transform Processes
Drive innovation by leveraging analytics to align processes with business goals

Improved efficiencies, decrease use of paper/space, improved records management

Thames Valley District School Board

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Milestone Achievements

Digitized
812,393
Records

Decreased
Waste/
Improved
Access

DOCUHub

Automated
Manual
Processes

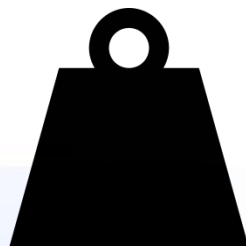We build each student's tomorrow, every day.
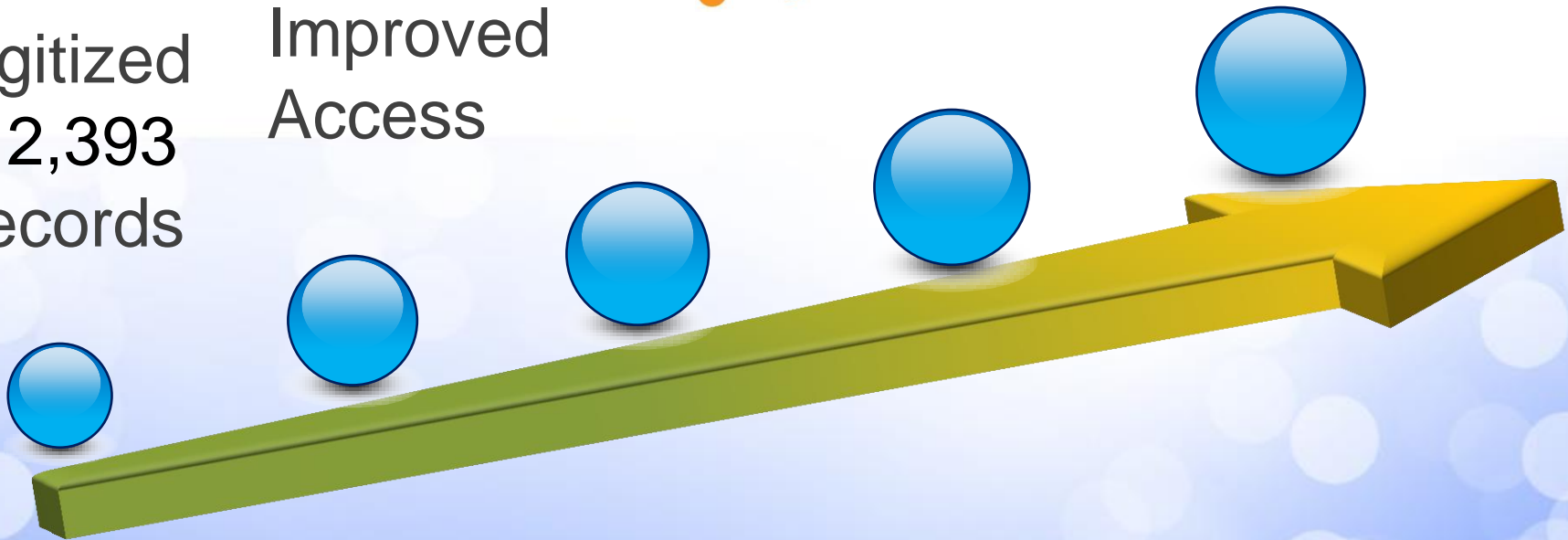
We have digitized

5,995,888

pages. This equals:
(as at August 7, 2018)

3,000

Bankers Boxes

150,000

Lbs. of weight

3,000

Linear Feet of Shelf Space

750

Standard Four
Drawer Filing Cabinet

1,000

Square Feet of Office Space

If laid end-to-end the scanned records
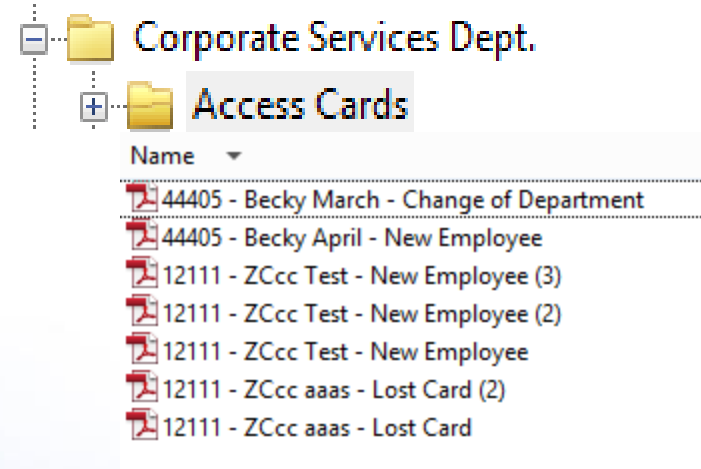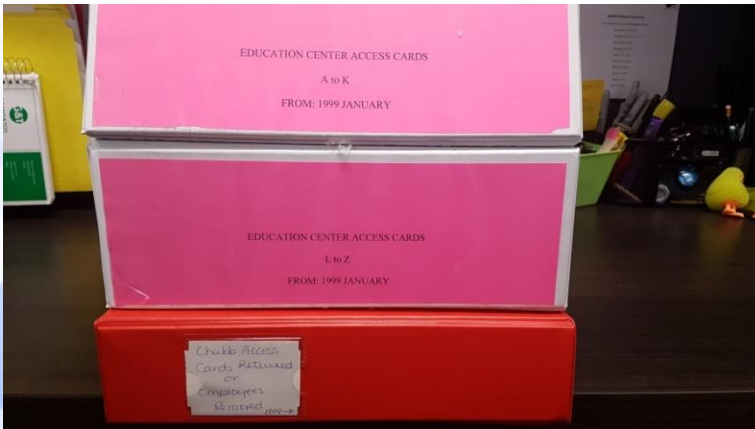would extend over
4.7 million feet
=1400 km (from here to Thunder Bay)

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Creating Space

We build each student's tomorrow, every day.

Access Card Automation

Corporate Services Dept.
  Access Cards

Name ▼

📄 44405 - Becky March - Change of Department
📄 44405 - Becky April - New Employee
📄 12111 - ZCcc Test - New Employee (3)
📄 12111 - ZCcc Test - New Employee (2)
📄 12111 - ZCcc Test - New Employee
📄 12111 - ZCcc aaas - Lost Card (2)
📄 12111 - ZCcc aaas - Lost Card

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Looking Ahead: Phase II (2019-2022)

Continue to identify and digitize historical/archival department records

- Expand into Director's Services, HR, and Finance (i.e., international students, TVEF, communications/graphics, purchasing, facility services)
- Expand into LSS departments

Focus efforts on automating business processes

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For Trustee Feedback:

- Continue to support EDMS through a budget initiative in 2019-2020 as a three year project. Estimated annual cost: $155,000 to $170,000 (annual support fee, laserfiche lead, training).

OR

- Permanently add $155,000 to 170,000 to the overall budget to support EDMS.

Thames Valley District School Board

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Business Case
Electronic Document Management System: Phase I

Submitted by:

Laurie Baines, Records Information Management Officer
Bonnie Williams, Supervisor-Corporate Services

September 2014

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Executive Summary

The **Electronic Document Management (EDM) System** project is a response to an identified need at the Thames Valley District School Board (TVDSB) to address current inefficiencies and risks inherent in the management of documents.[1]

The proposed implementation of an electronic documents management system will address those inefficiencies and risks by:

- managing document security to restrict inappropriate access or changes to records
- vastly improving document search and retrieval effectiveness
- archiving vital information for business continuity and disaster recovery
- consistently applying and managing document retention schedules
- providing a means for the appropriate sharing of documents and for collaboration
- enhancing the ability to comply with statutory obligations
- reducing paper record management costs
- improving auditability of record creation, changes, and access
- allowing for efficiency gains through workflow improvements
- increasing transparency and accountability

> *"Paperless filing and workflows create many benefits that improve the economics and efficiency of school districts."*
>
> - Patrick Maher (The Advocate, 2014)

The implementation of a full EDM system in TVDSB is considered a longer term initiative. The scope of Phase I is three years and includes the purchase and integration of an EDM software system in Organizational Support Services (OSS) and in Director's Services. The proposed budget includes the software purchase, implementation, licensing, hardware upgrades, training, consultation, and backlog scanning of current records.

This initial phase will enable OSS and Director's Services to efficiently manage and maintain electronic records and convert and store paper documents in electronic format. The transition to electronic format records has become essential as the volume, complexity, legal requirements and demand for data has increased. OSS is positioned to take advantage of this new system since file storage needs for paper records have exceeded existing capacity. Director's Services needs to harness data archival and retrieval functionality. The EDM system substantially will improve business processes by combining transactional data and document management so the flow and storage of information is standardized, secure, and accessible.

While it is suggested that implementation begin with OSS departments and Director's Services, the software solution adopted will be flexible and scalable to meet the needs of all TVDSB administrative departments. The EDM system will be expanded to other departments in Phases II and III of the initiative.

The budget for Phase I is $275,000. As this system expands to other departments within the organization, additional scanning and licensing costs would be incurred.

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[1] Deloitte and Touche, TVDSB Internal Audit Report (2008)

Authorization and Steering Committee

The following Steering Committee has been established to apply organizational resources to the project activities described in this document. The committee includes representatives from various departments recognizing that the Phases II and III will expand into all administrative departments.

Executive Project Sponsor:

Laura Elliott
Director of Education

Steering Committee Members:

Marion Moynihan
Superintendent of Student Achievement/Information Technology

Stephen Young,
Manager, Information Technology

John Cuddie
Manager, Human Resources

Jeremy Knight
Manager, Operational Accounting

Caroline Blewett
Supervisor, School Operations, Learning Support Services

Kevin Bushell
Executive Officer, Facility Services

Bonnie Williams
Supervisor, Corporate Services

Project Co-Managers:

Laurie Baines
Records Information Management Officer

Robert Kamphuis
Business Services Specialist

IT Liaison:

Stewart Spence
Supervisor, ITS - Development & Support

External Environmental Scan

In September 2014, an external environmental scan was conducted of Ontario school boards (including Public, Catholic, English and French) via an online survey. The survey was dispersed to members of the Ontario Association of School Board Officials (specifically staff specializing in the areas of records and information management and information technology). Responses were received from 27 school boards.

64% of respondents identified they had either implemented an EDMS (20%), were currently implementing the system (16%) or had plans to do so in the next 1 to 3 years (28%).

The top motivations for moving to an electronic management system included:
- Managing electronic documents (75%)
- Improving access to records (75%)
- Reducing hard copy document storage space (71%)
- Freedom of information compliance (42%)

Of those who have implemented, are currently implementing or have plans to implement, 78% indicated a phased in approach similar to that proposed in this document.

> *"We began in Corporate Records. As the word spread to what we were doing, departments began lining up for inclusion."*
>
> - Survey respondent

The most common challenge identified with the implementation process was the time and dedicated human resources required for the initiative.

Identified benefits included:
- Increased awareness of records and privacy compliance needs.
- Decreased time lag associated with moving paper records through the organization.
- Improved access to records.
- Improved document security.
- Reduction of paper and physical file storage footprint.
- Improved adherence to record retention schedule.

Internal Environmental Scan

In 2010-2011 an internal environmental scan to identify issues concerning records management was conducted. Follow up with a number of the various departments was conducted in 2014. Common or central themes emerging are:

1. **Paper Storage and Retention**

    There were a number of concerns identified regarding the storage of paper documents and their retention as follows:

    a) Lack of space
       - Space for filing cabinets and storage boxes is becoming an issue; most significant in OSS, Human Resources.

b) Challenges to safe storage
- Finance records are stored in a room over which sewer pipes currently run.
- In a disaster (i.e., fire) paper-only records could not be recovered/replaced.
- Records may become lost or damaged.

c) Barriers to access
- Accessibility to some paper records are an issue due to physical barriers.

d) Retrievability and security
- The ability to search and find records is onerous.
- The security of paper records is not assured.

e) Location of storage
- Records from various community groups (i.e., volunteer police checks and agreements) are being stored in various departments rather than held centrally.
- A number of departments suggested having a central or corporate repository for records versus. storing records in each department.

These challenges have prompted individual departments to move toward electronic storage of records. The result has been a departmental approach to record management rather than a corporate approach.

2. Electronic Record Use, Storage, and Retention

There are many examples of departments moving toward the electronic storage of records:

- Since 2009, the Records Information Management (RIM) department has processed a backlog of over 300,000 Ontario Student Records (OSRs).
- OSS, Human Resources microfiched about 150,000 employee records over a three year period (this was completed with the assistance of two casual staff; the process was discontinued 6 years ago). In 2014, the department scanned the 6 year backlog of records.
- In 2014 Corporate Services began to scan public Board minutes to provide improved access and retrievability of records.
- OSS, Financial Services electronically stores invoicing documents, budget management records, journal entry records, active entitlement records and supporting documentation.
- Psychological Services records of students have been scanned up to 2008.

The challenges identified include:

a) Lack of a consistent approach
- Various software and equipment is being used.
- There are various licensing arrangements with vendors (TVDSB currently holds licenses with Laserfiche and PaperVision).
- Business rules for indexing electronic documents vary across departments (indexing affects how documents are retrieved and searched)

b) Lack of resources
- Other than in RIM and Financial Services, work is completed intermittently and often dependent upon the availability of casual staff or project resources.

c) Lack of workflow processes
- Underutilizing technology to create workflow processes results in having multiple copies of the same documents in various forms (electronic record [e.g. word.doc, .pdf, excel, etc.], printed copy, photocopy, scanned image) and maintained by multiple individuals (i.e., originator of record, supervisor, department).

- Current software use does not provide the ability to auto-retain documents for the prescribed duration; similar to paper documents we are reliant on staff to follow the retention schedule and destroy electronic documents as appropriate.

d) Lack of accessibility
- Document storage remains in silos – there is no ability to search/access documents across departments.

Recommendation

Based on the internal and external scan the recommendation of the Working Committee is to explore a singular electronic document management system for TVDSB.

Project Summary and Scope

The proposed Phase I initiative allows for the implementation of an EDM system that will manage the full cycle of documents from creation, to use, to storage and retention, and finally to destruction as appropriate. The scope of this initial phase is limited to OSS (Human Resources, Finance, and Payroll) and Director's Services (Corporate Central and Records Department).

The projected budget accounts for the software purchase, implementation, hardware upgrades, training, and consulting services. In addition, the initiative includes the contracting of imaging services to convert existing paper records into an electronic format. Records include: employee and student records and Board minutes.

TVDSB has an identified need to improve its management of documents. Documents currently are duplicated, often redundant, and frequently difficult to locate causing inefficiencies and an inability to utilize the information contained in them. Paper documents are susceptible to damage and losses, require an ineffective cycle of filing, retrieval and re-filing, and take up considerable physical space.

> *"Implement an electronic records management solution to identify records and information contained on the Board's systems, their age, and facilitate the ease of access, retention, and other review purposes in order to maintain effective processes, and that is fully integrated, ensuring all copies and variations of a given record are tracked and managed consistently."*
>
> - Deloitte and Touche, TVDSB Internal Audit Report, 2008

OSS and Director's Services are well positioned to take advantage of this new system. An EDM system is an effective solution for managing the storage, accessibility, and retrievability of records for staff and the public that are originating from these departments.

Project Goals

1. **To improve transparency and accountability by:**

   - ensuring compliance with statutory obligations by documenting records retention practices and demonstrating they are routinely carried out;
   - providing a higher guarantee of privacy protection in accordance with legislation;
   - reducing search times on Freedom of Information requests, as well as routine requests for information; and
   - by managing the full life cycle of records, which guarantees long-term accountability.

2. **To increase efficiency and effectiveness by:**

   - reducing costs associated with inefficient search and retrieval activities;
   - providing collaboration and version control tools which allow easy and logical tracking of multiple versions of the same document in different stages of work;
   - implementing an EMD system that is "scalable" for future application in other departments/sites within the Board (this ensures consistency of hardware and software usage in order to minimize training, maintenance, and licensing costs);

- reducing storage costs through the elimination of document duplication in hard copy files, electronic directories and e-mail attachments;
- reducing the physical footprint required to maintain hard copy files;
- increasing record retrievability in the event of corporate disaster;
- ensuring long-term preservation and access to the Board's permanent records;
- providing a consistent client interface and consistent search capabilities for the document-based information needs of all Human Resources and other Board staff; and
- by providing an opportunity for reducing reliance on paper documents and records.

3. To protect corporate memory by:

- reducing the loss of information assets by ensuring that records are locked to prevent tampering, and are therefore reliable and trustworthy evidence of the business they document;
- providing consistent, corporate-wide access points to staff permitted to view the records; and
- by guaranteeing staff access to appropriate records over the long-term, subject to protection of privacy and authorized restrictions.

4. To mitigate corporate risks by:

- ensuring records are destroyed at a time and in a manner prescribed by legislation and/or policy;
- providing audit capability to demonstrate that every corporate record is created, used and disposed of in the usual and ordinary course of business, and that it is the usual and ordinary course of business to manage the records this way, as defined through the Board's records retention and records and information management procedures; and
- by providing enhanced document and record security and thereby ensuring the maintenance of the integrity of records throughout their life cycle in order to ensure their admissibility into evidence, if required, and their ability to produce legal effect (i.e. guaranteeing the authenticity of electronic records).

Key Outcomes

1. A scalable EDM System is developed and integrated into the OSS and Director's Services.

2. 100% of longer term records (i.e., retention greater than 6 years) and permanent TVDSB records (from amalgamation year 1998-1999 to current) are scanned into electronic format and are integrated with records that may already be in electronic format.

3. Staff report satisfaction and identify increased efficiencies with the new system

4. Paper-based forms are replaced with electronic forms where appropriate and work flow processes are established.

5. Phases II and III of the initiative are mapped out with demonstrated 'buy in' from departments.

Workflow

Workflow is a concept that refers to the electronic management of a document from creation to destruction. In a workflow process, documents are fully managed through the use of technology eliminating the need to create paper copies.

Milestones

A working committee was established in fall 2013 to assess the need and implications of an EDM system for TVDSB. To that end the following activities were carried out:

- The completion of an environmental scan;
- Review of internal documents/reports identifying the need for an EDM system;
- Site visits to two school boards (Waterloo Region and Ottawa-Carleton DSBs) currently utilizing EDM systems;
- Presentation to (and confirmed support from) Administrative Council regarding the implementation of an EDM system; and
- Development of a business case.

Key milestones in this three year project are described and are based on budget approval in 2014- 2015 with a project start date of September 1, 2015.

Year 1

Activity	Responsibility
Prepare and send out the Request for Proposal (RFP).	Steering Committee
Select a vendor.	Steering Committee
Develop project evaluation strategy.	Steering Committee
Develop communication strategy.	Steering Committee
Purchase hardware data storage.	Project Manager/ Implementation Leads
Complete document inventory to identify various categories and roles of records, create an organizational structure to categorize record types, and align the document categories with Records Retention Schedule.	Project Manager/ Implementation Leads
Determine the metadata to be attached to records, to facilitate ease of retrieval.	Project Manager/ Implementation Leads
Work with the vendor on implementing the EDM system into our existing business model.	Project Manager/ Implementation Leads Steering Committee

Year 2

Activity	Responsibility
Continue implementation of the EDM system.	Project Manager/ Implementation Leads
Create a test environment.	Project Manager/ Implementation Leads

| Develop a training strategy. | Steering Committee/ Project Manager/ Implementation Leads |

| Create/amend business procedures as appropriate. | Project Lead |

| Train staff on the new system and approach to records management. | Project Manager/ Implementation Leads |

| Initiate backlog scanning. | Outsourced |

| Ensure new records are entered into the new system on a "go forward" basis. | Implementation Teams |

| Identify departments for Phases II and III of the project and develop project timelines, budgets. | Steering Committee |

| Receive feedback from departmental staff and the organization on the success of the implementation and make adjustments to process as necessary. | Steering Committee/ Project Manager |

Year 3

| <u>Activity</u> | <u>Responsibility</u> |

| Identify and implement workflow strategies. | Project Manager/ Implementation Leads |

| Monitor and report on project implementation. | Steering Committee |

Test Environment

An essential piece of the early implementation of this project will be the establishment of a test environment. As this is the first large-scale EDM system to be implemented by the Board, this testing area will give staff the opportunity to explore the functionality of the system. It also will allow work to begin on workflow development. Testing will facilitate the development of documentation and training notes for staff and will provide the basis for a training environment. A similar approach was successfully adopted when Human Resources upgraded to IPPS.net in 2009 and a comfort level was established by both administrators and staff before the product went into live production. It is expected that repeating this model will be beneficial in the implementation of the EDM system.

Cost Savings and Investments

Cost Savings

There is a substantial cost to doing business with paper records. In their article, Record Storage & Retrieval Services Inc. (2011) reports on statistics provided by PricewaterhouseCoopers, Captaris. IOMA and Gartner as follows:

- Organizations spend $20 in labour to file a document
- $120 in labour is spent to locate a misfiled document
- $220 in labour is spent to reproduce a lost document
- 7.5% of all documents get lost; 3% of the remainder get misfiled
- Professionals spend 5-15% of their time reading information, but spend up to 50% looking for it
- Manually processing a single invoice costs $24 on average
- The average time to manually fax a document is 8 minutes
- It costs $8 to $15 on average to send a package by courier
- Of 1,200 organizations surveyed, 40% indicated that a disaster recovery plan was not a priority
- 40% of organizations have no redundant backup site
- 40% of companies who experience a disaster are out of business within 5 years

Separate site files within OSS increases the dispersion of records as well as the need to retrieve files from different physical locations. This leads to a greater risk of misfiled or misplaced documents. IDC Canada estimates that $14,000 worth of productivity is lost per worker per year due to their inability to find the data they require to do their job.

The advantages offered by an EDM system such as improved record storage, retrieval and auditability can substantially improve the efficiency of record management. It is generally estimated in vendor literature that an investment in EDM systems typically pays for itself in 2 to 3 years.

Investments

Staffing:

The work of this project will be under the leadership of a Steering Committee (see page 4) and managed as follows:

Records Information Management Officer, Laurie Baines will be the *Project Manager.* She will assume responsibility for this project as part of her duties. As the primary project manager she will be responsible for the overall management of the project and will work closely with the Implementation Leads in the design, implementation, and support of the EDM system. This will include stakeholder coordination, budget management, document record inventory, process diagramming, and development of business practices in preparation for an electronic document environment.

The *Implementation Leads* will work with the Project Manager on all aspects of the project and will be responsible for the design and building of repositories to meet user needs, and for the design and implementation of workflows to convert paper processes to electronic documents. The responsibilities of this project will be part of their regular duties.

Implementation Teams will be created in each department to work on this project as part of their regular duties and will work under the leadership of the Implementation Leads and the Project Manager.

No additional staffing is required.

Departmental Investments:

The importance and value of this project has been recognized by the organization. The following financial investments for licensing, data storage, maintenance and consultation/training have been secured in department for Phase I:

	Year 1	Year 2	Year 3
Corporate Services	20,000	20,000	20,000
OSS (Finance, Human Resources, Payroll)	30,000	30,000	30,000
Other	TDB	TBD	TBD
TOTAL DEPARTMENTAL INVESTMENTS	**$50,000**	**$50,000**	**$50,000**

In addition to the above financial contributions, the implementation of this project would not be possible without the significant investment of staff time and resources by Information Technology Services (ITS), OSS, and Director's Services.

Implementation Costs

The one-time costs of implementing an EDM system in OSS (Human Resources, Finance, Payroll) and Director's Services (Corporate Central and Records Department) are estimated as follows:

	Year 1	Year 2	Year 3
EDM System Implementation: (includes hardware, licensing, maintenance, consulting and training	105,000	55,000	55,000
Contractual Service for Backlog Scanning: (includes document preparation, scanning, indexing, and incorporation into EDM system)	30,000	30,000	--
TOTAL IMPLEMENTATION COSTS	**$135,000**	**$85,000**	**$55,000**

As this system expands to other departments within the organization, additional scanning and licensing costs will be incurred.

Consultation:

A key component of the implementation will be extensive consultation with the selected vendor. It is recognized that fundamental decisions regarding data design and organization will require expert advice and it is expected that the vendor be able to supply project management expertise to support the successful implementation of this project.

Backlog Scanning:

Contracting scanning services will ensure backlog scanning will be completed in in a short time frame, minimizing the need for staff to work concurrently in two different record systems.

The alternative would be to have OSS and Director's Services, perhaps supplemented by temporary help, begin the process in conjunction with their regular duties. The longer the scanning of the backlog paper records takes, however, the longer both paper and electronic records will need to be retained, thereby reducing efficiencies and providing more opportunity for error. A contracted service for the backlog records is estimated to take approximately 5 weeks whereas in-house scanning may take several months or longer depending on the staff and time available. (The Dufferin-Peel Catholic School Board employed a part-time, in-house approach and took almost three years to complete the task.)

Budget Request

	Year 1	Year 2	Year 3
IMPLEMENTATION COSTS	135,000	85,000	55,000
LESS DEPARTMENTAL INVESTMENTS	50,000	50,000	50,000
TOTAL BUDGET REQUEST	**$85,000**	**$35,000**	**$5,000**

The Cultural Shift: Staff Training and Adoption of System

A key component of the success of this project will be encouraging the engagement and support of the OSS and Director's Services staff. It is important to demonstrate the benefits of an EDM system and build support by involving staff early in the implementation. Record storage and retrieval will become more reliable, more accessible and will allow staff to rapidly access and share information.

Change must be managed in all departments in a way that encourages staff buy-in and support and starts with initial meetings to outline the advantages and goals of the EDM project. Secondly, a key feature in the RFP reviews will be the ease of use of the software. The selection of a tool that provides a clear and simple user interface will help staff to make a quick transition to the new system. Finally, it is essential that staff receive training to a level that allows for comfort with the software, as well as the new filing structure. As workflow changes are made, additional training will be required to ensure new processes are adopted effectively.

In addition to OSS and Director's Services staff, training also will be required to ensure that support of the system can be properly managed. Information Technology Services staff may need training on the upgrading and backing up of the server, as well as off-site storage and the restoration of the system in the event of a major system failure. Also, software administration and configuration training will be necessary to support changes and expansion of the EDM system.

As work-flow improvements are integrated, the broader organization will require instructions on the use of electronic forms and authorizations and Board procedures/processes will need to be revised and/or structured.

Key Considerations and Assumptions

Presuming project approval, any EDM solution must be compatible with our current information technology infrastructure. The solution must also be within the knowledge scope of existing Information Technology Services staff.

The EDM solution must be Active Directory compliant/aware so that accounts can be configured and aligned within existing procedures for account creation.

The file structure for records must align with the Board's records retention schedule. The remainder of the existing Records Management System file categories must be brought into line with the retention schedule categories at the same time.

Retention on new file categories must be reviewed to ensure legislative and legal compliance, as well as internal business needs.

Assumptions and Constraints

There are several assumptions and constraints that need to be considered when implementing an EDM system.

a. Data Backlog

This project presumes that paper files can be "mass entered" into the new EDM system. It is suggested that existing employee records, for example, be scanned as single files for each employee to minimize the cost of conversion. Professional services will be contracted by either the EDM vendor or a separate Record Management specialist to expedite the process.

b. Staff Training

There is an assumption that staff who may be less comfortable with technology can be trained in the use of the new client interface and can, in fact, become comfortable with the technology and can willingly utilize the new system. This could also be identified as a possible risk if staff is reluctant to use the EDM system.

c. File Structure

The early development of an appropriate and robust file structure that will meet the long-term needs of the department is presumed. Considerable time must be devoted to the development of the file structure, prior to any data being entered into the EDM system. Once entered into the system, re-categorizing data will be an almost impossible task. It would also make records difficult to find, which would be counter-productive to the implementation of this system.

d. Data Security

The data security of records is one of the prime considerations in the development of this project. Records must be accessible to those who require access as part of the functions of their position. However, the records must not be accessible to those who have no legitimate reason to view those records. This is critical to protect the confidentiality of the data, and to create an appropriate level of confidence in the integrity of the system.

Similarly, backups and possible off-site storage of the information must be constructed in such a manner to be able to restore critical business records in the event of a corporate disaster, while at the same time, again protecting the confidentiality of the record holdings.

Data security may also be considered to be a constraint to this project, given the information outlined above.

e. Future EDM Projects

Consideration needs to be given to provisioning for other departments who will adopt this EDM solution in Phases II and III. The EDM provider must be able to incorporate records from all areas of the Board.

f. Available Budget

This project is constrained by the budget monies available for implementation. With limited resources available from the provincial government, the Board will have to balance the needs against the available solutions and the funds available.

Risk Assessment

The following section lists the identified risks for the implementation of an EDM, and an analysis of ways to mitigate these risks.

a. Failure to adequately define file structure or the metadata at the beginning, resulting in the need to change design during implementation.

Consult with OSS and Director's Services to confirm their requirements, cross-reference these requirements against the Board's records retention schedule classifications, and obtain sign-off before beginning the design and build of the system. Direction is expected from the selected EDM provider to guide in the organizational design of the information.

b. Failure to adequately communicate the goals and impacts of the Human Resources EDM project

Conduct clear and open communications among OSS and Director's Services staff and throughout the organization.

c. The document inventory fails to identify all record holdings

OSS and Director's Services staff will have to review a reasonable sampling of files to ascertain the quantity and category of documents. Staff should use the file categories as outlined in the Board records retention schedule as a starting point for their review. The EDM product chosen must be robust enough to easily allow for new record categories to be added.

d. The metadata attached to records is not robust enough to ensure ease of retrieval

Ensure adequate time is allocated to the development of metadata standards to be attached to records. It is the metadata that will ensure that records can be retrieved on demand. Attaching metadata to records once they have been scanned into the system will be too time-consuming and will not achieve desired results—the proper data needs to be attached as the records are initially entered.

e. Time required for this project will compete with other time-sensitive organizational requirements of OSS staff

Specific staff will need to be designated as "project champions" who will make this project one of their main priorities and will serve on implementation teams. In addition, TVDSB staff with expertise in records management and project management need to be fully engaged. The selected vendor will be required to provide a project manager lead to provide expertise and assistance with the initial system setup.

f. OSS staff do not embrace the EDM system

Staff needs adequate foreknowledge of the proposed system in order to begin to become comfortable with the change, have the opportunity to voice their opinions, and to think about how workflows and processes may need to change. Training needs to be timely and sufficient, so staff have a comfort level with the new system.

g. Budget over-run

Ensure contracts with the successful vendor meet our financial parameters. Actively manage the project and budget to avoid scope creep and other reasons for cost overruns.

Conclusion

The *Electronic Document Management System* project provides an exciting opportunity for OSS and Director's Services to create efficiencies in the maintenance of employee files, achieve greater control over access to those files, reduce the overall cost for some of their consumables (e.g. paper, toner, shredding) and reduce their file storage footprint.

Based on the success of this project, it will pave the way for other TVDSB administrative departments to implement the system in their own areas.

References

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Maher, P. (2005, June). Going paperless: Six ways to benefit your district. *The Advocate Newsletter, 6-10.*

Record Storage & Retrieval Services Inc. (2011). *The Real Cost of Handling Paper (Weblog).* Retrieved from http://www.recordsolutions.ca/the-real-cost-of-handling-paper.

Glossary

Active Directory
A directory service that Microsoft developed for Windows domain networks and is included in most Windows Server operating systems as a set of processes and services.

Document imaging
The process of capturing, storing, and retrieving documents regardless of original format, using micrographics and/or electronic imaging (scanning, Optical Character Recognition [OCR], Intelligent Character Recognition [ICR].).

Electronic imaging
Technique for inputting, recording, processing, storing, transferring and using images.

Freedom of Information Requests
Under the Municipal Freedom of Information and Protection of Privacy Act there is a provision that allows anyone to request access to information that is under the care and control of the Thames Valley District School Board. The time frame for responding to Freedom of Information Requests is 30 days.

Metadata
Data that describes other data. For example, data dictionaries and repositories provide information about the data elements in a database

Microfilm/Fiche
Two forms of imaging media. Records are stored on rolls of film or strips of fiche through a scanning process and are retrieved using a microfilm/fiche reader printer. Microfilm/fiche must be stored with temperature and humidity controls in place to avoid the permanent film being damaged and the information lost.

Records Retention Schedule
An established timetable for maintaining an organization's records, transferring inactive records to storage, and destroying records which are no longer valuable to the organization.

Transactional Data
In the context of data management, it is the information recorded from transactions.

Workflow
A concept that refers to the electronic management of a document from creation to destruction. In a workflow process, documents are fully managed through the use of technology eliminating the need to create paper copies.

REPORT TO:	☐ Administrative Council	☐ Program and School Services Advisory Committee
	☐ Policy Working Committee	☒ Planning and Priorities Advisory Committee
	☐ Board	☐ Other:
	☒ PUBLIC	☐ IN-CAMERA

TITLE OF REPORT:	Elementary Student Enrolment and Staffing Update
PRESENTED BY:	Lynne Griffith-Jones, Superintendent of Human Resources, Organizational Support Services Susan Mark, Superintendent of Facility Services and Capital Planning, Organizational Support Services

PRESENTED FOR:	☐ Approval	☒ Information	☐ Advice

Recommendation(s):	
Purpose:	To provide an update on the elementary student enrolment and staffing.

Content:	**Elementary Staffing Processes:** In February of each school year, principals are asked to submit projections of student enrolment for the next school year. Current enrolment numbers are rolled up to the next grade taking into account any trends for that school. At the same time, Finance provides a preliminary budget outlining the projected number of teachers available to allocate. Upon receipt of principals' projected student enrolment for the next school year, the Planning Department reviews those numbers against their projections and addresses any anomalies. In early March, Human Resources uses Paradigm, a staffing tool to create preliminary school organizations using projected numbers from schools, preliminary budget for number of teachers and the following Ministry class size requirements: - At least 90% of primary classes must have 20 or fewer students; - All primary classes must have 23 or fewer students; - All combined primary/junior classes must have 23 or fewer students; - The board-wide class size average for FDK must not exceed 26.0; - FDK classes must have 29 students or fewer; - Board-size class size average for grades 4-8 must not exceed 24.5. Preliminary allocations go out to schools, the Friday after March Break. An appropriate holdback is maintained in order to continue to allocate to schools as enrolment ebbs and flows until June and into September. It has been our practice over the last number of years to continue to allocate classrooms on at least 3 more occasions during the staffing rounds to address changing class sizes and to allow contract teachers access to vacancies. The intent is also to ensure that each school is staffed appropriately to meet class size requirements and to minimize reorganization in September. **Staffing 2018-19** When the last snapshot was taken on 2018 June 12 system class sizes averages were as follows: *(table below)*

Class Size Averages		
2018 June 12	**Ministry**	**Board**
K1/K2	26.0	24.8
Primary	90%	93.57%
Junior/Intermediate	24.5	24.56

In August, Human Resources worked with principals to assist with changing enrolment

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numbers that had occurred over the summer or in the last week of August.
Following the first week of school, Human Resources reviewed current school organizations.

Class Size Averages		
2018 September 07	**Ministry**	**Board**
K1/K2	26.0	25.17
Primary	90%	87.45%
Junior/Intermediate	24.5	24.18

In K1/K2, 3 classrooms were added to address violations. In Primary, 8 classrooms were added to address violations and to gain compliancy, In Junior/Intermediate, 3 classrooms were added to address class size issues. 36 schools were contacted to shift students to gain additional compliant classes. In considering, an additional allocation to address compliancy, consideration was given as to whether there was space to accommodate the new class. All allocations were provided to schools on September 12. School listings were created to monitor J/I classes.

As of this date of 2018 September 07, enrolment reflected 641 students below October 31 projections and 810 below annualized projections. As a result, it was recommended that 20 classes plus prep be reserved out of holdback to reflect a gap in the numbers.

Class Size Averages		
2018 September 11	**Ministry**	**Board**
K1/K2	26.0	25.25
Primary	90%	89.04%
Junior/Intermediate	24.5	24.31

Class Size Averages		
2018 September 17	**Ministry**	**Board**
K1/K2	26.0	25.03
Primary	90%	93.77%
Junior/Intermediate	24.5	24.31

Currently, there are 36 K2/Grade 1 combined classes, a reduction from 44 in September 2017.

As of 2018 September 17, all Ministry class size requirements were met.
Human Resources continue to monitor class sizes and will address those issues as needed.

Appendix A identifies the actual number of students per grade in the elementary sector as of 2018 September 17 versus the projected enrolment. As of this date, there were 54,761 students with a shortfall of 218 from the projected amount. The Planning Department will begin to analyze the TVDSB data to fully understand the composition of the incoming TVDSB students. Immigration and migration continue to add a significant component to the enrolment. Preliminary numbers from the International Education Office identifies a total intake of 966 international students from 2017 November 06 to 2018 September 19 with 524 students registering over the summer period (2018 July 03 to 2018 September 19).

Cost/Savings:	
Timeline:	
Communications:	
Appendices:	Appendix A: 2018-2019 Elementary Projected Enrolment Compared to 2018 September 17 Trillium Student Upload

Form Revised 2017 November 8

Relation to Commitments:

☒Putting students first   ☐ Actively engaging our students, staff, families and communities

☐Recognizing and encouraging leadership in all its forms   ☐ Being inclusive, fair and equitable

We build each student's tomorrow, every day

☐Ensuring safe, positive learning and working environments   ☐ Inspiring new ideas and promoting innovation

☒Taking responsibility for the students and resources entrusted to our care

We build each student's tomorrow, every day

2018-19 - Elementary Projected Enrolment Compared to 2018 September 17 Trillium Student Upload

Grade	October 31 2017 Enrolment	2017 to 2018 Grade by Grade Gain/Loss	October 31 2018 Projected Enrolment	September 17th 2018 Enrolment (Prelimanary)	Projected vs Actuals Difference	Percent Change
Elementary						
K1	4915		5006	5020	14	0.28%
K2	5255	429	5344	5297	-47	-0.89%
Grade 1	5433	165	5420	5389	-31	-0.58%
Grade 2	5233	127	5560	5525	-35	-0.63%
Grade 3	5529	98	5331	5342	11	0.21%
Grade 4	5543	110	5639	5596	-43	-0.77%
Grade 5	5562	46	5589	5606	17	0.30%
Grade 6	5383	110	5672	5670	-2	-0.04%
Grade 7	5146	164	5547	5513	-34	-0.62%
Grade 8	5264	127	5273	5227	-46	-0.88%
SE JK-8	584		598	576	-22	-3.82%
Total	**53847**	**914**	**54979**	**54761**	**-218**	**-0.40%**