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Summary of Progress

By 2019, the District will optimize learning conditions for all students through the responsible and sustainable management of resources.

Strategies and Actions

Strategy #1: Improve access to learning environments and optimize the use of all resources through school accommodation and program review planning.

- Merivale High School- a second site for the International Baccalaureate (IB) Program;
- Stittsville Secondary School approval;
- Improved secondary school utilization;
- Reviewed boundaries and program locations for 29 schools;
- Allowed targeted investments in schools to enhance learning spaces;
- Declared surplus properties.

Strategy #2: Enhance operational practices to effectively and responsibly manage human and financial resources in support of students.

- Revised estimates forecast a budget surplus in 2018-2019;
- The early year's department currently moving to an electronic information system;
- Developed 3-year technology plan;
- Eliminated deficit and balanced budget;
- Invested in learning spaces and school-based supports;
- Provided operational training for principals;
- Developed School Council Funds Management Guide;
- Enhanced process for management of Designated Occasional Teachers.

Strategy #3: Model sustainability, smart energy use and sound environmental practices for students.

- Supported opportunities for students (e.g., Growing Up Organic; Outdoor Education Centers);
- Reduced carbon emission;
- (9) sites have net-metering solar power generation systems installed.

Evidence of Progress





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Observations

The District's stewardship interventions seemed to have had the greatest impact on improving the learning environments. One way this is reflected is in gains with school utilization, the development operational efficiencies with the Early Year's program, and in developing a path forward for technology use with a new technology plan. Additionally, the District has made considerable progress in environmental and financial stewardship.

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The Ottawa-Carleton District School Board promotes "a culture that practices ethical decisionmaking, and social, economic and environmental sustainability". The Stewardship objective states: "By 2019, the District will optimize learning conditions for all students through the responsible and sustainable management of resources." Stewardship at the OCDSB can be approached in two ways:

1) we work to promote and support sustainability in the organization and in our community; and

2) we work to inspire stewardship in our students.

Importantly, stewardship supports progress on the other strategic objectives. Through responsible and sustainable management of resources, we are able to invest in supports for learning, equity, well-being, and engagement. This report provides an overview of the work which has been underway to enhance stewardship at the OCDSB and provides evidence of our progress on this strategic objective. The Stewardship objective is supported by three specific strategies which will be discussed in turn.

Strategy #1: Improve access to learning environments and optimize the use of all resources through school accommodation and program review planning.

Stittsville Secondary School

Work on the new Stittsville Secondary School focused on site acquisition, preparation and plans for design and construction. Funding was confirmed in January 2018 and the boundary review for the new school will occur in 2019-2020.

Merivale High School- Second Site for the International Baccalaureate (IB) Program

The OCDSB worked to optimize learning environments by establishing a second site for the International Baccalaureate (IB) Diploma Program. One of the approved recommendations resulting from the Secondary School Program Review (June, 2016) included the implementation of a second IB program in the western area of the District. The Western Area Accommodation Review identified both the site location (Merivale High School) and implementation date (September 2019, subject to the accreditation by the International Baccalaureate Organization). Establishment of a second IB site will improve equity of access to enhanced programming and address the issue of demand versus capacity. Program accreditation was received in the spring of 2019 with space for 140 students, and grade 9 students were welcomed to the school in September.

School Utilization Rates

In order to optimize the use of all resources, student enrolment is distributed so that schools operate at their ideal capacity. Optimizing school utilization rates (i.e., number of students enrolled relative to the school's capacity) supports stewardship by efficiently managing school space, increasing options for depth of programming, and strengthening enrolment – all of which positively affect program streams. It is important to note that utilization rates are a single indicator, to be considered alongside other factors. Nevertheless, they highlight the important

work being done through accommodation reviews to realign programs and services, consolidate supports for students, and manage costs associated with surplus space in schools.

The figures below show the average school utilization rate (unweighted; with each school's utilization rate representing an equal portion in the equation), as well as the range of individual school utilization rates. A utilization rate below 100% indicates that a school might be underutilized, while a rate above 100% indicates that a school might be over-capacity. For both the elementary and secondary panels, the average school utilization rate increased in 2018-2019.





Figure 2. Secondary School Utilization Rates



Figures 1 and 2, Five year trend for school utilization rates (elementary and secondary). Diamond represents average utilization rate as of October 31 each year; end markers represent range across all OCDSB schools. Capacity includes relocatable classroom modules and leased space.

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Strategy #2: Enhance operational practices to effectively and responsibly manage human and financial resources in support of students.

Succession Planning

Work in this area is on-going. Over the course of last year, some of the work included:

- developing a set of leadership competencies that will be used for purposes of selection of leaders and leadership development; the competencies will be used as part of this year's P/VP selection process;
- staff identified need for additional resources to move the work forward an additional FTE was approved through the 2019-2020 budget for leadership development and succession planning;
- mentorship programs for newly appointed principals and VPs were reviewed and revised to increase support and development of new leaders; new program developed and is being rolled out this year with the Associate Director as lead.

The Budget

The 2018-2019 Budget was designed to support student learning and well-being, making meaningful investments in areas that address the objectives of the 2015-2019 Strategic Plan. Figure 3 below captures the allocations by strategic areas. The budget made noteworthy investments in supports for students, front line supports to schools, and increases to operating budgets (see Report 18-072 for the full report). These investments were made while demonstrating the Board's continued prudent and sustainable management of the District's financial position, balancing revenues and expenditures without reliance on unappropriated accumulated surplus.



Figure 3- Strategic Investments by Priority Areas - Budget 2018-2019

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Funds Spent Relative to those Allocated in the Budget

The establishment of a responsible and sustainable budget demonstrates progress on the stewardship objective. The District approved a balanced budget in 2018-2019 of \$974.3 million, representing a 5% increase from the previous year's budget. Details are captured in the Table 1 below.

	2017-2018	2018-2019	Ye	ear over Yea	r Change
Summary of Financial Results	Approved Budget	Approved Budget		\$	%
Revenue					
Grants for Student Needs	\$ 810,153,292	\$ 844,813,043	\$	34,659,751	4.3%
Capital Grants and Other	117,973,653	129,487,511		11,513,858	9.8%
Total Revenue	\$ 928,126,945	\$ 974,300,554	\$	46,173,609	5.0%
Expenditures					
Instruction	\$ 687,267,651	\$ 721,664,657	\$	34,397,006	5.0%
Continuing Education	9,935,838	10,954,538		1,018,700	10.3%
Transportation	40,132,990	41,461,358		1,328,368	3.3%
Facilities/Learning Environment	90,201,804	91,583,899		1,382,095	1.5%
Central Administration	19,455,702	20,208,432		752,730	3.9%
Amortization and Other	81,128,960	88,427,670		7,298,710	9.0%
Total Expenditures	\$ 928,122,945	\$ 974,300,554	\$	46,177,609	5.0%
Projected Surplus (Shortfall)	\$ 4,000	\$	\$	(4,000)	(100.0%)

Table 1.	Summary of	of Financial	Results
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Numbers may not add due to rounding

It is also necessary to examine how well the budget is adhered to by the end of the year. Revised estimates for year ended 31st August, 2019 revealed a 6% increase in revenues at \$980.1 million, and 2% decrease in expenses at \$972.3 million with a surplus of \$7.8 million and a healthy accumulated surplus of \$42.7 million¹.

Extended Day Program (EDP) Improvements

The chief recommendation from the internal audit was that the department streamlined its process for administrative tasks by investing in an EDP information system that would automate the registration, withdrawal and payment processes. The early year's department is currently moving to the electronic system and this work will carry-over into the 2019-2020 financial year. Both Finance and Early Learning would benefit from significant time savings and a reduced risk of input errors from the automation of identified processes. Other efficiencies will be realized with staff having more time to do other tasks, instead of conducting registration by hand.

¹ OCDSB (2019), Report 19-066, 2019-2020 Staff Recommended Budget: https://ocdsb.ca/common/pages/DisplayFile.aspx?itemId=29525948

Technology Plan

Work commenced on the development of the 3-year technology plan. The plan focuses on four key areas and is aligned with the 2019-2023 Strategic Plan. The four areas of the technology plan are modern learning, seamless and innovation technologies, privacy and security, and digital transformation. Additionally, deliverables, measures of progress, goals, outcomes and the connection to the OCDSB's Exit Outcomes have been identified for each of the core areas. Strategies to support the achievement of the four goals are as follows:

- Professional learning and training to assist staff in building their capacity to achieve the desired outcomes in each area of the plan;
- Foster the conditions to support staff in having an open learning stance to use technology in new ways;
- Collaborate with departments in the District to ensure alignment of tools and processes across the District;
- Develop a communication plan to ensure all stakeholders are aware of the 3-year technology plan and the goals within;
- Align the work of the technology plan with the OCDSB Strategic Plan (2019–2023); and
- Create an implementation and monitoring process to ensure the 3-year technology plan is effectively implemented and monitored for impact.

Community Use of Schools

As a district, one of our resources is space. This resource is used to support our students, families, and communities. Through Community Use of Schools, we support a broad range of community and health organizations, working closely together to find suitable school spaces for program delivery to those in need. Some of our partner agencies included: Lowertown Community Resource Centre, Sandy Hill Community Centre, Somerset West Community Health Centre, Pinecrest-Queensway Community Health Centre, Ottawa Community Housing Centres (Winthrop Court, Confederation Court, Morrison Gardens), Boys and Girls Club of Ottawa, Big Brothers, Big Sisters (Ottawa), Autism Ontario, Ottawa Community Immigrant Services Organization, Catholic Centre for Immigrants, Somali Centre for Family Services, Inuuqatigiit Centre for Inuit Children, Youth and Families (formerly Ottawa Inuit Children's Centre), and OrKidstra.

"Thanks to the space that has been provided to us, we continue to support these children and enhance their literacy, their confidence and their outlook on being a newcomer living in our community." - The Somali Centre for Family Services

"We are grateful to the Community Use of Schools program as it has provided area children with a recreation opportunity that otherwise would not be available to them." - Winthrop Court Community House

"With over 700 children from over 62 cultural and linguistic backgrounds, OrKidstra is far more than a music program – it is first and foremost a social development program, giving children a sense of belonging and achievement and fostering life skills." - OrKidstra

In addition, substantial work has been completed with Rideau Rockcliffe Community Resource Centre and the Odawa Friendship Centre in the establishment of a new hub at the former Rideau High School. The hub is expected to be formally launched later in 2019.

Community-use hours have remained consistently high in recent years, with consideration of some reductions in site availability. Sports and recreation activities attribute for the most frequent use of space. Other consistent uses of school space include educational purposes, supports for low-income communities, child care programs, and programs supporting recent immigrants. Note, the use of space can be considered under multiple categories, thus the totals shown across categories (Figure 5) will be larger than the totals shown in hours (Figure 4).

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Figure 4. Community use hours over time

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Figure 5. Community Use hours by category (2017-2018); Breakdown of categories can cover multiple permits

Strategy #3: Model sustainability, smart energy use and sound environmental practices for students.

Reductions in Energy Consumption

Energy Use Intensity (EUI) is an indication of overall energy efficiency. It is expressed as the energy consumption per area or equivalent kWh per square meter, and takes into account both heating energy and electricity. When comparing FY 2018 to the baseline year (FY 2009), a reduction in EUI of 9.9% has been observed, a clear indication of the positive impact of the energy saving initiatives. The District continues to meet and exceed our annual reduction targets. The cumulative cost avoidance through reduction in utilities from 2009-10 to 2017-18 is \$8.7million, as shown in the table below.

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Table 2. Cumulative Cost Avoidance		
Cumulative Cost Avoidance ² 2009/10 to 2017/18		
Electricity	\$ 8,271,582.00	
Natural Gas	\$ 402,876.00	
Solar Generation (consumed)	\$ 64,173.00	
Total	\$ 8,738,631.00	

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Solar Power Generation – Feed-In-Tariff (FIT) program

In addition to reducing the amount of energy used, the OCDSB has been working to create green energy. The District owns green energy installations at several locations. One type of installation is a solar hot water heating system which is installed at one of our high schools. There are 13 small (10 kW) solar photovoltaic (PV) MicroFIT arrays on the roof of 13 individual schools. The District also has larger solar PV systems under a lease agreement at 28 schools through the FIT program. These arrays generate 50 to 250KW depending on the size of the installation.

Table 3. Revenues from the Solar power generation – Feed-In-Tariff (FIT) program

Year	Micro-FIT	FIT	Total FIT	Revenue	Amount
	Revenues	Revenues	Revenues	Commitment	above
					Commitment
2017-	\$119,115	\$249,984	\$369,099	\$250,000	\$119,099
2018					
2018-	\$119,115	\$250,000	\$369,115	\$250,000	\$119,115
2019					
2019-	\$119,115	\$250,000	\$369,115	\$250,000	\$119,115
2020					
2019-	\$119,115	\$250,000	\$369,115	\$250,000	\$119,115
2020					

Solar FIT Summary

2018-2021 Estimated values

² Notes: For the Cost Avoidance calculation, the Baseline values have been adjusted for known factors such as Utility rate increases, weather and facilities area changes. Other unknown factors that increase the annual energy consumption include: increases to hours of operation (Community Use of Schools, Extended Day Program and Childcare), increased consumption due to construction activity and the addition of air conditioning into existing facilities. These factors have not been quantified and are not factored into the Cost Avoidance calculation.

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Solar Power Generation – Self-Consumption Systems

- Solar net-metering systems provide the District with the ability to consume the electricity generated on site;
- As part of a new initiative in 2018, five
 (5) sites had net-metering solar power generation systems installed;
- An additional four (4) sites have systems being installed in 2019;
- Further installations are being planned as future funding becomes available;



- In 2019, we will have net-metering systems in operation with a 1161 kW AC capacity; and
- On sunny days in spring and summer at these schools, 100% of the school's electricity will be generated from the solar systems with 0% coming from the hydro grid.

		5 ,	
Solar Generation FY2018	Cost Avoidance FY2018	Solar Generation FY2019	Cost Avoidance FY2019
367,963 kWh	\$61,045	887,885 kWh	\$154,847

Table 4. Solar Net-Metering Summary

Reduction in Greenhouse Gas Emissions (GHG)

The province of Ontario has announced a target for reduction in greenhouse gas emissions by 80% from 1990 levels, by 2050. The OCDSB calculates emissions annually and this is reported on the Utilities Consumption Database submitted to the Ministry as part of our legislated reporting requirements. Like other school Districts, we had set a reduction target of 10% by the year 2023 or approximately 1% annually using a starting baseline year of 2013. This is reflected in our five-year Conservation and Demand Management Plan and is consistent with the original targets set by the City of Ottawa. Based on our early success, we have further increased our 10-year (2023) GHG reduction target to 15% to help maintain our focus. As a leader in the community and recognizing the national priority of GHG reduction initiatives, we continue to identify ways to significantly accelerate the existing 10-year target. However, we recognize that this can only be achieved with increased funding from the province to assist with further building retrofits and ongoing maintenance. In the table below, base year raw data (28,679 tons) has been adjusted to reflect the change in total buildings area and the winter weather (heating degree days) for each year. Following describes our methodology which is the accepted methodology in the sector:

• 85% of our GHG emissions are a result of our gas consumption, which is dependent on both our buildings performance and the weather;

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- the 'raw data' fluctuates (-) from year to year mainly due to weather and is not necessarily reflective of the buildings performance;
- in order to evaluate buildings' performance and the impact that our GHG emission reduction measures are having, staff 'adjust' the raw data based on the severity of weather for that year (measured in Heating Degree Days);
- this provides an adjusted baseline value for each year. The raw data for that year is then compared with the adjusted baseline to give a better indication of the impact of our GHG emission reduction initiatives;
- for example, in 2014 based on raw data there was an increase of 5.8%. This was due to a much colder winter in 2014 and not reflective of our buildings performance. When the data was adjusted for weather, a *decrease* of 3.5% was calculated which is more reflective of the impact of our GHG emission reduction initiatives.

				2010 2010		
	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
	(base					
	year)					
GHG	28,679	30,347	27,660	24,356	24,191	25,101
Emissions						
(raw data)						
% Change	-	+5.8%	-3.6%	-15.1%	-15.7%	-12.5%
(vs base year)						
FY2013 GHG	-	31,439	32,054	27,907	29,162	31,036
Emissions						
(adjusted) (1)						
% Change	-	-3.5%	-13.7%	-12.7%	-17.1%	-19.1%
(vs base year)						
Heating	4287	4733	4782	4059	4190	4355
Degree Days						
Degree Days	I	1	1	1	1	I]

Table 5. GHG Emissions data 2013-2018³

(1) Base year raw data (28,679 tons) has been adjusted to reflect the change in total buildings area and the winter weather (heating degree days) for each year

Waste Diversion

The budget for solid waste management and collection continues to be decreased. We have gone from \$1,045,000 budget in FY 2010 to \$650,000 budget for FY 2019. This decreasing trend is attributed to the implementation of the two stream recycling and composting (green bin) programs, improved participation in the recycling and green bin programs within schools and a more aggressive tracking & scheduling of pick-ups administered through our EMC division. This budget line includes the collection and disposal of solid waste from all District facilities and the

³ FY 2013 GHG Emissions (adjusted): Base year raw data (28,679 tons) has been adjusted to reflect the change in total buildings area and the winter weather (heating degree days) for each year.

collection and recycling of mixed paper, cardboard and plastic containers. Through the sale of our recycled materials we were able to generate revenues for the District in the amount of \$51,685 for FY2018 which was used to offset some of the waste collection costs.

Collection of organic materials (composting) is currently being offered by the City of Ottawa under the 'Green Bins in Schools' program at no cost to the District. We continue to support schools interested in participating in this program. In 2018-2019, 84 schools participated in the program. Detailed information on waste, recycling, and composting is gathered for each facility and provided to the facility administrator to assist them in preparing their reports for compliance with the Ministry of the Environment O.Reg 102/94 Waste Audits and Waste Reduction Plans and 103/94 ICI Source Separation Programs. The chart below summarizes the District's waste collection by weight. While we had a significant increase in our Diversion rate in the previous year, the chart below indicates that our overall diversion rate in 2017-2018 has decreased slightly compared with the previous year. Through ongoing promotion we hope to continue to reduce our total refuse generated and increase school participation in our recycling and composting programs.

Items	2016-	2017	2017	7-2018
	Weight (kg)	Diversion %	Weight (kg)	Diversion %
Refuse	1,886,860		2,056,760	
(landfill)				
Fibre	469,440	18.1	469,380	17.3
Stream				
(black box)				
Container	106,560	4.2	95,740	3.5
Stream				
(blue				
box)				
Composting	126,000	4.9	95,740	3.5
(green bin)				
Total	2,588,860	27.2	2,717,620	24.3

Table 6.	Waste	Diversion	Rates
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Reduction in Plastic Bottles through Water Fill Stations

In support of the environmental initiative to reduce the amount of single use water bottles consumed within our schools, water bottle filling stations were installed throughout the District in 2011. To date an equivalent of over 5.9 million 16 oz. water bottles have been filled using the water bottle filling stations.



EcoSchools Program⁴

The Ontario EcoSchools Program is an initiative that focuses on staff and students. It promotes energy conservation and waste minimization through occupant behavior and is supported by staff from both leading and learning services. Many schools were actively participating in the EcoSchools program in 2018-2019 with 39 schools achieving certification (2 Platinum,16 Gold,16 Silver, 4 Bronze,1 Outdoor and Environmental Education Centre). Continued promotion of participation in the EcoSchools program should result in more schools coming on board in 2019-2020. Figure (6) below captures the EcoSchools program over the 2015-2019 period.





OCDSB (2019). Report 19-025 Multi-Year Energy Management Plan 2018-2021.

Active Transportation

One way in which the OCDSB supports active transportation to school is through Ottawa Student Transportation Authority's (OSTA) Walking School Bus. This initiative encourages students to walk to school in a group of their peers, under the supervision of adult. The program aims to promote active living as well as strategies for reducing our carbon footprint. In 2018-2019, there were 11 Walking School Bus Routes at the OCDSB, with 173 participants. In comparison to 2017-2018 numbers, there was an increase of 2 schools and 63 participants.

Table 7. Waiking School Bus Activity				
Year	Walking School Bus Routes	Participants		
2017-2018	9	110		
2018-2019	11	173		

Table 7. Walking	School Bus Activity
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In partnership with the Ottawa Safety Council, the City of Ottawa, and the Ottawa Student Transportation Authority, the OCDSB has also been working to ensure students are equipped with the tools they need to keep themselves safe while walking, biking, skateboarding or scootering to school.

Nature and Garden Projects

Growing Up Organic

The table below captures the 2018-2019 activities across schools. Our schools continued to embrace opportunities to model sustainability and sound environmental practices for students.

Table 8 Growing Lip Organic Activity

Activity	Number of schools
School gardens	5
Farm field trips (Just Food Farm)	4 (8 classes)
Curriculum linked garden based workshops (100)	24 (63 classes)

Two OCDSB Outdoor Education Centres (Bill Mason & MacSkimming) offer hands-on outdoor programming that is designed to complement classroom learning in many sections of the Ontario Curriculum. During the 2018-2019 school year, 23,521 students (1096 classes) attended the Centres. The number of students who attended the centres declined slightly in terms of the proportion of schools that were able to take advantage of this opportunity: 98% of elementary schools and 88% of secondary schools, as shown in the figure below. However, an overall trend of increased attendance is noted in comparison to 2015 figures. As of August 21st, 2019, 11,477 students are registered for the 2019-2020 school year.

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Figure 7. Percentage of OCDSB Elementary and Secondary Schools attending OCDSB Outdoor Education Centres

Every Student Attends Program:

Since 2006, the OCDSB Outdoor Education Centres have offered an outdoor education experience to all OCDSB grade 3 and 7 classes through the *"Every Student Attends Program"*. This program entitles each grade 3 & 7 class in the OCDSB to one "free field trip" per year to either Bill Mason or MacSkimming Outdoor Education Centre (No program costs). All RAISE index-identified schools are provided with free busing to access the program. All "Every Student Attends Programs" are developed to be active, hands-on curriculum based and reflect what is being covered inside the classroom by the teachers. All programs take place in a natural outdoor setting within the Centres. For the 2018-2019 school year, 7219 OCDSB Grade 3 and 7 students attended the Centres as part of the program.



Figure 8. Every Student Attends Program

The big rise in attendance in 2016-2017 was due to a number of factors:

- individuals who were unaware of the opportunities of the "Every Student Attends" program for Grade 3 and 7 students to attend the Centres became aware resulting in overbooking;
- construction of the Bill Mason Centre field centre, and;
- an increase in the hiring of casual outdoor education instructors to facilitate the program.

Our average is between 5000 and 7000 OCDSB Grade 3 and 7 students attending annually.

Reflections

The District made important strides under the Stewardship objective, with accomplishments under each of the three strategies outlined in the Strategic Plan. Based on early success, the District is well on its way to exceeding its15% reduction target for Greenhouse Gas Emissions (GHG). Strong financial management and significant energy savings were also realized with accommodation decisions resulting in increased school utilization rates. Additionally, the District continues to meet and exceed its annual energy use reduction targets. Through various green initiatives, our schools continued to embrace opportunities to model sustainability and sound environmental practices for students. Noteworthy activities included the active participation in the EcoSchools program, the Every Student Attends Program, and the Green Bins in School Program.