

NOVEMBER 12, 2018

**WATERLOO REGION DISTRICT SCHOOL BOARD**

**NOTICE AND AGENDA**

A Committee of the Whole meeting of the Waterloo Region District School Board will be held in the Board Room, Building 2, 1<sup>st</sup> Floor, 51 Ardelt Avenue, Kitchener, Ontario, on **Monday, November 12, 2018, at 7:00 p.m.**

**AGENDA**

**Call to Order**

**O Canada**

**Approval of Agenda**

**Declarations of Pecuniary Interest**

**Celebrating Board Activities/Announcements**

**Delegations**

**Policy and Governance**

01	Review of Board Policy 3003 - Trustee Professional Development	Chairperson
05	Review of Board Policy 3005 - Expressions of Sympathy	Chairperson
07	Review of Board Policy 4006 - Parking on School Board Property	M. Gerard
09	Review of Board Policy 4016 - Business Complaint	M. Gerard
13	Review of Board Policy 4011 - School Parking Lot Safety	M. Weinert
15	Review of Board Policy 4021 - Use of Volunteers	M. Weinert

**Reports**

17	West Waterloo Elementary Boundary Study	M. Gerard
21	Temperature and Humidity Levels in Classrooms	M. Gerard/ I. Gaudet
30	Motion: Air Conditioning in Schools	Trustee C. Watson
31	Motion: Trustee Parking	Trustee C. Waterfall

**Board Reports**

**Question Period** (*10 minutes*)

**Future Agenda Items** (*Notices of Motion to be referred to Agenda Development Committee*)

**Adjournment**

Questions relating to this agenda should be directed to  
Stephanie Reidel, Manager of Corporate Services  
519-570-0003, ext. 4336, or [Stephanie Reidel@wrdsb.ca](mailto:Stephanie_Reidel@wrdsb.ca)





## TRUSTEE PROFESSIONAL DEVELOPMENT

Legal References:	<i>Education Act, Section 171(1)17: Powers of Boards – Membership Fees and Travelling Expenses</i> <i>Ministry Memo 2006:B15 – School Board Expenditure Guidelines;</i> <i>Ministry Memo 2009:B8 – Trustee Expense Guideline</i>
Related References:	<i>Board Policy 3001 – Travel, Meals and Hospitality Expenditures – Trustees</i> <i>Administrative Procedure 4380 – Travel, Meals and Hospitality Expenditures</i> <i>FS-17-AS5 – Request for Expense Reimbursement</i> <i>HR-99-300 - Request for Staff Development Funds</i>
Effective Date:	January 25, 2010
Revisions:	June 13, 2016, November 20, 2017
Reviewed:	<b>November 12, 2018</b>

### 1. Trustee Professional Development

- 1.1 It is the policy of the Waterloo Region District School Board (**WRDSB**) to support and encourage the attendance of trustees at conferences, conventions, seminars and courses of an educational nature, in accordance with the regulations governing this policy, subject to budget limitations established by the **WRDSB**, in recognition of the benefits of providing opportunities for **trustees** to gain greater depth of knowledge and experience relative to their responsibilities.

### 2. Guidelines

- 2.1 A trustee professional development budget shall be established annually by the **WRDSB**.
- 2.2 Trustees may not attend more than one out-of-province professional development activity per year.
- 2.3 No more than three trustees may attend the same out-of-province professional development activity.
- 2.4 In the event that more than three trustees apply to attend the same out-of-province professional development activity, a special committee consisting of the Chairperson and two trustees to be appointed by the Board of Trustees would make the determination in accordance with the regulations. The Committee will give consideration to Board or Committee members having a special interest in the topic(s) being covered during the professional development activity and to the order in which applications were received.
- 2.5 The **WRDSB** will pay expenses in connection with the attendance by a trustee at an approved professional development activity in accordance with Administrative Procedure 4380 – Travel, Meals and Hospitality Expenditures.
- 2.6 A “Request for Staff Development Funds” form (HR-99-300) must be completed and submitted to the Chairperson for approval prior to attending the professional development activity.

- 2.7 Supporting vouchers and receipts for expenses incurred under these regulations must be submitted to the Chairperson's Office on a Request for Reimbursement of Expenses Form (FS-17-AS5).
- 2.8 Trustees whose expenses are being paid by another sponsoring organization will not be reimbursed under the policy and regulations.
- 2.9 Trustees attending a professional development activity under this policy and its regulations must complete a written report attached to the Request for Reimbursement of Expenses Form. The conference report will be posted on the **WRDSB** website quarterly providing information about the experience and how it contributed to their position as Trustee, as well as to education in the **WRDSB** while supporting the strategic plan.

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Legal References:	<i>Education Act, Section 171(1)17: Powers of Boards – Membership Fees and Travelling Expenses</i> <i>Ministry Memo 2006:B15 – School Board Expenditure Guidelines;</i> <i>Ministry Memo 2009:B8 – Trustee Expense Guideline</i>
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## EXPRESSIONS OF SYMPATHY

Legal References:

Related References:

Effective Date: *Feb 23, 1998*

Revisions: *May 30, 2005*

Reviewed: *March 20, 2017, **November 12, 2018***

### 1. Preamble

- 1.1 It is the policy of the Waterloo Region District School Board (**WRDSB**) to offer a tangible expression of sympathy to members of the immediate family upon the death of a trustee, employee, or student attending a school under the jurisdiction of the **WRDSB**, recognizing it has a genuine interest in and concern for the welfare of all members of its educational team, particularly in time of bereavement.

### 2. Regulations

- 2.1 On behalf of the **WRDSB**, a joint letter of condolence will be sent from the Chairperson and Director of Education to the immediate family upon the death of a trustee, employee, or student attending a school under the **WRDSB's** jurisdiction.
- 2.2 The letter will indicate that as an expression of Board sympathy, a general planting of trees memorializing individuals covered by the **WRDSB's** policy will be undertaken.
- 2.3 Memorial trees will be planted at times and locations to be determined by the **WRDSB's** grounds keeping staff in consultation with the family.
- 2.4 On behalf of the **WRDSB**, a joint letter of condolence will be sent from the Chairperson and Director of Education to the immediate family upon the death of community members who have contributed significantly to the education of students in the Region of Waterloo.



## EXPRESSIONS OF SYMPATHY

Legal References:

Related References:

Effective Date: *Feb 23, 1998*

Revisions: *May 30, 2005*

Reviewed: *June 9, 2014, February 8, 2016, March 20, 2017*

### 1. Preamble

- 1.1 It is the policy of the Waterloo Region District School Board to offer a tangible expression of sympathy to members of the immediate family upon the death of a trustee, employee, or student attending a school under the jurisdiction of the Board, recognizing it has a genuine interest in and concern for the welfare of all members of its educational team, particularly in time of bereavement.

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- 2.3 Memorial trees will be planted at times and locations to be determined by the Board's grounds keeping staff in consultation with the family.
- 2.4 On behalf of the Board, a joint letter of condolence will be sent from the Chairperson and Director of Education to the immediate family upon the death of community members who have contributed significantly to the education of students in the Region of Waterloo.





## PARKING ON SCHOOL BOARD PROPERTIES

Legal References: *Education Act: Trespass to Property Act*

Related References:

Effective Date: *March 30, 1998*

Revisions: *February 8, 2016, **November 12, 2018***

Reviewed:

### 1. Preamble

- 1.1 It is the policy of the Waterloo Region District School Board (**WRDSB**) to permit the use of its parking lot by its public provided that:
- 1.1.1 the site administrator approves the request or a permit for facility use is in place through the Rentals group in the Facilities Department;
  - 1.1.2 the use does not interfere with school requirements, maintenance work or snow removal;
  - 1.1.3 the parking is done at their own risk and there is no cost to the **WRDSB**;
  - 1.1.4 there is adherence to any restrictions posted with appropriate signage on the property. Failure to comply may result in costs which will be charged to the vehicle owner.

**PARKING ON SCHOOL BOARD PROPERTIES**

Legal References:        *Education Act: Trespass to Property Act*

Related References:

Effective Date:        *March 30, 1998*

Revisions:             *April 14, 2014, February 8, 2016*

Reviewed:

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  - 1.1.3 the parking is done at their own risk and there is no cost to the Board;
  - 1.1.4 there is adherence to any restrictions posted with appropriate signage on the property. Failure to comply may result in costs which will be charged to the vehicle owner.



## BUSINESS COMPLAINT POLICY

Legal References:	<i>Criminal Code of Canada: s. 425.1</i>
Related References:	<i>Administrative Procedure 4310 – Total Integrity Plan (The TIP Line); Administrative Procedure 4360 – Principles of Business Conduct for Board Employees.</i>
Effective Date:	<i>June 2010</i>
Revisions:	<i>April 10, 2017, <b>November 12, 2018</b></i>
Reviewed:	<i>February 22, 2016</i>

### 1. Preamble

- 1.1 The Waterloo Region District School Board (**WRDSB**) is dedicated to the principles of strong corporate governance combined with the highest level of personal and corporate ethical standards in the conduct of doing business.
- 1.2 The **WRDSB** is committed to the highest standards of openness, honesty and accountability. The **WRDSB** aspires to conduct its business affairs with honesty and integrity. The **WRDSB** places extreme value on the reputation of the **WRDSB**.
- 1.3 All employees and other parties of the **WRDSB** are encouraged to disclose any business wrongdoing that may adversely impact the **WRDSB**, the **WRDSB**'s stakeholders, employees or the public at large. All individuals shall be provided the opportunity to remain anonymous when reporting concerns.
- 1.4 The policy is intended as a clear statement that if a business-related wrongdoing by any of its employees/contractors/suppliers/volunteers is identified and reported to the **WRDSB**, it will be dealt with expeditiously and thoroughly investigated and remedied to the extent possible.

### 2. Roles and Responsibilities

- 2.1 The responsibility for the administration and enforcement of this policy rests with the Director of Education and the Coordinating Superintendent, Business Services & Treasurer of the Board.
- 2.2 The Director of Education is authorized to develop the administrative procedures necessary to implement this policy.

### 3. General

- 3.1 The provisions of this policy are independent of, and supplemental to, the provisions of collective agreements between the **WRDSB** and its Unions relative to grievance procedures, and to any other terms and conditions of employment.
- 3.2 There are existing procedures in place to enable employees to raise grievances about their own employment. Similarly, Administration Procedure 3740 - **Prevention and Resolution of Workplace Harassment** is in place to handle allegations of harassment.

- 3.3 This policy is intended to cover business related concerns that employees and other parties may have. The concerns are intended to include, but are not limited to the following:
- 3.3.1 Theft, embezzlement or misappropriation of funds, goods and supplies, resources, other assets or time;
  - 3.3.2 Fraud;
  - 3.3.3 Misuse or abuse of authority in the context of purchasing supplies or services;
  - 3.3.4 The use of **WRDSB** money, property, resources, or authority for personal gain or other non- **WRDSB** related purposes except as provided under **WRDSB** policy or procedure;
  - 3.3.5 Conflict of interest (when a personal interest influences the objective exercise of one's duties);
  - 3.3.6 Breach of confidentiality;
  - 3.3.7 Showing undue favour to a contractor or supplier of goods/services; or
  - 3.3.8 Breach of or failure to implement or comply with any **WRDSB** business related policies or procedures.

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## BUSINESS COMPLAINT POLICY

Legal References:	<i>Criminal Code of Canada: s. 425.1</i>
Related References:	<i>Administrative Procedure 4310 – Total Integrity Plan (The TIP Line); Administrative Procedure 4360 – Principles of Business Conduct for Board Employees.</i>
Effective Date:	<i>June 2010</i>
Revisions:	<i>September 2014, November 10, 2014, April 10, 2017</i>
Reviewed:	<i>February 22, 2016</i>

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  - 3.3.2 Fraud;
  - 3.3.3 Misuse or abuse of authority in the context of purchasing supplies or services;
  - 3.3.4 The use of Board money, property, resources, or authority for personal gain or other non-Board related purposes except as provided under Board policy or procedure;
  - 3.3.5 Conflict of interest (when a personal interest influences the objective exercise of one's duties);
  - 3.3.6 Breach of confidentiality;
  - 3.3.7 Showing undue favour to a contractor or supplier of goods/services; or
  - 3.3.8 Breach of or failure to implement or comply with any Board business related policies or procedures.



## SCHOOL PARKING LOT SAFETY

Legal References: *Education Act*

Related References:

Effective Date: *May 2004*

Revisions: **February 2016, June 12, 2017**

Reviewed: **November 12, 2018**

1. It is the policy of the Waterloo Region District School Board to ensure that student safety is the priority when schools establish guidelines for the managing of traffic in school driveways and parking lots, recognizing that:
  - 1.1 elementary students in Junior Kindergarten through to Grade six (6) must not be used to actively manage or direct traffic;
  - 1.2 students in grades seven (7) to twelve (12) may assist only during special events, with training, direct supervision, and the required safety equipment.

**SCHOOL PARKING LOT SAFETY**

Legal References:	<i>Education Act</i>
Related References:	
Effective Date:	<i>May 2004</i>
Revisions:	<i>April 14, 2014</i>
Reviewed:	February, 2016, June 12, 2017

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## USE OF VOLUNTEERS

Legal References:

Related References: *AP1415 – Use of Volunteers*  
*AP3770 – Criminal Reference Checks*

Effective Date: *November 21, 2016*

Revisions:

Reviewed: ***November 12, 2018***

It is the policy of the Waterloo Region District School Board to welcome the use of volunteers within our schools with an understanding of the following:

1. Volunteers are individuals who willingly give of their time and talent within a school setting;
2. Volunteers will not receive any type of remuneration;
3. Volunteerism is a form of community engagement;
4. Under certain circumstances, volunteers may act as supervisors for extracurricular activities, after being screened, trained, and only upon the approval of the school Principal.

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Legal References:

Related References:    *AP1415 – Use of Volunteers*  
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Effective Date:         *November 21, 2016*

Revisions:

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# Report to Committee of the Whole

November 12, 2018

## **Subject: West Waterloo Elementary Boundary Study Phase 2**

### **Recommendation**

*That the Waterloo Region District School Board approve the commencement of the West Waterloo Elementary Boundary Study Phase 2, involving Vista Hills Public School, Laurelwood Public School, and Abraham Erb Public School.*

### **Status**

The West Waterloo Elementary Schools Boundary Study, completed in 2015, recommended a second phase be implemented between December 2018 and 2020 through the completion of a new boundary study. This phase would consider redirecting Abraham Erb Public School area Grade 7 and 8 students to Laurelwood Public School, and reduce enrolment pressures at Vista Hills Public School. It was recommended that a boundary study take place after there was greater certainty around funding to construct permanent accommodation at Laurelwood Public School and/or Vista Hills Public School could no longer accommodate the enrolment from the Abraham Erb Public School area (in permanent or temporary accommodation).

Prior to the opening of Vista Hills Public School, Abraham Erb Public School students attended Laurelwood Public School for Grade 7 and 8.

Attached to this report are the status quo projections for Abraham Erb Public School, Laurelwood Public School, and Vista Hills Public School, as well as projections showing the proposed Grade 7 and 8 redirection (see Appendix B). A study area map is provided in Appendix A.

Vista Hills Public School will remain over capacity despite the redirection of Abraham Erb Public School Grade 7 and 8 students. Other measures to relieve enrolment pressure at Vista Hills Public School may need to be considered as part of the boundary study. This may include establishing new Development Areas.

### **Background**

A boundary study is a public consultation process undertaken to change attendance areas, grades, and/or programs at a school or group of schools. Implementing boundary study recommendations may result in the need for construction and/or renovations. [Administrative Procedure 4991 - Boundary Studies](#) provides the guidelines and expectations for reviewing school attendance areas.

On November 23, 2015 the board of trustees approved the final recommendations of the West Waterloo Elementary Schools Boundary Study. This boundary study

established a boundary for the new Vista Hills Public School (opened September 2016), and included modifications to the boundaries of Abraham Erb, Edna Staebler, and Laurelwood Public Schools.

On May 14, 2018, Trustees were presented with the Annual Accommodation Planning Report 2018-2019 which outlined the West Waterloo Elementary Boundary Study Phase 2 for consideration in the 2018-2019 school year.

### **Financial implications**

If the recommendation is approved, the redirection of students from Vista Hills Public School to Laurelwood Public School would require 2 bus runs to Laurelwood Public School. One bus can be accommodated within the present routing network and one new bus run would be required at a cost of approximately \$42,000.

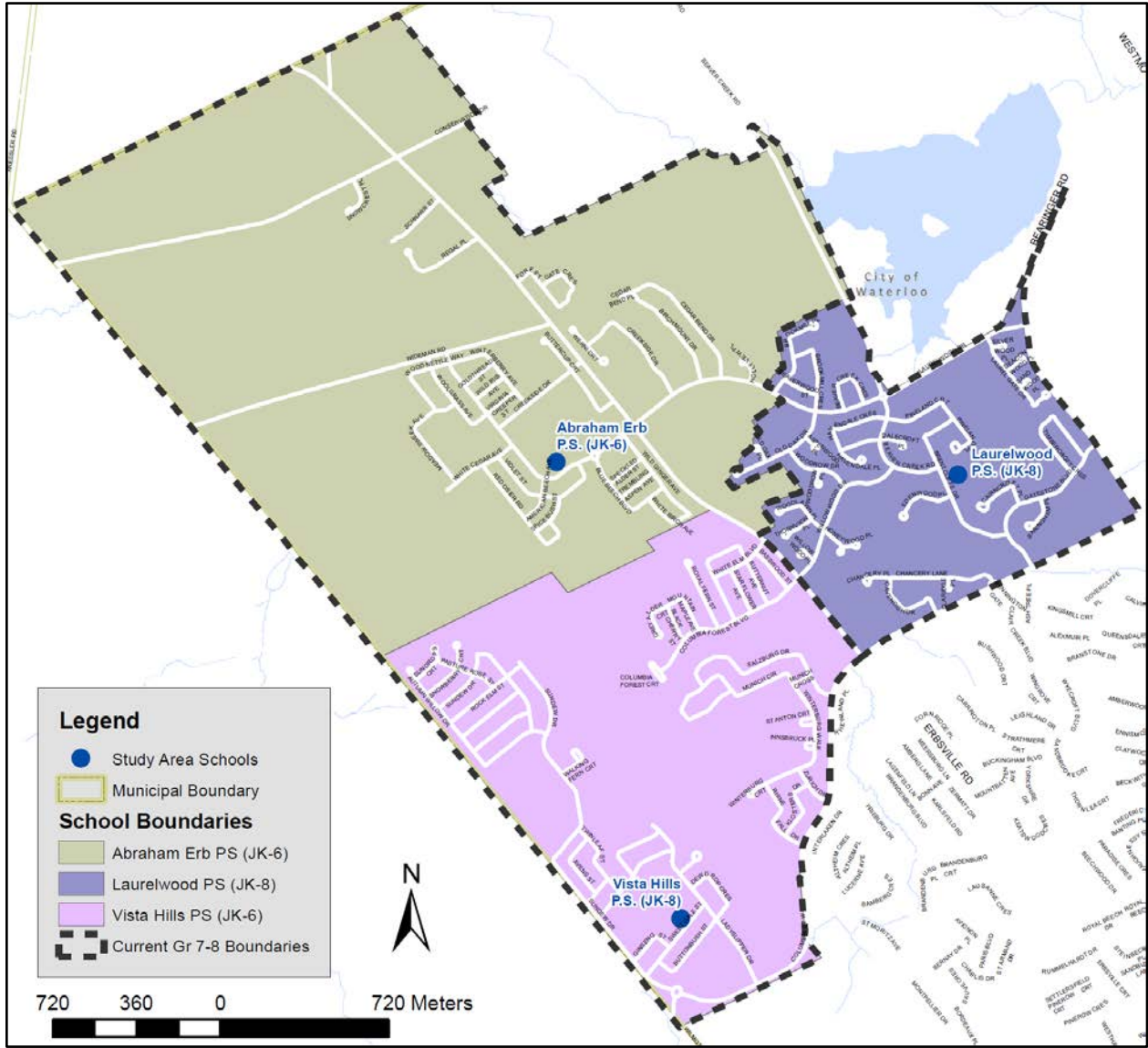
### **Communications**

Upon approval of the West Waterloo Elementary Boundary Study Phase 2, the schools and their School Councils will be notified. A web page will be set up as a link on the main page of the Board's website. The web page will provide up-to-date information about the study. Public meetings will be advertised through social media, and flyers or electronic communications with the school communities.

A Boundary Study Working Group will also be established, consisting of the appropriate Principals, Superintendents of Student Achievement and Well-Being, parent and student representatives from the schools involved, and Planning and Facilities staff.

Prepared by: Matthew Gerard, Coordinating Superintendent, Business Services & Treasurer of the Board  
Nathan Hercanuck, Manager of Planning  
Emily Bumbaco, Senior Planner  
Sarah Galliher, Senior Planner  
in consultation with Coordinating Council

# Study Area Map



## Enrolment Projections

Table 1 - Status Quo Enrolment Projections

School	Grades	2018 Capacity		Enrolment						
		Capacity	Portables	2018	2019	2020	2022	2024	2026	2028
Abraham Erb Public School	JK-6	487	1	473	452	459	443	406	404	399
Laurelwood Public School	JK-8	504*	6	562	522	514	474	456	465	466
Vista Hills Public School	JK-8	643	5	758	905	987	1144	1142	1105	1107

\*The capacity of Laurelwood Public School includes a semi-permanent 6 room portapak

Table 2 - Proposed Grade 7-8 Redirection Scenario Enrolment Projections

School	Grades	2018 Capacity		Enrolment						
		Capacity	Portables	2018	2019	2020	2022	2024	2026	2028
Abraham Erb Public School	JK-6	487	1	473	452	459	443	406	404	399
Laurelwood Public School	JK-8	504*	6	562	604	648	600	595	564	568
Vista Hills Public School	JK-8	643	5	758	822	853	1018	1003	1006	1005

\*The capacity of Laurelwood Public School includes a semi-permanent 6 room portapak



# Report to Committee of the Whole

November 12, 2018

## Subject: Temperature and Humidity Levels in Classrooms

### Recommendation

*This report is for the information of the Board.*

### Status

An inventory has been completed taking extractions of data from the School Facility Information System (SFIS). Room counts from SFIS total 4,944 for all 120 schools in our inventory. Of the 4,944 rooms, 2,888 are classrooms and 291 are portables. This represents a total of 3,179 classroom spaces. Other spaces not included in the 3,179 classrooms include administrative spaces, childcare spaces, auditoriums, libraries, gymnasiums, seminar rooms, and technological education shops.

Data counts taken from our Building Automation System (BAS) that monitor temperatures in our schools, indicates there are 594 classrooms in elementary that are not air-conditioned and 426 classrooms in secondary that are not air-conditioned. This represents a total of 1,020 classrooms lacking air-conditioning. These classrooms do not currently have the ability to track and monitor temperature or humidity. Based on this and an estimated \$40,000 to \$50,000 per classroom to air-condition, the magnitude of completing air-conditioning in the balance of un-air-conditioned classrooms, is more than \$40M and must be balanced against competing renewal needs and an uncertain fiscal environment in the province.

In schools that are not currently air-conditioned, the following supporting measures to reduce classroom temperatures have been installed:

- Nanotechnology window films (Waterloo Collegiate Institute and Linwood Public School)
- Tree planting (Sir John A Macdonald Secondary School)
- De-stratification fans (Tait Public School and Winston Churchill Public School completed, and Courtland Public School and King Edward Public School to be completed)
- Replacement of fluorescent lamps with Light Emitting Diodes (LED) at various schools
- Window roller shades (\$70,000 spent on 34 schools in last 12 months)
- Partial air-conditioning limited by electrical service (Sheppard Public School west facing and top floor classrooms air-conditioned)
- Free cooling by introduction of cooler outdoor air when conditions permit

Furthermore, new construction and renovations rely on the following:

- New building code requirements
- Building orientation to minimize heat gain for new construction
- Window design brief (40 percent window to wall ratio) for new installs
- Building shade structures
- Gas Heat Pump (Stewart Avenue Public School)

New school builds in our region have been air-conditioned since the 1970s. This has enabled our board to achieve 54 of 104 elementary schools with complete air-conditioning and six of 16 secondary schools with complete air-conditioning. It is important to note, that complete air-conditioning for our board does not include hallways, gymnasiums, utility rooms, technological education spaces, auditoriums, and the Cameron Heights Collegiate Institute swimming pool for example. It does include offices, libraries, classrooms, staff rooms and kindergarten rooms. Based on this, we are 54 percent air-conditioned when calculated by square footage.

When compared against the province, a poll completed in November 2017 indicated that of 34 responding boards in the province, 65 percent (23) air-condition new elementary school builds and 74 percent (25) air-condition new secondary builds. Locations in schools varied by board, but most were attempting to retrofit to enable cooling centres for student and staff refuge within their school buildings on days with high heat.

All 120 schools in the Waterloo Region District School Board have air-conditioning in at least one location to offer students refuge on extremely hot days. Historic and current practice has targeted libraries and office spaces in schools to be air-conditioned. Despite this, there are still 17 elementary school libraries in our system that have not yet been air-conditioned and eight office spaces that are not air-conditioned.

The design standard for implementation of full day kindergarten (FDK) in our region included air-conditioning in all FDK spaces. This greatly increased the number of air-conditioned classroom spaces in our region, as did the Board of Trustee initiated motion to air-condition all portables within our region beginning in 2009. Chart 1 presents the increase in number of air-conditioned classrooms in the region from 2008 through 2018. Chart 2 and Chart 3 presents a graphical representation of elementary and secondary schools, respectively, in our system with the greatest number of classrooms that are not air-conditioned.

Many schools are controlled for environmental comfort through our BAS. This system monitors a variety of data points including indoor air temperature, indoor carbon dioxide levels, outdoor air temperature, and uses a complex algorithm to determine when to activate heating or cooling systems and how much fresh air to introduce into classroom spaces.

Where a space does not have air conditioning, BAS components do not exist and therefore temperature readings are not readily available.



Further to the above, humidity sensors in BAS equipment has a relatively high rate of reading false measurements – a failure rate of approximately 50 percent historically. Because of this, humidity sensing equipment is not widely used across our region. Facility Services relies on six outdoor humidity sensors – two in Cambridge, two in Kitchener and two in Waterloo that are averaged for external environmental conditions to feed into the algorithm.

Staff will continue to add air-conditioning to classrooms, offices and libraries as budget permits on renovation projects at schools.

## **Background**

At a Committee of the Whole meeting on May 28, 2018, the following notice of motion was served:

*That the Waterloo Region District School Board record, track and collate temperatures and humidity levels in classrooms without air-conditioning during the months of May 2019 to October 2019; and That a report be presented to the Board of Trustees by the end of January 2020, with temperature and humidity data, as well as a prioritized plan that would air-condition all Waterloo Region District School Board classrooms that are without air-conditioning; and That short term measures be taken such as effective fans, U. V. filtering blinds, painting asphalt courtyards white, retractable shades, etc.*

Facility Services worked with various staff in the mechanical, electrical, environmental, capital and drafting services to compile data related to this request.

Student and staff comfort is highly impacted by temperature and humidity. However, six factors impact an individual's perception of comfort. In the realm of personal impacts, individual metabolic rate and clothing impact both impact perception. In the environmental realm, air temperature, radiant temperature, air speed, and humidity all impact perception of comfort.

Current building Heating, Ventilation and Cooling (HVAC) systems in the Waterloo Region District School Board are designed to the American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) 55—Thermal Environmental Conditions for Human Occupancy standard.

Room temperature set-points vary in Waterloo Region District School Board range between 21.5 and 25.5 degrees Celsius during occupied hours. Temperature and humidity impact the comfort range as presented in Figure 1.

A further factor in the effectiveness of room temperature settings in assembly occupancies is the use of demand controlled ventilation (DCV) in our schools. This is much different than home heating and cooling controls. Demand ventilation measures the amount of carbon dioxide in spaces as a measure of occupant load. This measure initiates HVAC systems to introduce make-up or fresh air to increase oxygen levels in occupied spaces. A pictorial representation of this is presented in Figure 2.

It is important to note that Board Policy 4014 - Extreme Temperatures and Administrative Procedure 4180 - Extreme Temperatures are in place to support staff in decision-making and strategies that can mitigate high heat and humidity exposure to staff and students during the day in our schools.

**Financial implications**

No financial implications.

**Communications**

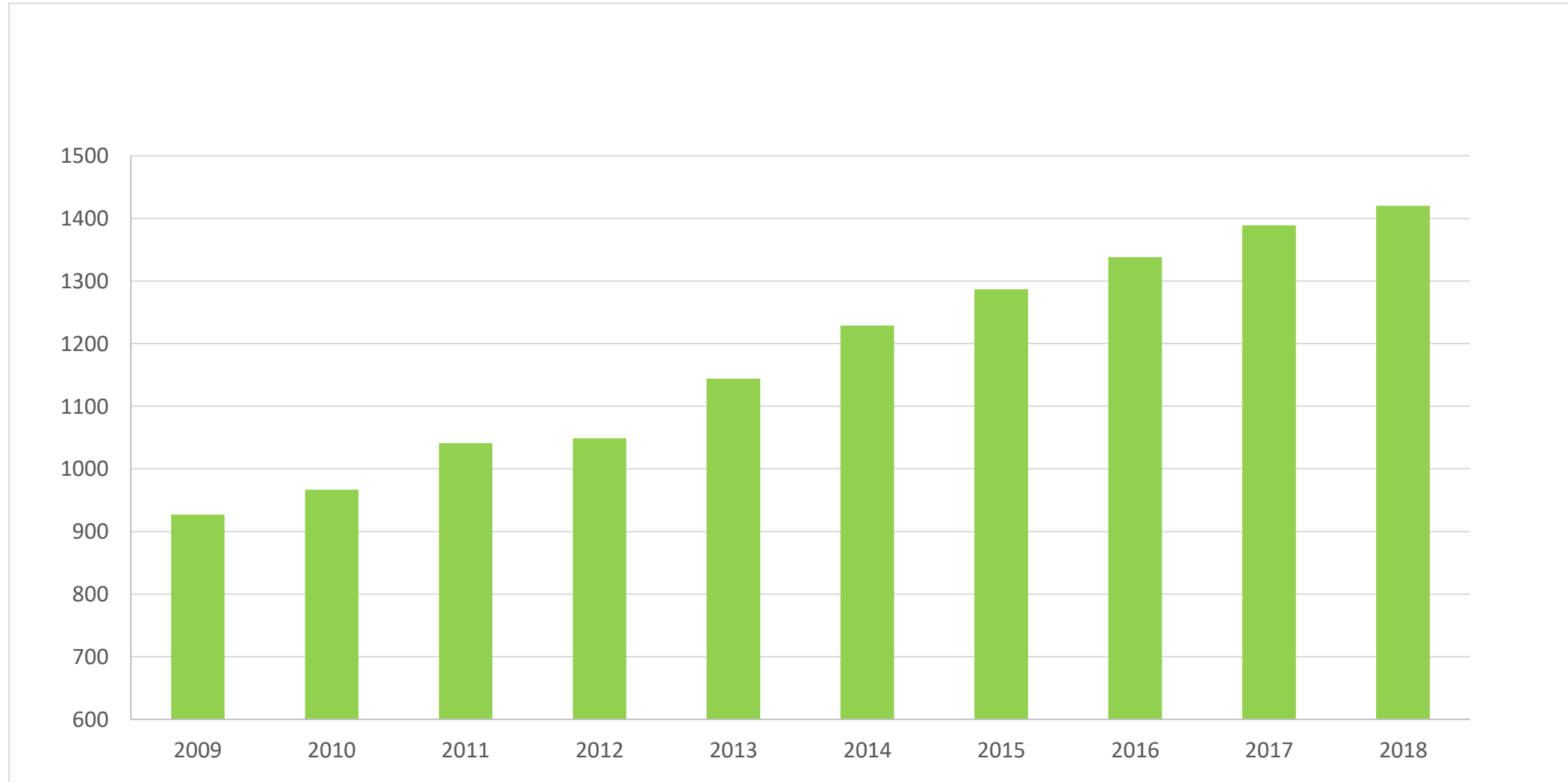
No further communication planned at this time.

Prepared by: Matthew Gerard, Coordinating Superintendent, Business Services  
& Treasurer of the Board  
Ian Gaudet, Controller, Facility Services  
Ron Dallan, Manager of Capital Projects  
in consultation with Coordinating Council

**CHART 1**

Number of Elementary Classrooms with Air Conditioning

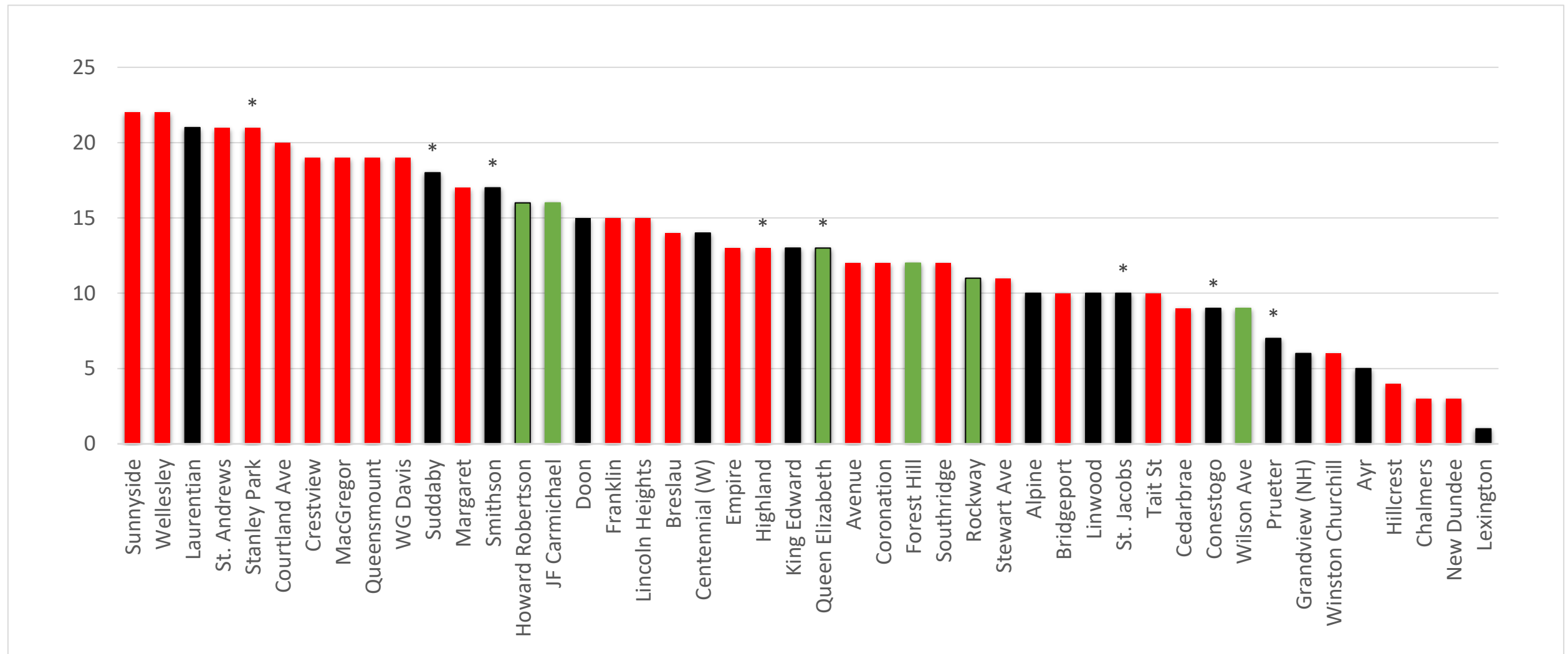
Number of Elementary Classrooms



Year

Number of Elementary Classrooms without Air Conditioning

Number of Elementary Classrooms



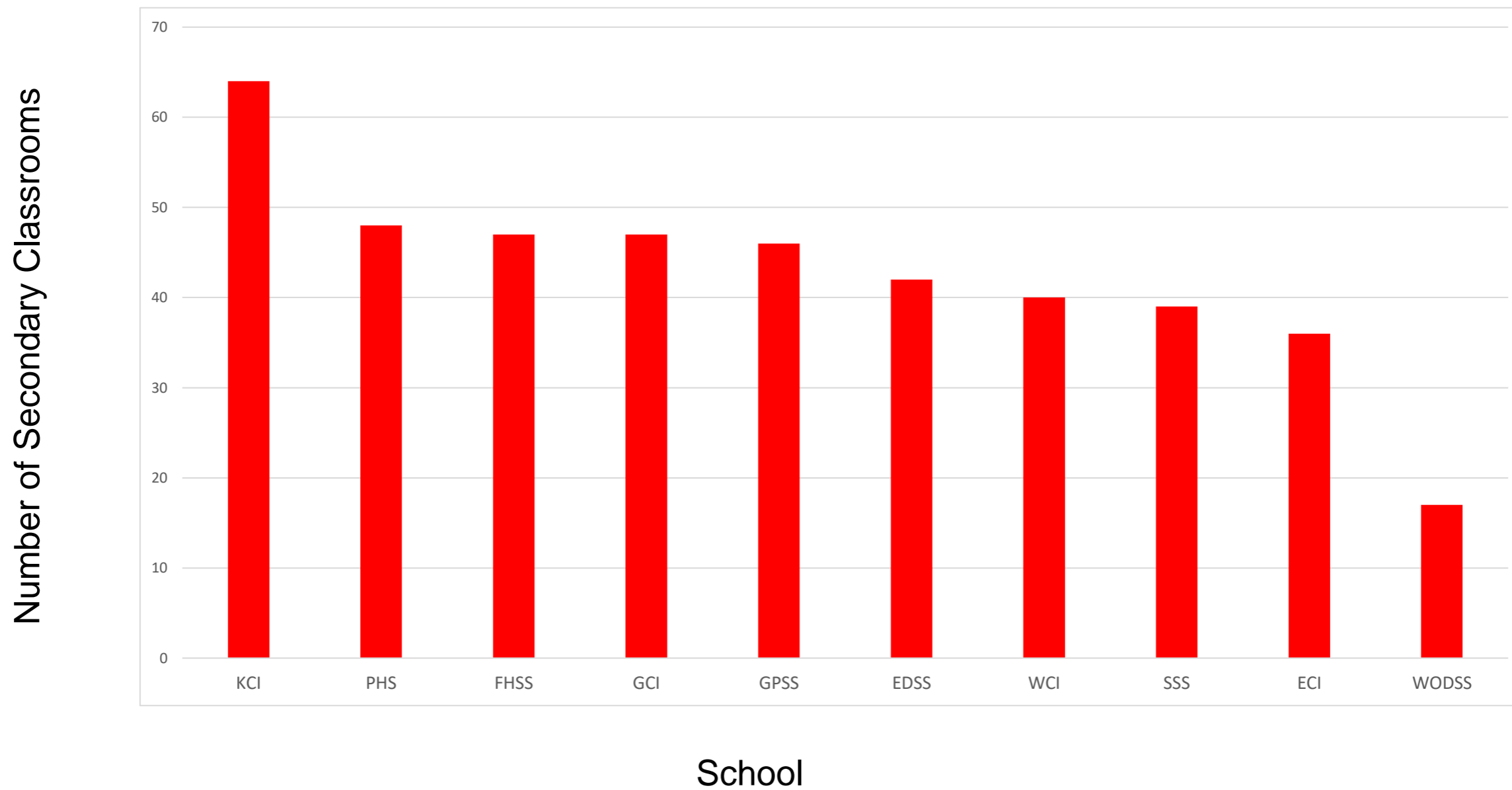
School

Legend

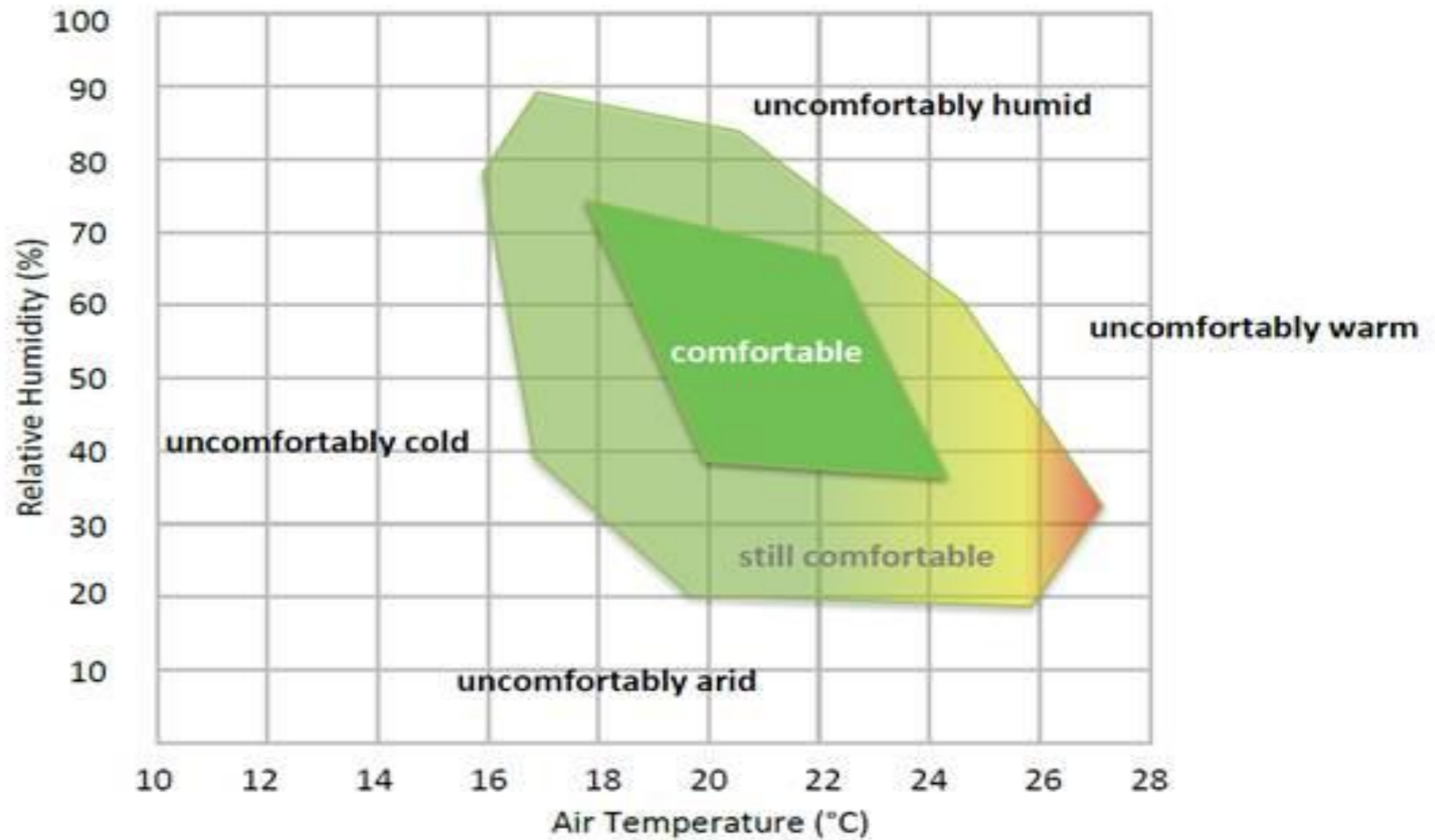
- Classrooms not air conditioned, but library is air conditioned
- Classrooms not air conditioned and library not air conditioned
- Lowest SEI schools to be air conditioned in next two years with library air conditioned
- Lowest SEI schools to be air conditioned without library air conditioned
- \* Office/admin not air conditioned

**CHART 3**

Number of Secondary Classrooms with Air Conditioning



## Temperature and Humidity Comfort Level



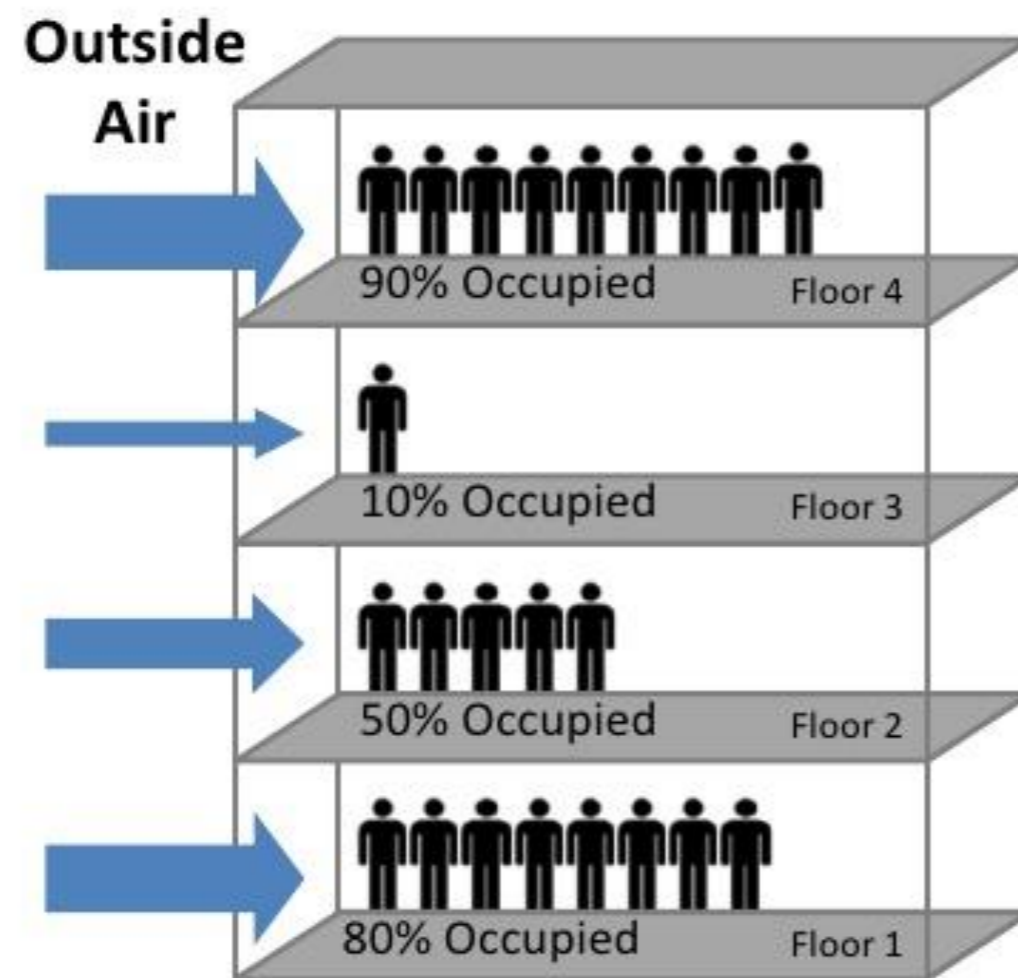
Reference CamLab Website

<https://www.camlab.co.uk/rm100-room-climate-monitor-for-temperature-humidity-and-carbon-dioxide-pv99842.aspx>

FIGURE 2

Graphical Representation of Demand-Controlled Ventilation

## Demand-Controlled Ventilation (DCV)



Adjust fresh-air intake based on occupancy

Ventilation demand is determined by CO<sub>2</sub> level (ppm)



Reference PowerCast Wireless Sensors

<https://www.google.ca/imgres?imgurl=https://image.slidesharecdn.com/demandcontrolledventilationenergysavings-120430215726-phpapp02/95/>

[demand-controlled-ventilation-and-energy-savings-4-728.jpg?cb%3D1335823442&imgrefurl=https://www.slideshare.net/PowercastSensors/](https://www.slideshare.net/PowercastSensors/demand-controlled-ventilation-and-energy-savings-4-728.jpg?cb%3D1335823442&imgrefurl=https://www.slideshare.net/PowercastSensors/)

[demand-controlled-ventilation-energy-savings&h=546&w=728&tbnid=4YA05WEURQ7KfM:&q=demand+ventilation&tbnh=150&tbnw=200&usg=AI4](https://www.slideshare.net/PowercastSensors/demand-controlled-ventilation-energy-savings&h=546&w=728&tbnid=4YA05WEURQ7KfM:&q=demand+ventilation&tbnh=150&tbnw=200&usg=AI4)

[demand+ventilation&tbnh=150&tbnw=200&usg=AI4](https://www.slideshare.net/PowercastSensors/demand+ventilation&tbnh=150&tbnw=200&usg=AI4)

[kRrWlq4etWEsZD8WgtUkUMupfirQ&vet=12ahUKEwiLnsbctqTeAhWrxYMKHeAlAbEQ\\_B0wGXoECAYQCQ..i&docid=TZoOrh18su3tpM&itg=1&sa=X&ved=2ahUKEwiLnsbctqTeAhWrxYMKHeAlAbEQ\\_B0wGXoECAYQCQ](https://www.slideshare.net/PowercastSensors/demand+ventilation&tbnh=150&tbnw=200&usg=AI4)



# Report to Committee of the Whole

November 12, 2018

## **Subject: Motion Re: Air Conditioning in Schools**

### **Recommendation**

*That the Waterloo Region District School Board record, track and collate temperatures and humidity levels in classrooms without air conditioning during the months of May 2019 to October 2019; and*

*That a report be presented to the Board of Trustees by the end of January 2020, with temperature and humidity data, as well as a prioritized plan that would air condition all Waterloo Region District School Board classrooms that are without air conditioning; and*

*That short term measures be taken such as effective fans, U.V. filtering blinds, painting asphalt courtyards white, retractable shades, etc.*

### **Status**

This report contains a Notice of Motion served by Trustee C. Watson at the May 28, 2018, Committee of the Whole Meeting and was supported by Trustees C. Harrington and N. Waddell.

### **Financial implications**

Financial Implications are to be determined.

### **Communications**

None identified at this time.

Prepared by: Stephanie Reidel, Manager of Corporate Services  
for Trustee C. Watson  
in consultation with Coordinating Council





# Report to Committee of the Whole

November 12, 2018

## **Subject: Motion Re: Trustee Parking**

### **Recommendation**

*That the Waterloo Region District School Board reassign the Trustee parking spaces for general staff and visitor use; and*

*That parking spaces further from the front entrance of the Education Centre be designated for Trustee use.*

### **Status**

This report contains a Notice of Motion served by Trustee C. Waterfall at the October 15, 2018, Committee of the Whole Meeting and was supported by Trustees T. Martin and C. Millar.

### **Financial implications**

Financial Implications are not yet determined.

### **Communications**

None identified at this time.

Prepared by: Stephanie Reidel, Manager of Corporate Services  
for Trustee C. Waterfall  
in consultation with Coordinating Council