VISION, MISSION & MANDATE

Vision:

An Ontario in which architects are valued contributors to society, by creating a safe and healthy built environment that performs at the highest levels and elevates the human spirit.

Mission:

To serve the public interest through the regulation, support, and promotion of the profession of architecture in Ontario.

Mandate:

To regulate and govern the practice of architecture in Ontario in the service and protection of the public interest in accordance with the *Architects Act*, its Regulations and Bylaws; to develop and uphold standards of skill, knowledge, qualification, practice, and professional ethics among architects; and to promote the appreciation of architecture within the broader society.

May 2016



OAA COUNCIL MEETINGS

RULES AND PROCEDURES

Meetings of the Council of the Ontario Association of Architects (OAA) are conducted in accordance with Roberts Rules of Order which is included in the Councillor Orientation Binder, unless stipulated otherwise with the by-laws or as otherwise approved by OAA Council – see below.

Rules and Procedures for Discussion/Debate/Motions within Council Meetings

- 1) The maximum time for a speech in debate on a motion is two minutes.
- The Chair shall keep a speakers' list of those wishing to speak to a specific item or motion; and
 - a) the speakers' list shall be built in the order that the Chair notes a member's intention to speak; and
 - b) any member having not spoken to a motion shall be given preference on the speakers' list over any member who has already spoken.
- 3) An original main motion may only be introduced at a meeting if it has been added under New Business to the agenda approved for that meeting.
- 4) Meetings of the Council of the Ontario Association of Architects (OAA) are conducted in accordance with Roberts Rules of Order which is included in the Councillor Orientation material, unless stipulated otherwise with the by-laws or as otherwise approved by OAA Council.
- 5) An item For Information Only which no Council member indicates will be the subject of a question or an original main motion is considered to be dispensed upon approval of the agenda for that meeting.
- 6) The meeting will move to a period of informal discussion immediately after a new item has been presented and any questions on the item have been put and answered, but before an original main motion on the item is introduced; and
 - a) a period of informal discussion is defined as the opportunity to discuss an item without there being a motion on the floor; and
 - b) the Chair of the meeting when the item is introduced continues as the Chair during the period of informal discussion unless they choose to relinquish the Chair; and
 - c) in a period of informal discussion the regular rules of debate are suspended; and
 - d) a period of informal discussion ceases when the Chair notes that no additional members wish to speak to the item or when an incidental motion to return to the regular rules of debate passes with a majority; and
 - e) immediately upon leaving a period of informal discussion, the presenter of the item may move an original main motion on the item and the formal rules of debate resume; and



f) if the presenter of the item moves no motion on the item then the item is considered dispensed unless an indication to introduce additional original main motions on the item is on the agenda, in which case each of these motions is presented in turn and debated as per the rules of formal debate.



ONTARIO ASSOCIATION OF ARCHITECTS Council Meeting of January 20, 2022 at approx. 11:00 a.m.

Meeting # 279

OPEN MEETING AGENDA

Recognition of Traditional Lands

4 mins	1.0	AGENDA APPROVAL	
1 min	1.1	Declaration re. Conflict of Interest	
	2.0	APPROVAL OF MINUTES	
4 mins	2.1	Draft minutes of the December 10, 2021 Open Council Meeting (see attached)	
2 mins	3.0	BUSINESS ARISING FROM THE MINUTES	
	4.0	ITEMS FOR REVIEW AND APPROVAL	
10 mins	4.1	Election of Officers (oral)	Registrar
5 mins	4.2	Process for Council Nominations for Inter-locking directors to the Pro-Demnity Insurance Company Board of Directors (see attached)	Executive Director
7 mins	4.3	Revised OAA Bylaws, Schedule A to incorporate Technologist OAAAS members (see attached)	Executive Director
7 mins	4.4	Approval of Roster of Tours for OAA Conference 2022 (see attached)	Vice President King
10 mins	4.5	Approval of Roster of Continuing Education for OAA Conference 2022 (see attached)	Vice President Krickhan
10 mins	4.6	Proposal re. Mandatory learning content under the OAA's Continuing Education Program (see attached)	Vice President Krickhan
2 mins	4.7	Appointment of OAA Representative to 2030 Workforce Coalition (oral)	Vice President Schumann
5 mins	4.8	City of Barrie Community Energy and Greenhouse Gas Reduction Plan (see attached)	Councillor Thomson
	5.0	ITEMS FOR DISCUSSION	
	6.0	EXECUTIVE COMMITTEE REPORTS	
	6.1	Report from the President	
3 mins 3 mins 5 mins		6.1.a Activities for the months of December-January (see attached)6.1.b Report from Executive Director (see attached)6.1.c Governance Committee Update (oral)	President Executive Director
	6.2	Report from the Senior Vice President and Treasurer	SVP & Treasurer
10 mins		6.2.a Financial Statements 12 months ending November 30, 2021 (see attached)	
	6.3	Report from Vice President Strategic	

O 7 mins	pen Col	uncil Agenda 6.3.a Report from Vice President Strategic (see attached)	Vice President Schuhmann
	6.4	Report from Vice President Communications	
7 mins		6.4.a Report from the Vice President Communications (see attached)	Vice President King
	6.5	Report from Vice President Regulatory	Vice President Hastings
7 mins		6.5.a Activities Report from the Registrar (see attached)	Registrar
	6.6	Report from Vice President Practice	
7 mins		6.6.a Report from Vice President Practice (see attached)	Vice President Vilardi
7 mins		6.6.b Overall 2021 Statistics of the Practice Advisory Services (PAS) Hotline, Practice Advisory E-newsletters and Update on RFP Monitoring (see attached)	Vilaitai
	6.7	Report from Vice President Education	
7 mins		6.7.a Report from Vice President Education and Comprehensive Education Committee (see attached)	Vice President Krickhan
	7.0	ITEMS FOR INFORMATION	
2 mins	7.1	Report on 2021 Annual Society Meetings Updates (see attached)	President
	8.0	OTHER BUSINESS	

9.0 **DATE OF NEXT MEETING**

9.1 The next regular meeting of Council is Thursday March 3, 2022 at 9:30 a.m. via Zoom.

The annual Council Priority Setting Session will held virtually and be conducted in three half day segments. These sessions will be held:

Thursday, February 3, 2022 3 p.m. to 6 p.m. Friday, February 4, 2022 12:30 p.m. to 4:30 p.m. Thursday February 10, 2022 3 p.m. to 6 p.m.

10.0 ADJOURNMENT



Ontario Association of Architects

Meeting #278 Open MINUTES December 10, 2021

The two hundred and seventy eighth meeting of the Council of the Ontario Association of Architects, held under the *Architects Act*, took place on Friday December 10, 2021 via Zoom.

Present: Susan Speigel President

Agata Mancini Senior Vice President & Treasurer

Paul Hastings Vice President Regulatory
Jennifer King Vice President Communications
Natasha Krickhan Vice President Education
Kathleen Kurtin Immediate Past President

Kristiana Schuhmann Vice President Strategic (part attendance)

Settimo Vilardi Vice President Practice Farida Abu-Bakare Councillor (part attendance)

Heather Breeze
J. William Birdsell
Barry Cline
Councillor
Councillor
Councillor
Councillor
Councillor

Jeffrey Laberge Councillor (part attendance)

Michelle Longlade Lieutenant Governor in Council Appointee

Lara McKendrick Councillor

Elaine Mintz Lieutenant Governor in Council Appointee

Deo Paquette Councillor

Gaganjot Singh Lieutenant Governor in Council Appointee

Andrew Thomson Councillor
Kristi Doyle Executive Director

Christie Mills Registrar

Tina Carfa Executive Assistant, Executive Services

Erik Missio Manager, Communications

Regrets: None

Guests: Pearl Chan Incoming Councillor

Claire Hepburn Deputy Registrar (part attendance)
Christine Karney Incoming Councillor (part attendance)
Adam Tracey Manager, Policy and Government Relations

Ted Wilson Incoming Councillor Marek Zawadzki Incoming Councillor

The President called the meeting to order at 11:35 a.m.

Incoming Council members, Chan, Karney, Wilson, and Zawadski were extended a welcome to the meeting by the President. It was noted that these incoming members would be attending the meeting as observers.

The President noted a land acknowledgement video video *The Secret Path – Ahead by a Century* would be shared with Council as an acknowledgement and recognition of the indigenous land and its people.

The President thanked outgoing Councillors Breeze, Cline, Erskine, Kurtin Laberge, and Mancini on behalf of Council for hard their work and support during their tenure on Council and spoke in detail about each one's accomplishments. Each outgoing member present spoke briefly, reflecting on their time on Council.

DECLARATION RE CONFLICT OF INTEREST

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The President called for declaration of any conflicts of interest.

No conflicts of interest were declared.

AGENDA APPROVAL

9315. The President noted that no new items would to be added to the agenda.

It was moved by Mancini and seconded by Vilardi that the agenda for the December 10, 2021 open meeting be approved as circulated.

-- CARRIED

APPROVAL OF MINUTES

9316. Reference Material Reviewed: Draft minutes of the November 4, 2021 Open Council meeting.

The draft minutes of the November 4, 2021 Open Council meeting were reviewed.

It was moved by Schuhmann and seconded by Birdsell that the minutes of the November 4, 2021 Open Council meeting be approved as circulated.

-- CARRIED (1 abstention)

BUSINESS ARISING FROM THE MINUTES

9317. There was no business arising from the minutes.

Council broke for lunch at 11:55 am and resumed at 1:00 p.m.

ITEMS FOR REVIEW AND APPROVAL

9318. Appointments to Complaints Committee (oral)

The Vice President Regulatory reported.

It was moved by Hastings and seconded by Schuhmann that Ibrahim El-Hajj and Tzoline
Ternamian be appointed to Complaints Committee for a three-year term effective January 1, 2022.
-- CARRIED (1 abstention)

It was moved by Hastings and seconded by Schuhmann that Toon Dreessen be appointed as Chair, Complaints Committee for a one-year term effective January 1, 2022.

-- CARRIED

It was moved by Hastings and seconded by Schuhmann that Denis Rioux be reappointed to Complaints Committee for a three-year term effective January 1, 2022

-- CARRIED

9319. Reappointments to Discipline Committee (oral)

The Vice President Regulatory reported.

It was moved by King and seconded by Vilardi that Vincent Alcaide and Catherine Friis be reappointed to Discipline Committee for a three-year term effective January 1, 2022.

-- CARRIED

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9320. Appointments to Experience Requirements Committee (oral)

The Vice President Regulatory reported.

It was moved by Kurtin and seconded by Cline that Emily Webster Mason be appointed to the Experience Requirements Committee for a three-year term effective January 1, 2022
-- CARRIED

It was moved by Longlade and seconded by Paquette that Donald Ardiel be reappointed to the Experience Requirements Committee for a three-year term effective January 1, 2022
-- CARRIED (1 abstention)

9321. Appointments to Registration Committee (oral)

The Vice President Regulatory reported.

It was moved by Cline and seconded by Paquette that Chris Montgomery be reappointed to the Registration Committee for a three-year term effective January 1, 2022
--- CARRIED

It was moved by Birdsell and seconded by Paquette that Shirley Lee be appointed to the Registration Committee for a three-year term effective January 1, 2022
-- CARRIED (1 abstention)

It was noted by the President that the next item would be the appointments to Council.

9322. Appointments to Council (oral)

The Registrar reported that the first motion would be to approve the terms of the appointment for the two seats for the City of Toronto.

It was moved by Kurtin and seconded by Mancini that Susan Speigel be appointed the 3 year term on Council and Marek Zawadzki be appointed the 1 year term on Council effective January 1, 2022.

-- CARRIED

The Registrar reported that a poll would be cast for Council to vote on the appointment of the member to the Eastern Ontario Electoral District. The candidates for consideration were Amin Amin, Clayton Payer, Dinko Sakanovic, and Mehdi Zahed.

The results of the poll reported that the majority of votes were to appoint Clayton Payer at 76%.

It was moved by Erskine and seconded by Mintz that Clayton Payer be appointed to Council from the Eastern Ontario electoral district for a three-year term effective January 1, 2022.

-- CARRIED

The Registrar reported that a poll would be cast for Council to vote on the appointment of the member to the Western Ontario Electoral District. The candidates for consideration were Donald Ardiel and Greg Redden.

The results of the poll reported that the majority of votes were to appoint Greg Redden at 72%.

It was moved by Mintz and seconded by McKendrick that Greg Redden be appointed to Council from the Western Ontario electoral district for a three-year term effective January 1, 2022.
-- CARRIED (1 opposed)

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9323. Appointments to Practice Resource Committee (oral)

The Vice President Practice reported.

It was moved by Vilardi and seconded by Kurtin that Sara Jordao be reappointed to the Practice Resource Committee for a three-year term effective January 1, 2022.

-- CARRIED

It was moved by Vilardi and seconded by Mancini that Donald Ardiel, John Ciarmela, and Paul Jurecka be appointed to the Practice Resource Committee for a three-year term effective January 1, 2022.

-- CARRIED (1 abstention)

9324. Appointments to Practice Review Committee (oral)

The Vice President Practice reported.

It was moved by Vilardi and seconded by Schuhmann that Teresa Adusei be appointed to the Practice Review Committee for a three-year term effective January 1, 2022

-- CARRIED (1 abstention)

9325. Appointments Sub-Committee on Building Codes and Regulations (SCOBCAR) (oral)

The President reported that voting on the appointments would be held at the end of the meeting as there was a request to discuss the candidates in camera once again.

The meeting moved from open to in camera at 4:00 p.m. Laberge left the meeting at 4:00 p.m.

The meeting returned to the open at 4:15 p.m.

It was moved by Vilardi and seconded by Birdsell that Brian Abbey, John Romanov, and Lea Wiljer be appointed to the Sub-Committee on Building Codes and Regulations (SCOBCAR) for a three-year term effective January 1, 2022.

-- CARRIED (1 abstention)

9326. Appointments to Practice Advocacy Coordination Team (PACT) (oral)

The Vice President Strategic reported.

It was moved by Schuhmann and seconded by Mintz that Len Abelman be reappointed to the Policy Advocacy Coordination Team (PACT) for a three-year term effective January 1, 2022 -- CARRIED

It was moved by Schuhmann and seconded by Paquette that John Stephenson be appointed to the Policy Advocacy Coordination Team (PACT) for a one-year term effective January 1, 2022.
-- CARRIED

9327. Appointment to the Communications Committee (oral)

The Vice President Strategic reported.

It was moved by King and seconded by McKendrick that Dana Seguin be appointed to the Communications Committee for a three-year term effective January 1, 2022

-- CARRIED (3 opposed, 1 abstention)

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9328. Appointment to the Interns Committee (oral)

The recommendations were reported to Council.

It was moved by Paquette and seconded by Mancini that the following individuals be appointed to the Interns Committee for a three-year term effective January 1, 2022:

Corey Andrews Heather Breeze
Christina Lee Fatemeh Masoumian
Javier Sanchez Moreno Dania Shahab

-- CARRIED

9329. Reference Material Reviewed: Memorandum from the Equity, Diversity, Inclusion | Truth & Reconciliation Working Group dated November 26, 2021 re. New Scholarship Awards Update fro Equity, Diversity & Inclusion and Truth & Reconciliation Working Group and attached background information. (APPENDIX 'A')

The Immediate Past President reported on the proposed terms of reference for the new OAA scholarship awards.

It was moved by Kurtin and seconded by Krickhan that the Terms of Reference for the new OAA Scholarships: Exceptional Leadership Through Design Excellence: Equity, Diversity & Inclusion (EDI) and Truth & Reconciliation be approved as presented to Council at the December 10, 2021 Council meeting.

-- CARRIED (1 opposed)

It was moved by Kurtin and seconded by Longlade that Council approve an increase in the award amount for OAA's existing scholarships to the Schools of Architecture from \$2000 to \$2500.

-- CARRIED (2 opposed)

A Council member requested some clarification with respect to how the scholarship is given.

A member of Council responded that the universities are tasked with selecting the best candidates based on the criteria established by the OAA

A member of Council requested clarification as to the process for a firm or member to set up an award or scholarship. Doyle noted that a policy is in development to outline process for endowments.

9330. Reference Material Reviewed: Memorandum from Councillor and Chair of the Interns Committee, Farida Abu-Bakare and Intern Representative on Council, Heather Breeze dated December 10, 2021 re. Interns Committee Comprehensive Research Report and attached background information. (APPENDIX 'B')

Councillor Breeze reported the the final report is a culmination of work over the past few months. The OAA's past architectural graduate performed thorough research for the Committee. In reviewing and analyzing the information, there was a search for overlaps and feedback in that analysis.

A member of Council indicated that the Committee is seeking a commitment from Council to proceed with a title change. There was discussion regarding feedback in that it would appear that the majority of interns have requested a change whilst the majority of architects feel the current title is appropriate. However, the majority of architects who liaise closely with interns are in favour of a title change.

Schuhmann left the meeting at 2:00 p.m.

A member of Council recalled the discussion at the spring Council meeting regarding the survey and the concern that the survey results did not adequately support a move to a title change. As such, Council

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had requested that the Committee consider other factors affecting interns and the pathway to licensure. Given the information that had been presented, Council was not prepared to support the move to a title change.

Councillor Breeze noted that the group considered this and noted that the feedback does indicate that many of the challenges are workplace-centric however a title change would be something that the OAA could do and the the perception created would be positive; it is a direct action to recognize the need to approach the issues from a number of angles.

A Council member suggested that the best approach is a letter to the Minister of Labour regarding the exemptions in the *Employment Standards Act* as well as to share with the membership an appropriate employment contract.

It was suggested by a member of Council that the recommendation be referred back to the Committee. There has been a move in the US wherein the AIA revised the title.

A Council member suggested that the issue of title change matters to the interns and that is a signal that this needs to be addressed.

It was suggested by a member of Council that a policy be developed to address architectural firms regarding naming and use of titles for their staff in general. It was further suggested that recommendation #7 in the report be removed so as to study in more detail and to be addressed in the context of the broader issue around the use of titles and designation and resulting policy. It was additionally noted that engineers were not included in the study by the Committee which may have been a better comparison.

A member of Council enquired as to where the funding would be sourced from since the 2022 budget was recently approved.

A Council member responded that the funding would be requested to be drawn from the policy contingency.

It was agreed that the final recommendation would be altered based on the discussion above. It was further noted that the Executive Director, in consultation with the appropriate staff and Council would review the individual recommendations in terms of human and financial resources require to implement. Where appropriate an item may be referred back to Council for further approval around funding and resources.

It was moved by Kurtin and seconded by Mintz that Council receive the Comprehensive Research Report of the Interns Committee as presented to Council at the December 10, 2021 Council meeting and that Council approved these specific recommendations:

- 1. Publish the report to the entire OAA membership.
- 2. Devise a system of tracking all recommendations and action items carried.
- 3. Develop a calendar and list of priorities that include events and other resources specifically pertaining to Intern Architects
- 4. Develop a series of continuing education webinars that provide architects with more information and perspective regarding the IAP and the experience of Intern Architects.
- 5. Further investigate and develop opportunities to encourage higher numbers of female-identifying and minority members of the OAA to engage in mentorship in the IAP.
- 6. The OAA to take stronger action on pushing for exemption under the *Employment Standards Act (2000)*.
- 7. Council to commit to a comprehensive study around the use of appropriate titles of which "Intern Architect" is a part and commit the appropriate funding and/resources
- -- CARRIED UNANIMOUSLY

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9331. Reference Material Reviewed: Memorandum from Vice President Education, Natasha Krickhan dated November 30, 2021 re. Update on mandatory Continuing Education on Equity, Diversity and Inclusion for the Cycle 2021-2022 and future plans related to mandatory programming for the upcoming Continuing Education cycles. (APPENDIX 'C')

The Vice President Education reported that the mandatory education piece required a significant amount of research, staff time, andongoing resources to delivery. The purpose of the programming was to bring awareness as opposed to solving the issue. A variety of feedback was received from the membership.

Doyle suggested that Council is being asked to determine if mandatory education hours will be required for the next cycle and should Council agree then direction on how to proceed is requested.

The Vice President Education added that consideration be given to complementary offerings for members should the mandatory component be implemented for the next cycle.

It was suggested by a member of Council that the mandatory component will require a policy and process of how to determine which learning or offerings meet the requirement.

Doyle noted that the recommendation in the memo is intended to to simplify and streamline a mandatory requirement, giving the flexibility to allow for members to obtain the requirement and report it fulfilled in another area.

A Council member expressed support for a mandatory learning component due to the multitude of important issues coming to the forefront. It is imperative that members are aware of critical changes.

It was noted by a member of Council that the topic selected would be required to align the OAA's primary objective.

It was moved by Krickhan and seconded by Mancini that Council agree to continue a requirement for a topic area of mandatory learning within the OAA's Continuing Education Program for the next Cycle which begins July 1, 2022 and ends June 30, 2024.

-- CARRIED (9 in favour, 8 opposed (Birdsell))

It was moved by Krickhan and seconded by Mancini that the mandatory learning topic area and number of hours required under the OAA Continuing Education program for the next cycle be identified by Council no later than January 20, 2022; and, that it be implemented such that members may choose how to fulfill that requirement based on selection of their own session(s) and/or learning provider that is consistent with the set of criteria established by the OAA; and that it be self reported.

-- CARRIED (10 in favour, 5 opposed)

Doyle noted that she will work with the Vice President and Manager Education to develop the criteria for consideration of Council. Members will be required to upload to their transcript, and will need to have flexibility; once fulfilled, the member would check off that the requirement is complete. Members' transcripts will be audited per usual to ensure compliance.

9332. Reference Material Reviewed: Memorandum from Communications Committee dated November 19, 2021 re. OAA Conference – Keynote Recommendation and attached supporting documentation. (APPENDIX 'D')

The Vice President Communications reported that the Committee is recommending that Katharine Hayhoe be retained as the keynote speaker at the 2022 Conference.

It was moved by King and seconded by Mancini that Council approve Katharine Hayhoe as the Keynote Speaker for the 2022 OAA Conference.

-- CARRIED

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9333. Reference Material Reviewed: Memorandum from Communications Committee dated November 30, 2021 re: Suggesting a Policy for New OAA Awards and attached supporting documentation. (APPENDIX 'E')

The Vice President Communications reported on the proposed policy for new OAA Awards.

It was moved by King and seconded by Mintz that Council approve the Policy for Creation of New OAA Awards as circulated.

-- CARRIED

9334. Reference Material Reviewed: Memorandum from Vice President Practice, Settimo Vilardi dated December 7, 2021 re. Sub-Committee on Building Codes and Regulations (SCOBCAR) Review of proposed building code changes of the Fall Consultation by Ministry of Municipal Affairs and Housing (MMAH) that affect 2015 National Construction Codes and Ontario-Only Requirements and attached supporting documentation. (APPENDIX 'F')

The Vice President Practice reported that the OAA is proposing a submission to the Ministry of Municipal Affairs and Housing (MMAH) in response to the consultation on building code changes as part of the national harmonization.

Zawadzki left the meeting at 3:05 p.m.

It was noted by the Vice President Practice that SCOBCAR reviewed the proposed changes and are prepared to make the submission.

It was moved by Vilardi and seconded by Erskine that Council approve the submission to the Ministry of Municipal Affairs and Housing (MMAH) regarding the proposed building codes changes which effect the National Construction Codes and Ontario Building Code in the report to Council dated December 7, 2021.

-- CARRIED

9335. Reference Material Reviewed: Memorandum from Vice President Regulatory, Paul Hastings dated November 22, 2021 re. Proposal to revise Complaints Process and attached supporting documentation. (APPENDIX 'G')

The Vice President Regulatory reported.

Hepburn reported over the past 18 months, she has been working in conjunction with the Registrar and outside legal counsel to review and assess the existing complaints handling process. A number of areas of risk were identified – legal, reputational, and financial - that impact the integrity of the complaints process. In alignment with the strategic goals arising from the operational review adopted by OAA Council, a proposal for amending the process to address these serious risks is set out in the attached memo for Council's consideration.

It was suggested by a Council member that the next step would be to review the Committee membership and clarify the role of the investigator.

Some clarification was requested by a member of Council as to what the qualifications of the investigator would be and would outside legal counsel need to be brought in based on those.

Hepburn responded that the investigator brings with them experience in investigation and was recommended by legal counsel prior to Discipline where at that point it would then go to legal.

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It was moved by Hastings and seconded by McKendrick that Council approve the process changes as proposed in the report *Proposal to Revise Complaints Process* as submitted to Council at the December 10, 2021 Council meeting.

-- CARRIED (1 opposed)

9336. *Reference Material Reviewed:* Memorandum from the Building Committee dated November 20, 2021 re. OAA Building Committee – Reserve Fund Study and attached supporting documentation. **(APPENDIX 'H')**

The Report was reviewed by Council.

Councillor and member of the Building Committee, Erskine reported that based on the study, the Committee determined that the elevator be retrofitted instead of replaced. The concept of the study is an aggregate with annual contributions being suggested in order to meet an end goal. A recommended \$154,000 is noted as a lower amount contribution to the capital reserve fund adding that a year end surplus may be spread among the other reserves based on Council's decision.

It was noted by a member of Council that the cost to replace the elevator would be \$300,000

It was moved by Erskine and seconded by Kurtin that Council receive the Reserve Fund Study as prepared by Keller Engineering and approve the recommendations regarding annual contributions to the OAA capital reserve in order to address the costs associated with the ongoing repair maintenance of the OAA Headquarters Building; and, that the Executive Director be directed to monitor adherence to those capital contributions as well as the elements of maintenance and repair of the major components of the building.

-- CARRIED

9337. Reference Material Reviewed: Memorandum from Registrar, Christie Mills dated November 26, 2021 re. Council Policy – Naming a Certificate of Practice and attached supporting documentation. (APPENDIX 'I')

Mills reported there was an existing policy in place, however, the amended policies address the distinction between architects and Licensed Technologists OAA as well as the incorporation of inclusive language.

It was moved by Vilardi and seconded by Hastings that Council approve the Council Policies – Naming a Certificate of Practice – Architect and Naming a Certificate of Practice – Licensed Technologist OAA as circulated.

-- CARRIED

ITEMS FOR DISCUSSION

9338. There were no items for discussion.

EXECUTIVE COMMITTEE REPORTS

9339. Reference Material Reviewed: Activities for the months of November-December. (APPENDIX 'J')

The report was noted for information.

9340. *Reference Material Reviewed:* Memorandum from Executive Director, Kristi Doyle dated December 1, 2021 re. Update on Activities of the Executive Director. **(APPENDIX 'K')**

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Doyle reported that the transition plan for returning to the office has been included with her report adding that it was reviewed by the Governance Committee. This will effect Council and committee meetings with respect to returning to the building. The OAA is continuing to monitor the government's guidance on the pandemic. Included in the transition plan is an allowance for future flexibility and a hybrid approach between working between home and office.

The report was noted for information.

9341. Update from the Senior Vice President and Treasurer (oral)

The Senior Vice President and Treasurer reported that the Audit Committee met earlier in the week as part of the final audit scheduled for February. There will be an RFP issued for an auditor earlier in the New Year with a recommendation for appointment of the auditor per usual the AGM in May.

The update was noted for information.

9342. Reference Material Reviewed: Memorandum from Vice President Strategic, Kristiana Schuhmann dated November 26, 2021 re. Update on Activities under the Vice President Strategic portfolio. (APPENDIX 'L')

The Vice President Strategic had left the meeting and Manager Policy & Government Relations reported.

Tracey noted that conversations continue with the MPPs, as well as opposition staff on topics including Long Term Care. A meeting with the Attorney General recently held was positive and discussion include the lack of time to respond to Bill 27 whicih in turn, received positive support from the Minister. Staff at the Ministry of Labour discussed the *Employment Standards Act* and right to disconnect; ministry staff recognized this as it applies to architects and are reviewing the information submitted.

The report was noted for information.

9343. Reference Material Reviewed: Memorandum from the Communications Committee dated November 30, 2021 re. Communications Committee Update and attached background information. (APPENDIX 'M')

The Vice President Communications reported.

The report was noted for information.

9344. *Reference Material Reviewed:* Memorandum from Vice President Regulatory, Paul Hastings and Registrar, Christie Mills dated November 26, 2021 re. Activities under the Registrar October 20, 2021 – November 24, 2021 and attached background information. **(APPENDIX 'N')**

The Vice President Regulatory reported.

The report was noted for information.

9345. Reference Material Reviewed: Memorandum from Vice President Practice, Settimo Vilardi dated November 25, 2021 re. Report from Vice President Practice. (APPENDIX 'O')

The Vice President Practice reported.

The report was noted for information.

9346. *Reference Material Reviewed:* Memorandum from the Vice President Education, Natasha Krickhan dated December 6, 2021 re. Report from Vice President Education. **(APPENDIX 'P')**

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The Vice President Education reported that revenue from webinars is 20% higher than budgeted. Currently, 30% are compliant with the mandatory education requirement for this cycle.

It was noted by the Vice President Education that the Comprehensive Education Committee is continuing to review funding for the Green Retrofit Program to develop and offer energy advisor training.

The report was noted for information.

9347. Reference Material Reviewed: Memorandum from the Governance Committee dated December 2, 2021 re. Governance Committee Update. (APPENDIX 'Q')

It was suggested by the Chair of the Governance Committee that the Institute of Corporate Directors (ICD) offers a variety of courses and Council is encouraged to partake in its offerings as a member of the Institute.

The report was noted for information.

ITEMS FOR INFORMATION

9348. Reference Material Reviewed: Canadian Architectural Licensing Authorities (CALA) Regulator's Agenda and materials from November 5, 2021 meeting. (APPENDIX 'R')

The update was noted for information.

9349. Society Updates and 2021 Fall President's Tour (oral)

It was noted by the President that the virtual meetings with Societies have been completed with very positive feedback. There is some important information gathered regarding climate stability that will play an important part in the OAA's strategic planning exercise in the New Year. The virtual format has also been positive in that it allows for additional staff to participate and observe the visits. The difference between regulatory and advocacy initiatives were also discussed in detail.

The update was noted for information.

OTHER BUSINESS

9350. There was no other business

DATE OF NEXT MEETING

9351. The next regular meeting of Council is Thursday January 20, 2022 at 9:30 a.m. via Zoom.

ADJOURNMENT

9352. It was moved by Mintz and seconded by Hastings that the meeting be adjourned at 4:17 p.m.

-- CARRIED UNANIMOUSLY

President	Date

Memorandum

To: Council

Susan Speigel Farida Abu-Bakare
J. William Birdsell Yan Ming (Pearl) Chan
Paul Hastings Christina Karney
Jennifer King Natasha H. Krickhan
Michelle Longlade Lara J. McKendrick
Elaine Mintz Deo M. Paquette
Clayton Payer Greg Redden

Kristiana Schuhmann Gaganjot (Gagan) Singh

Andrew Thomson Settimo Vilardi William (Ted) Wilson Marek C. Zawadski

From: Kristi Doyle, Executive Director

Date: January 11, 2021

Subject: Process for Council Nominations to the Pro-Demnity Insurance

Company (Pro-Demnity) Board of Directors

Objective: To outline the process for application and appointment of Council

Inter-locking directors to the Pro-Demnity Board.

To confirm the continued appointment of Kathleen Kurtin to the

Board to March 3.

As you are aware, the OAA Council has three interlocking directors on the Board of Pro-Demnity. One member is by virtue of office and that is the Senior Vice President & Treasurer. In addition to that the Council selects two other members of Council to sit on the Board.

The appointments to the Board of Directors are officially made each year at the annual meeting of the Shareholder (i.e. the Council of the OAA). At that time, Pro-Demnity's Nominations Committee puts forward a final slate of proposed Directors for Council to vote on. This year's annual meeting of the shareholder is scheduled for March 30.

It is Council's responsibility to put forward for the slate the names of the two Council appointees. This is done annually, however, Pro-Demnity requested in 2008 that OAA Council give consideration to ensuring that those appointed spend two years on the Board for purposes of continuity and corporate memory. Council agreed and that policy continues today.



As at the close of 2021 the OAA's interlocking directors were Agata Mancini, Settimo Vilardi and Kathleen Kurtin. As Council is aware both Councillors Mancini and Kurtin have now completed their terms on Council.

After the election of officers at the January 20 meeting, the new Senior Vice President and Treasurer will be appointed ex-officio to the Board, thus filling the vacancy left by Mancini.

Notwithstanding Kurtin's term on Council is complete, it has been recommended that she continue as an interlocking director on the Board until the March 3 Council meeting to allow for her to complete her work on the Nominations Committee and be present at the February Board meeting. This will also allow for the process to take place for Council to identify and appoint a new director from amongst the Council.

In the meantime, members of Council interested in serving on the Pro-Demnity Board are requested to submit their expression of interest along with a short statement which would include an outline of what contributions they feel they can make and their understanding of their role as an OAA Councillor on the Board prior to the March 3 Council meeting where all submissions will be considered and the appointment made. This appointment of a new interlocking director will then take effect after the full slate of Directors is affirmed for the 2022-23 year. Attached is a competency matrix provided by Pro-Demnity which highlights specific qualities being sought for the coming year for reference and which should be noted by members of Council interested in putting their name forward.

Indications of interest to serve on the Board of the Pro-Demnity Board of Directors should be submitted to OAA Executive Assistant, Executive Services Tina Carfa no later than February 15, 2022.

Action:

Council is asked to approve the continuance of Kathleen Kurtin as an interlocking director on the Pro-Demnity Board of Directors to March 3, 2022.

Attachments: Pro-Demnity Insurance Company Competency Matrix



SKILLS MATRIX OF EACH DIRECTOR ANTICIPATED ON ELECTION TO BOARD

Berton, Peter 1 3 2 2 1 0 1 1 2 1 1 2 ✓ Fischer, Debbie 3 1 2 3 3 1 1 1 1 0 2 3 3 3 N/A Haynes, Barbara 1 1 3 2 2 3 1 2 1 2 2 2 2 ✓ Krakow, Debra 3 3 3 3 2 1 0 1 1 1 1 1 1 1 ✓ Mancini, Agata Nathan, Binah 2 1 2 2 3 2 2 3 3 2 2 3 3 2 2 2 N/A Panday, Hari 3 1 3 3 3 2 2 2 3 2 3 2 3 2 3 N/A Ray, Lea 1 1 2 2 3 2 1 2 1 2 2 1 2 N/A Kurtin, Katie 1 3 2 2 2 1 2 1 2 1 2 2 1 2 N/A Vilardi, Settimo 1 3 2 2 2 1 2 1 1 1 0 1 1 ✓ Gogan, Paul 1 3 1 3 1 3 1 0 2 1 1 1 2 2 N/A		Strategic direction of Sharholder and reporting thereto	Understanding of architectural profession and its insurance needs	Understanding of Pro-demnity	Understanding/experience with industry or association board	Governance experience	Insurance industry experience	Information technology	Finance	Investment	Enterprise Risk Management	Marketing/Communications/Government relations	Strategic and business planning	Any additional relevant skills that you may have: indicate ($\mbox{\ensuremath{\sigma}}\xspace)$ and include in the right column	:
Haynes, Barbara 1 1 3 2 2 3 1 2 1 2 2 2 7 Krakow, Debra 3 3 3 3 2 1 0 1 1 1 1 1 1 7	Berton, Peter	1	3	2	2	1	0	1	1	2	1	1	2	1	
Haynes, Barbara 1 1 3 2 2 3 1 2 1 2 2 2 7 Krakow, Debra 3 3 3 3 2 1 0 1 1 1 1 1 1 7	Fischer, Debbie	3	1	2	3	3	1	1	1	0	2	3	3	N/A	
Mancini, Agata Nathan, Binah 2 1 2 2 3 2 2 3 2 2 3 2 2 N/A Panday, Hari 3 1 3 3 3 2 2 3 2 3 2 3 N/A Ray, Lea 1 1 2 2 3 2 1 3 2 2 1 2 N/A Kurtin, Katie 1 3 2 2 2 1 2 1 2 2 1 2 N/A Vilardi, Settimo 1 3 2 2 2 1 2 1 1 0 1 1 ✓ Gogan, Paul 1 3 1 3 1 0 2 1 1 1 2 2 N/A	Haynes, Barbara	1	1	3	2	2	3	1	2	1	2	2	2	✓	
Nathan, Binah 2 1 2 2 3 2 2 3 3 2 2 2 N/A Panday, Hari 3 1 3 3 3 2 2 3 2 3 2 3 N/A Ray, Lea 1 1 2 2 3 2 1 3 2 2 1 2 N/A Kurtin, Katie 1 3 2 2 2 1 2 1 2 1 2 N/A Vilardi, Settimo 1 3 2 2 2 1 1 1 0 1 1 7 Gogan, Paul 1 3 1 3 1 0 2 1 1 1 2 2 N/A	Krakow, Debra	3	3	3	3	2	1	0	1	1	1	1	1	✓	
Ray, Lea 1 1 2 2 3 2 1 3 2 2 1 2 N/A Kurtin, Katie 1 3 2 2 2 1 2 1 2 2 1 2 N/A Vilardi, Settimo 1 3 2 2 2 1 1 1 0 1 1 ✓ Gogan, Paul 1 3 1 3 1 0 2 1 1 1 2 2 N/A		2	1	2	2	3	2	2	3	3	2	2	2	N/A	
Kurtin, Katie 1 3 2 2 2 1 2 1 2 2 1 2 N/A Vilardi, Settimo 1 3 2 2 2 1 2 1 1 0 1 1 ✓ Gogan, Paul 1 3 1 3 1 0 2 1 1 1 2 2 N/A	Panday, Hari	3	1	3	3	3	2	2	3	2	3	2	3	N/A	
Vilardi, Settimo 1 3 2 2 2 1 2 1 1 0 1 1 V Gogan, Paul 1 3 1 3 1 0 2 1 1 1 2 2 N/A	Ray, Lea	1	1	2	2	3	2	1	3	2	2	1	2	N/A	
Gogan, Paul 1 3 1 3 1 0 2 1 1 1 2 2 N/A	Kurtin, Katie	1	3	2	2	2	1	2	1	2	2	1	2	N/A	
	Vilardi, Settimo Gogan, Paul														
JUANNE MICCANUM 2 2 2 2 2 2 2 1 1 1 2 2 2 1 1 2 2 2 1 2 1 2 1 2 2 1 2	Joanne McCallum	2	2	2	2	1	1	2	2	1	2	2	2		

Please indicate skill level as per below: **Legend:**

- 0 Little or no training, knowledge or experience
- 1 General knowledge / Basic (e.g. < 5 years exposure or practice - basic understanding but would need support executing)
- 2 Strong / Working knowledge (e.g. >5 years exposure or practice; generally able to execute without external support)
- 3 Expert (e.g. Professional designation, >10 years focused experience, recognized as expert by peers)For the qualitative portion, please provide a very brief (one to three line) summary of the nature of your training or experience in the area.

Legends revised 21/11/19 Directors updated 9/9/21 Directors updated 30/11/21 Memorandum

FOR COUNCIL MEETING January 20, 2022 (open) ITEM: 4.3

To: Council

Susan Speigel Farida Abu-Bakare J. William Birdsell Yan Ming (Pearl) Chan Paul Hastings Christina Karney Jennifer King Natasha H. Krickhan Michelle Longlade Lara J. McKendrick Elaine Mintz Deo M. Paquette Clayton Payer Greg Redden

Kristiana Schuhmann Gaganjot (Gagan) Singh Andrew Thomson Settimo Vilardi

William (Ted) Wilson Marek C. Zawadski

From: Kristi Doyle, Executive Director

Date: January 14, 2022

Subject: Proposed Amendment to OAA By-Laws - Schedule A

Objective: To review and approve the proposed amendments to the OAA By-

laws – Schedule A – Fees to include the OAA Technology Program.

As you may recall, Council approved the integration of the OAA Technology Program into the OAA at the November 4, 2021 Council meeting, which includes the dissolution of the Ontario Association for Applied Architectural Sciences (OAAAS)

As part of the integration, the OAA will now be responsible for invoicing fees previously collected by the OAAAS, which include Technologists OAAAS who are enrolled in the OAA Technology Program. As such an amendment to Schedule A is required to incorporate those fees.

As a reminder, the amended Schedule A will come into force upon Council's approval, however is subject to ratification at the next Annual General Meeting of Members.

Action: Council to consider the following motion:

> It was moved by ... and seconded by ... that Schedule A to the OAA By-laws be approved as circulated reflecting fees for

enrollment in the OAA Technology Program.

Attachments: Draft Schedule A to the OAA By-laws





SCHEDULE A OAA By-laws Fees

Licence

Architect, Licensed Technologist OAA, Non-Practising

On filing of application	\$309.00
On filing of re-application (by a person who	\$168.00
previously resigned their membership)	
On referral of application to the	
Experience Requirements Committee	\$281.00
On filing of application to Council for Exemption	
Pursuant to Section 33 of Regulation 27 R.R.O. 1990	\$505.00
On reinstatement	\$421.00
New Certificate	\$ 28.00

Notes:

The Reinstatement fee is payable by every person whose Licence was previously cancelled, whether or not the person is, on the date of the application, a member of another provincial association of architects in Canada or licensed as an architect with any state licensing board in the United States of America.

The applicant for Reapplication/Reinstatement of a Licence must pay, in addition to the Reapplication/Reinstatement fee set out, all fees, premiums, levies and deductibles in arrears, on the date of cancellation and the annual fees prescribed by the By-laws for the two years before the date of application, except that no payment is required for the first year after the date of resignation.

The following annual Licence fees shall be payable on the 2nd day of January each year:

Architect	\$937.00
Licensed Technologist OAA	\$659.00
Non-Practising Architect	\$469.00

Notes:

Persons who become members after July 1st in each year shall pay one-half of the applicable annual fee.

Payment received between March 1st and March 31st shall be subject to a late payment penalty of \$168.00

If payment of the annual fee and late payment penalty fee is not received by March 31st the Licence shall be cancelled on April 1st.

The applicant for re-application of a Licence must pay, in addition to the re-application fee set out, all fees, premiums, levies and deductibles in arrears, on the date of resignation.

Every applicant for a Licence shall pay all fees set out in this By-law that are in arrears on the date of the application.

Temporary Licence

On filing of application	\$ 449.00
On issue	\$2,319.00
On renewal	\$2,319.00

Retired Member, Student Associate, and Intern Architect

The following annual fees shall be payable:

Retired Member	\$ 70.00	
Student Associate	No charge	
Intern Architect	\$179.00	
Intern Architect with 5+ years Intern status	\$937.00	

Note:

Persons who are appointed as Intern Architects after July 1st in each year shall pay one-half of the applicable annual fee.

Every Intern Architect shall pay all fees set out in this By-law that are in arrears prior to the date of his or her re-appointment.

Certificate of Practice

Architect - Certificate of Practice

On filing of application	\$281.00
Annual Fees – based on the number of Licensed Architects and Licensed Technologists OAA in the practice	
practice with one Licensed Architect	\$478.00
 fee for each additional Licensed Architect within the practice fee for each additional Licensed Technologist OAA within the practice add 	\$358.00 \$239.00
Licensed Technologist OAA – Certificate of Practice	
On filing of application	\$281.00
Annual Fees – based on the number of Licensed Technologists OAA and Licensed Architects in the practice	
 practice with one Licensed Technologist OAA 	\$339.00
 fee for each additional Licensed Technologist OAA within the practice or Architect 	\$239.00
On opening of an office other than the registered or principal office	\$112.00

The annual Certificate of Practice Fee shall be payable on the filing of the application and thereafter on the 1st day of March in each year.

If payment of the annual fee is not received by May 1 the Certificate of Practice shall be cancelled on May 2. Applications for Certificates of Practice filed after August 1st in each year shall pay one-half of the annual fee.

Temporary Certificate of Practice Issued Under the *Architects Act*, R.S.O. 1990, c. A. 26, s. 23

On filing of application	\$ 449.00
On issue	\$4,058.00
On renewal	\$4,058.00
Other – Certificate of Practice	
Change of Name	\$ 281.00
New Certificate	\$ 28.00

OAA Technology Program

For annual enrollment	\$ 325.00
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Admission Course

On application to attend the Admission Course	\$ 350.00
on application to attoria the real transfer of a to a	Ψ 000.00

Canadian Experience Record Book – Late Submission

The following Late Submission Charges apply to experience records which are not submitted within eight weeks of the date of the last entry:

For every 1000 hours or portion thereof \$	3 112.00

Members and Intern Architects on Leave of Absence

The following fees are payable by members and Intern Architects who have been granted a leave of absence:

Where the leave of absence commences between the first day of	\$ 70.00
January and the last day of February and no annual fee has been paid	
for the calendar year	

For a leave period that starts part of the way through the calendar year, where the full annual fee for the year has already been paid, the fees would be calculated to be consistent with the existing Council Refund Policy where the leave period starts as follows:

Architects, Licensed Technologists OAA, Non-Practising Architects and Intern Architects Over 5 Years:

January 1 until February 28 – Full membership fee refunded minus the annual

April 1 until June $30 - \frac{1}{2}$ of the membership fee minus the annual leave fee

July 1 until September $30 - \frac{1}{4}$ of the membership fee minus the annual leave fee

October 1 until December 31 – no refund but the annual fee for the next calendar year would be based on the full one-year annual leave period fee minus the annual

Fines for Non-compliance with Continuing Education Requirements

Fine for first-time non-compliance in a Cycle	\$ 500.00
Fine for subsequent non-compliance in a Cycle	\$1,000.00

Financial Hardship

The fees set out in this by-law may be waived, reduced or deferred in whole or in part by the Executive Director in accordance with the terms of the Association's Financial Hardship policy.

Administration Fees

General Administration

\$ 56.00

Made by the Council of the Ontario Association of Architects on the 20th day of January 2022

FOR COUNCIL MEETING January 20, 2022

(open)

ITEM: 4.4

Memorandum

To: Council

Susan Speigel Farida Abu-Bakare
J. William Birdsell Yan Ming (Pearl) Chan
Paul Hastings Christina Karney
Jennifer King Natasha H. Krickhan
Michelle Longlade Lara J. McKendrick
Elaine Mintz Deo M. Paquette
Clayton Payer Greg Redden

Kristiana Schuhmann Gaganjot (Gagan) Singh

Andrew Thomson Settimo Vilardi William (Ted) Wilson Marek C. Zawadski

From: Communications Committee

Jennifer King Farida Abu-Bakare
Bill Birdsell Carl Knipfel
Joël León Elaine Mintz
Dana Seguin Arezoo Talebzadeh

Date: January 12, 2021

Subject: Proposed Tour Roster 2022

Objective: To provide Council with the proposed Tour Roster for approval with

respect to ongoing planning for this year's Conference.

A Call for Tours was issued in November 2021 on social media, the OAA Website, in *OAA News*, and shared with others in order to solicit ideas for tours that could take place as part of the OAA Conference in Toronto this May. As always, the goal is to find a diverse array of unique and informative excursions that will engage and educate delegates.

As the Call for Tours had a mid-December deadline, the OAA Communications Committee convened a special meeting in early January in order to meet with staff and conference organizers MCC to go through the selection of possibilities. In addition to the traditional call to outside parties, some of the options were developed by MCC staff and others were shared by the Toronto Society of Architects (TSA)—the Conference's local host and no stranger to putting on a robust slate of walking tours.

At the meeting, the VP Communications and Committee members discussed the potential offerings, with an aim to finalize a selection for Council's approval that would have a good, balanced mix of project types, recreational opportunities, and



accessibility levels that would still speak to the Conference's theme of Inspiring Climate Action. Fifteen tours found consensus, while five others were approved in principle, but pending further discussion with the potential tour guide to ensure their approach would be tailored to fit the theme and/or audience. Given the time frame for Conference planning, it was agreed that any "approved-in-principle tour" would get approval directly from the VP Communications who would then inform the Conference's Working Group that also includes the OAA President and the Vice President Education.

It is also important to note two tours have been suggested as "virtual." Given that the Conference will be offered in livestreaming and in-person options, and given that the OAA wishes to continue making virtual offerings available on YouTube and through other means to ensure accessibility, the best way to position such tours is currently being explored.

For the 15 in-person tours proposed by the Communications Committee, once approved by Council, MCC will work with staff to determine how to best integrate the offerings with the Conference schedule. At the current stage of planning, MCC has 12 slots, but the total slot count is flexible—that is, in a "typical" Toronto year, there would be 10 to 13 selections, but this would be including repeated tours.

Of special note is the tour of the OAA Headquarters. The intent is this would be offered more than once during the Conference and also be considered Structured Learning. (Outside of the Conference context, there is also discussion about virtual tours for the headquarters.)

Action: For Council to approve the 2022 Conference Tour Roster as

proposed by the Communications Committee.

Attachments: TourRoster.pdf





OAA 2022 CONFERENCE | TORONTO

Tour Information | May 11 to 13, 2022 As directed by the Communications Committee on January 6, 2022



APPROVED BY COMMITTEE / DIRECTED BY COMMITTEE

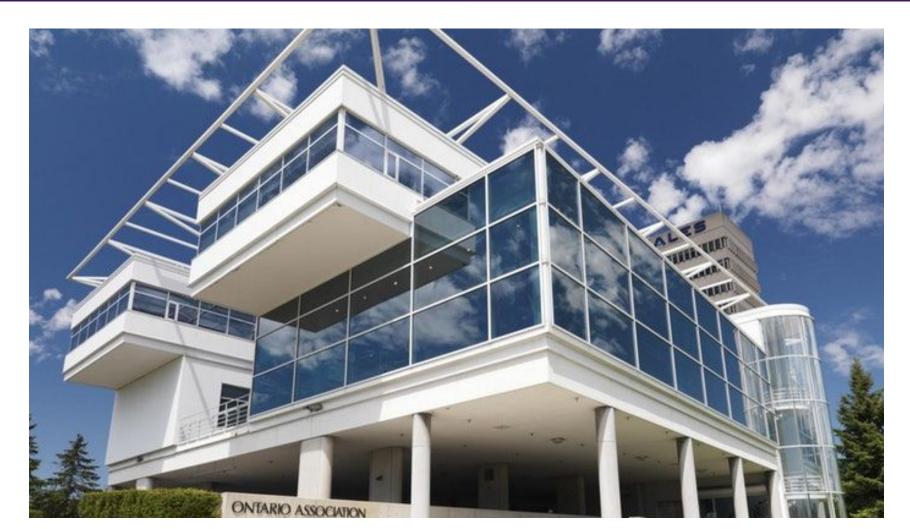
NO.	TOUR NAME	SOURCE
1	OAA HEADQUARTERS REVITALIZATION TOUR (STRUCTURED HOURS) (direction also to explore as a Virtual Tour)	OAA Staff/Council
2	WORKING TITLE "LOW-RISE NEIGHBOURHOOD TOUR" with Craig Race Architecture & Potentially Another Project	OAA Call for Proposals
3	WORKING TITLE "THE FUTURE OF ONTARIO PLACE" Potentially Explore Adding SHIFT Challenge Project to this Tour	OAA Call for Proposals
4	WORKING TITLE "MASS TIMBER IN TORONTO TOUR" PREFERRED OPTION T3 Bayside (Final project TBD based on expected construction completion date)	OAA Call for Proposals
5	RYERSON UNIVERSITY - DAPHNE COCKWELL HEALTH SCIENCES COMPLEX	OAA Call for Proposals
6	CENTENNIAL COLLEGE DOWNSVIEW CAMPUS CENTRE FOR AEROSPACE AND AVIATION	OAA Call for Proposals
7	TORONTO DOWNTOWN EAST (PENDING CONFIRMATION OF PROJECT)	OAA Call for Proposals
8	LIBERTY VILLAGE NEIGHBOURHOOD TOUR: THE EVOLUTION OF TORONTO'S EMPLOYMENT LANDS	OAA Call for Proposals
9	TOWERS: RACE TO THE SKY	TSA
10	ART AND THE GRANGE	TSA
11	HARBOURFRONT 2021	TSA
12	EAST BAYFRONT	TSA
13	LITTLE CANADA	MCC - Recreation
14	HARBOUR CRUISE OF TORONTO	MCC - Recreation
15	SUSTAINABILITY WALKING TOURS EXHIBITION PLACE (A Series of tours showcasing various Exhibition Place GreenSmart projects)	MCC - EX PLACE
	VIRTUAL TOURS	
	ADDING NATURE TO TORONTO'S URBAN FABRIC	OAA Call for Proposals
	THE NEXT HUNDRED: REIMAGINING DOWNTOWN HERITAGE BUILDINGS (Pending Team's Approval)	OAA Call for Proposals
	IN ADDITION TO THE ABOVE, MCC IS DEVELOPING/EXPLORING A FEW ADDITIONAL TOUR OPTIONS THAT WERE APPROVED BY COMMITTEE IN PRINCIPLE. Their inclusion will depend on the tour partner's interest, capacity and availability to offer a tour in May.	
	BEHIND THE SCENES TOUR OF MASSEY HALL	MCC - Recreation
	EXCURSION TO STACKT MARKET	MCC - Recreation
	HISTORIC FORT YORK	MCC - Recreation
	TOUR OF BMO FIELD - Exploring BMO Field's / MLSE's Sustainability Program.	MCC - Recreation
	INDIGENOUS-LED TOUR / EXPERIENCE Exploring potential avenues for collaboration with Indigenous Groups.	MCC - Recreation



MCC

ARCHITECTURAL TOUR | OAA HEADQUARTERS REVITALIZATION TOUR







Activity Description:

The Ontario Association of Architects presented its plan at the 2015 Conference to retrofit its 27-year-old Toronto headquarters in a bid to reach zero net carbon. The three-storey glass box, raised on columns, is a unique design that required innovative ideas to address energy efficiency. And now, plans have become reality. In 2017, the OAA offices relocated for 21 months, moving back this past May. May 2020 marks the official grand opening -- come and see what has been accomplished as the building moves to the commissioning phase.

This guided tour will include the importance of achieving zero net carbon and the components chosen to meet this goal, including energy-efficient geothermal system; creating energy to offset usage; harnessing daylighting, motion sensors and LED fixtures, and dynamic windows; embedded energy; open office arrangements for diverse uses; and furniture and sourcing.

Find out more about how technology and flexible spaces for both members and staff have been incorporated to address the present and future needs of the Association.

PLEASE NOTE:

This tour would be assigned structured hours. It is the only tour in the program that would be included in the suite of offerings for structured hours. This tour would be offered daily.

Activity At-A-Glance			
Tour Details			
Tour Length:	120	minutes	
Time of Day	TBD		
Transportation Required	Yes		
Activity Level	Easy		
Min/Max	10/25		
Activity Pricing Start at:			
\$0.00 CDN + HST Per Person			
Based on minimum			
Costs associated for tour support staff and any			

transportation is additional.



ARCHITECTURAL TOUR | WORKING TITLE "LOW-RISE NEIGHBOURHOOD TOUR"



CRAIG RACE ARCHITECTURE





Activity Description:

A rapidly growing population is creating pressure on available urban space, forcing Torontonians to find creative ways to build, afford, and own homes in low-rise neighbourhoods. Craig Race Architecture specializes in sustainable context-based design, offering unique and contemporary solutions that cater to the client's needs. The tour aims to showcase different infill housing projects in Toronto and how the firm designed livable spaces in densely populated areas.

The following projects will be included in the tour, which are all located in the heart of Leslieville:

- East End Laneway House (top)
- The Leslieville Laneway House (bottom)

Additional information about these projects can be found at the company website.

TOUR LEADER | CRAIG RACE

Craig is the Co-Founder of Lanescape, Principal of Craig Race Architecture Inc., a Founder of the Leslieville Residents' Association, a developer, an educator, and advocate for sustainable housing.

Craig's work in his eponymous architecture practice expands on his laneway housing advocacy by designing and implementing infill projects of a wider variety. The firm is a leader in acquiring approvals for unique projects such as coach houses, major additions/renovations, triplexes, and other advanced typologies. Its projects sensitively insert new density into Toronto's neighbourhoods, while placing a heavy focus on comfort, energy efficiency, and unique contemporary design. In addition to managing his firm, Craig also gives lectures various prominent universities in Ontario, and gives guided tours to Building Industry and Land Development Association (BILD), Canadian Green Building Council (CaGBC), and the public.

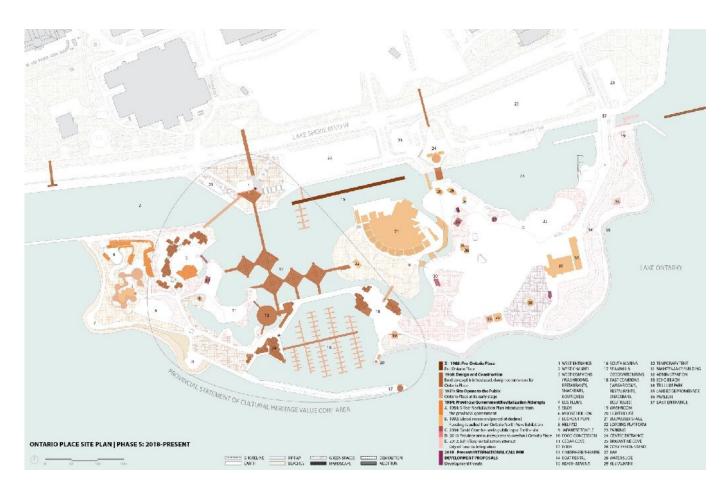
Activity At-A-Glance			
Tour Details			
Tour Length:	120	minutes	
Time of Day	TBD		
Transportation Required	Yes to destination		
Special Equipment Required	No		
Activity Level	Easy to Moderate this is a walking tour		
Min/Max	10/20		
Activity Pricing Start at:			
\$0.00 CDN + HST Per Person			
Based on minimum			
Costs associated for tour transportation is addition		taff and any	



ARCHITECTURAL TOUR | WORKING TITLE "THE FUTURE OF ONTARIO PLACE"







TOUR LEADER: WILLIAM GREAVES

Project Lead, Architectural Conservancy Ontario

Activity Description:

Bill Greaves would be pleased to lead a tour of Ontario Place at the OAA Conference in Toronto. We would walk the site and discuss its architectural and cultural significance, the changes it has undergone, and the current situation regarding the redevelopment plans put forward by the Provincial Government.

In 2020, Bill successfully nominated Ontario Place to be included in the World Monuments Fund Watch Program. He leads the advocacy effort on Ontario Place at the Architectural Conservancy of Ontario (ACO), where he is a board member.

He is also a co-director of The Future of Ontario Place Project--a collaboration between ACO, the World Monuments Fund, and the John H. Daniels Faculty of Architecture, Landscape and Design at the University of Toronto.

This would be an in-person tour -- and can be arranged to be entirely out of doors. Additional tour leaders could be arranged if there was interest.

ABOUT THE FUTURE OF ONTARIO PLACE PROJECT

The Future of Ontario Place Project was made possible by a partnership between the World Monuments Fund, the John H. Daniels Faculty of Architecture and Landscape Architecture at the University of Toronto, and Architectural Conservancy Ontario.

Through a research initiative and public campaign, the Future of Ontario Place Project is working to build public knowledge of the heritage values of the site, and to imagine the future of Ontario Place as a public cultural asset for all Ontarians.

Activity At-A-Gland	:e		
Tour Details			
Tour Length:	50	minutes	
Time of Day	Flexible		
Transportation Required	Not re	equired	
Special Equipment Required	No		
Activity Level	Moderate this is a walking tou		
Min/Max	10/15 per group		
Activity Pricing Start at:			
\$0.00	CDN + HST Pe	er Person	
Based on I	minimum	ו	
Costs associated for tour additional.	support s	staff is	



ARCHITECTURAL TOUR | WORKING TITLE "MASS TIMBER IN TORONTO TOUR"









Activity Description:

We hope to profile 1 of 3 possible buildings (locations to be confirmed) but we have 3 very large mass timber projects that will be well under construction at the time of the conference including:

T3 Bayside <u>or</u> Sterling Road <u>or</u> The Arbour

TOUR LEADER | TIMOTHY BUHLER, BBA Technical Manager, Ontario Wood WORKS! Program, **Canadian Wood Council**

In the past 15 years at the Canadian Wood Council, he has helped build a network of wood champions and experts throughout North America to promote the use of timber in the built environment. Tim's extensive knowledge in the industry comes from dozens of technical conferences, tours, meetings and workshops across North America and Europe. As Technical Manager in Ontario Tim works with municipalities, architects, engineers, and developers to make wood the sustainable building material of choice. Tim also works closely with the wood industry including sitting on the OSWA Board, working with multiple levels of government and associations, chairing technical advisory committees and leading national working groups to address wood construction roadblocks. Tim has been involved in over 200 timber construction projects in Ontario.



Activity At-A-Glance			
Tour Details			
Tour Length:	45	minutes + travel	
Time of Day	Flexible		
Transportation Required	Yes to destination		
Special Equipment Required	Yes, Full PPE		
Activity Level	Moderate this is a walking tour		
Min/Max	15/20		
Activity Pricing Start at:			
\$0.00 c	DN + HST	Per Person	
Based on m	ninimu	m	

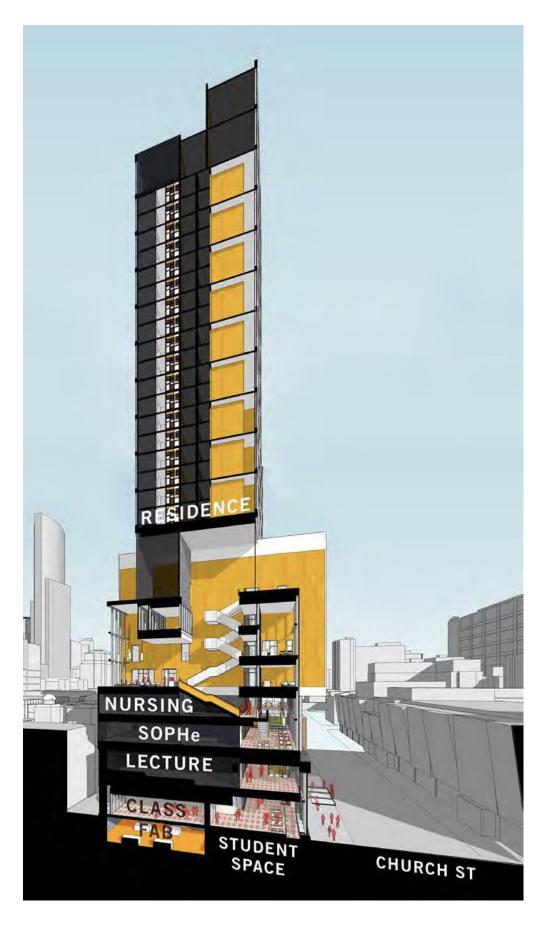
transportation is additional.



ARCHITECTURAL TOUR | RYERSON UNIVERSITY - DAPHNE COCKWELL HEALTH SCIENCES COMPLEX



Perkins&Will



Activity Description:

In response to rapid enrolment growth, limited land assets within an intensifying urban core, and the need to consolidate four disparate departments of the faculty of health sciences, Ryerson University developed an ambitious project brief for the Daphne Cockwell Health Sciences Complex. Responding to challenges presented by a confined, urban site, our team proposed a new typology for the University: a vertical campus that celebrates density, urbanity, and a radical mix of uses as key characteristics of 21st century learning.

The tour will focus on the strategies implemented when creating the vertical campus concept, discovering how the four academic departments – the Schools of Nursing, Midwifery, Nutrition, and Occupational and Public Health – share space with technology-rich classrooms, a Digital Fabrication Lab, flexible research facilities, university administration, and a 330-bed residence. We will explore the continuous thread of public space described in vibrant orange cladding connecting these diverse programs to each other, and to the city beyond.

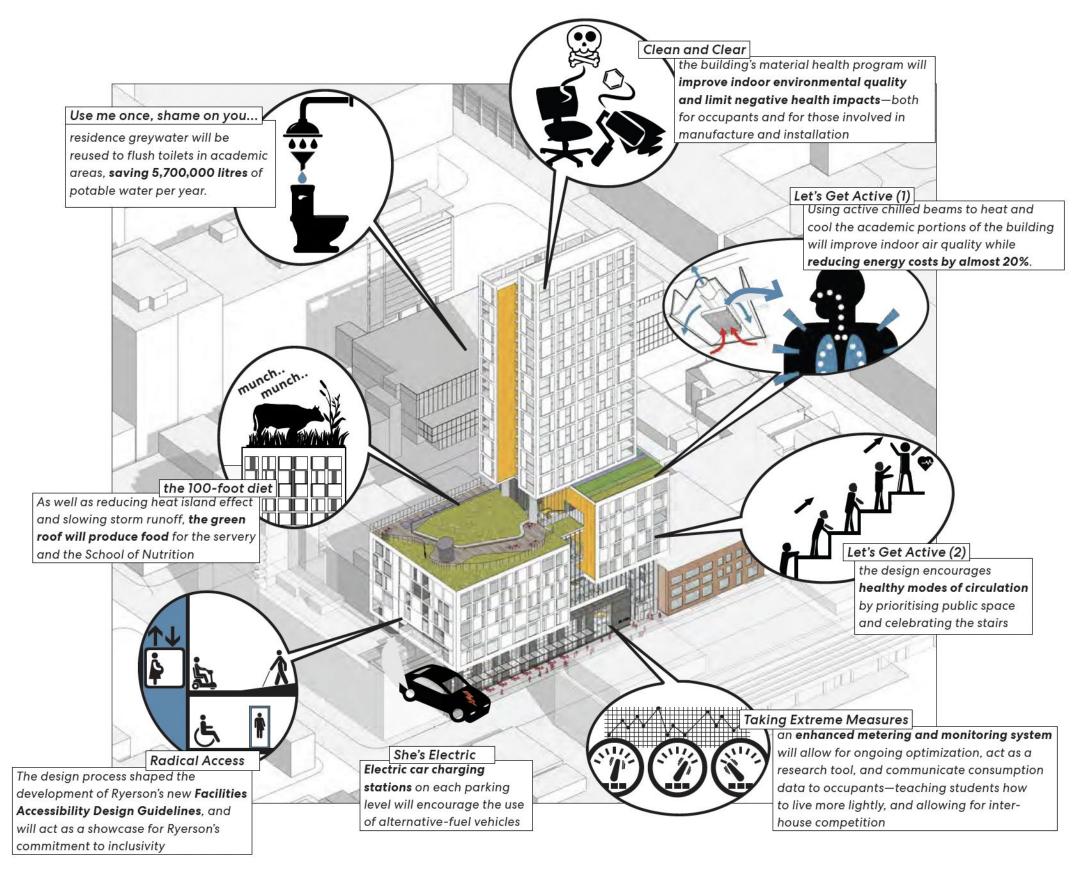
To complement its programmatic focus on health, the project also takes an ambitious approach to sustainability. At a systems level, several design features contribute to a radical reduction in the building's overall resource consumption. These include a high-performance envelope (R25+), enhanced building metering, and the use of a hydronic active chilled beam system. Compared to typical construction, the building will use 32% less energy, consume 35% less potable water and reduce greenhouse gas emissions by 945,000 kg each year. The high design and ambitious sustainability goals has resulted in numerous awards including:

- · American Institute of Architects Committee on the Environment (COTE) Top Ten Award, 2021
- · City of Toronto Urban Design Award of Merit, 2021
- · The Society for College and University Planning (SCUP), Excellence in Architecture for a New Building, Honor Award, 2021
- · Council on Tall Buildings and Urban Habitat (CTBUH), Award of Excellence, Mixed Use, 2021
- · AIA Canada Society Design Award of Merit, 2020

Continued on next page

Activity At-A-Glance	;	
Tour De	etails	
Tour Length:	45	minutes + travel
Time of Day	Flexible	
Transportation Required	Yes to destination	
Special Equipment Required	No	
Activity Level	Easy	
Min/Max	15/20	
Activity Pricing Start at:		
\$0.00 c	DN + HST P	er Person
Based on m	inimun	n
Costs associated for tour su transportation is additiona		staff and any

Building for Health, Well-being and Inclusivity







TOUR LEADER ANDREW FRONTINI, OAA, NSAA, FRAIC, LEED® AP BD+C PRINCIPAL, DESIGN DIRECTOR

commercial clients have been published internationally.

Andrew's approach to design is driven by a strong social agenda. He uses bold material expressions and considered responses to context to create spaces around which communities form. By maintaining a design philosophy that is open and collaborative, Andrew never stops learning, producing, and evolving. His award-winning designs for universities, municipalities, library systems, and

Andrew has taught at the University of Waterloo and serves as a visiting critic at the University of Waterloo, University of Toronto, and Ryerson University. He shares his passion for design through exhibitions, published articles, and speaking engagements.







DESIGN FOR WATER

The tower portion features a 330-bed Student Residence and amenities including study rooms and laundry facilities.

The water use reduction strategy for the project includes a combination of measures such as using low-flow and no-flow fixtures throughout the building, using high-efficiency irrigation systems, and planting drought tolerant species. The calculated annual rainwater collection is 369,863L. The building reclaims water to be used in the grey water system in two ways:

- 1. Rainwater is collected into the storm water retention tank in the parking levels and pumped into a storage tank on level 9, and
- 2. Greywater (showers and bathroom faucets) from the residence floors is collected into a storage tank on level 9. Both of these water sources are filtered and treated so that they can be reused. Reused water is used for toilet flushing, irrigation, and cooling tower make-up.

MCC

ARCHITECTURAL TOUR | CENTENNIAL COLLEGE DOWNSVIEW CAMPUS CENTRE FOR AEROSPACE AND AVIATION



MJMA

ARCHITECTURE & DESIGN





Activity Description:

The Centennial College Downsview Campus Centre for Aerospace and Aviation is located in North York.

The project has won a number of awards including:

- · Toronto Urban Design Awards Large Places and/or Neighbourhood Designs – Award of Excellence
- · Heritage Toronto Awards Built Heritage
- · National Trust for Canada Ecclesiastical Insurance Cornerstone Awards Transformative Projects
- · Architectural Conservancy of Ontario (ACO) Heritage Awards Paul Oberman Award for Adaptive Reuse: Large-Scale/Team/Corporate
- · Society for Experiential Graphic Designs (SEGD) Global Design Awards.

The new facility adaptively reuses a historic building that was once the centre of aviation design in Canada, and transforms it into an innovative learning institution for Centennial's Aviation and Engineering Technology programs. Attendees will be toured through new campus which includes teaching, research, and testing and fabrications labs and learning spaces for aviation engineering and mechanics, along with student services spaces, admissions, a library, and dining options. Public spaces have been designed with optimal views into the primary Hangar, as well as into the labs and teaching spaces, connecting students to and garnering interest in the campus' program offerings. Attendees will also be able to see the comprehensive environmental graphics program which take cues from colours, symbols, patterns, and imagery commonly found in aviation manufacturing, runway graphics, and airport wayfinding.

Continued on next page

Tour Details			
Tour Length:	45	minutes + travel	
Time of Day	Flexible		
Transportation Required	Yes to destination		
Special Equipment Required	No		
Activity Level	Moderate		
Min/Max	20/30		
Activity Pricing Start at:			
\$0.00	DN + HST P	er Person	
Based on m	ninimum	า	









MJMA

ARCHITECTURE & DESIGN

TOUR LEADERS ROBERT ALLEN

A Partner of the firm, Robert was the Partner in Charge on the Centennial College Downsview Campus Centre for Aerospace and Aviation. He has been with MJMA since 1992 and is an experienced architect whose work demonstrates technical excellence and sensitivity to issues of landscape and sustainability. He has taken a lead role in many of MJMA's most complex community and campus projects, working diligently with clients, users and stakeholders to realize a shared architectural vision. Many of his projects are recognized as models for a new form of hybrid, all-season community-centric designs that bring together different user groups, integrate interior and exterior programs, and create true community hubs.

SEAN SOLOWSKI

Sean joined MJMA in 2015, after obtaining a Bachelor of Architectural Studies and Master of Architecture, both at Carleton University in Ottawa; this was followed by time at Paul Raff Studio and Diamond Schmitt Architects in Toronto, where he gained professional experience designing award-winning residential, transit, healthcare, and campus projects. In addition to his work on the Centennial College Downsview Campus Centre for Aerospace and Aviation, Sean has played a major role on the Bernie Morelli Recreation Centre and Western North York Community Centre.

CHRIS BURBIDGE

A Principal at MJMA, Chris served as the Project Manager on the Centennial College Downsview Campus Centre for Aerospace and Aviation. With over 20 years of experience, Chris has established an expertise in all facets of architectural production, from initial conceptual design, through to the completion of contract documents and drawings, field review, and administration. Since joining the firm in 2007, Chris has led community and campus projects across Canada, including the Churchill Meadows Community Centre, Centennial College Ashtonbee Campus Renewal, and University of Guelph Gryphons Athletics Centre.

TIMOTHY BELANGER

As a Graphic Designer and Partner at MJMA, Timothy's interest lies at the intersection of graphic design and architecture. Building on the belief that graphic elements and signage should compliment and strengthen the architectural expression, Timothy's approach to integrated design of graphics is influenced by the building program while leveraging elements of visual interest to the advantage of the built environment. He is passionate about the development of signage and wayfinding programs that reinforce each client's unique brand and vision while complimenting the architectural design solution. Tim led the design of the comprehensive environmental graphics program of the Centennial College Downsview Campus Centre for Aerospace and Aviation, which was awarded a Society for Experiential Graphic Designs (SEGD) Global Design Awards.



ARCHITECTURAL TOUR | TORONTO DOWNTOWN EAST -- PENDING CONFIRMATION OF PROJECT





Activity Description:

The GTA is home to numerous aging postwar concrete apartment towers, many of which need significant repairs to ensure they are resilient in the face of a changing climate. Over-cladding Toronto's post-war apartment towers is an efficient, carbon-sensitive way to reduce operational emissions from the city's existing building stock, one that can be dramatically scaled. Equally as important, developing overclad systems that require less demolition helps ensure that tenants can stay housed during construction. Using an ongoing project in Toronto's Downtown East as a case study, this walking tour will speak to the converging building systems that guide the design direction for an overclad system and its installation. The walking tour will showcase the possibility of retaining the original character of aging post-war buildings while modernizing an existing complex, as well as present construction strategies that can streamline the process for building operators.

TOUR LEADER DAVID COLLINS

Partner, Zeidler Architecture

David Collins, Partner, Zeidler Architecture. David is a Partner at Zeidler Architecture with over 17 years of experience. David's extensive experience in the design and execution of commercial, residential, and mixed-use project extends across Canada, Asia, and the Middle East. His ability to manage highly technical projects and establish strong partnerships is exemplified on projects like the award-winning CF Eaton Centre Bridge, Allan Gardens Palm House Restoration, and Sherbourne Estates.

Second Tour Leader: TBD.

A second tour leader, whether an architect or building science professional working on the project, will be confirmed at a later date.

Tour Details					
Tour Length:	60	minutes + travel			
Time of Day	Flexib	ole			
Transportation Required	Yes to	destination			
Special Equipment Required					
Activity Level	Moderate this is a walking tour				
Min/Max	20/25				
Activity Pricing Start at:					
\$0.00 CDN + HST Per Person					
Based on minimum					



ARCHITECTURAL TOUR | LIBERTY VILLAGE NEIGHBOURHOOD TOUR THE EVOLUTION OF TORONTO'S EMPLOYMENT LANDS



BDP. Quadrangle

Activity Description:

This Liberty Village Tour will showcase projects that exemplify the changing nature of the workplace in the context of climate change in this historical Employment Lands neighbourhood. Preserving key heritage elements from the days of Industrial use and merging them with modern sustainable elements, these buildings speak to the current needs of modern tech-savvy tenants while maintaining the existing character of the neighbourhood, minimizing carbon footprint, and contributing to a more resilient future. The tour will explore the rich history of brick and beam factory buildings, and how that typology has been reinvented with Ontario's first new mass timber project, 80 Atlantic. Other projects highlighted will include the adaptive reuse of 60 Atlantic and the former Canada Bread Factory, now home to Hollywood-based post-production studio Stereo D, and more. The focus will be on architectural design in heritage areas, bringing forward the design thought process leading to the creation of several projects that thoughtfully connect Old and New Architecture. This tour will share lessons learned and key elements to take into account when repurposing spaces and creating new buildings that reflect a neighbourhood's history and our changing climate.

TOUR LEADERS || JAN SCHOTTE, ASSOCIATE & WAYNE MCMILLAN, INTERMEDIATE INTERN ARCHITECT

Jan's focus is in understanding a project's design intent and ensuring it is brought to realization. At the BDP Quadrangle studio, Jan is greatly involved in construction administration as well as design and development, specifically for commercial and residential projects, where his expert knowledge of working drawings and building regulations is a major asset. His portfolio includes award-winning projects such as 80 Atlantic, 619 Queen Street West, 100 Broadview, and DUKE Condos. Jan is also interested in building science and materials research and takes a lead role in organizing our Studio's popular Site Visit Series, which gives intern architects valuable experience on construction sites. An enthusiastic Torontonian, he loves exploring the city in his spare time and leading tours for others on Jane's Walks.

Wayne has experience in a range of project phases that include schematic design, design development, feasibility and contract administration, and works on diverse project types in the commercial, residential and mixed-use sectors. He was a key team member on the award-winning project 80 Atlantic, Ontario's first new wood office building in a generation. His portfolio also includes 1181 Queen Street West, 700 Bay and 1884 Queen Street East. Wayne takes an active role in promoting thoughtful discussions at BDP Quadrangle as a volunteer for the studio's Food for Thought committee, helping to organize monthly internal presentations on curated design-related topics.

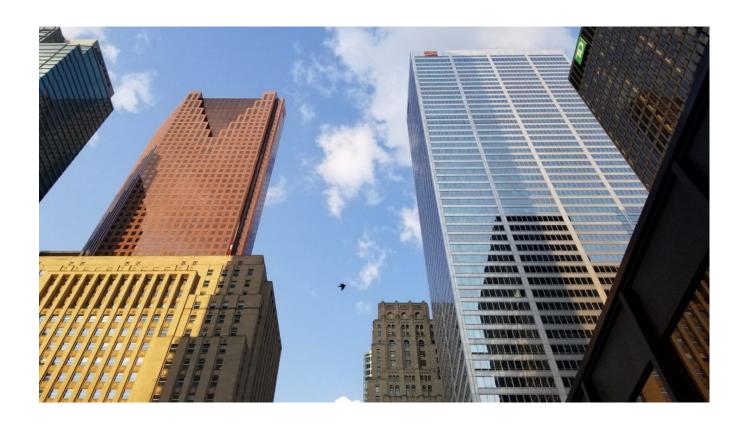
Tour De	tails					
Tour Length:	90	minutes + travel				
Time of Day	Flexib	le				
Transportation Required		e required to ng point				
Special Equipment Required	No					
Activity Level	Moderate this is a walking tour					
Min/Max	10/30					
Activity Pricing Start at:						
\$0.00 CDN + HST Per Person						
Based on m	inimum	า				



ARCHITECTURAL WALKING TOURS | TSA HOSTED | TOWERS: RACE TO THE SKY







Activity Description:

Look up! Waaaay Up! And join the TSA for a walk as we explore the history of Toronto's skyscrapers!!

With 68 towers over 150m in height and 30 more currently under construction, Toronto is the skyscraper capital of Canada and the third in North America. But it wasn't always like this – Toronto's skyscraper history is only about 100 years old and continues to evolve to this day.

Join the guide on a walk through the financial district as we visit towers from each era of Toronto's race to the sky, starting from some of the city's earliest skyscrapers at the beginning of the 20th century all the way to glass giants currently under construction. At each stop we'll talk about the technological innovations that made them possible, but also how each generation of architects dealt with the many questions this new building type presented from how it should look to how it should meet the ground. Included in this tour of some of Toronto's most iconic landmarks including Commerce Court North, the Toronto Dominion Centre, and – of course – the CN Tower.

Tour Basics

Starting Point:

Southwest corner of Yonge and Melinda, one block south of King Street End Point: Union Station

Route length: 0.9 km (mostly flat through city sidewalks)

Tour D	etails				
Tour Length:	120	minutes + travel			
Time of Day	Flexi	ble			
Transportation Required	Yes t	o Destination			
Special Equipment Required	No				
Activity Level	Moderate				
Min/Max	15/20				
Activity Pricing Start at:					
TBD CDN + HST Per Person					
Based on minimum					



ARCHITECTURAL WALKING TOURS | TSA HOSTED | ART AND THE GRANGE







Activity Description:

A walking tour through Toronto's Grange Park, exploring the bold contemporary buildings that house Canada's preeminent art institutions.

For over 100 years, Grange Park has been at the epicentre of Toronto's art scene – evolving from the private front lawn of a colonial estate to a lively urban park surrounded by some of the city's preeminent art institutions.

Join the guide on a stroll through the park and the surrounding streets as we explore some of the buildings – large and small, but always bold! – which are home to some of Canada's preeminent art institutions. Included in this tour are some of the city's best known contemporary landmarks like the colourful Sharp Centre for Design and Ghery's addition to the Art Gallery of Ontario, as well as small but daring projects that pack a design punch. And while architecture might take centre stage, we'll also speak to some of the great public art pieces along our walk and the playful urban park that unites it all.

Tour Basics:

Starting Point: Front porch of The Grange, overlooking Grange Park End Point: The Umbra Store

Route length: 1.2 km (mostly flat through city sidewalks)

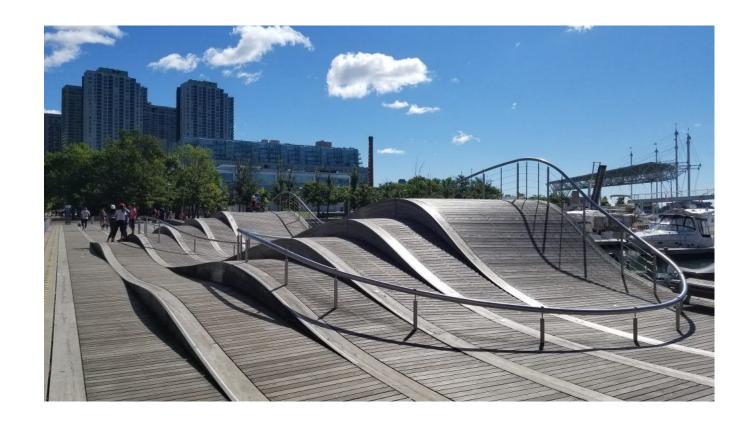
Tour Details					
Tour Length:	120	minutes + travel			
Time of Day	Flexi	ble			
Transportation Required	Yes t	o Destination			
Special Equipment Required					
Activity Level	Moderate				
Min/Max	15/20	O			
Activity Pricing Start at:					
TBD CDN + HST Per Person					
Based on minimum					



ARCHITECTURAL WALKING TOURS | TSA HOSTED | HARBOURFRONT 2021







Activity Description:

A walking tour exploring the innovative buildings and whimsical landscapes of Toronto's Harbourfront neighbourhood, a pioneer in waterfront revitalization.

Once a busy commercial harbour dominated by warehouses, factories, and seafaring merchants, Toronto's waterfront is now a place for culture, recreation and coming together at the water's edge.

Join the guide on a tour as we take a walk along the quays, slips and docks of Harbourfront, Toronto's pioneer neighbourhood in waterfront revitalization, and uncover the stories of this multi-decade transformation through its buildings and landscapes. Along the way we will see how old industrial buildings and spaces have been transformed into some of the city's leading cultural venues and take a look at award winning residential projects and imaginative landscapes that seek to reconnect Torontonians with their lake. From artist studios to manicured gardens, wetlands to silos, there is so much to see at the waterfront!

Tour Basics:

Starting Point: Plaza on north side of Queen's Quay Terminal, 207 Queens Quay Street West

End Point: Intersection of Queens Quay Street West and Dan Leckie Way

Duration: 120 minutes

Route length: 1.9 km (mostly flat through city sidewalks)

Activity At-A-Glance					
Tour D	etails				
Tour Length:	120	minutes + travel			
Time of Day	Flexible				
Transportation Required	Yes to	o Destination			
Special Equipment Required	No Moderate				
Activity Level					
Min/Max	15/20				
Activity Pricing Start at:					
TBD CDN + HST Per Person					
Based on r	Based on minimum				
Costs associated for transportation and tour support staff is additional.					



ARCHITECTURAL WALKING TOURS | TSA HOSTED | EAST BAYFRONT







Activity Description:

A walking tour of Toronto's newest waterfront neighborhood – East Bayfront – where innovative landscapes and high-quality public space take center stage.

For years, the Queen Elizabeth Docks were a reminder of Toronto's industrial past, dominated by parking lots with few trees and former warehouse buildings that separated the city (and Torontonians) from the water's edge. Now, after years of planning a transformation is underway where design is leading the way!

Join the guide on a tour as we explore this unfolding transformation through some of the buildings and landscapes of Toronto's newest mixed-use neighbourhood. At the center of this tour will be imaginative and innovative landscapes and public spaces by prominent landscape architects that have catalyzed this redevelopment, and the ambitious plans of Waterfront Toronto to transform our waterfront.

Tour Basics:

Starting Point: North end of Sugar Beach on the south side of Queen's Quay Boulevard East

End Point: Aitken Place Park

Route length: 0.8 km (mostly flat through city sidewalks)

Tour Details					
Tour Length:	90	minutes + travel			
Time of Day	Flexi	ble			
Transportation Required	Yes t	o Destination			
Special Equipment Required					
Activity Level	Moderate				
Min/Max	15/2	О			
Activity Pricing Start at:					
TBD CDN + HST Per Person					
Based on minimum					



A GLOBAL DMC PARTNER











Activity Description:

Little Canada is a celebration of all things Canada. It's a unique journey of discovery through the sights and sounds of our great country in miniature scale. A place that will unleash your childlike sense of wonder, discovery, and curiosity.

From captivating vistas to famous landmarks, iconic cityscapes and little stories, you can visit this vast miniature Canada in just a few short hours. A place for residents and visitors alike to experience and connect to Canada under one roof.

Guests will participate in the "littlization Experience" Where attendees will step inside a 3D scanner and have a miniature version of themselves printed. For an additional cost, guests will have the opportunity to drop their miniature character anywhere in Little Canada".

"I recently went to the exhibit at 'Little Canada', which is a scale model of the GTA, at Yonge Dundas square and thought it would make a great tour for conference. every architect (and their kids) will have a good time."

> Kristiana Schuhmann VP Strategic, OAA.

Activity At-A-Gland	:e					
Tour D						
Tour Length:	120	minutes + travel				
Time of Day	Flexib	le				
Transportation Required	Yes to	Destination				
Special Equipment Required	No					
Activity Level	Easy					
Min/Max	x 30/40					
Activity Pricing Start at:						
\$54.00 CDN + HST Per Person						
Based on	30 guests	5				
Tour Inclusions						
Toronto Tour Guide Guided Tour of Little Canada						
Littlization Experience						
MCC Coordination						
Costs associated for transportation and tour support staff is additional.						



RECREATIONAL TOUR | HARBOUR CRUISE OF TORONTO







Activity Description:

One of the most exciting ways to see Toronto is on a relaxing and scenic cruise on Lake Ontario. Participants will be transported away from the hustle and bustle of the busy city into the relaxing world of life on the water, providing wonderful views of the city and lake.

The ship features modern and elegant design on its dining decks which boast panoramic windows. Every table offers spectacular views of Toronto Island, the harbour and the city's skyline.

Your journey will begin with a leisurely cruise along the Toronto waterfront. Following that, you'll glide into the calming waters of the Centre Island Lagoons, then sail along the shoreline of the Toronto Islands and proceed out into Lake Ontario. Once on the lake, you'll witness the true beauty of the Toronto skyline, providing images and memories that will last a lifetime.

Please note: Depending on water levels, wheelchair access may be compromised

Tour Details					
Tour Length:	120	minutes + travel			
Time of Day	Flexib	le			
Transportation Required	Yes to	Destination			
Special Equipment Required	No				
Activity Level	Mode	rate			
Min/Max	20/40				
Activity Pricing Start at:					
TBD CDN + HST Per Person					
Based on 30 guests					
Tour Inclusions					
Toronto Tour Guide					
 Walking and Tasting W 	/hisky To	ur			
 MCC Coordination 					



VIRTUAL ARCHITECTURAL TOUR | ADDING NATURE TO TORONTO'S URBAN FABRIC



Activity Description:

The Greater Toronto area is the fastest growing region in North America. Based on the premise that urban sprawl rather than density is a significant threat to our environment and wellbeing, this tour addresses how natural landscapes can be both preserved and added into Toronto's development, with attendant benefits in relation to climate change, biodiversity, and physical and mental health. Starting with an overview of the unique ecology of Toronto's location, the tour illustrates the preservation, regeneration, and creation of more natural spaces, the challenges in doing so, and how various professionals involved in city planning and development can contribute. The tour provides a unique perspective on the intersection of urban and wilder spaces, and how they can be integrated and mutually enhanced.

Given present pandemic conditions the basic module is planned as a virtual tour, but it includes detailed information allowing for in vivo, self-guided exploration of three significant natural spaces: Evergreen Brickworks, Milkman's Lane, and Corktown Commons, all readily and quickly reached by public transit from the conference centre and city core. Milkman's Lane and the Brickworks provide windows on Toronto's residential and industrial histories, the former via entrance through the beautiful old Rosedale neighbourhood, and the latter via the re-envisioning of the Don Valley Brickworks and quarry, which were instrumental in early city-building. Both the Milkman's Lane and Brickworks sites connect into many kilometres of ravines and walking trails, including the Belt Line Trail, created from a railway line that once connected the city with outlying areas. Corktown Commons and its surroundings embody the opportunities that a new downtown residential development can provide for enhancing more natural environments and biodiversity while also promoting mixed urban amenities. Both Corktown Commons and Evergreen Brickworks allow for exploration by people with physical constraints. Milkman's Lane is more challenging, involving a short steep walk down into a ravine over at times unpaved terrain, with the option of continuing to the Brickworks (or doing the route in reverse).

The basic virtual tour component is approximately 35 minutes. MCC recommends adding 25 minutes of Q&A to fill the hour of virtual programming. The in-person voluntary tour could be offered for future exploration of nature.

TOUR LEADERS || ELLEN SCHWARTZEL

The Toronto Field Naturalists (TFN) is a nearly 100-year-old entirely volunteer organization, dedicated to connecting people with nature. The tour will be hosted by a senior TFN member, Ellen Schwartzel, who is currently President. Ellen's career in environmental policy included 23 years with the Environmental Commissioner of Ontario, and she was Ontario's Deputy Environmental Commissioner from 2014 until retiring in 2018. Ellen received her BSc and MSc in Botany at the University of Toronto.



Tour De	etails			
Tour Length:	35	minutes		
Time of Day	TBD			
Transportation Required	Not A	pplicable		
Special Equipment Required	Not A	pplicable		
Activity Level	Not A	pplicable		
Min/Max	Not A	pplicable		
Activity Pricing Start at:				
\$0.00 CDN + HST Per Person				
Based on m	ninimum	1		





PENDING VIRTUAL TOUR | THE NEXT HUNDRED: REIMAGINING DOWNTOWN HERITAGE BUILDINGS

Giaimo

Activity Description:

This tour explores the conservation and renovation underway at heritage buildings in downtown Toronto: The Hermant Buildings at 19 and 21 Dundas Square. Conservation of the old and existing is not just culturally sustainable, but also environmentally, operationally, and economically sustainable. The conservation approach for these buildings focuses on the long-term maintenance, to allow for their continued use and reuse. The embodied energy of old structures make up a significant portion of the lifetime energy expenditure, and should be weighted heavily in the evaluation of their future. Giaimo, a Toronto-based architecture firm integrating design and conservation, have been working since 2015 on transforming these buildings, considering not only how to conserve the last 100 years of history but also how to enable and support the next 100 years of use. The tour will share the project process and lessons learned in regards to the embodied energy and potential to extend building life cycles and capital expenditures, and considering the project in relation to sustainable architecture guidelines and policies.

TOUR LEADER | JOEY GIAIMO, OAA MRAIC CAHP, PRINCIPAL AT GIAIMO

Joey's projects have received numerous awards, and during his tenure at ERA his work on the Allandale Train Station and at Casey House was acknowledged with a Lieutenant Governor's Ontario Heritage Award for Excellence in Conservation. His involvement in architecture regularly extends beyond practice. He currently serves on the City of Hamilton's Design Review Panel (DRP), and is co-author of the award winning "Vancouver Matters", a book that takes a critical stance on the city's acclaimed urbanism.

He is also an instructor at the Department of Architectural Science at Ryerson University, and has been a visiting critic and thesis advisor for several academic institutions including the University of British Columbia, OCAD University and the University of Waterloo.

Mitchell May, OAA CAHP, Associate at Giaimo: Mitchell is an Architect and Project Manager with a decade of experience in design and conservation projects across Ontario. Over the last seven years at Giaimo, his work has focused on exploring the relationships between new and existing architectures. From restoring designated heritage buildings and designing complex brewery additions, to renovating retail spaces, developing custom CNC fabricated truss gusset plates, and Nuit Blanche laneway spectacles, Mitchell brings significant knowledge, respect, and creativity to the profession.

Prior to joining Giaimo, he worked with Professors Marco Polo and Colin Ripley at Ryerson University to research and document Canada's Centennial projects where his work formed part of the exhibition Architecture and National Identity: The Centennial Projects 50 Years On. He has also led a series of research initiatives at Giaimo, which have been presented at conferences including the Society for the Study of Architecture in Canada (SSAC) and National Trust for Canada (NTC).

Activity At-A-Glance							
Tour De	etails						
Tour Length:	Tour Length: 60 minute + trave						
Time of Day		ible between n & 5 pm					
Transportation Required	Yes t	to destination					
Special Equipment Required	Currently, both project are under construction and would require hare hats, construction boo						
Activity Level	Active this is a walking tou						
Min/Max	15/20						
Activity Pricing Start at:							
\$0.00 CDN + HST Per Person							
Based on n	ninimu	m					
Costs associated for tour support staff and any transportation is additional.							





SUSTAINABILITY WALKING TOURS | EXHIBITION PLACE











Activity Description:

Since 2004, Exhibition Place has undertaken an environmental stewardship initiative, entitled GREENSmart; which includes the promotion of sustainable development, environmental initiatives and leading-edge green technologies and practices across the site. Our environmental initiatives have resulted in award-winning recognition across North America, such as the Platinum Waste Minimization Award from the Recycling Council of Canada and have established Exhibition Place as a world leader in energy-efficient technologies. The program lays the groundwork for Exhibition Place to serve as a model for other organizations to operate successfully while being environmentally friendly.

Working with the Exhibition Place Sustainability team, MCC would develop 3-4 tours focussed on different areas of the GreenSmart program. A guided tour for as many as 30 architects at any one time would showcase their various sustainability projects across the grounds. The projects are quite spaced out so the team would highlight a few items that can be showcased in a 60-minute tour window.

In addition to the projects highlighted on the following pages, the team is about to commission our new magnetic bearing chiller with an industry leading design COP of 35 that architect's might be interested in addition to the list. It's located on the west end of the Enercare Centre (formerly Direct Energy Centre).

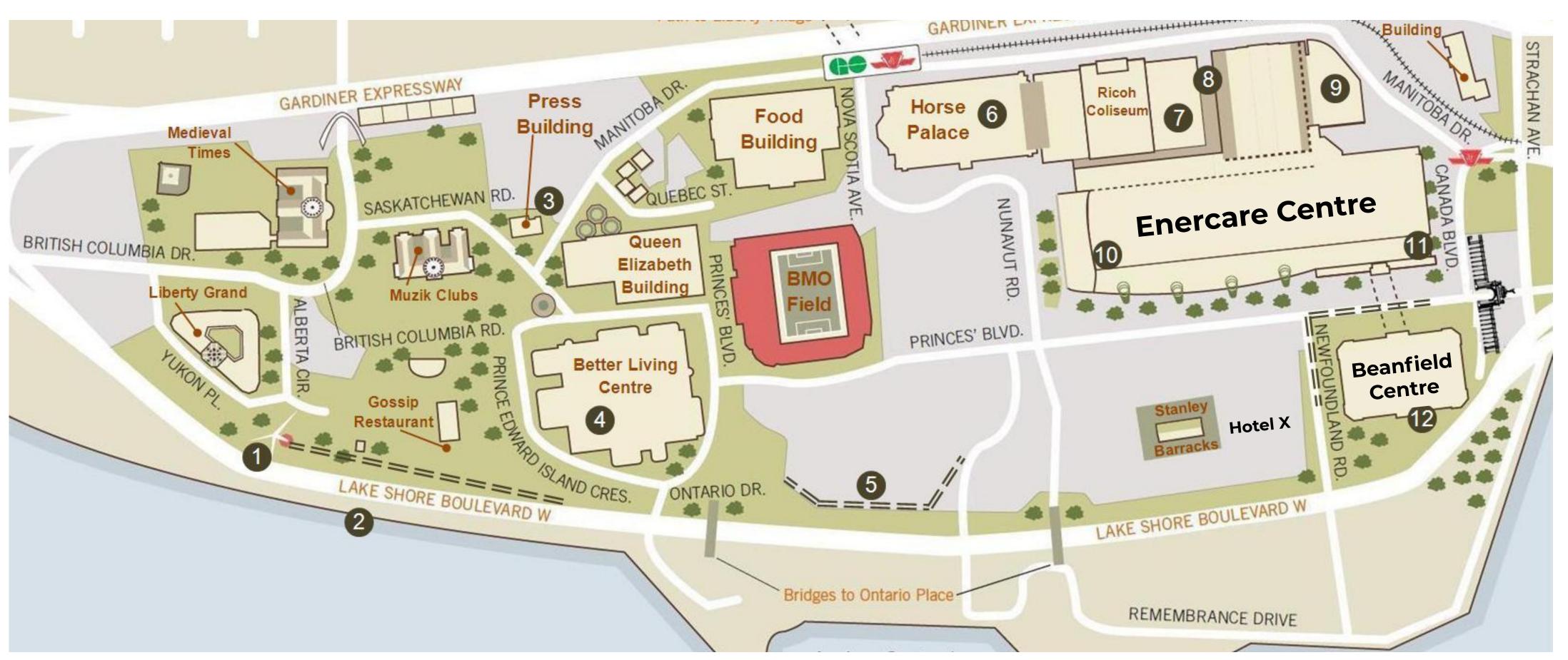
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Activity At-A-Glance						
Tour D	etails					
Tour Length:	45	minutes + travel				
Time of Day	Flexible No					
Transportation Required						
Special Equipment Required	No					
Activity Level	Moderate					
Min/Max	15/30 per tour					
Activity Pricing Start at:						
\$0.00 CDN + HST Per Person						
Based on r	minimu	m				
Costs associated for tour support staff is additional.						



Welcome to Exhibition Place, a 192-acre waterfront site owned by The City of Toronto and managed by The Board of Governors of Exhibition Place. Achieving energy self-sufficiency is one of our goals. Promoting sustainable development and environmental initiatives is our objective. This is your self-guided Walking Tour showcasing GREENSmart initiatives undertaken by the Board of Governors. The numbers on the map match the site, buildings, or facilities where environmental projects are located. MCC will work with the Sustainability Team to develop guided walking tours of several of these facilities.



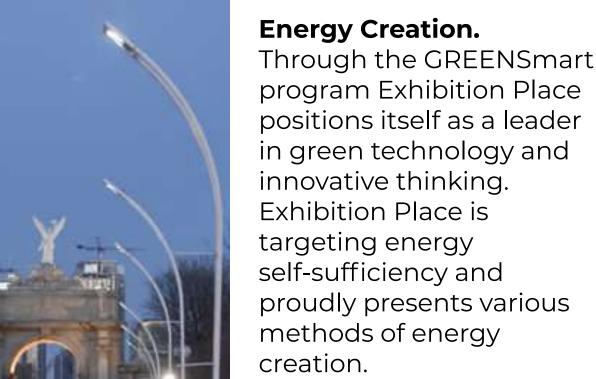
1	Wind Turbine "Wendy"	Ĩ	LED Pathway Lighting	8	Mid Arch - Back Pressure Steam Turbine
2	Urban Forestry - Lake Water Irrigation Inlet	(Horse Palace - 200 kW Solar Power	9	Northern Extension - Cool Roof & Green Roof
3	Press Building - Geothermal Project		- Cool Roof & Green Roof	1 O	Enercare Centre - 1.6 MW Tri-Generation
4	Better Living Centre - 250 kW Solar Power	-	East Annex - 150 kW Solar Power	11	Enercare Centre - Innovation Centre & Living Wall
	- Cool Roof		- Cool Roof	12	Beanfield Centre - Rainwater Harvesting



Place Walking

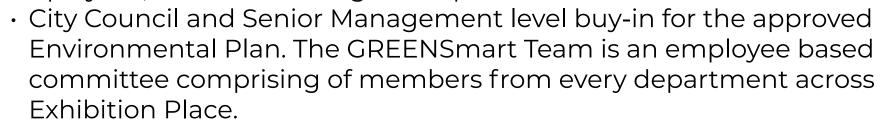












Exhibition Place earmarked \$7M of Venue Naming Rights fees for the 10-year sponsorship of Enercare Centre for environmental initiatives.



LEED® Certified Facilities. Beanfield Centre is one of Canada's first LEED SilverConference Centres. Beanfield Centre secured a 100% green power purchase agreement through Enercare Business and became the first building at Exhibition Place to be fully powered by renewable energy. In addition, Beanfield Centre has improved air quality through CO2 sensors; rainwater harvesting to reduce water consumption; Low VOC paints, carpets and adhesives and organic recycling programs.

Enercare Centre is one of the first convention centres in Canada to achieve LEED® EB:O&M Platinum certification by the CaGBC. The initial LEED® EB:O&M certification goal was to achieve Platinum (50 points). However, through the enthusiastic efforts of the Enercare Centre team, a total of 80 points were documented and awarded by the Canada Green Building Council (CaGBC). The Enercare Centre uses a major Co-generation project that will use a natural gas fired generator to satisfy approximately 30% of the Complex's electricity, heating and cooling needs. An energy reduction of 1,600 tonnes of equivalent CO2 emissions occurs through this project annually.





FOR COUNCIL MEETING January 20, 2022

> (open) ITEM: 4.5

Memorandum

To: Council

Susan Speigel Farida Abu-Bakare
J. William Birdsell Yan Ming (Pearl) Chan
Paul Hastings Christina Karney
Jennifer King Natasha H. Krickhan
Michelle Longlade Lara J. McKendrick
Elaine Mintz Deo M. Paquette
Clayton Payer Greg Redden

Kristiana Schuhmann Gaganjot (Gagan) Singh

Andrew Thomson Settimo Vilardi William (Ted) Wilson Marek C. Zawadski

From: Comprehensive Education Committee

Natasha Krickhan, VP Education, CEC Chair

Agata Mancini Janet Harrison
Christina Facey Jeffrey Laberge
Christopher Johnson Krystyna Ng
Hadi Jafari Maria Denegri
Heather Breeze Shane Laptiste

Date: January 13, 2022

Subject: Report on the Call for Presenters for the OAA Conference 2022.

Objective: For Council to consider approval of continuing education sessions

that are recommended for the OAA Conference 2022.

OAA Annual Conference - Call for Presenters

To ensure strong programming focused on the Conference theme, the OAA collected proposals and recommendations from the industry experts, OAA Councillors, OAA Committees, and allied stakeholders. We received more than 60 proposals and recommendations, including those that were submitted by various OAA Committees and Task Groups.

All proposals were independently reviewed and assessed by the members of the Comprehensive Education Committee according to the following criteria:

- Educational value and learning outcomes of the presentation;
- Speakers' credentials, expertise, and public speaking skills;
- Relevance to the Conference theme.



Based on the Committees assessments, the proposals were short-listed to 28 to be recommended for the upcoming OAA Conference 2022.

As an extra quality assurance step, the short-listed proposals were further reviewed by the Sustainable Built Environment Committee.

The Committee is submitting the short-list for Council approval to be offered at the OAA Conference 2022.

Refer to Appendix A for a recommended list of Continuing Education sessions.

Action: To obtain Council approval of the Continuing Education

sessions recommended for the OAA Conference 2022

Attachments: OAA Conference 2022 Continuing Education Sessions



OAA Conference 2022 Continuing Education Sessions

	Presentation Title	Speakers
1	A Net Zero Carbon Case Study - Davisville Aquatic Centre	Susan Lewin, Dejan Skoric, German Vaisman
2	Amicable Separations; WBAL Testing and Connected Buildings	Steve Murray
3	BC Government NetZero Carbon Neutral Conversion	Marjorie Beaulieu
4	Benchmarking Embodied Carbon in Ontario	Kelly Alvarez Doran, Lisa King, Ryan Zizzo
5	Building Envelope Sealing-Effects & Efficiency Opportunities	Josh Lewis
6	Building Portfolio Carbon Planning	Brandon Law
7	Carbon as currency: How to approach no/low carbon design	Paul Dowsett, Daniel Hall, Allison Evans
8	Climate Change and Deep Energy Building Retrofit	Tom Davis
9	Design for Tomorrow: Future-Proofing Arctic Architecture	Sarah Wetteskind
10	Design in an Uncertain Climate	Peter Duckworth-Pilkington, Jeff Mosher
11	Durability + Resiliency: Cornerstones to Sustainability	John Hackett, Dr. Michael A. Lacasse, Gerald R. Genge, David De Rose
12	Existing Building Renewal: Ready For the Future	Andrea Yee, Antoni Paleshi
13	Freehand Sketching for Architects	Joel Berman
14	Laneway Suites: Toronto's New Housing Typology	Craig Race
15	Mitigating Building Impacts with Green or Blue Roofs	Richard Hammond
16	Nature Based Solutions & the Resilient City	Jane Welsh, Colleen Mercer Clarke
17	NZ Ready Homes-10yrs of Lessons (10 Building Science Rules)	Andrew Oding
18	Opportunities of Mid-Rise Wood Construction in Canada	Veronica Madonna, Steven Street
19	Preparing for the Legal Risks Associated with Climate Change	Jackie van Leeuwen, Lena Wang
20	Radical Reuse	Nicolas Demers-Stoddart
21	Recommendations on Official plans and Zoning Bylaws	Khaled Khadra, Martin Rendl, OPPI rep, City of TO rep
22	Reimagination of 60 Bloor Street: A Deep Retrofit Case Study	Rob Wood
23	Resilient Transit, Resilient Communities	Vanessa Guillen
24	Selling Sustainability: Get Your Client to Do the Right Thi	Enoch Sears
25	Spotlight on Sustainable Outcomes & Opportunities from IPD	Markku Allison, Jen Hancock, Lindsay Worton
26	Stormwater Management under Constrained Environments	Ary Rezvanifar
27	The Paradox of Green: Supporting High-Performance Design	John Alberico, Mikk Toome, and Mike Carl
28	Zeroing in on Net Zero	Ted Watson

Memorandum

To: Council

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From: Kristi Doyle, Executive Director

Ellen Savitsky, Manager Education & Development

Date: January 20, 2022

Subject: Requirement for Mandatory learning under the OAA's

Continuing Education Program

Objective: To respond to the direction given by Council at the December

meeting to establish the framework for mandatory member learning

in the next Continuing Education Cycle

Background

Further to the report received from the Vice President Education and Manager, Education & Development in December, Council approved the following motions:

It was moved by Krickhan and seconded by Mancini that Council agree to continue a requirement for a topic area of mandatory learning within the OAA's Continuing Education Program for the next Cycle which begins July 1, 2022 and ends June 30, 2024. -- CARRIED (9 in favour, 8 opposed (Birdsell))

It was moved by Krickhan and seconded by Mancini that the mandatory learning topic area and number of hours required under the OAA Continuing Education program for the next cycle be identified by Council no later than January 20, 2022; and, that it be implemented such that members may choose how to fulfill that requirement based on selection of their own session(s) and/or learning provider that is consistent with the set of criteria established by the OAA; and that it be self reported. -- CARRIED (10 in favour, 5 opposed)



Further to the motions made, staff have considered how best to implement this policy decision in accordance with the parameters given above as well as giving consideration to efficiency, clarity, ease of understanding and administration.

In concert with the Vice President Education, the Executive Committee of Council also discussed this direction at their January 5 meeting. More specifically, they discussed a proposed topic area. Further to that discussion there was unanimous support for the recommendation that the mandatory topic area be focused on the Climate Crisis i.e. learning activities that would be considered to address climate issues, energy efficiency, as well as sustainability. This topic was the focus of discussion during the meetings with the 14 local architectural societies during the fall. It has been a strategic priority for the OAA Council for the past number of years, and has risen to the top of ideas that have been gathered so far during the consultation process leading up to our 5-year strategic planning sessions.

It is understood that this is a fairly wide topic area, however it allows for flexibility of the membership to decide how best to address this area of learning given their own practice circumstances, or areas of interest. Staff will work with our Sustainable Built Environment Committee (SBEC) in order to draft the most appropriate wording to encapsulate this topic area.

In addition to this topic, the following parameters will be established around this mandatory learning component:

- The learning must be completed in the category of structured learning activities. All rules and policies related to structured learning will apply to this mandatory topic area.
- The number of hours required will be two (2) structure hours within the 2year cycle
- The learning will be self-report, unless the member has undertaken learning that the OAA has offered directly and conducted the registration.
- Staff will implement a system within the Continuing Education transcripts in order to record this learning.
- Each member has the flexibility to decide how best to fill this mandatory requirement in keeping with the criteria set out by the OAA. Courses offered by outside organizations that meet the criteria do not need to be vetted or approved by the OAA.

In addition to the above, during the course of the two-year cycle, the OAA will be offering webinars that will focus on this topic area. During the cycle there will be at least two webinars offered free of charge to the membership that would fulfil this requirement. The OAA will endeavor to offer two sessions that vary in level of technical focus i.e. introductory vs. advanced.



Action: Council is asked to consider the following motion:

It was moved by... and seconded by.... that council approve the direction that each member will be required to complete two (2) hours of structured learning during the next Continuing Education cycle which begins July 1, 2022 that is focussed on addressing the climate crisis, sustainability and/or energy conservation; and that staff be directed to develop the appropriate communications to members to be delivered at the appropriate time.



Memorandum

To: Council

Susan Speigel Farida Abu-Bakare
J. William Birdsell Yan Ming (Pearl) Chan
Paul Hastings Christina Karney
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Andrew Thomson Settimo Vilardi William (Ted) Wilson Marek C. Zawadski

From: Kristi Doyle, Executive Director

Date: January 12, 2022

Subject: Barrie Community Energy and Greenhouse Gas Reduction Plan

Objective: Council to receive a report from OAA Councillor Andy Thomson

regarding his involvement in the development of the Barrie Community Energy and Greenhouse Gas Reduction Plan.

Council to consider the request to continue to provide advisory

support for this project.

With Council's support, Councillor Thomson has been involved with the development of the Barrie Community Energy and Greenhouse Gas Reduction Plan since March of 2020. Now in its near-final stages, Councillor Thomson has provided a copy of the draft report, which is anticipated to be finalized by March 2022. As I understand it, the request is for OAA Council to receive the report, and agree that the OAA will continue in an advisory role on the project.

Councillor Thomson will make a short presentation to OAA Council next week regarding the Report and also provide additional information in terms of what the OAA's continued advisory role would entail. Additional discussion regarding Council endorsement of the plan and/or use of the OAA's logo should also be discussed.

At the time that Council discussed and approved Councillor Thomson's participation in the development of this plan, it was noted that having an OAA representative at this table would ensure that architects remain at the forefront of discussions around energy performance targets for new buildings and



renovations. In addition, it was also agreed that our involvement would not require any substantial commitment of resources from the OAA.

The draft Plan is attached for Council's consideration and further direction in terms of the OAA's ongoing involvement in this project.

Action: Council to consider receiving the Barrie Community Energy

and Greenhouse Gas Reduction Plan, and approving OAA

support for the Plan as well as continuation of our

involvement in an advisory role.

Attachments: DRAFT Barrie Community Energy and Greenhouse Gas

Reduction Plan



Part 1: Rationale

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Preamble

Land Acknowledgement

The City of Barrie acknowledges that we are situated on the traditional land of the Anishnaabeg people. The Anishnaabeg include the Ojibwe, Odawa, and Pottawatomi nations, collectively known as the Three Fires Confederacy. The City of Barrie is dedicated to honouring Indigenous history and culture and committed to moving forward in the spirit of reconciliation and respect with all First Nation, Metis, and Inuit people.

Message from the Mayor Forthcoming.

Acknowledgements Forthcoming.



Glossary of Terms

Term	Definition
1.5 °C consistent model	One of two models included within this Plan. We acknowledge a gap between where our strategies take us and where we need to reach a target consistent with the 1.5 °C threshold of global temperature rise. Within the strategy description, we have noted potential opportunities to accelerate towards our target. Within the Plan, this is referenced as the "1.5°C consistent model".
Active transportation	Using an individual's power to get from one place to another. This includes walking, biking, skateboarding, rollerblading, jogging and running, non-mechanized wheel chairing, snowshoeing and cross-country skiing.
Baseline	Estimation of the current (2018) energy use, energy costs and greenhouse gas emissions.
Business-as-Planned	The Business-as-Planned (BAP) scenario is developed to understand future energy consumption, energy costs and emissions for the Barrie community - based on changes in population and employment. It considers the impacts of provincial and federal government commitments and assumes no local action to reduce energy or emissions.
Carbon budget	The cumulative amount of carbon dioxide (CO ₂) emissions permitted over time to keep within a certain temperature threshold.
Carbon sequestration	The long-term removal of carbon dioxide (CO ₂) from the atmosphere through storage in solid or liquid form.
Circular economy	An economy that strives to: eliminate waste and pollution; circulate products and materials; and, regenerate nature.
Complete streets	Streets planned to balance the needs of all road users, including pedestrians, cyclists, transit-users, and motorists.
Cost avoidance	Costs not incurred because of specific actions taken.
Deep energy retrofit	A project involving multiple energy efficiency and/or renewable energy measures in an existing building and building processes, designed to achieve substantial reductions in energy use
District Energy System (DES)	District energy systems (DES) use pipes to supply heating, cooling and/or power to multiple connected buildings from a decentralized energy source. Buildings that produce excess energy ("anchor tenants") can redistribute energy to nearby buildings.
Embodied carbon	The total carbon dioxide emitted by the production of a building. It includes the emissions created from extracting, transporting, and

Term	Definition
	manufacturing all input materials and emissions from the construction process. This also includes emissions generated from end-of-life disposal or recycling.
Emission intensity	The emission rate of a given pollutant relative to the intensity of a specific activity or industrial production process. The measure is used to derive estimates of air pollutants or GHG emissions based on the amount of fuel combusted. It can also be used to compare the environmental impact of different fuels or activities. For example, grams of carbon dioxide released per megajoule of energy produced.
Emission lock-in	Dynamic where previous decisions relating to GHG emitting technologies, infrastructure, and systems delay or prevent future transition to low-carbon alternatives. For example, an investment in a vehicle fleet can commit the owner to high emissions over the fleet's lifetime – even though more efficient options become available.
Energy use intensity (EUI)	A metric that expresses a building's energy use as a function of its size. It's typically calculated by dividing the total energy consumed by the building in one year (measured in GJ) by the total gross floor area (measured in square metres).
Evidence-based model	One of two models included within this Plan. The evidence-based model considers what is possible given current technologies, learnings from other municipalities and the local context.
Gigajoule (GJ)	A gigajoule (GJ) is a derived unit of energy in the International System of Units. It equals one billion Joules. The amount of energy represented by one GJ is equivalent to 278 kWh.
Greenhouse gas emissions	Emissions of gasses known to cause warming by trapping heat in the lower atmosphere that otherwise would be lost in space. The main greenhouse gases are carbon dioxide (CO_2), methane (CH_4), chlorofluorocarbons ($CFCs$), and nitrous oxide (N_2O). The most abundant greenhouse gas is CO_2 – carbon dioxide. Measured in tonnes of carbon dioxide equivalent (tCO_2e).
Ground-mounted solar	Ground-mounted solar panels are anchored to the ground rather than rooftop systems. They can range from single units to much larger arrays covering a field or parking lot.
Heat pumps	Devices that can warm and cool buildings by transferring heat. There are three types: air-to-air, water source, and geothermal – each providing an outside medium for heat transfer. They transfer available heat to spaces requiring heating and transfer heat out of spaces requiring cooling. Because they are heat transfer systems

Term	Definition
	they are an energy-efficient alternative to furnaces and air conditioners.
Local improvement charge (LIC)	Charges that a municipality levies on a property to recoup municipal projects' costs directly benefit the property. In 2012, an amendment came into effect that allows Ontario municipalities to use LICs to provide financing for home energy efficiency projects. Repayment of the LIC is often spread over multiple years and remains with the property, not the owner.
Net-zero emissions	A system that generates no greenhouse gas emissions or offsets all its emissions through actions and technologies that remove the amount generated from the atmosphere.
Net-zero ready	Net Zero Ready provides building owners with an achievable first step towards a Net Zero building. Buildings that are Net Zero Ready are built to a high energy efficient standard. The building owner can incorporate renewable energy in the building later and at a lower cost due to reduced energy requirements. For example, a Passive House or Canadian Green Building Council Zero Carbon Building.
Offset	Through carbon offsetting, emission reductions are sold to the purchaser in an "offset". Offsets (measured in tonnes of CO₂e) effectively reduce the purchaser's net emissions.
Passive House	A high-performance building standard. Passive house buildings consume as little as 10% of the energy required to heat and cool traditional buildings.
Recommissioning	Optimizing building performance to reduce energy use and improve occupant comfort. Recommissioning is used in existing buildings and systems to optimize energy efficiency, building operations and improve energy demand management.
Solar photovoltaic (PV)	A device that converts sunlight into electrical energy. A single PV device is known as a cell and can generate a few watts of power. Solar panels can be connected to form solar arrays. Multiple solar arrays can connect to the electricity grid as part of a PV system.
Solar thermal	Solar thermal energy harnesses the sun's energy to heat water, air, or other fluids in industry and the residential, institutional and commercial sectors. Solar thermal technology uses energy from the sun for domestic water heaters and can be used year-round in Canada.
Stationary Energy	Stationary energy sources are those used in buildings – including homes, stores, offices and schools. Stationary energy is one of the largest sources of GHG emissions in many communities.

Term	Definition
Thermal energy demand intensity (TEDI)	A measure of the amount of annual heating energy delivered to a building for maintaining its internal temperature. It's calculated by dividing the total energy output from all space conditioning and ventilation equipment (measured in kWh) by the building's enclosed floor area (measured in squared metres).
Transportation demand management	The application of policies, programs and services that redistribute the travel demand on the transportation network, resulting in fewer trips by car and reduced congestion.
Waste diversion	Preventing waste from entering a landfill through reuse, repair, recycling or composting.

Abbreviations

Abbreviation	Full reference
DAD	
BAP	Business-as-Planned
CDM	Conservation Demand Management
DER	Deep energy retrofit
DES	District Energy System
EV	Electric vehicle
FCM	Federation of Canadian Municipalities
GDS	Green Development Standard
GHG	Greenhouse gas
GJ	Gigajoule
GPC	Global Protocol for Community-Scale Greenhouse Gas Emission Inventories
IESO	Independent Electricity System Operator
IPCC	Intergovernmental Panel on Climate Change
LBG	Living Green Barrie
LEED	Leadership in Energy and Environmental Design
LIC	Local Improvement Charge
LSRCA	Lake Simcoe Region Conservation Authority
MDE	Markham District Energy
MMC	Mayor's Megawatt Challenge

Abbreviation	Full reference
NRCan	Natural Resources Canada
OBC	Ontario Building Code
OEB	Ontario Energy Board
OP	Official Plan
PV	Photovoltaic (solar)
RCO	Recycling Council of Ontario
RER	Regional Express Rail
SAG	Stakeholder Advisory Group
tCO₂e	Tonnes of carbon dioxide equivalent
TDM	Transportation demand management
TEDI	Thermal energy demand intensity
TGS	Toronto Green Standard
ZEN	Zero-emissions neighbourhood

Executive Summary

Introduction

Energy is part of our daily lives – it powers our homes and appliances, fuels our local businesses, and moves us around the City. Access to efficient and reliable energy plays a key role in our economy and our quality of life. While energy will continue to play a key role in our future, **our relationship with it needs to change**. Reducing our reliance on fossil fuels is essential to mitigating climate change, and will improve the health of our residents, our local economy, and the environment.

In 2019, Barrie City Council declared a **climate emergency** and directed city staff to create a Climate Change Mitigation Plan to reach Barrie's corporate GHG emissions target of net-zero by the year 2050.

Developing our community's Energy and GHG Emission Reduction Plan was the next logical step in Barrie's climate action journey. This plan will help the community better understand current energy consumption, identify energy efficiency opportunities, and help meet the community's climate priorities.

Together, we can collectively re-imagine the way we travel, work and play to maximize the positive benefits to our environment, health, economy – making Barrie a better place to live for everyone.

Barrie's Energy Use & Emissions

Without further climate action, Barrie's energy use is estimated to increase by 36% by 2050, and GHG emissions are expected to increase by 40% by 2050, compared to 2018 levels.

The Barrie community aims to reduce overall GHG emissions 45% below 2018 levels by 2030 and to become net-zero by 2050.

Barrie's Big Moves for Climate Action

Our Plan outlines four 'Big Moves' - buildings, transportation, circular economy, natural environment and land use. Overall, the Big Moves aim to achieve:

- Near zero emissions in new and existing building stock
- Near zero emissions from transportation
- Waste reduction through a circular economy
- Livable neighbourhoods that support energy efficiency, mixed-use, complete communities and environmental protection

Buildings

Buildings are responsible for more than 40% of our community-wide emissions. There are six strategies in the Buildings Big Move.

The first two strategies – Deep Energy Retrofit Program and Green Development Standard – will be critical in achieving the plan's emission reduction targets. The other four strategies include advancing energy management and benchmarking in industrial buildings, installing solar generation, exploring the creation of a district energy system, and exploring the development of large-scale renewable and energy storage infrastructure projects.

Transportation

Transportation is responsible for more than 55% of our community-wide emissions, with most of this attributed to personal vehicles. The Transportation Big Move involves five strategies that prioritize a shift away from single-occupancy, fossil-fuel powered vehicles to other modes of travel. These include investing in local public transit options (Barrie Transit) and supporting transit-oriented development, working with Metrolinx to increase GO Train use, promoting walking, cycling and rolling by expanding active transportation routes, promoting car-sharing, and advancing the adoption of electric vehicles.

Circular Economy

Creating a Circular Economy is about shifting the perception of "waste" towards being viewed as a resource. The City of Barrie is currently committed to the continual development of policies around a Circular Economy Framework. This includes four pillars for encouraging reuse, recycling, responsible consumption, and recovery. The Circular Economy Big Move strategies include strengthening the community sharing economy and, phasing-out single-use plastics, energy recovery from waste management activities, and encouraging circular construction.

Natural Environment & Land Use

Our final Big Move, Natural Environment & Land Use includes four strategies that cover the protection and expansion of natural assets that sequester carbon, promoting a culture of growing and buying local food, and creating high density and mixed-use neighbourhoods that use less energy, are transit and active transportation oriented, and reduce residents' commuting times through better mobility options. This Big Move includes the possibility of developing a Zero Emissions Neighbourhood (ZEN), in either a new or existing neighbourhood within the city.

Implementation

This is a plan for our entire community. The strategies outlined within each Big Move require significant effort and collaboration between all community members, including businesses, institutions, residents, and the City of Barrie to achieve these reductions. A gap will likely remain to achieving net zero, which will require the City to consider potential offset measures, and advocacy with the provincial and federal governments to implement additional climate-supportive policies that bolster local climate action.

Our Plan therefore outlines implementation components and key actions to begin immediately. The proposed governance model calls for the creation of an Internal Working Group comprised of cross-departmental staff to lead the implementation of City-led actions, and a series of Action Tables consisting of both staff and external stakeholders to lead the implementation of community actions. The Plan also requires ongoing operational funding, including full-time dedicated staff resource(s) to serve as Staff Lead(s) responsible for the overall coordination of the Plan's implementation, and for providing regular progress updates.

Key considerations for engagement and communications, as well as potential partners and their suggested roles in supporting implementation are also identified. The plan concludes with a list of immediate actions to start the Plan's strategies, that should be completed in the next one to three years.

How to Read this Plan

Our Community Energy and GHG Reduction Plan is presented in three parts. **Part 1** – this document – **focuses on the "why"**. It presents where we are now and the rationale for taking

climate action at the local level. **Part 2 focuses on the "what"** and outlines the strategies we need to reduce our energy use and emissions collectively. Finally, **Part 3 focuses on the "how"** and provides actionable next steps for moving this plan forward. These three parts are envisioned as "chapters in a book" and should be read in tandem.



Introduction

The Need for a Plan

Why Develop a Community Energy & GHG Reduction Plan?

Energy is a part of our daily lives – it powers our homes and appliances, fuels our local businesses, and moves us around the City. Access to efficient and reliable energy plays a key role in our economy and our quality of life. While energy will continue to play a key role in our future, **our relationship with it needs to change**. We can collectively re-imagine the way we travel, work and play to maximize the positive benefits to our environment, health, economy – making Barrie a better place to live for everyone. This plan is our community's collective opportunity to address climate action.

Impacts on Our Environment

On a global scale, 2020 was the hottest year on record (tied with 2016)¹. In 2015, nearly 200 countries developed the Paris Agreement to keep the global average temperature rise well below two degrees Celsius. There was a further push to drive efforts to limit the temperature increase to 1.5 degrees Celsius². In 2018, underscoring the need for urgent action, the Intergovernmental Panel on Climate Change (IPCC) released a special report on the impacts of a global temperature rise of 1.5°C. Limiting global warming to 1.5°C would lessen the risks to health, livelihoods, food security, water supply and economic growth. The IPCC indicates that limiting warming to 1.5°C "would require rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems"³. In August 2021, the IPCC issued a 'reality check', warning that without immediate, rapid and large-scale GHG reductions, limiting warming to 1.5°C or even 2°C will not be possible⁴.

¹ NASA. (2021). 2020 Tied for Warmest Year on Record, NASA Analysis Shows. Retrieved from https://www.nasa.gov/press-release/2020-tied-for-warmest-year-on-record-nasa-analysis-shows

² Government of Canada. (2016). *The Paris Agreement*. Retrieved from https://www.canada.ca/en/environment-climate-change/services/climate-change/paris-agreement.html

³ Intergovernmental Panel on Climate Change. (2018). *Special Report: Summary for Policymakers*. Retrieved from https://www.ipcc.ch/sr15/chapter/spm/

⁴ Intergovernmental Panel on Climate Change. (2021). *Climate change widespread, rapid, and intensifying - IPCC*. Retrieved from https://www.ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/

In Barrie, residents have seen increased intense storms (such as the tornado in July 2021, which displaced more than 100 residents⁵) and extreme cold and hot days. In 2017, the City developed a Climate Change Adaptation Strategy, which projected Barrie's climate to 2080 predicting higher temperatures, more intense precipitation and more extreme weather events.

Barrie's climate is changing^{5, 6}

Barrie has already seen notable changes in its climate and local weather. Increases in average annual temperatures, changes in the timing and amount of precipitation and increases in the intensity, duration and frequency of extreme storm events have already been seen locally.

These local climate impacts, which include more severe ice storms, wind storms, flooding events, heatwaves, and water main breaks, have resulted in significant costs to Barrie residents and damage to infrastructure. For example, the March 2016 ice storm destroyed 70% of trees on Barrie's streets and caused more than \$25 million in insurance claims. The July 2021 tornado left 71 homes uninhabitable and caused \$75 million in insurable damage. Meanwhile, heavier summer rainfalls are causing certain streets in Barrie to experience regular flooding, causing extensive damage to basements, vehicles, and other assets. The costs of these impacts are projected to increase without climate adaptation and mitigation strategies.

https://www.barrie.ca/Living/Environment/Conservation/Pages/Climate-Change.aspx

⁵ Paglinawan, D. (2021). *Tornado that hit Barrie caused \$75 million in insured damages: Insurance Bureau*. CP24. Retrieved from https://www.cp24.com/news/tornado-that-hit-barrie-caused-75-million-in-insured-damages-insurance-bureau-

^{1.5552266?}cache=%3FautoPlay%3FclipId%3D104070%3FautoPlay%3Dtrue

⁶Barrie. (n.d). *Climate Change Adaptation*. Retrieved from: https://www.barrie.ca/Living/Environment/Conservation/Pages/Climate-Change.aspx



Temperature

- •Barrie can expect to see an annual increase in mean temperature of approximately 3°C by 2050 and 4.7°C by 2080
- •Greatest warming will occur in the spring and summer
- •Increase in the number of hot days (days >30°C) from 4 days per year between 1971-2000 to 28 days per year by 2050 and 49 days by 2080
- •Heatwaves projected to become more frequent and prolonged
- •Increased surface warming of lakes, rivers, and streams
- •Greater variability in winter temperatures, including more freeze/thaw events



Precipitation

- •Annual increase in precipitation by 72.9 mm by 2050 and 106.3 mm by 2080
- •Increase in precipitation in the winter, spring, and fall
- •Decrease in precipitation in summer
- Decrease in annual snowfall, with more winter precipitation falling as rain instead of snow
- •Increased incidents of freezing rain



Extreme Events

- •Increase in the intensity, duration, and frequency of extreme rainfall events
- •Historically rare extreme rain events will occur almost twice as often by midcentury
- •Increased occurrences of storm events (ice storms, thunderstorms, etc.)

Taking climate action now will help to preserve greenspace, maintain habitats and ecosystem services and reduce pollution. Furthermore, natural assets can help us adapt to a changing climate through stormwater management and a reduction in the urban heat island effect⁶.

Impacts on Our Health

The Simcoe Muskoka District Health Unit has identified climate change as a priority health issue. Climate change can have several impacts on our health - especially amongst vulnerable populations. By taking local action, we have an opportunity to lessen the negative health impacts and improve overall health outcomes for our residents.

⁶ Federation of Canadian Municipalities. (2021). *Strengthening your community's approach to climate change with green infrastructure*. Retrieved from https://fcm.ca/en/case-study/mcip/strengthening-your-communitys-approach-climate-change-green-infrastructure

Reducing our reliance on fossil fuels in favour of active transportation improves air quality, increases physical activity and results in measurable reductions in mortality rates⁷. One study found that cycling could reduce mortality rates by 40%⁸. Built environments designed for active transportation and public transport support improved physical fitness, mental health and wellbeing, and stronger community networks⁹. Energy efficiency retrofits can help to lessen the impact of extreme heat and cold events on residents, especially amongst vulnerable populations like the elderly¹⁰.

Impacts on Our Economy

Taking action on climate change is good for our local economy. Reducing our reliance on fossil fuels and generating more green energy in Barrie means that more of the money spent on energy will stay in our community, drive technical and social innovation, and attract private investment. Additional economic benefits of climate action include:

- Cost savings on energy and water use, as well as healthcare costs
 - Efficiency programs in Canada have been shown to generate \$3 to \$5 of savings for every \$1 of program spending¹¹
- Creation of additional jobs in emerging sectors and the attraction of high-quality workers
 - Clean energy generation is generally more labourintensive and can generate twice as many jobs in the short-to-medium-term¹²
- Reduced costs for municipal infrastructure (capital and operating) for high-density, transit-oriented development
 - A recent study conducted for the City of Ottawa found that servicing low-density homes on undeveloped land costs \$465/person, while high-density infill

Climate adaptation aims to reduce the effects of climate change on built, natural and social systems. In 2017, the City of Barrie developed its Climate Adaptation Strategy. Climate adaptation and mitigation – the focus of this plan - are closely linked. Mitigation focuses on reducing the overall amount of GHGs in the atmosphere. Both adaptation and mitigation efforts need to be implemented to ensure a safe, healthy and climate-resilient community.

While the strategies outlined in this plan focus on mitigation, many also have adaptation benefits. For example, planting trees not only sequesters carbon (mitigation), but also provide shade and relief during extreme heat events (adaptation).

City of Barrie (2017). Climate Change Adaptation Strategy. Retrieved from: https://www.barrie.ca/Living/Environment/Conservation/Pages/Climate-Change.aspx

⁷ Government of Ontario. (2017). *Community Emissions Reduction Planning: A Guide for Municipalities*. Retrieved from http://www.downloads.ene.gov.on.ca/envision/env reg/er/documents/2018/013-2083.pdf

⁸ JAMA Internal Medicine. (2000). All-Cause Mortality Associated With Physical Activity During Leisure Time, Work, Sports, and Cycling to Work. Retrieved from https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/485349

⁹ Government of Ontario. (2017). *Community Emissions Reduction Planning: A Guide for Municipalities*. Retrieved from http://www.downloads.ene.gov.on.ca/envision/env_reg/er/documents/2018/013-2083.pdf
¹⁰ Ibid.

¹¹ Ibid.

¹² World Resources Institute. (2020). *10 Charts Show the Economic Benefits of US Climate Action*. Retrieved from https://www.wri.org/insights/10-charts-show-economic-benefits-us-climate-action

development pays for itself and saves \$606/person each year¹³

Climate Equity Impacts

Climate change does not impact everyone in our community in the same way. It is well-recognized that certain groups – such as seniors, those with lower incomes and renters – are more vulnerable to the effects of a changing climate ¹⁴. Inequities can be further reinforced due to climate impacts that cause or lead to a loss of income or personal assets ¹⁵. Low-income populations living in less-energy efficient housing are at risk of extreme temperatures and reduced air quality. Exposure to extreme temperatures and reduced air quality negatively impacts physical and mental health ¹⁶ ¹⁷. Despite having lower carbon footprints, lower-income households spend more on energy and have less disposable income to spend on necessities and dedicate to climate mitigation and adaptation ¹⁸. Municipalities play an important role in ensuring that policies meant to address climate change reduce existing inequities. As a community, it is our responsibility to ensure that everyone can benefit from the opportunities presented by local climate action.

Benefits of Taking Action

Actions we take collectively at the local level can help make Barrie a desirable place to live, work and play for years to come. Taking action now to reduce energy use will have many benefits to our community. Municipalities worldwide report several benefits to local climate action, including positive social, health and economic outcomes and overall environmental benefits. The co-benefits most commonly referenced by North American cities include¹⁹:

- A shift to more sustainable behaviours amongst residents, such as changes in diet and reduced consumption.
- Using food, water and energy resources more efficiently to meet the population's needs.
- Enhanced resilience to extreme events, such as flooding.
- Improved public health due to improved air quality and increased activity through active transportation.
- A greener and more sustainable local economy.

¹³ CBC News. (2021). Suburban expansion costs increase to \$465 per person per year in Ottawa. Retrieved from <a href="https://www.cbc.ca/news/canada/ottawa/urban-expansion-costs-menard-memo-1.6193429#:~:text=Suburban%20expansion%20costs%20increase%20to%20%24465%20per%20person%20per%20year%20in%20Ottawa,-Infill%20development%20is

¹⁴ Joseph Rowntree Foundation. (2014). *Climate change and social justice: an evidence review*. Retrieved from https://www.jrf.org.uk/report/climate-change-and-social-justice-evidence-review

¹⁵ Department of Economic & Economic Affairs. (2017). *Climate Change and Social Inequality*. Retrieved from https://www.un.org/esa/desa/papers/2017/wp152 2017.pdf

¹⁶ The Atmospheric Fund. (2019). *Inequalities in climate change: the impacts of policy on people.* Retrieved from https://taf.ca/wp-content/uploads/2019/07/Inequities-in-Climate-Change-July-2019.pdf
¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Chronic Disease Prevention. (2020). *The Co-Benefits of Climate Action*. Retrieved from https://www.cdp.net/en/research/global-reports/co-benefits-climate-action

Municipal Climate Action

Municipalities have a role to play in reducing energy use and GHG emissions. It is estimated that, collectively, cities account for up to 70% of global emissions²⁰. The City of Barrie has been actively engaged in climate action for almost two decades. Highlights of the City's achievements include:

- Establishment of an energy management branch, which has realized over \$9.4 million in cost avoidance and generated over \$1.6 million of incentive revenue since its inception in 2013.
- The City was awarded by the Mayor's Megawatt Challenge (MMC) Program multiple times. The award recognizes municipalities that reduce energy consumption within a facility by 10% year over year. City Hall, the Allandale Recreation Centre and East Bayfield Community Centre have been recognized by the MMW program.
- Water Operations and Energy Management staff launched an optimization team that
 works to identify conservation opportunities at the Water Treatment Facilities. The latest
 project reduced electricity consumption by 20% through January and February 2019,
 realizing a cost avoidance of \$20,000.
- Placeholder for Wastewater Optimization Group impact.
- In 2015, the City converted over 10,000 streetlights to LEDs. This has resulted in \$575,000 of energy costs avoided each year.
- Developing the 2020-2024 Conservation Demand Management (CDM) Plan to reduce further the energy intensity of City facilities and drinking water and wastewater processes.
- In June 2021, Council endorsed transitioning the transit fleet to battery electric buses. A pilot program is currently in development.
- In June 2021, Council endorsed in principle the conversion of the City's corporate fleet (non-transit vehicles) to lower/zero emission vehicles through a phased program. The program will be developed over 2022/23.
- In 2012, the City developed its Sustainable Waste Management Strategy to promote waste reduction and diversion. The City is currently in the process of developing its first Circular Economy Strategy.
- Developing a new Official Plan (OP). The OP includes several founding principles, which
 are in alignment with advancing climate action through land use that creates healthy,
 complete and safe communities, supports connectivity and mobility and is green and
 resilient.
- Approved the Barrie Transit Field Trip Pass Program (providing barrier free access to Barrie Transit for elementary aged students, their teachers and chaperones). Barrie Transit also provides free transit to youth 12 and under.
- In 2020, the City added 27 km of bike lanes, urban shoulders, sidewalks and trails for a total of 1000 km of active transportation routes in Barrie.

²⁰ UN-Habitat. (2011). *Global Report on Human Settlements 2011 Cities and Climate Change, United Nations Human Settlements Programme*. Retrieved from https://unhabitat.org/sites/default/files/download-manager-

files/Cities%20and%20Climate%20Change%20Global%20Report%20on%20Human%20Settlements%20 2011.pdf

In the past few years, energy and climate change issues have become even greater priorities for City Council and staff. Through developing the Council Strategic Priorities for 2018-2022, Council elevated the discussion on climate change by requesting that "while mitigating and adapting to climate change" be added to the priority of "Building a greener Barrie". Through these efforts, the City has demonstrated significant progress towards addressing climate change within its operations and establishing frameworks for community action.

Recently, communities worldwide have increasingly been calling governments to act on climate change at the local level. In September 2019, several hundred residents took to the streets of Barrie, asking for climate action. At the same time, Barrie Council received a recommendation to declare a climate emergency. The climate emergency directed city staff to create a Climate Change Mitigation Plan to reduce Barrie's corporate GHG to net-zero by the year 2050. Residents and grassroots organizations continue to call for collective climate action in Barrie²¹²².

Developing a Community Energy and GHG Emission Reduction Plan was the next logical step in Barrie's climate action journey. The plan will help the community better understand current energy consumption, identify energy efficiency opportunities, and help meet the community's climate priorities.

Understanding our Energy Use & Emissions

Our Energy Use & Emissions Now

In 2018²³, Barrie's residents and businesses used 20.4 million GJ of energy to heat and power their homes and buildings and for transportation fuel within the City. As a community, we spent over \$598 million on energy in 2018 alone. The average person used 132 GJ of energy per year and spent \$3,870 on energy. More than one-quarter of households in Barrie (about 11,500 households) have a high home energy cost burden²⁴. These households spend six percent or more of their after-tax income on home energy.

Residential, commercial, institutional and industrial buildings accounted for 57% of energy consumption and 45% of energy costs. Transportation fuel use contributed 43% of all energy and 55% of energy costs, most of which was personal vehicle use.

²¹ D. Roberts, CTV News. (2021). *Barrie climate group calls for heightened focus on climate change*. Retrieved from https://barrie.ctvnews.ca/barrie-climate-group-calls-for-heightened-focus-on-climate-change-1.5401878

²² R. Vanderline, Barrie Advance, Simcoe County. (2021). *'I'm gonna choose hope': Climate change fighter calls on Barrie residents to get involved.* Retrieved from https://www.simcoe.com/news-story/10471974--i-m-gonna-choose-hope-climate-change-fighter-calls-on-barrie-residents-to-get-involved/²³ When developing our plan, 2018 was used as the baseline since this was the most recent year with complete data available.

²⁴ Canadian Urban Sustainability Practitioners. (n.d). *Energy Poverty and Equity Explorer, Housing & Demographics Theme*. Retrieved from https://energypoverty.ca/mappingtool/

Research conducted by the University of Toronto and Lakehead University (Orillia) provides an estimate of current and potential **carbon sequestration** within Barrie (within Lake Simcoe watershed only). Current landcover (forests and wetlands) and restoration opportunities could sequester approximately 12,500 tonnes/year. This could represent about 5% of the carbon emissions per year if it were to include street trees and Nottawasaga Valley Conservation Area lands.

Source: Lake Simcoe Region Conservation Authority. (2020). Climate Change Mitigation Strategy for the Lake Simcoe Watershed. Retrieved from:

https://www.lsrca.on.ca/Shared%20Documents/reports/Climate-Change-Mitigation-Report.pdf

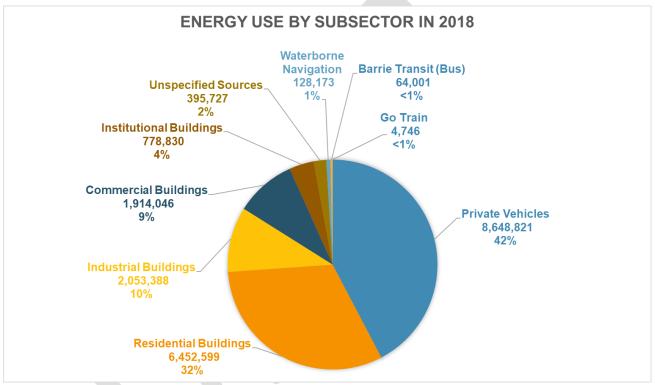


Figure 1: Energy consumption by subsector in 2018 (GJ)

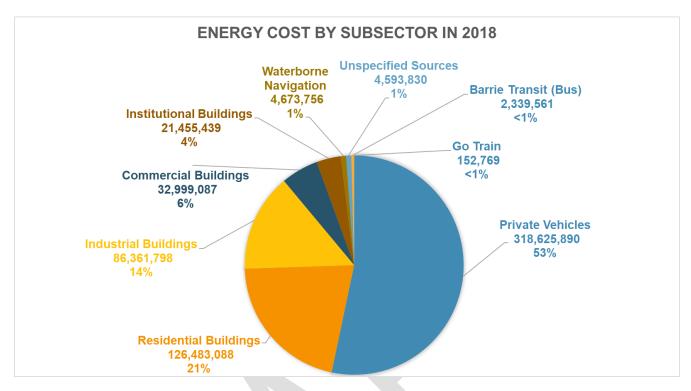


Figure 2: Energy expenditures by sector and subsector in 2018

When looking at energy use by fuel type, gasoline was the most significant fuel type used across all sectors, making up 39% of fuel consumption, followed by natural gas at 33%. As a general rule, gasoline and natural gas produce more emissions compared to electricity, which is relatively "clean" in Ontario.

Although residents and businesses in Barrie spent \$598 million on energy in 2018, most energy dollars left the community. In fact, 87% of the money spent on energy left the local economy and ended up elsewhere in Ontario, Canada and in some cases in the United States.

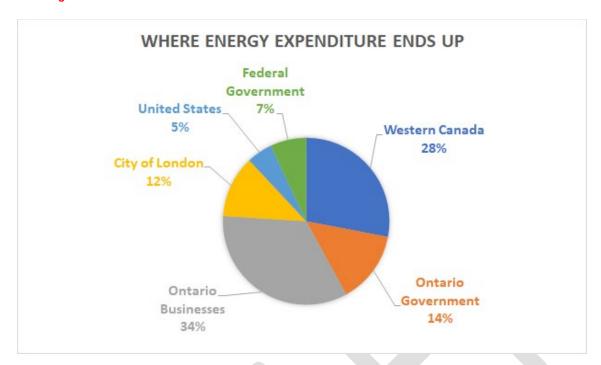


Figure 3: Using the City of London as an example, a typical city in Ontario may see as Energy as much as 90% of all energy costs leaving the community¹⁹

In 2018, the community of Barrie generated 1.07 million tonnes of carbon dioxide equivalent (tCO₂e), equivalent to the annual emissions from 230,000 cars, and 6.9 tCO₂e per capita.

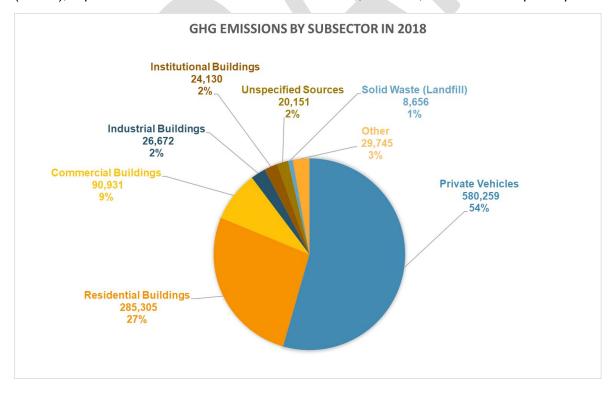


Figure 4: GHG emissions by sector in 2018 (tonnes of carbon dioxide equivalent)

Our Energy Use & Emissions in the Future

A Business-as-Planned (BAP) scenario was developed to understand Barrie's future energy use, costs, and emissions. The BAP assumes that no action is taken to reduce energy or emissions. It is estimated that without any local climate action, energy use will increase by 36% from 2018 to 2050.

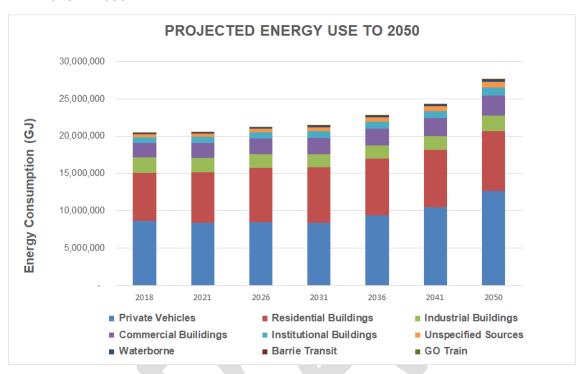


Figure 5: Projection of energy use under a business-as-planned scenario, by subsector

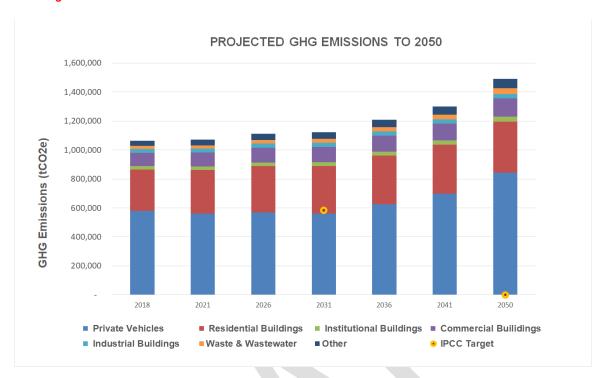


Figure 6: Projection of GHG emissions under a business-as-planned scenario, by sector

GHG emissions are expected to increase by 40% by 2050 from the 2018 baseline under the business-as-planned scenario.

The modelled BAP scenario accounts for projected population and employment growth. Growth in Barrie will lead to more houses, more businesses, more cars on the road, and more waste, and therefore increases to energy consumption and emissions. Changes that occur outside the influence of the municipality will also influence Barrie's energy consumption and emissions in the future. This might include actions from higher levels of government and technology changes driven by broader economic trends. For example, due to the shutdown of the Pickering nuclear power plant and the refurbishment of the Darlington and Bruce nuclear-power stations, Ontario's energy grid could potentially become more emissions-intensive in the future if supply is sourced from higher-carbon fuels ^{25.}

The BAP also includes a forecast of energy costs in Barrie by residents and businesses. The Canada Energy Regulator projects what the energy prices look like in the future under two scenarios. We have modelled a "high cost" future where energy prices increase considerably and a "low cost" future where energy prices increase by a smaller amount or decrease. Both cost scenarios were used to develop a range of expected energy expenditures for the Barrie community in the BAP scenario.

²⁵ TVO. (2019). *Why Ontario's Electricity is about to get dirtier*. Retrieved from https://www.tvo.org/article/why-ontarios-electricity-is-about-to-get-dirtier

Under the high-cost scenario, energy costs are expected to increase by 61% by 2050 from the 2018 baseline. Under the low-cost scenario, energy costs are expected to increase by 21% by 2050 from the 2018 baseline.

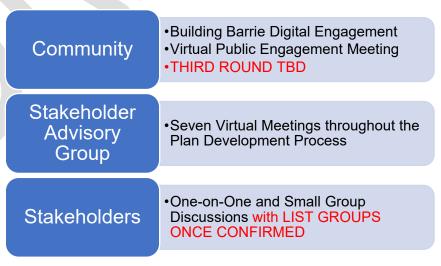
Figure 7: Projection of energy expenditures under a business-as-planned scenario, under a low and high-cost scenario

Developing Our Plan

Stakeholder & Community Engagement

Barrie's Community Energy & Emissions Reduction Plan development began in early 2020 with the formation of a Stakeholder Advisory Group (SAG). The SAG met regularly throughout the plan's development and advised on all key elements – from vision and overall direction to

emissions reduction targets and plan implementation. All meetings occurred virtually due to COVID-19 restrictions. The SAG included representation from various stakeholders, including members from local utilities, school boards, Conservation Authorities, staff and Council, post-secondary institutions, the development industry, health care and the health unit, local business, and local environmental groups.



Three rounds of community engagement also informed the plan's development. The first, an online survey through Building Barrie, occurred in the fall of 2020. The survey solicited high-

level feedback on energy use and climate change, Barrie's ideal energy future, and opportunities for residents, businesses, institutions and the City to take action. A second opportunity for feedback was provided in the spring of 2021 through a virtual public engagement meeting. The meeting provided community members with an opportunity to learn more about the project and contribute to the energy and GHG reduction strategies relating to buildings, transportation, waste, land use and natural assets. Additional opportunities to provide feedback after the meeting were made available through Building Barrie.

Additional information to be added once all stakeholder workshops and community engagement is completed.

Setting Our Target

In 2020, the Canadian government committed to "moving to net-zero emissions by 2050"²⁶. In this case, "net-zero" is defined as either emitting zero greenhouse gas emissions or offsetting any remaining emissions that cannot be reduced. In 2021, Canada announced that it would enhance its emissions reduction target under the Paris Agreement to 40-45% below 2005 levels by 2030²⁷. Barrie has aligned its GHG reduction target with the IPCC. **The Barrie community aims to reduce overall GHG emissions 45% below 2018 levels by 2030 and to become net-zero by 2050**.

This plan outlines a series of Big Moves and strategies (Part 2) to reduce Barrie's energy use and GHG emissions through ambitious yet attainable action. The strategies have been modelled using an evidence-based approach. The evidence-based approach is informed by comprehensive research, which considers current technologies, best practices and learnings from other municipalities and what makes sense for Barrie. Throughout the Plan, this is referred to as the "evidence-based model". We acknowledge a gap between where our strategies take us and where we need to reach a target consistent with the 1.5 °C threshold of global temperature rise. Within the strategy description, we have noted potential opportunities to accelerate towards our target. Within the Plan, this is referenced as the "1.5°C consistent model". Wherever possible, Barrie will leverage new technologies, partnerships and funding to accelerate action within each of the Big Moves. As science evolves, there may be a need to increase targets and efforts.

We acknowledge that our community's ability to reduce emissions is impacted by external forces, including higher levels of government. Where appropriate, the City of Barrie will advocate for the provincial and federal governments to implement climate-supportive policies to enable local climate action.

²⁶ Government of Canada. (2021). *Net-Zero Emissions by 2050*. Retrieved from https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/net-zero-emissions-2050.html

²⁷ Prime Minister of Canada. (2021). *Prime Minister Trudeau announces increased climate ambition*. Retrieved from https://pm.gc.ca/en/news/news-releases/2021/04/22/prime-minister-trudeau-announces-increased-climate-ambition

Plan Framework

Our plan contains a vision and principles, Big Moves with associated goals and strategies, and guidance for implementation. The following section provides an overview of the key elements of the plan's framework. Further details are provided in Parts 2 and 3 of the Plan.

Vision	Barrie's "big picture" for climate action.
Principles	Values to guide our path forward.
Big Moves	Four areas where we will focus our efforts.
Goals	What we hope to achieve within each Big Move.
Strategies	Concrete steps to reduce energy and emissions.
Implementation	How we will move this plan forward.

Vision

The Barrie community is taking an integrated, ambitious and action-oriented approach to climate action providing positive environmental, social, economic and health outcomes for all.

Principles

- There are economic benefits in pursuing climate action at the local level.
- Recognize and promote the inextricable link between the natural and built environments, climate change and our communities' health and wellbeing, and foster the health cobenefits of climate action.
- Pursue innovative solutions and an evidence-based approach to climate action.
- Educate and inspire residents and businesses to make positive environmental change, building on the City's leadership.
- Develop strategies that are equitable and enhance the quality of life for all residents.
- Benchmark against best practices and look for continuous improvement.
- Enable positive environmental actions amongst Barrie's residents.
- Advance Barrie's climate and energy goals in partnership with residents, organizations and businesses.

Big Moves, Goals, Strategies

Our plan outlines four 'Big Moves' - buildings, transportation, circular economy, natural environment and land use. Each Big Move includes a goal and supporting strategies, as outlined below.



Big Move: Buildings

- •Goal: Near zero emissions in new and existing building stock
- •Strategies:
- •Deep energy retrofit program
- Green development standard
- Energy management and benchmarking
- Solar generation
- District energy (feasibility study)
- Larger renewables (feasibility study)



Big Move: Transportation •Goal: Near zero emissions from transportation •Strategies:

- •Electric vehicle adoption
 - Active transportation
- Local transit options
- •GO Train use
- Car-sharing programs and networks



Big

•Goal: Waste Move: Circular Economy reduction through a circular economy

- •Strategies:
- Community sharing economy
- Phase-out of singleuse plastics
- Recovering energy
- Circular construction



Big Move: Natural Environment & Land-Use Planning

- •Goal: Liveable neighbourhoods that support energy efficiency, mixed-use, complete communities & protection of the natural environment.
- ·Strategies:
- Higher density, mixed-use developments
- Zero-emissions neighbourhood
- Local food
- Nature-based solutions

Part 2: Big Moves

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Barrie's Big Moves for Climate Action

Our Plan outlines four 'Big Moves' - buildings, transportation, circular economy, natural environment and land use. Each Big Move includes a goal and supporting strategies, as outlined below. The purpose of the Big Moves is to highlight the areas we – as a community – need to focus our collective efforts for significant energy and emissions reduction. Efforts will be required in each of the areas to achieve our goals. Our first two Big Moves – transportation and buildings – represent the largest sources of emissions in our community, demonstrating the immediate need to act in these areas. Our third Big Move looks at emissions from waste and highlights the City's Circular Economy Framework. The Circular Economy Framework has implications for energy and emissions and how we use, share and recycle goods and resources. Our final Big Move looks at the natural environment and land use, recognizing how land-use patterns influence behaviours and our abilities to reduce emissions.

How to Read this Section of the Plan

This section of the Plan (Part 2) focuses on the <u>"what"</u>. It outlines the <u>strategies</u> we need to reduce our energy use and emissions collectively. The following information is provided for each of the Big Moves:

- A description of the "Big Move" and a rationale for why it is included in the Plan
- A callout box, which highlights the percentage of emissions from the Big Move in 2018, and our goals for future reductions
- A list of the strategies to achieve each Big Move
- A table outlining the co-benefits of taking action and associated equity considerations

Further information is provided for each strategy, including:

- A description of the strategy
- An outline of the scope of the strategy (where applicable)
 - What is included and how far we need to go
- A selection of case studies from other municipalities, as applicable

Part 3 focuses on implementation – the "how" - and provides actionable next steps for moving this plan forward. The strategies outlined here are a starting point – there will be much work to do in the coming years to design business cases, undertake feasibility studies, identify resources and align efforts in order to implement the items identified below.

Big Move #1: Buildings

The Buildings Big Move sets an ambitious goal of reaching near-zero emissions in new and existing buildings across the community – this includes our homes, schools, businesses and workplaces. Increasing building efficiency is one of the most cost-effective and quickest ways to reduce a community's energy and emissions¹. How we operate and power, our buildings will

Big Move #1: Buildings

2018: Over 40% of emissions

Goal: Near Zero emissions in new and existing buildings

need to become more energy-efficient and rely more heavily on low-carbon technologies to meet the targets of this Plan.

As buildings account for more than 40% of our community-wide emissions - of which, 63% comes from the residential buildings - significantly reducing emissions from existing buildings and new developments is a priority. The Building Big Move includes **six key strategies** that consider energy conservation, energy-efficient technologies, renewable energy and energy distribution and storage.

Strategies:

- 1. Deep Energy Retrofit Program
- 2. Green Development Standard
- 3. Energy Management and Benchmarking
- 4. Solar Generation
- 5. District Energy (Pre-feasibility)
- 6. Larger Renewables (Pre-feasibility)

Co-Benefits

Creating more energy-efficient buildings has positive co-benefits, from increasing occupants' health and comfort to reducing operating costs. There is evidence that energy-efficient buildings result in lower health-related absenteeism and increased productivity². Renewable energy and energy storage systems can help offset the cost of using electricity during peak hours during the day and increase the resiliency of the community energy supply.

Designing for Equity

Ensure that retrofits, renewable energy and green homes are accessible to all residents. Provide targeted support for low-income residents and small businesses to access retrofit programs. Work with landlords to provide energy-efficient upgrades in rental units. Ensure green building principles are used in affordable housing. Incorporate an equity lens in pre-feasibility studies.

3

¹ Project Drawdown. (n.d). *Solutions: Sector Summary Buildings*. Retrieved from https://www.drawdown.org/sectors/buildings

² Ibid.

Strategy 1: Deep Energy Retrofit Program

Description: Development and implementation of a deep energy retrofit (DER) program for residential, institutional, and commercial buildings within the community.

A DER will target older, less efficient buildings first. Such a program would consider the overall

performance from the building envelope to technologies used to heat, cool, and ventilate indoor spaces to reduce energy use and emissions. The DER program will be a critical strategy to meet our reduction targets. The program's scope will be both comprehensive, including residential, institutional, and commercial buildings and all building types, and extensive, covering many buildings each year from the inception of the program to 2050. The DER program aims to retrofit 16 percent of our 105,000 residential buildings and 25 percent of ICI buildings by 2030 and 82 percent of all structures by 2050.

Target Participation

RETROFIT 16% OF
RESIDENTIAL BUILDINGS
BY 2030

RETROFIT 25% ICI BUILDINGS BY 2030

Additional considerations include:

- Providing inexpensive energy efficiency improvements, such as sealing air leaks for building airtightness.
- Prioritizing the adoption of heat pumps.
- Adding rooftop solar, heat pumps, and other technologies as appropriate, such as solar thermal for hot water.
- Encouraging the adoption of hybrid equipment to transition to zero-carbon technologies.
- Using local case studies to demonstrate successfully retrofit projects and payback period.

Case Study: Retrofit Halton Hills³

In 2020, the Town of Halton Hills began planning for its Retrofit Halton Hills pilot project, which aims to retrofit residential buildings in the community. The pilot program will see the deployment of a financing mechanism known as a Local Improvement Charge (LIC) to help homeowners access the upfront capital needed for home retrofits. The program offers low-interest loans that are repayable through property tax bills and stay with the property rather than with the owner. LIC financing has been used in Ontario for decades. An amendment to the legislation governing LICs came into effect in 2012, allowing municipalities to provide financing for home energy efficiency projects. As 22 percent of Halton Hill's emissions come from residential buildings, the program is expected to be an important part of meeting the Town's net-zero target by 2030.

Case Study: Parkdale Landing⁴

Completed in 2018, Parkdale Landing is a mixed-used supportive housing community in East Hamilton. The development was created through one of the largest Passive House retrofit projects in Canada. Originally built in the 1880s, the building had been left neglected in recent decades. The site was purchased by Indwell, a Christian charity that provides supportive

³Town of Halton Hills. (2020). *Retrofit Halton Hills*. Retrieved from https://www.haltonhills.ca/en/residents/retrofit-halton-hills.aspx

⁴ Invisij Architects Inc. (2018). *Parkdale Landing*. Retrieved from https://invizij.ca/project/1152/

housing. It was transformed through the retrofit project to create 57 affordable studio apartments, non-residential space for community programs and retail storefronts. The retrofit included adding exterior insulation, enlarging window openings to allow for greater solar heat gain, and installing triple-pane windows to maintain heat. As a result, the building's energy footprint was reduced by more than 50%, and the total heating load of the building is anticipated to be \$40/year for each apartment. By implementing passive house standards to its projects, Indwell is able to significantly curtail greenhouse gas emissions, while drastically reducing utility costs – helping to ensure long-term affordability for tenants.

A Deep Energy Retrofit Program has the potential to avoid over 100,000 tonnes of carbon from being emitted to the atmosphere each year by 2050. This is the equivalent of removing nearly 25,000 cars from our roads annually.

Strategy 2: Green Development Standard

Description: Develop and adopt a green development standard (GDS) for all new buildings, approaching zero emissions by 2035.

The GDS will apply to all building sectors throughout the community. While a GDS will be

voluntary, incentives and resources to encourage its adoption will be implemented. Enabling components, such as reduced permitting fees and application barriers, energy performance labelling, will be used to meet an ambitious adoption rate. By 2035, all new construction to meet the standards' higher tier requirements. The GDS will include absolute performance metrics, which consider energy and emission per square foot per year of a building and will based on a tiered system with increasing energy performance standards. This might include thermal energy demand intensity (TEDI), energy use intensity (EUI), and emission intensity.

Target Participation

ALL NEW BUILDINGS
APPROACH ZERO
EMISSIONS BY 2035

ALL NEW BUILDINGS ARE NET-ZERO BY 2050

The GDS will also consider buildings' full emission life cycle to reduce embodied carbon associated with new construction.

The development standard will include electric vehicle charging infrastructure and renewable energy-ready design (rooftop solar and district energy connection readiness).

Additional considerations include:

- Energy performance labelling to encourage increased voluntary adoption of higher tiers.
- Reviewing parking requirements in zoning bylaws to investigate a maximum parking standard – encouraging transit and active transportation.
- Encouraging green and cool roofs to reduce urban heat islands, reduce GHG emissions and contribute to energy savings.

Green Development Standards in Barrie's Official Plan

Barrie's new Official Plan commits to developing Green Development Standards in consultation with the building and construction industry. In the interim, all applications for an Official Plan Amendment, Zoning By-law Amendment, Plan of Subdivision, and/or Site Plan Approval are required to submit a Sustainable Development Report, outlining plans to:

- Provide a high level of efficiency in energy consumption to reduce greenhouse gas emissions.
- Maximize solar gains and be constructed in a manner that facilitates future solar energy installations.
- Include or facilitate future on-site renewable energy systems.
- Provide a high-level of efficiency in water consumption, including rainwater harvesting and grey water recirculation for irrigation purposes/
- Enhance indoor air quality.
- Contain or facilitate the future installation of plug-ins for electric vehicles.
- Use environmentally preferable building materials, high-renewable and recycled content building products, and certified sustainably harvested lumber.
- Prioritize local sourcing to reduce carbon footprint.
- Provide water efficient and drought resistant landscaping, which should include the use of native plants.
- Incorporate *Low Impact Development* and maximize permeable surfaces, including the provision of permeable driveways.
- Incorporate green roofs into building design.
- Reduce construction waste and divert construction waste from landfill.
- Design to connect amenity areas, open spaces and parks.
- Promote Energy Star qualified and LEED-certified development.

City of Barrie. (2021). *Official Plan 2051 Working Version September 23, 2021*. Retrieved from: https://www.buildingbarrie.ca/22277/widgets/90160/documents/66200

Case Study: Toronto Green Standard⁵

The Toronto Green Standard (TGS) sets sustainable design requirements for new private and City-owned developments. The TGS outlines air quality, energy efficiency, water efficiency, ecology, and solid waste sustainability requirements. The corresponding performance measures are tiered, with incentives for buildings that achieve higher tiers. Tier 1 sets a performance floor - its measures are a mandatory minimum for planning approvals. Developments that achieve the Tiers 2-4 performance measures are eligible for development charge refunds. The TGS is updated every four years. The requirements progressively increase over time to achieve net-zero emissions in new developments by 2030. Version 4 of the Standard was approved by Toronto City Council in July 2021, advancing sustainability requirements further. In addition to greater energy and GHG efficiency, this includes improving resiliency. Resilience can be

⁵ City of Toronto. (2021). *City Council approves bold strategy to reduce emissions from existing buildings to net zero by 2050, updates Toronto Green Standard*. Retrieved from https://www.toronto.ca/news/city-council-approves-bold-strategy-to-reduce-emissions-from-existing-buildings-to-net-zero-by-2050-updates-toronto-green-standard/

improved by reducing stormwater runoff and heat island impacts and promoting biodiversity with measures like green roofs, rain gardens, and the planting of native pollinator species. As homes and buildings account for 55 percent of GHG emissions in Toronto, the TGS is a key driver of the City's net-zero targets. The program has already resulted in 169,000 tonnes of avoided carbon dioxide emissions annually.

A Green Development Standard has the potential to avoid over 220,000 tonnes of carbon each year by 2050. This is the equivalent of removing nearly 50,000 cars from our roads annually.

Strategy 3: Energy Management and Benchmarking

Description: Advance energy management and benchmarking in industrial buildings by promoting and supporting existing programs.

Energy management and benchmarking are well-established practices that use engineering and economic principles to manage how buildings use energy in their heating and cooling, ventilation, power systems, lighting, building envelopes, as well as their industrial processes. Completion of a current conditions assessment of the industrial sector in Barrie will help to establish a baseline of present energy management practices being undertaken by the industrial sector and inform how the strategy should evolve. A key component will be to promote existing energy management programs throughout the ICI sectors.

Existing programs include:

- ENERGY STAR Portfolio Manager program offered through Natural Resources Canada, a benchmarking tool which allows users to monitor and optimize how energy is used in a facility.
- ISO 50001 Energy Management Standard, a voluntary standard that provides a structured approach to integrated energy efficiency principles into energy management and provides a framework for continuous energy performance improvements.

Promoting building commissioning and recommissioning initiatives that assess and optimize the performance of operational systems and mechanical equipment of buildings in the industrial sector, will also be included in the strategy. Enabling factors to consider, include:

- Requiring buildings to be recommissioned at the time of sale.
- Requiring a commissioning and recommissioning plan submitted with the building permit applications.

A building recommissioning program alone has the potential to avoid over 9,000 tonnes of carbon from being emitted to the atmosphere each year by 2050 in the industrial sector. This is the equivalent of removing nearly 2,000 cars from our roads annually.

Strategy 4: Solar Generation

Description: Develop and implement a rooftop and ground-mounted solar program across all sectors.

The solar photovoltaic (PV) program will be implemented across the community and will include both rooftop and ground-mounted installations. The business case and program design for the Deep Energy Retrofit Program will include a solar generation strategy for rooftop PV, though deployment of the two programs will be separate. The Green Development Standard will include consideration for building rooftop design that can accommodate solar generation.

Based on a preliminary analysis of the available rooftop space in the residential sector, a 5 percent target participation rate has been identified for 2030 and 15 percent in 2050. For commercial buildings, the target participation rate is 15 percent for 2030 and 40 percent by 2050.

For ground-mounted solar in the ICI sectors, 0.5 percent uptake by 2030 and 1.5 percent uptake by 2050 has been identified for the potential available space. Before moving to ground-mounted systems, solar generation will focus on rooftops (all building types). Ground-mounted systems will be

Target Participation

ELIGIBLE RESIDENTIAL
ROOFTOPS HAVE 5%
COVERAGE OF SOLAR
PANELS BY 2030 AND 15%
BY 2050.

considered over paved areas (i.e., parking lots) rather than greenspaces and include electric vehicle charging where appropriate.

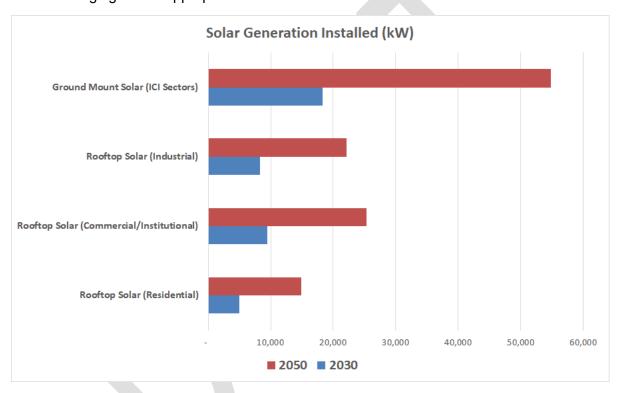


Figure 1: Rooftop and ground mount solar generation potential based on a preliminary analysis of available space in Barrie

Case Study: Halifax Solar City⁶

In 2016, Halifax launched the Solar City Program to make it easier for property owners to explore, install, and finance a solar energy system. With free guidance from the city's Solar City Administrator, property owners can select an eligible technology and a contractor of their choice. The Administrator helps provide a level of review and due diligence to ensure the proposed system meets industry standards and will provide energy and cost savings over its

⁶ Halifax Regional Council. (2021). *Halifax Solar City Program Update and Future Program Recommendation*. Retrieved from https://www.halifax.ca/sites/default/files/documents/city-hall/regional-council/210720rc1121.pdf

lifetime. Solar City then provides financing as a charge to the property instead of the individual (like a Local Improvement Charge) on flexible terms at a fixed interest rate over ten years. This further reduces barriers as no personal credit checks are needed. If a participant sells their property, the charge is automatically passed on to the next property owner. This streamlined process has contributed to the growth of a competitive local solar industry by reducing the cost for contractors, leading to a steady decline in installed unit costs. Over 550 agreements have been executed to date, reducing the community's annual GHG emissions by approximately 4,120 tonnes.

A Solar Generation Program has the potential to prevent over 3,500 tonnes of carbon from being emitted to the atmosphere each year by 2050. This is the equivalent of removing nearly 800 cars from our roads annually.

Strategy 5: District Energy (Pre-feasibility Study)

Description: Undertake a pre-feasibility study and business case for a district energy system within Barrie.

District energy systems (DES) have a central plant(s) that use pipes to supply heating, cooling and/or power to multiple connected buildings. Heating and cooling are centralized, but the thermostats remain independent within each building. District energy systems can use various fuel types, such as natural gas, oil, biomass, geothermal, large-scale solar thermal, and waste-to-energy. They can also capture and distribute excess heat from industrial processes and power generation. Buildings that produce excess energy ("anchor tenants") can redistribute energy to nearby buildings. Anchor tenants could include hospitals, hotels, large housing complexes, swimming pools, libraries, universities, or college campuses with significant demand for power.

District energy systems are beneficial from an energy perspective because they replace individual small boilers and chillers with a centralized plant that is more efficient.

The City of Barrie should explore the pre-feasibility of implementing a low-carbon fuel DES. Areas within the existing built environment (public, ICI sector, and multi-residential properties) around potential anchor tenants and new neighbourhoods and developments where the density of thermal energy needed is enough to support the costs to create the DES infrastructure should be considered. In general, a DES is more favourable in areas with:

- High development and heating density support the business case for a cost-effective DES solution.
- The central plant and the buildings it serves should be close enough to one another.
- The shorter the distance the energy has to travel, the lower the costs.
- High demand for heating or cooling is within the development area will create a more efficient system.

District heating systems have several preconditions, including:

 A stable and reliable energy baseload demand. District heating systems need to be located in high-density development areas (i.e., technology parks, new neighbourhoods, multi-unit residential, or near hospitals). A mix of building types, including anchor client(s) which provide a consistent energy baseload.

The viability of DES implementation is improved by:

- A favourable financial return on investment to the project owner and favourable costsaving opportunity to end clients.
- Policy support to actively encourage DES development and uptake. For example, the Green Development Standard can stipulate expected energy performance for new developments. Policies can also support the development of a DES for all new buildings or retrofits to buildings larger than 1000 m² be required to incorporate features that facilitate DE connection in the future.

The pre-feasibility study would explore the most appropriate locations for DES, potential buildings for connection, and various building owners' motivations to be part of the project. This step would also include a review of the technical options, including fuel types and generation options, configuration of the system and network, and a high-level assessment of the financial viability of the initiative.

A District Energy System has the potential to prevent 2,500 tonnes of carbon from being emitted into the atmosphere each year. This is the equivalent of removing nearly 550 cars from our roads annually.

Case Study: District Energy in Ottawa^{7,8}

A 34-acre waterfront community in Ottawa that is set to become the National Capital Region's first carbon-neutral community. Situated along the Ottawa River, Zibi is developing its own District Energy (DE) system that will provide all the heating and cooling needs of residents on a net-zero carbon basis. This will be achieved by recovering waste industrial heat from the local Kruger Products plant for heating and leveraging the Ottawa River for cooling. All buildings will be interconnected through heating and cooling loop. The federal government and the Federation of Canadian Municipalities (FCM) are supporting the development of the DE system with an investment of \$23 million through FCM's Green Municipal Fund. In addition to being carbon-neutral, the planned DE system will provide residents with increased energy reliability, comfort and convenience through temperature control using a mobile application, and reduced overall costs including those associated with ongoing operation and infrastructure maintenance.

Case Study: Markham District Energy⁹

In 2000, the City of Markham started Markham District Energy (MDE), its own thermal energy utility, to improve local energy resiliency. MDE's thermal grid systems distribute hot/chilled water to connected buildings to provide heating and cooling services, independent of the energy grid. Currently two Markham districts are served by MDE: the city's downtown core known as

⁷ DCN-JOC News Services, Daily Commercial News. (2021). *Funding helps create district energy system for Ottawa Gatineau net-zero development*. Retrieved from

https://canada.constructconnect.com/dcn/news/government/2021/04/funding-helps-create-district-energy-system-for-ottawa-gatineau-net-zero-development

⁸ Zibi. (n.d). *District Energy System*. Retrieved from https://zibi.ca/zcu/

⁹ Markham District Energy Inc. (2021). *Who we are*. Retrieved from https://www.markhamdistrictenergy.com/who-we-are/

Markham Centre, and Cornell Centre which contains Markham Stouffville Hospital. To date, this represents over 8 million square feet of buildings that use MDE service. Connecting to MDE allows buildings to avoid having their own boilers and chillers on site, which reduces maintenance costs, provides greater flexibility in architectural design, and increases energy efficiency. MDE has flexibility to use cleaner fuels such as biomass, which individual buildings could not pursue. These efficiencies have enabled MDE to reduce GHG emissions in the districts it serves by 35% and to attract investments from companies like IBM and Bell that decided to locate job-creating facilities in Markham. In the event of a future emergency that disables the electricity grid, Markham now has the capability to maintain power and heating to over 4 million square feet of selected buildings, including its regional hospital, two high schools, and a community centre.

Case Study: Toronto Deep Lake Water Cooling¹⁰

In 2004, the City of Toronto and Enwave Energy launched the world's largest deep lake water cooling (DLWC) system. The system draws cold water from the bottom of Lake Ontario and pumps this water through a closed loop network of pipes to provide cooling to downtown buildings. Toronto's DLWC originally only had a handful of customers, but now over 100 buildings, ranging from City Hall, Toronto General Hospital, Scotiabank Arena, and several other commercial and residential buildings have opted to connect to the DLWC because of the efficiencies and cost savings that it provides. DLWC can connect multiple buildings on the same network of infrastructure, rather than each building conducting and managing their own retrofits, and reduces electricity use by 80%. This has resulted in Toronto's DLWC displacing 55 MW of energy a year from Toronto's electricity grid – which is enough to power eight hospitals. The system is now at capacity, and in 2019 Enwave announced a \$100 million system expansion with \$10 million in federal funding to increase capacity by 60%. This investment will make the City of Toronto more resilient.

Strategy 6: Larger Renewables (Pre-feasibility Study)

Description: Explore the opportunity for larger renewable energy and energy storage infrastructure projects through a pre-feasibility study

and business case.

A large-scale renewable energy project was identified as an opportunity to reduce emissions as well as create greater energy security in the community. As the city moves to electrify the building and transportation sector, the demand on the electricity grid will increase. It is expected that in Ontario, due to the decommissioning of the Pickering nuclear power plant slated for 2024 and an increasing demand for electricity, emissions from the electricity grid will intensify. This is because power generation will rely more heavily on natural gas in the future. The pre-feasibility of a large-scale renewable energy plant should be considered to ensure that electrification leads to emission reduction in our community. This would be in addition to the district energy system and the solar generation on private property (both included above).

A more extensive pre-feasibility analysis of potential renewable energy projects and consultation is required to identify what would work best in Barrie. Large scale renewable energy projects may include wind turbines, deep lake cooling, geothermal, bioenergy, and solar energy. A large-scale solar plant is likely to be the most feasible for the community. The availability of land, and a strong need to ensure that a large-scale project is not placed on current greenfield areas, or competes with natural assets and infrastructure, was identified as a priority for the community and a potential limiting for a project of this kind. Therefore, opportunities for larger renewable projects should be monitored over time as technology continues to evolve.

Energy Storage

Renewable energy solutions, like wind and solar, are intermittent and vary depending on the time of day and season. Distributed energy storage solutions (batteries) can store small or large amounts of energy to be used later when needed, reducing some of this variability. Energy storage can also help to avoid purchasing energy from the grid at peak times and which also corresponds to periods when emissions are greater due to the reliance on natural gas. Batteries are becoming more affordable and allow buildings to achieve energy independence as part of a modernized energy system, reducing the pressure on the grid¹. Energy storage can also help with resiliency – providing a reliable source of power during outages.

Source: Project Drawdown. (n.d).

Solutions: Distributed Energy Storage.
Retrieved from

https://www.drawdown.org/solutions/distributed-energy-storage

Other considerations include:

- Communicating to the public and partners about the pre-feasibility study process, rationale, potential benefits and results.
- Exploring opportunities to partner with neighbouring municipalities.

Case Study: Sault Ste Marie Alternative Energy Capital of North America 10

In 2008, in recognition of its growing renewable energy assets, Sault Ste Marie declared its intention to be the Alternative Energy Capital of North America. Sault Ste Marie has strategically pursued leadership in renewables to counteract the decline of jobs in steelmaking – the city's traditional industry. The city now produces more than 1.5x its energy needs completely from renewable sources, making it a substantial net exporter of clean energy. Its local energy economy includes hydro (70% of power), wind (24% of power), and solar (4% of power), as well as industrial cogeneration at the local steel plant and alternative energy manufacturing. The Prince Wind Farm alone – one of the largest wind farms in Canada, consisting of 126 turbines – can generate enough electricity to power 60,000 homes. Furthermore, Sault Ste Marie has started converting its gas-powered fleet into electric vehicles and is working to become one of the first Canadian cities to deploy a community-scale Smart Grid.

Case Study: Newmarket Energy Storage¹¹

In 2019, a new battery energy storage facility was completed and went online in Newmarket, Ontario. The system draws power from the local grid when demand and costs for energy are lowest (e.g., overnight) and can store this power until needed. Typically, when demand is extremely high (e.g., heat waves), peaking plants – which are power plants that only run during peak times – would have to be used. Running peaking plans can be very costly. With the battery energy storage facility, the low-cost electricity stored can be fed into the grid during peak times. This energy savings not only leads to a significant decrease in energy rates for residents over time but also provides greater power reliability. The current system has a capacity of four megawatts or 16 megawatt-hours, which can serve 22,000 households during peak periods. In the future, the storage system can connect directly to local neighbourhoods and hospitals to further strengthen local resiliency.

Wilson Centre, Person, Place, and Policy. (2017). Sault Ste. Marie's Alternative Energy Transformation: A Canadian City Thinking Outside the "Grid". Retrieved from https://www.wilsoncenter.org/sites/default/files/media/documents/misc/person_place_policy_-sault_ste. marie.pdf

¹¹ York Region. (2019). *Tesla battery technology helping to power Newmarket.* Retrieved from https://www.yorkregion.com/news-story/9639749-tesla-battery-technology-helping-to-power-newmarket/

Big Move #2: Transportation

Our Plan has set an ambitious goal of reaching nearzero emissions from the transportation sector by 2050. Achieving this goal will significantly reduce the community's overall emissions and help meet our emission reduction target. The Transportation Big Move includes **five key strategies** that prioritize a shift away from single-occupancy, fossil-fuel-powered vehicles to other modes of travel. Strategies align with Big Move 2: Transportation

In 2018, the transportation sector accounted for 56% of Barrie's overall emissions. Of which 98% was personal vehicles.

Goal: Near zero emissions from transportation

the Transportation Master Plan's prioritization of non-auto modes and ambitious goals to significantly shift travel within the community away from personal vehicles and increase active transportation and transit uptake.

Our strategies are listed in priority order according to the "Transport Hierarchy", which first aims to reduce the overall need to travel, followed by shifting to low or no-emission forms of transportation¹².

Strategies:

- 7. Active Travel & Complete Streets
- 8. Local Transit Options
- 9. GO Transit Use
- 10. Electric Vehicle Adoption
- 11. Car-Sharing

Co-Benefits

Transitioning away from combustion engine vehicles has the added benefit of making the air we breathe in our community cleaner and healthier for everyone. Walking and cycling are beneficial for health and wellness in general.

Designing for Equity

Ensuring equitable connections, such that everyone has access to connected transportation, including under-served neighbourhoods. Conducting a community audit of accessibility and safety related to active transportation, walkability, bikeability, and transit to identify priority projects to improve active transportation. This would be especially important in especially in lower socioeconomic status neighbourhoods. Ensure all residents are able to access EV charging stations.

Strategy 7: Active Travel & Complete Streets

Description: Increase active travel by planning for complete streets and providing a network of safe infrastructure to promote walking, cycling and rolling.

One way to support active travel is through designing and implementing complete streets. Complete streets are designed to be accessible and safe for all road users, including

¹² Institution of Mechanical Engineers. (2021). *The Transport Hierarchy: A Cross-Modal Strategy to Deliver a Sustainable Transport System*. Retrieved from https://imeche.org/policy-and-press/reports/detail/the-transport-hierarchy-a-cross-modal-strategy-to-deliver-a-sustainable-transport-system

pedestrians, cyclists, and persons living with disabilities. Barrie's new Official Plan indicates that all streets shall be designed to be complete streets, with an emphasis on supporting active transportation comfort and safety.

Active travel can also be supported by:

- Incorporating complete streets principles in existing neighbourhoods and during road reconstruction projects.
- Designing an urban form that incorporates mixed land uses and promotes active transportation.
- Updating City standards to ensure active transportation routes are safe, secure and comfortable for all ages and abilities.
- Updating zoning bylaws to ensure routes are direct, continuous and well-connected across the city.
- Including active transportation infrastructure in the City's infrastructure standards, and in all new road construction and reconstruction projects.
- Ensuring bike racks and other end-of-trip amenities are available at key destinations.
- Requiring developers to support or implement enhancements to the active transportation network, bicycle parking requirements, and transit subsidies as part of their approval process.
- Encouraging the adoption of the City's transportation demand management (TDM) guidelines for new development.
- Working with major employers in Barrie to encourage active transportation to commuters.
- Better linking the City's active transportation network to public and regional transit hubs.
- Promoting active school travel programs.
- Communicating and increasing awareness of the health benefits of active transportation.
- Ensuring winter maintenance of active transportation infrastructure.
- Ensuring development charges adequately account for costs to support implementation of complete streets and related active transportation infrastructure.
- Developing a branded signage and wayfinding strategy for on and off-road active transportation.

Case Study: Complete Streets Kitchener¹³

In 2019, the City of Kitchener approved Complete Streets Kitchener: Streets for All, to create guidelines for approaching every roadway (re)construction as an opportunity to improve the design and functionality of a street. The guidelines include design goals to prioritize (design for safety, improve transportation choices, advance sustainability) and visually demonstrate how Complete Streets can be applied to each of its four street types (local streets, minor collector streets, major collector streets, and arterial streets). The guidelines also provide an overview of various design elements that can be applied to better support different street uses and functions, including pedestrian travel, cycling, transit, motor vehicle use, climate action and

¹³ City of Kitchener. (2019). Complete Streets Kitchener: Streets for All Community Edition. Retrieved from https://www.kitchener.ca/en/resourcesGeneral/Documents/DSD Transport Complete Streets Kitchener
Community Edition.pdf

urban forestry. Lastly, the guidelines provide an implementation plan and a scorecard that can be used by City Staff, elected officials, and residents to evaluate how well the guidelines are being incorporated into Kitchener's construction projects. By implementing Complete Streets Kitchener, Kitchener envisions that every street can be made safe, comfortable, and convenient for all users.

Strategy 8: Local Transit Options

Description: Advance local transit options for all users as a viable alternative to personal automobile use.

Single occupancy vehicles account for a significant amount of GHG emissions in Barrie. Increasing the uptake of transit can lead to multiple benefits, including emissions reduction, reduced traffic congestion, fewer accidents, and reduced air pollution. Public transit services also enhance equity by providing transportation options to those who cannot drive. Prepandemic, daily ridership on Barrie Transit was 13,000. A ridership of 76,900 per day is expected by 2041¹⁴.

Barrie could successfully implement several transit initiatives to increase transit ridership, such as increasing bus frequencies, reduced transit fares, and special and express services. Additional transit initiatives could include:

- Designated transit priority measures.
- Ensuring connectivity between transit systems (public transit, active transit, vehicles) and neighbouring regions for all users.
- Designing an urban form that incorporates mixed land uses and promotes transit use (transit-oriented development).
- Integrating active transportation and ride-sharing with transit to help support first and last-mile connections.
- Educating first-time transit users (e.g., youth, newcomers) on system use and navigation.
- Providing free transit for priority users.
- Increasing parking fees to be higher than transit fares.
- Marketing and coordination with large employers and employment zones.
- Expanding transit routes and increase the frequency of service, as outlined in Barrie's Transportation Master Plan.
- Providing express services to significant landmarks and prioritizing transit growth in the secondary plan areas.
- Developing and implementing a program to provide seating and weather protection at all transit stops.
- Communicating and increasing awareness of the health benefits of public transportation.

¹⁴ WSP. (2019). Transportation Master Plan: Transit Technical Memorandum. Retrieved from https://www.barrie.ca/City%20Hall/Planning-and-Development/Engineering-Resources/Documents/Transportation-Master-Plan/Appendices/BarrieTMPAppA_Transit_20190418.pdf

Case Study: Kingston Free Transit for Youth 15,16

In 2018, the Federation of Canadian Municipalities (FCM's) Sustainable Communities Awards recognized Kingston's Transit High School Bus Pass Project. The program provided free bus passes to grade 9 students directly at their schools. The key pillar of the program was taking grade 9 students on a bus to familiarize them with how the transit system works and teach them about the environmental and cost benefits of public transit. The program taught students how using transit can increase their freedom to travel to other activities. The program resulted in a 20-fold increase in high school ridership after six years. By initiating students in grade 9, students would take the bus more often outside of school and would be more inclined to take transit as paying customers after graduation. This has benefited the community by giving students a life skill, reducing emissions associated with parents driving students, and increasing transit riders during off-peak hours. Due to the success of this high-school program, in 2017, Kingston Transit also eliminated fares for all children aged 0-14.

Strategy 9: GO Transit Use

Description: Work with Metrolinx to increase GO Train use and provide seamless connections for users in Barrie.

Under the Regional Express Rail (RER) program, Metrolinx will be upgrading rail service along the Barrie line to two-way, all-day rail service during peak and non-peak periods. This service will operate along the entire length of the Barrie line from Toronto's Union Station to the Allandale Waterfront GO Station, providing options for commuters coming into and leaving Barrie. The City's Transportation Master Plan recommends coordinating the Barrie Transit and GO Transit schedules to encourage transit use to and from the GO stations. The City is currently in the process of moving its Transit Hub (terminal) to share space with an existing GO Train location, making it more convenient for riders.

Other initiatives to improve GO Transit use may include:

- Implement additional measures to support the 'first/last mile' such as connected active transportation routes, ride share or on-demand services and electric, micro-mobility.
 - o Consider building on the successful Transit ON Demand pilot, launched in 2020.
- Working with the province to support more frequent service and expanded hours of availability outside of usual business hours (consider commuters coming into Barrie and leaving Barrie).

¹⁵ Federation of Canadian Municipalities. (2018). *Case study: Kingston gets more youth riding public transit.* Retrieved from https://fcm.ca/en/resources/gmf/case-study-kingston-gets-more-youth-riding-public-transit

¹⁶ Clean 50. (2021). The "Kingston Model" for Youth Transit Programming - the benefit public transit can have on our youth, schools and the community. Retrieved from https://clean50.com/the-kingston-model-for-youth-transit-programming-the-benefits-public-transit-can-have-on-our-youth-schools-and-the-community/

Strategy 10: Electric Vehicle Adoption

Description: Advance the adoption of electric vehicles by creating an EV-ready city.

The adoption of electric and low emission vehicles (EVs) will play a critical role in driving emissions down in the transportation sector and reaching our goal of near-zero emissions. The importance of encouraging residents and businesses in the community to transition to low-carbon emission vehicles as soon as possible is critical. The vehicles purchased today will still be on the roads in 2030 and some in 2040. It will be vitally important to front-load our efforts immediately to meet the goals outlined in our Plan.

Encouraging the adoption of electric vehicles requires action in four key areas – charging infrastructure, education and awareness, price parity and the availability of vehicles. While price parity and the supply of EVs are beyond the community's control, there is work to be done locally around charging infrastructure and consumer education.

Actions to make Barrie an EV-ready city include:

- Enabling residents to charge EVs at home (where the majority of charging takes place today)
 - Including EV charging in the Green Development Standard and Deep Energy Retrofit program.
 - Current GDS guidelines require new developments to contain or facilitate the future installation of plug-ins for electric vehicles.

There are three levels of **EV charging stations** available on the market today. Level 1 – a regular wall socket – is the slowest form of charging and will provide 8km of range per hour of charging. For most drivers, this will be sufficient for their daily commute or errands. Level 2 – known as "destination" or "opportunity" charging – provides 30km of range with one hour of charging. Level 3 fast chargers – provide 250km of range per hour of charging and are known as the "gas station replacements".

All three levels of charging stations are beneficial in creating a local network, while supporting the use of EVs beyond the city limits.

Source: Plug'n Drive - Electric Cars. (n.d). Charge My Car, A Plug'n Drive Initiative: Home Charging. Retrieved from https://www.plugndrive.ca/guide-ev-charging/

- Encourage multi-use residential buildings to provide charging stations for owners and renters. Consider power management systems which share charging capacity amongst multiple parking spaces and allow for future growth.
- Provide alternatives (i.e., public level 2 and 3 chargers) for those unable to charge at home.
- Enabling residents to charge EVs around the city
 - Installing EV charging stations on all City-owned properties.
 - Creating preferred parking spots and reducing fees for low emission vehicles in municipal parking lots.
 - Encouraging employers, institutional and commercial buildings to install charging infrastructure for staff and patrons.
- Leading by example
 - Accelerating the electrification of the City's vehicle fleet.
 - Advocating for EV-ready housing within the Ontario Building Code.
 - o Encouraging commercial and institutional fleets to adopt EVs.

- Advocating other levels of government to increase rebate programs to make EVs as affordable as combustion engine vehicles.
- Advocating for ending the sale of new conventional gasoline/diesel cars.
- Educating the public EV
 - Dispelling myths around EVs.
 - o Increasing awareness of and support to access financial supports for EVs.

Switching to electric vehicles has the potential to prevent nearly 150,000 tonnes of carbon from being emitted to the atmosphere by 2030 and 800,000 tonnes by 205017. This is the equivalent of removing over 30,000 cars from our roads each year by 2030 and 170,000 each year by 2050.

Case Study: City of Edmonton's Electric Vehicle Strategy^{18,19}

In 2018, the City of Edmonton approved a five-year Electric Vehicle Strategy with the goal of becoming an EV-ready city and accelerating the adoption of EVs in Edmonton. In developing the strategy, the City conducted stakeholder research to understand the public's barriers to owning and driving electric vehicles. As a result, Edmonton's Electric Vehicle Strategy focuses on addressing the most cited barriers, such as purchase price, concerns about driving range, charging station availability, and a general low level of public familiarity with EVs. The strategy includes public education and marketing activities, financial incentives, and City leadership through electrifying the municipal fleet and operating public charging stations at municipal facilities. Since approving the strategy, the number of EVs in Edmonton has more than doubled, from 379 in 2017 to 782 in 2019, and in 2020 the City renewed its popular rebate for homes and businesses that install EV charging stations, adding \$300,000 in funding. Through this strategy, the City of Edmonton projects it will avoid at least 600,000 tonnes of GHG emissions by 2040, while improving its air quality and energy resiliency, and reducing respiratory issues and urban noise.

Strategy 11: Car-Sharing

Description: Promote and support existing car-sharing programs and networks to reduce the reliance on single occupancy gasoline vehicles.

Barrie's new Official Plan calls for supporting carpooling and ridesharing programs by establishing standards to be incorporated into new development; identifying opportunities for carpool parking and coordination areas; and, supporting parking for carpool, car share, and zero emission vehicles through preferential designated parking spots and/or reduced parking fees, as appropriate. Car-sharing can also be encouraged through:

¹⁷ Note, the total emission reduction potential decreases as the share of electric vehicles increases over time.

¹⁸ Solar Alberta, (2020). *Charging Up! Edmonton's Electric Vehicle Strategy*. Retrieved from https://solaralberta.ca/wp-content/uploads/2020/10/City-of-Edmonton-EV-Strategy.pdf

¹⁹ City of Edmonton. (2018). *Edmonton's Electric Vehicle Strategy*. Retrieved from https://www.edmonton.ca/city_government/city_vision_and_strategic_plan/electric-vehicle-strategy

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- Advocating that the provincial government create high-occupancy vehicle lanes on Highway 400, prioritizing high occupancy and single-occupancy, low carbon emission vehicles.
- Investing in co-working spaces locally as an alternative to commuting.
- Encouraging major employers to join existing car-sharing networks.
- Developing guides for partners/businesses to support the implementation and uptake of car-sharing programs.
- Considering access and a tiered fee model to support use amongst low socioeconomic neighbourhoods.

Switching to alternative modes of transportation has the potential to avoid nearly 80,000 tonnes of carbon from being emitted to the atmosphere by 2030 and 24,000 tonnes by 205020. This is equivalent to nearly 18,000 cars from our roads annually by 2030 and over 5,000 each year by 2050.

Case Study: City of London, UK Parking Fees based on emissions^{21,22}

In 2018, the City of London introduced emissions-based parking fees for on-street parking, which charges fees based on the vehicle's emissions, fuel type, and age. Environmentally friendly vehicles, such as electric and hybrid vehicles, pay a lesser fee, while newer fossil-fuel vehicles pay a standard price. The most polluting vehicles are charged a higher fee. The emission-based parking fees are paid for on the RingGo mobile app, automatically calculating the appropriate charge based on the vehicle registration. This was not an issue as 98% of municipal parking was already paid for through mobile phones. The app informed motorists each time they parked about the impact of their vehicle and prompted them to consider alternative transport where possible. The program saw an immediate drop in parking sessions from the most polluting vehicles (pre-2015 diesel vehicles and pre-2005 petrol vehicles). In contrast, electric and hybrid vehicles have increased over time.

²⁰ Note, the total emission reduction potential decreases as the share of electric vehicles increases over time.

²¹ Fleet News. (2018). *City of London introduces emissions-based parking charges*. Retrieved from https://www.fleetnews.co.uk/news/car-industry-news/2018/08/15/city-of-london-introduces-emissions-based-parking-charges

ParkNow Group (n.d). PARK NOW Group can help Councils make a positive impact in maintaining air quality. Retrieved from https://fr.park-now.com/wp-content/uploads/sites/4/2020/08/PN-LONDON-CASE_STUDY-BROCHURE-INTERACTIVE-compressed.pdf

Big Move #3: Circular Economy

Our Plan recommends reducing waste-related emissions through a circular economy approach. Within a circular economy, "waste" is viewed as a resource and is reintegrated into the economy. Such an economy eliminates waste and pollution, circulates products and materials, and helps to regenerates nature.

By encouraging a more circular economy in the community, the waste diverted from landfills will be reduced. The target participation rate for waste diversion from landfill is a 60 percent reduction by 2030 and an 80 percent reduction by 2050.

Big Move #3: Circular Economy

In 2018, emissions from Barrie's landfill site made up 2% of the community's emissions.

Goal: Waste reduction through a circular economy.

Strategies:

- 12. Community sharing economy
- 13. Phase-out of single-use plastics
- 14. Recovering energy
- 15. Circular construction

Co-Benefits	Designing for Equity
Moving towards a circular economy makes better use of our planet's finite resources, protects our natural environment and preserves landfill space. Reducing pollution supports human health and biodiversity. A circular economy also supports small businesses and local jobs.	There is an opportunity to include those most vulnerable to climate change in the transition to a new economy. Involving vulnerable groups and small businesses in training can help support their involvement in reuse and repair.

Barrie's Circular Economy Framework

Barrie is currently developing a Circular Economy Framework. The framework will encourage reuse, recycling, responsible consumption, and recovery actions to minimize waste generation and associated emissions. The strategy identifies four pillars as a framework for influencing a circular economy approach in Barrie – reuse, recycle, consume and recover.



Our Community Energy and Emissions Reduction Plan is meant to align with the goals of the circular economy framework, while emphasizing the actions most likely to lead to emissions reductions. Both the plan and the framework should be read and implemented in tandem with one another.

Strategy 12: Community Sharing Economy

Description: Strengthening the Community Sharing Economy includes identifying events and online platforms for swap, share and repair events, promoting innovation and experimentation with circular initiatives and support and the reduction and phase-out of single-use plastics.

This might include, for example, the development of a community bike share program or a community hub with tools and expertise to fix items and workshops to share knowledge. Promoting experimentation in the reuse of materials, for example, through upcycling textiles collected in the community is another way to build a circular economy. Producing, consuming and disposing of new products costs energy and emits GHG emissions. Some estimates

indicate that, together, these processes account for up to two-thirds of global emissions²³. The sharing economy can help to use goods more efficiently and reduce emissions.

Barrie's Circular Economy Framework will:

- Support initiatives that actively promote the circular economy through share, repair and reuse events and programs.
- Incorporate circular economy strategies to inspire innovation and experimentation with circular initiatives.
- Promote activities that support a sharing economy and establish partnerships with internal and external stakeholders.

Strategy 13: Phase-Out Single-Use Plastics

Description: Supporting the reduction and phase-out of single-use plastics through promotion and education strategies and voluntary bans at City facilities and permitted events.

In addition to being a source of pollution – ending up in our environment, waters and landfills – plastics produce emissions throughout their lifecycle. More than 99% of plastics are made from fossil fuels, and emissions are produced during extraction, transport, refining, manufacturing and disposal²⁴. The majority of these emissions occur outside of Barrie. However, the importance of reducing single-use plastics cannot be understated from a broader environmental protection lens.

Barrie's Circular Economy Framework will support the reduction and phasing out of single-use plastic items. This might also include a public awareness/education campaign on the waste management system and the importance of a circular economy. Other supporting actions include:

- Expanding recycling programs.
- · Minimizing waste generation and maximize waste diversion opportunities at all Cityowned facilities.

Strategy 14: Recovering Energy

Description: Recovering energy and realizing the value of resources by minimizing GHG emissions and maximizing energy recovery opportunities from waste management activities.

Barrie's Circular Economy Framework will:

- Recover energy generated from waste disposal and waste processing.
- Minimize greenhouse gas emissions from waste management activities.

²³ European Environment Agency. (2020). Cutting greenhouse gas emissions through circular economy actions in the buildings sector. Retrieved from https://www.eea.europa.eu/themes/climate/cuttinggreenhouse-gas-emissions-through/cutting-greenhouse-gas-emissions-through

24 Columbia Climate School. (2020). *More Plastic Is On the Way: What It Means for Climate Change.*

Retrieved from https://news.climate.columbia.edu/2020/02/20/plastic-production-climate-change/

Strategy 15: Circular Construction

Description: Circular construction through the investigation and development of tools supporting low carbon development. The Green Development Standard should include considerations for circular construction.

Barrie's Circular Economy Framework will:

- Encourage reuse and recycling of construction and demolition (C&D) waste.
- Advocate for updating regulations related to construction and demolition waste through municipal waste organizations and investigating the pre-feasibility of including innovations for the reduction of GHG emissions as a deliverable in procurement documents for waste collection programs.

Case Study: Vancouver Green Demolition By-law²⁵

In 2014, the City of Vancouver enacted the Green Demolition By-law, which established that at least 75% (by weight) of demolition waste from pre-1940 homes must be recycled or reused. This was in response to the finding that construction and demolition (C&D) waste represented more than 40% of total materials disposed of in Vancouver. Contractors must submit green demolition compliance reports that show where materials are sent; recycling, for example, must be sent to Metro Vancouver licensed facilities. Between 2014 and 2018, the bylaw resulted in 86% of waste from pre-1940 home demolitions recycled or reused, almost double the typical rate. Due to this success, Vancouver City Council has committed to expanding the bylaw requirements to newer homes incrementally over time due to this success. Since 2019, the bylaw has expanded to include pre-1950 homes, capturing 70% of residential homes and diverting about 18,000 tonnes of materials annually. A deconstruction requirement has also been added to the bylaw, mandating that at least three metric tonnes of materials must be salvaged from pre-1910 and heritage-listed homes. As a result, 20-30% of the deconstructed homes are reused in local construction and furniture making, which has helped grow the local downstream market and salvage industry.

Diverting waste from landfill has the potential to prevent nearly 25,000 tonnes of carbon from being emitted into the atmosphere each year. This is the equivalent of removing nearly 5,500 cars from our roads each year.

²⁵ City of Vancouver. (2018). *Green Demolition By-law Update*. Retrieved from https://council.vancouver.ca/20180516/documents/pspc2c.pdf

Big Move #4: Natural Environment & Land Use

How communities are designed and operate can play a significant role in reducing emissions while also improving the quality of life for residents. High-density and mixed-used development can reduce the energy required to power our buildings and lessen the commuting time required to move around our city.

Big Move #4: Natural Environment & Land Use

Goal: Livable neighbourhoods that support energy efficiency, mixeduse, complete communities & protection of the natural environment.

Promoting local food options supports our businesses

and shortens supply chains needed to transport goods from other places. Creating a zeroemission neighbourhood has been identified as a demonstration project to show how our community and its neighbourhoods can look and function in the future.

Achieving net-zero emissions by 2050 will require reducing the emissions we generate to the fullest extent possible. Recognizing that, as our emissions come closer to zero, there will be areas of our community where reductions are more challenging or not possible to bring to zero. Once we reach this point, we will need to offset emissions and drawdown carbon from the atmosphere. Our Plan considers the protection and expansion of natural assets that sequester carbon from the atmosphere and considers how to support further advancement of nature-based solutions into our future.

Strategies:

- 16. Higher density, mixed-use developments
- 17. Zero-emissions neighbourhood
- 18. Local food
- 19. Nature-based solutions

Co-Benefits Designing for Equity Complete communities offer Individuals from all levels of socioeconomic status should residents many benefits. Active have access to the benefits of complete communities – transportation options and local including access to active transportation, transit, green space and healthy food. There is a need to promote food help to promote physical health. Access to greenspace equitable access to natural environments and the provides climate resilience, benefits they provide. A future zero-emissions ecosystem services and overall neighbourhood should include affordable housing human health and wellbeing. options for people of all ages and socioeconomic statuses.

Strategy 16: High Density, Mixed-Use Development

Description: Create higher density, mixed-use developments, fostering complete communities.

High-density, mix-use development enables residents to live, work and play without travelling long distances. The Official Plan defines Complete Communities as "places as mixed-use neighbourhoods or other areas within cities, towns, and settlement areas that offer and support opportunities for people of all ages and abilities to conveniently access most of the necessities

for daily living, including an appropriate mix of jobs, local stores, and services, a full range of housing, transportation options and public service facilities". Complete communities are age-friendly. They may take different shapes and forms appropriate to their contexts" (p. 190)²⁶.

Barrie's new Official Plan includes several provisions to promote the development of complete communities – both at the neighbourhood and city-wide level, such as:

- Concentrating density and the widest mix of uses in areas that can support additional growth, with criteria for affordable housing options.
- Ensuring high-density areas have a sufficient population to attract fresh food retailers.
- Planning for transit-oriented development, which is supportive of active transportation.
- Ensuring a mix of housing and employment options are available.
- Centring residential developments around parks and schools to support access to greenspace and community gardens.

Strategy 17: Zero-Emissions Neighbourhood

Description: Develop a zero-emissions neighbourhood (ZEN). This could be a new or existing neighbourhood within the City. High thermal and energy efficiency, low-carbon materials and renewable energy sources can help to achieve neighbourhood-wide emissions reductions.

A ZEN is a community designed to reduce its emissions to zero over time. ZENs typically have the following characteristics²⁷:

- Buildings and other infrastructure are built and operated in a manner that reduces lifecycle emissions.
- Highly efficient homes and buildings, powered by primarily renewable energy.
- Building share energy in a flexible way to minimize waste.
- Neighbourhood design promotes active and sustainable modes of transportation.
- Innovation and economic sustainability are embedded in design, development and operations.

The development of a ZEN in Barrie would require a detailed, neighbourhood-specific energy plan. This would include specific modelling and analysis of the energy and emissions generated within a neighbourhood and recommendations to approach zero emissions. These recommendations would feed into an update at the secondary plan level, establishing the policy guidance for ZEN development. While both greenfield and brownfield ZEN is possible, a review of best practice suggests beginning with brownfields as they are often located close to amenities in urban centres²⁸.

²⁶ City of Barrie. (2021). *Official Plan 2051 Working Version September 23, 2021*. Retrieved from https://www.buildingbarrie.ca/22277/widgets/90160/documents/66200

²⁷ FME ZEN. (n.d). What is a Zero Emission Neighbourhood? Retrieved from https://fmezen.no/what-is-a-zen/

²⁸ Community Energy Knowledge - Action Partnership. (2017). *On the path to net-zero communities*. Retrieved from https://www.cekap.ca/resources/research-report-OCC Full%20Report.pdf

Case Study: Markham's Net Zero Community^{29,30}

In 2018, the City of Markham announced the development of a pilot neighbourhood that will use community-scale geothermal energy for heating, cooling, and domestic hot water. The planned development of approximately 300 homes will be Canada's largest residential community to use net-zero emission geothermal heating and cooling. The community will access geothermal energy through wells that are up to 250 metres deep. Each well will be connected to a common pipe (called an ambient loop) buried underneath the community and connects to each home to provide heating and cooling. This community-scale model reduces the number of needed wells, allows for centralized maintenance, reduces energy costs and improves energy efficiency. As a result, each of the 300 homes in the community is projected to use 61% less energy and generate 86% less GHG emissions than homes with conventional heating and cooling. The City of Markham is championing this pilot to innovate community design to meet its 2050 net-zero emissions target.

Strategy 18: Local Food

Description: Promote a culture of growing and buying locally grown food.

Local food production supports the local economy, reduces the distance food travels (and resulting transportation emissions) and contributes to local food security and resiliency. Local foods are also known to be fresher, taste better and contain more nutrients³¹. Healthy food should be accessible for all community members, whether by transit or active transportation networks. Suggested actions include:

- Promoting urban agriculture (community gardens, indoor vertical gardens, edible landscaping, rooftop gardens in residential, commercial and institutional areas/buildings) through policy, operational plans, zoning bylaws.
- Maintaining and expanding the community garden program within the city.
- Protecting and conserving land and water for use in the growing and production of food as part of a sustainable local food system.
- Expanding organics diversion opportunities and developing a food waste reduction strategy.
- Promoting local food production and sales, such as through the Barrie Farmer's Market.
- Supporting foraging opportunities of safe and edible plants, medicines and food, local community gardens.
- Educating the community on planting vegetable gardens at home (i.e., indoor vertical gardens), food waste reduction, composting and related topics.

²⁹ Enwave Energy Corporation. (2018). *Smart, energy-efficient homes of the future coming to Markham.* Retrieved from https://www.enwave.com/resources/smartenergy-efficienthomesofthefuturecomingtomarkham/

³⁰ City of Markham. (n.d). *Media Backgrounder: Markham Geothermal Community Pilot Project.* Retrieved from https://www.enwave.com/resources/smartenergy-efficienthomesofthefuturecomingtomarkham/
³¹ Michigan State University. (2013). *Seven benefits of eating local foods*. Retrieved from https://www.canr.msu.edu/news/7 benefits of eating local foods

Case Study: MealCare Guelph32

MealCare Guelph is a student group at the University of Guelph addressing local food insecurity by reducing campus food waste. Two students founded the group when they noticed that edible surplus food from campus kitchens was being sent to compost or landfill daily. To prevent this waste, they organized a process where volunteers collect campus-prepared surplus food, package, label and refrigerate the food according to public health guidelines, and coordinate redistribution local charities. MealCare Guelph has partnered with local charities such as the campus food bank, Royal City Mission and the city's youth shelter, Wyndham House, for donating the collected food. In 2021, after three years of operations, MealCare Guelph has grown to become an accredited student association club with over 20 volunteers and has donated over 17,000 pounds of rescued food to date.

Strategy 19: Nature-Based Solutions

Description: Protect and expand carbon sequestration through trees, wetlands and other nature-based solutions.

Though not quantified at this time, protecting our natural assets has several benefits. In addition to sequestering carbon, natural assets provide climate resilience, ecosystem services and overall human health and wellbeing. Protecting and expanding nature-based solutions might include:

- Completing a natural asset inventory for Barrie, which includes carbon quantification and cost valuation to develop a baseline of the sequestration potential of the current urban canopy.
- Setting a target for Barrie's urban canopy cover.
- Developing a private tree conservation bylaw.
- Developing a greenspace policy to promote equitable access to natural environments and the benefits they provide.
- Supporting the equitable distribution of nature-based solutions.
- Promoting and enhancing awareness of the environmental, social, health, and economic benefits of thriving natural environments.
- Ensuring native and fruit-bearing trees are expanded on public lands.
- Increasing the recognition that natural systems are important infrastructure supporting mitigation and providing many adaptation and health co-benefits.

Case Study: 10,000 Trees for Barrie³³

In 2019, Living Green Barrie (LGB), with the City of Barrie's support, Lake Simcoe Region Conservation Authority (LSRCA), and various community sponsors, launched a campaign to plant 10,000 trees in Barrie 2024. LGB is a registered charity that has spearheaded various environmental innovations in the community for over 30 years. The 10,000 Trees for Barrie campaign focuses on planting native trees and shrubs and guides community volunteers in before-planting and after-planting care to give them the best chance to grow. Increasing Barrie's tree canopy through this initiative will reduce Barrie's GHG emissions through carbon

University of Guelph. (2021). MealCare Guelph Helping to Alleviate Local Food Insecurity. Retrieved from https://guides.uoguelph.ca/2021/07/mealcare-guelph-helping-to-alleviate-local-food-insecurity/
 Living Green Barrie. (n.d). Tree Planting. Retrieved from http://www.livinggreenbarrie.com/tree-planting/

sequestration, contribute to cleaner air and waterways, mitigate the heat-island effect, and provide habitat for birds and pollinators and other wildlife. By engaging community members through various events and activities, LGB has already mobilized volunteers to plant over 2200 trees since the campaign started.

Case Study: Montreal's Urban Forest Action Plan³⁴

The City of Montreal has one of Canada's boldest municipal tree planting plans, given its ambitious timelines and challenges posed by its high population, industry, and commercial density. In 2010, the city set a target of growing its tree canopy coverage has since further committed to planting 500,000 trees by 2030. Montreal has pursued these targets vigorously by investing in public trees, purchasing land to add to public parks, providing funding to treat and protect trees from insect infestations, and funding a coalition of local NGOs that support increasing tree cover on private land. The partnership with local NGOs has allowed for more focused outreach to inspire community and corporate participation, resulting in close to 55,000 trees planted on privately owned land since 2015. Despite setbacks from Emerald Ash Borer infestations, Montreal has increased its canopy cover to 23%.

Emission Reduction Pathways to 2050

In developing this Plan, we have considered two alternate emission reductions pathways to 2050. Each was developed and refined in tandem with City staff and the Stakeholder Advisory Group.

The **first emission reduction pathway** was modelled using evidence and best practices to determine the potential energy and emission reduction of a program, policy, or initiative. We have referred to this pathway as the "**evidence-based model**". The evidence-based model takes a bottom-up approach, beginning with the potential reduction from each strategy to determine the overall reduction. For example, in the Deep Energy Retrofit Program, the average energy efficiency gain from retrofit projects in Canada was used alongside a target level of participation within the program. Applying evidence-based emission reduction estimates for all strategies would bring the overall reduction in emissions to 32 percent by 2030 and 72 percent by 2050. This falls short of the City's reduction target, 45 percent below 2018 by 2030 and net-zero by 2050.

³⁴ Smart Prosperity Institute. (2021). Growing forests in a city. *Retrieved from* https://institute.smartprosperity.ca/sites/default/files/Urban%20Trees%20study_EN.pdf

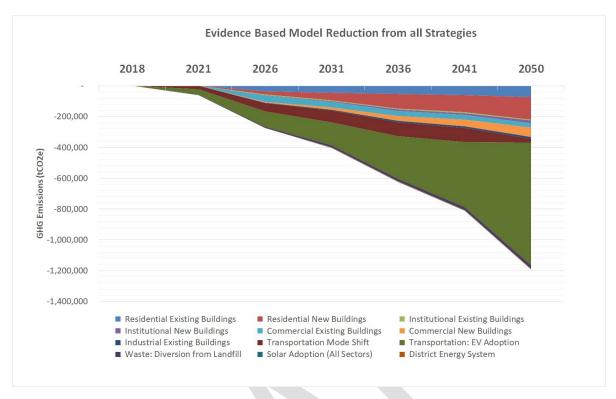


Figure 2: Evidence-Based Model Emission Reductions to 2050 shows the relative emission reduction from the six strategies with the largest reductions and with all the remaining strategies combined in dark blue.

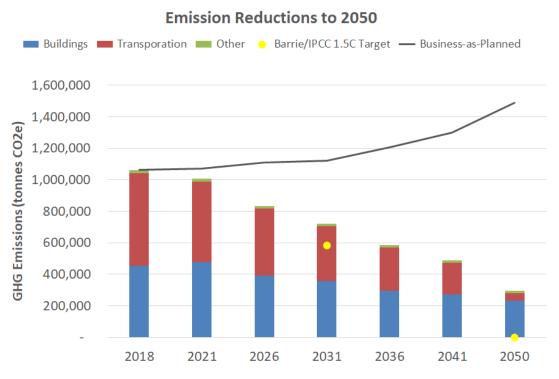


Figure 3:Evidence Based Model Emission Reduction to 2050 by sector, business-as-usual pathway, and Barrie's target.

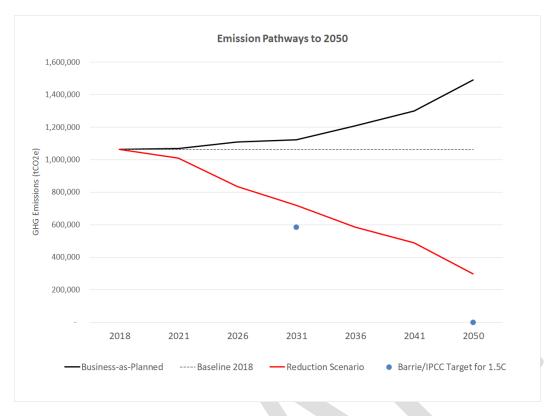


Figure 4 Evidence-Based Model Emission Pathway to 2050 shows the aggregate reduction from all the strategies combined, reduced from the business-as-usual pathway.

The **second emission reduction pathway** considers the level of effort required to meet targets to understand better the scope needed in each strategy. We have referred to this pathway as the **"1.5°C consistent model"** as it is consistent with the level of effort required to meet the IPCC targets and keep warming to 1.5 degrees. This second model takes a top-down approach, considering first where we need to get to and then how to shape our strategies to get us there.

The key components considered in the 1.5°C consistent model were an increased uptake of low-carbon technologies and further electrification in the building sector and a significantly greater percentage of electric vehicle registration by 2030. These changes would increase the overall reduction in emissions to 50 percent by 2030 and 87 percent by 2050.

While the strategies in the model have been expanded significantly, the 1.5°C consistent model highlights the need for the City to consider potential offset measures. While natural assets will play into sequestration efforts, a gap will likely remain to achieving net zero. In future iterations of the Plan, the programs, plans, and policies identified should adapt to meet the depth and breadth required to achieve the community's emission reduction targets. At the same time, strategies should be implemented to the fullest extent possible now, as this will be vitally important to prevent emission lock-in across all sectors in the community.

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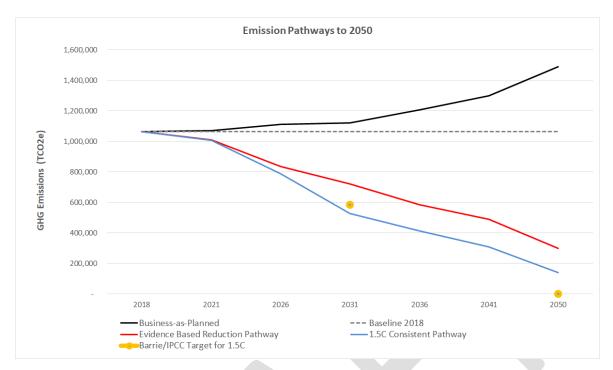


Figure 5: 1.5°C Consistent Emission Pathway to 2050 shows the aggregate reduction from all the strategies combined, reduced from the business-as-usual pathway.

Part 3: Implementation

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Introduction

There is much work to be done to make our Plan a reality. Significant effort and collaboration are needed from all community members, including businesses, institutions, residents, and the City of Barrie. Shifting our community away from fossil fuels will require us to rethink and transform how we live, work and play. We all have a part to play to ensure the success of this Plan and the wellbeing of future generations. This section of the Plan outlines key implementation components, including governance, financing, engagement and communications, potential partners and immediate actions.

Governance

Local governments – like the City of Barrie – have control over as much as half of the emissions that occur within the municipality¹. The City will play many important roles in supporting implementation, including:

- Developing and implementing policies that encourage and enable others to act sustainably.
- Providing or sourcing funding to implement various actions and strategies, as well as dedicated staff resourcing.
- Advocating higher levels of government to implement climate-supportive policies.
- Leading by example, reducing emissions and energy use within their buildings, vehicles and operations.
- Monitoring and sharing progress with the wider community.

Best practices suggest that plan implementation must involve partnerships and collaboration from the entire community to be successful. Cities that take a collaborative approach to implement their climate plans achieve twice as many actions and are more likely to reach long-term goals². The proposed implementation structure (outlined below) is informed by the following best practices seen in other Canadian and international municipalities³:

- Ensure there is a dedicated staff resource within the municipality, focused on climate action, which works with other departments and a series of task forces to coordinate and implement actions.
 - o This may include the use of a climate lens in all City departments.
- Cross-sector collaboration, where the municipality engages multiple partners from across the community to support implementation.
- Open communications, both across the organization and with the wider community.
- Ongoing monitoring, evaluation and reporting.

Proposed Governance Model

The proposed governance model for implementing Barrie's Community Energy and GHG Emissions Reduction Plan is outlined below. The proposed model can be described as "municipally-led and community-supported" – meaning that the City (corporation) provides

¹ Linton, S., Clarke, A., & Tozer, L. (2020). *Strategies and governance for implementing deep decarbonization plans at the local level*. Retrieved from https://www.mdpi.com/2071-1050/13/1/154. Ibid.

³ Ibid.

leadership and administrative oversight, while the wider community supports implementation. The wider Barrie community should be involved throughout the implementation of this Plan through continued engagement – particularly those who may be more vulnerable to the effects of climate change. The inclusion of Indigenous voices and perspectives should be prioritized.

The organizational diagram (Figure 1) outlined the proposed structure and lines of communication – solid lines indicate a direct reporting relationship, while dotted lines represent communication pathways. Please note that the Action Tables have been listed in alphabetical order. The roles of the Implementation Working Group and the Action Tables have been highlighted below. Additional details on the proposed roles and reporting/communication pathways are provided in Table 1. It is envisioned that this governance model will continue to evolve throughout the Plan's implementation – it is meant to be flexible and adapt to the community's changing needs.

Role of the Implementation Working Group

- Leads the implementation of corporate and City-led actions within this Plan and the Conservation & Demand Management Plan, according to departmental responsibility.
- Develops and applies a climate lens for decision-making across the corporation.
- Assesses funding needs and potential funding sources for corporate actions.
- Ensures new policies and programs are in line with the goals of this Plan.
- Monitors and reports on progress for corporate actions.

Role of the Action Tables

- Leads the implementation of community actions based on the "Big Moves".
- Sets priorities for action; assesses funding needs and potential funding sources.
- Monitors and reports on progress for community actions.
- Adapts the focus of strategies over time to meet current needs, challenges and opportunities.

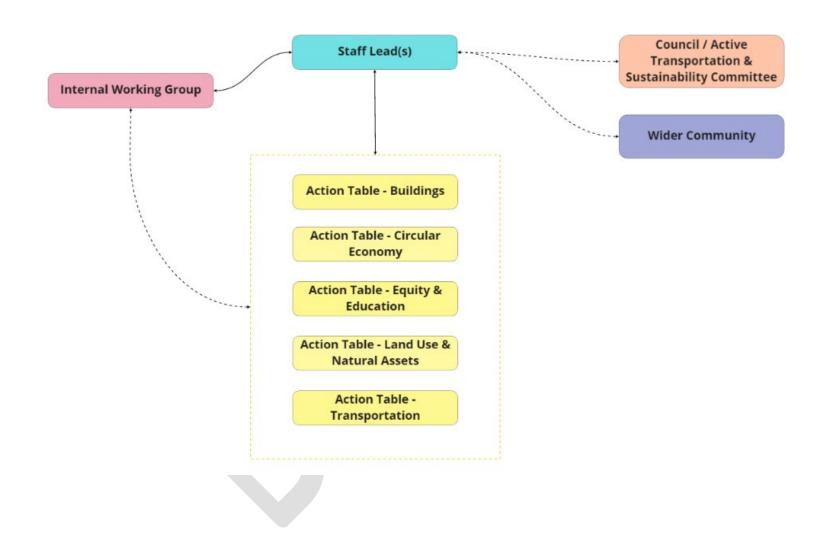


Table 1: Proposed Governance Model, role descriptions

Implementation Body	Description	Implementation Role	Reporting & Communications
City of Barrie Staff Lead(s)	Requires a new full-time dedicated staff resource in the short-term, in addition to existing staff resources. Other support staff may be brought on in the future.	 Acts as the convenor and facilitator for all actions related to plan implementation. Responsible for the overall direction and coordination of implementation to ensure alignment with reduction targets. Coordinates and provides administrative support to the Internal Working Group and Action Tables, including developing terms of reference. Liaises between Internal Working Group and Action Tables to ensure coordination and alignment of efforts. Seeks out financing opportunities – both grants and private funding – to support plan implementation via the Action Tables. Leads plan renewal process, including regular monitoring and evaluation. Coordinates the alignment of new policies and programs with the goals of this Plan. 	 Provides regular updates to Council and the Active Transportation and Sustainability Committee, with a focus on City-led actions. Works with City Communications team to promote the Plan, celebrate success and collect input from the public on programs. Maintains regular communication with and between the Internal Working Group and Action Tables, ensuring progress is being made and efforts of respective groups are in alignment. Fulfils a secretariat function, coordinating Action Tables.
Internal Working Group	Cross-departmental staff team, including (but not limited to) – transportation, transit, planning, circular economy, water, solid waste and wastewater, facilities, communications, finance.	 Leads the implementation of corporate and City-led actions within this Plan and the Conservation & Demand Management Plan, according to departmental responsibility. Develops and applies a climate lens for decision-making across the corporation. Assesses funding needs and potential funding sources for corporate actions. Ensures new policies and programs are in line with the goals of this Plan. 	 Liaise with departments about plan implementation and actions. Reports on progress from respective departments at regular meetings. Chaired by Staff Lead(s). Departmental staff could sit on both the Internal Working Group and Action Table(s) to ensure alignment.

Implementation Body	Description	Implementation Role	Reporting & Communications
		 Monitors and reports on progress for corporate actions. 	
Action Tables Buildings Circular Economy Equity & Education Land Use & Natural Assets Transportation	A series of five Action Tables (to be formed) consisting of both internal (staff) and external (stakeholder) members. Groups will establish their meeting schedule and approach – to be coordinated by Staff Lead(s). The formation of various Action Tables may need to be phased, depending on available resources at the staff level.	 Leads the implementation of community actions based on the "Big Moves" (transportation, buildings, circular economy, land use & natural assets). The Equity & Education Action table helps ensure that the benefits of climate action are distributed fairly and that no one community bears an unfair burden. Sets priorities for action; assesses funding needs and potential funding sources. Monitors and reports on progress for community actions. Adapts the focus of strategies over time to meet current needs, challenges and opportunities. 	 Liaise with stakeholders and community members about plan implementation and actions. Reports on progress at regular meetings. Coordinated by Staff Lead(s). Groups should appoint a Chair. To encourage alignment between groups, Chair(s) may participate in multiple Action Tables. Departmental staff could sit on both the Internal Working Group and Action Table(s) to ensure alignment.
City Council & Active Transportation and Sustainability Committee	Consists of Barrie City Council members and the existing Active Transportation and Sustainability Committee	 Provide oversight and approvals for Cityled actions. Approves funding for City-led actions, as appropriate. 	Receives updates from Staff Lead(s) on implementation.
Wider Community	Consists of Barrie residents, institutions, and businesses.	 Fully participate in all actions and reduction strategies to the extent possible. Hold the City accountable to commitments within the Plan. Provide feedback to the City during engagement activities, as appropriate. 	 Staff Lead(s) to provide annual updates to the wider community on implementation status, including ways they can remain involved. Ongoing engagement and communications.

Financing

Financing is an important tool to support the adoption of energy-efficient measures within the community. There are multiple avenues to finance the strategies outlined within this Plan.

The City has a role to play in supporting this Plan financially. In terms of financing, support is needed for both the administrative functions of the implementation framework, as well as implementation of specific strategies. In order to be successful, the City will have to enhance its scope of services to enable the implementation of the plan. The City will need to provide ongoing operational funding to support the plan administratively – including the provision for a new full-time staff position to oversee this work.

In terms of support strategy implementation, the City can administer financial support (from municipal resources and/or external grants) to local homeowners and businesses. This may, for example, take the form of a micro-grant program like the City of Toronto's Climate Action Fund⁴. In September 2021, Council approved a motion that the Mayor's Office on behalf of the City of Barrie provide a letter of support for the MaRS Smart Cities Centre's application to the FCM's Green Municipal Fund to undertake a pre-feasibility study for a Municipal Infrastructure Investment Fund (MIIF)⁵.

The City can also support third-party financing through enabling policies and programs. For example, Council can ensure that local bylaws support local improvement charge (LIC) programs, which would enable homeowners and businesses to invest in energy-efficient upgrades. As referenced earlier, those groups who would most benefit from such upgrades are the least able to access them. From an equity perspective, financing programs should be designed to support individuals from low-income households, affordable housing and small businesses .

The City and Action Tables must stay abreast of the ever-changing landscape of available funding programs, such as those offered through the Federation of Canadian Municipalities (FCM). Municipal leaders can also play a role in attracting green investment and private capital. At the same time, there is a need to develop a sustainable financing model to implement this Plan, which is not solely dependent on external grants. Other municipalities (Brampton, Oakville and Guelph) have provided time-limited seed funding to support plan implementation and develop a self-sustaining finance model. Over time, this decreases the reliance on municipal funds and external grants.

ICLEI Local Governments for Sustainability and FCM have identified six financial tools (below) that can move local climate action forward. These are stable, scalable options that help to overcome the uncertainty of grants and incentives⁶. A summary of the tools is provided in the

⁴ City of Toronto. (n.d). *Climate Action Fund*. Retrieved from https://www.toronto.ca/services-payments/water-environment/environmental-grants-incentives/neighbourhood-climate-action-grants/

⁵ City of Barrie. (2021). *City Council Agenda*. Retrieved from https://barrie.legistar.com/MeetingDetail.aspx?ID=873096&GUID=848D2023-3BDF-4B22-B95D-991D0CACC08B&Options=info|&Search=MaRS

⁶ ICLEI Canada Local Governments for Sustainability. (2018). *On the money: Financing tools for local climate action*. Retrieved from https://icleicanada.org/project/auto-draft-2

table below. It is recommended that the City and Action Tables explore these tools as part of the Plan's sustainable financing model.

Financial Tool	What is it?	How does it support local climate action?
Group purchasing	 Purchasing large quantities of a good or service to receive a discount by a municipality or group of municipalities It could be used on a variety of technologies such as solar panels or electric vehicles 	 Municipality negotiates a discounted price and passes on savings to consumers Reduces upfront and transaction costs Increases acceptance of new technologies
Community- owned renewable power	 Renewable energy project owned by a group of community members A cooperative or other entity manages procurement and maintenance 	 Provides residents with access to clean energy in a more affordable way Reduces dependence on carbonintensive fuels
Local improvement charges (LICs)	 A low-interest loan for energy retrofits that is repaid on the property tax bill The loan remains with the property, rather than the individual if the home is sold 	 Homeowners and building owners can complete energy retrofits with little to no upfront cost Potential to support local green jobs
Energy performance contracts	 A contract between building owners and energy service company Guarantees energy savings will cover the initial capital cost of a retrofit over the life of the contract 	Multi-unit residential, industrial, commercial and institutional building owners/managers can complete energy retrofits with reduced upfront costs and guaranteed savings
Green revolving funds	 Pools of funding that finance climate action projects Savings are used to help finance additional projects in the future 	 Only requires one-time funding to support a variety of projects over the long-term It can be used for a variety of projects, from municipal infrastructure improvements to community-led activities
Green bonds	 Green bonds mobilize private investment to support "green" initiatives Similar to a traditional bond, investors receive a fixed interest rate when the green bond matures 	Municipalities (and other levels of government) can leverage green bonds to help fund public infrastructure projects

Engagement & Communications

For Barrie to meet its climate and energy goals, all community members must be active participants. There is a need for ongoing engagement and communications with residents, businesses and institutions. Communications and education should outline the "how" and "why" of local climate action, demonstrating our role in making this Plan a reality. Consider activities that enhance peoples' understanding and awareness of causes of climate change, current/expected impacts, what climate mitigation is, actions that are being done/can be taken, and associated benefits of climate mitigation. There is also an opportunity for communications and engagement around designing and delivering specific strategies (e.g., the home retrofit program) as they roll out over time.

While there is a role for city staff to play in engagement and communications, support will be required from local community organizations, non-profits, schools and businesses. One of the key next steps will be to develop a communications and engagement plan to support plan implementation.

Progress Reporting

There is a need for transparent reporting on the community's collective progress towards implementing the strategies of this Plan and achieving overall reduction targets. It is recommended that the City and Action Tables track and report on key metrics and achievements annually. Information should be shared in an accessible manner and include public input and feedback on the next steps. Potential community reporting metrics are provided in the table below.

Strategy	Potential Metrics
Deep Energy Retrofit Program	 Proportion of buildings retrofitted Energy saved through retrofits Money saved through retrofits
Green Building Standard	Proportion of new buildings adhering to the standard
Energy Management & Benchmarking	 Proportion of industrial facilities participating in energy management programs Energy saved through energy management Money saved through energy management
Solar Generation	Number of solar panels installed
	Amount of energy generated by solar
District Energy (Pre- feasibility)	Pre-feasibility study completed (Y/N)
Larger Renewables (Prefeasibility)	Pre-feasibility study completed (Y/N)
Local Transit Options	Proportion of trips taken using local transitTransit ridership rates
Go Transit Use	Proportion of trips taken using Go TransitTransit ridership rates
Electric Vehicles	Number of charging stations installedProportion of trips taken using electric vehicles
Active Travel	Proportion of trips taken using active modesKilometres of active transportation infrastructure
Car Sharing	Proportion of trips taken with more than one occupant

Strategy	Potential Metrics
	Use of carpool lots
Sharing Economy	 Number of sharing events and programs
	Reduction in the amount of waste generated
Single-Use Plastics	Number of events/facilities with voluntary bans
	Reduction in the amount of waste generated
Resource Recovery	 Amount of energy recovered from waste
	Reduction in the amount of waste generated
Low Carbon Construction	 Number of developments using recycled materials
	Reduction in the amount of waste generated
High-Density, Mixed-Use	Proportion of units approved and built that are compact
Development	and/or mixed-use
	Population density in new developments
Zero Emissions	 Zero-emissions neighbourhood planned or in
Neighbourhood	developed (Y/N)
Local Food	 Number of community garden plots
	 Number of local food stands, farm markets
Nature-Based Solutions	Increase in urban canopy cover

A fulsome review of this Plan and an update of the energy and emissions baseline should be completed at least every five years. City staff may choose to align this cycle with reporting for the internal Energy Conservation and Demand Management Plan or other corporate planning cycles. It is noted that more frequent (annual) analysis will be required if the City chooses to adopt a carbon budgeting approach

Potential Partners

When implementing Barrie's Community Energy & Emissions Reduction Plan, we aim to leverage the good work already being done in our community. As a community, we hope to align our efforts to ensure we are fulfilling the goals of this Plan while preventing duplication and unnecessary work. The table below outlines *potential* implementation partners and *suggested* roles in supporting implementation. Partners are encouraged to review the table below and work with the City to support implementation in a manner that they deem is appropriate and leverages existing efforts. Roles may be fluid on a topic-by-topic basis.

Lead (L) Facilitator (F) Partner (P)	Deep Energy Retrofit Program	Green Building Standard	Energy Management & Benchmarking	Solar Generation	District Energy (Pre-Feasibility)	Larger Renewables (Pre-Feasibility)	Local Transit Options	Go Transit Use	Electric Vehicles	Active Travel	Car Sharing	Sharing Economy	Single Use Plastics	Resource Recovery	Low Carbon Construction	High Density, Mixed Use Development	Zero Emissions Neighbourhood	Local Food	Nature-Based Solutions
City of Barrie	F	L	F	F	L	L	L	F	L	L	F	L	L	L	L	L	L	F/L	Р
Alectra Utilities	P	Р	Р	Р	Р	Р			Р										
Barrie Farmer's Market			•															Р	
Barrie Transit								Р										•	
Building owners & managers	Р			Р	Р	Р	_	•	Р										
Canadian Green Building Council	 P	Р	Р	P					•										
CANREA (Canadian Renewable Energy Assoc.)	<u> </u>		•	P	Р	Р													
Chamber of Commerce / Economic Dev.			Р	•		,	Р					P	Р	Р	P	Р		Р	
Circular Cities & Regions Initiative (FCM, RCO)			•									P	P	Р	P	'		•	
Circular Innovation Council												P	P	P	P				
Clean Air Partnership	Р						4					•		-					
Conservation Authorities	-															Р	Р		
County Of Simcoe					Р	Р	Р				Р							Р	Р
Developers, builders, designers	Р	Р		Р					Р	Р	Р			Р	Р	Р	Р		
Enbridge Gas	Р	Р	Р																
EV Society							Р		Р								Р		
Federation of Canadian Municipalities	Р																		
Forestry associations																			Р
Green Communities Canada							Р			Р									
Simcoe Muskoka District Health Unit							Р			Р						Р		Р	Р
IESO	Р	Р		Р	Р	Р													
Industry association (TBD)														Р					
Large energy consumers & employers	Р		Р	Р	Р	Р	Р			Р	Р		Р	Р					
Living Green Barrie	Р			Р					Р	Р	Р	Р	Р					Р	Р
Metrolinx								L											
Ministry of Natural Resources & Forestry																			Р
New energy retrofit entity (TBD)	L			L															
OEB					Р	Р			Р										
Ontario Active School Travel							Р			Р									
Ontario Association of Architects	Р	Р		Р										Р	Р				
Ontario Federation of Agriculture																		Р	
Provincial Government									Р				Р			Р	Р		
Residents	Р			Р					Р			Р	Р	Р	Р			Р	
School Boards & institutions	Р			Р			Р		Р	Р	Р	Р	Р	Р	Р				
Smart Commute												Р							
QUEST	Р	Р		Р	Р	Р													

Role Descriptions

Please note that the roles and responsibilities outlined below and within the accompanying table are draft and for discussion purposes only. It is not meant to establish formal commitment from community organizations or exclude anyone from the implementation process. This is the first step in an ongoing conversation to make this Plan a reality.

Organization	Potential Role to Support Implementation
City of Barrie	 Lead the implementation and financing of all corporate actions related to energy reduction and GHG mitigation. Serve as stewards of the Plan. Provide leadership in the creation of a complete community that meets the needs of current and future generations. Provide staff support for the oversight and coordination of all Action Tables during implementation. Monitoring, reporting and communications with the community about the City's overall progress on plan implementation. Seek out opportunities to finance strategy implementation.
Utilities & IESO	 Provide expertise related to energy management, retrofits, renewables and other strategies as appropriate. Ensure Barrie's Plan implementation aligns with the broader regional and provincial energy network. Partner with the City (or other local organizations) to implement local energy-saving and/or emissions reductions projects. Participate in Action table(s) as appropriate.
School Boards & Post- Secondary Institutions	 Work to implement energy reduction and GHG mitigation strategies (such as deep energy retrofits and renewable generation) within schools and corporate facilities. Work with staff and students to share the Plan and the importance of climate action. Continue to support programs promoting active travel to school and waste reduction. Participate in Action table(s) as appropriate.
Simcoe Muskoka District Health Unit	 Identify health vulnerabilities related to climate change as well as health co-benefits of climate change. Engage with municipal stakeholders, community members, and the broader public health community to increase awareness of climate change and associated health risks. This includes mitigation and adaptation strategies to increase resilience to climate change and reduce negative impacts of climate change. Support the City of Barrie to mitigate and adapt to the impacts of climate change. Support synergies between mitigation, adaptation and health cobenefits. Continue to support programs promoting active travel, food security, healthy community design principles, equity and social and ecological determinants of health. Participate in Action table(s) as appropriate.

Organization	Potential Role to Support Implementation
Building Owners, Managers & Developers	 Work to implement energy reduction and GHG mitigation strategies (such as deep energy retrofits and renewable generation) within existing buildings. Abide by the City's Green Development Standard for new developments. Educate tenants about building environmental initiatives. Participate in Action table(s) as appropriate. Showcase success stories of local energy and emission reductions initiatives.
Businesses & Residents	 Participate in the implementation of the Plan to the fullest extent possible. Implement strategies, as appropriate, within daily lives and business operations. Participate in Action table(s) as appropriate. Showcase success stories of local energy and emission reductions initiatives.
Major Employers	 Work to implement energy reduction and GHG mitigation strategies (such as deep energy retrofits and renewable generation) within corporate facilities. Investigate the pre-feasibility of participating in a district energy system. Educate employees about corporate environmental initiatives. Support existing transportation initiatives, such as SmartCommute, for employees. Showcase success stories of local energy and emission reductions initiatives.
Conservation Authorities	 Ensure the conservation, restoration and responsible management of Ontario's water, land and natural habitats through programs that balance human, environmental and economic needs. Continue to protect and establish carbon sinks through natural asset management. Explore methods to quantify carbon sequestration in the natural environment. Participate in Action table(s) as appropriate; play a lead role in natural asset strategies. Showcase success stories of local energy and emission reductions initiatives.
Living Green Barrie	 Guide and educate citizens, businesses and local leaders towards actions that foster sustainability and resilience in our community. Provide support in education and communicating the benefits of climate action. Encourage residents to participate in the implementation of the Plan to the fullest extent possible. Continue to lead grassroots initiatives, such as tree planting programs, in the community. Participate in Action table(s) as appropriate.

Organization	Potential Role to Support Implementation
	 Showcase success stories of local energy and emission reductions initiatives.
Simcoe County	 Collaborate with the City of Barrie on climate-related actions, where feasible and alignment exists.
Other Community Partners	 Fully participate in the implementation of the Plan to the extent possible. Participate in Action table(s) as appropriate. Showcase success stories of local energy and emission reductions initiatives.

Establishing a Carbon Budget

Based on the business-as-usual pathways, Barrie's remaining carbon budget of 17 million tonnes and will be exhausted by 2032⁷.

Developing an annualized carbon budget for our community's emissions has been identified by the SAG as an important implementation factor in managing emissions along the pathway to our 2030 and 2050 targets. A carbon budget is similar in many ways to accounting. A carbon budget details the total amount of emissions that we have to 'spend' or emit to the atmosphere, which can then be allotted to Barrie's sectors and subsectors. The process for allotting emissions to sectors should consider baseline emissions and the emission reduction pathway estimated by each of the strategies. Emissions are then monitored over time, and adjustments are made accordingly to remain within the total budget identified.

The global carbon budget identified by the IPCC is based on a calculation of emissions already released into the atmosphere and the remaining amount that can be emitted to limit global temperature rise to the 1.5°C threshold⁸. Scaling the global carbon budget down to the community level is useful to identify the portion of the global total a community is responsible for reducing.

Based on the C40 Cities methodology, our community needs to reduce emissions to 3.2 tonnes per capita of carbon dioxide equivalent by 2030 and reach net zero emissions by 2050⁹. Applying this per capita value to Barrie's current population projections means that the carbon budget allows for roughly 650,000 tCO2e in annual emissions by 2030. For our community, the total carbon budget remaining is nearly 17 million tCO2e. Continuing our business-as-usual emission pathway would exhaust our carbon budget by 2032.

The management framework of a carbon budget should be developed by the Plan's staff lead and Internal Working Group in the first year of implementation of the Plan. Administrative aspects to consider will include aligning reporting with capital and operating budget timelines, including the carbon budget within the financial budgeting process, including emission impact

⁷ Since this value is based on current population projections, it is subject to change as projections are refined leading up to 2030, and actual values are known at 2030.

⁸ Intergovernmental Panel on Climate Change. (2018). *Special Report: Summary for Policymakers*. Retrieved from https://www.ipcc.ch/sr15/chapter/spm/

⁹ C40 Cities. (2016). *Deadline 2020: How Cities Will Get the Job Done*. Retrieved from https://www.c40.org/researches/deadline-2020

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assessment into planning and policies across all departments, and systematizing emission data collection annually. In addition to establishing a management framework for the carbon budget, the carbon budget should be annualized based on the expected reduction in emissions across the sectors outlined in this Plan.

Ensuring that emissions reductions are in line with established targets is a key aspect of the carbon budget. Front loading efforts will be critical to preventing emission lock-in from high-carbon technologies that will remain in operation well into the future, impacting our ability to meet targets.

Establishing priority areas where emission lock-in could have the greatest impact will be critical to the successful implementation of our Big Moves. For example, in the transportation sector, the number of registered electric vehicles at 2030 needs to approach 50 percent to meet the 1.5°C consistent model. To achieve this level of uptake, sales of electric vehicles need to be prioritized in our community immediately to prevent lock-in of combustion engines. As older, high-carbon technologies are retired in the building sector, prioritizing replacement of these technologies with low-carbon technologies and electrification will similarly be required to ensure a phase out of high-carbon technologies is consistent with the objectives in this plan. Our green development standard will also consider the importance of minimizing embodied carbon in new construction, as emissions from high-carbon intensity materials can make up most emissions of a building well into a building's lifespan and significantly impact the value of operational improvements.

Managing our community's emission pathway to future targets through carbon budget will:

- Increase transparency,
- Encourage accountability for emissions annually,
- Enable a climate lens to be applied throughout the city's planning and policies,
- Demonstrate leadership to residents and businesses, and
- Act as a guide for our strategies to evolve and adapt over time to meet the emission targets set for our community.

Case Study: City of Edmonton's Community-Wide Carbon Budget¹⁰

The City of Edmonton established a carbon budget utilizing the C40 Cities Convergence and Contraction methodology. The budget allows for no more than 155 megatonnes carbon dioxide equivalent from 2019 to 2050. The total amount was allocated annually, beginning with larger proportions allocated to the early years of the budget and steadily declining to 2050. An emissions impact is required within each department's annual budget and reporting aligned alongside the financial budget.

¹⁰ City of Edmonton. (2019). *Information Brief: Carbon Budget and Accounting*. Retrieved from: https://www.edmonton.ca/city_government/documents/PDF/CarbonBudgetandAccountingInformation-PolicyBrief-2019-11.pdf

Immediate Actions

The following section outlines a series of "immediate actions" for implementing this Plan. These actions are the key next steps to advance local climate action. Ideally, these actions should begin immediately and be complete within the next one to three years (before the Plan is renewed). This is not meant to suggest that these are the only actions that need to be taken.

There is a need for continuous and transformational action within each of the Big Moves. This list is meant to serve as a starting point as the community charts a path forward. This section primarily focuses on the immediate actions suggested for the municipality and its partners. Guidance for residents and the wider community is provided in the following section.

Immediate Strategy-Specific Actions

Actions relating to each of the Plan's strategies are provided below.

Deep Energy Retrofit Program

- Develop a detailed business plan and retrofit program design, including the development of a delivery agent.
- Communicate and provide tools/resources to educate the public and businesses on the benefits of programs/strategies and how to access supports/funding.
- Advocate for energy rebates and efficiency/affordability programs at all government levels.

Green Building Standard

- Implement the GDS as outlined within Barrie's forthcoming Official Plan update.
- Advocate for the provincial government to strengthen the Ontario Building Code to include higher energy efficiency standards.

Solar Generation

- Communicate and provide tools/resources to educate the public and businesses on the benefits of solar generation and access supports/funding.
- Advocate for energy rebates and efficiency/affordability programs at all government levels.

Energy Management & Benchmarking

• Identify or establish an energy management best practices network with industry and businesses in Barrie.

District Energy (Pre-feasibility)

- Undertake a pre-feasibility study for a district energy system.
- Develop a business case/plan for district energy in Barrie.
- Establish a district energy entity for delivery.

Larger Renewables (Pre-feasibility)

- Undertake a pre-feasibility study for larger renewable energy infrastructure projects.
- Develop a business case/plan for renewable energy in Barrie.
- Identify or establish a renewable energy entity for delivery.

Electric Vehicles

• Install EV charging stations on municipally-owned properties.

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- Create preferred parking spots and reduced fees for low emission vehicles in municipal parking lots.
- Encourage employers and commercial buildings to install charging infrastructure for staff and patrons.
- Advocacy with other levels of government to increase rebate programs to make EVs as affordable as combustion engine vehicles.
- Educate the public about the benefits of EVs.

Car Sharing

 Form partnerships with existing providers to provide access to car-sharing programs within the City for use by residents.

Zero Emissions Neighbourhood

• Identify potential zero-emissions neighbourhood(s) at the secondary plan level.

Local Food

- Maintain and expand the community garden program within the City.
- Educate the community on planting vegetable gardens at home, food waste reduction and related topics.

Nature-Based Solutions

- Complete a natural asset inventory for Barrie, which includes carbon quantification and cost valuation to develop a baseline of the sequestration potential of the current urban canopy.
- Conduct an aerial survey to set a baseline for land use coverage across the City and is possible, compare to land-use change in the last 20 years.
- Set a target for Barrie's urban canopy cover.

Immediate Enabling Actions

Actions meant to support the successful implementation of the overall Plan are outlined below.

Administration

- Hire dedicated staff resource.
- Formalize governance structure:
 - Draft Terms of Reference for each proposed Action Table.
 - Recruit members for Buildings & Transportation Action Tables and facilitate meetings.
 - o Recruit members for Internal Working Group and facilitate meetings.
 - o Confirm leads and partners for all strategies.
- Establish a sustainable financing model for the Plan.
- Continue to pursue financing for strategy implementation.

Plan Alignment

- Confirm alignment with existing plans and strategies, including:
 - Circular Economy Framework
 - Transportation Master Plan
 - Official Plan (forthcoming revision)

Strategic Asset Management Policy and Asset Management Plans Communications & Engagement

- Develop a Communications & Engagement Plan to support strategy implementation.
- Solidify partnerships with public-facing organizations to support communication and engagement efforts.
- Work with Corporate Communications and Action Tables to communicate and engage with the public on key issues and projects, as appropriate.

Monitoring, Evaluation and Reporting

- Develop key performance indicators (KPIs) for internal and public reporting.
- Report on KPIs annually.
- Update the energy and emissions baseline (plan renewal) every four years.
 - Opportunities for additional data collection:
 - Acquire data on the number and gross floor area of buildings in the commercial and industrial sector.
 - Require City departments to report on emissions annually, including departments not currently required under the Energy Act (wastewater, waste, and transportation).
 - Determine the number of recreational boats and total fuel consumption for recreational boating.
- Determine the pre-feasibility of implementing a carbon budgeting approach for the community.

Immediate Community Actions

The following is a list of actions that residents and community members can take to support the Plan's implementation. Where appropriate, the City should look for ways to support and facilitate action by community members.

- ✓ Learn about and engage on topics related to the Plan.
- ✓ Complete energy efficiency retrofits at home, or encourage employers, schools, landlords to implement retrofits on their behalf.
- ✓ Purchase food and other goods from local sources, with environmental mandates.
- ✓ Reduce single vehicle trips by using local and regional transit, car-sharing and active transportation.
- ✓ Consider purchasing an electric vehicle.
- ✓ Plant trees and other native plants.
- ✓ Live near you work or learn, telecommute when possible.
- ✓ Reuse (repair and share) goods and recycle them at the end of life, reduce food waste.
- ✓ Hold the City and its partners accountable to the goals and targets within this Plan.

Strategy			e Based odel	1.5°C Consistent Model					
#	Strategy	32% below 2018 by 2030	72% below 2018 by 2050	50% below 2018 by 2030	87% below 2018 by 2050	Scope Expansion			
1	Residential Retrofit Gross Floor Area (m2) SFD: 7,843,320 RowTown: 668,174 MURB: 1,149,189 Total: 9,651,683 Number of Structures SFD: 82,572 RowTown: 9,852 MURB: 12,984 Total: 105,408	15% of existing residential floor area	80% of existing residential floor area	25% of existing residential floor area	90% of existing residential floor area	Expansion of the scope of the retrofit program more rapidly and retrofit more existing residential structures by 2050.			
1	Residential Heat Pumps	20% of existing residential floor area	40% of existing residential floor area	30% of existing residential floor area	80% of existing residential floor area	Target a greater number of homes for transition to heat pump technology for space and water heating.			
NA	Residential Fuel Switching	Fuel Make Up: 23% Electricity, 65% Natural Gas (present value)	Fuel Make Up: 23% Electricity, 65% Natural Gas (present value)	Fuel Make Up: 33% Electricity, 55% Natural Gas	Fuel Make Up: 53% Electricity, 35% Natural Gas	Create an emphasis on the phase out of natural gas through the home retrofit program.			
NA	Institutional Fuel Switching	Fuel Make Up: 47% Electricity,	Fuel Make Up: 47% Electricity,	Fuel Make Up: 57% Electricity, 43% Natural Gas	Fuel Make Up: 77% Electricity, 23% Natural Gas	Create an emphasis on the phase out of natural gas through the			

Strategy			e Based odel	1.5°C Consistent Model					
#	Strategy	32% below 2018 by 2030	72% below 2018 by 2050	50% below 2018 by 2030	87% below 2018 by 2050	Scope Expansion			
		53% Natural Gas (present value)	53% Natural Gas (present value)			institutional retrofit programs.			
NA	Commercial Fuel Switching	Fuel Make Up: 21% Electricity, 74% Natural Gas (present value)	Fuel Make Up: 21% Electricity, 74% Natural Gas (present value)	Fuel Make Up: 31% Electricity, 64% Natural Gas	Fuel Make Up: 51% Electricity, 44% Natural Gas	Create an emphasis on the phase out of natural gas through the commercial retrofit programs			
1	Institutional Retrofit Number of Structures: 95 GFA: 537,973	25% of existing residential floor area	80% of existing residential floor area	30% of existing residential floor area	90% of existing residential floor area	Expansion of the scope of the retrofit program more rapidly and retrofit more existing residential structures by 2050			
1	Institutional/Commercial Buildings Heat Pumps	20% of buildings by 2030	40% of buildings by 2050	30% of buildings by 2030	80% of buildings by 2050	Target a greater number of buildings for transition to heat pump technology for space and water heating.			
2	Green Development Standard (Model assumes 100% uptake)	Net-zero ready by 2036	Net-zero by 2050	Net-zero ready by 2030	Net-zero by 2050	Move the target year for the GDS tiered based standard to be net zero earlier.			

Strategy #	Strategy	Evidence Based Model		1.5°C Consistent Model			
		32% below 2018 by 2030	72% below 2018 by 2050	50% below 2018 by 2030	87% below 2018 by 2050	Scope Expansion	
NA	Natural Gas Restriction for New Residential Developments	Fuel Make Up: 23% Electricity, 65% Natural Gas (present value)	Fuel Make Up: 100% Electric	Fuel Make Up: 100% Electric	Fuel Make Up: 100% Electric	Restrict natural gas by 2030 from new developments	
NA	Natural Gas Restriction for New Institutional Developments	Fuel Make Up: 47% Electricity, 53% Natural Gas (present value)	Fuel Make Up: 100% Electric	Fuel Make Up: 100% Electric	Fuel Make Up: 100% Electric	Restrict natural gas by 2030 from new developments	
NA	Natural Gas Restriction for New Commercial Developments	Fuel Make Up: 21% Electricity, 74% Natural Gas (present value)	Fuel Make Up: 100% Electric	Fuel Make Up: 100% Electric	Fuel Make Up: 100% Electric	Restrict natural gas by 2030 from new developments	
5-7,9-10	Alternatives Modes of Transportation	Driver: 61% Passenger: 17% Transit: 7% Walk & Cycle: 14%	Driver: 38% Passenger: 20% Transit: 17% Walk & Cycle: 25%	Driver: 61% Passenger: 17% Transit: 7% Walk & Cycle: 14%	Driver: 38% Passenger: 20% Transit: 17% Walk & Cycle: 25%	Both models follow TMP Alternative 4	

Strategy #	Strategy	Evidence Based Model		1.5°C Consistent Model			
		32% below 2018 by 2030	72% below 2018 by 2050	50% below 2018 by 2030	87% below 2018 by 2050	Scope Expansion	
8	Electric Vehicle Adoption	30% of all vehicles registered in Barrie are electric	99% of all vehicles registered in Barrie are electric	50% of all vehicles registered in Barrie are electric	99% of all vehicles registered in Barrie are electric	Significantly higher uptake in sales, 90% by 2024.	
NA	Wastewater Co- generation	Not included within strategies	Not included within strategies	Projected biogas capture rates provided by the wastewater department were applied to the model, and result in a reduction in emissions from wastewater at 2050 by 56%	Projected biogas capture rates provided by the wastewater department were applied to the model, and result in a reduction in emissions from wastewater at 2050 by 48%	The City is currently planning to expand cogeneration at its wastewater facility in the near term to capture all the biogas generated outside of maintenance periods and plans to continue this expansion to meet projected future population growth.	
NA	Barrie Transit	Not included within strategies	Not included within strategies	Utilizing the adoption timeframe outlined in the study, and the battery electric buses (BEB) option, the transition to electric buses applied in the model would start at 2027 with a full fleet	Utilizing the adoption timeframe outlined in the study, and the battery electric buses (BEB) option, the transition to electric buses applied in the model would start at 2027 with a full fleet	The Barrie Alternative Fuel Study considers several options for transitioning the City's transit fleet in the coming years to meet the municipality's corporate net zero target.	

Strategy #	Strategy	Evidence Based Model		1.5°C Consistent Model			
		32% below 2018 by 2030	72% below 2018 by 2050	50% below 2018 by 2030	87% below 2018 by 2050	Scope Expansion	
				conversion to BEB by 2038.	conversion to BEB by 2038.		
NA	Waterborne Navigation	Not included within strategies	Not included within strategies	In order to acknowledge that emissions could be reduced in this sector as well, an electrification goal of 10% at 2030	In order to acknowledge that emissions could be reduced in this sector as well, an electrification goal of 65% at 2050 was applied to the model.	Waterborne navigation was included in the baseline inventory based on per capita shipping rates. Data was unavailable for recreational boating and shipping was utilized as a placeholder in the 2018 inventory. There is some indication that recreational boating will also be electrified in the future.	
NA	Unspecified Sources	Not included within strategies	Not included within strategies	The overall reduction in natural gas in the community based on the strategies in the 1.5C Consistent Model is 22% at 2031	The overall reduction in natural gas in the community based on the strategies in the 1.5C Consistent Model is 40% at 2050.	Assuming the total amount of unspecified sources is connected to the overall amount of natural gas in the community, the same reduction rate was applied to estimate the reduction from unspecified sources.	

President's Log

Date	Event/Meeting	Location	Attendees	Time
December 2	PACT Meeting	Virtual meeting	w/Committee Members	10am-noon
December 15	SBEC Meeting	Virtual meeting	w/Committee Members	10am-noon
December 15	Provincial Housing Affordability Task Force meeting	Virtual meeting	w/stakeholders	1-2pm
December 16	Meeting w/MPP Bell	Virtual meeting	w/MPP Bell, A.Tracey, S.Trotta	10-10:30am
December 16	Governance Committee	Virtual meeting	w/Committee Members	1-2pm
December 17	End User Licence Agreement Meeting	Virtual meeting	w/S.Vilardi, K.Doyle, C.Mills, M.Audet	1:30-2pm
January 5	Executive Committee	Virtual meeting	w/Executive Committee	11am-12 noon
January 11	New Councillor Orientation	Virtual meeting	w/new Councillors, K.Doyle, C.Mills,	3-4:30pm
January 13	OAA Technology Program Review Working Group	Virtual meeting	w/Working Group members	2-3:30pm
January 17	Governance Committee	Virtual meeting	w/Committee members	11am-1pm
January 19	Pre-Council Meeting	Virtual meeting	w/Council	6-8pm
January 20	Council Meeting	Virtual meeting	w/Council	9:30am-4pm

Memorandum

FOR COUNCIL MEETING January 20, 2022 (open) ITEM: 6.1.b

To: Council

Susan Speigel
J. William Birdsell
Paul Hastings
Jennifer King
Michelle Longlade
Elaine Mintz
Clayton Payer
Farida Abu-Bakare
Yan Ming (Pearl) Chan
Christina Karney
Natasha H. Krickhan
Lara J. McKendrick
Deo M. Paquette
Greg Redden

Kristiana Schuhmann
Andrew Thomson
William (Ted) Wilson
Gaganjot (Gagan) Singh
Settimo Vilardi
Marek C. Zawadski

From: Kristi Doyle, Executive Director

Date: January 10, 2022

Subject: Report from Executive Director

Objective: To provide Council with an update on activities of the Executive

Director not covered elsewhere in the Council agenda.

This report outlines specific activities that have occurred and which have not been reported elsewhere in the Council package since the December meeting. This report has also been expanded to include an update on specific items pertaining to the Operational Review as approved and directed by Council.

Internal and Administration

Given the current situation with respect to the COVID 19 pandemic, I have placed a pause on the dates for the Return to Office Plan that had been reflected in the document that Council saw at the December meeting. The content of the plan remains unchanged, however we will continue to monitor the direction from government, health officials as well as the status of number of cases. It is clearly not the right time to be arranging for staff to return to the office, or reopen.

We are moving forward this week with the move to Office 365 for the OAA's email exchange. In addition, two factor authentication for login for all staff will be up and running later this week. Further to discussions with our IT staff and outside consultants, the OAA will also be upgrading our firewall protocol in the coming weeks.

The integration of the OAA Technology Program has begun with a letter from the OAA and OAAAS presidents to all OAA members and OAAAS members. Internally we have begun to move the financial operations over to the OAA, including the collection of fees for OAAAS Technologist members beginning at



the end of January. Meetings between myself, the Registrar and OAAAS staff are taking place this month to review all aspects of their operations and develop the plan for integration.

Operational Review Updates

Rec: Develop, Implement & Monitor 5-year strategic plan

As Council is aware, work continues with Strategic Planning Consultant, Kathy McLaughlin & Associates. The consultation process has been completed and preparation of materials for the planning sessions is underway. After the planning sessions take place, the final plan will be prepared for presentation to Council at the March 3 meeting.

Rec: Comprehensive Review of OAA's Technology & Data Management Needs at organizational level - IT REVIEW BUCKET

As reported previously, I have met with OAA's Information Technology Administrator, Abhishek Chaudhary as well as OAA outside IT consultants VelocITy to review, in detail the section of the Operational Review report pertaining to our IT systems and database management. We assessed each of the points made and the recommendations. Chaudhary will be working with me to develop an RFP for an appropriate consultant to respond to the IT/data management recommendations, however that had been put on hold pending completion of the IT work noted above. The RFP will be issued some time in the first quarter.

Rec: Fill Known or anticipated staffing needs HR BUCKET

The final outstanding gap in staffing which existed in the Practice Advisory Service (PAS) has been filled. We are pleased to announce that Rex Shettlewood will join staff on January 24 in the role of Project Coordinator, PAS.

Rec: Build Leadership Competencies across the OAA

I will be attending a four-part webinar series starting January 13 "Introduction to Conscious Leadership / Jan-Feb 2022 / with Bethany Davis + Deb Katz". Myself and the Manager Human Resources are continuing to actively source additional management training for staff. We are also following up on the development of a course specific for OAA staff focussed on managing conflict in a positive manner and addressing difficult situations.

Rec: Develop, Implement & Monitor a robust process for responding to complaints

A proposal was approved by Council at the December 2021 Council meeting that included changes to the Complaints process to address specific recommendations from the Review, as well as other matters to enhance the OAA's regulatory role and function. This recommendation is considered complete within the context of the Review.

Rec: Add Financial Policies & Controls to Further minimize risk to the Organization



Along with the Manager of Finance and the new Senior Vice President & Treasurer we will be reviewing the detailed commentary and recommendations regarding financial policies and controls. Work on addressing the specifics will take place over the next 6 months.

New Councillor Orientation will take place on January 11 via Zoom.

OAA Activities/Policy and Industry Relations

I will be attending a meeting of the Board of Directors of the Construction & Design Alliance Ontario (CDAO) on January 21. The Board will be reviewing the CDAO's strategic objectives in preparation for the next full CDAO forum meeting scheduled for February 9. Of note, in my capacity as a Board member, I have pressed for the climate crisis to be an overarching lens for the work of the CDAO moving forward.

National Initiatives

Along with the Registrar I will be attending a full day Workshop of the CALA Administrators which will be held on two successive afternoons – February 14 and 15. These meetings provide an opportunity for the Administrators to discuss key topics affecting our nationally recognized programs such as the IAP, the ExAC as well as issues affecting each jurisdiction such as the Ontario government's move to eliminate the requirement for Canadian experience.

Action: For information only. No action is required.

Attachments: None



FOR COUNCIL MEETING January 20, 2022

(open)

ITEM: 6.2.a

Memorandum

To: Council

Susan Speigel
J. William Birdsell
Paul Hastings
Jennifer King
Michelle Longlade
Elaine Mintz
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Farida Abu-Bakare
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Andrew Thomson Settimo Vilardi William (Ted) Wilson Marek C. Zawadski

From: Kristi Doyle, Executive Director

Melanie Walsh, Manager, Finance

Date: January 11, 2021

Subject: Unaudited Financial Statements for the Twelve Months Ended

November 30, 2021

Objective: To provide information on the year end cash surplus based on

projected financial statements and the recommended transfer of

funds to the Reserve as at November 30, 2021.

Attached for your reference is the 2021 Statement of Members Equity. This statement is based on preliminary Financial Statements for 2021 currently in the audit process. Audited Financial Statements will be reviewed by the Audit Committee on February 23, 2022 for presentation to Council on March 3, 2022 for approval.

Based on preliminary financial statements and estimated expenses to be accrued the projected surplus is \$1,050,000.

The Reserve fund balances as of November 30, 2021 are;

Operating Reserve Fund \$848,127
Major Capital Reserve \$813,574
Legal Reserve \$62,500

The projected surplus is higher than anticipated due to Conference and Continuing Education session expenses being significantly lower than budgeted in contrast to the income generated, plus reduced expenses for in person meetings.

Based on our current financial position, it is recommend to allocate the following amounts to each reserve retroactive to November 30, 2021;



Operating Reserve Fund \$200,000
Major Capital Reserve \$500,000
Legal Reserve \$100,000

The transfer noted above into the major capital reserve will address the allocation to the reserve fund as anticipated for 2022 as outlined in the Reserve Fund Study.

Once the Fiscal Year is closed and no additional expenses are accrued, the remaining balance, approximately \$250,000 will be transferred into the Unrestricted Fund of Members Equity.

Action: Council is asked to approve the following motions.

It was moved and seconded that Council approval the allocation of the 2021 anticipated surplus as follows:

Operating Reserve Fund \$200,000
Major Capital Reserve \$500,000
Legal Reserve \$100,000

Attachments: Statement of Members Equity'21



ONTARIO ASSOCIATION OF ARCHITECTS

Statement of Members Equity

Twelve Months Ended November 30, 2021

	Detail	Total
Members Equity Year to Date (YTD)		
Total Members Equity		43,758,972
Less: Current YTD Surplus from P&L		1,103,278
Less: Allocated Reserves (Restricted)		1,724,201
Legal Reserve	62,500	
Major Capital Reserve	813,574	
Operating Reserve	848,127	
Less: Pro-Demnity Insurance		31,081,920
Less: Property & Equipment		6,871,534
YTD Unrestricted Members Equity Available for Allocation		2,819,040
Future Reserve Allocation	'	
2021 Projected YE Reserve Allocation (Restricted)		0
Legal Reserve	0	
Major Capital Reserve	0	
Operating Reserve	0	
Remaining Unrestricted Members Equity 2021 YE		2,819,040
	·-	·

Detail

Total

Any Surplus or Deficit at Year End is transferred to the Members Equity. Council determines at Year End the portion of Unrestricted Members Equity to be allocated to the restricted reserves.

Major Capital Reserve Fund

In 2021 a Reserve Fund Study was commissioned which provided recommendations for the allocation of yearly Member Equity Contributions to the Major Capital Reserve.

In 2014 the Building Reserve Policy was formalized and issued "to provide a source of sustained funding for Capital Maintenance and Repair as well as Capital Improvements that cannot be otherwise funded in a single budget year through the OAA's existing annual operating budget for repair and maintenance of the building."

Operating Reserve

It is recommended the fund reaches 6 months of Operating Expenses.

In 2014 the Operating Reserve Policy was issued to "ensure the stability of the mission, programs, employment, and ongoing operations of the organization in the event of a sudden or unexpected negative change in revenue that would affect the provision of services to members."

Legal Reserve

The legal reserve fund was established in 2017 to set aside funds for years during which unusually high legal costs arise as was the case in 2017.

Memorandum

To: Council

Susan Speigel
J. William Birdsell
Paul Hastings
Jennifer King
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Andrew Thomson Settimo Vilardi William (Ted) Wilson Marek C. Zawadski

From: Kristiana Schuhmann, Vice President, Strategic

Date: January 6, 2022

Subject: Update on the activities under the Vice President, Strategic

portfolio

Objective: To update Council on the activities under the Vice President,

Strategic portfolio.

Highlights:

Activities Report - Vice President, Strategic

PACT Updates

SBEC Updates

Construction and Design Alliance of Ontario (CDAO) Updates

Activities Report - Vice President, Strategic

SBEC meeting: December 15, 2021

• PACT meeting: December 2, 2021

PACT Updates



January 20, 2022 (open) ITEM: 6.3.a

FOR COUNCIL MEETING

PACT met last on December 2, 2021. Meeting dates for the current year will be scheduled once the election of officers is complete. PACT is working on various items including:

- Legislative monitoring Bill 27, Working for Workers Act, 2021 and Bill 37, Fixing Long-term Care Act have both passed. Despite very tight timelines, the OAA delivered submissions on both of these pieces of legislation. See attached. PACT will continue to monitor both as the implementation of them rolls out this year. Bill 27 is also discussed further elsewhere in the Council package.
- Housing Affordability The OAA was invited to appear before the province's Housing Affordability Task Force on December 15, 2021. Furthermore, on December 16, 2021, MPP Jessica Bell, the Opposition Critic on Housing, met with OAA President and Policy and Government Relations staff to discuss housing affordability. PACT intends to continue working on housing affordability in 2022, including responding to the province's Housing Affordability consultation (closing January 13) and likely convening a new roundtable on the issue.
- Qualifications-based Selection (QBS) The Canada/US study, partially funded by the OAA, continues to move ahead. A final report from this research is expected in spring of 2022.

PACT will also be considering the OAA's engagement with the upcoming provincial election, currently scheduled for June 2.

SBEC Updates

SBEC met last on December 15, 2021. Meeting dates for the current year will be scheduled once the election of officers is complete. SBEC is working on various items including:

- Topics for Conference Continuing Education Sessions SBEC reviewed the proposed topics for Continuing Education sessions at Conference 2022 and expressed support for all of them. The topics include:
 - Tools for Stakeholder buy-in for Climate Change
 - o How to Approach Architectural Education on Climate Change
 - o Incremental changes to buildings and cost benefit
 - Energy Modeling
- NRCan Green Energy Advisors SBEC continues to monitor the NRCan Green Energy Advisors program and the MURBs stream of the program in particular. The Committee is particularly concerned about whether NRCan getting into MURBs is encroaching on the protected scope of work of architects. More information about this program is required before SBEC can make a recommendation to Council about how to proceed with regard to making a statement about it. Policy and Government



Relations staff are corresponding with NRCan staff regarding these concerns.

- Canadian Architect Articles SBEC has proposed developing an article
 for publication in Canadian Architect about old growth timber. The article
 will focus on the need for clarification of timber specifications to clarify
 sources and embodied carbon in carbon products. As in the past, the
 byline of the article will be individual SBEC members, and the article will
 include brief information about SBEC.
- Toronto Green Standard Version 4 At their December 15 meeting, SBEC hosted Lisa King, who delivered a presentation about Version 4 of the Toronto Green Standard. This updated version will be implemented on May 1, 2022 and, for the first time, contains embodied emissions tracking.
- Design Excellence Awards SBEC continues to support the OAA awards program this year. Committee members have volunteered to take part in the technical jury day and also provide support as Communications is fielding technical questions about the sustainability requirements for the Design Excellence awards.
- Green Grants and Funding Opportunities At the request of the Comprehensive Education Committee, SBEC has started to explore the possibility of developing a section about green grants and funding opportunities on the Climate Stability page of the OAA website.
 Discussion about this initiative will continue at the Committee's first meeting of 2022.

Construction and Design Alliance of Ontario (CDAO) Updates

There have been no new developments since the last Council meeting.

Action: None. For information only.

Attachments: Bill 27 and Bill 37 submissions



Established in 1889, the Ontario Association of Architects (OAA) is the self-regulating body for the province's architecture profession. It governs the practice of architecture and administers the Architects Act in order to serve and protect the public interest.

Standing Committee on Social Policy c/o Tanzima Khan, Clerk 99 Wellesley Street West Room 1405, Whitney Block Queen's Park Toronto, ON M7A 1A2

[sent via email]

November 18, 2021

Re: OAA Submission on Bill 27

Dear Chair and Members of the Standing Committee,

The Ontario Association of Architects (OAA) thanks you for the opportunity to comment on Bill 27, *Working for Workers Act*, 2021. This legislation touches on important aspects related to workers' rights and the regulatory licensing process.

With regard to the former, the legislation does not adequately protect against unfair labour practices within the architecture profession. The OAA strongly encourages legislative reform to rescind exemptions in the *Employment Standards Act* related to architecture.

On behalf of the OAA, I am submitting this response. My colleagues and I would be happy to engage with you further as you prepare for clause-by-clause reading and eventual passage in the legislature.

SCHEDULE 2: EMPLOYMENT STANDARDS ACT, 2000

Policy on disconnecting from work

The OAA supports the right to disconnect, and encourages this legislative provision to be extended to the architecture profession. The OAA is concerned these protections, if passed, will not extend to architects and Licensed Technologists OAA as they are currently exempted from comparable provisions within the *Employment Standards Act* (by virtue of O. Reg. 285/01: WHEN WORK DEEMED TO BE PERFORMED, EXEMPTIONS AND SPECIAL RULES).

A right-to-disconnect policy offers little benefit to those in the architecture profession because the provincial government currently exempts these individuals from any rights or entitlements related to:

- minimum wage;
- hours of work;
- daily rest periods;
- time off between shifts;
- weekly/biweekly rest periods;
- eating periods;
- overtime;
- public holidays; and



vacation with pay.

If the government is committed to the right to disconnect, then it must also rescind the architectural exemptions related to the Employment Standards Act preferably through an amendment at clause-by-clause. This can guickly and easily be integrated into the Bill by integrating a provision to remove (or trigger the removal) of clause 2.(1)(a)(i) from O. Reg 285/01.

The OAA has repeatedly requested this regulatory amendment as far back as March 2017. The OAA received a commitment from the Ministry of Labour in 2017 that said exemptions would be removed, but this commitment has not yet been honoured. We would welcome the government's support for this important change.

Non-compete agreements

Recently, the OAA has become aware of a growing use of non-compete agreements in architectural employment contracts.

On October 26, I sent out an email to all those who have status with the OAA, reminding our members that the use of non-compete agreements—particularly against intern architects—is inappropriate, and may prevent an intern architect from being able to gather the necessary experience and hours required for licensure. In this communique, I also cautioned employers that it is the regulator alone—and not individual firms—that can determine eligibility for licensure and practice.

The OAA conditionally supports legislative changes to remove non-compete agreements from contracts.

SCHEDULE 3: FAIR ACCESS TO REGULATED PROFESSIONS AND **COMPULSORY TRADES ACT, 2006**

Canadian experience requirements

While the OAA is supportive of efforts to reduce unnecessary barriers to licensure, it does not agree with recent characterizations of Canadian experience requirements as "bureaucracy and red tape." Canadian experience requirements—at least in relation to the practice of architecture—align with legislative requirements set out in the Architects Act to serve and protect the public interest.

The OAA has been an active participant in ongoing conversations with the Office of the Fairness Commissioner, and remains committed to reducing barriers to licensure. Such efforts include the Canberra Accord on Architectural Education recognizing educational equivalencies, various mutual recognition agreements (MRAs) related to reciprocal licensure, and actively supporting the Broadly Experienced Foreign Architect (BEFA) program—an alternative pathway for foreign architects to become licensed.

The Architects Act also contains provisions for an exemption request to OAA Council. The purpose of Section 13(1)(d) and (e) of the Act and Section 33 of the Regulation is to provide a procedure for an applicant who can demonstrate their



qualifications, knowledge, or experience merit exemption. Council will consider requests wherein the applicant is very close to meeting the requirements, but is unable to do so because of personal hardship or special circumstances, or where their qualifications, knowledge, and experience are of such an exceptional nature.

As per Section 13(3)b of the *Architects Act*, the Registrar may refer an application for the issuance of licence to the OAA's Experience Requirements Committee. This Committee is tasked with determining whether the applicant has met the experience requirements prescribed by the Regulations for the issuance of licence, or if the applicant should be granted an exemption from "all or part of the academic and experience requirements set out in this Regulation" on account of their qualifications, knowledge, and experience. Again, these recommendations are subject to Council's final determination.

The OAA also grants project-specific temporary licenses to practitioners and practices, and allows foreign architects to practice under the supervision of a licensed architect. Put together, these measures allow significant labour mobility for foreign-trained architects to work or become licensed in Ontario.

Regarding the aforementioned MRAs, it is important to note that when striving to implement additional reciprocal agreements, the OAA identified significant deficiencies in the educational and/or licensing regimes of many other jurisdictions.

Architects in Ontario are highly trained and specialized individuals, requiring:

- an undergraduate and graduate degree in architecture;
- completion of 3,720 hours of architectural experience addressing each of the following competencies
 - programming:
 - site and environmental analysis;
 - schematic design;
 - engineering systems integration; 0
 - building cost analysis;
 - 0 code research;
 - envelope detailing; 0
 - design development;
 - construction documents; 0
 - specifications and material research; 0
 - document checking and coordination; 0
 - energy literacy/sustainability:
 - procurement and contract award;
 - construction phase office; 0
 - construction phase site;
 - management of the project; and
 - business/practice management;
- collaboration with a supervising architect and mentor; and
- passing and/or completion of additional examinations including the Examination for Architects in Canada (ExAC).



It takes architects roughly the same length of time to become licensed in Canada as it does a medical doctor.

Foreign-trained architects, where subjected to less-stringent academic or licensing standards, should be required to gain equivalency with domestically trained architects. Indeed, the goal must be to level the playing field and to ensure licensing requirements expressly serve and protect the public interest. Where foreign-trained architects have equivalent qualification, the OAA has multiple methods that allow alternative means to assess competency and gain licensure.

The OAA is committed to improving and enhancing the pathways to licensure to eliminate unnecessary barriers to the profession of architecture.

Expedited registration

The OAA supports provisions for expedited registration in the case of emergency, although it is important to note licensing and other regulatory processes related to architecture were not materially disrupted by the pandemic.

Thanks to previous experience with remote work during our headquarters renovation, the OAA was able to quickly mobilize its staff to work from home virtually. This ensured regulatory processes continued to function, serving and protecting the public interest with little impact on daily operations.

Supporting access of internationally trained individuals to regulated professions

The OAA strongly supports efforts to encourage broader participation of internationally trained individuals in our profession when they possess equivalent qualification (or are willing to take the necessary steps to obtain it). The Association recognizes that diverse backgrounds, training, and approaches bring tremendous value to the profession and our province.

The Ontario Association of Architects is a progressive regulator committed to serving and protecting the public interest through regulating the practice of architecture. On behalf of the OAA and the profession, I encourage a legislative amendment to remove architectural exemptions from the Employment Standards Act, and welcome further consideration or discussion around the other matters reflected in our submission.

Sincerely,

Susan Speigel, Architect

OAA, FRAIC President





Established in 1889, the Ontario Association of Architects (OAA) is the self-regulating body for the province's architecture profession. It governs the practice of architecture and administers the Architects Act in order to serve and protect the public interest.

Standing Committee on the Legislative Assembly c/o Valerie Quioc Lim, Clerk 99 Wellesley Street West Room 1405, Whitney Block Queen's Park Toronto, ON M7A 1A2

[sent via email]

November 25, 2021

Re: OAA Submission on Bill 37

Dear Chair and members of the Standing Committee,

The Ontario Association of Architects (OAA) commends government for introducing comprehensive legislation on long-term care, and welcomes the opportunity to comment on Bill 37, *Fixing Long-Term Care Act, 2021*. This legislation touches on important aspects related to fixing long-term care in the province; however, it fails to address the design of long-term care homes as a key part of addressing the problem. While a commitment to maintaining the building in a safe condition is included, this also needs to be present in a more consistent manner throughout the legislation.

As the OAA and its membership watched the tragedy of long-term care in Ontario unfold throughout the COVID-19 pandemic, we have all taken the opportunity to begin exploring the design interventions that can help mitigate the effects of this crisis and prevent it from ever happening again.

As the regulator for the profession responsible for the design of built environments where Ontarians live, work, and play, and entrusted to serve and protect the public interest, the OAA is keen to continue working alongside government to fix long-term care in our province.

The Association has taken the opportunity to review the proposed Bill 37, and the following is a series of recommendations based on this legislative review:

Continuous Quality Improvement:

The OAA is encouraged to learn that "continuous quality improvement" is contemplated in the proposed legislation. While a focus on patient satisfaction and outcomes is a significant measure of quality improvement, the opportunity to explore innovative and evidence-based design of long-term care homes should also be integrated into government's approach to "continuous quality improvement".

Section 44 of the proposed legislation states that, "The Minister may establish a Long-Term Care Quality Centre" that will support mission-focused organizations and advance and share research on innovative and evidence informed personcentred models of care. **The OAA recommends that the advancement and**



sharing of research on innovative and evidence informed design of longterm care homes be included as an additional function of the Long-Term Care Quality Centre.

This recommendation is one that the OAA has heard loud and clear from members who design long-term care. In April 2021, the OAA hosted a member roundtable about the design of long-term care homes attended by 15 members with a combined 300 years' experience designing long-term care in Ontario. There was a resounding call for government support of design innovation. Moreover, the OAA has invested in this cause by supporting a research study with the University of Toronto and Jacobs Consultancy Canada Inc. This study explores design best practices that maximize infection control and patient quality of life outcomes. The final recommendations from this study will be submitted to government and can inform innovative and evidence-based approaches to the design of new long-term care homes in the province, as well as renovations to existing homes.

The addition of long-term care beds in the province is not enough; these beds must be better suited to infection control and patient quality of life outcomes. By supporting research on innovative and evidence informed design of long-term care homes, government can uniquely position itself to deliver the highest return on its investment to the betterment of everyone in Ontario.

Licensing:

Government has positioned Bill 37 as a tool to enhance transparency and improve enforcement. To be effective at doing this, measures need to be put in place that require licensees to bring their facilities up to the current Design Manual standards, and to update them as these standards are updated. As noted in the Auditor General's report on long-term care that was published in April 2021, over 40% of long-term care homes in Ontario are not currently compliant with 1999 design standards and many residents continue to share rooms with three additional people.

One major contributing factor to the 3800 deaths that have occurred in Ontario long-term care homes is the widespread reality of double- and multi-occupant bedrooms throughout the province. These bedroom configurations make physical distancing very difficult and increase the risk of infection spread. At the time of publication of the Auditor General's report, neither the Ministry nor the LHINs had record of how many residents were living in rooms designed to accommodate four beds (C and D classified rooms). However, it is known that in for-profit homes where more than half of the residents contracted COVID-19, bedroom configurations were primarily (more than 70%) multi-occupant suites.

In order to be eligible for licensure, the OAA recommends that government require licensees to demonstrate how their homes are designed to meet the current design guidelines, including the accommodation single occupancy bedrooms. In the case of existing homes, inspectors should be required to enforce this single occupancy requirement within a shorter, defined period.

Ontario Building Code:



Upon review of the proposed legislation, it is notable that there is no mention of updates to the Ontario Building Code as it pertains to long-term care (and other congregate living environments). The following recommendations for Code changes are straightforward and could have a significant impact on quality improvement in long-term care.

The first recommended change is to section 3.7.1.3. Sleeping Areas in Group B and Child Care Facilities, which currently states that:

- (2) Sleeping rooms for residents in long-term care homes shall have, exclusive of space provided for washrooms and for built-in or portable clothes closets, a floor space not less than,
 - (a) 10.22 m² in a single-bed unit,
 - (b) 16.72 m² in a two-bed unit,
 - (c) 25.08 m² in a three-bed unit, and
 - (d) 29.73 m² in a four-bed unit.

The OAA recommends that this section should be amended to remove consideration of three- and four-bed units and should include the requirement for a vestibule between the sleeping room and any corridor.

The vestibule could support hand hygiene through the inclusion of a washbasin, and could function as storage space for personal protective equipment and linens. This amended section should read as follows:

- 3.7.1.3. Sleeping Areas in Group B and Child Care Facilities
- (2) Sleeping rooms for residents in long-term care homes shall have, exclusive of space provided for washrooms and for built-in or portable clothes closets, a floor space not less than,
 - (a) 10.22 m² in a single-bed unit, and
 - (b) 16.72 m² in a two-bed unit shared by consenting residents.
- (3) [new inserted article] Sleeping rooms for residents in long-term care homes shall have a vestibule, not less than 8 m2 in area, between the sleeping room and any corridor.

The second recommended change is to section 3.7.4.4. Plumbing Fixtures for Care, Care and Treatment or Detention Occupancies, which currently states that:

- (2) In a Group B, Division 2 or 3 occupancy, washrooms shall be provided so that each washroom,
 - (a) serves not more than four patients or residents,
 - (b) is accessible from patients' or residents' sleeping rooms,
 - (c) contains one water closet, and
 - (d) contains one lavatory.

The OAA recommends that this section is amended to include single occupancy bathrooms in long-term care and to require a shower in each



of these single occupancy bathrooms. The amended section should read as follows:

- 3.7.4.4. Plumbing Fixtures for Care, Care and Treatment or Detention Occupancies
- (2) In a Group B, Division 2 or 3 occupancy, washrooms shall be provided so that each washroom,
 - (a) serves not more than:
 - i. four patients, or
 - ii. one resident in long-term care, or
 - two consenting residents in long-term care; and iii.
 - (b) is accessible from patients' or residents' sleeping rooms,
 - (c) contains one water closet,
 - (d) contains one lavatory, and
 - (e) in the case of a long-term care facility includes one shower.

These simple Code changes can lead to significant quality improvements for long-term care residents and the time to implement them is now. Ontarians living in long-term care have been through enough tragedy in the last two years and these changes can help to mitigate further tragedy from unfolding.

Long-term Care Design Manual:

The OAA is keenly aware of the importance of the Long-term Care Design Manual's role in regulating the design of these homes; however, this manual appears to be updated at irregular intervals (the last update was 2015, and prior to that was 1999). In order to strengthen Bill 37 and to improve long-term care for all Ontarians, the OAA recommends that the legislation mandate:

- Regular intervals for updates to the Design Manual;
- Shortened, defined timeframes for existing long-term care homes to come up the current standard; and,
- The inclusion of Design Manual compliance inspections along with the other quality improvement inspections that the legislation currently proposes.

"Safe Condition and in Good State of Repair":

Inspections to ensure compliance with the current Design Manual, the Ontario Building Code, and provisions within this Act or related regulations, are of particular importance. In the Auditor General's report, it was noted that licenses for approximately 26,500 beds are set to expire in 2025, but it is not clear how many of these meet 2015 (or even 1999) Design Manual standards. Similar to condominium reserve fund inspections which are mandated by the Condominium Authority of Ontario to occur within the first year of the condominium incorporation and every three years following that, the OAA recommends that similar inspections are done within the first year of licensing and every three years following that. Furthermore, inspection reports should be made publicly available to enhance transparency about long-term care quality.

Further amendments to the legislation should be considered. While this legislation begins to address recommendations in the COVID-19 Commission Final Report to prescribe the staffing mix under the Act, the maintenance and upkeep of the



facility remains largely undefined putting residents at potential risk. S19(2)(c) does clarify that every licensee is responsible to ensure that the home is "maintained in a safe condition and in a good state of repair" but how this gets operationalized within homes should be better defined.

Good state of repair should be further assigned as a responsibility to one of the designated staff in s76, most likely to the Administrator unless legislators determine that a new person should be defined within this section. Training (s82) should require that staff be trained on how to report building-related deficiencies to this designated individual. S84 and 85 should be amended to make it clear to residents or substitute decision-makers how they communicate building-related complaints. This amendment could occur in s84(2)(e) or be added as a standalone subsection.

The OAA hopes that inspections (s144 onwards) explicitly cover the home being "maintained in a safe condition and in a good state of repair" but advises government to make this explicit if not adequately reflected in existing or envisioned inspection processes and/or roles and responsibilities.

The OAA believes that s159 (suspension or revocation) would cover failing to maintain the home in a safe condition and good state of repair, but posits that government may want to explicitly add this failure under subsection (2) as a clearly articulated reason why a license may be suspended.

The OAA believes that s184(2) would allow for the Minister to issue operational or policy directives on homes being "maintained in a safe condition and in a good state of repair" but posits government may want to amend s184(2)(a) to read "the proper management, operation and maintenance of long-term care homes in general."

These clauses will help to operationalize s19(2)(c) and to ensure that homes remain in the "safe condition and in a good state of repair" that residents deserve and that the legislation intends. In this spirit, the OAA hopes that once the legislation is passed, the Lieutenant Governor in Council will also take full advantage of S193(2)(17). The OAA welcomes the opportunity to collaborate on establishing those regulations.

It is important to note that earlier in the year, the OAA tabled 27 recommendations to the Minister of Long-Term Care. While many of these recommendations may reside more at a policy level, we do still encourage members of the Standing Committee to consult both this deputation and our earlier submission and to determine if any recommendations could be reconciled within the existing legislation; for instance, requiring long-term care homes to be integrated within existing communities as the default.

On behalf of the OAA, I thank you for the opportunity to share the architecture profession's recommendations and encourage you to reach out to me further should you wish to discuss clarifications, legislative changes, or how we can work with government to help ensure Ontario's long-term-care homes can better serve the public.



Sincerely,

Susan Speigel, Architect OAA, FRAIC

President



Established in 1889, the Ontario Association of Architects (OAA) is the self-regulating body for the province's architecture profession. It governs the practice of architecture and administers the Architects Act in order to serve and protect the public interest.

The Honourable Rod Phillips
Minister of Long-Term Care
Main Legislative Building, Queen's Park
110 Wellesley Street West, Room 436
Toronto, ON M7A 1A2

July 8, 2021

Sent via email: rod.phillips@pc.ola.org

Re: Long-Term Care Submission

In March 2020, we collectively began to witness the unimaginable: a hundredyear pandemic sweeping across the globe, infecting thousands across Canada, but particularly vulnerable residents and loved ones in long-term care (LTC) homes.

Deeply moved by the unfolding tragedy, the architectural profession began to explore what it could do to help mitigate the effects of the crisis. As the regulator of a profession responsible for the design of Ontario's built environment, and entrusted to serve and protect the public interest, the OAA is keen to play an important role in assisting the Government as it moves forward with this critical task.

In Ontario's Long-Term Care COVID-19 Commission: Final Report, the province's Long-Term Care COVID-19 Commission (the Commission) reminds us that, "Ontario's legislative promise to long-term care residents is to provide residences that are 'safe, comfortable, home-like environment[s]' that support 'A high quality of life'." The Ontario Residents' Bill of Rights requires a safe environment for every resident. Ontario has not met this challenge, and we must collectively strive to do better.

The OAA submits the following 27 recommendations for consideration, and looks forward to discussing them further as we work together to solve this urgent crisis. These recommendations are covered in the pages that follow, categorized by broader subject, and can be seen collectively in Appendix B.

FUNDING

In April 2021, the OAA hosted a virtual roundtable event that brought together those in the architecture profession with experience in designing long-term care homes. The participants agreed that good policy and adequate funding are required to create a successful space. In the most recent iteration of the *Long-Term Care Home Design Manual* (2015), attempts were made to shift thinking away from institutional settings toward the creation of home-like environments. However, despite many revisions, this desired outcome is often contradicted by the document and the way it is applied. Participants agreed a shift in the guidelines is necessary to focus more on performance and less on prescriptive rules.

At the roundtable, participants discussed the importance of funding to support innovations in design and care to improve the quality of LTC homes across Ontario. They noted that their clients are keen to innovate, but lack the financial



ability to do so. Trying to secure funding for any measure that goes beyond the guideline is difficult. It is further complicated by the unprecedented realities brought on because of the COVID-19 pandemic, such as the quadrupling of construction material costs (namely lumber and steel) that have resulted from supply shortages. Architects are eager to innovate but, in the absence of appropriate funding, very little innovation is possible.

Recommendation #1: Increase capital funding for long-term care homes by indexing the Capital Funding Model to annual construction cost data.

PROCUREMENT

In their final report, the Commission cites "credible estimates" indicating the province will require "an additional 96,000 to 115,000 long-term care beds by 2041." As this is a dauntingly high number, the natural response may be to do whatever it takes to get as many shovels in the ground as quickly as possible. However, this approach poses great risk—at best, from failing to realize the full potential of LTC homes Ontarians deserve and, at worst, from repeating the mistakes of the past.

We should not stop construction underway, but we must recalibrate in real time how we procure, design, construct, and maintain long-term care homes. Extraordinary costs may drive procurement officials and legislators to the lowest bid, but the focus is, and has always been, on best value. We must use our investment wisely to get the best and most innovative long-term care homes to protect and enrich the lives of our residents.

The Commission recommends separating the delivery of services from the construction of long-term care homes. It is questionable whether a profit incentive will actually decrease the costs of construction, particularly when considered over the lifecycle of the building. Short-term decisions geared toward the handover may result in significant post-occupancy costs in terms of both operations and maintenance.

It is understandable for investors and developers to focus only on the part of the equation that concerns them. However, a sustainable, long-term approach will be paramount in warding off the problems that are almost otherwise guaranteed to manifest.

More broadly, on the subject of private versus public procurement, the OAA has members with opinions across the spectrum. Some diametrically oppose P3s, while others support the model. Throughout these concerns, it has become apparent that P3 procurement can contribute toward a solution, or actively work against one. The procurement model must be carefully considered before it is employed. Simply put, a P3 is not the only way to design and construct these facilities—this delivery method simply forms a part of the solution at best.

While procurement may seem innocuous, it has reared its head in subtle but unmistakably significant ways throughout the course of the crisis. Indeed, the Commission flags that while 90% of the existing stockpile of personal protective equipment was destroyed, "successive governments spent three years deliberating procurement policy options" instead of replenishing the stockpile. We must focus some of our attention on getting our procurement processes right.



Recommendation #2: Focus on the long-term cost, not the lowest cost.

Recommendation #3: Find the right mix between traditional and P3 procurement.

INVESTING IN DESIGN

Regardless of whether these facilities are procured through a public or private model, the selection process—particularly for architecture and engineering services—must change. For well over a decade, the industry collectively has advocated for a change from lowest bid procurement to qualifications-based selection (QBS).

While this may sound self-serving, there is an irrefutable body of evidence that shows lowest-bid value cannot be effectively used in the procurement of consulting services. Repeatedly, governments at the municipal, provincial, and federal levels have used low-bid procurement to disastrous effect. Setting aside the detrimental effects to taxpayers and the institutions themselves, lives have even been tragically lost in the process. These realizations have been accepted long-ago by our counterparts in other jurisdictions.

Qualifications-based selection has been federally required for the procurement of architectural and engineering services in the United States since 1972 (via the passage of the *Brooks Act*). "Mini *Brooks Acts*" have been passed by almost every state legislature, and further mirrored down within many municipalities. While Ontario may have pride in our procurement process and like to view ourselves as leaders, that pride is largely misplaced. In this particular regard, we are more than a half-century behind our closest neighbour.

Recommendation #4: Adopt QBS as the procurement method for architecture and engineering services.

STRIKING THE RIGHT BALANCE

Symptomatic or asymptomatic spread. Existing threats and future unknowns. Architects must plan for these challenges, incorporating necessary separation, barriers, and safety measures while delivering meaningful homes for our citizens. At the OAA's roundtable, architects spoke at length about this balance. We must not move too far toward a hospital or institutional setting, or else we break out legislative (and moral) commitment to provide meaningful living spaces. However, we must design spaces that can reduce or even eliminate threats from outbreaks, something the Commission notes are "common in long-term care homes."

All the while, we must also change our very way of thinking, recognizing that the needs of long-term care residents have significantly changed, and likely will continue to change. As the Commission notes, "[w]hen compared to long-term care residents a decade ago, today's residents experience higher percentages of cognitive impairment, physical disability, medical instability and incontinence."

The architecture profession requires a supportive government to be able to move us all out of that paradox of providing adequate medical care and infectious



disease control while maintaining a home-like environment, and recognizing significantly higher and evolving resident needs. Architects need every possible tool at their discretion given the Herculean task before them.

Recommendation #5: Provincial policy and funding must empower architects to design spaces that rise to the challenge of infection control and increasingly complex medical needs, while maintaining a home-like environment.

INNOVATION

The Commission celebrates "innovative programs to strengthen quality of life and care in long-term care homes," including "better home design to meet the evolving needs and acuity of long-term care residents." While we have many exemplary architecture practices who have delivered exemplary designs, we must provide broader guidance and leadership to the industry.

The OAA is supporting a research study with the University of Toronto that will conduct a literature review and perform post-occupancy assessments on well-regarded homes in Ontario to identify best practices that maximize infection control, occupant satisfaction, and well-being. While we will not know the findings until the study is completed, we would encourage the government to review these recommendations once available and to work with our industry to set improved standards across the board for all long-term care homes.

Recommendation #6: Review findings and work with OAA to integrate best practices into the next iteration of the *Long-Term Care Home Design Manual*.

FOSTERING A NEW SELF-REGULATED PROFESSION

As a regulator entrusted to serve and protect the public interest, the OAA noted the Commission's recommendation on making personal support workers (PSWs) a regulated profession. The OAA would support government in this mandate, particularly the recommendation to bridge a new group of regulated professionals under the umbrella of an already-established regulator. This model would appear to parallel the one we have proposed for other professionals in the consulting industry.

Recommendation #7: Consider making PSWs a regulated profession under the umbrella of an already-established regulator.

NEW DESIGN STANDARDS

The Commission flags concerns around the physical design of older long-term care homes—in particular, three- and four-bedrooms. The OAA expressly shares these concerns, and we are in agreement with our experts that single occupancy rooms are a requirement both from a best practice, Infection Prevention and Control Canada (IPAC) standpoint, human dignity, and from a user preference



standpoint. <u>Some studies</u> indicate residents prefer their own room by a margin of 20 to 1.

However, things are not quite so simple. As our roundtable participants point out, even if single-occupancy rooms should be the requirement, there must be flexible spaces allowing for deviations from the prevailing standard. Examples include space for specialized medical equipment or the need to accommodate elderly couples entering (or wishing to enter) a facility together. It is inhumane to separate a couple, family member, or possibly even a friend because a policy is too prescriptive and inflexible.

This flexibility could most likely be accomplished by specifying a proportion of couples suites or larger rooms, which could accommodate these and other needs as they arise. (A recent report prepared for the Alberta Department of Health recommended eight couple suites per 100 units) This approach would be consistent with Ontario's *Residents' Bill of Rights* which specifies "[e]very resident has the right to share a room with another resident according to their mutual wishes, if appropriate accommodation is available."

On a similar note, in its report, the Commission identifies the 2015 requirement for a washroom in all resident bedrooms. The OAA is not aware of any discussions to change or lessen these requirements, but recommends the single-occupancy washroom requirement be upheld not only in new facilities, but also in the retrofit of older ones. The Commission detailed stories of residents who were denied the right to a shower due, in part, to risks around contagion. The only way to resolve this would be to also require a shower in each of these washrooms.

Throughout the Commission's findings, as well as other various studies, cohorting and isolating were critical to reducing the spread of COVID-19. The OAA's own roundtable echoes these findings, recommending smaller cohorts, improved funding models, and policies supporting small-scale "household" models. Various other targeted design recommendations were also shared, including:

- Increasing dining and lounge space to allow for great social distancing or subdividing space when heightened transmission risks exist;
- Increasing staff space to reduce the risk of transmission between staff members;
- Incorporating a personal protective equipment (PPE) station at the entrance to each room; and
- Creating a unified standard for ventilation of all long-term care homes, incorporating best practices from hospital ventilation.

The importance of clean air is becoming increasingly clear and its relevance is being explored in the context of shared spaces and other congregate living environments. Recent reports from the <u>U.S. Centers for Disease Control (CDC)</u> found that COVID-19 incidence was 39% lower in schools that improved ventilation.

Recommendation #8: With the exception of a set proportion for couples suites or larger rooms that allow for flexibility, require all long-term care homes to have single-occupancy rooms with individual washrooms containing a shower.

Recommendation #9: Update and rapidly deploy a new *Long-Term Care Home Design Manual*.



Recommendation #10: Update the Ontario Building Code and *Long-Term Care Home Design Manual* to explicitly recognize and address infection control in design, incorporating relevant CSA standards.

Recommendation #11: Consider developing a national standard on long-term care design to reduce regional variation and bring together national best practices.

Recommendation #12: Reflect the current literature on airborne (specifically aerosol) transmission of COVID-19 in the design and retrofit of long-term care homes.

Recommendation #13: Improve ventilation in long-term care to provide clean air, particularly in older facilities.

ZONING AND DELAYED PLANNING APPROVALS

The Commission estimates a cost of \$19.8 billion to build enough beds "to replace the expiring licences and to accommodate the current waitlist at the estimated cost of \$350,000 per bed." Costs to meet the longer-term demand is significantly higher, at a projected price of \$33.6 billion. Innovative architectural solutions can help to deliver those necessary investments. The Commission also identified another critical factor, which they subtitle as "Delayed and Prolonged Licensing Approval Process."

At multiple points, the Commission flags that alongside Ministry approvals, "zoning issues at the provincial and municipal level...are blocking redevelopment." Indeed, the OAA has seen the recent employment of Minister's Zoning Orders (MZOs) for long-term care homes, but these represent site-specific and one-off solutions to a broader problem. Slow and ineffective approval processes are causing perplexing delays not only to long-term care facilities, but also to all development across the province. The OAA has advocated for significant reforms to site plan approval and the planning approval process in general, for nearly a decade, with cautions dating back 15 years.

The province should focus some of its attention on significant reforms to the *Planning Act* to expedite planning approvals. The Commission stresses that "a new model of building homes [is an] urgent necessity," and the OAA agrees with this assessment. Expediting planning approvals for long-term care homes would be laudable. Expediting planning approvals for Ontario would be even more beneficial as it would expedite and lower costs not only for the development and redevelopment of long-term care beds, but also other critical infrastructure including hospitals and affordable housing.

In 2018, the OAA commissioned Altus Group to study the impacts of site plan delay. The <u>resulting report</u> found the total costs of delay each year to stakeholders could amount to as much as \$900 million per year in Ontario—a number believed to be a conservative estimate. Institutional building permits account for over 10% of that total, with estimated delays costing nearly \$100 million per year. This estimate is not solely for long-term care, but rather for all institutional building permits subjected to site plan approval—however, a rising tide lifts all boats.

At the OAA's roundtable, it was recommended that development charge waivers be enacted, and that long-term care homes become eligible to be built on



employment lands given that these facilities generate more job opportunities than many other uses that are currently permissible.

Recommendation #14: The Province should focus significant attention on planning approval reforms, including greater use of as-of-right zoning and expediting the site plan control process.

Recommendation #15: While these reforms could be targeted toward long-term care, the Province should recognize that urgent reforms are required for *all* institutional projects and for building in Ontario more broadly.

PERSONAL PROTECTIVE EQUIPMENT

Through the course of the pandemic, the OAA remained silent on the issue of PPE as the profession recognized the urgent need for the medical community and did not want to compound dangerous shortages. The OAA is glad to have taken this position in support of the medical staff and those needing medical or long-term care. Within the profession, there were also many architectural firms supporting the medical community by providing supplies, including 3D printed equipment.

The security of PPE would help the profession to operate more safely in the future. The Commission reported that inspectors stopped on-site inspections in long-term care homes at the start of the pandemic. The OAA witnessed similar measures as municipal building departments suspended on-site building inspections for a number of reasons, including COVID-19 transmission risks, procedural disruptions, and staffing shortages. In some of these instances, municipal building departments attempted to deputize architects to carry out their responsibilities.

Not every architect needed access to a ready supply of PPE, but it is important to recognize some architects were involved in the design and construction of critical health infrastructure (including temporary structures to increase COVID-19 response capacity). It would be prudent to factor in the architectural profession when determining the level of stockpile and provisions required to face future pandemics or crises.

Recommendation #16: Include architects in the PPE count to ensure the profession can safely continue its work—particularly on long-term care and medical infrastructure—during a future pandemic.

MAINTAINING ACCESS TO RESIDENTS

The Commission speaks extensively about the impacts of visitor restrictions on long-term care residents and on the functioning of these homes in general. Indeed, the provincial *Residents' Bill of Rights* requires that residents can "receive visitors of his or her choice...without interference" and, in particular, "[e]very resident who is dying or who is very ill has the right to have family and friends present 24 hours per day."

The OAA defers to public health and IPAC experts regarding how residents could more safely have maintained access to their loved ones. However, the ability for



families and caregivers to maintain access to residents is important, and safe solutions could have been factored into the design (and design standards) for long-term care homes. The OAA would have to further explore ways to create transitory spaces that could safely maintain this access to loved ones.

Recommendation #17: Consider how transitory spaces can provide continued access to residents during outbreaks and code this into the *Long-Term Care Home Design Manual* if/where appropriate.

BUILDINGS REFLECTED IN PANDEMIC PLANS

Not surprisingly, the Commission continuously stresses the need to be prepared, specifically to have a pre-existing pandemic plan. This is a clear necessity and one the OAA obviously supports. However, the OAA has some concern the Commission may not have incorporated building-specific considerations in these plans. While the Commission applauded homes that "[re]purposed space in the home to create isolation rooms in the event of an outbreak, or used facilities outside the home to isolate sick residents," there is more to be done here.

The OAA believes building layout and configuration should be considered and clearly articulated in these plans so staff know how to conduct themselves not only in their interactions with patients, but also when assisting residents within the physical space. There should be clear plans articulating to staff how elements or uses of the building need to be reconfigured, repurposed, or augmented (for example, through changes to ventilation). Failure to adequately account for the building itself may continue to expose residents to future risk.

During discussions around the Ontario Health Plan for an Influenza Pandemic (OHPIP), the Commission notes OHPIP included "limited discussion of several items that could have helped the province better respond to a novel threat" including embracing the use of virtual care, and adopting modern communication tools such as videoconferencing. These two elements are excerpted in particular as their implementation may be tied to the design of a facility.

The OAA encourages the consideration of any requirements that create or require a design intervention, such as the better integration of current telecommunications technology, and that these requirements be communicated to the design team, and factored into the facility design, early on. It is critical to identify these requirements early in this period of renewed building and rebuilding of long-term care homes, as it can be far more difficult and costly to add this infrastructure after the fact.

The OAA also noted the Commission's recommendation for more infectious disease control simulations. While these simulations are understandably geared towards front-line workers, the Ministry should consider whether it may be advantageous for architects to be involved as observers in case there are design-related barriers that need to identified and changed.

While much of the discussion surrounds building and retrofitting long-term care homes, the Commission also stressed the importance of identifying alternative quarantine and isolation sites in the emergency planning. Architectural expertise would likely be useful in helping to identify and assess the appropriateness of different sites, and we would encourage the Ministry to engage the profession in this important work.



Recommendation #18: Use architectural knowledge and expertise in pandemic preparation planning.

Recommendation #19: Ensure that design is a required consideration for pandemic preparation planning.

Recommendation #20: Ensure any pandemic preparation plans that entail design changes are clearly communicated to the architectural profession.

INTEGRATED HOMES WITHIN EXISTING COMMUNITIES

Participants at the OAA roundtable cautioned against building long-term care homes at the fringes (or beyond) of society—a practice that seems to have arisen from lower land costs and more friendly zoning and planning approvals. The integration of a home within a community—namely the resident's own community—is inherently tied to quality of life. As our roundtable participants put it, "the key to a satisfying life is feeling like you can make a meaningful contribution to it."

Participants discussed the benefits of locating homes near libraries, community centres, and social and medical supports. Proximity to schools and other very active sites was also viewed as being highly beneficial to residents. Indeed, the long-term care homes could actually be utilized as community hubs. Looking beyond the effects on residents, a disconnected facility can also have negative effects on staff and loved ones who benefit from transit accessibility, places to walk or visit around the home, etc. Socially disconnected sites should be used only as a last resort. To quote the Commission's excerpt from André Picard's recent book: "homes should be an integral part of the community, not hidden away."

Recommendation #21: Employ Minister's Zoning Orders for long-term care homes until broader changes can be made to expedite the planning approval process.

Recommendation #22: Review planning approvals to broaden the permissibility of long-term care homes in existing communities.

Recommendation #23: Require long-term care homes to be integrated within existing communities as the default.

Recommendation #24: Encourage long-term care homes to be co-located with complementary services and facilities.

LEVERAGING CREATIVITY AND INNOVATION

The Commission's recommendations, building on the former Gillese Inquiry's recommendations, made it clear that leveraging the existing creativity and innovation is critically important to ensuring residents can live safely and with dignity. This is perhaps the best parting comment the OAA can make.



Architects have no shortage of ideas how to improve these spaces. Some of these ideas have already been shared, some have yet to be shared, and others may still need to be further developed or explored. However, this is not a passive activity. To use a colloquial expression, the best time to start was yesterday but the next best time is now.

Architects must be actively engaged immediately so that we do not, as the Commission put it, make the same mistake again by, "building more of the same type of homes that currently dominate the sector." As previously mentioned, the OAA is collaborating with the University of Toronto and Jacobs to produce a literature review and best practices white paper as it relates to the design of long-term care homes. While this research is taking place, the OAA would be happy to partner with the government to help facilitate and promote direct discussions with practitioners in the field.

Recommendation #25: Create processes that enable the full creativity and innovation of the architectural profession.

AGING-IN-PLACE

Aging-in-place cannot be the entire solution to the long-term care crisis, and overuse could potentially exacerbate other social problems related to housing. However, aging-in-place remains a critical part of the broader solution, and our members deliver innovative solutions on a daily basis including accessibility retrofits to housing up to full reconfigurations of single-family homes to allow for co-living. The allowance of laneway and secondary suites in the City of Toronto is a prime example of creating improved opportunities for aging-in-place.

While the concept of co-living has been around for a long time, there has been a renewed interest in this arrangement, with significant media coverage ramping up over the last few years. The Commission briefly discussed a number of different models, all of which should be carefully studied given the correlation between smaller housing and reduced COVID-19 infection and mortality, the benefits for residents living within integrated communities, individual preferences, and the apparent cost savings for home care versus institutional care.

Recommendation #26: Expand the use of age-in-place, particularly co-living, to help deliver the required capacity in a cost-effective manner.

MANDATORY CHANGES

As exposed by this pandemic, many long-term-care homes have had decades to complete outstanding and necessary repairs but have failed to do so. It is no longer enough to believe that these facilities will naturally come to upgrade their facilities in the necessary timeline. Both the Commission and Auditor General's report argue the Ministry should reassess its licensing process to require home operators to renovate within a realistic, but shortened defined period to comply with current standards and when LTC home design standards change.



Recommendation #27: Set a shorter, defined timeframe for changes, and tie deadlines to phasing out long-term care homes that fail to meet standards.

CONCLUSION

While this submission outlines 27 recommendations, we continue to learn more every day through ongoing discussions with practitioners and partners throughout the industry and academia. We suggest continued discussion and the creation of a working group tasked with quickly identifying and implementing solutions to do justice to the many Ontarians who were so tragically affected by this crisis.

The OAA also recognizes that these recommendations focus on long-term care, but many of them are applicable to *all* congregate living environments. The government should consider and adopt a broader suite of reforms that will reduce risks associated with COVID-19 and future pandemics for all congregate living settings including shelters, group homes, and correctional facilities.

Thank you for allowing me the opportunity to share the architecture profession's recommendations on behalf of the OAA. Please do not hesitate to contact me directly should you have questions, need clarification, or wish to discuss further how we can work with the government to help ensure Ontario's long-term-care homes, existing and future, can better serve the public.

Sincerely,

Susan Speigel, Architect

OAA, FRAIC

President

CC: The Honourable Steve Clark, Minister of Municipal Affairs and Housing

CC: The Honourable Christine Elliott, Minister of Health



Appendix A: Resources

- City of Toronto. Response to the Second Wave of COVID-19 in City of Toronto Long-Term Care (LTC). April 20, 2021.
- Gettings, Jenna, et al. <u>Mask Use and Ventilation Improvements to Reduce</u>
 <u>COVID-19 Incidence in Elementary Schools Georgia, November 16—December 11, 2020</u>. Morbidity and Mortality Weekly Report 2021; 70:779–784.
- Government of Ontario. <u>Long-term care homes</u> (Graphs and tables of COVID-19 data for residents and staff living or working in Ontario's long-term care homes).
- Kevin A. Brown. <u>Association Between Nursing Home Crowding and COVID-19</u>
 <u>Infection and Mortality in Ontario, Canada</u>, *JAMA Internal Medicine*,
 JAMA Network, February 1, 2021.
- Marr, Linsey, et al. <u>FAQs on Protecting Yourself from COVID-19 Aerosol</u> <u>Transmission (version 1.87)</u>. December 9, 2020.
- MNP (for the Alberta Department of Health). <u>Improving Quality of Life for</u>
 Residents in Facility-Based Continuing Care. April 30, 2021.
- Office of the Auditor General of Ontario. <u>COVID-19 Preparedness and Management Special Report on Pandemic Readiness and Response in Long-Term Care</u>. April, 2021.
- Ontario Association of Architects. <u>Member Roundtable: Designing Long-Term</u>
 <u>Care Homes</u>. April 8, 2021.
- Ontario Association of Architects. <u>Misc. Letters to Ministers of Long-Term Care,</u> Municipal Affairs and Housing. 2020-2021.
- Ontario Association of Architects. Site Plan Delay Analysis. July 19, 2018.
- Ontario's Long-Term Care COVID-19 Commission. Final Report. April 30, 2021.
- Ontario's Long-Term Care COVID-19 Commission. <u>Transcripts</u> (Misc). September 2020-April 2021.
- The SARS Commission. *Executive Summary*. December, 2006.
- Zimmerman, Sheryl, et al. Nontraditional Small House Nursing Homes Have
 Fewer COVID-19 Cases and Deaths. The Journal of Post Acute and
 Long-Term Care Medicine (JAMDA). January 25, 2021.



Appendix B: The 27 Recommendations

- #1: Increase capital funding for long-term care homes by indexing the Capital Funding Model to annual construction cost data.
- #2: Focus on the long-term cost, not the lowest cost.
- #3: Find the right mix between traditional and P3 procurement.
- #4: Adopt QBS as the procurement method for architecture and engineering services.
- #5: Provincial policy and funding must empower architects to design spaces that rise to the challenge of infection control and increasingly complex medical needs, while maintaining a home-like environment.
- #6: Review findings and work with OAA to integrate best practices into the next iteration of the *Long-Term Care Home Design Manual*.
- #7: Consider making PSWs a regulated profession under the umbrella of an already-established regulator.
- #8: With the exception of a set proportion for couples suites or larger rooms that allow for flexibility, require all long-term care homes to have single-occupancy rooms with individual washrooms containing a shower.
- #9: Update and rapidly deploy a new Long-Term Care Home Design Manual.
- #10: Update the Ontario Building Code and Long-Term Care Home Design Manual to explicitly recognize and address infection control in design, incorporating relevant CSA standards.
- #11: Consider developing a national standard on long-term care design to reduce regional variation and bring together national best practices.
- #12: Reflect the current literature on airborne (specifically aerosol) transmission of COVID-19 in the design and retrofit of long-term care homes.
- #13: Improve ventilation in long-term care to provide clean air, particularly in older facilities.
- #14: The Province should focus significant attention on planning approval reforms, including greater use of as-of-right zoning and expediting the site plan control process.
- #15: While these reforms could be targeted toward long-term care, the Province should recognize that urgent reforms are required for all institutional projects and for building in Ontario more broadly.
- #16: Include architects in the PPE count to ensure the profession can safely continue its work—particularly on long-term care and medical infrastructure—during a future pandemic.
- #17: Consider how transitory spaces can provide continued access to residents during outbreaks and code this into the Long-Term Care Home Design Manual if/where appropriate.
- #18: Use architectural knowledge and expertise in pandemic preparation planning.



- #19: Ensure that design is a required consideration for pandemic preparation planning.
- #20: Ensure any pandemic preparation plans that entail design changes are clearly communicated to the architectural profession.
- #21: Employ Minister's Zoning Orders for long-term care homes until broader changes can be made to expedite the planning approval process.
- #22: Review planning approvals to broaden the permissibility of long-term care homes in existing communities.
- #23: Require long-term care homes to be integrated within existing communities as the default.
- #24: Encourage long-term care homes to be co-located with complementary services and facilities.
- #25: Create processes that enable the full creativity and innovation of the architectural profession.
- #26: Expand the use of age-in-place, particularly co-living, to help deliver the required capacity in a cost-effective manner.
- #27: Set a shorter, defined timeframe for changes, and tie deadlines to phasing out long-term care homes that fail to meet standards.



FOR COUNCIL MEETING

January 20, 2022 (open)

ITEM: 6.4.a

Memorandum

To: Council

Susan Speigel
J. William Birdsell
Paul Hastings
Jennifer King
Michelle Longlade
Elaine Mintz
Clayton Payer

Farida Abu-Bakare
Yan Ming (Pearl) Chan
Christina Karney
Natasha H. Krickhan
Lara J. McKendrick
Deo M. Paquette
Greg Redden

Kristiana Schuhmann Gaganjot (Gagan) Singh

Andrew Thomson Settimo Vilardi William (Ted) Wilson Marek C. Zawadski

From: Communications Committee

Jennifer King Farida Abu-Bakare
Bill Birdsell Carl Knipfel
Joël León Elaine Mintz
Dana Seguin Arezoo Talebzadeh

Date: January 12, 2021

Subject: Communications Committee Update

Objective: To provide an update on current and ongoing communications-

related activities for the OAA.

Highlights

<u>Conference</u> <u>OAA Website</u>

<u>Awards</u> <u>E-Communications</u>

Podcasts Social Media

While there has not been a regular Communications Committee meeting since the last Council session in January, this report includes general updates from OAA staff as well as some information from the group's virtual gathering during the first week of January expressly to discuss possible tour options for the Conference in May. This meeting included new Committee appointee, Dana Seguin, who was able to participate in the discussions.

After this, the next meeting is expected to take place virtually in late February, following election of the VP Communications and the strategy planning sessions



Page 1 of 5

of Council. That meeting traditionally focuses on Public Awareness Sponsorship and Special Project Funding requests as these two opportunities close in late January.

Conference

After a call for tours went out in November, the Communications Committee and OAA staff met Conference organizers MCC to explore the submitted options in order to prepare a memo to Council with recommendations. As the local hosts of the event, the Toronto Society of Architects (TSA) also provided some potential tours.

The final slate of possibilities include both architectural and recreational selections, as well as a Structured Learning opportunity to enable members to see the OAA Headquarters post its Renew+Refresh net zero renovation project. (See elsewhere in this Council package for further details.) Give the current atmosphere related to the Omicron variant of COVID-19, there was also some discussion of the need for virtual and livestreamed tour options to complement such plans for the education sessions.

Following Council's direction at its December meeting, OAA staff have secured Katherine Hayhoe as the keynote speaker in March. The event is scheduled for, with outreach and publicity beginning later this month. The OAA has also received permission for this event to be posted on its YouTube channel (and embedded in the website) in perpetuity.

At the time this memo is being written, work continues on the development of the Plenary for Conference, as well as other aspects related to the multi-day event.

OAA Website

Changes and refinements have continued on the OAA Website over the last month, with more planned for the first-quarter of 2022.

A new OAA Contracts Suite page is being developed in concert with Practice Advisory Services (PAS) to make it easier for the public and architectural professionals to find the contract they are looking for. This will complement future work related to fees, design competitions, and other information pages related to finding and working with members of the architecture profession;

A listing of scholarships under the Access to Architecture page is continuing to be fine-tuned, while resources and news items are being tagged as Indigenous or Equity, Diversity, and Inclusion to ensure links with those sections.

Discussions continue on a page looking at the OAA's educational outreach work with building officials and municipalities from a public interest perspective, as well as including general educational resources for high



school students, teachers, and parents looking for pathways to the profession.

Communications staff have also been working with the Office of the Registrar regarding new pages related to the Experience Requirements Committee and requests for exemption. Council information has been updated, and work has begun to overhaul the Continuing Education FAQ and provide a countdown toward End of Cycle.

Web Updates (December 2021)

- 2022 OAA Awards/Call for Entries updates, including jury bios
- Annual fee renewal updates
- Internship in Architecture Program (IAP) and mentorship updates
- OAA ConEd Webinar Series updates
- blOAAg: Sponsored Sessions from Conference
- TEUI/CSA Standards reporting

Upcoming Priorities

- New Contract page updates
- Creation of Design competitions information page
- New pages/resources related to public interest and educational outreach
- Accessibility training

OAA Awards

The Communications Committee directed OAA staff with a shortlist of nominations to create the juries for the 2022 Design Excellence and OAA Service Awards. Many of the candidates declined to participate due to concerns over conflicts of interest—that is, a principal at a practice was aware colleagues were intending to submit candidates. Ultimately, the jury was chosen with the Committee happy with the results. To see bios, click here.

The deadline for awards submissions has been extended for one week due to several requests from possible participants who cited the pandemic as a consideration. The one-week extension still maintains the various administrative deadlines in place, including a pre-review day to ensure completeness of applications, a sustainability-focused review day to review inclusion of mandatory EUI metrics for Design Excellence projects, and the actual Jury Day in February, which will be virtual.

Plans to make slight alterations to the OAA Awards program continue. Most notably, OAA staff and the Vice President Communications met with Heritage Toronto to discuss the potential of building plaques for Design Excellence winners (conversations were also held with the OAA's current awards vendor). More information will be shared with the Committee this spring in advance of the



possibility of presenting a memo to Council for consideration of this public outreach opportunity.

With respect to the OAA's pair of SHIFT events in the fall, webinar producer MCC has offered this report on audience metrics for Council's review (Appendix 1). Feedback was very, very favourable and attendance was higher than anticipated.

The videos of both events are now available for on-demand viewing, and OAA staff will consider ways to ensure continued new views from both the membership and the wider general public who may find the topics of particular interest.

Later in 2022, the Committee will review the success of the SHIFT program, taking into account suggestions made by past jury facilitator (and part of the initial Working Group), Toon Dreessen.

E-communications

In addition to the regular biweekly editions of the *OAA News* enewsletter and the bimonthly *Practice Advisory*, numerous other "special bulletin" emails have been sent out since the last Council report. These include:

- A note from the OAA and OAAAS presidents discussing the planned integration of the OAA Technology Program;
- Reminders about submitting for the OAA Awards program;
- Information for Intern Architects registered for the ExAC; and
- The first of several Regulatory Notices reminding members of the impending end to the Continuing Education cycle in June.

Podcasts

An RFP (following quality-based selection process) was issued with respect to finding a producer/consultant for the OAA's planned inaugural podcast season. It seeks assistance with the technical production (recording, editing, uploading, disseminating, SEO, etc), as well as collaborating with OAA staff and Committee members on developing and launching a pilot season that will be six 30-minute episodes focusing on evergreen topics to maintain relevance over time. The intended audience is the OAA membership, as well as others in the design/construction sphere including the general public.

The RFP is open until the end of the month; at the time of this memo, a few proponents had reached out with submissions or requests for more information.

Social Media

As shown below, all social channels showed growth, even during such a short period.

On **Instagram** and **Facebook**, posts and stories were used to share individual stories that appeared in *OAA News*, calls for entries and tours for Conference, and the OAA Continuing Education Webinar series, as well as striving for content on equity, diversity, and inclusion, along with congregate living. (Information on the OAA's recommendations related to long-term care appeared here as well as on Twitter.)



Twitter was used to inform followers about Council meetings and winners of the election process, career/volunteer opportunities, news, events, and COVID-19 updates. Many events were also retweeted from sources such as the Toronto Society of Architects, RAIC, *Canadian Architect*, *Building*, and *Architect*.

LinkedIn was used to share practice- and public-facing items, including election results, SHIFT, the podcast RFP, and the latest edition of *Practice Advisory*.



Followers: 6,806 (up 2 from last report)

Average Post Audience: 3,860



Followers: 7,750 (up 13 from last report) Total Likes: 7,377 (24 up from last report)



Followers: 2,381 (up 2 from last report)

Total Likes: 1,996



Followers: 8,878 (up 121 from last report)

Post Impressions: 5,800

Action: For information only.

Attachments: SHIFT_Report.pdf



SHIFT CHALLENGE - FALL PROGRAMMING

Event Data | November 16 & 30, 202



Key Benchmarks | Audience Attendance

784

total unique viewers across the two events

285

total viewers who watched both events

569

total unique viewers SHIFT 2021 Challenge Resiliency in the City November 16, 2021 511

total unique viewers SHIFT 2021 Challenge The Resiliency of Changing Communities November 30, 2021

Key Benchmarks | Audience Attendance

81%

registration to viewer conversion rate Nov 16, 2021 **74**%

registration to viewer conversion rate Nov 30, 2021 **76.9**%

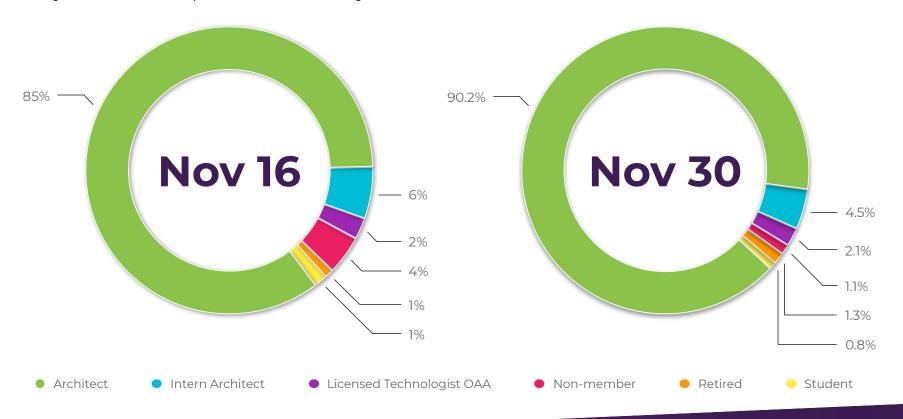
registrant to viewer conversion rate

Communications events have an average of **69.3%** conversion rate.

Overall, webinar conversion rates for most other types of events is about **35% to 45%** on average.*

*Based on 2021 Event Industry Webinar Benchmarks,

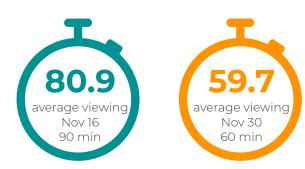
Key Benchmarks | OAA Affiliation by Event



Key Benchmarks | Audience Engagement & Views

Your Event Performance

Average viewing time for webinar attendees



Industry Comparisons

Average viewing time for webinar attendees**



Audience Engagement | Questions

Nov 16, 2021

10

total number of questions asked

Nov 30, 2021

25

total number of questions asked

industry comparisons

19

average number of webinar questions*

*Based on 2021 Event Industry Digital Experiences Benchmarks, **Based on 2021 Event Industry Benchmarks, from Intrado.

Key Benchmarks | Registration Pick-up

Nov 1 Bulletin || Impact of Dedicated Email Bulletin "Register Now for Two Free OAA SHIFT Webinars"



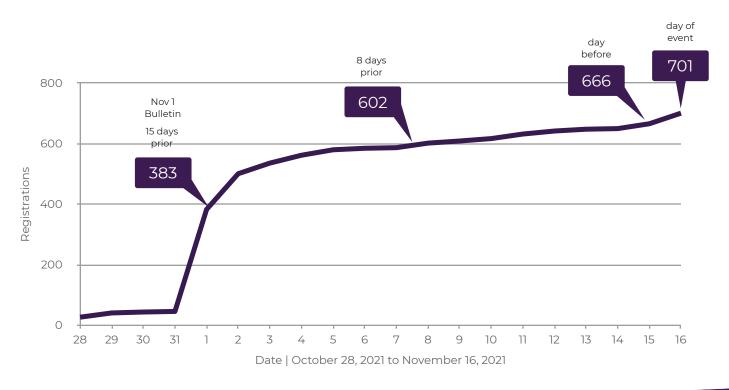
Close to **46%**of the total guests who registered did so on November 1 (the date of the dedicated bulletin inviting guests to attend the two

*based on registration data

webinars.)*



Key Benchmarks | Registration



701

total registered

In the lead-up to the event, the email marketing campaigns and social marketing resulted in

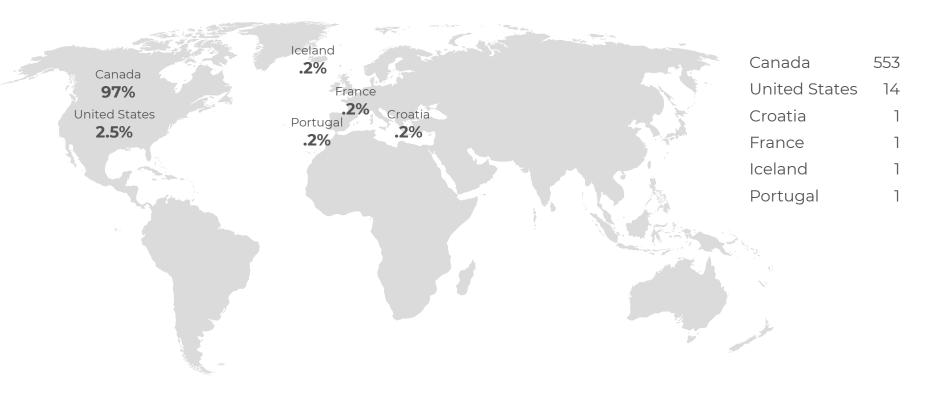
140%

registration growth in the two weeks. prior to the event.

Key Benchmarks | Registration

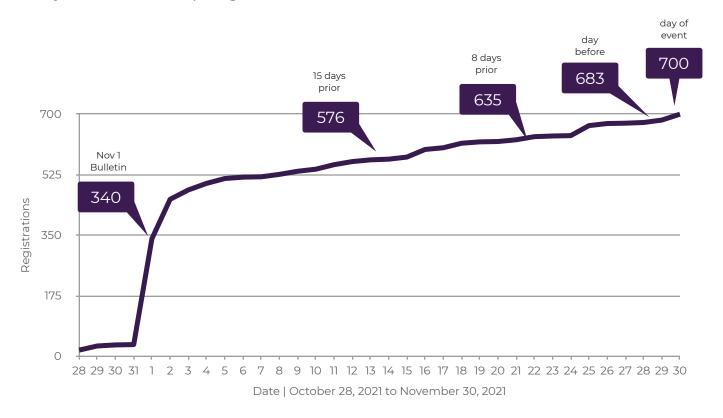


Key Benchmarks | Audience Attendance by Viewing Country





Key Benchmarks | Registration



700

total registered

In the lead-up to the event, the email marketing campaigns and social marketing resulted in

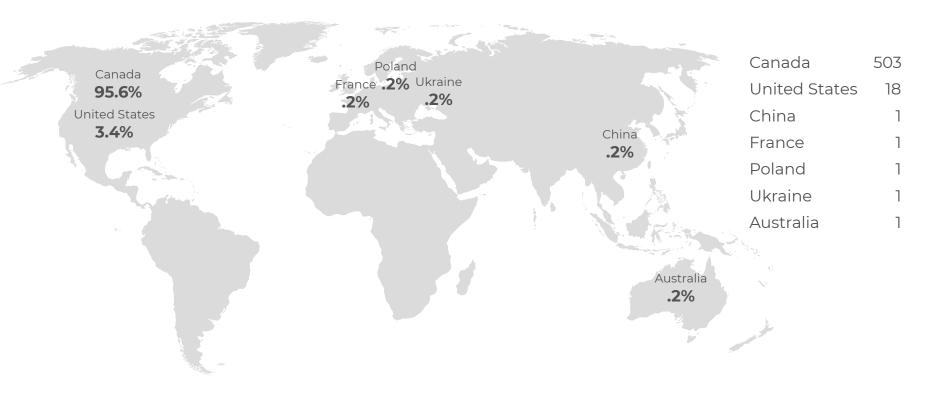
117%

registration growth in the two weeks prior to the event...

Key Benchmarks | Registration



Key Benchmarks | Audience Attendance by Viewing Country





Key Benchmarks | Audience Feedback

SHIFT 2021 Challenge: Resiliency in the City | November 16, 2021 (206 Respondents - 36% of Attendees)

85.4%

rated the event very good (4) or excellent (5)

4.16/5

average rating

91.8%

would recommend this event to a colleague or friend

SHIFT 2021 Challenge: The Resiliency of Changing Communities | November 30, 2021 (258 Respondents - 50%)

89.5%

rated the event very good (4) or excellent (5)

4.23/5

average rating

90.1%

would recommend this event to a colleague or friend

Audience Feedback | What did you like about this event?

Thoughtful feedback was provided to aid in planning the next event. Selected feedback as follows:

Resiliency in the City || Nov 16

It was interesting to see what might be new in small scale developments. I liked the optimism of the presenters. Stefan Novakovic did a good job moderating.

An important topic that deserves more attention in our city.

Appreciated accompanying visuals and the preparedness of all presenters Being exposed to new ideas.

Detailed review of project goals and strategies

Differing perspectives including student. Also feedback shared by each of presenters on the respective presentations. Excellent moderator, Stefan.

Discussion of typologies in context of real economies. Discussion of architecture in terms of urban fabric and texture and cultural signs, with NO display of the latest "style".

Each presentation represented a unique response to the issue of maintaining resiliency in the urban context of Toronto

Good Energy From Panel

Ideas for main streets

Interesting proposals on densification in urban centres

Knowledge of the presenter and level of details.

Presentation was smooth without any pause. Transition to each presenter good.

Professional presentation.

Project and speaker diversity

Steven Fong's interest in acknowledging messy vitality as a way for architects to gain agency.

Student, practitioner and professor good cross discussion

Super interesting and zoom makes it very accessible

The difference approach to commercial residential typologies along our public thoroughfares to ensure viability and sustainability of the projects

The comparison of the approaches

The developer aspects for architects involvement

The format with multiple speakers, discussion and Q&A was interesting

The Resiliency of Changing Communities || Nov 30

Acknowlegement of key social problems by architectural community

Affordable fresh ideas that were introduced

Attention to sustainable development and innovation

Balanced - both young and old; new and experienced. Hosted efficiently

Both presentations showed how architects can assist their communities in solving problems and even bringing problems to light that the community may not have even been aware of.

Different subject. We are looking to the community and one of the architects' roles.

Emphasis on topics in ex-urban areas

Enjoy seeing what people are coming up with for the Shift Challenges and hearing the inspiration / story behind it...

Excellent graphics and concise descriptions

Excellent mix of new and seasoned talent and thoughts

Good presenters and moderator. It was refreshing to hear about the experience of practicing in small communities

Got us out of the city!

Having presentors that varied from very seasoned architects to architects just beginning their career and how their passion and ideas could be interwoven.

it was a very inspiring and current topic

Joe Lobko at the moderator was EXCELLENT

Love the diversity in the projects.

Moderator was very good

Presenters had real challenges - not theoretically driven and both raised interesting solutions and possibilities.

the focus on architecture as a catalyst in the revitalization of communities...that the ideas in many respects can be scalable. We have many near 'invisible' peoples, who must be considered as we densify our world centres and save the rest for rewilding. Excellent examples which prompt much thinking and set a high standard. Kudos.

The freshness of Holly's ideas and the social concerns of Gordon's.

Audience Feedback || What recommendations or comments would you offer to improve this event?

Thoughtful feedback was provided to aid in planning the next event. Selected feedback as follows:

Resiliency in the City || Nov 16

I would have wanted more in depth information on each project. The presentation was short

Ability to watch recording if time does not work for attendees

Architects like pictures/ graphics

Fine as an introduction to the topic but a follow up event to further discuss ideas in depth would be helpful

Get more participation from municipally elected officials and developers (such as Jack Daniels). Question them directly.

It was really good and I hope to have more of such meetings. Having more of this type of discussions will strengthen the theoretical aspects of the architectural design rather than just following the codes and zoning requirements.

Leave drawings up longer

Maybe too Toronto centric. May be good to incorporate other presenters/projects outside of Toronto to gain more perspective on the rest of Ontario.

More detail about the projects. The overview of the images was rather quick and lacked visual depth. Discussion about the works was good, but visual examples to support the conversation would have been appreciated.

Not enough realistic discussion regarding feasibility/impacts of individual "insertions" to neighbouring properties (i.e. what does the street look like if everyone builds out in the same manner? - not good!)

The two Main Street projects allowed for a more focussed discussion of the options and issues surrounding this condition. To group together similar projects is one way of organizing a discussion with more depth.

Would like to see this kind of events in future from OAA

The Resiliency of Changing Communities || Nov 30

Adequate introduction to the subject matter for the 1 hour time allocated.

An extra 15 or 30 minutes! It was too short.

Each project could have been allotted 10-20 minutes of time to present the project. The discussion of the projects with the moderator and the 3-way discuss of the Resiliency theme was unnecessary and uninteresting.

Everyone is getting really good at staging & participating in zoom meetings

Explore the possibilities of using native materials in building.

Why we are forced to use plywood that requires cutting the trees in B.C.

Are there any local native materials that can replace plywood?

Another way to consider to cut the cost and interference of natural habitat.

It was difficult to get engaged in the Gordon's long answers. A more concise back and forth would have helped. Additionally, the whole presentation would have benefited from real world examples and lessons learned from other parts of the world.

it was very good structured session, keep doing it

Maybe a little more detail on the procurment process

Maybe OAA can arrange more of this type of event.

Would have really liked to hear a bit more detail on the dialectics between architecture in northern Ontario and migrant labour.

Audience Feedback | Please share any other feedback that you would like to share.

Thoughtful feedback was provided to aid in planning the next event. Selected feedback as follows:

Resiliency in the City || Nov 16

A healthy dose of Passion for Architecture is an occasionally required medicine.

Cars are an unfortunate reality: the Uber driver living in the downtown needs a place to park his car.

I would have been interested in seeing some visuals for the OP project. The two urban projects pose the question -why are projects like these not more often realized. Hearing that mid-rise projects on Toronto's "Avenues" struggle with economic viability due to lack of the economy of scale, I wonder if that may be the reason for these small projects.

Interesting projects. Would recommend looking at 3 examples which are quite distinct from one another. Two of the projects presented were not that different.

It was great!

Keep it coming

Moderator was excellent - sorry I had to leave before the session was over

Stefan Novacovic did an execellent job!

Thanks for providing this program and the webinar!

The K-town project is an aestheticized versions of what is done on main streets on a daily basis, and no different as a typology than the buildings it proposes to replace. Neither project proposed to solve, but appears to contribute to problems of gentrification on main streets and in downtown neighbourhoods. Also disappointed cost questions were not answered in both projects. If it is possible to build a 12 unit tower at the same cost per square foot as a 300 unit building I think everyone was interested in hearing about it. If tearing down a 3 storey main street building and rebuilding it made economic sense, it would happen more often than it does. The content felt very thin.

Time of event at 1.5 hrs seemed a little long for a work day - would like to request consideration for a 1 hr event

We need encourage more visibilty of this smaller scale work. Awards and publications tend to promote projects that are larger in scale and high profile.

The Resiliency of Changing Communities || Nov 30

Bring in as many panels as you can.

From both presentations I appreciated how the proponents had experiences to share about the progress of their ideas beyond the awards stage

Great choice for moderator!

Great initiative and follow through event

Great job and compliments to all who had a role in preparing and presenting todays session.

Hope it becomes an ongoing event. Showcasing this type of project is great for awareness and to get to know other practices in Ontario.

It is not a bad idea for OAA to engage interns in this type of study. i.e. How to revitalize cities in northern Ontario.

It was a very clear presentation

Love it.

Nice to see great socially conscious and sustainable projects outside the GTA and large Cities. Rural southern and northern Ontario has some great buildings and talented young (and older) architects. Keep them coming!

OAA definitely needs to do more of this!

Send future updates in the development of this initiatives

Thank you - these two Shift presentations have been very revealing.

the interplay between generations, seasoned with smart starter

the OAA team rocks; putting events like this on is excellent, would love to see more of these, pairing different projects together around other themes and discussions.

Theses are a great way to engage architectural communities.. we are siloed

This was a good start as a "manifesto". I hope it leads to real resilient "built stuff".

THANK YOU

Sheri Moore
e. smoore@mccevents.ca

FOR COUNCIL MEETING January 20, 2022

> (open) ITEM: 6.5.a

Memorandum

To: Council

Susan Speigel Farida Abu-Bakare
J. William Birdsell Yan Ming (Pearl) Chan
Paul Hastings Christina Karney
Jennifer King Natasha H. Krickhan
Michelle Longlade Lara J. McKendrick
Elaine Mintz Deo M. Paquette
Clayton Payer Greg Redden

Kristiana Schuhmann Gaganjot (Gagan) Singh

Andrew Thomson Settimo Vilardi William (Ted) Wilson Marek C. Zawadski

From: Paul Hastings Vice President Regulatory, Christie Mills Registrar

Date: January 10, 2022

Subject: Activities Under the Registrar - Annual 2021 review

Objective: Statistical Update

Experience Requirements Committee (ERC): For 2021 ERC conducted seven assessment interviews; five for foreign experience and two for exemption requests to Council. Interviews are fully remote via Zoom hosted by Arbitration Place. OAA Communications and the Office of the Registrar are currently working to place more information on the OAA website related to the function and process of the Experience Requirements Committee – this will assist in greater transparency for members and the public as well as satisfy an outstanding request with the Office of the Fairness Commission. Early in 2022 the Committee will also be working to update current assessment questions as well as create a back up set for second/follow-up interviews and overall resiliency.

Complaints Committee: 18 complaints were received in 2021. There is currently one active complaint, its disposition will be determined in the next scheduled Complaints Committee meeting. There are six matters at the intake stage, meaning formal complaints have yet to be filed. One complaint is being held in abeyance. There were 45 non-compliant members relating to outstanding Con-Ed requirements for the 2018-20 cycle. By way of motion, the following was decided:15 members were issued a Caution; 5 members were issued an Undertaking; and 25 members were referred to the Discipline Committee. Training and rollout of the recently approved updated Complaints Committee process will be the focus of early 2022 in addition to the administration of the active complaints. Work is underway with the new Coordinator, Investigations to



leverage a database case management feature recently launched in iMIS. This forms part of the overall operational review recommendations related to better OAA data management.

Public Interest Review Committee (PIRC): The Public Interest Review Committee met in May of 2021 to decide upon 219 matters related to ConEd non-compliance. Determinations included Dismissal with Caution, Dismissal with Undertaking, and Referral to Complaints Committee.

Discipline Committee: The Discipline Committee held four hearings in 2021. Two appeals were heard at Divisional Court. Three hearing are to be scheduled for early 2022. Outstanding hearings will move forward using the virtual platform if it is agreeable to all parties. Work is underway to modernize the Committee Manual inclusive of updated Rules of Procedure. The Committee requires more members than the current roster and the VP Regulatory will be bringing appointment recommendations to Council in March 2022.

Registration Committee: There were no Registration Committee hearings during 2021 but a Divisional Court appeal to a 2019 Registration Committee decision was heard in January 2021.

Act Enforcement: Over the course of 2021 there were 105 matters investigated that related to misuse of the term "Architect" or "Architecture" or otherwise holding out. Of the 105 matters 32 investigations remain ongoing. Three Registrar's Investigations were initiated in 2021 with two ongoing. Work is underway with the new Coordinator, Investigations to leverage a database case management feature recently launched in iMIS. This forms part of the overall operational review recommendations related to better OAA data management. Additionally, for 2022 the Deputy Registrar and Coordinator Investigations will be creating a new feature on the website that allows the public and members to have a searchable resource that lists members of the public who the OAA has enforced against for contraventions of the *Architects Act*.

Injunction: There are no injunctions in process related to holding out and unauthorized practice.

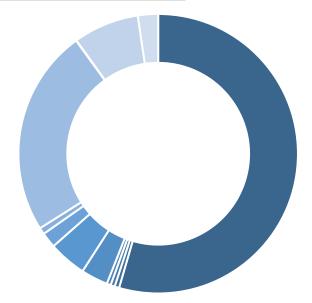
Action:	None. For Information Only.

Attachments: Activities Under the Registrar Statistical Report



OAA Community as of December 31, 2022

OAA Individual Status Distribution



Architect: 4477

Architect Non Practising: 43

Architect On Leave: 40

Architect Long Standing: 38

Retired Member Status: 256

Life Member Status: 360

Lic.Tech.OAA: 147

Temporary Licence: 63

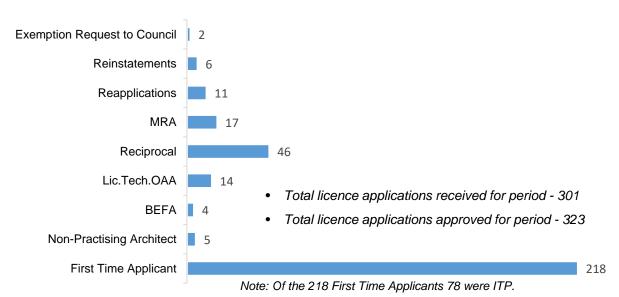
Intern Architect: 1967

Intern Architect On Leave: 4

Student Associate: 625

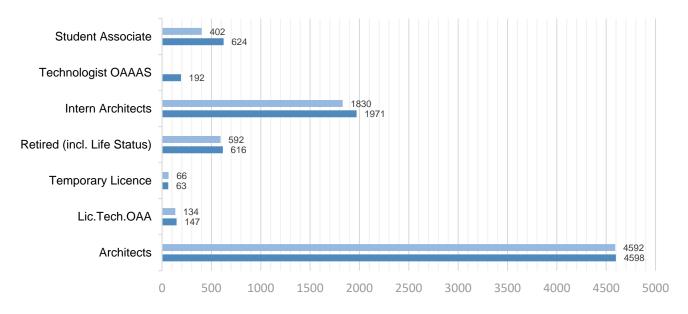
Technologist OAAAS: 192

Licence Application Approval Distribution for the year 2021



Growth in Individual Status for period Jan 1, 2021 – Dec 31, 2021

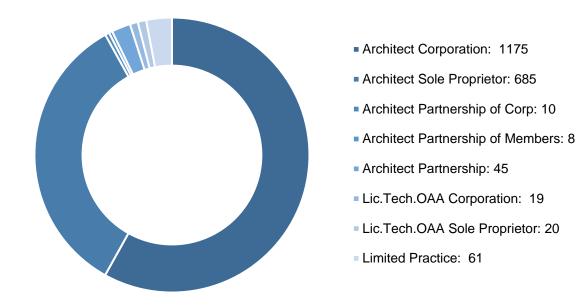




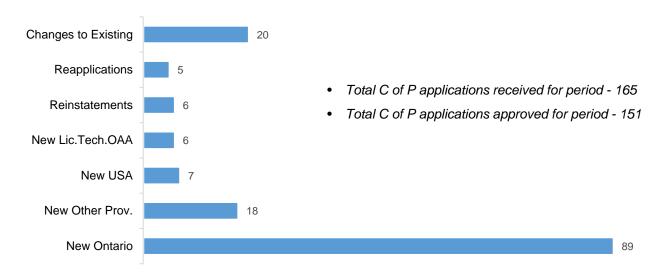
- Total Intern Architect Applications Received for the period 576
- Total Student Associate Applications Received for the period 283

Certificate of Practice as of December 31, 2021

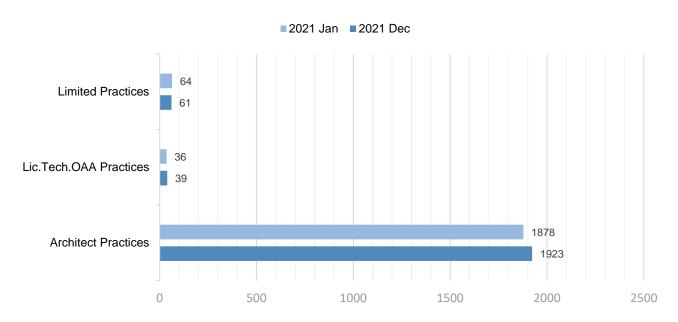
OAA Certificate of Practice Distribution



Practice Application Approval Distribution period Oct 21, 2021 – Nov 24, 2021



Growth in Certificate of Practice period Jan 1, 2021 – Dec 31, 2021



FOR COUNCIL MEETING

January 20, 2022 (open)

ITEM: 6.6.a

Memorandum

To: Council

Susan Speigel Farida Abu-Bakare
J. William Birdsell Yan Ming (Pearl) Chan
Paul Hastings Christina Karney
Jennifer King Natasha H. Krickhan
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Elaine Mintz Deo M. Paquette
Clayton Payer Greg Redden

Kristiana Schuhmann Gaganjot (Gagan) Singh

Andrew Thomson Settimo Vilardi William (Ted) Wilson Marek C. Zawadski

From: Settimo Vilardi, Vice President Practice

Date: January 12, 2022

Subject: Report from Vice President Practice

Objective: To update Council on activities of the Practice Portfolio.

Activities Report – Vice President Practice (since last Council meeting in December 2021)

Interviews for Strategic Planning Consultants: December 15, 2021

- OAA Strategic Planning Meeting: December 6, 2021, January 6, 2022
- Pro-Demnity Board, Committee & Special Meetings: December 16, 2021
- OAA Governance Committee Meeting: January 17, 2022
- OAA Executive Committee Meeting: January 5, 2022
- VPM City of Ottawa: December 17, 2021
- End-User License Agreement (with OAA President and Registrar): December 17, 2021

Activities Report – COVID-19 Webpage:

Latest updates to <u>webpage</u> reflect the current status of the Province being in Stage 2 of the Roadmap to Reopen as of January 5, 2022.

The OAA continues to monitor the situation and refresh the content on the COVID-19 webpage as the situation evolves.

Activities Report – Practice Advisory Services (Key Items)

OAA Hotline: PAS received about 1600 calls during 2021, including about 135 between November 20 and December 31, 2021). (Note: This may include



multiple calls about the same topic). This number does not include email correspondence.

Update on Requests for Proposals (RFPs) monitoring:

No RFP Alerts have been issued since Council last met in December 2021. The number of requests for RFP review has fallen recently. Many of the requests come in too close to the closing date, leaving insufficient time to review the RFP or engage with the issuing authority. PAS's ability to respond to RFP review requests has been reduced by other staff commitments and the unfilled staff positions.

Update to OAA Contracts:

At the September Council meeting, the new OAA 600-2021 Contract was endorsed. PAS is working on the editable format that will be posted on website very soon. Other updates:

OAA 900–2021: Draft complete and sent to legal. Initial meeting with legal occurred week of November 22 to review comments as it pertains to this flow through subconsultant contract. PAS plans a second meeting to address additional comments. It will be going to Council for endorsement in the spring.

OAA 800–2021: There was engaging discussion at the PRC meeting on October 14th to discuss what content is necessary to be included. The discussion will help to start the draft based on the OAA 600 copy that was endorsed in September. Pro-Demnity reminded PRC that a guiding principle in the previous version was "if it is established by applicable law, the contract should be silent about it." The PRC further noted that the document is in wide use, needs to be keep as short as possible and should be retained.

New Contract Landing page: As previously reported, PAS is working with Communications group to create new Contract Landing page and related webpages to support the launch of the new OAA 2021 Contract Suite.

CSA Subscription – Update:

The OAA announced it had <u>secured access to critical CSA standards</u> for Ontario's practices and licensed members through the CSA OnDemand program on June 1, 2021. Practice Advisory Services area continues to work with OAA Communications to provide reminders to members about the program. December 1 will be the half-year mark of the new program's existence. PAS will provide more detailed statistics at the next Council meeting.



Professional Fees & Discussion re. Various Strategies (Follow-up to December 2020 Council Meeting):

Here is a brief update on the following strategies:

Strategy 1 – Fee Calculator. On November 2, 2020, the OAA met with RIBA to dices their fee calculator. Looking at a web application/tool was identified as a strategy in assisting the membership as well as the public in this area. Since the OAA was aware that RIBA had developed this tool the OAA thought it prudent to investigate further to gain information on its inception, development and costs.

Strategy 2 – Fees related resource (website): VP Practice and PAS continue to work on a shortlist of fee related resources and information, for both the public and membership, on architectural fees and collect these on a standalone fees landing page, providing a concentrated resource for this information. First starting with information/resources the OAA has already available and then expanding on additional content, either new or from related resources.

Strategy 3 - FRAP Module (Calculating Reasonable Fees): VP Practice Vilardi was secured as a Subject Matter Expert (SME) by the Fundamentals of Running and Architectural Practice (FRAP) Course to prepare a module for "Determining Reasonable Fees". The module is complete and being converted to self-guided online resource. Next steps are to explore accessibility of the course to members not enrolled in the FRAP course.

Additionally, the OAA advised members via the OAA News of early January and the Practice Advisory e-newsletter (going out on January 14) that as of January 4, 2022, the 2019 edition is free to all on the <u>RAIC website</u>, and can still be purchased as a printed booklet.

Fall Consultation: The Next Edition of Ontario's Building Code (MMAH)

On October 20, the Ministry of Municipal Affairs and Housing (MMAH) launched public consultation on proposed changes for the next edition of Ontario's Building Code, which continues the process of increased harmonization with the National Construction Code.

The final submission included a cover letter as well as the tables to summarize comments of SCOBCAR Committee. The <u>document was uploaded on OAA website</u> and shared via OAA News of January 6, 2022.

Additional proposed changes for the next edition of Ontario's Building Code will be posted for comment in the winter of 2022. These proposals will focus on 2020 National Construction Code changes.



Other Projects and Initiatives under the Practice Portfolio

Practice Advisory e-newsletter – Issue 16 and upcoming editions for 2022: The latest e-newsletter was published on November 19, 2021. PAS will be issuing Issue 16 (first one of 2022) on January 14, 2022. Topics will include latest COVID-19 updates, Excess Soil Regulations (O.Reg. 406/19), RAIC Fee Guide (digital version) now free, Practices and End Users License Agreements, etc.

Discussion with OAA President and Registrar – End User License Agreement (EULA): On December 17, a discussion occurred following recent news that some Ontario firms had been imposed an audit as it pertains to licensing agreement between the practice and a software company. In normal times, the practice internal processes may be adequate to ensure compliance with the licensing requirements as laid out in the EULA, but in the midst of a pandemic, everyone working remotely may have inadvertently resulted in violations of licencing agreements. During the discussion, it was decided that an awareness piece would be added to the Practice Advisory E-newsletter. PAS has slotted this for the January 2022 Edition.

Supporting Committees and departments at OAA: PAS provides feedback on interdepartmental projects.

Website update: PAS continues to work with Communications on updating the library of Practice documents and web content.

Committee Updates

Practice Resource Committee (PRC): PRC continues to author peer-to-peer content for the website with thorough review and comment by all committee members. Some of the topics that were developed included: Code Compliance, Bidding, BIM, Cartoon Sets, etc. The work will eventually make its way on the OAA website. The committee will be welcoming new members in 2022 following interview processes that occurred during November 2021.

Sub-committee on Building Codes and Regulations (SCOBCAR): The sub-committee finalized its review of the 876 proposed code changes through both individual committee member review and then group consensus meetings. Refer to previous section entitled Fall Consultation: The Next Edition of Ontario's Building Code (MMAH). The committee will be welcoming new members in 2022 following interview processes that occurred during November 2021.

Action: None. For Information Only.

Attachments: None.



FOR COUNCIL MEETING January 20, 2022

(open) ITEM: 6.6.b

Memorandum

To: Council

Susan Speigel
J. William Birdsell
Paul Hastings
Jennifer King
Michelle Longlade
Elaine Mintz
Clayton Payer
Farida Abu-Bakare
Yan Ming (Pearl) Chan
Christina Karney
Natasha H. Krickhan
Lara J. McKendrick
Deo M. Paquette
Greg Redden

Kristiana Schuhmann Gaganjot (Gagan) Singh

Andrew Thomson Settimo Vilardi William (Ted) Wilson Marek C. Zawadski

From: Settimo Vilardi, Vice President Practice

Date: January 11, 2022

Subject: Overall Statistics of the PAS Hotline, Practice Advisory E-newsletters

and Update on Requests for Proposals (RFPs) monitoring

Objective: To update Council on 2021 activities the PAS Hotline, Practice

Advisory E-newsletter and Requests for Proposals

Background:

PAS Hotline - General

The <u>PAS Hotline service</u> addresses questions related to a wide range of issues pertaining to the architectural profession. The service provides assistance to architects, licensed technologists, intern architects, clients, building officials, lawyers, contractors, consultants, and other construction related entities.

Between 2007 to early 2020, the Hotline was experiencing continuous growth, hitting over an average of 2000 calls/emails a year in 2017.

In March 2020, COVID-19 had a major impact in the design and construction industry, and this was also seen in the usage of the Hotline.

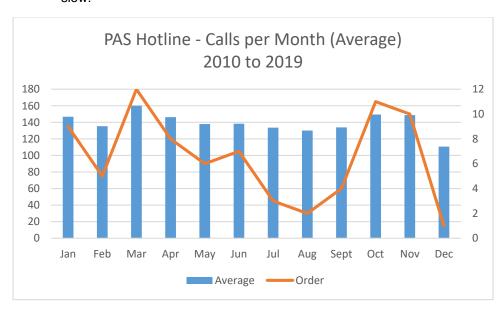
As a means to support and address questions that were surfacing through the Hotline, and those received by the Office of the Registrar (OOTR), the COVID-19 webpage was created in late spring 2020. As further questions arise, and authorities update legislation and responses, the COVID-19 webpage continues to be updated.



PAS Hotline - Overview 2010-2019 (Pre-COVID)

The following observations can be made based on the historic overview:

- 2017 marked the year that Hotline reached over 2000 calls/emails per year.
- Prior to COVID, the PAS Hotline's busiest months were typically January, March, October and November.
- The PAS Hotline's slowest months were typically July, August and September, corresponding to summer holidays. December was also slow.



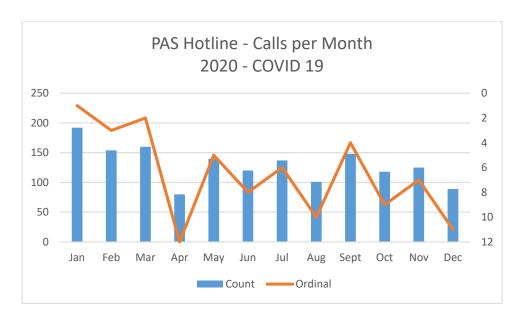
Note: the blue columns represent the average number of calls per month over the 2010-2019 period. The orange line indicates which months are the busiest – the peaks confirm that March, October and November have been historically the time Hotline received the most calls/emails in average.

PAS Hotline - Overview 2020-2021 (COVID-19)

In 2020, the following observations were made:

- Yearly number of calls and estimated number of emails received was less than 2000 for the first time since 2017. This can be likely attributed to the COVID-19 lockdown starting in March 2020 as well as subsequent interventions/closures by the government.
- Prior to March 2020 lockdown, January (216 calls), February (154 calls) and March (160 calls) 2020 were tracking to be the busiest since the start of the Hotline records in 2007.





Note: the blue columns represent the average number of calls per month over the 2020 period. The orange line indicates which months are the busiest. As COVID-19 hit the world in March 2020, design/construction was affected by the closures mandated by the Government. As people adjusted to the new reality, projects picked back up and so did new questions about COVID-19 and the practice of architecture.

In 2021, the following observations were made:

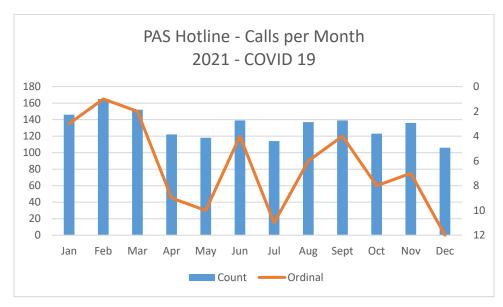
- Yearly number of calls and estimated number of emails received was tracking upwards compared to 2020. But still less than 2000, the typical range we have observed pre-COVID.
- The biggest users of the Hotline for 2021 were Architects (with about 80%) followed by Clients (with about 10%). The rest of conversations/emails are had by either Lic.Tech. OAA, Interns, Building Officials, Lawyers and the "Other" category.
- The 3 busiest months were January, February and March (with about 150 calls in average - excluding any email correspondence). And the 3 least busy months were May, July and December (with less than 120 calls in averages).

Here are some of the most frequently topics of the calls in 2021 (in no particular order):

- Architect B taking over from Architect A
- Business Continuity/Succession Planning Including purchasing another firm, retirement, families/estates dealing with sudden death of sole practitioners, etc



- Questions about improper/unfair clauses in contracts and/or RFPs
- COVID-19 including return to office policies, and requests for proof of vaccination
- · Difficulty getting paid by clients or other fee questions
- Copyright, and providing CAD files
- Question about finding resources on website
- Joint Ventures



Note: the blue columns represent the average number of calls per month over the 2021 period. The orange line indicates which months are the busiest. The Hotline has been more consistently busy over the year. The seasonal peaks and valleys seem to be aligning to Pre-COVID times.

Practice Advisory E-newsletters

The Practice Advisory e-newsletter is a bi-monthly communication that brings topics to member's attention and that have an impact on either management of the practice or management of the project.

In addition to excerpting Practice Tip 39.1, Best Practices for Review of RFP Language and Supplementary Conditions to OAA 600 and Other Client-Architect Contracts, Practice Advisories highlight other practice-related information relevant to members. There were three issues of the newsletter issued in 2019 and six in 2020. Practice Advisories are posted on the OAA Website.

The newsletter is sent via email as well as posted on social media outlets such as Facebook, LinkedIn, Instagram, and Twitter.

The content is curated by the Practice Advisory Services team (PAS) with the assistance of the Communications group.



In 2021, six issues were published. One notable change that occurred mid-year was the addition of an index so readers could view at a glance the topics covered in the publication. This aligns with the OAA News layout.

The publication serves as part of the array of tools to promote the new CSA program (launched in 2020) and ties into updates on the OAA's Covid-19 updates as well.

The following tables present an overview of topics for each newsletter as well as the number of emails sent (which include Architects, Licensed Technologist OAA, and Interns amongst the recipients). The month of May had the lowest viewership. This may be explained by usual flurry of emails surrounding our annual conference. The PAS team is studying the advisability of increasing the frequency of the newsletter or leveraging other communication channels to share practice content to the members and the public.

		Number		Topics covered in the issue	
		of			
Practice Advisory Issue	No.	emails	Open		
	articles	(approx.)	Rates		
		(-11-		COVID-19 – Impacts on Construction Activities	
				New OBC Amendments	
				Excerpt 9 of PT.39.1	
	7			4. CCDC 2-2020	
				New Indexes PT.00 and RN.00	
Issue 10 Practice Advisory		7765		New Excess Soil Regulations	
- January 15, 2021		emails	59.5%	Changes to Building Code Related Fees	
				 Professional Coordination of Consultants – Updated PT.27 	i
				2. Excerpt 10 of PT.39.1	
				OAA Careers – Practice Advisor	
				OAA Roundtable: Design of Long-term Care Facilities	es
	9			MZOs: New Practice Tip	
				6. ISO 19650: Part 3 of International BIM Framework	
				Being Mindful of Legal Issues when Using Drones	
Issue 11 Practice Advisory		7835		8. COVID-19: ProDemnity Special Edition Bulletins	
- March 26, 2021		emails	56.9%	9. New FAQ.00 Index	
				CSA Standards Program	
				Excerpt 11 of PT.39.1	
				COVID-19 – Dealing with Supply Chain Impacts	
				Index to OAA Contracts and Guides	
				Congratulations to Newly Licensed Members	
	11			6. TEUI tool launch	
	''			New Excess Soil Regulations	
				Durability & Maintenance Plans: Discussions with Cl	lients
				National Codes – Electronic access	
Januarda Danatian Ashrianan		7846		 Spec Document – Flatness/Levelness for Concrete 	
Issue 12 Practice Advisory				receiving Floor Coverings	
- May 21, 2021		emails	36.2%	11. CodeNews Issue 312: Building Transit Faster Act	
				COVID-19: Province Moving into Step 3 on July 16	
				Construction Activities: Importance of Vibration Conf	trol to
				Mitigate Issues for Adjacent Buildings	_
				Construction Site Safety: Owner Found Responsible Figure 4.0 of BT 20.4)
Issue 13 Practice Advisory	7			4. Excerpt 12 of PT.39.1	
- July 16,2021	/			 New 2021 Surety Association of Canada (SAC) Enhanced Bond Forms 	
				6. From the OAA's Practice Advisors: Recommended	
				Mailing Lists	
		7700		7. CSA Subscription Program: Sign up NOW for FREE	:
		emails	59.60%	Access	
		Citiano	00.0070	Revised North American Architectural Woodwork	
Issue 14 Practice Advisory	_			Standards (NAAWS)	
- September 24, 2021	9	7700		2. Excerpt 13 of PT.39.1	
<u> </u>		emails	59.80%		tees
- September 24, 2021			59.80%	 Looking for Volunteers for Practice-focused Commit 	tees



				4.	MMAH Revised Sewage Systems, Plumbing, and Housing Codes and Guides
				_	
				5.	Public Consultation: Proposed Code Amendments
				_	Related to Tiny Homes
				6.	CCDC Orientation Webinars Series Starting in October
				7.	From the OAA's Practice Advisors: Recommended
					Mailing List Subscription
				8.	CSA Standards Subscription Program: Have You Signed
					Up Yet?
Issue 15 Practice Advisory				1.	New Best Practice Guide on Procurement Issues Being
- November 19, 2021					Developed
- November 19, 2021				2.	When Clients Ask Your Practice to Certify COVID-19
					Vaccination
				3.	Status Excerpt 14 of PT.39.1
				4.	Offering Construction Services: New ProDem Exclusions
				٦.	as of January, 2022
				5.	Public Consultation: MMAH Proposes Building Code
					Changes
				6.	Construction Act Survey for Certificate of Practice
	11			0.	Holders
				7.	OAA and OGCA Release Recommended Supplementary
					Conditions for New CCDC 2-2020 and New Practice Tip
					PT.23.11
				8.	World-wide Fire Safety Initiative Launched
				9.	Construction Sites and Excess Soil Management
				9.	
				10	Regulations
		7700		10.	
			44.700/		Continue
		emails	41.70%	11.	OAA Careers: Searching for a Project Coordinator (PAS)

RFP Monitoring

RFP Alerts are issued by the OAA to highlight comments, cautions or advice related to Request for Proposals (RFPs) and similar documents.

The following report presents overview of the last 5 years.

Some observations:

- The PAS team has noticed the Alerts are resulting in greater awareness and willingness by some of the creators of the RFPs to having a discussion to review OAA's concerns about content of the documents.
- The introduction of <u>Practice Tip PT.39.1 Best Practices for Review of RFP Language and Supplementary Conditions OAA 600 and other Client-Architect Contracts</u> in May 2019 also resulted in empowering members with key items to look for.
- The number of Alerts issued in 2021 was 3. The low number can be linked to by the fact that the time span is often too short between when RFPs are brought to PAS attention and the closing date of the RFPs. This impacts the ability to review. PAS has been working on other projects (OAA's Contracts, COVID-19 webpage, etc) which took over a lot of time that could have otherwise been dedicated to RFP reviews.



- In 2021, in addition to reviewing RFPs and integrating some of the findings into the new OAA contracts coming out in 2021, PAS spent time talking to client specific groups before RFPs were published. The exercise consisted of reviewing the proposed documents from client-groups as well as meetings (page-turns) to discuss some of the concerns the OAA highlighted. This newer pilot initiative offers the OAA an opportunity to build relationship with client groups and engage proactively before RFPs hit the street.
- With the issuance of the new OAA Contract Suite later this year, PAS
 has been discussing opportunities for outreach to client groups (including
 procurement groups and lawyers) to promote the new OAA contracts
 and identify educational opportunities to hopefully elevate understanding
 of the *Architects Act* and Regulations, copyright as it pertains to the work
 of OAA licensed members, and what PLI is, etc. These are often topics
 that are problematic in RFPs.

Year	Number of RFPs reviewed	Number of RFP Alerts Issued
2017	42	17
2018	57	18
2019	46	13
2020	57	12
2021	28	3

Action: None. For Information only.

Attachments: Update on Requests for Proposals (RFPs) monitoring (attached)



Summary of RFP's - 2021

	Dates Issued/Closed	Agreement	Status
2021			
1	Nov 25/21	Thunder Bay - RFP 2021-67 - Victoria Ave	Requested by Member
2	Nov 5/21	McMaster University RFP - Psych Building Atrium Addition	Requested by Member/no time to review
3	N/A	City of Kingston - Professional Services Agreement	Requested by Member/no time to review
4	Oct 20/21	RFP -The Dorothy Ley Hospice Expansion Project	Requested by Member
5	N/A	Queen's University - Pre Engineering Building SC's	Requested by Member/comments to Member
6	N/A	Ryerson University - Professional Services Agreement	Requested by Member/comments to Member
7	Sept 24/21	Durham Region RFP - Forest Centre Innovation & Resilience	Requested by Member/no time to respond
8	Oct 4/21	Toronto Streetscape Master Plan RFP - Little Italy	Requested by Member/comments to Member
9	N/A	PSPC - Project Services for Office Fit Up (EP008-212103(A))	Requested by RAIC/no tme to respond
10	Aug 27/21	Ottawa Community Housing RFQ	Requested by Client/continuing discussions
11	July 9/21	Grassy Narrows First Nations RFP-Bridging & Compliance	Requested by Member/no time to respond
12	July 5/21	Oakville North Park Community Centre, RFP-26-2021	Requested by Member/letter to Oakville
13	Jun 18/21	City of Vaughan, RFP 21-136 - Fire Station #7	Response to Member June 14/21
14	June 15/21	York Region, P-20-100 Transitional Emergency Housing	Requested by Member/No time to review
15	May 27/21	Wasaga Beach - RFP#Fire-2021-01 - Fire Station #2	Requested by Member/Comments to Client
16	May 14/21	Bruce County - RFP#BC-PS-21-38 - Paramedic Centre	RFP Alert May 13/21
17	N/A	Manitoulin-Sudbury Services District	Requested by RAIC/comments to RAIC
18	April 15/21	Brantford Info Centre Design Build RFP 2021	Requested by Member/no time to respond
19	N/A	Ottawa Community Housing - Draft RFQ	Requested by Client/continuing discussions
20	Mar 2/21	Simceo Muskoka Family Connextions - RFP 020121	Requested by Member/member decided not to pursue
21	Feb 22/21	City of Markham - RFQ 005-Q-21 - Milliken Mills Comm Cen	Requested by Member/no time to respond
22	Mar 2/21	University of Ottawa -20-21898 BT-Stem Lab	Requested by Member/comments to Member
23	Mar 1/21	Cartier Place Renovation	Requested by Member/comments to Member
24	N/A	Beth Sholom Synagogue SC's	Requested by Member/Comments to Member
25	Close Feb 10/21	Chatham Kent - RFP R21-161 - New Public Works Garage	RFP Alert Feb 9/21
26	Close Jan 26/21	Franco Achat - RFQ-21-62 - Elementary School North York	RFP Alert Jan 25/21 - Client Responded
27	Close Feb 4/21	University of Guelph - 2021 RFSQ	Member requested item review/Response to Member
28	N/A	Landcape Arch Services - RFP #2650895870 - Market Lane	Requested by Member/comments to Member

Year	RFP's and Supplementary Conditions Review	Number of Alerts
2021	28	3
2020	57	12
2019	46	13
2018	57	18
2017	42	16

Memorandum

To: Council

Susan Speigel Farida Abu-Bakare
J. William Birdsell Yan Ming (Pearl) Chan
Paul Hastings Christina Karney
Jennifer King Natasha H. Krickhan
Michelle Longlade Lara J. McKendrick
Elaine Mintz Deo M. Paquette
Clayton Payer Greg Redden

Kristiana Schuhmann Gaganjot (Gagan) Singh

Andrew Thomson Settimo Vilardi William (Ted) Wilson Marek C. Zawadski

From: Natasha Krickhan, Vice President Education

Date: January 12, 2022

Subject: Report from Vice President Education

Objective: To update Council about activities under the Vice President

Education portfolio

Highlights

Activities Report - Vice President, Education

Education and Development Portfolio Update

Comprehensive Education Committee Initiatives Update

Activities Report – Vice President, Education

December 6, 2021 – OAA K-12 Resource Guide Meeting with Andrew Davies, Executive Director of No.9

December 7, 2021 – Mentorship Survey Results Meeting with Neo Mahfouz, Interns Subcommittee Lead

December 8, 2021 – Education resources on OAA website Internal meeting

December 14, 2021 - OAA K-12 Resource Guide Meeting with Susan Spiegel and Agatha Mancini

December 15, 2021 - Mentorship Survey Results Communication plan



FOR COUNCIL MEETING January 20, 2022 (open) ITEM: 6.7.a

Internal meeting

December 17, 2021 - OAA Conference 2022 Interview with KBK Architecture Inc

January 11, 2021 – Mentorship Survey Results Comprehensive Education Subcommittee

Education and Development Portfolio Update

1. Continuing Education Webinars Series

In 2022, the Continuing Education Webinars Series continue to be offered on a biweekly basis. In collaboration with Practice Advisory Services, there is planning underway to develop and deliver webinars on the following topics:

- Structure of the OAA Contracts & how they fit in the construction industry
- Standard Form of Contract for Architect's Services OAA 600
- Standard Short Form of Contract for Architect's Services OAA 800
- Standard Contract between Architect and Consultant OAA 900
- The role of Tarion and Home Construction Regulatory Authority
- Succession Planning and Business Continuity

The following Continuing Education webinars are currently open for registration:

January 13	Overcoming Common Legal Risks & Disputes in using BIM
January 27	Communicating Your Value as an Architect posted
February 10	Ontario's new Excess Soils Legislation
February 24	Understanding your Role as a Licensed Professional

2. Mandatory Continuing Education on Equity, Diversity and Inclusion

As of January 10, 2022, approximately 40% of the membership is compliant with the mandatory requirement for a minimum one learning hour of accredited programming focused on Equity, Diversity, and Inclusion (EDI). To assist members to comply with the mandatory requirement, the following ten EDI webinars will be offered before the end of the cycle.

1.	January 20	The Business Case for Diversity
2.	February 3	Minimizing Unconscious Bias in the Hiring Process
3.	February 15	Human Rights in the Workplace
4.	March 1	The Business Case for Diversity
5.	March 15	Minimizing Unconscious Bias in the Hiring Process
6.	March 31	Human Rights in the Workplace
7.	April 14	The Business Case for Diversity
8.	April 28	Minimizing Unconscious Bias in the Hiring Process
9.	June 7	Human Rights in the Workplace
10.	June 21	The Business Case for Diversity



Those who do not meet the EDI requirement by the end of the cycle, will be provided with an opportunity to comply by attending one of the following EDI webinars that are scheduled outside of the current cycle.

July 12 Minimizing Unconscious Bias in the Hiring Process
 July 28 Human Rights in the Workplace
 August 11 The Business Case for Diversity
 August 25 Minimizing Unconscious Bias in the Hiring Process

A separate memo has been submitted to Council regarding a requirement for a topic area of mandatory learning within the OAA's Continuing Education Program for the next Cycle which begins July 1, 2022 and ends June 30, 2024.

3. Course "Fundamentals of Running an Architectural Practice"

Work continues to move forward with the development of the online course "Fundamentals of Running an Architectural Practice" on the online platform at University of Toronto, School of Continuing Studies. The content development has now been completed. Work is underway to incorporate content into the online platform. It is anticipated that the online course will be available in the second half of 2022.

Comprehensive Education Committee (CEC) Initiatives Update

1. OAA Conference 2022 - Continuing Education Programming

The OAA Conference 2022 will be an in-person event held in May 2022 in Toronto along with some live virtual streaming options. The Comprehensive Education Committee has now completed the review and evaluation of the proposals submitted for the upcoming OAA Conference. A separate memo has been submitted to Council seeking approval of speakers/sessions recommended for the upcoming OAA Conference.

2. CACB Validation Conference 2022

The Comprehensive Education Committee continues to work on the submission to the next CACB Validation Conference. The deadline for submission of Issue papers is May 31, 2022. In order to inform the submission paper for the CACB Validation Conference, the Comprehensive Education Committee collaborated with the Interns Committee on a survey of the membership. The collected data is currently under review by both Committees. A separate memo will be submitted to Council in March to consider the survey findings within wider policy and decision making context and as part of the CACB Conference submission.

3. New Energy Advisors - Green Retrofit Program



In 2021, Natural Resources Canada launched a call for proposals to create middle-class jobs through the federal government's \$2.6 billion green retrofit program. This call for proposals is a \$10 million commitment to recruit, train, and mentor up to 2,000 new energy advisors across the country to support the Canada Greener Homes Grant.

The Comprehensive Education Committee, in collaboration with Policy Advocacy Coordination Team, is exploring potential challenges and benefits of applying for funding to develop and offer energy advisor training. The CEC will continue to be involved in this discussion, once it is determined that this program does not infringe upon protected scope, to help raise awareness about this program.

4. Architecture Education for Students

Work continues on the development of a webpage / dashboard on the OAA website, which will serve as a single-point resource hub for teachers, parents, and students. The dashboard will feature the document "Architecture Education for Students. An Educator's Guide to Teaching Architectural Concepts. Grades JK to 12". It will also provide links and additional resources to educational materials which may be of use to teachers and parents.

In addition to the webpage / dashboard on the OAA website for teachers and parents, the CEC has also been working on the development of a webpage / dashboard to educate the general public about architecture and events related to the allied arts. It is hoped that both of these dashboards will be accessed through the "resources" page of the OAA website.

Action: For information only

Attachments: None



Memorandum

To: Council

Susan Speigel Farida Abu-Bakare
J. William Birdsell Yan Ming (Pearl) Chan
Paul Hastings Christina Karney
Jennifer King Natasha H. Krickhan
Michelle Longlade Lara J. McKendrick
Elaine Mintz Deo M. Paquette
Clayton Payer Greg Redden

Kristiana Schuhmann Gaganjot (Gagan) Singh

Andrew Thomson Settimo Vilardi William (Ted) Wilson Marek C. Zawadski

From: Susan Speigel, President

Kristi Doyle, Executive Director

Date: January 12, 2022

Subject: Report on Annual Society Meetings Fall 2021

Building Our Partnership: Societies and the OAA

Objective: To provide Council with a report on the fall 2021 meetings with local

societies of architects

The 2021 annual meetings with the OAA's local architectural societies were held virtually between September and November. Once again a number of societies combined efforts and hosted their sessions jointly in an effort to expand the conversations between members from across the province.

In conversation with the society chairs beforehand, OAA President Speigel took a different approach in terms of the agenda and focussed on a specific topic of discussion. The intent was to conduct a meaningful dialogue with local members on this topic, as opposed to the usual download of information on current OAA initiatives.

Without much debate the topic of focus was Climate Stability – or more appropriately described as the climate emergency. The hope was to discuss ways for the OAA and societies to work together to advance collective goals and objectives in this important area. More specifically, during each of the meetings the discussion focussed on understanding what members feel are the priorities around climate stability and what the society or local members/firms might be engaged in to address the issue. It was also an opportunity to provide a clearer understanding in terms of the work that the OAA's Sustainable Built Environment



Committee is doing and understand what the members feel the OAA should be doing to address climate stability within our mandate.

Those meetings also presented an opportunity to create a better awareness and understanding as to the difference as well as similarities between the role of the OAA vs. that of the societies, and, in doing so understand how we can leverage the strength in each other's mandate.

For the most part, three very important streams of discussion emerged, and were consistent among all meetings:

- Further pressure needs to be placed on government to address the climate emergency in terms of policy and/or regulatory directives, which should be undertaken by the OAA.
- Members require additional tools and resources to help explain the life cycle cost of the upfront investment in design to address climate stability to their clients.
- Members need assistance understanding what educational and other resources are available to them which could better facilitated through the OAA's website.

This information is provided to Council for information and in the context of the OAA's strategic planning exercise in February.

Action: For information.

Attachments: None

