ST. J@HN'S

Committee of the Whole Agenda

9:00	ust 19, a.m. Floor C	2020 ity Hall	Pages
1.	Call to	o Order	
2.	Appro	oval of the Agenda	
3.	Adop	tion of the Minutes	
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4.	Prese	entations/Delegations	
5.	Finan	ce & Administration - Councillor Dave Lane	
6.	Public	c Works & Sustainability - Councillor Ian Froude	
	6.1	Update of Resilient St. John's Planning Process	8
	6.2	FCM Community Energy Financing Program Design Application	44
	6.3	What We Heard Sidewalk Snow Clearing Public Engagement	49
7.	Comr	nunity Services - Councillor Jamie Korab	
8.	Spec	ial Events - Councillor Jamie Korab	
9.	Hous	ing - Deputy Mayor Sheilagh O'Leary	
10.	Econ	omic Development - Mayor Danny Breen	
11.	Touri	sm and Culture - Councillor Debbie Hanlon	
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12. Governance & Strategic Priorities - Mayor Danny Breen

13.	Plannin	g & Development - Councillor Maggie Burton	
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	13.3	Re-Imagine Churchill Square, Initial Public Engagement – What We Heard	154
14.	Transpo	ortation and Regulatory Services - Councillor Sandy Hickman	
	14.1	Donegal Place Traffic Calming	168
15.	Other B	Business	

16. Adjournment

ST. J@HN'S

Minutes of Committee of the Whole - City Council

Council Chambers, 4th Floor, City Hall

August 5, 2020, 9:00 a.m.

Present:	Mayor Danny Breen Deputy Mayor Sheilagh O'Leary Councillor Maggie Burton Councillor Dave Lane Councillor Sandy Hickman Councillor Deanne Stapleton Councillor Jamie Korab Councillor Ian Froude
Regrets:	Councillor Debbie Hanlon Councillor Wally Collins
Staff:	Derek Coffey, Deputy City Manager of Finance & Administration Tanya Haywood, Deputy City Manager of Community Services Jason Sinyard, Deputy City Manager of Planning, Engineering & Regulatory Services Susan Bonnell, Manager - Communications & Office Services Elaine Henley, City Clerk Shanna Fitzgerald, Legislative Assistant Brian Head, Manager - Parks & Open Spaces Linda Bishop, Senior Legal Counsel

1. Call to Order

2. <u>Approval of the Agenda</u>

Councillor Froude requested that information regarding curb extensions at Larkhall Street and Donegal Place is added to the agenda for the next Committee of the Whole.

Recommendation Moved By Deputy Mayor O'Leary Seconded By Councillor Korab

That the agenda be adopted as presented.

For (8): Mayor Breen, Deputy Mayor O'Leary, Councillor Burton, Councillor Lane, Councillor Hickman, Councillor Stapleton, Councillor Korab, and Councillor Froude

MOTION CARRIED (8 to 0)

3. Adoption of the Minutes

3.1 Adoption of Minutes - July 22, 2020

Recommendation Moved By Councillor Froude Seconded By Councillor Lane

That the minutes of the Committee of the Whole meeting held July 22, 2020 be adopted as presented.

For (8): Mayor Breen, Deputy Mayor O'Leary, Councillor Burton, Councillor Lane, Councillor Hickman, Councillor Stapleton, Councillor Korab, and Councillor Froude

MOTION CARRIED (8 to 0)

4. <u>Presentations/Delegations</u>

5. Finance & Administration - Councillor Dave Lane

6. Public Works & Sustainability - Councillor lan Froude

6.1 St. John's Transportation Commission - Q2 Financial Statement

Councillor Froude presented the financial statement of the second quarter of 2020 with an elaboration on noteworthy points. He reiterated his intent to present quarterly financial statements so that Council and the public is better informed of operational and financial matters with the St. John's Transportation Commission.

- 7. <u>Community Services Councillor Jamie Korab</u>
- 8. <u>Special Events Councillor Hope Jamieson</u>
- 9. Housing Deputy Mayor Sheilagh O'Leary
- 10. Economic Development Mayor Danny Breen
- 11. Tourism and Culture Councillor Debbie Hanlon
- 12. <u>Governance & Strategic Priorities Mayor Danny Breen</u>

13. Planning & Development - Councillor Maggie Burton

13.1 750 Kenmount Road - Zone Line Interpretation - DEV1400357

At 750 Kenmount Road, on lands that are part of Kenmount Crossing, Phase 2, by H3 Developments Ltd., the zone boundary between the Industrial General (IG) Zone, the Rural (R) Zone and the Comprehensive Development Area (CDA) Kenmount Zone are interpreted to run along the property boundary. Corresponding changes will be made to the Future Land Use Map of the St. John's Municipal Plan. This accords with the rules of zone interpretation in Section 3.4 of the St. John's Development Regulations.

13.2 78 McNiven Place - Zone Line Interpretation - INT1900047

At 78 McNiven Place, on land which the City will sell to the property owner to expand his lot slightly, the zone boundary between the Open Space (O) Zone and the Residential Low Density (R1) Zone is interpreted to run along the new property boundary. A corresponding change will be made to the Future Land Use Map of the St. John's Municipal Plan. This accords with the rules of zone interpretation in Section 3.4 of the St. John's Development Regulations.

13.3 5 and 7 Little Street - MPA2000003

Recommendation Moved By Councillor Burton Seconded By Councillor Froude

That Council consider amendments to the St. John's Municipal Plan and Development Regulations to rezone land from the Residential Medium Density (R2) Zone to the Apartment Low Density (A1) Zone at 5 and 7 Little Street, and approve the attached draft Terms of Reference for a Land Use Assessment Report to consider a Personal Care Home at this location. Further, upon submission of a satisfactory Land Use Assessment Report, that Council refer the application to a digital Public Meeting chaired by an independent facilitator for public input and feedback.

For (8): Mayor Breen, Deputy Mayor O'Leary, Councillor Burton, Councillor Lane, Councillor Hickman, Councillor Stapleton, Councillor Korab, and Councillor Froude

MOTION CARRIED (8 to 0)

13.4 6 Lambe's Lane - MPA2000005

Recommendation Moved By Councillor Burton Seconded By Deputy Mayor O'Leary

That Council consider amendments to the St. John's Municipal Plan and Development Regulations to rezone land from the Institutional (INST) Zone to the Apartment High Density (A3) Zone at 6 Lambe's Lane to allow a 200-unit student apartment development, and approve the attached draft terms of reference for a Land Use Assessment Report to consider Apartment Buildings at this location.

Further, upon receiving a satisfactory Land Use Assessment Report, that Council refer the application to a digital Public Meeting chaired by an independent facilitator for public input and feedback.

For (8): Mayor Breen, Deputy Mayor O'Leary, Councillor Burton, Councillor Lane, Councillor Hickman, Councillor Stapleton, Councillor Korab, and Councillor Froude

MOTION CARRIED (8 to 0)

14. Transportation and Regulatory Services - Councillor Sandy Hickman

15. <u>Other Business</u>

16. <u>Adjournment</u>

There being no further business the meeting adjourned at 9:36 am.

Mayor

Title:	Multi-Stakeholder Sustainability Team: Resilient St. John's Climate Plan Update
Date Prepared:	August 4, 2020
Report To:	Committee of the Whole
Councillor and Role:	Councillor Ian Froude, Public Works & Sustainabilty
Ward:	Ward 4

Issue:

To inform Council about the status of the planning process of the Resilient St. John's Climate Plan, the membership of the Multi-stakeholder Sustainability Team, and to launch stakeholder and public engagement activities.

Discussion – Background and Current Status:

Canada and the province of Newfoundland and Labrador continues to work on actions related to achieving the global <u>Sustainable Development Goals</u> (SDGs), which are the global blueprints to achieve a better and more sustainable future for all. National governments cannot achieve the ambitious SDGs in the 2030 Agenda – but cities can contribute. The St. John's City Council has ongoingly re-enforced its commitment to be a Sustainable City through the development and implementation of various strategies and plans that support elements the SDGs. Plans and strategies related to SDGs include:

- Envision St. John's Municipal Plan
- Affordable Housing Strategy
- Municipal Arts Plan
- Parks and Open Spaces Master Plan
- Urban Forest Management Master Plan
- Water Conservation Order
- Updated Economic Development Strategic Plan (in development)
- Healthy City Strategy (in development)

Climate change continues to be the biggest challenge of our generation. As with COVID-19, we also need to flatten the global warming curve before it's too late. The "Resilient St. John's" Climate Plan will focus on a sustainability cornerstone by addressing energy and climate change. Its aims to support the City and the community as a whole to reduce the emission of greenhouse gases (GHGs), stabilize energy costs by supporting energy efficiency, and preparing the City to address the challenges and opportunities presented by the impacts from climate change. This will ensure other sustainability development outcomes and long-term recovery are not undermined by the risks that climate change presents.

The City of St. John's has completed key foundational steps since Council declared a Climate Emergency. These foundations will aid in planning corporate and community climate action, and include:

- Joined the Federation of Canadian Municipalities Partners for Climate Protection.
- Committed to the Global Covenant of Mayors for Climate and Energy.
- Developed a planning and engagement framework.
- Estimated the corporate and community energy use and greenhouse gas baseline (2018) to characterize the City's contribution to climate change.
- Established an Environmental and Sustainability Expert Panel (ESEP), which will ongoingly provide advice to Council and support the planning process and later implementation of the sustainability plan.
- Compiled climate science relevant to the City in the "St. John's Climate Profile", which aims to aid in decision making through considerations of past weather conditions and future climate projections.
- Initiated the development of a Corporate Greenhouse Gas Reduction Framework through an Inter-departmental Working Group and an Energy Efficiency Opportunity Assessment, to develop a comprehensive corporate program that will stabilize energy costs and reduce greenhouse gas emissions.
- Formed a Multi-Stakeholder Sustainability Team (MSST), with a membership supported by the ESEP.

Next Steps:

Corporately, the City of St. John's is working to develop a Corporate Energy and Greenhouse Gas Reduction Framework, which will be a component of the Resilient St. John's Climate Plan. This distinction is defined in accordance to the guideline of FCM's Partners for Climate Protection program, which suggests that the corporate energy and emissions inventory be defined by the concept of "Operational Control Approach" (e.g., City operated buildings, fleet, waste management plants).

The Community components of the Resilient St. John's Climate Plan is a stakeholder driven process, including both the community and staff from the City operations. This community engagement process will address the mitigation of the entire community's GHGs, as well as the inter-dependent issue of adaptation for the community as a whole. This would include items such as energy consumption in residential and commercial buildings, industrial processes, transportation (including public transit), and emissions generated from the community's wastewater and solid waste. The plan will address adaptation as a community challenge, as the responsibility is shared across the various members of the community and the municipality to avoid harm. The City and the Community (ESEP and MSST) are now ready to initiate the engagement process.

Multi-Stakeholder Sustainability Team

<u>Purpose:</u> To provide local perspective and advice to the community energy efficiency, GHG mitigation and adaptation components of the sustainability plan.

To facilitate discussions, the MSST is thought of as two Working Groups i) energy & GHG mitigation and ii) adaptation. However, workshops involving both to identify co-benefits are envisioned.

Scope of Working Groups in the MSST:

Energy & GHG Mitigation Group	Adaptation Group		
- Develop community GHG reduction	- Identify how climate may impact		
target(s).	the community through a		
- Participate in workshops to develop	vulnerability and risk assessment.		
community energy efficiency and	- Develop community adaptation		
GHG mitigation actions. goals and actions.			
Inform Co-benefits of mitigation and a	daptation actions in our community to		
achieve Low Carbon Resilience.			
Inform and develop the necessary partnerships.			
Inform financial implications.			
Initiate collaboration and partnerships	s needed to leverage existing funding		
opportunities (e.g., FCM's Greer	n Municipal Fund Opportunities).		

<u>Membership</u>: Sectors were identified within the community systems (environmental system, socioeconomic system, built environment system). Stakeholder and partner organizations reviewed by the ESEP were contacted to elicit participation. The relevant staff from the City will attend the workshops to support the planning of the MSST Groups.

<u>Role of Council in MSST:</u> Council is invited to participate in the MSST workshops to provide broader community perspectives. The outputs of the MSST will be reviewed by the ESEP. The final plan will be brought to Council for review and adoption.

<u>Reporting:</u> The MSST will work with the City staff to inform the community sections of the Planning Framework, which will report to Council via the ESEP.

Proposed Timeline	Task	Framework Phase
Late Summer 2020	MSST Launch	
Late Summer 2020	Council Update	
Early Fall 2020 (TBC)	Public Engagement	Assessment
Early Fall 2020	MMST Workshop 1	
Mid- Fall 2020	MMST Workshop 2	
Late Fall 2020	MMST Workshop 3	
Mid – Winter 2021 (TBC)	Public Engagement	
Mid Spring 2021	MMST Workshop 4	Dianning
Late Spring 2021	Council Update	Planning
Late Spring 2021	Public Engagement	
Summer 2021	ESEP Draft Plan	
Summer 2021	Council Final Draft Plan	Adoption & Implementation

<u>Timeline:</u>

Public Engagement Process:

The City of St. John's values public engagement as it ensures policy reflects public needs and interests, considers diverse viewpoints and values, and enables collaboration and consensus. Public engagement will be carried out by the City of St. John's.

<u>DIY Workshop Tool</u>: In addition to the City's public engagement activities, a facilitators guide will be developed to support community groups that would like to have discussions about climate change, which will help ensure that these discussions provide information relevant to the process. This tool will include items like guidance for facilitators, background information about climate change relevant specifically to our community, the Resilient St. John's planning process, questions of interest, and next steps.

<u>Youth Engagement:</u> Youth Engagement Advisory Committee recommendations for engaging youth were reviewed and incorporated in the public engagement steps of the process shown below.

Key Considerations/Implications:

- 1. Budget/Financial Implications: N/A
- 2. Partners or Other Stakeholders: Partners and Stakeholders have committed to participate in the planning process through the Multi-Stakeholder Sustainability Team.
- 3. Alignment with Strategic Directions/Adopted Plans: A Sustainable City; A City That Moves; A Connected City; An Effective City.
- 4. Legal or Policy Implications: N/A
- 5. Privacy Implications: N/A
- 6. Engagement and Communications Considerations: Online Workshops with the Multi-Stakeholder Sustainability Team and the Public Engagement page in the City's online platform will be launched. Any community group is also encouraged to make use of the DIY Community Climate Workshop Tool.
- 7. Human Resource Implications: N/A
- 8. Procurement Implications: N/A
- 9. Information Technology Implications: N/A
- 10. Other Implications: N/A

Conclusion/Next Steps:

- The "St. John's Climate Profile" report will be made publicly available to aid in decision making, incorporating considerations of past weather conditions and future climate projections.
- The Multi-Stakeholder Sustainability Team will begin the engagement process to develop community strategies to address climate change.
- Public Engagement will be launched through the City's online platform and the DIY Community Climate Workshop tool made available to the public.

Report Approval Details

Document Title:	Resilient St. John's Climate Plan Multi-Stakeholder Sustainability Team.docx
Attachments:	 Multi-Stakeholder Sustainability Team Membership.pdf St. John's Climate Profile-Infographic.pdf St. John's Climate Profile-Final.pdf
Final Approval Date:	Aug 10, 2020

This report and all of its attachments were approved and signed as outlined below:

Brian Head - Aug 6, 2020 - 1:26 PM

Lynnann Winsor - Aug 10, 2020 - 9:36 AM

Multi-Stakeholder Sustainability Team Membership

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Economy	Health	Food systems		Wat Underground	Water & Underground Infrastructure	Energy Reliability & Security	Buildings	Transportation & Land Use
Kieran Hanley, NEIA	Pablo	NL Federation	East Coast Trail	Michel	Joseph Daraio	Krista	Home Builders'	Dennis Knight (ESEP)
(ESEP)	(ESEP)	of Agriculture	Association	PEGNL (ESEP)	(ESEP)	Power (ESEP)	Association	Metrobus
St. John's Board of	Healthy City St John's	FFAW	MUN Botanical	Quidi Vidi / Rennies River	AIM Network	NL Hydro	BOMA	St. John's
Irade	0,100,10		uargens	Foundation				International Airport
170 Destination St. John's	NL Public Health	Food First NI	CCNI	NAACAP	DFO	NALCOR Fnerøv	CMHC	NL Department of Natural Resources
	Association) - 1	10)	Martin Batterson
				NL Municipal Affairs	fairs			
				Joel Finnis (ESEP)	EP)			

Energy & GHG Mitigation Working Group

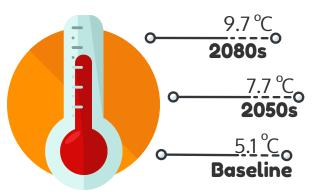
Industrial/Commercial/Institutional	Residential	Transportation	Energy & Waste
BOMA NL	CMHC	Metrobus	NL Department of Natural Resources
NOIA	Home Builders' Association	Bike St. John's	SWANA
Destination St. John's	Dennis Knight (ESEP)	DriveElectricNL	MMSB
MUN	North /	North Atlantic	MUN
Kieran Hanley, NEIA (ESEP)		Krista Langthorne, NL Power (ESEP)	
St. John's Board of Trade		NALCOR Energy	
	NL Municipal Affairs	ıl Affairs	

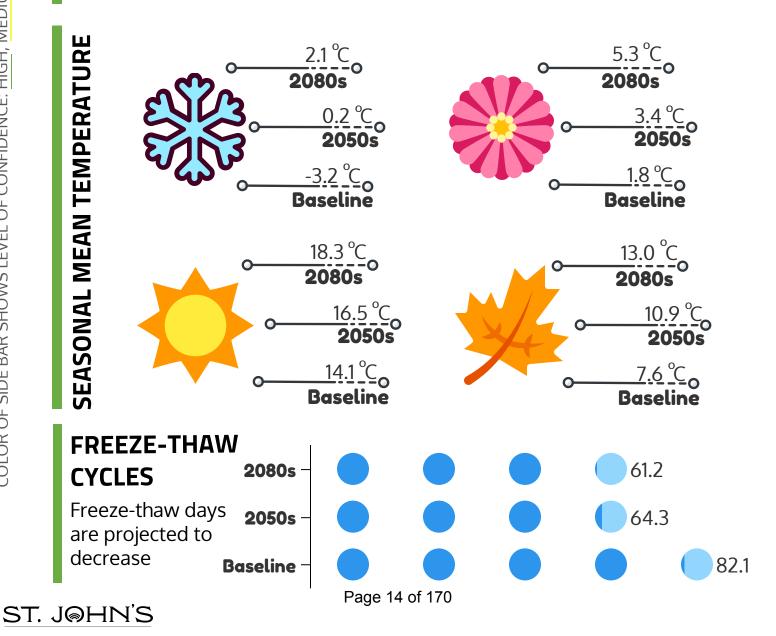
Note: Relevant City staff will be engaged in workshops on an ongoing basis

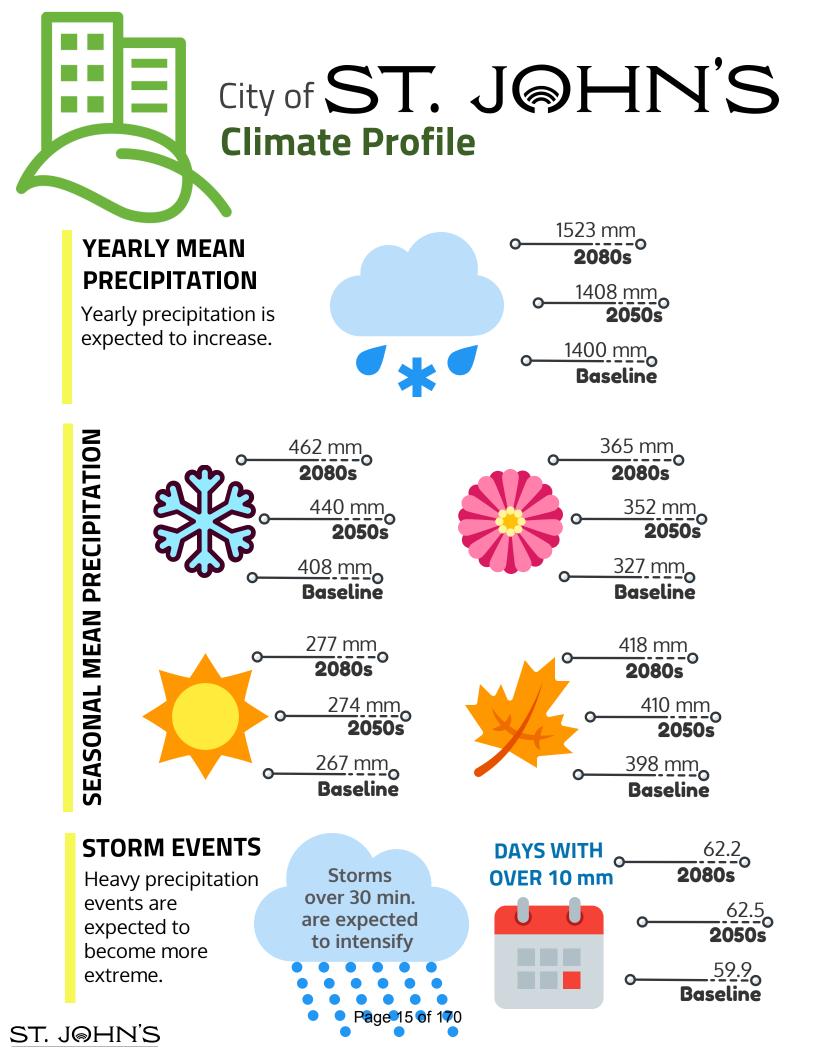
City of ST. JOHN'S **Climate Profile**

ANNUAL AVERAGE TEMPERATURE

Average, Minimum, and Maximum daily temperatures are projected to increase







City of ST. J@HN'S Climate Profile

SNOW

Snowfall is expected to decrease, while freezing rain and winter rain increases.



Surface Snow Thickness is Predicted to Decrease 60% by 2050s 90% by 2080s

FREEZING RAIN

Freezing rain events are expected to increase during winter, with little to no change in November or April. December, January & February

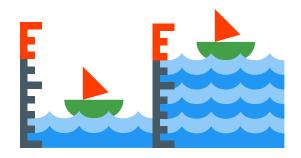
March

November & April



SEA LEVEL

Sea Level is expected to rise by 75 to 100 cm by 2100



WIND & GUSTS

There is significant uncertainty on wind projections





To read the full report or to learn more about the City's climate change adaptation and mitigation strategies, plepage if to the Sustainability page at stjohns.ca

ST. J@HN'S

St. John's Climate Profile

Summary

Historical Observations

The City of St. John's has seen an increase in average **temperatures** of approximately +0.8 °C since 1942. The warming has been an increased tendency to break high temperature records (warmest parts of the day became much warmer), and a relatively smaller shift in our low temperatures (coldest parts of the day became a little warmer). Similarly, the **hottest temperatures** in the year have increased by approximately 1.0 °C, while the **coldest temperatures** in each year have increased by 0.5 °C. St. John's may have seen a very slight decreasing trend in the number of days per year that experience **freeze-thaw** since 1950.

Precipitation (rainfall and snowfall) trends show that St. John's may have seen a very small reduction in the amount of precipitation every year since 1942. However, the intensity and duration of **storms** is likely to have increased since 1949 (particularly with durations over 30 minutes). Observations show slightly more precipitation falls as **rain or freezing rain**, with about 23-24% of average yearly precipitation falling as **snow**. Consistent with this shift, data shows that it is possible that the total annual **snowfall** in St. John's may have decreased slightly since 1942. Satellite imagery suggests that Eastern Canada has seen a decrease in **snow cover** (-5% to -10%) duration in the months between October-January since 1981. Data for annual **maximum snow on the ground** shows no significant change, however, it is possible that there has been an increase of 4 cm over the last 66 years.

St. John's coast has seen a long-term trend of rising **sea levels**, with relative sea-level changing by +1.9mm/year since the 1940's. Observations show a warming in the **sea surface temperature** of 0.13 °C per decade (at the ocean surface), and a warming of 0.02 °C per decade was observed below the surface (0-175m).

The analysis of St. John's observed **wind** speeds shows a possible decrease in hourly wind speeds. However, St. John's is in the region with the most frequent **wind gusts** in the country and data shows that it experiences approximately 1,424 hours per year with wind gusts above or equal to 40 km/hr, 151 hours above or equal to 70 km/hr, and 24 hours with winds above or equal to 90 km/hr.

Projections

Climate models (under scenarios RCP 8.5 and RCP4.5) estimate that St. John's will continue to see increases in **temperatures**, both average daily temperatures as well as extreme temperatures (+2.8 by 2050s, +4.8 by 2080s). Extreme maximum temperatures are projected to increase (+1.5 by 2050s, +2.4-3.5 by 2080s) and minimum temperatures are also projected to increase (+2.5-2.8 by 2050s, +4.0-5.8 by 2080s). Along with these changes, the number of days with **frost** and/or **freeze-thaw cycles** per year are projected to decrease.

The amount of **precipitation** is projected to increase overall (+7% by 2050s, +9% by 2080s). However, this is not uniform across seasons and does not speak to all storm sizes. For example, winter is expected to see less precipitation but events with greater intensity. St. John's is projected to see a decrease in the percentage of precipitation that is **snowfall**, this means it is likely that more winter precipitation will be **freezing rain or rain**. Consequently, **snow cover** and **maximum snow on the ground** are projected to decrease. Most **storm** events are projected to increase in frequency and intensity, specifically events with durations over 30 minutes.

The rise in **sea level** is projected to continue, reaching 75 to 100 cm by the year 2100. The **sea surface temperatures** are projected to see further warming, resulting in further reductions in **sea ice cover**. There is significant uncertainty around projections of wind. However, existing research suggests that St. John's will see an increase in **wind** speeds and **wind gusts**, particularly in winter.

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Introduction to the Climate Profile

In municipal operations, decisions often require consideration of climate and/or weather conditions. These decisions often influence best management of natural resources and essential operations (e.g., water, snow clearing, land use planning, infrastructure design). Information about current or approached weather conditions is often necessary for operational decision-making over periods of hours to a week, and may include monitoring/anticipating changes in temperature, precipitation and wind (among other factors).

When weather data covering longer periods (e.g. decades) is examined collectively, it provides important information about the climate of our municipality and guidance for long-term planning. For example, by looking at many years of weather data we can see how prone the region is to a variety of environmental hazards including storms, heat waves, or cold spells. This information also can be analyzed to try to understand climate trends, like whether our municipality is getting warmer or cooler, drier or wetter over long periods of time. This information, combined with information about impacts (e.g., flooding, insurance claims) are key in supporting planning, especially when climate trends show changes. This report outlines how the City of St. John's can expect climate change to materialize.

What are Climate Trends and Climate Change?

Climate change is a term used to describe various changes in long-term weather patterns (for example the difference in the general weather conditions experienced in the mid-20th century and the early 21st century). Discussion of climate change often begins with a look at temperature, which has (as a global average) been rising noticeably over recent decades. Consequently, 'climate change' is often referred to as 'global warming'. Since the 1880s, the average global mean surface temperature has risen by a bit more than 1 degree Celsius. This is a significant change: for reference, the last Ice Age was about 5.5 degrees Celsius colder than pre-industrial temperatures. Figure 1 shows global surface temperatures relative to the average between 1951-1980.

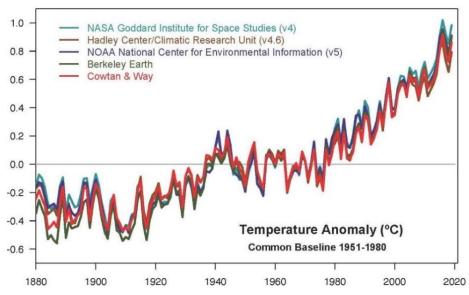


Figure 1 Global surface temperatures relative to 1951-1980 as recorded by NASA, NOAA, the Berkeley Earth research group, the Met Office Hadley Centre (UK), and the Cowtan and Way analysis. Though there are minor variations from year to year, all five temperature records show peaks and valleys in sync with each other. All show rapid warming in the past few decades, and all show the past decade has been the warmest. (Source: https://www.giss.nasa.gov/research/news/20200115/).

This does not mean that temperatures have increased to the same degree everywhere, risen consistently every year, impacted every season equally. A particular city can still see days, months, or even seasons that are colder than average, and we continue to see new record setting cold temperatures; however, this is now happening rarely, even as the number of record warm observations has increased steadily. This reflects the natural variability inherent in climate which (on local or regional scales) is often as large or larger than the influence of climate change to date.

Regardless of what is happening in a given year and particular location, collectively temperature data from across the planet confirms that the world as a whole is warming. This has in turn influenced other aspects of climate, including precipitation patterns, snow and ice cover, ocean temperatures, sea level, and more. Figure 2 shows just some of the indicators of change measured globally in recent decades that show the Earth's climate is warming. White arrows indicate increasing trends, and black arrows indicate decreasing trends. All the indicators expected to increase in a warming world are, in fact, increasing, and all those expected to decrease in a warming world are decreasing. (Source: http://nca2014.globalchange.gov/report/our-changingclimate/observed-change#tab2-images)

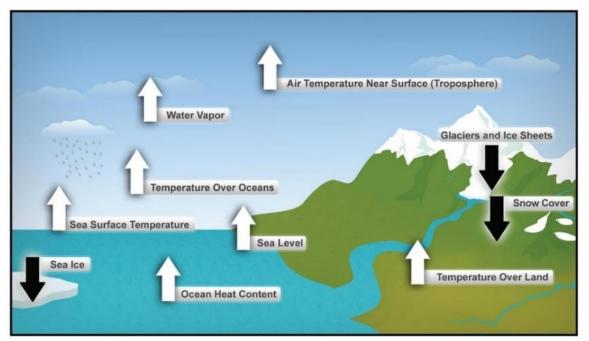
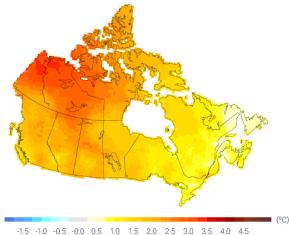


Figure 2 Observed indicators of a warming world. White arrows indicate increasing trends. Black arrows indicate decreasing trends. Source: <u>http://nca2014.globalchange.gov/report/our-changingclimate/observed-change#tab2-images</u>

Canada is a large country with three coasts and various climatic regions. In Canada, temperatures have been observed to increase between 1948 to 2016 (Figure 4) at a much faster rate than the global average. The North West of Canada has seen the largest change in temperature in this time period (2-3°C), and winter is changing faster than any other season (up to 5°C in some areas). Other climate change impacts are also distributed unevenly across the country and between seasons.



-1.5 -1.0 -0.5 -0.0 0.5 1.0 1.5 2.0 2.5 5.0 5.5 4.0 4.5

Figure 3 Observed Changes in Annual Temperatures 1948 to 2016. Atlantic Canada +0.7C (Bush and Lemmen, 2019).

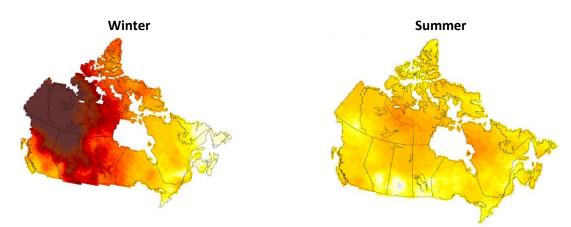


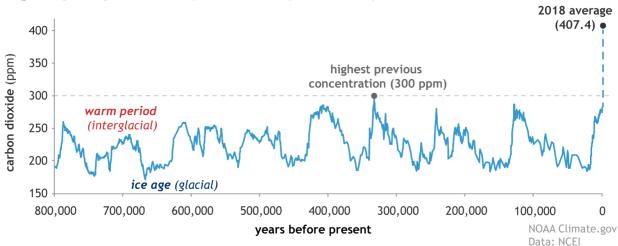
Figure 4 Observed Changes in Seasonal Temperatures 1948 to 2016. Atlantic Canada +0.7C (Bush and Lemmen, 2019).

Why is the Climate Changing?

Science academies, scientific societies, and intergovernmental bodies all agree that Climate Change is real, as well as that the role of humans in causing this is clear and mostly linked to the emissions of greenhouse gases (GHGs) from human activities (e.g., burning fossil fuel, deforestation, waste, etc). The amount of carbon dioxide (CO_2) between the atmosphere, the ocean or the land in the past 10,000 years was roughly balanced. However, since the start of the Industrial Era it has risen by 240 Pg¹. Human activities in the last 100 years, like burning of fossil fuels and significant changes in land use, have increased CO_2 (and other GHGs) in the air. Humans have emitted 550 Pg of CO_2 , therefore it can be understood nature has been a carbon sink.

The contribution from human activity has been studied through the use of isotopes (C13/C12) ratios to understand how much of the CO_2 came from combustion vs other natural processes and estimates of the reduction of oxygen in the atmosphere (which is consumed by combustion) (Bush and Lemmen, 2019). Current GHG levels are the highest in millions of years and the highest levels in human history (Our species, *Homo sapiens*, evolved around 300,000 years ago) (Figure 5). In May 2019, global levels of CO_2 reached a 3 million-year record high.

¹ Petagram: 1 petagram = 1 billion metric tonnes.



CO₂ during ice ages and warm periods for the past 800,000 years

Figure 5 Atmospheric carbon dioxide concentrations in parts per million (ppm) for the past 800,000 years, based on EPICA (ice core) data. The peaks and valleys in carbon dioxide levels track the coming and going of ice ages (low carbon dioxide) and warmer interglacials (higher levels). Throughout these cycles, atmospheric carbon dioxide was never higher than 300 ppm; in 2018, it reached 407.4 ppm (black dot). Source: <u>https://www.climate.gov/news-features/understanding-climate/climate-change-atmospheric-carbon-dioxide</u>.

This rise in atmospheric GHG levels, predominantly CO₂, has been the main driver of climate warming during the Industrial Era (mid-18th century to today). The ability of GHGs in the Earth's atmosphere to absorb heat energy radiated from the Earth is well understood, as are many ensuing climate impacts. This increase in GHGs limits the ability of the planet's surface to lose heat it receives from the sun. This energy circulates in our systems (air, ocean, land, ice, etc.) and we see it as increases in temperature of the air and ocean, melting of icecaps, strengthening of hurricanes, changes in flows of air (e.g., polar vortex), etc.

Measurements show that we have reached CO_2 concentrations of 400 ppm at this time. The last time the planet had these concentrations (mid-Pliocene), the Antarctic was largely ice-free, sea levels were 10 to 20 meters higher, and global temperatures were an average of 2 to 3 °C warmer². In the Arctic, summer temperatures were approximately 14 degrees higher. If CO_2 continues to rise, we could reach levels unseen in over 34 million years.

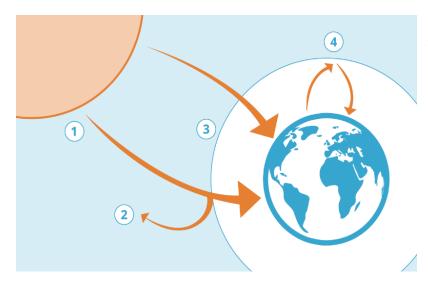


Figure 6 The Greenhouse Gas Effect. 1) Solar energy from the sun passes through the Earth's atmosphere; 2) Some energy is reflected back into space; 3) The surface of the Earth is heated by the sun and radiates the heat back into space; 4) Greenhouse gases in the atmosphere trap some of the heat, warming the Earth. Source: https://www.turnbackthetide.ca/aboutclimate-change-and-energyefficiency/what-is-climate-change.shtml.

² <u>https://e360.yale.edu/features/how-the-world-passed-a-carbon-threshold-400ppm-and-why-it-matters</u>

Other factors, beyond increases in CO_2 , that contribute to changes in climate in smaller amounts are:

- Sun brightness variation during the Industrial Era (10x smaller than human emissions effect).
- Volcanic eruptions (Cooling effect that can last several years but cannot explain the observed long-term change in global temperature).

Increasing concentrations of GHGs will not only impact climate change, but also presents adverse effects on physical and mental health due to hazards that accompany extreme weather events, heatwaves, lower ambient air quality, and increasing range of vector-borne pathogens³. Not all regions of the world are affected in the same way, and the scientific community studies these changes to help communities understand what can be expected for the near, medium, and long-term future.

The Irreversibility of Climate Change

Earth system model simulations of the response to CO₂ emissions show that surface temperatures remain approximately constant for many centuries following a hypothetical stop of emissions. Vegetation, ice sheet volume, deep ocean temperature, ocean acidity, and sea level are projected to change for centuries after stabilization of surface temperatures (NRCAN, 2017).

Climate Change Adaptation Planning

The climate change adaptation planning process has been taken up by municipalities across Canada to anticipate and adjust to new or changing environments in ways that take advantage of the beneficial opportunities and reduce negative effects. This process is similar to other resource management planning processes and generally include:

- Identifying past and future trends
- Identifying risks and vulnerabilities
- Assessing and selecting options
- Implementing strategies
- Monitoring and evaluating the outcomes of each strategy
- Revising strategies and the plan in response to evaluation outcomes

The steps in adaptation planning processes are being undertaken by the City of St. John's as part of its Sustainability Planning framework and as part of the commitment to the Global Covenant of Mayors for Climate and Energy.

Confidence Indicators

There are various levels of confidence in the past and future trends in our region. In part this is due to the length of the record, the method of collecting data, or generally the research to date in the particular hazard. To ensure there is a level of transparency we have assigned a confidence indicator to the trends presented under each section. You will see these in the report to help guide you in the level of confidence you can place on the trends shown.



³ <u>https://www.who.int/news-room/facts-in-pictures/detail/health-and-climate-change;</u> <u>https://www.cpha.ca/climate-change-and-human-health</u>

St. John's Historical Climate

The instrumental record from an Environment & Climate Change Canada climate station operating at St. John's International Airport (YYT) was used for this analysis. Climatologists refer to the period from 1895 to the present as the "instrumental record" period. The earliest instrumental record at this site dates back to 1942. The St. John's station 8403500 and 8403501 cover a record between 1874 and 1975, however, these datasets have significant gaps in measurements and data quality. So, for the purpose of illustrating recent climate trends, this report will focus the analysis on the YYT station.

Temperature

The City of St. John's has observed an increase in average temperatures of approximately +0.7 to +0.8 °C since 1942. This is in line with what other Atlantic provinces have experienced in a similar time period (1948-2006) (Bush and Lemmen, 2019). Rather than looking at simple daily average, temperatures have been assessed in terms of the i) average daily maximum, ii) average daily minimum, and iii) overall daily average; this can be useful in identifying the character of any trends experienced, and potentially highlight important patterns.

- Maximum annual average is the average of all the warmest daily temperatures.
- Minimum annual average is the average of the lowest temperature readings each day of the year.
- The **overall average** is the average of both maximum and minimum temperatures for the location.

Results for the YYT station daily maximum, minimum and mean are shown in Figure 7, and emphasize that maximum temperatures have been rising faster than minimum temperatures. This pattern suggests the warming trend is best summarized by an increased tendency to break high temperature records (warmest parts of the day became much warmer), but a relatively small shift in our low temperatures (coldest parts of the day became a little warmer).



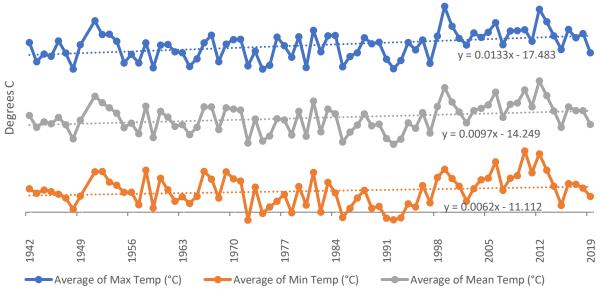


Figure 7 Changes to average, minimum, and maximum temperatures at the St. John's International Airport Station.

Table 1 Estimated changes in yearly average, minimum and maximum temperatures at St. John's Int. Airport (1942-2019).

Change in Average Maximum Temperatures	Approx. +1.0 °C
Change in Average Temperatures	Approx. +0.8 °C
Change in Average Minimum Temperatures	Approx. +0.5 °C

The previous section tells us a lot about the "average day", however, we are also interested in how the extreme temperatures in the year (coldest and hottest days of each year) have changed over time. This is important since these days pose different hazards than seasonal or gradual changes. The change in the most extreme temperatures can be examined by looking at yearly maximum records (highest temperature recorded in the year) and minimum (lowest temperature recorded in the year) temperatures. These extreme temperatures have changed more significantly, and the greatest change is in the year's coldest temperature, which has increased by about 2.3 °C, while the highest temperature in the year has increased by approximately 1.0 °C.

Table 2 Estimated changes in yearly average, minimum and maximum temperatures at St. John's Int. Airport (1942-2019).

Change in Extreme Minimum Temperature	Approx. +2.3 °C
Change in Extreme Maximum Temperature	Approx. +1.0 °C

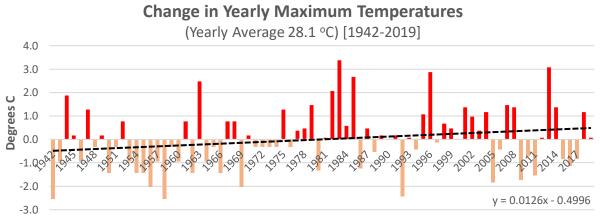


Figure 8 Estimated change in yearly maximum temperatures at St. John's International Airport. Orange years are below average, while Red years are warmer than average.

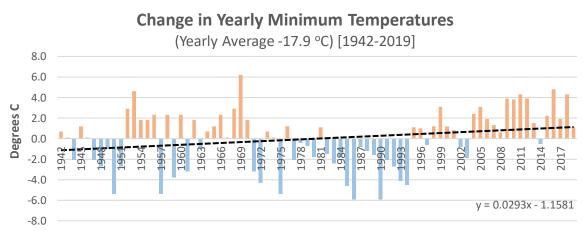
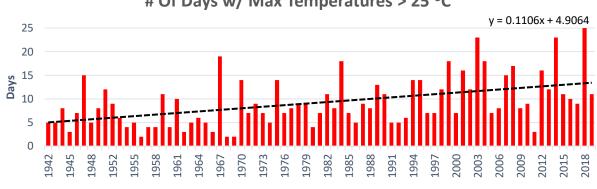


Figure 9 Estimated change in yearly minimum temperatures at St. John's International Airport. Blue years are below average, while Orange years are warmer than average.

We looked at how many days per year exceeded a comfortable heat threshold of 25 °C. While there are warmer temperatures in other parts of Canada, we chose to rely on a threshold suggested by St. John's

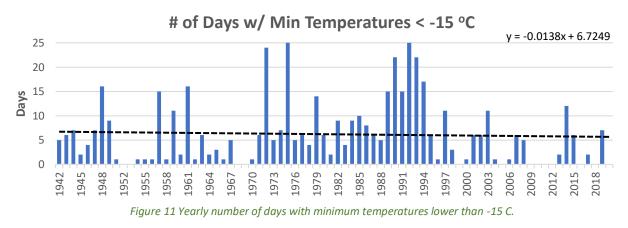
residents as these thresholds often pose hazards to vulnerable populations. Since 1942, St. John's has seen an increase of 8.5 days per year above 25 °C.



Of Days w/ Max Temperatures > 25 °C

Figure 10 Yearly number of days with maximum temperatures greater than 25 C.

Similarly, we looked at cold temperatures. This was done by looking at the number of days with temperatures below -15 °C. Since 1942, St. John's has seen a small decrease (about 1 day per year) in the number of days below -15 °C.



Natural Variability

St. John's temperatures are heavily influenced by its proximity to open ocean, particularly during the winter (Banfield and Jacobs, 1998). Finnis and Bell (2015) found that our region is heavily influenced by decadal-scale variability (a change every approximately 10-years). This natural variability comes mostly from synoptic systems like North Atlantic Oscillation (NAO), Atlantic Multidecadal Oscillation (AMO), to a lesser extent for St. John's the El Nino- Southern Oscillation (ENSO).

This explains the unusually cool conditions from the 1980s through the late 1990s, and then a shift to warmer conditions in the late 1990s to approximately 2011 seen in the temperature data. When the influence of these systems is removed (Finnis and Bell, 2015), the yearly overall change is reduced somewhat. However, a sign of overall warming is still evident, and the temperature increases in winter and spring are more pronounced. These results showed that after accounting for natural variability within the observations, climate change in the region has been obscured by other shorter-term natural variability in this region for some periods of time. However, it is clear that it has impacted the climate of the region.

A freeze-Thaw cycle is a simple way to count the days per year when the air temperatures cross the freezing point (0°C) at some point (coldest temperature in the day is lower or equal to 0°C, and the hottest part of the day is above 0°C). St. John's sees approximately 86.8 freeze-thaw cycles in an average year. These temperature cycles, along with the precipitation and snowmelt, have a significant impact on infrastructure. The impact comes from the fact that water expands when frozen and can cause damage to roads and sidewalks, as well as other infrastructure. The number of cycles may have decreased slightly since 1950, by about 2.5 days.

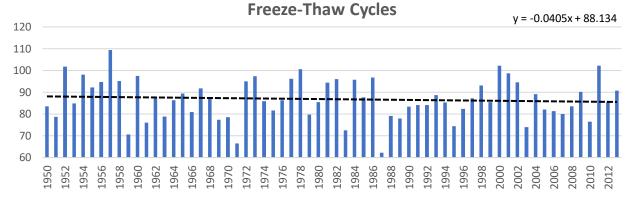


Figure 12 Freeze-Thaw Cycles in St. John's based on historical data from Natural Resources Canada (1950-2013) (NRCan; McKenney et al., 2011).

Precipitation

Precipitation data from YYT show that St. John's may have seen a reduction in the amount of average yearly precipitation of about -58 mm (between 1942 and 2019). However, this doesn't speak to the frequency and intensity of storm events. Precipitation includes both rainfall and snowfall during the year (January to December).

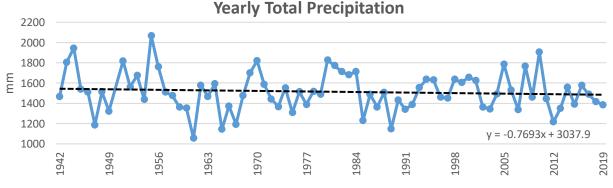


Figure 13 Yearly total precipitation from 1942 to 2019 at St. John's International Airport.

Environment and Climate Change Canada (ECCC) analyzed the rainfall storm events at YYT from 1949-1996⁴. This analysis shows that most storm events have increased in intensity and frequency. Later, the province of Newfoundland and Labrador commissioned a study that incorporated more recent data from YYT (1949-2014)⁵. This study found trends consistent with ECCC YYT estimates. Subsequently, the Rennies River Catchment Stormwater Management Plan⁶ incorporated data from Windsor Lake rain gauge, which brought better estimates of rainfall for Tropical Storm Chantal and Hurricane Igor into the analysis. The estimates found consistent trends with previous studies, which showed an increase in the

⁴ https://climate.weather.gc.ca/prods_servs/engineering_e.html

⁵ <u>https://www.exec.gov.nl.ca/exec/occ/climate-data/index.html</u>

⁶ http://www.stjohns.ca/publications/rennies-river-catchment-stormwater-management-plan

intensity and frequency of storms with durations over 30 minutes (e.g., 30 min, 1 hr, 2 hr, 6 hr, 12 hr, 24 hr).

Duration	Estimated Trend ⁷						
5m	Small Decrease						
10m	Small Increase						
15m	Increase						
30m	Increase						
1hr	Significant Increase*						
2hr	Significant Increase*						
6hr	Significant Increase*						
12hr	Increase						
24hr	Increase						
*indicates statistically significant trends							

Table 3 Summary of Observed Trends for Storm Events at YYT.

Yearly total snowfall (Jan-Dec) has been observed to decrease slightly. Observations show slightly more precipitation falls as rain or freezing rain, with about 23-24% of average yearly precipitation falling as

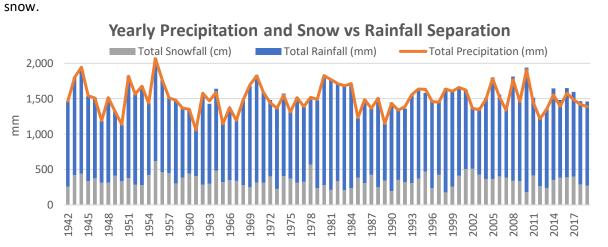
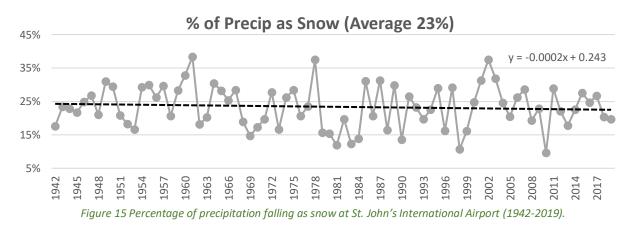
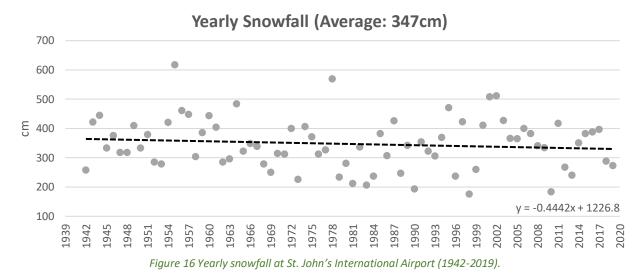


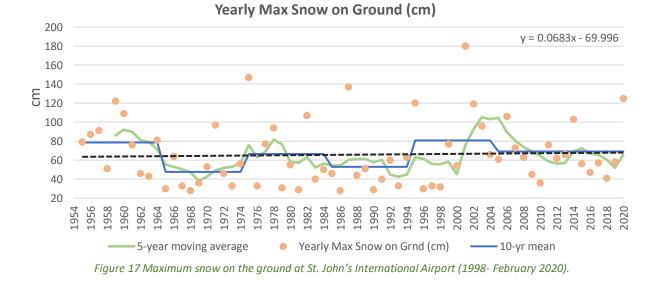
Figure 14 Yearly total precipitation from 1942 to 2019 at St. John's International Airport. Bar graph shows which portion fell as rainfall vs snowfall.



⁷ <u>https://www.exec.gov.nl.ca/exec/occ/climate-data/index.html</u>



Satellite imagery suggests that Eastern Canada and St. John's has seen a decrease in snow cover of approximately 5% to 10% in the months between October-January between 1981-2015 (Bush and Lemmen, 2019). To provide an idea of the changes in the depth of snow cover, YYT station provides observations of daily maximum snow on the ground. The available data (1954-present) shows a nearly flat trend, with a possible increase of 4 cm over the last 66 years. However, this is heavily influenced by both snowfall trends and temperatures, among other things. A 10-year average of the maximum snow on the ground better shows the fluctuations of cold and warm periods.



Not all precipitation in St. John's falls as rainfall or snowfall. Cheng et al., 2011 studied freezing rain in Canada. The results showed that St. John's is in the region that experiences the most days with freezing rain for the three durations that were studied. St. John's experiences over 12.5 days per year (within November-April) experiencing freezing rain for 1 hour or longer.

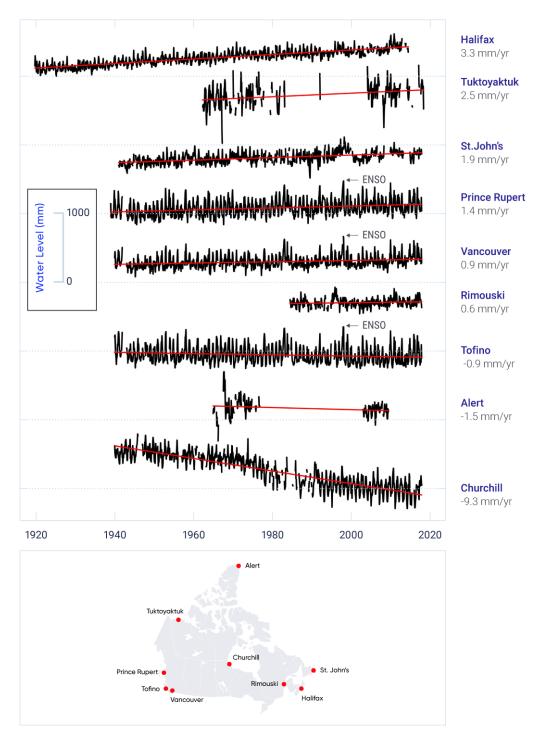
Table 4 Regional seasonal mean number of days with freezing rain from November to April (Cheng et al., 2011).

Duration	≥1h	≥4h	≥6h
Number of Days per year	12.5	3.5	1.7

Sea Level and Temperature

Relative sea level has been observed to rise over the past century in much of Canada, if at significantly different rates in different regions; these differences are due to the combination of sea level rise with local changes in the land surface (e.g. local uplift or subsidence). St. John's is in an area where the land is subsiding, and it has seen a long-term trend of relative sea-level changing by +1.9mm/year since the 1940's.

Ø





Atlantic Zone Monitoring Program (AZMP) Station 27, located near St. John's, has observed a sea surface temperature warming trend of 0.13 °C per decade at the ocean surface. A somewhat lower warming of 0.02 °C per decade was observed below the surface (0-175m). A long-term comparison of the average surface (land and ocean) temperature between 1951 and 1980 to the past year (2019) also shows a warming in most of the ocean regions near St. John's.

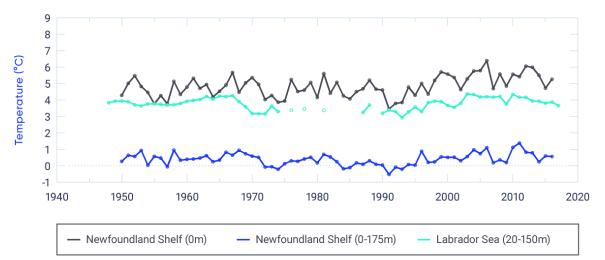


Figure 19 Ocean temperature time series in the Newfoundland Shelf and Labrador Sea collected by DFO monitoring programs. Sea surface temperature (0 m) on the Newfoundland Shelf at AZMP Station 27 near St. John's (1950–2016) and depth-averaged ocean temperature (0–175 m) from that site (1950–2016). Upper-ocean temperature (20–150 m) of the central Labrador Sea basin (OWS Bravo) does not demonstrate long-term warming (1948–2016) (Bush and Lemmen, 2019).

Wind

There is a limitation in the analysis of wind due to available observations and the limited research on the mechanisms that cause observed and projected changes in Canada. However, since there is a strong interest in better understanding what the wind historical and future conditions may be, we present the available information. Any insight in this section should be taken with caution.

The YYT station is part of ECCC's Adjusted and Homogenized Canadian Climate Data (AHCCD), which are climate station datasets that incorporate adjustments (derived from statistical procedures) to the original historical station data to account for discontinuities from non-climatic factors, such as instrument changes or station relocation. This data shows decreasing trends at YYT station for hourly wind speeds for every season, ranging between 7.2 and 8.9 km/hr. Winter appears to be the least impacted by this decreasing trend.

Time Period	Km/hr
Annual	-8.0
Winter	-7.2
Spring	-8.9
Summer	-8.1
Fall	-8.1

Table 5 Summary of Trends at the YYT Station (1953-2014)⁸

⁸ <u>https://climate-viewer.canada.ca/climate-maps.html#/?t=annual&v=sfcwind&d=ahccd&cp=-62.67291171604404,46.99654881950912&z=5</u>

A more detailed analysis including extreme wind and frequency of a particular wind speed is available from the MSC50 hindcast dataset (C-CORE, 2017a; C-CORE, 2017b). The dataset contains hourly wind values for 10 m above mean sea level wind speeds from 1954 to 2015. The MSC50 database is the most comprehensive, long-term, widely used model hindcast, it models the Canadian East Coast at significant high resolution and incorporates shallow-water physics and ice pack. The wind fields used in the model are based on careful re-analysis of three-hourly wind fields. This provides a sense of 1-hour wind speed and direction at for the region where St. John's is located. The MSC50 dataset is broadly used in coastal risk assessment processes, and offshore environmental risk assessments in the region.

In St. John's the winter months have the strongest average sustained winds (11.3-11.6 m/s) and most of the strongest sustained winds as well (17.1-16.6 m/s). Summer (Jun, July, August) is usually the least windy, with average sustained winds of 6.3-6.8 m/s. The maximum sustained winds can take place in August (up to 28.3 m/s), September (up to 31.9 m/s), and during the winter (26.8-29.3) (Table 7 and Table 8). However, August and September are less likely to reach speeds over 22-24 m/s (Table 6). In the winter, wind comes primarily from the North West and West. During spring, wind direction is a lot more distributed than in Winter, ranging mostly Between North West and South West. During the summer winds come from mostly from the South West. During the fall, wind direction is a lot more distributed than in winter, ranging mostly Between North West and South West.

Cell: 370 47.46°N 52.44°W			Wind Speed - Probability of Exceedance by Month														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
	2	1	1	1	0.999	0.996	0.995	0.993	0.997	0.998	1	1	1				
	4	0.998	0.996	0.987	0.969	0.914	0.885	0.874	0.919	0.956	0.985	0.994	0.997				
	6	0.964	0.956	0.919	0.854	0.734	0.684	0.652	0.72	0.813	0.896	0.937	0.956				
	8	0.873	0.848	0.783	0.666	0.506	0.431	0.392	0.453	0.593	0.726	0.79	0.847				
	10	0.716	0.674	0.6	0.457	0.3	0.21	0.169	0.216	0.366	0.517	0.601	0.687				
	12	0.523	0.487	0.401	0.28	0.144	0.079	0.047	0.08	0.187	0.312	0.399	0.5				
(s/u	14	0.345	0.311	0.24	0.147	0.054	0.026	0.01	0.025	0.079	0.16	0.233	0.323				
i) bee	16	0.202	0.178	0.126	0.064	0.016	0.006	0.002	0.007	0.032	0.072	0.12	0.184				
Wind Speed (m/s)	18	0.104	0.09	0.055	0.021	0.005	0.001	0.001	0.002	0.013	0.029	0.05	0.087				
Wine	20	0.047	0.04	0.02	0.005	0.002	0.001	0	0.001	0.005	0.012	0.017	0.036				
	22	0.018	0.016	0.005	0.001	0	0	0	0	0.003	0.004	0.006	0.013				
	24	0.005	0.006	0.001	0	0	0	0	0	0.001	0.001	0.002	0.004				
	26	0.001	0.002	0	0	0	0	0	0	0	0	0	0.001				
	28	0	0	0	0	0	0	0	0	0	0	0	0				
	30	0	0	0	0	0	0	0	0	0	0	0	0				
	32	0	0	0	0	0	0	0	0	0	0	0	0				

Table 6 Summary of Probability of Exceedance by Month (1-hr wind speeds)

Table 7 Courses	Aller of Constant Tarlelone	(1
Table 7 Summar	Wind Speed Tables	(1-nr winas)

Cell: 370 47.46°N 52.44°W		Summary Table - Wind Speed													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
	Mean	11.6	11.2	10.3	8.9	7.3	6.6	6.3	6.8	8.1	9.4	10.3	11.3	9	
(m/s)	St. Dev.	4.1	4.1	3.9	3.7	3.3	3	2.8	2.9	3.4	3.6	3.8	4	4	
Speed	Median	11.3	10.9	10	8.6	7.1	6.5	6.2	6.6	7.8	9.2	10	11	8.6	
	P90	17.1	16.7	15.6	14	11.8	10.5	9.9	10.6	12.5	14.2	15.4	16.6	14.5	
Wind	Max.	27.9	29.3	27.1	24.7	22.3	23.5	20.8	28.3	31.9	25.7	26.5	26.8	31.9	
_	Dom. Dir.	285	285	285	225	225	215	215	225	225	235	285	275	225	

Cell: 370 47.46°N 52.44°W			Wind Speed Extremes by Return Period												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
	10 Year	25.9	27	23.7	21.2	19.4	17.5	16.4	19.3	23.8	23.6	23.6	25.1	28.2	
(m/s)	25 Year	27.8	29	24.9	22.5	20.8	18.9	17.9	21.7	26.8	25.6	25.3	26.3	29.4	
WS (50 Year	29.2	30.4	25.7	23.6	21.8	20	19.1	23.5	29.2	27.1	26.5	27.2	30.4	
	100 Yr.	30.7	31.9	26.6	24.7	22.7	21.1	20.3	25.4	31.6	28.6	27.8	28	31.3	

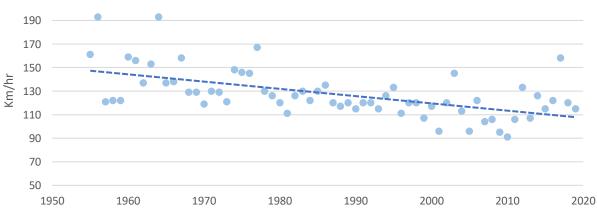
Table 8 Extreme Return Periods (1-hr winds)

Although high-speed (over 90km/hr or 25 m/s) sustained winds are rare, St. John's more often experiences destructive wind gusts. Wind Gusts are the sudden increases of wind speed that lasts no more than 20 seconds, these are the portion of wind that usually reach the highest speeds and can increase damage to infrastructure. Cheng et al. (2014) studied the patterns of hourly and daily wind gusts⁹ in Canada and found that St. John's is in the region with the most frequent wind gusts in the country, where the least frequently occur in the summer months. The results showed that the City may experience approximately 1,424 hours per year with wind gusts above or equal to 40 km/hr, 151 hours above or equal to 70 km/hr, and 24hrs with winds above or equal to 90 km/hr.

Table 9 Regional annual-average number of hours and days observed with wind gust events greater or equal to the thresholds.Hourly gusts (1994-2009), Daily gusts (1976-2009), and projected change by 2050s and 2080s (Cheng et al., 2014)

Region		Hourly wir	nd gust (km/	Daily wind gust (km/hr)					
	≥28	≥40	≥70	≥90	≥28	≥40	≥70	≥90	
Historical	2505	1424	151	24	238	188	40	10	

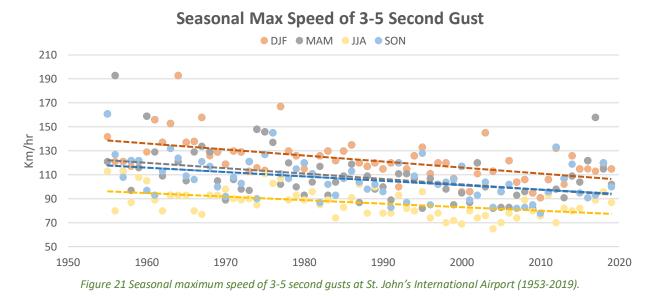
The Environment & Climate Change Canada YYT stations reports daily speed of maximum 3-5 second wind gusts. The maximum values per year and season were analyzed and are presented below.



Yearly Max Speed of 3-5 Second Gust

Figure 20 Yearly maximum speed of 3-5 second gusts at St. John's International Airport (1953-2019).

⁹ An hourly wind gust was defined as a sudden increase in wind speed during the 10-min period prior to the observation with a \geq 28 km/hr speed and measured at 9km/hr greater than the 2-min-average wind speed prior to the observation. A daily wind gust was defined as a daily peak wind that is \geq 28 km/hr measured during the entire 24-h period of a day.



The decrease in maximum speed of gusts annually and in every season shown by the data should be taken with caution and further research is needed to really estimate changes in wind in St. John's. This type of recent trends in decreasing wind speeds in areas of Eastern Canada have been seen elsewhere, but do not stand out in the context of other longer-term studies. However, they are consistent with a global stilling process (a decrease in wind over the last three decades) and may be partially because of large-scale climate dynamics. More information is needed to confidently say what the past trend of winds have been locally at the YYT station.

St. John's Future Climate

Environment and Climate Change Canada (ECCC) determines the climate of a region and how it changes over time using various statistical tools, and often communicates these in terms of Climate Normals. These are estimates based on 30-year periods (as per the World Meteorological Organization). Long-term climate change predictions are communicated in terms of changes to the Climate Normal, frequently named for the central decade. For example, the 2050's usually refers to what would be possible between 2041-2070, while 2080's refers to what would be possible between 2071-2100. This is to make sure that these estimates incorporate the impact of various slow-changing phenomena like the NAO, AMO, to a lesser extent for St. John's ENSO. The projections are estimated using global and subsequently regional climate models, which are state-of-the-art mathematical representations of the major climate system components (atmosphere, land surface, ocean, and sea ice), their interactions, and a range of future emission scenarios.

It is unknown what the total greenhouse gas emissions (GHG) emissions will be in the future. To develop climate projections and account for multiple possible future emissions scenarios, the Inter-Governmental Panel on Climate Change (IPCC) developed four Representative Concentration Pathways (RCP) (Taylor et al., 2012). Each RCP (RCP 2.6, 4.5, 6.0 and 8.5) reflects on various assumptions like levels of energy uses and greenhouse gas mitigation efforts. To account for uncertainties in sources of GHGs, land use and short-lived aerosols, the RCP scenarios reflect the outcome of the scenario assumptions in the form of numbers corresponding to potential radiative forcing levels reached by 2100. Radiative forcing is a measure of the combined effect of greenhouse gases, aerosols, and other factors that can influence climate to trap additional heat. For example, RCP2.6 results in an increase in radiative forcing to the global climate system reaching only 2.6 W/m² in 2100, while the no-policy or intervention GHG emissions RCP8.5 would be expected to lead to an increase reaching 8.5 W/m² in 2100.

Peters et al. (2013) and Smith and Myers (2018) found that RCP8.5 most closely resembles emissions from recent years. As such, some studies only focus on RCP8.5 and in some cases include RCP4.5. Raferty et al. (2017) suggested that RCP8.5 may be on the outside of the range of plausible emissions scenarios. However, he also showed that even without reaching RCP8.5 scenario emissions, significant impacts can come from RCP6.0 and RCP4.5. This report and its sources attempt to incorporate the uncertainty in GHG emissions by providing estimates and develop a conservative approach by focusing on RCP8.5 but incorporating RCP4.5 where possible.

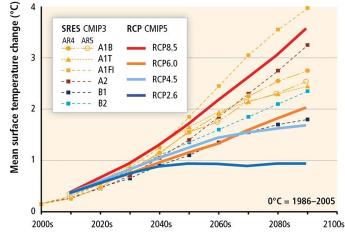


Figure 22 Global Mean Surface Temperature Change (°C) over the 21st Century Using the Special Report on Emissions Scenarios (SRES) and Representative Concentration Pathway (RCP) Scenarios

Temperature

Average yearly temperatures are expected to increase in St. John's by about 2.5-2.8 °C by the 2050s and 4.4-4.8 °C by the 2080s. Similarly, average maximum and minimum temperatures are projected to increase. The projected warming trend of average temperatures is best summarized by an increased tendency to break high temperature records (warmest parts of the day will become much warmer), and a shift in our low temperatures (coldest parts of the day will become warmer).

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Table 10 Summary of ten	Table 10 Summary of temperature related projected changes for St. John's.				
Variable	20 th	2050s	2080s		
	Century	(2041-2070)	(2071-2100)		
Average Temperature	5.1°C	7.7 °C (+/- 1.2) + 2.7 °C	9.7 °C (+/- 1.6) +4.6 °C		
Average Maximum	8.8°C	11.3 °C (+/-1.3)	13.2 °C (+/- 1.7)		
Temperature		+ 2.5 °C	+ 4.4 °C		
Average Minimum	1.4 °C	4.2 °C (+/- 1.2)	6.2 °C (+/- 1.6)		
Temperature		+ 2.8 °C	+4.8 °C		

Seasonally, changes in temperature are anticipated to be more intense during the Fall and Winter. The change in temperature is projected to bring a significant reduction in days with frost (days with minimum temperatures reaching below freezing), particularly in winter and spring months, with a reduction between -18 and -19 days for each season by the 2050's, and -33 to -36 days by 2080s.

	y oj projected	seusonui temperu	ture changes for St. Jo 2050s	2080s
Variable	Season	20 th Century	(2041-2070)	(2071-2100)
	Winter (DJF)	-3.2 °C	0.2 °C (+/- 1.5) + 3.4	2.1°C (+/- 1.8) +5.3
Average Temperature	Spring (MAM)	1.8°C	3.4 °C (+/- 0.9) +1.6	5.3 °C (+/- 1.1) + 3.5
Average reinperature	Summer (JJA)	14.1 °C	16.5 °C (+/- 1.2) +2.4	18.3 °C (+/- 1.8) +4.2
	Fall (SON)	7.6 °C	10.9 °C (+/- 1.3) +3.3	13.0 °C (+/- 1.7) +5.4
	Winter (DJF)	0.0°C	3.1°C (+/-1.4) + 3.2	4.9°C (+/-1.7) +4.9
	Spring (MAM)	5.4 °C	6.6°C (+/-1.1) +1.2	8.4 °C (+/-1.4) +3.0
Average Maximum Temperature	Summer (JJA)	18.6 °C	21.0 °C (+/-1.2) +2.4	22.8 °C (+/-1.8) +4.2
	Fall (SON)	11.1 °C	14.5 °C (+/- 1.4) + 3.4	16.5 °C (+/- 1.7) +5.5
	Winter (DJF)	-6.5 °C	-2.8 °C (+/-1.6) +3.6	-0.7 °C (+/-2.0) +5.7
Average Minimum Temperature	Spring (MAM)	-1.9 °C	0.1°C (+/-0.7) +2.0	2.1 °C (+/-1.1) +4
	Summer (JJA)	9.6 °C	12.0 °C (+/-1.2) +2.3	13.9 °C (+/-1.8) +4.2
	Fall (SON)	4.2 °C	7.3 °C (+/- 1.3) +3.2	9.5 °C (+/- 1.7) +5.3
Number of Days with Frost	Year	160.4	109.9 (+/-22.0) - 31%	75.2 (+/-27.8) -53%

Table 11 Summary of projected seasonal temperature changes for St. John's.

Average temperatures are important; however, we are most often concerned with extremely hot or cold days. To examine trends on these kinds of days we looked at the highest and lowest temperatures throughout the year and how they are expected to change. The Climate Atlas of Canada (2019) shows that the maximum temperature is projected to change by +1.5 $^{\circ}$ C (to approximately 28.4 $^{\circ}$ C) by the 2050s (2021-2050), and up to 2.4-3.5 °C (about 30.4 °C) by the 2080s (2051-2080). Minimum temperatures are projected to increase by 2.5-2.8 °C by 2050s (2021-2050) and 4.0-5.8 °C by the 2080s (2051-2080). Similarly, the number of days when temperatures will not go above freezing temperatures (Icing days) are projected to decrease significantly (27-30% by 2050s and 42-59% by the 2080s). Freezethaw cycle days are also projected to decrease by the 2050s and the 2080s.

Table 12 Climate Atlas of Canada Summary of temperature related projected changes for St. John's.					
Variable	20 th Century	2050s (2041-2070)	2080s (2071-2100)		
Maximum Temperature	26.9 °C	+1.5 °C	+2.4 to 3.5 °C		
Minimum Temperature	-17.8 °C	+2.5 to 2.8 °C	+4.0 to 5.8 °C		
Icing Days	58.4	-16.3 to -17.8	-24.6 to -34.6		
Freeze-Thaw Cycle Days	82.1	-7.0 to –8.4	-13.3 to -20.9		

Table 12 Climate Atlan of Canada Cummun of terms anti-up value of a varianted available dependent for St. John's

Energy use in building and facilities is heavily impacted by weather and changes in climate. Cooling requirements are expected to increase for the summer and spring months. Summer cooling requirement is expected to increase by 82% by the 2050s and 164% by the 2080s. Spring is expected to also see an increase in instances of days when cooling may be needed. Heating needs for winter are expected to decrease by approximately -18%, spring and fall are also projected to decrease -20% and -30% respectively by the 2050s. Further decreases are projected for the 2080's, -28% during winter, -25% and -50% for spring and fall respectively.

Variable		20 th Century	2050s (2041-2070)	2080s (2071-2100)
Cooling Degree Dave	JJA	133.2	243.1 (+/-51.0) +82%	351.3 (+/-96.7) +164%
Cooling Degree Days	Annual	157	310.0 (+/- 81.3) +97%	477.7 (+/- 151) +204%
	Annual	4,135.8	3,311.1 (+/-369.9) -20%	2772.6 (+/-453.8) - 33%
	Winter (DJF)	1,736.0	1427.0 (+/-132.9) -18%	1252.4 (+/-165.9) -28%
Heating Degree Days	Spring (MAM)	1,314.4	1162.1 (+/-77.9) -12%	992.8 (+/-100.1) -24%
	Summer (JJA)	303.9	197.5 (+/-63.2) - 35%	137.7 (+/-78.9) -55%
	Fall (SON)	781.6	524.5 (+/-96.1) - 33%	389.6 (+/-108.9) -50%

Table 13 Summary of projected temperature changes as they relate to indoor cooling and heating needs for St. John's.

Precipitation

Average daily precipitation is expected to increase by approximately 7% by the 2050s and 9% by the 2080s. The biggest increase is expected to take place in the summer months, while the winter months are expected to see a decrease by the 2050s, but then bounce back to near-20th century levels by the

2080s. These changes in daily precipitation appear small but are significant when taken over a full season. For example, 0.5 mm/day change for a 90-day season amounts to 45mm or roughly 10% change in total seasonal precipitation.

The distribution of precipitation between seasons is also important. Seasonally, winter is projected to remain the season with the most days with heavy (+10mm) precipitation, and the highest average precipitation. Summer and fall are projected to get wetter by the 2050s, and by the 2080s summer and spring will continue to see that increased wetness.

Table 14 Summary of Precipitation volume changes for St. John's (Canada Climate Atlas, 2019).					
Variable		20 th Century	2050s (2021-2050)	2080s (2051-2080)	
	Annual	1,400 mm	1,474 mm +5.3	1,523 mm +8.8%	
	Winter (DJF)	408 mm	440 mm +7.8%	462 mm +13.2%	
Total Precipitation	Spring (MAM)	327 mm	352 mm +7.6%	365 mm +11.6%	
	Summer (JJA)	267 mm	274 mm +2.6%	277 mm +3.7%	
	Fall (SON)	398 mm	410 mm +3%	418 mm +5%	

Table 15 Summary of Precipitation changes for St. John's (Finnis and Daraio, 2018).

Variable	,	20 th Century	2050s (2041-2070)	2080s (2071-2100)
	Annual	5.1 mm	5.5 mm (+/- 0.5) +7%	5.6 mm (+/- 0.5) +9%
	Winter (DJF)	7.2 mm	6.6 mm (+/- 0.5) -7%	7.1 mm (+/- 0.6) -1%
Average Daily Precipitation	Spring (MAM)	4.8 mm	5.0 mm (+/- 0.3) +5%	5.4 mm (+/- 0.4) +13%
	Summer (JJA)	3.4 mm	4.3 mm (+/- 0.6) +27%	4.2 mm (+/- 0.6) +23%
	Fall (SON)	5.1 mm	6.0 mm (+/- 0.4) +16%	5.8 mm (+/- 0.5) +12%
	Annual	59.9	62.5 (+/-5.1) +2.6	62.2 (+/- 5.6) +2.3
	Winter (DJF)	21.9	19.6 (+/- 1.5) -2.3	20.3 (+/- 1.5) -1.6
Days with +10 mm	Spring (MAM)	14.0	14.9 (+/- 1.1) +1.0	15.6 (+/- 1.2) +1.6
	Summer (JJA)	9.6	11.8 (+/- 1.4) +2.2	11.1 (+/- 1.4) +1.5
	Fall (SON)	14.4	16.2 (+/- 1.1) +1.8	15.2 (+/- 1.5) +0.7

The intensity and frequency of most storms are projected to increase by the 2050s and by the 2080s. The increasing trend for St. John's has been reported in various studies (Finnis, 2013, Finnis and Daraio 2018), which have used various datasets (NARCCAP and CORDEX-NA). These studies both incorporated high-resolution climate models to estimate the projections for the City of St. John's. The latest projections show for example, two design storms (one with a 4% probability of taking place every year, also referred to as the 25-year storm; and one with a 1% probability, also referred to as the 100-year storm) may increase by approximately 17% by mid-century and 25% by the end of the century.

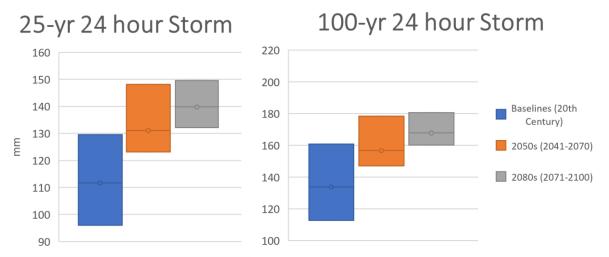


Figure 23 Example of change to volume of two storms of frequency and duration (Finnis and Daraio, 2018). The baseline box plots show the 5th percentile, median, and 95th percentile. Projections show 10th, median, and 90th percentiles due to data availability.

An alternative way to interpret these projected changes is that the 100-year, 24-hour event for St. John's is projected to increase its frequency to become the 25-year 24-hour event by the 2050s, and it will proceed to become more frequent as we approach the end of century. This means that St. John's will be almost four times more likely to see a storm with approximately 133 mm of rainfall over 24 hours by mid-century.

Freezing rain events are projected to increase (Cheng et al., 2011) with December-February projected to see the greatest increase in freezing rain, while March may see a moderate/small increase, and November and April may experience no change.

Table 16 Approximat	Table 16 Approximation of annual average number of days with freezing rain (Cheng et al., 2011).								
Months	De	c, Jan, F	eb	March			Nov, April		
Duration	≥1h	≥4h	≥6h	≥1h	≥4h	≥6h	≥1h	≥4h	≥6h
Number of Days	6.5	1.8	1	3	1	0.5	3	1	<1
Change 2050s (2046-2065)	+20%	+18%	+30%	+2%	+10%	+10%	-	-	-
Change 2080s (2081-2100)	+35%	+30%	+55%	+5%	+15%	+20%	-	-	-7%

The detailed impact of temperature and precipitation changes on snowfall can be more complex than temperature and precipitation projections. However, an expectation exists that snowfall will continue to decrease by the 2030s and the 2050s. This is based on the projected decrease in winter precipitation (-7%) by the 2030's and (-1%) by the 2080s. Historically, approximately 25% of the annual precipitation falls as snowfall, this percentage is expected to continue to decrease. Another indication that snowfall is projected to decrease is that climate models project that snow depth (the amount of snow on the ground) is predicted to decrease by approximately 60% by the 2050s and closer to 80-90% by the 2080's.

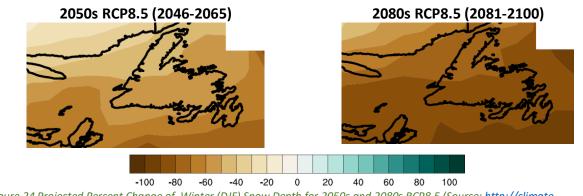


Figure 24 Projected Percent Change of Winter (DJF) Snow Depth for 2050s and 2080s RCP8.5 (Source: <u>http://climate-</u> scenarios.canada.ca/?page=download-cmip5)

Sea Level and Temperature

Sea level has been rising near the City of St. John's at about +1.9 mm/year since the 1940s. Projections show this will continue and will result in a rise of 75 to 100 cm by the year 2100. This does not include the influence of storm surges, which if timed with high tide can create a significant increase in water level.

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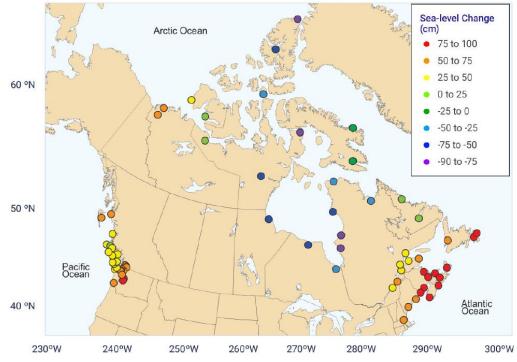


Figure 25 Projected relative sea-level changes shown at 2100 for the median of a high emission scenario (RCP8.5) at representative sites across Canada (Bush and Lemmen, 2019).

Sea surface temperatures have been higher during the past three decades than any other time since reliable data collection began in 1880. The ocean near St. John's has seen a rise in temperatures of 0.13 °C per decade and is projected to see further warming. Sea ice has seen a decrease of 1.53% per year between 1998-2013. Warmer winters and a warmer ocean are projected to result in further reductions in ice cover, as well as shorter duration of the ice season and decreases in ice thickness. The Gulf of St. Lawrence, for example, is projected to experience ice-free winters by the year 2100.

Wind

There is significantly more uncertainty in wind and extreme wind projections than in projections of temperature, sea level, or even precipitation. However, we present here estimates relevant to the City of St. John's for consideration in the assessment of risk. These projections should be used with caution as there is a significant amount of uncertainty within these.

Jeong and Sushama (2019) studied average wind speeds in North America. The study found that projections mostly show increases in future yearly average wind speeds and the 50-year return period wind speed for Eastern Canada (approximately +4%). Seasonally, the increase in future sustained wind speed (3-hr winds) are larger in winter than in summer and intensify in more intense emission scenarios (RCP8.5 vs RCP4.5). Increases were also projected for spring in Eastern Canada, while the fall shows no significant change.

Wind Gusts are the sudden increases of wind speed that lasts no more than 20 seconds, these are the portion of wind that usually reach the highest speeds and can increase damage to infrastructure. Cheng et al. (2014) studied hourly and daily wind gusts¹⁰ across Canada and attempted to developed projections for the 2050s and 2080s. Wind gust differences are experienced seasonally. Changes in the number of days with wind gusts greater or equal to 70 km/hr are projected to increase by 30-50%.

Table 17 Regional annual-average number of hours and days observed with wind gust events greater or equal to the thresholds.Hourly gusts (1994-2009), Daily gusts (1976-2009), and projected change by 2050s and 2080s (Cheng et al., 2014)

	Hourly Wind Gusts						nd Gusts	
	≥28 km/hr	≥40 km/hr	≥70 km/hr	≥90 km/hr	≥28 km/hr	≥40 km/hr	≥70 km/hr	≥90 km/hr
Historical	2505	1,424	151	24	238	188	40	10
Change 2050s (2046-2065)	+10%	+14%	+20%	+100%	+9%	+13%	+24%	+30%
Change 2080s (2081-2100)	+15%	+22%	+30%	+100%	+12%	+19%	+37%	+60%

Table 18 Regional seasonal-average number of days observed with wind gust events greater or equal to 70 km/hr (1976-2009) and projected change by 2080s (Cheng et al., 2014)

	Daily Wind Gusts ≥70 km/hr					
	Winter Spring Summer Fall					
Historical	19	9	2	10		
Change 2080s (2081-2100)	+10-30%	+30-50%	+50%	+30-50%		

¹⁰ An hourly wind gust was defined as a sudden increase in wind speed during the 10-min period prior to the observation with a \geq 28 km/hr speed and measured at 9km/hr greater than the 2-min-average wind speed prior to the observation. A daily wind gust was defined as a daily peak wind that is \geq 28 km/hr measured during the entire 24-h period of a day.

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DECISION/DIRECTION NOTE

Title:	FCM Community Energy Financing Program Design Application
Date Prepared:	August 11, 2020
Report To:	Committee of the Whole
Councilor and Role:	Ian Froude, Environment & Sustainability Experts Panel
Ward:	Ward 4

Decision/Direction Required:

That Council supports the collaborative approach presented to be the lead municipality applying for funds to FCM's to develop a study that will Design a Community Efficiency Financing program.

Discussion – Background and Current Status:

The City of St. John's strives to be sustainable today and for future generations. This is a vision expressed in the City of St. John's Strategic Plan. Through various commitments, the City of St. John's Council has re-enforced its ongoing commitment to act and reduce the greenhouse gas emissions, while preparing the City to deal with the challenges and capitalize on opportunities that climate change is presenting. This includes:

- Joining the Federation of Canadian Municipalities Partners for Climate Protection program
- Declared a Climate Emergency on November 4, 2019
- The Mayor of the City of St. John's joined the Global Covenant of Mayors for Climate and Energy on December 18, 2019
- Development and ongoing implementation of a Planning Framework to scope the transition towards a more sustainable low-carbon resilient St. John's.

The City of St. John's 2018 Energy Use and Greenhouse Gas (GHG) Inventory estimated that up to 15% of the GHG emissions from the community come from the residential sector. Meanwhile, energy-economic data shows that the median energy expenditure in St. John's is \$2,404 per year, and 34% of the households in St. John's have a high home energy cost burden (i.e. > 6% of after-tax income spent on home energy). A recent cross-Canada study placed St. John's at the top of this metric across all Canadian Urban Sustainability Practitioners (CUSP) and Big City Mayors Caucus (BCMC) members. With residents concerned about electricity costs, a struggling provincial economy, and COVID-19 economic impacts, the amount of people facing higher energy cost burden may increase without interventions.



The Community Efficiency Financing (CEF) initiative by the Federation of Canadian Municipalities (FCM) Green Municipal Fund (GMF) supports municipalities and partner organizations to design, implement, and/or scale financing programs for home energy upgrades. This is achieved through a mix of low-interest loans, loan guarantees, grants, and capacity building. This is all with an effort to encourage a bottom-up approach to local program design and delivery to residents.

The CEF program currently is composed of a two-step process:

- 1) Program Design: up to \$175,000 (GMF funds 80% of eligible costs)
- 2) <u>Capital for Program Implementation:</u> up to \$10M (GMF loans 80% of eligible costs and provides a grant of up to 50% of the loaned GMF funds.)

Council is being presented with the opportunity to partner with NetZero, the Newfoundland and Labrador Environmental Industry Association (NEIA), and Newfoundland Power, with support from the Provincial Government of Newfoundland and Labrador, to apply to the CEF initiative to fund a study that would look to scope the design of a program to deliver energy efficiency financing in Newfoundland (Step 1). Two modes of implementation may be studied 1) on-bill financing 2) direct financing through financial institutions.

This GMF opportunity would fund a study of up to \$175,000 (GMF funds 80% of eligible costs) to assess how this program could be structured and delivered effectively in Newfoundland's municipalities. The leadership and support from municipalities and their partners is key for Newfoundland partnerships to be able to access this funding, as provincial governments, and provincial corporations (e.g., NLHydro) are not eligible.

If funding is awarded, the City of St. John's would participate in the design study as the lead municipal partner, and other municipalities across NL will be invited to the partnership and/or consulted in the study. St. John's staff would engage in the program development process by supporting the application development, participating in the steering committee and workshops, and supporting the project team with information gathering to ensure that the program details are aligned to the needs of the residents of St. John's.

This Program Design study is and essential first step to enable the partners to test and develop a clear and beneficial program that can then be proposed to GMF for capital support as soon as January 2021 (when the capital program [Step 2] applications will open). At this time GMF could capitalize a program with up to \$10M (GMF funds 80% of eligible costs and provides a grant of up to 50%) for the program to be delivered to residents. Discussions about the scale of the capital program, needed matching funds, and other implementation considerations would be had as part of the development of a Step 2 proposal. This will take place throughout the implementation of the study in Step 1. An ask may be brought forward once the program is designed and the intention to submit a proposal for Step 2 is confirmed by partner organizations.

The ability to empower residents by making financing available for energy efficiency and other enabling retrofits (such as heat pump installations, building envelope improvements, other energy efficiency retrofits) in a more holistic way than what is currently available, would give

residents in St. John's the opportunity to improve their own financial well-being, reduce household stress, lower greenhouse gas emissions and increase resilience. Furthermore, this type of financing has the potential to unlock additional private capital for building retrofits, resulting in energy and emissions reductions, more resilient buildings, economic development, and job creation.

Key Considerations/Implications:

- 1. Budget/Financial Implications: up to \$5,000 from the approved \$100,000 Sustainability Momentum initiatives funds to support the application and enable the partnership to obtain a grant of up to \$80,000.
- 2. Partners or Other Stakeholders:
 - NetZeroNL is a not-for-profit organization that aims to further clean growth initiatives in Newfoundland and Labrador. The organization develops, facilitates, and delivers activities that contribute to the advancement of the climate change mitigation, energy efficiency, waste management, and carbon offset priorities in the province, its regions, and its municipalities.
 - Supported by the Newfoundland and Labrador Environmental Industry Association (NEIA), NetZeroNL builds customized project teams to scope, manage, and support its individual activities.
 - Other confirmed partners for this project include Newfoundland Power, Provincial Government of Newfoundland and Labrador. Other municipalities in NL will be invited to participate in the study.
- 3. Alignment with Strategic Directions/Adopted Plans:
 - A Sustainable City
 - A Connected City
 - An Effective City
 - Declaration of Climate Emergency
 - Global Covenant of Mayors for Climate and Energy
- 4. Legal or Policy Implications: N/A
- 5. Privacy Implications: N/A
- 6. Engagement and Communications Considerations: N/A
- 7. Human Resource Implications: The Sustainability Coordinator will engage with the partners in the proposal and provide the support from the City of St. John's to the implementation of the study.
- 8. Procurement Implications: N/A
- 9. Information Technology Implications: N/A
- 10. Other Implications: N/A

Recommendation/s:

That Council support the application to GMF's Community Energy Financing Program Design initiative and further;

That Council provide up to \$5,000 from the approved \$100,000 Sustainability momentum initiatives funds to the CEF Program Design application to enable the partnership to access up to \$80,000 in matching funds from FCM.

Prepared by: Edmundo Fausto, Sustainability Coordinator

Report Approval Details

Document Title:	FCM Community Energy Financing Program Design Application.docx
Attachments:	
Final Approval Date:	Aug 12, 2020

This report and all of its attachments were approved and signed as outlined below:

Brian Head - Aug 12, 2020 - 11:59 AM

Lynnann Winsor - Aug 12, 2020 - 12:11 PM

Report Approval Details

Document Title:	FCM Community Energy Financing Program Design Application.docx
Attachments:	
Final Approval Date:	Aug 12, 2020

This report and all of its attachments were approved and signed as outlined below:

Brian Head - Aug 12, 2020 - 1:14 PM

Lynnann Winsor - Aug 12, 2020 - 1:32 PM

INFORMATION NOTE

Title:	What we Heard Sidewalk Snow Clearing Public Engagement	
Date Prepared:	August 11, 2020	
Report To:	Committee of the Whole	
Councillor and Role:	Councillor Ian Froude, Public Works & Sustainabilty	
Ward:	N/A	

Issue: Provide Council with a comprehensive overview of the outcomes of the public engagement process undertaken on sidewalk snow clearing.

Discussion – Background and Current Status:

Public engagement was undertaken between May and June 2020 on the topic of sidewalk snow clearing. As the engagement process included a variety of different stakeholders and engagement touch points, what we heard has been organized into several files.

- 1. A detailed what we heard document which provides a summary of the engagement purpose, stakeholders, public engagement tools, what we heard from each stakeholder group, and key themes
- 2. An infographic providing a quick/simple overview of what was heard to support communications via social media
- 3. Detailed overviews of surveys completed with the public and business communities

Key Considerations/Implications:

- 1. Budget/Financial Implications: None related to the engagement process
- 2. Partners or Other Stakeholders: Several stakeholders noted in the what we heard document.
- Alignment with Strategic Directions/Adopted Plans: Strategic direction around a City that Moves includes a goal to improve safety for all users on a well-maintained street network. Outcomes from this process could support future projects to advance that goal.
- 4. Legal or Policy Implications: N/A
- 5. Privacy Implications: N/A



- Engagement and Communications Considerations: As outlined in the What we Heard Document. Results will be shared on enaggestjohns.ca, through city communications channels, and with those who provided input directly to the process.
- Human Resource Implications: Public engagement work undertaken by staff in Organizational Performance and Strategy.
- 8. Procurement Implications: None at this time.
- 9. Information Technology Implications: N/A
- 10. Other Implications:

Conclusion/Next Steps:

Share the What we Heard results as outlined in the engagement and communications considerations and for consideration of recommendations/improvements related to service.

Report Approval Details

Document Title:	WWH Sidewalk Snow Clearing Public Engagement.docx
Attachments:	- FINAL WWH Sidewalk Snow Clearing 2020.pdf
	- Sidewalk Snow Clearing infographic FINAL.pdf
	- FINAL Public survey sidewalk snow clearing 2020.pdf
	- FINAL Business Survey Sidewalk Snow Clearing 2020.pdf
Final Approval Date:	Aug 12, 2020

This report and all of its attachments were approved and signed as outlined below:

No Signature - Task assigned to David Crowe was completed by workflow administrator Shanna Fitzgerald

David Crowe - Aug 12, 2020 - 11:31 AM

Lynnann Winsor - Aug 12, 2020 - 11:38 AM



Sidewalk Snow Clearing Public Engagement

What We Heard (Detailed Report) August 2020 ST. J@HN'S







Disclaimer

- This document aims to provide a detailed summary of what was heard from participants during the engagement process. It is not meant to reflect the specific details of each submission word-forword.
- The City produces a What we Heard document for every city-lead project that has public engagement to share back with the community the commentary collected and to ensure we heard you correctly.
- The full scope of commentary is used by the project team, city staff, and Council to help inform recommendations and decisions.



Context and Background

- Council directed staff to undertake public engagement on sidewalk snow clearing.
- This has been a topic of much discussion especially considering the 2019-20 winter and unprecedented snow events.
- There were several facebook groups established, petitions created, and a protest at City Hall related to this topic in 2020.
- Previous engagement took place in 2014 as part of the broader winter maintenance review and a pilot program for sidewalk snow clearing was launched in 2015 which was positively received.
- Budget reductions brought changes to the pilot in 2016-17.
- Any decisions related to changes in service would need to be considered in the context of the 2021 budget planning process and current constraints due to the pandemic. Recommendations coming from this engagement process will likely need to consider quick wins in the short term and an implementation plan for the longer term.



Purpose of Public Engagement

- Council and staff recognize there is a voice within the community advocating for improved service in sidewalk snow clearing. Messages have focused on the importance of sidewalks for those who rely primarily on active transportation and those who use public transit to get around.
- The key decision point for Council to consider through the engagement process was <u>how</u> to improve the service levels in a way that is effective, i.e. there is a recognition of improvement, <u>and</u> the cost of making the improvements.
 - To make these decisions it will be imperative that the city understand what the issues are, and for whom, in the current level of service and where the improvements will have the greatest impact.



Public Engagement Goals

- Create space where residents and key stakeholders can learn more about the current sidewalk snow clearing program and provide their perspectives on current, and potential future service levels using tools that are easy to use and accessible.
- Gather feedback in such a way that Public Works staff can use the information to inform recommendations to Council who will ultimately make decisions around service levels and budgets.

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Public Engagement Tools

Engagement Activity	Target group	Notes	
Virtual meeting with Advisory committees and Youth Engagement Action Team	Representatives of various sub- groups such as inclusion, youth, seniors	These meetings were designed to seek feedback from various segments on the engagement approach and survey questions	
Virtual meeting with Board of Trade and Downtown St. John's	Business Community	Seek feedback on the best approach to use to get feedback from the business community	
Launch engage project page	All stakeholders	Page designed to provide information about current program, links to surveys for public and business community and a mapping tool	
Key stakeholder meetings	Inclusion Advisory committee Metrobus NL English School District Seniors' Advisory Committee Empower Local Immigration Partnership (newcomers)	Meetings tailored and focused on specific stakeholder communities, their concerns and issues.	
Virtual Public Sessions	All residents	Two sessions planned for different times of day to accommodate various needs. Registration required and test sessions conducted to increase comfort.	
Social Media campaign	All residents	Used standard social media to use polls/questions and then direct users to survey, engage page	
Email and 311	All residents (especially those not comfortable with virtual/online) Page 57 o	Promotion of 311 and email – calls to 311, took name and contact and staff followed up with one-on-one	

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Promotion of Public Engagement Opportunities

- City Guide full page advertisement Spring issue
- Social media
 - 13 posts on Facebook, Instagram and Twitter reaching nearly 100,000
- Engage newsletters
 - Three newsletters sent to more than 2400 registered users of engagestsjohns.ca
- Paid advertising
- Promotion through business associations, i.e. Downtown St. John's, Board of Trade
- Council interviews/media coverage
- City's Calendar of events
- E-updates News and news release
- City's Economic Update e-newsletter, sent to 2400 subscribers



Some people ask why they need to register at engagestjohns.ca to post their comments or actively participate in a public engagement process.

By creating an account, you will receive the summary of what was heard during the engagement process and always receive notification of new engagement opportunities.

The simple answer is that it helps you participate more fully in the process. Your registration means that we can stay in touch with you, keep you informed about the project, and send you updates periodically when new public engagement opportunities come up that you may be interested in.

If you have questions about the registration process, emai engage@stjohns.ca

CITY GUIDE |SUMMER 2020 31



Points of engagement

 More than 3,000 engagement touch points through engagestjohns.ca, online surveys, virtual meetings, social media, calls to 311 or emails





What we Heard From E-mail and 311

• 311 (three calls)

Major concerns with winter access, safety, priority street without priority service, downtown and limited access
off street to connector streets, increase use of Go Bus in winter, less physical activity in winter, mail service
impacted

• Emails (14 received)

- Intersections/sight lines are issues
- Staff need to experience the sidewalks to better understand user needs
- Areas in and around MUN need connectivity
- Area around WestView Village needs improvement
- Comfortable with current level of service given the weather (Georgestown)
- Snow being pushed onto sidewalks and other obstacles such as garbage bins
- New sidewalks added in the city are they being considered within the program?
- Need improvements/service in and around Doyles Rd/Schools in Goulds
- Quality of service/contractors who currently provide the service. i.e. Queen's Rd
- Bus stops need clearing
- Change street design to allow for boulevards for snow storage
- Agreement with Telegram article referenced here.

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Feedback from engagestjohns.ca

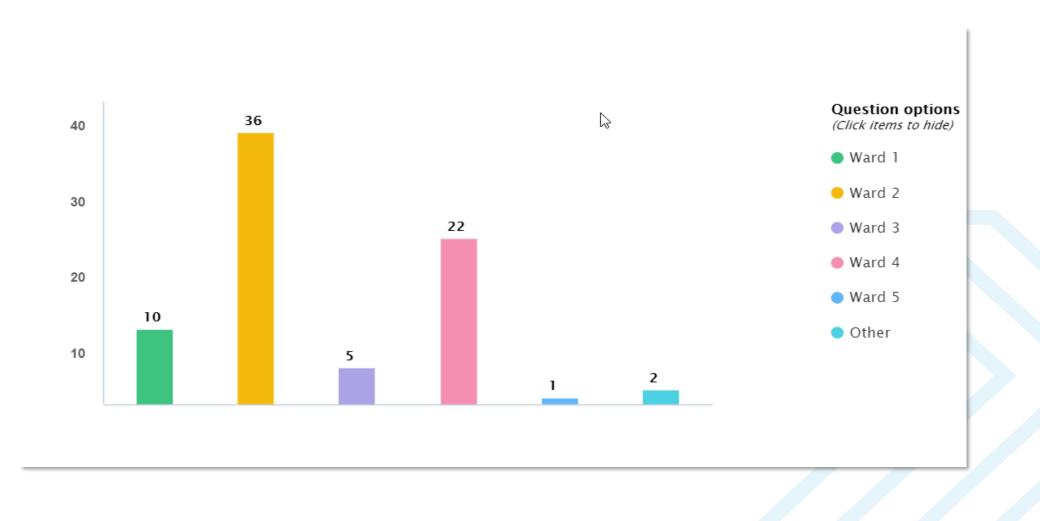
2,300 visits to the project page

Aware	Informed	Used the mapping tool	Featured Projects - open for your input	
1,900 (unique user who visited at least one page)	815 (unique user who visited multiple pages)	76 separate accounts left feedback using the mapping tool Note: Site Admin1 added pins for callers to 311, during virtual events, and meetings with stakeholder groups so the actual number of individual pieces of feedback is higher.	Engage! St. Johns Contraction of the second	Sidewalk Snow Clearing 26 May 2020 Provide your feedback - deadline June 19. Take a survey, attend a virtual meeting, map your feedback, e-mail or call. Visit the project page to learn more and have your say

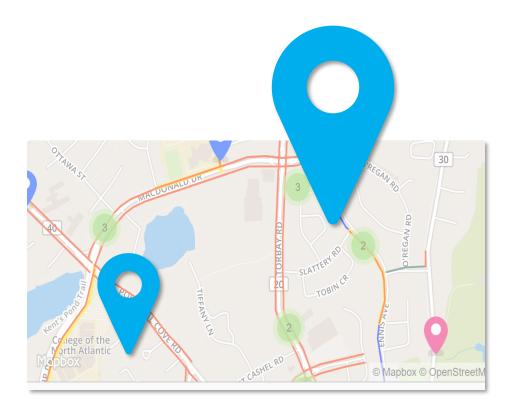
Note: Visitors could also access both the public and business surveys from this site.



Demographics of engagestjohns.ca participants





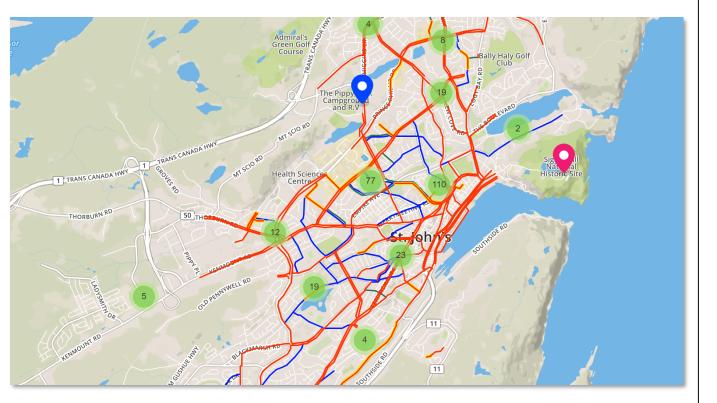


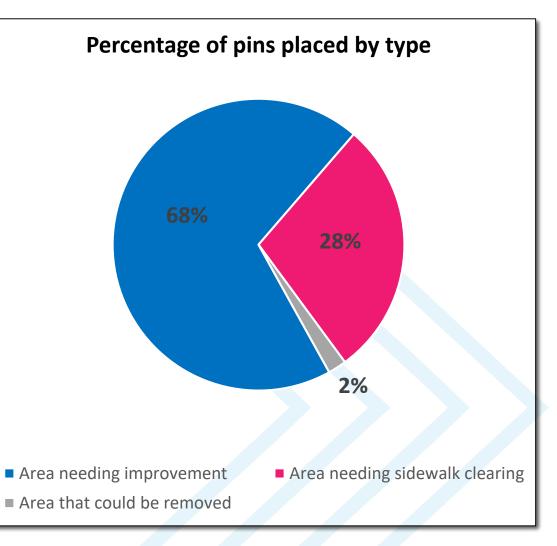
Mapping feedback

- Residents were provided with a map of the city overlaid with the sidewalk snow clearing routes and their priority.
- On engagestohns.ca, registered users could place pins using the following categories:
 - Area of concern/improvement needed
 - Need sidewalk snow clearing here
 - Sidewalk snow clearing not necessary here

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Mapping feedback 305 pins placed on map



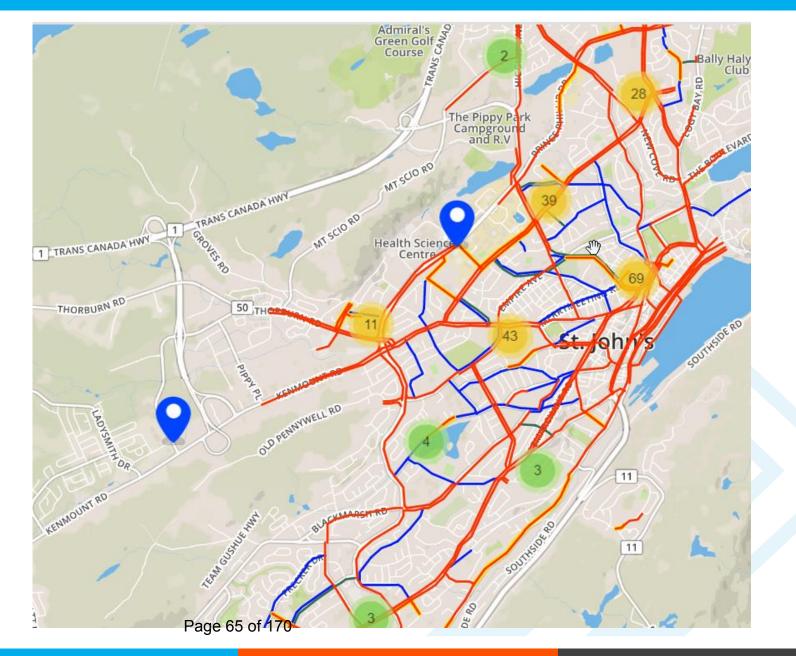


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Area of concern/ improvement needed 200+ pins placed





Areas noted for improvement - locations

- Bonaventure area connectivity from downtown to MUN need clear path with minimal cross over also a school zone with hundreds of students and in a walkable neighbourhood
- Merrymeeting area grocery/connectivity
- Wherever there are box stores and bus stops, i.e. Stavanger drive/Aberdeen Ave, Kelsey Drive area
- Elizabeth Avenue high pedestrian and bus traffic
- Freshwater Rd connectivity
- Rawlins Cross area Queens, Military, -high foot traffic and connectivity
- Harvey Rd
- Torbay Rd
- Allandale Rd from Higgins Line to Prince Philip
- Monkstown Rd narrow streets, cars parked on street and high foot traffic area
- Hills into and out of downtown i.e. Prescott
- Streets with bridges where bridge is narrow and full of snow/pushing pedestrians into busy streets
- In and around Memorial many students walking/taking bus



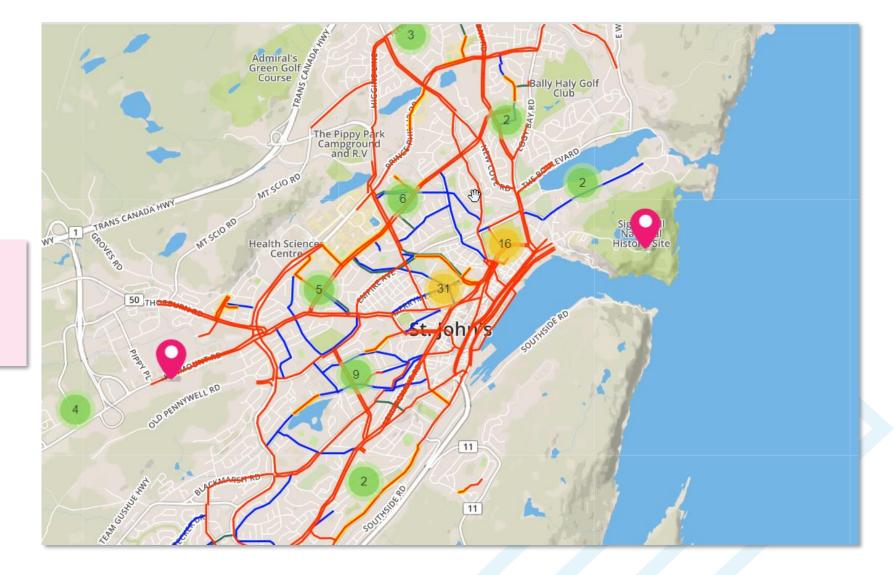
Areas Noted for Improvement/Key Concerns

- Crossing buttons/push buttons/cross walks access
- Bus stops both Metrobus and school bus stops need to be free from snow, sight lines improved, intersections and access
 to these stops free from snow
- Safety and Consistency full streets need to be cleared not just partial help people get where they are going without having to go out into street, reach dead ends
- Co-ordination between road and sidewalk plows to improve service and consistency
- Blind corners intersections build up issues, sight lines
- Not all Priority 1 streets are cleared well enough if a Priority 1 then make it priority
- School zones generally need bigger areas not just sections in front of schools as school zone
- Areas around poles ensure path around the pole is clear
- Salting more required and at same time as clearing
- Steps/connectivity issues sidewalks leading to and from steps and steps themselves especially in downtown
- Downtown overall needs to be walkable as many services are in Downtown, people bus there, tourists/visitors, business
 community and their employees need to get around barrier free
- Dangerous cited frequently as an issue for people who walk in the city in winter. Blind curves, snow mounds/hills, sight lines
- Contractors pushing snow into the street/sidewalk
- Connectivity





Need sidewalk snow clearing here **85 pins placed**



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Areas Needing Sidewalk Snow Clearing

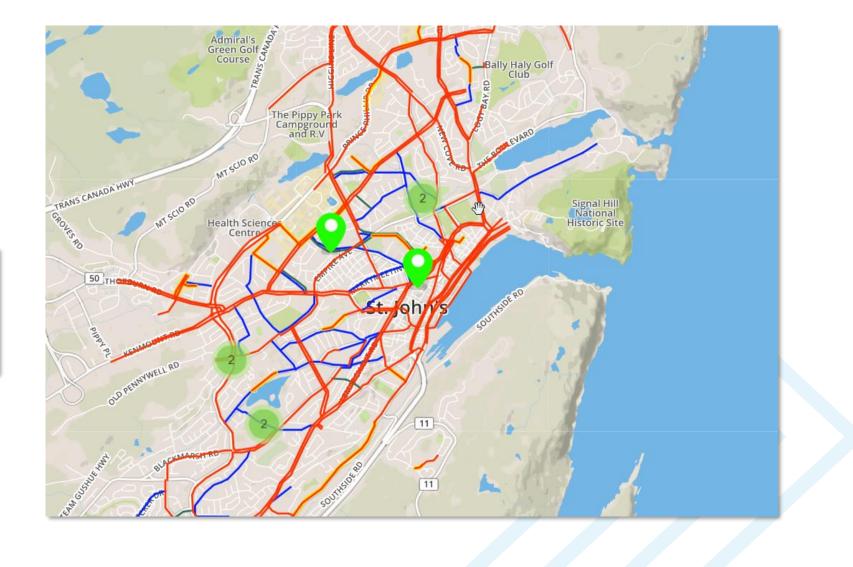
Key locations noted as needing sidewalk clearing or an increase in priority level

- Locations included:
 - Mundy Pond Rd area and Ropewalk Lane school zones and bus stops
 - Pennywell Rd connectivity high foot traffic
 - Logy Bay Rd connectivity
 - Circular Rd between King's Bridge and Empire connectivity
 - Hayward Avenue
 - Escasoni Place Empower located here, wheelchair users
 - Jasper Street school connection
 - Portugal Cove Rd North connector to Airport Heights
 - Wicklow Street high foot traffic
 - Craigmiller Avenue high foot traffic/bus stops
 - Topsail Rd South disconnected leading to Downtown
 - Bay Bulls Rd
 - Waterford Bridge Rd gaps- connections
 - Della Drive area Goulds School zones high foot traffic
 - All streets with bus stops/walking to schools including private schools post-secondary





Sidewalk snow clearing not necessary here 8 pins placed





Sidewalk Snow Clearing Not Needed Here

- Comments about whether both sides of Columbus Drive are necessary
- Steps connecting streets where sidewalks are not connected –e.g.
 Sycamore Place dead end
- Bannerman Street lower priority
- Newtown Rd, Sections of Blackmarsh Rd lower priority if fewer pedestrians

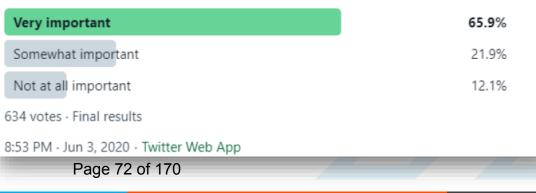


 Social media used to promote engagement and to solicit feedback through a series of polls/questions

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- 54 comments provided through social media during promotional posts and include such items as:
 - Comments about quality of sidewalk snow clearing/looking for feedback
 - Comparisons to other cities such as Mount Pearl
 - Importance of school zones and need to increase radius
 - Specific reference to lack of sidewalk clearing in Southlands
 - Need for snow removal to improve service
 - Change in type of equipment to be used
 - Impact of poles in sidewalk and consistency of clearing
 - Importance of clearing intersections
 - Need for salting/safety
- 1195 engaged directly with quick polls on socials Top poll noted below:

How important is winter walkability to your quality of life?





What we Heard from Public Sessions

- Two sessions 32 people registered for the virtual sessions
- Participation from cross section of City geographies Downtown/Signal Hill, East end, West end, Goulds, University area, Centre City, Georgestown
- One of the pedestrians also wrote a piece in the Telegram (link to that)
- Key messages included:
 - Sidewalks are essential in all seasons
 - Challenging winters do not have to mean inaccessible sidewalks
 - We need consistent ice control so people can feel confident the sidewalks are safe
 - Better sidewalk snow clearing would be a convenience for many but is clearly vital for a significant and often marginalized minority
 - Ice control/salting major concern
 - Priorities are ok but more consistency needed
 - Accessibility for all users of sidewalks
 - We need a walkable city pedestrians have rights, not everyone needs or can afford a car



Public Sessions – Key Concerns

- Snow being placed/pushed into sidewalk by contractors/residents
- Need to look at walking paths for school-aged children and where they get buses to increase safety including connector streets to priority 1/school zones
- Push buttons/intersections need to be cleared
- Consider clearing highly used trails to create connectivity; some expressed concerns with lighting on trails
- Steps/hilly streets need more priority/consistency/ice control, especially Downtown
- It's scary being a pedestrian, people should not need to walk in the street
- Need ice control would improve safety
- Need salt when cleared not afterwards, and frequently
- Improve staff knowledge of pedestrian experience and increase training
- Willing to pay more for better/increased service levels \$25 a year seems reasonable but want to see prioritization of sidewalks through that investment
- Better communications/ dedicated 311 call line for snow related issues
- Poles are impediments to clearing creating "roadblocks" and inconsistency
- Coordination of road and sidewalk plow to prevent "pushing snow" back on sidewalk after it is cleared
- Do not use road plows to clear sidewalks creates unevenness and makes sidewalk unsafe and therefore not usable



Key Stakeholder Groups

- Virtual meetings with key stakeholder groups included:
 - Metrobus
 - Newfoundland and Labrador English School District (NLESD)
 - Newcomers
 - Seniors
 - Inclusion/Empower



What we Heard from Metrobus

Public transit review completed in 2019 identified sidewalk snow clearing and safety concerns and recommended the following:

Strategy 4A – Bus Stop Snow Clearing - The current snow clearing policy does not prioritize the clearing of transit stops. Furthermore, the priority for snow clearing is for the road surface itself, with little regard for the clearing of transit stop areas so passengers can board buses without climbing over snowbanks. To address bus stop access during winter conditions, the existing snow clearing policy should be updated to further prioritize the transit network and include specific provisions for stop access. Stops on the network should be prioritized based on usage, with all stops on the Frequent Transit Network given the highest priority.

This recommendation was based on feedback from the public which noted: Lack of coordination with the city over snow clearing, construction, and parking enforcement

- At present there are 800-900 bus stops and 65 shelters
- Frequent routes with most traffic 1, 2, 3, 10
- Calls/complaints about sidewalks directed back to 311
- Bus shelters are cleared by Metrobus and they are generally done about 48 hours after a snow event and in coordination with city roads clearing once push back is done - this is very much subject to the type of snow event and volume of snow Page 76 of 170



What we Heard from NLESD

- Usually when there is feedback related to sidewalk snow clearing they direct people to the City
- Most feedback would relate to line of sight, where bus stops are located, walking on road where there are multi-lanes
- May not be clear to parents what gets cleared and when
- Some parents drive their kids to bus stops and create congestion/unsafe situations
- Decision on closing schools based on road safety mainly
- The more we clear of the 1.6 KM "walking" zone the better it will be for walkers



What we Heard from the Seniors' Advisory Committee (SAC)

- Seniors need to know what to expect when there is a weather event
- Prioritize sidewalks as important as many seniors use them to get around
- Downtown important to seniors
- Crosswalks important
- Training for operators to improve service
- Access to certain facilities like health care facilities trying to get to certain locations
- Consider it in context of 'Complete' streets all ages, connectivity
- Access to city buildings is important, should be clear
- SAC also provided feedback on the engagement process



What we Heard from the Inclusion Advisory Committee (IAC)

 A session with the IAC provided feedback on how best to use engagement tools effectively to include voices to be heard in this community. City staff provided options to allow groups to have separate surveys or focus groups. This led to a focus group with 25 users of services from Empower – the disability resource centre. What we heard from this group follows.



What we Heard from Empower Users

- Lack of safe sidewalks in winter significantly impacts quality of life isolation, depression, people stay in more, reply on others more, use Go Bus more
- Need to know when and what sidewalks are done to plan or alter route
- Would use Metrobus accessible routes but cannot get to stops due to sidewalk clearing
- Getting to mailboxes, putting out garbage a challenge
- GoBus challenges with dropping ramps and providing access
- Ice control safety is important
- Snow needs to be cleared off and sidewalks need to be level with curb cuts to get to road
- No snow on outer edge of sidewalk some sidewalks clear but the edge not, so can't get off and on
- Clear crosswalk push button areas and have safe cross walks



What we heard from Newcomers and Organizations Supporting Newcomers

Local Immigration Partnership organized two focus groups which included both newcomers and organizations that support or work with newcomers including post-secondary institutions, government agencies, Association for New Canadians.

- Significant concerns about fear of falling, afraid of getting hurt, difficult to get around, scary in winter especially with children
- Accessibility is a necessity, accessibility is equality
- Downtown important for newcomers, many services there and bus stops/routes they need to access
- If sidewalks are not clear, the city is not safe
- Sidewalk snow clearing important anywhere that population density is high and there is potential for lower income earners. Apartment buildings, locations with NL Housing units. Many occupants in these residences are without vehicle access.
- Coordinate with NLESD walkable to schools, many newcomers in walking zones. Particular note about elementary schools and walk zones some newcomers houses at apartment buildings on Crosby Rd and Torbay Rd, for example, and are in walk zones for schools – safety concerns – noted St. Andrews and Virginia Park, Mundy Pond – issue is not just sidewalks for walking, but school bus stops where kids in the street and not safe due to accumulation of snow on sidewalks and roads.
- Routes to grocery stores important.
- Need to see both sides clearly in trouble areas Elizabeth Ave and Thorbourn Rd. Main Rds 24 hours highest traffic and pedestrian feeders
- Bus routes connected where are people getting off and where are they going i.e Churchill Sq. MUN, most popular/stops
 plowing and salting tandem approach/teamwork

Newcomers Continued

- The newcomer experience is an important one:
 - They are bus users and taking the bus is challenging in the best of times, winter makes it that much harder
 - People are waiting in the street
 - People who are economically disadvantaged are even more so due to not having a car, forced into street, least likely to call councillor or complain
 - If they do not have a positive experience they do not stay – bigger issue and concern
- Hiring a few extra people/new machine a little extra to make a difference
- Consider impact of service on lower income residents

• Do we need a conversation with housing? Hold landlords accountable.

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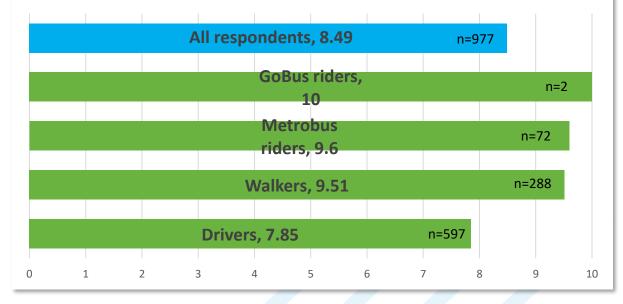
- Procedures/knowledge/education on process and requirements
- We are losing our immigrants due to weather and experience – bigger implications for newcomers
- Neighbourhoods focused landlords responsible for rentals in other cities
 - Some people take it on themselves to clear make it neighbourhood focused
 - May not be realistic for some people
- Have seen improvement and need to continue to improve; Keep investing in improving the service
- If you want better service, you have to pay- other cities pay for that.

What We Heard from the Public Survey

- Online survey
- 1,019 total responses
- Detailed results available here (link to detailed report):
- Winter walkability is very important to the quality of life of all citizens surveyed, rating 8.49 out of 10 (where 1 is not at all important and 10 is very important).
- While drivers rated the importance of winter walkability slightly lower than respondents using other modes of transportation, their rating of 7.85 out of 10 indicates the important role walking plays in their quality of life in winter.
- The importance of winter walkability was rated higher than average by those aged 18-24 (8.85 out of 10) and those aged 25-44 (8.72 out of 10), and by postsecondary students (9.04 out of 10), newcomers who had relocated to St. John's from another country in last five years (9.45 out of 10), and visible minorities (9.43 out of 10). Note, however, that these samples were generally quite small.

Importance of winter walkability to quality of life on a scale of 1 to 10 where 10 is very important Results presented according to a respondent's primary mode of transport

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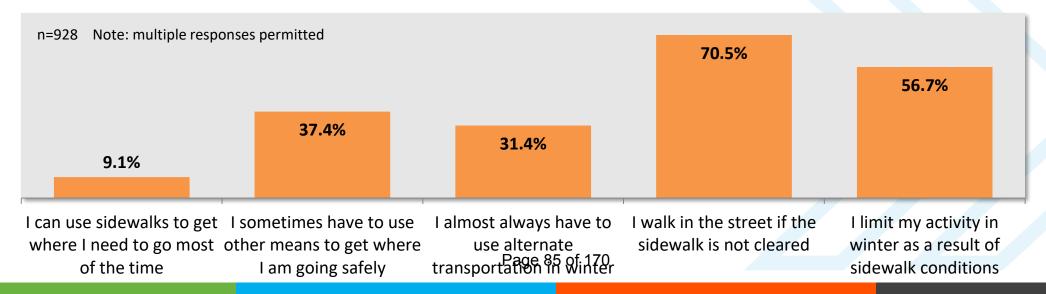
- In the past two winters, 92% of citizens surveyed have wanted to use, or used, the City's priority sidewalk routes. Those who did not use the sidewalks citied safety concerns, and lack of snow clearing and ice control as reasons. Others indicated they were primarily drivers, did not live near or walk in the priority areas, or had mobility challenges.
- Safety is a significant concern for pedestrians using the priority sidewalk routes. When asked to rate how safe they felt using the priority sidewalk routes in winter, respondents' average rating was 3.49 out of 10 (where 1 was not at all safe and 10 was very safe). Respondents who indicated their primary mode of transportation was Metrobus, rated their feeling of safety lower than average (2.95 out of 10), as did post-secondary students (2.79 out of 10).
- When asked to rate the overall condition of the priority sidewalks in winter, respondents gave an average rating of 3.6 out of 10 (where 1 was poor and 10 was excellent). Postsecondary students rated the condition at 2.99.

Respondents' rating of the overall condition of priority routes and their feeling of safety while using them (on a scale of 1 to 10, where 10 is very safe/excellent)





- Using the priority sidewalk routes in winter was challenging for most citizens surveyed. When asked about their experiences using the routes, the most frequently cited response (71%) was "I walk in the street if the sidewalk is not cleared." Fifty-seven percent of respondents indicated that they limited their activity in winter as a result of sidewalk conditions. Respondents also turned to using alternate transportation either "almost always" (31%) or "sometimes" (37%). Only 9% indicated they could use sidewalks to get where they were going most of the time.
- Eighty-five percent of citizens who used either walking or Metrobus as their primary mode of transport, indicated they "walk in the street if the sidewalk is not cleared." Sixty-six percent of those using Metrobus as their primary method of transport indicated they limited their activity in winter as a result of sidewalk conditions.



Respondents' experience using the priority sidewalk routes in winter



Views of specific aspects of the sidewalk snow • clearing program were generally noting areas needing improvement. **Ice control/salting** was perceived as being poor by almost 70% of respondents. **Connectivity** – how effectively cleared sidewalks connect to each other, and consistency – how consistently the sidewalk is cleared, were also rated as poor by about 60% of respondents. **Timeliness** – how guickly the sidewalk is cleared after a snow event, was rated somewhat more positively than the other queried aspects, receiving the following ratings: good or excellent (17.6%), fair (39.7%), and poor (42.8%). Those who used walking as their primary mode of transportation, were more likely to rate ice control/salting and connectivity as poor (75%) and 70% respectively) than those who used other modes.

Respondents' rating of various aspects of the current priority sidewalk snow clearing program

Connectivity – how effectively cleared sidewalks connect to each other	62.8%		27.9%	9.2%
Consistency – how consistently the sidewalk is cleared	60.2%		30.9%	8.9%
Ice control/salting – how well the sidewalk is salted, and ice is controlled	68.6%		24.8%	6.6%
Timeliness – how quickly the sidewalk is cleared after a snow event	42.8%	39.7%		17.6%
n=913	Poor Fair	Good or Excellent		



- A significant majority of citizens surveyed were supportive of Council making winter walkability a priority (92% agree or somewhat agree), and of the City investing more resources in sidewalk snow clearing (88% agree or somewhat agree).
- Support for both statements was high regardless of a respondents' primary mode of transport, though drivers were somewhat less supportive than those who used walking or Metrobus as their primary mode (a comparison is provided in the table below).

Respondents' level of agreement on Council priorities and investment in sidewalk snow clearing

Improving winter walkability should be a priority for Council.

The City should invest more resources (financial, human, equipment) into sidewalk snow-clearing to provide a more consistent service.



 $0\% \quad 10\% \quad 20\% \quad 30\% \quad 40\% \quad 50\% \quad 60\% \quad 70\% \quad 80\% \quad 90\% \quad 100\%$

■ Disagree or somewhat disagree ■ Neither agree nor disagree

Agree or somewhat agree



- Support for potential tax increases related to improving the sidewalk snow clearing program weakened as the amount of tax increased. A clear majority (67%) of citizens surveyed 'definitely support' an increase of \$25 or less, with a further 17% indicating they 'might support' it.
- Forty-six percent of respondents 'definitely support' an increase of between \$25 and \$50.
- A tax increase of between \$50 and \$100 had the most mixed support with 40% of respondents not supporting it, while 29% 'might support' it, and 24% 'definitely support' it.
- Fifty-seven percent of respondents did not support a tax increase of between \$100 and \$200.

Respondents' level of support for potential tax increases related to improving the sidewalk snow clearing program

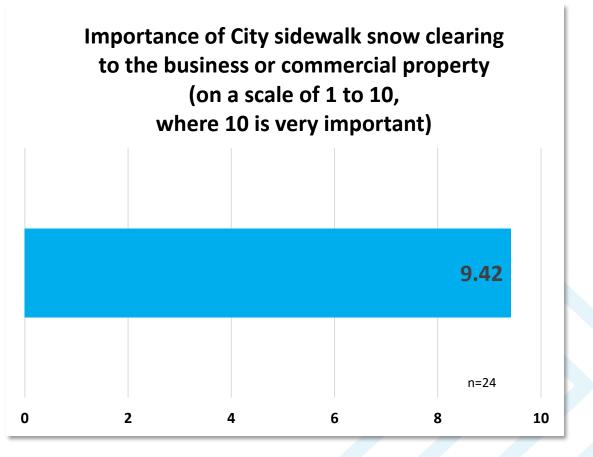


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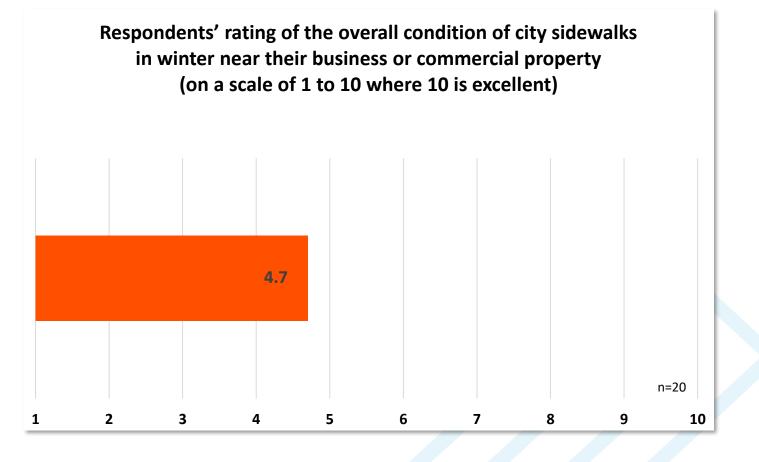
What We Heard from the Business Survey

- Online survey
- 24 responses
- Detailed results available here (link to detailed document):
- Businesses surveyed rated the importance of City sidewalk snow clearing as a 9.42 on a scale of 1 to 10, where 1 is not at all important and 10 is very important.
- 78% of businesses surveyed arrange for their own sidewalk snow clearing (this is likely reflective of the large number of respondents whose businesses or commercial properties are located in the downtown along Water or Duckworth streets.





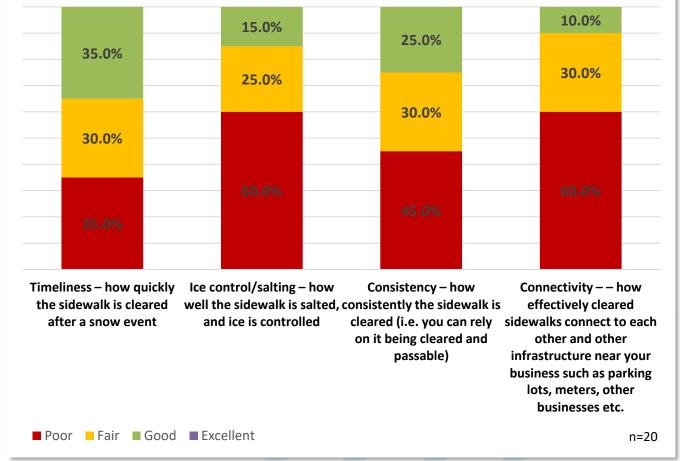
 When asked to rate the overall condition of city sidewalks near their business in winter, survey respondents gave a 4.7 rating out of 10 (where 1 was poor and 10 was excellent).





- When queried on the quality of various aspects of the current priority sidewalk snow clearing program, 60% of the businesses surveyed cited ice control/salting, and connectivity as being poor. Consistency was rated as poor by 45% of respondents. Timeliness received the most mixed ratings, with about one third of respondents rating it as either poor, fair or good.
- Some respondents expressed specific concerns about snow clearing including: safety concerns related to ice buildup on sidewalks, the timeliness of clearing on main streets in the downtown, the inconsistency with which businesses clear sidewalks in the downtown and whether this was enforced, concerns about vacant properties in the downtown and the lack of sidewalk clearing that results, concerns about access to stairs, and concerns about street plows pushing snow onto cleared sidewalks. In addition, access to sidewalks in the downtown was cited as problematic when cuts were not made in snowbanks to allow pedestrian access at various points along a block

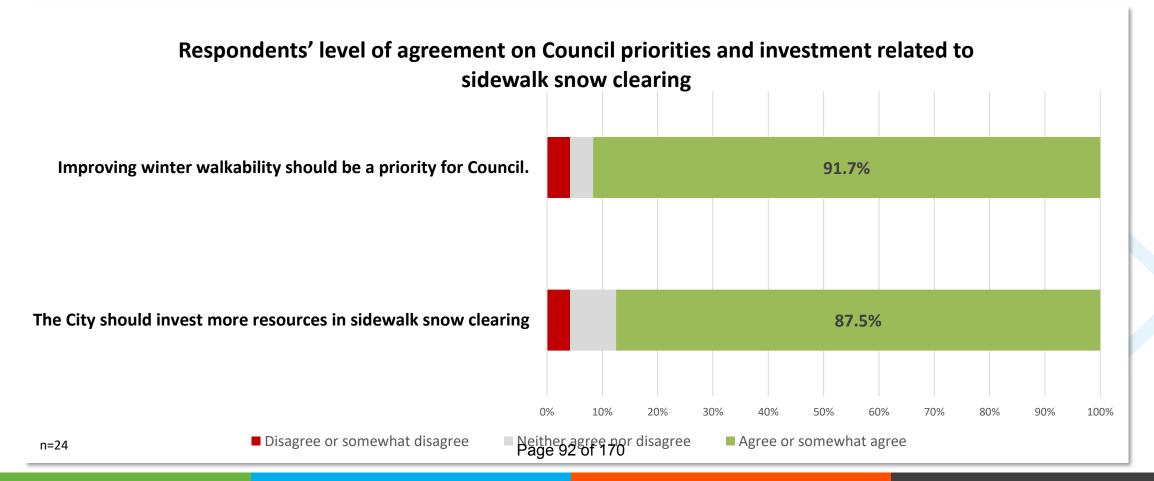
Respondents' rating on the quality of various aspects of the current priority sidewalk snow clearing system



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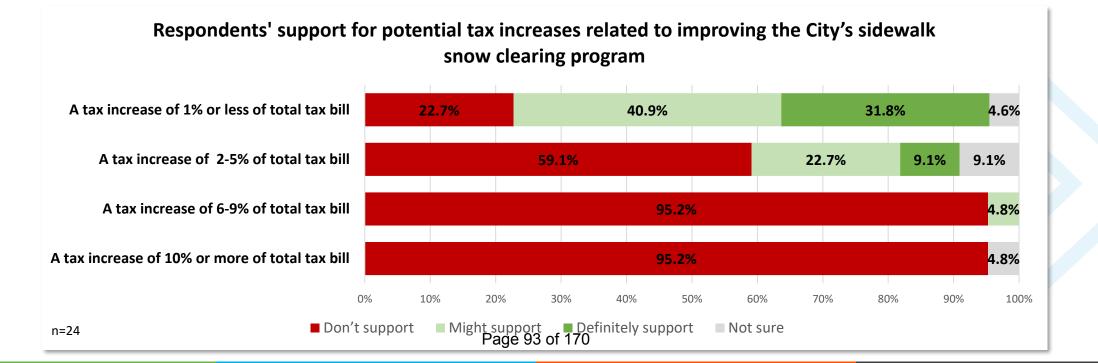


Surveyed businesses were very supportive of Council making winter walkability a priority (91.7% agree or somewhat agree) and of the City investing more resources in sidewalk snow clearing to provide a more consistent service (87.5% agree or somewhat agree).





- Support for potential tax increases related to improving sidewalk snow clearing declined as the amount of tax increased. The only tax increase that received substantive support was an increase of 1% or less, with 32% of surveyed businesses definitely supportive, and 41% indicating they might support it.
- Sixty percent of respondents opposed a tax increase of between 2% and 5% and there was effectively no support for tax increases above 5%, with 95% of respondents being opposed.





Common Themes Across all Stakeholders and Engagement Platforms

- A desire for sidewalk service levels to be at the level of road service
- Connectivity and safety are key walking in the street should not have to be an option for people
- Sidewalks that are cleared need to be consistently accessible and safe (ice free)
- Need walkable paths to key locations where do people walk most frequently
- Accessibility is an important consideration quality of life, livability of city
- Improve infrastructure/equipment and more training
- Invest in the service/money and resources
- Priority 1 needs to be a priority
- Focus on school zone/Metrobus/Downtown connectivity of routes



Next Steps

- Share detailed reports and what we heard documents with city staff and Council
- Share What we Heard document with public and those who participated
- Develop recommendations for Council consideration
- Council decision making and budget process
- Potential Implementation of improvements/changes



To Stay Up to Date

Visit engagestsjohns.ca

Home » Sidewalk Snow Clearing

Sidewalk Snow Clearing



Consultation has concluded - Check back for a What we Heard document soon.

Winter sidewalk maintenance activities are an important component of an active transportation network. The City has designated 161 km of sidewalk to be cleared during the winter season. These have varying

levels of priority. Visit the map here to see which streets are currently within the program area. Priority details can be found here.

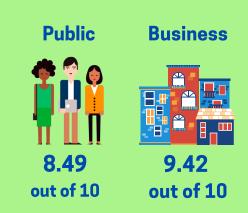
Council has requested feedback on the current service levels and what they could be in the future. As Council considers service levels it must also consider the cost of any potential changes.

SIDEWALK SNOW CLEARING ST. J@HN'S

What We Heard From Public Engagement

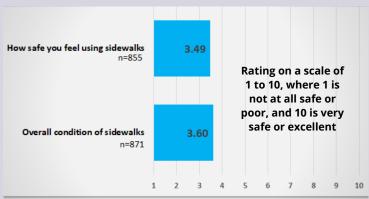
IMPORTANCE OF WINTER WALKABILITY

Winter walkability is very important to the quality of life of citizens and the operation of businesses and commercial properties. Though walking may not be the primary mode of transport for all citizens, it does factor significantly in their recreation and how they choose to get around the city. The importance of winter walkability is rated higher than average by those aged 18-44, and by post-secondary students, newcomers who have relocated to St. John's from another country in last five years, and visible minorities.



Results from public and business surveys rating of the importance of winter walkability and sidewalk snow clearing where 1 is not at all important and 10 is very important

EXPERIENCES ON THE PRIORITY SIDEWALK ROUTES



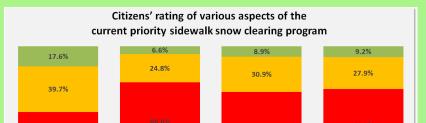
Results from the online public survey

Many citizens change the way they get around in winter. Our public survey indicated:

- 57% limit their activity because of sidewalk conditions
- 71% walk in the street
- 31% must use alternate transportation
- Safety and the overall condition of sidewalks are significant concerns
- Those with mobility challenges feel more restricted in their winter transportation options due to sidewalk conditions

PERSPECTIVES ON CURRENT SNOW CLEARING PROGRAM

Ninety-five percent of the citizens we surveyed had at least some knowledge of the City's priority sidewalk system. We heard that while improvements to snow clearing have been noticeable in the past few years, connectivity, consistency, and ice control were problematic. In terms of timeliness, 60% of the citizens surveyed expect sidewalks to be cleared within 24-72 hours after a snow event.





Results from the online public survey. n=913

- SPECIFIC CONCERNS ABOUT SIDEWALK SNOW CLEARING
- Connectivity of routes and inconsistency of clearing i.e., only portions of a route are cleared
- Ice and snow buildup and the need for better ice control
- Inaccessible intersections and crosswalks due to snowbanks and concerns with sight lines
- Street plows pushing snow into cleared sidewalks
- Obstacles impeding sidewalk plows e.g., poles that result in inaccessible sections
- Contractors and citizens pushing snow onto sidewalks
- The inaccessibility of bus stops requiring riders to wait in busy streets
- Connectivity of neighbourhood sidewalk routes in school zones

SUPPORT FOR INVESTMENT

Throughout the public engagement process we heard significant support for:

- Council making winter walkability a priority (92% of citizens and businesses surveyed agree)
- Increasing investment in sidewalk snow clearing (88% of citizens and businesses surveyed agree)

70%

Of citizens surveyed would pay \$25 or less per property per year to support improvements to sidewalk snow clearing

HOW WE COLLECTED FEEDBACK

- Engagestjohns.ca 2,300 visitors to the project page
- Online public survey (1,019 responses) and business survey (24 responses)
- Meetings with key stakeholders (Metrobus, NLESD, Downtown St. John's, St. John's Board of Trade, Local Immigration Partnership, Empower NL), City's Youth Engagement Action Team and Seniors, Inclusion, and Youth Advisory Committees
- Two virtual public meetings (32 attendees)
- Email and calls to 311 Page 97 of 170
- Social media 'tell us on social' campaign



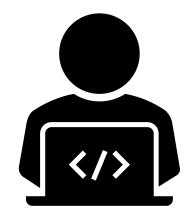


Report of results from the online CITIZEN survey on Sidewalk Snow Clearing

2020 <u>ST. J@HN'S</u>

SURVEY METHODOLOGY

- Online survey
- Responses collected between May 24 and June 19, 2020
- 38 questions
- Average time to complete the survey: 13 minutes
- 1,019 total responses



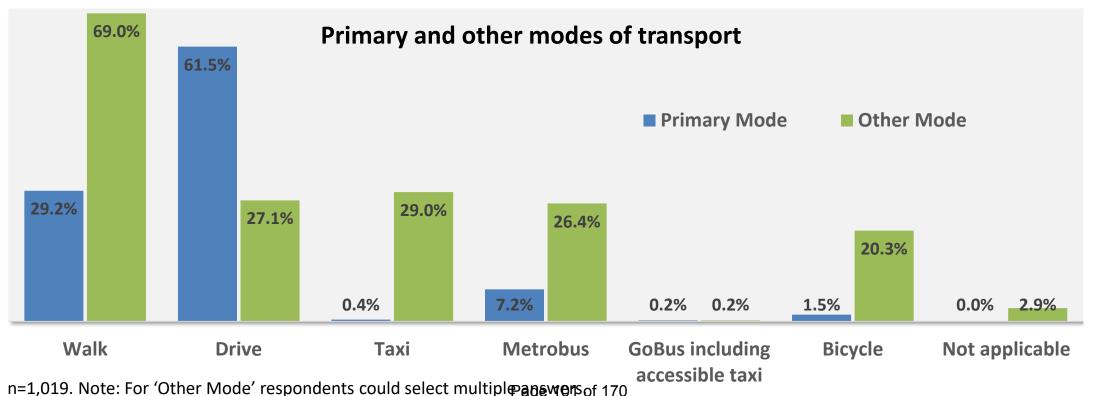




Modes of Transport

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- Walking was the primary mode of transportation for 29% of citizens surveyed. Driving was cited as the primary mode for 61.5% of respondents, and Metrobus 7.2%.
- Walking was more prevalent with newcomers i.e., persons who had relocated to St. John's from another country in last five years, and individuals who identified as LGBTQ2s+, with 39% and 36% respectively citing it as their primary mode of transportation (note however that these samples were small). Post-secondary students were more likely to use Metrobus, with 46% listing it as their primary mode of transport.
- While walking may not be the primary transportation mode for many respondents, it does factor significantly in how they get around the city. When asked to consider all the other transportation modes that they used, walking was cited by 69% of respondents. Taxi, Metrobus, driving and bicycle followed in popularity respectively.









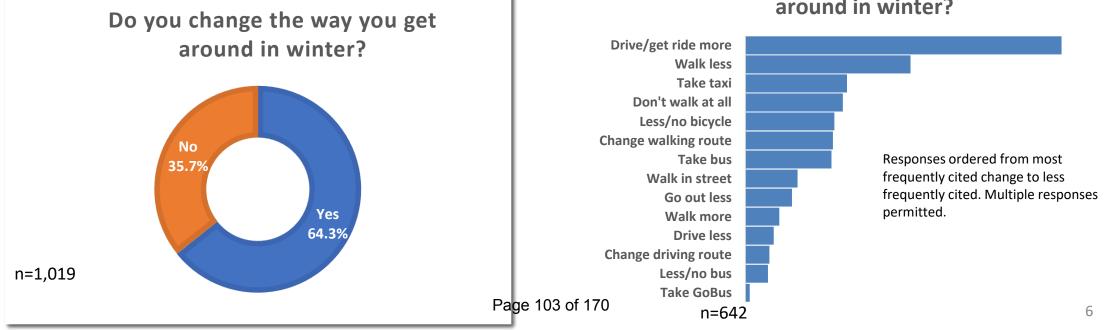




Getting around in winter

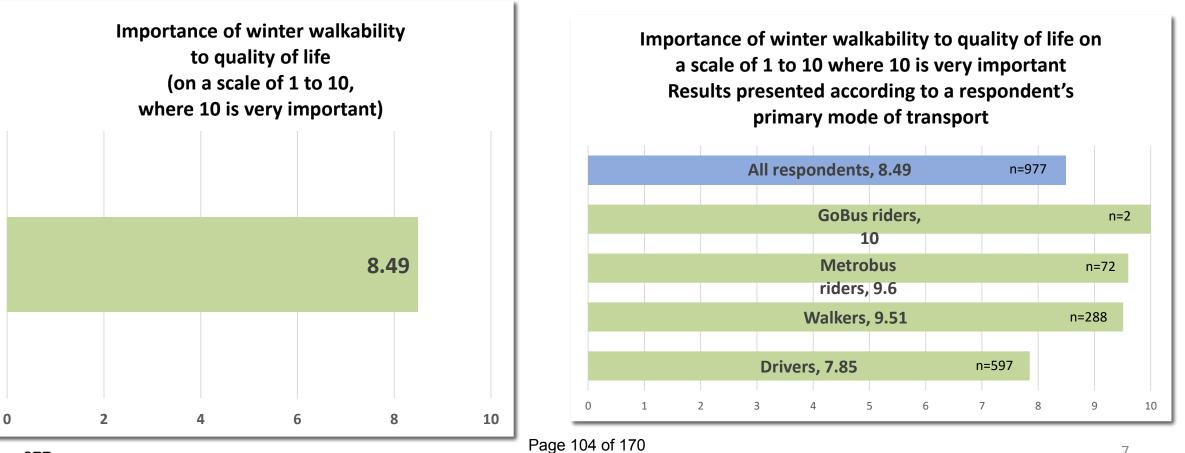
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- 64% of citizens surveyed change the way they get around the city in winter. Walkers were slightly more likely to change the way they got around than drivers, 68% versus 64%. Approximately half of respondents using Metrobus as their primary mode of transport, changed the way they got around in winter.
- The most frequently cited change to transportation patterns was driving/getting a ride, followed by walking less, and taking a taxi. Some respondents indicated that they do not walk at all in winter, and those that do frequently change their route to use sidewalks that are cleared or streets that are safer to walk in. Changing walking routes sometimes creates a longer commute.
- Some respondents go out less in winter due to sidewalk conditions.
- Respondents that walked recreationally often indicated they turn to parks and trails in winter or visit indoor walking arenas or gyms.
- Some respondents who cited an increased use of taxis in winter indicated that the added expense negatively impacted their household budgets.
- Some Metrobus riders stop taking the bus in winter due to concerns around uncleared bus stops and having to wait at stops in the street.
- Those with mobility challenges felt more restricted in their winter transportation options due to sidewalk conditions.



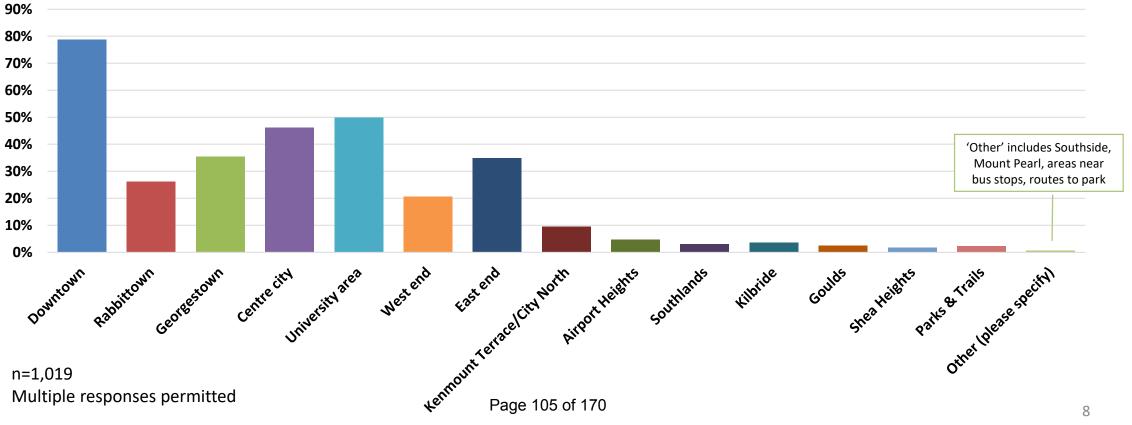
How do you change the way you get around in winter?

- Winter walkability is very important to the quality of life of citizens surveyed, rating 8.49 out of 10 (where 10 is very important).
- While drivers rated the importance of winter walkability slightly lower than respondents using other modes of transportation, their rating of 7.85 out of 10 indicates the important role walking plays in their quality of life in winter.
- The importance of winter walkability was rated higher than average by those aged 18-24 (8.85 out of 10) and those aged 25-44 (8.72 out of 10), and by post-secondary students (9.04 out of 10), newcomers who had relocated to St. John's from another country in last five years (9.45 out of 10), and visible minorities (9.43 out of 10). Note, however, that these sub samples were generally quite small.



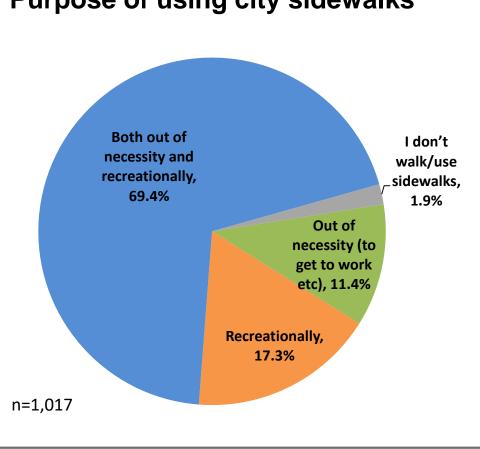
When asked which areas of the city they were most likely to walk in during the winter, Downtown was cited by ٠ almost 80% of citizens surveyed. Other popular areas, in order, were: University Area, Centre City, Georgestown, East End and Rabbittown.

Areas respondents most likely to walk



in during winter

Approximately 70% of citizens surveyed use city sidewalks both out of necessity (i.e., to get to work, an appointment etc.) and recreationally. Just over 11% of respondents use sidewalks out of necessity. Post-secondary students were more likely to use sidewalks out of necessity (19%).



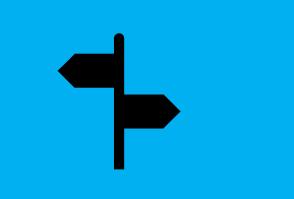
Purpose of using city sidewalks

- When asked what would encourage them to walk more in winter, the most common answers were: better snow clearing, clear sidewalks, safe sidewalks, salt and ice control, and consistent clearing. The word cloud below depicts the most common responses with text size indicating the frequency of response.
- Some citizens surveyed referenced the idea of making trails accessible in winter. Others referenced safety concerns of walking alongside high volumes of fast-moving traffic. Also mentioned was the need to ensure cleared sidewalks were connected so continuous paths could be relied upon.

walk street trails Consistent clearing Better weather plowed snow ice Better snow clearing crosswalks Safe sidewalk Knowing Clear sidewalks dangerous Salt/ice control routes ice icy Cleared salted sidewalks intersections paths snow



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Priority Sidewalk Routes

while 34% knew there was a system but were not aware of the details.

Ninety-five percent of citizens surveyed

priority system used by the City to clear

Sixty percent of respondents indicated

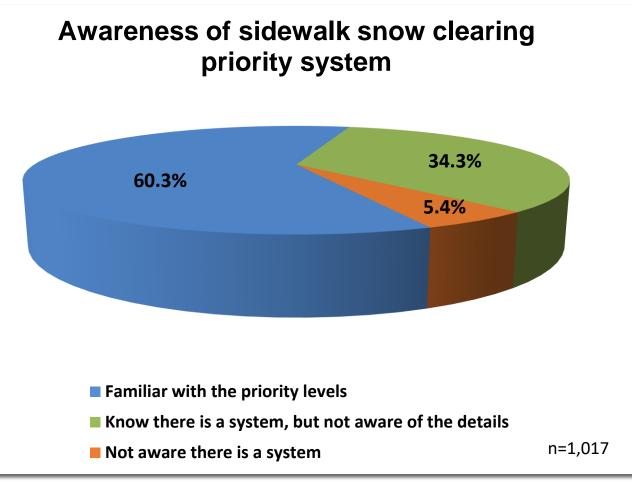
they were familiar with the priority levels,

had at least some awareness of the

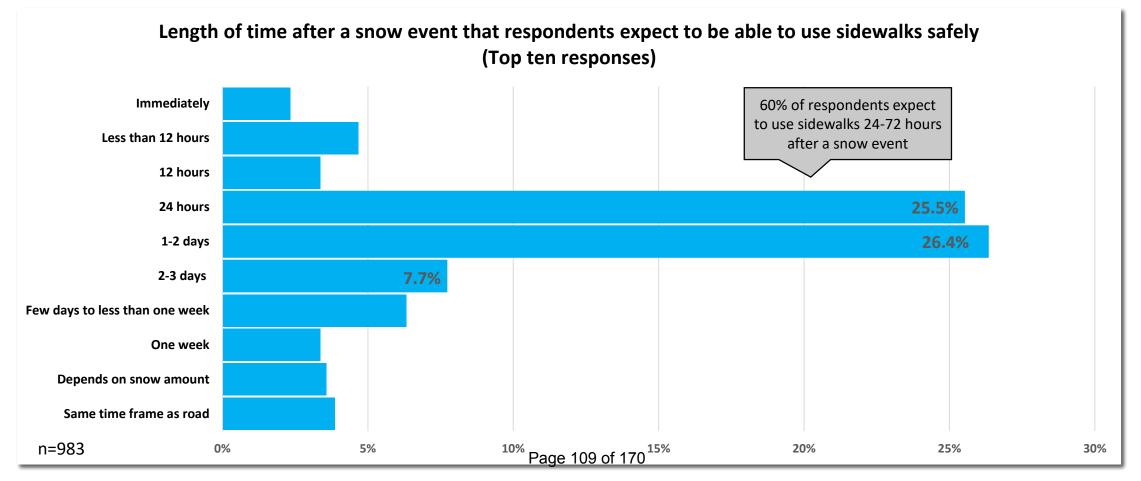
sidewalks of snow.

٠

•



- When asked how long after a snow event they expected to be able to use city sidewalks safely, approximately one quarter of citizens surveyed indicated 24 hours, and an additional one quarter of respondents indicated 1-2 days.
 Overall, 60% of respondents expect to be able to use sidewalks within 24-72 hours after a snow event.
- When suggesting a time frame, some respondents indicated there was a degree of flexibility in their expectations depending on the severity of the snow event. Others indicated that the time frame would depend on the priority of the street with higher priority streets receiving quicker service.
- Expectations did not vary amongst respondents regardless of whether they were primarily walkers or drivers.



- In the past two winters, 92% of citizens surveyed have wanted to use, or used, the City's priority sidewalk routes. Respondents who did not use the sidewalks citied safety concerns, and lack of snow clearing and ice control as reasons. Others indicated they were primarily drivers, did not live near or walk in the priority areas, or had mobility challenges.
- Safety is a significant concern for pedestrians using the priority sidewalk routes. When asked to rate how safe they felt using the priority sidewalk routes in winter, respondents' average rating was 3.49 out of 10 (where 1 was not at all safe and 10 was very safe). Respondents that indicated their primary mode of transportation was Metrobus, rated their feeling of safety lower than average (2.95 out of 10) as did post-secondary students (2.79 out of 10).
- When asked to rate the overall condition of the priority sidewalks in winter, respondents gave an average rating of 3.6 out of 10 (where 1 was Poor and 10 was Excellent). Post-secondary students rated the condition lower than average at 2.99.

Respondents' rating of the overall condition of priority routes and their feeling of safety while using them (on a scale of 1 to 10, where 10 is very safe/excellent)



- Using the priority sidewalk routes in winter was challenging for most citizens surveyed. When asked about their experiences using the routes, the most frequently cited response (71%) was "I walk in the street if the sidewalk is not cleared." Fifty-seven percent of respondents indicated that they limited their activity in winter as a result of sidewalk conditions. Respondents also turned to using alternate transportation either "almost always" (31%) or "sometimes" (37%). Only 9% of respondents indicated they could use sidewalks to get where they were going most of the time.
- Eighty-five percent of respondents who used either walking or Metrobus as their primary mode of transport, indicated they "walk in the street if the sidewalk is not cleared." Sixty-six percent of those using Metrobus as their primary method of transport indicated they limited their activity in winter as a result of sidewalk conditions.

n=928 Note: multiple responses permitted 70.5% 56.7% 37.4% 31.4% 9.1% I can use sidewalks to get I sometimes have to use I almost always have to use I walk in the street if the limit my activity in winter sidewalk is not cleared as a result of sidewalk where I need to go most of other means to get where I alternate transportation in the time am going safely conditions winter Page 111 of 170

Respondents' experience using the priority sidewalk routes in winter

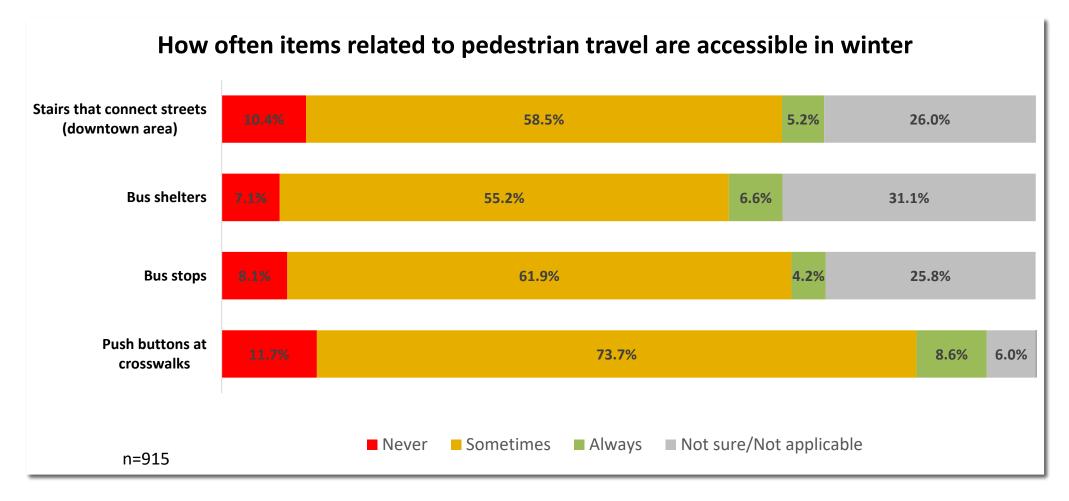
Views of specific aspects of the sidewalk snow clearing program were generally negative. Ice control/salting was perceived as being poor by almost 70% of citizens surveyed. Connectivity – how effectively cleared sidewalks connect to each other, and consistency – how consistently the sidewalk is cleared, were also rated as poor by about 60% of respondents. Timeliness – how guickly the sidewalk is cleared after a snow event, was rated somewhat more positivity than the other queried aspects, receiving the following ratings: good or excellent (17.6%), fair (39.7%), and poor 42.8%). Those who used walking as their primary mode of transportation, were more likely to rate ice control/salting and connectivity as poor (75% and 70% respectively) than those who used other modes.

Respondents rating of variou	clearing program	Shorty sidev		
Connectivity – how effectively cleared sidewalks connect to each other	62.8%		27.9%	9.2%
Consistency – how consistently the sidewalk is cleared	60.2%		30.9%	8.9%
Ice control/salting – how well the sidewalk is salted, and ice is controlled	68.6%		24.8%	6.6%
Timeliness – how quickly the sidewalk is cleared after a snow event	42.8%	39.7%		17.6%
n=913	Poor Fair Good or Exce Page 112 of 170	ellent		

Respondents' rating of various aspects of the current priority sidewalk snow

- Many citizens commented on the timeliness, consistency, connectivity and ice control aspects of the snow clearing program. From the more than 400 comments, some common themes were:
 - One of the mostly frequently voiced comments was the perceived **conflict between sidewalk snow clearing and street** snow clearing. Many respondents suggested that cleared sidewalks on priority routes were frequently snowed in by street plows.
 - **Consistency and connectivity** of the priority routes were frequently cited as problematic. Respondents commented that cleared sidewalks might end unexpectedly forcing them into the street, or cleared sidewalks often shifted from one side of the street to another forcing pedestrians to cross the street frequently.
 - Many respondents indicated that intersections and cross-walks were challenging. Snow piled by street plows at intersections
 creates barriers that force pedestrians into the street, blocks access to crosswalks and crosswalk buttons, and creates a safety
 hazard when pedestrian sight lines are obscured.
 - Some respondents suggested that **connectivity in school zones** was a problem as sidewalks in the block around the school were not cleared and these were required for neighbourhood children to walk to school. Snow left behind by sidewalk and street plows also presents obstacles for drop off and pick up in school zones.
 - Some commented that access to bus stops often required riders to wait in the street and snowbanks created obstacles when boarding or disembarking a bus.
 - Snow left behind by sidewalk plows was also cited as a problem. Respondents suggested that sidewalk plows rarely clear down to the concrete and often leave a layer of snow behind that tends to build up and/or freeze.
 - Some commented that items on or near sidewalks such as light **poles or traffic signal boxes** often require sidewalk plows to detour resulting in a pile of snow being left on the sidewalk that blocks pedestrian access.
 - Concerns were expressed about private contractors and property owners pushing snow into previously cleared sidewalks.
 - Inconsistency of salting was referenced plows dropping large amounts of salt in one area of a sidewalk and then very little.
 - Some comments specific to the **downtown** were referenced. Ice on hilly sidewalks, snow left between the street and the sidewalk creating obstacles and blocking access, the issue of vacant properties and the resulting lack of cleared sidewalks, and access to pedestrian stairs were all identified as challenges.

Push buttons at crosswalks, bus stops and shelters, and stairs that connect streets (mostly in the downtown) were
perceived to be accessible sometimes by most of those surveyed. There was a significant number of respondents that
were not familiar or did not use bus stops, bus shelters, or stairs in the downtown and this is reflected in the relatively
high number (25-30%) of not sure/not applicable answers in these instances.



When asked what <u>one</u> thing the City could do to improve their experience using sidewalks, citizens cited the following:

Most frequent responses in order of mentions:

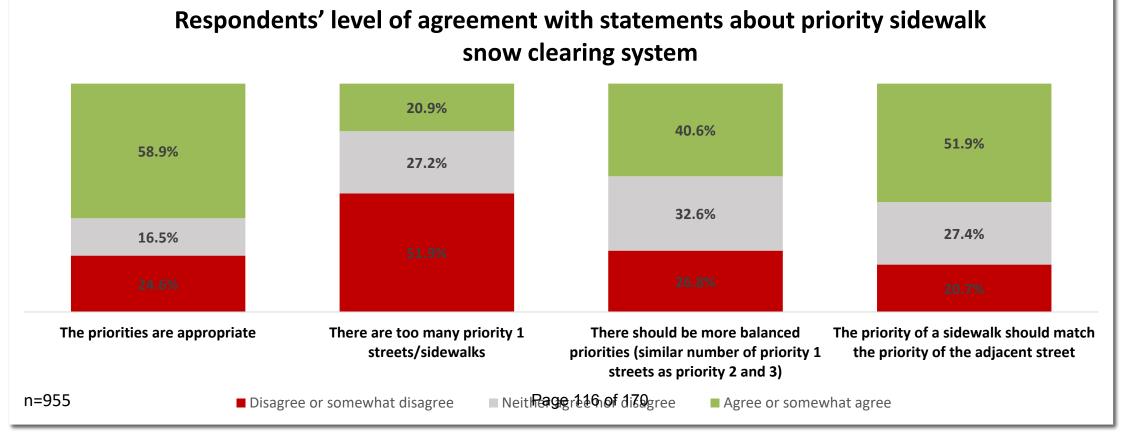
- Improve reliability and connectivity
 - Clear and salt /sand- clear to cement, especially hills
 - $\circ~$ Make sure priority 1 is treated as priority 1
 - Full streets/no breaks
 - Make it easy to walk from east to west, north to South, downtown to MUN, etc..
 - $\circ~$ Include steps that are connectors to sidewalks
 - Improve access for those who must walk/have mobility issues – crossings, buttons, curbs,
 - $\circ~$ Make it unnecessary to walk in the street
 - Clear intersections/cross walks
- Timeliness
 - Respect pedestrians clear at same time as roads and to the same service level, make sidewalks a priority
- Better coordination between road and sidewalk plows as well as bus stop clearing and mailbox clearing
- Clear bus stops/routes/school walking routes/downtown
- Address issues with contractors/residents putting snow back on sidewalk

- Address issues of poles which impede clearing and create inconsistent service
- Clear both sides for major thoroughfares where crossing can be unsafe
- Some people suggested clearing one side of Priority streets really well; others suggested both sides of priority 1 streets should be done
- Better understand experience of walkers/pedestrians improve experiential training for staff
- More/better equipment/more resources generally
- Remove more snow to improve visibility and reduce "blocks"
- Clear storm drains to avoid slush/water build up
- Communicate where the walkable networks are on a timely basis i.e. via an app
- Review frequent pedestrian routes and do them more frequently

Less frequent responses included:

 Do what is currently done and/or focus on roads (3); ask residents to clear in front of their own property, ask commercial property owners to clear in and around their stores and use their parking lots for snow storage

- After being presented with a visual of the sidewalk snow clearing priority route map, survey respondents were asked to
 indicate their level of agreement with four statements. Overall, there was support for the current system with almost
 60% of respondents agreeing or somewhat agreeing that the priority levels for sidewalks were appropriate.
- Fifty-two percent of respondents disagreed or somewhat disagreed that there were too many priority 1 streets/sidewalks.
- Forty-one percent agreed or somewhat agreed that there should be more balanced priorities, however, one third were
 neutral on the statement, and 27% disagreed or somewhat disagreed.
- Fifty-two percent agreed or somewhat agreed that the priority of a sidewalk should match the priority of a street as is currently the case.



- When asked if areas could be <u>removed from the current priority program</u> to allow resources to be used elsewhere, 25% of citizens surveyed indicated yes.
- When asked if areas should be <u>added to the current priority program</u>, 56% of respondents indicated yes.
- As a follow-up, respondents were asked to specify the areas that should be removed from, or added to, the current priority system. Some respondents provided specific suggestions, and these are presented below and on the following page. In some cases the responses to remove or add areas were contradictory.

Of the 162 respondents that provided a suggestion as to which areas could be **REMOVED**, specific ideas were:

- Logy Bay Road (6)
- Columbus Drive/Prince Phillip Drive (5) not all areas need clearing
- Make Waterford Bridge Road a priority 2/3 or remove from system
 (3)
- Allendale from Higgins Line to TCH (2)
- White Hills Road
- Hamilton Ave clear one side only
- Prince Phillip drive from Allendale to Portugal Cove Road
- Bay Bulls Rd to Topsail Rd
- Torbay Road
- Airport Heights
- Mayor Avenue

- Blackmarsh Road
- Top of Portugal Cove Road
- East Meadows,
- Pippy place,
- Past Columbus drive on Topsail Road
- Bay Bulls Road
- Far east end of Water Street, east of Hill 'O Chips
- Empire avenue from Rennes Mill to Carpasian
- Newtown Road does not require both sides

Notes:

1) Numbers in brackets indicate multiple responses.

2) These questions did not provide a "Do not know" answer option and many respondents indicated they would have selected this option rather than No".

Of the 441 citizens that provided a suggestion as to which areas could be **ADDED** to the priority sidewalk system, specific ideas were: (continues on next page) Note: Numbers in brackets indicate multiple responses

- Kelsey Drive (20) especially from Kenmount to Messenger
- Kenmount Terrace (22) especially Great Eastern and Ladysmith
- Rabbitown (12)
- Georgetown (10) Barnes Rd (2), Hawyard Avenue (2), Monkstown Road (6)
- Merrymeeting Rd. (8)
- Empire Ave (8) full extent, currently there are gaps such as between Carparisan and Bonaventure, Old Penneywell and Columbus, east of Mayor, east and west of Jensencamp, also from Forest Rd. to Quidi Vidi Rd
- Airport Heights (7) Airport Heights is cut off from City in winter due to a lack of sidewalks connecting via either Majors Path or Portugal Cove Road, more streets near school
- Stavanger Drive (7)
- Thorburn Rd (6) further north to Goldstone/Seaborn
- Kenmount Road (6) include north to Kelsey or Kenmount Terrace/Ladysmith
- Major's Path (6)
- Grovesdale Park (5) Seaborn, Faulkner, Bambrick
- Southlands (5)
- Cowan Heights (4)
- Goulds (4) also including Back Line, opposite side of street from St. Kevin's High, Doyles Road Extension

- er• Kilbride (4)
 - Newtown Road (4)
- O'Leary Ave. (4) all of it
- Signal Hill (4) Signal hill area Forest Rd to Quidi Vidi Rd (2)
- The Boulevard (4)
 - Bonaventure Ave (3)- clear both sides near holy heart at the same time, also triangle area formed by Bonaventure avenue, Mayor Avenue and Empire avenue should be priority 1
 - Circular Rd (3) including area between Monkstown and Rennies Mill
 - Gower St. (3)
- Hazelwood Crescent (3)– all, currently stops at Blue River
 Place
- Logy Bay Rd. (3) all of it
- Rotary Drive (3)
- Airport Heights Dr (2) -. extend clearing to Viscount St.
- Blackmarsh road (3) including around Marie's Market, Blackmarsh from Mount Pearl boundary to Captain Whelan and then to Columbus Drive
- Newpennywell Road (2), Lions road
- Cabot St. (2)

- Canada Drive (2) & Frecker Drive (2) currently priority 2 and ends at Burgeo
- Carpasian (2)
- Churchill Park/Square area (2)
- Clinch Cres at HSC (2)
- Cochrane St (2)
- Cowan Ave (2) increase priority, include other side and lower end
- Craigmillar Ave (2)
- Forest Rd (2) including between Empire and Kingsbridge
- Leslie St. (2) including bridgeFleming St. (2)
- Montague Street (2)
- Pleasantville area (2)
- Pennywell Road (2)
- Polina Road connecting to Old Pennywell Road & Kenmount (2)
- Pasadena Cresent and Barachois street (2) area
- Prince Philips Dr (2), Freshwater (2), Elizabeth Ave (2) , and Allandale all the streets enclosed by
- Quidi Vidi Rd (2)
- Shea Heights (2)
- Torbay Rd. (2) Torbay Rd to Toronto (1)
- Wicklow (2)

Areas suggested to be **ADDED** to the priority sidewalk system (continued):

- All of Mundy Pond Road
- Anderson Avenue
- Argyle St.
- Baird Place, Vinnicombe Street, Oxen Pond Road area
- Bannerman St. ٠
- Bay Bulls Road stops at the Old Bay Bulls fork ٠
- Bell's Turn, Buckmaster's Circle, Graves Street and Froude Avenue
- Bishop Abraham area expand to Pennywell from Freshwater to Cashin and on both sides between Adams Ave & Morris
- Both sides of Prince of Wales St.
- Brier Avenue area ٠
- Cabot Street
- Campbell Ave. change to priority 1
- Carnell Drive
- Carrick Drive
- Carter Hill, Carters Hill Place
- Casey St.
- Codroy Place
- Columbus Drive
- East end of Topsail Rd connecting to west Water
- Eastbourne Cres.
- Exmouth street

- Fredericton and Ottawa
- George St. West
- Halley Drive
- Harding Road
- Harrington Dr and/ or Cherrington St
- Highland Dr.
- Kenna's Hill
- Kings Road including between Bond St and Duckworth St
- Kingsbridge
- Lake Ave
- Livingstone St.
- Long Pond Rd South of Elizabeth need both sides
 St. Clare Ave.
- Longs Hill
- MacDonald Dr between Torbay Rd & Logy Bay Rd
- MacDonald Drive Logy bay Road intersection down Terra Nova Road • to Kenna's Hil
- Mayor Ave
- Mount Scio Road
- Newtown Road and Bonaventure the intersection • connecting these along the cemetery should be Priority 1
- Old Petty Harbour Rd.
- Old Topsail Rd. Page 119 of 170
- Parade St.

- Pearson Street
- Penney Crescent
- Pilots Hill
- Pine Bud Avenue
- Pippy Place
- Pleasantview •
- Portugal Cove Road- from Newfoundland Drive to Viscount Street, and to Majors Path
- Ropewalk Lane
- Shaw to Alexander
- Southlands to the Pearlgate area of Mount Pearl
- Springdale St
- Stirling Crescent
- Strawberry Marsh Rd.

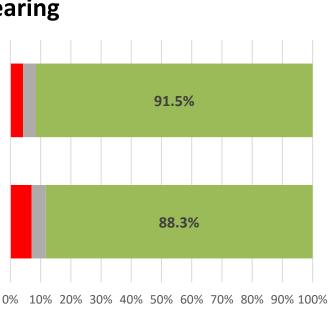
- Topsail Road
- University Ave all of it
- Waterfordbridge RD between Brookfield and Cowan - currently a gap
- Whiteway St from Bonaventure & Rodney

- A significant majority of citizens surveyed were supportive of Council making winter walkability a priority (92% agree or somewhat agree), and of the City investing more resources in sidewalk snow clearing (88% agree or somewhat agree).
- Support for both statements was high regardless of a respondents' primary mode of transport, though drivers were somewhat less supportive than those that used walking or Metrobus as their primary mode (a comparison is provided in the table below).

Respondents' level of agreement on Council priorities and investment in sidewalk snow clearing

Improving winter walkability should be a priority for Council.

The City should invest more resources (financial, human, equipment) into sidewalk snow-clearing to provide a more consistent service.



■ Disagree or somewhat disagree ■ Neither agree nor disagree

Agree or somewhat agree

Level of agreement on Council priorities and investment in sidewalk snow clearing presented according to a respondent's primary mode of transport

The City should invest more resources (financial, human, equipment) into sidewalk snow-clearing to provide a more consistent service.

	DISAGREE OR	NEITHER	AGREE OR
	SOMEWHAT	AGREE NOR	SOMEWHAT
Primary mode of transport	DISAGREE	DISAGREE	AGREE
Walk (n=283)	2.83%	2.47%	94.70%
Drive (n=551)	10.17%	6.17%	83.67%
Metrobus (n=68)	0.00%	1.47%	98.53%
GoBus including accessible taxi (n=1)	0.00%	0.00%	100.00%
Improving winter walkability should be	e a priority for Co	uncil.	
Walk	0.71%	1.77%	97.53%
Drive	6.56%	6.19%	87.25%
Metrobus	0.00%	0.00%	100.00%
GoBus including accessible taxi	0.00%	0.00%	100.00%

n=927

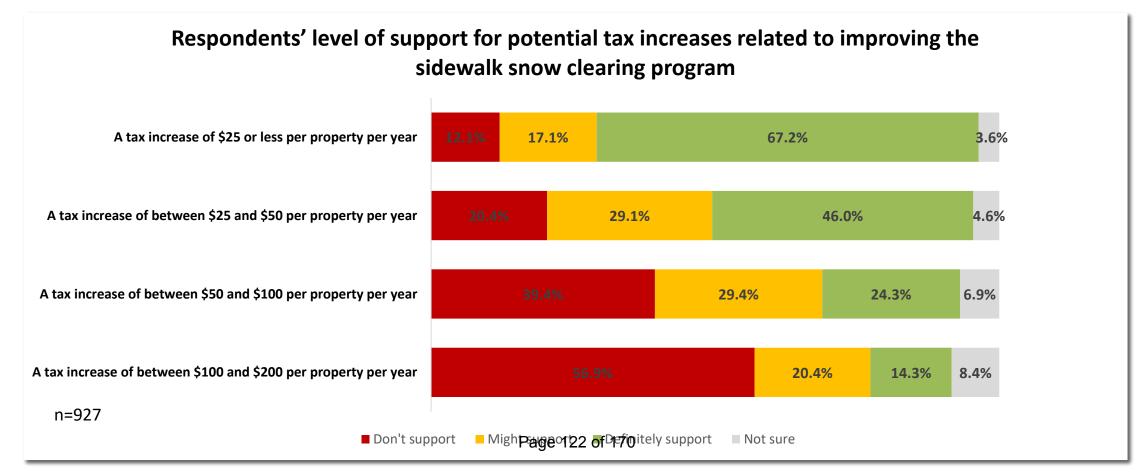
While property owners (i.e., taxpayers) overall level of agreement on whether winter walkability should be a
priority for Council, and if the City should increase investment in the snow clearing program was significant (85%
or higher agree or somewhat agree), they were slightly more likely to disagree than respondents that were not
property owners. A comparison of respondents' level of agreement with the statements according to their
property ownership status is provided in the table below.

Level of agreement on Council priorities and increased investment in sidewalk snow clearing presented according to a respondent's property ownership status

The City should invest more resources (financial, human, equipment) into sidewalk snow-clearing to provide a more consistent service.

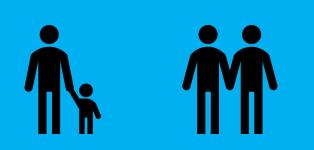
	DISAGREE	SOMEWHAT DISAGREE	NEITHER AGREE NOR DISAGREE	SOMEWHAT AGREE	AGREE
Property owner	6.1%	4.0%	5.6%	17.7%	66.7%
Not a property owner	0.9%	0.9%	2.7%	15.1%	80.4%
Improving winter walkability should be a priority for Council.					
Property owner	4.0%	1.9%	5.4%	14.6%	74.1%
Not a property owner	0.3%	0.9%	2.1%	9.1%	87.6%

- Support for potential tax increases related to improving the sidewalk snow clearing program weakened as the amount of tax increased. A clear majority (67%) of citizens surveyed 'definitely support' an increase of \$25 or less, with a further 17% indicating they 'might support' it.
- Forty-six percent of respondents 'definitely support' an increase of between \$25 and \$50, and a further 29% indicated they 'might support' it.
- A tax increase of between \$50 and \$100 had the most mixed support with 40% of respondents not supporting it, while 29% 'might support' it, and 24% 'definitely support' it.
- Fifty-seven percent of respondents did not support a tax increase of between \$100 and \$200.



 Property owners (i.e., taxpayers) were somewhat more likely to indicate they did not support a potential tax increase than respondents who were not property owners. A comparison of respondents' support for tax increases according to their property ownership status is provided in the table below.

Support for potential tax increases by re	spondents' p	roperty own	ership status	5
A tax increase of \$25 or less per property per year	DON'T SUPPORT	MIGHT SUPPORT	DEFINITELY SUPPORT	NOT SURE
Property owner	15.0%	15.5%	67.5%	2.0%
Not a property owner	6.8%	19.1%	67.6%	6.58%
	1			
A tax increase of between \$25 and \$50 per property per year				
Property owner	24.3%	26.3%	46.7%	2.8%
Not a property owner	13.3%	34.0%	45.1%	7.7%
A tax increase of between \$50 and \$100 per property per year				
Property owner	43.6%	26.8%	25.7%	3.9%
Not a property owner	31.7%	34.5%	21.6%	12.2%
A tax increase of between \$100 and \$200 per property per year				
Property owner	59.6%	19.7%	15.4%	5.4%
Not a property owner	52.3%	22.2%	11.8%	13.7%

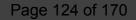






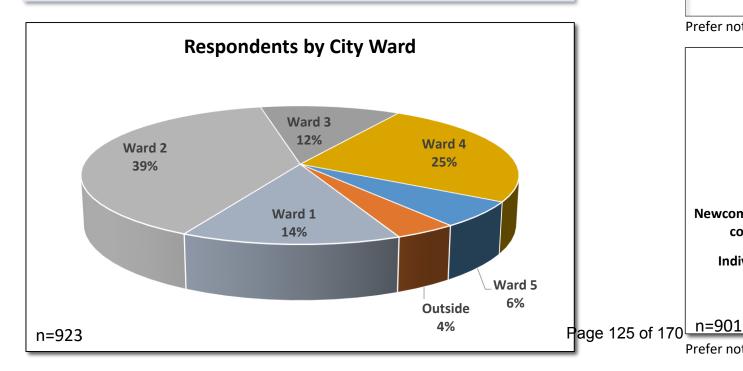


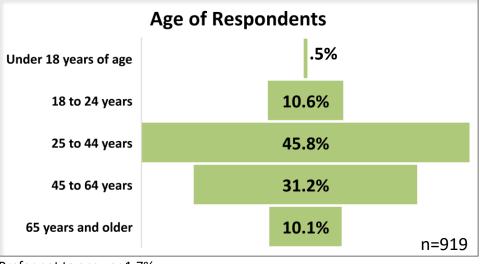
Profile of respondents



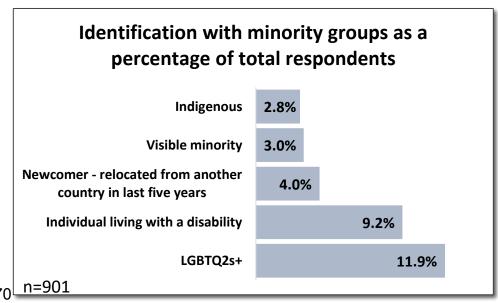
Profile of Survey Respondents

- 96% were residents of St. John's
- 79% worked or attended school in St. John's
- 64% were residential property owners
- 18% were post-secondary students (i.e. Memorial University, College of the North Atlantic or private colleges)
- .8% were K-12 students





Prefer not to answer 1.7%



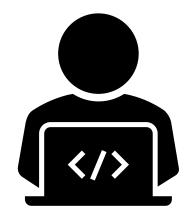


Report of results from the online BUSINESS survey on Sidewalk Snow Clearing

2020 ST. J@HN'S

SURVEY METHODOLOGY

- Online survey
- Responses collected between May 27 and June 19, 2020
- 18 questions
- Average time to complete the survey: 7 minutes
- 24 responses







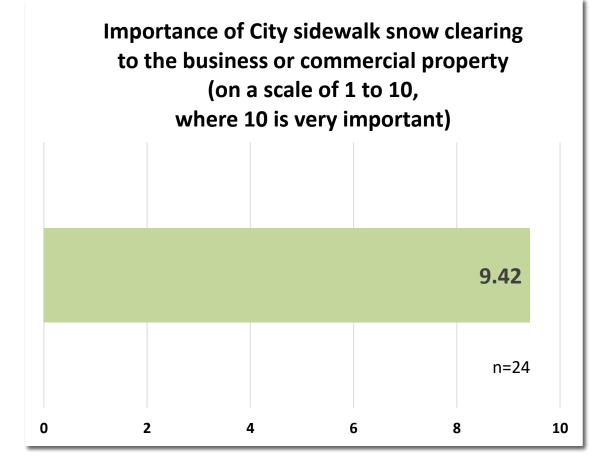




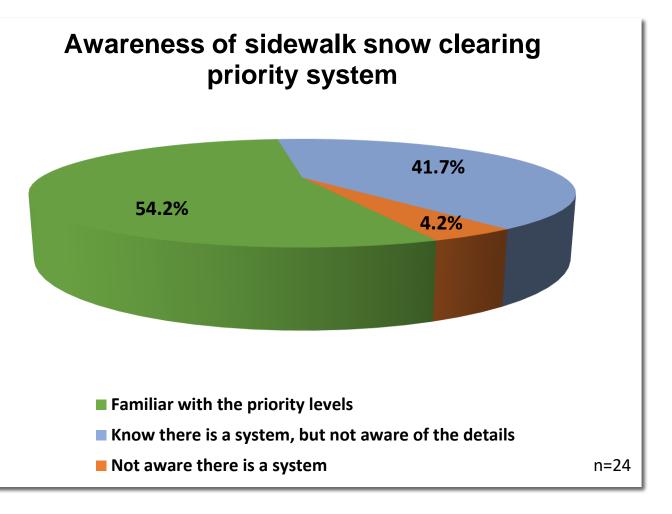
Sidewalks and business in winter

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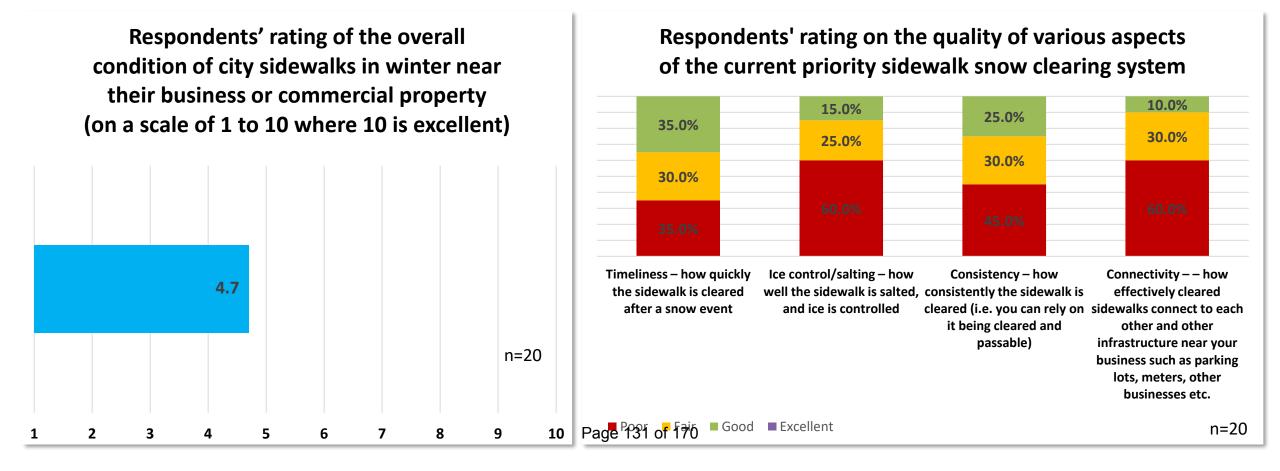
- There is a public sidewalk near or leading to all the businesses/commercial properties surveyed.
- 78% of businesses surveyed arrange for their own sidewalk snow clearing (this is likely reflective of the large number of respondents whose businesses or commercial properties are located in the downtown along Water or Duckworth streets).
- Respondents rated the importance of City sidewalk snow clearing as a 9.42 on a scale of 1 to 10, where 1 is not at all important and 10 is very important.



- Fifty-four percent of businesses surveyed indicated they were familiar with the priority system used by the City to clear sidewalks in winter, while 42% indicated they knew there was a system but they were not aware of the details.
- Eighty-three percent of respondents indicated their business/commercial property was located on an existing City sidewalk snow clearing route.



Some respondents expressed specific concerns about snow clearing including: safety concerns related to ice buildup on sidewalks, the
timeliness of clearing on main streets in the downtown, the inconsistency with which businesses clear sidewalks in the downtown and
whether this was enforced, concerns about vacant properties in the downtown and the lack of sidewalk clearing that results, concerns
about access to stairs, and concerns about street plows pushing snow onto cleared sidewalks. In addition, access to sidewalks in the
downtown was cited as problematic when cuts were not made in snowbanks to allow pedestrian access at various points along a block
and to provide access to crosswalks.



When asked what, if any, challenges or concerns they had regarding the current City sidewalk snow clearing program near their business or commercial property, respondents cited the following:

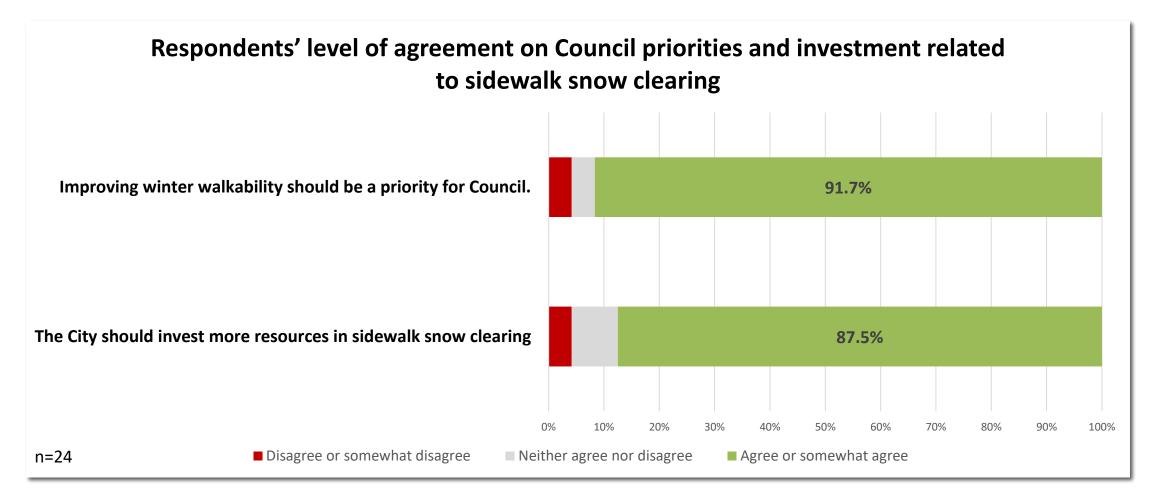
- There is limited space to put snow in the downtown.
- Bates Hill is a challenge often cleared of snow with one pass, however, it is a two-way street (with multiple businesses and a bus stop).
- Businesses are inconsistent in snow clearing sidewalks. Suggest City do it, especially in the downtown, and charge.
- Taxis need access to bars and restaurants in the downtown area during snow removal. Special attention should be paid to when snow removal is being done, i.e., avoid weekend nights, avoid nights before stat holidays, avoid west of the Court House until after 5:00 am.
- Snow removal should happen immediately after a significant snowfall on Water & Duckworth. Not just pushed back but removed.
- Parking meter access is problematic. Drivers must walk over snowbanks to access meters. Bus riders must do the same.
- Snow removal can sometimes create challenges when snow is pushed and builds up a level of snow and ice on the sidewalk.
- The priority system is inconsistent on Duckworth Street parts are clear to the sidewalk and salted, while other portions (across from the Marriott) can be dangerous.
- Ice control is an issue. (3)
- It is difficult for customers to access the business/property from the street because of snow piles. (3)
- Stairs on McMurdo's Lane are frequently used in winter by employees and customers, including those who park in Metro Park. Uncleared stairs restricts access, is a safety concern, and a deterrent to people coming to the downtown.

Note: numbers in brackets indicate multiple responses Page 132 of 170

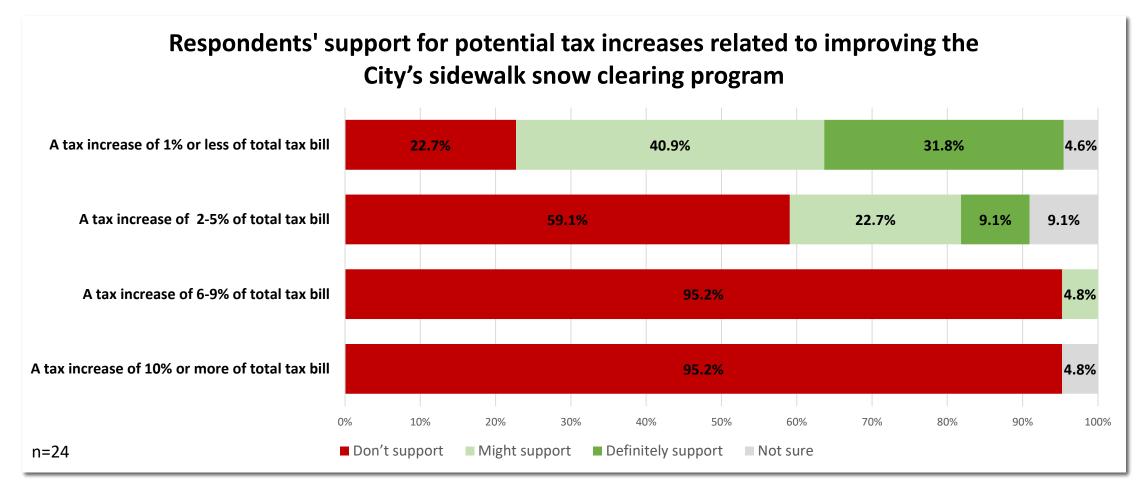
When asked if there was one thing the City could do to improve the sidewalk snow clearing near their businesses, respondents cited:

- Bates Hill should be a one-way street. Remove the snow, rather than piling it up in front of businesses or at the end of the street.
- Timely clearing and removal of snow and ice control (3). Also, explore the cost of the City doing it and charging businesses.
- Make more cuts through snowbanks on Water/Duckworth/George instead of just at the corners, to allow access to the street at various points along the block. If not, property owners should also make cuts. Keep the cuts free of slush.
- Snow removal needs to happen within 24 hours after a significant snowfall. If Duckworth & Water became one way, there would be more room for moving vehicles to navigate parked vehicles.
- Since the downtown has a parking ban the snow should be removed instead of plowing on the sidewalks.
- Everyone should be responsible for clearing in front of their areas. This includes vacant buildings.
- Need consistency on Duckworth Street. Section (near Marriott) often feels neglected and does not connect well with the rest of the commercial areas, making it less desirable to venture down.
- Clear McMurdo's Lane.
- The sidewalk plow should not plow the sidewalk before the road plow clears the street.
- Create a long-term policy of moving poles and posts so that a more efficient method of cleaning sidewalks can be employed.
- Enforce businesses to clear to the curb. Take away the drift along the curb in a timely fashion.
- Clear sidewalks down to the pavement. A general problem with sidewalk clearing is the snow that is left behind is subject to freeze and thaw conditions and ultimately becomes ice.
 Page 133 of 170

 Surveyed businesses were very supportive of Council making winter walkability a priority (91.7% agree or somewhat agree) and of the City investing more resources in sidewalk snow clearing to provide a more consistent service (87.5% agree or somewhat agree).



• Support for potential tax increases related to improving sidewalk snow clearing declined as the amount of tax increased.



Other comments:

- Re-organize priorities for spending and look for efficiencies rather than raising taxes. (2)
- Kenmount Road, past Pippy Place, is not on the priority map. This part of the city has developed so much in the past 20 years with hotels, restaurants. Hotel guests can't walk next door to a restaurant in winter because sidewalks are not walkable.
- Need more after hours plowing and salting of the streets and more push back at intersections.
- Downtown should be more welcoming during winter. Make Duckworth & Water one way. Allow parking on both sides in one direction during the day.
- We pay a lot in property taxes, and commercial rents are quite high given our current economic situation. Sidewalk clearing (and snow clearing generally) needs to be a bigger priority because the city isn't safe in the winter.
- The city did a good job managing the response to Snowmagedon and we understand that was an outlying event. What is needed is a regular, consistent response to the ongoing snow and ice control requirements in a typical winter
- Given our weather, snow clearing in this City is definitely problematic. Over the past 10 years I have witnessed improvements. Thank you for giving me the opportunity to engage.
- This needs to be fixed. I live & work in the downtown core and can't believe how poorly the snow clearing has been.
 However I do want to acknowledge the great job the city did after Snowmageddon, just prior to the lifting of the SOE, in the downtown core. Not only was the snow from that storm removed but also the snowfall that fell earlier in the year that had never been dealt with up to that point.



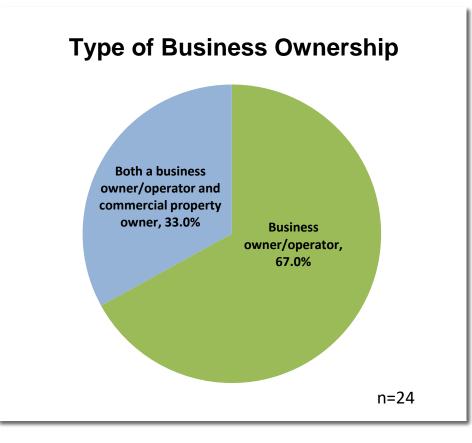


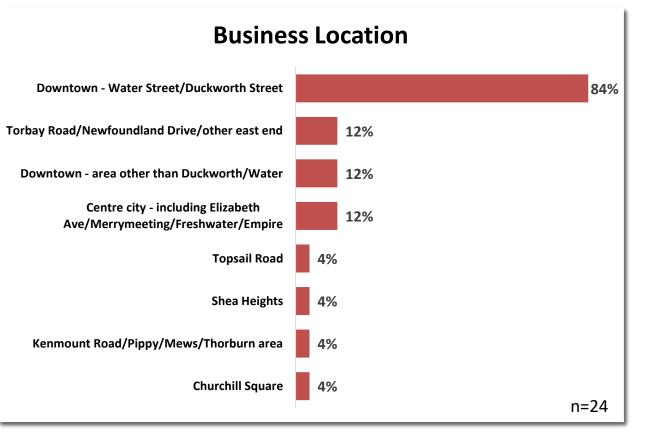




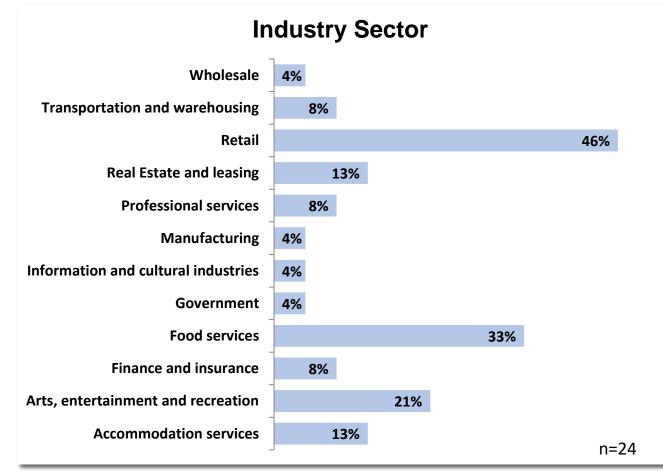


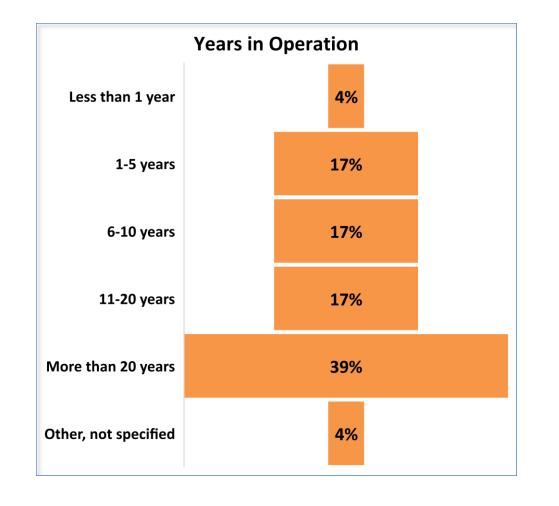
Profile of Respondents





Note: Percentages do not add to 100 as some respondents had more than one business/commercial property location Page 138 of 170





Note: Percentages do not add to 100 as some respondents had more than one business/commercial property Page 139 of 170

DECISION/DIRECTION NOTE

Title:	Membership for Arts and Culture Advisory Committee
Date Prepared:	August 5, 2020
Report To:	Committee of the Whole
Councillor and Role:	Councillor Debbie Hanlon, Tourism, Culture & Immigration
Ward:	N/A

Decision/Direction Required:

Council's approval is required to appoint two new members to the Arts and Culture Advisory Committee to fill two vacancies. A total of three applications were received in response to the City's call for nominations. The selection review process identified that of the three applications received, the following two meet the eligibility criteria for appointment:

- One vacancy representing a Theatre organization;
 - Nicole Rousseau (RCA Theatre Company)
- One vacancy representing a Public Member (Community);
 - Tim Matson (Best Kind Productions)

Discussion – Background and Current Status:

Key Considerations/Implications:

- 1. Budget/Financial Implications: n/a
- 2. Partners or Other Stakeholders: n/a
- 3. Alignment with Strategic Directions/Adopted Plans:
 - a) A Connected City: A city where people feel connected, have a sense of belonging, and are actively engaged in community life.
 - b) An Effective City: A city that performs effectively and delivers results.
- 4. Legal or Policy Implications: n/a
- 5. Privacy Implications: n/a
- 6. Engagement and Communications Considerations:



- a) Call for new members was advertised and promoted by Communications Division
- 7. Human Resource Implications: n/a
- 8. Procurement Implications: n/a
- 9. Information Technology Implications: n/a
- 10. Other Implications: n/a

Recommendation:

That Council appoint the following members as per the selection review process already undertaken:

- One vacancy representing a Theatre organization; Nicole Rousseau (RCA Theatre Company)
- One vacancy representing a Public Member (Community); Tim Matson (Best Kind Productions)

Prepared by: Shanna Fitzgerald – Legislative Assistant Approved by: Elaine Henley – City Clerk

Report Approval Details

Document Title:	Membership for Arts and Culture Advisory Committee.docx
Attachments:	
Final Approval Date:	Aug 6, 2020

This report and all of its attachments were approved and signed as outlined below:

Karen Chafe - Aug 6, 2020 - 12:55 PM

Elaine Henley - Aug 6, 2020 - 1:53 PM

DECISION/DIRECTION NOTE

Title:	11 Tiffany Lane, REZ2000001
Date Prepared:	August 11, 2020
Report To:	Committee of the Whole
Councillor and Role:	Councillor Maggie Burton, Planning & Development
Ward:	Ward 4

Decision/Direction Required:

To consider a rezoning application for land at 11 Tiffany Lane from the Residential Medium Density (R2) Zone to the Apartment High Density (A3) Zone to allow two 6-storey assisted living facilities (Personal Care Homes). An amendment to the St. John's Municipal Plan is not required.

Discussion – Background and Current Status:

The City has received an application from 77345 Newfoundland and Labrador Ltd./KMK Capital Inc. for two 6-storey assisted-living facilities at 11 Tiffany Lane. In the St. John's Development Regulations, an assisted-living facility is classed as a Personal Care Home. The property is zoned Residential Medium Density (R2), in which Personal Care Home is not permitted. The applicant has asked for a rezoning to the Apartment High Density (A3) Zone to accommodate the height and density of the proposed buildings.

The proposed development will contain a total of 237 units and two (2) levels of underground parking. The level of care to be provided has not been determined yet. The attached site plan proposes buildings of 6 storeys, however the applicant has asked for the A3 Zone to allow increased density, increased floor-area ratio (FAR), and the possibility of building heights to a maximum of 10 storeys. Should this application proceed, the public will be informed that the zone allows a maximum building height of 10 storeys.

The subject property is undeveloped, with mature trees and lawns, has a total area of 14,513 square metres and has frontage along Portugal Cove Road/New Cove Road, Baird's Lane and Tiffany Lane. The main entrance will be off Tiffany Lane, with an access off New Cove Road to the parking garage. The property was subdivided from the Bryn Mawr property at 154 New Cove Road and was much of its lawns and gardens. That house, a designated Heritage Building, remains standing empty in the R2 Zone. The surrounding properties are in the Apartment Medium Density (A2) Zone, in the Institutional (INST) Zone across Tiffany Lane, and in the Residential Low Density (R1) Zone across Portugal Cove Road/New Cove Road.

The proposed zone and use would complement the neighbourhood. As per Section 2.2.2 of the Municipal Plan, the City shall promote more intensive use of existing services through infill, rehabilitation, and redevelopment projects. Further, Section 2.2.5(2) states the City shall



enhance neighbourhoods by encouraging the development/redevelopment of quality housing, capitalizing on any opportunities to diversify same. This agrees with the housing objectives in the draft Envision Municipal Plan, which encourage a range of housing to create diverse neighbourhoods for all ages, income groups and family types. Personal Care Homes in appropriate areas make neighbourhoods more age-friendly and allow senior citizens the ability to "age in place".

Personal Care Home is not a listed use in the A3 Zone and therefore a text amendment is required to add it. Personal Care Home is already in the Apartment Low Density (A1) and Apartment Medium Density (A2) Zones, so the proposed amendment is consistent with them.

The property is designated Residential High Density under the St. John's Municipal Plan and therefore a Plan amendment is not required. As per Section 2.3.3 of the Municipal Plan, the Residential High Density District shall permit zones providing for medium density residential uses. Subject to a land-use assessment report (LUAR), the City may permit zones to allow high density residential uses. Further, an LUAR is required for developments exceeding four (4) storeys. Draft LUAR terms of reference are provided for the Committee's review.

More information, including a detailed servicing plan and floor plans, is required before staff can complete our development and engineering review and calculate the required parking. This information will be provided by the applicants in the LUAR.

Should the application proceed, following completion of an LUAR, the application will be presented to the public for review and comment.

Key Considerations/Implications:

- 1. Budget/Financial Implications: Not applicable.
- 2. Partners or Other Stakeholders: Neighbouring residents and property owners; senior citizens who may be interested in this type of development.
- 3. Alignment with Strategic Directions/Adopted Plans: *St. John's Strategic Plan 2019-2029 - A Sustainable City* – Plan for land use and preserve and enhance the natural and built environment where we live.
- 4. Legal or Policy Implications: Text and map amendments to the St. John's Development Regulations are required.
- 5. Privacy Implications: No applicable.
- 6. Engagement and Communications Considerations: Required public consultation will take place following completion of the LUAR.
- 7. Human Resource Implications: Not applicable.

- 8. Procurement Implications: Not applicable.
- 9. Information Technology Implications: Not applicable.
- 10. Other Implications: Not applicable.

Recommendation:

That Council consider amendments to the St. John's Development Regulations to add Personal Care Home to the Apartment High Density (A3) Zone, and to rezone land at 11 Tiffany Lane from the Residential Medium Density (R2) Zone to the Apartment High Density (A3) Zone, and approve the attached draft terms of reference for a land-use assessment report (LUAR).

Further, upon submission of the LUAR, that Council refer the application to a digital Public Meeting chaired by an independent facilitator for public input and feedback.

Prepared by: Ann-Marie Cashin, MCIP, Planner III – Urban Design & Heritage Approved by: Ken O'Brien, MCIP, Chief Municipal Planner

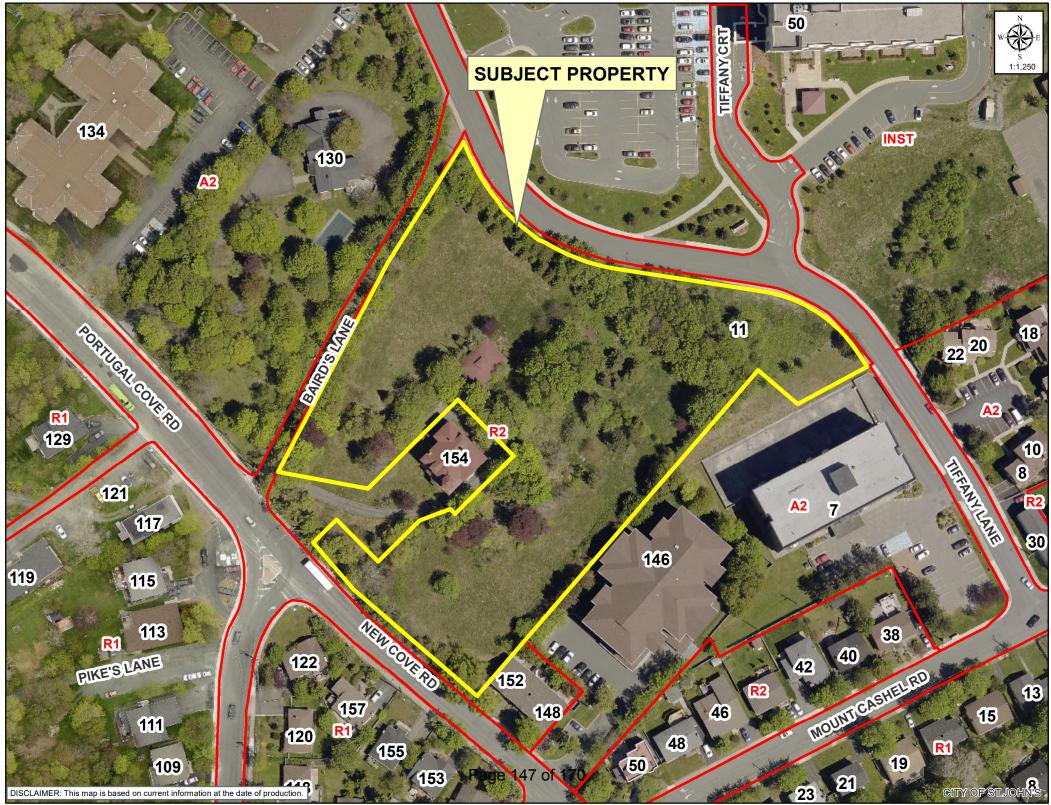
Report Approval Details

Document Title:	11 Tiffany Lane, REZ2000001.docx
Attachments:	- 11 Tiffany Lane - COTW Attachment.pdf
Final Approval Date:	Aug 13, 2020

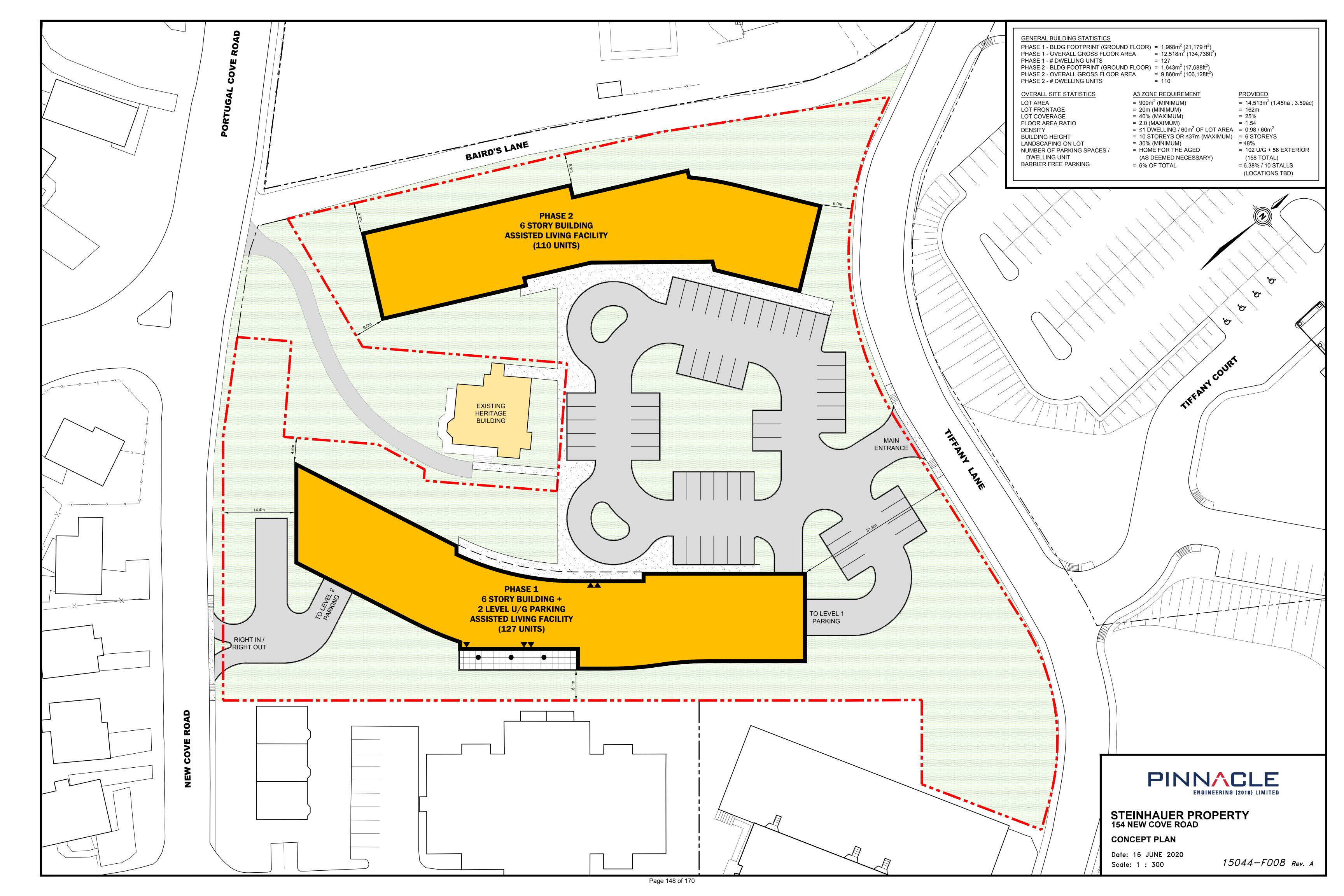
This report and all of its attachments were approved and signed as outlined below:

Ken O'Brien - Aug 12, 2020 - 4:03 PM

Jason Sinyard - Aug 13, 2020 - 10:03 AM



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TERMS OF REFERENCE LAND USE ASSESSMENT REPORT (LUAR) APPLICATION FOR A PERSONAL CARE HOME AT 11 TIFFANY LANE PROPONENT: 77345 NEWFOUNDLAND AND LABRADOR LTD./ KMK CAPITAL INC.

The proponent shall identify significant impacts and, where appropriate, also identify measures to mitigate impacts on land uses adjoining the subject property. All information is to be submitted under one report in a form that can be reproduced for public information and review. The numbering and ordering scheme used in the report shall correspond with that used in this Terms of Reference and a copy of the Terms of Reference shall be included as part of the report (include an electronic PDF version with a maximum file size of 15MB). A list of those persons/agencies who prepared the Land Use Assessment Report shall be provided as part of the report. The following items shall be addressed by the proponent at its expense:

A. Building Use.

- Identify the size of the proposed building by:
 - Gross Floor Area, and
 - Floor Area Ratio (FAR).
- Identify all proposed uses/occupancies within the building by their respective floor area.
 - Confirm in writing if the applicant plans on subdividing the lot or if they intend on selling any of the units.
 - Provide floor plans including total area for the suites or wards under a separate document (due to privacy concerns, floor plans will not be made public).

B. Elevation & Building Materials

- Provide elevations of the proposed building.
- Identify the finish and colour of exterior building materials.

C. Building Height & Location

- Identify graphically the exact location with a dimensioned civil site plan:
 - Location of the proposed building in relation to neighbouring buildings;
 - Proximity of the building to property lines and identify setbacks;
 - Identify any stepbacks of higher storeys from lower storeys (if applicable);
 - Identify any encroachment over property lines (if applicable);
 - Identify the height of the building;
 - Information on the proposed construction of patios/balconies (if applicable);
 - Potential shadowing/loss of sunlight on adjacent public and private properties, including sidewalks;
 - Identify any rooftop structures; and
- Provide street scape views/renderings of the proposed building from the following locations:
 - Along the property frontage at Portugal Cove Road;
 - Along the property frontage at Tiffany Lane.

D. Exterior Equipment and Lighting

- Identify the location and type of exterior lighting to be utilized. Identify possible impacts on adjoining properties and measures to be instituted to minimize these impacts.
- Identify the location and type of any exterior HVAC equipment to be used to service the proposed building and identify possible impacts on adjoining properties and measures to be instituted to minimize these impacts.

E. Landscaping & Buffering

- Identify with a landscaping plan, details of site landscaping (hard and soft) and the location of any outdoor gathering places.
 - Consideration should be given to tree preservation and incorporating existing trees into future site development. Indicate through a tree plan/inventory which trees will be preserved.
- Identify the location and proposed methods of screening of any electrical transformers and refuse containers to be used at the site.

F. Snow Clearing/Snow Storage

• Provide information on any snow clearing/snow removal operations. Onsite snow storage areas must be indicated.

G. Off-street Parking and Site Access

- Identify the number and location of off-street parking spaces to be provided, including accessible parking spaces.
- Identify the number and location of bicycle parking to be provided.
- Provide a dimensioned and scaled plan of parking structure lot, including circulation details.
- Indicate if the two levels of underground parking will be linked thereby creating a connection between New Cove Road and Tiffany Lane.
- Identify the location of all access and egress points, including pedestrian access.

H. Municipal Services

- Provide a preliminary site servicing plan.
- Identify points of connection to the City's sanitary sewer, storm sewer and water system.
- Identify if any services are proposed to be relocated.
- Provide the sanitary rate generated by the proposed development.
- Stormwater detention is required for this development. The proposed location/method of detention must be indicated on the site plan. Stormwater generation rates must be provided.
- Identify if the building will be sprinklered or not, and location of the nearest hydrant and siamese connections.
- Indicate how garbage will be handled onsite. The location of any bins must be indicated on the site plan.

I. Public Transit

• Consult with St. John's Metrobus (St. John's Transportation Commission) regarding public transit infrastructure requirements.

J. Construction Timeframe

- Indicate any phasing of the project and approximate timelines for beginning and completion of each phase or overall project.
- Indicate on a site plan any designated areas for equipment and materials during the construction period.

DECISION/DIRECTION NOTE

Title:	Mobile Vending Review Committee
Date Prepared:	August 11, 2020
Report To:	Special Meeting of Council
Councillor and Role:	click on councillor/role from dropbox
Ward:	N/A

Decision/Direction Required:

Seeking approval from Council for the formation of a temporary Mobile Vending Review Committee and to appoint Jeff LeDrew, owner of Jumping Bean as the traditional sector representative and Todd Hickey, owner of Ziggys as representation of the Mobile Vending Association.

Discussion – Background and Current Status:

At its Special Meeting of May 25, 2020, Council agreed that a committee to review mobile vending in the City would be beneficial. Its mandate is to provide Council with meaningful insight to help facilitate a mixture of mobile and traditional vendors to enhance the virbrancy of our city.

Subsquent to the above meeting, the City called for Expressions of Interest from an individual in the traditional restaurant/retail sector to sit on the committee and received three applications.

Based on a review of the applicants, it is recommended that Council appoint Jeff Ledrew as the traditional sector representative.

The Mobile Vending Association has put forward Todd Hickey, owner of Ziggys to reprensent them.

The committee will consist of the following members:

- Councillor Maggie Burton
- Councillor Debbie Hanlon
- Jason Sinyard, Deputy City Manager of Planning, Engineering & Regulatory Services
- Randy Carew, Manager of Regulary Services
- Andrew Woodland, Legal Counsel
- Jennifer Langmead, Supervisor of Tourism & Events
- Brian Head, Manager of Parks and Open Spaces
- Wendy Mugford, Community Services
- Jeff Legrow, Owner of Jumping Bean/Traditional Sector Rep



• Todd Hickey, Owner of Ziggys/Mobile Vendors Association Rep

Key Considerations/Implications:

- 1. Budget/Financial Implications: n/a
- 2. Partners or Other Stakeholders:
 - Residents of the City
 - Mobile Vendors Association Ltd.
 - Restaurant/Retail Sector
- 3. Alignment with Strategic Directions/Adopted Plans: n/a
- 4. Legal or Policy Implications: n/a
- 5. Privacy Implications: n/a
- 6. Engagement and Communications Considerations: n/a
- 7. Human Resource Implications: n/a
- 8. Procurement Implications: n/a
- 9. Information Technology Implications: n/a
- 10. Other Implications: n/a

Recommendation:

That Council approve the formation of a temporary Mobile Vending Review Committee and to appoint Jeff LeDrew, owner of Jumping Bean as the traditional sector representative and Todd Hickey, owner of Ziggys as representation of the Mobile Vending Association.

INFORMATION NOTE

Title:	Re-Imagine Churchill Square, Initial Public Engagement – What We Heard
Date Prepared:	August 12, 2020
Report To:	Committee of the Whole
Councillor and Role:	Councillor Ian Froude, Public Works & Sustainabilty
Ward:	Ward 4

Issue:

Information about the Re-imagine Churchill Square project and engagement activity to date.

Discussion – Background and Current Status:

Last fall Council recognized an opportunity to coordinate planned improvements and engagement through a concept design project for the Churchill Square area. In February of this year the City retained Mills & Wright Architecture and began the Re-Imagine Churchill Square project.

The first phase of this work involved engaging area stakeholders and the general public on their vision of what a Re-imagined Churchill Square could be. This work was delayed initially due to the pandemic and the in-person public engagement events were transitioned to a virtual platform.

The attached What We Heard document provides a summary of the project stakeholders and engagement activities completed in this first round of consultation as well as the key themes and ideas shared.

Key Considerations/Implications:

- 1. Budget/Financial Implications: n/a
- 2. Partners or Other Stakeholders: Residents, businesses (and their employees) and visitors of Churchill Square, Advisory Committees, and the general public.
- 3. Alignment with Strategic Directions/Adopted Plans: While not currently outlined in the strategic plan, outcomes from the project could advance the strategic direction of Connected City, specifically the goal to develop and deliver programs, services and public spaces that build safe, safe, healthy and vibrant communities
- 4. Legal or Policy Implications: n/a



- 5. Privacy Implications: n/a
- Engagement and Communications Considerations: This What We Heard document will be shared back with the community. Once draft concept plans are prepared by the project team, there will be a second round of engagement to gather more feedback and refine the final design.
- 7. Human Resource Implications: n/a
- 8. Procurement Implications: n/a
- 9. Information Technology Implications: n/a
- 10. Other Implications: n/a

Conclusion/Next Steps:

This What We Heard document will be shared with those who engaged on the project and through City communication channels. The project team will incorporate feedback into the design of the Re-imagine Churchill Square draft concept plans which will be shared with the public again in the next iteration of public engagement.

Report Approval Details

Document Title:	Re-imagine Churchill Square Initial Public Engagement - What We Heard .docx
Attachments:	- Re-imagine Churchill Square_WWH_final.pdf
Final Approval Date:	Aug 13, 2020

This report and all of its attachments were approved and signed as outlined below:

No Signature found

Garrett Donaher - Aug 12, 2020 - 4:23 PM

Scott Winsor - Aug 12, 2020 - 5:18 PM

Jason Sinyard - Aug 13, 2020 - 11:23 AM



What We Heard

Through Public Engagement • August 2020

About the Project

Over time, Churchill Square has evolved to become an important public space for the city. Recently, the City has considered improvements to several aspects of Churchill Square including the proposed redevelopment of the old Dominion grocery store, changes to the parking system, and a need to upgrade and improve lighting. These initiatives allow us to look at other improvement opportunities that may exist.

From March to June of 2020, the City engaged residents and stakeholder groups to hear their ideas for re-imagining Churchill Square's public spaces. This document represents a summary of what we heard.













Through Public Engagement • August 2020

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How We Engaged

The following list represents engagement activities that occurred from March to June of 2020.

Engagement Activity	Date දීදී	How Many People Engaged?
Meeting with the City's Advisory Committees	March 10th	20+
Meetings with Representatives of the Churchill Square Business Association	April 21st/May 14th	4
Online Survey	May to June	646
engagestjohns.ca	May to June	1,898
Meeting with KMK Capital (developers of former Dominion)	May 20th	2
Community Virtual Open House	June 25th, 1pm	45
Community Virtual Open House	June 25th, 7pm	44
Submissions via email or Access St. John's (311)	May to June	24





What We Heard

Through Public Engagement • August 2020

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Feedback from Meeting with the City's Advisory Committees

The City's Advisory Committees provide valuable advice and guidance on matters that affect the city and its residents. On March 10th, a focus group was attended by representatives of the following committees to provide feedback on Churchill Square's public spaces:

- Affordable Housing Working Group
- Inclusion Advisory Committee
- Youth Advisory Committee
- Seniors Advisory Committee
- Bike St. John's Advisory Committee
- Built Heritage Experts Panel

Key Themes from the Meeting

The space needs to be pedestrian oriented; it currently feels too focussed on cars	Churchill Square's public spaces must consider all four seasons and include consideration of snow storage	Could the flow of traffic be changed to remove the central drive aisle and create more pedestrian space?	Improvements are needed to provide better accessibility to all buildings
More outdoor amenities such as benches, picnic tables, and bike racks are needed	Lighting is generally poor in Churchill Square	Connect the Square to the soccer field and park across the street	There is a unique heritage architecture in Churchill Square that must be incorporated
Can the parking lot be reconfigured to find more social spaces or space for community events?	Bus stops are currently too far away from the Terrace on the Square and other buildings	Cycling infrastructure should be incorporated; bike racks, bike lanes, connection to planned routes of the Bike Master Plan	Wider sidewalks are needed throughout the Square







What We Heard

Through Public Engagement

August 2020

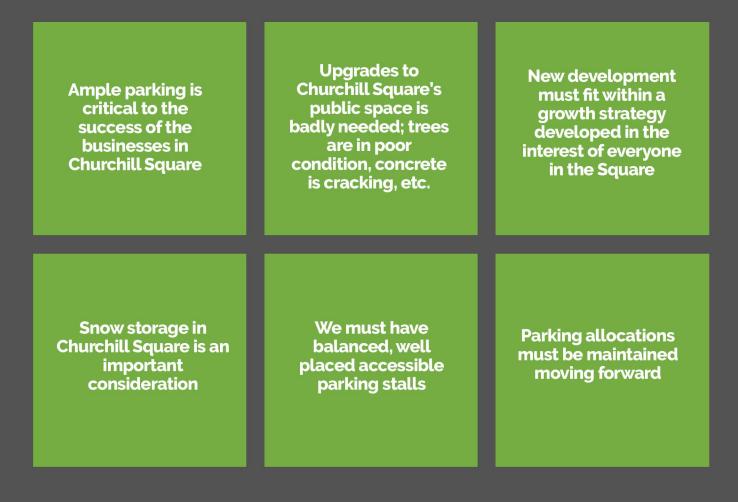
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Feedback from Meeting with the Churchill Square Business Association

The Churchill Square Business Association is an organized committee that represents the shared voice of 60+ real estate and business owners as well as 420 employees who work in Churchill Square. Two meetings were held with representatives of the Business Association on April 21st and May 14th to collect feedback on Churchill Square's public spaces.

Key Themes from the Meetings







What We Heard

Through Public Engagement • August 2020

Feedback from engagestjohns.ca

1,898

Visited a project page at least one time



Viewed or downloaded a document or visited multiple project pages



Contributed feedback by either placing a pin on the map or sharing an idea



Key themes from the Mapping Tool feedback:

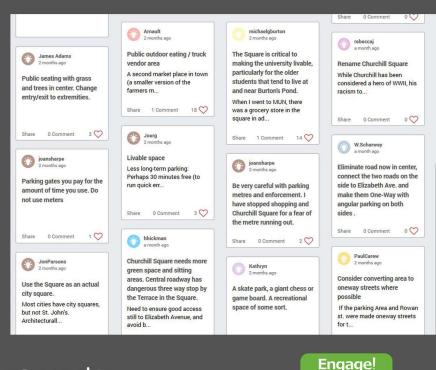
- More trees/green space
- Less trash
- Better snowclearing
- Improve pedestrian connections
- Better accessibility
- Reduce visual impact of parking lot More pedestrian & patio spaces
- Dedicated space for mobile vendors
- Prioritize pedestrian safety
- More public art



36 ideas were shared by members of the community

Key ideas that were shared:

- More trees/green space
- More places to sit
- Improved pedestrian safety
- Rename Churchill Square
- Design the space to function as a community square
- Consider reconfiguring traffic flow
- More space for vendors
- Remove the centre drive aisle
- Reduce the amount of parking
- Add bicycle racks
- The Square today feels dismal & neglected



St. John's





What We Heard

Through Public Engagement • August 2020

Feedback from the Virtual Open Houses

Due to COVID-19 restrictions, traditional in-person public consultation methods were not possible. Instead, two virtual open houses were held online using the Zoom platform on June 25th. The open houses provided the opportunity for residents to provide feedback on Churchill Square's public spaces and to hear what others had to say.











What We Heard

Through Public Engagement • August 2020

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Key Themes from the Virtual Open Houses







What We Heard

Through Public Engagement • August 2020

Feedback from the Online Survey

What is your interest in this project?

268

Live in the Churchill Square neighbourhood

304

Live outside the Churchill Square neighbourhood

Own or work for a business in Churchill Square

79 Other

What mode of transportation do you use the most often to get to Churchill Square?





What are the most frequest reasons for visiting Churchill Square?

Shopping

Services (lawyer, bank, doctor, salon, etc.)

Visiting the outdoor market

Eating at restaurants and pubs

What are the least frequest reasons for visiting Churchill Square?

Enjoying the outdoor space

Using the parking lot to get to nearby destinations

Visiting someone who lives on Churchill Square

Do you agree or disagree with the following statements about Churchill Square

statements about churchitt square	Agree	Neither Agree nor Disagree	Disagree	Not Sure	
There is adequate lighting	36%	21%	32%	11%	
Churchill Square is accessible/barrier-free	38%	18%	26%	18%	
I feel safe in Churchill Square	75%	13%	11%	1%	
Traffic flow in Churchill Square is adequate	44 %	18%	35%	3%	
Churchill Square is walkable	62%	8%	29%	1%	
There is adequate landscaping	12%	9 %	78 %	1%	
There are adequate places to sit outside	5%	5%	87%	3%	





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What We Heard

Through Public Engagement • August 2020

5%

Feedback from the Online Survey









93%

Thought

this could

work

91%

Thought

this could

work

91%

Thought

this could

work

82%

Thought this could

work













Did not

think this

could work



Sitting Areas

Were not

sure

5%

Were not

sure



Said this was their top priority

158

Said this

was their

top priority

64

Said this was their top priority





Said this was their top priority





Did not think this could work

Public Art



Did not think this could work

sure

11%

Were not



What We Heard

Through Public Engagement • August 2020

17%

Were not

sure

Feedback from the Online Survey



MILLS & WRIGHT



Multipurpose Public Space



Thought

this could

work

74%

Thought

this could

work

74%

Thought

this could

work





121

Said this was their top priority

Shared Streets

Did not

think this

could work

19% **?**

Were not

sure

15%

Were not

sure



78

Said this was their top priority

8

Said this

was their

Did not think this could work



Ç

Did not

Did not think this could work

Improved Lighting





Preferred the traditional style of lighting



1

Said this was their top priority



What We Heard

Through Public Engagement • August 2020

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St. John's

Other Comments from the Online Survey



Thank you to everyone who participated in the public engagement. The feedback received will be used to inform the design of Churchill Square's public spaces. To learn more and stay up to date on this project, including future engagement opportunities, please visit **engagestjohns.ca**.



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DECISION/DIRECTION NOTE

Title:	Donegal Place Traffic Calming
Date Prepared:	August 5, 2020
Report To:	Committee of the Whole
Councillor and Role:	Councillor Sandy Hickman, Transportation & Regulatory Services
Ward:	Ward 4

Decision/Direction Required:

Decision is required on whether to install a curb extension on Larkhall Street at Donegal Place.

Discussion – Background and Current Status:

Residents in the area have requested a crosswalk with curb extensions at the end of Donegal Place on Larkhall Street. Residents are concerned about vehicle speeds and children crossing the street to reach the school.

School crosswalk improvements are being designed at Larkhall Academy and Leary's Brook Junior High School as part of the Road Safety Initiatives. Staff evaluated adding a crosswalk on Larkhall Street at Donegal Place as part of this project for the nearby schools. However, a pedestrian count done on a regular school day in 2019 showed that almost all pedestrians crossed the street about 110 metres east of Donegal Place at the existing crosswalk in front of the schools. This factor was included in a technical evaluation which found that a crosswalk is not warranted at Donegal Place.

A curb extension at this location would contribute to a traffic calming effect in the area. However, Larkhall Street does not currently qualify under the Traffic Calming Policy.

The benefits of this extension are less than would be achieved by a more isolated project because the improvements planned as part of the Road Safety Initiatives will have already affected driver behaviour nearby.

Key Considerations/Implications:

- Budget/Financial Implications: A curb extension would require approximately \$20k -\$25k which currently isn't budgeted.
- 2. Partners or Other Stakeholders: n/a
- 3. Alignment with Strategic Directions/Adopted Plans: n/a



- 4. Legal or Policy Implications: n/a
- 5. Privacy Implications: n/a
- 6. Engagement and Communications Considerations: Staff and Councillors have met with residents several times to discuss concerns in this area.
- 7. Human Resource Implications: n/a
- 8. Procurement Implications: n/a
- 9. Information Technology Implications: n/a
- 10. Other Implications: n/a

Recommendation:

That Council maintain status quo and not allocate special funding for the requested curb extension on Larkhall Street at Donegal Place.

Prepared by:	Marianne Alacoque, Transportation Systems Engineer

Approved by:Garrett Donaher – Manager, Transportation Engineering

Report Approval Details

Document Title:	Donegal Place Traffic Calming.docx
Attachments:	
Final Approval Date:	Aug 10, 2020

This report and all of its attachments were approved and signed as outlined below:

No Signature found

Garrett Donaher - Aug 10, 2020 - 12:26 PM

- Scott Winsor Aug 10, 2020 1:45 PM
- Jason Sinyard Aug 10, 2020 2:37 PM