

Voluntary Local Review 2022

May 2022

Authors

Amanda Dodaro Lakehead University, Department of Health Sciences

Ashley Wilkinson Lakehead University, Department of Health Sciences

Rebecca Schiff Lakehead University, Department of Health Sciences

Working Group Members

Albert Brule - United Way Thunder Bay
Amy Coomes - City of Thunder Bay
Bonnie Krysowaty - Lakehead Social Planning Council
Charles Levkoe - Lakehead University
Helle Moller - Lakehead University
Jacob Porter - City of Thunder Bay
Lee-Ann Chevrette - City of Thunder Bay
Lindsay Galway - Lakehead University
Summer Stevenson - City of Thunder Bay

Acknowledgements

This work was funded by the Social Sciences and Humanities Research Council of Canada by way of a Partnership Engage Grant #892-2021-0007 as well as through in-kind contributions of Lakehead University.

Suggested Citation: Dodaro, A., Wilkinson, A., & Schiff, R. (2022). Thunder Bay and the SDGs: A Voluntary Local Review. Thunder Bay: Lakehead University.

LAND ACKNOWLEDGEMENT

We respectfully acknowledge that the work involved in creating this report took place on the traditional lands of Indigenous Peoples in the region of the Robinson-Superior Treaty of 1850. The authors and contributors gratefully acknowledge their presence in these traditional territories and strive to live and work in the spirit of reconciliation. Thunder Bay is built on the traditional territory of the Anishinabek, which includes the Ojibway of Fort William First Nation. We also acknowledge the contributions of the Métis peoples in this region.

TABLE OF CONTENTS

Front Material

- 05 A Message
- 06 Executive Summary
- Our VLR Process
- 10 Summary of the Goals
- 14 Decolonizing the SDGs
- 15 Thunder Bay in Focus

Sustainable Development Goals

- 16 SDG 1: No Poverty
- 17 SDG 2: Zero Hunger
- 19 SDG 3: Good Health and Well-being
- SDG 4: Quality Education
- 25 SDG 5: Gender Equality
- 27 SDG 6: Clean Water and Sanitation
- 29 SDG 7: Affordable and Clean Energy
- 31 SDG 8: Decent Work and Economic Growth
- 32 SDG 9: Industry, Innovation and Infrastructure
- 33 SDG 10: Reduced Inequalities
- 35 SDG 11: Sustainable Cities and Communities
- 37 SDG 12: Responsible Consumption and Production
- 39 SDG 13: Climate Action
- 40 SDG 14: Life Below Water
- 41 SDG 15: Life on Land
- 42 SDG 16: Peace, Justice and Strong Institutions
- SDG 17: Partnerships for the Goals

End Material

- 45 Reflections
- 46 Recommendations
- 47 Community Organizations List
- 51 References

A MESSAGE FROM OUR PROJECT DIRECTOR

I am delighted to finally present the first Voluntary Local Review (VLR) of progress on the Sustainable Development Goals (SDGs) for the Thunder Bay Region. This report was several years in the making. The project partners began this journey to produce the first VLR for Thunder Bay in February 2020. We had plans for gatherings and community meetings to develop and refine the approach to localizing the SDGs, gathering data, and evaluating results. Then the COVID-19 pandemic hit and we needed to quickly change our approach to adapt to the new circumstances. This final report is the product of over 18 months of dedicated work by the project team, including extensive data mining and consultation with partners in the Thunder community.

VLRs are not meant to be one-time reports. They are intended to measure progress over time and as such, I hope that this is just the first in a series of VLRs for the Thunder Bay region.



We have attempted to lay the groundwork for streamlined production of VLRs and their associated reports - which we hope will contribute to further SDG research and action in this region.

I firmly believe that VLRs are not meant to be simply reports and data gathering activities - rather they are intended to support and contribute to ongoing action on the SDGs. I hope that this first VLR highlights some of the incredible sustainability-related work being done in this region. I also hope that is spurs ongoing collaboration and action - for progress on the SDGs - as well as for production of the next VLR to document and guide our progress.

EXECUTIVE SUMMARY

The success of the United Nation's 17 Sustainable Development Goals (SDGs) largely depends on work at the local level-voluntary local reviews (VLRs), which monitor sub-national implementation are key in this work.

Undertaking a VLR for the Thunder Bay region was borne out of discussion between community partners who were committed to creating a systematic and comprehensive evaluation of Thunder towards achieving Bay's progress sustainability. While there is no formal process for completing a VLR, the flexibility of the VLR concept allowed for an adaptive process that could work around the challenges of COVID-19 while still ensuring partnerships (virtual) fostering collaboration among partners was fundamental in the process.

This VLR attempted to address as many targets as possible from all 17 SDGs, in order to provide the most comprehensive report on Thunder Bay's SDG progress.

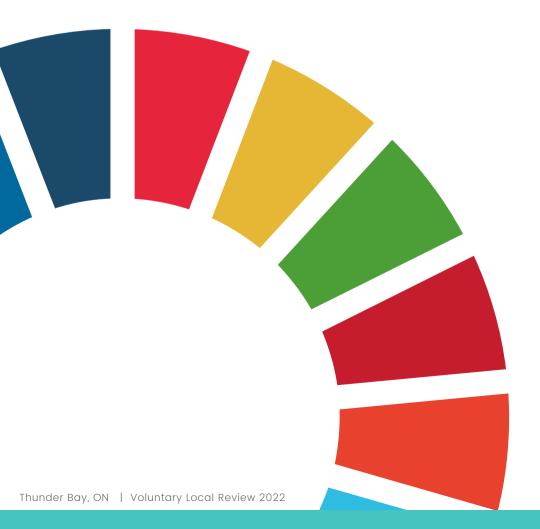
Included in this report are key indicators, in addition to contextual data and qualitative information. This combination helps to not only provide a measurable baseline for future VLRs, but also paints a detailed picture of Thunder Bay that showcases the local work contributing to progress for each SDG.

Woven throughout the report is our commitment to Reconciliation and an equity lens so that, as the 2030 Agenda promises, no one is left behind. Elements that speak to equity and diversity, such as age, gender, and race, are denoted throughout the report with the symbol:

This initial VLR iteration identifies gaps in data and serves as a baseline that can be revisited in the future to track progress over time. While an effort was made to cover a broad range of SDGs, it was not possible, in a single report, to capture the entirety of SDG-related work in the region. Rather, this first VLR attempts to highlight some of many successes, efforts, challenges, and possible ways forward.

EXECUTIVE SUMMARY

We believe that this, and future iterations of the VLR, will be of great value to the community not only as a resource but also as a creator of opportunities for municipal and civic engagement to make Thunder Bay a healthier, happier, safer, and more sustainable place for all to live, learn, work, and play.



OUR VLR PROCESS

EARLY STAGES

The Thunder Bay VLR process began by reviewing academic and grey literature for information about strategies, processes, and methods for conducting and reporting VLRs. We reviewed VLR reports from other locations as well as guides for conducting VLRs. This was done to uncover emerging knowledge and to distill information that may be useful for assembling a VLR in Thunder Bay. The next step in the process was an environmental scan of existing data sources relevant to the SDGs. Data was gathered from a wide range of currently available data sources from partners and other organizations. Data gaps were identified and investigated further with partner support.

INDICATOR SELECTION

Based on available data, the team identified local data that would be representative of the 17 SDGs and their corresponding targets. These data were reviewed for their relevance to the global targets, their commitment to equity and diversity, and local relevance.

INDICATOR SELECTION (CONT.)

Where the global targets were not suitable for the local context, attempts were made to adapt targets or determine new targets (relevant to each SDG) for a Thunder Bay context. The result was a preliminary set of localized SDG indicators for the Thunder Bay region. Each indicator in this draft set was assessed according to 5 quality assurance criteria: validity, reliability, credibility, preciseness, and accessibility. Indicators not meeting such quality considerations were excluded from the final indicator set used in this report.

CHALLENGES

Many data limitations influenced the finalization of the localized indicator set. Some reporting processes changed standards between periods, making the data incomparable. In other cases, data was only available for one time period; however, it was sometimes still included as it will likely be available in the future, and/or it provides key information unavailable elsewhere about the status of a particular target or population group (ex: the Our Health Counts survey).

OUR VLR PROCESS

CHALLENGES (CONT.)

In terms of geographic levels, there are some inconsistencies between indicators as there were times where municipal-level data was not available or not relevant. Integrating the surrounding rural catchment was necessary in certain instances, such as for agricultural data.

THE FINAL PRODUCT

After many months of development and regular meetings with core partners, the VLR was assembled. This was done by combining the selected indicators (often depicted with a visual or graph), contextual information, and comparisons to Provincial or National level data where applicable. A goal summary (see "Summary of Goals" section) was created and the percent change evaluation method applied to determine progress relevant to key indicators. We also incorporated highlights of ongoing SDG-related work in the City, and examples of next steps that would support ongoing progress towards the SDGs.

HOW TO READ THIS REPORT

The following pages provide a thorough look at the 17 SDGs in Thunder Bay. The indicator information within each goal is separated by headings which indicate the associated global target in brackets (E.g. "Poverty (1.2)" corresponds to Target 1.2 of the global Goals).

The symbol indicates information related to equity, diversity, and inclusion.

In-text citations are present in square brackets (e.g. "[12]"). The corresponding full reference can be found at the end of the report's reference section, divided by SDG.

Disclaimer: The information in this report does not necessarily represent the views and opinions of the community groups that are "Spotlighted" in this VLR. However, those with included logos were asked for permission prior to publication.

SUMMARY OF THE SDGS

In order to track the progress of key indicators, we utilized a threshold of 5% - **percent change**. Percent change determines the change from one number to another or the "initial" to the "final" value. It is not a direct subtraction of the values.

The percent change for each indicator was calculated using a range of 5 years. If a 5 year span was unavailable, the next closest timeframe with available data was used in the calculation. "Positive" is meant to indicate direction towards desired change:

- = positive change indicates a move greater than 5% in a positive direction
- = negative change indicates a move greater than 5% in a negative direction
- = no change indicates the indicator has moved less than 5%

5% percent change was chosen for all indicators in an attempt to standardize the process. A smaller threshold might falsely detect trends, while a large threshold might not be able to detect changes over shorter VLR intervals.

We acknowledge that, for some indicators, whether the change is desired or not, may be debatable. Hence, we have included a ? when a positive/negative symbol is not appropriate for indicators that are too complex for a concrete decision. Further explanation of the controversies is out of the scope of this VLR but may be incorporated into future VLRs.

Not all data presented in the goal-specific pages is included in the summary of the goals on the next page. Rather, key indicators with currently available comparison data are highlighted. Future VLRs will strive to incorporate more indicators as more data becomes available.

SUMMARY OF THE GOALS

SDG	Key Indicators	% Change	Years	% Value
1 NO POVERTY	Low-income measure after tax		2011 - 2016	-8
Ů ¥ † ††	Proportion of the population experiencing homelessness		2016 - 2018	+63%
2 ZERO HUNGER	Food Insecurity		2013/14 - 2015/16	+40.2
	Farms generating <\$25,000 gross income		2011 - 2016	-20.4
(((Average age of farm operators		2011 - 2016	+4
	Number of school gardens		2012 - 2017	+175
	Number of community gardens		2012 - 2017	+190
3 GOOD HEALTH AND WELL-BEING	Neonatal mortality		2010 - 2015	-2.9
AND WELL-BEING	Under 5 mortality		2010 - 2015	-33.9
<i>-</i> ∕n/ è	Cancer mortality		2010 - 2015	-10.6
V	Diabetes mortality		2010 - 2015	-11.1
	Cardiovascular disease mortality		2010 - 2015	-19.2
	Respiratory disease mortality		2010 - 2015	+16.6
	Opioid-related deaths		2016 - 2020	+361.5
	Opioid-related hospitalizations		2016 - 2020	+21.8
	Opioid-related emergency department visits		2016 - 2020	+227
	Fatal motor vehicle collisions		2010 - 2015	+14.7
4 QUALITY EDUCATION	Percentage with no certificate, diploma, or degree		2006 - 2016	-22.1
EDUCATION	EQAO math scores (Gr 3)		2015-17 - 2017-19	+2
	EQAO math scores (Gr 6)	3	2015-17 - 2017-19	0
	EQAO math scores (Gr 9 applied)	Ş	2015-17 - 2017-19	+11.1
	EQAO math scores (Gr 9 academic)	Ş	2015-17 - 2017-19	+2.5
	OSSLT success rates	3	2015-17 - 2017-19	-2.5
5 GENDER EQUALITY	Intimate partner violence rates - female victim		2016 - 2019	-4.6
©	Proportion of women on city council		2014-18 - 2018-22	0
	Proportion of women in management occupations		2006 - 2016	+0.7

= positive change - indicates a move greater than 5% in a positive direction

= negative change - indicates a move greater than 5% in a negative direction

= no change - indicates the indicator has moved less than 5%

? = desirability of change is debatable

SUMMARY OF THE GOALS

SDG	Key Indicators	% Change	Years	Value
6 CLEAN WATER AND SANITATION	Wastewater by-passing secondary treatment		2019 - 2020	-90.5
	Litres of treated water per capita per day	?	2012 - 2017	-4.9
	Number of new rain gardens installed		2015 - 2019	-5
7 AFFORDABLE AND CLEAN ENERGY	Average # of hours power was interrupted		2016 - 2020	-52.5
	Average # of times power was interrupted		2016 - 2020	-25.4
8 DECENT WORK AND ECONOMIC GROWTH	Gross domestic product growth	?	2013 - 2018	+15.3
	Unemployment Rate		2016 - 2021	+4.4
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	Traffic Volume		2013 - 2017	+3.7
	Number of manufacturing jobs	?	2006 - 2016	-32.7
10 REDUCED INEQUALITIES	% agree racism is a serious issue in Thunder Bay		2015 - 2019	-1.2
\ _ \$				
11 SUSTAINABLE CITIES AND COMMUNITIES	% spend >30% of income on shelter (owner)		2011 - 2016	-11.3
	% spend >30% of income on shelter (tenants)		2011 - 2016	+10.4
	Sustainable transportation to work		2011 - 2016	+110.7
Molitical State of the last of	Annual mean concentration of fine particulate		2013 - 2018	-4.8
	Kms of bike lanes/sharrows & multi-use trails		2012 - 2017	+31.9
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Hazardous waste diversion	3	2014 - 2019	+11.3
	Residential waste per capita		2015 - 2019	-6.2
	Residential waste diversion rate		2013 - 2019	+40
	Organic waste (tonnes)	,	2015 - 2019	-13.9
	Recycling (tonnes)	?	2015 - 2019	+12.3

⁼ positive change - indicates a move greater than 5% in a positive direction

⁼ negative change - indicates a move greater than 5% in a negative direction

⁼ no change - indicates the indicator has moved less than 5%

⁼ desirability of change is debatable

SUMMARY OF THE GOALS

SDG	Key Indicators	% Change	Years	Value
13 CLIMATE ACTION	% of City budget for climate adaptation		2016 - 2019	+812
	% of City reports w/ climate adaptation measures	•	2016 - 2019	+182.5
	Engagement in climate change adaptation outreach	•	2016 - 2019	+348
14 LIFE BELOW WATER	Total Lake whitefish, trout & herring total harvest weight	?	2016 - 2020	-6.7
15 LIFE ON LAND	Lakehead watershed forest cover		2013 - 2018	-5.1
	Tree seedlings planted through assistance program		2014 - 2019	-15.4
	City budget for urban forest management		2018 - 2021	+8.8
PEACE, JUSTICE AND STRONG INSTITUTIONS	Crime rate per 100,000		2016 - 2020	-1
	Crime severity index		2016 - 2020	+24.2
	Rate of sexual violations against children		2015 - 2020	+35.6
	Perceptions of safety		2015 - 2019	-22.9
	Satisfaction with city services		2015 - 2019	-6.9
17 PARTNERSHIPS FOR THE GOALS	Number of partnering organizations on the VLR	TBD		

= positive change - indicates a move greater than 5% in a positive direction

= negative change - indicates a move greater than 5% in a negative direction

= no change - indicates the indicator has moved less than 5%

? = desirability of change is debatable

DECOLONIZING THE SUSTAINABLE DEVELOPMENT GOALS

TRUTH & RECONCILIATION

The Calls to Action from the Truth and Reconciliation Commission of Canada are connected the SDGs. We to are committed understanding to and advocating for action that addresses the harmful impacts of colonization and resulting inequities. while also acknowledging there is more to learn in collaboration with Indigenous partners.

DATA ON INDIGENOUS PEOPLES

Weaving the culture, experiences, values, and strengths of Indigenous Peoples throughout this report was a key priority. Where data availability allowed, we have included information **Indigenous** on Peoples, relevant to each of the SDGs and targets. However, data is limited in scope and quality, which is a significant gap. As a result, this report does not adequately represent First Nations, Inuit and Métis perspectives, priorities, and experiences relation the to SDGs. **Ensuring** Indigenous **Peoples** rightfully are represented in the VLR will continue to be a priority for improvement.

LOCAL INDIGENOUS-LFD INITIATIVES

As part of our commitment to representation, we aimed to amplify work being done by Indigenous Peoples. This includes highlighting the numerous Indigenous organizations working in areas related to the SDGs.

Throughout the report have we highlights included of **Indigenous** organizations through descriptions in "Community Spotlights" sections as as through identification well of Indigenous organizations working in areas related to each SDG.

THUNDER BAY IN FOCUS

HISTORY

The City of Thunder Bay is the primary regional centre of Northwestern Ontario. It is located in the traditional territory of the Anishnaabeg, in the region covered by the Robinson-Superior Treaty of 1850. The municipality was formed by the amalgamation of the municipalities of Port Arthur and Fort William in 1970.

LOCATION

Thunder Bay is located 62km North of the United States border, 702km East of Winnipeg, and 1,386km northwest of Toronto by car. It sits along the North shore of Lake Superior, overlooking the rock formation Nanibijou, or the Sleeping Giant, with rich natural landscapes in the surrounding area.



DEMOGRAPHICS & CULTURE

According to the 2016 Census, the city of Thunder Bay is home to 107,909 people [1]. Of this population, just 4.5% represent a visible minority group and 7.8% speak both French and English [1]. Thunder Bay is the 6th most culturally diverse city of its size in North America [2]. In particular, Indigenous culture is deeply rooted in the character of Thunder Bay. 12.8% of residents identify as Indigenous [1]; however, this number is widely accepted as being much lower than actual. Data from Our Health Counts found that of Indigenous adults in Thunder Bay, 41% speak an Indigenous language; 53% have participated in traditional ceremonies; and 82% feel a strong connection to the land and Mother Earth [3].

OVERALL LIFE

Residents of Thunder Bay experience a high quality of life - with 82% rating their quality of life as very good/good in 2019 [4]. Thunder Bay is a smaller city but an important hub of the North with many opportunities for a high quality of life.

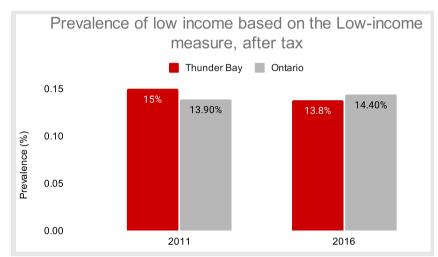
Goal 1: No Poverty

End poverty in all its forms everywhere.



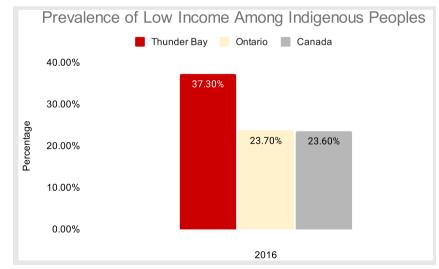
POVERTY (1.2)

Using the low-income measure after tax (LIM-AT), the Thunder Bay CMA had poverty rates of 15% (2011) and 14% (2016) [1-2].



Source: Statistics Canada [1]

In 2016, 37.3% of Indigenous people in Thunder Bay meet the criteria for low income, according to the LIM-AT, but Indigenous peoples account for only 12.8% of the city's population [1],[3].

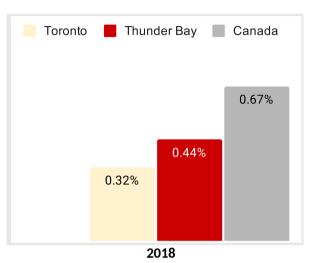


Source: Statistics Canada

Our Health Counts survey data indicates that 89% of Indigenous persons aged 15+ fell below the before-tax Low-Income Cut-Off [4].

HOUSING (1.4) 🗱

Rates of homelessness in Thunder Bay are higher than in larger urban centres but lower than Canada [5-7].



Source: Statistics Canada; LSPC; City of Toronto [5-7]

Indigenous Peoples are significantly over-represented in the homeless population. Thunder Bay Point-in-Time (PiT) counts show that



of homeless individuals identified as Indigenous [5, 8-9] while Indigenous peoples account for only 12.8% of the city's population [1]. This is also double the rate of the 2016 and 2018 national PiT counts [10-11].

Goal 2: Zero Hunger

End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.



FOOD SECURITY (2.1)

14.3% or 1 in 7 households are marginally, moderately or food severelv insecure in Thunder Bay [1]. This is up from 10.2% in 2013/14 [2].



The price of a nutritious food basket for a family of four was \$949 in 2021 [3]. This was 35% of the monthly income for 2 2 children parents with Ontario Works [3].



= \$875 in 2015

= \$949 in 2021

In 2017, **\$1,571,110** in food value was distributed to 8 food banks and feeding programs in Thunder through Bay the Regional Food Distribution Association [4].

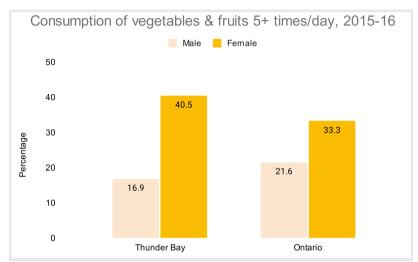
number Average of people accessing food banks per month:

3447 people in March 2015 4680 people in March 2017 [5].

Supports policies and address the root causes of food insecurity are needed.

NUTRITION (2.2)

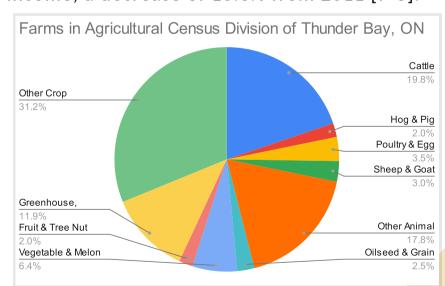
Males in the TBDHU are consuming far fewer fruits and vegetables than their female counterparts [6].



Source: PHO Nutrition and healthy weights snapshot [6]

AGRICULTURAL PRODUCTION (2.3)

Within the Census Division of Thunder Bay, ON, there were 202 farms recorded. 52.4% of farms generate less than \$25,000 in annual gross income, a decrease of 13.3% from 2011 [7-8].*



Source: Statistics Canada Table 32-10-0403-01.[8]

*Note: Farms generating under \$7,000 annually are not included in Census data as they are not registered as a farm.

Goal 2: Zero Hunger

End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.



AGRICULTURAL PRODUCTION (CONT.) (2.3)

There were a total of 49,219 acres of farm area, of which



is operator owned [9].

There were 295 operators of which approximately

2 out of 3 were males [10].

The average age of farm operators is shown below [11]:

SEEDS (2.5)

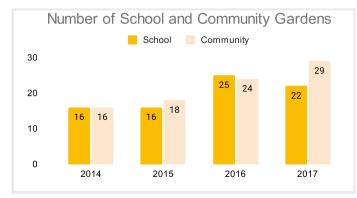
Superior Seed Producers is a group of local growers who support access to sustainable and locally adapted seeds. In 2017, the producers sold 1906 packages of seeds, up from 569 packages in 2015 [5].

CHALLENGES & NEXT STEPS

Food travels an average of 3,500 km to reach Thunder Bay. Strengthening the local food system. including infrastructure and production, would not provide environmental benefits (such as reducing emissions), it would also greatly benefit economic viability, employment, and reduce vulnerability to food supply threats in the city. A focus on sustainable food consumption education can help consumers make healthier, fresh choices, and build a stronger community [13].

SUSTAINABLE FOOD PROGRAMS (2.4)

There are more school and community gardens in the city [12]. In 2015, Ontario Nature ran 27 sustainable harvesting workshops with 834 participants [13].



Source: EarthCare Annual Report, 2017 [12]

COMMUNITY SUPPORT FOR SDG 2















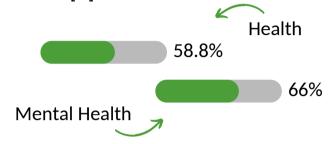
Goal 3: Good Health and Well-being

Ensure healthy lives and promote well-being for all at all ages.



OVERALL HEALTH AND WELL-BEING

In 2017/2018, **58.8%** and **66%** of the TBDHU population self-reported their perceived health and mental health as very good or excellent [1].



70% of Indigenous adults self-reported their mental health as very good or excellent [2].

NEONATAL & UNDER-FIVE MORTALITY (3.2)

The Neonatal and Under-5 Mortality age standardized rates per 100,000 in the TBDHU are both below the global target in SDG Target 3.2 [3].



Source: Public Health Ontario All-Cause Mortality Snapshot [3]

In 2015, the neonatal and under-5 mortality rates in the TBDHU were not significantly different from the Ontario average [3].

COMMUNICABLE DISEASES (3.3)

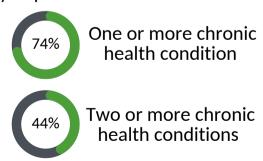
Annual rates of Hepatitis C are higher in the Thunder Bay District than the provincial average [4].

COMMUNITY SPOTLIGHT

Elevate NWO is a non-profit organization providing support for those living with, at-risk of, or affected by HIV, AIDS, and Hepatitis C in Thunder Bay and Northwestern Ontario. Elevate NWO provides a range services such as outreach. education, testing, treatment, referrals and needle exchange, to empower and improve lives. Learn more at elevatenwo.org

NON-COMMUNICABLE DISEASES (3.4)

Indigenous adults in Thunder Bay reported:



The prevalence of diabetes and pre-diabetes was 2x higher compared to the general Ontario population [5].

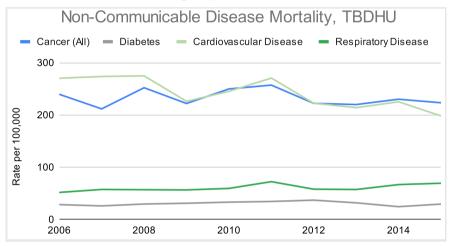
Goal 3: Good Health and Well-being

Ensure healthy lives and promote well-being for all at all ages.



NON-COMMUNICABLE DISEASES (CONT.)(3.4)

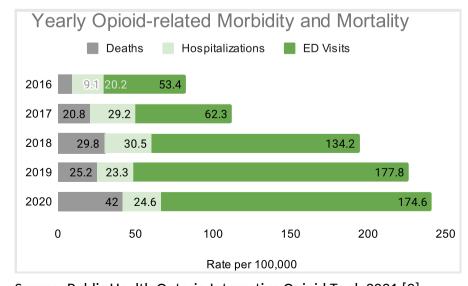
Changes in age standardized rates of mortality from non-communicable diseases are shown in the graph below.



Source: Public Health Ontario Chronic Disease Mortality and Cancer Mortality Snapshots [6-7]

SUBSTANCE USE (3.5)

54.4% of persons 19 and over exceeded low-risk alcohol drinking guidelines in 2015/16 [8]. Opioid-related deaths, hospitalizations, and emergency department visits are on the rise [9]. The Thunder Bay Drug Strategy collaborates to reduce substance related harms.



Source: Public Health Ontario Interactive Opioid Tool, 2021 [9]

ROAD TRAFFIC ACCIDENTS (3.6)

The rate of fatal motor vehicle collisions remained consistently above the Provincial average from 2009 - 2015 [10].

REPRODUCTIVE HEALTHCARE (3.7)

Indigenous, public, and private organizations provide sexual and reproductive healthcare services in the Thunder Bay region. These include:

- Anishnawbe Mushkiki
- TBDHU Sexual Health Clinic
- Community Midwives
 Thunder Bay
- Dilico Anishinabek Family
 Care
- Thunder Bay Regional Health Sciences Centre
- Maternity Care
 Midwives Thunder Bay













Goal 3: Good Health and Well-being

Ensure healthy lives and promote well-being for all at all ages.



HEALTH SERVICES (3.8)

For Indigenous adults:



reported being treated unfairly because of their Indigenous identity



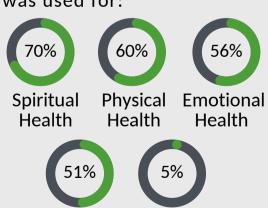
reported experiences of racism that prevented, stopped or delayed them from returning to health care services



and 1 in 4 had unmet health needs in the past 12 months [11]

INDIGENOUS SPOTLIGHT

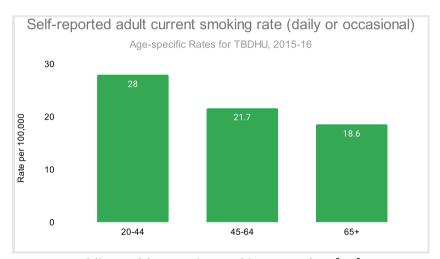
40% of Indigenous adults in Thunder Bay used traditional medicines and practices to maintain health and wellbeing [12]. Of this 40%, it was used for:



Mental Specific Health Conditions

TOBACCO (3.A)

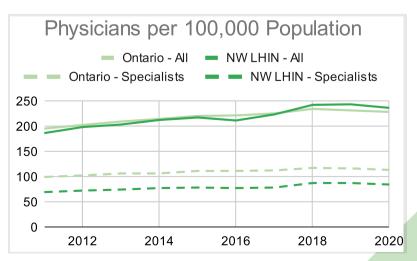
The self-reported adult daily smoking rate for 2015/16 was 17.3%, above the Provincial average of 13% [13].



Source: Public Health Ontario Smoking Snapshot [13]

HEALTH WORKFORCE (3.C)

Prior to the switch to Ontario Health Teams, the City of Thunder Bay was part of the Northwest Local Health Integration Network (LHIN) which has a similar rate of total physicians to the Ontario average, but is lagging behind in specialists [14].



Source: Canadian Institute for Health Information [14]

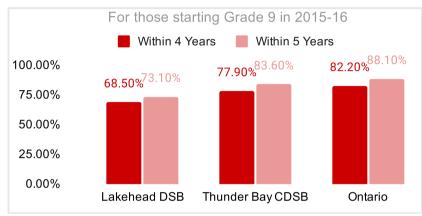
Goal 4: Quality Education

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



EDUCATIONAL COMPLETION (4.1)

The Lakehead District School Board (LDSB) and Thunder Bay Catholic District School Board (CDSB) have high school graduation rates below the Ontario average [1].

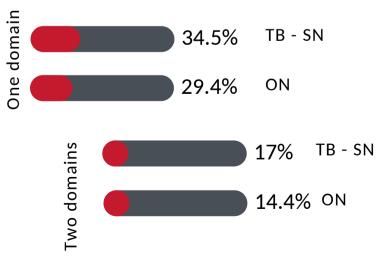


Down 5.6% from 2006, 19.8% of residents in the Thunder Bay CMA aged 15+ did not have a certificate, degree or diploma in 2016 [2-3]. This jumps to 38.8% for those identifying as a Registered or Treaty Indian [3].

Source: ON Ministry of Education [1]

EARLY CHILDHOOD DEVELOPMENT (4.2)

Using the Early Childhood Development Instrument, the % of vulnerable children (scoring below the 10th percentile cut-off) in the Thunder Bay - Superior North Region (TBSN) vs Ontario (ON) in 2014/15 [4]:



EDUCATIONAL DISPARITIES (4.5)

Indigenous: 9.54% of those with Registered or Treaty Indian status have a university certificate, diploma or degree at the bachelor level or above, compared to 23.3% without this status [3].

The rate of learning disabilities for Indigenous adults in the regionr Bay is **4xs higher** than the general Canadian rate [5].

Financial: 54% of domestic undergraduate students at LU received financial aid in the 2019/20 school year [6].

Gender: 21.5% of females in the Thunder Bay CMA have a university certificate, diploma or degree at the bachelor level or above, compared to 17.4% of males [7].

Goal 4: Quality Education

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



Frontière

LITERACY AND NUMERACY (4.6)

Percentage of fully participated students who were successful on the OSSLT (Lakehead DSB):







2015-2017

2016-2018

2017-2019

Source: Education Quality and Accountability Office [8]

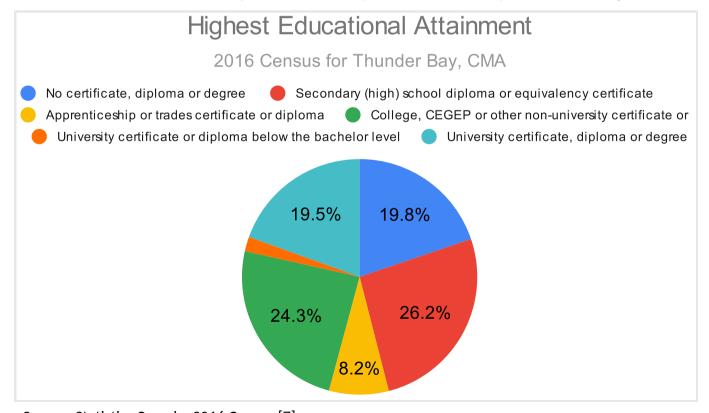
COMMUNITY SPOTLIGHT

Frontier College runs literacy programs for children, youth and adults. The Thunder Bay office also offers the Indigenous Summer Reading Camp and the Community Literacy Catalyst Program, which support Indigenous learners from First Nations.

Learn more at frontiercollege.ca/Programs/By-location/Ontario/Thunder-Bay

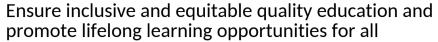
POST-SECONDARY EDUCATION (4.3)

54% of residents have a postsecondary certificate, diploma, or degree [7].



Source: Statistics Canada. 2016 Census [7]

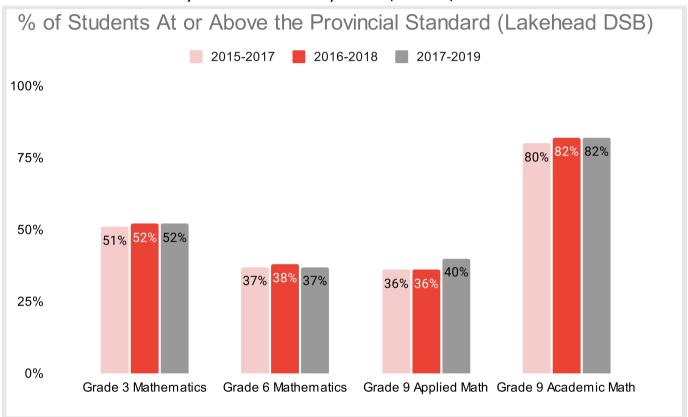
Goal 4: Quality Education





LITERACY AND NUMERACY (4.6)

The Education Quality and Accountability Office (EQAO) administers reading, writing and mathematics assessments for students in Grade 3, 6, and 9, and the Ontario Secondary School Literacy Test (OSSLT).



Source: Education Quality and Accountability Office [8]

Students in the Thunder Bay Catholic District School Board and Le Conseil Scholaire de District Catholique des Aurores Boréales generally performed slightly better than the Lakehead DSB. Results for all school boards can be found at www.eqao.com/the-assessments/find-my-school/

CHALLENGES AND NEXT STEPS

Increasing access to postsecondary education, providing culturally-relevant curriculums and learning environments, and boosting overall support for Indigenous education is important for closing the gap between Indigenous and non-Indigenous learners. Additionally, while recognizing the controversies of standardized testing, improving mathematics abilities so that more students can reach Provincial standards is another focus area for improving education outcomes in Thunder Bay.

Goal 5: Gender Equality

Achieve gender equality and empower all women and girls



NON-DISCRIMINATION (5.1)

32% of Indigenous adults in Thunder Bay reported experiencing discrimination because of their gender [1].

COMMUNITY SPOTLIGHT

Since 1978, Beendigen has been providing support for Indigenous women and their children experiencing violence since 1978. Through culturally appropriate programs and services including grief counselling. pre postand natal programs,

drumming, and sacred circle, they aim to facilitate the cycle of healing.

VIOLENCE AGAINST WOMEN (5.2)

The following presents the number of family violence (domestic and family disputes) calls to the Thunder Bay Police Service [2]:

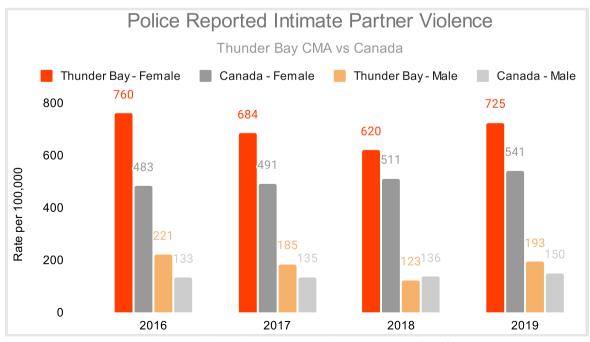
3,391 in 2018

3,469 in 2019

3,500 in 2020

Rates of police-reported intimate partner violence were substantially higher for female victims vs males in Thunder Bay, as shown in the following graph [3-6].

From 2004 to 2015, domestic violence incidents more than doubled in Thunder Bay, which is of major concern since domestic violence incidents are often underreported [7].



Source: Statistics Canada: Family violence in Canada 2016-2019 [3-6]

Goal 5: Gender Equality

Achieve gender equality and empower all women and girls



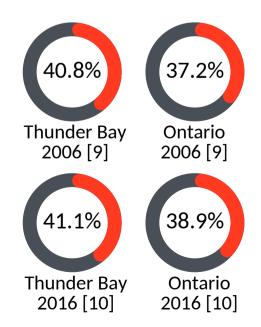
PARTICIPATION AND LEADERSHIP (5.5)

Since 2014 3 out of 12 (25%) councilors on the Thunder Bay City Council have been women [8]. This increased from 2010 when only 2 of 12 (16.67%) were women [8].



City Councillors are women

The proportion of women in management occupations in the Thunder Bay CMA labour force has not changed much since 2006 and was slightly above the Ontario average in 2006 and 2016 [9-10].



COMMUNITY SUPPORT FOR SDG 5

These are some of the many organizations doing work on gender equity in the region.





















CHALLENGES AND NEXT STEPS

The number of missing & murdered Indigenous women and girls (MMIWG) is an ongoing crisis. While exact numbers are difficult to determine, the Sovereign Bodies Institute counts 1,724 confirmed MMIWG cases in Canada dating back to 1900s [11], and CBC's database includes details on 307 cases, with 21 in Northwestern Ontario [12]. The National Missing and Inquiry into Murdered Indigenous Women and Girls called this genocide crisis race-based Indigenous Peoples... which especially targets women, girls, and 2SLGBTQQIA people... empowered by colonial structures" [13]. In order to advance equality, there must concerted effort to address the root causes of this ongoing crisis.

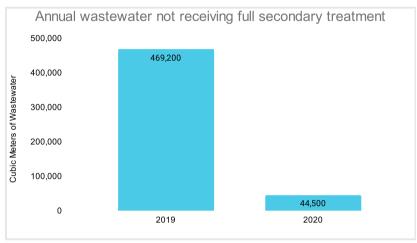
Goal 6: Clean Water and Sanitation

Ensure availability and sustainable management of water and sanitation for all.



WATER TREATMENT (6.3)

At the Atlantic Avenue Water Pollution Control Plant, by-pass events sometimes occur where the water receives primary treatment but partially or completely by-passes secondary treatment.



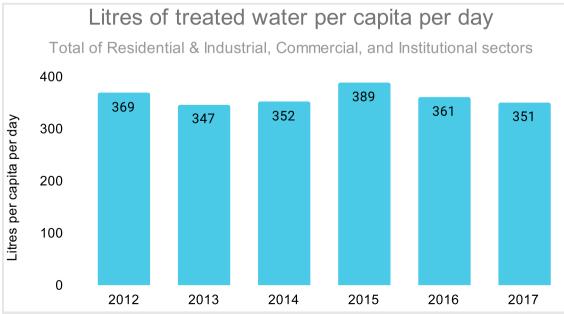
Source: Wastewater treatment annual reports [1-2]

WATER USE (6.4)

The following graph details the amount of water used per capita per day from 2012-2017 [3].*

WATER MANAGEMENT COOPERATION (6.5)

Maintaining protecting and water resources and systems is a multi-component task - as such, there are multiple groups collaborating this on Thunder Bay. As outlined in the EarthCare Sustainability Plan 2014-2020. multiple partnerships with stakeholders that have been created [4]. Some of these partners include University, Lakehead Lakehead Region Conservation Authority, EcoSuperior, Confederation College [4]. plans There Citv and are water-related programs for issues such as the Thunder Bay Stormwater Management Plan, the Drainage Assistance Rebate Program, and the Adopt-A-Drain Program [4].



*Note: changes in litres per capita do not necessarily indicate domestic water use changes as industrial usage is included in the calculation.

Source: EarthCare Annual report 2017 [3]

Goal 6: Clean Water and Sanitation

Ensure availability and sustainable management of water and sanitation for all.



WATER-RELATED ECOSYSTEMS (6.6)

The Lakehead Region Conservation Authority (LRCA) jurisdiction is 2,718km² including approximately 200km of shoreline [5].

LRCA Watershed Report Cards rated surface water quality a "B" in 2013 but upgraded to an "A" in 2018 [5-6]. Ground water quality was graded an "A" in 2013 and deemed in "overall excellent condition" in 2018 [5-6].



Generally, there were low concentrations of nitrate, nitrite, and chloride in LRCA monitored wells and low concentrations of phosphorous and E. coli within the Lakehead Watershed measured over 2013-2017 [6].

COMMUNITY SPOTLIGHT

The City, in partnership with EcoSuperior, runs a Rain Garden Rebate Program which provides a rebate of up to \$500. Rain gardens improve residential drainage, protect urban waterways, and provide habitat for birds, butterflies, and beneficial insects.



In 2019, 19
new rain
gardens were
installed,
which is just 1
less than in
2015 [7-8].
This brings
the total to
120 rain
gardens [7].

The Lakehead University Rain Garden

CHALLENGES AND NEXT STEPS

sodium hydroxide, a 2020. corrosion control chemical, was phased out of being added to the City's drinking water. This poses a risk to residents who's water passes through lead pipes or fixtures. The City offers free lead tap testing, is increasing water quality awareness, giving free NSF/ANSI approved water filters for those living in lead-serviced residences. In the longer-term, the City continue these measures. addition to reducing the overall service connections lead performing routine flushes to reduce health risks to residents [9].

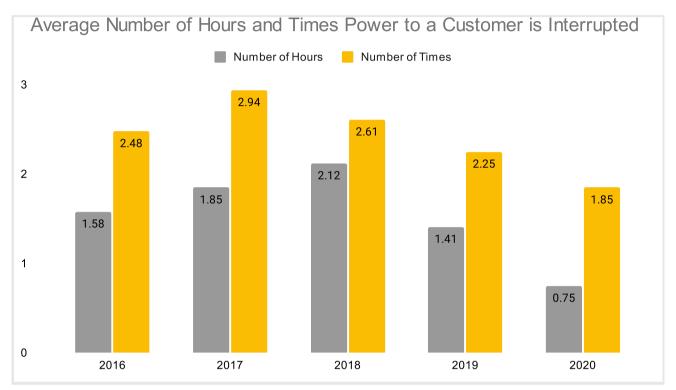
Goal 7: Affordable and Clean Energy

Ensure access to affordable, reliable, sustainable and modern energy for all



RELIABLE ENERGY SERVICES (7.1)

Synergy North provides all electricity services to the City of Thunder Bay. The following graph speaks to service reliability from 2016 - 2020 [1].

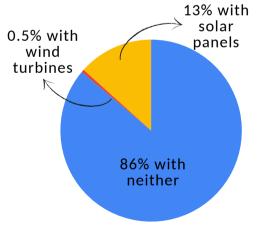


Source: Synergy North Score Card 2020 [1]

RENEWABLE ENERGY (7.2)

In the 2016 Thunder Bay Census Agricultural Region there were:

- farms reporting solar panels
- farm reporting wind turbines [2].



Synergy North plans to expand renewable energy sources in the City of Thunder Bay through the Sustainable Electric Energy Development (SEED) Initiative. Currently, Synergy North has two major renewable energy focuses:

- 1. Generating electricity from local landfill gas
- 2. Installing solar panels on City-owned buildings and properties [3].

Goal 7: Affordable and Clean Energy

Ensure access to affordable, reliable, sustainable and modern energy for all



ENERGY EFFICIENCY (7.3)

The Thunder Bay Net-Zero Strategy evaluates opportunities to improve energy efficiency and reduce GHG emissions across the community's various sectors [4]. The Strategy outlines current challenges and ways forward with targets and actions to achieve net-zero emissions by 2050, including through improved energy efficiency [4].

CLEAN ENERGY RESEARCH (7.A)

Approximately 1500 students per year at Lakehead University (LU) are enrolled in programs related to affordable and clean energy [5].

In 2020, 4 LU Research Chairs were conducting research related to SDG 7 [5].

Confederation College is also engaged with research and teaching related to this goal. The Biomass Learning and Research contains two 500kW biomass boilers. one 150kW research boiler and two smaller residential demonstration boilers [6]. These boilers create a living lab environment providing opportunities for hands-on education and research. Confederation College is uniquely set up to support remote communities in their movement to sustainable biomass boiler heating or electricity generation [6].

COMMUNITY SUPPORTS FOR SDG 7









COLLEGE

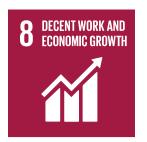


CHALLENGES & NEXT STEPS

Prioritizing initiatives in support of Net Zero Strategy will important for making the necessary and urgent shift towards cleaner and greener Increasing energy. charging stations. improving accessibility to zero emissions vehicles, supporting alternative energy resources for residents, and supporting divestment movements (such as Fossil Free Lakehead) are just a few of many ways to focus on conservation, energy improved efficiency, and widespread renewable energy availability.

Goal 8: Decent Work and Economic Growth

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.



ECONOMIC GROWTH (8.1)

In 2018, the Gross Domestic Product (GDP) of the Thunder Bay CMA at basic prices was \$6,338,000,000 compared to \$5,869,000,000 in 2014 [1].

SECTOR DIVERSITY (8.2)

The Thunder Bay Community Economic Development Commission highlights their goal to "work with partners to expand a highly productive and innovative economy ensuring it is diverse and globally effective." [2].



Forestry, mining and port activities are historically key sectors. The City has recently been diversifying - growing in sectors such as mining, aviation, health sciences, and advanced manufacturing [3].

COMMUNITY SPOTLIGHT

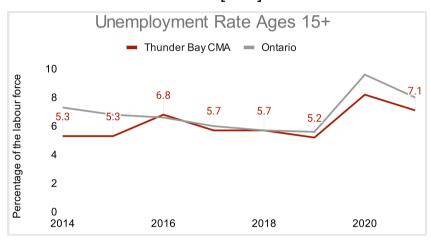
The Thunder Bay + District Centre Entrepreneur entrepreneurs successfully plan and launch their business via advisory services. grant programs, workshops, and other supports. Learn more at gotothunderbay.ca/entreprene urcentre. THUNDER BAY + DISTRICT

trepreneurcentre

IMAGINE. PLAN. EXECUTE.

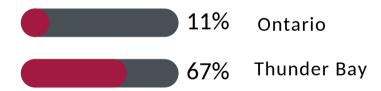
UNEMPLOYMENT (8.5)

Unemployment rates in the Thunder Bay CMA are similar to Ontario, with a spike in 2020 due to COVID-19 [4-5].



Source: Statistics Canada [4-5]

The Our Health Counts survey reports Indigenous adult unemployment being immensely higher than unemployed adults ages 15+ in Ontario [6].



CHALLENGES AND NEXT STEPS

The proportion of Thunder Bay workers over the age of 55 is quite high, such as in transit and ground passenger transportation at 61% of workers [7]. There are not enough young people to meet the demand of the current labour market [7].

Goal 9: Industry, Innovation and Infrastructure

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

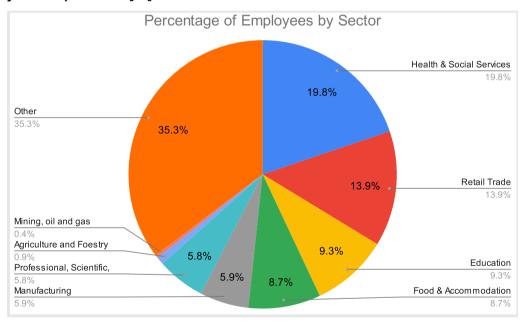


TRANSPORT INFRASTRUCTURE (9.1)

Traffic volume (vehicle kms traveled/lane kms on major roads - in millions) has seen a slight increase, going from 1,280 in 2013, to 1,327 in 2017 [1].

MANUFACTURING & MAJOR INDUSTRIES (9.2)

Manufacturing jobs make up 5.9% of jobs in Thunder Bay across 177 manufacturing businesses [2-3]. There has been a decrease in manufacturing jobs from 4,310 in 2006 to 2,900 in 2016, with predictions of 2,866 jobs by 2051 [2].



Source: Thunder Bay Employment Land Strategy 2020 [2]

FINANCIAL SERVICES (9.3)

There are various financial incentives and funding available to businesses at the local, provincial and national level. A few examples of programs for Thunder Bay include the Port Tax Increment-Based Grant, the Downtown Financial Assistance program, and the Airport Development Incentive [4].

SUSTAINABLE INFRASTRUCTURE (9.4)

The City's Asset Management Roadmap is looking at the sustainability of all City Infrastructure and Assets, by integrating climate change considerations for decision-making and strategic long-term investments. This supports the City's Net-Zero Strategy [5].

INNOVATION RESEARCH (9.5)

In 2020, five Lakehead University Research Chairs and 16 Research Centres were conducting research and work focused on SDG 9 [6].

ACCESS TO INTERNET (9.C)

In 2012, 82.3% of households in the Thunder Bay CMAhad access to the internet at home [7]. More area-specific broadband data on speed can be found **National** the on Broadband Internet **Availability** Service Map [8].

Goal 10: Reduced Inequalities

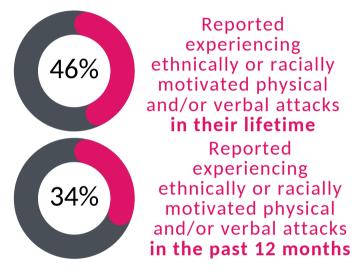
Reduce inequality within and among countries



DISCRIMINATION (10.3)

91% of Indigenous adults indicate that racism towards Indigenous Peoples is an issue in this city - 66% reporting experiencing racism [1].

Of Indigenous adults in Thunder Bay:



Source: Our Health Counts Thunder Bay. Discrimination Factsheet [1]

In 2019, 13% of residents said they experienced discrimination based on their race or colour, 8% based on their age, and 8% based on their sex. Additionally, 80% of residents agree that racism and discrimination is a serious issue in the city [2].

The 2017 Community Perspectives and Perceptions on Violence, Impacts and Prevention Opportunities report found that 44% of survey respondents had experienced racism and discrimination based on gender, sexual orientation, age and disability that made them feel unsafe [4].

Of the 29% who reported experiencing violence, 14.8% reported having a disability, 11.1% reported being 2SLGTBQIA+ and 9.6% reported being a minority. [4].



Source:
Community
Perspectives
and
Perceptions on
Violence,
Impacts and
Prevention
Opportunities
[4]

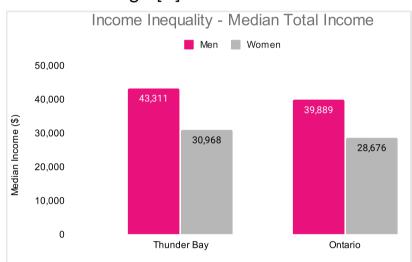
Goal 10: Reduced Inequalities

Reduce inequality within and among countries



INCOME INEQUALITY (10.2)

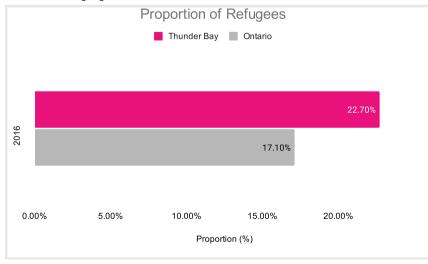
Women in Thunder Bay and Ontario earn between \$12,343 and \$11,213 less than men on average [5].



Source: Statistics Canada

PROPORTION OF REFUGEES & IMMIGRANTS (10.7)

The proportion of refugees in Thunder Bay is significantly higher than the proportion in Ontario [5].



Source: Statistics Canada

By comparison, only 0.6% of the population were recent immigrants (2016 census), which is low compared to Ontario's rate of 3.6%.

COMMUNITY SPOTLIGHT

Thunder Multicultural Bav Association has been providing newcomer and immigrant settlement services since 1972. TBMA works to encourage and facilitate newcomer settlement and to provide referrals to local community partners. A sampling of services include; provide Language Instruction for Newcomers to (LINC), Community Canada. Connections. newcomer **Employment** services. and Language Interpreter Services available in over 70 languages. Learn more at:

www.thunderbay.org/about/

Thunder Bay
Multicultural Association

The Fabric of our Community

CHALLENGES AND NEXT STEPS

Addressing anti-Indigenous racism and violence, as well as racism and violence against such other groups newcomers, immigrants, and refugees, is crucial reducing inequality the region. Addressing complex challenges requires a cross-sectoral. collaborative **Strategies** approach. and solutions must also developed in partnership with local leadership.

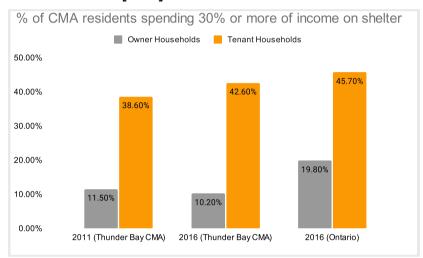
Goal 11: Sustainable Cities and Communities

Make cities and human settlements inclusive, safe, resilient and sustainable



HOUSING (11.1)

A much larger percentage of tenant households are spending 30% or more of their income on shelter costs than owner households [1-2].



Source: 2011 National Household Survey and 2016 Census [1-2].

COMMUNITY SPOTLIGHT

The Thunder Bay Indigenous Friendship Centre aims to strengthen the lives of Indigenous people by providing holistic supports, services, and advocacy with an approach rooted in culture, land-based teachings and traditional foods. They offer numerous services including Akwe:go, a program for urban Indigenous children and

the Anishnawbe Skills Development Program.

For more visit: https://tbifc.ca/



CULTURE AND HERITAGE (11.4)

Thunder Bay is home to 25 formally designated municipal heritage properties, 49 listed heritage properties, 1 Heritage Conservation District, and 8 museums [3]. The city also has a Heritage Advisory Committee.

TRANSPORT SYSTEMS (11.2)

In 2016, 20.9% of Thunder Bay CMA commuters used sustainable transportation to get to work [4]. This is an increase of ~11% from 2011 [5]. Of those that used more sustainable transportation:



Source: Statistics Canada 2016 Census Commuter Data [4]

Carpooled

There were 35.02 public transit trips per capita in 2017 and more than 60% of transit stops are accessible [6-7].

AIR QUALITY (11.6)

The annual mean concentration of fine particulate matter has not changed in the past 10 years and is below World Health Organization guidelines [8-9]. The average level of PM_{2.5} was 5.78μg/m³ from 2014-2018 [8].

Goal 11: Sustainable Cities and Communities

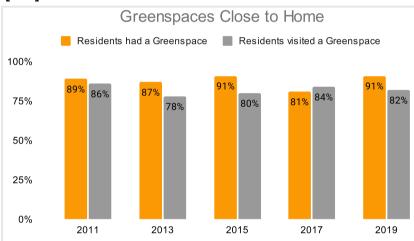
Make cities and human settlements inclusive, safe, resilient and sustainable



GREENSPACES (11.7)

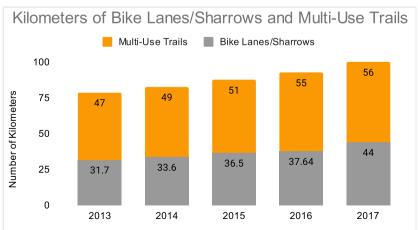
5.7% of the Municipality is parkland and open spaces and there are 129 parks [10-11].

The following graph shows the percentage of residents who visited or have a park or green space close to home in the Thunder Bay CMA [12].



Source: Statistics Canada. Table 38-10-0020-01 Parks and green spaces [12]

Over 50kms of paved multi-use trails and 40kms of bike lanes and sharrows are available to enjoy [6]. However, there are critiques of their safety and availability on major roads [13].



Source: EarthCare Annual Report 2017 [6]

SUSTAINABLE BUILDINGS (11.C)

The Thunder Bay Net-Zero Strategy highlights that residential and commercial buildings use 31% of the total energy used in Thunder Bay.

Retrofitting existing buildings and net-zero new construction to improve energy efficiency is very important [14].

CHALLENGES AND NEXT STEPS

Thunder Bay transit has multiple for areas improvement, including better service route speed and transfers. and more shelters [13]. There have also been multiple accounts of racist service from public transportation operators members towards of black, Indigenous, and other people of colour communities. These incidents are of particular frequency for Indigenous people who disproportionately make ridership [13]. Not only should public transit improved to support efficient travel for those who rely on it, but to support safe and welcoming travel for all.

Goal 12: Responsible Consumption and Production

Ensure sustainable consumption and production patterns.



SUPPORTING SUSTAINABLE CONSUMPTION AND PRODUCTION (12.1)

In 2014, the City of Thunder Bay adopted the Solid Waste Management Strategy, intending guide the city on more environmentally-friendly waste practices over the following 20 vears [1]. Additionally. the EarthCare Sustainability Plan for 2014-2020 includes a section on waste, with goals to progress towards zero-waste [2].

FOOD WASTE DIVERSION (12.3)

EcoSuperior supports food waste diversion by selling personal composters and hosting educational vermicomposting (VC) workshops [3].

In 2016 ---> 2017 there were:



266 ---> 243

personal composters sold



16 ---> 30

vermicomposting workshops



380 ---> 648

students engaged with the vermicomposting workshops

HAZARDOUS WASTE (12.4)

The Household Hazardous Waste (HHW) Depot properly processes hazardous waste.

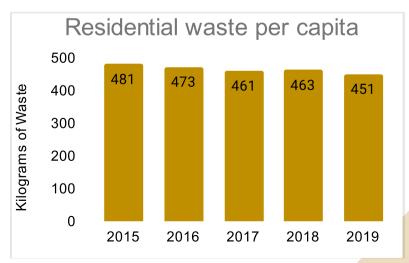


Source: EarthCare Annual Reports [4-6]

In 2017, 258 metric tonnes of electronic waste was diverted [4]. This is a drop from 2016 where 312 tonnes were diverted [4].

WASTE GENERATION (12.5)

In 2019, the City of Thunder Bay generated 48,624 tonnes of residential waste, equivalent to 451kg of waste per capita [7]. From 2013-2019, the residential waste diversion rate has increased by 8% and was 28% in 2019 [6].



Source: Resource Productivity and Recovery Authority [7]

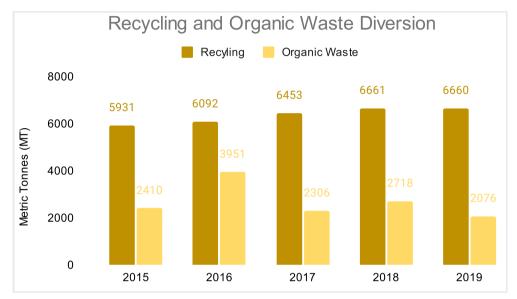
Goal 12: Responsible Consumption and Production

Ensure sustainable consumption and production patterns.



WASTE GENERATION (CONT.) (12.5)

Much of the municipality's waste diversion is due to recycling and organic (leaf and yard materials) waste diversion, as shown in the graph below.



In 2019, the City gave residents 419m³ of finished compost to enrich their soil [6].

Source: EarthCare Annual Reports [4-6] and Resource Productivity and Recovery Authority, multiple years [8]

PUBLIC EDUCATION (12.8)

EcoSuperior is a key player in community engagement and education related to waste. Below are some examples of waste-related workshops, presentations, programs and events that they offer [9].

- Home Composting sells subsidized backyard composters
- Cigarette Waste 'Your Butt Goes Here' ashtray for businesses program
- Recycling offers presentations to the community
- Litter Spring Up to Clean Up and Spring into Fall Clean Up campaigns
- Plastics Reduction Last Straw Thunder Bay Campaign

Learn more at ecosuperior.org/waste.

CHALLENGES & NEXT STEPS

One of the recommendations for reducing waste in the EarthCare Sustainability Plan is having the City investigate and implement a curbside organic collection [2]. This program would incredibly valuable for not only waste reduction but greenhouse gas reductions, as organic material sent to landfill produces the potent greenhouse gas, methane.

Additionally, while recycling is important, more upstream "R's" such as refusing and repurposing are preferred. Moving towards a more circular economy will be key for truly reducing the amount of waste produced.

Goal 13: Climate Action

Take urgent action to combat climate change and its impacts

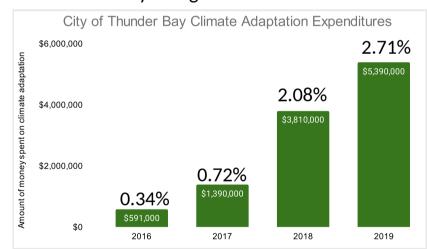


HAZARDS AND DISASTERS (13.1)

In 2019, floods and fires resulted in 1738 people evacuated to Thunder Bay, up from 279 in 2018 [1]. Additionally, as part of the COVID-19 response, the City developed a Severe Weather Response Plan to coordinate responses and mitigate direct impacts of cold and heat exposure on those most vulnerable [2].

CLIMATE CHANGE INTEGRATION (13.2)

City expenditures towards climate adaptation are minimally increasing - the increase in 2018 mainly reflects adding the full stormwater budget to the calculation [1]. Climate adaptation is a small portion of the entire City budget.



Source: City of Thunder Bay Agenda Material [1]

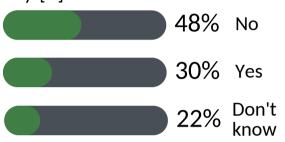
The Climate Adaptation Strategy and the Net-Zero Strategy are both City strategies dedicated to climate change measures [3-4]. A growing percentage of City reports include climate adaptation measures:



Source: City of Thunder Bay Agenda Material [1]

EDUCATION & AWARENESS (13.3)

A majority of Thunder Bay residents are not aware of examples of climate change action being taken in Thunder Bay [5].



Source: Perspectives on Climate Change in Thunder Bay [5]

However, in 2019, 2626 people were engaged in climate adaptation activities, up from 1723 in 2018, 1340 in 2017 and 586 in 2016 [1].

COMMUNITY SPOTLIGHT

The Thunder Bay Climate Connection Change was created EarthCare. by partnership with Lakehead University. The online platform provides a variety of educational resources climate change, how to take action at the local level and and communication beyond, toolkits to continue conversation. There is a photo gallery where message members community can share stories to inspire climate engagement in the region [6].

Goal 14: Life Below Water

Conserve and sustainably use the oceans, seas and marine resources for sustainable development



ABOUT LAKE SUPERIOR

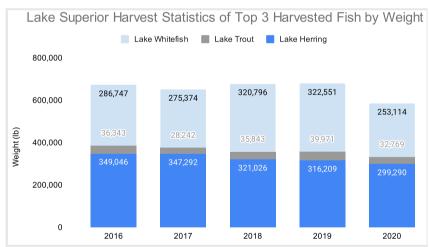
Called gichigamiing - $P\Gamma b\Gamma$ - or "The Big Lake" by the Anishinaabe, Lake Superior is the largest freshwater Lake in the world by surface area [1-2]. It is the largest, deepest, coldest, and in the best ecological condition of the five Great Lakes [1], [3].

MARINE POLLUTION (14.1)

The status of phytoplankton in Lake Superior is good/appropriate, with an unchanging trend from 1996-2016 [4].

FISH HARVESTING (14.4)

The following graph displays Lake Superior harvest statistics by weight (lbs) for Royalty Paying Fisheries [5].



Source: Ontario Commercial Fisheries 2020 [5]

COMMUNITY SPOTLIGHT (14.A)

The Lake Superior Living Labs Network aims to support community engagement, research, and partnership for those finding solutions to socio-ecological related-challenges in the Lake Superior watershed at the local and regional scales.

Lake Superior Living Labs Network

CONSERVATION AND ECOSYSTEM MANAGEMENT (14.2 AND 14.5)

Lake Superior Lakewide Action and Management Plan 2015-2019 acts as "a binational action plan for restoring and protecting the ecosystem' [1]. It includes current conditions. threats, priorities for future work, and actions to achieve set objectives [1]. For areas with high levels environmental harm, the plan identifies designated Areas of Concern (AOC) with associated Clean Up or Remedial Action Plans. Thunder Bay has been a designated AOC since 1987 due to degraded water quality [6].

CHALLENGES & NEXT STEPS

While the Lake Superior ecosystem (fisheries. ecosystem habitats and concentrations contaminants), are overall in good condition, there are current and future threats to address such as invasive species, climate change, fish consumption advisories, concerning substances such as microplastics, and others Strengthening continuing the many Lake Superior partnerships will be key for addressing these future challenges.

Goal 15: Life on Land

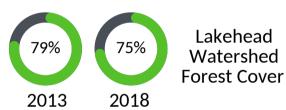
Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss



ECOSYSTEM CONSERVATION (15.1)

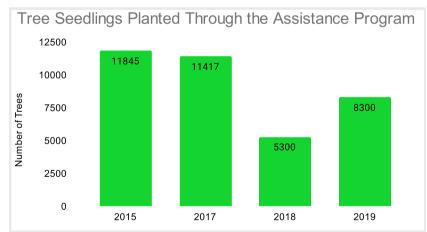
The Lakehead Region Conservation Authority owns 2500 hectares of land. Half of this land is for 8 Conservation Areas which provide great ecological, recreational, and educational value [1].

Data from both the 2013 and 2018 LRCA Watershed Report Cards grade the Lakehead Watershed Forest "A", as it is in overall excellent condition [2-3].



FOREST MANAGEMENT (15.2)

The LRCA owns and operates 3 Forest Management Properties [4]. The LRCA also offers subsidized tree seedlings through the Private Landowners Tree Seedling Assistance Program [5].



Source: LRCA Annual Reports [5]

BIODIVERSITY (15.5)

A Biodiversity Conservation Strategy for Lake Superior was developed in 2015 [6].

INVASIVE SPECIES (15.8)

Multiple invasive species threaten aquatic and terrestrial ecosystems in Thunder Bay and area, such as the Round Goby. Himalavan Sea Lamprey, Garlic Mustard. Balsam. Knotweed. Japanese Emerald Ash Borer [7]. The Lake Superior Aquatic Invasive Species Complete Prevention Plan (2014) was developed to address this [8]. Additionally, the threat of the Emerald Ash Borer was responded to with a targeted Management Strategy by the City, since over 25% of Thunder Bay's municipallyowned trees were at risk [9].

INTEGRATION OF VALUES (15.9)

Integration of ecosystem values into planning is best exemplified in the EarthCare Sustainability Plan 2014-2020, where it includes community greening and the goal to "protect, maintain and improve the ecosystems... of Thunder Bay" [10].

FINANCIAL RESOURCES (15.A)

City budget for urban forest management was \$930,000 in 2019, 2020 and 2021 for the tree planting program, urban forest stewardship, and the Emerald Ash Borer Response [11]. This is an increase from 2018 at \$855,000 [11].

Goal 16: Peace, Justice and Strong Institutions

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels



ALL FORMS OF VIOLENCE (16.1)

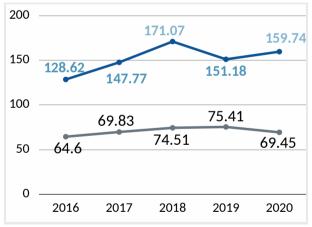
In 2020, the crime rate for all violations (incidents per 100,000 people) in the Thunder Bay CMA is higher than both Ontario and Canada [1].

6,432.63 Thunder Bay

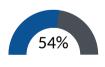
4,044.17 Ontario

5,856.04 Canada

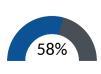
The following graph displays the crime severity index for violent crime in Thunder Bay (top line) and Ontario (bottom line) from 2016-2020 [2].



Source: Statistics Canada [2]



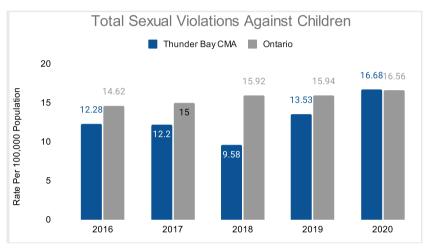
agree they feel Thunder Bay is a relatively safe city (down 12% from 2017) [3].



feel safe walking alone in their neighbourhood after dark (down 7% from 2017) [3].

VIOLENCE AGAINST CHILDREN (16.2)

The following graph displays the rate of sexual violations against children in the Thunder Bay CMA from 2016-2020. Rates per 100,000 in Thunder Bay are comparable to those in Ontario [1].



Source: Statistics Canada. Table 35-10-0177-01 [1]

Human trafficking is a serious problem in Thunder Bay, with the 2020 rate per 100,000 population being approximately 11xs greater than Ontario's rate and 17xs greater than Canada's [1].

Rate of Human Trafficking per 100,000 in 2020

15.88 Thunder Bay

1.35 Ontario

0.9 Canada

Source: Statistics Canada Table: 35-10-0177-01 [1]

Thunder Bay is one of 6 known hubs for human trafficking in Ontario and the average age of recruitment is 13 years [4].

Goal 16: Peace, Justice and Strong Institutions

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

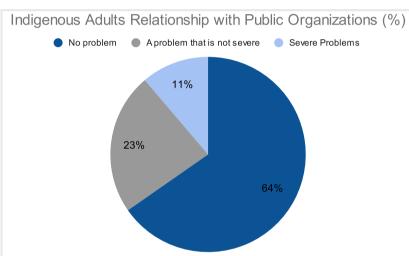


INSTITUTION SATISFACTION (16.6) 🗱

4 in 5 residents are overall somewhat or very satisfied with city services, but this has been on a downward trend from 89% in 2013 [3]. Satisfaction with police services has also decreased and sat at 84% in 2019, compared to 90% in 2017 and 2015 [3].



Satisfied with City Services



Source: Our Health Counts Criminal Justice Factsheet [5]

29% of respondents from the *Our Health Counts* survey believe legal services for Indigenous people in Thunder Bay are inadequate [5].

PARTICIPATION (16.7)

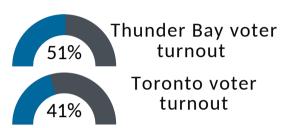
Regarding topics of interest to them, one-third of residents do not feel that they have had opportunities to participate and engage [3].

Without engagement opportunities

This percentage jumps to 65% for those who have experienced racial discrimination, demonstrating an area lacking inclusive and representative engagement [3].

PARTICIPATION (CONT.) (16.7)

The 2018 municipal election voter turn out in the City of Thunder Bay was higher than some other municipalities such as Toronto, Ottawa, Sudbury and Kenora [6].



EXAMPLES OF COMMUNITY SUPPORTS FOR SDG 16

- Community Safety & Well-Being Thunder Bay
- COVID-19 Release from Custody Task Force
- Thunder Bay District Coalition to End Human Trafficking
- Northwest Community Mobilization Network
- Thunder Bay Youth Justice Committee Program

COMMUNITY SPOTLIGHT

The Community Safety and Well-being Plan (2021-2025) is a strong component of working towards addressing identified priorities and risks to safety and well-being in Thunder Bay. The plan is collaborative. holistic, takes an upstream approach. also reaffirms the commitment to Truth. Reconciliation, and Anti-Racism [7].

Goal 17: Partnerships for the Goals

Strengthen the means of implementation and revitalize the global partnership for sustainable development



PARTNERSHIPS FOR THE VLR

Partnerships are incredibly valuable knowledge, expertise, for resource sharing. Completion of this VLR would not have been possible without the collaboration between multiple individuals and community the Thunder groups in following community. The organizations were key contributors to the VIR's success:









LOCAL SDG COMMITTMENTS

Lakehead University declared the 2021/2022 school year the Year of Climate Action (YOCA). This entails participation promoting staff, and the students, faculty, community in events, research, and actions related to climate action [1]. YOCA actions are most related to SDG 13: Climate Action. but this and other work at Lakehead University also incorporates SDGs. The Times Higher Education Rankings, which Impact universities against each SDG, ranked Lakehead 99th in the world overall in 2021 [2].

Top 10:



Top 30:





Top 20:



Top 40:





LOCAL SDG COMMITTMENTS (CONT.)

Confederation College has also committed to the SDGs by signing the Sustainable Development Goals Accord. The signing of the Accord supports incorporating sustainability into their strategic planning and hopes to inspire the community to take action on many of the issues the SDGs addresses [3].

The City of Thunder Bay is also working to incorporate the SDGs into their work by committing to tracking various indicators and linking them to the SDGs within the Population Level Indicator Report [4].

COMMUNITY COLLABORATIONS

Complex social, health, economic and environmental challenges require a collaborative approach that brings together expertise from diverse sectors. Several planning tables in Thunder Bay seek to do this, including but not limited to:

- Community Safety & Well-Being Thunder Bay
- Poverty Reduction Strategy
- Northwest Community Mobilization Network
- Diversity Thunder Bay
- Housing & Homelessness Coalition
- Thunder Bay Drug Strategy
- Vulnerable Populations COVID-19
 Planning
 Table
- Healthy Kids Program
- Thunder Bay & Area Coordinating Committee to End Woman Abuse

REFLECTIONS

LIMITATIONS

The SDGs and corresponding targets cover a broad range of social and ecological issues related sustainability. This is beneficial for comprehensiveness and integrity of the Goals, but can present challenges in terms of measurement, particularly at the local level. Throughout the VLR process. the team encountered difficulties finding quality data for certain indicators, disaggregated data by individual characteristics (such as identity and disability status), and specific that was geography of the City of Thunder Bay. Due to these difficulties, the VLR has inconsistent geographic some adapted parameters. targets/indicators, and lacking details of respondent characteristics. Future VLRs will focus on improvements to data consistency across indicator sets and filling data gaps.

We encourage local community groups and the City of Thunder Bay to support data quality through ongoing partnerships research which can focus developing on and implementing methodologies for consistent local - level data gathering and analysis. Such efforts can support sustained and integrated knowledge sharing as well as provide stronger and more comprehensive data to better inform decision making.

THE EVOLVING PROCESS

As partnerships for the Goals and data availability evolve, so too will future VLRs to continually meet the need for ongoing measurement on towards sustainability. progress Future VLRS might included more indepth analysis of local, regional, and federal level policy implications, provide further analysis on intersection of the goals, and/or set new targets and indicators for the region. Regardless of what the future future holds. VI Rs should supported with collaboration and equity as the core values of the process. With future priorities focused on deepening partnerships, especially with Indigenous partners. developing and stronger a understanding of the most important aspects of sustainable and healthy living in Thunder Bay. we confident the VLR will be able to evolve to capture challenges successes to come.

GOING FORWARD

With the valuable, consolidated information provided in this VLR, our hope is that the community and municipal support for the SDGs will grow. There are so many positive ways that Thunder Bay is improving and we look forward to celebrating continued innovative and creative action, engagement, and leadership surrounding the SDGs in our region.

RECOMMENDATIONS

Based on the process and results of this VLR, we recommend:

- 1. The City of Thunder Bay further incorporate the SDGs into their work, particularly in the upcoming Strategic Plan
- 2. Creation of a data consortium of individuals involved with sustainabilityrelated data-tracking to keep track of indicators over time and strengthen the VLR in future years
- 3. Increase in the collection of data that incorporates considerations for various dimensions of Equity, Diversity, and Inclusion (i.e. with regards to age, sex, race, disability status) and data which allows for intersectional analysis at the local level
- 4. Further incorporation of principles and actions towards decolonization and reconciliation in future VLRs
- 5. More funding and resource support for agencies, organizations, and associations particularly for non profit organizations that are working on sustainability-related initiatives in the region
- 6. Local, regional, provincial and federal governments should provide additional and more cohesive support for sustainability-related datatracking, voluntary local review processes, and local-level actions aimed at work towards the Sustainable Development Goals

Below is a list of organizations highlighted in this report, as well as where you can find more information about each. This list is not exhaustive of all organizations doing SDG-related work in Thunder Bay.

LOGO	ORGANIZATION NAME	WEBSITE AND/OR MAIN PHONE #
United Way Thunder Bay	United Way Thunder Bay	www.uwaytbay.ca
Thunder Bay + Area Food Strategy Connecting Food and Community	Thunder Bay and Area Food Strategy	www.tbfoodstrategy.ca
roots to harvest	Roots to Harvest	www.rootstoharvest.org 807-285-0189
Thunder Bay District Health Unit	Thunder Bay District Health Unit	www.tbdhu.com 807-625-5900
rfda REGIONAL FOOD DISTRIBUTION ASSOCIATION	Regional Food Distribution Association	www.foodbanksnorthwest.ca 807-622-7440
	Indigenous Food Circle	www.facebook.com/indigenousfoodcircle
SS TEMS	Sustainable Food Systems Lab	www.foodsystems.lakeheadu.ca 807-346-7954
BEEKEEPERS' ASSOCIATION	Thunder Bay Beekeepers Association	www.thunderbaybeekeepersassociation .ca
elevate NWO	Elevate NWO	www.elevatenwo.org 807-345-1516
ANISHNAVEE MUSHKIKI General Teach as suitants and appearance heart class and a	Anishnawbe Mushkiki	www.mushkiki.com 807-623-0383
community midwives THUNDER BAY	Community Midwives Thunder Bay	www.communitymidwives.net 807-622-2229

LOGO	ORGANIZATION NAME	WEBSITE AND/OR MAIN PHONE #
Thunder Bay Regional Health Sciences Centre	Thunder Bay Regional Health Sciences Centre	www.tbrhsc.net 807-684-6000
DILICO Anishinabek Family Care	Dilico Anishinabek Family Care	www.dilico.com 807-623-8511
MCM	Maternity Care Midwives	www.mcmidwives.ca 807-344-2229
Collège Frontière Frontier Collège	Frontier College	www.frontiercollege.ca/Programs/By- Location/Ontario/Thunder-Bay 807-285-3343
	Beendigen	www.beendigen.com 807-622-1121
Naadmaagewin Indigenous Domestic Violence Committee	Naadmaagewin Indigenous Domestic Violence Committee	www.idvc.ca
	Ontario Native Women's Association	www.onwa.ca 1-800-667-0816
YOUTH Violence Prevention Project in Thunder Bay and District	Youth Violence Prevention Project	www.tbdhu.com/YVPP
PRIDE	Thunder Pride	www.thunderpride.ca
Centr'ElJes	Centr'Elles	www.centrelles.com 1-888-415-4156
Rainbow Collective of Thunder Bay	Rainbow Collective of Thunder Bay	www.rainbowcollectiveofthunderbay.com
Sexual Abuse Centre	Sexual Abuse Centre Thunder Bay	www.tbsasa.org 807-345-0894

LOGO	ORGANIZATION NAME	WEBSITE AND/OR MAIN PHONE #
Thunder Bay and District Coordinating Committee to End Woman Abuse	Thunder Bay and District Coordinating Committee to End Woman Abuse	www.endwomanabuse.com 807-345-0450
NORTHWESTERN ONTARIO WOMEN'S CENTRE DIFFERENCE CONTROL OF THE PROCESS A DRIFT OF THE REISS	Northwestern Ontario Women's Centre	www.nwowomenscentre.org 807-345-7802
Lakehead	Lakehead University	www.lakeheadu.ca 807-343-8110
SYNERGY NORTH THE POWER OF THE NORTH	Synergy North	www.synergynorth.ca 807-343-1111
Confederation	Confederation College	www.confederationcollege.ca 807-475-6110
ecosuperior	EcoSuperior	www.ecosuperior.org 807-624-2140
earth care	EarthCare Thunder Bay	www.thunderbay.ca/en/earthcare.aspx 807-684-3217
ΗΔΤCΗ	Hatch	www.hatch.com 1-807-623-3449
THUNDER BAY + DISTRICT TREPRENEURCENTRE IMAGINE. PLAN. EXECUTE.	Thunder Bay + District Entrepreneur Centre	www.gotothunderbay.ca/entrepreneurce ntre
Thunder Bay Light Multicultural Association The Fabric of our Community	Thunder Bay Multicultural Association	www.thunderbay.org 807-345-0551
AMENDSHIP CENTRE	Thunder Bay Indigenous Friendship Centre	www.tbifc.ca 807-345-5840
LSLLN Lake Superior Living Labs Network	Lake Superior Living Labs Network	www.livinglabs.lakeheadu.ca

Additional organizations highlighted in the report that were not included with a logo:

a logo:	
ORGANIZATION NAME	WEBSITE AND/OR MAIN PHONE #
Community Safety & Well-Being Thunder Bay	www.thunderbay.ca/en/city-services/crime- prevention.aspx?_mid_=22297 807-625-2554
COVID-19 Release from Custody Task Force	www.kmb.camh.ca/eenet/resources/covid -19-release-custody-task-force
Thunder Bay District Coalition to End Human Trafficking	humantraffickingthunderbay.ca
Northwest Community Mobilization Network	thunderbay.cmha.ca/our-services/the-northwest-community-mobilization-network/
Thunder Bay Youth Justice Committee Program	tbifc.ca/program/youth-justice- committee-program/
Poverty Reduction Strategy	www.lspc.ca/poverty-reduction-strategy/ 807-624-1720
Diversity Thunder Bay	www.diversitythunderbay.ca 807-345-6209
Housing & Homelessness Coalition	www.lspc.ca/poverty-reduction-strategy/ 807-624-1720
Thunder Bay Drug Strategy	www.thunderbay.ca/en/city-hall/thunder- bay-drug-strategy.aspx 807-625-2942
Vulnerable Populations Planning Table	www.thunderbay.ca/Modules/News/index.as px?newsId=ce460a31-f578-4e1a-95cc-c7729e121e08
Healthy Kids Program	www.facebook.com/healthykidstbay/

References: Thunder Bay in Focus

- 1. Statistics Canada. Census profile, 2016 Census, Thunder Bay, City [Census subdivision], Ontario [Internet]. Ottawa: Statistics Canada; 2017 [cited 2022 Feb 8]. Catalogue no. 98-316-X2016001. Available from https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E
- 2. City of Thunder Bay. Did you know [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Feb 8]. Available from: https://www.visitthunderbay.com/en/about-us/did-you-know.aspx
- 3. Anishnawbe Mushkiki. Our health counts Thunder Bay Adult culture and identity factsheet. [Internet]. Thunder Bay: Well Living House; 2020 [cited 2022 Feb 8]. 4 p. Available from: http://www.welllivinghouse.com/wp-content/uploads/2020/11/Final_OHC-TB-Factsheet-Culture-Identity.pdf
- 4. Ipsos. Citizen satisfaction survey 2019 [Internet]. Thunder Bay: City of Thunder Bay; 2021 [cited 2022 Feb 22]. 78 p. Available from: https://getinvolvedthunderbay.ca/8742/widgets/33783/documents/16486

- 1. Statistics Canada. Census profile, 2016 Census, Thunder Bay [Census metropolitan area], Ontario and Ontario [Province] (table) [Internet]. Ottawa: Statistics Canada; 2017 [cited 2022 Jan 25]. Catalogue no. 98-316-X2016001. Available from https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E
- 2. Statistics Canada. NHS focus on geography series Thunder Bay CMA [Internet]. Ottawa: Statistics Canada; 2013 [updated 2020 Mar; cited 2022 Jan 25]. Available from: https://www12-2021.statcan.gc.ca/nhs-enm/2011/as-sa/fogs-spg/Pages/FOG.cfm? lang=E&level=3&GeoCode=595
- 3. Statistics Canada, Data tables, 2016 Census, Aboriginal identity (9), individual low-income status (6), low-income indicators (4), registered or treaty Indian status (3), age (6) and sex (3) for the population in private households of Canada, Provinces and Territories, census metropolitan areas and census agglomerations, 2016 Census 25% sample data [Internet]. Ottawa: Statistics Canada; 2017 [updated 2019 Jun 17; cited 2022 Jan 25]. Catalogue no. 98-400-X2016173
- 4. Anishnawbe Mushkiki. Our health counts Thunder Bay demographics factsheet. [Internet]. Thunder Bay: Well Living House; 2020 [cited 2022 Jan 25]. 6 p. Available from: http://www.welllivinghouse.com/wp-content/uploads/2020/11/Final_OHC-TB-Factsheet-Demographics.pdf
- 5. District of Thunder Bay point-in-time count 2018 of people experiencing homelessness [Internet]. Thunder Bay: Lakehead Social Planning Council; 2019 [cited 2022 Jan 25]. 46 p. Available from: https://www.lspc.ca/wp-content/uploads/2018-Point-In-Time-Count-.pdf
- 6. Strobel S, Burcul I, Hong Dai J, Ma Z, Jamani S, Hossain R. Characterizing people experiencing homelessness and trends in homelessness using population-level emergency department visit data in Ontario, Canada [Internet]. Ottawa: Statistics Canada; 2021 [cited 2022 Jan 25]. 13 p. Available from: https://www.doi.org/10.25318/82-003-x202100100002-eng
- 7. Toronto Street needs assessment 2018 results report. Toronto: City of Toronto; [date unknown] [cited 2022 Jan 25]. 64 p. Available from: https://www.toronto.ca/wp-content/uploads/2018/11/99be-2018-SNA-Results-Report.pdf
- 8. Thunder Bay Point-in-time-count data 2016 [Internet]. Thunder Bay: Lakehead Social Planning Council; 2017 [cited 2022 Jan 25]. 2 p. Available from: https://www.lspc.ca/wp-content/uploads/2016-Point-In-Time-Counts.pdf
- 9. Thunder Bay point in time count 2021 [Internet]. Thunder Bay: Lakehead Social Planning Council; 2022 [cited Mar 28]. 2 p. Available from: https://www.lspc.ca/2021-point-in-time-count/
- 10. Hunter P. Homelessness partnering strategy: highlights 2016 coordinated point-in-time count of homelessness in Canadian communities [Internet]. [place unknown]: Employment and Social Development Canada; [date unknown] [updated 2020 Aug; cited 2022 Jan 25]. 29 p. Cat. No.: Em12-25/1-2016E-PDF. Available from: https://www.canada.ca/en/employment-social-development/programs/homelessness/reports/highlights-2016-point-in-time-count.html
- 11. Hunter P. Everyone counts 2018: Highlights Preliminary results from the second nationally coordinated point-in-time count of homelessness in Canadian communities [Internet]. [place unknown]: Employment and Social Development Canada; 2019 [cited 2022 Jan 25]. 13 p. Cat. No.: Em12-25/2018E-PD. Available from: https://www.canada.ca/content/dam/esdc-edsc/documents/programs/homelessness/reports/1981-Reaching_Home-PIT-EN_(3).pdf

- 1. Community Safety and Well-being Thunder Bay. 2021 population level indicator report [Internet]. Thunder Bay: City of Thunder Bay; 2021 [cited 2022 Feb 22]. 33 p. Available from: https://www.thunderbay.ca/en/city-services/resources/Documents/Crime-Prevention/Population-Level-Indicator-Report.pdf
- 2. Thunder Bay District Health Unit. Profile of the social determinants of health in Thunder Bay District, 2018 [Internet]. Thunder Bay: Thunder Bay District Health Unit; 2018 [cited 2022 Feb 21]. 8 p. Available from: https://www.tbdhu.com/sites/default/files/files/resource/2018-07/Profile%20of%20SDoH%20in%20Thunder%20Bay%20District%202018.pdf
- 3. Thunder Bay District Health Unit. The cost of eating well in the district of Thunder Bay, 2021 [Internet]. Thunder Bay: Thunder Bay District Health Unit; 2021 [cited 2022 Jan 22]. 7 p. Available from: https://www.tbdhu.com/sites/default/files/files/resource/2021-11/Nutritious%20Food%20Basket%20%20The%20Cost%20of%20Healthy%20Eating%20in%20Thunder%20Bay%20District%20%28Sep%202021%29.pdf
- 4. NNL Staff. Regional Food Distribution Association report card. NetNewsLedger [Internet]. 2018 Feb 5 [cited 2022 Jan 22]; Main messages. Available from: https://www.netnewsledger.com/2018/02/05/regional-food-distribution-association-report-card/
- 5. Thunder Bay + Area Food Strategy (Personal Communication).
- 6. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Self-reported nutrition and healthy weights Snapshot: self-reported adult overweight rate-age-standardized rate (both sexes combined) 2015–2016 [Internet]. Toronto, ON: Queen's Printer for Ontario; 2018 [updated 2018 Jul 27; cited 2022 Mar 07]. Available from: publichealthontario.ca/en/DataAndAnalytics/Snapshots/Pages/Health-Behaviours---Nutrition-andHealthy-Weights.aspx
- 7. Statistics Canada. Farms classified by total gross farm receipts, Census of Agriculture, 2011 and 2016 [Internet]. Ottawa: Statistics Canada; 2017 [updated 2022 Feb; cited 2022 Feb 14]. Table 32-10-0436-01. Available from: https://doi.org/10.25318/3210043601-eng
- 8. Statistics Canada. Farms classified by farm type, Census of Agriculture, 2011 and 2016 [Internet]. Ottawa: Statistics Canada; 2017 [updated 2022 Feb; cited 2022 Feb 14]. Table 32-10-0403-01. Available from: https://doi.org/10.25318/3210040301-eng
- 9. Statistics Canada. Land tenure, Census of Agriculture, 2011 and 2016 [Internet]. Ottawa: Statistics Canada; 2017 [updated 2022 Feb; cited 2022 Feb 14]. Table 32-10-0407-01. Available from: https://doi.org/10.25318/3210040701-eng
- 10. Statistics Canada. Characteristics of farm operators: sex and number of operators on the farm, Census of Agriculture, 2011 and 2016 [Internet]. Ottawa: Statistics Canada; 2017 [updated 2022 Feb; cited 2022 Feb 14]. Table 32-10-0441-01. Available from: https://doi.org/10.25318/3210044101-eng
- 11. Statistics Canada. Characteristics of farm operators: age and number of operators on the farm, Census of Agriculture, 2011 and 2016 [Internet]. Ottawa: Statistics Canada; 2017 [updated 2022 Feb; cited 2022 Feb 24]. Table 32-10-0442-01. DOI: https://doi.org/10.25318/3210044201-eng
- 12. EarthCare. Annual report 2017 [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Jan 22]. 24 p. Available from: https://www.thunderbay.ca/en/city-hall/resources/Documents/EarthCare/EarthCare-Annual-Report-2017.pdf
- 13. Thunder Bay + Area Food Strategy. Community food security report card [Internet]. Thunder Bay: Thunder Bay + Area Food Strategy; 2016 [cited 2022 Jan 22]. 48 p. Available from http://tbfoodstrategy.ca/files/9614/5804/8867/FoodStrategy_FoodSecurityReportCard_WEB.pdf

- 1. Statistics Canada. Health characteristics, two-year period estimates [Internet]. Ottawa: Statistics Canada; 2019 [cited 2022 Feb 28]. Table 13-10-0113-01. Available from: https://doi.org/10.25318/1310011301-eng
- 2. Anishnawbe Mushkiki. Our health counts Thunder Bay Mental health factsheet. [Internet]. Thunder Bay: Well Living House; 2020 [cited 2022 Jan 13]. 9 p. Available from: http://www.welllivinghouse.com/what-we-do/projects/our-health-counts-thunder-bay/.
- 3. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: All-cause mortality snapshot: Neonatal and under 5 mortality (both sexes) [Internet]. Toronto, ON: Queen's Printer for Ontario; 2019 [updated 2019 Sept 30; cited 2022 Jan 13]. Available from https://www.publichealthontario.ca/en/data-and-analysis/mortality-overall-health/all-cause-mortality.
- 4. Thunder Bay District Health Unit. Hepatitis C [Internet]. Thunder Bay: Thunder Bay District Health Unit; [date unknown] [updated 2021 Nov 18; cited 2022 Feb 2]. Available from https://www.tbdhu.com/health-topics/diseases-infections/hepatitis-c
- 5. Anishnawbe Mushkiki. Our health counts Thunder Bay chronic health conditions factsheet. [Internet]. Thunder Bay: Well Living House; 2020 [cited 2022 Jan 13]. 3 p. Available from: http://www.welllivinghouse.com/wp-content/uploads/2020/11/Final_OHC-TB-Factsheet-Chronic-Health-Conditions.pdf
- 6. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Cancer mortality snapshot: all cancers (both sexes) [Internet]. Toronto, ON: Queen's Printer for Ontario; 2019 [updated 2019 Apr 15; cited 2022 Jan 13]. Available from: https://www.publichealthontario.ca/en/data-and-analysis/chronic-disease/cancer-mortality
- 7. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Chronic disease mortality snapshot: diabetes, cardiovascular and respiratory disease [Internet]. Toronto, ON: Queen's Printer for Ontario; 2019 [updated 2019 Apr 15; cited 2022 Jan 13]. Available from: https://www.publichealthontario.ca/en/data-and-analysis/chronic-disease/chronic-disease-mortality
- 8. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Self-reported alcohol use Snapshot: Self-reported rate of exceeding either low-risk alcohol drinking guideline-age-standardized rate (both sexes) [Internet]. Toronto, ON: Queen's Printer for Ontario; 2018 [updated 2018 July 27; cited 2022 Jan 13]. Available from: https://www.publichealthontario.ca/en/data-and-analysis/substance-use/alcohol-use
- 9. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Interactive opioid tool: Opioid-related morbidity and mortality in Ontario [Internet]. [place unknown]: Public Health Ontario; [date unknown] [updated 2021 Dec 6; cited 2022 Jan 13]. Available from: https://www.publichealthontario.ca/en/data-and-analysis/substance-use/interactive-opioid-tool
- 10. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Injury mortality Snapshot: mortality from injuries due to motor vehicle collision-age standardized rate (both sexes) [Internet]. Toronto, ON: Queen's Printer for Ontario; 2019 [updated 2019 Apr 15; cited 2022 Jan 13]. Available from: https://www.publichealthontario.ca/en/data-and-analysis/injuries-data/injury-mortality
- 11. Anishnawbe Mushkiki. Our health counts Thunder Bay Access to health care services fact sheet. [Internet]. Thunder Bay: Well Living House; 2020 [cited 2022 Jan 13]. 5 p. Available from: http://www.welllivinghouse.com/wp-content/uploads/2020/11/Final_OHC-TB-Factsheet-Access-to-Health-Care-Services-1.pdf
- 12. Anishnawbe Mushkiki. Our health counts Thunder Bay Adult culture and identity factsheet. [Internet]. Thunder Bay: Well Living House; 2020 [cited 2022 Jan 13]. 4 p. Available from: http://www.welllivinghouse.com/wp-content/uploads/2020/11/Final_OHC-TB-Factsheet-Culture-Identity.pdf
- 13. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Self-reported smoking snapshot: self-reported adult daily smoking-age-standardized rate (both sexes) [Internet]. Toronto, ON: Queen's Printer for Ontario; 2018 [updated 2018 Jul 27; cited 2022 Jan 13]. Available from: https://www.publichealthontario.ca/en/data-and-analysis/substance-use/smoking-status.
- 14. Canadian Institute for Health Information. Supply, distribution and migration of physicians in Canada, 2020 Historical data [Internet]. Ottawa: Canadian Institute for Health Information; 2021 [cited 2022 Jan 13]. Available from: https://www.cihi.ca/sites/default/files/document/supply-distribution-migration-physicians-in-canada-1968-2020-data-tables-en.xlsx

- 1. Ontario Ministry of Education. School board progress reports [Internet]. [place unknown]: Ontario Ministry of Education; 2020 [updated 2020 Mar 25; cited 2022 Jan 14]. Available from: https://www.app.edu.gov.on.ca/eng/bpr/searchBoard.asp
- 2. Statistics Canada. 2006 community profiles 2006 Census Thunder Bay CMA [Internet]. Ottawa: Statistics Canada; 2007 [updated 2019 Aug 20; cited 2022 Feb 21]. Catalogue no. 92-591-XWE. Available from: https://www12.statcan.gc.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E
- 3. Statistics Canada, Data tables, 2016 Census, Aboriginal Identity (9), Highest Certificate, Diploma or Degree (11), Income Statistics (17), Registered or Treaty Indian Status (3), Age (9) and Sex (3) for the Population Aged 15 Years and Over in Private Households of Canada, Provinces and Territories, Census Metropolitan Areas and Census Agglomerations, 2016 Census 25% Sample Data [Internet]. Ottawa: Statistics Canada; 2017 [updated 2019 June 17; cited 2022 Jan 14]. Catalogue no. 98-400-X2016178.
- 4. Brass Bell Family Resource Centre (n.d.). Summary report: Early development instrument Thunder Bay Superior North Region. School year 2014/15 [Internet]. [place unknown]: Brass Bell Family Resource Centre; [date unknown] [cited 2022 Jan 14].13 p. Available from: https://www.brassbell.org/upload/documents/edi tbay superior n 2015 summary report.pdf
- 5. Anishnawbe Mushkiki. Our health counts Thunder Bay chronic health conditions factsheet. [Internet]. Thunder Bay: Well Living House; 2020 [cited 2022 Jan 13]. 3 p. Available from: http://www.welllivinghouse.com/wp-content/uploads/2020/11/Final_OHC-TB-Factsheet-Chronic-Health-Conditions.pdf
- 6. Lakehead University (Personal Communication)
- 7. Statistics Canada. Census profile, 2016 Census, Thunder Bay [Census metropolitan area], Ontario and Ontario [Province] (table) [Internet]. Ottawa: Statistics Canada; 2017 [cited 2022 Jan 14]. Catalogue no. 98-316-X2016001. Available from https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E
- 8. Education Quality and Accountability Office. School and school board profiles Lakehead DSB [Internet]. [place unknown]: Education Quality and Accountability Office; [date unknown] [cited 2022 Jan 14]. Available from: https://www.eqao.com/report/?id=64

- 1. Anishnawbe Mushkiki. Our health counts Thunder Bay discrimination factsheet. [Internet]. Thunder Bay: Well Living House; 2020 [cited 2022 Jan 18]. 4 p. Available from: http://www.welllivinghouse.com/wp-content/uploads/2020/11/Final_OHC-TB-Factsheet-Discrimination.pdf
- 2. Thunder Bay Police Service. Annual report 2020 [Internet]. Thunder Bay: Thunder Bay Police Service; 2021 [cited 2022 Jan 18]. Available from: https://www.thunderbaypolice.ca/sites/default/files/pdfs/2021-10-13_annual_report_2020.pdf
- 3. Statistics Canada. Family violence in Canada: A statistical profile, 2016 [Internet]. Ottawa: Statistics Canada; 2018 [updated 2018 Jan 17; cited 2022 Jan 18]. Table 3.7. Victims of police-reported intimate partner violence, by sex of victim and census metropolitan area, 2016. Available from: https://www150.statcan.gc.ca/n1/pub/85-002-x/2018001/article/54893/tbl/tbl3.7-eng.htm
- 4. Statistics Canada. Family violence in Canada: A statistical profile, 2017 [Internet]. Ottawa: Statistics Canada; 2018 [updated 2018 Dec 05; cited 2022 Jan 18]. Table 2.8. Victims of police-reported intimate partner violence, by victim sex and census metropolitan area, 2017. Available from: https://www150.statcan.gc.ca/n1/pub/85-002-x/2018001/article/54978/tbl/tbl2.8-eng.htm
- 5. Statistics Canada. Family violence in Canada: A statistical profile, 2018 [Internet]. Ottawa: Statistics Canada; 2019 [updated 2019 Dec 12; cited 2022 Jan 18]. Table 2.9 Victims of police-reported intimate partner violence, by victim sex and census metropolitan area, 2018. Available from: https://www150.statcan.gc.ca/n1/pub/85-002-x/2019001/article/00018/tbl/tbl02-9-eng.htm
- 6. Statistics Canada. Family violence in Canada: A statistical profile, 2019 [Internet]. Ottawa: Statistics Canada; 2021 [updated 2021 Mar 02; cited 2022 Jan 18]. Table 3.5 Victims of police-reported intimate partner and non-intimate partner violence, by gender of victim and census metropolitan area, 2019. Available from: https://www150.statcan.gc.ca/n1/pub/85-002-x/2021001/article/00001/tbl/tbl03.5-eng.htm
- 7. Chevrette, L. (2016). Snapshot in tIme: Risk factors, protective factors and trends in crime in Thunder Bay [Internet]. Thunder Bay: Crime Prevention Thunder Bay; 2016 [cited 2022 Jan 18]. 24 p. Available from https://www.thunderbay.ca/en/city-services/resources/Documents/Snapshot-in-time-document.pdf
- 8. City of Thunder Bay. Meet your city council [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Jan 18]. Available from: https://www.thunderbay.ca/en/city-hall/Mayor-and-Council-Profiles.aspx
- 9. Statistics Canada. *Thunder Bay*, *Ontario (Code595)* (table). *2006 Community Profiles*. 2006 Census. Ottawa: Statistics Canada; 2007 [cited 2022 Jan 18]. Catalogue no. 92-591-XWE. Available from: https://www12.statcan.gc.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E
- 10. Statistics Canada. Census profile, 2016 Census, Thunder Bay [Census metropolitan area], Ontario and Ontario [Province] (table) [Internet]. Ottawa: Statistics Canada; 2017 [cited 2022 Jan 18]. Catalogue no. 98-316-X2016001. Available from https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E
- 11. Barrera, J. MMIWG cases continued at same rate even after national inquiry began, data shows [Internet]. [2019 June 5; cited 2022 Feb 16]. CBC News. Available from: https://www.cbc.ca/news/indigenous/mmiwg-inquiry-new-cases-statistics-databases-1.5162482
- 12. CBC News. Missing & murdered: The unsolved cases of Indigenous women and girls [Internet]. [Updated n.d.; cited 2022 Feb 16]. Available from: https://www.cbc.ca/missingandmurdered/
- 13. National inquiry into missing and murdered Indigenous women and girls. Reclaiming power and place: The final report of the national inquiry into missing and murdered Indigenous women and girls, volume 1a [Internet]. (2019) [cited 2022 Feb 16]. 723p. Available from: https://www.mmiwg-ffada.ca/wp-content/uploads/2019/06/Final_Report_Vol_1a-1.pdf

- 1. City of Thunder Bay. Wastewater treatment annual report 2020 [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Jan 19]. 20 p. Available from: https://www.thunderbay.ca/en/city-services/resources/Documents/Water-and-Sewer-Services/2020-Wastewater-Report_WEB-final.pdf
- 2.City of Thunder Bay. Wastewater treatment annual report 2019 [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Mar 01]. 20 p. Available from: https://www.thunderbay.ca/en/city-services/resources/Documents/Water-and-Sewer-Services/4008---Wastewater-Report-2019_working_WEB.pdf
- 3. EarthCare. Annual report 2017 [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Jan 22]. 24 p. Available from: https://www.thunderbay.ca/en/city-hall/resources/Documents/EarthCare/EarthCare-Annual-Report-2017.pdf
- 4. EarthCare. EarthCare sustainability plan 2014-2020 report. [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Jan 22]. 28 p. Available from: https://www.thunderbay.ca/en/city-hall/resources/Documents/EarthCare/EarthCare-Sustainability-Plan-2014---2020-Report ACCESSIBLE-V1.pdf
- 5. Lakehead Region Conservation Authority. Lakehead region watershed report card 2013. Thunder Bay: Lakehead Region Conservation Authority; 2021 [cited 2022 Jan 22]. Available from: https://lakeheadca.com/application/files/9714/4682/1369/Lakehead_Watershed_Report_Card_2013.pdf
- 6. Lakehead Region Conservation Authority. Lakehead region watershed report card 2018. Thunder Bay: Lakehead Region Conservation Authority; 2021 [cited 2022 Jan 22]. Available from: https://lakeheadca.com/application/files/3615/4386/2604/FINAL_LRCA_WRC-2018.pdf
- 7. EarthCare. Annual report 2019 [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Jan 22]. 22 p. Available from: https://www.thunderbay.ca/en/city-hall/resources/Documents/EarthCare/2019-EarthCare-Annual-Report-web.pdf
- 8. EarthCare. Annual report 2015 [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Feb 21]. 40 p. Available from: https://www.thunderbay.ca/en/city-hall/resources/Documents/EarthCare-Thunder-Bay-2015-Annual-Report.pdf
- 9. City of Thunder Bay. Lead in drinking water [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Jan 22]. https://www.thunderbay.ca/en/city-services/lead-in-drinking-water.aspx

- 1. Synergy North. Scorecard Synergy North Corporation [Internet]. [place unknown] Synergy North; 2021 [cited 2022 Jan 21]. Available from: https://synergynorth.ca/wp-content/uploads/2021/10/Scorecard-Synergy-North-Corporation.pdf
- 2. Statistics Canada. Renewable energy production, Census of Agriculture, 2016 [Internet]. Ottawa: Statistics Canada; 2017 [updated 2022 Feb 11; cited 2022 Jan 21]. Table 32-10-0449-01. Available from: https://doi.org/10.25318/3210044901-eng
- 3. Synergy North. Renewable power [Internet]. [place unknown]: Synergy North; [date unknown] [cited 2022 Jan 21]. Available from: https://synergynorth.ca/corporate/renewable-power/
- 4. EarthCare. Climate-forward City: Thunder Bay net-zero strategy [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Mar 01]. 88 p. Available from: https://www.thunderbay.ca/en/city-hall/resources/Documents/Reports-Studies-Policies-and-Plans/Thunder-Bay_Net-Zero-Strategy_WEB-VERSION_Accessible.pdf
- 5. Lakehead University (Personal Communication).
- 6. Confederation College (Personal Communication).

- 1. Statistics Canada. Gross domestic product (GDP) at basic prices, by census metropolitan area (CMA) (x 1,000,000) [Internet]. Ottawa: Statistics Canada; 2021 [updated 2022 Feb; cited 2022 Jan 24]. Table 36-10-0468-01. Available from: https://doi.org/10.25318/3610046801-eng
- 2. Thunder Bay Community Economic Development Commission [CEDC]. Strategic action plan 2019-2022. Mission possible: Agents of change [Internet]. Thunder Bay: CEDC; [date unknown] [cited 2022 Jan 24]. 16 p. Available from: https://gotothunderbay.ca/download/20/why-thunder-bay/882/cedc-strategic-plan-2019-2022-2.pdf
- 3. Cushman & Wakefield. Thunder Bay employment land strategy 2020 [Internet]. Thunder Bay: Community Economic Development Commission; 2020 Sept [cited 2022 Jan 24]. 122 p. Available from: https://gotothunderbay.ca/download/13/publications/2864/thunder-bay-employment-land-strategy-2020-final.pdf
- 4. Statistics Canada. Labour force characteristics, annual [Internet]. Ottawa: Statistics Canada; 2022 [updated 2022 Feb; cited 2022 Jan 24]. Table 14-10-0385-01 Available from: https://doi.org/10.25318/1410038501-eng
- 5. Statistics Canada. Unemployment rate, participation rate and employment rate by educational attainment, annual [Internet]. Ottawa: Statistics Canada; 2022 [updated 2022 Feb; cited 2022 Jan 24]. Table 14-10-0020-01. Available from: https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1410002001
- 6. Anishnawbe Mushkiki. Our health counts Thunder Bay demographics factsheet. [Internet]. Thunder Bay: Well Living House; 2020 [cited 2022 Jan 24]. 6 p. Available from: http://www.welllivinghouse.com/wp-content/uploads/2020/11/Final_OHC-TB-Factsheet-Demographics.pdf
- 7.#ImmigrationMatters economic profile series: Thunder Bay [Internet]. Ottawa: Immigration, Refugees and Citizenship Canada; 2020 [cited 2022 Jan 24]. Cat. No. Ci4-193/27-2019E-PDF. 6 p. Available from: https://www.canada.ca/content/dam/ircc/migration/ircc/english/pdf/immigration-matters/economicprofile-thunderbay-ontario-en-final.pdf

- 1. EarthCare. Annual report 2017 [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Jan 22]. 24 p. Available from: https://www.thunderbay.ca/en/city-hall/resources/Documents/EarthCare/EarthCare-Annual-Report-2017.pdf
- 2. Cushman & Wakefield. Thunder Bay employment land strategy 2020 [Internet]. Thunder Bay: Community Economic Development Commission; 2020 [cited 2022 Jan 24]. 122 p. Available from:
 - https://gotothunderbay.ca/download/13/publications/2864/thunder-bay-employment-land-strategy-2020-final.pdf
- 3. Thunder Bay Community Economic Development Commission [CEDC]. Specialized manufacturing report 2019 [Internet]. Thunder Bay: CEDC; 2019 [cited 2022 Jan 25]. 8 p. Available from: https://gotothunderbay.ca/download/16/for-site-selectors/886/specialized-manufactuing.pdf
- 4. Thunder Bay Community Economic Development Commission [CEDC]. Incentives & funding [Internet]. Thunder Bay: CEDC; [date unknown] [cited 2022 Jan 25]. Available from: https://gotothunderbay.ca/how-we-help/incentives-funding/
- 5. Asset management plan: Phase one future ready-roadmap [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Mar 01]. 115 p. Available from: https://getinvolvedthunderbay.ca/15072/widgets/58930/documents/70953
- 6. Lakehead University (Personal Communication).
- 7. Statistics Canada. Households with access to the Internet at home by geography, inactive [Internet]. Ottawa: Statistics Canada; 2021 [updated 2022 Feb; cited 2022 Jan 25]. Table 22-10-0011-01. Available from: https://doi.org/10.25318/2210001101-eng
- 8. National Broadband Internet Service Availability Map [Internet]. [place unknown]: The Government of Canada; [date unknown] [updated 2021 Mar 25; cited 2022 Mar 15]. Available from: https://www.ic.gc.ca/app/sitt/bbmap/hm.html?

- 1. Anishnawbe Mushkiki. Our health counts Thunder Bay discrimination factsheet. [Internet]. Thunder Bay: Well Living House; 2020 [cited 2022 Jan 26]. 4 p. Available from: http://www.welllivinghouse.com/wp-content/uploads/2020/11/Final_OHC-TB-Factsheet-Discrimination.pdf
- 2. Ipsos. Citizen Satisfaction Survey 2019 [Internet]. Thunder Bay: City of Thunder Bay; 2021 [cited 2022 Jan 26]. 78 p. Available from: https://getinvolvedthunderbay.ca/8742/widgets/33783/documents/16486
- 3. Urban Aboriginal people's study [Internet]. Toronto: Environics Institute; 2011 [cited 2022 Jan 26]. 78 p. Available from: https://www.uaps.ca/wp-content/uploads/2010/02/UAPS-Thunder-Bay-report.pdf
- 4. Vis J, Scofich R, Chevrette L, Olsen C, Ongaro K. Community perspectives and perceptions on violence, impacts and prevention opportunities [Internet]. Thunder Bay: Crime Prevention Thunder Bay, Thunder Bay Drug Strategy, Thunder Bay District Health Unit; 2017 [cited 2022 Jan 26]. 44 p. Available from: https://www.tbdhu.com/sites/default/files/files/resource/2017-11/Violence%20Prevention%20Report.pdf
- 5. Statistics Canada. Census profile, 2016 Census, Thunder Bay [Census metropolitan area], Ontario and Ontario [Province] (table) [Internet]. Ottawa: Statistics Canada; 2017 [cited 2022 Jan 26]. Catalogue no. 98-316-X2016001. Available from https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E

- 1. Statistics Canada. NHS focus on geography series Thunder Bay CMA [Internet]. Ottawa: Statistics Canada; 2013 [updated 2020 Mar; cited 2022 Jan 27]. Available from: https://www12-2021.statcan.gc.ca/nhs-enm/2011/as-sa/fogs-spg/Pages/FOG.cfm? lang=E&level=3&GeoCode=595
- 2. Statistics Canada. Census profile, 2016 Census, Thunder Bay [Census metropolitan area], Ontario and Ontario [Province] (table) [Internet]. Ottawa: Statistics Canada; 2017 [cited 2022 Jan 27]. Catalogue no. 98-316-X2016001. Available from https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E
- 3. City of Thunder Bay. Heritage properties [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Jan 27]. Available from: https://www.thunderbay.ca/en/city-hall/heritage-sites.aspx
- 4. Statistics Canada. Commuters using sustainable transportation in census metropolitan areas, Catalogue no. 98-200-X [Internet]. Ottawa: Statistics Canada; 2017 [updated 2019 Apr; cited 2022 Jan 27]. Available from: https://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016029/98-200-x2016029-eng.cfm
- 5. Statistics Canada. Mode of transportation (20), commuting type (5), commuting duration (6), commuting distance (12), time leaving for work (7), age groups (5) and sex (3) for the employed labour force aged 15 years and over having a usual place of work, in private households of Canada, Provinces, Territories, census metropolitan areas and census agglomerations, 2011 National Household Survey Catalogue no. 99-012-X2011064 [Internet]. Ottawa: Statistics Canada; 2013 [updated 2019 Jan; cited 2022 Jan 27].
- 6. EarthCare. Annual report 2017 [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Jan 27]. 24 p. Available from: https://www.thunderbay.ca/en/city-hall/resources/Documents/EarthCare/EarthCare-Annual-Report-2017.pdf
- 7. City of Thunder Bay 2019-2024 multi-year accessibility plan [Internet]. Thunder Bay; City of Thunder Bay; [date unknown] [cited 2022 Jan 27]. 15 p. Available from: https://www.thunderbay.ca/en/city-hall/resources/Documents/Committees-and-Boards/2019-2024-Multi-Year-Accessibility-Plan---online.pdf
- 8. Air quality in Ontario 2018 report [Internet]. [unknown location]: Ministry of the Environment and Climate Change; [unknown date] [cited 2022 Jan 17]. 66 p. Available from: https://www.ontario.ca/document/air-quality-ontario-2018-report
- 9. WHO global air quality guidelines: Particulate matter (PM2.5 and PM10), ozone, nitrogen dioxide, sulfur dioxide and carbon monoxide. Executive summary [Internet]. Geneva: World Health Organization; 2021 [cited 2022 Jan 27]. 16 p. Available from: https://apps.who.int/iris/bitstream/handle/10665/345334/9789240034433-eng.pdf
- 10. EarthCare (Personal Communication)
- 11. City of Thunder Bay. City parks [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Mar 15]. Available from: https://www.thunderbay.ca/en/recreation/city-parks.aspx
- 12. Statistics Canada. Parks and green spaces. Table 38-10-0020-01 [Internet]. Ottawa: Statistics Canada; 2021 [updated 2022 Feb; cited 2022 Feb 14]. Available from: https://doi.org/10.25318/3810002001-eng
- 13. Andrew-Gee E. Thunder Bay's diverging paths: What bus routes and pickup trucks have to do with race and class. the Globe and Mail [Internet]. 2019 Oct 7 [cited 2022 Jan 27]. Available from: https://www.theglobeandmail.com/canada/article-thunder-bays-intersectional-politics-what-bus-routes-and-pickup/
- 14. EarthCare. Climate-forward City: Thunder Bay net-zero strategy [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Mar 01]. 88 p. Available from: https://www.thunderbay.ca/en/city-hall/resources/Documents/Reports-Studies-Policies-and-Plans/Thunder-Bay_Net-Zero-Strategy_WEB-VERSION_Accessible.pdf

- 1. Stantec Consulting Ltd. City of Thunder Bay comprehensive solid waste management strategy [Internet]. Thunder Bay: City of Thunder Bay; 2014 [cited 2022 Jan 17]. 677 p. Available from: https://www.thunderbay.ca/en/city-hall/resources/Documents/Comprehensive-Solid-Waste-Management-Strategy-1.pdf
- 2. EarthCare. EarthCare sustainability plan 2014-2020 report. [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Jan 17]. 28 p. Available from: https://www.thunderbay.ca/en/city-hall/resources/Documents/EarthCare/EarthCare-Sustainability-Plan-2014---2020-Report_ACCESSIBLE-V1.pdf
- 3. Thunder Bay + Area Food Strategy (Personal Communication)
- 4. EarthCare. Annual report 2017 [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Jan 17]. 24 p. Available from: https://www.thunderbay.ca/en/city-hall/resources/Documents/EarthCare/EarthCare-Annual-Report-2017.pdf
- 5. EarthCare. Annual report 2018 [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Jan 17]. 22 p. Available from: https://www.thunderbay.ca/en/city-hall/resources/Documents/EarthCare/Attachment-A---EarthCare-Annual-report-2018.pdf
- 6. EarthCare. EarthCare annual report 2019 [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Jan 17]. 22 p. Available from: https://www.thunderbay.ca/en/city-hall/resources/Documents/EarthCare/2019-EarthCare-Annual-Report-web.pdf
- 7. Resource Productivity and Recovery Authority. 2019 residential waste diversion rates by municipality [Internet]. [place unknown]: Resource Productivity and Recovery Authority; [date unknown] [cited 2022 Jan 17]. Available from: https://rpra.ca/programs/about-the-datacall/
- 8. Resource Productivity and Recovery Authority. 2015-2019 blue box program marketed tonnes [Internet]. [place unknown]: Resource Productivity and Recovery Authority; [date unknown] [cited 2022 Jan 17]. Available from: https://rpra.ca/programs/about-the-datacall/
- 9. EcoSuperior. Waste [Internet]. Thunder Bay: EcoSuperior; [date unknown] [cited 2022 Jan 17]. Available from: https://www.ecosuperior.org/waste

- 1. Agenda Material Committee of the Whole November 2 2020 [Internet]. Thunder Bay: City of Thunder Bay; [cited 2022 May 6].
 59 p. Available from: https://www.thunderbay.ca/en/city-hall/resources/Documents/Committees-and-Boards/Committee-of-the-Whole-Agenda---November-2-2020.pdf
- 2. City of Thunder Bay COVID-19 severe weather response plan [Internet]. Thunder Bay: City of Thunder Bay; 2021 [cited 2022 Apr 1]. 26 p. Available from: https://www.thunderbay.ca/en/city-services/resources/Documents/Emergency-Services-and-Public-Safety/Severe-Weather-Response-Plan--For-WEBSITE.pdf
- 3. City of Thunder Bay climate adaptation strategy [Internet]. Thunder Bay: City of Thunder Bay; 2015 [cited 2022 Jan 17]. 116 p. Available from: https://climatereadycity.com/wp-content/uploads/2015/12/Earthcare_Climate_Ready_City_Web1.pdf
- 4. EarthCare. Climate-forward City: Thunder Bay net-zero strategy [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Jan 17]. 88 p. Available from: https://www.thunderbay.ca/en/city-hall/resources/Documents/Reports-Studies-Policies-and-Plans/Thunder-Bay_Net-Zero-Strategy_WEB-VERSION_Accessible.pdf
- 5. Galway L, Buse C, Gislason M., Parkes M. Perspectives on climate change in Thunder Bay: Findings from a community survey. Lakehead University, Ontario, Canada [Internet]. Thunder Bay: Lakehead University; 2020 [cited 2022 Jan 17]. 34 p. Available from:.https://www.thunderbay.ca/en/city-hall/resources/Documents/EarthCare/Galway_2020_Perspectives-on-Climate-Change-in-Thunder-Bay.pdf
- 6. EarthCare. Thunder Bay climate change connection [Internet]. Thunder Bay; City of Thunder Bay; [date unknown] [cited 2022 Mar 15]. Available from: https://climatechangetbay.com/

- 1. Lake Superior Lakewide Action and Management Plan Writing Team. Lake Superior lakewide action and management plan 2015 2019 [Internet]. [place unknown]: The Lake Superior Partnership; 2016 [cited 2022 Jan 28]. 99 p. Available from: https://www.epa.gov/sites/default/files/2016-10/documents/lake superior lamp 2015-2019.pdf
- 2. Lake Superior national marine conservation area [Internet]. [place unknown]: Parks Canada; [date unknown] [updated 2021 May; cited 2022 Jan 28]. Available from: https://www.pc.gc.ca/en/amnc-nmca/on/super/
- 3. Lake Superior [Internet]. [place unknown]: United States Environmental Protection Agency; [date unknown] [cited 2022 Jan 28]. Available from: https://www.epa.gov/greatlakes/lake-superior
- 4. McInnis P, McElhinney C, Sulej E. State of the Great Lakes 2019 technical report. [place unknown]: Environment and Climate Change Canada and the U.S. Environmental Protection Agency; 2021 [cited 2022 Jan 28]. Cat No. En161- 3/1E-PDF. EPA 905-R-20-044. 668 p. Available from: https://publications.gc.ca/collections/collection 2021/eccc/En161-3-1-2019-eng.pdf
- 5. Ontario Commercial Fisheries Association. 2020 harvest statistics for Lake Superior [Internet]. Blenheim: Ontario Commercial Fisheries Association; [date unknown] [cited 2022 Jan 28]. 9 p. Available from: https://www.ocfa.ca/downloads/2020-superior-stats.pdf
- 6. InfoSuperior. Thunder Bay [Internet]. Thunder Bay: Lakehead University; [date unknown] [cited 2022 Jan 28]. Available from: https://infosuperior.com/thunder-bay/

- 1. Lakehead Region Conservation Authority. Conservation areas [Internet]. Thunder Bay: Lakehead Region Conservation Authority; [date unknown] [cited 2022 Jan 31]. Available from: https://lakeheadca.com/conservation/conservation-areas
- 2. Lakehead Region Conservation Authority. Lakehead region watershed report card 2013 [Internet]. Thunder Bay: Lakehead Region Conservation Authority; [date unknown] [cited 2022 Jan 31]. 2 p. Available from: https://lakeheadca.com/application/files/9714/4682/1369/Lakehead Watershed Report Card 2013.pdf
- 3. Lakehead Region Conservation Authority. Lakehead region watershed report card 2018 [Internet]. Thunder Bay: Lakehead Region Conservation Authority; [date unknown] [cited 2022 Jan 31]. 2 p. Available from: https://lakeheadca.com/application/files/3615/4386/2604/FINAL_LRCA_WRC-2018.pdf
- 4. Lakehead Region Conservation Authority. Forest management properties [Internet]. Thunder Bay: Lakehead Region Conservation Authority; [date unknown] [cited 2022 Jan 31]. https://lakeheadca.com/conservation/forest-management-properties
- 5. Lakehead Region Conservation Authority. Annual reports 2015- 2019 [Internet]. Thunder Bay: Lakehead Region Conservation Authority. [unknown dates] [cited 2022 Jan 31]. Available from: https://lakeheadca.com/about/annual-reports
- 6. Lake Superior Binational Program. A biodiversity conservation strategy for Lake Superior [Internet]. [place unknown]: Nature Conservancy Canada; 2015 [cited 2022 Jan 31]. 20 p. Available from: https://www.natureconservancy.ca/assets/documents/on/lake-superior/A-Biodiversity-Conservation-Strategy-for-Lake-Superior.pdf
- 7. EcoSuperior. Land connections [Internet]. Thunder Bay: EcoSuperior; [date unknown] [cited 2022 Jan 31]. Available from: https://www.ecosuperior.org/land-connections#work-section-189
- 8. Lake Superior Work Group. Lake Superior aquatic invasive species complete prevention plan [Internet]. [place unknown]: Lake Superior Binational Program; 2014 [cited 2022 Jan 31]. 92 p. Available from: https://s3.documentcloud.org/documents/3480534/Lake-Superior-Aquatic-Invasive-Species-Complete.pdf
- 9. City of Thunder Bay. Emerald ash borer [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Jan 31]. Available from: https://www.thunderbay.ca/en/city-services/emerald-ash-borer.aspx
- 10. EarthCare. EarthCare sustainability plan 2014-2020 report. [Internet]. Thunder Bay: City of Thunder Bay; [date unknown] [cited 2022 Jan 17]. 28 p. Available from: https://www.thunderbay.ca/en/city-hall/resources/Documents/EarthCare/EarthCare-Sustainability-Plan-2014---2020-Report_ACCESSIBLE-V1.pdf
- 11. City of Thunder Bay. City budget capital improvements [Internet]. Thunder Bay: City of Thunder Bay; 2019-2021. 28 p. Available from: https://www.thunderbay.ca/en/city-hall/city-budget.aspx

- 1. Statistics Canada. Incident-based crime statistics, by detailed violations, Canada, provinces, territories and Census Metropolitan Areas [Internet]. Ottawa: Statistics Canada; 2021 [cited 2022 Feb 01]. Table 35-10-0177-01. Available from: https://doi.org/10.25318/3510017701-eng
- 2. Statistics Canada. Crime severity index and weighted clearance rates, police services in Ontario [Internet]. Ottawa: Statistics Canada; 2021 [cited 2022 Mar 28]. Table 35-10-0188-01. Available from: https://doi.org/10.25318/3510018801-eng
- 3. Ipsos. Citizen satisfaction survey 2019 [Internet]. Thunder Bay: City of Thunder Bay; 2021 [cited 2022 Feb 01]. 78 p. Available from: https://getinvolvedthunderbay.ca/8742/widgets/33783/documents/16486
- 4. New website sheds light on human trafficking in Thunder Bay [Internet]. Thunder Bay: CBC News; 2021 [cited 2022 Mar 28]. Available from: https://www.cbc.ca/news/canada/thunder-bay/thunder-bay-human-trafficking-1.5923240
- 5. Anishnawbe Mushkiki. Our health counts Thunder Bay criminal justice factsheet. [Internet]. Thunder Bay: Well Living House; 2020 [cited 2022 Feb 1]. 4 p. Available from: http://www.welllivinghouse.com/wp-content/uploads/2020/11/Final_OHC-TB-Factsheet-Criminal-Justice.pdf
- 6. Association of Municipalities Ontario. 2018 Ontario municipal elections results City of Thunder Bay [Internet]. [place unknown]: Association of Municipalities Ontario; [date unknown] [cited 2022 Feb 01]. Available from: https://elections.amo.on.ca/web/en/home
- 7. Community safety and well-being plan 2021-2025 [Internet]. Thunder Bay: City of Thunder Bay; 2021. 39 p. Available from: https://www.thunderbay.ca/en/city-hall/resources/Documents/Mayor-and-Council/for-web-CSWB-2021-Plan-2021---2025-Accessible.pdf

- 1. Lakehead University. Year of climate action [Internet]. Thunder Bay: Lakehead University; [date unknown] [cited 2022 Feb 02]. Available from: https://www.lakeheadu.ca/yoca
- 2. World university rankings Lakehead University [Internet]. [place unknown]: Times Higher Education; [date unknown] [cited 2022 Feb 02]. Available from: https://www.timeshighereducation.com/world-university-rankings/lakehead-university
- 3. Confederation College second postsecondary Institution in Ontario to sign Sustainable Development Goals Accord. Thunder Bay [Internet]; Confederation College; 2021 [cited 2022 Feb 02]. Available from: https://www.confederationcollege.ca/news-events/confederation-college-second-postsecondary-institution-ontario-sign-sustainable
- 4.2021 Population Level Indicator Report [Internet]. Thunder Bay: Community Safety and Well-being Thunder Bay; 2021 [cited 2022 Mar 31]. 33 p. Available from: https://www.thunderbay.ca/en/city-services/resources/Documents/Crime-Prevention/Population-Level-Indicator-Report.pdf