7. Urban Design and Mobility for a Healthy, Sustainable and Attractive City

The built environment contains many different components that together form a functioning city — these components include our neighbourhoods, commercial and employment areas, road infrastructure and the active transportation network. The ways neighbourhoods and developments are designed is intimately tied to the ways we are able to move and interact throughout our city. Equally as important, the way our built environment is designed can be strongly linked to how healthy Saultites are as well as how environmentally sustainable our city is in the face of climate change.

The design of the Sault's built environment — "Urban Design" — is a key factor in making Sault Ste. Marie an attractive place for current and potential residents and businesses. Cities worldwide that are consistently ranked as highly liveable and attractive emphasize high standards of urban design. In an effort to retain and attract residents and businesses, it will be essential for the City of Sault Ste. Marie to embrace and implement urban design standards that foster community health, resiliency and sense of place.

What We Know

Key Points

- There is room for improvement in Sault Ste. Marie and Algoma residents' physical health. Designing a built environment that enables and promotes healthy living and mental wellness is important, especially as the City increasingly needs to accommodate an aging population.
- Sault Ste. Marie must prepare for and adapt to projected impacts of climate change, including hotter and rainier seasons, as well as more frequent and severe storms.
- The transportation system and sustainable site design for urban developments are two key areas in which the City can have a direct impact in reducing our community's greenhouse gas emissions.
- Promoting the development of complete neighbourhoods where residents can easily access a diversity of amenities, services and housing options, as well as complete streets which comfortably accommodate multiple modes of transportation, will go a long way towards creating a healthy, sustainable and attractive city.
- The Transportation Master Plan identifies transportation needs of the community and highlights approaches to facilitate alternative modes of transportation. The Transportation Master Plan shall be updated at regular intervals.
- In recent years, the City has actively developed it's cycling infrastructure, emphasizing Active Transportation as a meaningful part of the City's overall transportation system.
- The Downtown continues be a priority for the City, in terms of policy, design, as well as focusing key capital investments in infrastructure and public spaces.
- As a result of strategic policy approaches and targeted capital construction, Downtown Sault Ste. Marie has experienced a significant amount of private sector investment over the past 10 years (2010-2020).

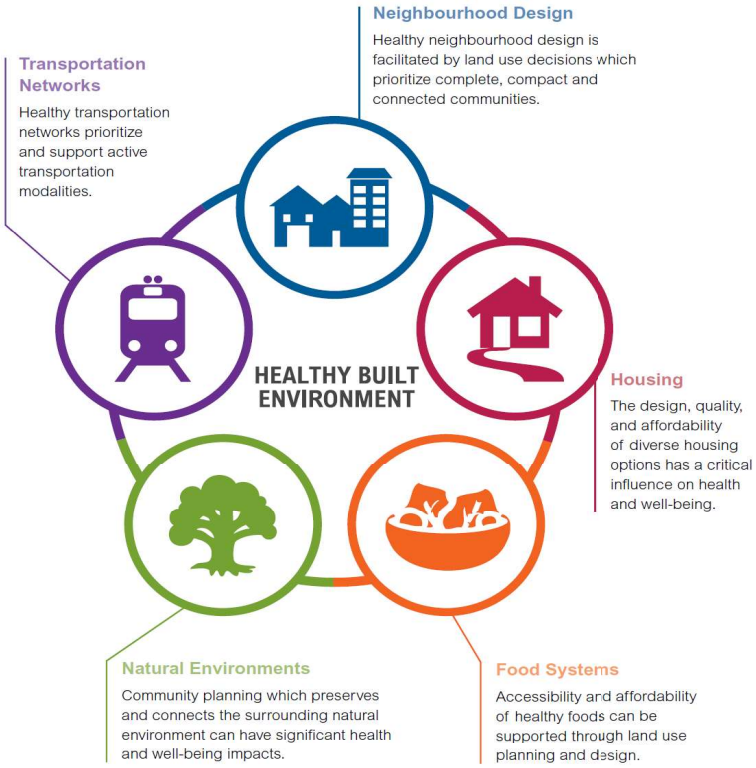
Why Design for a Healthy Sault Ste. Marie?

Current research by public health organizations such as Algoma Public Health and the BC Centre for Disease Control recommends that communities should consider the following interlinked components of a healthy built environment that influence people's health and wellbeing:

- **Neighbourhood design**: Facilitate neighbourhood design that enables healthy living, through land use decisions which prioritize complete, compact and connected communities.
- **Food systems**: Support increased accessibility and affordability of healthy foods through land use planning and design.
- **Transportation networks**: Build transportation networks that prioritize and support healthy active transportation modes.
- **Housing**: Provide diverse housing options with good design, quality and affordability.
- **Natural environments**: Preserve and connect a community's surrounding natural environment to its residents.

The design of neighbourhoods and transportation networks is discussed in this chapter, including the implications of neighbourhood design on food systems at the neighbourhood level. The larger food system in terms of the city's agricultural and food sectors is separately discussed in the Rural Area and Agriculture Chapter. For further information on housing and the natural environment, please refer to the Housing Chapter and the Natural Environment, Resources and Constraints Chapter.

Figure 7.1: The Components of a Healthy Built Environment.
Source: BC Centre for Disease Control, Healthy Built Environment Linkages Toolkit.



Health of Sault Ste. Marie's Population

Please note that in the community health statistics provided below, statistics for the entire Algoma Public Health region are used in place of statistics specific to Sault Ste. Marie. Algoma is considered an acceptable indicator for Sault Ste. Marie in terms of health data, because Sault Ste. Marie's population forms the bulk of Algoma's population, and Algoma's region-wide data is more readily available.

Table 7.1: Residents who are Overweight or Obese.

Source: Public Health Ontario and Statistics Canada, Canadian Community Health Survey 2015-2016 (self-reported).

Age group	Algoma	Ontario
Youth ages 12–17	23.4%	23.6%
Adults ages 18–44	54.2%	45.7%
Adults ages 45–64	68.8%	60.5%
Adults (seniors) ages 65+	63.7%	58.6%
All adults	***61.4%***	***53.6%***

Generally, adults in Algoma are slightly more overweight or obese than residents across Ontario. However, youth in Algoma do not differ much from youth across Ontario.

Table 7.2: Residents who do Enough Physical Activity at or above Level Recommended by the Canadian Physical Activity Guidelines.

Source: Public Health Ontario and Statistics Canada, Canadian Community Health Survey 2015-2016 (self-reported).

Age group	Algoma	Ontario
Youth ages 12–17	44.5%	27.2%
Adults ages 18–44	68.1%	65.7%
Adults ages 45–64	58.8%	56.5%
Adults (seniors) ages 65+	45.1%	41.2%
All adults	***60.3%***	***57.7%***

Generally, a slightly greater proportion of adults in Algoma do enough physical activity compared to adults across Ontario, and youth in Algoma are much more active than the average Ontario youth. Still, amongst youth and seniors, more than half do not regularly attain the level of physical activity recommended by Canadian health experts.

Table 7.3: Hospitalization Rates for Chronic Disease, Per 100,000 Population.

Source: Public Health Ontario, 2018 Snapshots.

Chronic disease category	Algoma	Ontario
Cardiovascular disease	1,221.6	879.7
Respiratory disease	724.4	625.2
Diabetes	174.3	102.8

Table 7.4: Mortality Rates for Chronic Disease, Per 100,000 Population.
Source: Public Health Ontario, 2015 Snapshots.

Chronic disease category	Algoma	Ontario
Cardiovascular disease	228.9	170.0
Respiratory disease	78.9	57.2
Diabetes	29.2	18.0
Cancer (all types)	217.9	189.6

The community health data in the tables above suggest there is room for improvement in local physical health. On average, Algoma residents show much higher rates of hospitalization and mortality for chronic diseases — including cardiovascular disease, respiratory disease, diabetes and cancer — than Ontario residents. Chronic diseases are often associated with healthy behaviours, such as getting enough physical activity and maintaining healthy eating habits.

For the wellbeing of all residents, it is important that the City strives to design and create a built environment that enables and promotes healthy living and healthy day-to-day behaviours, such as walking, cycling and access to neighbourhood parks. For example, a neighbourhood where residents can easily walk or bike from their home to pick up fresh groceries is likely to have physically healthier residents. This is especially important given that almost a quarter of Sault Ste. Marie's population, both now and in the future, consists of seniors. The City will need to accommodate for an aging population in its built environment.

Table 7.5: Residents who Feel a Strong Sense of Belonging to Their Local Community.
Source: Statistics Canada, Canadian Community Health Survey 2017-2018 (self-reported).

Age group	Algoma	Ontario
Youth ages 12–17	83.9%	84.8%
Adults ages 18–34	70.5%	63.0%
Adults ages 35–49	79.5%	69.8%
Adults ages 50–64	79.5%	70.1%
Adults (seniors) ages 65+	84.2%	79.3%
All residents ages 12+	***79.0%***	***70.8%***

The sense of belonging felt by residents of a community is an important component of a population's mental wellness. Generally, the vast majority of Algoma residents feel a strong sense of belonging to their community. In addition, compared to adults across Ontario, a greater proportion of adults in Algoma feel a strong sense of belonging to their local community. This could be attributed to the small-town, tight-knit feel that is often expressed by Sault Ste. Marie and Algoma residents about our community. On the other hand, youth in Algoma generally have the same level of sense of belonging as youth across Ontario.

There are many factors that might influence residents' sense of belonging to their local community, including the strength of family and friend connections within the community, presence of local events and organizations, and opportunities for civic participation such as the City of Sault Ste. Marie's Mayor's Youth Advisory Council. The connection between residents' sense of belonging and a community's built environment is not necessarily straightforward. However, the degree to which

different areas of a city are physically connected to each other, whether through cycling lanes, transit service and road networks, can definitely impact the extent to which individual residents can interact and be involved in events and organizations throughout the city. This is especially true for residents who might not be able to drive themselves to destinations across the city.

Crime Prevention Through Environmental Design

Crime Prevention Through Environmental Design (CPTED) is an internationally recognized multi-disciplinary approach that uses urban and architectural design and management of built and natural environments to reduce victimization, deter offender decisions that precede criminal acts and grant a sense of community among inhabitants so they can gain territorial control of their area. In more simple terms, Jane Jacobs' concept of 'eyes on the street', to make people feel safe in active public spaces even though they may be surrounded by strangers.

Autonomous Vehicles

Connected, driverless, autonomous vehicles are an emerging technology that could have a variety of impacts upon city design, infrastructure and mobility. According to the Society of Automotive Engineers (SAE), there are 6 levels of vehicle automation, with Level 0 having no automation and Level 5 being completely automated requiring no driver intervention or oversight. Level 2 automation, which simultaneously controls vehicle speed and steering but requires continuous monitoring by a human driver is available today. Features such as 'adaptive cruise control' and 'lane assist' are examples. The jump from Level 2 to Level 3 is significant, in that Level 3 vehicles have significantly more environmental detection capabilities and human oversight and intervention becomes less significant. Level 5 vehicles perform all driving tasks under all conditions, with no human attention or interaction required.

It is at Level 5 technology where impacts to urban design and mobility could be the most profound. Fully autonomous vehicles have the potential to significantly alter locational relationships between various destinations. Literature suggests that autonomous vehicles will increase people's tolerance for longer drives, thereby creating more sprawl (of all uses) because people can multi-task and do other things during their trip. The precision of fully autonomous vehicles could result in narrower roads, driveways and parking areas, all with fewer traffic controls. One can also imagine that fully autonomous vehicles could be summoned on-demand, reducing the need for parking areas in close proximity to destinations or even eliminating them altogether. Publicly available on-demand autonomous vehicles could reduce the need for mass public transit. Private autonomous vehicles could drop one off at work and rather then sit in a parking lot all day, head home to take other family members to their destinations. The possibilities are endless.

Having said all of this, the urban environment is very complex and major technical, legal and ethical challenges remain in developing the technology to the point of Level 5 automation. Therefore, it is not anticipated that widespread fully autonomous vehicles will be in place within the 20-year time frame of the Official Plan, however it is worth monitoring over time.

Why Design for a Sustainable Sault Ste. Marie?

Through the Provincial Policy Statement, the Province requires municipalities to take a two-pronged approach to addressing environmental sustainability. Municipalities must have policies and make planning decisions that:

- **Prepare for the impacts of a changing climate** — this refers to being ready for and adaptable to future consequences from changes in climate, including more frequent extreme weather events and increased climate variability.
- **Minimize negative impacts to air quality and climate change** — through the promotion of energy conservation and efficiency, improvements to air quality and reduction of greenhouse gas emissions.

This is complementary to Provincial requirements regarding the protection of natural heritage features and natural resources, which is discussed in the Natural Environment, Resources and Constraints Chapter. Please also refer to the same chapter for a discussion on protecting the City's urban tree canopy.

In December 2020, the City of Sault Ste. Marie adopted the ***Sault Ste. Marie Community Greenhouse Gas Reduction Plan 2020–2030***[10] with a greenhouse gas (GHG) reduction goal of achieving net zero by 2050. This plan calls for the City to work in partnership with residents and community stakeholders to reduce GHG emissions from the buildings & energy, transportation and waste sectors while pursuing green space, municipal leadership and economic development opportunities. The City intends to take a staged approach to achieve its goal, focusing on a GHG reduction target of 10% corporate and 5% community between 2020–2030, with an increasing scale of reduction targets between 2030 and 2050.

Projected Climate Change Impacts for Sault Ste. Marie

The following table summarizes the findings of the *Sault Ste. Marie Community Climate Change Risk Assessment*[11] conducted by the Climate Risk Institute, a not-for-profit, academic-based entity that provides planning and decision support on climate change impacts and adaptation. The City participated in the Northern Climate Change Network led by the Climate Risk Institute, which worked with five Northern Ontario municipalities to advance climate change adaptation planning and risk assessment efforts.

[10] Available at: https://saultstemarie.ca/City-Hall/City-Departments/Community-Development-and-Enterprise-Services/Greenhouse-Gas-Emissions-Reduction-Plan.aspx
[11] Available at: https://saultstemarie.ca/City-Hall/City-Departments/Community-Development-Enterprise-Services/Greenhouse-Gas-Reduction-Plan/Climate-Change-Adaptation.aspx

Table 7.6: Current and Projected Climate Indicators for the Sault Ste. Marie Region.
Source: Climate Risk Institute, Sault Ste. Marie Community Climate Change Risk Assessment (February 2020). All values are averages.

Indicator	Baseline (1981–2010)	2050s	2080s
Annual mean temperature	4.7 °C	8.2 °C (Increase by 3.5 °C)	10.5 °C (Increase by 5.8 °C)
Maximum daytime temperature	30–32 °C	32–34 °C	35–39 °C
Annual total precipitation*	912 mm	982 mm (Increase by 8%)	1,015 mm (Increase by 11%)
Annual rainfall	668 mm	801 mm	884 mm
Annual snowfall	244 cm	193 cm	148 cm
Days per year with max. temperature > 30 °C	3.9 days	19.4 days	42.0 days
Days per year with min. temperature < -25 °C	5.2 days	1.4 days	0.2 days
Days per year with > 40 mm of rain in 24 hrs	0.6 days	0.8 days	0.8 days
Frost-free days per year	199 days	252 days	279 days
Annual water budget*	379 mm	371 mm	307 mm

*Notes:

- Total precipitation includes rain and snow. As a rule of thumb, 1 cm of snow equals approximately 1 mm of rain.
- Annual water budget refers to the annual difference between incoming annual precipitation and outgoing evaporation. A higher positive value indicates more precipitation is available for agriculture and consumption. Lower values would indicate the potential for drought conditions.

Generally, it is projected that over the course of the next several decades, Sault Ste. Marie will experience substantially more hot days and frost-free days. In terms of precipitation, Sault Ste. Marie will see an overall increase in total annual precipitation, mostly in the form of rainfall, since annual snowfall amounts are projected to decline. In addition, climate change may have a mixed impact on agriculture in the region, potentially resulting in more preferable days per year to grow crops, but at the same time less water available to support agriculture (as indicated by the “annual water budget” indicator).

If these projections hold, adapting to hotter and rainier seasons will be a challenge that Sault Ste. Marie must face. If the City does not have appropriate adaptation measures, such as being prepared for more frequent and potentially more severe storms, the projected changes could increase stress on City infrastructure and operations as well as Saultites’ daily lives and comfort.

The design of urban developments at the site level can play an important role in mitigating the impacts of climate change. **Low-impact design** or **low-impact development** is an approach to development and design that revolves around the use of natural processes to manage stormwater runoff on a development site. Development that uses low-impact design strives to cause minimal impact on local water systems.

- Low-impact design incorporates **green infrastructure** into a development — built features that perform environmental functions such as filtering and storing rainwater and stormwater, or enabling reuse of water.
- Common examples of green infrastructure include bioswales and artificial wetlands, permeable pavement and surfaces, green roofs, rain gardens and other vegetated landscaping features. These features can reduce the amount of stormwater that enters the municipal storm sewer system, especially helpful in times of heavy rainfall or severe storms.
- Green infrastructure can also help with energy conservation. For example, hard surfaces like asphalt and concrete in parking lots contribute to warmer temperatures in the immediate area through the **urban heat island effect**. By incorporating vegetation and other green features throughout the site, the urban heat island effect can be alleviated, thus reducing the need for energy-intensive artificial cooling (air conditioning).
- Other benefits from using low-impact design include improved air quality and enhanced greenhouse gas sequestration (carbon sequestration) due to the addition of more vegetation.

Both the City's current ***Stormwater Management Master Plan and Guidelines***[12] (2015) and ***Sustainable Site Plan Guidelines***[13] (2011) support and encourage the use of low-impact design and green infrastructure in developments.

Sault Ste. Marie's Community Greenhouse Gas Emissions

According to the Greenhouse Gas Emissions Inventory, Sault Ste. Marie emitted **approximately 1.5 million tonnes of greenhouse gases in 2017, or 20.5 tonnes of emissions per capita**. On a per capita basis, Sault Ste. Marie's emissions are comparable to Canada's national average of 19.5 tonnes of emissions per capita. Based on a business-as-usual forecast which assumes no action is taken to reduce emissions, if Sault Ste. Marie's emissions increase at the same rate as the City's projected population growth, Sault Ste. Marie's total community greenhouse gas emissions will **increase by 14% to approximately 1.7 million tonnes in 20 years**.

[12] Available at: https://saultstemarie.ca/City-Hall/City-Departments/Public-Works-Engineering-Services/Engineering-and-Planning/Engineering-and-Construction/Stormwater-Management.aspx
[13] Available at: https://saultstemarie.ca/City-Hall/City-Departments/Community-Development-Enterprise-Services/Planning-Enterprise-Services/Strategic-Long-Range-Planning/Urban-Design.aspx

Table 7.7: Community Greenhouse Gas (GHG) Emissions in Sault Ste. Marie by Sector in 2017.
Source: City of Sault Ste. Marie, Community & Corporate Greenhouse Gas Emissions Inventory.

Category	Sector	Emissions (tCO_2e) *	% of all emissions	Data scope
Buildings & Energy	Residential	96,807	6%	Electricity and natural gas consumption
	Commercial and institutional	77,078	5%	Electricity and natural gas consumption
	Industrial	1,039,794	69%	Natural gas consumption
	Propane and fuel oil	93,080	6%	Estimate of propane and fuel oil consumption
Transportation	On-road transportation	173,847	12%	Vehicle kilometres travelled
	Railways	12,771	1%	Estimate of emissions per kilometre of rail track
Waste	Solid waste	8,764	1%	Annual landfill gas collected
Total GHG emissions in 2017		***1,502,142 (20.5 per capita)***		

*Note: Greenhouse gas emissions are recorded as tCO_2e (tonnes of carbon dioxide equivalent), which is a measure that allows for comparison of different greenhouse gases relative to one unit of CO_2.

Sault Ste. Marie's industrial sector is the largest source of greenhouse gas emissions in the Sault, accounting for 69% of our total emissions. Other comparable cities where heavy industry comprises a significant part of the community, such as Hamilton, also see approximately 70% of their community's GHG emissions come from the industrial sector. Industrial greenhouse gas emissions are already regulated and monitored by the Provincial and Federal governments. That being said, it is imperative that the City also embrace urban design methods, such as using low-impact design and landscaping in both public projects and new developments, to help offset industrial emissions.

Road transportation is Sault Ste. Marie's second-largest source of greenhouse gas emissions, accounting for 12% of our total emissions (or 38% if industrial emissions are excluded). In terms of Official Plan policies and municipal decisions on land use, development and infrastructure, road transportation could be the most important area where the City can have a direct impact in reducing our community's greenhouse gas emissions.

Design of Sault Ste. Marie's Transportation Network

Mobility Choice of Sault Ste. Marie Residents

According to Census data, the vast majority of residents in Sault Ste. Marie commute to work by driving (83%), exceeding the provincial average (72%). In addition, compared to Ontarians in general, Saultites are less likely to take public transit to work, but Saultites show about the same tendency towards walking or cycling to work. These differences in transportation mode choice could potentially be explained by the fact that Sault Ste. Marie has a much different transportation system than larger, more populous centres in Southern Ontario. For example, our low population density makes it difficult to implement a high-capacity, high-frequency public transit system.

Table 7.8: Main Mode of Commuting to Work for Employed Persons in Sault Ste. Marie and Other Ontario Cities.

Source: Statistics Canada, 2016 Census of Population.

City (Census subdivision)	Car/truck/van as driver	Car/truck/van as passenger	Public transit	Walking	Cycling
Sault Ste. Marie	**83%**	**7%**	**4%**	**5%**	**1%**
Sarnia	83%	7%	3%	4%	1%
Sudbury	83%	6%	5%	5%	0%
Windsor	82%	7%	5%	4%	1%
Thunder Bay	82%	6%	4%	5%	1%
Kitchener	80%	7%	7%	4%	1%
Waterloo	77%	7%	8%	6%	2%
Guelph	77%	7%	7%	6%	2%
Timmins	76%	9%	5%	7%	1%
North Bay	76%	8%	4%	9%	2%
Peterborough	75%	8%	6%	9%	2%
London	75%	7%	9%	6%	1%
Kingston	72%	7%	8%	9%	2%
Ottawa	63%	6%	21%	7%	3%
Toronto	46%	5%	37%	9%	3%
Ontario	***72%***	***6%***	***15%***	***5%***	***1%***

Encouraging and enabling more people to choose walking or cycling as opposed to driving would result in positive health benefits, as well as a significant reduction in our greenhouse gas emissions. This requires consideration of both Sault Ste. Marie's transportation system as well as how urban development is designed in the city.

Sault Ste. Marie's Street Network

The Sault Ste. Marie ***Transportation Master Plan***[14] outlines strategies and priorities for development of the City's transportation system. This plan was approved in 2015 and is updated every ten years. Generally, the Plan concludes that the City's existing road network is largely sufficient for future needs, and that the City should adopt a balanced approach for our transportation system — invest in capital

[14] Available at: https://saultstemarie.ca/Cityweb/media/Engineering-and-Planning/Planning/Strategic%20Long%20Range%20Planning/TransportationMasterPlan.pdf

road improvements plus the implementation of active transportation and transit network improvements. More specifically, it recommends the City use four key strategies:

1. Build multimodal networks.
2. Maximize operational efficiency of existing roads and intersections.
3. Provide safe and accessible network for all travelers.
4. Promote environmental sustainability and community health.

There are about **550 km of municipal streets** within Sault Ste. Marie. The existing Official Plan classifies both urban and rural streets into three categories based on their intended function:

- **Arterial streets**: Designed to facilitate the safe movement of large volumes of traffic at a moderate rate of speed over extended distances.
- **Collector streets**: Designed to facilitate the safe movement of traffic from residential, commercial and industrial areas to or from the arterial street network.
- **Local streets**: Designed to facilitate the safe movement of traffic within a residential area and provide access to individual properties.

Approximately 70% of the local street network is in the urban area, and around 30% is in the rural area. The vast majority (69.8% city-wide) consists of local streets. Arterial and collector streets comprise 16.6% and 13.6% respectively.

Roughly 25 km of the Sault's street network is designated as part of the Province's Connecting Links — major roads that act as connections between Provincial highways. Connecting Links include Black Road, Carmen's Way, Great Northern Road, Second Line East and Trunk Road. These are also primary routes for commercial truck traffic travelling through the city.

Table 7.9: Municipal Streets in Sault Ste. Marie as of May 2020.
Source: City of Sault Ste. Marie.

Street designation	Total length	Proportion
Urban Arterial	71.5 km	13.0%
Urban Collector	54.5 km	9.9%
Urban Local	260.8 km	47.4%
Rural Arterial	19.6 km	3.6%
Rural Collector	20.6 km	3.7%
Rural Local	122.9 km (includes Base Line and Town Line on boundary with Prince Township)	22.4%
Total municipal streets *Connecting Links*	***549.8 km*** *27.6 km*	

According to data collected in 2011 and 2012 for the Transportation Master Plan, the major traffic flows in Sault Ste. Marie are:

- East-west along Second Line across the top of the city.
- East-west along Lyons Avenue and Wellington Street through the Downtown to Trunk Road.
- East-west through the core area along Northern Avenue and McNabb Street.
- East-west on Trunk Road leading to Wellington Street and along the Trans-Canada Highway east of Black Road.

- North-south on Great Northern Road and Pim Street.
- North-south on Bruce Street leading into the Downtown.
- North-south on Black Road for the Trans-Canada Highway portion.

Sault Ste. Marie's Active Transportation Network

There is an increasing understanding in the urban planning field that **active transportation** — cycling and walking (and rolling for wheelchair users) — is much more than just a recreational activity. Active transportation is a legitimate mode choice, and sometimes the only choice for individuals to travel throughout the community. **Active transportation deserves as much attention as conventional vehicular forms of mobility**.

The Sault Ste. Marie ***Cycling Master Plan***[15] was approved in 2007 with the goal of making cycling a real alternative for utilitarian trips — travel for non-recreational purposes, such as commute trips to work or school, or trips to run errands like getting groceries and visiting businesses and services. The Cycling Master Plan contains a number of principles for the development of active transportation in Sault Ste. Marie:

- All traveled roadways are cycle routes and cycling should be accommodated as part of any road reconstruction.
- Facilitates safe and responsible cycling practices amongst all ages, skill levels and abilities.
- Facilitates creation of partnerships.
- Is destination oriented.
- Supports quality of life: recreation, health and fitness benefits.
- Provides a sustainable transportation alternative that is practical, energy efficient, cost-effective and non-polluting.
- Supports the tourism and economy of Sault Ste. Marie.
- Inspires innovations: in programs, events, marketing, and so forth.

The City has made significant investments into building and improving Sault Ste. Marie's active transportation network over the past two decades:

- The **John Rowswell Hub Trail**, which was first conceived in 2006, has become a signature part of Sault Ste. Marie and is a very well-used corridor for pedestrian and cyclist travel. Various spoke routes to extend the City's trail network have been completed or planned, including a spoke route to Strathclair Park along Second Line and a future spoke into the James Street neighbourhood.
- In 2017, the City adopted a four-year **Active Transportation Infrastructure Implementation Strategy** that aims to add 70 km of cycling infrastructure across Sault Ste. Marie, including cycling lanes, multi-use paths and road diets. The strategy states that if it is fully implemented, approximately 94% of the Sault's population would live within 800 metres (1/2 mile or 10-minute walk) of a cycling facility.
- In 2020, more than 50 km of active transportation routes were installed across the city, including a new multi-use path along Bay Street in the Downtown and on-road painted cycling lanes throughout the urban area.

[15] Available at: https://saultstemarie.ca/City-Hall/City-Departments/Community-Development-Enterprise-Services/Planning-Enterprise-Services/Strategic-Long-Range-Planning/Active-Transportation/Cycling-Master-Plan.aspx

Table 7.10: Municipal Active Transportation Infrastructure in Sault Ste. Marie as of May 2020.
Source: City of Sault Ste. Marie.

Infrastructure	Total length
Multi-use pathways	27.6 km
John Rowswell Hub Trail	26.1 km
Bay Street	1.5 km
On-road cycling lanes	Approx. 58 km, bi-directional
Existing Queen Street cycling lane	8 km (both west and east directions)
New cycling lanes installed in summer 2020	50 km (bi-directional)
Sidewalks and walkways	367.0 km (includes Hub Trail)
Pedestrian shortcut pathways ('catwalks')	7.2 km, on 109 walkways

Walking is the most basic form of transportation. Well designed and maintained sidewalks are important to maintain an accessible city for seniors, children and persons with disabilities or mobility challenges, as well as to enable healthier living. When designing streets, the City needs to consider where residents are walking from and where they are going, with the overall goal of identifying disconnections in pedestrian routes as part of capital projects. Furthermore, new developments should also facilitate safe and intuitive pedestrian movement to, from and within their sites.

Sault Ste. Marie currently has **367 km of public sidewalks**, installed on one or both sides of most urban streets. The City's current policy is to install a sidewalk on one side of a local residential street, and both sides of an arterial or collector street. This applies to all new and reconstructed streets.

The City also has **109 pedestrian pathways** that act as connecting shortcuts between two streets. Sometimes called '**catwalks**', these shortcut pathways often appear as fence-lined alleys situated between two properties. They provide connections for pedestrians and cyclists where there are no street connections otherwise, such as at mid-block locations or at the ends of cul-de-sacs.

Figure 7.2: Map of Streets and Cycling Infrastructure in Sault Ste. Marie (Focused on Urban Area).

Source: City of Sault Ste. Marie. Includes on-road cycling lanes installed in 2020.

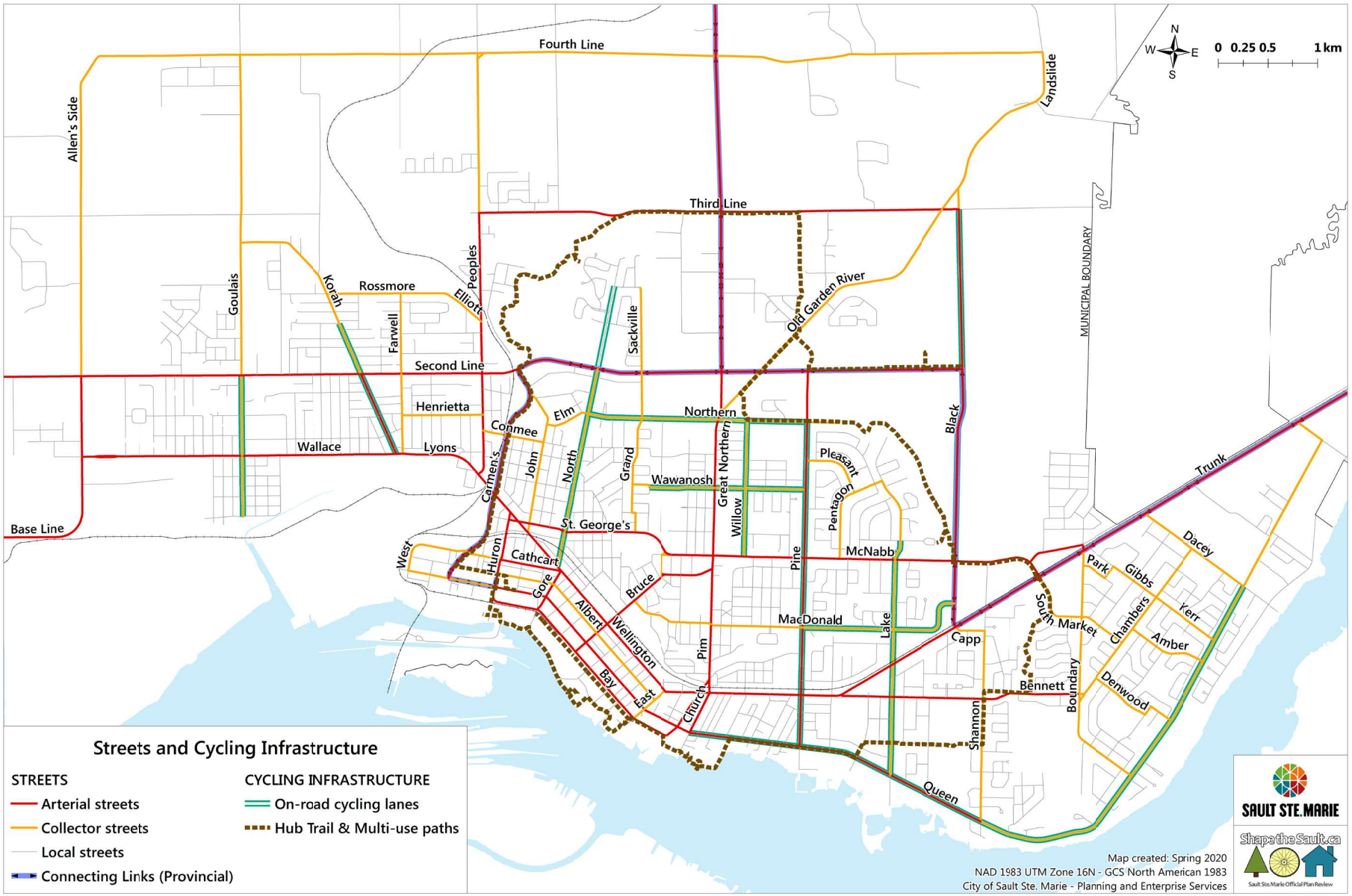
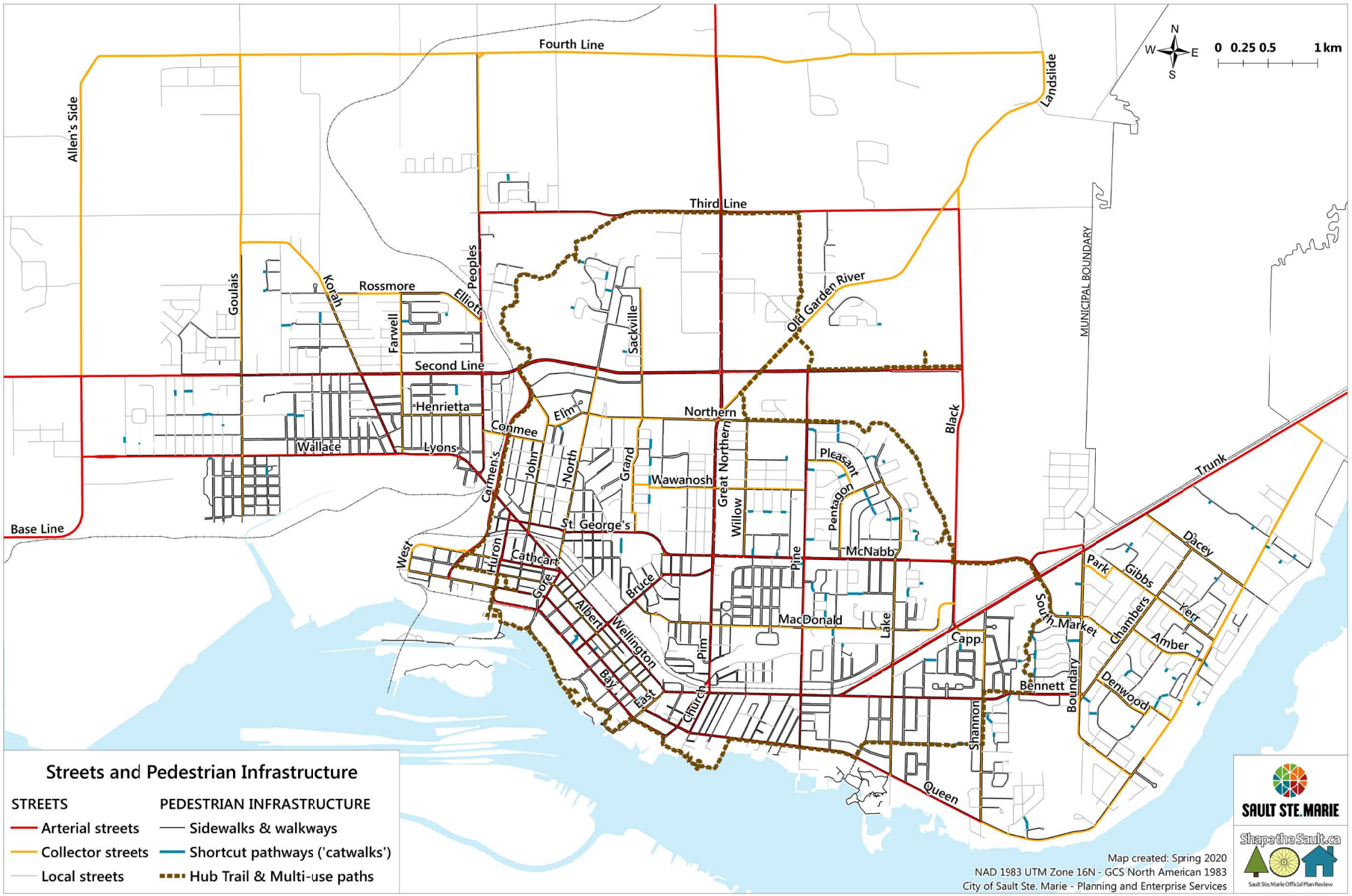


Figure 7.3: Map of Streets and Pedestrian Infrastructure in Sault Ste. Marie (Focused on Urban Area).
Source: City of Sault Ste. Marie.



Public Transit in Sault Ste. Marie

The current public transit system in Sault Ste. Marie consists of 7 conventional bus routes, 1 community bus route that primarily serves seniors' apartments, a Parabus service that serves persons with disabilities, and an on-demand bus service that serves specific times (Sunday evenings) and certain areas (McQueen subdivision) with lower transit demand. The table below provides a snapshot of Sault Ste. Marie's transit usage in 2019. The transit routes and stops that are the most popular are those that serve major grocery shopping destinations and significant student populations.

Table 7.11: Public Transit Usage in Sault Ste. Marie in 2019.
Source: City of Sault Ste. Marie.

Indicator	Comments
Total ridership	Almost 2 million passengers
Most popular bus stops or destinations	• Downtown transit terminal (Queen at Dennis St.) • Sault College bus stops on Northern Avenue • Walmart — Great Northern Road & Second Line • Food Basics — Pine St. & McNabb St. • Metro — Great Northern Road & Northern Avenue
Top two most popular bus routes	• Sault College — 490,000 passengers Route overview: Downtown terminal → Cambrian Mall → Sault College → Pine & McNabb → John Rhodes Centre → Algoma University • Riverside/McNabb — 400,000 passengers Route overview: Downtown terminal → Algoma University → Trunk Road & Rankin reserve → Wellington Square → Pine & McNabb → Cambrian Mall → Sault Area Hospital (plus Sault College on return trip)

Complete Streets

A **complete street** is a street that maximizes the use of the street's right-of-way by accommodating multiple modes of transportation, recognizing that people use streets in different ways. Creating and retrofitting streets using a complete street approach is critical to building a city where people of all ages and abilities can safely and comfortably move throughout the community. The Transportation Master Plan strongly recommends using a complete street approach to designing roads in Sault Ste. Marie, with the overall intention of balancing mobility goals with goals for building community and protecting the environment.

As the Transportation Master Plan states, creating complete streets means:

- Community: No plan or project can truly be successful without engaging the community and supporting community goals.
- Choices: Communities realize that cycling, walking and transit are critical components of the transportation system.
- Capacity: Capacity for private automobiles and trucks must continue to be addressed, balancing roadway capacity with mobility needs across modes.
- Calming: Planning and design of streets will encourage appropriate driving behaviours and speeds.

- Connection: Providing connections between sites, neighbourhoods, modes and jurisdictions is crucial to maintaining healthy transportation systems and communities.

Pine Street is an example of a major street that lacks accommodation and connectedness for pedestrians, despite heavy use by both vehicles and pedestrians. As a specific example, consider Pine Street at the Food Basics entrance, just north of McNabb Street. Many shoppers at Food Basics regularly cross Pine Street to reach the bus stop on the east side of the street, including many post-secondary students who do not have a car. However, there is no pedestrian infrastructure to support this very common movement, with this location having neither any visual cue for motorists to slow down or yield for pedestrians, nor any sidewalks on the east side of the street for this entire stretch of Pine from McNabb until around Pleasant Drive.

Figure 7.4: Pine Street at the Food Basics Entrance North of McNabb Street.
Source: Google Maps (2019).

Queen Street between Church Street and Churchill Boulevard (Bellevue Park's west entrance) is a good existing example of a complete street in Sault Ste. Marie. Its design provides accommodation for multiple different modes of transportation:

- Motor vehicles: 3 traffic lanes — 2 through lanes plus 1 turning lane.
- Cyclists: painted on-road cycling lanes on both sides of the street.
- Pedestrians: multi-use path (Hub Trail) on one side of street and concrete sidewalk on other side of street.
- Transit riders: bus stops on both sides of street, including some with shelters.

One possible shortcoming preventing Queen Street from being an excellent complete street might be its lack of facilities that enable pedestrians and cyclists to comfortably cross from one side of the street to the other. Queen Street is currently classified as an arterial street between Church Street and Shannon Road. But along this entire stretch of Queen, there is only one protected pedestrian crossing — the signalized intersection at Queen and Pine streets.

Figure 7.5: Queen Street Looking East towards the Signalized Intersection at Pine Street.
Source: City of Sault Ste. Marie.

The City has begun a program of installing **pedestrian crossovers (PXOs)** at various street locations where there is not a fully signalized intersection, but which are still locations that see significant pedestrian crossing movement. Pedestrian crossovers are enhanced crosswalks with brightly-flashing, pedestrian-activated signals that alert drivers to stop for a pedestrian. While the signal is enabled, vehicles (including bicycles) are required to stop behind the painted yield line, and may only proceed once the pedestrian has completely crossed the street. A PXO was installed in late 2019 at the intersection of Queen Street East and Churchill Boulevard, just by the entrance to Bellevue Park, which is also where the Hub Trail multi-use path crosses the street. Other PXOs recently installed by the City are located at:

- Wellington Street West and Beverley Street in the Steelton neighbourhood.
- St. Georges Avenue near St. Basil Catholic School.
- Bay Street at Spring Street and also at Pim Street in the Downtown.

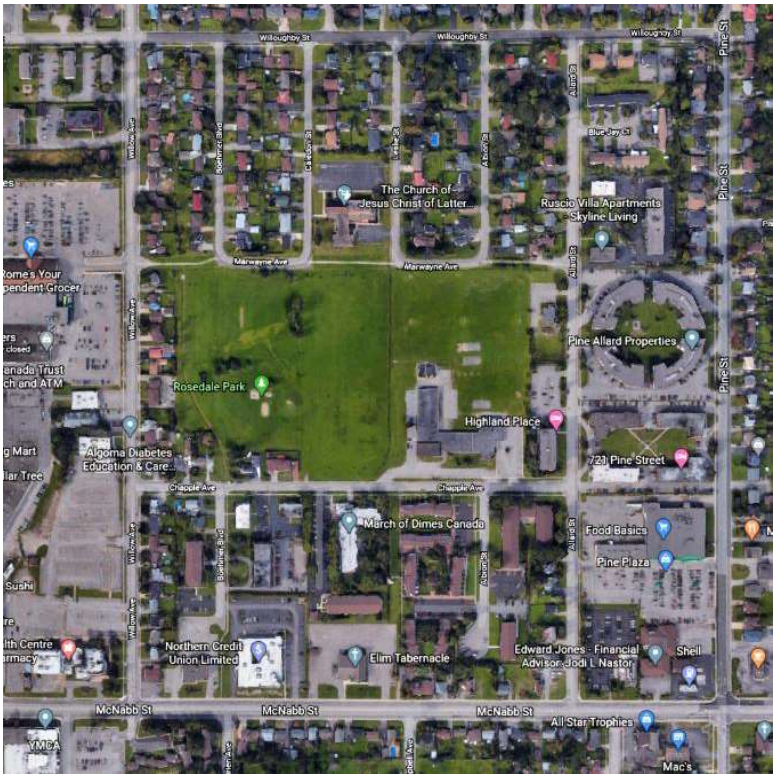
Figure 7.6: Diagram of PXO with Ladder Stripes, Signs and Pedestrian-Activated Lights.
Source: Ontario Ministry of Transportation.

Design of Neighbourhoods in Sault Ste. Marie

Complete Neighbourhoods

A **complete neighbourhood** is a mixed-use neighbourhood where residents can easily access a diversity of amenities, day-to-day services and varied housing options all within the same interconnected immediate area. There is strong connectivity from residences to the available amenities and services, especially for pedestrians and cyclists. Essentially, residents in well-designed complete neighbourhoods should not need to drive or be driven in order to access amenities and services.

Figure 7.7: Area around Rosedale Park as a Local Example of a Complete Neighbourhood.
Source: Google Earth.



The Rosedale area — bounded roughly by McNabb Street to the south, Willow Avenue to the west, Willoughby Street to the north, and Pine Street to the east — is a good existing example of a complete neighbourhood in Sault Ste. Marie. Its completeness can be partially attributed to its fortunate central location beside a major commercial corridor (Great Northern Road) and near major institutions (Sault College, Group Health Centre). It is a complete neighbourhood because its mixed development pattern allows residents to access many amenities, services and housing options within easily walkable distances:

- A centrally located and open park: Rosedale Park.
- A community hub to access services and programming: Social Services' Chapple-Albion Hub (being relocated into the former Rosedale School), as well as the Sault Ste. Marie YMCA.
- Homes of different forms: single detached dwellings, townhomes and apartment buildings.
- Homes of different tenancies: owner-occupied homes, rental apartments, seniors' apartments and social housing.
- Grocery stores and convenience stores: Food Basics, Rome's Your Independent Grocer, Mac's.

- A variety of other stores for day-to-day conveniences (even if Cambrian Mall is excluded): Pine Plaza at Pine & McNabb contains a pharmacy, walk-in clinic, laundromat, and both sit-down and take-out restaurants.
- Institutional uses that provide essential services, such as the Group Health Centre.
- 'Third places' where neighbours can gather to socialize: Tim Hortons, The Harp Bar & Grill, four churches in and around the neighbourhood, and Rosedale Park itself.
    - The term **third places** refers to how these places are the places we frequent most often outside of our homes ('first place') and our workplaces ('second place').
- Good connections to other parts of the city through public transit, cycling lanes, sidewalks and even a few shortcut pathways (along north side of park and along south edge towards McNabb).

A neighbourhood that is highly connected and complete contributes greatly to creating a healthier and more environmentally sustainable city. Its residents would be able to walk or cycle more often for groceries and daily errands instead of driving, and residents might also feel a stronger connection and sense of belonging to their local community. In addition, as explained in the Housing Chapter, a neighbourhood with a variety of housing options allows residents to stay in the same, familiar neighbourhood as they age through life (i.e. "**aging in place**").

Access to Food in Urban Sault Ste. Marie

The way Sault Ste. Marie's urban areas and neighbourhoods have developed and have been designed impacts how easily Saultites can access food options. For those who do not have access to a vehicle, it is immensely advantageous to have a healthy food source right in their immediate neighbourhood.

Healthy food sources in the city include (but are not limited to):

- Big box grocery stores: Large-format, full-service grocery stores are often only located on major commercial corridors or in auto-oriented shopping nodes, due to their space and land needs. In Sault Ste. Marie, they are all located within the Great Northern Road, Trunk Road and Second Line West commercial corridors, with the sole exception of Food Basics at Pine and McNabb. (There used to be a large-format grocery store at Station Mall in the Downtown, but none has replaced Walmart since its closure in mid-2019.) Since these stores are usually intended to serve large sections of the city, if not the entire city, they are not generally located within residential neighbourhoods. That said, if the City encourages residential intensification and mixed-use development in areas next to these big box grocery stores, new complete neighbourhoods could emerge where residents could live within walking distance to these stores. This is the part of the thinking behind the "**nodes and corridors**" development pattern that many cities have adopted.
- Small grocery stores, butcher shops, pharmacies and potentially convenience stores and corner stores: There can be wide variations in the types of food products and other daily necessities that are available at these smaller retail establishments. However, because they are smaller in size and serve smaller areas, it could be easier to encourage entrepreneurs to open these stores in neighbourhoods across the city. Therefore, relaxing land use and zoning regulations to permit small-scale retail in both established and new residential areas could be beneficial for many neighbourhoods.
- Community gardens: Community gardens are a popular form of urban agriculture and also a popular recreational amenity. Community gardens can certainly help provide fresh fruits and

vegetables for individual Saultites and families (and occasionally, non-profit food organizations as well). However, community gardens might not be reliable food sources because they are seasonal and access to some gardens might be restricted to specific groups or individuals. Nevertheless, community gardens are generally easy to add into neighbourhoods and can contribute a variety of positive community impacts.

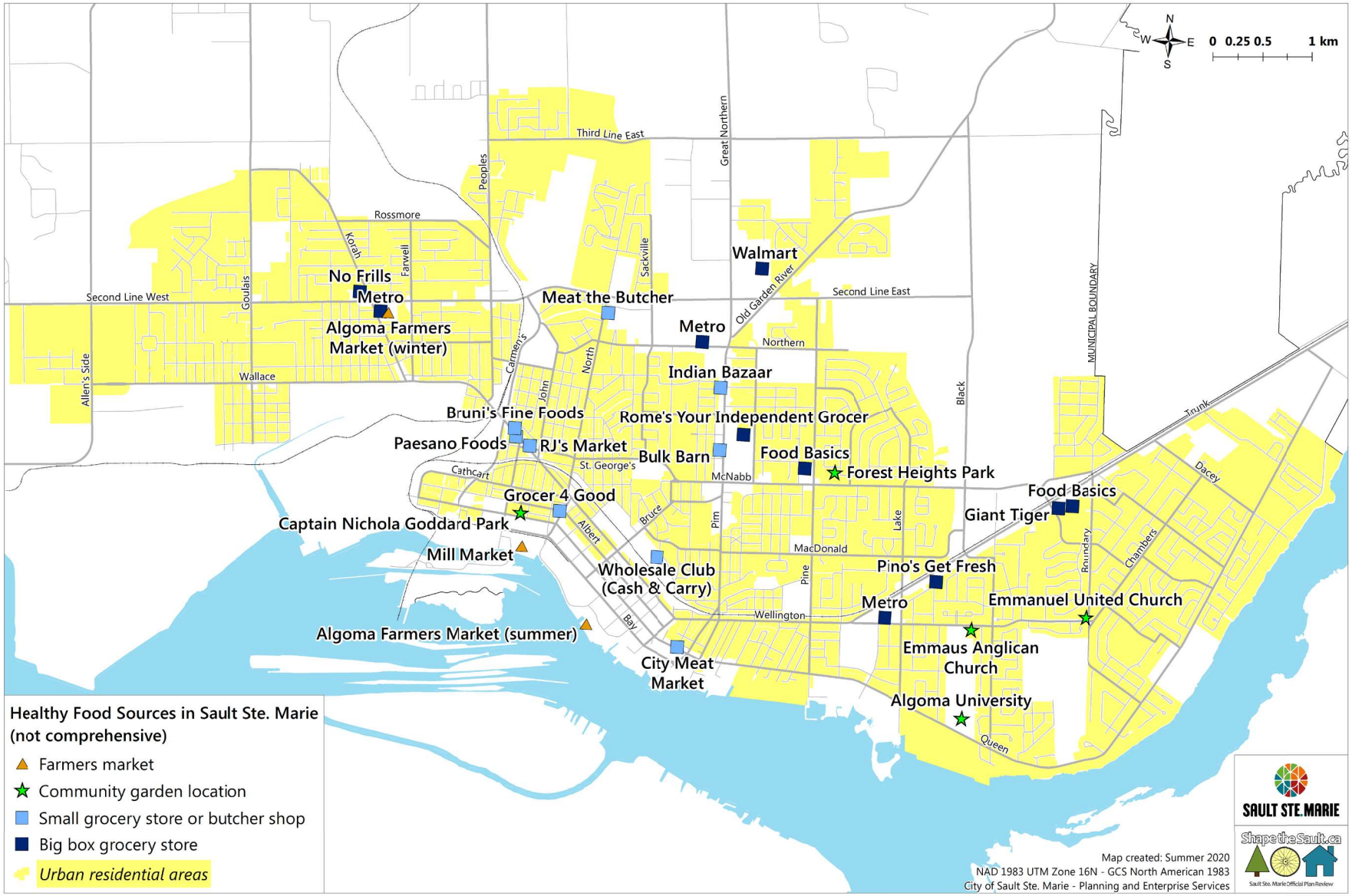
- Farmers markets: Sault Ste. Marie currently has two operating farmer's markets within the city's urban area: the year-round Mill Market in the Downtown and the seasonal Algoma Farmers Market which alternates their location based on the season. The impact of farmers markets on food access is likely similar to that of big box grocery stores, due to their nature as city-wide destinations.

Please note that this chapter focuses on food sources where individuals can purchase or grow their own food. For a discussion on food sources involving organizations that provide free or reduced-cost access to food on a community-wide scale, such as food banks, please see the Rural Area and Agriculture Chapter.

Figure 7.8: Map of Selected Healthy Food Sources in Sault Ste. Marie's Urban Area.

Source: City of Sault Ste. Marie and Google Maps.

Note: This map is not comprehensive. Small stores that may sell some grocery items, like convenience stores and corner stores, are excluded. Only community gardens that are publicly listed on the City of Sault Ste. Marie website are mapped.



What We Heard

Key Themes Heard on: Urban Design and Mobility

Designing Neighbourhoods and Urban Areas

- There is a need for more marketplaces and neighbourhood centres that can be walked to where people can access services.
- Keep public access to our waterfront — prioritize public activities, green spaces and public-serving businesses on waterfront lands.
- Consider including more park space in new urban developments.
- Allow community gardens in any public spaces, especially spaces that are underused.

Designing an Attractive City

- Maintain waterfront views by prohibiting new buildings that block views to the water.
- Make the gateways into the city more beautiful.
- Encourage better landscape design for parking lots, such as encouraging the addition of more shade trees and landscaping.

There is particularly strong interest to create an appealing and lively Downtown, and Saultites gave many ideas on this, including:

- There is a lot of opportunity to make the waterfront more vibrant. For example, reduce vehicular lanes on St. Marys River Drive or close it to cars on weekends to give more space for pedestrians, cyclists and temporary retail establishments like food trucks, thereby turning it into a safe and attractive destination.
- Introduce a Downtown hop-on, hop-off shuttlebus.
- Create better connections between key Downtown locations such as the Bondar Pavilion, Queen Street and Gore Street.
- The transformation of Bay Street into a more ‘complete’ and ‘livable’ street is a positive development that makes Downtown more welcoming.
- Consider creating pedestrian-focused shopping streets like those in Europe.
- Improve streetscaping and wayfinding on Downtown streets to create a stronger sense of place (i.e. a distinctive Downtown identity) and a more welcoming Downtown for visitors.
- Developments in the Downtown should not have parking lots in front of buildings facing the street. Keep parking lots behind buildings.
- Encourage changes to the Station Mall parking lot to make it a more attractive place.
- The City’s recent reconstruction and beautification efforts, for example on Gore Street, are appreciated and are positive; however, we still need to attract businesses to these beautified streets.

Designing a City with Good Mobility Options

We’ve heard strong support for making Sault Ste. Marie friendlier for pedestrians and cyclists. Some suggested ideas include:

- Add sidewalks and bike lanes where pedestrians and cyclists currently have to use the street’s shoulder or where streets are busy with vehicular traffic. This could be considered for rural streets too, such as Base Line and Old Garden River Road.

- Add more protected crossings for pedestrians and cyclists, e.g. traffic lights, crosswalks, bike signals.
- Use road diets to provide more space for pedestrians and cyclists.
- Provide wider street shoulders where there are no bike lanes.
- Develop a network of bike routes using side streets.
- Continue creating and maintaining pedestrian infrastructure that is accessible for people using mobility devices, including wide sidewalks, curb cuts and accessible rail crossings. Also, consider providing a longer crossing time for pedestrians at intersections.
- Consider traffic calming measures to slow down drivers who cut through residential neighbourhoods.
- Consider maintaining existing and creating new pedestrian shortcut pathways i.e. 'catwalks'.
- Better street lighting is needed on certain streets to increase safety and visibility, in both the Sault's urban and rural areas. Examples given include Carmen's Way, Gore Street and Base Line.
- Ensure proactive maintenance for streets and continue to address issues like congestion and traffic accidents from a design perspective.
- More amenities are needed along the Hub Trail and other places where Saultites walk for leisure and recreation, such as the waterfront walkway and Downtown streets. Commonly requested amenities include benches for rest stops, garbage bins, public washrooms and lighting.

The Hub Trail is a highly valued component of mobility in Sault Ste. Marie, and many Saultites recognize that multi-use paths and trails like the Hub Trail can be used for getting around the city, not just for recreation. However, Saultites did suggest improvements for the Hub Trail system:

- There is a need to complete existing gaps in the Hub Trail system.
- More infrastructure is needed along parts of the Hub Trail, such as rest stops and signage.
- Add new multi-use paths across the city, especially in the west end and east end.

Transit is always a popular topic of discussion and a variety of ideas were heard, including:

- Consider more frequent bus routes, including perhaps assigning a few key routes to a Bus Rapid Transit system.
- Improve transit stop infrastructure, including shelters (ideally heated) and more sidewalks and crosswalks near transit stops.
- Expand service to popular destinations outside the urban area, such as Hiawatha, Pointe des Chenes and the Airport.
- Ensure transit service is available even during Sundays and holidays.
- Consider the perspective of newcomers and people with disabilities when making decisions about transit service.

<u>Designing a Healthy City</u>

Algoma Public Health staff strongly recommends the City consider all five components of a healthy built environment in planning decisions to ensure a healthy Sault Ste. Marie.

- Neighbourhood Design, specifically:
    - Create complete, mixed neighbourhoods where people can live, work and play all within a short distance.
    - Build compact neighbourhoods to avoid urban sprawl.

  - Create neighbourhoods that are connected with efficient and safe networks.
  - Prioritize new developments within or beside existing communities to encourage densification.
- Healthy and Sustainable Food Systems, specifically:
  - Increase equitable access to affordable, healthy food options in individual neighbourhoods.
  - Protect agricultural land and enhance the local agri-food sector's capacity.
  - Support community-based food programs such as community gardens, urban agriculture, community food hubs and community kitchens.
- Transportation Networks, specifically:
  - Use street designs that prioritize active transportation.
  - Make active transportation networks safe and accessible for all ages and abilities.
  - Design connected routes that support multiple modes of travel, using "complete street" design approaches.
  - Improve the aesthetics and functionality of the city's transportation networks with items like good lighting, rest stops, public art and bike racks.
- Healthy Housing, specifically:
  - Provide a variety of affordable housing options that help people stay in their communities longer.
  - Ensure adequate housing quality for everyone.
  - Provide specialized housing options for marginalized populations and populations with specific needs.
  - Situate housing developments in ways that minimize exposure to environmental hazards.
- Natural Environments, specifically:
  - Preserve and connect environmentally sensitive areas.
  - Maximize opportunities for everyone to access and engage with natural environments.
  - Reduce urban air pollution and mitigate urban heat island effects by expanding natural elements through landscaping on public and private spaces.

As noted before, some of these healthy built environment components are addressed in other chapters of this document.

Other suggestions raised by Saultites for a healthier Sault Ste. Marie include:

- Require a "health impact assessment" for developments that might have a major impact on the physical health of residents, such as industrial projects that affect air quality.

<u>Designing a More Sustainable City</u>

Many Saultites are aware of the impending challenges and risks associated with climate change and greenhouse gas emissions, and want to see the City do more to address climate change:

- Use tax incentives to encourage developments to incorporate environmental features and recreational areas, such as native vegetation landscaping, natural stormwater management features, community gardens and green spaces.
- Encourage developers and builders to incorporate "green infrastructure" and "low-impact design" into new developments.
- Institute a new urban forestry strategy to address loss of existing trees.

- Install more pedestrian crossings and bike paths to make walking and cycling safer and more functional for getting around the city.
- Limit surface parking in the Downtown, and encourage conversion of parking to green space. Perhaps even consider reducing mandatory parking space requirements and encouraging developers to provide bicycle parking.
- Encourage mixed-use developments and decrease urban sprawl.
- Expand waste diversion programs such as composting, expanded plastics recycling and plastics reduction initiatives.
- Promote use of electric vehicles, both in terms of private vehicles and the municipal fleet.
- Support the Algoma passenger rail proposal currently being advanced by the Missanabie Cree First Nation.
- Support green energy businesses, 'clean' businesses and sectors that do not rely on fossil fuels.

Specifically, in reference to **Sault Ste. Marie's Greenhouse Gas Reduction Plan**, FutureSSM staff heard from residents and community stakeholders a number of priorities associated with community GHG reduction:

- Develop and encourage green economy opportunities as a sustainable job sector.
- Design future assets and infrastructure that encourage GHG mitigation at the business and citizen level (e.g. free parking for electric vehicles, bike racks and shelters).
- Prioritize energy management and energy efficiency in existing assets and new builds.
- Consult with local industrial facilities to continue to understand and work with them on their current and planned GHG reduction efforts (e.g. consortium hydrogen energy and/or transit pilot).
- Review strategies and polices that support ways to divert waste.

What We Propose

Proposed Official Plan Policies on: Urban Design

City-wide Guiding Documents on Design of Private and Public Projects

The City will develop and maintain a number of documents containing guidelines to ensure high-quality urban design, and will refer to these documents during the undertaking of public projects and the review of private projects. These documents include:

- ***Complete Streets Manual*** (to be developed): Guides the design of municipal streets and roadways to ensure that the City's transportation network is an integrated, multimodal network that serves all modes of transportation.
- ***Downtown Streetscape Manual*** (to be developed): Guides the design of streets and other public spaces in the Downtown, including the design of the streetscape within rights-of-way as well as the frontage of private properties on Downtown streets.
- ***Sustainable Site Plan Guidelines***[16]: Guides the design of all developments for which Site Plan Control is applied, to promote developments that are attractive, environmentally sustainable, barrier-free, and supports public health and comfort.
- ***Facility Accessibility Design Standards (FADS)***[17]: Guides the design of municipal buildings and developments to ensure their universal accessibility in accordance with the Accessibility for Ontarians with Disabilities Act.

Neighbourhood and Subdivision Design

The City supports and promotes the creation of urban areas that are **Complete Neighbourhoods**, meaning mixed-use neighbourhoods where residents can easily access a diversity of amenities, day-to-day services and varied housing options all within the same interconnected immediate area.

1. In reviewing development applications (Rezoning, Official Plan Amendment, Subdivision), the City shall promote the creation of complete neighbourhoods by:
    a. Considering whether a development contributes to a complete and diverse mix of land uses and housing types for the immediate area where the development is proposed. The immediate area can be defined by factors such as walking distances or transportation connections, as appropriate.
    b. Requiring appropriately designed transitions between different land uses, different densities and interfaces between existing and new development.
    c. Recognizing that parks and other public open spaces are as an integral part of enjoyable, attractive and complete neighbourhoods that shall be protected as much as possible.

2. In reviewing Subdivision applications, the City shall promote the creation of highly connected neighbourhoods by considering, as appropriate:
    a. Neighbourhood connections — roads, sidewalks, pathways, crossings, etc. — that are straightforward and intuitive, in accordance with the **Complete Streets Manual**.

[16] Available at: https://saultstemarie.ca/City-Hall/City-Departments/Community-Development-Enterprise-Services/Planning-Enterprise-Services/Strategic-Long-Range-Planning/Urban-Design.aspx
[17] Available at: https://saultstemarie.ca/City-Hall/City-Departments/Community-Development-Enterprise-Services/Planning-Enterprise-Services/Accessibility/Facility-Accessibility-Design-Standards.aspx

   b. Safe and continuous pedestrian connections between residences and community amenities such as schools, parks, places of worship and neighbourhood retail and services.
   c. A street network that facilitates public transit through the neighbourhood with reasonable walking distances to transit stops. This includes safe pedestrian connections, such as sidewalks and crosswalks, to these transit stops.

3. The City shall encourage new residential subdivisions to include land uses that function as "third places" — neighbourhood hubs intended for social gathering and interaction. These may include: parkettes, places of worship, coffee shops and small restaurants. ♡

Please refer to the Parks, Recreation, Arts, Culture and Heritage Chapter on proposed policies regarding the design and location of public parks. Please refer to the Rural Area and Agriculture Chapter for proposed policies regarding community-based food uses, such as community gardens and food banks.

Area-Specific Design Policies

The City supports and promotes enhanced, high-quality design for developments and public projects in identified areas of Sault Ste. Marie where there is extra importance in creating and maintaining an attractive built environment.

1. Downtown — Downtown is the economic, social and cultural heart of Sault Ste. Marie. A well-designed, attractive Downtown is critical to attracting new residents and businesses to the city. Therefore, in accordance with the **Downtown Strategy** and the **Downtown Streetscape Manual**, the City shall:
   a. Use incentives and regulatory policies to develop Downtown into a complete neighbourhood containing a diverse mix of places to live, work, shop for groceries and necessities, and enjoy leisure time and have fun.
   b. Require human scale, street-oriented development. This means development that:
      i. Considers the relationship between buildings and the public realm.
      ii. Continues the existing traditional built form pattern, which includes zero front yard setback and ground floor commercial uses.
   c. Implement appropriate complete street approaches for Downtown streets, by:
      i. Ensuring streets and abutting development facilitate pedestrian, cyclist and transit modes of travel.
      ii. Incorporating trees, landscaping and welcoming pedestrian amenities into streetscapes.
   d. Encourage the construction and rehabilitation of a variety of dwellings that can accommodate residents of all ages, income levels and household sizes.
   e. Develop neighbourhood infrastructure and amenities, such as public parks and plazas, that residents of all ages can enjoy.
   f. Activate underused spaces to create places where residents can gather, socialize and enjoy leisure time, including places for temporary use.
   g. Prioritize Downtown waterfront lands along the edge of the St. Marys River for public uses. Any new private development along the Downtown waterfront shall be required to incorporate public access to the river.

h. Develop a distinctive identity for the entire Downtown by promoting high quality urban design and property aesthetics through Site Plan Control.
i. Require public and private projects throughout the Downtown to be consistent in establishing a clear sense of place and direction, recognizing Downtown's distinct heritage character, and creating Downtown gateways and landmarks that are inviting and attractive. This concept will be further developed as part of the **Downtown Streetscape Manual**.

2. Gateways — Gateways are locations that visitors first see when they arrive in Sault Ste. Marie, and therefore must portray a positive impression of the city.
    a. Currently identified Gateways are:
        i. Area immediately surrounding the International Bridge Plaza.
        ii. Great Northern Road between Second Line and Fourth Line.
        iii. Trunk Road from the east City limits to Black Road.
    b. Developments located within identified Gateways shall be attractive, welcoming and interesting, and have a higher standard of building and site design, in accordance with the **Sustainable Site Plan Guidelines**.
    c. Frontage along Great Northern Road north of Fourth Line to the north City limits shall be maintained as a wilderness area.

3. Landmarks and public vistas — The City may identify significant views from public spaces to key Sault Ste. Marie landmarks and natural features that are deemed to be important to protect for public enjoyment. This concept will be further developed as part of the **Sustainable Site Plan Guidelines**.

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4. Nodes and corridors — Nodes and corridors are urban areas of the city where there already exist significant people activity, especially in terms of commercial retail. These areas present strong opportunities to create well-designed and highly-connected complete neighbourhoods.
    a. Currently identified nodes and corridors are:
        i. Great Northern Road between McNabb Street and Second Line — with nodes at Great Northern Road & McNabb Street and Great Northern Road & Northern Avenue.
        ii. McNabb Street between Great Northern Road / Pim Street and Pine Street — with a node at McNabb & Pine Street.
        iii. Trunk Road between Wellington Street and Dacey Road, with nodes at Black Road and Boundary Road.
        iv. Second Line West between Goulais Avenue and Farwell Terrace — with nodes at Goulais Avenue, Korah Road and Farwell Terrace.
        v. Wellington Street West between John Street and Carmen's Way.
    b. In accordance with the **Sustainable Site Plan Guidelines**, the City shall encourage higher design standards for developments within nodes and corridors to enhance connectivity and multimodal movement for all ages and abilities.
    c. Street design within nodes and corridors should utilize appropriate complete street approaches in accordance with the **Complete Streets Manual**, such as by:
        i. Ensuring streets facilitate pedestrian, cyclist and transit modes of travel.
        ii. Incorporating trees, landscaping and welcoming pedestrian amenities into streetscapes.

Site Design

The City supports and promotes developments that advance the goals of attractive and high-quality design, barrier-free accessibility, environmental sustainability, land use compatibility, and public health and comfort. The City shall maintain a **Sustainable Site Plan Guidelines** document that staff will use to review all development proposals for which Site Plan Control is applied.

1. Site Plan Control shall be applied to all of the following:
    a. On all lands designated Commercial, Mixed Employment, Institutional and Downtown.
    b. On lands that interface with residential or other sensitive uses.
    c. On lands that front onto urban Arterial Streets.
    d. On lands located within identified Gateways.
    e. For all developments of certain sensitive uses, including multi-family residential, group homes and bed-and-breakfasts.

2. Where a development of a non-sensitive use contains an interface between sensitive and non-sensitive uses (such as when a commercial development abuts a residential dwelling), the following shall be required where applicable:
    a. High-quality landscaping on property edges.
    b. Landscaping that provides aesthetic, visual and acoustical buffering for abutting sensitive use properties.
    c. Functional activities of non-sensitive uses such as outdoor storage, parking and loading shall not be located in yards across from or abutting sensitive uses.
    d. Light and noise shall be directed away from sensitive use properties, and noise attenuation measures may be considered.
    e. Buildings should be compatible in scale with abutting sensitive use buildings.

3. New developments shall consider their impact on street functions, and access and circulation for all transportation modes.
    a. Allow for sharing of driveways and direct vehicular connections between parking lots and buildings of abutting properties where possible, to limit access points onto streets.
    b. Incorporate facilities that support access via alternative modes of transportation into the development, such as: internal sidewalks, transit shelters, internal bike lanes, bicycle parking and traffic calming measures.
    c. Accommodate and promote pedestrian travel within the development through the creation of pedestrian-friendly environments. Where feasible, new developments will provide walking facilities and ensure reasonable walking distances to the public street and abutting transit stops.
    d. Consider constructing several smaller-sized parking areas defined by landscaping and pedestrian amenities, rather than one extensive parking area.

4. All new and significantly reconstructed buildings and spaces, especially those that are intended to be open to the public, shall use barrier-free design that enables universal accessibility for all ages and abilities, in accordance with the **Accessibility for Ontarians with Disabilities Act** and the **Ontario Building Code**. Municipal developments shall additionally be designed in accordance with the **Facility Accessibility Design Standards (FADS)**.
    a. The City will continually encourage the elimination of barriers in existing developments.

   b. For all new developments and redevelopments, barrier-free parking shall be provided in accordance with the requirements of the **Zoning By-law**. Barrier-free parking spaces should be located adjacent to buildings and within close proximity to primary entrances.
   c. Developments shall include physical amenities that allow for safe and accessible travel by pedestrians and persons with disabilities or mobility challenges, such as: unobstructed dedicated walkways, curb cuts, ramps and drop off & pick up areas.

5. The City shall require higher quality landscaping on all developments where Site Plan Control is applied.
   a. Tree planting and landscaping shall be emphasized for all new developments.
   b. Vegetation to be planted shall be varied and be either native species or other non-invasive species, and shall be species that thrive in urban environments.
   c. Access corridors (private access roads), front yards and edges/buffers shall be characterized by high quality landscaping.
   d. Wherever possible, developments shall maintain and reinforce existing trees, natural features and wooded areas within or adjacent to the development site.
   e. Vegetation and sustainable landscaping measures should be used to reduce urban heat and stormwater runoff.

6. The City shall encourage developments to integrate low-impact design into landscaping plans and site design.
   a. Incorporate in all new developments, redevelopments and public projects, sustainable and low-impact design features that address energy efficiency, energy and water conservation and other environmental goals.
   b. Wherever possible, minimize impact on the City's stormwater management system by incorporating on-site measures, such as permeable surfaces and vegetative retention areas, that limit the amount of stormwater entering the municipal service system.
   c. Design parking areas in ways that are visually appealing and considers the impact on stormwater and urban heat island effects through the choice of surface materials and vegetation.
   d. Use energy-efficient lighting and development standards in creating a well-lit and comfortable environment for the entire site.

7. The City will ensure developments promote comfort and safety by adopting appropriate human scale design and Crime Prevention through Environmental Design (CPTED) considerations, in accordance with the **Sustainable Site Plan Guidelines**.

8. Functional areas such as outdoor storage, refuse areas, and loading and servicing areas should either be visually screened using landscaping or visually blended using proper building materials.

9. Large-scale public and private developments shall incorporate areas and amenities for public use that are safe, comfortable, intuitive and well-designed to foster social interaction or leisure. These amenities could include: parkettes, bus shelters and waiting areas, and pedestrian facilities such as sidewalks, boardwalks and trails.

10. In reviewing development applications for properties abutting rivers, creeks and lakes, the City may consider opportunities to increase public access to shorelines.

Proposed Official Plan Policies on: Mobility — Design of the Municipal Transportation System

In accordance with the **Transportation Master Plan** and **Cycling Master Plan**, the City shall take a balanced approach to developing Sault Ste. Marie's municipal transportation system, by investing in capital road improvements as well as implementing active transportation and transit network improvements. ♡🚲🛤🍃

1. The City's transportation network shall be built and maintained as an integrated, multimodal network that serves all modes of transportation: pedestrian, cyclist, transit, private automobile and commercial vehicles.
    a. The City shall develop a **Complete Streets Manual**, and where feasible, and considering available right-of-way widths, the City shall use appropriate complete street approaches in the design and construction or reconstruction of all streets within the Urban Settlement Area.
    b. The City shall expand and maintain the active transportation network, including completing gaps along the John Rowswell Hub Trail, extending the network via spoke routes and implementing on-street cycling lanes.
    c. The City shall maintain an appropriate highway and commercial vehicle (truck route) network in conformance with Ministry of Transportation guidelines.

2. The City shall monitor and maintain the operational efficiency of roads and intersections.
    a. Major goods movement corridors, such as highways and truck routes, shall be protected for efficient vehicular movement. However, the need for pedestrians, cyclists and transit users to use or cross these corridors shall simultaneously be considered, and the City shall facilitate safe movement along or across these corridors as appropriate.
    b. The City shall identify standards for consolidated driveway and access control onto Arterial roads and the Trans-Canada Highway. This includes applying Site Plan guidelines for developments abutting these corridors that:
        i. Preserve and promote the integrity, functionality and aesthetic quality of Arterial corridors.
        ii. Minimize traffic conflicts, collisions and congestion.
        iii. Enhance safe access to and from a property for all modes of transportation.
    c. A **Transportation Impact Study** may be required as part of a development's application process, as determined by the City.

3. The City shall provide a safe, accessible, intuitive and interconnected transportation network for travelers of all ages and abilities using any mode of transportation.
    a. All transportation infrastructure projects shall have input from the City's Accessibility Advisory Committee.
    b. When constructing or reconstructing any transportation infrastructure, the City shall ensure it is built to be safely usable by individuals of all ages and abilities. This applies to infrastructure including roads, cycling facilities and sidewalks, as well as crossings of different transportation infrastructure such as street intersections, crosswalks, crossovers, and railway crossings.
    c. Best practice standards shall be applied to create safe and accessible crossings along the John Rowswell Hub Trail and high-demand pedestrian corridors.

d. The City should continually support opportunities to make the transportation network better. This could include, but is not limited to:
    i. Supporting road diets and temporary road closures where appropriate to provide more space for active transportation users.
    ii. Considering traffic calming measures where appropriate based on neighbourhood input with reference to the City's Procedures for Traffic Calming.

4. The City shall promote environmental sustainability and community health through mobility, by designing municipal transportation infrastructure to be appealing and easy to use for all modes. This may include, but is not limited to:
    a. Installing safe, comfortable and intuitive pedestrian and cyclist crossings at intersections.
    b. Providing rest stops along multi-use trails.
    c. Providing good lighting on roads, selected multi-use trails and connectors.
    d. Providing bicycle parking at public facilities.
    e. Considering bicycle parking in Site Plan review of major private developments.
    f. Providing safe and effective transit stops and connections.
    g. Implementing wayfinding that enhances ease of travel and navigation for travelers using any mode of transportation.

5. All municipal streets shall be designed according to the following street classifications where feasible.

Street Class	Description	Protected Design Width
Arterial Street (urban & rural)	Arterial Streets are designed to be able to carry high vehicular traffic volumes, and form the primary network of corridors for traffic moving through the city. • Within the Urban Settlement Area, commercial truck traffic should be directed onto Arterial Streets wherever appropriate, instead of Collector Streets or residential Local Streets. • Arterial Streets within the Urban Settlement Area, specifically in the Downtown, within nodes and corridors identified in the Official Plan, and where abutting land uses on either side of the street are primarily Residential or Commercial uses, shall have enhanced 'complete street' designs to accommodate active transportation modes and public transit safely and comfortably within the street right-of-way, where feasible. This may include, as appropriate: o Sidewalks on both sides of the street. o Active transportation infrastructure such as cycling lanes or multi-use paths. o Landscaping to separate vehicle lanes from sidewalks or multi-use pathways. o Controlled mid-block crossings.	Up to 30m

	○ Safe and accessible street furnishings such as transit shelters, benches, receptacles and bike racks. • Lands that front onto Arterial Streets within the Urban Settlement Area shall be subject to Site Plan Control, in order to regulate: ○ Access to and from Arterial Streets, with consideration for all modes of transportation. ○ Aesthetic quality of the built form along Arterial Streets. ○ High-quality front yard and interior landscaping. • Arterial Streets outside the Urban Settlement Area should accommodate active transportation modes using on-street designs (such as widened roadway shoulders) or off-street designs (such as multi-use paths). • Changes in classification to the Arterial Street network do require an Official Plan amendment.	
Collector Street (urban & rural)	Collector Streets are designed to be able to carry medium vehicular traffic volumes, and provide connections between Local Streets and the Arterial Street network. Collectors are often used as linkages between residential land uses and institutional or commercial land uses. • Collector Streets within the Urban Settlement Area should use 'complete street' approaches to promote an even balance between vehicular and active transportation modes within the street right-of-way, where feasible. This may include, as appropriate: ○ On-street cycling lanes. ○ Sidewalks on both sides of the street, including addressing missing linkages. ○ Landscaping to separate vehicle lanes from sidewalks or multi-use pathways. ○ Marked mid-block crossings. • Collector Streets outside the Urban Settlement Area should have adequate marked paved shoulders that could provide space for active transportation wherever space allows. • Changes in classification to the Collector Street network do require an Official Plan amendment.	Up to 21.5m
Local Street (urban & rural)	Local Streets are designed to be able to carry low vehicular traffic volumes, and provide direct access to individual properties primarily within residential and industrial areas. • Local Streets within the Urban Settlement Area located in the Downtown and residential neighbourhoods will give equal priority to active transportation and vehicular transportation, including: ○ Consideration to creating a well-connected active transportation network within these areas using Local Streets and other streets. ○ Shall have sidewalks on at least one side of the street. • Local Streets within the Urban Settlement Area located in industrial areas generally give more priority to vehicular	Up to 20m

	transportation than active transportation. However, sidewalks and on-street cycling lanes should still be considered on Local Streets in these areas. • Changes in classification to the Local Street network <u>do NOT</u> require an Official Plan amendment.	

<u>Proposed Changes to Street Classification from Existing Official Plan</u>
The following changes to municipal streets' existing classification are proposed, based on their current functions and traffic volumes.

Street	Bounds	Existing classification	Proposed classification	Rationale
Adeline Avenue	Trunk Road, Frontenac Street	Urban Arterial	Collector	South Market extension has replaced it.
Bennett Boulevard	Indiana Drive, Boundary Road	Urban Arterial	Collector	Quiet nature and road diet proposed.
Cathcart Street	Huron Street, Gore Street	Urban Arterial	Collector	Carmen's Way has replaced this as main route to border.
Huron Street	Albert Street West, Wellington Street West	Urban Arterial	Collector	Carmen's Way has replaced this as main route to border.
McNabb Street	South Market Street, Adeline Avenue	Urban Arterial	Collector	South Market extension has replaced it.
Pine Street	Queen Street East, Wellington Street East	Urban Arterial	Collector	More appropriate due to quiet nature.
Queen Street East	Church Street, Shannon Road	Urban Arterial	Collector	More appropriate due to its current multimodal, quiet nature.
St. George's Avenue West	Huron Street, Wellington Street West	Urban Arterial	Collector	This is only the section behind former Steelton Seniors Centre.
Wallace Terrace	Allen's Side Road, Goulais Avenue	Urban Arterial	Collector	Not a truck route, and road diet proposed.

Street	Bounds	Existing classification	Proposed classification	Rationale
Wellington Street East	Trunk Road, Indiana Drive	Urban Arterial	Collector	Section starting at Churchill Plaza. Much quieter nature than west of here, and road diet proposed.
Wellington Street West	Second Line, Lyons Avenue	Urban Arterial	Collector	Carmen's Way has replaced it.
Queen Street West	Carmen's Way, Huron Street	Urban Collector	Arterial	Current main route to border.
Denwood Drive	Simon Avenue, Chambers Avenue	Urban Collector	Local	More appropriate due to low traffic.
Millwood Street	Queen Street East, Simon Avenue	Urban Collector	Local	More appropriate due to low traffic.
Simon Avenue	Denwood Drive, Millwood Street	Urban Collector	Local	More appropriate due to low traffic.

Figure 7.9: Proposed Official Plan Street Classification.

Source: City of Sault Ste. Marie.