

# SUDBURY 2050 - BOLD AND BEAUTIFUL

## INTRODUCTORY TEXT

**Our Vision**  
For the past century, Sudbury has been best known for its booming mining industry; while we strive to honour and uphold such legacy, with shifting demographic structures and a growing awareness of sustainability worldwide, it is opportune to plan far ahead and reimagine the urban areas of Sudbury as a city that, by 2050, is Bold and Beautiful.

We envision a biophilic, age-friendly Sudbury which promotes diverse arts and culture. To achieve such a vision, four key pillars of Transport, Housing, Environment & Public Realm, Arts & Culture, have been identified. Under each pillar, a wide range of new planning initiatives and design interventions are proposed. Meanwhile, urban design principles formulated under each of the key pillars serve as overarching guidelines for future upcoming developments to ensure that they are in general conformity to the Sudbury 2050 vision.

**Transport**  
The three key objectives for Transport in the Sudbury 2050 plan are to enhance sustainability and accessibility as well as to promote connectivity to and within the Downtown Core and other areas in the city. Sudbury currently has a high percentage of private car usage and a lack of integration between various modes of transport, such as between train and bus use. Hence, interventions and development plans are proposed to meet these objectives, as well as conforming to Greater Sudbury's current policy vision of achieving 'A community-wide shift towards low impact and low carbon methods of transport'.

We aim to improve the current transport system at Sudbury by creating an even more extensive and integrated network of public transport that is efficient, reliable and safe. This not only aims to reduce car usage but also lower greenhouse gas emissions, which echoes with our objective of enhancing sustainability. Alongside various design elements, newly introduced shuttles and express buses will serve downtown Sudbury and its neighbouring areas respectively. Notably, the new downtown car park design highlights the concept of transport sustainability and can promote the integration between people, transport and the wider environment.

**Housing**  
The housing objective for Sudbury 2050 is conceptualised in response to two key predicted demographic shifts in the future - Sudbury is currently seeing an out-migration of youths, and a rapidly-ageing population. Thus, there is a need to develop more vibrant living opportunities to attract youths to remain in Sudbury to contribute to its planned creative and research sectors, while also building more senior-friendly housing typologies to allow seniors to age-in-place.

We envision a 24-hour downtown where individuals can work, live and play together within a vibrant community. Hence, the development of new economic sectors will be complemented with new housing, retail, F&B and leisure options, making the Downtown an attractive place to live in. New mixed-use housing typologies are encouraged, in accordance with urban design principles that activate streetscapes.

The Downtown does not exist on its own, and adequate consideration was also made over the connections between the urban core and the surrounding neighbourhoods, which are re-conceptualised into liveable neighbourhood units that can be planned in a participatory fashion. Along with the introduction of co-living typologies for elderly looking to downsize from single-family homes, streetscape improvements also increase walkability, community vitality and greenery to improve safety and wellbeing.

**Environment & Public Realm**  
In line with Greater Sudbury's reputation as the 'City of Lakes' and its shining commitment to environmental sustainability, the environment vision for Sudbury 2050 is one with a high-quality public realm boasting attractive natural spaces and sustainable, people-centred urban design. The centrepiece of this strategy is an ambitious new cultural greenway that brings new meaning and life to the vacated rail lands and connects the Downtown to the nearby Ramsey lake. The cultural greenway serves as a vital connection in the heart of the downtown and also provides important social, recreational, cultural and green spaces for festivals, concerts, outdoor play, farming and much more. Accompanying this are a suite of green and blue elements and biophilic design features that accentuate the city's natural character. From rooftop farms and green walls to water-themed squares and fast-growing mini-forests, these natural elements help foster a deeper connection with nature and awareness of issues of sustainability as well as create more attractive and liveable environments for all to enjoy. The public realm strategy is finally anchored by a set of urban design principles which work towards creating a downtown that is sustainable, animated and beautiful at all times for all users.

**Arts & Culture**  
Arts and culture form an integral role in how Sudbury has been shaped over the years, fostering a strong identity for the city. Sudbury 2050 continues to focus on the arts for the rejuvenation of the downtown, built environment, economy as well as community spirit. The cultural cluster provides a thriving area of the downtown where the creativity of the people can be easily expressed, encouraging them to be creative and be inspired by others too. Integrating arts and culture with the built environment is a strong element of this proposal in order for Sudbury to visually manifest its art-centric identity. This comes with urban design guidelines to ensure the strong presence of art in public spaces, encouragement of community-initiated place-making initiatives as well as public events to showcase local talent while fostering community bonding. Acknowledging conservation and built heritage is also crucial, hence the proposal of a heritage trail through the city, educating locals and visitors with fun activities and sights. Overall, this ties in with public realm strategies to beautify the city through both functional and aesthetically appealing initiatives.

**Public Engagement Strategy**  
Having a comprehensive understanding of people's needs and concerns is a critical enabling factor to achieving smooth and successful implementation of the Sudbury 2050 Plan. Hence, a people-centric approach is adopted throughout the proposed three-stage public engagement strategy of the plan, spanning over the public pre-engagement, engagement and consultation stages. Highlighted in the strategy are a wide range of innovative engagement instruments. For example, focus group interviews and roadshow exhibitions will be used, according to the different desired outcomes of public engagement in each stage. Stakeholders from different backgrounds, such as government agencies, private corporations, community groups, as well as the general public all fall within the target audience of our public engagement process. This provides the opportunity for different views and any potential conflicts or risks to be identified and resolved at an earlier stage.

**Conclusion**  
Sudbury has a wealth of history and a youthful and diverse character unique to the city. We will continue to honour its legacy while catering to its evolving needs. We will continue to work with the community, proactively involving them in plans, events, exhibitions and the execution of ideas. Together, we can create a Bold and Beautiful Sudbury.

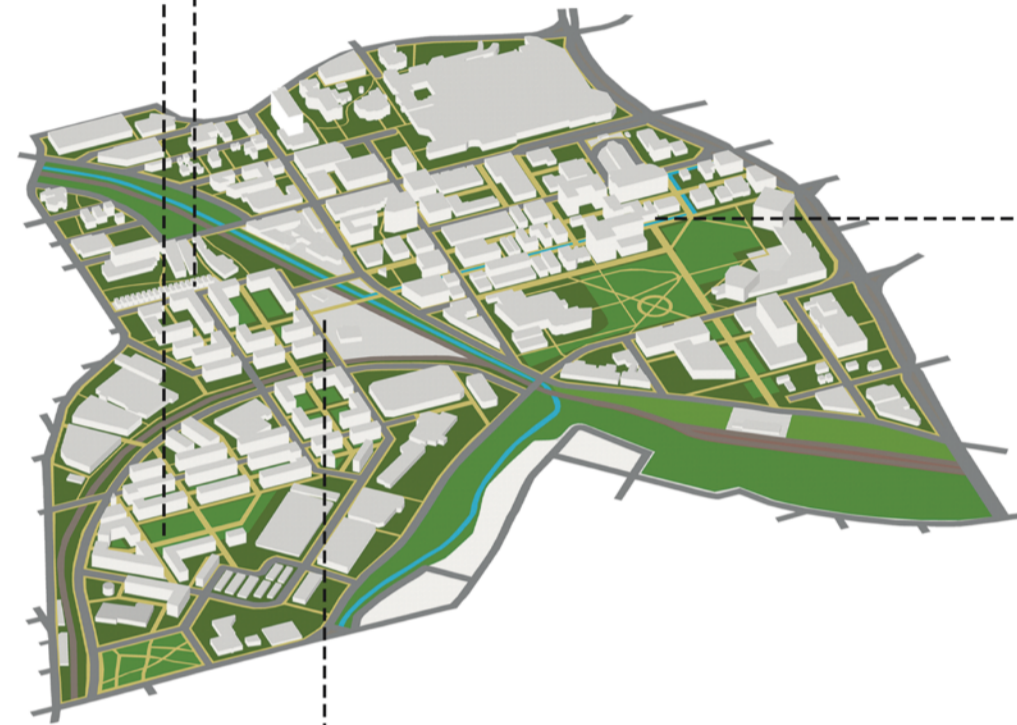


## CITY OF TOMORROW

**Enhancing Opportunities for Play @ New Retail and Residential Cluster**  
Like many traditional American cities, Sudbury is relatively low in density. We will inject higher density housing into the Downtown. This brings residents closer to their workplaces and lifestyle destinations. Supported by a plethora of green infrastructure, it will encourage social interaction through opportunities for shopping, eating and even urban farming.



**Welcoming Innovation @ Incubation Hubs, Research and Excellence Hub**  
Sudbury was founded as a mining town and continues to lead the region and the nation in mining excellence. It is also supported by a wide range of services. The new research and excellence hub can help to facilitate knowledge spillovers and help revitalise the mining, forestry and other related industries.



**Creating Safe and Inclusive Living and Working Environments @ Downtown Core**  
The revitalisation of a waterway, and the injection of green infrastructure provides a strong foundation for a pedestrian-centric Downtown. Core to many residents and workers, the Downtown will become a vibrant and exciting space to live, work and play.



**Embracing Arts & Culture through Community-led Efforts @ Main Square**  
New ground-up centre point of Sudbury. Built on the old rail lands, it refreshes and enhances the public space. It serves as a canvas for art and culture to flourish and a reminder of Sudbury's industrial past.



# PUBLIC ENGAGEMENT STRATEGY

**STAGE 1**

**Nature**  
Pre-engagement

**Proposed Duration**  
3-6 months

**Objectives**

- Solicit preliminary views and general aspirations from key stakeholders in Sudbury over the 2050 Plan's Strategic Visions
- Identify, gauge and assess any potential interfacing issues between stakeholder groups and their impacts and make necessary changes to the Plan

**Proposed Activities**

- Market Sounding Exercise to explore funding opportunities from the private sector (PPP?)
- Formal focus group meetings and interviews with key stakeholders: City of Greater Sudbury Council, Sudbury Councillors, GOVA (Public Transit Operator), Vale (Mining Corporation), Third Sector Community Groups, Civil Groups, etc.

**Intended Outcomes**

- Gather support from key stakeholders
- Avoid and minimise any conflicts and interfacing issues between stakeholder groups in later stages of the plan-making process
- Form partnership with stakeholders in facilitating later stages of public engagement

**Inspiration:** Urban Redevelopment Authority, Singapore: URA. Engaging stakeholders on conserving historic districts

**STAGE 2**

**Nature**  
Public Engagement

**Proposed Duration**  
6-12 months

**Objectives**

- Increase level of public involvement, awareness and understanding throughout the plan-making process by different activities
- Understand general public aspirations towards the Plan's Strategic Visions and the relevance to their day-to-day lives, making necessary changes to the revised 2050 before finalisation for Stage 2.5/3

**Proposed Activities**

- Face-to-face interview/questionnaires
- Public Forums
- Open Access Data (GIS Database)
- Asset Mapping (to understand downtown usage patterns of residents)
- Street Photography Competition
- Pop-up Artwork Exhibition
- Public Walking Tours
- Active promotion on mass media and social platforms (# for the plan) etc.
- Guided Walks

**Intended Outcomes**

- Well-received PE exercise with a strong civic response
- Increase sense of community ownership and identity towards the 2050 Plan

**Inspiration:** Places for People Campaign, Vancouver, Canada: PPC. Involving thousands of residents and volunteers with public studies and tours to increase spatial awareness.

**STAGE 3**

**Nature**  
Public Participation and Consultation

**Proposed Duration**  
6-12 months

**Objectives**

- The revised Plan is presented, allowing the general public to raise any final issues and concerns over the procurement, implementation details and/or management of the Plan
- Understand public concerns to ensure smooth implementation of the Plan according to the phasing schedule

**Proposed Activities**

- Direct Participation with respect to Urban Commons (e.g. rooftop urban farming, temporal/permanent road pedestrianisation, 'organic' urban spaces)
- Face-to-face interview/questionnaires
- Public Forums
- Active promotion on mass media and social platforms etc.

**Intended Outcomes**

- Finalised 2050 Plan with implementation schedule
- Sense of empowerment and engagement, leading to general consensus and support for detailed implementation of the Plan among the general public

**Inspiration:** Superkilen Park, Copenhagen, Denmark: Kristian Skeie. Directly involving the community in designing beautiful and function spaces for play.

**STAGE 4**

**Nature**  
Implementation and Review

**Proposed Duration**  
30 years

**Objectives**

- Implement vision for Sudbury in partnership with through private public partnerships
- Continue people-centric focus on developments throughout project length

**Proposed Activities**

- Public open house to key milestones of new projects
- Transparent and Open Tender process for private developers
- 'Hackathon' for students and youths to involve them in adhoc placemaking activities
- Active promotion on mass media and social platforms, etc.
- Direct participation and maintenance of urban commons to encourage sustainability and social interaction

**Intended Outcomes**

- Operationalising new projects that are budget-friendly
- Increased sense of empowerment and community in building a bold and beautiful Sudbury
- Strong partnership between public and private realm

# ANALYSIS & CONCEPTS

## INTRODUCTION

The urban core of Sudbury is located on the South of the Sudbury basin (the 3rd largest meteorite crater in the world). It was a temporary workers' camp in 1883-84 during the construction of the Canadian Pacific Railway through the region. Soon after, Sudbury became the most important mining centre in Canada after settlement began and mining commenced in 1888.

Sudbury is home to Laurentian University, Cambrian College and College Boreal. It is also home to the Sudbury Neutrino Observatory and SNOLAB, both cosmic-particle physics research facilities. It is also of close proximity to several conservation areas, parks and is within walking distance to Ramsay Lake.

## CONTEXT

**Demographics**

Population: 155,219 (2001), 157,877 (2006), 160,274 (2011), 161,531 (2016)

Median Age: 38.9 (2001), 41.1 (2006), 42.3 (2011), 43.3 (2016)

**Housing**

65.8% homeowners

Household Income: 38.8% (2011-2016 rise)

House Prices: 30.1% (2011-2016 rise)

House Rents: 46.6% (2011-2016 rise)

**Transportation**

82.8% commute by car

14,500+ Daily trips made at PM peak

9,000+ External Trips

**Employment and Education**

57.4% employed

Education: University, Below Degree College, Apprenticeship, No Certificate, High School

Industry: Mining, Construction, Manufacturing, Wholesale, Retail, Transportation Professional Services, Public Administration, Other, Accommodation, Arts & Entertainment, Healthcare, Education Administration

## VISION

**Biophilic Architecture**  
Building occupants should be connected to nature. Buildings can incorporate natural lighting and ventilation, natural landscape features and other elements. This creates a more productive environment and improves community well-being.

**Age-friendly Precincts**  
Ageing is a lifelong process which results in physiological and psychological changes. The built environment should support seniors' daily movements and encourage interaction with their neighbours. Issues of safety, walkability, inclusivity and mental well-being will be addressed.

**City of Art and Culture**  
A diversity of arts and culture should be made accessible to the community, facilitating creative physical spaces for positive interactions.

## OBJECTIVES

<b>ECONOMY</b> Enhance job opportunities and resource efficiency by advancing Sudbury as a research, innovation and excellence hub	→	Dedicated incubation hubs for new businesses	Promotion of Sudbury's expertise in mining technologies	Introduce shopping streets into the downtown core
<b>TRANSPORT</b> Improve connectivity and sustainability through an integrated transport system and an inclusive and walkable downtown	→	Reduce car usage in Downtown Sudbury	Introduce pedestrian-centric walkways and cycling routes	Improve and implement sustainable public transport coverage
<b>HOUSING</b> Create sustainable, inclusive and diverse neighbourhoods through mixed, green and affordable housing	→	Introduce vibrant and affordable living in the urban core	Introduce a network of liveable neighbourhood units	Encourage inclusivity in design for vulnerable populations
<b>ARTS &amp; CULTURE</b> Enhance social capital through the provision of arts and cultural opportunities, transforming Sudbury into a canvas	→	Fostering a strong cultural identity through the urban environment	Introduce strong culturally urban design to create fun environments	Promote and represent cultural diversity with the community
<b>ENVIRONMENT</b> Enhance the quality of the public realm through green cityscapes and public spaces for and by the community	→	Designing pleasant and lively streets and spaces	Embedding Downtown Sudbury in a rich green-blue network	Promoting sustainability through biophilic principles

THE 15-MINUTE AGE-FRIENDLY, BIOPHILIC DOWNTOWN SHOULD HAVE...

- LOCAL EMPLOYMENT
- WALKING & CYCLING
- HOUSING DIVERSITY
- ARTS & CULTURAL FACILITIES
- GREEN STREETS & SPACES

## FUTURE LAND USE

**Embracing Mixed Land-uses**  
Mixed-use buildings can cater to a wide variety of uses. Retail and Offices on the lower floors and residential apartments on high levels encourages activity at all times of the day. It also increases walkability by allowing occupants to live, work and play in close proximity.

**Legend:** Residential, Restaurants & Cafes, Retail, Religious Institutions, Public Institutions, Waterways, Green Spaces, Railway, Mixed (Residential above), Hotels & Restaurants, Conferences, Government Offices, Public Infrastructure

## STRATEGIC PLANS

<b>Economy</b> Active frontages should be encouraged in the downtown core to promote vibrancy and opportunities for the local economy to flourish.	<b>Transport</b> Streets should be re-prioritized for pedestrians, cyclists and public life. This will improve safety and inclusivity of visitors from all walks of life.	<b>Housing</b> Residential areas should be densified to provide more opportunities for social interaction. This is also catalysed by the introduction of pedestrian networks.	<b>Arts &amp; Culture</b> Public art should be pervasive and be encouraged in the downtown, softening the hard landscapes of the built environment and adding vitality and vibrancy.	<b>Environment</b> The public realm should embrace natural features such as green and blue infrastructure, providing spaces for play. It should be inclusive and sustainable.
---	--	--	---	--

## FORMING IDENTITIES

**Research and Excellence Hub**  
The co-location of new research facilities will encourage knowledge spillovers, bringing research, entrepreneurship and scholarship.

**New Major Retail and Residential Developments**  
Sitting on the old rail lands, this is an opportune moment to improve research, bring housing into the downtown and create new uses.

**Pedestrian-Friendly Downtown Core**  
The Downtown should be a lively hub, focus will be brought back into streets that are further expanded to be enjoyable at all times of the day for the whole community.

**Cultural Cluster**  
Sudbury is in a good position to advance its interests in arts and culture. This can be further expanded by encouraging public art alongside major arts venues.

## DOWNTOWN MASTERPLAN

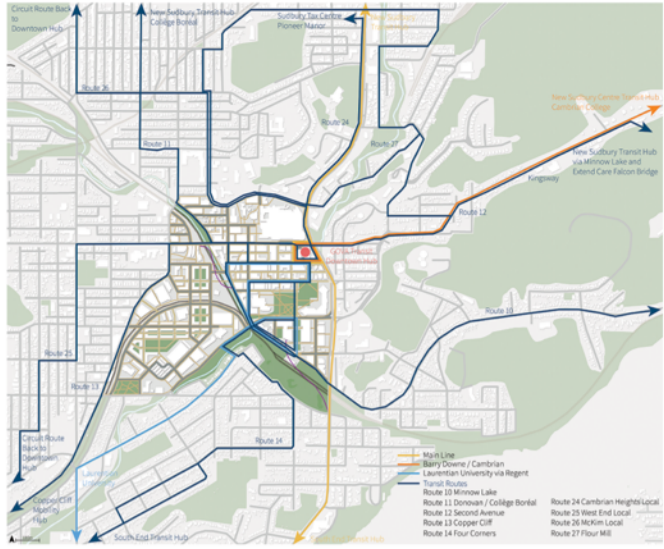
**A. New cluster of mixed-use developments** on the old rail-lands, in the midst of old buildings which can be reused for seasonal events.

**B. Places des arts**, a multi-disciplinary arts centre acting as a focal point for downtown Sudbury, promoting culture and contemporary arts.

**C. The Junction**, a shared site for a library, art galleries and a convention centre, it will further extend Sudbury's reach as arts and culture hub of Ontario.

# TRANSPORT

## ANALYSIS & OVERALL CONCEPT



Transportation Study Report, 2015: City of Greater Sudbury

Most residents travel within Sudbury itself. 50% of residents are using public transport at least few times each month. Despite the low numbers, it is encouraging that many are view improvements to public transport and active mobility networks are crucial to Sudbury's future.

Nonetheless, the current public transit network is focused on moving people to and from the downtown. There is little focus on moving people around the downtown itself via public transportation and to key nodes such as the Airport and Train Station.

## INTEGRATED PUBLIC TRANSPORT NETWORK

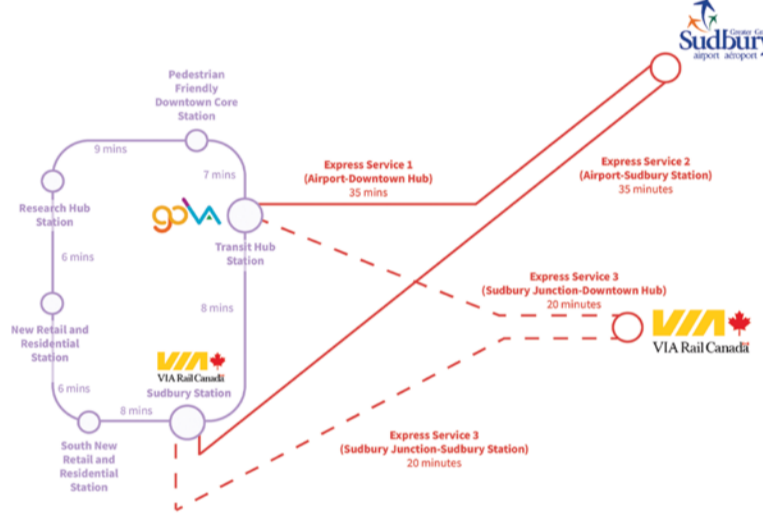


There is potential to increase accessibility and connectivity within Sudbury and outside Sudbury.

A new city shuttle service (left) will enable easy and convenient access around Sudbury's expanded and revitalised Downtown.

This new express routes will also allow an integration between various modes of public transport (Trains and Buses) and improve connectivity between key transport hubs.

Improvements can reduce car usage, reduce level of GHG emissions and create a cleaner, safer and more beautiful Sudbury for all.



### Car Parking at the fringes

To improve the safety and vitality of the downtown, car parking spaces will be progressively developed and moved to the fringes of Downtown Sudbury. Smart systems will be implemented to provide real-time information on available spaces. This certainty decreases the time spent by individuals looking for places to park.

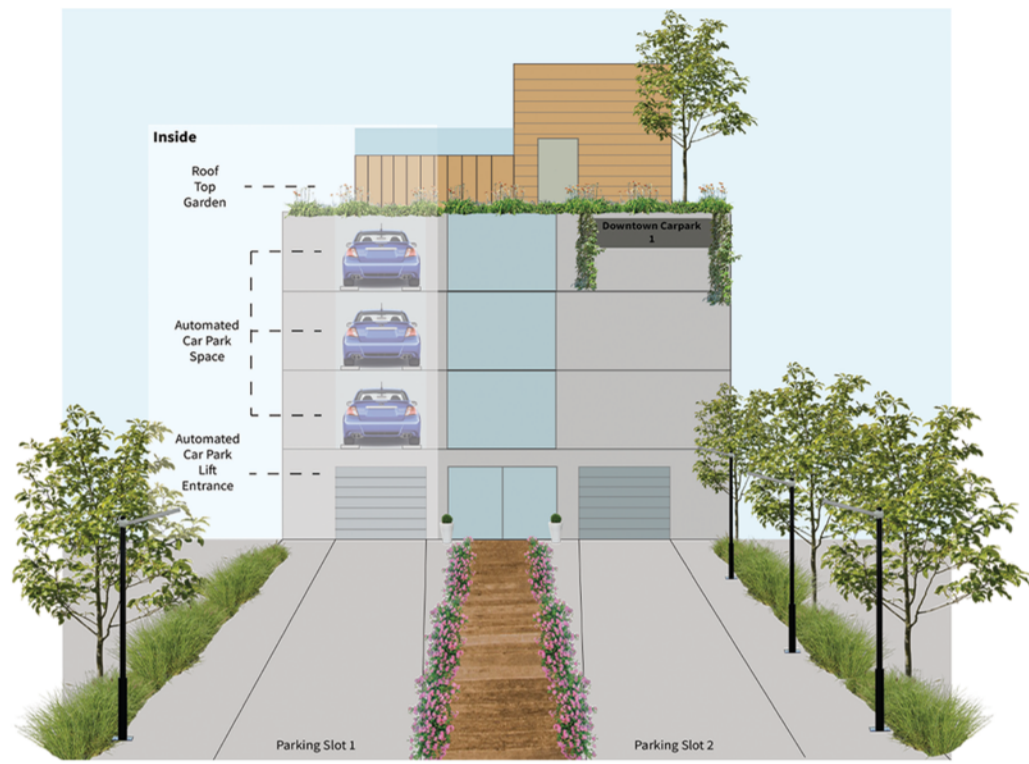
These car parks will be sustainable, innovative and beautiful. They will host rooftop gardens, urban farms and wall murals, inviting play in these new community spaces.



Conceptual Design, Miami, USA: Hulton & Crow



Conceptual Design, Bordeaux, France: Artefactory



## PROMOTING ACTIVE MOBILITY



Sudbury has seen increasing numbers of cyclists. However, their experiences are seldom positive. With good infrastructure and a well-developed framework, walking and cycling can help to enhance travel experiences, and improve first- and last-mile trips. This can reduce the reliance on short car journeys and promote healthier lifestyles.

Furthermore, designated bicycle parking stations, the availability of public bicycles and public bicycle tool stations could further promote cycling.



Bottom (Left): Self-servicing tool station, Singapore: Bike School Asia  
Bottom (Right): Shared bicycle docking station, London, UK: Laura Reynolds

### Residential Routes

Roads reclaimed where feasible for cycling paths. Traffic calming is also put in place to increase safety in residential areas.



### Paved-off Multi Use Routes

To be used downtown, contrasting markings to demarcate various purposes for different lanes, increasing safety and reduce conflict.



### Cycle Superhighways

Physical separation between bicycles and cars, increasing the safety in areas with higher speed and traffic. Green infrastructure is encouraged where feasible.



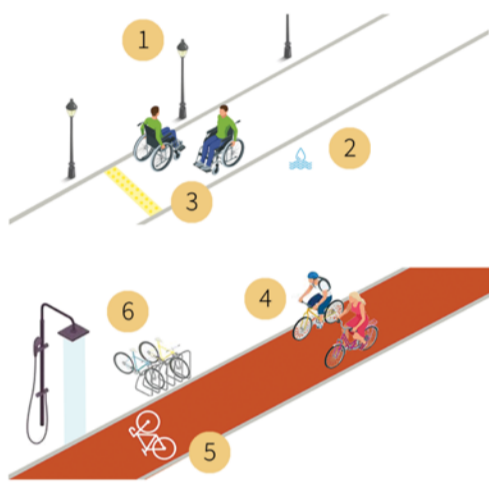
## URBAN DESIGN PRINCIPLES

### Walk

1. Pedestrian pathways should be well-developed and maintained. They should be paved smooth, supported by good lighting at night and of sufficient width for two wheelchairs to pass each other (~1.8m).
2. Permeable paving and anti-slip materials should be employed to ensure safe usability during the thawing season.
3. Tactile flooring should be adopted at key intersections.

### Cycle

4. Sufficient width for cyclists (1m) must be adopted, when possible, an allowance should be made for two cyclists cycling adjacent to each other (2m).
5. Cycling routes should be clearly marked and paved brick red whenever possible. This is especially so in the Downtown and on Key Movement Routes.
6. Building owners in the downtown should provide last-mile facilities such as shower rooms and bicycle parking facilities.



### Ride

7. The transit system should adopt smart technology and pilot on-demand services.
8. Public transit modes should be bicycle-friendly and wheelchair-accessible.
9. Transit networks should be built around key nodes of the city, inducing integration between various forms of transportation modes.



### Drive

10. Widening of roads should be banned. When possible, traffic calming measures such as reduced lane width (to 10/3metres) should be employed to reduce speeds and increase safety.

# HOUSING

## ANALYSIS AND OVERALL CONCEPT

### An ageing population

By 2036, 1/3 of Sudbury will be over the age of 55 and 1/5 will be over the age of 70 (City of Greater Sudbury Housing and Homelessness Study, 2013). Most live in single detached housing which are not senior-friendly. There is also a shortage of long-term care homes with a waiting list of 2,400. Relying on care homes is not a sustainable long-term strategy.

Ageing in place thus allows seniors to live independently and comfortably amidst communities of support that can promote physical, social and mental wellbeing.

### Vibrancy

In recent years, Sudbury has seen an out-migration of youths. This negatively impacts creativity and innovation. Efforts to develop Sudbury's economy into a thriving hub for research have to be complemented with a housing strategy that emphasizes vibrancy. A vibrant downtown area is one that is a desirable place for people to live, work and play - a city that provides many opportunities for people to gather, exchange ideas and form connections.

### Affordability

Housing affordability remains a challenge for lower-income families, particularly for Aboriginal persons. Homelessness continues to be an issue. Existing rental housing stock is of old age and frequently of poor quality. Other than crucial schemes of social support and rental support, it is important to increase the quantity and quality of affordable housing stock as we redevelop the downtown core.

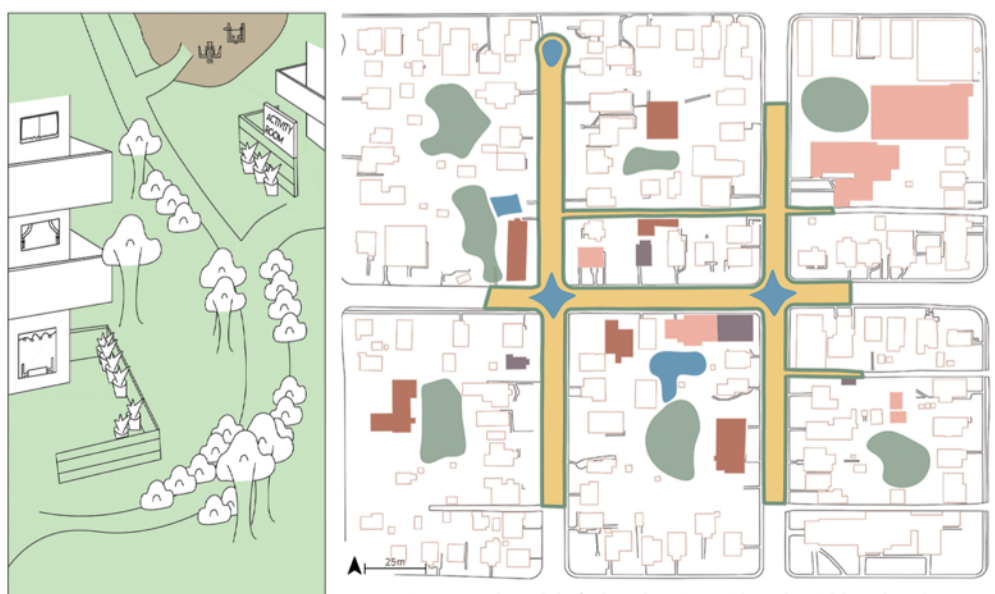


Conceptual model of surrounding residential neighbourhood units in relation to the Urban Core

### A participatory approach to neighbourhood planning

In line with theories of community-led regeneration, urban planning should be conducted with the people and not for the people. Hence, these strategies and urban design principles should be conducted with the community in each neighbourhood involved in co-creation. It is also through the process of participatory design that communities draw closer together to develop stronger support systems and create lively neighbourhoods.

## NETWORK OF LIVEABLE NEIGHBOURHOOD UNITS



Conceptual model of a low density residential neighbourhood

### 1. New build senior-friendly housing typologies

Seniors have expressed interest in downsizing their houses, but without compromising on independence and privacy. New typologies should embrace units with communal settings and facilities such as common kitchens and activity rooms. These can allow seniors to age in place with social support.

There should also be consideration for universal design, accessibility and assisted living. A green environment should be cultivated together with senior-friendly exercise equipment.

### 2. Pedestrianised or Shared Streets

Within a neighbourhood units, inner streets are pedestrianized or converted into shared streets (with cycling, personal mobility devices or other forms of non-car transport) to promote walkability. This increases safety as well as health and wellbeing.

### 3. Increased Public Space

Streets are reclaimed as public spaces for pedestrians. As seniors downsize from single family homes, more land that becomes vacant can also be turned into vibrant public spaces to build cohesive communities, and can also promote art and culture.

### 4. Green Spaces and Corridors

Green corridors complement walkable streets by providing a pleasant environment, while also promoting sustainability and improving health. Converting vacant land into parks and gardens can improve the liveliness of the neighbourhoods, and community gardening can also be introduced to promote more cohesive and healthy communities, particularly for isolated seniors.

### 5. Co-located Social Infrastructure

The extension of accessible healthcare facilities into each neighbourhood is very important. Seniors should also be able to access facilities like recreational centres and arts centres within their neighbourhoods.

### 6. Relaxed Zoning Regulations

Re-zoning areas that were previously purely single family homes will result in the introduction of new land uses in the neighbourhood, such as more retail or F&B options. This is important to create a self-sustaining neighbourhood that meets the needs of seniors within close proximity, particularly in access to supermarkets and healthy foods.

Loosened zoning regulations can also allow the construction of accessory dwelling units which can provide an additional source of income for seniors and affordable housing for vulnerable groups, while increasing neighbourhood vibrancy and density to future-proof Sudbury for the decades to come.



Isabel Street Revamped: Adapted Google Maps

## VIBRANT AND AFFORDABLE LIVING IN THE DOWNTOWN

### 1) New builds of mixed use housing

Mixed use developments ensure an active downtown throughout the day. An emphasis on public space and the encouragement of diverse retail/F&B options further enhances vibrancy. New co-living and co-working typologies can also be experimented with. These can be financed through public-private partnerships in real estate development

### 2) Retrofit existing single-use buildings with housing units

Many buildings have single storey retail/service uses. Retrofitting them can preserve the area's unique character while increasing density of the downtown. Adaptive Reuse is also a cost-effective strategy for disused light industrial buildings or big box shopping with poor footfall to convert them into mixed-use developments.

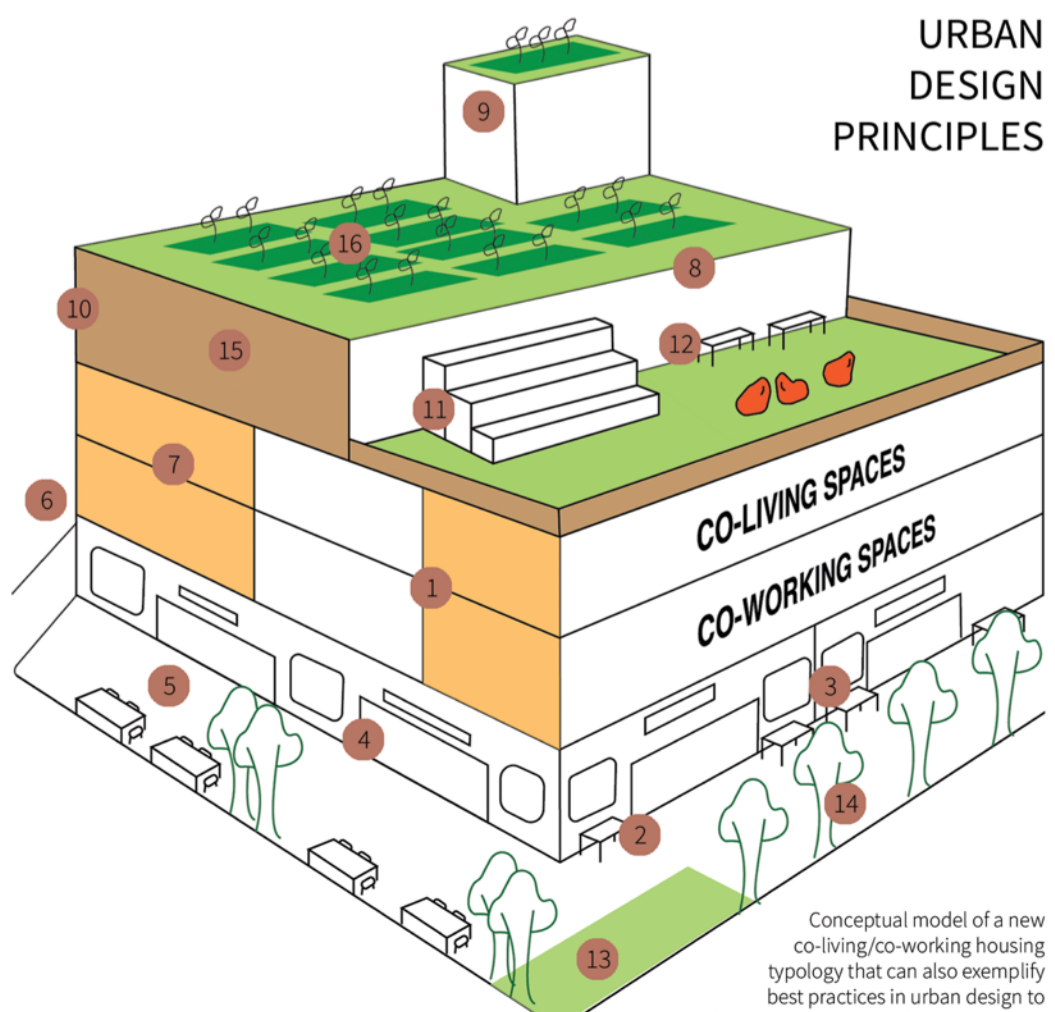


Housing plan for urban core

### 3) Increase affordable housing stock

New housing builds are required to include a percentage of affordable housing units. At the same time, a review of existing affordable housing stock should be conducted. Those in poor condition should be upgraded or re-developed. Short-term assistance through rental support must be continued while facilitating the transition process for vulnerable populations into long-term affordable housing options.

## URBAN DESIGN PRINCIPLES



### Land Use/Zoning

1. Update zoning to promote vertical mixed use
- Streetscape
2. Activate ground floor with retail, F&B or other active uses
3. Set up outdoor furnitures and dining
4. Encourage transparency into building
5. Regulate building setback from street edge
6. Locate service areas, and vehicular entrances to carparks away from streetscapes
- Building Facade
7. Break up building facade using colours, dormers and pitched forms
8. Vary building heights, width and massing
9. Regulate building heights in different zones
10. Conform to local character

### Public Space

11. Increase provision of and connectivity to public space
12. Provide adequate attractive facilities for seating
- Green Space and Sustainability
13. Increase provision of and connectivity to green space
14. Ensure landscape buffer against traffic
15. Promote the use of timber in construction
16. Adhere to green building codes (see Environment)

Conceptual model of a new co-living/co-working housing typology that can also exemplify best practices in urban design to bring people into a 24-hour downtown

# ENVIRONMENT & PUBLIC REALM

## ANALYSIS & OVERALL CONCEPT

The City of Lakes Committed to the Environment Greater Sudbury has more than 300 lakes and almost a 20% of its land area covered by water. In addition, as part of its greening program, more than 9.8 million trees have been planted and above 3400 ha of land grassed over and limed since 1978. The city's rich natural assets and shining commitment to environmental sustainability inspire a vision that has a high-quality public realm with attractive natural spaces and sustainable, people-centred urban design.



## CULTURAL GREENWAY

The relocation of most of the rail tracks frees up land for green, active and lively public spaces. The greenway sees the rails as a place of opportunity, a connecting centrepiece that pays homage to the city's past. This is achieved through softening the tracks with greenery and water and ensuring pedestrian connectivity across and around the tracks.

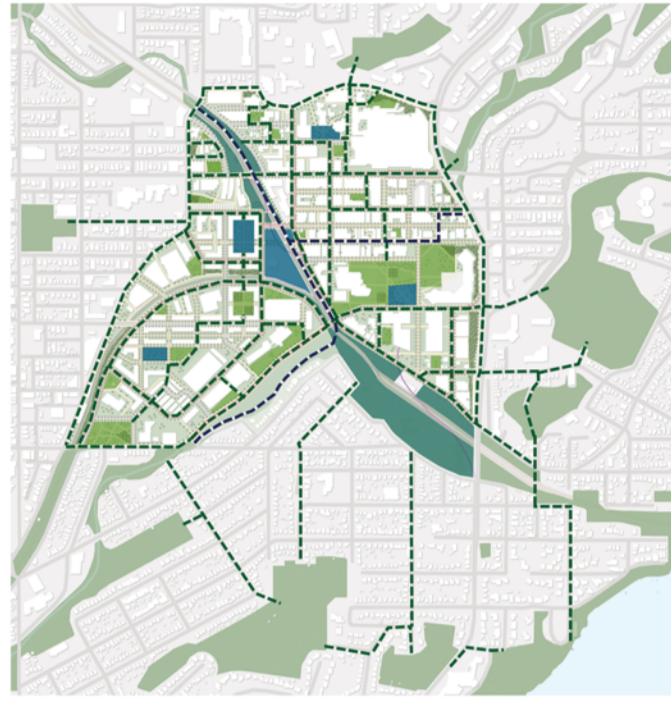


- Frequent, paved at-grade track crossings
- Skybridges
- Raised continuous crossings
- Through-building access to greenway
- Visual permeability across tracks

## GREEN & BLUE NETWORK

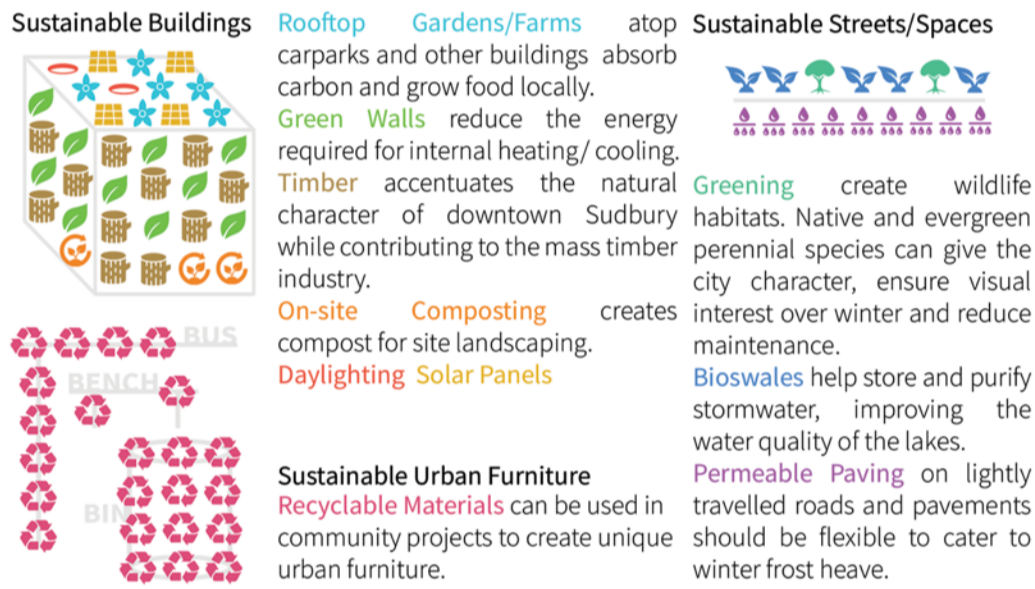
### Green and Blue Elements

A rich and varied green and blue network is a core anchor of the Sudbury 2050 vision. Green and blue elements serve the twin aims of sustainability and enhancing the public realm through regulating the microclimate, improving air quality, reducing carbon emissions, purifying stormwater runoff, softening the city, accentuating its natural character and activating public spaces with farming/gardening activities and visual interest.

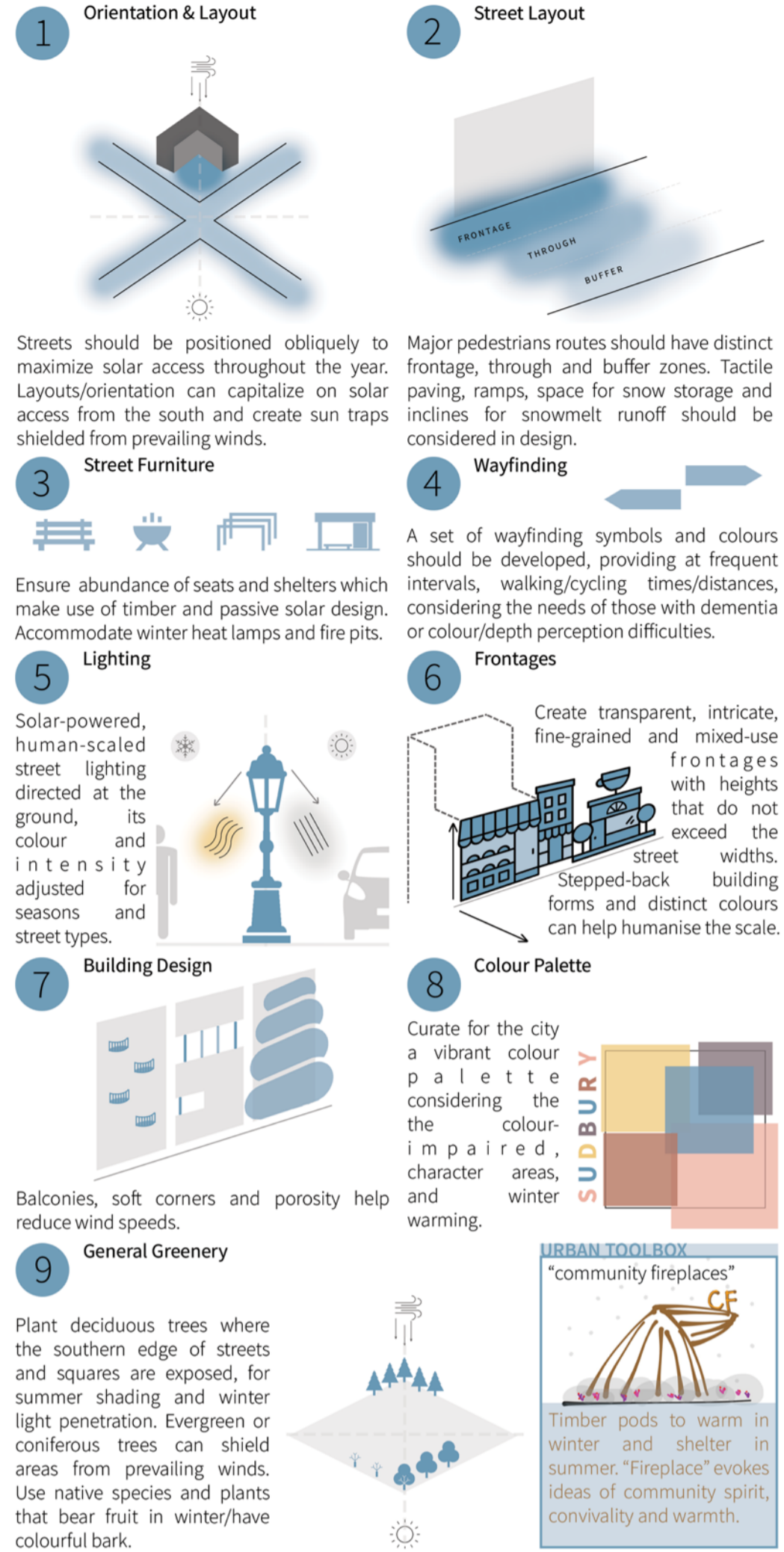


## SUSTAINABLE DESIGN

Cities around the world are facing the threats of Climate Change. In response, they must find innovative ways to mitigate and adapt to these challenges, both to maintain the liveability of their own cities as well as contribute to global efforts to reduce carbon emissions. The vision for Sudbury 2050 is one that is sustainable, a city that safeguards precious natural resources for generations to come.



## URBAN DESIGN PRINCIPLES



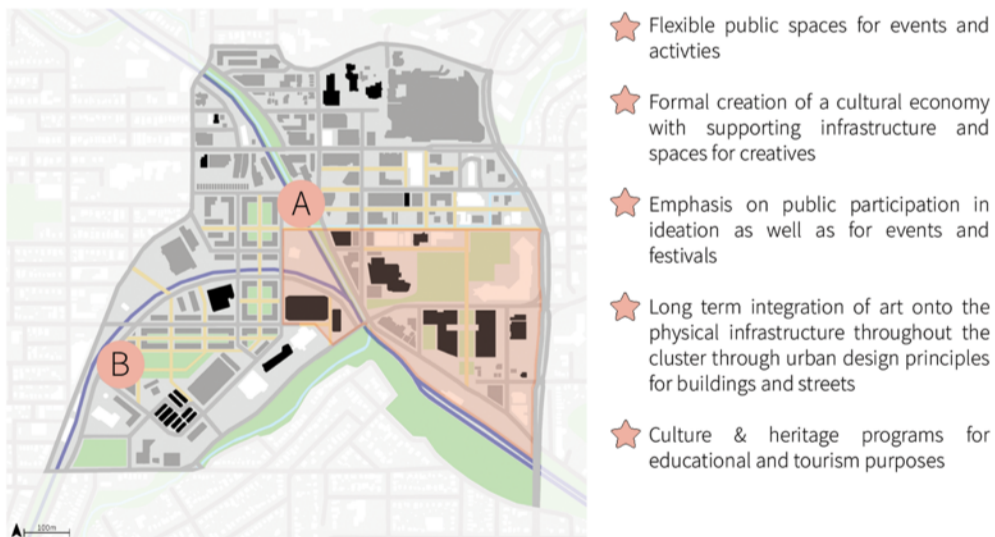
# ARTS & CULTURE

## ANALYSIS & OVERALL CONCEPT

Sudbury has a strong cultural identity which is growing each day. The 2015 culture plan clearly sets goals and processes to strengthen this aspect of the city, agreed upon by the community. Urban Design can be used to emphasise these existing strategies and ideas, enhancing the public realm and opportunities to actualise the city's cultural identity.

Sudbury 2050's vision is to be able to incorporate the arts & Sudbury's cultural identity into all aspects of the city, both physically and socially. Furthermore, dynamic and adaptable strategies would be adopted to ensure Sudbury's resilience over time, taking into account changing social demographics, interests and the ever-changing physical environment.

## CULTURAL CLUSTER HIGHLIGHTS



## Repurposing Spaces

Large ground carparks → Public Spaces for arts, events and recreation



## Cultural Economy

Dedicating land uses for the arts both encourages and supports artists in the city. In line with Sudbury's Cultural plan, providing creative spaces would boost the cultural economy in the long run. Citizen engagement is key in this process to understand their needs and wants better for progressive shifts in the industry.



## INTEGRATING ARTS & CULTURE THROUGHOUT THE CITY

### Strong Art Presence in the Built Environment



**Cultural Placemaking Initiatives** Sudbury is known for iconic city-wide festivals & events, however bringing small-scale community and cultural nuances throughout the city characterizes the city even more. Examples of small placemaking initiatives include Car free Sundays for certain streets, transforming them into markets with cultural activities or having a weekend where the community does a DIY project in their neighbourhood park.



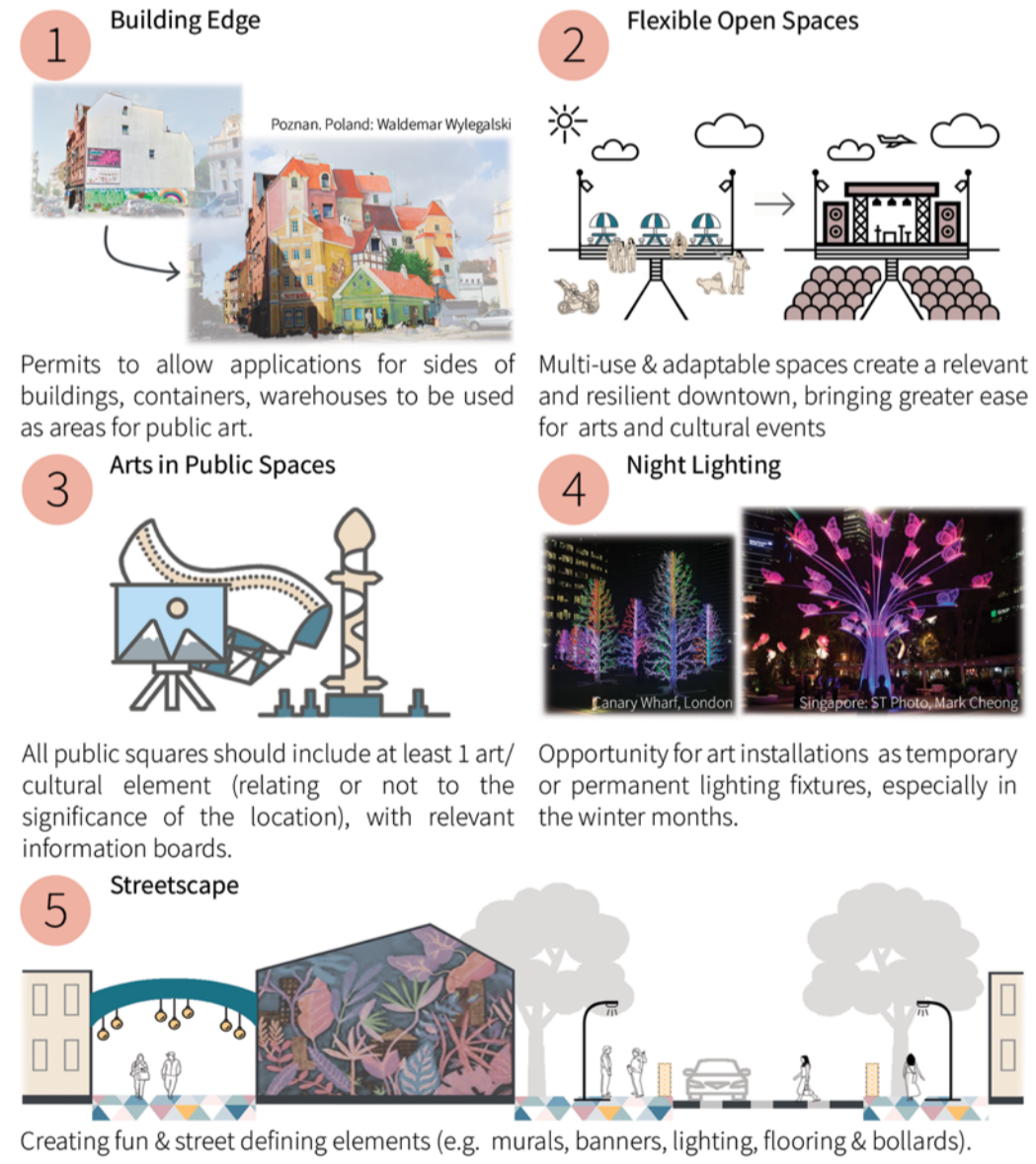
## Fostering the City's Identity

Sudbury already has a strong arts identity, and this should continually be emphasized to attract both human capital and investment into the city. This ties in with integrating art throughout the built environment as well as having complementary events to have a resilient strategy for the strengthening of this identity over time.

**Public Events** Sudbury has an extremely strong arts scene with a multitude of existing festivals and events for the public to enjoy throughout the year. The urban design of the city should complement and enhance the flexibility of urban spaces for such events, and even consider smaller ones for up-and-coming artists & performers. Similarly, the urban design of the city should also inspire artists to be creative in their environments, boosting the resilience of Sudbury's arts scene.

The consideration of seasonal events is very important in sustaining activity as well as engagement with city residents. Furthermore, making these events inclusive and accessible to all should also be a priority to ensure no one is left out in the city's festivities.

## URBAN DESIGN PRINCIPLES



## CONSERVATION AND HERITAGE

Introducing more guided heritage trails in the city highlights new and existing cultural & heritage landmarks throughout Sudbury.

