

Calgary



Municipal Development Plan – 2020

Adopted 2009 and Updated 2020





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Notice

In some cases, there may be gaps in policy numbering. This is to provide continuity on policy numbering with the previous Municipal Development Plan.

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The Municipal Development Plan: Volume 1

Land Acknowledgment

In the Blackfoot language, Calgary is Moh'kin'stis; in Stoney Nakoda, Wiçispa Oyade; in Tsuut'ina, Gu'tsi'tsi and in Métis, it is Ototkwunee. For each of these Indigenous languages, the words translate to 'Elbow,' representing the confluence of the Bow and Elbow Rivers. This is where the story of Calgary begins as the confluence has been a trading hub for Indigenous peoples for millennia and the site where they celebrated natural abundance, ceremony, culture, and partnerships.

This plan acknowledges the traditional lands of the Treaty Seven Nations – the Blackfoot confederacy, (Siksika, Kainai, Piikani), the Tsuut'ina, the Îyâxe Nakoda Nations (Bears paw, Chiniki, Wesley), the Métis Nation of Alberta, Region 3, and all people who have made Calgary their home. This plan honours their long history and deep connections to this land.

The strength and energy of Calgary comes from the land it was built on, as well as the Indigenous people and newcomers whose footsteps have marked this territory.



Canvas tepee and fur trading fort at
Heritage Park



Where the Elbow River meets the Bow River



Indigenous Flags in Council Chambers

Part 1

Role and Scope of the Municipal Development Plan

The City of Calgary's Municipal Development Plan (MDP) is a strategic policy document that guides Calgary's growth and city building. Alberta's Municipal Government Act (MGA) requires that the council of every municipality must adopt a Municipal Development Plan by bylaw.







The MDP and MGA

Calgary's MDP is a statutory document that establishes the orderly use of land and settlement to optimize the quality of the physical environment. The MDP fulfils the requirement of section 632 of the MGA as amended from time to time by addressing matters related to:

- Future land use, development, transportation systems, municipal services and facilities within Calgary and with adjacent municipalities.
- City's development constraints.
- Subdivision and development regulations.
- Municipal, school, environmental and conservation reserves.
- Calgary Metropolitan Region Board Growth Plan (CMRB Growth Plan) and intermunicipal development plans.

The MGA allows a municipal development plan to address other matters relating to the physical, social, environmental and economic development of the city. The MDP addresses these matters as they relate to the integrated land use patterns and mobility networks of the city.

1.1 Plan Foundations – Towards a Sustainable City

Sustainability has always been part of The City's long-range planning. The MDP and Calgary Transportation Plan (CTP) build upon the work of Calgary's previous transportation plan (The Go Plan –1995), which recognized the need to better link transportation and land use planning issues into long range planning for Calgary. A major emphasis of the Go Plan was to optimize the use of existing road and transit infrastructure by incenting land use and travel behavioural changes.

The Calgary Plan (1998), was a compilation of existing City policies that incorporated relevant direction from the Go Plan into land use and growth management policies. However, The Calgary Plan introduce the principles of sustainable development into the statutory planning framework and included policy direction to integrate social, environmental and economic objectives into a coordinated decision-making process.

These previous policy documents have been expanded upon in the MDP and CTP. They start by setting a long term 60-year strategy of a more sustainable city form for Calgary and the transportation networks needed to serve it. This is supported by a 30-year plan for managing growth and change, public investment and land use approval decisions. Finally, short-term, ten-year, corporate decision-making, business planning, implementation and accountabilities are aligned to the strategies and plan to support Calgary's move to being a more sustainable city.

1.1.1 SUSTAINABILITY PRINCIPLES AND KEY DIRECTIONS

In January of 2007, City Council adopted the Sustainability Principles. The Principles were derived from City of Calgary policy direction, well recognized Smart Growth principles, and the direction of the Long Range Urban Sustainability Plan for Calgary (imagineCALGARY).

The Sustainability Principles for Land Use and Mobility are:

1. Create a range of housing opportunities and choices.
2. Create walkable environments.
3. Foster distinctive, attractive communities with a strong sense of place.
4. Provide a variety of transportation options.
5. Preserve open space, agricultural land, natural beauty and critical environmental areas.
6. Mix land uses.
7. Strategically direct and manage redevelopment opportunities within existing areas.
8. Support compact development.
9. Connect people, goods and services locally, regionally and globally.
10. Provide transportation services in a safe, effective, affordable and efficient manner that ensures reasonable accessibility to all areas of the city for all residents.
11. Utilize green infrastructure and buildings.

In November of 2008, City Council approved eight Key Directions for Land Use and Mobility, for use in the development of the MDP and CTP. The Key Directions represented the strategic moves that needed to be accomplished in order to guide Calgary towards the imagineCALGARY vision and the Sustainability Principles for Land Use and Mobility.

The Key Directions for Land Use and Mobility are:

1. Achieve a balance of growth between established and greenfield communities.
2. Provide more choice within complete communities.
3. Direct land use change within a framework of Activity Centres and Main Streets.
4. Link land use decisions to transit.
5. Increase mobility choices.
6. Develop a Primary Transit Network.
7. Create Complete Streets.
8. Optimize infrastructure.

Each goal of the MDP reference one or more of the relevant key directions that it supports.

1.2 Organization of the MDP

Volume 1: The Municipal Development Plan

The MDP is organized as follows:

Part 1 – Role and scope of the MDP

- Plan foundations, sustainability principles and key directions
- Alignment of the MDP with provincial legislation, regional authorities and policies and other City policies.
- Implementation of the MDP:
 - » How the MDP is to be implemented through various planning processes.
- MDP review, updates and amending the Plan.
- Interpreting the MDP.

Part 2 – City-wide policies

- Broad, city-wide land use and mobility goals and objectives and comprehensive policies addressing:
 - » Creating a prosperous economy
 - » Shaping a more compact urban form
 - » Creating great communities
 - » Urban design
 - » Connecting the city
 - » Greening the city

Part 3 – Typologies for Calgary's future urban structure

- Land use, mobility and design policies for specific areas of the city.

Part 4 – Specific-use policies

- Policies relating to specific land use issues or development processes.
- Other policy and content areas required by the Municipal Government Act (MGA).

Part 5 – City Wide Growth Strategy

- Policies to manage growth and change and direct implementation and public investment decisions by The City.

Appendices

- Glossary - definition and interpretation of terms used in the MDP.
- Maps - supporting and aiding in the interpretation of the policies of the MDP.

Volume 2: Implementation

Part 1 - New Community Guidebook

Part 2 - Centre City Guidebook

Part 3 - Developed Areas Guidebook

Volume 3: Calgary Transportation Plan

1.3 Role of MDP in Planning Hierarchy

Land use planning and decision-making in Alberta are done through various provincial legislation and policies and are implemented by a number of decision makers including provincial departments, regional boards and agencies and municipal governments.

Provincial land use planning in Alberta is centered on the Alberta Land Stewardship Act (ALSA), Land Use Framework (LUF), South Saskatchewan Regional Plan and the regional plans authorized under this Act. Municipal land use planning is primarily governed by the Municipal Government Act (MGA). Figure 1 below explains the hierarchy of land use planning in Alberta.

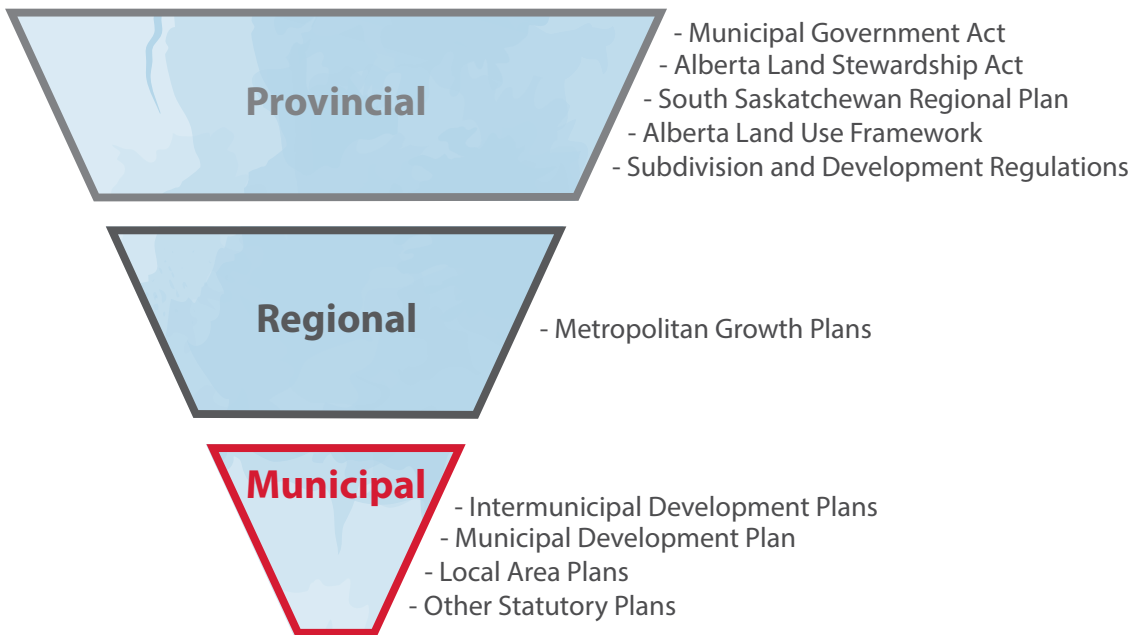


Figure 1-1: Land Use Planning in Alberta

1.3.1 CALGARY AS A REGIONAL PARTNER

The MGA and Provincial Land use Framework requires that local Municipal Development Plans align with:

- South Saskatchewan Regional Plan
- Calgary Metropolitan Region Growth Plan
- Intermunicipal development plans

1.3.2 SOUTH SASKATCHEWAN REGIONAL PLAN

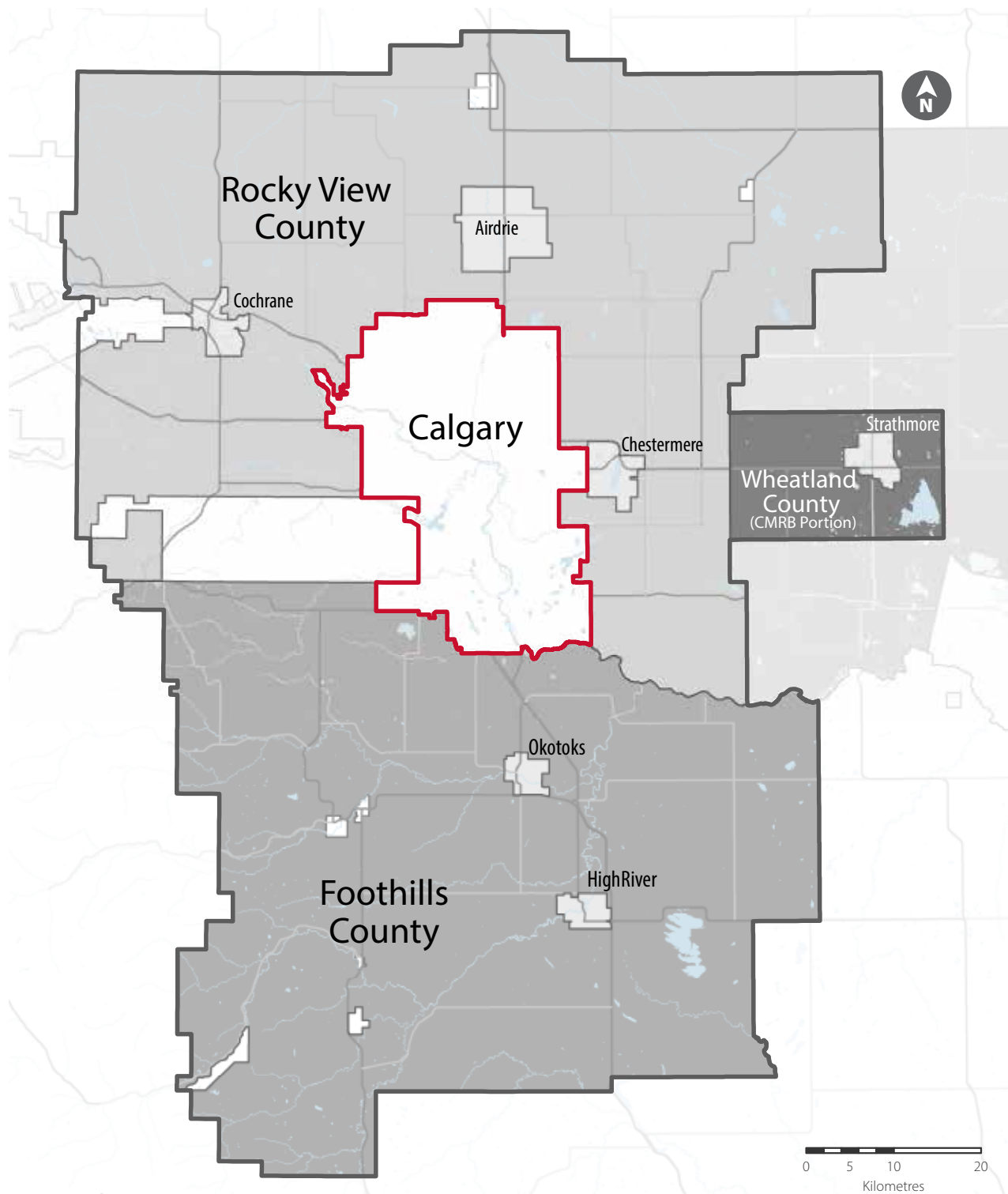
Alberta Land Stewardship Act (ALSA) enables the provincial government to provide direction and leadership in identifying current land-use objectives of the province. In 2008, the provincial government adopted a policy statement titled the Land Use Framework. The purpose of this framework is to manage the provincial land and natural resources to achieve Alberta's long-term economic, environmental and social goals. ALSA enables the strategies identified in the framework including the creation of seven regional plans. The South Saskatchewan Regional Plan (SSRP) is the regional plan that applies to The City of Calgary. It establishes a long-term economic, environmental and social vision for the region. Policy plans approved by The City of Calgary, including the MDP, must be consistent with the SSRP.

1.3.3 CALGARY METROPOLITAN REGION GROWTH BOARD PLAN

The Government of Alberta established the Calgary Metropolitan Region Board (CMRB) of which Calgary is a member. The purpose of the CMRB is to provide for integrated and strategic planning for the long-term sustainability of the region. The Growth Plan and Servicing Plan must be consistent with the SSRP. Policy plans approved by The City of Calgary, including the MDP, must be consistent with the CMRB Growth Plan.

1.3.4 INTERMUNICIPAL DEVELOPMENT PLANS

Regional alignment facilitation may be done through the joint preparation of Intermunicipal Development Plans (IDPs) for common boundary areas with intermunicipal neighbours, including Rocky View County, Foothills County, and the City of Chestermere. IDPs include objectives for a shared area, including collaboration, consultation, infrastructure, transportation and land use planning, protection of growth areas and provisions for annexation. IDPs shall also provide guidance on referral requirements and communications for proposals within the plan area. Policy plans approved by The City of Calgary, including the MDP, must be consistent with any IDP covering the same land area. In the case of any inconsistency, the provisions of the IDP would prevail.



Legend

- Calgary Metropolitan Region Board Area
- City of Calgary

Figure 1-2: Calgary Metropolitan Region Board (CMRB) Members

1.3.5 ALIGNMENT WITH CALGARY'S OTHER STRATEGIC PLANS

The City has other Council policies that establish strategic direction in matters relating to social, environmental, economic and fiscal service delivery and management.

The MDP aligns with policies adopted by Council that establish strategic direction related to:

- Transportation – transit, Complete Streets, transportation choice.
- Housing – forms, types and affordability.
- Economic development – investment and planning to support growth, an innovative and diverse economy, sustainable municipal finances.
- Culture – heritage, public art, design excellence.
- Social Issues – quality of life, safety, food.
- Environment – climate resiliency, air and water quality, watershed plans, natural areas, biodiversity, trees and waste.

The MDP has been prepared in context with these policies to ensure that where environmental, social and economic policies impact, or are impacted by, land use and transportation decisions, relevant policies are included within the statutory framework of the MDP. In some cases, references are made to these other policies within the discussion portion of the MDP to provide a broader context for the policies and actions that follow.



Air and water quality

1.4 Implementing the MDP

The MDP becomes effective following Third Reading by Council on the date set by Council in the bylaw. The MDP will be implemented through a variety of means and processes, to achieve the plan objectives. These processes are described below.

1.4.1 GUIDING STRATEGIC DECISIONS OF THE CITY

The MDP provides strategic direction to support corporate decisions around managing growth and change, prioritizing corporate initiatives and public investment. The MDP will be implemented in conjunction with the CTP as both plans were developed together and are highly linked. The MDP also helps to direct co-ordination between departments and business units to align directions and work programs to achieve the objectives of the MDP.

1.4.2 FACILITATING PRIVATE SECTOR INVESTMENT

Buy-in and investment by the private sector market is critical to achieving the vision of the MDP. The MDP provides the vision for growth and change in the city and direction and certainty to both business and communities, to support private sector investment to build housing, commercial and industrial developments.

1.4.3 SUPPORTING COMMUNITY-BASED INITIATIVES

The MDP can help provide city-wide context to support community-based planning initiatives. It can also provide guidance on smaller more locally-scaled initiatives that support neighbourhood and community development.

1.4.4 IMPLEMENTING THE MDP AND THE CALGARY TRANSPORTATION PLAN THROUGH PLANNING POLICY

Volume 3 of the MDP - The Calgary Transportation Plan

The MDP and CTP are Calgary's long-range land use and transportation plans. Together they align growth and development goals of the MDP with transportation goals of the CTP. Both plans support each other, with the MDP density targets being supported by the CTP's transportation goals and vice versa. These documents are meant to be implemented together. In the event of a policy conflict, the MDP Volume 1 will prevail.

Volume 2 of the MDP - Implementation Guidebooks

The implementation guidebooks apply to specific areas of the city and must be read in conjunction with the MDP and, where applicable, a local area plan. In the event of a conflict or inconsistency between the MDP Volume 1 and the implementation guidebooks in Volume 2, content in MDP Volume 1 prevails. Volume 2 guidebooks only apply in areas where area structure plans or area redevelopment plans indicate that they apply.

Volume 2 of the MDP contains the following three Implementation Guidebooks:

- Volume 2, Part 1 – New Community Guidebook
- Volume 2, Part 2 – Centre City Guidebook
- Volume 2, Part 3 – Developed Areas Guidebook.

Volume 2, Part 1 – New Community Planning Guidebook

The purpose of the New Community Planning Guidebook is to translate the policies and objectives of the MDP Volume 1 into implementation policy at the community level, provide a new framework for new community design, and set common standards for new community development.

Volume 2, Part 2 – Centre City Guidebook

The purpose of the Centre City Guidebook is to translate the policies and objectives of the MDP Volume 1 into implementation policy at the community level, set out land use framework using building blocks and policies to guide growth and change in the Greater Downtown.

Volume 2, Part 3 – Developed Areas Guidebook

The purpose of the Developed Areas Guidebook is to translate the policies and objectives of the MDP Volume 1 into implementation policy to facilitate and guide growth and change in the Developed Areas. Using building blocks as a land use framework and common policies to support development in the Developed Areas, it provides guidance on how to integrate new development into a community's existing urban fabric.

1.4.5 THE GUIDEBOOK FOR GREAT COMMUNITIES

The Guidebook for Great Communities is identified as an 'other statutory policy' allowed for under the MGA. This policy document supports local area planning with a consistent framework for local area planning through the establishment of urban form categories and related policies. Guidance is provided to planning applications and development outcomes.

In the event of a conflict or inconsistency between the MDP Volume 1 and the Guidebook for Great Communities, the MDP prevails.

Figure 1-3 below, illustrates the relationship of the MDP Volume 1 with the implementation guidebooks Volume 2 and the Guidebook for Great Communities.

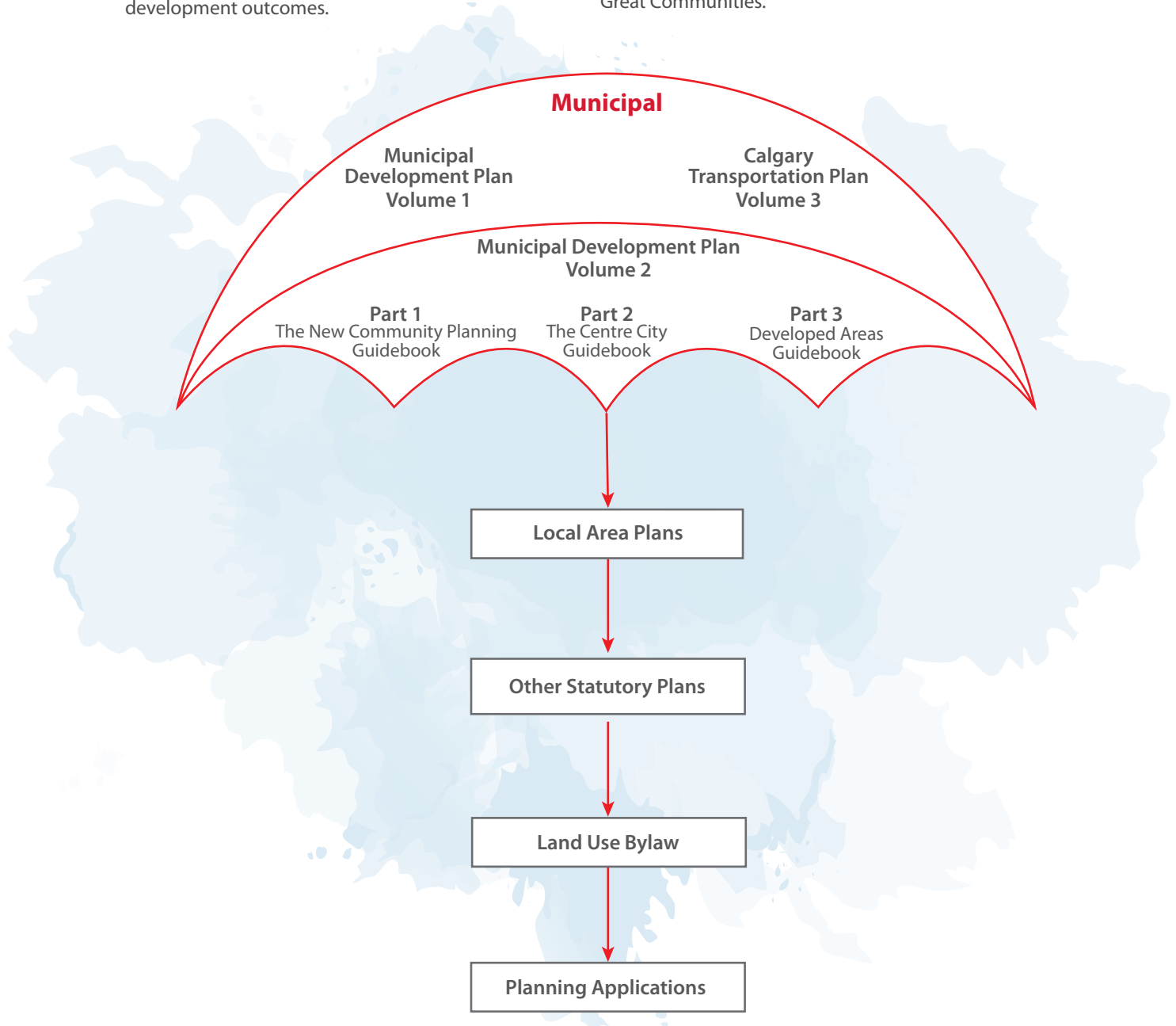


Figure 1-3: Calgary's Policy Planning Hierarchy

1.4.6 LOCAL AREA PLANS

The City provides a range of policy plans for local geographic areas, communities and neighbourhoods. The policies in Volume 1 of the MDP inform these local area plans by providing a city-wide level of direction on land use, urban form and transportation that is interpreted and applied within a local planning context. The policies in Volume 2 of the MDP and the Guidebook for Great Communities provide implementation-level guidance that is to be applied in conjunction with local area plans. Local area plans include two categories: statutory and non-statutory. All local area plans must be consistent with the MDP. In the event of a conflict or inconsistency between the MDP and a local area plan, the MDP prevails.

Statutory plans are those prepared in alignment with the regulations of the MGA. They are usually prepared at a community scale and include area redevelopment plans (ARP) and area structure plans (ASP). ARPs direct the redevelopment, preservation or rehabilitation of lands and buildings within developed communities. ASPs guide the future land use patterns, transportation and utility networks and sequence of development in new communities. The MGA requires that all ASPs and ARPs must be consistent with the MDP.

ARPs and ASPs in existence prior to approval of the MDP are recognized by the MDP as policies providing specific direction relative to the local context. Future reviews of, and amendments to, those ARPs and ASPs will be required to align with the policies of the MDP.

Non-statutory local area plans are also prepared for specific areas of the city, and include plans that apply to future growth corridors, watershed basins, areas of interest across multiple-communities or small redevelopment sites within one community. Such plans may include but are not limited to:

- Regional context studies.
- Community studies or community design briefs.
- Detailed site design plans for transit-oriented development.
- Corridor land use studies – Comprehensive redevelopment plans for major streets.
- Open space and park plans.

These non-statutory local area plans form an important part of The City's overall planning policy direction and will also be consistent with the MDP and with relevant ASPs and ARPs.

Where local area plans do not exist for a community, or where the local area plan does not provide significant policy direction to inform decision-makers, the MDP, CTP and other policies should be considered when making planning decisions.

1.4.7 OUTLINE PLAN AND LAND USE AMENDMENT APPLICATIONS

The City undertakes detailed planning and design of new communities, or the redevelopment of large areas of existing communities, through the outline plan and subdivision process. This involves design details such as the preservation of environmental areas, open space locations and reserve dedications, development patterns, land use mixes and local street networks.

The outline plan is a non-statutory site plan, with associated conditions, that is usually processed together with land use amendments, to ensure a workable distribution of land uses, open space and road network (e.g. land districts, the location and classification of streets, the distribution and size of the parks and school sites in the neighbourhood).

Outline plans must be consistent with statutory provincial, regional, and municipal plans and policies.

A land use amendment (or land use redesignation) changes the allowable uses and development rules of an area. It may be processed concurrently with an outline plan or as a standalone application.

Not all areas experiencing development pressures have the benefit of a local area plan to provide guidance to a local community or specific application. In such cases, the MDP should be used to provide guidance on the application of an appropriate land use district or identify appropriate land uses.

In areas where an approved ASP or ARP is in effect, when making land use decisions, the specific policies and design guidelines of that plan will continue to provide direction. In cases where the ASP or ARP is silent, or does not provide sufficient detail on land use, development or design issues, the MDP should be used to provide guidance on the appropriate land use districts, as deemed appropriate by the Development Authority.

1.4.8 SUBDIVISION

Subdivision is a legal process of dividing land into smaller parcels. This involves design details such as the preservation of environmental areas, open space locations and reserve dedications, lot patterns, development patterns, land use mixes and local street networks. Decisions made by the Subdivision Authorities must comply with the provincial, regional, and municipal plans and policies.

1.4.9 DEVELOPMENT PERMIT APPLICATIONS

A Development Permit is a document authorizing a development, issued by a Development Authority pursuant to the Land Use Bylaw and includes plans and conditions of approval.

The MDP provides direction to the Development Authority when making decisions on development permit applications. The MDP also provides guidance within areas identified for long term urban intensification and the appropriateness of interim uses.

1.4.10 URBAN DESIGN

The urban design policies in Part 2 set out the overall urban design vision for Calgary. The policies and guidelines are intended to inform local area planning, outline plans, land use amendments and development permits. They are also relevant to city-initiated design projects for public realm improvements, street corridors, open space plans, and transit station area planning.

1.5 MDP Review, Updates and Amending the Plan

The City is resourced to provide on-going implementation support regarding interpretation and application of the policies, thresholds and targets of the MDP.

The MDP is a living document that The City will keep current by reviewing it regularly, updating and amending it. Administration will also monitor implementation of the MDP and bring forward amendments from time to time to clarify interpretation issues, policy gaps, implementation processes and corporate decisions. Parts 2, 3 and 4 of the MDP are organized such that future policies can be incorporated into the MDP. The policies of Volume 2 Implementation Guidebooks will be reviewed on an ongoing basis and amendments may be made as necessary for consistency with any policy changes made to Volume 1. Amendments to the MDP will be undertaken in accordance with the requirements of the MGA.

Proposed changes to the MDP require a bylaw amendment, as required by the MGA. Opportunities for broader public and stakeholder engagement may be desirable, depending upon the nature of the proposed MDP amendment, potential impacts or anticipated level of public interest generated by the change. Administration will assess and develop appropriate engagement processes for each future MDP amendment.

Since the Calgary Transportation Plan is linked to the MDP, if an amendment to the MDP is proposed, a complementary amendment to the CTP may be required.

A major review of Volume 1 of the MDP should be undertaken every 10 years to ensure that the goals, policy directions, processes, actions and Core Indicators for Land Use and Mobility consider such factors as current growth forecasts, market trends, overall city and community values and The City's financial capacity. The policies of Volume 2 will be reviewed on an on-going basis and amendments may be made as necessary.

1.6 Using and Interpreting the MDP

The policies in Volume 1 of the MDP are written to provide direction to Calgary's land use planning, development and growth management framework. The policies in Volume 2 of the MDP are written to provide implementation-level guidance for specific areas within Calgary.

Within the MDP, "The City" is used to describe The City of Calgary as a municipal government, or corporation, whereas, "the city" and "Calgary" are used to describe the physical area of the municipality.

Most policies are written in the active tense, as deliberate statements or plans indicative of the direction that The City is proposing for future development or desired outcomes. In some of these policies, the word "should" is explicitly used to further clarify the directional nature of the statement (e.g. policies regarding threshold densities of people and/or jobs in Part 3 – Typologies). The use of the active tense or word "should" does not imply that the policy is optional. Rather, policies that use active tense or "should" are to be applied in all situations, unless it can be clearly demonstrated to the satisfaction of The City that the policy is not reasonable, practical or feasible in a given situation. Proposed alternatives must be to the satisfaction of The City with regards to design and performance standards.

In some cases, policies are written to apply to all situations, without exception, usually in relation to a statement of action, legislative direction or situations where a desired result is required. The words "require", "must", "will" or "shall" are used within these policy statements.

The MDP provides a long-term strategy for the future growth of the city. It puts into place a plan and policies that will work towards achieving that strategy over time. No representation is made herein that any particular site is suitable for a particular purpose as shown on maps or implied through policies of the MDP. Site conditions must be assessed on a case by case basis as part of subsequent development application reviews.

Implementation, actions and programs identified within the MDP will need to be reviewed within the priorities and municipal financial capacities of current and future City Councils.

The MDP also contains several indicators and associated targets. These indicators and targets, as identified in Sections 5.2.2 and 5.3, are intended to track overall city-wide progress towards achieving the goals and objectives of the MDP and CTP.



Part 2

City-wide Policies

The city-wide policies presented in this section are the integrated land use and mobility policies of the MDP. They are the policies that guide growth and change across the whole city and speak to the kind of city Calgarians want for the future. The policies also have relevance and provide direction across many specific scales of planning in the city (e.g. implementation guidebooks, local area plans, outline plans, land use amendments and development permits).



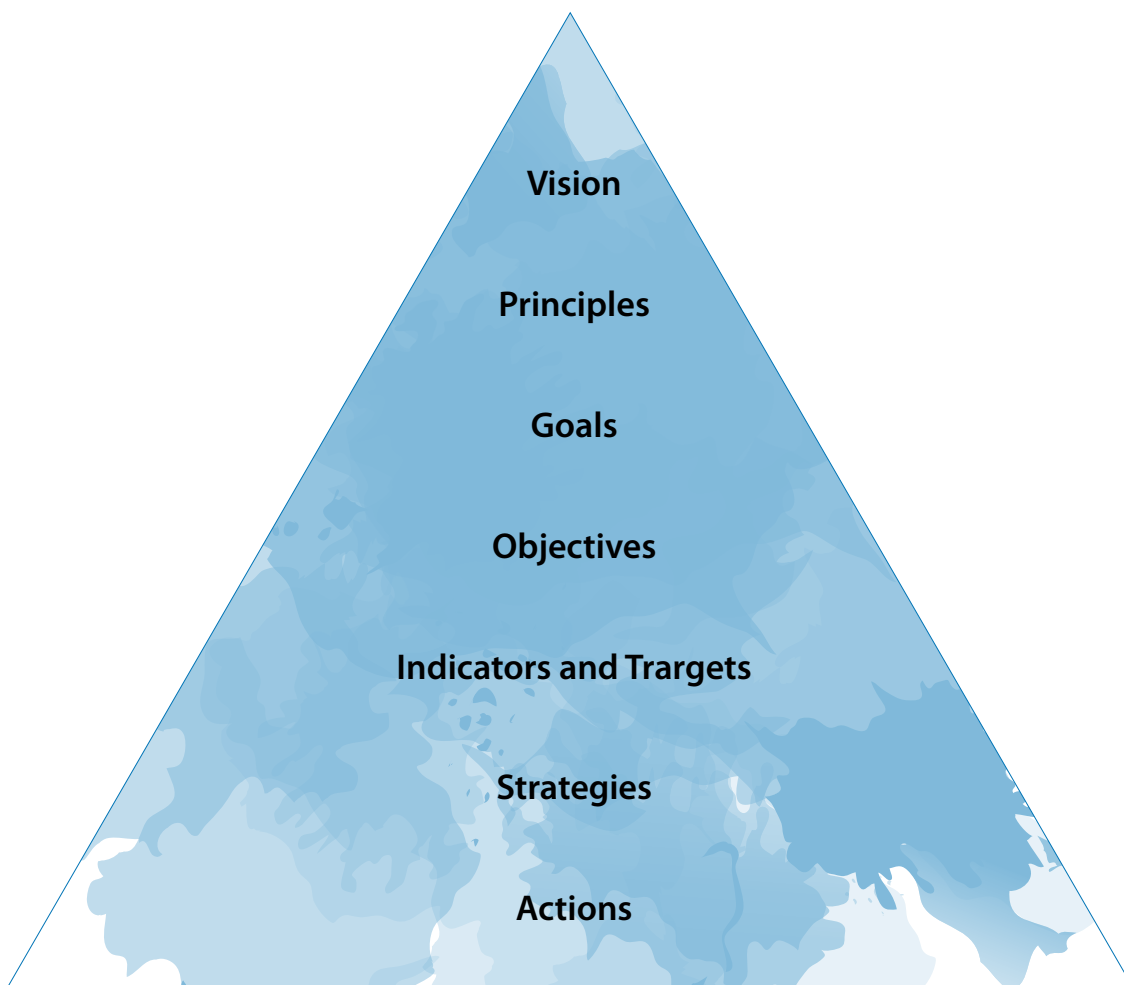


Figure 2-1: Decision-making framework

The section is organized to align the MDP goals, objectives and policies within the overall context of the decision-making framework (Figure 2-1) that links the vision of imagineCALGARY through to actions that will be required to implement the plan. This framework ensures that the MDP is aligned with the long-term community vision for the city, as well as the actions and indicators. Each serves a purpose within the MDP and provides different degrees of direction to implementers and decision makers.

2.1 A Prosperous and Diverse Economy

Goal Build a globally competitive city that supports a vibrant, diverse and adaptable local economy, maintains a sustainable municipal financial system and improves the quality of life for current and future Calgarians.

Supports

- Key Direction 1:** Achieve a balance of growth between established and greenfield communities.
- Key Direction 2:** Provide more choice within complete communities.
- Key Direction 4:** Link land use decisions to transit.
- Key Direction 5:** Increase mobility choices.
- Key Direction 8:** Optimize infrastructure.

Calgary is a major player in the global marketplace. The City enjoys a robust economy with jobs across many industry sectors and plans to build upon the economic diversity already realized. As a city, Calgary is committed to creating an economy for future generations, maintaining financial success and the benefits it brings: new businesses, job opportunities, global connections and a culture of innovation.

The New Economy

The 2018 economic strategy for The City, “Calgary in the New Economy” focuses on four drivers of growth: talent, innovation, place and a business-friendly environment. Under the areas of focus, the strategy identifies 13 initiatives to support growing the new economy.

Talent

1. Create Canada’s largest talent accelerator.
2. Emphasize creativity and innovation from Kindergarten to University.
3. Establish Calgary as a magnet for students.
4. Address immediate needs through attraction efforts.

Innovation

5. Create the Calgary Innovation Corridor.
6. Develop relationships within the innovation ecosystem.
7. Build funding to support generational growth.
8. Accelerate growth through attraction, advocacy and trade.

Place

9. Accelerate urbanization and connectivity in the core.
10. Intentionally support diversity and inclusion.
11. Expand and enhance tourism (including authentic indigenous tourism), culture and recreation assets.

Business Environment

12. Deploy initiatives to facilitate business development and growth.
13. Develop Calgary as a Living Lab.

Growth of Clusters

To assist in realizing the strategy's goals, growth in established and emerging clusters are strongly encouraged. These include:

- Energy
- Transportation & Logistics
- Agribusiness
- Tourism
- Creative Industries
- Life Sciences
- Financial Services
- Technology

These areas of focus, initiatives and clusters, are the key elements to support business investment and job creation in Calgary over the long-term and attract international in-migration, population growth and demand for housing, services and mobility. In the shorter term, Calgary's population is expected to experience a significant demographic shift with the labour force comprising of more older persons and relatively fewer young people. This will impact businesses' ability to attract and retain employees. It will also impact local housing needs, travel patterns and service delivery to the community, all of which may result in rising costs incurred by The City.

A Prosperous City and Sustainable Urban Growth

Responsible governments plan for long-term sustainability of the local economy. They serve current and future generations within the constraints of limited resources. Creating a competitive and enduring city means ensuring that the urban economy and urban form:

- Are resilient and adaptable to future economic cycles and unanticipated shocks.
- Support the financial strengths of the municipality.
- Preserve a high quality of life for citizens.
- Respect the region's natural environment.

Planning for the future growth, maintenance and the type of built environment of the city have significant long term implications for public spending. Therefore, the urban form and how and where, Calgary grows become significant components of The City's overall economic policy.

Economic principles that will inform the future framework for growth and change in the city are:

1. People are the greatest asset of a city. Calgary needs to:
 - Maintain an educated and diverse labour force.
 - Keep the labour force healthy and safe.
 - Provide a high quality of life for citizens.
 - Attract new people and businesses.
2. A vibrant economy attracts business investment. Calgary needs to create:
 - An environment where the local economy can be resilient and adaptable to economic cycles and emerging global trends.
 - An environment where the local economy's global competitiveness is enhanced.
 - Efficient and cost-effective mobility linkages between business centres.
 - High-quality business locations.
3. The dynamics of the three orders of government (municipal, provincial and federal) impact The City, its cash flow and the quality of life of Calgarians. Calgary needs to:
 - Influence regional, provincial and National economic policy decisions that impact cities.
 - Enhance and promote its competitive advantages in environmental protection and sustainability regionally, nationally and globally.
4. A municipal government provides services efficiently and equitably in a way that improves the quality of life for future generations. The City needs to:
 - Maintain sustainable finances and reduce timing between public infrastructure investment and resulting revenues.
 - Provide and maintain affordable, efficient and environmentally balanced infrastructure, services and facilities.

2.1.1 CREATING A CITY ATTRACTIVE TO PEOPLE

Objective

Create a city that provides a good quality of life for its citizens; attracts and retains an educated, creative, skilled and diversified workforce; and has the financial capacity to support existing and future generations.

Calgary is recognized and awarded as being one of the most livable cities in the world. The long-term economic health of the city is vital when creating communities where residents and newcomers want to live and work. Equally important is ensuring that existing and future citizens have a good quality of life and will want to remain in the city and that we are attracting new and innovative talent. Attractors of migration include career and job opportunities and housing affordability. The design of a community is also essential to delivering additional attractors including convenient transportation to jobs and amenities. Chief among those amenities is proximity to schools, open spaces and education facilities.

Policies

- a. Provide safe and healthy communities with a variety of housing choices, employment opportunities, local retail and services and mobility options.
- b. Ensure impacts on overall housing affordability are considered as part of planning decisions.
- c. Provide greater housing choices in locations close to job markets and in areas well served by the Primary Transit Network.
- d. Provide mobility networks to connect citizens with major employment areas, places of learning and cultural and recreational destinations.
- e. Ensure opportunities for life-long learning by supporting institutions offering post-secondary education, job training and skill development.
- f. Design community and urban infrastructure that incorporates new technologies to allow home and community-based learning.
- g. Facilitate the availability of competitively priced, easily serviceable and developable land for residential purposes, including opportunities for brownfield development.
- h. Encourage community led initiatives and develop flexible adaptive tools to support them.

2.1.2 CREATING A CITY ATTRACTIVE TO BUSINESS

Objective

Create a globally competitive city that protects and enhances the key drivers of the local economy and supports on-going business investment and expansion while attracting a growing workforce.

It is beyond the ability of The City to mandate when and how businesses in the sectors outlined above locate or expand. However, The City can enact public policy to ensure that adequate locations for office, institutional, retail and industrial development are protected in strategic and accessible areas that will meet the future needs of these businesses.

Policies

Supporting business and investment

- a. Attract and retain business and industry in Calgary by fostering economic diversification and providing a climate that competitively attracts and enhances economic activity.
- b. Protect the integrity of viable employment and retail areas by supporting the retention and growth of existing businesses.
- c. Promote the Downtown Core of Calgary as the location of choice for corporate head offices and supporting businesses.
- d. Provide locations for office growth outside of the Downtown Core in areas well connected by public transit.
- e. Remain open to innovation and provide flexibility to accommodate the changing needs of business.
- f. Create and maintain clear policy direction, application procedures and development standards to reduce uncertainties and risks to the economy.

Supporting healthcare and learning institutions

- g. Incorporate the long-term growth needs of existing healthcare and learning institutions within the land use framework and transportation networks of the city.
- h. Provide a land use framework that helps attract highly specialized businesses in the areas of healthcare, education and research and development.
- i. Link existing healthcare and learning institutions to the Primary Transit Network.
- j. Support and promote the location of new healthcare and learning institutions in areas served by the existing Primary Transit Network.

Supporting the transportation and logistics industry

- k. Recognize the role of the Calgary International Airport as a global logistics centre while ensuring city-wide access is retained for public transit, passenger vehicles and goods movement.
- l. Identify railroad inter-modal sites as strategic destinations within the regional logistics network and plan for supporting land uses that benefit from proximity to these facilities.
- m. Recognize the access needs of the logistics industry by locating warehouses and local distribution centres in areas that provide direct roadway connections to the goods movement corridors.

Supporting manufacturing and industrial businesses

- n. Ensure the availability of competitively priced, easily serviceable and developable land for industrial purposes: including providing opportunities for brownfield redevelopment.
- o. Protect appropriately located industrial areas from undue encroachment by residential development in cases where the nature of that industrial activity requires separation from residential uses.

2.1.3 ENSURING A SUSTAINABLE ECONOMY

Objective

Support the sustainable growth and environmental integrity of Calgary and the Calgary Region.

Co-ordinating efforts between senior governments and municipalities is necessary to ensure efficient and aligned service delivery and to preserve the economic and environmental integrity of the Calgary Region.

As the environment and economy are inextricably linked, land use and mobility choices that affect the economy and growth of the city must take into account the impacts on the natural environment. Climate (green house gas, water, etc.), land (natural areas, biodiversity) and energy issues are linked to the economy and cannot be addressed by one municipality alone. In the case of Green House Gas (GHG) emission reductions, Calgary may need financial assistance to implement a full set of successful initiatives, or attract the necessary investments to realize the required efficiencies and improvements. Co-operation among all orders of government will be needed to protect the environment and mitigate climate-induced impacts to our urban landscape; thus the economic well-being of the Calgary Region.

Policies

- a. Work with federal and provincial governments and external partners, to ensure environmental and economic sustainability are considered in decisions affecting the region.

2.1.4 ENSURING SUSTAINABLE MUNICIPAL FINANCES – FOCUSING AND PRIORITIZING INVESTMENTS

Objective

The City will ensure that it has the long-term financial capability to support the city being created.

Sustainable municipal finances depend upon the ability of the local economy to support a healthy population and the quality of life in the local area. The ability to continue to meet citizen and business demand for services is, in turn, dependent on a municipality's financial ability to provide and maintain that infrastructure. Prudent planning and use of municipal infrastructure can help the growth cycle continue while minimizing the financial costs. As the level of government that delivers day-to-day services to citizens and businesses, municipalities are strategically placed to provide the majority of public services in the most efficient manner possible. Alignment in service delivery is achieved through co-ordination with federal and provincial governments and neighbouring municipalities. Co-ordination with other organizations providing health, education and social services through their own infrastructure will also assist in maintaining the growth cycle at minimum costs.

Policies

- a. Optimize the use of existing infrastructure and services.
- b. Manage assets wisely and provide infrastructure that is affordable and cost-effective over the long-term life cycle of the asset.
- c. Make planning and capital investment decisions considering a triple bottom line within a corporate strategic framework that supports financial sustainability for The City (see also Part 5).
- d. Accommodate growth while avoiding premature investment in municipal infrastructure.
- e. Work with other levels of government to secure sustainable sources of municipal funding for both the capital and operational needs of The City.

2.2 Shaping a More Compact Urban Form

Goal Direct future growth of the city in a way that fosters a more compact efficient use of land, creates complete communities, allows for greater mobility choices and enhances vitality and character in local neighbourhoods.

Supports

- Key Direction 1:** Achieve a balance of growth between established and greenfield communities.
- Key Direction 2:** Provide more choice within complete communities.
- Key Direction 3:** Direct land use change within a framework of nodes and corridors.
- Key Direction 4:** Link land use decisions to transit.
- Key Direction 5:** Increase mobility choices.
- Key Direction 7:** Create Complete Streets.
- Key Direction 8:** Optimize infrastructure.

This section describes the vision for a long-term pattern of growth and development in Calgary over the next 60 years (as shown on Map 1, Urban Structure) and provides policies that will start to create that form of city over the next 30 years. The critical issues of creating a more compact urban form and reducing the rate of outward growth are addressed in this section. These include:

- Greenfield a future land use framework that will support transit.
- Creating a vibrant Greater Downtown.
- Providing complete communities.
- Directing growth to strategic areas that can support neighbourhood and economic vitality.
- Reinforcing the character, quality and stability of neighbourhoods.
- Balancing growth between Developed and Greenfield Areas of the city.



Greenfield Areas

Areas of the city that are still under development, or being planned for future development. They include new residential communities, commercial areas and industrial subdivisions.

Developed Areas

Areas of the city that have already been built out. They include residential communities, commercial areas and industrial/business parks.

The objectives and policies below represent the citywide land use framework for creating an urban structure for the city that is livable, healthy and prosperous and will remain so for future generations.

2.2.1 VIBRANT AND TRANSIT-SUPPORTIVE MIXED-USE, ACTIVITY CENTRES AND MAIN STREETS

Objective

Build and diversify urban activities in Activity Centres and Main Streets.

The MDP proposes a more compact urban form for Calgary by locating a portion of new housing and jobs within higher intensity, mixed-use areas that are well connected to the Primary Transit Network. Such areas define the strategic locations where high-quality transit and a diversity of commercial, residential and service uses currently exist, or where they could be developed over the long term. These locations have the capacity to support future residential and employment intensification in concert with the provision of high-quality urban environments and cohesive community development. Focusing most intensification to defined areas provides more certainty to the development and building industries and makes redevelopment more predictable for existing communities by lessening the impact on stable, low-density areas. Activity Centres and Main Streets will increasingly act as priority locations for:

- Accessible, safe and convenient public transit hubs along the Primary Transit Network.
- A greater variety of housing choices within or near existing residential communities.
- Higher density residential and employment concentrations.
- Local opportunities for employment and daily retail and service needs.
- Walkable destinations and local gathering places for adjacent communities.

Primary is the Transit Network?

It is a permanent network of high-frequency transit services, regardless of mode, that operates every 10 minutes or better, 15 hours a day, seven days a week.



Activity Centres

Greater Downtown – is Calgary's primary activity centre with the highest concentration of employment and population growth. It is the heart of Calgary and comprised of the Downtown Core and several higher-density neighbourhoods. It is where the transportation system has the highest levels of interconnectivity.

The following Activity Centres generally have a low-density built form today and an existing employment character to build upon. Their parcel size, location and built form provide the potential for comprehensive, higher-intensity development that can be integrated with the Primary Transit Network as well as with adjacent communities.

Major Activity Centres (MAC) – Major Activity Centres are areas of high job and population growth, located in strategic areas central to larger residential catchment areas and linked city-wide by the Primary Transit Network.

Community Activity Centres (CAC) – Community Activity Centres are areas of moderate job and population growth, near one or more communities and supported by the Primary Transit Network.

Neighbourhood Activity Centres (NAC) – Neighbourhood Activity Centres are smaller mixed-use areas within neighbourhood districts that are appropriate locations for local job and population intensification, in scale with neighbourhood context.

This hierarchy recognizes that all local contexts are different and that varying scales of development opportunity, mix of uses and levels of transit service will be needed to achieve city-wide objectives in a manner sensitive to local communities. Specific land use, transportation and urban design policies and implementation strategies for each Activity Centre are provided in Part 3 of the MDP.

Main Streets

Development opportunities within Main Street areas relate to their existing role as retail streets and their potential to become places for urban intensification near the Primary Transit Network. The existing block layouts, business types and

varied ownership patterns means planning and development may transform incrementally. Main Streets are classified into two types:

- Urban Main Streets
- Neighbourhood Main Streets

The Main Street hierarchy recognizes that all local contexts are not the same and that varying scales of development, the classification of road type, existing uses and levels of transit service will be needed to achieve city-wide objectives in a manner sensitive to local communities. Specific land use, transportation and urban design policies and implementation strategies for Main Streets are provided in Part 3 of the MDP.

Policies

Activity Centres and Main Streets

- a. Direct a greater share of new growth to the Activity Centres and Main Streets, identified on Map 1, in a manner that:
 - i. Provides compact and high-quality urban development, with a mix of uses across the area.
 - ii. Concentrates jobs and people in areas well served by primary transit stations and stops.
 - iii. Achieves the residential and employment intensity thresholds of the applicable Activity Centre and Main Street contained in Part 3 of the MDP.
 - iv. Concentrates urban development in a built form that helps to optimize existing public investment, municipal infrastructure and facilities.
 - v. Provides a mix of employment, residential, retail and service uses that support the needs of adjacent communities.
 - vi. Supports a range of housing opportunities in terms of type, tenure, unit size and affordability.
 - vii. Creates a built form that reinforces their role as vibrant centres of activity by promoting walkability and local connectivity.
- b. Plan the development of Activity Centres and Main Streets appropriate to the local context by:
 - i. Maintaining compatibility, avoiding dramatic contrast in height and scale through limits on allowable heights and bulk of new development particularly when low density residential areas are adjacent.
 - ii. Creating transitions in development intensity between low density residential areas and more intensive multi-unit residential or commercial areas.
 - iii. Locating the tallest buildings and highest densities closest to transit stops and stations and at strategic sites, identified through local area planning processes, and transitioning heights and densities away from these areas.
 - iv. Massing new development to frame adjacent streets in a way that respects the existing scale of the street.
 - v. Limiting the impacts of shadowing on streets, parks and properties.
 - vi. Providing public systems, including connecting pathways, that facilitate direct, convenient, comfortable and safe pedestrian movement to transit, recreational uses and other services.
- c. Co-ordinate planning and public investment decisions to support the development of a greater variety of medium and higher density housing forms in Activity Centres and Main Streets.
- d. Support Activity Centres and Main Streets as locations for the growth and intensification of major employment uses (including post-secondary and medical institutions) by linking them to the Primary Transit Network.
- e. Identify the appropriate jobs and population ratio and planning area boundaries of Activity Centres and Main Streets in the implementation guidebooks and/or the local area planning process.
- f. Identify appropriate locations and scales of Activity Centres and Main Streets required to support urbanization of the Future Greenfield areas through future regional context study (RCS) processes or, in absence of an RCS, the Area Structure Plan (ASP) process may be considered.
- g. Direct development to Activity Centres, Main Streets, and TODs with pro-active City-led initiatives.

2.2.2 A TRANSIT-SUPPORTIVE LAND USE FRAMEWORK

Objective

Establish a land use framework that optimizes population and job growth within walking distance of transit.

Transit service is an integral component of the City's transportation network and provides mobility options for people of all ages. The type and quality of transit service that can be economically supported in a community is determined almost exclusively from the land use characteristics of the area. There are four key land use elements that are critical to supporting quality transit service. These elements are:

Density: The intensity of people living or working in the area

Diversity: Mixing land uses

Design: Creating a quality pedestrian environment (see also Section 2.4 Urban design)

Distance: Locating the right uses close to transit

The successful integration of these elements within a local planning context will determine the ultimate success of encouraging transit ridership.

Transit-oriented development (TOD)

TOD is a strategy that promotes higher density, mixed use development within walking distance of public transit stations.



Density

To be cost-effective, transit must reach enough potential riders. In turn, density located near transit encourages additional transit use. Development of population and jobs above minimum density levels is essential, as this affects the quality (frequency of service), range (service choices) and span (hours of operation) of transit service that can be provided in an area. Minimum thresholds of 100 people or jobs per gross developable hectare are needed within walking distance of a transit station or stop (approximately 400 metres) to support service levels of 10 minutes or less over extended periods of the day.

Where higher orders of employment or residential intensification are desired in MACs or Urban Main Streets to support numerous routes of the Primary Transit Network, minimum thresholds of 200 people or jobs per gross developable hectare should be achieved within walking distance of transit stations and stops. These densities can be accommodated through a variety of different building scales as the station area develops over time.

Diversity

A diversity of land uses within transit areas is needed to create local destinations that attract transit riders as well as provide walkable destinations for residents and employees. Generally, a broad variety of residential and employment uses should be provided, supported by local retail, service, recreation and amenity uses. Diversity can also include a mix of uses and intensities between different transit areas, to promote counter-flow transit travel during peak commuter periods as well as support off-peak ridership. This also means providing more employment uses within Activity Centres outside of the Greater Downtown and a broader mix of residential, cultural and entertainment uses in the Greater Downtown and at larger transit hubs within more established areas of the city.

Design

All transit trips begin and end with a pedestrian. Creating a strong pedestrian environment within transit areas is essential to promote walkability. Design should include features that create a direct, convenient and safe pedestrian system that is integrated with transit service. Design must also recognize local context and create urban environments that support and integrate new development with existing communities.

Distance

People are most likely to use public transit if it is accessible and convenient for their travel needs. Higher-density development should be focused closest to transit, within a distance that a rider is most likely to walk. This is typically a five minute walk, focused within a 400-metre distance. A compact urban form focused around transit promotes greater mobility choices. Local area plans will determine areas appropriate for intensification.



What does an intensity threshold look like?

What might the minimum target of 200 jobs and population per hectare (pph and uph), look like on the ground? To illustrate this, three different options are provided: one where there is a balance (50/50 split) between jobs and population; one where there are more jobs than population (75/25 split); and one where there are fewer jobs than population (25/75 split). The appropriate split for each Major Activity Centre (MAC) or Urban Main Street will be determined through a local area plan. Assumptions have been made on residential occupancy rate (two people per unit) and floor space per employee (30 sq. m).

Jobs		Possible Job Form	Population	Possible Housing Form
Balanced	100 (3000 sq.m. of office)	Low and Mid-rise office	100 pph 50 uph	Townhouses, stacked townhouses
Job-Focused	150 (4500 sq.m. of office)	Mid-rise office	50 pph 25 uph	Semi-detached Townhouse
Population-Focused	50 (1500 sq.m. of office)	Low rise office, retail	150 pph 75 uph	Stacked townhouse, low-rise to high-rise apartments



How do minimum intensity thresholds compare to density?

Population Intensity (Population/Ha)	Dwellings per Ha		Dwellings per Ac	
	Assuming 2.5 persons per unit	Assuming 1.5 persons per unit	Assuming 2.5 persons per unit	Assuming 1.5 persons per unit
50	20	33	8	13
100	40	67	16	27
200	80	133	32	54

Table 2-1: Comparison of population intensity to housing density

Policies

Transit-supportive density and uses

- a. Locate transit-supportive land uses, including higher density residential and employment developments, within Activity Centres and Main Streets supported by the Primary Transit Network.
- b. Increase development densities near the Primary Transit Network by targeting residential and employment intensities within 400 metres of transit stations and stops, in areas deemed appropriate through the local area planning process and in accordance with the typology thresholds identified in Part 3.
- c. Locate land uses that generate counter-flow transit ridership during peak-hour commuting times and support non-peak hour ridership.
- d. Underutilized commercial and brownfield sites near the Primary Transit Network should be redeveloped over time, where feasible, as mixed-use and/or employment intensive sites.

Design to encourage transit use

- e. Ensure that the design and mix of land uses surrounding transit stops and stations support transit and emphasize a pedestrian oriented environment.
- f. Manage vehicle traffic within transit station areas and reduce conflicts between active modes and vehicles.
- g. Develop new mobility management strategies that will reduce the demand for vehicle access and parking.

2.2.3 A VIBRANT GREATER DOWNTOWN

Objective

Create a vibrant and resilient Greater Downtown for everyone.

Greater Downtown

The City's central Activity Centre, the Greater Downtown plays a central role in the city's overall urban structure. The Greater Downtown will continue to reflect Calgary as a centre for business and innovation and serve as a focal point for residents and visitors. This image of the Greater Downtown will be reinforced through ongoing enhancements of the Greater Downtown to support a vibrant and resilient destination for everyone, with interactive neighbourhoods, riverfronts, streets and buildings. The Greater Downtown is expected to undergo significant residential and employment growth and will serve as a model of how high-density urban growth is achieved while ensuring an attractive environment and high quality of life. The Greater Downtown is comprised of six distinct, mixed-use neighbourhoods, full of great places connected by great streets and transit. The vision for the Greater Downtown includes meeting the needs of each unique neighbourhood while continuing to retain and enhance the vital role that the Greater Downtown plays for the entire city.

The MDP provides high-level supporting policy to recognize the Greater Downtown's role within the overall urban structure of the city.

Policies

Greater Downtown

- a. Reinforce the Downtown Core's position as Calgary's principal Activity Centre, business centre, premier urban living environment and centre for the arts, culture, recreation, tourism and entertainment.
- b. Support the development of distinct, vibrant, mixed-use neighbourhoods in the Greater Downtown that are well connected and easily accessible to the Downtown Core, to one another and their surroundings.

2.2.4 COMPLETE COMMUNITIES

Objective

Foster distinctive, complete communities with a strong sense of place.

The overarching concept of complete communities is interwoven through the goals and policies of the MDP, CTP and city wide plans and strategies approved by City Council.

Complete communities are vibrant, green and safe places, where people of all ages, incomes, interests and lifestyles feel comfortable and can choose between a variety of housing types and locations in which to live.

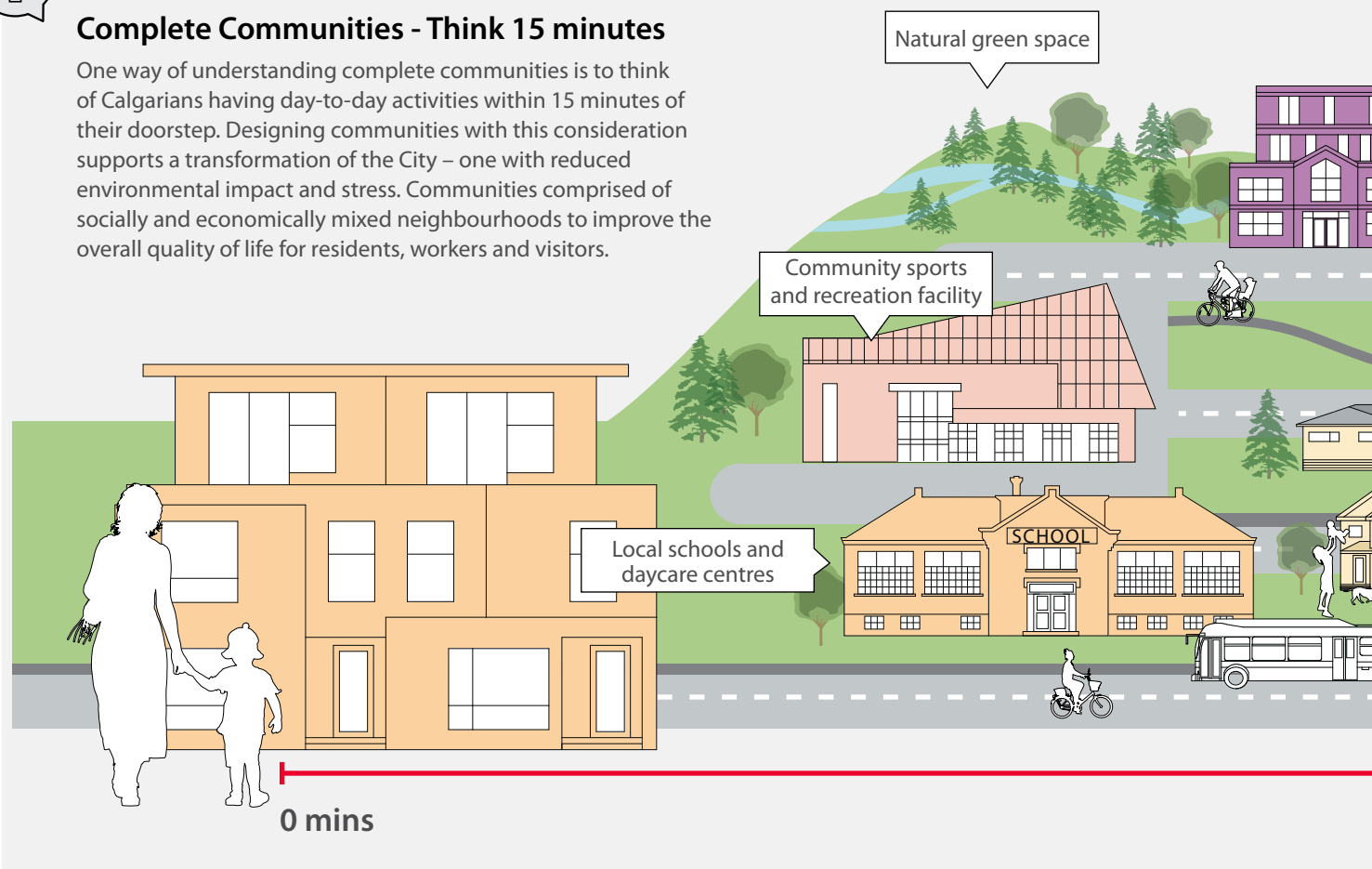
The MDP promotes a city where change is leveraged to augment existing communities through the addition of housing types, services and amenities. Complete communities are achieved over time by accommodating future growth existing and future residents and businesses within communities of varied intensities at appropriate locations throughout the city. New communities should be designed to support the objective of complete communities.

Communities are a collection of neighbourhoods that provide a fuller set of amenities for residents. They are a key component of communities. Within neighbourhoods, daily needs can be met usually within walking distance. At this scale, the diversity within complete communities generates more choice, so that residents have the opportunity to live



Complete Communities - Think 15 minutes

One way of understanding complete communities is to think of Calgarians having day-to-day activities within 15 minutes of their doorstep. Designing communities with this consideration supports a transformation of the City – one with reduced environmental impact and stress. Communities comprised of socially and economically mixed neighbourhoods to improve the overall quality of life for residents, workers and visitors.



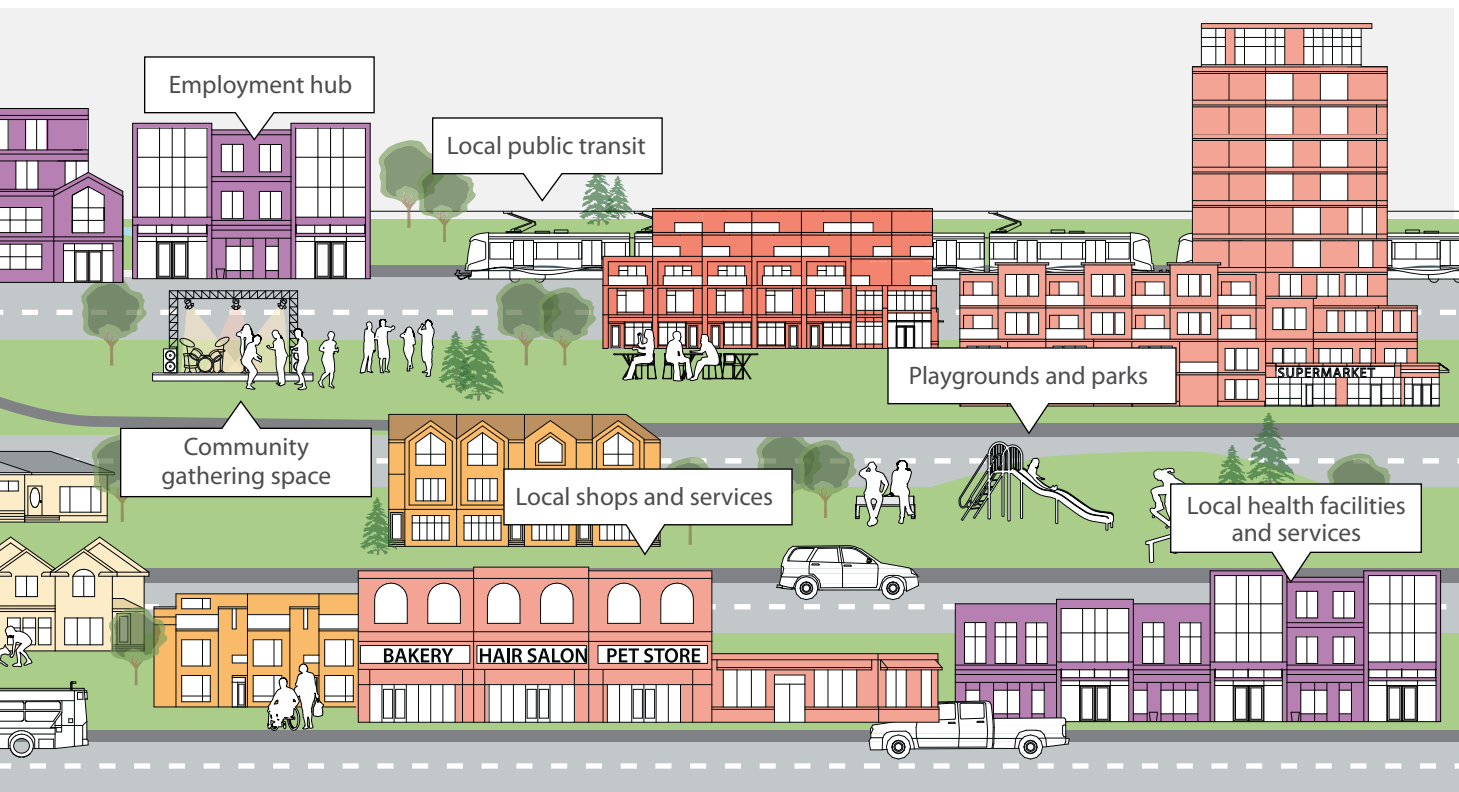
and remain in their own community as their needs change over their lifetime. It provides viable choices and markets for businesses to locate across the city in communities or in a variety of employment areas accessible to local residential concentrations and quality transit service. Directing future urban growth in a way that fosters more compact and complete communities has benefits for individual neighbourhoods and for Calgary as a whole. Complete communities are often less affected by community demographic lifecycles and can better support business and a vibrant, safe public realm. Directing future urban growth in a way that fosters more compact and complete communities has benefits for individual neighbourhoods and for Calgary as a whole. Complete communities are often less affected by community demographic lifecycles and support meeting the needs of

community members at all stages of their lives. They can also better support business and a vibrant, safe public realm. This leads to an ongoing resiliency for communities. At a city wide level, a more compact urban form reduces the cost of service provision.

Policies

Complete communities

- a. Support the development of complete communities to ensure a compact and well-designed urban form that efficiently utilizes land and infrastructure, provides housing choices at transit-supportive densities, local services and employment and promotes mobility options.



15 mins

- b. Communities should be planned according to the following criteria for complete communities and provide:
 - i. A range of housing choices, covering a mix of built forms and ownership tenures, at densities that support transit viability, local commercial and other services.
 - ii. Diverse employment opportunities that are integrated into the community or serviced by a number of modes of travel.
 - iii. Neighbourhood stores, services and public facilities that meet day-to-day needs within walking distance for most residents by providing access to healthy food, care and recreation.
 - iv. Public transit that is supported by good service and ease of access.
 - v. Distinctive, resilient and attractive neighbourhoods that feature architectural and natural elements that contribute to a local identity, a strong sense of place and in community pride.
 - vi. Public spaces, parks and recreation facilities that provide access to nature, cultural events and social gathering areas and support sports, relaxation and outdoor activities.
 - vii. Spaces for community gardens and local food production, processing, sales and programming.
 - viii. Local schools, social infrastructure, places of worship and community services.
 - ix. A connected street and mobility network that promotes comfortable, safe and universally accessible travel.
 - x. A healthy, sustainable and resilient environment with street trees and greenery, connections to the city's open space system and an integration of local natural systems with an urban development pattern that respects the natural function of the landscape.
 - xi. Equitable public infrastructure and services that are provided in a timely fashion and sustained over the long term by stable community populations.
 - xii. Natural infrastructure and sustainable, energy-efficient community design and site planning (see Section 2.6).

Jobs/housing balance

- c. Promote a greater balance of residential and employment within communities and across the city by:
 - i. Increasing residential housing opportunities in areas close to existing employment concentrations.
 - ii. Increasing employment opportunities in areas close to existing residential concentrations.
 - iii. Creating better and equitable mobility linkages between existing concentrations of residential and employment populations.
- d. Locate and plan new communities to ensure adequate access to employment opportunities within the hierarchy of Activity Centre and/or Main Street areas located to serve the new growth areas.



Community

The terms "Community" and "Neighbourhood" are both used within the MDP. The term "Community" is typically used to describe a geographic area of between 5,000 and 20,000 residents, that was planned comprehensively and developed over a period of time. The boundaries of a community are usually used to delineate community associations and statistical data collection boundaries. This term also emphasizes the bonds that link residents to each other and to the neighbourhood they call home, or to a group with which they share a common interest.

Neighbourhood

The term "Neighbourhood" is used to describe a distinct part of a larger community, containing up to 5,000 people. A neighbourhood is typically considered as an area within walking distance of a local commercial area, school, park, transit station, etc. As compact, pedestrian friendly and mixed use areas, the neighbourhood becomes the building block from which enduring settlements are formed.

2.2.5 STRONG RESIDENTIAL NEIGHBOURHOODS

Objective

Reinforce the stability of Calgary's neighbourhoods and ensure housing quality and vitality of its residential areas.

Residential communities are not static. They evolve over time as demographics shift and buildings age, offering an opportunity to review and accommodate changing community needs. Understanding this community dynamic can help develop plans and strategies to stabilize local population fluctuations, support predictability for the market, guide public reinvestment and ensure long-term viability of local services and facilities.

Outside of the Greater Downtown, Activity Centre and Main Street areas, low to moderate density infill development can be accommodated to support the efficient use of land, infrastructure and services as well as enhance housing choice and affordability. In many cases, public infrastructure and transit service are already in place to support redevelopment. Calgary's older residential areas present some of the best opportunities to accommodate infill development, increasing the range of housing for families and individuals within areas that take advantage of existing infrastructure, transit and existing amenities such as local retail, schools, parks and community services.

Intensification should be accommodated within existing communities in a sensitive manner. In commercial areas, infill and redevelopment can create more cohesive and vibrant neighbourhoods. Integrating new development with existing buildings can enhance or fill in gaps in the street wall to improve the vitality, appearance and security of streets and public spaces.

The City promotes infilling that is sensitive, compatible and complementary to the existing physical patterns and character of neighbourhoods.

Policies

Neighbourhood infill and redevelopment

- a. Encourage growth and change in low-density neighbourhoods through development and redevelopment that is similar in scale and built form and increases the mix of housing types such as accessory suites, semi-detached, townhouses, cottage housing, rowhousing and other ground-oriented housing.
- b. Support development and redevelopment that provides a broader range of housing choice in local communities to help stabilize population declines and support the demographic needs of communities
- c. Encourage higher residential densities in areas of the community that are more extensively served by existing infrastructure, public facilities and transit, appropriate to the specific conditions and character of the neighbourhood.
- d. Encourage redevelopment that incorporates natural infrastructure solutions and shared energy efficiencies (See Section 2.6).

2.3 Creating Great Communities

Goal Create great communities by maintaining high-quality living and working environments, improving housing diversity and choice, enhancing community character and distinctiveness and providing vibrant public places.

Supports

Key Direction 2: Provide more choice within complete communities.

Key Direction 3: Direct land use change within a framework of activity centres and main streets.

Key Direction 4: Link land use decisions to transit.

Key Direction 5: Increase mobility choices.

Key Direction 7: Create Complete Streets.

Key Direction 8: Optimize infrastructure.

This section sets out a framework of policies that focuses on housing, the quality of the physical environment and the amenities and services required for day-to-day, neighbourhood-focused living.

Forecasts indicate that there will be large changes in the coming decades, not only in the total numbers but also in the make-up of Calgary's population profile. Older residents will make up an increasingly larger proportion of the population and Calgary will become more ethnically diverse. Citizens will need different housing types, in different locations and configurations. Future growth will also bring clear challenges to providing affordable and quality housing, community services and wider mobility choices for an increasingly diverse population.

The City will strive to maintain strong communities. This means that future growth is accommodated in a way that respects and enhances what Calgarians value in their neighbourhoods, communities and city as a whole. This includes the built and natural heritage, access to safe and attractive parks and public spaces and overall liveability. Strong communities evolve to support the lives of the people who live there today and welcome

new residents as the city grows. Adding to the best qualities in Calgary's neighbourhoods and supplementing them with new, sustainable developments that contribute to new choices and opportunities is a key to Calgary's future growth strategy.

Local context, a diversity of land uses and variation in building densities and scales all have significant implications for neighbourhood liveability and investment in public infrastructure and programs. The concept of "great communities" emphasizes these elements and the bonds that link Calgarians to their communities.

Policies in this section are aimed at promoting individual and community health and promoting a good quality of life by:

- Nurturing vibrant, active, healthy, safe and caring communities.
- Pursuing economic and housing diversification in order to make Calgary a city of variety and choice.
- Recognizing and building upon existing neighbourhood character, heritage and cultural identity.
- Providing quality public spaces, parks and other local amenities and leisure, cultural and recreation activities to all Calgarians.
- Designing communities to encourage increased social capital and health and wellness.
- Providing citizens with opportunities to become involved in decision-making processes and effectively engaged in shaping their local communities.

Policies are also provided on a number of social issues that can have direct links to the built form of a city, including public safety, affordable housing and social inclusion.

2.3.1 HOUSING

Objective

Ensure a choice of housing forms, tenures and affordability to accommodate the needs of current and future Calgarians and create sustainable local communities.

Access to adequate and affordable housing is a fundamental component of the quality of life in a city. Factors influencing access include price, supply and the distribution of a variety of housing types. The housing market and different levels of government play vital roles in ensuring that housing choice exists for a range of needs and income levels. The City will ensure that the residential planning framework supports the delivery of housing supply in a range of types and tenures to meet current and future community needs, preferences and financial capabilities.

Through setting public land use and transportation policy, The City exercises influence over how and where future housing is provided. Housing policy is addressed on four levels:

- Increasing housing choice across the city.
- Accommodating a mix of dwelling types to meet a full range of housing needs in all communities.
- Facilitating conditions to enable citizens from a wide economic and demographic spectrum to live within a community.
- Minimizing the impact of public decisions on the cost of housing and household mobility.

Neighbourhoods that accommodate a broad range of housing types can be less vulnerable to the consequences of community life cycling (e.g. population gain, peaking, population decline, levelling off). A population base that is relatively stable over the long term helps to ensure that community facilities (e.g. schools, retail and recreational facilities, community associations) public services (e.g. personal and community services, medical services) and businesses are maintained and fully utilized. A limited range of housing choices can result in some residents leaving their community if their housing needs can no longer be met. Given Calgary's projected demographic changes, this becomes increasingly

likely as people age or household composition changes and residents are no longer able, or wish to maintain a single-detached home. Existing communities that have the capability to add new housing units and compensate for declining populations tend to retain or regain their vitality, as evidenced in Calgary's inner-city communities. As well, new communities that are planned and built from the outset to include a wider variety of housing choices may avoid future population swings and ensure long term stability.

Policies

Housing diversity and choice

- a. Provide for a wide range of housing types, tenures (rental and ownership) and densities to create diverse neighbourhoods that include:
 - i. A mix of housing types and tenures, including single detached, ground-oriented (e.g. duplexes, row houses, attached housing, accessory dwelling units and secondary suites), medium- and higher-density and mixed-use residential developments.
 - ii. A range of housing choices for all stages of life, in terms of the mix of housing sizes and types to meet affordability, accessibility and lifestyle needs of different people and family types.
- b. Promote a broader range of housing choice for all ages, income groups, family types and lifestyles by:
 - i. Encouraging housing opportunities for low- and moderate-income households in all communities.
 - ii. Promoting innovative housing types, such as co-housing, live/work and cottage and carriage housing and accessory dwelling units, as alternative means of accommodating residential growth and providing affordable housing options.

- iii. Encouraging adaptation of existing housing and the development of new housing to create physically-accessible housing to meet the needs of seniors and people with mobility challenges, especially within walking distance to services and the Primary Transit Network.
- iv. Including supportive land use policies and development strategies in the implementation guidebooks and/or in local area plans that encourage the provision of a broader range of housing affordable to all income levels.
- c. Ensure a sufficient land supply for residential development in Developed and Greenfield Areas to accommodate Calgary's share of regional household growth (see Part 5 of the MDP).
- d. Promote methods to efficiently use or adapt the city's existing housing stock to enable changing households to remain in the same home or neighbourhood for many years. Strategies may include allowing accessory units in low-density areas and other methods determined through community planning processes.
- iv. New development and redevelopment to incorporate affordable housing that is visually indistinguishable from market housing.
- v. Affordable housing units of different sizes and types within market residential developments.
- vi. The provision of an adequate supply of rental accommodation across the city that is affordable to low-and moderate-income households.
- vii. Partnerships with developers, other orders of government and non-governmental agencies to pursue measures to ensure construction of affordable housing in multi-unit development projects, in new communities and within redevelopment areas.

Increased opportunities for affordable housing

- e. Recognize and encourage affordable housing as an integral part of complete communities.
- f. Create affordable housing by encouraging:
 - i. A varied community composition by providing opportunities for affordable housing to locate in all areas of the city with a built-form contextually appropriate to the area.
 - ii. Affordable housing to locate in all areas of the city, with a focus on locations served by the Primary Transit Network and appropriate services, while avoiding an over-concentration of affordable housing in any one area.
 - iii. Affordable housing serving families to locate in areas close to parks, schools, recreation facilities and commercial nodes.
- g. Accommodate special care facilities within residential and mixed-use communities to provide for a broad range of specialized accommodation and care in order to meet a diverse array of city-wide and community needs, including nursing homes, adult group homes, youth care facilities, rehabilitative homes and transitional facilities.
- h. Special care facilities should be small scale in nature and dispersed throughout the city, in a form that fits with local neighbourhood character.
- i. Discourage an over-concentration of facilities serving one type of need in any community.

Special care facilities

Child care services

- j. Encourage child care services in residential and mixed-use communities, commercial areas, Activity Centres and Main Streets.

2.3.2 RESPECTING AND ENHANCING NEIGHBOURHOOD CHARACTER

Objective

Respect and enhance neighbourhood character and vitality.

The identity and character of a neighbourhood is a function of how people interact with the history, built form, landscape, and visual qualities. This interaction defines how people feel about a neighbourhood as a place. An area's identity and character may include, but does not specifically refer to, heritage resources, which are separately recognized for heritage values and qualities.

The prospect of a more significant portion of future growth being directed to the Developed Areas of the city requires a focus on high-quality urban design and construction that builds upon and adds value to the existing character of communities.

Greater Downtown, Activity Centres, Main Streets and comprehensive redevelopments provide some of the greatest opportunity for positive change. Attention must be paid to ensuring that appropriate local context is considered when planning for intensification and redevelopment.

Respecting neighbourhood character does not mean preventing change. A neighbourhood is not static; it evolves over time as the area ages and redevelops. Some neighbourhoods experience significant changes as a result of demographic, economic conditions, changing preferences in housing and design innovations.

Policies

- a. Respect the existing character of low-density residential areas, while still allowing for innovative and creative designs that foster distinctiveness.
- b. Ensure an appropriate transition of development intensity, uses and built form between areas of higher and lower intensity, such as low-density residential areas and more intensive multi-residential or commercial areas.
- c. Ensure infill development complements the established character of the area and does not create dramatic contrasts in the physical development pattern.
- d. Ensure that the preparation of local area plans includes community engagement early in the decision making process that identifies and addresses local character, community needs and appropriate development transitions with existing neighbourhoods.

2.3.3 HERITAGE AND PUBLIC ART

Objective

Conserve Calgary's heritage resources and promote public art.

Heritage conservation is part of good city building and community identity. Heritage resources serve to enhance perspective, understanding and awareness of our past and help to build a sense of identity and pride in our local communities. Some heritage resources also provide an avenue for Truth and Reconciliation by increasing the visibility of Indigenous communities and heritage in Calgary. These heritage resources allow us to understand the pre-colonial history of Indigenous stewardship and collective responsibility to the land that Calgary sits upon.

Heritage sites provide a rich range of detail and texture and a diverse and attractive pedestrian environment. Heritage conservation also provides demonstrated economic and environmental benefits. The reuse of existing structures has significant energy savings. Furthermore, historic structures and districts can stimulate commercial activity and increase tourism activity and spending.

The following key principles inform Calgary's overall heritage conservation approach:

Values: We conserve heritage resources because they have value to our community – aesthetic, historic, scientific, economic, cultural, social, natural and/or spiritual qualities that make a place important or significant for past, present and future generations.

Alignment: To be most effective, heritage conservation efforts must be integrated and aligned with overall community and City goals, planning principles, practices and process across all stakeholder groups.

Heritage Resource

Features including historic buildings, bridges, engineering works and other structures; cultural landscapes such as historic parks, gardens or streetscapes, culturally significant areas, indigenous traditional use areas, and sites with archaeological or palaeological resources. These can be managed by municipal, provincial or federal authorities.

Policies

- a. Identify and help to protect and manage Calgary's heritage resources.
- b. Ensure that conservation of heritage resources in Calgary is based on an understanding of their value and heritage conservation is integrated into the wider approach to planning and city-shaping.
- c. Identify heritage resources and concentrated areas of heritage resources with integrity and value and adopt policies for their conservation and enhancement including financial incentives where appropriate.
- d. Encourage property owners to conserve and enhance Calgary's heritage resources.
- e. The City will be a leader in conserving and enhancing heritage resources using all tools and mechanisms currently enabled for use by The City.
- f. The City will be a role model for the creative use and adaptive reuse of City-owned heritage buildings, including excellence in maintenance and restoration.
- g. Incorporate relevant interpretive elements in public realm improvements to assist in the recognition and appreciation of Calgary's heritage resources.

Public art

- h. Integrate works of art within the public realm, particularly when designing new public buildings infrastructure and public spaces.
- i. Encourage private developments to incorporate public art.



Public art

Public art is an important component of a healthy and interesting place, contributes to the economy and inspires individual creativity. The City of Calgary Public Art Policy ensures that our visual environment and identity is as intentional, deliberate and carefully considered as other infrastructure systems.

2.3.4 PARKS, OPEN SPACES AND OUTDOOR RECREATION

Objective

Create quality public parks, open spaces and other community amenities and make leisure and recreation activities available to all Calgarians.

Parks and open spaces are special places within the urban environment. These spaces enrich the fabric of our city and provide a unifying framework across neighbourhoods and communities, a means of orientation and special places for gathering, relaxing or active recreation.

Calgary's park system covers over 8,400 hectares of green, natural and open spaces and 1,000 kilometres of pathways and trails. The overall provision of green space demonstrates that all residential areas are well serviced.

Calgary is a city recognized for its vast network of open spaces, consisting of parks, natural corridors, pathways and trail systems that serve many functions. The City will strengthen the connection between its natural areas, public parks and communities to enhance opportunities for outdoor recreation, retain Calgary's natural and cultural heritage and conserve biodiversity and important environmental systems. Together, these promote overall community health and quality of life for all Calgarians.

Parks and open spaces are an essential part of the complex interactions between growth, our day-to-day life and conserving nature. They are places recognized for supporting biodiversity and increasing our climate resiliency by reducing vulnerabilities and risk to severe weather events and long-term climate effects.

Calgary's most prominent natural open spaces are on its ridges and hilltops and along its creeks and riverfronts within the river valley system. The City is committed to protecting the value and quality of these assets and will strive to sustain them while ensuring they remain accessible for the enjoyment and outdoor pursuits of all.

In addition to these natural areas, The City provides high-quality public parks, open spaces and other community amenities by:

- Protecting, conserving and restoring environmentally significant areas and providing a sustainable, connected and diverse open space system that represents the natural ecosystem of Calgary and the region.
- Protecting, conserving and enhancing urban parks and open spaces.
- Providing a healthy, well-managed urban forest and natural environment areas.
- Maintaining and improving the quality and distribution of and public access to, recreation and cultural facilities, open space, parks and natural areas.
- Providing a safe, attractive and comfortable environment through quality landscaping.
- Protecting and promoting an integrated, open space network to better connect communities.
- Providing high-quality open space and neighbourhood, community, regional and city-wide recreation opportunities to service new development or redeveloped areas.
- Fully serving Calgarians with a comprehensive range of community services and programs.

Creating and sustaining healthy communities requires promoting active living through the provision of a wide range of accessible recreational programs, services, facilities and amenities. Many types of recreation are provided to serve all age groups and interests. The need for new types of parks may be more critical in some areas of the city due to denser development patterns. The important role that community associations, social recreation groups and civic partners play in providing is also acknowledged.

"The Sport for Life Policy will make life better for Calgarians everyday by acknowledging sport as a fundamental human desire. It will create opportunities for all Calgarians to participate, experience and enjoy sport to the fullest extent of their abilities and interest."

- Sport for Life Policy

Policies

A high-quality public park system

- a. Provide a high-quality park and open-space system to meet the varied needs of Calgarians.
- b. Create a comprehensive and connected park, pathway and open-space system that links neighbourhoods, public parks, natural areas, athletic parks, plazas, squares and the river valleys.
- c. Maintain and enhance the riverfront as an active, liveable and pedestrian/bicycle-oriented amenity.
- d. Protect and improve scenic landscapes that enhance the amenity and character of Calgary's river valley park system, other waterways and wetlands, natural tree stands and prominent escarpments.
- e. Protect and promote large-scale landscaped and open-space areas that define neighbourhoods and local topography and enhance Calgary's river valley park system.

Open Space

Open space in its broadest sense includes all land and water areas, either publicly or offering public access, that are not covered by structures. Open space includes current and potential future parks, pathways, roadway greens, land for parks and recreation facilities, golf courses, cemeteries and other alternative use of green space.

Park

A specific-use open space that is managed to provide opportunities for recreation, education, cultural and/or aesthetic use (Open Space Plan).

Natural area

Open space containing unusual or representative biological, physical or historical components. It either retained or has had re-established a natural character, although it need not to be completely undisturbed (Natural Areas Management Plan).



- f. Protect the basic social and environmental functions of City parks and public open spaces and prevent parkland conversion to other uses.

Land use, location and design

- g. Provide neighbourhood parks within a five-minute walk of all residents.
- h. Ensure sufficient community open space in Inner City and Established Areas using 2.0 hectares of open space per 1,000 residents. Calculations should be applied to logical community clusters where parks and recreation amenities are accessible and shared between communities. Community open space includes areas dedicated for schools; community centres; playfields; outdoor performance spaces; community gardens; and habitat areas that offer public amenity.
- i. Plans for new communities should include a hierarchy of parks and public spaces interconnected to adjacent neighbourhoods by pathways and Complete Streets.
- j. Plan land uses adjacent to public parks that are supportive and enhance the vitality of both existing and new open spaces.
- k. New development adjacent to the public pathway system should maintain existing connections to pathways and/or provide new linkages.
- l. Encourage high-quality parks near high-density residential buildings to act as a local amenity and places for community gathering, with greater focus on site design qualities than the quantity of park space.
- m. Design parks, facilities and recreational centres in a way that is compatible with nearby residential and commercial uses.
- n. Locate and design public gathering areas within parks and public open spaces to optimize sun exposure during midday hours.

Inclusive, accessible, safe parks

- o.** Maintain and improve access to water bodies, including rivers, creeks, and reservoirs.
- p.** Design parks, open spaces, and amenities to the highest accessibility standards feasible.
- q.** Support the design and redesign of parks, recreation and cultural facilities to reflect changing user needs and preferences.
- r.** Design parks and open spaces to provide opportunities for cultural enjoyment and artistic pursuits.

Outdoor recreation

- s.** Develop and maintain open spaces, parks, recreational, sport and cultural facilities to provide for active recreation and passive recreational needs that are appropriate for all age groups and abilities.
- t.** Support linear parks and linkages to promote connectivity and facilitate walking and cycling.
- u.** Recognize the role of Complete Streets and the sidewalk system as a means to provide amenity and recreation opportunities, particularly in dense neighbourhoods such as Greater Downtown, Activity Centres and Main Streets, where additional land for traditional park space is more difficult to assemble.
- v.** Encourage the provision of outdoor recreational space in private developments, including private schools, institutions, campuses and business parks.

2.3.5 MUNICIPAL, SCHOOL, ENVIRONMENTAL AND CONSERVATION RESERVES

The MGA requires a Municipal Development Plan to include policies respecting the provision for reserve lands, including municipal reserves (MR), school reserves (SR) or municipal and school reserves (MSR).

These policies include, but are not limited to, the need for, amount of and allocation of those reserves and the identification of school requirements in consultation with affected school authorities.

The subdivision authority may require certain lands, such as natural drainage courses, lands that are prone to flooding, unstable lands, and strips of land adjacent lakes, streams or other water bodies to be provided as environmental reserves (ER), subject to the provisions of the MGA.

In order to protect environmentally significant features, the Subdivision Authority may require certain lands to be provided as conservation reserve (CR) if the land has environmentally significant features, subject to the provisions of the MGA.

Policies

Municipal and school reserves

- a. Require that 10 per cent of lands that are the subject of a proposed subdivision be dedicated for the purpose of providing MR, SR, and/or MSR, in accordance with the provisions of the MGA.
- b. Notwithstanding Policy 2.3.5(a) above, in the case of a strata (volumetric) subdivision of a portion of a building, the Subdivision Authority may consider reducing or eliminating the dedication of reserves or reducing or eliminating the payment of reserve cash-in-lieu, where the following condition is met to the satisfaction of the Subdivision Authority: the redevelopment site consists of a number of small parcels created on a prior subdivision that are required to be consolidated into a single parcel to meet the Alberta Building Code requirements for the building which is to be subsequently subdivided into strata lots. Where the Subdivision Authority does not require reserve to be dedicated as land or provided

as money-in place of land, a deferred caveat should be registered against the Certificate of Title of the parcel(s) to the satisfaction of the Subdivision Authority.

- c. Enable dedication of reserves to occur in the form of reserve land, money in lieu or, if warranted, filing a deferred reserve caveat against the title of the lands being subdivided. The means of reserve dedication will be determined by the Subdivision Authority upon the advice of the Joint Use Co-ordinating Committee.
- d. Prioritize the location and allocation of MR, SR, and/or MSR land as follows:
 - i. Neighbourhood needs: elementary schools, elementary/junior high schools and neighbourhood parks.
 - ii. Community needs: junior high schools, community associations, open space linkages and priority environmentally significant lands.
 - iii. Regional needs: high schools, pools, arenas, athletic parks and other recreational facilities.
- e. Support the dedication of additional municipal reserves where the density of land being subdivided is at least 30 units per hectare.
- f. Additional reserve land purchased by The City or the school authorities through the use of the Joint Use Reserve Fund should not be considered to comprise part of the landowner's dedication at the time of subdivision.

Environmental and conservation reserves

- g. At the time of subdivision, Environmental Reserves (ER) should be provided in accordance with the MGA.
- h. At the time of subdivision, Conservation Reserves (CR) may be provided when environmentally significant features are identified through the local area planning process and cannot be protected through alternative methods.

2.3.6 COMMUNITY SERVICES AND FACILITIES

Objective

Provide for a full range of community services and facilities.

Community services and facilities include community and recreation centres, arenas, community health clinics, community gardens and publicly funded schools and libraries. They are located across the city within both communities and neighbourhoods. Providing opportunities for a full range of community services and facilities is the shared responsibility of The City and public agencies, with the participation of the development industry.

The presence of local schools is vital to neighbourhood life and an essential component of complete communities. Recreation, which includes sport, arts and culture, physical and leisure activities also plays a key role in fostering active and vibrant neighbourhoods. The principles below represent characteristics of recreation services and community facilities used by The City to achieve active and vibrant neighbourhoods:

Integrated and proactive: Plan for the integration of new facilities and balance development with redevelopment while satisfying future recreation and facility trends.

Multi-purpose: New, redeveloped and repurposed will be designed with components that respond to diverse needs, interests, levels of ability and skill level.

Grouping: Group recreation facilities with other community services as appropriate.

Flexible: Ensure, to the degree possible, that facilities are flexible in design, with opportunities to accommodate as wide a range of uses as possible and to be able to convert them to other uses in the future.

Adaptable: Strive to build and re-purpose facilities that will accommodate a range of sporting activities and artistic skills.

Policies

Community services and facilities

- i. Maintain sites with existing public facilities and promote their reuse for new or expanded community services and recreational and educational facilities to meet changing community needs.
- j. Ensure that recreation services and facilities are located conveniently within catchment areas of the users connected to the primary transit network and are designed to the highest accessibility standards feasible.
- k. Optimize the availability, accessibility and affordability of community facilities, including areas for public engagement, personal growth, health and learning.
- l. Promote the optimum location of community services and facilities, including emergency services/protective services, recreational and educational facilities to meet community needs.
- m. Locate community services and facilities in a manner that integrates with the open space system.
- n. Locate local food production, processing, sales and programming on-site or within community facilities.

2.3.7 FOSTER COMMUNITY DIALOGUE AND PARTICIPATION IN COMMUNITY PLANNING

Objective

Promote community education and engagement.

All Calgarians should be provided with opportunities to participate in shaping the future of their community. This means encouraging on-going education, engagement strategies and collaborative neighbourhood planning processes that consider MDP strategies and local community-based aspirations. Community planning is a way to engage, in a meaningful way, local residents and businesses in the future of their community and to provide a local interpretation and implementation of the MDP policies. Community planning initiatives should be equitable and purposeful in dialogue between The City and stakeholders to gather information to inform decision-making, guided by Council approved public engagement policy.

City projects involving Indigenous people will seek knowledge from indigenous communities and Elders. Fostering good relations is a must for Indigenous history and knowledge to be meaningfully incorporated into City projects. The engagement should facilitate relationship building and be guided by best practice.

Policies

Community participation

- a. Recognize that community planning processes are critical implementation tools for refining and realizing the vision of the MDP.
- b. Work with the broad public and local community groups in planning for the future of local neighbourhoods.
- c. Provide for effective community consultation and participation in projects of significance to The City and local communities.
- d. Ensure that engagement on planning processes is responsible, thorough and transparent.
- e. City projects will determine when to involve Indigenous communities and Elders in the projects engagement and should facilitate relationship building and be guided by best practice.

2.3.8 - BUILDING AN EQUITABLE AND INCLUSIVE CALGARY

Objective

Advance the Social Wellbeing principles of Equity, Truth and Reconciliation, Culture and Prevention.

The City of Calgary aims to make life better every day for Calgarians by delivering citizen centric services. Calgary's demographics are changing along with society's awareness of social inequalities. The City of Calgary approaches planning, and managing change, to make life better every day for all Calgarians. Using an equity lens for planning and growth decisions considers an approach which is responsive to the diverse needs, strengths, and social realities of Calgarians. Planning for equity prioritizes addressing systemic and intersecting barriers to Calgary being a great place to make a living and a great place to make a life for everyone. Equity focuses decision-making on addressing the needs of all Calgarians, both now and as their needs change and evolve over time.

The neighbourhood in which a person lives contain many factors that drive quality of life, including access to community amenities; city services; grocery stores; cultural experiences; housing and transportation options; and more. It is therefore essential The City understand any potential disparities between our neighbourhoods and seek to identify and eliminate systematic barriers with the goal of equitable opportunity for all.

Planning to provide equitable services should be responsive to Calgary's changing and increasingly diverse population. Planning for equity must account for the multiple and intersecting identities of Calgarians (example: age, disability, family status, gender, gender identity/expression, marital status, Indigenous heritage/identity, level of income, place of origin, place

of residence, race, religious beliefs, and sexual orientation, etc.) in the design of policies, plans, services and infrastructure. Planning for equity is also conscious of the environmental, infrastructure, and amenity context in which planning occurs.

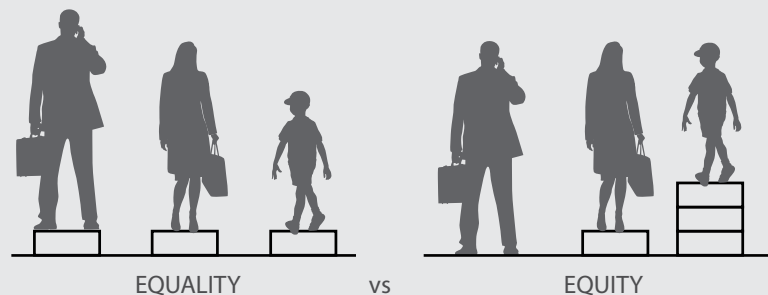
Policies

- a. Social Wellbeing principles as outlined in the Social Wellbeing Policy (CP2019-01), and as may be amended from time to time, should be considered in Implementation Guidebooks, city-wide growth-related decision-making and local area plan processes.



Equity

Conditions are adjusted to meet people's diverse needs, strengths and social realities. It requires recognition that different barriers (often systemic) exist for diverse individuals or groups. The result of equity is all people have the opportunity to benefit equally from City Services.



2.4 Urban Design

Goal Make Calgary a livable, attractive, memorable and functional city by recognizing its unique setting and dynamic urban character and creating a legacy of high-quality public and private developments for future generations.

Supports

Key Direction 2: Provide more choice within complete communities.

Key Direction 3: Direct land use change within a framework of Activity Centres and Main Streets.

Key Direction 5: Increase mobility choices.

Key Direction 7: Create Complete Streets.

Urban design has a significant role to play in achieving economic vitality and a higher quality of life. To compete nationally and on an international level, cities are recognizing the importance of the combination of physical characteristics and public amenities, which contribute to their image as attractive urban places. As such, The City of Calgary is committed to fostering a culture of collaboration and innovation with citizens and the design and development industry industries in the goal of creating great streets, quality buildings and memorable places for people.

Section 2.4 provides the overarching guidance on urban design for City of Calgary statutory and non-statutory documents. Its intent is to establish a robust framework that is responsive at all scales of planning and development while setting clear expectations around the creation of planning and design outcomes.

Urban design involves:

- The art of making places that are attractive, memorable and functional for the people who use them.
- The arrangement, shaping, appearance and functionality of urban public space.
- The collaboration and co-ordination of all related disciplines, including land use planning, transportation planning, architecture, engineering and landscape design, to achieve striking and effective results.

The Urban Design Elements are 13 areas of focus which can be applied to all aspects of building, site, public space and community design. They serve to frame expectations around the outcomes, and provide the criteria for evaluating the quality of all development applications, plans and designs.

2.4.1 CREATING A BEAUTIFUL CITY

Objective

Make Calgary a more beautiful, memorable city with a commitment to excellence in urban design.

Cities are made up of collections of great buildings and memorable spaces within and/or between the buildings where people live, work, play and visit. It is this collection – the built environment and its architecture and public spaces – that influences each individual's image of the city. The city can be planned and designed in a way that promotes the creation of civic beauty through a potent combination of architectural interest, material and spatial richness and visual variety. It is the resulting beauty of this combination, together with the legibility and complexity of the pattern, arrangement and scale of the streets spaces and buildings, that has a direct and daily impact on the quality of people's lives.

Memorable places are the special spaces that have a major role in defining and enhancing the image of the city, the legibility of the physical structure and the enjoyment of residents and visitors. Calgary has a unique natural setting. Its location, proximity to the Canadian Rockies, riverfronts, escarpments, ridgelines and other natural features are memorable,

act as landmarks and are special for the value they add to the passive and recreational open space system. Calgary also has certain buildings, public places, artworks and structures such as bridges that act as landmarks. These natural and cultural landmarks provide reference points in the city that contribute to wayfinding, sense of place and city identity. Enhancing Calgary's unique natural and designed assets through the appropriate design of our built form and mobility networks can strengthen the prominence of these resources and contribute to making Calgary a more beautiful city.

Policies

Civic image

- a. Locate and design significant sites and public buildings to promote their civic importance and integrate open space that is designed to enhance the quality of the setting and support a variety of public functions.
- b. Preserve, enhance and feature important elements of significant architectural, topographical, landscape, scenic, ecological, recreational or cultural interest.

Views and vistas

- c. Identify, preserve and enhance scenic routes and principal views of important natural or designed features.

Gateways

- d. Celebrate entranceways and gateways at major entry points to the city, Greater Downtown and communities through the use of distinctive urban design features, lighting, enhanced vegetation and landscaping and public art features.

Urban design excellence

- e. Promote excellence, creativity, innovation and sustainability in architecture, landscape, site and overall community design.

Landscaping

- f. Encourage the use of landscaping approaches and design techniques to define public spaces, screen parking areas and adjacent building forms and direct pedestrian movement.
- g. Promote and protect trees in street corridors as a means to support pedestrian and amenity areas in commercial districts, soften industrial developments and enhance the attractiveness of residential communities.

Urban Design Elements

Thirteen Urban Design Elements are important to the creation of good urban design:

1. Creativity and innovation
2. Context and appropriateness
3. Connectivity and continuity
4. Functional and aesthetic integration
5. Legibility and accessibility
6. Enclosure and human scale
7. Comfort and safety
8. Quality and durability
9. Vitality and animation
10. Flexibility and adaptability
11. Diversity and variety
12. Sustainability and accountability
13. Wayfinding & orientation



2.4.2 BUILT FORM

Objective

Promote site and building design that contributes to high-quality living environments and attractive, walkable and diverse neighbourhoods and communities.

The City recognizes the importance of excellent urban design in the creation of great communities and neighbourhoods. The built form plays a critical role in defining the character and visual qualities of an area. To promote well-designed buildings, high-quality streetscape and attractive public spaces that reinforce or build unique neighbourhood character, community planning must include a consistent, design-led approach which:

- Creates a sense of place with unique neighbourhood character.
- Promotes design solutions that contribute to high-quality living environments.
- Provides well-connected, pedestrian-friendly and transit-supportive networks.
- Conserves, protects and integrates existing natural, cultural and heritage resources.
- Promotes community safety.

Two issues of particular importance to community design are taller buildings and the redevelopment of large sites within existing communities. A taller building is defined as a building whose height is greater than the width of the right-of-way of the street that it fronts. Well-designed taller buildings can make a positive contribution to the city and create an interesting skyline. Taller buildings can also act as landmarks which, when appropriately located and designed, can contribute to orientation and way finding within urban areas. Taller buildings, by their nature, can have greater impacts on a larger area than small buildings and, thus, they have a larger civic responsibility and require additional built form principles to be applied to their design.

Policies

Site and building design

- a. Promote high quality standards of urban design and construction that ensures that development builds upon and adds value to the existing character of communities.
- b. The ground and lower levels of developments should demonstrate a strong relationship to the human scale and contribute positively to the public realm and street.
- c. Encourage the development of low and midrise buildings to achieve the desired intensity of development.
- d. Require detailed site design when large sites (greater than 1.0 hectare in size) become available for redevelopment. To the greatest extent possible, new development should be street-oriented, provide amenity space, where applicable, and be integrated into the fabric of the surrounding communities.
- e. Taller buildings are appropriate in Greater Downtown, Major Activity Centres, or Community Activity Centres and Urban Main Streets where deemed appropriate through a local area plan.
- f. Plans and designs for taller buildings should ensure that they are:
 - i. Sited and architecturally designed to contribute positively to the skyline of the city.
 - ii. Designed with pedestrian scale at the base and a prominent roofline.
 - iii. Integrated with adjacent areas by stepping down to lower-scale buildings and compliment neighbourhoods.
 - iv. Minimizing the shadow and wind impacts on adjacent residential areas and parks and open spaces.

2.4.3 ENHANCING THE PUBLIC REALM

Objective

Enhance the public realm and promote pedestrian use through the coherent and collaborative design of streets, building interfaces and public spaces.

The public realm is made up of publicly accessible space both between and within buildings. The public realm includes streets and squares, special places, linkages, interfaces and pedestrian zones which are fundamental to the creation of a functional, visually attractive and safe environment for people.

Pedestrians, bicycle, transit and cars all contribute to lively and interesting streets. Good urban design will encourage and facilitate their co-existence, with pedestrian use given strong emphasis and careful consideration.

Policies

- a. Design streets and sidewalks to encourage pedestrian comfort, safety and linkages between neighbourhoods, open spaces and adjacent land uses.
- b. Safe pedestrian connections, transit shelters, bicycle parking, benches and clear wayfinding signage should be provided to facilitate all travel modes.
- c. Provide sufficient and uniform sidewalk width to allow for comfortable and safe pedestrian traffic, the planting of trees and additional landscaping and wayfinding elements. Sidewalks should enhance the visual character of streets, with landscaping and buffer planting used to reduce the impacts of vehicle traffic.
- d. Promote a higher degree of attention to the architectural design and detailing of building edges in areas of interface with heavy pedestrian traffic, notably commercial streets.
- e. Consider seasonal factors when designing the public realm.
- f. The design of buildings, open spaces, pathways and parking areas should adhere to the principles of Crime Prevention Through Environmental Design (CPTED).
- g. While ensuring light spill into adjacent property or the surrounding environment is minimized. A reduction in light spill should be achieved by minimizing the intensity of light sources and directing light only to where it is needed.
- h. Transit stations should be designed as vibrant, mixed-use areas incorporating public gathering areas and public art.

2.5 Connecting the City

Goal Develop an integrated, multi-modal transportation system that supports land use, provides increased mobility choices for citizens, promotes vibrant, connected communities, protects the natural environment and supports a prosperous and competitive economy.

Supports

Key Direction 3: Direct land use change within a framework of Activity Centres and Main Streets.

Key Direction 4: Link land use decisions to transit.

Key Direction 5: Increase mobility choices.

Key Direction 6: Develop a Primary Transit Network.

Key Direction 7: Create Complete Streets.

The design of the transportation system has a significant impact on the urban form of the city and determines how we move around. As a result, the transportation system must perform a wide variety of roles and consider the local context. It must provide more mobility choice for Calgarians through walking, wheeling, transit, high-occupancy vehicles, single-occupant vehicles, commercial vehicles and emergency services.

This section provides an overview of the strategic changes for transportation in Calgary that supports the development of more complete communities and a more compact city, including:

- Transportation choice
- Transit networks
- Complete Streets
- Local transportation connectivity

Comprehensive transportation policies for Calgary are provided in the CTP. The CTP provides transportation policies, design guidelines and operational procedures that are closely linked with the MDP policies. Specific mobility policies are included in Part 3 of the MDP for specific land use typologies.

2.5.1 TRANSPORTATION CHOICE

Objective

Maintain automobile, commercial goods and emergency vehicle mobility in Calgary while placing increased emphasis on more sustainable modes of transportation (walking, wheeling and transit).

A more sustainable city requires an integrated transportation system that supports a compact urban form. Bringing jobs, housing services and amenities closer together encourages non-automobile modes of travel, providing more choice to Calgarians. In most cases, it will not be practical to accommodate all modes of travel equally in every part of the Calgary. More sustainable modes of transportation should be emphasized where they can provide convenient and realistic travel choices. The Transportation Sustainability Triangle shows the relative sustainability of each transportation mode, with walking being the most sustainable.

Although walking, wheeling and transit are more sustainable modes of transportation, the majority of daily trips are expected to continue to be made by private vehicles. This will be particularly true in outlying areas of the city where most destinations are too far to reach by walking and wheeling and where transit service is not as frequent or efficient. Transportation networks will be designed to manage the demand for vehicle use and will be optimized using a wide range of tools and new technologies.



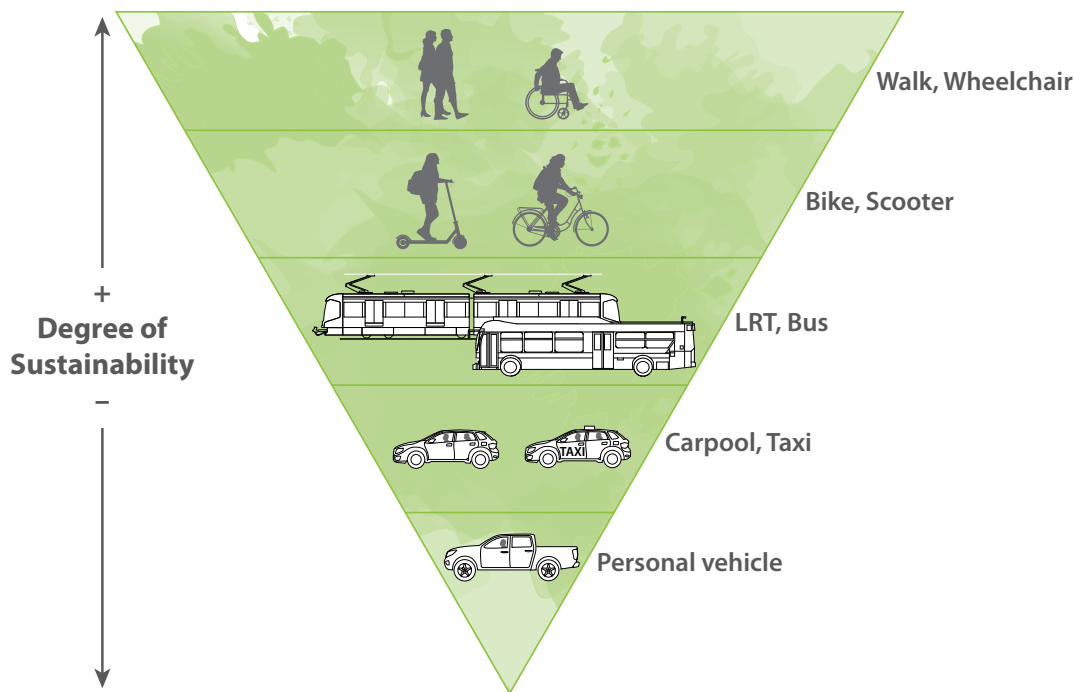


Figure 2-2: The Transportation Sustainability Triangle

Increased walking and wheeling activity will occur primarily in the Greater Downtown, Activity Centres and Main Streets. Homes, jobs, services and amenities will be located in close proximity to each other in these locations. Therefore, the needs of Calgarians who walk and wheel should be given the highest priority in the Greater Downtown, Activity Centres and Main Streets.

Transit service offers the most convenient choices to people travelling between the Greater Downtown, Activity Centres and along the Main Streets that connect them. Priority measures will enhance the reliability of transit services within and between these strategic locations, making transit competitive and an attractive option to private automobiles.

The city is a major hub for goods movement in western Canada and the movement of goods and services by air, rail and truck plays an important role in the Calgary economy. The City must consider the needs of goods and services movement with emphasis on access to industrial areas, the airport and intermodal rail facilities.

The needs of emergency services must also be considered carefully in all parts of the city.

Policies

- a. Priorities for different transportation modes in each typology must be assessed in accordance with Council approved policies and plans, including the CTP.
- b. Include more sustainable forms of transportation to support the needs of land use and development.
- c. Respect the needs of businesses and the impact on local communities in the planning, design and maintenance of goods and service movement in the city.

2.5.2 TRANSIT

Objective

Provide a safe, accessible and customer focused public transit service that is capable of becoming the preferred mobility choice of Calgarians.

Base Transit Service will continue to provide good coverage and a basic level of service to all areas of the city. In addition, a well connected Primary Transit Network will link major city-wide destinations and connect the Greater Downtown, Activity Centres and Main Streets. Providing a Primary Transit Network, integrated with a high-quality urban environment and multi-modal transportation corridors, offers a high degree of mobility, with an attractive service offering reduced travel times, accessibility, comfort and safety.

Base Transit Service

Base Transit Service focuses on community level service with direct connections and convenient transfers to the Primary Transit Network. Areas served by Base Transit Service will have a sufficient intensity of population and employment to achieve the performance policies for transit service.

Primary Transit Network

Primary Transit Network, illustrated in Map 2, comprises a permanent network of high-frequency transit services that will include Light Rail Transit (LRT), Bus Rapid Transit (BRT), streetcars/trams and frequent bus service that will operate every ten minutes or less over an extended time period, seven days a week. Primary Transit will provide for direct travel and seamless connections between transit services and regional transit connections and incorporate the highest standards with regard to level of service, operating speed, connectivity and amenities.

The development of the Primary Transit Network is key to the success of the MDP and the CTP and continues to require prioritized operating and capital investments.

Regional transit

The City supports collaborating with regional partners to proactively plan regional transit services. These transit services may include the short term services such as regional Bus Rapid Transit as well as longer term services such as Transit Mobility Hubs and regional commuter rail service.

Linking transit and land use

Providing transit-supportive land uses in close proximity to transit service is critical to attracting ridership and making it a viable and efficient travel choice. Mixing jobs and housing and incorporating appropriate intensities within these transit hubs will be essential in meeting the required population and job thresholds, supported by 10 minute transit service levels.

Policies

- a. Integrate land use planning with transit investments and service delivery to meet the objectives of both the CTP and MDP.

2.5.3 COMPLETE STREETS

Objective

Increase the attractiveness, convenience and safety of all modes of transportation by creating a selection of multi-modal streets that emphasize different modes of transportation, incorporate elements of natural infrastructure and function in the context of surrounding land uses.

Complete Streets allow people to move by foot, bike, bus or car, provide places to live, work, shop, play and support the natural environment and the economy. The main function of roads and streets is to provide a connection between the origin (where we are) and destination (where we want to go). Applying the Transportation Sustainability Triangle means the development of multi-modal corridors that focus on all modes of transportation. Complete Streets also accommodate the movement of emergency services vehicles. Not every street in Calgary will be able to meet the needs of all users. Different types of streets have different functions that should fit into the community context.

The road and street palette

A road and street palette has been developed to differentiate between more traditional “roads,” which primarily serve long-distance vehicle trips and do not interact with adjacent land uses and “streets,” which serve a broader range of transportation modes and do interact better with adjacent land uses.

Both streets and roads should provide mobility for a wide range of users, facilitate the movement for goods and services to support the economy and incorporate the elements of natural infrastructure to enhance the environment. However, unlike streets, roads do not contribute to place-making since their primary role is the movement of people and goods over long distances at higher speeds. The Complete Streets section of the CTP and Map 3 of the MDP provide more information on Complete Streets and their functions.

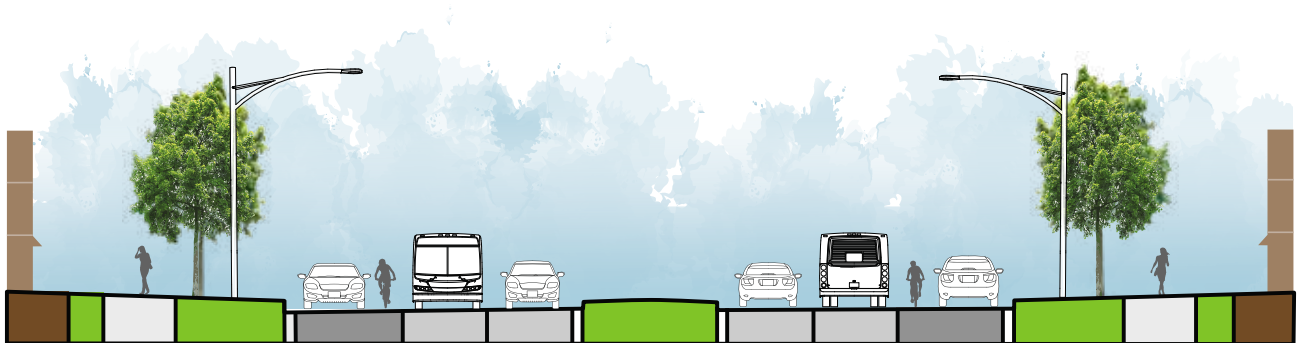


Figure 2-3: Complete Street zones

Traditionally, the elements within the right-of-ways (e.g. travel lanes, medians, sidewalks, underground utilities, streetlights) have been the main focus of transportation planning and design. However, the right-of-way is only part of the overall Complete Street. Complete Streets include not only transportation and utility components, but also natural infrastructure and public realm elements. How each of these elements is combined depends on the surrounding land use context and the transportation mode priorities. Adjacent land uses might range from parks and green space to intense corridor development with a mix of commercial and residential buildings.

The quality of the public realm in streets located in the Greater Downtown, Urban and Neighbourhood Main Streets is a very important design consideration. The urban design and public realm policies contained in Section 2.4 should be followed when designing Complete Streets to function in the context of the surrounding environment. The CTP also specifies several special street types to support these land uses. Additional information on Complete Streets, can be found in Part 3 of the CTP and the Complete Streets Policy and Guide.

Policies

- a. Ensure that land use strategies complement the Complete Street policies contained in Part 3 of the CTP.

2.5.4 LOCAL TRANSPORTATION CONNECTIVITY

Objective

Create better connectivity in future communities, the Greater Downtown, Activity Centres and Main Streets for walking, wheeling and street networks, while also increasing access and reducing response times for emergency services.

Research shows that increased connectivity has a number of benefits, including:

- Enhancing public safety by reducing response times for emergency services.
- Improving the health of Calgarians by making walking and wheeling viable options for travelling to work or other daily needs.
- Improving accessibility to the regional street system and reducing delays for motorists entering or leaving developments.
- Reducing walking distances to transit stops and improving routing for City services such as Calgary Transit and Waste & Recycling Services.
- Building communities that have the ability to adapt over time.
- Increasing social interaction between residents.

Effective design of local transportation networks has shown that the land requirements for transportation infrastructure can be minimized using a variety of different street networks, while enhancing connectivity relative to recent curvilinear designs. Within residential communities, concerns about traffic on residential streets can also be mitigated through the proper design of streets to manage the flow of traffic and discourage undesirable driver behaviour.

Local transportation connectivity policies are included in Part 3 Typologies for Major Activity Centres, Community Activity Centres and New Community areas. Additional information on local transportation connectivity, along with policies and detailed guidelines to assess connectivity, can be found in Part 3 of the CTP.

Policies

- a. Local transportation connectivity in the Greater Downtown, Major Activity Centres, Community Activity Centres and New Community areas developments must be assessed according to the connectivity policies contained in the CTP.

2.6 Greening the City

Goal Conserve, protect and restore the natural environment.

Supports

Key Direction 1: Achieve a balance of growth between established and greenfield communities.

Key Direction 2: Provide more choice within complete communities.

Key Direction 3: Direct land use change within a framework of Activity Centres and Main Streets.

Key Direction 4: Increase mobility choices.

Key Direction 7: Create Complete Streets.

Key Direction 8: Optimize infrastructure.

Calgary has developed within a prairie landscape rich with natural habitats that support biodiverse vegetation, wildlife species and beautiful river valleys. It is understood that conserving the natural environment results in personal, social, economic and environmental benefits. It is important to recognize the interconnectedness of air, land, water, climate, ecosystems, habitat and people. Connecting citizens to nature, through access to open space and through fostering ecological literacy can contribute to personal well-being.

Towards a Climate-Resilient City

Calgary's climate is changing, creating new risks and new opportunities. In order to meet these challenges, the city must integrate climate resiliency across the organization, including long-range planning. How the city grows and develops has a significant impact on greenhouse gas emissions and the capacity to adapt to changing climatic conditions. The Climate Resilience Strategy was adopted in 2018 and aims to maximize the climate resilience of Calgary. The City of Calgary is committed to reducing GHG emissions to reduce the impacts of climate change and making Calgary more resilient to climate related events.

The City recognizes the need to partner with adjacent municipalities and its regional neighbours

to develop strategies for protecting watersheds, habitats and biodiversity and to establish ecological networks.

The MDP supports reducing GHG emissions and climate resiliency through the following actions:

- Protecting environmentally-sensitive areas and natural infrastructure to conserve biodiversity and contribute to people's quality of life, the quality of communities and the quality of ecological systems.
- Creating a more compact urban form that uses less land and, therefore, reduces habitat loss and fragmentation and adverse impacts on wildlife, vegetation and water quality and quantity.
- Reducing the number of impervious surfaces by incorporating site level and neighbourhood level stormwater source control practices.
- Supporting mixed-use developments that provide opportunities for more local travel choices by walking, wheeling and transit.
- Facilitating economic energy-efficient buildings and creating opportunities for renewable energy generation that reduces dependence on fossil fuels.
- Ensuring climate resiliency in our City and communities by working to reduce greenhouse gas emissions and are adaptable to the changing climate.

2.6.1 NATURAL INFRASTRUCTURE

Objective

Connect natural infrastructure throughout the urban fabric.

There is a need to establish an integrated approach to natural infrastructure management and decision making as part of The City's ongoing planning, investment and asset management processes. A shared understanding of the relationship between the value of services and the benefits of natural assets will help to inform these processes.

Natural infrastructure is an interconnected network of natural assets and engineered elements that provide ecological services (e.g. water filtration, air filtration and food production) in urban environments. Natural assets include trees, wetlands and riparian areas and natural open spaces. Engineered elements include hard infrastructure (e.g. roadways) and natural stormwater infrastructure (e.g. gardens). These are designed to replicate ecological functions or to reduce impacts on ecological systems. Figure 2-4 below shows the range of natural infrastructure.

Natural infrastructure requires a strategic approach to ensure conservation and support growth management. For natural infrastructure to be fully integrated throughout the city, it must become part of the underlying framework that is used to guide future development patterns. The location and design of parks and open spaces are often considered secondary to traditional utility and road infrastructure, which is planned strategically well in advance of development. Natural infrastructure elevates the ecological services that these green spaces provide to the same level as traditional forms of hard infrastructure.

Policies

Natural Infrastructure

- a. Incorporate principles of natural infrastructure into land use, development and transportation decisions:
 - i. Prioritize the protection of natural assets.
 - ii. Where feasible restore degraded natural areas to achieve greater ecosystem and municipal services.

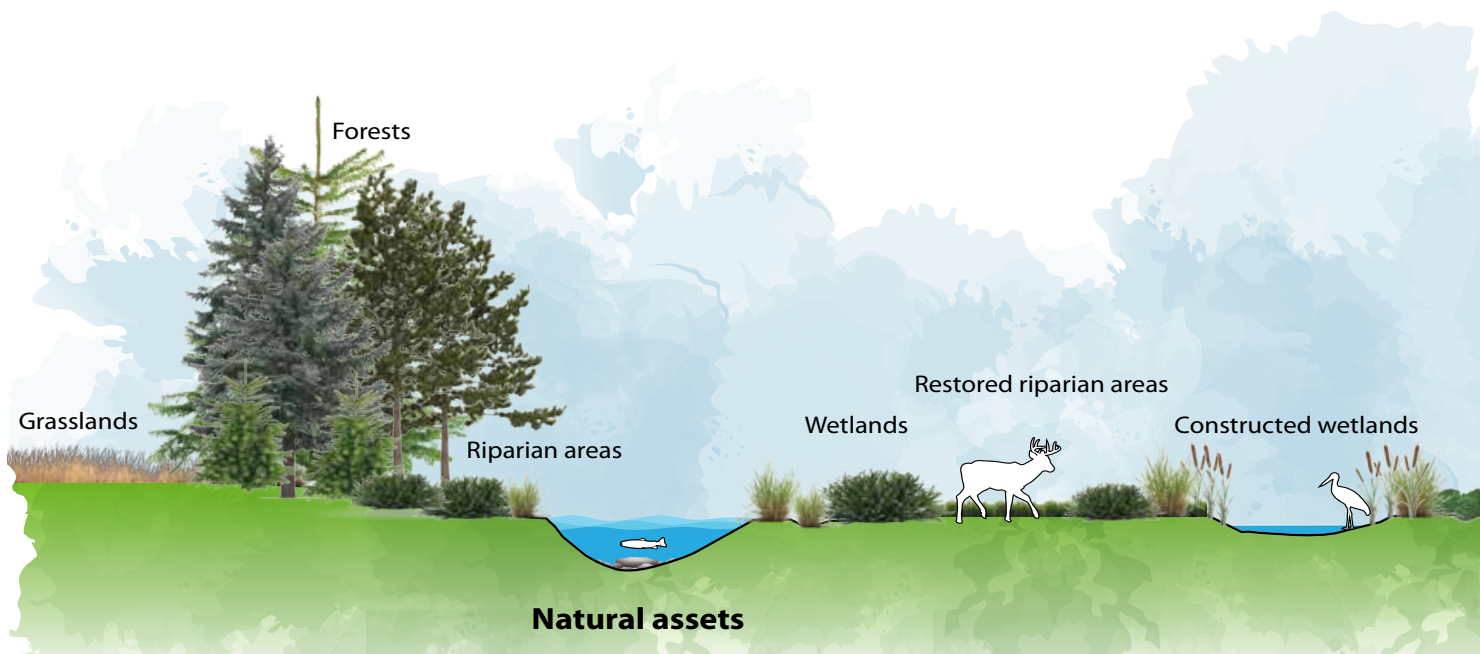


Figure 2-4: Spectrum of Natural and Engineered Elements

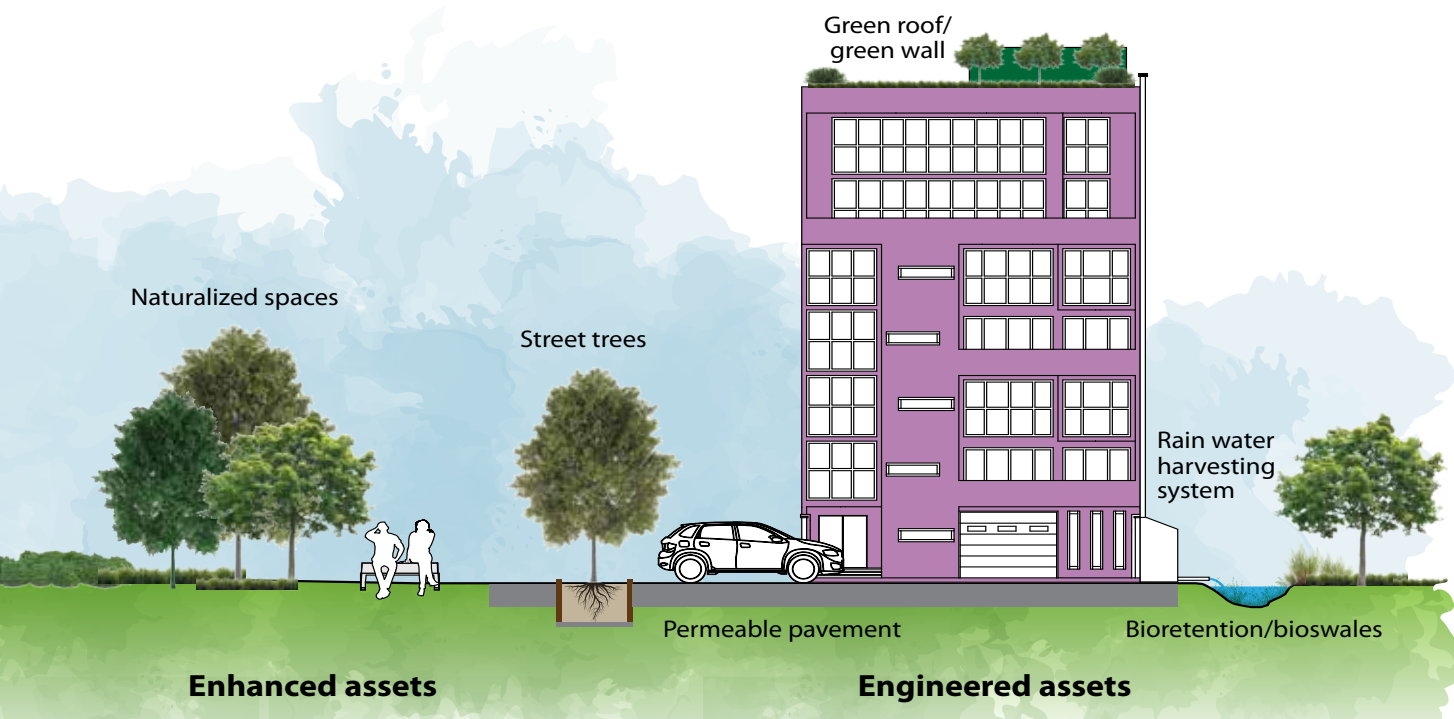
- iv. Build engineered elements that use ecological and hydrological processes to reduce the impact of development on the natural environment.
- v. Improve the aesthetic quality and sense of place for all communities and landscapes.
- b. Identify and protect strategic parcels, blocks and corridors that contribute to essential municipal ecosystem services.
- c. Facilitate the development of eco-industrial business parks.
- d. Prioritize ecological protection for natural areas, open spaces and parks.
- e. Support landscape designs and developments that enable food production.
- f. Establish an integrated approach to natural asset management and decision making as part of The City's ongoing planning, investment and asset management processes.
- g. Reduce the cumulative impacts of development on ecosystems.



Natural Infrastructure includes a range of assets from natural through engineered elements which rely on ecological and hydrological processes to provide municipal, ecosystem and social services as well as resilience benefits.

Resilience of a city improves when integrated systems are in place to conserve, enhance and maintain our natural infrastructure as well as the social, economic and environmental benefits that they provide.

Natural Infrastructure is better able to self-adapt to the stresses and shocks associated with Calgary's changing climate than hard infrastructure. Protecting and using natural infrastructure appropriately can offset costly investments in new hard infrastructure, while providing additional social, economic and environmental co-benefits.



2.6.2 LAND

Objective

Minimize the amount of land that is taken up by the built environment and create opportunities to connect with nature.

Creating a more compact urban form has some of the most direct benefits to the natural environment, including:

- Minimize land used for development by creating a more compact urban form.
- Reducing disruption and fragmentation of habitat.
- Minimizing impervious surfaces to reduce stormwater runoff.
- Remediating contaminated soil and water through brownfield development.

Compact development minimizes the conversion of open land to urbanized uses and maximizes retained natural habitat and allows for connected ecological connectivity.

Ecological literacy:

"The City of Calgary supports the conservation and appreciation of biodiversity cultivating knowledge and understanding about ecological processes, personal stewardship actions and Calgary's natural heritage."

Biodiversity Policy – Policy Number: CSPA037, 2015



Policies

Design with nature

- a. Conserve natural habitats by reducing disturbance and fragmentation.
- b. New communities should be designed to retain undisturbed land to support ecological connectivity, promote biodiversity and improve water quality.
- c. Encourage the remediation and redevelopment of brownfield sites.
- d. Address critical ecological characteristics such as steep slopes and pervious soils as part of optimal site design.

Connecting with nature

- e. Enhance Calgary's livability by improving urban and natural ecosystems.
- f. Provide low impact access and amenities for people to interact with nature.
- g. Foster appreciation and stewardship of our natural environment by enhancing ecological literacy of Calgarians.
- h. Protect and expand the integrated open space network to support community well-being and for ecological connectivity.
- i. Establish service standards that address type, proximity, quality and quantity of park space serving citywide and neighbourhood needs.
- j. Include parks and natural assets as part of Calgary's heritage, natural history and identity.
- k. Provide educational and interpretive elements in parks and open spaces to increase knowledge about natural conservation and cultural and archeological points of interest.

Soils

- l. Conserve soil and reduce erosion:
 - i. Encourage the retention of natural vegetation and topography on a development site.
 - ii. Address sedimentation of rivers and streams by implementing stormwater management measures.
 - iii. Preserve nutrients and protect soils.

2.6.3 WATER

Objective

Protect, conserve and enhance water quality and quantity by creating a land use and transportation framework that protects the watershed.

Our rivers and creeks are the most visible part of a complex hydrological system. However, rivers are far more than the waters within their banks, they are the hearts of freshwater systems called watersheds that include all lands that drain to the rivers, as well as groundwater, springs, wetlands, ponds, streams and lakes within those lands. Watersheds reflect both the natural characteristics of their geography and the impacts of human activities within them.

The Bow and Elbow Rivers have drawn people to their banks and sculpted the landscape for thousands of years. These two rivers are the hearts of freshwater systems, called watersheds that include all lands that drain to the rivers, as well as groundwater, springs, wetlands, ponds, creeks, streams and lakes. Calgary contains six sub-watersheds (see Figure 2-5) and each sub-watershed is influenced by its surrounding topography and impacted by human settlements and activities.

Watersheds require management to limit the impact of human settlements and activities and to maintain their health and capability in providing clean, reliable water. Managing a watershed requires close collaboration between The City of Calgary, Calgary's regional partners and the Province. This collaboration helps to safeguard the water supply, promote sustainable water use and keep rivers healthy.

Watershed management cannot occur in isolation and must tie closely with land development and urban growth. Population and economic growth require a secure water supply and The City must consider the quantity, quality and movement of water alongside other planning outcomes. This requires direction guiding water conservation, improving flood and drought resilience, protecting source water, planning for infrastructure upgrades and managing increased stormwater runoff in communities that are growing and changing. Water is an important component of city-building and must be integrated into land use plans, policies and decisions.

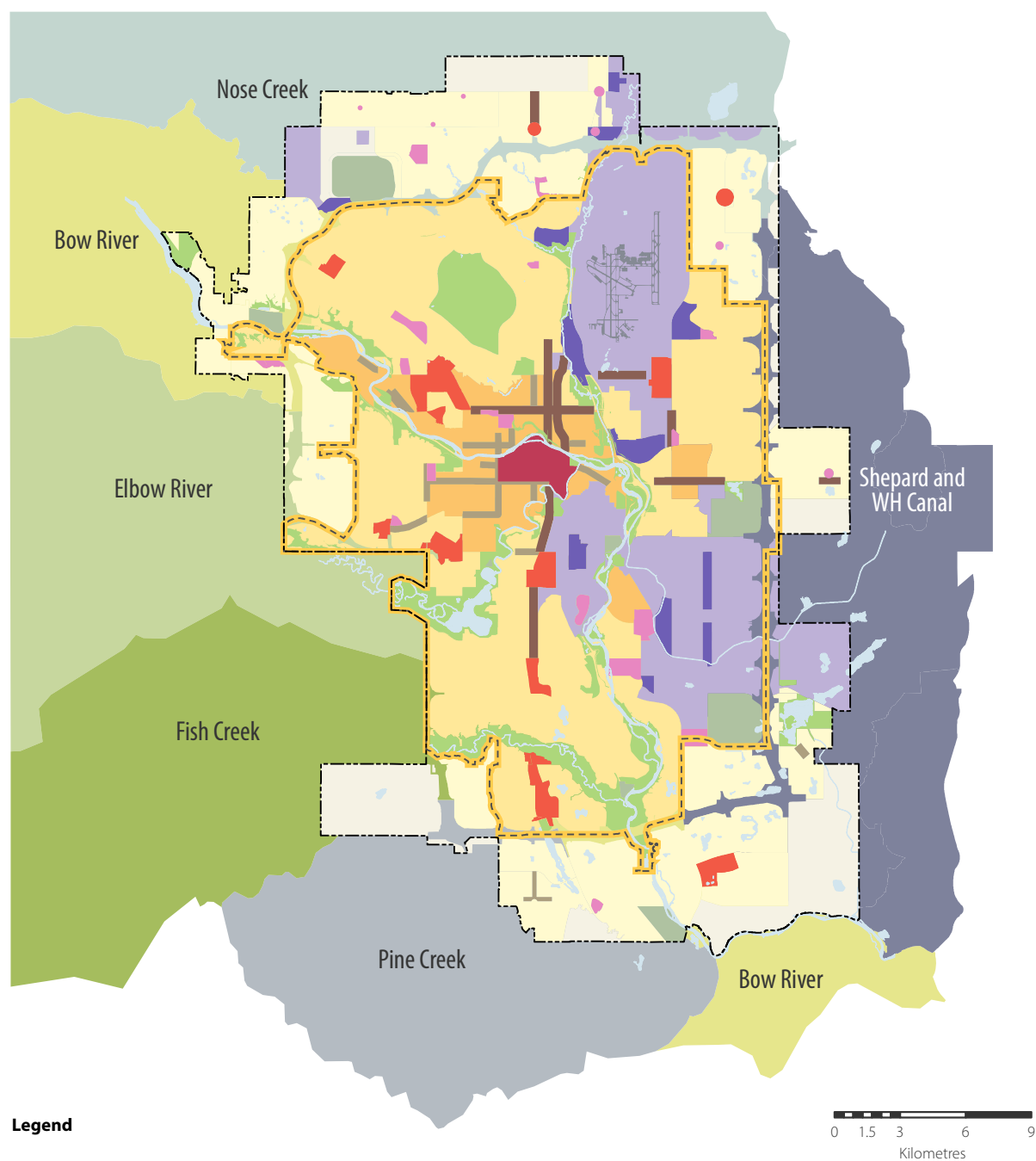
To integrate watershed management with land use planning it requires a multi-faceted policy approach that includes direction to service development, mitigate impacts to watershed health, shape communities and protect public health and safety. To do this effectively, The City needs to consider water from multiple perspectives: the service lines (potable water, wastewater and stormwater), severe weather patterns (flooding, droughts and storms) and water security (source water protection, water supply etc.). In addition to these different perspectives, climate change and community resiliency provide important lenses to ensure water and its role in city-building is evaluated comprehensively and thoroughly to meet the needs of Calgarians today and into the future.

With an increase in severe weather patterns, including floods and droughts, decreasing freshwater resources and increasing land use changes, Calgary is becoming increasingly vulnerable to climatic changes.



Water security

For thousands of years, people have met at the confluence of the Bow and Elbow rivers. These rivers are the lifeblood of Calgary – they provide safe drinking water, clean water for the natural environment and a reliable water supply to support Calgary's economy. Calgary has grown to be a big city on a small river. Limited water availability, declining water quality and flood resiliency are important considerations in maintaining Calgary as a healthy and green city.



Approved: 24P2009
Amended: 5P2012

Figure 2-5: Watershed Management

Watershed management

The Government of Alberta and other authorities have taken action to protect and improve the quality and quantity of water in Alberta through the development of watershed management plans. The City of Calgary has been instrumental in working with its regional partners to create watershed management plans that will ensure the protection of our water resources. A watershed management plan considers water quantity, water quality, aquatic ecosystems and riparian areas, as well as a variety of land use issues that impact water. Watershed management plans require water and land use managers to work together to ensure healthy watersheds.

Policies

Natural waterbodies

- a. Protect ground and surface water to support life and prosperity for Calgarians' and those living in downstream municipalities.
- b. Protect and integrate critical ecological areas such as wetlands, floodplains, riparian corridors, into development areas.

Water conservation and efficiency

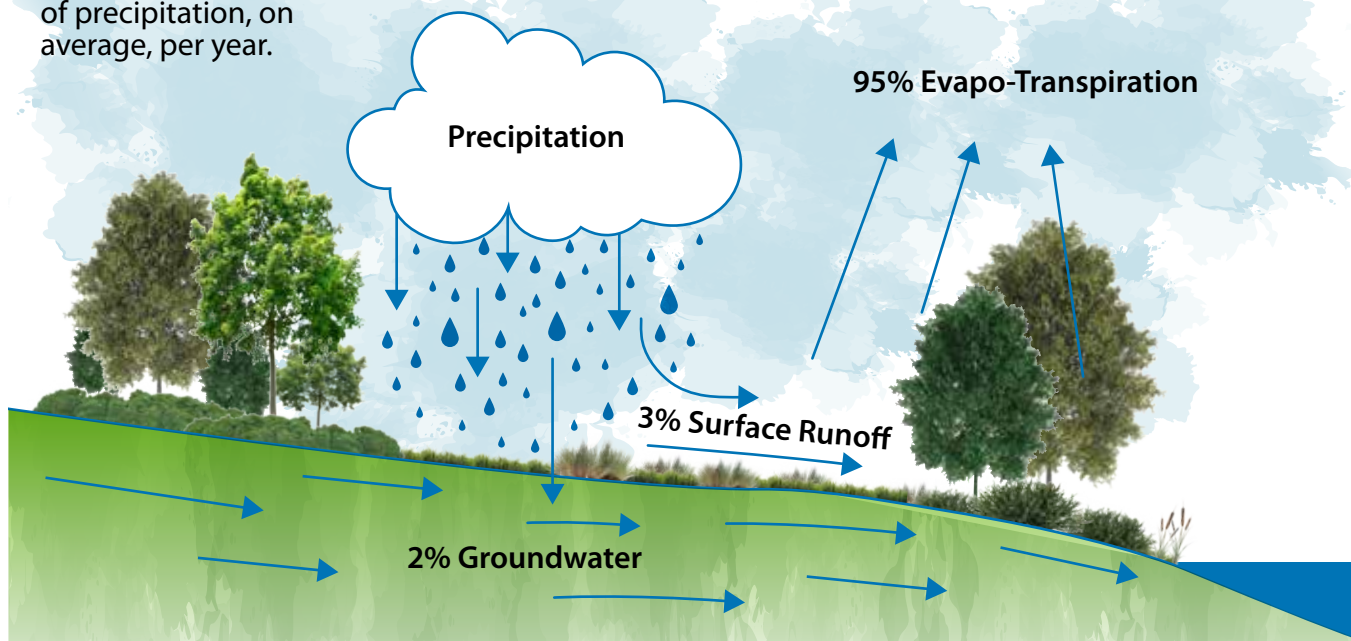
- c. Promote water conservation initiatives.
- d. Reduce water use by supporting stormwater harvesting, investing in water supply infrastructure and water demand management programs.
- e. Improve alignment between water management and planning by adopting an integrated water management approach.
- f. Encourage water conservation measures in site and building design and public and private landscaping.
- g. Promote water reuse where the water source meets provincial environment and public health legislation.

Stormwater management

- h. Implement stormwater regulations and practices to capture stormwater on-site and reduce flood damage.
- i. Promote the use of green stormwater infrastructure, pervious surfaces, vegetation and infiltration to manage stormwater.
- j. Support a citywide network of natural infrastructure.
- k. Support initiatives for green stormwater infrastructure on public and private lands.
- l. Encourage sustainable building practices for private and public buildings and sites that promote storm water management and reuse.
- m. Increase the amount of pervious surface by minimizing development on undisturbed open space and agricultural lands and by reducing hardscape surfaces and maximizing the use of pervious paving.
- n. Develop sub-watershed plans to ensure integration inform integration of principles and policies of relevant watershed management plans into local area plans and development decisions.
- o. Ensure approval standards are consistent with objectives of water management plans.
- p. Design new communities to manage stormwater at the pre-development state to ensure the continued health of nearby waterways, ravines, wetlands and other sensitive areas.

NATURAL AREA

We see about 410 mm of precipitation, on average, per year.



Typical pre-development hydrology

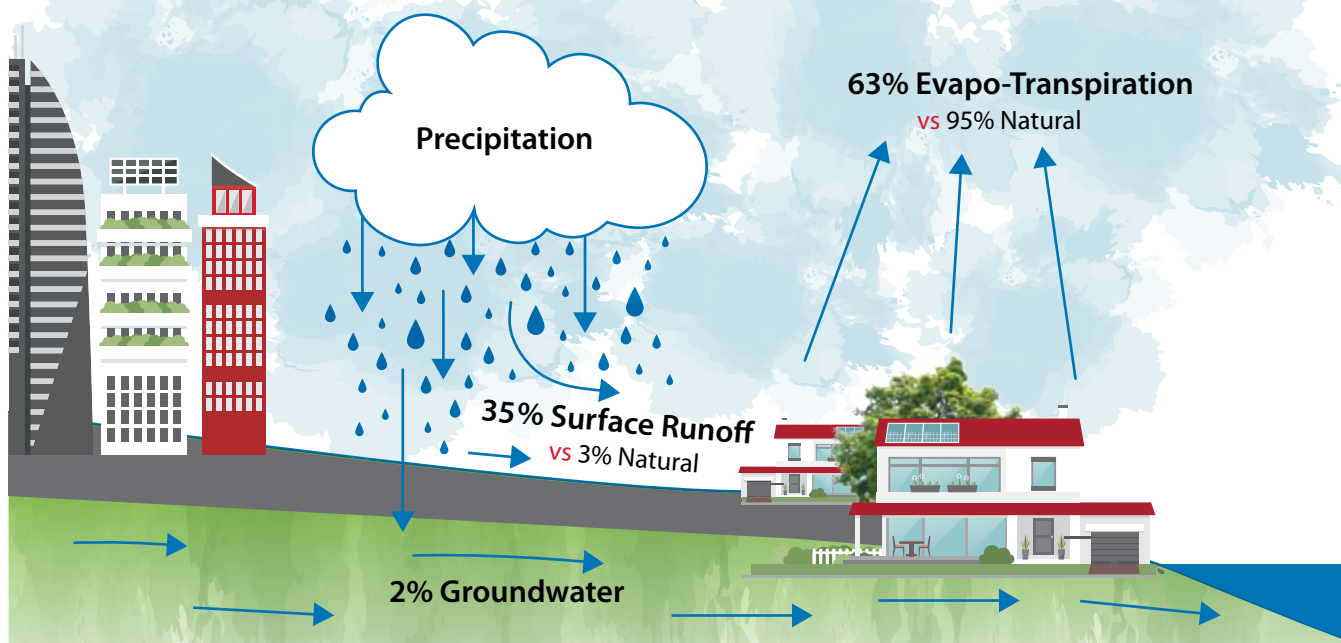
DEVELOPED AREA

Figure 2-6: Impacts of Impervious Surfaces on Runoff Water Quantity

Typical post-development hydrology

Water security and quality

- q. Protect and enhance waterway catchment boundaries to safeguard fresh water resources.
- r. Protect water quality and supply by:
 - i. Increasing natural infrastructure.
 - ii. Reducing water consumption per capita.
 - iii. Preserving and expanding lands critical to watershed protection.
 - iv. Sustaining groundwater sources.
 - v. Safeguarding sourcewater catchments.
- s. Improve the quality of city and regional water supply through sourcewater protection:
 - i. Promote and foster continued inter-municipal partnerships for land use regulations.
 - ii. Incorporate source watershed overlays in land use planning decisions inter-municipal partnerships and the Calgary Metropolitan Board on matters related to water security and quality and land use regulations.
 - iii. Support active and public transportation modes (walking, wheeling, transit) to reduce polluted run-off from streets.

Hydrology

- t. Seek opportunities to preserve and/or improve natural watershed hydrology during planning and development processes.

Sub-watershed planning

- u. Integrate sub-watershed planning objectives within land use planning and development processes.
- v. Consider sub-watershed management objectives as a foundational tool for regional open space planning.

2.6.4 ECOLOGICAL NETWORKS**Objective**

Maintain biodiversity and landscape diversity, integrate and connect ecological networks throughout the city.

An ecological network is a network of natural areas and open space that provides the conditions necessary for ecosystems and species populations to survive in a human-dominated landscape. This network is one of the defining features that establish Calgary's character, sense of place and quality of life. The components of the network include the river valley system, natural environment parks, regional and neighbourhood parks, streetscapes, pathways, linear parks, school sites, community gardens and urban plazas. These provide habitats for many tree, plant and animal species. Figure 2-7 depicts Calgary's ecological network, delineated through spatial network theory. The distribution and health of both habitats and corridors influence how well ecological networks function to support biodiversity and foster network resilience.

A functioning ecosystem conserves biodiversity and contributes to the cleaning of air, land and water. These benefits can be obtained by systematically acquiring land for the primary purpose of protecting beneficial ecosystem functions. Map 4 presents the Parks and Open Space System in Calgary. This map is supported by a range of City policies, principles and strategies including the Wetlands Policy, Urban Forestry Strategic Plan, Urban Parks Master Plan and Open Space Plan.

The power of natural areas and open spaces and their ability to significantly improve the quality of life in communities lies in viewing and applying them as a system, rather than in individual components that responds to the social and recreational needs of the city's population. Open spaces can be viewed as a structural pattern of landscape elements. These elements, patches and corridors, join together to form a matrix. The overall pattern determines flows and movements of species in and through the landscape.

The open space typology categorizes open spaces based upon physical similarities. These categories combined serve as an evaluation framework to determine the value of the ecological network and the associated sensitivities that should be considered prior to any development/activities occurring.

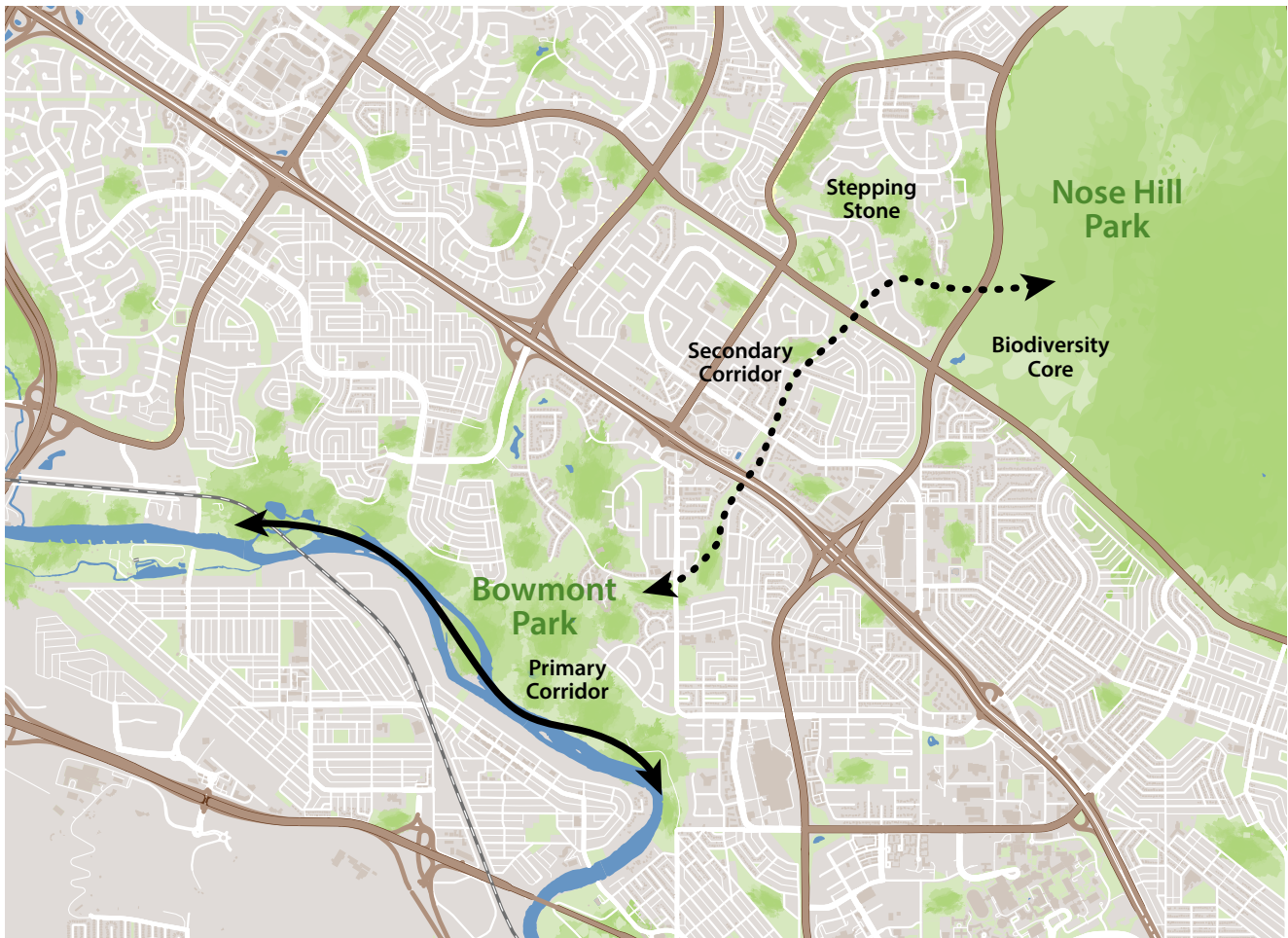


Figure 2-7: Urban Ecological networks consist of connected natural areas and open spaces.

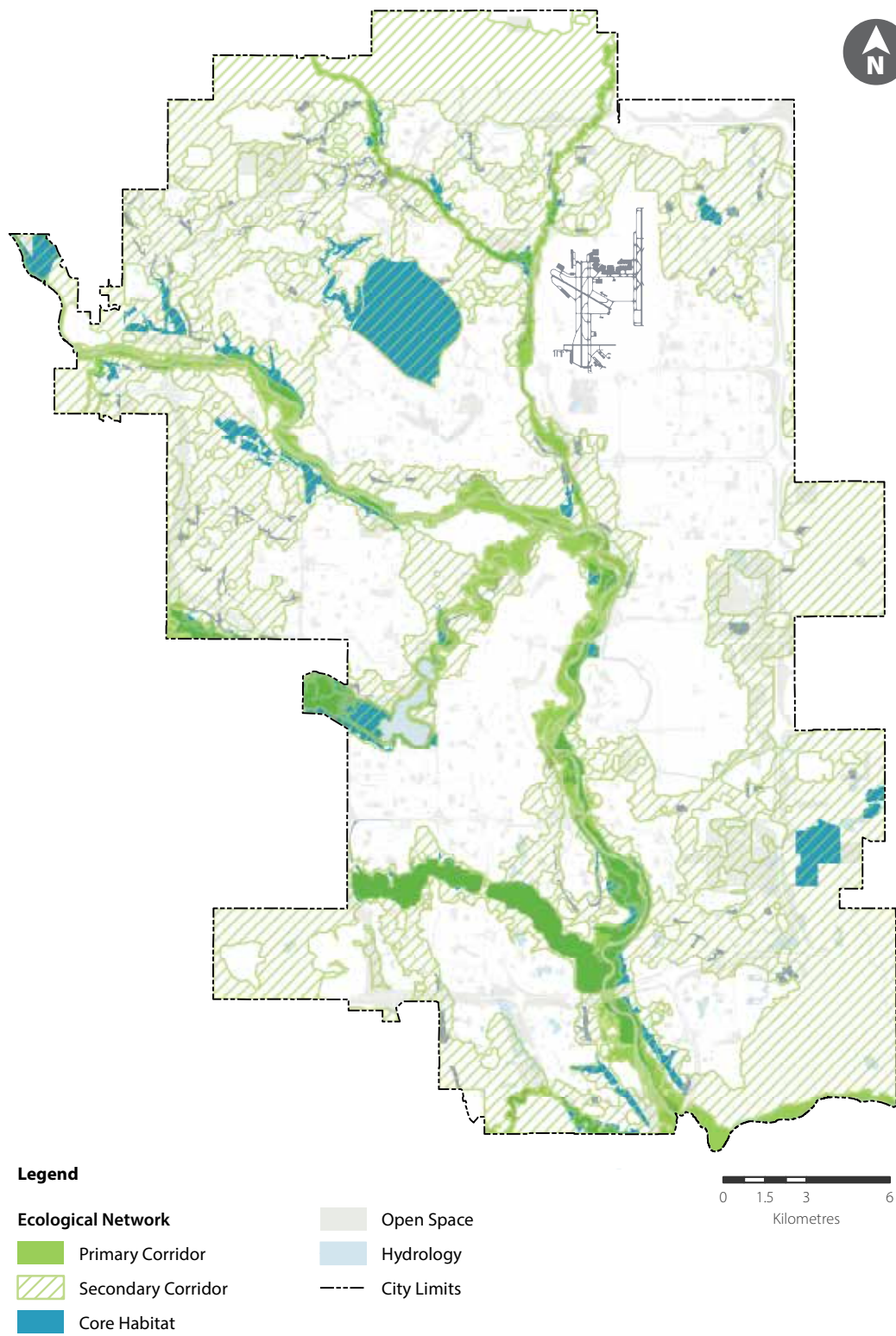


Figure 2-8: Ecological Network Map

Open space typology definitions

Habitat

There are two types of environmentally significant areas and natural environment parks that form the framework of Calgary's open space system:

- Habitat cores: areas greater than 30 hectares
- Stepping stones habitats: areas between five and 29 hectare

Corridor

Corridors are natural and semi-natural open spaces that link habitats. There are two type of corridors:

- Primary corridors connect Calgary to the region and consist of linear riparian zones along Calgary's major waterways including the Bow and Elbow Rivers, Fish Creek, Nose Creek and West Nose Creek.
- Secondary corridors connect other ecological network elements to a primary corridor, through a configuration of stepping stone habitats.

Policies

Protection of natural ecosystems

- a. Protect and enhance the quality and function of significant natural assets and features.
- b. Land use, development and transportation planning should seek to conserve and protect natural asset features, parks and open spaces and the buffers and connections between them to:
 - i. Protect environmentally-significant areas in the allocation of land use.
 - ii. Ensure the protection of sensitive ecological areas and unique environmental features within the city's parks and open space system takes precedence over other uses.
- c. Provide an 18 metre building setback from the tops of escarpments.
- iii. Encourage the integration of trees, vegetation and natural infrastructure to reduce the impacts of development.
- iv. Integrate sensitive design and construction management practices to optimize the protection of natural assets and the services they provide.
- v. Incorporate trails and pathways that link local and regional open space into the planning and review processes.

"Ecosystems: the interaction between organisms, including humans and their environment. Ecosystem health and integrity refers to the adequate structure and functioning of an ecosystem, as described by scientific information and societal priorities."

Establish and Maintain Ecological Networks

- d. Ensure parks and natural assets are valued pieces of Calgary's heritage, natural history and identity.
- e. Create a network of land uses, landscape elements, natural areas and open spaces that support ecosystem connectivity, biodiversity, wildlife and habitat conservation.
- f. Plan and support natural areas and parks to help shape the urban form and buffer incompatible uses by:
 - i. Integrating natural features of the surrounding landscape into the site design to maintain a high degree of interconnectivity.
 - ii. Strategically protecting areas adjacent to waterways to safeguard freshwater resources.
 - iii. Allow for the modification of natural areas, to increase their capacity to incorporate a buffer for more sensitive ecological areas.

- iv. Locating and designing parks and open spaces to connect with green streets, green alleys and lane initiatives (see CTP for details regarding the inclusion of green stormwater infrastructure in Complete Streets).
- v. Greenfield partnerships between The City and Calgary's school boards to facilitate the greening of school yards and the proper design and redevelopment of recreational and athletic fields for all levels of play.

Ecosystem Services

Ecosystem services are the benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as regulation of floods, drought, land degradation and disease; supporting services such as soil formation and nutrient cycling; and cultural services such as recreational, spiritual, religious and other nonmaterial benefits. Recognize the interconnectedness of air, land, water, climate, ecosystems habitat and people.

Regional partnerships

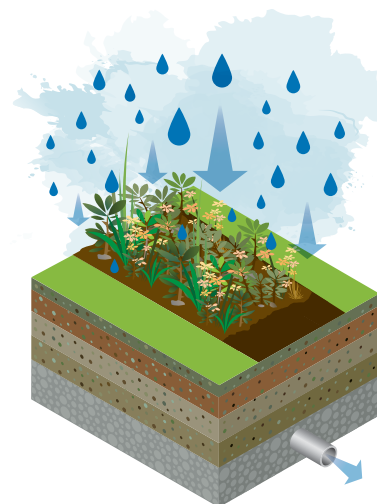
- g. Partner with neighbouring municipalities to create an integrated regional open space network and source watershed protection strategy. Consider watershed management plans as a foundational tool for regional open space planning.

"Riparian areas are among the most biologically diverse and productive places in Alberta. Networks of riparian open spaces provide critical habitat and corridors for plant, animal and fish populations."

THE RIPARIAN ACTION PROGRAM:
A Blueprint For Resilience.

Biodiversity

- h. Preserve natural open space in environmentally significant areas for biodiversity and ecosystem functions, while supporting complete communities and naturalization of open space, through:
 - i. Designs for new communities that retain greater amounts of undisturbed lands.
 - ii. Management and rehabilitation of natural areas and critical habitat.
 - iii. Protection of aquatic and riparian corridors and habitats through preservation, restoration and creation of wetland bank sites, environmental reserve dedications and design alternatives.
 - iv. Reduction in habitat fragmentation and increase connectivity, where feasible, within the city and region.
 - v. Efforts to monitor and manage invasive species.
 - vi. Support stewardship of City-owned natural open space.
 - vii. Implementation and promotion of education and best practices in management and stewardship of natural lands.
 - viii. Considering the needs of pollinator species in the design of new communities and developments.



Bioswales (bio-infiltration areas) promote absorption and infiltration of stormwater runoff in urban areas.

Source: Design Centre for Sustainability, SALA, UBC

Protecting aquatic and riparian habitats.

- i. Ensure no net loss principles of significant wetland habitat and preserve existing wetlands as a priority over reconstruction 3.
- j. Preserve and restore wetland bank sites to protect aquatic habitats.
- k. Protect riparian areas to meet habitat, water quality and public access through environmental reserve dedications and design alternatives.
- l. Encourage and enable protection of source water and groundwater recharge areas.



City's riparian management categories: conservation, restoration, recreation, flood and erosion control, develop. Management categories should be used to guide The City's land use decisions within and adjacent to riparian areas and inform restoration and bank stabilization efforts. Protect and enhance escarpments for open space, public views and setbacks to private property.

River valleys and crossings

- m. Mitigate the impacts of urban development on Calgary's rivers systems by preserving and restoring the City's riparian areas.
- n. Transportation infrastructure crossings should consider environmental impacts on river valleys and waterways. Factors to be considered when planning, designing and constructing these crossings includes:
 - i. City-wide street connectivity that connects stream corridors into the community.
 - ii. Waterway constraints (stream corridor considerations and riparian areas).
 - iii. Location and design of stream channel crossings.
 - iv. Minimizing impacts on adjacent communities and parks.
 - v. Incorporating river crossing design principles (See CTP Appendix B).

Urban Tree Canopy

As a priority consideration during development design of new communities, it is important to provide a suitable environment for sustainable trees and promote the growth of a future urban tree canopy. It is equally important in development to preserve existing trees. The following policies should direct local area plans to protect existing tree canopy, maintain planted trees to grow to maturity and provide the required growing conditions for sustainable trees in Calgary.

- o. Protect and expand parks, green spaces and connections between these areas, as shown in Map 4.
- p. Protect, restore and expand Calgary's urban forests. Provide adequate space and environmental conditions for forests to thrive.



Trees provide many ecosystem services, including improving air quality, reducing erosion and creating wildlife habitats. The amount of services provided by trees increases exponentially with tree size. Trees also contribute to an improved quality of life, health and community well-being. Maintaining and preserving existing trees is critical to a sustainable, healthy urban forest and expanding urban tree canopy. These policies support increasing Calgary's urban forest and vegetation. Trees and natural vegetation are an integral component of planning for landscape connectivity, climate resilience and carbon sequestration. Trees are planted for the enjoyment of future generations, the benefits from trees currently within the city are a gift from past Calgarians and new trees will support wellbeing of future Calgarians.

- q. Identify the target urban tree canopy target in local area plans.
- r. Plant a variety of native deciduous and coniferous trees that are drought tolerant and adapted to Calgary's climate.
- s. Foster partnerships with organizations that help protect forests, plant trees and provide education.
- t. Support incentives that encourage -tree planting and care by private property owners.
- u. Reduce the urban heat island effect through planting trees and other vegetation, to provide shade and cool air temperatures.
- v. Ensure natural infrastructure is sustainable by following Arboriculture standards and specifications.
- w. Encourage green infrastructure and enhanced landscaping in the built environment.
- x. Ensure tree sustainability to create the greatest benefit for the site and the community.
- y. Further develop tree protection and planting measures to:
 - i. Ensure maximum conservation of existing healthy, mature trees and incorporation of native and adapted vegetation in the site design and layout of new buildings.
 - ii. Protect trees and root systems during street/boulevard work and during site development.
 - iii. Protect healthy trees on private lands.



Environmental benefits of a healthy urban forest:

- Reducing particulate and gaseous air pollution.
- Providing fresh air through CO₂ consumption and O₂ production.
- Cooling the air through a natural air conditioning effect.
- Intercepting rainfall by reducing stormwater runoff and improving water quality.
- Reducing soil erosion by trapping and slowing stormwater runoff.
- Providing wildlife habitat.
- Reducing noise pollution by acting as a sound barrier.
- Changing the scale of a street corridor to a more human dimension.
- Add to the street's sense of place.
- Create physical barriers, directing foot traffic or screening views.

2.6.5 CLIMATE CHANGE AND ENERGY

Objective

Adapt to current and anticipated changes in climate and contribute to mitigation efforts for long-term resilience and reduce the dependency on non-renewable energy resources.

The changing climate poses evolving risks to the city and to Calgarians. The Calgary Climate Resilience Strategy aims to maximize the resilience of Calgary in the context of a changing climate. The strategy is guided by local, provincial and federal climate policies and provides mitigation and adaptation actions. As a city, we recognize our responsibility to adapt to the impacts of climate change on our community. Our city seeks to achieve emission reduction targets which align with federal climate change commitments.

In 2009, the Calgary Climate Change Accord established The City's commitment to pursue reductions in community green-house gas (GHG) emissions to 20% below 2005 levels by 2020 and 80% below 2005 levels by 2050 (Figure 2-10). Nonetheless, between 2005 and 2019 Calgary's GHG emissions increased.

Calgary's Climate Resilience Strategy: Mitigation & Adaptation Action Plans, establishes three main goals:

- Reduce vulnerabilities and risks to severe weather and long-term climate effects.
- Improve energy efficiency and reduce GHG emissions.
- Support the low-carbon economy.

Reducing the reliance on fossil fuels through these measures, we can reduce our contribution to climate change; however, we must also adapt to the impacts of climate change. Impacts include an increase in the frequency and severity of extreme weather events, higher temperatures, flooding, drought and a shift in seasonal patterns of heat and precipitation. Adapting to climate change allows us to target interventions and strategies to make our neighbourhoods, infrastructure, services and economy more resilient.

Per capita greenhouse gas emissions have decreased since 2005

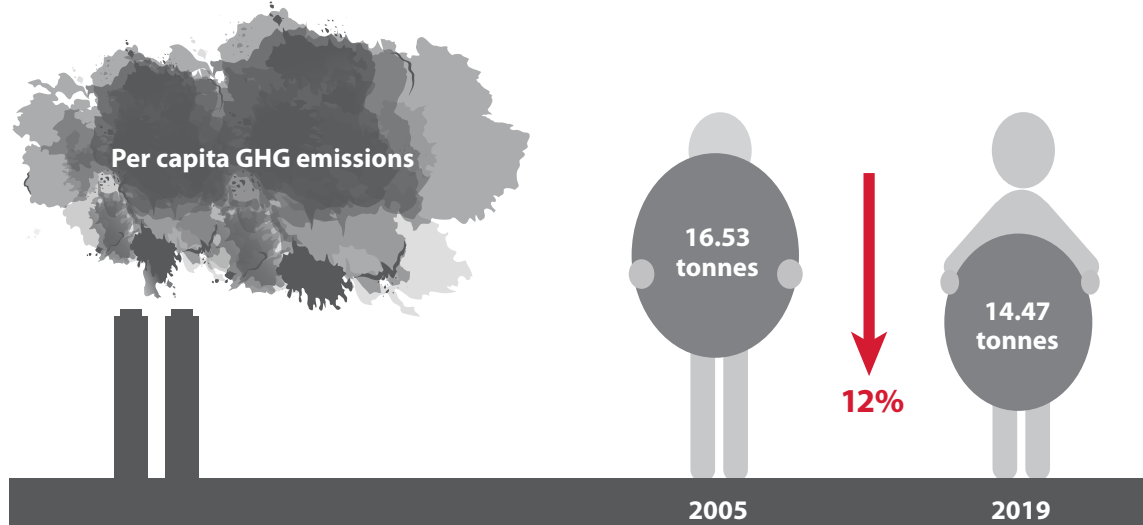


Figure 2-9: Calgary community-wide GHG emissions by sector – 2019

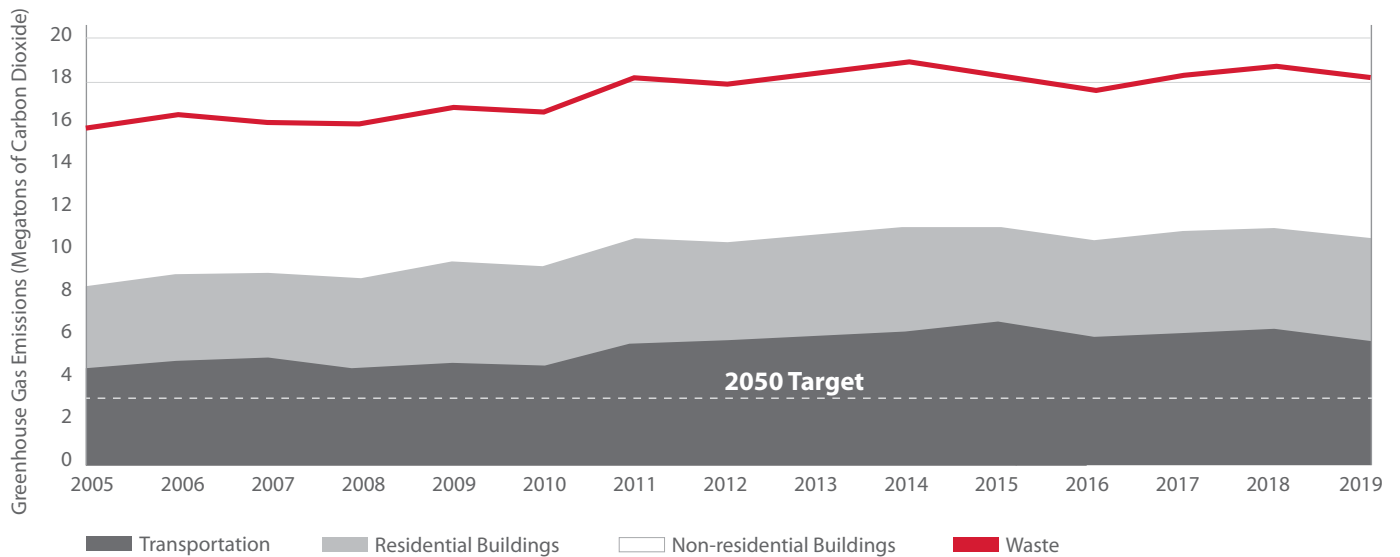


Figure 2-10: Historical Calgary Community-wide GHG Emissions (2005-2019)

Adopted corporate energy principles

- Responsible Energy Management
- Collaboration
- Integration
- Relevance; and targets for GHG emissions reduction, energy consumption and renewable energy and multi-modal transportation.



While climate change is a global problem, at the local level, it is possible to reduce GHG emissions by improving energy-efficiency in buildings, renewable energy generation, electric vehicle adoption and alternative fuel use and fostering compact development of complete communities. The Energy Intensity Map (Figure 2-11) demonstrates the projected citywide annual energy consumption if ultra high-efficiency improvements are adopted by 2036.

Targeted actions can generate substantial impacts on future carbon emissions. Urban form plays a fundamental role in shaping urban processes and can affect future emissions. How we design our city and neighbourhoods impacts the need for energy. Achieving the targets outlined in MDP is the most cost effective action that can be undertaken with respect to climate action. Energy efficient buildings and low-carbon energy will contribute to achieving Calgary's 2050 emission reduction targets for built form.

Where people live, work and access amenities impacts how they choose to get around the city. Currently, emissions associated with transporting people and goods account for one third of Calgary's emissions. Moving towards zero-emission vehicles as outlined in CTP section 3.12 supports additional cumulative GHG reductions. Failure to fully achieve the plans' outcomes will diminish the ability to achieve the targets.

The policies below support achieving the 2020 emission reduction targets, and must be exceeded to achieve the 2020 emission targets.

Policies

Climate resiliency

- a. Reduce vulnerabilities and risks due to severe weather and long-term climate effects.
 - i. Encourage infrastructure design that can withstand climate change impacts.

Action	Total potential GHG reductions to 2050 (Mt)
Implement existing MDP	12
Implement existing CTP	15
Improve energy performance in new and existing buildings	215
Neighbourhood renewable and low-carbon energy systems	17
Shift to low-emissions vehicles	60
Exceed core indicator targets in CTP	3
Exceed core indicator targets in MDP	7

Table 2-3: Components of Climate Change Mitigation

- ii. Encourage development and land use patterns that reduce vulnerabilities to climate change impacts.
- iii. Discourage development in areas known to be vulnerable to the impacts of severe weather and natural hazards, such as steep slopes and floodplains, to minimize long-term risk to Calgarians and the community.
- b. Minimize disruption from extreme weather events by encouraging on-site backup power systems and emergency shelters within new buildings and development of disaster management plans for buildings and communities.

Energy efficient transportation and land use planning

- a. Co-ordinate sustainable energy planning at all scales of development by:
 - i. Promoting urban forms and infrastructure that support alternative and renewable energy production and reduced energy consumption.
 - ii. Ensuring that energy efficiency is part of the design considerations for local area plans and subdivisions.
 - iii. Minimize building setbacks to encourage efficient use of land and/or support district energy where appropriate to reduce energy loss or create opportunities for energy exchange.
 - iv. Maximizing passive solar gain through street design and building orientation.
 - v. Reducing the consumption of carbon-based fuels and increase renewable energy systems.
 - vi. Minimize energy use through innovative site design and building orientation or stacking that addresses factors such as prevailing winds, landscape, sun-screens and sun-shade patterns.
- b. Remove barriers to the development of district energy low-carbon heating and cooling systems, solar and other renewable sources that serve buildings or a broader district.

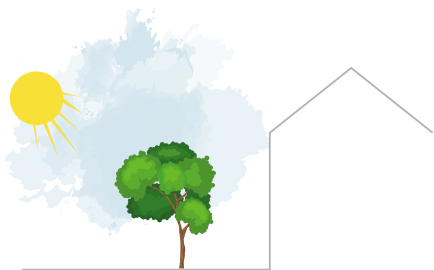
- c. Develop and adopt new and amended regulations, programs and incentives to implement the MDP and CTP goals and policies to:
 - i. Create a compact urban form and complete communities to encourage active transportation, reduce vehicular trips and preserve open space.
 - ii. Plan for and support infill development.
 - iii. Improve public transit, walking and wheeling infrastructure and encouraging active modes of transportation.
 - iv. Support the preservation, restoration and utilization of natural infrastructure for its many benefits, including reducing the urban heat island effect, stormwater management and carbon sequestration.
- e. Consider methodologies to integrate greenhouse gas (GHG) reduction potential into growth management decisions and transportation assessments.
 - i. Update the Corporate Energy Plan to fully integrate corporate GHG management and consider the establishment of a Community Energy and Emissions Plan.

Energy efficient buildings

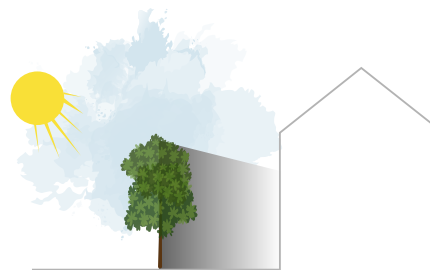
- f. Promote energy-efficient, “green” building design, techniques and practices for the construction and operation of buildings.
- g. Eliminate barriers to energy efficient design practices.
- h. Encourage the conversion, retrofit and adaptive reuse of existing buildings.
- i. Promote mixed-use buildings to reduce heat and power demand and increase the viability of on-site energy supply.

Air quality

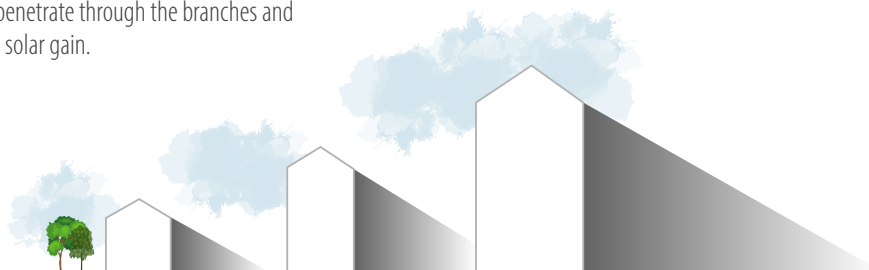
- d. Integrate air quality considerations in planning and transportation decisions:
 - i. Employ strategies to improve air quality related to transportation, buildings and industry including construction and waste management to reduce overall contributions to air pollution.



Deciduous vegetation should be used to block the high summer sun and reduce the chance of overheating. In the winter the low sun will be able to penetrate through the branches and increase solar gain.



Taller buildings should be located to the north of a site to maximise solar access.



Impact of height and aspect on solar gain.

Solar gain is affected by vegetation and building height

- j. Collaborate with partners and agencies in the transportation, energy and development and building sectors to develop a comprehensive green building strategy that incorporates National Energy Code and sets higher efficiency standards for new and existing buildings.
- k. Encourage development that respects natural topography.
- l. Promote energy performance standards in new and existing buildings.
- m. Support businesses that contribute to a low carbon economy.
- n. Support learning platforms and educational tools that encourage responsible energy use, reduced GHG emissions and promote a low carbon economy.

Climate resilient economy

- o. Create a system where businesses that employ sustainable practices are rewarded, recognized and/or prioritized.
- p. Support a learning platform for sustainable production and consumption solutions to create green capital growth.

Food assets

- q. Support the implementation of a food action plan for the City of Calgary.



The Energy Intensity Map (Figure 2-11) demonstrates the projected citywide annual energy consumption if ultra high-efficiency improvements are adopted by 2036. Research and collaboration with key stakeholders is underway to update the Energy Intensity Map. The Energy Intensity Map will be used as a tool to visualize pathways to The City's 2050 emissions reduction goal and support the implementation of the MDP's energy efficiency policies and the 2018 Climate Resilience Strategy.

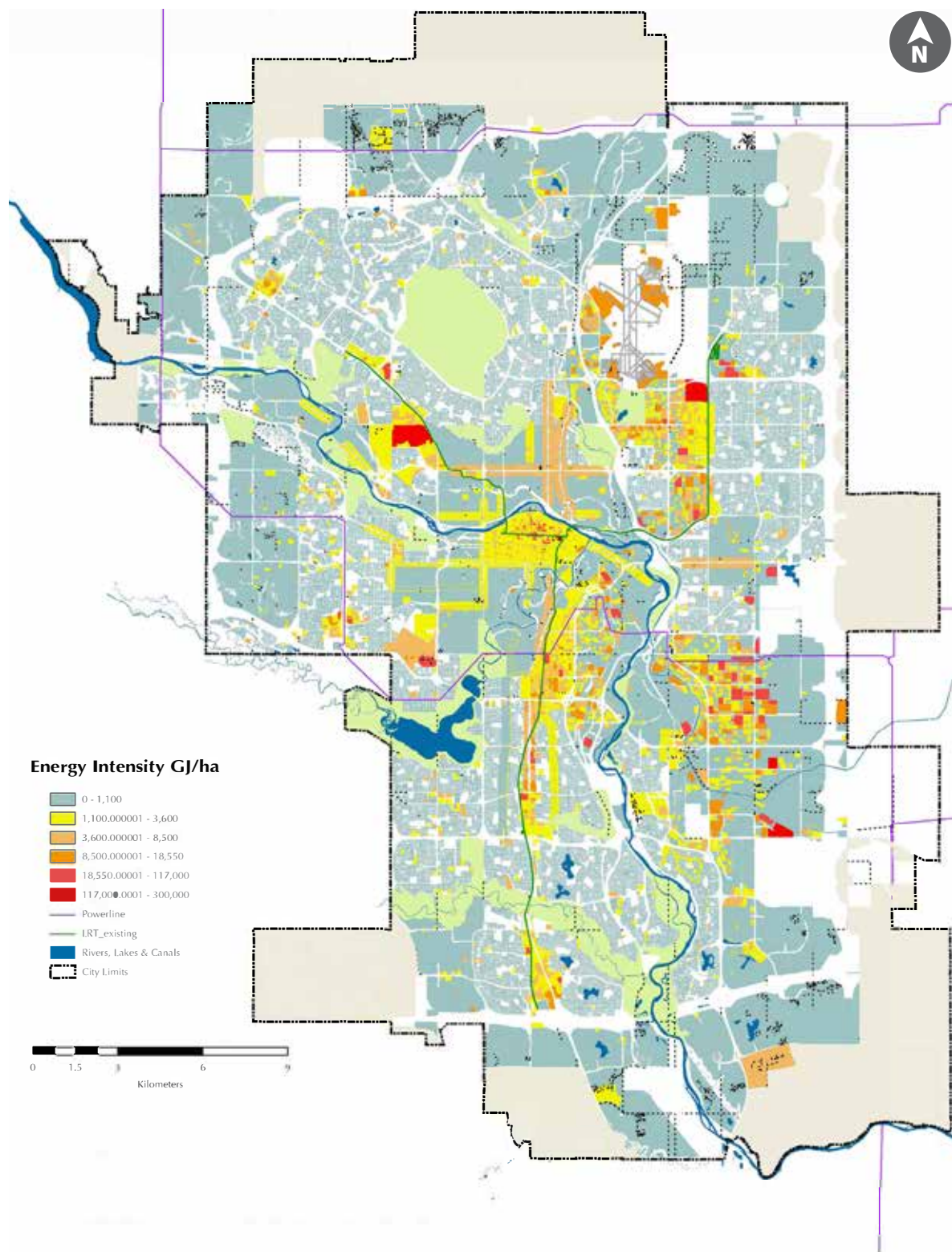


Figure 2-11: Energy Intensity Map

2.6.6 WASTE

Objective

Reduce waste and improve waste management and resource recovery.

The City of Calgary aims to lead the community towards zero waste through a focus on reduction, reuse and diversion (recycling and composting).

Waste generated by construction and demolition of buildings accounts for a significant portion of waste disposed in landfills. However, many of the materials in this waste can be recycled, including untreated wood, concrete, asphalt, drywall, metal and cardboard. Diversion of construction and demolition waste is a collaborative effort between The City of Calgary and the private sector. In addition, sustainable design, building and landscaping practices can help to reduce the waste generated in the first place and make use of reclaimed or reused materials.

Land use planning and development can support waste diversion by designing communities and buildings to incorporate sustainable building materials and facilitate waste collection services and community diversion programs.

Policies

- a. Encourage development that incorporates sustainable design, building and landscaping practices to reduce waste and reuse materials and lead the way with City buildings and facilities. This includes:
 - i. Deconstruction practices that emphasize reusing or recycling materials.
 - ii. Innovative approaches to reduce waste, such as adapting older buildings to avoid demolition waste.
 - iii. Repurposing existing buildings and infrastructure and designing new buildings for future repurposing.
- b. Protect the operational needs and manage the long-term liability associated with landfills and recycling facilities by reducing conflicts with incompatible uses and managing residential/commercial/industrial interfaces.
- c. Encourage design practices that reduce waste construction including pre-fabrication and modular construction.
- d. Provide safe and adequate space for waste collection and diversion bins, appropriate to the type of waste generated on site, at residences, businesses and organizations and in public spaces.
- e. Provide safe and adequate access points and clearance for waste collection vehicles on City property and private parcels, including consideration for operational conditions (e.g. parked cars, snow), connectivity and route design.
- f. Require responsible diversion of recyclable waste from construction and demolition activities.

Part 3

Typologies for Calgary's Urban Structure





3.1 Introduction

Calgary consists of distinct geographic and functional areas that share common attributes with other areas across the city. Similar land use patterns, road layout, age of the building and the stage within a community life cycle help to define an area in terms of its development form and how it functions. They also provide determinants of how the area might change and transform in the future. These broad geographic areas, defined as “Typologies” are shown on the Urban Structure Map (Map 1) and form the organization of this section. Typology-based policies supplement other policies contained elsewhere in the MDP by providing interpretation of broad, city-wide policies within the context of a specific area to help provide guidance to planning and development processes.

The Typologies are:

Activity Centres

- Greater Downtown
- Major Activity Centre
- Community Activity Centre
- Neighbourhood Activity Centre

Main Streets

- Urban Main Street
- Neighbourhood Main Street

Developed Residential Areas

- Inner City
- Established

Greenfield Residential Areas

- Planned Greenfield
- Future Greenfield

Industrial Areas

- Standard Industrial
- Industrial–Employee Intensive
- Industrial Greenfield

3.1.1 IMPLEMENTATION GUIDEBOOKS AND LOCAL AREA PLANS

Some local area plans are intended to work in conjunction with the Implementation Guidebooks. Some Typologies require a level of detailed investigation to clearly understand the local opportunities, constraints and impacts of the respective policies. In those cases, supplemental policies should be established within the Implementation Guidebooks, or a local area plan.

Policies

- a. An Implementation Guidebook and/or local area plan should include, but not be limited to the following:
 - i. Definition of the study area.
 - ii. Public engagement to identify local character and community needs.
 - iii. Assessment of parks, public spaces, community facilities and service capacities.
 - iv. Assessment of natural and built infrastructure conditions and capacities.
 - v. Locations for intensification, transition and conservation.
 - vi. Land use diversity and development densities.
 - vii. Identification of the anticipated jobs and population for the total area and by typology.
 - viii. Street types and locations, in accordance with the Complete Streets policies of the CTP.
 - ix. Development phasing, staging and public investment.
 - x. Other policies or context-specific guidelines as deemed appropriate.
 - xi. Impacts of land uses and densities and the need for transition and interface with development in adjacent municipalities.

3.2 Greater Downtown

The Greater Downtown is made up of diverse and unique “neighbourhoods” focused around the Downtown Core and includes Stampede Park. The Greater Downtown is well connected with the rest of the city by multiple routes of the Primary Transit Network and high-quality pedestrian connections within and beyond its boundaries.



3.2.1 GREATER DOWNTOWN ACTIVITY CENTRE

Land Use Policies

- a. Reinforce Greater Downtown as the primary hub for business, employment, living, culture, recreation, and entertainment within Calgary. This will be achieved by:
 - i. Supporting the Downtown Core as the most concentrated employment centre in the city.
 - ii. Greenfield high-density residential and support services.
 - iii. Generating activity throughout the day and evening, 365 days a year.
 - iv. Investing in the development of the Primary Transit Network and the implementation of transit priority measures.
 - v. Providing high-quality walking and wheeling connections within the Greater Downtown and to communities, Activity Centres and Main Streets beyond its boundaries.
 - vi. Supporting economic vitality by embracing innovation and technology, and continuing to diversify into high-growth sectors.
 - vii. Putting pedestrians first and planning for the future of mobility.
 - viii. Connecting amenity-rich Greater Downtown neighbourhoods with a vibrant public realm network.
 - ix. Supporting the vitality of the rivers while protecting the built environment by adhering to a model of climate and infrastructure resilience which includes being future focused, innovative and prepared.
 - x. Supporting and enhancing its status as Calgary's destination for arts, culture, celebration and information exchange.
 - xi. Creating and maintaining a caring, safe and inclusive environment for all.
- b. Plan to accommodate at least 232,000 jobs and 70,000 residents in Greater Downtown over the next 60 years. Local area plans in Greater Downtown should implement the framework as identified in Centre City Guidebook(s) and establish individual densities and approximate job and population distributions.
- c. Preserve existing public lands in Greater Downtown for civic and cultural facilities such as parks, museums, libraries and any other creative venues that will enliven it as a destination for residents, employees and visitors.
- d. Support the location of major educational institutions and related uses in areas of Greater Downtown well served by the Primary Transit Network.
- e. The land use policies of section 3.3.1, General Activity Centre, shall apply to the Greater Downtown.

Mobility Policies

- f. Transportation planning and investment decisions in Greater Downtown should align with the Centre City Mobility Plan.

Public Realm Policies

- g. The public realm policies of section 3.3.1, General Activity Centre, shall apply to the Greater Downtown.

3.3 Activity Centres

Accommodating future urban growth within transit-supportive, mixed-use Activity Centres is a fundamental strategy for linking land use and transit. As per Section 3.2, Calgary's primary Activity Centre is the Greater Downtown, including the Downtown Core. Recognizing that the Downtown Core and the even larger Greater Downtown will reach their capacity over time, it is necessary to identify and plan for other strategic activity centres, including MACs, CACs and NACs that will support long-term employment and population growth in locations and at intensities that will support the Primary Transit Network.

Four scales of Activity Centres are identified based on the level and type of transit service, the expected level of intensity (density of jobs and population) and their citywide location and local context. The four Activity Centre types identified from largest to smallest are:

Greater Downtown

Greater Downtown is a vibrant and resilient destination for everyone. It is the business and cultural heart of the city and Calgary's historic mixed-use neighbourhoods and destinations. Greater Downtown fulfills many functions. It should have: the city's highest concentration of jobs and office space; the broadest variety of cultural activities; and, high-density, mixed-use residential communities.

Major Activity Centres

Major Activity Centres (MAC) are located strategically across the city to provide a major mixed-use destination central to larger residential or business catchment areas. They are located along one or more of the proposed Primary Transit Network routes, and contain one or more transit stations or stops, with a transit-oriented development pattern. The MAC builds upon existing concentrations of jobs and/or population and has

a sufficient land area to provide a high number of jobs and population to support the highest levels of transit service. MACs will have the highest density and building heights outside of Greater Downtown, with the broadest range of land uses. MACs will have the highest density and building heights outside of Greater Downtown, with the broadest range of land uses.

Community Activity Centres

Community Activity Centres (CAC) are located central to a number of residential communities or business areas, on a moderately sized land base, often on current shopping centre sites or around a specific employment area. CACs may be located at transit stations or stops on the Primary Transit Network. CACs will accommodate a broad mix of uses but, generally, at lower intensity levels than the MACs.

Neighbourhood Activity Centres

Neighbourhood Activity Centres (NAC) exist primarily within the developed areas of the city (1950s to 1990s communities) in the form of smaller commercial sites, strip malls or reGreenfield public facilities. They are located central to a small residential catchment area and provide walkable destinations for local communities. NACs are typically served by a base level of transit service,

though some may be located along the Primary Transit Network. NACs are appropriate sites to accommodate moderate intensification over time, with uses and development scales appropriate to the local context and community needs. NACs will also be an important part of new community designs. They will be locations for medium density housing (e.g., ground oriented to medium density apartments), local retail and services, community facilities and integrated transit stops.

Greater Downtown, MACs and CACs are identified on Map 1. However, others, especially in New Community areas, could be located and defined as part of a regional context study (RCS) process or in absence of an RCS, the Area Structure Plan (ASP) process may be considered. The intensity for each Activity Centre, level of transit service and typical land uses are shown in Table 3-1.

Activity Centre	Intensity (jobs and population per gross developable hectare)*	Transit Service	Typical Key Uses
Major	200 (minimum)	One or more Primary Transit stations	One or more major institutional uses, business and employment, high and medium density residential, retail and supporting services
Community	150 (minimum)	Primary Transit station	Institutional use (opt), retail centre, medium and high density residential, business and employment
Neighbourhood	100 (minimum)	Primary Transit station or Transit stop	Local retail and local services, medium density residential

* Intensities for each specific Activity Centre will be determined through local area plans and/or Implementation Guidebooks in consideration of land available for development, community context, and the opportunities to optimize infrastructure and public investment.

Table 3-1: Summary of Activity Centre Characteristics

3.3.1 GENERAL POLICIES FOR ACTIVITY CENTRES

The following policies apply to all scales of Activity Centres and are general in nature. Policies that are unique to specific activity centre types (Greater Downtown, MAC, CAC and NAC) are included below in this Section.

Land Use Policies

- a. Activity Centres should be locations for a mix of medium and higher density employment and residential uses.
- b. Uses such as retail, recreation facilities, sport, cultural facilities, open space and community and protective services that support concentrations of jobs and population are encouraged.
- c. The scale of retail appropriate to each Activity Centre should be determined in consideration of the retail policies in Part 4 of the MDP.
- d. Within mixed-use areas, encourage retail and service uses at grade, with residential and office uses on upper floors.
- e. Where a site fronts more than one street, public entrances should be located on the street with the greatest pedestrian activity, on both street fronts, or, in the case of a corner site, the entrance may be placed on the corner.
- f. Larger buildings should be designed to reduce their apparent size by the recession of upper floors to harmonize with the lower scale of the surrounding neighbourhood.
- g. City-owned land within an Activity Centre should be developed to support the land use and development objectives of that Activity Centre.
- h. Appropriate transition of building scale between the Activity Centre and adjacent areas should be provided. These transitions should be sensitive to the scale, form and character of surrounding areas.

Mobility Policies

- i. Pedestrian environments should be the priority design element, focusing on pedestrian convenience, safety, comfort and enjoyment.

- j. Create an internal street network that is interconnected, multi-modal and recognizes the needs of all users, in accordance with the Local Transportation Connectivity policies of the CTP.
- k. Facilitate movement, loading and unloading of delivery vehicles throughout the Activity Centre.
- l. Transit facility designs should accommodate efficient transit access, comfortable passenger waiting areas and safe, direct and unobstructed routes for pedestrians and cyclists.
- m. When designing new streets or retrofitting existing streets, use the Complete Streets policies and guidelines of the CTP.
- n. Establish connections between the Activity Centre and the surrounding communities to encourage pedestrian and cyclist movement.
- o. Parking impacts on surrounding residential areas should be limited by providing a mix of short-stay and longer-stay parking for different users, bicycle parking and on-street parking.
- p. Convenient and high quality parking locations should be provided for bicycles, carpool and car-sharing vehicles, and vehicles with environmental benefits.

Public Realm Policies

- q. Design transit facilities as public “places” that are a focal point within the Activity Centre.
- r. Urban design should be used to ensure that the intensification of land use occurs in a sensitive manner and that new buildings contribute to a pedestrian-friendly streetscape with the following characteristics:
 - i. Reduced building setbacks from public sidewalks.
 - ii. Where appropriate, existing setbacks should be used to enhance the pedestrian interface (e.g., street furniture, landscaping, street trees, pedestrian level street lighting, wide sidewalks, etc.).
- s. In addition to the Urban Design policies contained in Part 2.4 of the MDP, apply the following design policies to the Activity Centre:
 - i. Establish a local identity for each Activity Centre.
 - ii. Provide social spaces that provide for a comfortable and interesting public realm.

3.3.2 MAJOR ACTIVITY CENTRES

Major Activity Centres (MACs) provide for the highest concentration of jobs and population outside of the Greater Downtown area. In addition to achieving higher concentrations of jobs and population, the design and character of the MACs must also create a high-quality environment that features amenities for a comfortable street environment.



Possible Major Activity Centre image

space patterns, local mobility networks and urban design details should be developed through an ASP that includes the entire area of the future MAC.

- d. MACs should be developed to function as an “urban centre” for a sub-region of the city and provide opportunities for people to work, live, shop, recreate, be entertained and meet their daily needs.
- e. Each MAC should provide locations for high intensity jobs as part of institutional growth and/or mixed-use business centres.
- f. Each MAC should contain a broad range of medium and high density housing opportunities and a mix of housing tenure and affordability levels to accommodate a diverse range and age of population.
- g. Large format retail that provides services to residents and employees within the MAC and surrounding communities, should be located at the edge of a MAC and designed using Large Retail/Commercial Urban Design Guidelines.
- h. Open spaces that provide for a wide variety of activities within a medium to high density environment are encouraged. This will include the creation of public plazas and key gathering areas. Large sports fields may be appropriate, although they should be located at the edges of the MAC.

Land Use Policies

- a. The MACs are those shown on Map 1.
- b. Local Area Plans for a MAC should provide a land use framework to achieve a minimum intensity threshold of 200 jobs and population per gross developable hectare. Individual MAC densities and the approximate jobs and population distributions will be established through a local area plan or within an Implementation Guidebook.
- c. Future MACs in New Community areas will be identified through the regional context study (RCS) process or in absence of an RCS, the Area Structure Plan (ASP) process may be considered. Future MACs should be located to align with the Primary Transit Network and major road system. Specific land use and open

Mobility Policies

- i. Vehicle parking should be located, accessed and designed so as to minimize impacts on transit and pedestrian areas within the MAC. Smaller surface parking lots may be accommodated at peripheral locations away from the transit facility and pedestrian precincts, or located at the rear of buildings. Vehicle parking should ultimately be contained within structured facilities or underground.
- j. Continue to support the development of MACs with timely investment in the Primary Transit Network.
- k. Continue to facilitate the circulation of transit into the centre of each MAC, providing connections to the Primary Transit Network and surrounding communities.

3.3.3 COMMUNITY ACTIVITY CENTRES

Community Activity Centres (CACs) provide for a concentration of jobs and population in strategic locations throughout the city, and represent a local destination for multiple communities. They provide an opportunity to accommodate significant numbers of workers and residents in centres that are well served by public transit. The design and character of each CAC must ensure a high-quality environment that features amenities to create a comfortable environment that accommodates pedestrians and cyclists and makes the CAC a desirable place for workers, residents and businesses to locate. Because CACs are often located at existing retail sites, retail is an important element to be retained. CACs are also appropriate within new greenfield areas to provide convenient locations for a range of higher density housing types, local employment and retail services to new communities, in an area well served by the Primary Transit Network.



Possible Community Activity Centre Illustration

Source: Design Centre for Sustainability, SALA, UBC

Land Use Policies

- a. The CACs are those shown on Map 1.
- b. Local Area Plans for a CAC should provide a land use framework to achieve a minimum intensity threshold of 150 jobs and population per gross developable hectare. Individual CAC densities and the appropriate job and population distributions will be established through a local area plan or within an Implementation Guidebook.
- c. Future CACs in New Community areas will be identified through the Area Structure Plan (ASP) process and/or regional context study process where required and located to align with the Primary Transit Network and major road system. Specific land use and open space patterns, local mobility networks and urban design details should be developed through an ASP that includes the entire area of the future CAC.
- d. Recognize that most CACs are existing commercial developments and should continue to provide a significant level of retail service.
- e. CACs should contain a broad range of ground oriented and medium to high density apartment housing and a mix of housing tenure and affordability levels to accommodate a diverse range of the population.

Mobility Policies

- f. Support the development of CACs with timely investment in the Primary Transit Network.
- g. Facilitate the circulation of transit into the centre of each CAC, providing connections to the Primary Transit Network and surrounding communities.
- h. Vehicle parking should be located, accessed and designed so as to minimize impacts on transit and pedestrian areas within the CAC. Smaller surface parking lots may be accommodated at peripheral locations away from the transit facility and pedestrian precincts, or located at the rear of buildings. Vehicle parking should ultimately be contained within structured facilities or underground.

3.3.4 NEIGHBOURHOOD ACTIVITY CENTRES

The Neighbourhood Activity Centre (NAC) is a neighbourhood-scale centre providing opportunities for residential intensification and local jobs, retail, services and civic activities. NACs exist either in older residential communities or within new communities. Within the Developed Areas, a NAC typically would develop on those smaller commercial sites that are not identified as either MACs or CACs on Map 1. Smaller commercial sites located throughout established areas have the potential to provide a diverse mix of uses that fit with the scale and character of the surrounding neighbourhood. Because many residential communities where NACs exist do not have potential for significant intensification, smaller commercial sites provide a good opportunity for moderate mixed-use intensification and new housing forms not available within the community. In new communities, there would be similar opportunities for NACs, which should be planned at the outset through the ASP process.

Land Use Policies

- a. Development of NACs should achieve a minimum intensity threshold of 100 jobs and population per gross developable hectare. Specific NAC intensities will be established based upon the local context, site size and available infrastructure, as determined through a local area plan, an Implementation Guidebook, land use amendment or comprehensive development permit process.
- b. NACs should contain a broad range of ground oriented and low-density apartment housing and a mix of housing tenure and affordability to accommodate a diverse range of the population.
- c. NACs should include a mix of uses and retain retail services for the local community.
- d. Encourage the creation of a public gathering space within each NAC.

- e. Auto-oriented uses and designs that generate high volumes of traffic, consume large amounts of land in a low density form, require extensive surface parking, and create negative impacts for pedestrian travel and access should be discouraged.

Mobility Policies

- f. Where a NAC is in close proximity to a MAC or CAC and a street connection exists between them, ensure there is good pedestrian and cyclist infrastructure within that street.
- g. To slow vehicular traffic and enhance the pedestrian environment, consider measures such as traffic calming and off-peak parking on the street.

3.4 Main Streets

Main Streets share many of the same attributes as Activity Centres, but are linear in nature, and oriented along a street served by the Primary Transit Network. Main Street development has historically formed along street car lines and then auto-oriented roadways.

That same right-of-way now provides the opportunity to re-integrate adjacent land uses within a transit oriented street framework. Since Main Streets provide for the mobility needs of local and regional automobile commuters and border multiple residential communities, the land use and transportation system should be designed to include many different travel modes. Two scales of Main Streets are identified, with specific policies to each:

- Urban Main Street
- Neighbourhood Main Street



Typical Main Street Cross Section

3.4.1 GENERAL POLICIES FOR MAIN STREETS

The following policies apply to all Main Streets and are general in nature. Policies that are unique to specific Main Street type (Urban or Neighbourhood Main Street) are provided below.

- a. Main Streets should provide for a broad mix of residential, employment and retail uses.
- b. The highest densities and tallest buildings on the Main Street should be concentrated into “nodes” that occur at the intersections of the Main Street with other major transit streets or any Future Comprehensive Plan Area identified through a local area planning process. Between the nodes and any Future Comprehensive Plan Area, lower scales of development are appropriate.
- c. Commercial development along the Main Street should be oriented to the transit street and public sidewalk.
- d. Develop an active street environment by encouraging retail and service uses at-grade with residential and office uses on upper floors along the Main Street core areas, with grade oriented residential uses in other areas.
- e. Recognizing that the Main Street is pedestrian and transit oriented, large format retail should support a good pedestrian frontage along the transit street and public sidewalk by:
 - i. Locating buildings close to the transit street and sidewalk.
 - ii. Creating active building frontages by incorporating smaller retail units, public accesses and display areas visible to the sidewalk.
- f. On corner sites, buildings should be placed adjacent to streets wherever possible to create defined street edges.
- g. Retail buildings should provide front-door openings facing the transit street and principal public areas.
- h. Appropriate transition of building scale between developments in the Main Street and adjacent areas should be provided. These transitions should be sensitive to the scale, form and character of the surrounding buildings and uses.

Main Street	Intensity (jobs and population per hectare)*	Transit Service	Typical Key Uses	Street Type (See CTP)
Urban	200 (minimum)	Located on Primary Transit Network	Retail, Office, Mixed- use buildings, medium and high density residential	Urban Boulevard support for multiple modes
Neighbourhood	100 (minimum)	Located on Primary Transit Network	Low to medium density residential, retail, mixed-use buildings	Neighbourhood Boulevard, support for multiple modes

* Intensities for each specific Main Street will be determined through local area plans and/or Implementation Guidebooks in consideration of land available for development, community context, and the opportunities to optimize infrastructure and public investment.

Table 3-2: Summary of Main Street Characteristics

Mobility Policies

- i. When designing new streets or retrofitting existing streets within the Main Street, use the Complete Streets policies and guidelines in the CTP.
- j. Make pedestrian connections to the Main Street from adjacent communities. These connections should occur primarily within streets that will facilitate good pedestrian and cyclist movement.
- k. The impact on surrounding residential areas should be limited by providing a mix of short-stay and longer-stay parking for different users, bicycle parking and on-street parking.
- l. Calgarians who walk and wheel should be given the highest priority in the planning, design, operation and maintenance of transportation infrastructure in Main Streets.
- m. A strong pedestrian environment should be created along the transit corridor by discouraging on-site parking in front of the building and providing parking alternatives on street, and to the side and rear of buildings.
- n. Priority and high-quality parking locations should be provided for bicycles, carpool and car-sharing vehicles, and vehicles with low environmental impacts.
- o. Driveway access to parcels fronting onto Main Streets should be consolidated and new accesses minimized to provide a continuous building façade and safer pedestrian zone.
- p. Site layout, vehicular circulation and loading zones should be planned to minimize the impact of vehicles on the pedestrian realm.

Public Realm Policies

- q. Create a human-scale environment along the Main Street by generally encouraging a maximum of a 1:1 street wall height of the building to right-of-way width ratio. Additional height should be considered through a local area plan.
- r. For Main Streets that run east-west, building heights should be designed to allow solar penetration through the block and reduce shadows cast onto public sidewalks on the north side of the street. Where practical, encourage taller buildings to locate on the north side of the Main Street.
- s. For Main Streets that run east-west, south facing public open spaces and plazas should be incorporated in the buildings fronting the north side of the Main Street.
- t. Public investment in key elements of the public realm should be provided to support intensification along Main Streets.
- u. Urban design should be used to ensure that the intensification of land use occurs in a sensitive manner and that new buildings contribute to a pedestrian-friendly streetscape with the following characteristics:
 - i. Reduced building setbacks from public sidewalks.
 - ii. Where appropriate, existing setbacks should be used to enhance the pedestrian interface (e.g., street furniture, landscaping, street trees, pedestrian level street lighting, wider sidewalks, etc.).

3.4.2 URBAN MAIN STREETS

Urban Main Streets provide for a high level of residential and employment intensification along an Urban Boulevard street type, as defined in the CTP. The Urban Boulevard is a multi-modal street with a strong focus on walking, cycling and transit, though it continues to accommodate moderately high traffic volume. Urban Main Streets emphasize a walkable pedestrian environment fronted by a mix of higher intensity residential and business uses.

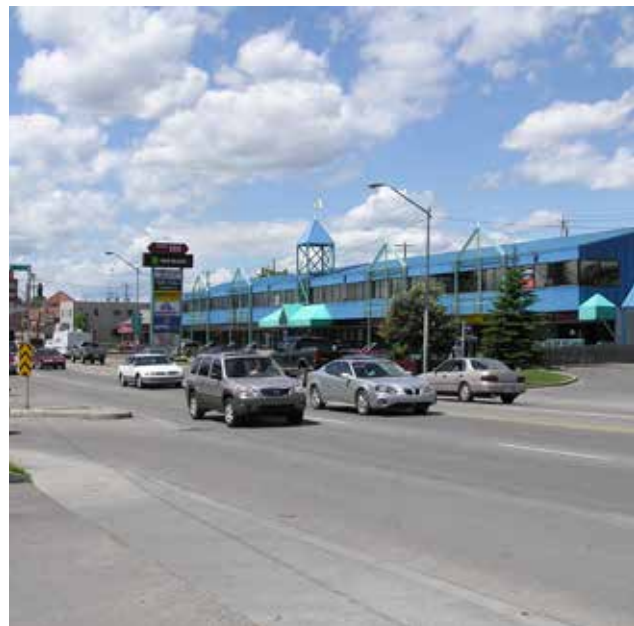
Land Use Policies

- a. The Urban Main Streets are those shown on Map 1.
- b. Additional Urban Main Streets may develop over time as the role and function of some streets change. New Urban Main Streets will be identified through an amendment to the MDP.
- c. Local Area Plans for an Urban Main Street should provide a land use framework to achieve a minimum intensity threshold of 200 jobs and population per gross developable hectare. Individual Urban Main Street densities and appropriate job and population distributions will be established through a local area plan or within an Implementation Guidebook.
- d. The local area plan study area for an Urban Main Street should include all land fronting directly onto the Urban Boulevard, and extend back at least one block on either side, potentially extending along intersecting streets. The highest development densities are to be located on lands directly fronting onto the Urban Boulevard and any Future Comprehensive Plan Area identified through a local area planning process, stepping down to provide transition with lower scale buildings, as defined in Part 3 - Typologies for Calgary's future urban structure.

- e. The Urban Main Street should contain a broad range of employment, commercial and retail uses as well as housing (form, tenure, and affordability) to accommodate a diverse range of the population. Apartments, mixed-use developments and ground oriented housing are encouraged.

Mobility Policies

- f. Provide transit service along the Urban Main Street via the Primary Transit Network. Development adjacent to transit stops should locate entrances and provide features that make it safe and convenient for transit users.
- g. The Urban Main Street should generally coincide with the Urban Boulevard street type as defined in the CTP.



Typical Urban Main Street

3.4.3 NEIGHBOURHOOD MAIN STREETS

Neighbourhood Main Streets typically are located along Primary Transit Network within the Inner City and have a strong historical connection to the communities they abut. They are the “main streets” for one or more communities, providing a strong social function and typically support a mix of uses within a pedestrian-friendly environment. Some areas have a more city-wide draw because of the unique uses present or the quality of the environment, while others serve a more local population base. Neighbourhood Main Streets provide the opportunity for moderate levels of intensification of both jobs and population over time. To support this increased activity, the Neighbourhood Main Street should be served by the Primary Transit Network. Neighbourhood Main Streets are also appropriate in a New Community as places to focus different housing types and densities and create local destinations adjacent to transit streets.

Land Use Policies

- a. The Neighbourhood Main Streets are those shown on Map 1.
- b. Opportunities for additional Neighbourhood Main Streets will be identified through an amendment to Map 1.
- c. Local Area Plans for a Neighbourhood Main Street should provide a land use framework to achieve a minimum intensity threshold of 100 jobs and population per gross developable hectare. Individual Neighbourhood Main Street densities and the appropriate job and population distributions will be established through a local area plan or within an Implementation Guidebook.
- d. For Neighbourhood Main Streets that have no local area plans, areas for significant intensification should include those parcels that front directly onto the proposed Neighbourhood Boulevard (as defined in the CTP).

- e. Encourage ground-oriented housing, low-scale apartments and mixed-use retail buildings within the Neighbourhood Main Street, with the highest densities occurring in close proximity to transit stops and in locations where they merge with Activity Centres, other Main Streets and any Future Comprehensive Plan Area identified through a local area planning process.
- f. An appropriate transition between the Neighbourhood Main Street and the adjacent residential areas is required. Transition should generally occur at a rear lane or public street. These transitions should be sensitive to the scale, form and character of surrounding areas, while still creating opportunities to enhance the connectivity with the community.
- g. Auto-oriented uses and designs that generate high volumes of traffic, consume large amounts of land in a low density form, require extensive surface parking, drive-thrus or create negative impacts for pedestrian travel and access should be discouraged.

Mobility Policies

- h. The Neighbourhood Main Street should generally coincide with a Neighbourhood Boulevard street type.



Typical Neighbourhood Main Street

3.5 Developed Residential Areas

Developed Residential Areas defined on Map 1 include those communities that have been built out and are at various stages of their life cycle, either as stable residential communities or those experiencing moderate redevelopment activity. Two types of Developed Residential Areas are identified – Inner City Area and Established Areas.



3.5.1 GENERAL POLICIES FOR DEVELOPED RESIDENTIAL AREA

Policies

The following policies apply to all Developed Residential Areas and are general in nature. Policies that are unique to the Inner City Area and the Established Area follow after this section.

Land Use Policies

- a. Recognize the predominantly low density residential nature of Developed Residential Areas and support retention of housing stock, or moderate intensification in a form and nature that respects the scale and character of the neighbourhood. Local commercial development within residential areas, that is of a scale and intensity that supports residents' commercial needs is supported.
- b. Redevelopment within predominantly multi-family areas should be compatible with the established pattern of development and will consider the following elements:
 - i. Appropriate transitions between adjacent areas.
 - ii. A variety of multi-family housing types to meet the diverse needs of present and future populations.
- c. Redevelopment should support the revitalization of local communities by adding population and a mix of commercial and service uses.

Mobility Policies

- d. For multi-family housing, encourage parking that is well integrated into the residential environment (e.g., consider landscape buffering, smaller lots).
- e. When designing new streets or retrofitting existing streets, use the Complete Streets policies in the CTP.
- f. Ensure that high-quality pedestrian and cyclist connections and facilities are provided from the Developed Residential Area and linked to adjacent areas of higher intensity development (i.e., Neighbourhood Main Streets and Neighbourhood Activity Centres).
- g. Areas beyond the Primary Transit Network will be served with Base Transit Service, with opportunities for enhancing frequency of service as required.

3.5.2 INNER CITY AREA

The Inner City Area comprises residential communities that were primarily subdivided and developed prior to the 1950s. Key features of these areas are a grid road network, older housing stock in the form of low to moderate housing densities and a finer mix of land uses along many of the edge streets. The Inner City Area has undergone redevelopment in recent years. Much of this intensification has taken place along busier roads and as low density infilling within lower density areas. Intensification and change will continue to occur within the Inner City Area; however, it is important to maintain stable family neighbourhoods.



Typical Inner City Area Development Pattern

Land Use Policies

- a. Sites within the Inner City Area may intensify, particularly in transition zones adjacent to areas designated for higher density (i.e., Neighbourhood Main Street), or if the intensification is consistent and compatible with the existing character of the neighbourhood. Transition zones should be identified through a subsequent planning study.
- b. A range of intensification strategies should be employed to modestly intensify the Inner City Area, from parcel-by-parcel intensification to larger more comprehensive approaches at the block level or larger area.
- c. Maintain and expand, where warranted by increased population, local commercial development that provides retail and service uses in close proximity to residents, especially in the highest density locations.
- d. Buildings should maximize front door access to the street and principal public areas to encourage pedestrian activity.
- e. Encourage at-grade retail to provide continuous, active, transparent edges to all streets and public spaces.

Mobility Policies

- f. Transit stops should be easily accessible and, where possible, integrated with adjacent multi-family residential or retail buildings.

3.5.3 ESTABLISHED AREAS

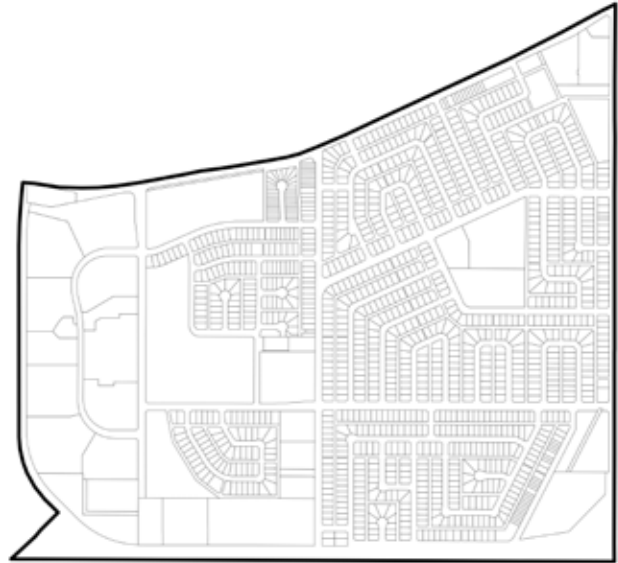
The Established Area comprises residential communities that were planned and developed between the 1950s and 1990s. They are primarily residential communities containing a mix of low- and medium-density housing with support retail in relatively close proximity. The road network is a blend of modified-grid and curvilinear. These are stable residential communities with limited redevelopment potential over the next 30 years. Populations have declined from their peak and housing stock is generally in good condition.

Land Use Policies

- a. Encourage modest redevelopment of Established Areas.
- b. Redevelopment opportunities should be focused on the Neighbourhood Activity Centres, though changes to other sites may provide opportunities for redevelopment over time.
- c. New developments in Established Areas should incorporate appropriate densities, a mix of land uses and a pedestrian-friendly environment to support an enhanced Base or Primary Transit Network.

Mobility Policies

- d. Provide opportunities to increase pedestrian, cycling and emergency services connectivity when redevelopment occurs where community support exists.
- e. Transit stops should be easily accessible and, where possible, integrated with adjacent multi-family residential or retail buildings.



Typical Established Area Pattern

3.6 Greenfield Residential Communities

Greenfield Residential Areas include those communities that have an ASP completed and are in the process of Greenfield and future growth areas that have not had an ASP approved. Two types of Greenfield Residential Areas are identified – Planned Greenfield communities and Future Greenfield communities.

3.6.1 PLANNED GREENFIELD AREAS

Planned Greenfield areas comprise residential communities that have been planned and are still being developed. Many of these communities were subject to the Sustainable Suburbs Study that was created in the mid-1990s and proposed greater community densities and mix of residential and commercial uses than communities built in the 1970s and 1980s. Typically, they are characterized as relatively low-density residential neighbourhoods containing single-family housing, smaller pockets of multi-family and locally-oriented retail in the form of strip developments located at the edges of communities. The road network is curvilinear, with a hierarchical streets system, including major collectors that circulate through a community with local crescents, p-loops and culs-de-sac feeding off of it. Transit service to most areas is provided from the internal collector roadway.

Land Use Policies

- a. The ASPs for Planned Greenfield areas, in existence prior to adoption of the MDP, are recognized as appropriate policies to provide specific direction for development of the local community. Future reviews of, and amendments to, ASPs will be required to align with the policies of the MDP.



Typical Planned Greenfield Pattern

3.6.2 FUTURE GREENFIELD AREA

Future Greenfield areas are those large land areas in the city identified for future urban development that do not have an approved ASP in place. Planning for these areas should identify Activity Centres and Main Streets that provide for a variety of housing types, opportunities for daily needs within walking distance to residential communities, and centres for transit access. Supporting the land use pattern is a street network that connects residents, jobs and commercial services through direct automobile, transit, bicycle, and pedestrian routes. The overall community design should integrate natural area protection within the open space and natural infrastructure systems.

Land Use Policies

a. Future Greenfield Areas should:

- i. Be protected for future urban development by restricting premature subdivision and development on parcels.
- ii. Retain environmentally significant natural areas, water courses and tree stands.
- iii. Allow for a limited range of uses that will not compromise the developability of the land for urban purposes.
- iv. Allow for local food production.

b. Plans for new communities in Future Greenfield areas will be established through an Area Structure Plan (ASP), and may require completion of a regional context study (RCS).

c. ASPs for new communities in Future Greenfield areas will achieve a minimum intensity threshold of 60 people and jobs per gross developable hectare. This community intensity level includes NACs, CACs, Urban Main Streets and Neighbourhood Main Streets, as identified in the ASP. ASPs must also demonstrate how a target density of 70 people and jobs per gross developable hectare can be achieved over the life of the plan.

In addition to the intensity threshold, other factors should be considered in the development of an ASP. These include:

- i. land use diversity

- ii. residential diversity

- iii. accessibility to the Primary Transit Network

- iv. street and walk/cycle connectivity

- v. ecological networks and natural infrastructure

- vi. mix of local and regional retail

d. New communities should be organized to include the following:

- i. A number of distinct neighbourhoods that are defined by a 400-metre or five-minute walking distance from a NAC or Neighbourhood Main Street.

- ii. A physical combination of public realm and related built form that establishes a "heart" or focus for the community.

- iii. A NAC or Neighbourhood Main Street to serve each neighbourhood that contains multi-family housing and an enhanced transit stop, and may contain local employment, retail services or a school.

- iv. A CAC may be provided to serve the needs of one or more communities. The location and scale of the CAC may be determined through the RCS and and/or ASP processes.

- v. Retail developments should be planned in accordance with the retail policies contained within Part 4.

e. NACs or Neighbourhood Main Streets should be identified through the ASP process and appropriately separated from higher order Activity Centres or Main Streets.

f. Encourage the concentration of residential density in areas adjacent to open space, parks, wetlands and sports fields, especially where the area is served by transit, services and other community amenities. These locations should be identified through the ASP process.

g. Create a hierarchy of recreation facilities and parks and open spaces that accommodate as many recreation functions as possible, appealing to a range of users, age groups and abilities (See Section 2.3).

h. New communities and neighbourhoods should be designed and have a built form that allows for adaptation, which can evolve and be reused over time.



Possible Future Greenfield Area (Residential)

Mobility Policies

- i. Create a street network that is interconnected, multi-modal, and balances the needs of all users, in accordance with the Local Transportation Connectivity policies of the CTP.
- j. When designing new streets or retrofitting existing streets, use the Complete Streets policies in the CTP.
- k. Facilitate the movement of Calgarians that wheel by providing direct connections to the Always Available for All Ages & Abilities (5A) Network.
- l. Existing rural road rights-of-way in Future Greenfield areas should be protected for potential incorporation into the future transportation network, as required.

Public Realm Policies

- m. Activity Centres should contain locally-focused open spaces, which can include community and city-wide services and amenities such as schools, community association facilities, civic buildings, transit and recreation facilities.
- n. Watercourses, significant wetlands and other key natural features shall be prioritized for protection and integrated into the public open space and natural infrastructure networks.
- o. Parks and recreation facilities, sport and cultural facilities should be located throughout the community in walkable proximity to all residences and designed to provide for flexibility of recreation uses over the lifecycle of the community.

3.7 Industrial Areas

Industrial areas contribute to a strong and prosperous economy for Calgary, and should be maintained as a major economic driver for the City. Calgary is a transportation and logistics hub and is recognized as an inland port.

Industrial development and land supply in proximity to regional, National and international transportation networks, such as the Calgary International Airport, intermodal freight yards, distribution centres and National and provincial highways connect Calgary with regional, National and international markets. These links must be maintained and protected. Industrial areas should allow for a diverse and balanced mix of industrial uses and intensities and must offer flexibility to respond to the changing nature of industrial activities. Industrial areas should remain predominantly industrial and resist the encroachment of non-industrial uses into them, including residential, office and retail. Three types of industrial typologies are identified – Standard Industrial, Industrial – Employee Intensive and Greenfield Industrial. The Standard Industrial Area policies provide a base layer of policy that will apply to all industrial areas throughout Calgary whereas the Industrial – Employee Intensive typology provides specific policy for industrial areas designed to attract high labour concentrations. The Industrial Greenfield section outlines policies for future industrial areas.

3.7.1 STANDARD INDUSTRIAL AREA

The Standard Industrial Area consists of existing planned industrial areas that contain a mix of industrial uses at varying intensities. These areas are intended to allow for a broad variety of industrial uses and as the area redevelops, the industrial character should be maintained.

Land Use Policies

- a. Industrial uses should be maintained as the primary use.
- b. Allow for the development and retention of a broad range of industrial uses and a variety of industrial parcel sizes.
- c. Only uses that support the industrial function of this area and cater to the day-to-day needs of area businesses and their employees may be supported.
- d. Discourage uses such as stand-alone office use, regional retail developments, places of worship, public or private schools and residential uses in industrial areas.
- e. Regional or city-wide recreation and sport facilities may be located in industrial areas to meet the extensive land needs of city-wide recreation and sport programs. Ensuring minimal conflict for goods movement, these facilities should be designed and located to be accessible to transit routes, cycling routes and pathways.

- f. Notwithstanding policy a above, portions of the Standard Industrial Areas may be appropriate for redevelopment as non-industrial or mixed-residential business area if they are within close proximity to an existing community(ies) and the Primary Transit Network. Any proposal for such a change requires an amendment to the relevant Local Area Plan(s) or, if there is no Local Area Plan, an amendment to the MDP to indicate the area is no longer required for Standard Industrial Area purposes.
- g. Encourage the development of eco-industrial/business parks, characterized by:
 - i. Water flows designed to conserve resources and on-site stormwater management that cascades water through uses at different quality levels.
 - ii. Businesses that utilize clean production methods.
 - iii. Businesses that have reduced energy needs and consumption.
 - iv. Maximum energy efficiency through facility design or rehabilitation, co-generation, energy cascading and other means.
 - v. Encourage progressive environmental best practices for sustainable development and materials selection.
- h. When designing new streets or retrofitting existing streets, use the Complete Streets policies in the CTP.
- m. New intermodal sites and warehousing facilities should develop within 1600 metres of the Primary Goods Movement Network.
- n. Protect the integrity of primary goods movement corridors by limiting direct access from truck routes to adjacent properties.
- o. Sidewalks should be provided to ensure safe and friendly pedestrian connections to major businesses within the immediate industrial area and to the surrounding areas.
- p. Transit waiting facilities should be provided in public rights-of-way or, where possible, integrated with adjacent industrial or commercial developments.

Public Realm Policies

Mobility Policies

- h. The road network should support the efficient movement of trucks, goods and services throughout the Standard Industrial Area.
- i. Street networks should be designed to allow Base or Primary Transit Service and provide sufficient coverage to support the transportation access needs of area businesses and their employees.
- j. Convenient connections and accessibility should be achieved within industrial areas, as per the Local Transportation Connectivity policies in the CTP.
- k. Streets and sidewalks that provide safe and direct connections to transit services should provide amenities for pedestrians, cyclists and transit.
- q. In cases where the Standard Industrial Area interfaces with other types of land uses and public rights-of way, provide street trees, landscaping, fencing and architectural elements for sites that are highly visible to the public from skeletal roads, and along the city's major entranceways.
- r. Development or redevelopment of industrial sites should provide for safe, attractive and connected walking environments within the site and to adjacent public sidewalks, open spaces and transit stops.
- s. Public open space should be provided where possible throughout the Standard Industrial Areas to provide outdoor recreational opportunities and spaces for area employees.

3.7.2 INDUSTRIAL- EMPLOYEE INTENSIVE

The Industrial-Employee Intensive Area is intended for manufacturing, warehousing and mixed industrial/office developments that have high labour concentrations and require access to the Primary Transit Network. They can be new business parks locating in newly planned areas (i.e., Greenfield Industrial typology), or they could also occur as part of redevelopment and intensification of the Standard Industrial Areas, at transit stops and along corridors served by the Primary Transit Network.

Land Use Policies

- a. Industrial-Employee Intensive Areas should achieve a minimum intensity threshold of 100 jobs per gross developable hectare.
- b. Industrial-Employee Intensive Area should contain predominantly industrial uses.
- c. Notwithstanding policy b above, other uses that support the industrial function may be allowed. Specific rules for the amount of support uses should be determined as part of the policy planning process and land use application process.

Mobility Policies

- d. Ensure that the Industrial-Employee Intensive Area is served by the Primary Transit Network.
- e. Streets that provide direct connections to higher order transit services should provide amenities for pedestrians, cyclists and transit.
- f. Roads and streets within Industrial-Employee Intensive Areas should provide for the efficient movement of goods.
- g. When designing new streets or retrofitting existing streets, use the Complete Streets policies in the CTP.
- h. Sidewalks should be provided along all streets to connect businesses with the Primary Transit Network.

Public Realm Policies

- i. Encourage forms of accessible public or private open space to create amenities and local destinations in conjunction with transit stations, higher intensity uses and the local retail/service areas.

3.7.3 GREENFIELD INDUSTRIAL AREA

Greenfield Industrial Areas are future industrial areas located at the edge of the city. These areas provide land for future industrial growth.

Land Use Policies

- a. Plans for industrial development in Greenfield Industrial Areas will be established through an Area Structure Plan (ASP).
- b. Ensure that the primary function of Greenfield Industrial Areas is for a broad range of standard industrial activities and industry-related commercial functions including:
 - i. Value-added manufacturing, advanced technology industries, warehouse and distribution activities.
 - ii. Employee intensive industrial uses in locations where the Primary Transit Network is provided within or adjacent to new industrial areas.
- c. Greenfield Industrial Areas should be located to provide sufficient separation from adjacent non-industrial uses or include special conditions that reduce the potential for conflict.

Mobility Policies

- d. The road network should support the efficient movement of trucks, goods and services throughout the Standard Industrial Area.
- e. Street networks should be designed to allow Base or Primary Transit Service and that will provide sufficient coverage to support the transportation access needs of area businesses and their employees.
- f. Convenient connections and accessibility should be achieved within industrial areas, as per the Local Transportation Connectivity policies in the CTP.
- g. Streets that provide direct connections to transit services should provide facilities and amenities for pedestrians, cyclists and transit.
- h. When designing new streets or retrofitting existing streets, use the Complete Streets policies in the CTP.
 - i. New intermodal sites and warehousing facilities should develop within 1600 metres of the Primary Goods Movement Network (see the CTP).
- j. Protect the integrity of primary goods movement corridors by limiting direct access from truck routes to adjacent properties.
- k. Sidewalks should be provided to connect transit stops to major businesses in the surrounding industrial areas.
- l. Transit waiting facilities should be provided in public rights-of-way or, where possible, integrated with adjacent industrial or commercial developments.

Part 4

Specific Use Policies





4.1 Retail

Retail development serves numerous purposes. It provides local and regional goods and services, supports employment areas, provides employment, contributes to the health and vitality of the local economy and provides opportunities to integrate transit into the design of concentrated centres of activity. Retail developments also play a special role in providing publicly accessible spaces and in shaping unique public gathering destinations across the city. These combined factors suggest there is a significant public interest in the location and urban design of retail development.

4.1.1 RETAIL STRUCTURE

The retail landscape in Calgary has evolved over the years to include a wide variety of locations and scales. There are older patterns of development that have formed over many decades, and there are patterns and retail formats that have emerged more recently. Providing direction for this diversity of retail requires an approach that respects the current retail landscape as well as the desire to ensure that future retail developments are better aligned with the overall integrated land use and transportation strategies of the MDP.

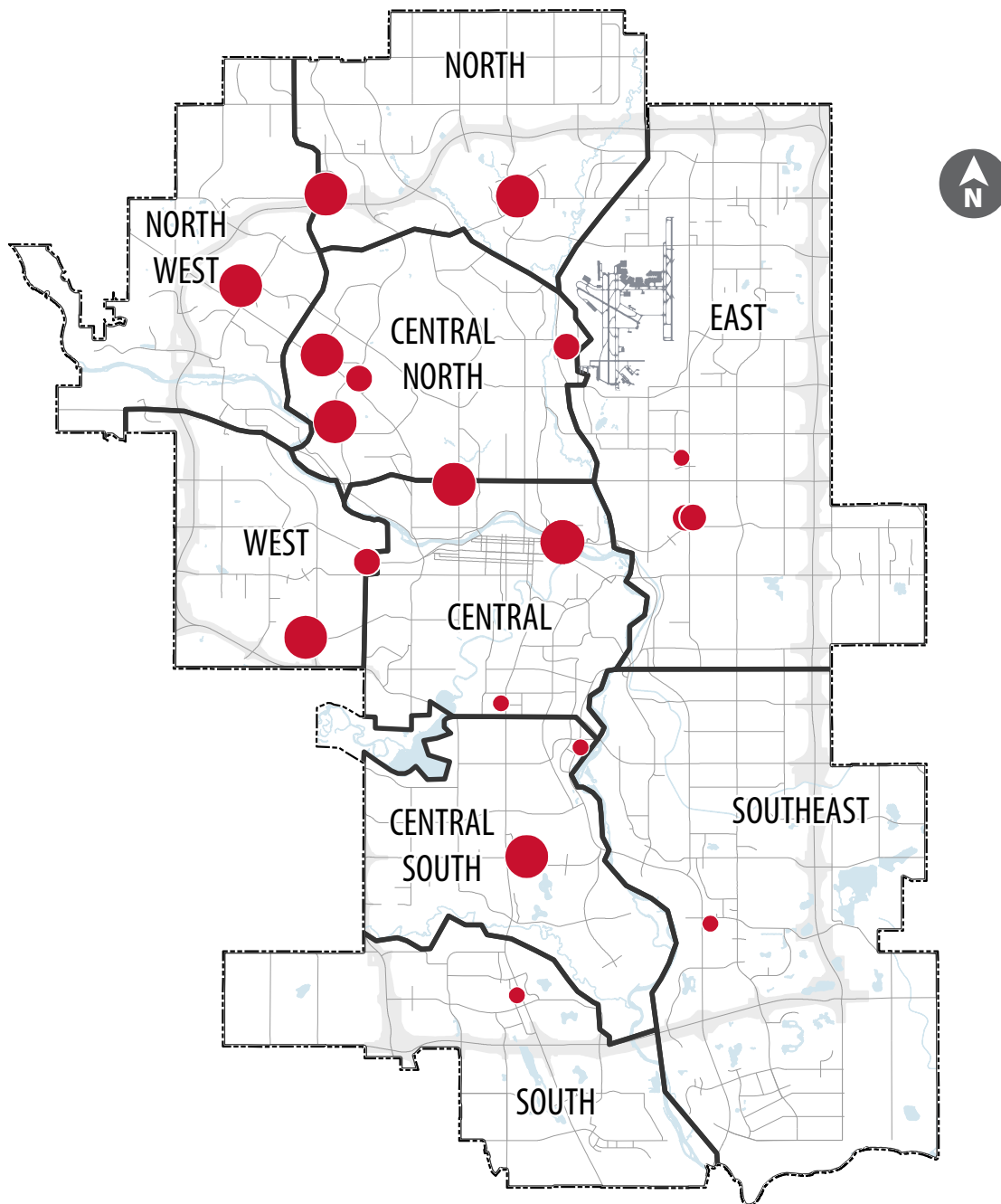
The retail structure emphasizes the role and function of the various retail scales and their importance in providing retail service at the local and city-wide level. This categorization places less emphasis on the built form, which is often subject to shorter term, trend based designs. By utilizing this approach, it is simpler to categorize and monitor changes in retail over time. It also provides a framework for planning future retail developments in Calgary.

Policies

- a. Retail development is categorized into six groups that define its role and function within Calgary. The size of the retail centre should not be defined by an individual retail development, but rather by all retail developments within the immediate vicinity. The six retail categories are:
 - i. Regional
 - A. Super Regional Retail Centre
 - B. Regional Retail Centre 1
 - C. Regional Retail Centre 2
 - ii. Local
 - A. Community Retail Centre 1
 - B. Community Retail Centre 2
 - C. Neighbourhood Retail Centre

The nine retail sectors (see Figure 4-1) should be used to monitor the distribution of retail throughout the city.

Within each of the nine retail sectors, the distribution between Regional and Local retail should be approximately 45 per cent Regional and 55 per cent Local within each of the nine retail sectors (see Figure 4-1).



Legend

Existing Regional Retail Distribution, byType

- Super Regional Retail Centre
- Regional Retail Centre 1
- Regional Retail Centre 2

- Retail Sector Boundary
- Transportation/Utility Corridor
- City Limits

Figure 4-1: Calgary retail sectors and regional retail distribution, by type

4.1.2 RETAIL CATEGORIES

The following table provides the framework for retail categories to determine the appropriate type and distribution of retail:

Retail Centre Category	Approximate Size (sq. m.)	Location Criteria	Suggested Proportion of Retail in Sector (percent)
Super Regional Retail	Larger than 93,000	Key city gateway locations	20
Regional Retail 1	46,500 to 93,000	Serving a retail sector	20
Regional Retail 2	9,300 to 46,500	Serving a retail sector	5
Community Retail 1	Approx. 9,300	Serving multiple communities	20
Community Retail 2	Less than 9,300	Serving one or more communities	20
Neighbourhood Retail	Less than 1,900	Serving a sub-area of a community	15

Table 4-1: Framework for retail categories

Policies

City-wide retail

- a. Redevelopment, improvements and expansion of existing retail areas should be a priority.
- b. The creation of new or the redevelopment of existing community and neighbourhood retail centres to serve community needs should be a priority.
- c. The city should strive to achieve an appropriate mix of retail types within each of the nine retail sectors (see Table 4-1: Framework for retail categories).
- d. A retail area should conform to the policies of the relevant typology area, as defined in Part 3-Typologies for Calgary's future urban structure.
- e. Create and retain viable local retail and mixed-use areas that encourage business creation, residential development and community services; while maintaining compatibility with the neighbourhood oriented character of the retail.
- f. Support the development and maintenance of areas with a wide range of character and function that provide for the employment, service, retail and housing needs of Calgary's existing and future population.
- g. Support comprehensively planned retail developments at all scales to provide for high quality public systems (e.g., sidewalks, pathways, open spaces) and designed to allow for intensification to accommodate residential uses.
- h. Facilitate the development of retail areas within communities, by providing:
 - i. A full mix of uses to be developed over time.
 - ii. Active ground floor uses.
 - iii. Conveniently located, safe and accessible pedestrian linkages that connect retail entrances with internal and public pedestrian networks and transit stops.
 - iv. Enhanced public realm pedestrian linkages and gathering spaces on site.

Established retail areas

- i. Retail should be included as part of the mixed-use at Activity Centres and along Main Streets.

- j. Redevelopment of older shopping centres and commercial strips should include mixed use developments that create greater residential and employment variety while retaining a retail function.

Greenfield retail areas

- k. Regional retail centres should be identified through a regional context study (RCS) process or in absence of an RCS, the Area Structure Plan (ASP) process may be considered. The location, scale and size of these sites will further be refined through a subsequent Area Structure Plan process.
- l. Regional Retail centres should provide for:
 - i. Direct on-site linkages and amenities for pedestrians.
 - ii. Reduced visual and environmental impact of large parking lots.
- m. New Regional Retail centres should be evaluated in terms of their impact on the city as a whole and their immediate surroundings, based on the following criteria:
 - i. Consistency with the growth strategy of the MDP.
 - ii. Compatibility with local area plans and the location relative to Activity Centres and Main Streets.
 - iii. The physical impact of the centre with regard to:
 - A. Integration with transit networks to serve retail centres.
 - B. The ability of the street system to handle the associated traffic volumes.
 - C. The need for other possible public expenditures.
 - D. Integration with surrounding community development.
 - E. The quality of the site development, including the landscaping, parking, access, pedestrian and vehicular circulation.
- n. The location of community and neighbourhood retail centres should be identified through the Area Structure Plan process, and located and appropriately separated from other larger retail centres to support viability of the local retail. As a general guide, local retail developments should be:
 - i. Located to support integrated residential development, or to serve adjacent higher density residential areas of the community.
 - ii. Supported by a convenient pedestrian network that provides direct access to the retail site.
- o. Retail sites should be planned around transit stops or stations and should provide good accessibility by a variety of modes to provide connections to surrounding neighbourhoods and developments.

4.2 Protection of Sand and Gravel Resources

The City recognizes the strategic importance of retaining local sources of building materials within a sustainable city to minimize the need to import resources into the city. The MDP provides policies respecting the protection of sand and gravel sources from premature urban development, as well as direction for protecting existing sand and gravel extraction operations and mitigating conflicts with adjacent urban uses.

Policies

- a. Protect existing and future aggregate sources from premature use for urban development, and ensure appropriate mitigative measures to protect and facilitate aggregate extraction.
- b. Allow the continuation of existing sand and gravel extraction operations in accordance with the conditions of the necessary permits.
- c. Support the recycling of concrete, pavement and stone in locations that minimize nuisance impacts of dust, noise, odours and truck traffic on surrounding urban development.
- d. Routes for truck access and egress to the site should be identified and located to minimize nuisance impacts.

4.3 MGA-Mandated Policies

This section provides policies for the land use and development adjacent to sour gas facilities, protection of agricultural operations, and development in the vicinity of the airport. Map 6 identifies areas of the city where some of these constraints apply.

4.3.1 SOUR GAS POLICIES

There are a number of issues pertaining to sour gas operations within Calgary's boundaries and adjacent municipalities that need to be considered within the MDP. One is ensuring that the minimum requirements of the MGA are included. Another is recognizing that parts of Calgary's long-term growth areas lie within, or adjacent to, active sour gas fields. These fields and the facilities may have decades of life left in them, and sour gas may not be extracted as quickly as desirable. Sour gas facilities could impact Calgary's future urban growth by leaving large areas of serviced land undevelopable, as well as the safety of the general public and emergency responders in the event of an accident.

The policies of the MDP provide municipal direction to guide the planning and development processes that deal with the locating of types of land uses in relation to sour gas facilities. The MDP also addresses compatibility issues between urban growth and sour gas facilities by minimizing nuisance impacts from dust, noise and truck traffic on residential communities. The MDP policies are intended to be applied in concert with other administrative policies and procedures for dealing with on-going issues around oil and gas activities and applications, including maintaining public safety and emergency response and working pro-actively with the industry to address public notification and information needs. Part 3 of the CTP also supports these policies and provides direction for emergency evacuation routes.

Policies

- a. Support in principle the accelerated resource extraction in areas with little or no existing urban development to allow for orderly and safe city development; however, each situation will be evaluated on its merits.
- b. The City will apply appropriate safety setbacks as determined by the Alberta Energy Regulator (AER).
- c. Residential uses, permanent overnight accommodations and public facilities shall not be developed in the vicinity of sour gas operations, unless located outside setbacks established by the ERCB.
- d. Industrial, commercial or other non-residential uses may be developed adjacent to sour gas facilities, subject to any setbacks as determined by the AER.
- e. Reserve the right to apply The City's own setback regarding nuisance factors for sour gas facilities.
- f. In determining appropriate locations and timing of growth within Long-term Growth Areas, Regional Context Studies should identify the location of active and future sour gas operations and facilities, the projected life span of those operations and the impact of the facilities and safety setbacks on the cost effective design of future urban communities, as well as potential impacts on Emergency Planning Zones, evacuation route planning and Calgary's emergency responders.

4.3.2 AGRICULTURAL OPERATIONS

The MGA directs that a Municipal Development Plan must contain policies respecting the protection of agricultural operations within its boundaries. The City recognizes that agriculture is a viable use of land prior to urban development. It supports its continuation by allowing extensive agriculture as a Permitted Use in the Land Use Bylaw and restricts the fragmentation of agricultural land until needed for urban development. The City also supports the use of such lands for the long term food security of the city.

Policies

- a. Protect existing agricultural operations by maintaining appropriate definitions and land use designations in the Land Use Bylaw.
- b. Prevent the premature fragmentation of agricultural land.
- c. Review proposals for subdivision or land use changes within the context of The City's growth management activities, ASPs, Implementation Guidebooks and development permit application processes.

4.3.3 CALGARY INTERNATIONAL AIRPORT VICINITY PROTECTION AREA (AVPA)

The Calgary International Airport Vicinity Protection Area (AVPA) Regulation defines lands within the city that are subject to the AVPA, as well as Noise Exposure Forecast (NEF) contour lines. These impose varying degrees of land use, development and building restrictions on affected parcels of land.

Policies

- a. Enforce land use, development and building regulations within municipal areas impacted by airport operations.
- b. Incorporate relevant land use, development and building regulations into local area plans for areas impacted by the airport operations.
- c. Notify the Calgary International Airport at the outset of land use planning studies or development applications for lands within the AVPA.

4.4 Flood Hazard Areas

This section provides policies that give direction to guide the planning and regulations that govern the development within the floodplain), in concert with other administrative policies and the Land Use Bylaw.

In Canada, floods are the natural disasters that cause the most damage and expense to communities. Climate change models indicate flood events will likely occur more frequently and severely than in the past. Therefore it is imperative The City be proactive in its approach to increasing resiliency and be forward thinking with regard to regulating land uses and development within floodplain.

Throughout its history, Calgary has experienced flooding of varying degrees with recent major events occurring in 2005 and 2013. Though these floods caused minimal loss of life, they significantly impacted the city in causing social, environmental and economic damages. All citizens of Calgary are stakeholders, either directly or indirectly, in being impacted by flooding and in how The City responds to flood events. Therefore, the approach to flood risk reduction will place a priority on the public good over private interests. The City's top priorities in the approach to reducing impacts from flood events are to:

- Increase public safety through appropriate land use and development regulations in the floodplain.
- Minimize property damage by requiring all development and redevelopment in the floodplain to be designed to mitigate the potential impact or obstruction of floodwaters, high groundwater associated with river flooding and riverbank erosion..
- Enhance Calgary's flood resiliency by employing a comprehensive approach to flood risk reduction measures, that addresses and is adaptable to current and future flood risks.
- Align The City's policies and regulations to meet at least the minimum standards set by the Province.
- Integrate climate change projections into Calgary's flood risk calculations.

Flood hazard mapping is developed by the Province and identifies the floodway, flood fringe and overland flow areas, each with varying levels of flood risk. These maps are based on the 1-in-100 year flood event and are a crucial part of informing policy direction regulating development. 1-in-100 year flood event has a 1% likelihood of occurring in any given year or a 40% chance of happening in a 50-year period, which is generally linked to a river water flow-rate. It does not mean that this size of flood event will only occur every 100 years

The floodway is the area closest to rivers and has the highest risk for damage to buildings and development located there as the flood water is the deepest and fastest moving. Development in the floodway may potentially increase upstream water levels and therefore increase the risk of damage to those areas. Reducing the level of development within the floodway overtime will contribute to a reduction in risk exposure to people, property and the environment.

Flood fringe and overland flow areas have comparatively lower risk for flood damage, since flood water is shallower and slower moving than in the floodway. People can generally tolerate occasional flooding in these areas, and development does not cause higher upstream river water levels. Flood risk reduction measures can be incorporated into development to reduce the amount of damage that is likely to occur during a 1-in-100 year flood.

Due to this discrepancy in risk, a graduated approach to regulating land use and development in the floodplain is appropriate, with the floodway having higher strictness than the flood fringe and overland flow areas.

The City regulates land use and development; however, where development and redevelopment in the floodplain is allowed to occur, it is undertaken by choice of the land owner, and involves their acceptance of risk of potential flood damage.

Policies

- a. Increase public safety, reduce private and public property damage, minimize municipal liability, and enhance the city's flood resiliency, through the following:
 - i. Flood risk reduction work undertaken by, or on behalf, of The City of Calgary within the floodway, consisting of repairing river banks, erosion control, and land stability where the primary purpose is to enhance public safety, protect public infrastructure and ensure proper function of river morphology, be allowed without requiring a development permit.
 - ii. All new development in the floodway should be refused by the Development Authority, with the exception of the following.
 - Uses related to agriculture, open space, outdoor recreation, parks, transportation infrastructure and utilities.
 - the redevelopment of low density residential buildings on the existing building footprint where sufficient risk reduction measures have been taken to the satisfaction of the Development Authority.
 - iii. For redevelopment of existing buildings where the building footprint straddles both the floodway and flood fringe, the redeveloped building should be located exclusively in the flood fringe.
 - iv. All redevelopment of existing residential buildings in the floodway must be done through a discretionary permit process.
 - v. All buildings located in the floodway, flood fringe or overland flow area must be designed to prevent:
 - Damage by floodwaters.
 - Damage by elevated groundwater.
 - Incremental increase of upstream river water levels.
 - vi. The Development Authority, when reviewing applications that propose flood risk reduction measures, ensure that public safety, minimizing property damage, and minimizing municipal liability take precedence in considering development relaxations that may alter the existing built form context and development pattern in a neighbourhood. Approved relaxations should be commensurate with the degree of proposed flood risk reduction measures.
 - vii. Align The City's flood policy and development regulations to at least meet the minimum standards set by the Government of Alberta.
 - viii. Recognize the importance of using up to date flood modelling information as the basis for informing policy and development regulations.
 - ix. In areas with Community Scale Flood mitigation measures in place, relaxation of redundant mitigation in individual buildings should be considered.
 - x. Include the impacts of climate change on river flood risk.
 - xi. Promote long-term management of flood mitigation infrastructure and minimize the need for future flood mitigation infrastructure through land use planning.
 - xii. Include flood protection measures for development in provincially identified flood fringe areas to mitigate risk at the 1-in-100 flood event level.

4.5 Development Next to Freight Rail Corridors

Calgary is a major transportation and logistics hub and is connected via six corridors to the National rail network through the Canadian Pacific Railway (CP) and Canadian National Railway (CN). CP and CN play a critical role in the economic development and prosperity of Calgary. With increasing volumes and types of goods being transported via freight railways there is an increased awareness across the country for the potential risks of accidents and the physical impacts of train derailments.

As development interest along the freight rail corridors increases, it is important for a municipality to employ a risk management approach when considering development proposals in proximity to freight railways. In order to facilitate desired development along the freight rail corridors, it is essential to recognize that the probability of a derailment event will determine the level of mitigation required. For sites with higher probability risks, the potential impact of a train derailment will need to be mitigated.

To achieve an appropriate level of livability, and to reduce the potential for complaints due to noise, buildings in proximity to railway operations will need to be designed and constructed to achieve defined interior sound level limits.

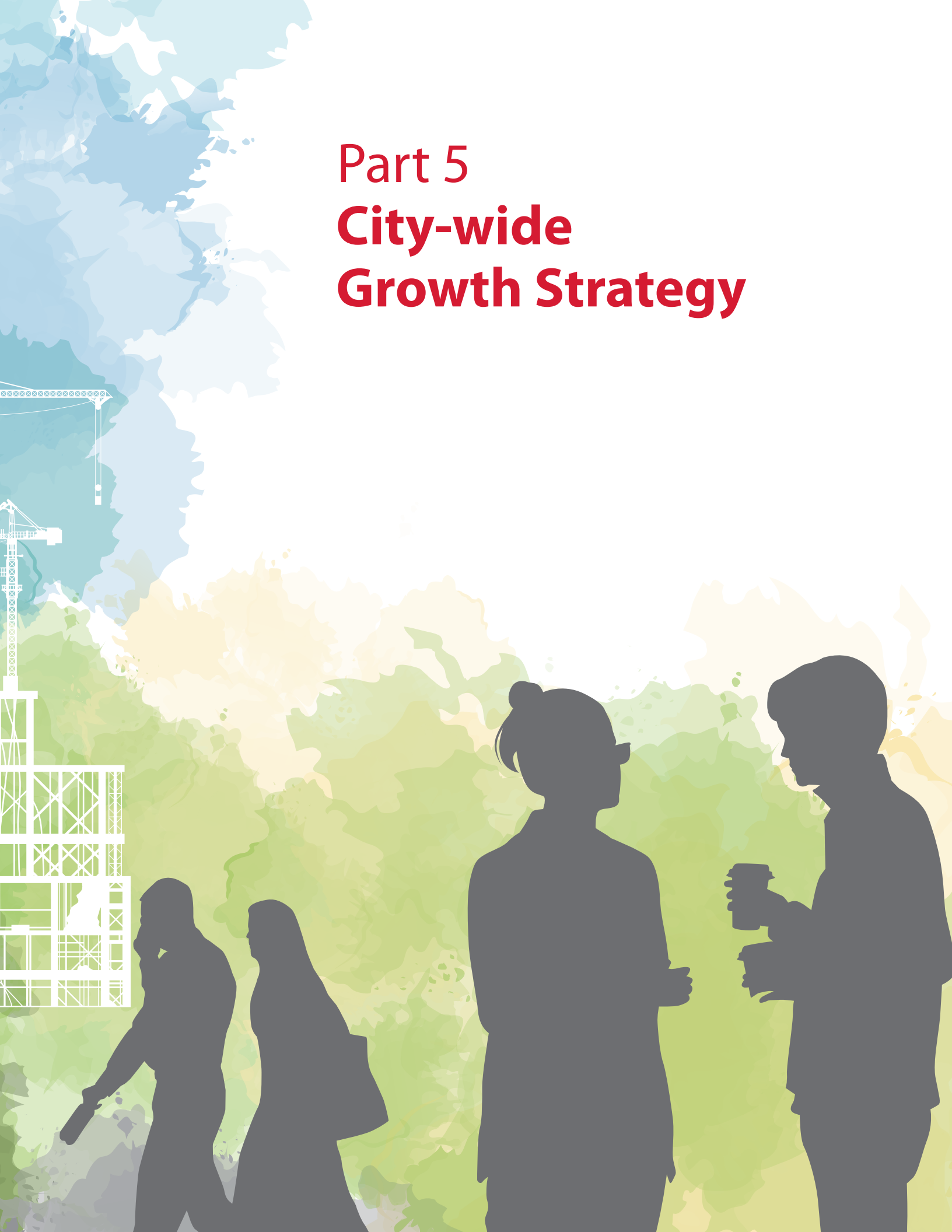
Policies

- a. All development next to freight rail corridors must comply with the requirements of the Development Next to Freight Rail Corridors Policy.



Part 5

City-wide Growth Strategy



5.1 Introduction

Goal As stewards of the land within its jurisdiction, the City of Calgary will guide growth and change within a strategic framework that achieves the best possible social, environmental and economic outcomes while operating within The City's financial capacity. The City will work with key stakeholders to achieve this goal.

The framework for growth and change outlines a strategic process for The City's major planning and transportation decisions to advance the objectives of the MDP's eight key directions, and in particular facilitating the balanced growth objectives of a more compact urban form.

The strategic framework for growth and change is intended to support where new jobs and homes should be located, improved integration of transportation systems, the evolution of complete communities, while doing so in an economically sustainable manner. The City must also ensure that growth pays for growth. Growth and change should occur within its financial capacity as the cost

of supplying and maintaining infrastructure and services is a considerable demand on the budget of the Corporation. Realizing a more compact city form will result in considerable cost savings, and therefore reducing the tax burden placed on Calgarians.

Section 5.2 presents a Strategic Framework for Growth and Change designed to facilitate Calgary's urban structure (map 1) and development in a way that meets these challenges. It guides where growth and change should occur to ensure the best possible social, environmental and economic outcomes for the citizens of the city both now and in the future.

5.2 A Strategic Framework for Growth and Change

In order to strengthen The City's approach to growth, the Strategic Framework for Growth and Change has been created. This framework will ensure policy, strategy and resources for growth are better aligned to facilitate Calgary's supply of planned and serviced lands and achieve the objectives of the Calgary Metropolitan Regional Board (CMRB) Growth Plan, the Municipal Development Plan and the Calgary Transportation Plan. The objectives and alignment of the Strategic Framework for Growth and Change is illustrated in Figure 5-1.

The Strategic Framework indicates the role of the:

- Provincial Government which provides legislative direction for land use and transportation planning through the Municipal Government Act, the City Transportation Act, the SSRP and the Alberta Land Use Framework.
- The City of Calgary which provides policy direction through the MDP and CTP, for comprehensive city-wide growth strategies. Planning and Investment Priorities for growth will be decided through internal Committee processes.

Policies

- a. Related to growth, The City's strategies shall apply the policies of Section 5.2, A Strategic Framework for Growth and Change.

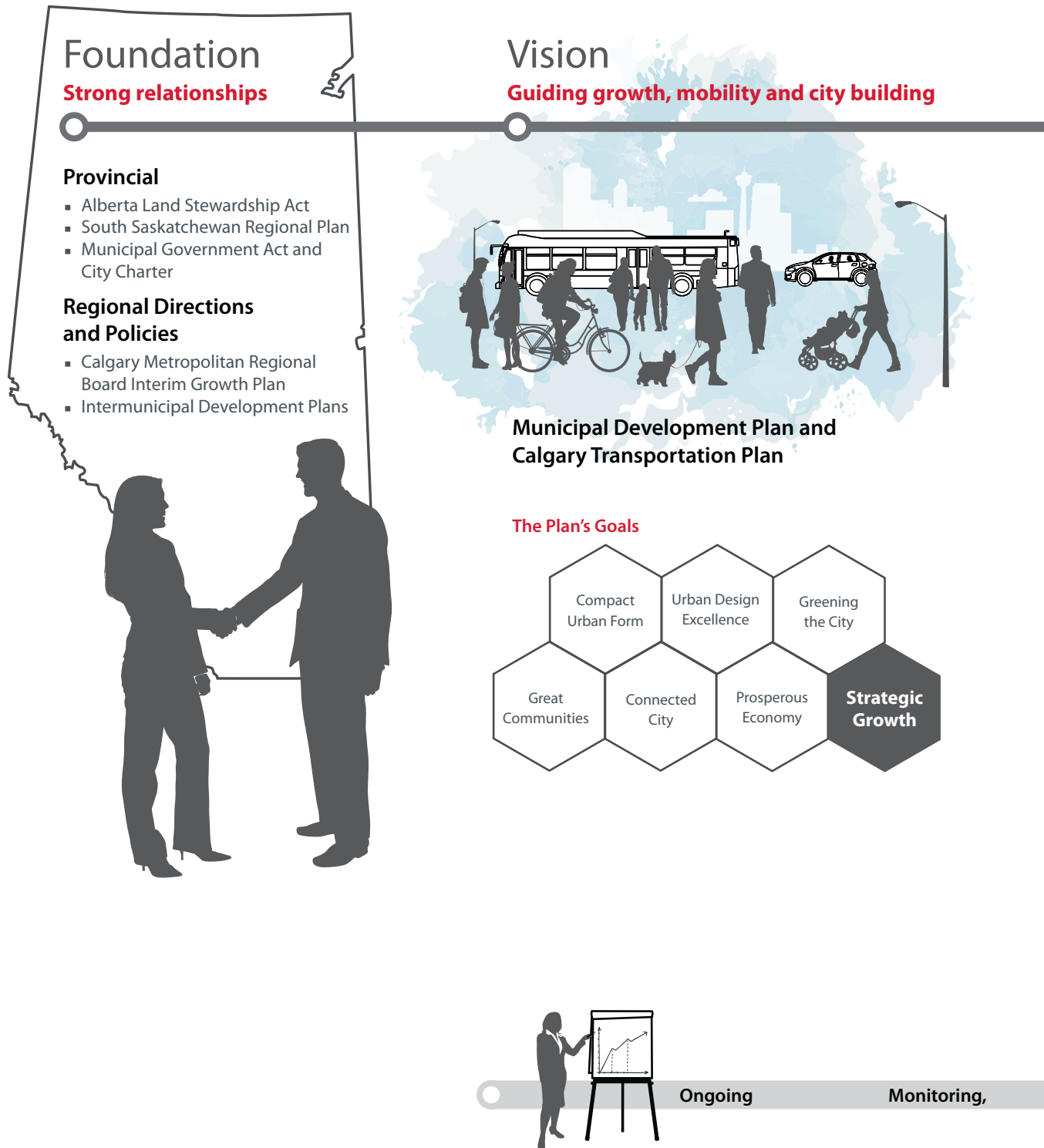


Figure 5-1: Growth Strategy Infographic

Implementation

Strategic direction

Where we grow

Identify Opportunity Areas - ensuring growth and change decisions align with the goals, policies and key directions of the above plans, including Established Areas, Centre City, New Communities, and Industrial Areas.

Why we grow

To support of the goals of balanced growth, a more compact urban form and great communities.

How we grow

Growth, the type of built environment and infrastructure maintenance have significant long-term implications for public spending. Recommendations and decisions on growth and change incorporates: The City's financial and infrastructure capacities; integrated decision making; and a variety of tools, processes and investment strategies.

Examples

- Guidebooks
- Regional context studies
- Local area plans
- Service plans and budgets
- Asset management plans

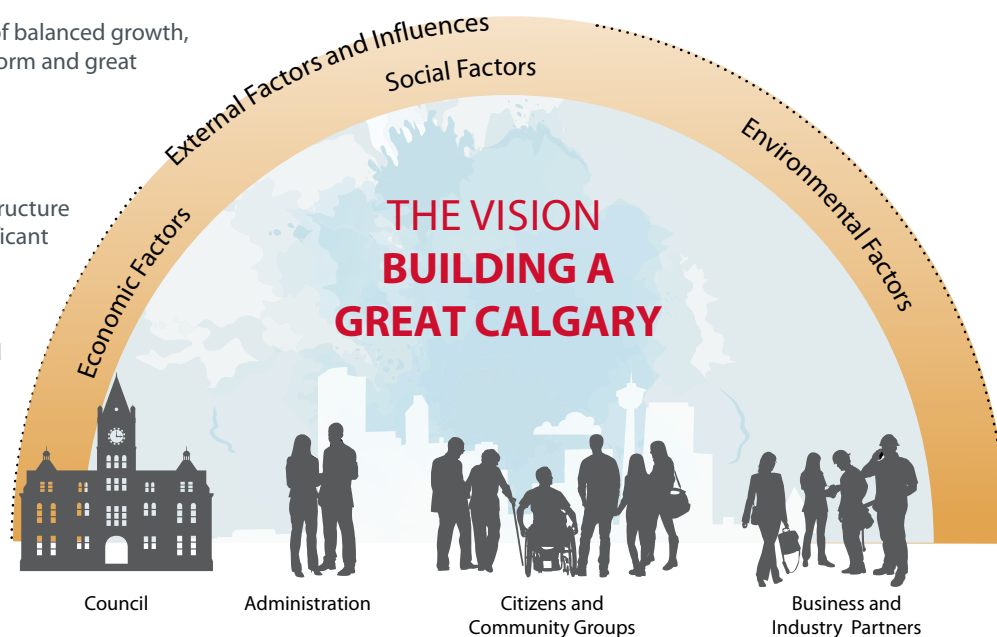
Execution

Growth and change actions

Building a sustainable future

Leveraging growth and change to benefit Calgarians by maintaining a high-quality life and realizing tangible outcomes:

- Investments in growth and change



5.2.1 ALIGNMENT AND STRONG RELATIONSHIPS

Objective

Maintain strong relationships with municipal neighbours, regional partners and key stakeholders within Calgary, to ensure that growth and change decisions reflect provincial and regional policies and the direction of the MDP and CTP.

The City must ensure that growth is aligned with and occurs within the legislative and regulatory framework of other orders of government. In particular, the South Saskatchewan Regional Plan, Alberta Land Use Framework and the Calgary Metropolitan Regional Board Growth Plan will provide direction on how the city grows and interacts within a regional and provincial context.

In order to achieve a good quality of life for all people in the Calgary region, and to support the long-term health of our regional communities, The City of Calgary is committed to maintaining strong relationships with our municipal neighbours and regional partners. The City also supports strong relationships with key stakeholders within Calgary to ensure that the growth and change of our city benefits all citizens, now and into the future.

Policies

- a. Continue to engage with inter-municipal and regional partners to ensure the best possible outcomes to issues of mutual interest within the framework of the CMRB Growth Plan.
- b. Continue to consult and work with the development and building industries and other stakeholders (including citizens, organized business, community groups and community associations) regarding matters of municipal process and policy to ensure mutual understanding and to support shared goals and objectives.
- c. Acknowledge and enhance Calgary's role as the centre of regional growth and demonstrate the benefits of compact and connected development for the region.

5.2.2 STRATEGIC DECISIONS ON WHERE WE GROW

Objective

Maintain Calgary's ability to grow over the long term by ensuring that growth and change decisions facilitate a land supply that aligns with the direction, goals, policies and key directions of the CMRB Growth Plan, South Saskatchewan Regional Plan, MDP and CTP.

The MDP and CTP are aligned with the policy directions of the Alberta Land Use Framework and the CMRB Growth Plan. The MDP and CTP contain a 60 year perspective that provides policies for Calgary that:

- Guide where growth occurs.
- Reflect the desired urban structure (Map 1).
- Define the city's transportation networks.

The policies of the MDP provide the primary source of direction for strategic growth and change decisions and should remain the primary source. Since 1985, Calgary's population and land area roughly doubled, with almost all growth occurring in new communities. Each new community requires investments in new schools, roads, fire stations, and other city services.

In 2009 the MDP encouraged balancing growth within the city to make the best use of our existing land, reduce the cost of City services, locate residents closer to where they work, shop and play, and support increased mobility options. Between 2009-2019, Calgary's population increased by nearly a quarter of a million people, with 10% of growth being accommodated in built-out neighbourhoods, and 90 per cent in new communities on the outer edges of the city.

To meet our long range target of 50 percent and interim 2039 target of 33 percent of cumulative growth to the Developed Areas, a much greater percentage of new homes will need to be accommodated in the Developed Areas. For progress to move forward, it will be essential to continue to add population in the Activity Centres and Main Streets and remain committed to balancing future growth.

Policies

- a. Continue to protect and manage Calgary's long-term growth requirements through the policies of the CMRB Growth Plan and through Intermunicipal Development Plans with adjacent neighbours.
- b. Maintain within The City's jurisdiction a 30-year supply of developable land for all uses.
- c. To realize the efficiencies and objectives of achieving a more compact city form, The City will balance future growth between and endeavor to:
 - i. Accommodate 33 per cent of Calgary's future population growth within the Balanced Growth Boundary (map 1) Residential Areas of the city by 2039.
 - ii. Accommodate 50 per cent of Calgary's future population growth over the next 60 to 70 years, starting in 2009, within the Balanced Growth Boundary (map 1).
- d. City planning and investment decisions must support the policy and growth directions of the CMRB Growth Plan, the Municipal Development Plan and the Calgary Transportation Plan.

5.2.3 BALANCED COMPACT GROWTH AND PLANNED LAND SUPPLY

Objective

Support strategic intensification with a variety of processes and investments and broaden The City's practice for determining planned land supply and maintain The City's practice for serviced land supply.

To attain the vision and considerable cost savings in realizing a more compact urban form, The City must take an active role in supporting strategic intensification. Intensification can be facilitated through The City's planning processes and investment decisions. This will require:

- Continued attention to process improvements for development applications.
- A pro-active approach to community outreach and engagement.
- The implementation of a wide array of planning and urban design initiatives in order to support intensification of residential and non-residential development.

The City will provide leadership by sequencing and coordinating its infrastructure investment priorities to support intensification. It will also provide leadership through demonstration projects that will serve as models for the changes in urban form required to achieve the goals of the MDP. The City will work with the development and building industries and community groups to facilitate intensification initiatives that support the direction of the MDP and CTP.

Achieving balanced future growth and offering a variety of housing choice in an economically sustainable manner requires comprehensive information regarding Calgary's planned land supply. To facilitate better decisions regarding city-wide growth and change The City will produce and maintain information on land supply and demand including consideration of uses.

Future Greenfield designation in the Urban Structure Map (Map 1) identifies lands situated outside the planned Greenfield Area and are where future growth may be provided. The City's practice

will be to undertake a local area plan in a Future Greenfield area when required is to maintain up to a 15-year planned land supply. Further, in Greenfield Area(s) with approved policy plans in place The City should maintain three to five years of serviced land (i.e., land with infrastructure in place). Both of these practices will support an adequate supply of land is in place to provide for growth in Greenfield Areas over the MDP's long-term horizon.

Policies

- a. Prioritize and facilitate efficient growth and redevelopment in the Developed Areas, especially in Activity Centres, Main Streets and residential areas connected by LRT service and the Primary Transit Network.
- b. The City will provide leadership on intensification through its investment in infrastructure and the public realm and through demonstration projects that model the changes required in housing and development forms.
- c. The City will consult with community groups, community associations and the development and building industry to facilitate intensification initiatives.
- d. Support achieving the population growth targets in policy 5.2.2 (c) and facilitate planned strategic growth by:
 - i. Updating local area plans periodically in Developed and Greenfield areas.
 - ii. Initiating local area plans in Future Greenfield areas:
 - A. When monitoring of population and housing forecasts indicate undertaking the local area plan will facilitate the objective of maintaining up to a 15 year city-wide land supply within the Greenfield Area.
 - B. The planned area is adjacent to an approved Area Structure Plan.

5.2.5 LINKING GROWTH DECISIONS TO MUNICIPAL FINANCIAL AND INFRASTRUCTURE CAPACITY

Objective

Ensure decision-making on growth and change incorporates The City's financial and infrastructure capacities, long-term fiscal sustainability and lifecycle costs.

The City will face significant capital and operating shortfalls if it continues to provide the same services, in the same way, with the same revenue. Much of this shortfall is driven by the choices on when, where and how we grow. To achieve sustainable costs, it will be necessary to improve decision making by integrating evaluations of capital and operating expenditures into growth decisions, including Regional Context Studies and all local area plans.

As the land use Development Authority, The City has an obligation to provide essential infrastructure, including core services, such as water, wastewater, stormwater, roads and fire and police services. The City is also responsible to its current and future citizens for ensuring the provision of complete community infrastructure including transit, libraries, parks and recreation facilities. Provision of infrastructure and the associated operating and maintenance costs require substantial ongoing investment.

In order to incorporate financial and infrastructure capacity into decision-making on growth and change, the information inputs will have to be enhanced.

Policies

- a. The City's fiscal sustainability, shall be based on an understanding of the strategic goals of The City including the overall fiscal environment impacted by growth and change decisions, and shall:
 - i. Align with MDP, CTP vision and goals and CTP Council approved transportation plans and guides (reference figure 1 of the CTP).
 - ii. Consider supporting plans and studies including Regional Context Studies, local area plans, industrial area plans and major land use applications.
- b. Municipal capital investment in infrastructure (including new and maintenance/refurbished) should be prioritized in the following order:
 - i. Investments that support intensification of Developed Areas of the city.
 - ii. Investments that expedite the completion of communities in planned Greenfield Areas of the city (as defined on the MDP Urban Structure Map).
 - iii. Investments that support the development of Future Greenfield areas.
- c. Limits on the funding available to the City to support growth and change require that potential qualitative and quantitative cost/benefit implications for The City including life cycle costs are identified, and communicated comprehensively as part of budget deliberations by City Council.
- d. In the Greenfield Area, The City should endeavor to maintain 3 to 5 years of serviced land when it:
 - i. Supports a healthy, competitive land market.
 - ii. Considers fiscal sustainability and The City's capacity to meet financial commitments both immediate and long-term.
 - iii. Maximizes cost efficiencies, such as leveraging existing transportation and infrastructure networks.

5.2.6 INTEGRATED DECISION-MAKING

Objective

Make decisions regarding growth and change in an interdepartmental and integrated manner.

Decisions on land supply must take into consideration the financial and infrastructure implications for The City. The MDP proposes a strategic decision-making process with a mandate to integrate corporate information and rely on an inter-departmental management structure.

Policies

- a. Make growth-related land use planning decisions and investment decisions within a strategic, inter-departmental process.
- b. Align the growth-related priorities and resource allocations of City departments, portfolio management plans and capital planning programs to the MDP and CTP vision and goals.
- c. Collaborate between City departments to prioritize and combine growth-related projects that advance common goals.
- d. Improve the integration of regulations across multiple disciplines and City departments.
- e. Analyze the cumulative impact of proposed growth-related funding or financing tools and identify opportunities to advance multiple goals through one tool or approach.

5.2.7 PUBLIC ACCOUNTABILITY – LEVERAGING GROWTH AND CHANGE TO BENEFIT CALGARIANS

Objective

Provide a public accountability structure for making growth and change decisions and for communicating progress toward the direction of the MDP and CTP.

City Council is accountable for growth and change decision making. In order to enhance that accountability, the objective of section 5.2.7 is achieved through the implementation of a range of policies that ensure that growth decisions are based on thorough assessment of the environmental, economic and social factors of any proposal. The public are given opportunities to be involved in and shape the future growth of Calgary through engagement and public hearings of Council. Communication with the public regarding progress towards the direction of the MDP and CTP will also be achieved by monitoring the Core Indicators (Figure 5-2b) and reporting to City Council and Calgarians.

Policies

- a. Recommendations to City Council to proceed with the preparation of a local area plan shall be based on, but not limited to, the following criteria:
 - i. The contribution of growth in the local area plan towards advancing the overall objectives of the MDP and CTP.
 - ii. An assessment of The City's financial capacity and tools to support growth.
 - iii. For Greenfield and/or Future Greenfield areas, a demonstrated need for planned land.
 - iv. For Developed Areas, to help articulate a vision and plan for areas that are experiencing growth and change pressures, or for areas that require a vision and plan to help realize growth potential.
 - v. Opportunities for land use that supports Primary Transit Network.
 - vi. Landowner interest.

- vii. Community interest.
- viii. The advancement of goals of the Social Wellbeing Policy, adopted by Calgary Council in 2019, as may be amended from time to time.
- b. Upon adoption of a new local area plan, all relevant maps in both the MDP and CTP must be updated.
- c. Recommendations to City Council to make growth investment decisions in strategic areas shall be based on, but not limited to, the following criteria:
 - i. The contribution of growth in the strategic area towards advancing the overall objectives of the MDP and CTP.
 - ii. The contribution of growth investments in the strategic area towards advancing other corporate strategic initiatives, including resilience and climate change.
 - iii. As assessment of economic activity and contributions to City revenues brought about by growth in the strategic area, in the context of growth citywide.
 - iv. A comprehensive accounting of City capital and operating costs in the strategic area, and an assessment of The City's financial capacity for funding capital and operating costs (including available tools).
 - v. An assessment of The City's overall existing and planned capital infrastructure; in relation to the strategic area.
 - vi. The contribution of the strategic area towards maximizing the efficient use of existing and approved City infrastructure and services lines, with the intent of reducing operating and life-cycle costs, thereby reducing future liabilities requiring tax support.
 - vii. For strategic areas in Greenfield and/or Future Greenfield areas, demonstrated market demand for growth in the context of the existing serviced land supply.
 - viii. Opportunities for development that supports the Primary Transit Network.
 - ix. Landowner interest.
 - x. Community interest.
 - xi. Respecting Section 2.3.5 and the advancement of goals of the Social Wellbeing Policy, adopted by Calgary Council in 2019, as may be amended from time to time.

5.3 Monitoring and Reporting

Objective

Provide a basis for effective strategic decision making by monitoring and reporting on the progress made towards achieving the goals and objectives of the MDP.

The MDP and CTP are dynamic documents. They establish strategic policy directions, and periodic progress checks must be undertaken to review to what extent progress is being made.

To evaluate progress toward the policy direction of the MDP and CTP, a broad spectrum of indicators and targets has been developed. The Core Indicators for Land Use and Mobility can be found in Figure 5-2. These indicators are proxy measures for the social, environmental and economic performance of the MDP and CTP. They are intended to track the overall progress towards achieving the goals and objectives of the MDP and CTP. However, these indicators and targets are not intended to be applied to individual local area plans and land use applications. It is important to note that no one or two measures in isolation indicate progress. The full set of indicators should be measured and reported in order to provide a comprehensive picture.

Each of the indicators is accompanied by a target. The targets provide a desired performance outcome for an indicator over a specified period of time. The targets were based on benchmarking of other cities and through engagement with stakeholders. The targets represent a direction that The City wishes to achieve through its planning and investment processes and through collaborative work with other orders of government, the public and stakeholders.

A monitoring and reporting program is in place for the Core Indicators for Land Use and Mobility as part of the MDP/CTP implementation program. A regular cycle of reporting on the Core Indicators provides performance information to Council, Administration and the public.

Reporting is conducted in advance of each City business planning cycle and will assist in Greenfield investment strategies and strategic

growth decisions. The reporting process will also help ensure that implementation strategies and corporate processes are aligned with the long term goals of the MDP and CTP. In addition to evaluating progress towards the targets contained in this section, additional reports will look at current growth forecasts, market trends and The City's financial capacity.

A major review of the Core Indicators for Land Use and Mobility should occur on a ten year basis as part of the MDP policy review process (which will assess whether the policy direction remains appropriate or requires adjusting). Each metric and target will be evaluated to ensure that they align with the updated vision and policies of the MDP and CTP.

Policies

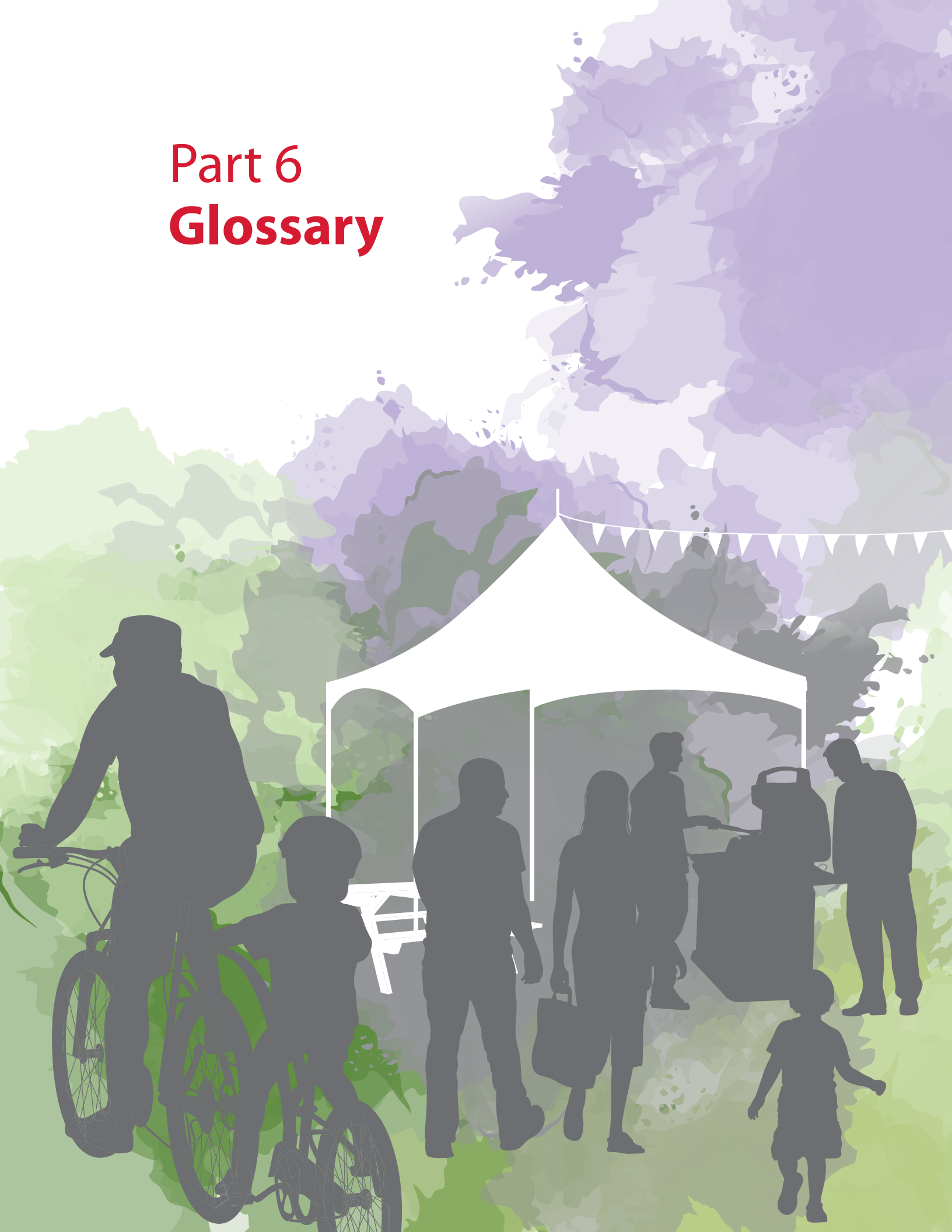
- a. The City will monitor the Core Indicators for Land Use and Mobility on a continuous basis and report to Council, Administration and the public on the progress towards the targets prior to each business planning cycle.
- b. Based on monitoring, The City may decide to update indicators or supporting strategies through plan amendments to keep the plan current and relevant.

Core indicators for Land Use and Mobility (MDP)					
#	Core Indicators	Metric	Baseline	2018	60 Year target
1	Urban Expansion	Per cent of population growth from 2006 accommodated within balanced growth boundary.	-5.9% (2005)	9.7%	50%
2	Density	People per hectare	20 (2005)	24.7	27
		Jobs per hectare	11 (2005)	13.5	18
3	Population / Jobs Balance	Population/Jobs Northwest ratio	3.0	3.0	3.0
		Population/Jobs Northeast ratio	1.7	1.7	1.4
		Population/Jobs Southwest ratio	1.3	1.4	1.5
		Population/Jobs South east ratio	1.2	1.5	1.5
4	Mix Land use	Land Use Diversity Index	0.53 (2008)	0.56	0.7
5	Residential Mix	Residential Diversity Index	0.19 (2008)	0.22	0.4
6	Road and Street Infrastructure	Roads to streets ratio	0.72 (42% Roads and 58% Streets)	0.61	0.57 (36% Roads and 64% Streets)
7	Accessibility to Primary Transit Network	Per cent of population within 400 m of Primary Transit Network	0%	37%	45%
		Per cent of jobs within 400 m of Primary Transit Network	0%	14%	67%
8	Transit Service	Annual transit service hours per capita	2.2	2.24	3.7
9	Goods Access	Per cent of intermodal and warehousing facilities within 1600 m (actual) of Primary Goods Movement Network	73% (2008)	73%	95%
10	Transportation Mode Split	Walking and Cycling Mode split (all purpose trips, 24 hours, city-wide)	14% (2005)	18%	20% - 25%
		Transit Mode split (all purpose trips, 24 hours, city-wide)	9% (2005)	8%	15% - 20%
		Auto Mode split (all purpose trips, 24 hours, city-wide)	77% (2005)	74%	65% - 55%
11	Accessibility to Daily Needs	Per cent of population within Major and Community Activity Centres, and 600 m of Urban and Neighbourhood Corridors	18% (2006)	21%	30%
12	Watershed Health	Per cent of impervious surface	33% (1998)	44%	10% - 20%
13	Urban forest	Per cent of tree canopy	7% (1998)	8.25%	14% - 20%
14	District Energy	Per cent of land area with densities supportive of district energy systems	1.8%	2.6%	1.7%

Figure 5-2: Core Indicators for Land Use and Mobility

Part 6

Glossary





A

accessibility

Ease of access and egress to any location by walking, wheeling, transit and private vehicles, or for commercial vehicles.

accessible housing

The construction or modification (such as through renovation or home modification) of housing to enable independent living for persons with disabilities.

action

A specific task to help achieve an objective or implement a policy.

active modes

Non-motorized travel, primarily walking, wheeling and movements with mobility devices.

active uses

Types of commercial uses on the main or ground floor of buildings adjacent to the sidewalk or street, which generate frequent activity in and out of a building or business entrance.

affordable housing

Housing that meets the needs of households earning 65 per cent or less of the median household income in Calgary that are spending 30 per cent or more of their gross annual household income on shelter.

Alternative Use Open Space

Part of the Open Space Network; lands that are acquired or dedicated for purposes other than those of Recreational or Environmental Open Space such as, but not limited to, plazas, utility corridors, stormwater management facilities (e.g. dry or wet ponds) and special event facilities.

amenity space

Common or private, indoor or outdoor space provided on-site and designed for active or passive recreational use.

application stage

The appropriate or applicable stage when applications for Building Permits, Development Permits, Land use or Subdivision are reviewed.

Area Redevelopment Plan (ARP)

A statutory plan as defined by the Municipal Government Act, that directs the redevelopment, preservations or rehabilitation of existing lands and buildings, generally within existing areas of the city.

Area Structure Plan (ASP)

A statutory plan as defined by the Municipal Government Act, that directs the future land use patterns, transportation and utility networks and sequence of development in new communities.

Arterial street

Arterial streets provide a high-quality environment for all modes of transportation. These streets are not destinations themselves, but provide reasonably direct connections between multiple communities and major destinations. They have varying degrees of interaction with adjacent land uses but, on average, allow for greater connectivity than through roads.

B

Balanced Growth Boundary

The boundary between Developed and Greenfield areas of the city in 2006, used to measure the balance of growth being achieved by way of the urban expansion core indicator.

Base Transit Service

A range of feeder, crosstown, circulator and shuttle services whose primary function is to provide comprehensive community coverage to complement the Primary Transit Network.

benchmarking

A standardized method for collecting and reporting critical operational data in a way that enables relevant comparisons among the performances of different organizations or programmes, usually with a view to establishing good practice, diagnosing problems in performance and identifying areas of strength. Benchmarking gives the organization (or the programme) the external references and best practices on which to base its evaluation and to design its working processes.

brownfield site

A brownfield site is an abandoned, vacant, derelict or underutilized property where past actions have resulted in real or perceived contamination and where there is an active potential for redevelopment. Brownfield sites include parcels of all sizes from corner gas stations to large areas encompassing many properties.

built form

The engineered surroundings that provide the setting for human activity and includes buildings, streets and structures (including infrastructure).

Bus Rapid Transit (BRT)

A type of limited stop bus service that relies on technology to speed up the service. It can operate on exclusive transit ways, high occupancy vehicle lanes and any type of road or street. A BRT line combines intelligent transportation systems technology, priority for transit, rapid and convenient fare collection and integration with land use policy, in order to upgrade bus system performance substantially.

C

Calgary Region

The geographic area encompassing Calgary and other municipal jurisdictions within the boundary of the Calgary Metropolitan Regional Board.

Calgary Metropolitan Region Board

The provincially mandated Growth Board for the Calgary Region, as described in section 1.3.

Calgary Metropolitan Region Board Growth Plan

Refers to the current approved Growth Plan of the Calgary Metropolitan Region Board.

canopy cover

The area within the boundaries of Calgary covered by tree and forest foliage.

capacity

The volume of people or vehicles a transportation facility was designed to carry in a unit of time, such as an hour. Can also be applied to transit or walking/wheeling facilities (e.g. pathways).

cascading energy

Energy cascading is using residual heat in liquids or steam from a primary process to provide heating or cooling to a later process. For example, excess steam from a power plant or refinery may be used in a food processing plant or greenhouse.

Climate

Weather conditions prevailing in an area in general or over a long period. Taken from Climate Resilience Strategy.

Climate Change

A change in the state of the climate that can be identified using statistical tests by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. It refers to any change in climate over time, whether due to natural variability or as a result of human activity.

Climate Change Adaptation

The process and actions to manage the actual and projected climate impacts and risk to reduce the effects on built systems, the natural environment and people. Taken from Climate Resilience Strategy.

Climate Change Mitigation

The process and actions that stabilize or reduce the greenhouse gas concentration in the atmosphere. Taken from Climate Resilience Strategy.

co-generation

The capturing and using of otherwise “wasted” heat from the electrical generating process.

community group

Any mobilized body of citizens that operates under a common name and mandate, comprises a formal governance structure, and supports the expression of a collective voice and/or perspective. This includes, but is not limited to: community associations, resident associations, social recreation groups, business improvement areas, etc.

compact urban form

A land-use pattern that encourages efficient use of land, walkable neighbourhoods, mixed land uses (residential, retail, workplace and institutional all within one neighbourhood), proximity to transit and reduced need for infrastructure.

complete community

A community that is fully developed and meets the needs of local residents through an entire lifetime. Complete communities include a full range of housing, commerce, recreational, institutional and public spaces. A complete community provides a physical and social environment where residents and visitors can live, learn, work and play.

Complete Street

A street designed and operated to enable safe, attractive and comfortable access and travel for all users, including pedestrians, cyclists and public transit and private vehicle users. A Complete Street incorporates natural infrastructure and optimizes public space and aesthetics wherever possible. The degree to which any one street supports different modes of transportation, natural infrastructure or public space varies depending on surrounding context and role of the street.

Concept Plan

A plan that may be required, at the discretion of the Development Authority, to be submitted at the time of Outline Plan / Land Use Amendment application, showing the relationship of the design of the subject site with adjoining parcels, the possible development of adjoining parcels, and/or the next phases of development.

congestion

A condition lasting 15 minutes or longer where travel demand exceeds the design capacity of a transportation facility.

connectivity

The directness of links and the density of connections in a path or road network. A connected transportation system allows for more direct travel between destinations, offers more route options and makes active transportation more feasible.

core indicators

The most significant measures to provide an overall picture of our progress toward achievement of the key directions for land use and mobility.

Crime Prevention Through Environmental Design (CPTED)

The proper design and effective use of the built environment, which may lead to a reduction in the fear and incidence of crime and an improvement in quality of life.

cycle-track

Dedicated space for bicycles built into street right-of ways. They are separated physically from both vehicle travel lanes and sidewalks to improve safety and efficiency for all modes of transportation.

D**density**

A measure of the number of dwelling units on a parcel of land, expressed in units per hectare or in units per parcel.

design indicators

Design indicators are criteria for measuring progress towards sustainability, with a focus on the issues relating to the interaction and design of land use and transportation systems (e.g., proximity of population and jobs to convenient transit). Effective design issues should be measured easily and reliably, be simple and easy to understand, and can be used to drive future decision-making processes related to land use and transportation.

Development Authority

The Subdivision Authority, Development Authority or Subdivision and Development Appeal Board of The City of Calgary, as the context implies.

Development Permit

A Development Permit indicates permission from the Development Authority for construction or changes of use in accordance with The City of Calgary Land Use Bylaw.

diversity

An environment that offers a variety of experiences to patrons. Mix of land uses, architecture, street design and landscaping can all contribute to providing variety.

Downtown Core

One of the mixed-use neighborhoods that make up the Greater Downtown. This area is a prominent destination for business, entertainment, culture, and events in the city. It is an area of intensive high-rise, high-density developments with a high-quality public realm.

E

ecological integrity

A condition where the structure and function of an ecosystem are unimpaired by stresses induced by human activity and that condition is likely to persist.

ecological network

A network of ecological components (core areas, corridors and buffer zones) which provides the physical conditions necessary for ecosystems and species populations to survive in a human-dominated landscape.

ecosystem

The interaction between organisms, including humans and their environment. Ecosystem health/integrity refers to the adequate structure and functioning of an ecosystem, as described by scientific information and societal priorities.

Ecosystem Services

Ecosystem services are the benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as regulation of floods, drought, land degradation, and disease; supporting services such as soil formation and nutrient cycling; and cultural services such as recreational, spiritual, religious and other nonmaterial benefits.

Engineered Assets (purpose built)

Are those assets that have been designed to function like natural assets but are new designs not found in nature. They are a subsection of Natural Infrastructure and include pervious pavement, green and brown roofs, rain barrels, green walls, and cisterns.

Engineered Elements (purpose built)

Are those assets that have been designed to function like natural assets but are new designs not found in nature. They are a subsection of Natural Infrastructure and include pervious pavement, green and brown roofs, rain barrels, green walls, and cisterns.

Engineered Stormwater Wetland

A constructed and/or modified water body that fluctuates with water drainage peaks but holds water at all times. The wetland is used to improve stormwater runoff quality through nutrient and sediment removal using vegetation, detention, settlement and other best management practices. The wetland is also used to manage the volume of runoff through storage and restricted pipe outlets. Engineered Stormwater Wetlands have a habitat function with existing or constructed riparian and upland vegetation communities. The wetland boundary may be dedicated as Environmental Reserve in accordance with the Municipal Government Act, and the adjacent buffer or riparian and upland vegetation may be dedicated as MR, and all forebays should be dedicated as Public Utility Lots.

Enhanced Assets

Are those assets that have been designed to function like natural assets. They are a subsection of Natural Infrastructure and include rain gardens, bioswales, urban forests, urban parks, biomimicry, stormwater ponds, and reed beds.

entranceways or gateways

Important transportation connections either to enter the city or to signify entrance into a specific part of the city. Well-designed entrances welcome people and provide a sense of arrival to an important place.

Environmental Open Space

Part of the Open Space Network; lands that are acquired or dedicated to preserve Environmentally Significant Areas such as, but not limited to, forests, shrublands, grasslands, streams and wetlands

Environmentally Significant Area (ESA)

A natural area site that has been inventoried prior to potential development and which, because of its features or characteristics, is significant to Calgary from an environmental perspective and has the potential to remain viable in an urban environment. A site is listed as an Environmentally Significant Area on the basis of meeting one or all of the criteria listed in Appendix C of The City of Calgary Parks' Open Space Plan.

equitable

Fair, just, and reasonable treatment of people, giving all members of society the opportunity to fully participate, regardless of ability.

escarpment

A steep slope formed by the erosive action of water, and normally adjacent to a watercourse.

F**Floor Area Ratio (FAR)**

The quotient of the total gross floor area of a building on a parcel divided by the gross site area of the parcel. FAR is one of the measures to direct the size and massing of a building in relation to the area of the parcel of land it occupies.

Future Greenfield

Future Greenfield are those large land areas in the city identified for future urban development that do not have an approved ASP in place.

G

goal

A desirable condition to be achieved – a sought-after end state that is not quantifiable or time-dependent. Provides context for corresponding objectives and policies.

goods movement

The transportation of goods, usually freight, by road, rail and/or air. Lighter service vehicles may also be included.

Greater Downtown

Refers to an area comprised of the Eau Claire, Chinatown, Downtown West, East Village, Downtown Core, and Beltline communities. Greater Downtown is located on the south bank of the Bow River and bounded to the east by the Elbow River, to the south by 17 Avenue S.W. and to the west by 14 Street S.W. The direction within this Plan will also apply to properties west of 14 Street SW and south of 17 Avenue S. This area can also referred to as Centre City.

Green Corridor

The recreational component of Environmental Open Space, providing pathways and linking ecological networks.

green infrastructure

Is the natural vegetative systems and green technologies that collectively provide society with a multitude of economic, environmental, and social benefits, and includes clean electricity infrastructure, energy efficient infrastructure, and natural infrastructure.

greyfield

An outdated, vacant or failing commercial or institutional site. The term “grey” refers to the large area of concrete and asphalt that typically accompanies retail sites.

Gross Developable Hectare / Acre

Gross developable acre/hectare is calculated by starting with the gross area of land and deducting nondevelopable lands.

Gross Developable Residential Area

Gross Developable Residential Area is the total developable area available for general residential development. It is also used as the base measurement for density. GDRA is calculated by starting with the gross area of land and deducting non-developable land and land required for regional uses.

H

habitat fragmentation

Fragmentation occurs when a large region of habitat has been broken down, or fragmented, into a collection of smaller patches of habitat. Fragmentation typically occurs when land is converted from one type of habitat to another.

Heritage Resource

Features including historic buildings, bridges, engineering works and other structures; cultural landscapes such as historic parks, gardens or streetscapes, culturally significant areas, indigenous traditional use areas, and sites with archaeological or palaeological resources. These can be managed by municipal, provincial or federal authorities.

High Occupancy Vehicle (HOV) lane

A roadway lane designated for use by transit vehicles and carpools with at least two to three people. The highest service HOV lane is a reserved transit lane.

Housing Affordability

Providing a range of housing opportunities to meet the diverse housing needs of all Calgarians by allowing access to a range of housing types and tenures in all areas of the City of Calgary.

hydrology

The study of the movement, distribution and quality of water throughout the Earth; hydrology thus addresses both the hydrologic cycle and water resources.

I

impervious surfaces

Mainly artificial structures, such as building roofs, road pavements, sidewalks and parking lots that cannot be easily penetrated by water, thereby resulting in runoff.

indicator

A variable that is representative of progress towards the achievement of an objective, policy or action.

Industrial Arterial

Streets located in industrial areas. Their first priority is the efficient movement of heavy trucks but, as streets, they still accommodate all modes of transportation.

infrastructure

The technical structures that support a society, including roads, transit, water supply, sewers, power grid, telecommunications, etc.

intensification

The development of a property, site or area at a higher density than currently exists. Intensification can be achieved through redevelopment, development of vacant/underutilized lots, the conversion of existing buildings, or through infill development in previously developed areas.

intensity

A measure of the concentration of people and jobs within a given area calculated by totaling the number of people either living or working in a given area.

intermodal facilities

Places that accommodate connections between transportation modes. Typically refers to break of bulk locations between rail and air and truck

J**jobs/housing (population/jobs) balance**

A measure of the relationship between the number of residents and the number of jobs in a specific area. The commonly used metric of this balance is simply the number of residents divided by the number of jobs in that community.

Joint Use Site

Lands set aside for or including a school building, a location for a school building or a school playing field and community playing fields with facilities and grounds which are accessible to both school and non-school users.

L**Land Use Bylaw**

Legislative document that regulates development and land use in Calgary and informs decisions regarding planning applications

land use diversity

An indicator used to describe the mix of different land uses within a given community or planning area, expressed in terms of the mix of land use districts.

legibility

The degree to which users of a space are able to perceive and understand its layout and function readily.

life cycle cost

The sum of all recurring and one-time (non-recurring) costs over the full life span or a specified period of a good, service, structure or system. It includes purchase price, installation cost, operating costs, maintenance and upgrade costs and remaining (residual or salvage) value at the end of ownership or of its useful life.

Light Rail Transit (LRT)

Electrically-powered rail cars, operating in sets of three to five cars per train on protected rights-of-way, adjacent to or in the medians of roadways or rail rights-of-way. Generally at grade, with some sections operating in mixed traffic and/or tunnels or on elevated bridge structures.

linkages

Linear systems that connect places and built form. Linkages allow for the movement of people and goods within the urban fabric.

local area plan

Plans that align with the Municipal Government Act regulations and are usually prepared at a community level. Examples include Area Redevelopment Plans and Area Structure Plans.

logistics

The management of the flow of goods, information and other resources, including energy and people, between the point of origin and the point of consumption in order to meet the requirements of consumers.

low impact development (LID)

An approach to land development that uses various land planning and design practices and technologies to simultaneously conserve and protect natural resource systems and reduce infrastructure costs.

M**Master Drainage Plan**

A stormwater drainage plan prepared for a large drainage area, usually serviced by one or more outfalls.

metric

A standard measure to assess performance in a particular area.

mixed-use development

The development of land, a building or a structure with two or more different uses, such as residential, office and retail. Mixed-use can occur vertically within a building, or horizontally on a site.

mode split or modal split

The proportion of total person trips using each of the various modes of transportation. The proportion using any one mode is its modal share.

N

native biodiversity

Species of flora and fauna that are indigenous to a specific area.

Natural area

Open space containing unusual or representative biological, physical or historical components. It either retained or has had re-established a natural character, although it need not to be completely undisturbed. (Natural Areas Management Plan)

Natural Assets

Are components of the environment that provide useful services, such as biological assets (produced or wild), and land and water areas and their ecosystems. They are a subsection of Natural Infrastructure and include wetlands, forests, parks, lakes, rivers, creeks, fields, soil, trees and river banks.

Natural Environment Park

A City-owned park where the primary role is the protection of an undisturbed or relatively undisturbed area of land or water, or both, and which has existing characteristics of a natural/native plant or animal community and/or portions of a natural ecological and geographic system. Examples include wetlands, escarpments, riparian corridors, natural grasslands and woodlots. A relatively undisturbed Natural Environment Park would either retain or have re-established a natural character, although it need not be completely undisturbed.

natural infrastructure

An interconnected network of natural green and engineered green elements applicable at multiple scales in the land use and mobility framework. Natural green elements include the conservation and integration of traditional green elements such as trees, wetlands, riparian areas and parks. Engineered green elements include systems and technologies designed to mimic ecological functions or to reduce impacts on ecological systems. Examples include green alleys, green buildings and green roadways and bridges.”

Neighbourhood Boulevard

These streets form the backbone of Neighbourhood Main Streets and Activity Centres. Pedestrians are given the highest priority on these streets, which are fully integrated with adjacent land uses and provide the highest level of connectivity of all street types. Similar to Urban Boulevards, high quality urban design and natural infrastructure strategies are incorporated into Neighbourhood Boulevards.

O

objective

An expression of a desired outcome or more specific way to achieve a goal.

Open Space

Open space in its broadest sense includes all land and water areas, either publicly or offering public access, that are not covered by structures. Open space includes current and potential future parks, pathways, roadway greens, land for parks and recreation facilities, golf courses, cemeteries, and other alternative use of green space.

Open space network

Comprises current and future land and water areas offering public access. These areas may include features such as wetlands, sports fields, grasslands, plazas, cemeteries, neighbourhood parks, utility corridors and stormwater management facilities. The network is composed of three open space categories: Recreational Open Space (ROS), Environmental Open Space (EOS) and Alternative Use Open Space (AUOS).

Outline Plan / Land Use Amendment Application

Detailed planning and design of new communities, or the redevelopment of large areas of existing communities, is done through the outline plan and subdivision process. This involves design details such as the preservation of environmental areas, open space locations and reserve dedications, development patterns, land use mixes and local street networks.

P**Park**

A specific – use open space that is managed to provide opportunities for recreation, education, cultural or aesthetic use. (Open Space Plan) park and ride lots

park and ride lots

Parking lots located at LRT stations or bus stops that allow automobile users to park their private vehicles, access and transfer to and from public transportation service in a convenient manner.

parkway

A street that focuses on integration with natural areas. Natural vegetation and new forms of stormwater management would be integrated with the street. Adjacent land uses would include large natural parks, waterways or special public institutions.

pedestrian-oriented or pedestrian-friendly

An environment designed to make travel on foot and/or by assisted mobility device, safe, convenient, attractive and accessible for all ages and abilities. Considerations include directness of the route, interest along the route, safety, street activity, separation of pedestrians and traffic, street furniture, surface material, sidewalk width, prevailing wind direction, intersection treatment, curb cuts, ramps and landscaping.

pedestrian-scale/human-scale

Refers to the scale (height/proportions) and comfort level that the street level and lower stories of a building provide for pedestrians as they walk alongside a building or buildings.

performance indicator

See “indicator”.

performance measurement

See “metric”.

Planned Greenfield

Lands subject to an approved Area Structure Plan and located in the Greenfield Area.

policy

A deliberate statement or plan to achieve an objective. Policies are instructive, directional and positive, but not limited to a single course of action when some other course could achieve the same result.

Primary Cycling Network

A network of on-street cycling facilities, pathways and cycle tracks that connects major destinations such as Activity Centres, mixed-use Main Streets and major institutions.

Primary Transit Network

A permanent network of high-frequency transit services, regardless of mode, that operates every 10 minutes or better, 15 hours a day, seven days a week.

primary transit threshold

A minimum intensity of people or jobs per gross developable hectare that is required within walking distance of a transit station or stop to support service levels of the Primary Transit Network.

prominent sites

Sites which by their location and relationship to the urban and geographical form have a strong visual impact. Prominent sites include those that terminate a street, are on a street corner, frame or adjoin a public park or open space or are located on a ridgeline or other highly visible location.

Public Plaza

A Community amenity that serves a variety of users, including building tenants and visitors and members of the public. This space type may function as a pedestrian site arrival point, home for public art, setting for recreation and relaxation and an inconspicuous security feature for high-profile buildings. Plazas are a beneficial feature of any lively streetscape.

public realm

The space between and within buildings that are publicly accessible, including streets, squares, parks and open spaces. These areas and settings support or facilitate public life and social interaction.

public utility

Areas that provide space for large scale public utilities such as landfills and water treatment facilities.

R

Recreational Open Space

Part of the Open Space Network; lands that are acquired or dedicated to provide areas for public recreation, such as but not limited to, sports fields, neighbourhood parks and cemeteries.

Regional Pathway

A city-wide linear network that facilitates non-motorized movements for recreation and transportation purposes. The spine of the system parallels the major physical features of the river valleys park system, including waterways, escarpments and ravines. It connects communities by linking major parks, recreation facilities and natural features. The regional pathway system may also link other major community facilities such as schools, community centres and commercial areas. The regional pathway is hard-surfaced, typically asphalt and located off-street. It is a multi-use facility and no one user or type of user is to be given elevated status.

redevelopment

The creation of new units, uses or lots on previously developed land in existing communities.

residential diversity

An indicator used to describe the mix of residential types in an area, expressed in terms of the mix by residential land use district area, or by mix of housing unit types.

resilience

The capacity of individuals, communities, institutions, businesses, and systems to adapt and thrive despite chronic stresses (e.g. water shortages) and acute shocks they experience (e.g. floods).

retail ready

Retail ready buildings have appropriate floor heights, mechanical systems and other needs to accommodate retail uses in the future, while still allowing for non-retail uses at the time of application.

right-of-way (ROW)

Publicly-owned land containing roads and streets and/ or utilities.

riparian areas

Riparian areas are those areas where the plants and soils are strongly influenced by the presence of water. They are transitional lands between aquatic ecosystems (wetlands, rivers, streams or lakes) and terrestrial ecosystems.

riparian corridor

A riparian corridor is the interface between land and a stream.

road

Roadways that are designed to move large volumes of vehicular traffic (private vehicles, commercial vehicles and occasionally transit) at higher speeds over long distances.

roadway

A generic term that encompasses all types of roads and streets.

Road and Street Palette

A functional classification system that differentiates between traditional Skeletal Roads, which primarily serve long-distance trips and do not interact with adjacent land uses, and Streets, which serve a broader range of transportation modes and do interact with adjacent land uses.

S

secondary indicator

A potentially more detailed or finely focused indicator, several of which, when combined, may support a core indicator.

sense of place

A strong identity and character that is felt by local inhabitants and visitors. Factors that help to create a “strong sense of place” include natural and cultural features, built form and architecture, mobility to and within the place and the people who frequent that place. Areas with a good sense of place often have elements that are appealing to the five senses (sight, smell, touch, taste, sound) and generally encourage people to linger longer and enjoy the atmosphere.

Skeletal Road

Skeletal Roads have an emphasis on moving vehicular traffic over long distances. They typically operate at high speeds and have little direct interaction with adjacent land uses. Ideally, they should form a skeletal grid across the city with approximately three to five kilometer spacing.

social inclusion

Actions to assist all individuals to participate in community and society and to encourage the contribution of all persons to social and cultural life.

stream corridor

Generally consists of the stream channel, floodplain, and transitional upland fringe

street

Roadways that are designed to accommodate all modes of transportation (to varying degrees depending on the specific type of street). They also contribute to sense of place, and typically provide more streetscape elements than roads.

streetcars

Urban rail vehicles operating at low speeds (e.g., 10 to 25 kph) in mixed traffic, with closely spaced stops (e.g., every 200 metres).

Street-Oriented

Design that supports orienting building frontages and primary entranceways towards the street rather than internal to a site.

streetscape

All the elements that make up the physical environment of a street and define its character. This includes paving, trees and vegetation, lighting, building type, style setback, walking, wheeling and transit amenities, street furniture, etc.

sustainability

Meeting the needs of the present without compromising the ability of future generations to meet their own needs. It includes environmental, economic and social sustainability. Sustainability is defined by the 11 Sustainability Principles for Land Use and Mobility, approved by Calgary City Council on Jan. 8, 2007.

T**target**

A desired performance outcome for an indicator over a specified time period.

Transit Hub

A place of connectivity where different modes of transportation (walking, cycling, bus and rail transit) come together seamlessly and where there is an attractive, intense and diverse concentration of housing, employment, shopping and other amenities around a major transit station.

Transit-Oriented Development (TOD)

A compact, mixed-use community within walking distance of a transit stop, that mixes residential, retail, office, open space and public uses in a way that makes it convenient to travel on foot or by public transportation instead of by car.

transit-oriented, transit-friendly or transit-supportive

The elements of urban form and design that make transit more accessible and efficient. These range from land use elements, (e.g., locating higher intensity housing and commercial uses along transit routes) to design (e.g., street layout that allows efficient bus routing). It also encompasses pedestrian-friendly features, as most transit riders begin and end their rides as pedestrians.

transit priority measures

Strategies that improve transit operating speeds and transit travel time reliability in mixed traffic, such as traffic signal priority or queue jumps.

Transit Plaza

An area developed to serve as a public transportation centre, including onsite driveways, walkways, benches, bus shelters, and landscape areas.

U

universal design

Universal design is the design of products, building features and environments to be usable by all people, to the greatest extent possible, without the need for adaption or specialized design. It is the integration of usability and accessibility methods that enable public interaction.

Urban Boulevard

A street type that forms the backbone of Urban Main Streets and Activity Centres. It gives the highest priority to walking, cycling and transit but accommodates reasonably high volumes of vehicular traffic. Urban Boulevards are fully integrated with adjacent land uses and provide high levels of connectivity to surrounding communities and destinations. High quality urban design and natural infrastructure are also critical components of Urban Boulevards.

urban forest

All the trees and associated vegetative understory in the city, including trees and shrubs intentionally planted, naturally occurring or accidentally seeded within the city limits.

W

walkable

See “pedestrian-oriented.”

Water Body

Any location where water flows or is present, whether the flow or the presence of water is continuous, intermittent or occurs only during a flood, and includes but is not limited to wetlands and aquifers.

watershed

Watersheds include groundwater, springs, wetlands, ponds, streams and lakes as well as all land that drains into these linked aquatic systems. Watersheds reflect both the natural characteristics of their geography and the impacts of human activities within them.

wayfinding

A term used to describe how people respond to the built environment to orient themselves. Elements that contribute to wayfinding include reference points such as signage, natural areas or parks, landmark buildings, bridges, distinctive lighting, public art, etc.

wetlands

A (Calgary) wetland is a waterbody and its bed and shores, that is naturally occurring or disturbed and is located within the Foothills Fescue and Foothills Parkland Natural Regions within the city of Calgary (as per the Wetland Conservation Plan).

wheeling

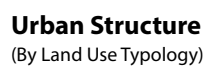
A person travelling by bike, skateboard, in-line skates, kick-scooter, e-scooter, or other similar form of mobility device.

Part 7 Maps





Urban Structure



 Greater Downtown
 Major Activity Centre
 Community Activity Centre

Urban Main Street

Neighbourhood Main Street

 Inner City
 Established

Planned Greenfield with
Area Structure Plan (ASP)

Future Greenfield

Industrial - Employee Intensive
Standard Industrial

 Public Utility

 Balanced Growth Boundary

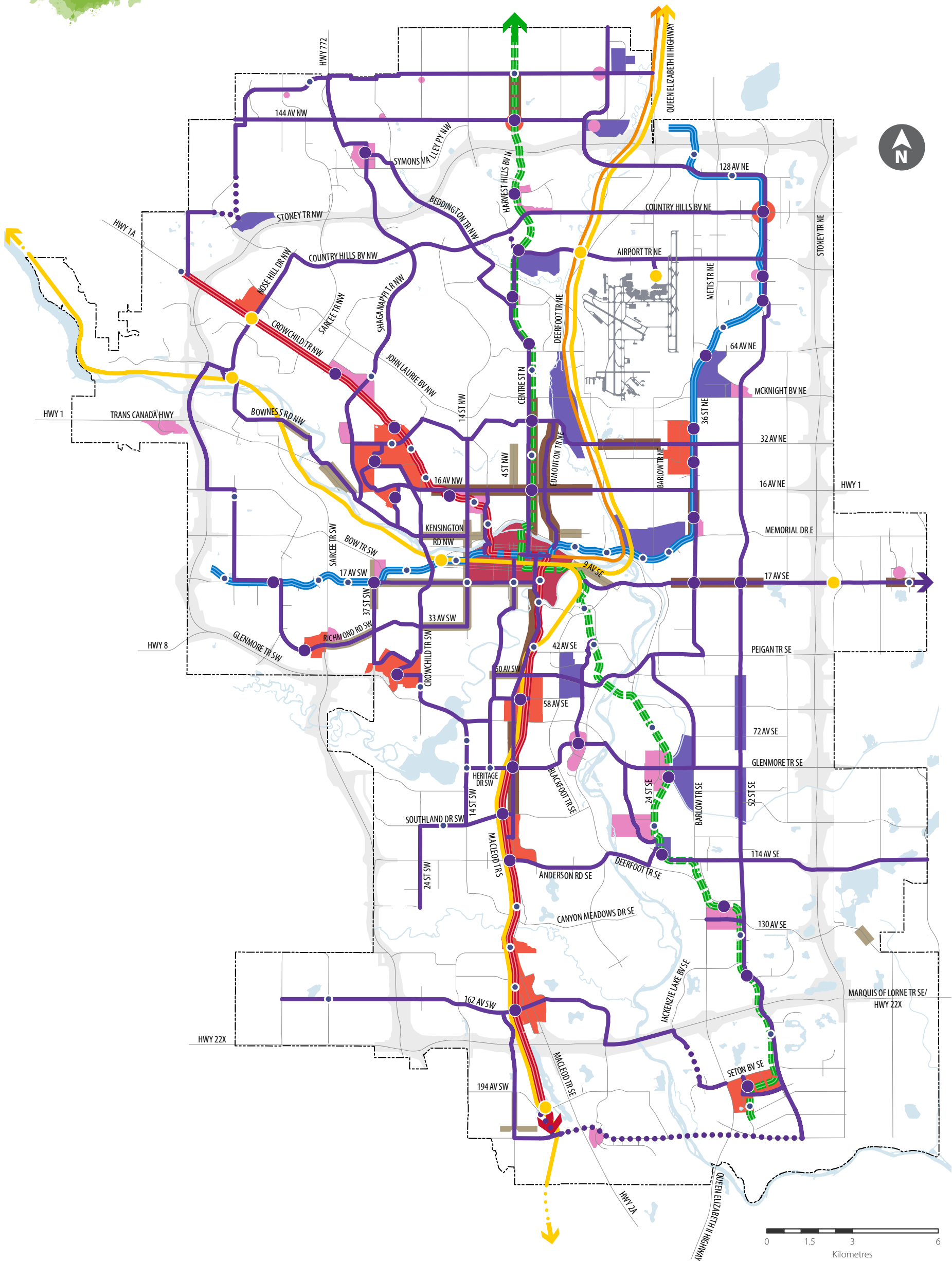
 University

Transportation/Utility Corridor

----- City Limits

2

Primary Transit Network



Legend

Primary Transit Network

- (Frequent, Fast, Reliable, Connected)
<10 min. Frequency, 15 hours/day, 7 days/week>
- Primary Transit Network (mode to be determined based on corridor development)
- Primary Transit Network (dependent on supportive land use)
- Connection to Route in Region

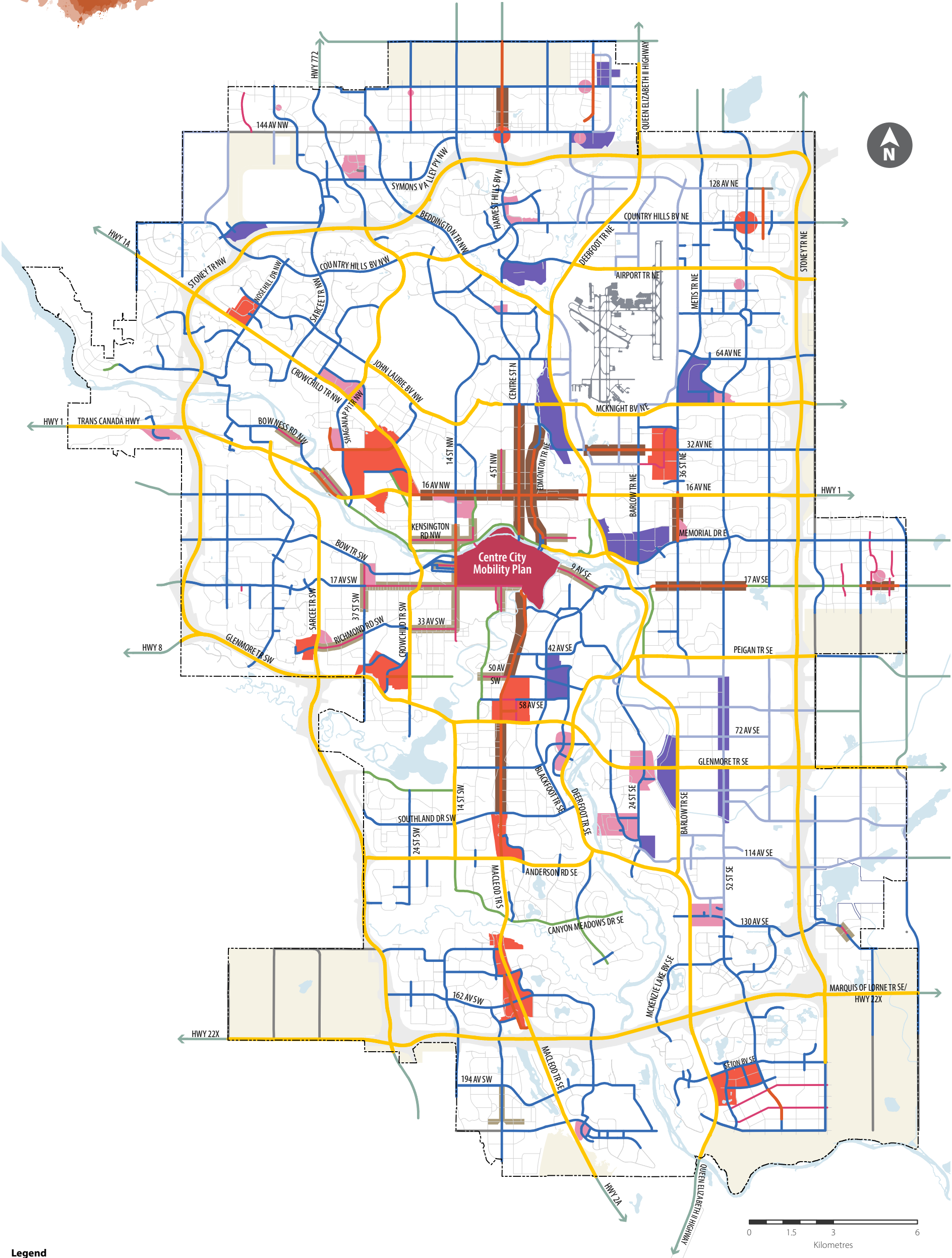
- Regional Commuter Rail Corridor
- High Speed Rail Corridor
Calgary - Edmonton
- Primary Transit Hub
- Regional/ Inter City Gateway Hub
- Transit Centres

- Red Line LRT
- Blue Line LRT
- Downtown LRT Line
- Future Green Line LRT
- Transportation/Utility Corridor
- City Limits

- #### Urban Structure
- Greater Downtown
 - Major Activity Centre
 - Community Activity Centre
 - Urban Main Street
 - Neighbourhood Main Street
 - Industrial - Employee Intensive

3

Road and Street Network



Legend

Roads and Street Network

- Skeletal Road
- Arterial Street
- Urban Boulevard
- Industrial Arterial
- Neighbourhood Boulevard
- Parkway

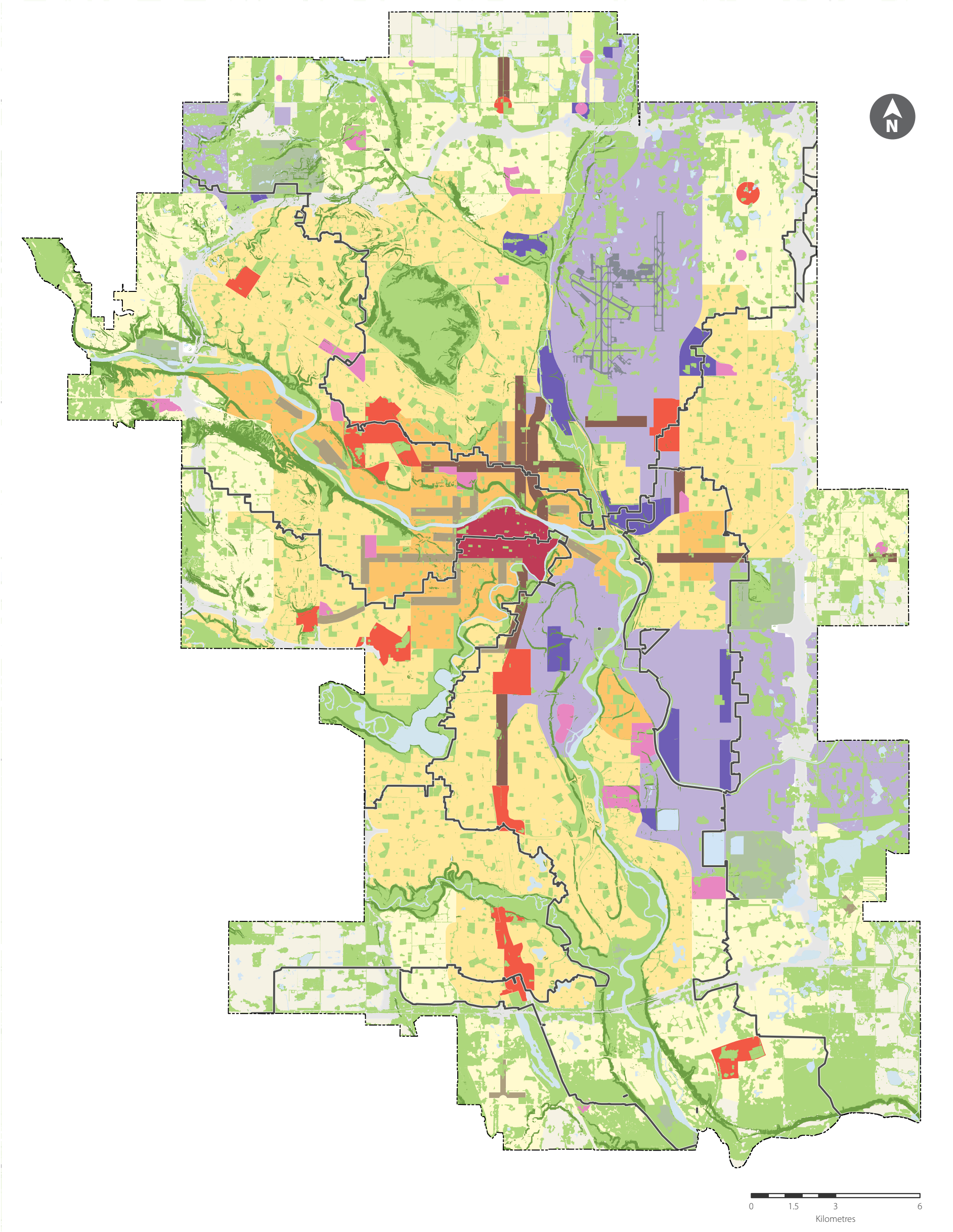
- Roadway within City limits
(To be classified through future local area plans)
- Roadway outside City limits
- Connection to Route in Region
- Collector Roads
- Transportation/Utility Corridor
- City Limits

Urban Structure

- Greater Downtown
- Major Activity Centre
- Community Activity Centre
- Urban Main Street
- Neighbourhood Main Street
- Future Greenfield
- Industrial - Employee Intensive



Natural Areas and Open Spaces



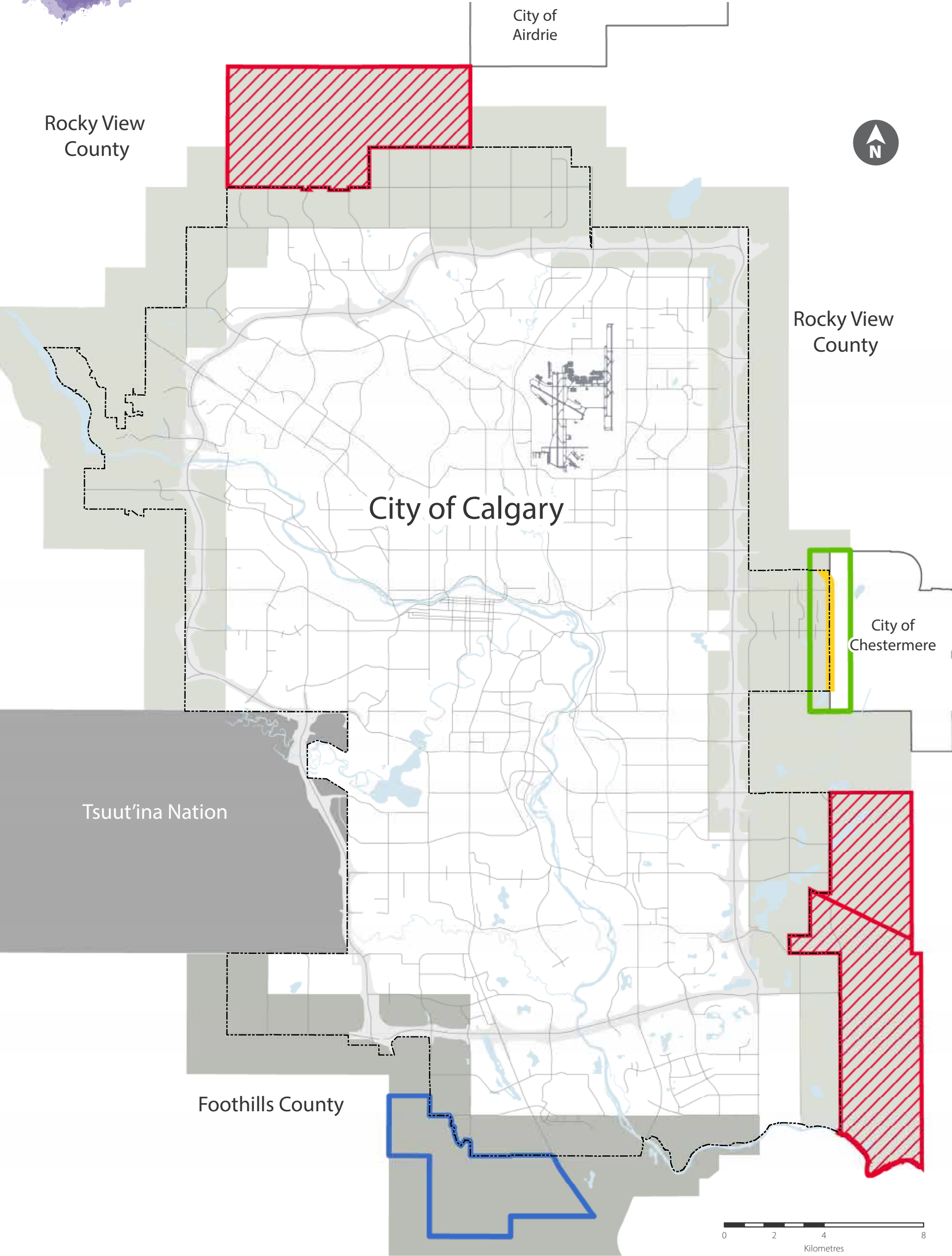
Legend

- Natural Areas and Open Spaces
- Watersheds
- Transportation/Utility Corridor
- City Limits

Underlying tones refer to Typologies (Urban Structure map)



Jurisdictional Areas

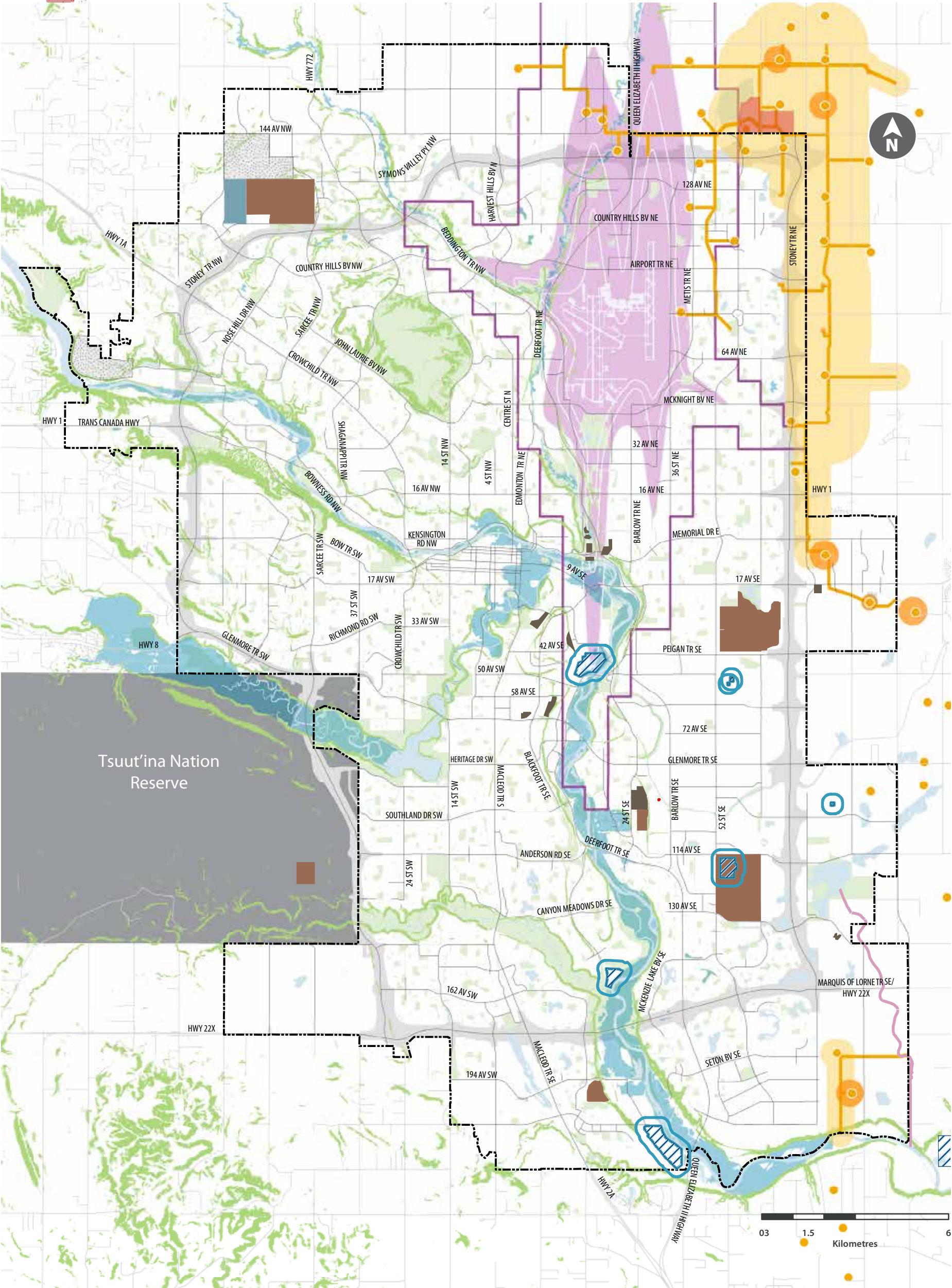


Legend

- City Limits
- Transportation/Utility Corridor
- Identified City of Calgary Long-Term Growth Areas
- Calgary Growth Area
- Interface Area between Chestermere and Calgary
- Intermunicipal Development Area Foothills
- Intermunicipal Development Area Rocky View County
- Intermunicipal Development Area Chestermere
- Tsuut'ina Nation

6

Major Development Influences



Legend

- | | | | |
|--|-------------------------------|---|---------------------------------|
| Calgary International Airport/ 30 NEF | Waste Water Treatment Plant | Sour Gas Lines | Tsuut'ina Nation Reserve |
| Airport Vicinity Protection Area Boundary | Floodway/ Flood fringe | Sour Gas Line Buffer | Transportation/Utility Corridor |
| Operating Landfill Site | Major Parks | Sour Gas Facilities (pipelines & wells) | City Limits |
| Non-Operating Landfill Site | Slopes >= 15% | Sour Gas Setbacks (residential) | |
| Current and Potential Future Gravel Operations | Calgary Correctional Facility | Gas Plant and Setback | |