

# Urban Sustainability Plan for Calgary

**June 2006** 



# **Shaping our city's future**

## What are your hopes and dreams for Calgary's future?

By answering this and four other simple questions, Calgarians began the process of shaping their city's future. imagineCALGARY was an 18 month project which launched in January 2005 with the goal of producing a long range urban sustainability plan for Calgary. Over 18,000 Calgarians added their voice to imagineCALGARY, making this the largest community visioning process of its kind anywhere in the world!

imagineCALGARY was a City led — community owned initiative. The City of Calgary provided project staff and resources to support over 150 active and committed stakeholders who were responsible for developing the plan.

The plan includes a long range vision and goals which reflect the diversity of aspirations and interests of the community for the future. It also includes a series of targets which provide useful reference points for organizations and individuals to determine what action can be taken to reach the goals.

imagineCALGARY took an innovative approach to developing the plan. The city was viewed as a whole system, of which all the parts are inter-related. People, buildings, commerce, roads, businesses, skills, government structures, incomes, plants and animals, history, churches, schools and countless other elements combine to make up our community. imagineCALGARY hosted a discussion about the whole community with the aim of making the whole greater than the sum of its parts.

There is no better time for long term sustainability planning in Calgary. As the city continues to prosper and face unprecedented levels of growth, a plan that expresses the aspirations of the community is critical.

Now, with a roadmap to get us to there, citizens, corporations, community agencies and the civic government of Calgary are working together to shape the city's future.

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# **Our vision for Calgary**

For thousands of years, people have met at the confluence of two vital rivers to imagine and realize their futures. Together, we have built a city of energy, born of a powerful convergence of people, ideas and place. Together, we continue to imagine Calgary, making a community where

- We are each connected to one another. Our diverse skills and heritage interweave to create a resilient communal fabric, while our collective spirit generates opportunity, prosperity and choice for us all.
- We are each connected to our places. We treasure and protect our natural environment.
   Magnificent mountain vistas and boundless prairie skies inspire each of us to build spaces worthy of their surroundings.
- We are each connected to our communities. Whether social, cultural or physical, these communities are mixed, safe and just. They welcome meaningful participation from everyone and people move freely between them.
- We are each connected beyond our boundaries. We understand our impacts upon and responsibilities to others. Our talent and caring, combined with a truly Canadian sense of citizenship, make positive change across Alberta, throughout Canada and around the world.

We can make it happen!

With purpose, drive and passion, Calgary will be a model city, one that looks after the needs of today's citizens and those to come. We make imagination real; it's the Calgary way. It's what we've always done and will always do.

Calgary: a great place to make a living, a great place to make a life.

# **Built environment and infrastructure system 100-year goals**

## **Communications**

Calgarians are connected to each other and the rest of the world. Our communication systems are reliable and support the engagement of all people, information dissemination, social relationships, entertainment and economic activity.

## **Energy**

The energy used by Calgarians comes from a diverse portfolio of resources that are renewable, have a low impact on the environment and contribute to the positive development of our society. Calgarians use energy in an efficient and responsible manner.

#### Food

Food sources derive from sustainable practices that provide us with a high quality, healthy, affordable and secure supply of food.

## **Goods and services**

Calgarians access a wide variety of locally produced goods and services and consume these in a responsible manner. We support and consume responsibly produced goods and services from around the world.

## Housing

Calgarians have a choice of housing options that are affordable, accessible and eco-efficient and that support a variety of lifestyles. Housing reflects local environmental conditions and resources and is adaptable over time to reflect changes in technology, climate and demographics.

## **Transportation**

Calgary is built at a human scale with a transportation system that serves the access and mobility needs of all people through a choice of convenient, comfortable, affordable and efficient transportation modes. The transportation system connects people and goods locally, regionally and globally. Transportation needs are met safely and in a manner supportive of human and ecosystem health.

## Waste management

Calgarians work toward zero waste by using materials responsibly and minimizing consumption. We reuse, recycle and reduce the materials we consume. Wastes created are safely managed without harm to other species or systems.

# **Economic system 100-year goals**

## **Economic well-being**

Calgary is a city with a vibrant, resilient, environmentally sound and sustainable economy that fosters opportunity for individual economic well-being.

## Meaningful work

Through their work, all Calgarians have the opportunity and working conditions to contribute to their own and their community's economic and social well-being in a personally meaningful way.

## **Sufficient income**

All Calgarians have sufficient income and other resources to meet their current and future needs and to provide for healthy lives.

## **Governance system 100-year goals**

#### Access

Calgary is a city in which individuals have access to all public information when they need it. They can and do participate in decisions that affect their well-being. Decision-making is an inclusive process in which broad-based support is actively sought and contributes to continual improvement in people's lives. Factors such as language, age, race, culture, gender, sexual orientation, time, finances, ability, knowledge and health are not barriers to public decision-making.

## **Conflict resolution**

Calgary is a city in which conflicts are resolved peacefully and individuals' rights and responsibilities are accepted. Conflict resolution is seen as an opportunity to improve the fabric of the community — to ensure that all voices are heard in the resolution process. The community and local governments support mutual understanding and respect, harmony and co-operation among all peoples.

## Equity

Calgary maintains and champions each person's right to a sustainable life and a sustainable environment in which to live. Diversity is valued and all voices are considered in the decision-making process. Factors such as language, age, race, culture, gender, sexual orientation, time, finances, ability, knowledge and health are not barriers to publicly provided goods and services. Each decision results in the most effective and fair method of achieving mutually beneficial objectives. All decision-making enhances the value, vitality and sustainability of human and natural systems in both the present and future.

## **Self-determination**

Calgary is a partner in creating and managing a sustainable region. We are empowered and actively engaged in our local community and beyond. The personal and collective freedoms that Calgarians enjoy are balanced by their responsibilities to each other and the world. Opportunities for improving quality of life are numerous and accessible, creating an environment in which Calgarians are able to decide their futures.

# Natural environment system 100-year goals

## Air

Calgarians value the quality of clean air, recognizing it as the most basic need for survival. Treasuring clear, bright skies, we steward our airshed and responsibly address climate change. Economic and social activities protect all living things by ensuring healthy air quality indoors and out.

## Land and soil

Fertile soil is vital to maintaining life. Calgarians are responsible stewards of land, maintaining the life-supporting processes integral to healthy, intact ecosystems. We use and share our land wisely and equitably.

## **Plants and animals**

Calgary is rich with intact ecosystems. We protect and restore our natural heritage, valuing native biodiversity as the foundation of life. Our built environment is integrated into and respects the natural environment we inhabit.

## Water

Water is recognized as necessary for life. Calgarians value this precious resource and guarantee equitable access for all living things. We are stewards of water, protecting its quality and maintaining the integrity of the hydrologic cycle. Our water supply system is sufficiently secure, flexible and adaptable to changing conditions and circumstances.

## Social system 100-year goals

## Aesthetic enjoyment

All aspects of life in Calgary provide opportunities for aesthetic enjoyment. We recognize and protect our natural and built environments for their beauty. Our traditions, values and distinctive characteristics are used to enhance physical and human resources. Opportunities for aesthetic enjoyment are accessible to all.

## **Creative self-expression**

Creative self-expression is cultivated and nurtured as part of everyone's life. We renew ourselves, using our unique gifts and talents, through creative self-expression. There is a wide range of opportunities for creative expression.

#### Health and wellness

Calgary is known for its attention to a healthy lifestyle. We sustain physical, mental and social well-being. In circumstances in which health is compromised, we can easily access knowledge and services. Ecological, social and economic interconnectedness is reflected in our support for well-being.

## Lifelong learning

We value opportunities for continuous personal growth and development. We are empowered by learning and, as a result, can make substantial improvements to our own and others' lives. The community is a learning ground for all.

## Meaning, purpose and connectedness

We create individual meaning, purpose and connectedness in our lives for our own benefit and that of others. We respect and embrace the ways in which others choose to create meaning, purpose and connectedness.

## Peace, safety and security

We live in peace. We are safe in our homes and throughout our city. We believe and behave in ways that reflect our respect and consideration for all life forms. We have adequate income and access to resources. We live with each other in unity.

## Recreation

We are continually renewed by participating in activities that refresh our bodies and minds. Active lifestyles contribute to our abilities to restore and enhance our senses of personal and community well-being.

## Relationships

We participate in mutually supportive and generous relationships. Interactions are based on mutual respect: with oneself, other persons, other cultures, other beings and the larger whole of which all are a part. These healthy relationships help people understand their human, cultural, historic and natural systems.

## Self-esteem

We are confident and satisfied. We know we are valued and respected. We collectively understand and act upon our inner potential so we can achieve sustainable development.

## Sense of community

We have a sense of belonging, friendship and identity within the context of our groups and neighbourhoods. We honour and celebrate diversity. We act as collective stewards of our values, traditions, institutions and the natural environment.

# **Built environment and infrastructure system targets**

## **Communications**

- T1 By 2036, 75 per cent of Calgarians report that they are informed.
- T2 By 2036, all Calgarians have easy access to current forms of communications technology and resources.
- T3 By 2036, Calgarians increase their use of communications technology to support sustainability.
- T4 By 2036, Calgary increases the number of facilities and spaces that encourage human interaction, and they are widely distributed throughout the city.

## **Energy**

- T1 By 2036, 30 per cent of Calgary's energy derives from low-impact renewable sources.
- T2 By 2036, all new and retrofitted communities, buildings, vehicles, equipment and processes are built to be within five per cent of the highest energy-efficient design available out of all economically competitive products, as measured on a life cycle basis.

## Food

- T1 By 2036, Calgarians support local food production.
- T2 By 2036, Calgary maintains access to reliable and quality food sources.
- T3 By 2036, 100 per cent of Calgary's food supply derives from sources that practice sustainable food production.
- T4 By 2010, 100 per cent of Calgarians have access to nutritious foods.

## **Goods and services**

- T1 By 2036, over 50 per cent of Calgary businesses adopt a protocol for sustainable practices and report on it regularly.
- T2 By 2016, Calgary has a strong and diverse portfolio of locally based businesses.
- T3 By 2036, all Calgarians consume more responsibly.
- T4 By 2016, we are developing "complete communities" that, among other aspects, allow people to obtain daily goods and services within a reasonable walking distance from home.
- T5 By 2036, all new commercial buildings are designed to encourage the use of alternative forms of transportation (e.g. walking, cycling and transit).
- T6 By 2036, all new and retrofitted non-residential buildings are built to be within five per cent of the highest energy- and water-efficient design available out of all economically competitive products, as measured on a life cycle basis.
- T7 By 2036, all commercial buildings are accessible to people with disabilities.

## Housing

- T1 By 2016, we are developing "complete communities" that enable people to meet most of their daily needs within a reasonable walking distance from home.
- T2 By 2036, all new and retrofitted residential buildings are built to be within five per cent of the highest energy-efficient design available out of all economically competitive products, as measured on a life cycle basis.

- T3 By 2036, all Calgarians have the option of spending less than 30 per cent of their gross family incomes on housing.
- T4 By 2036, the Calgary market can meet the housing needs of those below the Low-income Cut-off (LICO).

## **Transportation**

- T1 By 2036, we reduce the annual private vehicle kilometres travelled per capita by 20 per cent.
- T2 By 2016, we increase the residential population within walking distance (600 metres) of LRT stations and major transit nodes by 100 per cent.
- T3 By 2016, we increase the number of jobs within walking distance (600 metres) of LRT stations and major transit nodes by 35 per cent.
- T4 By 2036, there is a 50 per cent reduction from 1990 levels in the pollution (greenhouse gases) associated with automobiles.
- T5 By 2036, we increase peak period transit, walking and cycling and carpool travel to downtown by 50 per cent, 40 per cent and 20 per cent respectively.
- T6 By 2036, 100 per cent of public transit services (buses, CTrains and facilities) are accessible to people with disabilities.
- T7 By 2036, transit trips per capita increase 40 per cent over 2006 levels.
- T8 By 2036, the number of on-street bikeways increases by 200 per cent, and the number of pathways by 100 per cent.
- T9 By 2036, fatal collisions per 100,000 people and injury collisions per 1,000 people decrease by 50 per cent.

## Waste management

- T1 By 2036, 85 per cent of the waste generated within Calgary is diverted from landfills.
- T2 By 2036, 75 per cent of construction industry waste materials are recovered for reuse and/or recycling.
- T3 By 2036, 85 per cent of waste materials are converted to other useful products.

# **Economic system targets**

## **Economic well-being**

- T1 By 2036, research and development intensity, both public and private, increases to five per cent of Calgary's gross domestic product.
- T2 By 2036, the number of environmentally sustainable and commercially viable value-added products and technologies produced in Calgary increases by 100 per cent.
- T3 By 2036, Calgary's non-oil-related industries grow by 50 per cent.
- T4 By 2036, Calgary is ranked as the most favourable Canadian city in which to establish businesses that support sustainability practices.
- T5 By 2036, tourist visitations and expenditures grow by 90 per cent.

T6 By 2036, alternative ways to measure economic well-being are commonly used to support sustainability principles in decision-making.

## Meaningful work

- T1 By 2036, full employment of the labour force (defined as unemployment below five per cent) is sustained.
- T2 By 2036, the high school graduation rate for individuals up to age 21 increases to 95 per cent, and 75 per cent of adults aged 21 to 25 complete a post-secondary or vocational education program.
- T3 By 2036, 95 per cent of entrants in trades-related programs complete their programs and 98 per cent of graduates are employed in their fields of study within six months of graduation.
- T4 By 2036, all adult immigrants to Calgary have the opportunity to integrate into the economy through employment or entrepreneurial activity at the same participation or success rate as other Calgarians.
- T5 By 2036, 85 per cent of employees express a high degree of job satisfaction.
- T6 By 2036, healthy seniors have the opportunity to be engaged in fulfilling work that contributes to the economy and/or the community.

## **Sufficient income**

- T1 By 2036, 95 per cent of all people living in Calgary are at or above Statistics Canada's Low-income Cut-off (LICO) rates; there is no child poverty.
- T2 By 2036, all children of low-income families who are residents of Calgary have the opportunity to complete post-secondary education or appropriate training to enable them to fully participate in the economy.

# **Governance system targets**

## Access

- T1 By 2016, 80 per cent of Calgarians report that they feel government activity is open, honest, inclusive and responsive.
- T2 By 2016, Calgary City Council establishes a participatory budgeting process.

## **Conflict resolution**

- T1 By 2036, 100 per cent of non-criminal disputes are resolved by some form of collaborative process.
- T2 By 2036, 80 per cent of non-violent criminal offences are handled in the community in which the victim lives.
- T3 By 2020, 100 per cent of regulatory offences are enforced by the responsible governments, rather than through court processes.
- T4 By 2036, 100 per cent of personal conflicts among students, parents, teachers, administrators, support staff and elected representatives in the education system are resolved through collaborative means.

## **Equity**

- T1 By 2021, the makeup of elected and appointed bodies reflects the diversity of the community.
- T2 By 2010, all public institutions and organizations implement sustainability principles (e.g. Melbourne Principles) in decision-making and reporting, using tools such as triple bottom line.

- T3 By 2020, all public institutions and systems create and implement an urban Aboriginal policy that recognizes the detrimental colonial history experienced by First Nations, Metis and Inuit people; reduces barriers to public participation and governance; and supports economic, social and political advancement.
- T4 By 2036, racism and discrimination is dealt with by having public and private sector institutions and organizations throughout the city introduce meaningful and effective policies and processes and measurable outcomes.

## **Self-determination**

- T1 By 2036, there is a 75 per cent turnout in municipal elections.
- T2 By 2036, there is a citizen-to-municipal-politician ratio of 55,000:1.
- T3 By 2036, The City of Calgary reduces its dependence on property taxes to no more than 25 per cent of revenue.
- T4 By 2036, all general revenues are based on the principle of progressive taxation.
- T5 By 2036, all publicly provided goods and services are affordable, accessible and priced in accordance with their public benefits.
- T6 By 2010, The City of Calgary has co-operative, supportive and mutually beneficial working relationships with governments in the region.
- T7 By 2016, governance is restructured to allow governments to create or reallocate authority so that effective decisions are made at the geographical scale that matches the processes involved.
- T8 By 2008, beginning with the approval of the 100-year vision, all government decisions protect individual freedoms, ensure that people meet their obligations and improve quality of life.
- T9 By 2008, and every year thereafter, groups/organizations/government report on how they have considered and adopted the imagineCALGARY targets and strategies that are relevant to them and in which they have been identified as having a role.

# **Natural environment system targets**

## Air

- T1 By 2036, energy consumption is reduced by 30 per cent based on 1999 use.
- T2 By 2036, the use of low-impact renewable energy increases by 30 per cent as a percentage of total energy use.
- T3 By 2012, total community greenhouse gas emissions are reduced by six per cent from 1990 levels; by 2036, they're reduced by 50 per cent from 1990 levels and criteria air contaminants are also significantly reduced.
- T4 By 2036, indoor air contaminants are reduced to zero per cent.
- T5 By 2036, Calgary's ecological footprint decreases to below the 2001 Canadian average of 7.25 hectares per capita.

#### Land and soil

- T1 By 2036, land use efficiency increases by at least 30 per cent, as measured by public transit threshold and increased density.
- T2 By 2036, sustainable urban food production increases to five per cent.
- T3 By 2036, the consumption of urban- and regionally produced food by Calgarians increases to 30 per cent.
- T4 By 2036, there is zero per cent new soil contamination.
- T5 By 2036, at least 30 per cent of existing contaminated sites are remediated.
- T6 By 2036, Calgary's ecological footprint decreases to below the 2001 Canadian average of 7.25 hectares per capita.

## Plants and animals

- T1 By 2036, native biological diversity increases to healthy levels, as measured through Habitat Suitability Index indices and local key indicator species.
- T2 By 2036, the number and/or size of protected or restored habitats increases to a state of health and functionality.

#### Water

- T1 By 2036, per capita water consumption is reduced by 40 per cent.
- T2 By 2036, positive rates of flow in the Bow River Basin are maintained to keep aquatic ecosystems at these levels.
- T3 By 2036, effective impervious areas are reduced equal to or below 30 per cent to restore natural hydrograph and become less susceptible to flooding.
- T4 By 2036, watershed health as measured by loss of wetlands, water quality, non-compliance with pollution standards, in-stream flow and groundwater levels improves.
- T5 By 2036, Calgary's ecological footprint decreases to below the 2001 Canadian average of 7.25 hectares per capita.

# **Social system targets**

## **Aesthetic enjoyment**

- T1 By 2036, 90 per cent of citizens report that Calgary is a beautiful city.
- T2 By 2036, 95 per cent of Calgarians report that they have a range of opportunities for the aesthetic enjoyment of nature, arts and culture.

## **Creative self-expression**

- T1 By 2016, 90 per cent of Calgarians report that they have opportunities to express their unique gifts and talents.
- T2 By 2021, 90 per cent of Calgarians report that Calgary is a city that promotes creative freedom.
- T3 By 2026, 90 per cent of Calgarians report that participation in creative activities is an important part of their lives.

## **Health and wellness**

- T1 By 2036, all Calgarians live in a safe and clean natural environment, as measured by the quality of its air, water, soil and food sources, plus by the lack of exposure to toxic waste.
- T2 By 2036, 95 per cent of Calgarians enjoy positive and supportive living conditions, as reflected by adequate income; high rates of employment; adequate food and appropriate nutrition; appropriate, adequate and affordable housing; and high levels of personal safety.
- T3 By 2036, 95 per cent of Calgarians receive sufficient information and supports to maintain and improve their health and foster their independence at all ages and stages of life.
- T4 By 2036, 100 per cent of Calgarians can obtain quality, affordable, timely and appropriate health information and services, as measured by satisfaction levels.
- T5 By 2036, the incidences of preventable illness, injury and premature death are significantly reduced.
- T6 By 2036, 85 per cent of Calgarians, in all age groups, maintain excellent or very good mental health.

## Lifelong learning

- T1 By 2016, by the age of six years, 95 per cent of Calgary children exhibit school readiness, as reflected by physical well-being and appropriate motor development; emotional health and a positive approach to new experiences; age-appropriate social knowledge and competence; age-appropriate language skills; and age-appropriate general knowledge and cognitive skills.
- T2 By 2016, 95 per cent of Calgary students succeed in elementary and junior high school, as measured by standardized achievement testing in grades three, six and nine and alternate education metrics.
- T3 By 2036, 95 per cent of Calgary youth complete high school by age 21 and complete some form of post-secondary education or training by age 25.
- T4 By 2016, 100 per cent of adult Calgarians have access to a full range of formal and informal quality learning opportunities and resource options that allow them to achieve their full potentials in life.
- T5 By 2016, 95 per cent of adult Calgarians have the minimum levels of literacy and numeracy as defined by the International Adult Literacy and Skills Survey required to fully participate in the economy and all aspects of life in Calgary.

## Meaning, purpose and connectedness

- T1 By 2036, 90 per cent of citizens agree that "Calgary is a city with soul," which is defined as citizens having meaning and purpose in life and experiencing ongoing feelings of connectedness with some form of human, historic or natural system.
- T2 By 2036, 100 per cent of Calgarians report that they feel respected and supported in their pursuits of meaning, purpose and connectedness, and that they extend respect and support to others who meet this need in ways different from their own.

## Peace, safety and security

- T1 By 2016, 95 per cent of Calgarians report that they feel safe walking alone in their neighbourhoods and walking alone downtown after dark.
- T2 By 2016, 95 per cent of Calgary parents report that they allow their children over six years old to play unsupervised on their own blocks.

- T3 By 2036, given that crime rates are driven primarily by the number of males in the population aged 15 to 24, the proportion of adolescents and young adults in conflict with the law decreases from 2006 levels of about one per cent to 0.01 per cent.
- T4 By 2036, the percentage of Calgary women who have been assaulted by their intimate partners at least once in the past five years is reduced from approximately 11 per cent to three per cent.

#### Recreation

- T1 By 2036, 90 per cent of people living in Calgary report that they participate in active lifestyles that include informal and structured recreational opportunities.
- T2 By 2036, 100 per cent of Calgarians report that they can access a range of high-quality recreational experiences, regardless of gender, socio-economic status, age, ability, religion, race, sexual orientation or heritage.

## Relationships

T1 By 2036, 95 per cent of Calgarians of every age and ability report that they value and have mutually supportive relationships in several settings, such as at home, school and work and in the community.

## Self-esteem

- T1 By 2036, 95 per cent of children aged two to five years exhibit high levels of emotional well-being and age-appropriate levels of attention span and impulse control, as measured by the Ages and Stages Questionnaire.
- T2 By 2036, 95 per cent of children aged six to 11 years report a high sense of self-worth, and 80 per cent of Calgary adolescents, both male and female, describe themselves as productive or potentially productive members of society, able to change themselves or their lives through their own actions, having the personal power to effect change in the world and being optimistic about their futures.

## Sense of community

- T1 By 2010, 90 per cent of Calgarians agree that there is a strong sense of community in Calgary, and at least 80 per cent of Calgarians report high levels of satisfaction, sense of belonging, attachment and civic pride.
- T2 By 2010, 80 per cent of citizens experience a high sense of community in their neighbourhoods and affinity-related communities, as reflected by residents' reports of neighbourhood participation and volunteering, sense of belonging, neighbourliness and reciprocity, sense of efficacy, attachment, safety and voter turnout.
- T3 By 2010, at least 75 per cent of Calgarians report that they volunteer for the benefit of others who are outside their circles of family and friends.



## **Communications**

System Built environment and infrastructure

Goal

Calgarians are connected to each other and the rest of the world. Our communication systems are reliable and support the engagement of all people, information dissemination, social relationships, entertainment and economic activity.

TARGET
By 2036, 75 per cent of Calgarians report that they are informed.

#### STRATEGY 1

## Develop communications infrastructure to support informed decision-making.

- Encourage the development of communications infrastructure to efficiently relay information to citizens (e.g. electronic messaging on roads, information posted and easily accessible on Web sites).
- Establish "just in time" information; decisions made by government are quickly and widely dispersed and inform us as to how decisions will impact us.
- Develop and communicate information about emergency warning systems that alert residents of possible hazards.

#### STRATEGY 2

## Increase the use of plain language in public communications.

• Communicate in plain language to make information accessible and understandable.

## STRATEGY 3

## Establish communications programs that cater to all Calgarians.

- Encourage public forums on significant issues facing Calgarians.
- Support communications systems and technology that can enhance local identity.
- Provide communications in multiple languages.
- Develop greater communications accessibility for diverse audiences, including those with special needs.
- Ensure there are appropriate rules to protect privacy of information.

# 2

## **TARGET**

By 2036, all Calgarians have easy access to current forms of communications technology and resources.

## STRATEGY 1

# Establish programs to provide Calgarians with the skills necessary to access current communications technology.

- Develop communications awareness programs to increase familiarity with the various technologies necessary for daily living.
- Develop education and training programs.

## STRATEGY 2

## Provide support for the provision of necessary communications technologies and resources.

- Ensure programs are designed to provide communications technology to households unable to afford them, including software and monthly communications costs, publicly funded programs for access and access in schools.
- Ensure new buildings and facilities are capable of supporting appropriate communications infrastructure and can adapt over time.
- Ensure there are community-supported and publicly accessible technologies, resources and facilities.



## **Communications**

System Built environment and infrastructure

Goal Calgarians are connected to each other and the rest of the world. Our communication

systems are reliable and support the engagement of all people, information dissemination, social relationships, entertainment and economic activity.

TARGET

By 2036, Calgarians increase their use of communications technology to support sustainability.

#### STRATEGY 1

Promote opportunities for information technology to replace or reduce the need to physically move people or goods and services.

• Foster technologies and programs that can reduce the need to drive (e.g. teleworking, teleconferencing, online shopping).

## STRATEGY 2

Ensure communications infrastructure supports the long-term health of humans and the environment.

#### STRATEGY 3

Promote information and communications technology to advance knowledge and innovation that supports long-term sustainability.

# TARGE

By 2036, Calgary increases the number of facilities and spaces that encourage human interaction, and they are widely distributed throughout the city.

## STRATEGY 1

Support the development of places for people to gather and communicate in formal and informal ways.

## STRATEGY 2

Support communications infrastructure that enhances creativity and the arts in Calgary.



## **Energy**

System

**Built environment and infrastructure** 

Goal

The energy used by Calgarians comes from a diverse portfolio of resources that are renewable, have a low-impact on the environment and contribute to the positive development of our society. Calgarians use energy in an efficient and responsible manner.

TARGET

By 2036, 30 per cent of Calgary's energy derives from low-impact renewable sources.

#### STRATEGY 1

## Support local low-impact, renewable energy generation within the Calgary area.

- •Establish energy reserves for future needs.
- Enable energy derived from renewable sources to be put on the local grid (distributed energy).
- Develop standardized regulatory and planning processes that are not overly onerous.
- Promote heat exchangers within buildings.
- Explore the use of geothermal technology for heating and cooling buildings.
- Use energy micro-production.
- Explore the use of local improvement charges to fund building renewable energy upgrades.
- Review the option of using revolving, low-interest loan funds to support the development of low-impact, renewable sources of energy.

## STRATEGY 2

## Support alternative energy derived from low-impact, renewable sources.

- Fund research and development on the use of alternative energy sources.
- Promote the commercialization of low-impact, renewable sources of energy.
- Explore financial, taxation and regulatory incentives for renewable energy.
- Ensure we have adequate transmission facilities.
- Promote green procurement policies.
- Explore options for an emission trading market.

## STRATEGY 3

# Develop education and awareness programs that provide information on low-impact, renewable sources of energy.

- Support the labelling of the energy source and environmental impacts of energy products.
- Target education and awareness campaigns to specific user groups.

## STRATEGY 4

## Support a diversity of energy sources.

- Utilize local energy expertise to become alternative energy experts.
- Develop local expertise, business incentives and education on energy diversification.
- Explore options for the land lease system used in the oil and gas sector that could be used to support wind-powered energy.
- Encourage the use of electric or hybrid transit vehicles.



## **Energy**

**System** 

**Built environment and infrastructure** 

Goal

The energy used by Calgarians comes from a diverse portfolio of resources that are renewable, have a low-impact on the environment and contribute to the positive development of our society. Calgarians use energy in an efficient and responsible manner.

2

## **TARGET**

By 2036, all new and retrofitted communities, buildings, vehicles, equipment and processes are built to be within five per cent of the highest energy-efficient design available out of all economically competitive products, as measured on a life cycle basis.

#### STRATEGY 1

# Develop education and awareness programs to support energy-efficient products and practices.

- Promote energy efficiency at trade shows.
- Include education and awareness materials as inserts in utility bill statements.
- Measure and report energy use patterns regularly.
- Promote energy efficiency labelling on products.

## STRATEGY 2

## Support initiatives to reduce the use of energy.

- Develop systems to minimize energy loss from the grid.
- Promote energy-efficient products to reduce energy consumption.
- Advance product energy efficiency standards.
- Improve traffic flow to reduce the starting and stopping of vehicles.
- Explore energy pricing mechanisms to reduce peak energy demand.
- Implement surcharges on vehicles registered within city limits that are identified as high-energy users.
- Reduce speed limits on major thoroughfares within city limits (e.g. 90 kilometres per hour on Deerfoot Trail).
- Explore changes to the taxation policy to encourage energy efficiency.
- Promote building standards to improve energy efficiency.
- Promote ride-sharing and car-sharing programs.
- Expand the Calgary Region Home Builders' Built Green program throughout the city.
- Establish an idling bylaw.
- Promote green procurement policies that encourage more energy-efficient products.

## STRATEGY 3

## Develop incentives to conserve energy.

- Explore the establishment of an escalating energy price based on the level of consumption.
- Continue programs that offer rebates for energy-efficient retrofitting.
- Provide visible electric consumption meters on buildings.
- Establish incentives for innovative practices among energy providers/distributors.
- Use smart meters that can identify the time of use of energy.
- Provide better transit service so that people are encouraged to use it.
- Encourage builders and developers to site buildings and plan land for improved solar orientation.
- Explore the use of subsidies from higher levels of government for alternative energy projects.



## **Energy**

System

**Built environment and infrastructure** 

Goal

The energy used by Calgarians comes from a diverse portfolio of resources that are renewable, have a low-impact on the environment and contribute to the positive development of our society. Calgarians use energy in an efficient and responsible manner.

## STRATEGY 4

Promote urban forms that support reduced energy consumption and the use of low-impact, renewable energy.

- Promote new infrastructure to encourage people to get around in ways other than by private vehicle.
- Provide incentives for urban forms that support reduced energy consumption.
- Promote employment centres and concentrations closer to where people live and to transit stations.
- Encourage building orientation that takes advantage of passive solar heat.
- Encourage more compact forms of development that are more energy-efficient.
- Support mixed-use neighbourhoods to reduce the need to use vehicles.

## STRATEGY 5

## Create and support infrastructure that enables energy efficiency.

- Explore the use of local improvement charges to fund energy efficiency upgrades.
- Explore financial mechanisms, such as low-interest loans, to fund infrastructure that reduces overall energy consumption.
- Provide funding for research and development concerning energy efficiency.



## Food

System

**Built environment and infrastructure** 

Goal

Food sources derive from sustainable practices that provide us with a high quality, healthy, affordable and secure supply of food.

TARGET By 2036

By 2036, Calgarians support local food production.

## STRATEGY 1

Provide opportunities for local food producers to easily access the Calgary food marketplace.

- Subsidize local food producers.
- Set aside some of The City's landholdings for food production.
- Develop land use districts for local food production.
- Consider microclimate options when citing food growth areas.
- Require mainstream food stores to carry a certain percentage of locally produced food.
- Promote community-based gardens and local farmers' markets in various communities within Calgary.
- Increase accessibility so small producers can participate in farmers' markets.

## STRATEGY 2

## Encourage household and community gardens.

- Enable green roofs for food production.
- Encourage local gardens to supplement food production.
- Utilize spaces within The City's park space inventory for local food production.

## STRATEGY 3

Establish educational programs on the benefits of supporting local food suppliers.

2 TARGET
By 2036

By 2036, Calgary maintains access to reliable and quality food sources.

STRATEGY 1

Ensure food sources are affordable and derived from secure and reliable suppliers.

3

## **TARGET**

By 2036, 100 per cent of Calgary's food supply derives from sources that practice sustainable food production.

## STRATEGY 1

## Promote sustainable food production.

- Establish educational programs about sustainable food production.
- Develop awareness programs about where our food comes from and how far it has travelled.
- Indicate the distance that food has travelled to get to your door.
- Discourage the use of chemicals in the production of food.

## STRATEGY 2

Foster opportunities for farmers' markets to locate within Calgary.



## Food

System **Built environment and infrastructure** 

Goal Food sources derive from sustainable practices that provide us with a high quality,

healthy, affordable and secure supply of food.

4	TARGET By 2010, 100 per cent of Calgarians have access to nutritious foods.
	STRATEGY 1 Direct food surpluses to those in need.
	STRATEGY 2  Establish educational programs about making healthy food choices.
	STRATEGY 3  Use food banks to provide nutritious foods to those in need.



# **Goods and services**

System Built environment and infrastructure

Goal Calgarians access a wide variety of locally produced goods and services and consume these in a responsible manner. We support and consume responsibly produced goods

and services from around the world.

TARGET
By 2036, over 50 per cent of Calgary businesses adopt a protocol for sustainable practices and report on it regularly.

#### STRATEGY 1

# Develop incentives to support businesses that operate in an environmentally sustainable way.

- Support the attraction and retention of sustainable industry.
- Support the design of eco-efficient industrial and business centres.
- Enhance e-commerce infrastructure within Calgary.

## STRATEGY 2

## Develop a sustainable business ethic that Calgary businesses can sign on to.

• Promote sustainable business and products (through labelling, associations, etc.).

#### STRATEGY 3

## Ensure Calgary businesses adopt cradle-to-cradle responsibility of products.

• Ensure businesses think longer-term when selling goods and services.

## STRATEGY 4

## Encourage the trade of locally based goods and services.

• Ensure businesses think longer-term when selling goods and services.

# By 2016, Calgary has a strong and diverse portfolio of locally based businesses.

## STRATEGY 1

## Provide incentives to diversify our economic base.

- Provide seed money to help support the establishment of local businesses and industries in strategic sectors.
- Explore options for utilizing publicly owned land to help support/incubate locally owned businesses.
- Explore the option of using vacant and underutilized buildings as local business incubators.
- Support tax incentives for local business.
- Create economic development programs to diversify local business.

## STRATEGY 2

## Develop information that promotes locally based businesses in Calgary and its region.

- Create a directory of locally based businesses.
- Create economic development programs to diversify local business.

## STRATEGY 3

## Support flexible standards to encourage a wide variety of local businesses.

- Enable buildings that can adapt to a wide range of business types.
- Provide land use districts that facilitate the development of flexible spaces.
- Support mixed-use communities.



## **Goods and services**

System Built environment and infrastructure

Goal Calgarians access a wide variety of locally produced goods and services and consume

these in a responsible manner. We support and consume responsibly produced goods

and services from around the world.

TARGET
By 2036, all Calgarians consume more responsibly.

#### STRATEGY 1

Develop awareness and educational campaigns on the responsible consumption of goods and services.

TARGET By 2016

By 2016, we are developing "complete communities" that, among other aspects, allow people to obtain daily goods and services within a reasonable walking distance from home.

## STRATEGY 1

Increase the mix of uses within communities, particularly in strategic locations, such as near transit stations and employment areas.

- Encourage livable streetscapes that have activity throughout the day.
- Provide education/awareness programs about mixing commercial activities into residential areas.
- Develop standards for identifying the components of mixed-use communities.
- Promote existing mixed-use developments in Calgary.

## STRATEGY 2

# Support the development of underdeveloped land for population-intensive activities and uses.

- Support changes to the tax system to encourage the development of vacant land within established areas.
- Provide mortgages, guarantees and revolving loans for brownfield sites that meet restoration criteria.
- Support the remediation and redevelopment of brownfield sites for appropriate development.
- Encourage the redevelopment of greyfield sites (old malls and other commercial sites that are no longer economically viable).
- Support the intensification of existing communities, particularly in strategic locations like transit stations.

## STRATEGY 3

Promote innovative commercial forms that are able to adapt to a variety of housing needs.

- Support commercial intensification.
- Encourage flexible commercial space to adapt to changes within communities and the market.
- Support streamlining processes for commercial developments that are innovative and support more sustainable lifestyles.



## **Goods and services**

## **System**

**Built environment and infrastructure** 

Goal

Calgarians access a wide variety of locally produced goods and services and consume these in a responsible manner. We support and consume responsibly produced goods and services from around the world.

#### STRATEGY 4

Review rules for commercial construction and community development to determine how they may be unnecessarily limiting innovation.

- Develop flexible rules within the Land Use Bylaw (create opportunities for mixed use, building setbacks, etc.).
- Explore options to streamline the permitting process to encourage desired commercial forms and make them more financially feasible.
- Review the Alberta Building Code to identify how it may be limiting innovative commercial options.
- Research the appropriateness of alternative policy mechanisms, such as objective-based policy versus prescriptive-based policy.

# 5

## TARGE1

By 2036, all new commercial buildings are designed to encourage the use of alternative forms of transportation (e.g. walking, cycling and transit).

#### STRATEGY 1

Establish design standards that foster multiple forms of transportation and reduce the impacts of the transportation system on the natural environment.

## STRATEGY 2

Provide incentives to commercial builders that promote more environmentally friendly travel choices.

## STRATEGY 3

## Encourage increased use of transit.

- Explore options to enable transit on commercial sites.
- Provide convenient and comfortable connections from commercial buildings to transit facilities.
- Encourage reduced building setbacks to enable buildings to be closer to the public street (transit stops).



## **Goods and services**

System

**Built environment and infrastructure** 

Goal

Calgarians access a wide variety of locally produced goods and services and consume these in a responsible manner. We support and consume responsibly produced goods and services from around the world.

## **TARGET**

By 2036, all new and retrofitted non-residential buildings are built to be within five per cent of the highest energy- and water-efficient design available out of all economically competitive products, as measured on a life cycle basis.

## STRATEGY 1

Develop education and awareness programs that identify the benefits of eco-efficient design.

- Identify the ecological impacts of different forms of commercial development.
- Provide benchmarking to indicate how eco-efficient non-residential buildings are and where we rank against other cities of similar size and characteristics.
- Develop a system to rate commercial types according to eco-efficiency standards.
- Develop a single comprehensive labelling system for "green" buildings, products and technologies.

## STRATEGY 2

Streamline the development approval process for buildings that demonstrate eco-efficient standards.

## STRATEGY 3

Develop incentives for adopting eco-efficient standards in buildings and site design.

- Consider subsidies for eco-efficient buildings and site design.
- Provide financing incentives for buildings that are more energy efficient.
- Support local groups and businesses that offer green building products and technologies through information and awareness packages.

# 7

## TARGET

By 2036, all commercial buildings are accessible to people with disabilities.

## STRATEGY 1

Ensure commercial buildings incorporate barrier-free design to ensure buildings are constructed to be functional, safe and convenient for all users, including those with any type of disability.

## STRATEGY 2

Utilize The City's Access Design Guidelines in the design of all commercial buildings.



# **Housing**

System

**Built environment and infrastructure** 

Goal

Calgarians have a choice of housing options that are affordable, accessible and eco-efficient and that support a variety of lifestyles. Housing reflects local environmental conditions and resources and is adaptable over time to reflect changes in technology, climate and demographics.

1

#### **TARGET**

By 2016, we are developing "complete communities" that enable people to meet most of their daily needs within a reasonable walking distance from home.

#### STRATEGY 1

Support an increase in residential density, particularly in strategic locations at transit stations, in employment areas and close to goods and service providers.

- Change the Municipal Development Plan policy to allow higher densities within new communities.
- Communicate/increase awareness of the ecological impacts of low-density housing.
- Develop housing intensification policies for strategic locations (e.g. near LRT stations and employment areas).

#### STRATEGY 2

## Increase the mix of uses within communities.

- Encourage livable streetscapes that are active throughout the day.
- Educate consumers to increase awareness of different housing types and mix.
- Develop of standards for complete communities.
- Promote existing mixed-use developments in Calgary.
- Develop mandatory design guidelines.
- Revise City policies that restrict opportunities for the development of mixed uses.

## STRATEGY 3

# Support the development of underdeveloped land for population-intensive activities and uses.

- Support changes to the tax system to encourage the development of vacant lands within established areas.
- Provide mortgages, guarantees and revolving loans for brownfield sites that meet restoration criteria.
- Support the remediation and redevelopment of brownfield sites for appropriate development.
- Encourage the redevelopment of greyfield sites (old malls and commercial sites that are no longer economically viable).
- Support the intensification of existing communities, particularly in strategic locations like those near transit stations.



## **Housing**

System

**Built environment and infrastructure** 

Goal

Calgarians have a choice of housing options that are affordable, accessible and eco-efficient and that support a variety of lifestyles. Housing reflects local environmental conditions and resources and is adaptable over time to reflect changes in technology, climate and demographics.

#### STRATEGY 4

Promote innovative housing forms that are able to adapt to a variety of housing needs.

- Support backyard infill housing (e.g. granny suites).
- Encourage co-housing or other forms that provide innovative living arrangements.
- Encourage flex-housing to enable the spaces within residential units to be converted over time to meet changing household needs.
- Support streamlining processes for housing developments that are innovative and support more sustainable lifestyles.
- Develop a provincial strategy to address the shortfall of affordable and accessible housing for people with disabilities.

## STRATEGY 5

Review the rules for housing construction and community development to determine how they may be unnecessarily limiting innovative housing options.

- Develop flexible rules within the Land Use Bylaw (create opportunities for mixed use, building setbacks, etc.).
- Explore options to streamline the permitting process to encourage desired housing forms and make them more financially feasible.
- Review the Alberta Building Code to identify how it may be limiting innovative housing options.
- Research the appropriateness of alternative policy mechanisms, such as objective-based policy versus prescriptive-based policy.
- Research options for alternative housing forms, such as legalized basement suites.
- Research options to improve the Ward system of political representation.



## Housing

System

**Built environment and infrastructure** 

Goal

Calgarians have a choice of housing options that are affordable, accessible and eco-efficient and that support a variety of lifestyles. Housing reflects local environmental conditions and resources and is adaptable over time to reflect changes in technology, climate and demographics.

2

## **TARGET**

By 2036, all new and retrofitted residential buildings are built to be within five per cent of the highest energy-efficient design available out of all economically competitive products, as measured on a life cycle basis.

## STRATEGY 1

Develop education and awareness programs that identify the benefits of eco-efficient design.

- Identify the ecological impacts of different forms of housing development.
- Provide benchmarks to gauge how eco-efficient Calgary housing is and where we rank against other cities of similar size and characteristics.
- Change the Municipal Development Plan to allow higher densities within new communities.
- Develop a system to rate housing types according to eco-efficiency standards.
- Develop a single comprehensive labelling system for "green" buildings, products and technologies.
- Have all builders actively participate in the Built Green Alberta program.

## STRATEGY 2

Streamline the development approval process for housing that demonstrates eco-efficient standards.

## STRATEGY 3

Create incentives for adopting eco-efficient standards in homes and land development.

- Consider subsidies for eco-efficient house building and land development.
- Provide mortgage incentives for housing that is more energy efficient.
- Adopt Leadership in Energy and Environmental Design (LEED) standards or a LEED-type standard for identifying the components of eco-efficient housing and community design.
- Use information and awareness packages to support local groups and businesses that offer green building products and technologies.



## **Housing**

**System** 

**Built environment and infrastructure** 

Goal

Calgarians have a choice of housing options that are affordable, accessible and eco-efficient and that support a variety of lifestyles. Housing reflects local environmental conditions and resources and is adaptable over time to reflect changes in technology, climate and demographics.

3

## **TARGET**

By 2036, all Calgarians have the option of spending less than 30 per cent of their gross family incomes on housing.

#### STRATEGY 1

## Encourage innovative practices or standards that reduce the costs of new housing.

- Explore modified parking standards to reduce housing costs, especially where housing is close to transit, pathways or employment.
- Research if quotas could be applied to affordable housing.
- Ensure a certain percentage of rental units are for low-income households.
- Investigate options for setting land aside for affordable housing.
- Research options for providing more affordable housing, such as legalized basement suites.
- Establish policy and land use districts to support single-room occupancy units.
- Support programs that help integrate affordable housing into the community at large.
- Support an increase in funding for programs that meet the complex needs of those who are at risk of becoming homeless.
- Support the construction trades to ensure we have enough labour to fulfill the demands for housing construction.
- Develop information and awareness on choosing the housing trades as a career.
- Support streamlining processes for housing developments that are innovative and provide affordable housing.
- Encourage mixed-income neighbourhoods.
- Explore options for alternative financing to integrate affordable housing within all communities.

## STRATEGY 2

## Support the concept of a living wage for all Calgarians.

- Identify a living wage standard for Calgary.
- Develop awareness programs for employers on the benefits of paying employees a living wage.
- Develop training programs that enable people to earn enough to afford housing and to sustain this affordability over time.

## STRATEGY 3

## Support public/private partnerships to develop integrated affordable housing.

- Encourage government to act as a land banker to absorb the risks of providing affordable housing in new communities.
- Support streamlining processes for housing developments that are innovative and provide affordable housing.
- Encourage mixed-income neighbourhoods.



## Housing

**System** 

**Built environment and infrastructure** 

Goal

Calgarians have a choice of housing options that are affordable, accessible and eco-efficient and that support a variety of lifestyles. Housing reflects local environmental conditions and resources and is adaptable over time to reflect changes in technology, climate and demographics.

4

## **TARGET**

By 2036, the Calgary market can meet the housing needs of those below the Low-income Cut-off (LICO).

## STRATEGY 1

Fully integrate non-market housing into communities throughout the city, with a mix of rental, owned and mixed-income tenures.

## STRATEGY 2

Increase the stock of affordable housing along the continuum: from emergency shelters, to transitional housing, to non-market rental units, to formal and informal rental units, to affordable owned homes.

- Support the development of hostels and single-room occupancy dwellings like boarding houses, special care facilities and lodging houses.
- Support the development of emergency and transitional housing to accommodate specific subgroups within the homeless population, including youth under the age of 18, families, women with or without children who are fleeing violence, people leaving addictions treatment and people with mental health issues or cognitive or physical disabilities.

## STRATEGY 3

## Research and develop new ways of providing non-market housing.

Develop new ways of providing non-market housing in Calgary by having The City's
 Affordable Housing Implementation Team work with the Community Action Committee
 addressing homelessness, the Community Land Trust and other partners in public, private and
 community sectors.

## STRATEGY 4

Identify specific buildings and parcels of land that can be set aside for the development of non-market housing.

• Provide the option of subsidizing people, and not projects, to expand the supply of affordable housing.

## STRATEGY 5

Bring together developers and non-profit organizations and guide them in seeking federal and provincial funding for the development and operation of affordable housing.

## STRATEGY 6

Support appropriate relaxations to regulations on a site-specific basis for development that meets the needs of low-income households.



## **Housing**

**System** 

**Built environment and infrastructure** 

Goal

Calgarians have a choice of housing options that are affordable, accessible and eco-efficient and that support a variety of lifestyles. Housing reflects local environmental conditions and resources and is adaptable over time to reflect changes in technology, climate and demographics.

## STRATEGY 7

## Support initiatives to eliminate homelessness.

- Mobilize community partners and other orders of government to develop a comprehensive 10-year plan to eradicate homelessness that would lead to a shift from our current temporary/ transitional shelter approach to one that uses prevention combined with rapid re-housing and supportive housing practices.
- Focus short-term efforts on families with children that are homeless or at risk of becoming homeless, as well as on children and youth at risk of becoming homeless later in life due to childhood housing instability.
- Support a Mayor's task force to reach out to vulnerable groups at risk of becoming homeless.
- Continue to introduce and support social programs that help the homeless become self-reliant.
- Enhance programs and supports that help unemployed and low-income people achieve economic self-sufficiency.
- •Use a collaborative and shared investment approach with not-for-profit, industry and government sectors.
- Provide adequate training or education and services for life skills development, job preparation and job placement to the homeless population and those at risk of becoming homeless.
- Support various employment supports, including transportation subsidies, child care and eligibility for health benefits.
- Support early childhood development that assists parents in providing children with healthy environments for full development.



# **Transportation**

System Built environment and infrastructure

Goal

Calgary is built at a human scale with a transportation system that serves the access and mobility needs of all people through a choice of convenient, comfortable, affordable and efficient transportation modes. The transportation system connects people and goods locally, regionally and globally. Transportation needs are met safely and in a manner supportive of human and ecosystem health.

1 T

## **TARGET**

By 2036, we reduce the annual private vehicle kilometres travelled per capita by 20 per cent.

## STRATEGY 1

## Encourage increased use of transit.

- Support transit-oriented development that focuses development at strategic transit stops.
- Provide high-quality pedestrian connections, particularly along transit routes that connect with transit stops.
- Encourage employers to offer transit passes to employees.
- Support tax exemptions for employer-provided transit passes.
- Support preferred parking rates for carpoolers.
- Support more "in lieu fees" for parking spaces to pay for public parking space.
- Research the option of premium-level service for transit passengers willing to pay more.
- Provide transit service and facilities that are as comfortable and convenient as other travel options.
- Provide better transit service (increase capacity; increase service hours; security/comfort; LRT platform design; more frequent service; cleanliness).
- Provide priority for transit vehicles on roads.
- Integrate public transit facilities with large employment areas (e.g. hospitals, educational institutions).
- Create more high-occupancy vehicle/bus lanes on congested roadways.

## STRATEGY 2

# Establish community design standards that foster multiple forms of transportation and reduce the impacts of the transportation system on the natural environment.

- Make pedestrian needs a high priority in the design of communities and facilities.
- Provide space within road rights-of-way for cycle lanes and bike paths.
- Promote telework programs for employees.
- Explore various innovative strategies for parking.
- Explore congestion management to alter travel behaviour.
- Support flexible working hours to reduce peak period traffic.
- Support the optimization of the current road network (e.g. lane reversals, ramp metering, co-ordinating signals).
- Review options for traffic calming as a means to encourage more sustainable forms of transportation.
- Integrate land use and transportation design.
- Encourage change facilities within new buildings for those who cycle, run or walk to work.
- Encourage high-density, mixed-use development, combined with appropriate transit service.
- Develop our transportation system to emphasize pedestrians.
- Change the design of roads to reduce speed and slow traffic through changing engineering standards.
- Encourage the use of permeable surfaces to increase groundwater levels within city limits.
- Encourage families to use walking school buses to travel to community-based schools.
- Explore options for setting maximum parking standards.



# **Transportation**

**System** 

**Built environment and infrastructure** 

Goal

Calgary is built at a human scale with a transportation system that serves the access and mobility needs of all people through a choice of convenient, comfortable, affordable and efficient transportation modes. The transportation system connects people and goods locally, regionally and globally. Transportation needs are met safely and in a manner supportive of human and ecosystem health.

#### STRATEGY 3

Provide incentives or penalties that promote more environmentally friendly travel choices.

- Encourage secure bike storage facilities on work sites.
- Surcharge vehicles registered within city limits to fund transit improvements.
- Support the expansion of fuel taxes, with funds directed to more sustainable forms of transportation.
- Support a tax credit for transit passes, rather than for parking spaces.
- Use an energy credit system: collect credits for making environmentally friendly travel choices.
- Support flexible work hours to reduce peak period traffic.
- Reduce speed limits on major thoroughfares within the city (e.g. 90 kilometres per hour on Deerfoot Trail).
- Review the feasibility of toll roads.

#### STRATEGY 4

## Develop opportunities for more environmentally friendly travel behaviour.

- Support educational initiatives that inform the public of all the costs of our transportation system, with the intent to change travel behaviour.
- Explore pricing options that reflect the true costs of transportation activity and of the infrastructure required.
- Utilize intelligent transportation systems to provide more timely information.
- Encourage communities to establish ride-sharing and car-sharing programs.
- Provide support for vehicles that provide information on pollution emitted.
- Support education and awareness initiatives on the cost of commuting by various modes.
- Review the municipal governance model to determine its impact on transportation decisions.

## STRATEGY 5

Build a public transportation system that is faster and more efficient than vehicle use.

## STRATEGY 6

Encourage organizations to adopt telework as a means of reducing the overall vehicle kilometres travelled in Calgary.

- Support staff working from home and to peak shift where it fits with organizational needs.
- Provide information on how to best use and benefit from telework.
- Provide information on the benefits of telework for the individual, organization and city.



# **Transportation**

System

**Built environment and infrastructure** 

Goal

Calgary is built at a human scale with a transportation system that serves the access and mobility needs of all people through a choice of convenient, comfortable, affordable and efficient transportation modes. The transportation system connects people and goods locally, regionally and globally. Transportation needs are met safely and in a manner supportive of human and ecosystem health.

2

## **TARGET**

By 2016, we increase the residential population within walking distance (600 metres) of LRT stations and major transit nodes by 100 per cent.

#### STRATEGY 1

Establish partnerships between the private and public sectors to develop higher-density housing close to major transit facilities.

• Create land bank parcels that will allow organizations to concentrate employment in strategic locations.

## STRATEGY 2

Support land use districts and policies that allow for higher-density housing forms that can easily integrate with major transit facilities.

- Revise land use districts to enable high-density housing to be integrated with major transit facilities.
- Provide policy within the Municipal Development Plan and other planning policies to support higher-density housing close to major transit facilities.

## STRATEGY 3

Explore reduced parking standards for higher-density housing located close to major transit facilities.



# **Transportation**

**System** 

**Built environment and infrastructure** 

Goal

Calgary is built at a human scale with a transportation system that serves the access and mobility needs of all people through a choice of convenient, comfortable, affordable and efficient transportation modes. The transportation system connects people and goods locally, regionally and globally. Transportation needs are met safely and in a manner supportive of human and ecosystem health.

3

## **TARGET**

By 2016, we increase the number of jobs within walking distance (600 metres) of LRT stations and major transit nodes by 35 per cent.

#### STRATEGY 1

Establish partnerships between the private and public sectors to develop employment centres.

• Create land bank parcels that will allow organizations to concentrate employment in strategic locations.

#### STRATEGY 2

Support land use districts and policies that allow for employment clusters in suburban locations.

- Revise land use districts to encourage employment-intensive uses near major transit facilities.
- Protect locations for employment centres by establishing policy within the Municipal Development Plan.
- Promote positive examples of employment centres as models for future suburban employment centres (e.g. Seton Town Centre).
- Review parking standards for businesses located close to major transit stops.

## STRATEGY 3

Establish community design that fosters sustainable forms of transportation by providing mixed-use development consisting of residential housing, office space and retail shops.

- Encourage land use districts that support employment-intensive uses.
- Encourage land use districts that support commercial and retail businesses within the communities.
- Integrate land use and transportation design.
- Promote and educate about the benefits of living in mixed-use communities.

## STRATEGY 4

Provide public amenities (e.g. transit, quality public connections) at employment centres early in the development process.



# **Transportation**

System

**Built environment and infrastructure** 

Goal

Calgary is built at a human scale with a transportation system that serves the access and mobility needs of all people through a choice of convenient, comfortable, affordable and efficient transportation modes. The transportation system connects people and goods locally, regionally and globally. Transportation needs are met safely and in a manner supportive of human and ecosystem health.

4

## **TARGET**

By 2036, there is a 50 per cent reduction from 1990 levels in the pollution (greenhouse gases) associated with automobiles.

#### STRATEGY 1

## Encourage the use of low-emission vehicles.

- Identify alternative energy sources for transportation.
- Encourage automakers to make increasingly energy-efficient vehicles.
- Establish an energy credit system.

#### STRATEGY 2

## Reduce the number of vehicles owned by Calgarians.

- Promote local car-sharing and ride-sharing programs.
- Provide transit service and facilities that are as comfortable and convenient as private vehicles.

5

## **TARGET**

By 2036, we increase peak period transit, walking and cycling and carpool travel to downtown by 50 per cent, 40 per cent and 20 per cent respectively.

## STRATEGY 1

## Promote the use of alternative transportation.

- Provide subsidies for employees who take transit, cycle or walk to work.
- Encourage car-sharing and ride-sharing.
- Provide transit facilities that are as comfortable and convenient as private vehicles.
- Provide an extensive pathway and bikeway system.
- Increase snow clearing on pathways.
- Educate citizens about the benefits of using alternative transportation and about the options available.
- Educate the public on the relative costs of different commuting modes.
- Encourage organizations to provide secure bike storage facilities on their work sites.
- Encourage organizations to provide change facilities on their work sites for those who cycle, walk or run to work.
- Research the costs and benefits of carpool lanes leading into and out of downtown.
- Increase transit frequency (the average time between buses or trains, city-wide, in minutes).
- Support flexible work hours to reduce traffic congestion.
- Eliminate employee parking subsidies.

6

## **TARGET**

By 2036, 100 per cent of public transit services (buses, CTrains and facilities) are accessible to people with disabilities.

## STRATEGY 1

## Provide buses and CTrains that are accessible to all Calgarians.

- Increase funding to retrofit existing public transit vehicles and facilities to be accessible.
- Ensure Access Calgary has a sufficient number of handi-buses to support demand.



# **Transportation**

System **Built environment and infrastructure** 

Goal

Calgary is built at a human scale with a transportation system that serves the access and mobility needs of all people through a choice of convenient, comfortable, affordable and efficient transportation modes. The transportation system connects people and goods locally, regionally and globally. Transportation needs are met safely and in a manner supportive of human and ecosystem health.

By 2036, transit trips per capita increase 40 per cent over 2006 levels. STRATEGY 1 Increase the residential population and number of jobs within walking distance (up to 600 metres) of LRT stations and major bus zones by 100 per cent and 50 per cent respectively. STRATEGY 2 Implement transit-oriented development funded or supported by The City, to be given priority over current LRT park-and-ride lots. Limit suburban office development in areas not well served by transit. STRATEGY 4 Improve the pedestrian environment in older districts, including industrial areas. **TARGET** By 2036, the number of on-street bikeways increases by 200 per cent, and the number of pathways by 100 per cent. STRATEGY 1 Increase capital and operating funding for pathways and on-street bikeways. • Provide increased funding for pathways and on-street bikeways. • Provide road rights-of-way to provide space for bicycle commuters. • Increase pathway snow clearing for safe and efficient use during winter. STRATEGY 2

Develop long-term implementation plans for pathways and on-street bikeways.



# **Transportation**

System

**Built environment and infrastructure** 

Goal

Calgary is built at a human scale with a transportation system that serves the access and mobility needs of all people through a choice of convenient, comfortable, affordable and efficient transportation modes. The transportation system connects people and goods locally, regionally and globally. Transportation needs are met safely and in a manner supportive of human and ecosystem health.

9

#### **TARGET**

By 2036, fatal collisions per 100,000 people and injury collisions per 1,000 people decrease by 50 per cent.

#### STRATEGY 1

### Develop education and enforcement programs on traffic safety.

- Reduce speed limits on major city thoroughfares.
- Review traffic fines to determine the level that best influences driver behaviour.
- Ban items that distract drivers from the road (e.g. cell phones).
- Re-evaluate driver skills at a certain age.
- Install more red light cameras to influence driver behaviour.

#### STRATEGY 2

# Improve the operations of roads in all conditions.

- Increase the use of reflective paint for road markings.
- Provide immediate road sanding after a snowfall.
- Ensure adequate road conditions.
- Reduce speed limits on major city thoroughfares.



# **Waste management**

System Built environment and infrastructure

Goal Calgarians work toward zero waste by using materials responsibly and minimizing

consumption. We reuse, recycle and reduce the materials we consume. Wastes

created are safely managed without harm to other species or systems.

# TAR

By 2036, 85 per cent of the waste generated within Calgary is diverted from landfills.

#### STRATEGY 1

## Establish programs to reduce the amounts of waste collected at landfills.

- Provide a residential curbside recycling service.
- Provide waste diversion infrastructure to assist with processing/transferring collected recyclable and organic materials.
- Consider residential waste bag limits if the voluntary programs are not achieving expected diversion rates
- Establish higher fees for waste that contains recyclable materials.
- Create incentives to separate materials for recycling or composting; offer a lower landfill tipping fee for targeted materials like organics, paper and wood.
- Promote research and development concerning low-waste products.
- Establish a fee structure based on the amount of waste collected.
- Review options to operate municipal waste services like a utility (fee for service).
- Research funding sources available for waste reduction programs.
- Develop an annual reporting of how well the waste target is being met.
- Create forums for waste reduction strategies.

#### STRATEGY 2

## Establish programs to encourage Calgarians, on a per capita basis, to consume less goods.

- Establish product-sharing libraries to limit the consumption of products (e.g. lawn mowers).
- Promote Web-based sites that promote reuse, such as "free-cycle."
- Provide information kits to residents and businesses on ways to consume in a more sustainable way.
- Support changes to packaging standards that limit product-associated waste.

#### STRATEGY 3

## Assist in the development of markets that use waste as a resource.

- Support using the organic wastes currently in landfills to generate gas for energy.
- Research the viability of mining landfills for reusable products.
- Create accessible composting facilities throughout city.
- Develop "energy from waste" programs as technologies become available and proven.
- Enable opportunities for waste generated from construction activities to be utilized by individuals or other businesses.
- Expand The City's recycling program to attract more participants.
- Encourage communities to establish recycling days to trade unwanted goods.
- Explore opportunities for employment programs in the recycling industry.
- Promote opportunities for industries to utilize by-products (waste) from other industries in their businesses (e.g. waste heat could be used to heat greenhouses that increase local food production).
- Explore opportunities for waste-related regional partnerships to take advantage of economies
  of scale.



#### STRATEGY 4

Support businesses, institutions and other organizations that minimize the amounts of waste generated in their operations.

- Encourage organizations to establish green procurement policies to reduce their amounts and types of waste.
- Limit the types of materials that can enter the waste stream (e.g. landfill bans).
- Review advertising standards on packaging to determine opportunities for reduced packaging.
- Encourage end-of-life management responsibilities to be adopted by manufacturers.
- Promote products that have longer lifespans.

#### STRATEGY 5

## Develop education and awareness programs on the importance of reducing waste.

• Develop a comprehensive communications strategy to help citizens understand the impacts of the wastes they produce and the alternate choices available.

# 2

## **TARGET**

By 2036, 75 per cent of construction industry waste materials are recovered for reuse and/or recycling.

#### STRATEGY 1

Develop education and awareness programs for the building industry that promote the value of reducing waste in construction.

- Develop information kits that identify the value of waste reduction and recycling.
- Develop information kits for homebuyers on the value of recycling.
- Promote programs like LEED and Built Green in the building and design industries.

#### STRATEGY 2

Foster markets for construction waste materials.

## STRATEGY 3

Establish policy for the recovery of materials generated from building demolitions.

# 3

#### TARGET

By 2036, 85 per cent of waste materials are converted to other useful products.

#### STRATEGY 1

Support the use of organic materials for composting.

- Develop a city-wide organic collection system.
- Support community composting to support local food production.
- Promote backyard composting.

#### STRATEGY 2

Develop extended producer responsibility programs to transfer to the producer some or all costs of — and/or physical responsibility for — the end-of-life management of products or packaging.



# **Economic well-being**

System Economic

Goal Calgary is a city with a vibrant, resilient, environmentally sound and sustainable economy that fosters opportunity for individual economic well-being.

TARGET

By 2036, research and development intensity, both public and private, increases to five per cent of Calgary's gross domestic product.

#### STRATEGY 1

Further develop Calgary's research and development capacity and the city's ability to commercialize technology, specifically regarding conventional and alternative energy resources, as they relate to Alberta's natural resources.

- Establish an Alberta Heritage Trust Fund research institute in alternative energy sources, modelled after the Health Research Institute.
- Seek Alberta Heritage funding, possibly complemented by joint federal and industry funding and partnerships, to implement this strategy.

#### STRATEGY 2

Leverage research and development resources and the skill sets/know-how of Calgarians to develop new research and development clusters and build upon existing ones.

- Integrate the outcomes of current and future research initiatives, and concentrate/consolidate resources in core strength areas (e.g. examine potential synergies between the Institute for Sustainable Energy, Environment and Economy; the Alberta Energy Research Institute; and the Canadian Energy Research Institute).
- Attract key research talent by offering endowed research "chairs" and funding for world-class research.
- Promote new research networks and establish appropriate research facilities.
- Increase the profiles of research institutes and conferences.

## STRATEGY 3

Position Calgary as the global energy capital by supporting and nurturing the diversity of activity within our energy sector, including research, education and capital market and head office activity.

TARGET

By 2036, the number of environmentally sustainable and commercially viable value-added products and technologies produced in Calgary increases by 100 per cent

#### STRATEGY 1

Establish a capacity for research that studies how to develop value-added products and practices that are environmentally sustainable and economically viable.

- Explore joint federal-provincial, non-government organization and industry funding and partnerships as a means of developing and commercializing value-added products.
- Explore closed-circuit industrial parks in which the waste energy or materials of some firms are the essential feedstock for others.
- Develop energy-efficient products to reduce energy consumption.
- Explore transportation systems and land use policies that lower both environmental and economic costs.

# **Economic well-being**

System Economic

Goal Calgary is a city with a vibrant, resilient, environmentally sound and sustainable

economy that fosters opportunity for individual economic well-being.

TARGET
By 2036, Calgary's non-oil-related industries grow by 50 per cent.

#### STRATEGY 1

Capitalize on Calgary's highly educated and creative people to support the diversification of the economy by enhancing economic activity in a number of areas, including

- culture, media and entertainment (film, festivals, music, theater, art)
- software design, publishing, animation, fashion and other creative endeavours
- education, training and skills development
- health and medicine, including research
- business and financial, legal and project management
- information and communications technology
- new and emerging technologies/areas
- import replacement; and
- value-added product development and manufacturing.

# TARGET

By 2036, Calgary is ranked as the most favourable Canadian city in which to establish businesses that support sustainability practices.

## STRATEGY 1

Work collaboratively with stakeholders to develop policy that guides local economic development and long-term environmental, social and economic sustainability.

#### STRATEGY 2

Develop a favourable environment for business — particularly to encourage growth in entrepreneurship and small business and the creation of new businesses — through

- a tax environment that favours economic, environmental and social sustainability
- access to capital and markets
- the promotion of a culture of innovation/creativity and risk taking
- affordability and access to resources (human, capital, real estate, energy)
- well-developed training, education and incubation capacities
- the promotion and support of entrepreneurship in general, and as a way for low-income people to participate in the economy
- partnership brokering
- electronic trade; and
- flexible land use and other standards that enable and support a wide variety of local businesses.



# **Economic well-being**

System Economic

Goal Calgary is a city with a vibrant, resilient, environmentally sound and sustainable economy that fosters opportunity for individual economic well-being.

#### STRATEGY 3

# Enhance Calgary's infrastructure and associated elements to attract and retain business and a quality workforce.

- Lobby government and airline carriers for better/more strategic air connections and better air treaties (i.e. attract carriers that will allow strategic air connections worldwide, thus providing global access to skilled and creative workers and to and from leading energy centres and major knowledge centres).
- Establish a downtown post-secondary educational campus to meet the needs of students and enable better interface among business, the arts community and social service agencies.
- Create commercial/mixed-use employment zones outside of downtown, supported by a sustainable transportation system.
- Explore innovative and creative ways to foster the expansion of the downtown business core to the south by overcoming the Canadian Pacific Railway line constraints, either by relocating the rail line outside Calgary or by developing over/under-track parking structures, parks and pedestrian walks, vehicle underpasses and other means.
- Ensure appropriate mechanisms and structures are in place to be able to develop and service suitable amounts of industrial land in order to meet demand.
- Develop world-class infrastructure to allow for the efficient and sustainable movement of goods, people, ideas and information.

### TARGE

By 2036, tourist visitations and expenditures grow by 90 per cent.

#### STRATEGY 1

Enhance tourism products to attract tourists to Calgary and encourage them to stay longer and spend more money.

- Develop Calgary's attractions so they rank in the global top 10 in their classes, and/or create new ones that do.
- Improve tourism product development and the marketing and packaging of Calgary as an urban destination that offers world-class arts, cultural festivals, theatre, museums, convention facilities, sports stadiums and arenas, and other attractions or facilities currently under development or to be developed in the future.

#### IAKGE

By 2036, alternative ways to measure economic well-being are commonly used to support sustainability principles in decision-making.

### STRATEGY 1

Investigate the establishment and acceptance of alternative ways to measure the outcomes of economic activity and decision-making.

- Investigate and develop indicators or measures that take into account the balance between economic, social and environmental goals and benefits.
- Develop ways to adopt full-value accounting including life cycle, environmental, social, health and other "costs" in economic decision-making.
- Encourage business organizations to implement sustainability principles (e.g. Melbourne Principles) in decision-making and reporting.

System

**Economic** 

Goal

Through their work, all Calgarians have the opportunity and working conditions to contribute to their own and their community's economic and social well-being in a personally meaningful way.

1

#### **TARGET**

By 2036, full employment of the labour force (defined as unemployment below five per cent) is sustained.

#### STRATEGY 1

To achieve a balanced labour market in the region, develop and enhance mechanisms that communicate current and forecasted workforce demand and supply.

- Establish and enhance up-to-date and accurate labour force profiling and forecasting capabilities.
- Enhance communications, education and information mechanisms relating to current and future labour market conditions.

### STRATEGY 2

Develop approaches that ensure we have an adaptive workforce.

- Develop ways that support the transfer of skills to new careers as the economy changes.
- Develop ways to better detect trends so we are prepared for any change or downturn in the economy.
- Foster an education system that prepares people to think, reflect and understand (broad education), while also providing specific/technical expertise and skills.
- Provide a wide range of lifelong learning and training opportunities that enables individuals to keep pace with the changing work environment and to lead fulfilling lives.
- Continuously enhance skills to maximize the benefits of evolving communications and information technologies.

2

#### **TARGET**

By 2036, the high school graduation rate for individuals up to age 21 increases to 95 per cent, and 75 per cent of adults aged 21 to 25 complete a post-secondary or vocational education program.

### STRATEGY 1

Increase access to education and skills development at all levels, and continue to adapt educational and skills training programs to meet the current and future needs and opportunities of the region's economy, particularly the knowledge-based economy.

- Encourage the school systems and government to continuously review educational and training
  programs to provide a strategic balance of academic learning and specific skill/vocational
  development that enables all working-age adults to reach their potentials concerning
  participating in the economy.
- Examine other jurisdictions in which trades, vocational and other skills development, or semi-skilled programs, are introduced at the secondary level and provide high rates of workforce participation.
- Develop programs that engage and stimulate secondary students and help them find meaningful work of their choice (e.g. shop, culinary kitchens, career pathway models, drama, music, sports).
- Invest in education, particularly in order to provide the management and leadership capacity required for the 21<sup>st</sup> century workforce.



**System** 

**Economic** 

Goal

Through their work, all Calgarians have the opportunity and working conditions to contribute to their own and their community's economic and social well-being in a personally meaningful way.

#### STRATEGY 2

Develop other innovative and effective approaches that increase the percentage of students who complete high school, progress to and complete post-secondary or vocational education and obtain employment in their fields upon graduation.

- Provide timely and appropriate career planning information, life skills programs and job placement services, within and complementary to the school system.
- Proactively forecast future needs, rather than primarily responding to immediate industry requirements.
- Develop apprenticeship/trades/vocational orientation programs for secondary level students.
- Develop incentives for young adults to complete educational and skills training programs.

#### STRATEGY 3

Develop innovative and effective programs/approaches that increase the overall education level among First Nations, Metis and Inuit youth, immigrants and people with disabilities, as a means of providing them with increased opportunities for employment and of capitalizing on an otherwise underutilized labour pool.

3

### **TARGET**

By 2036, 95 per cent of entrants in trades-related programs complete their programs and 98 per cent of graduates are employed in their fields of study within six months of graduation.

#### STRATEGY 1

Develop innovative approaches and incentives that will encourage and enable apprentices to complete their programs.

4

# **TARGET**

By 2036, all adult immigrants to Calgary have the opportunity to integrate into the economy through employment or entrepreneurial activity at the same participation or success rate as other Calgarians.

#### STRATEGY 1

Develop and implement immigration policies and support programs that allow immigrants to easily and successfully adapt to and participate in the Calgary economy.

- Advocate for immigration policies that enable immigrants to successfully integrate into the workforce or engage in entrepreneurial activity.
- Develop pre-immigration information that enables would-be immigrants to make appropriate choices regarding their potentials for economic integration.
- Develop and adequately resource community or private sector agencies that deliver programs in language preparation, employment preparation (including employment standards and rights), job placement and retraining/skills development in order to facilitate employment or successful enterprise.
- Urge non-governmental or voluntary organizations to provide new immigrants with community connections to facilitate social and economic integration.

System

**Economic** 

Goal

Through their work, all Calgarians have the opportunity and working conditions to contribute to their own and their community's economic and social well-being in a personally meaningful way.

#### STRATEGY 2

Develop effective and timely accreditation/certification approaches that ensure immigrants are granted certification and are prepared to assume positions at performance standards acceptable to the relevant profession/industry; such approaches should also enable individuals to find work at a level commensurate with their qualifications.

- Develop affordable upgrading/"upskilling" and recertification programs.
- Develop reciprocal arrangements with out-of-province institutions to facilitate pre-certification.
- Urge governments and industry to collaborate with regulatory or governing bodies and professional associations to facilitate the effective participation of immigrants in the economy.
- Establish a co-ordinated approach to offer immigrant integration programs, possibly using a one-window approach.
- Develop approaches that address underemployment among immigrants.

5

### TARGET

By 2036, 85 per cent of employees express a high degree of job satisfaction.

#### STRATEGY 1

Urge industry, associations and government to collaborate on the continued adoption of progressive human resources policies that promote meaningful work and safe work practices.

- Explore flexible benefits, reworked responsibilities, recognition options and employee consultation options.
- Focus on a healthy workplace culture, including ergonomics and air quality.
- Promote and communicate best practices in the field.
- Develop programs and incentives that help small and medium enterprises develop the leadership and management skills necessary to implement progressive human resources policies, allowing them to become more attractive places to work.

#### STRATEGY 2

Encourage employers and employees to explore technology options, alternative workspace/ work locations and different types of work, as means of providing employees with meaningful work without harming the environment.

- Utilize technological advances to provide flexible working schedules and work locations.
- Explore more flexible zoning policies that allow a wide range of home-based enterprises (e.g. artists and artisans would be able to have studios and storefronts in their homes).
- Explore all forms of alternative work arrangements to enhance worker choice and flexibility.



System

**Economic** 

Goal

Through their work, all Calgarians have the opportunity and working conditions to contribute to their own and their community's economic and social well-being in a personally meaningful way.

#### STRATEGY 3

Explore and promote ways to encourage people to value all occupations and educational achievements and recognize each contributes to the overall needs of the community.

- Promote cross-training as a means to enrich work and increase productivity.
- Add responsibility to jobs.
- Engage people more in problem solving.
- Explore ways to shift the mindset that values higher education and certain occupations more than other educational achievement levels and occupations.
- Develop campaigns to change the perceptions that certain jobs aren't valuable.
- Attract companies that have high job satisfaction ratings.

#### STRATEGY 4

Continue to promote volunteerism as an alternative way to obtain meaningful work.

• Explore ways to support volunteerism, creative work and community service as ways of making work more meaningful for more people.

6

#### **TARGET**

By 2036, healthy seniors have the opportunity to be engaged in fulfilling work that contributes to the economy and/or the community.

## STRATEGY 1

Create flexible work schedules, seasonal work opportunities and volunteer opportunities, and promote a change in attitude toward hiring older workers.

### STRATEGY 2

Advocate for changes in policies, practices and attitudes toward hiring older workers.

# Sufficient income

System Economic

Goal All Calgarians have sufficient income and other resources to meet their current and

future needs and to provide for healthy lives.

1

#### **TARGET**

By 2036, 95 per cent of all people living in Calgary are at or above Statistics Canada's Low-income Cut-off (LICO) rates; there is no child poverty.

#### STRATEGY 1

Enhance programs and supports that help unemployed and low-income people achieve economic self-sufficiency.

- Urge the not-for-profit sector, industry and government to use a collaborative and shared investment approach to develop and implement
  - adequate training, education, life skills development, job preparation and job placement services
  - various employment supports, including transportation subsidies, child care and eased eligibility levels for health benefits.
  - early childhood development supports that help parents provide children with healthy environments for full development; and
  - affordable housing supports, including eased eligibility levels for mortgages and subsidized interest rates.

#### STRATEGY 2

Urge all public sector institutions and non-profit sector employers, including all subcontractors, to adopt livable wage policies.

#### STRATEGY 3

Develop education programs to inform business and consumers of the benefits associated with employers adopting livable wage policies and/or provide incentives that encourage them to do so.

- Explore tax incentives.
- Examine how paying a livable wage might reduce the taxes associated with the income transfers that are necessary otherwise (e.g. income assistance).
- Explore the benefits of decreased turnover, training and recruitment costs and employee theft.
- Promote the benefits of increased attraction and retention, customer satisfaction, employee morale and productivity.
- Explore the livable wage as a corporate social responsibility, community public relations and goodwill process.
- Provide financial and other support to the non-profit sector to enable them to perform this advocacy role that benefits the whole community.

## STRATEGY 4

Make sure all public income benefits are funded and structured to enable individuals and families to meet their basic needs, maintain a safe and decent standard of living in their communities and save for future needs.

• Lobby the provincial and federal governments for laws and policies that will provide adequate income assistance benefits, and urge non-governmental organizations to do the same.



# **Sufficient income**

System

**Economic** 

Goal

All Calgarians have sufficient income and other resources to meet their current and future needs and to provide for healthy lives.

#### STRATEGY 5

Explore and promote other income- and wealth-generating strategies, beyond conventional wages and salaries or government transfers, including

- profit sharing plans and stock options
- barter systems and complementary currencies
- entrepreneurship support, training and development
- tax structure reforms that benefit low-income individuals (income, consumption and property); and
- other innovative or non-traditional forms of income and wealth creation.

#### STRATEGY 6

Enable more people to participate in the economy in a sustainable fashion by exploring the social economy and promoting it through various policies and financial instruments, such as micro-loans and specialized venture capital funds.

#### STRATEGY 7

Explore and promote ways for people to make the most out of their money through

- education programs on financial management
- cost-saving strategies relating to consumption patterns
- better access to local or cheaper food sources (e.g. farmer markets, garden sharing/communal gardens).
- participation in community programs designed to help disadvantaged people become economically self-sufficient.

# 7

### **TARGET**

By 2036, all children of low-income families who are residents of Calgary have the opportunity to complete post-secondary education or appropriate training to enable them to fully participate in the economy.

### STRATEGY 1

Establish programs that give all children from low-income families the opportunity to receive sufficient, affordable education or training, which may include

- access for parents with children (from conception to age 18) to programs and support mechanisms (e.g. family literacy programs) for all levels of childhood development
- the abolition of all school fees in the public system
- school breakfast and lunch programs
- high-quality out-of-school care that includes mentoring, tutoring and assistance with homework; and
- high-quality daycare with flexible hours.

# GOVERNANCE

## **Access**

# System

## Governance

## Goal

Calgary is a city in which individuals have access to all public information when they need it. They can and do participate in decisions that affect their well-being. Decision-making is an inclusive process in which broad-based support is actively sought and contributes to continual improvement in people's lives. Factors such as language, age, race, culture, gender, sexual orientation, time, finances, ability, knowledge and health are not barriers to public decision-making.

# 1

#### **TARGET**

By 2016, 80 per cent of Calgarians report that they feel government activity is open, honest, inclusive and responsive.

#### STRATEGY 1

Ensure campaign finance does not deter people from running for public office.

- Implement campaign contribution limits.
- Implement a campaign spending cap.
- Develop real-time campaign contribution tracking, indicating sources through the open identification of contributors.
- Use public funding for elections to level the playing field for potential candidates and promote voting campaigns.
  - Candidates would attend "candidate school" to learn about the electoral process, the responsibilities of elected office and the goods and services provided by government.
  - After the election, candidates who attended candidate school would receive funds based on the number of votes received.
- Use public funding for mandatory all-candidate forums.
- Conduct a survey to establish a baseline and track the progress toward targets.

### STRATEGY 2

Ensure all people have equal opportunities to participate in decision-making processes, before a decision is made, by using timelines and other constraints that are clear, well understood and fair.

## Information

- Narrow restrictions on the use of in-camera sessions; all decisions are public.
- Provide public access to elected officials' electronic calendars.
- Fully use Internet technology to disseminate information.
- Create a "City report card" executed by elected officials, administration and the public on City Hall's decision-making with respect to Council priorities.
- Strengthen The City's records management program to ensure residents and City staff have convenient and timely access to public information at minimal cost.
- Review the Freedom of Information and Protection of Privacy Act and Personal Information Protection Act for their effects on citizens' abilities to access information.
- Provide information that is accurate, timely and in plain language.

## Access

System

Governance

Goal

Calgary is a city in which individuals have access to all public information when they need it. They can and do participate in decisions that affect their well-being. Decision-making is an inclusive process in which broad-based support is actively sought and contributes to continual improvement in people's lives. Factors such as language, age, race, culture, gender, sexual orientation, time, finances, ability, knowledge and health are not barriers to public decision-making.

### Engagement

- Consult communities in their "places" and within their cultural norms.
- Continually review and improve The City's citizen engagement policy.
- Provide mechanisms that ensure people have equal opportunities to participate in decision-making processes.
- Clearly inform people at the beginning of the decision-making process about plans and decisions that may affect them; clearly describe constraints, assumptions, uncertainties and risks.
- Allow enough time for the public to develop solutions to satisfy all interested parties.
- Develop communications strategies to ensure all residents are informed.
- Ensure decision-making is geographically appropriate (from neighbourhood to region) for the issue at hand.
- Encourage community associations to play a greater and more representative role in community matters.
- Initiate "Conversation Calgary," which will require political and administrative decision makers to "hang out" with formal and informal groups to discuss issues and upcoming decisions.
- Have The City provide an inclusive media outlet that facilitates effective discussion of the positions and opinions of all significant interest groups in Calgary: civic organizations, business organizations, labour organizations, religious organizations, political parties, environmental organizations, social service organizations, etc.

### STRATEGY 3

Ensure City staff prepare all major plans and place priority on advancing the public interest.

- Prepare multiple alternative plans and detailed analyses of the implications of each alternative.
- Adopt plans only after they are widely publicized and there is open public discussion that includes representation from all groups affected directly and indirectly.

### STRATEGY 4

Provide all data collected or obtained by The City — or other individuals, institutions and organizations using public funds — to the public free of charge for non-profit activities, unless privacy restrictions apply; develop suitable licensing and royalty arrangements for commercial users.

#### STRATEGY 5

Protect public spaces from privatization and protect the right to peaceful political expression in public spaces.



# GOVERNANCE

# Access

System

Governance

Goal

Calgary is a city in which individuals have access to all public information when they need it. They can and do participate in decisions that affect their well-being. Decision-making is an inclusive process in which broad-based support is actively sought and contributes to continual improvement in people's lives. Factors such as language, age, race, culture, gender, sexual orientation, time, finances, ability, knowledge and health are not barriers to public decision-making.

2	TARGET By 2016, Calgary City Council establishes a participatory budgeting process.
	STRATEGY 1 Have City Council members hold open public hearings in their wards on City budget proposals.
	STRATEGY 2  Prepare and analyse alternative budgets.  • Adopt budgets only after the public has discussed the implications of alternative budget proposals.

# **Conflict resolution**

System Go

Governance

Goal

Calgary is a city in which conflicts are resolved peacefully and individuals' rights and responsibilities are accepted. Conflict resolution is seen as an opportunity to improve the fabric of the community — to ensure all voices are heard in the resolution process. The community and local governments support mutual understanding and respect, harmony and co-operation among all peoples.

1

## **TARGET**

By 2036, 100 per cent of non-criminal disputes are resolved by some form of collaborative process.

#### STRATEGY 1

Educate the public on appropriate conflict resolution and teach people productive ways of dealing with it.

- Provide conflict resolution courses at all levels (schools K–12, post-secondary institutions, professional training, upgrading).
- Use creative ways to impart the message (e.g. a Forum Theatre, by All Nations Theatre, about conflict resolution).
- Build awareness within community groups and community facilities on methods of conflict resolution.
- Develop public awareness about methods and resources for conflict resolution that are accessible to the public.
- Ensure conflict resolution processes recognize issues of culture and diversity.

2

### **TARGET**

By 2036, 80 per cent of non-violent criminal offences are handled in the community in which the victim lives.

## STRATEGY 1

Implement a community justice model within the community to restore community relations.

- Have the three levels of government work in co-ordination to allow for an appropriate justice model that builds communities.
- Develop processes that ensure that trial, punishment and restitution occur in the community in which the victim lives.
- Develop the victim's trust that the community will act in his or her best interest.
- Identify the convicted offender and his/her offence in the community in which the offender resides.
- Ensure the justice process recognizes issues of culture and diversity.

# GOVERNANCE

# **Conflict resolution**

System

Governance

Goal

Calgary is a city in which conflicts are resolved peacefully and individuals' rights and responsibilities are accepted. Conflict resolution is seen as an opportunity to improve the fabric of the community — to ensure all voices are heard in the resolution process. The community and local governments support mutual understanding and respect, harmony and co-operation among all peoples.

3

#### **TARGET**

By 2020, 100 per cent of regulatory offences are enforced by the responsible governments, rather than through court processes.

#### STRATEGY 1

Create processes and structures to ensure administrative action.

- Require governments to enforce the quality of life intended by the bylaws and regulations in a timely fashion and, during an emergency, immediately through collaborative administrative actions.
- Establish community appeal panels or boards.
- Establish societal administrative penalties.
- Establish a regular review period of administrative penalties to ensure they reflect changing community standards.

4

#### **TARGET**

By 2036, 100 per cent of personal conflicts among students, parents, teachers, administrators, support staff and elected representatives in the education system are resolved through collaborative means

#### STRATEGY 1

Establish conflict resolution processes that encourage and empower students, parents, teachers, administrators, support staff and elected representatives to resolve conflicts in a collaborative manner.

- Develop mandatory ongoing conflict resolution training for teachers, students, administrators, support staff and elected representatives.
- Create community-based conflict resolution training.
- Clearly define rights, entitlements and responsibilities for all members of the educational community.



# **Equity**

# **System**

# Governance

## Goal

Calgary maintains and champions each person's right to a sustainable life and a sustainable environment in which to live. Diversity is valued and all voices are considered in the decision-making process. Factors such as language, age, race, culture, gender, sexual orientation, time, finances, ability, knowledge and health are not barriers to publicly provided goods and services. Each decision results in the most effective and fair method of achieving mutually beneficial objectives. All decision-making enhances the value, vitality and sustainability of human and natural systems in both the present and future.

1

#### **TARGET**

By 2021, the makeup of elected and appointed bodies reflects the diversity of the community.

#### STRATEGY 1

# Use proactive measures to encourage more diversity in political office.

- Attract diverse groups by initiating special marketing from recognized leaders.
- "Save" certain seats for particular groups.
- Use public funding to encourage diverse groups to participate in elections.

#### STRATEGY 2

## Create a model of engagement to reflect the diversity of the community.

• Consult communities in their "places" and within their cultural norms.

## STRATEGY 3

## Ensure the media embraces the diversity of the community.

- Help media outlets be able to accept the foreign credentials of media professionals.
- Provide incentives for diverse groups to become involved in the media (e.g. scholarships for media programs in Calgary).
- Ban racial profiling in the media.
- Educate the media in terms of becoming more aware on diversity issues.
- Increase media coverage of diverse cultural events/holidays.
- Increase the diversity of media personalities, perhaps through short-term affirmative action measures.
- Use diversity in the media to create more inclusive and reflective understandings of Calgary issues.

# GOVERNANCE

# **Equity**

# System

### Governance

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# 2

#### TARGET

By 2010, all public institutions and organizations implement sustainability principles (e.g. Melbourne Principles) in decision-making and reporting, using tools such as triple bottom line.

#### STRATEGY 1

Ensure decisions are based on sustainability and the fair and equitable distributions of social, economic and environmental resources.

- Have public institutions report transparently on the impacts of their decisions on multiple bottom lines.
- Develop an integrated set of regularly reported-on sustainability indicators.
- Develop the Calgary Region Principles to provide direction on social, economic and environmental co-operation.
- Focus the greatest allocation of resources on the most disadvantaged.
- Ensure all economic, environmental and social strategies consider everyone's right to meet their needs.
- Revise Calgary's Triple Bottom Line Policy to achieve environmental, social and economic sustainability.

## STRATEGY 2

Ensure the environment of the Calgary region is conserved, protected and — where needed to achieve sustainability — improved.

- Determine the level of environmental sustainability achieved and achievable in Calgary and its region.
- Remove obstacles, inappropriate incentives and divergent decision-making that result in unsustainable development (e.g. loss of prime agricultural land, urban or rural "sprawl," degradation of watersheds).
- Support co-ordination between government, business and environmental non-governmental organizations (ENGOs) to create synergies in achieving environmental integrity (e.g. Clean Air Strategic Alliance).
- Empower and fund ENGOs (e.g. the Bow River Basin Council)) to co-ordinate and implement all initiatives in the region to protect the watershed and improve the sustainability of water supplies.
- Develop Calgary as a city that demonstrates responsibility for protecting and restoring biodiversity and acts as a custodian for nature.
- Measure our ecological footprint on a consistent basis and actively encourage Calgarians to reduce it, thereby reducing social, environmental and economic impacts.
- Promote and support sustainable consumption by implementing demand management (i.e. increase public awareness so that people accurately value natural resources).
- Have an expert panel review the targets, strategies and initiatives of all end-state goals to determine how they can be co-ordinated and strengthened to ensure environmental sustainability.

# **Equity**

System

Governance

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#### STRATEGY 3

Calgary is a safe, inclusive community that responds effectively to the needs of its vulnerable and disadvantaged residents and embraces and values diversity as an asset.

- Determine the level of social sustainability achieved and achievable in Calgary and its region.
- Develop racism awareness training programs for institutions, organizations and individuals in the community.
- Create a provincial-regional program to identify and resolve issues of safety and inclusiveness.
- Work to reduce spatial disparities of income and diversity within the city.
- Empower those whose voices are not heard; mobilize local knowledge, support and participation.

#### STRATEGY 4

Ensure economic development contributes to long-term prosperity.

- Determine the level of economic sustainability achieved and achievable in Calgary and its region.
- Develop a financial sustainability index to help decision makers evaluate proposals.
- Increase sustainable production by supporting the adoption and use of environmentally sound technologies.

3

## **TARGET**

By 2020, all public institutions and systems create and implement an urban Aboriginal policy that recognizes the detrimental colonial history experienced by First Nations, Metis and Inuit people; reduces barriers to public participation and governance; and supports economic, social and political advancement.

### STRATEGY 1

Encourage urban First Nations, Metis and Inuit elders, individuals, communities, agencies and governance groups to create a shared vision for Calgary.

• Develop a culturally inclusive collective vision and plan that honours and embraces the diverse First Nations, Metis and Inuit communities of Calgary.

# GOVERNANCE

# **Equity**

# System

### Governance

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#### STRATEGY 2

Encourage urban First Nations, Metis and Inuit elders, individuals, communities, agencies and governance groups to develop and support a co-ordinated and targeted approach to service delivery to urban First Nations, Metis and Inuit citizens and communities.

- Build upon existing initiatives to enhance trust among Aboriginal groups and honour previous leadership and efforts in these areas.
- Develop a targeted approach to decrease the social exclusion experienced by First Nations, Metis and Inuit individuals and communities; symptoms are often manifested by poverty, a low sense of community, lack of employment, low levels of education and crime.
- Develop a targeted approach to decrease the number of First Nations, Metis and Inuit individuals in households living below Statistic Canada's Low-income Cut-off (LICO).
- Develop a targeted approach to decrease the poverty rate of First Nations, Metis and Inuit individuals, especially of children and seniors.

## STRATEGY 3

Engage and support all public systems and institutions (e.g. education, justice, health) that interact with and provide services to First Nations, Metis and Inuit individuals and communities, to develop and support cross-pollinated, co-ordinated and targeted services for urban First Nations, Metis and Inuit citizens and communities.

- Encourage groups to understand the historical, economic, social and political challenges of Calgary's First Nations, Metis and Inuit communities; these include mainstream institutions and systems that work with First Nations, Metis and Inuit communities; service delivery agents; governance groups; and all three levels of government.
- Recommend that institutions and systems use Aboriginal awareness training to better understand and respond to social, cultural and economic service requests, and finance such training.
- Recommend that institutions and systems work collaboratively with all three levels of government to ensure the most effective and efficient funding of services for and delivery of services to Calgary's First Nations, Metis and Inuit communities.

#### STRATEGY 4

Enhance funding for services by engaging public and private funders that interact with, and provide funding to, First Nations, Metis and Inuit services.

- Have funders support and provide inverse service delivery and financial support to urban First Nations, Metis and Inuit programming over the next 30 years.
- Have funders provide long-term and sustainable funding for urban First Nations, Metis and Inuit programming.

# 4

#### **TARGET**

By 2036, racism and discrimination is dealt with by having public and private sector institutions and organizations throughout the city introduce meaningful and effective policies and processes and measurable outcomes.

# **Self-determination**

# System Governance

Goal

Calgary is a partner in creating and managing a sustainable region. We are empowered and actively engaged in our local community and beyond. The personal and collective freedoms that Calgarians enjoy are balanced by their responsibilities to each other and the world. Opportunities for improving quality of life are numerous and accessible, creating an environment in which Calgarians are able to decide their futures.

# Target By 2036, there is a 75 per cent turnout in municipal elections.

#### STRATEGY 1

Provide continuing, strategic education to the public about the importance and responsibility of voting and participating in other forms of engagement.

- Continue the development of civic education.
- Develop an independent voter education group.
- Build advocacy and education of issues related to municipal elections, to educate voters.
- Have celebrities endorse voting.
- Attract diverse groups by initiating special marketing from recognized leaders.
- Recognize the values of other forms of involvement (e.g. community volunteering).

#### STRATEGY 2

### Provide incentives to increase voter turnout.

- Provide vouchers for voting (e.g. a \$5 coupon from Safeway or 10 Calgary Dollars).
- Reward schoolchildren who bring in people to vote (e.g. prizes, Calgary Dollars).
- Encourage kid- and youth-friendly voting by providing activities for kids at voting stations (e.g. kids' voting stations) or engaging youth on committees.
- Provide free transit/transportation to voting stations on election day.
- Vote for members of the Calgary Health Region board.

### STRATEGY 3

# Revise the structure of the electoral system to make government more responsive and easier to access.

- Implement proportional representation.
- Establish limits on campaign contributions; the Municipal Government Act should regulate this.
- Provide public funding for elections to level the playing field for potential candidates.
- Establish term limits for politicians.
- Create whistle-blower legislation.
- Synchronize federal, provincial and municipal elections on one national day.
- Provide higher pay for government officials.
- Establish longer voting hours.
- Allow more flexible advance voting and promote this feature.
- Provide proactive communications in multiple languages about voting procedures, dates, etc.
- Utilize electronic voting methods; this could be used for typical voting, and also to engage our regional partners (e.g. someone in Canmore can electronically participate in an issue that is in Calgary, but has regional implications).
- Encourage plebiscites/referendums as ways to encourage voters to come.

# GOVERNANCE

# **Self-determination**

## **System**

### Governance

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#### STRATEGY 4

### Generate interest and trust by Increasing public information on government activity.

- Require open disclosure of the contributions/lobbyist registry.
- Establish a city scorecard on how Council decisions meet public expectations.
- Provide more public access to the workings of government to show where decisions come from (open government).
- Implement mandatory all-party/all-candidate forums.

# **つ** | ]

By 2036, there is a citizen-to-municipal-politician ratio of 55,000:1.

#### STRATEGY 1

Add city-wide aldermanic seats to Council.

# 3

#### TARGET

By 2036, The City of Calgary reduces its dependence on property taxes to no more than 25 per cent of revenue.

#### STRATEGY 1

Increase revenue opportunities to allow more flexibility in how we meet the needs of our citizens.

- Have a broader palette of progressive taxation tools to raise revenues.
- Revise the Municipal Government Act to, for example, obtain charter powers that give us more flexible sources of revenue, allowing us to meet the needs of our citizens.

### STRATEGY 2

Maximize the benefits of provincial royalties and associated fees and taxes generated from non-renewable resources.

- Maximize Alberta's non-renewable resource royalties and associated fees and taxes, taking
  into account the 100-year financial requirements for sustainability of Alberta's economic, social
  and environmental infrastructure and other publicly provided goods and services and financial
  arrangements in other comparable jurisdictions.
- Work with the provincial government to distribute non-renewable resource royalties and associated fees and taxes to municipalities, school boards and health regions for investment in physical and social infrastructure that promotes the long-term sustainability of communities and regions.

# 4

#### **TARGET**

By 2036, all general revenues are based on the principle of progressive taxation.

#### STRATEGY 1

Manage expenditures to increase flexibility and effectiveness and to ensure equity in meeting the needs of our residents.

 Allocate public revenue to ensure the wise and sustainable use of publicly provided goods and services.

# **Self-determination**

System

Governance

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#### **FARGET**

By 2036, all publicly provided goods and services are affordable, accessible and priced in accordance with their public benefits.

#### STRATEGY 1

Ensure the fees and charges for publicly provided goods and services are based on the principles of encouraging the conservation of scarce resources, promoting the extensive use of publicly beneficial goods and services and ensuring there are equitable alternatives in meeting people's needs.

6

#### TARGE1

By 2010, The City of Calgary has co-operative, supportive and mutually beneficial working relationships with governments in the region

#### STRATEGY 1

Ensure The City of Calgary and all other governments in the region are able to efficiently and effectively provide public goods and services in co-operative, co-ordinated and mutually beneficial manners that support sustainable development objectives.

- Create equitable and level playing fields for services by/between municipalities.
- Co-ordinate service delivery within the region.
- Prepare a "regional revenue reduction and reform" plan to: improve the efficiency of revenue collection in the region; expand, in a revenue-neutral manner, the flexibility of governments to raise revenue or reduce the fiscal imbalance between all levels of government; and provide for equitable revenue sharing that levels the playing fields for public goods and services.
- Develop and implement a method of making municipalities and First Nations equal partners in federal and provincial decisions that affect the region.
- Remove obstacles, inappropriate incentives and divergent decision-making that result in unsustainable development (e.g. loss of prime agricultural land, urban or rural "sprawl," inadequate transportation, degradation of watersheds).
- Conduct a survey of the costs of services compared to the tax base.
- Ensure benefits and burdens are fairly distributed.

# GOVERNANCE

# **Self-determination**

## **System**

### Governance

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# 7

### **TARGET**

By 2016, governance is restructured to allow governments to create or reallocate authority so that effective decisions are made at the geographical scale that matches the processes involved.

#### STRATEGY 1

Building on the relationships within the Calgary Regional Partnership, develop options for regional governance that, while respecting local autonomy, will reduce intergovernmental conflicts, enhance the efficiency and effectiveness of public service delivery, strengthen growth management and ensure social, economic and environmental sustainability.

- Establish a form of regional governance that will ensure the sustainability of growth and development in the Calgary region.
- Establish a regional agency to protect and manage the environment of the Calgary region.

#### STRATEGY 2

## Strengthen community associations by building upon their existing network.

- Restructure community associations to make them democratic, representative and accountable.
- Include community association candidates on the ballot during municipal elections; relevant initiatives related to campaign finance and voter turnout (from Access Target 1 and Self-Determination Target 1) would apply.
- Grant community associations greater responsibility for neighbourhood-specific processes and issues.

# 8

## **TARGET**

By 2008, beginning with the approval of the 100-year vision, all government decisions protect individual freedoms, ensure people meet their obligations and improve quality of life.

#### STRATEGY 1

## Clearly define and promote people's rights, entitlements and responsibilities.

- Ensure all decisions comply with the Charter of Rights and Freedoms and other legal arrangements.
- Review current legal arrangements to determine if a City charter of rights and freedoms is needed.
- Create a City ombudsman with educational, investigative and enforcement powers.

#### STRATEGY 2

#### Protect the public interest.

- Establish performance measures based on the outcomes of imagineCALGARY, to be used for legislative and administrative decisions.
- Review City Council's decision-making process to determine if some items should require more than a majority for approval.



# **Self-determination**

System Governance

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decide their futures.

TARGET By 2008

By 2008, and every year thereafter, groups/organizations/government report on how they have considered and adopted the imagineCALGARY targets and strategies that are relevant to them and in which they have been identified as having a role.

STRATEGY 1

Establish a public advisory group to promote and monitor the targets and strategies and recommend changes.



# Air

# System

# **Natural environment**

#### Goal

Calgarians value the quality of clean air, recognizing it as the most basic need for survival. Treasuring clear, bright skies, we steward our airshed and responsibly address climate change. Economic and social activities protect all living things by ensuring healthy air quality indoors and out.

# 1

#### **TARGET**

By 2036, energy consumption is reduced by 30 per cent based on 1999 use.

#### STRATEGY 1

Capitalize on opportunities to educate consumers about the energy-efficient behaviours of various energy products and practices, and encourage them to adopt the best.

- Establish feedback mechanisms to consumers, related to their use of energy and impact on the environment.
- Conduct research to understand barriers to energy efficiency behaviour.
- Develop technical training courses to educate about energy conservation techniques.
- Regularly measure and report on energy use patterns.
- Encourage energy efficiency labelling on products.

#### STRATEGY 2

Reduce energy waste and loss, at both household and community levels, for all fuels.

#### a. Heat/electricity use

• Measure consumption by using visible household electrical and natural gas meters.

## b. Transportation

- Control traffic flow to reduce the need to start and stop.
- Have communities establish ride-sharing and car-sharing programs.
- Establish an idling bylaw.
- Surcharge vehicles registered within city limits.
- Expand fuel taxes.
- Increase parking costs and decrease parking availability.
- Enforce speed limits (e.g. 90 kilometres per hour is a more optimal speed for less energy consumption).

### c. General

- Increase prices during peak energy demand times.
- Promote advanced standards for product energy efficiency.
- Promote and develop energy-efficient products to reduce energy consumption.
- Base property tax partly on the amounts of services used, rather on than the value of the property.
- Use building standards to improve energy efficiency.
- Increase the adoption and use of the Built Green program throughout the city.
- Establish green procurement policies.



# Air

# System

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#### STRATEGY 3

# Develop incentives to conserve energy.

- Offer incentives to use energy-efficient products or consume certain levels of energy.
- Offer incentives for innovative practices among energy providers/distributors.
- Escalate prices for energy consumption based on demand.
- Offer rebates for energy-efficient retrofitting.
- Price support low/no-emission transportation alternatives: bicycles, transit, car-sharing, etc.
- Use a public benefits charge to support system efficiency improvements.
- Offer incentives to developers for citing solar buildings.
- Urge higher levels of government to subsidize alternative energy projects.
- Use local improvement charges to fund energy efficiency upgrades.
- Offer revolving low-interest loan funds.
- Fund research and development.
- Support markets for energy conservation.
- Use an energy credit system in which people can collect credits and sell them if they want.
- Subsidize transit, cycling or walking for workers.

#### STRATEGY 4

Promote urban forms and buildings that reduce energy consumption and use low-impact renewable energy.

## **Urban forms**

- Design communities that have pedestrian destinations like parks, shopping areas, etc., instead of implementing them after the fact as part of the road network.
- Develop planning policies that reflect energy efficiency.
- Increase the proportion of higher-density dwelling units to reduce the per capita consumption of building materials and service infrastructure.
- Increase interest in eco-neighbourhoods and forms of co-operative housing, which reduce demand for appliances and personal automobiles.
- Provide easy access to life necessities and urban amenities, mostly by walking or cycling.
- Integrate energy planning into neighbourhood design.
- Balance vehicle use with public transit.
- Support alternative modes of transportation through new infrastructure.
- Create suburban employment centres to put jobs closer to where people live.
- Encourage compact urban forms that are more energy-efficient; discourage zoning barriers.
- Encourage mixed-use neighbourhoods to reduce the need to use vehicles.
- Develop a Calgary energy plan that requires a certain percentage of Calgary's energy to be produced from zero/low-emission fuel sources (solar utilities on roofs, landfill gas, etc.).



## Air

# System

#### **Natural environment**

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## **Buildings**

- Create a comprehensive network of diverse communications infrastructure, which will reduce the need for people to travel to in-person meetings in energy-intensive ways.
- Develop solar orientation requirements (right to light regulations).
- Create buildings that provide their own energy, purify their own wastes and participate in sustainable materials cycles.
- Encourage developers to orient buildings to take advantage of passive solar heat.
- Use better design to enhance comfort levels (e.g. locate buildings near LRT stops with retail fronts).
- Require all new and retrofitted communities, buildings, vehicles, equipment and processes to
  be within five per cent of the highest energy-efficient design available out of all economically
  competitive products, as measured on a life cycle basis (e.g. green infrastructure design and
  technology, energy-efficient housing, LEED development and neighbourhood design and
  R-2000, Built Green, etc.).
- Apply full cost accounting.
- Change the National Building Code to include higher efficiency standards.
- Give access to the general grid to all producers, including household- and community-level production facilities.
- Establish wind, geothermal, solar-thermal and photo-voltaic solar power as the main sources of energy for household, community (business and non-governmental organizations) and government levels.
- Propose water conservation programs that will reduce the need for energy-intensive water processes.

# 2

#### TARGE1

By 2036, the use of low-impact renewable energy increases by 30 per cent as a percentage of total energy use.

### STRATEGY 1

# Create a supportive infrastructure for alternative sources of energy.

- Create financial, taxation and regulatory incentives for the use of renewable energy.
- Establish adequate transmission facilities.
- Make electrical cogeneration possible through economies of scale and agglomeration economies.
- Implement the principles of low-throughput "industrial ecology"; create closed-circuit industrial parks in which the waste energy of some firms is the essential feedstock for others.
- Develop district energy systems for Calgary that use renewable or waste energy.
- Stimulate green power programs and green certification adoption for all sectors.
- Implement green procurement policies.
- Establish an emissions trading market.



# Air

# System

### **Natural environment**

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#### STRATEGY 2

# Diversify the economy and add to the portfolio of jobs offered in Calgary (and Alberta).

- Create incentives to stimulate job growth (develop local expertise, business incentives and education).
- Promote additional products and services that would go along with new industries.
- Expand energy production forms to increase and diversify the economy.
- Develop new forms of energy (e.g. solar energy).
- Shift subsidies to renewable energies.
- Utilize energy expertise to become an alternative energy expert.
- Support wind power by using a system similar to the land lease system for oil and gas.

#### STRATEGY 3

# Develop Calgary's energy research capacity.

- Develop research, development and technology commercialization capabilities, for conventional and alternative energy resources, specifically as they relate to Alberta's natural resources.
- Establish an Alberta Heritage Trust Fund research institute in alternative energy sources, modelled after the Health Research Institute.
- Integrate the outcomes of current and future research initiatives, including the appropriate concentration/consolidation of resources in core strength areas (e.g. examine potential synergies between the Institute for Sustainable Energy, Environment and Economy and the Alberta Energy Research Institute).
- Fund research and development to create and improve new and existing products.

#### STRATEGY 4

# Generate energy locally that enables grid-connected generation and distribution.

- Establish energy reserves for future needs.
- Put energy derived from renewable sources on the local grid and support energy microproduction.
- Standardize regulatory and planning processes that are not overly onerous.
- Promote heat exchangers within buildings.
- Use geothermal technology to heat and cool buildings.
- Use local improvement charges to fund renewable energy upgrades.
- Facilitate the use of heat wasted by industry or power plants for local (neighbourhood) water and space heating, and use thermal conversion technology to create energy from waste.

## STRATEGY 5

# **Education and awareness**

• Label energy products to indicate energy sources and environmental impacts.



## Air

# System

### **Natural environment**

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# 3

#### **TARGET**

By 2012, total community greenhouse gas emissions are reduced by six per cent from 1990 levels; by 2036, they're reduced by 50 per cent from 1990 levels and criteria air contaminants are also significantly reduced.

#### STRATEGY 1

# Improve transportation choices to reduce emissions.

- Promote weekday transit and weekend-only driver programs, carpooling, telecommuting, etc.
- Promote public transit and other transportation alternatives, such as by creating additional commuter bike lanes.
- Reduce energy use by building transportation infrastructure (walking, cycling, transit).
- Support the use of alternative fuels by greening our business fleets.
- Increase LRT coverage to service new developments.
- Increase the service level to make public transit competitive with auto travel.
- Use transit-oriented development to focus development at transit stops.
- Provide high-quality pedestrian connections, particularly along transit routes to connect with transit stops.
- Have employers offer transit passes versus parking spaces, and fleet vehicles; offer a tax credit for transit passes rather than for parking spaces, and a tax exemption for employer-provided transit passes.
- Provide transit service and facilities that are as comfortable and convenient as those of other travel options.
- Provide priority for transit vehicles.
- Enforce the building of public transit facilities that are integrated with large employment areas (e.g. hospitals).
- Encourage the use of transit that runs on electricity or uses hybrid vehicles, and the use of the right mode for the right activity (e.g. electricity downtown and diesel for longer suburban trips).
- Identify alternative energy sources (ride the wind).
- Encourage rules for automakers that require them to provide higher degrees of energy efficiency.



# Air

# System

### **Natural environment**

# Goal

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#### STRATEGY 2

# Establish community design standards that foster sustainable development and behaviour.

- Ensure pedestrian needs are given the highest priority when designing facilities, especially in terms of the form, function and quality of the transportation system.
- Create road rights-of-way to provide space for commuter bike paths.
- Promote telework programs for employees and provide flextime incentives (e.g. property tax relief).
- Optimize the current road network (e.g. use lane reversals, ramp metering, co-ordinating signals).
- Use traffic calming measures to encourage sustainable forms of transportation.
- Integrate land use and transportation design (e.g. locate buildings near LRT stops with retail fronts).
- Design change facilities into new buildings for those who cycle, run or walk to work.
- Reduce the need to drive by combining high-density, mixed-use development with appropriate transit service.
- Reduce speed on roads to slow traffic through better design and changing engineering standards.
- Design communities that reduce car use.

#### STRATEGY 3

#### Apply best practices to household/commercial activities to reduce emissions.

- Ensure new and renovated homes have demand hot water and heating systems.
- Ensure all homes/businesses have energy-efficient appliances.
- Establish green building standards and management systems for commercial buildings.

## STRATEGY 4

# Create areas that mitigate the effects of emissions.

- Protect and create areas that will act as carbon sinks.
- Use green roofs to reduce the heat island effect.

# STRATEGY 5

## Raise public awareness of the importance of emissions reduction.

- Create smog alerts.
- Monitor and report on air quality (e.g. the ozone level and other concerns).
- Support local clean air groups.
- Educate and train municipal staff.
- Inform the public of municipal clean air actions and encourage people to take individual action.

## STRATEGY 6

## Diversity the economy to provide jobs and opportunity.

- Provide incentives for climate stabilization through carbon taxes and emissions trading agreements.
- Offer incentives to those who use alternative transportation.
- Offer economic incentives for addressing air quality.



## Air

# System

### **Natural environment**

### Goal

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### STRATEGY 7

Jointly approach air quality issues and co-ordinate action strategies with organizations working on emissions reduction and energy efficiency.

- Create a joint provincial-regional air quality action team to reduce pollution and greenhouse gas emissions.
- Remove obstacles, inappropriate incentives and divergent decision-making that result in unsustainable development (e.g. loss of prime agricultural land, uncontrolled/uncoordinated urban/rural fringe development, watershed degradation).
- Co-ordinate emissions reduction programs.

#### STRATEGY 8

## Significantly reduce criteria air contaminants.

- Establish standards for criteria air contaminants.
- Support existing studies (such as those done by The City of Calgary) to reduce criteria air contaminants.
- Work with the provincial government to monitor contaminants.

# 4

#### TARGET

By 2036, indoor air contaminants are reduced to zero per cent.

#### STRATEGY 1

## Establish criteria for healthy indoor air quality.

- Identify contaminants.
- Co-ordinate actions that focus on indoor air quality.
- Collaborate with the building industry (e.g. LEED programs, Built Green, etc.).

## STRATEGY 2

Achieve targets through source reduction.



# Air

System

**Natural environment** 

Goal

Calgarians value the quality of clean air, recognizing it as the most basic need for survival. Treasuring clear, bright skies, we steward our airshed and responsibly address climate change. Economic and social activities protect all living things by ensuring healthy air quality indoors and out.

5

#### **TARGET**

By 2036, Calgary's ecological footprint decreases to below the 2001 Canadian average of 7.25 hectares per capita.

#### STRATEGY 1

Mitigate the environmental impacts of transportation, including for work, recreation, trade, etc.

- Invest in public transportation and bicycle lanes.
- Integrate land use and transportation planning to counter low density, segregated land use and vehicle dependence (a.k.a. sprawl).
- Encourage people to walk or bicycle whenever possible.
- Encourage people to carpool or take public transportation to work instead of driving alone.
- Encourage people to drive smaller, more fuel-efficient cars and keep them well maintained.
- Encourage people to buy more locally grown foods and locally produced goods, to reduce the need for transportation.

#### STRATEGY 2

# Reduce energy consumption in order to reduce "energy land."

• Encourage people to reduce household energy use by turning off lights, turning down temperatures at night and when not at home, hanging out laundry to dry and using energy-efficient appliances.

# Land and soil

System Natural environment

Goal Fertile soil is vital to maintaining life. Calgarians are responsible stewards of land, maintaining the life-supporting processes integral to healthy, intact ecosystems.

We use and share our land wisely and equitably.

TARGET By 2036

By 2036, land use efficiency increases by at least 30 per cent, as measured by public transit threshold and increased density.

#### STRATEGY 1

# Increase density to support efficient and cost-effective public transit and appropriate commerce.

- Incorporate land conservation into transportation planning.
- Encourage shared parking strategies versus designated parking spaces.
- "Unbundle" parking from residential units; buying condos and parking spaces separately results in less automobile ownership.
- Create parking maximums for developments in order to promote automobile alternatives.
- Reduce the need to drive by combining high-density, mixed-use development with appropriate transit service.
- Offer parking incentives for carpoolers and those who drive hybrid/low-impact vehicles.
- Increase LRT development (expedite funding).

#### STRATEGY 2

## Design communities to provide for decreased consumption and improved ecology.

- Develop a regional growth (boundary) strategy.
- Increase density and mixed-use development, which reduce the per capita demand for occupied land (e.g. partially or totally remove zoning restrictions).
- Optimize land use through community design.
- Restore and enhance wetlands through green infrastructure design and technology.
- Apply low-impact effect development standards.
- Reduce road width standards.
- Develop regulations that control the impacts of construction on ecological services (e.g. government needs to encourage new approaches through legislation).
- Perform ecological impact assessments prior to development.
- Establish ecological infrastructure for cities and towns that requires less use of materials, energy and engineering.
- Offer incentives for innovative planning that improves ecological integrity.
- Reduce the stripping of natural vegetation and topsoil.

#### STRATEGY 3

## Reduce the financial impacts of infrastructure service provision by using ecological services.

- Decrease the use of harmful chemicals to decrease agricultural fertility costs.
- Increase property values by investing less in services over time and increasing the use of ecological services.
- Decrease consumption and increase permeability to decrease water treatment costs.
- Increase permeability to also decrease the costs of managing watercourses and estuaries.



# **Land and soil**

# System Natural environment

Goal

Fertile soil is vital to maintaining life. Calgarians are responsible stewards of land, maintaining the life-supporting processes integral to healthy, intact ecosystems. We use and share our land wisely and equitably.

### Strategy 4

## Develop incentives to support businesses that operate in environmentally sustainable ways.

- Offer support for attracting and retaining sustainable industry.
- Ensure industrial and business centres are designed to be eco-efficient.
- Enhance e-commerce infrastructure within Calgary.
- Provide incentives for companies wanting to be located in eco-parks.
- Provide property tax incentives for green homes/properties (e.g. smaller homes).
- Promote sustainable practices like LEED.

# 2

### TARGET

By 2036, sustainable urban food production increases to five per cent.

### STRATEGY 1

# Support and develop land use, public regulations and infrastructure that promote urban food production.

- Promote the farming of unused and underused lands.
- Establish a percentage of urban land to be set aside for food production (e.g. community gardens).
- Develop land use districts for urban food production.
- Introduce urban agriculture as part of housing development.
- Consider areas with appropriate microclimates to place food growth areas.

### STRATEGY 2

## Extend appropriate farm-related services and other consumer opportunities to urban farmers.

- Establish subsidies for local food producers.
- Require mainstream food stores to carry certain a percentage of locally produced food.
- Increase accessibility to allow small producers to participate in farmers' markets.

### STRATEGY 3

## Encourage the development of household, community and public food gardens.

- Allow green roofs for food production.
- Encourage people to plant rear yard gardens to supplement food production.
- Grow food in city parks, on hospital grounds, on school grounds and on other appropriate lands.
- Encourage food banks to develop their own gardens through sweat equity.
- Promote community-based gardens and local farmers' markets in various Calgary communities.

### STRATEGY 4

# Educate the public and professionals about unsustainable land use patterns and opportunities for local food production.

- Educate about composting, gardens, soil conservation and surface permeability.
- Educate about the benefits of local food production, such as increasing the link between urban and rural lands.
- Promote and develop food production training.
- Support smart growth that steers development away from farmland with good quality soil.



# Land and soil

**System** 

**Natural environment** 

Goal

Fertile soil is vital to maintaining life. Calgarians are responsible stewards of land, maintaining the life-supporting processes integral to healthy, intact ecosystems. We use and share our land wisely and equitably.

3

#### TARGET

By 2036, the consumption of urban- and regionally produced food by Calgarians increases to 30 per cent.

#### STRATEGY 1

Educate the public about unsustainable land use patterns and opportunities for local food production.

- Educate about composting, gardens, soil conservation and surface permeability.
- Educate about the benefits of local food production, such as increasing the link between urban and rural lands.
- Provide information on the outcomes of applying full cost accounting to food (production, delivery, transportation, etc.).

### STRATEGY 2

Increase market access to locally produced food, such as through supermarkets, farmers' markets, restaurants, etc.

- Support the slow food movement in restaurants.
- Require mainstream food stores to carry a certain percentage of locally produced food.
- Work with the provincial government and health authorities to research and promote the use of locally produced food.

### STRATEGY 3

Use economic/financial mechanisms to capture the costs of food and provide incentives to purchase in a sustainable way.

- Apply full cost accounting (cost and benefit analysis) to food (production, delivery, transportation, etc.).
- Establish environmental taxes to discourage unsustainable practices.

4

### ARGET

By 2036, there is zero per cent new soil contamination.

### STRATEGY 1

Educate residents, organizations and business about the advantages of soil fertility.

- Establish food gardens.
- Educate the public on the value of soil.



# **Land and soil**

System Natural environment

Goal

Fertile soil is vital to maintaining life. Calgarians are responsible stewards of land, maintaining the life-supporting processes integral to healthy, intact ecosystems. We use and share our land wisely and equitably.

#### STRATEGY 2

## Assimilate waste to decrease pollution levels and provide additional sustainable resources.

- Develop closed-loop cycles in waste management.
- Establish protocols for labelling products, buildings and other objects with disassembly and remanufacturing instructions.
- Promote resource efficiency to minimize needs for raw materials.
- Establish programs to effectively manage hazardous waste.
- Promote research and development concerning low-waste products.
- Establish a fee structure based on the amount of waste collected.
- Develop a comprehensive communications strategy to help citizens understand the impacts of the wastes they produce and the alternate choices available.
- Create accessible composting facilities throughout the city.
- Expand The City's recycling program to get greater participation.

#### STRATEGY 3

### Enforce source reduction to complete material cycles.

- Apply the "polluter pays" principle.
- Use sustainable materials cycles to avoid the chemical contamination of soils.
- Use natural/safe alternatives instead of harmful chemicals.
- Create incentives to separate materials for recycling or composting; offer a lower landfill tipping fee for targeted materials like organics, paper and wood.
- Encourage manufacturers to take responsibility for end-of-life management.
- Create policies that favour the "take back" of products by manufacturers.
- Design products that offer continuing streams of service and value.

## STRATEGY 4

### Reduce the use of harmful chemicals in agriculture, landscaping, etc.

- Reduce pesticide use to zero by 2010 for community and City operations.
- Do not allow materials from the Earth's crust and from society to systematically accumulate in the biosphere.
- Use materials that are highly abundant, non-toxic and easily broken down by ecosystems.
- Explore alternatives to pesticides, including encouraging natural predators and using mechanical controls.

### STRATEGY 5

### Eliminate the risks of contamination.

- Design feedback systems for gas stations and other possible polluters.
- Work with fire and emergency services to identify high-risk polluters.

# Land and soil

# System

### Natural environment

# Goal

Fertile soil is vital to maintaining life. Calgarians are responsible stewards of land, maintaining the life-supporting processes integral to healthy, intact ecosystems. We use and share our land wisely and equitably.

# 5

### TARGET

By 2036, at least 30 per cent of existing contaminated sites are remediated.

### STRATEGY 1

# Categorize and prioritize contaminated sites.

• Compile an inventory of contaminated sites.

#### STRATEGY 2

## Redevelop existing lands (brownfield) to improve previously degraded areas.

- Maintain the health of nearby riparian zones and provide as much wildlife habitat as possible.
- Implement the practice of low-impact development.

# 6

# **TARGET**

By 2036, Calgary's ecological footprint decreases to below the 2001 Canadian average of 7.25 hectares per capita.

### STRATEGY 1

### Improve food consumption to reflect sustainable living.

- Use product labelling and certification systems to guide consumption and green procurement.
- Establish reliable certification systems to give people the choice to buy products that are grown/ harvested in sustainable ways.
- Avoid dependence on imports that are produced with destructive consequences to people and ecosystems.
- Encourage people not to overeat, but to consume the calories appropriate for their ages and levels of activity.
- Encourage people to eat more grains, vegetables and natural foods.
- Support local agriculture, sustainable farming methods and nutritional education.

# STRATEGY 2

# Create educational programs that address unsustainable consumption patterns and promote sustainable practices.

- Increase public literacy on why and how to reduce the consumption of threatened ecosystem resources.
- Encourage producers and retailers to educate the public on nutritional facts and promote sustainable food.

### STRATEGY 3

# Support social and ecological values that guide actions, purchases and investments.

- Promote reusing, recycling and composting trash, and reducing packaging.
- Offer tax incentives to support environmentally friendly practices like Danish-style co-housing developments.
- Establish standards to report overall life cycle performance (e.g. ISO 14000, LEED).



# **Plants and animals**

System Natural environment

Goal Calgary is rich with intact ecosystems. We protect and restore our natural heritage, valuing native biodiversity as the foundation of life. Our built environment is

integrated into and respects the natural environment we inhabit.

TARGET

By 2036, native biological diversity increases to healthy levels, as measured through Habitat Suitability Index indices and local key indicator species.

#### STRATEGY 1

# Ensure species are protected and managed and that recovery measures are in place for threatened species.

- Establish a linked network of representative reserves in the city and throughout the bioregion, as well as enhance diversity in gardens and in support ecosystems in the bioregion.
- Use fair trade to avoid the spread of invasive species.
- Monitor and track current and emerging invasive species.
- Develop proactive management strategies to protect species.

### STRATEGY 2

### Establish programs and areas that provide for useful and sufficient habitat supplies.

- Develop a long-term plant community inventory program.
- Preserve lands essential to maintaining regional ecosystem functions.
- Protect and restore wildlife corridors.

### STRATEGY 3

## Ensure planning policies/bylaws reflect the commitments of the sustainability goal.

- Work with the Calgary Regional Partnership and Alberta Municipal Affairs to reinstitute regional land use planning.
- Develop landscape scale monitoring and modelling tools to improve our understanding of land impacts.
- Integrate biodiversity conservation and development planning (low-impact development).
- Integrate ecological service (nature's ability to clean water and air, break down waste, replenish resources and provide a sustainable source) provision into development.
- Engage citizens in the development of community-level goals (in support of 100-year goals).
- Protect and improve the carrying capacities of ecosystems.
- Encourage natural landscaping and relax bylaws that restrict natural landscaping.

### STRATEGY 4

## Raise public awareness about the importance of protecting biodiversity and ecosystems.

- Give people access to information about ecosystems and decisions affecting their ecosystems.
- Increase transparency and accountability concerning decisions that affect ecosystems, which includes greater involvement of concerned stakeholders in decision-making.
- Increase the co-ordination of multilateral environmental agreements and the co-ordination of environmental agreements with the policies and actions of international economic and social institutions.
- Develop shared outcomes and reporting for government, the private sector and non-governmental organizations.
- Describe environmental costs in dollars and cents.
- Foster and support local biodiversity-monitoring initiatives.

# Plants and animals

**System** 

**Natural environment** 

Goal

Calgary is rich with intact ecosystems. We protect and restore our natural heritage, valuing native biodiversity as the foundation of life. Our built environment is integrated into and respects the natural environment we inhabit.

2

### **TARGET**

By 2036, the number and/or size of protected or restored habitats increases to a state of health and functionality.

#### STRATEGY 1

Ensure no viable wetlands are lost, which integrates ecological services into infrastructure and increases natural areas.

- Protect aquatic systems to support all species.
- Restore wetlands to re-establish native ecosystems.

### STRATEGY 2

Integrate the planning and management of all natural and man-made public areas and facilities.

- Establish and implement a standard that requires there to be a public recreational facility for all ages within a very short walking distance from all residential buildings.
- Ensure public transit provides access to places like Nose Hill.
- Provide the public with recreational and creative opportunities, so that people can have easy
  access to their natural (and man-made) surroundings: schools, libraries, performance spaces,
  and parks.

### STRATEGY 3

Use the rural urban fringe to create new, exciting, living landscapes, ranging from working farms, to historic sites, to cultural centres.

• Provide opportunities to regenerate land and develop communities using the best available knowledge in building and landscape design and management, sustainable transportation and renewable energy.

### STRATEGY 4

Improve habitat health and resilience.

- Value biodiversity and ecosystem services the same as other economic commodities; place a monitory value on ecological goods and services.
- Secure land in environmentally sensitive areas through partnerships and other legal vehicles like land trusts and conservation easements.
- Promote biodiversity through the use of indigenous plants in local parks and for decorative purposes.
- Establish riparian corridors with setbacks (e.g.100 metres for floodplain protection).
- Encourage and promote the sale of native plant species at nurseries.



## Water

System Na

**Natural environment** 

Goal

Water is recognized as necessary for life. Calgarians value this precious resource and guarantee equitable access for all living things. We are stewards of water, protecting its quality and maintaining the integrity of the hydrologic cycle. Our water supply system is sufficiently secure, flexible and adaptable to changing conditions and circumstances.

1

## **TARGET**

By 2036, per capita water consumption is reduced by 40 per cent.

### STRATEGY 1

Co-ordinate and support strategic initiatives in water conservation among all government and non-profit sectors to accomplish synergy and economies of scale.

- Support The City of Calgary's Water Efficiency Plan.
- Encourage the co-ordination of efforts of the Bow River Basin Council.
- Support the overall objectives of the Water for Life strategy, which states "Albertans will be leaders in conservation by using water efficiently and effectively."
- Encourage collaborative efforts to increase The City's target of a 30 per cent water use reduction by 2030 to 40 per cent by 2030.
- Research/eliminate health issues that restrict water conservation practices like grey water use.

### STRATEGY 2

Use economic and financial tools to reduce water consumption and increase ecological service contribution.

- Lower rates/taxes or offer other incentives to decrease consumption.
- Subsidize new technologies (economic incentives).
- Apply full cost accounting.

### STRATEGY 3

Establish community design initiatives that will result in decreased consumption and improved ecology.

- Encourage community design that maximizes the use of recycled water.
- Designate what percentage of land should remain permeable (without paved surfaces).
- Increase erosion controls and decrease impermeability.
- Promote low-impact development (e.g. introduce swales).
- Establish ecological infrastructure for cities and towns that requires less use of materials, energy and engineering.

# STRATEGY 4

Adapt engineering infrastructure design to accommodate ecological infrastructure that will lead to water conservation.

- Use green infrastructure design and technology to restore and enhance wetlands.
- Provide opportunities for low-impact development standards.
- Reduce road width standards to reduce imperviousness.
- Apply green infrastructure management where land use and wastewater management regulate and augment water flows in wetlands.
- Develop regulations that control the impacts of construction on land water resources.
- Conduct hydrological impact assessments prior to development.



## Water

# System

### **Natural environment**

# Goal

Water is recognized as necessary for life. Calgarians value this precious resource and guarantee equitable access for all living things. We are stewards of water, protecting its quality and maintaining the integrity of the hydrologic cycle. Our water supply system is sufficiently secure, flexible and adaptable to changing conditions and circumstances.

### STRATEGY 5

Ensure current systems, policies and regulations are consistent with sustainable water use policies.

- Explore regulatory opportunities that favour water use efficiency.
- Apply universal metering programs.
- Restrict outdoor water use.

### STRATEGY 6

Raise awareness of water conservation and encourage citizens to adopt water-efficient technologies and processes.

- Encourage community involvement in conservation planning.
- Support water education among non-governmental organizations and other groups.

# 2

### **TARGET**

By 2036, positive rates of flow in the Bow River Basin are maintained to keep aquatic ecosystems at these levels.

# STRATEGY 1

Encourage the co-ordination of water management strategies to accomplish synergy (saving resources and achieving objectives faster in order to protect the resources).

- Encourage the co-ordination of strategies between provincial and basin levels.
- Support Alberta Environment's implementation of the Water Management Plan for the South Saskatchewan River Organization, which recommends there will be no additional allocations.
- Establish the minimum in-stream flow needed to support all aquatic life forms by 2010 for the entire Bow River Basin.
- Support Alberta Environment's water conservation objectives.
- Permit opportunities for flow restoration.
- Support appropriate basin-wide indicator development by the Bow River Basin Council.

### STRATEGY 2

# Minimize the impacts of up- and downstream development activities on water flow.

- Encourage TransAlta Utilities to operate hydroelectric dams in a way that minimizes their impacts on aquatic ecosystems.
- Encourage people to use water in a way that returns most of the water diverted back to rivers on a continuous basis and in good quality, while recognizing their rights to economic development and prosperity.
- Support flow restoration and water and land management for the Bow River downstream of Calgary to meet objectives for aquatic ecosystems.



## Water

# System

### **Natural environment**

# Goal

Water is recognized as necessary for life. Calgarians value this precious resource and guarantee equitable access for all living things. We are stewards of water, protecting its quality and maintaining the integrity of the hydrologic cycle. Our water supply system is sufficiently secure, flexible and adaptable to changing conditions and circumstances.

### STRATEGY 3

## Develop a strategy for watershed protection.

- Establish an ecological inventory and water balance sheet.
- Establish objectives for aquatic ecosystems as described in the Alberta Government's Water for Life strategy.
- Through watershed management planning, encourage land uses that protect riparian habitats.
- Establish a water trust to buy up water allocations to keep water in streams.

# 3

# **TARGET**

By 2036, effective impervious areas are reduced equal to or below 30 per cent to restore natural hydrograph and become less susceptible to flooding.

#### STRATEGY 1

Develop policies (planning, engineering, transportation) and land use requirements that will promote permeability and reduce the share of imperviousness.

- Designate what percentage of land should remain permeable (without paved surfaces).
- Increase erosion controls and decrease impermeability.
- Promote low-impact development (e.g. introduce swales).
- Establish community design standards that foster sustainable forms of transportation.
- Align policy with conservation.
- Foster conservation ethics.
- "Unbundle" parking from residential units; buying condos and parking spaces separately results in less automobile ownership.
- Create parking maximums for developments in order to promote automobile alternatives.
- Reduce the sizes of driveways.
- Reduce road width.
- Require businesses in Calgary to use water-efficient technologies at their sites and in new or renovation projects.

### STRATEGY 2

# Disconnect impervious surfaces from the drainage system so that runoff does not flow directly to streams.

- Develop ecological approaches to infrastructure management that provide for on-site water infiltration where possible.
- Promote permeable paving (e.g. paving tiles).
- Promote rooftop rainwater catchment systems and gardens, and water-retaining eco-roofs.
- Reduce the effects of soil compaction, lack of topsoil, loss of soil aerating organisms and vegetation removal on permeability.
- Allow for the natural restoration of streams and wetlands.
- Increase native tree planting and landscaping.
- Encourage swales along building lots and parking areas, also considering human health impacts.
- Encourage on-site stormwater storage and use.



## Water

# System

### **Natural environment**

# Goal

Water is recognized as necessary for life. Calgarians value this precious resource and guarantee equitable access for all living things. We are stewards of water, protecting its quality and maintaining the integrity of the hydrologic cycle. Our water supply system is sufficiently secure, flexible and adaptable to changing conditions and circumstances.

# 4

### **TARGET**

By 2036, watershed health — as measured by loss of wetlands, water quality, non-compliance with pollution standards, in-stream flow and groundwater levels — improves.

### STRATEGY 1

# Establish a forum to increase co-ordination among the stakeholders who directly impact river basin issues.

- Support the province's Water for Life strategy, specifically the watershed approach for planning and management.
- Establish regional watershed goals and targets.
- Align policies with conservation.
- Establish a co-ordinated approach to healthy water.

### STRATEGY 2

### Decrease all forms of water and riparian zone pollution.

- Support City of Calgary initiatives as described in the Water Efficiency Plan (2005).
- Control nutrient loading to the river.
- Support the best available technologies and practices for irrigation in- and outside the city.
- Reduce harmful pesticide use to levels acceptable environmentally and for human (health).
- Support alternative land practices that decrease pollution.

### STRATEGY 3

## Restore water quantity and quality to improve hydrological cycles.

- Apply full cost accounting to water quantity and quality.
- Seek to restore a full complement of native plants and animals.
- Connect habitat with surrounding watersheds.
- Ensure there is a net increase in viable wetlands.
- Establish groundwater testing criteria that will involve the identification and protection of key recharge areas, establishing natural water tables and natural recharge rates.
- Ban the commercial and industrial mining of groundwater.
- Ensure the residential extraction rate does not exceed the recharge rate.
- Increase groundwater levels.
- Use a combined approach of reducing effective impervious area, reforesting open space uplands, protecting riparian corridors and strategically placing facilities; this will improve stream health more than one or two strategies alone would.

# 5

### **TARGET**

By 2036, Calgary's ecological footprint decreases to below the 2001 Canadian average of 7.25 hectares per capita.

### STRATEGY 1

## Reduce water consumption.

• Reduce water consumption by using water-efficient showerheads, turning off taps when not in use and collecting rainwater to water plants and lawns.

# **Aesthetic enjoyment**

System

Social

Goal

All aspects of life in Calgary provide opportunities for aesthetic enjoyment. We recognize and protect our natural and built environments for their beauty. Our traditions, values and distinctive characteristics are used to enhance physical and human resources. Opportunities for aesthetic enjoyment are accessible to all.

**▼** TARGET

By 2036, 90 per cent of citizens report that Calgary is a beautiful city.

### STRATEGY 1

Develop and use measures to regularly report Calgarians' opinions regarding the beauty of the city.

### STRATEGY 2

Establish design performance standards for new residential, commercial and industrial construction to ensure beauty is considered in all new development.

- Include stringent aesthetic requirements.
- Encourage the integration of public art into all new development.
- Use public art and other design elements to reflect our diverse cultural character and celebrate our heritage.
- Sustain and celebrate the environmental features within each neighbourhood.
- Promote mixed use.
- Promote economic diversity.
- Revise existing land use policies to reflect new performance-based standards.

### STRATEGY 3

Create and protect beautiful public spaces to provide more opportunities for aesthetic enjoyment.

- Bring beautiful public spaces into view for the aesthetic enjoyment of all.
- Develop a community-wide, multi-stakeholder public art strategy (e.g. business sector, private and public organizations) that will expand the success of The City of Calgary's Public Art Policy Framework.

### STRATEGY 4

Foster an understanding of and appreciation for the aesthetic value of our built environment so that citizens, developers and others can enhance our physical resources.

- Raise public awareness of the need for good design as a form of art.
- Increase the use of public art to assist with the growth of a culturally informed public.
- Require public space to be designed in a high-quality and aesthetically pleasing way, including all the amenities and individual elements within (e.g. garbage cans, water fountains).
- Require a healthy diversity of built form in all new developments.

### STRATEGY 5

Create and protect developed and uncultivated natural areas to ensure we can enjoy these areas now and in the future.

• Include parkland and natural vegetation bordering the riverbanks for the aesthetic enjoyment of all Calgarians.

# **Aesthetic enjoyment**

System Social

Goal Al

All aspects of life in Calgary provide opportunities for aesthetic enjoyment. We recognize and protect our natural and built environments for their beauty. Our traditions, values and distinctive characteristics are used to enhance physical and human resources. Opportunities for aesthetic enjoyment are accessible to all.

TARGET

By 2036, 95 per cent of Calgarians report that they have a range of opportunities for the aesthetic enjoyment of nature, arts and culture.

### STRATEGY 1

Develop and use measures to regularly report Calgarians' opinions regarding the range of opportunities available for aesthetic enjoyment.

#### STRATEGY 2

Increase public support for the arts to develop additional ways for citizens to enjoy natural and created aesthetics.

- Ensure a broad spectrum of culturally diverse opportunities for aesthetic enjoyment are available.
- Ensure those opportunities are accessible to all Calgarians.

### STRATEGY 3

Undertake cultural impact assessments for all public or private initiatives, so we can properly consider and enhance the cultural life of our city.

• Perform assessments at the planning and development stages of all initiatives that involve significant changes to our city's cultural life.

# **Creative self-expression**

System Social

Goal Creative self-expression is cultivated and nurtured as part of everyone's life.

We renew ourselves, using our unique gifts and talents, through creative self-expression. There is a wide range of opportunities for creative expression.

TARGET

By 2016, 90 per cent of Calgarians report that they have opportunities to express their unique gifts and talents

STRATEGY 1

Develop and use measures to regularly report Calgarians' opinions of the availability of opportunities for creative self-expression.

STRATEGY 2

Ensure Calgarians have the support systems necessary to foster artistic excellence and innovation as expressions of their gifts and talents.

STRATEGY 3

Identify ways for the full range of stakeholders to co-operate and create connections to realize the full potential of the arts.

STRATEGY 4

Ensure the Alberta Government continues to recognize and strengthen its level of financial commitment to arts and culture in Calgary.

STRATEGY 5

Boost the strategic roles of the cultural industries and local media for their contributions to local identity, creative continuity and job creation.

STRATEGY 6

Provide accessible informal and professional arts educational programs to Calgarians of all ages and abilities.

TARGET

By 2021, 90 per cent of Calgarians report that Calgary is a city that promotes creative freedom.

STRATEGY 1

Develop and use measures to regularly report Calgarians' opinions of how well we promote creative freedom in our city.

STRATEGY 2

Ensure the arts and culture sector plays a leadership role in Calgary's future, so we can build creative freedom into the most influential levels of decision-making processes.

STRATEGY 3

Promote the development and continuity of the cultures of First Nations, Metis and other indigenous people, as they are the bearers of the historic and interactive relationships with our land.

# **Creative self-expression**

System

Social

Goal

Creative self-expression is cultivated and nurtured as part of everyone's life. We renew ourselves, using our unique gifts and talents, through creative self-expression. There is a wide range of opportunities for creative expression.

#### STRATEGY 4

Ensure newcomers from other regions and countries can access, participate in and express themselves through the evolving culture of Calgary, ensuring the richness of our creative freedom is continuously strengthened.

### STRATEGY 5

Review, revise and develop policies and practices that foster creative freedom, rather than censorship.

3

### TARGE1

By 2026, 90 per cent of Calgarians report that participation in creative activities is an important part of their lives.

### STRATEGY 1

Develop and use measures to regularly report citizens' opinions of the importance of and levels of participation in creative activities.

### STRATEGY 2

Create public opportunities for all Calgarians to recognize the intrinsic value of arts and culture as an important element of our vibrant city.

## STRATEGY 3

Ease or eliminate restrictions on the forms of creative expression that can occur in public spaces, so citizens can participate in and appreciate a wider range of formal and informal creative activities.

- Consider abandoning or easing busking bylaws for musicians and artists.
- Identify ways to lessen the impacts of liability insurance requirements.
- Assess the types of signage regulations that affect the development of murals and other informal expressions of visual art.

## STRATEGY 4

Promote creative expression in public spaces to make Calgarians more aware of, and allow them to participate in, a wider range of cultures and creative experiences.

### STRATEGY 5

Build the leadership and facilitation skills of cultural leaders, so they promote the kinds of events that directly engage people in creative experiences.

# STRATEGY 6

Attract and support new talent and creative leadership in the community, including support for and the promotion of local artists from diverse communities.

### STRATEGY 7

Ensure Calgary artists are recognized for their excellence, to honour the important roles they play in encouraging other citizens' to participate in and value creative self-expression.

**System** 

Social

Goal

Calgary is known for its attention to a healthy lifestyle. We sustain physical, mental and social well-being. In circumstances in which health is compromised, we can easily access knowledge and services. Ecological, social and economic interconnectedness is reflected in our support for well-being.

1

### **TARGET**

By 2036, all Calgarians live in a safe and clean natural environment, as measured by the quality of its air, water, soil and food sources, plus by the lack of exposure to toxic waste.

### **Indicators**

- Calgary's drinking water consistently meets or exceeds the standards set by the Government of Alberta
- Calgary's air quality is consistently measured as "good" using the Alberta Air Quality Index.
- The quality of soil in and around Calgary consistently meets or exceeds the benchmarks for quality identified by the Alberta Environmentally Sustainable Agriculture Soil Quality Benchmark Program.
- New contamination from toxic waste onto residential, farm and wilderness lands is avoided
- Calgary's ecological footprint (which weighs demand for biological capacity against the Earth's ability to supply it) is reduced to below the 1999 Canadian average of 7.8 hectares per acre.

### STRATEGY 1

Work to ensure self-sufficiency in waste management to reduce our exposure to toxic waste.

- Ensure the clean production of, and reductions in the use of, industrial chemicals and pesticides.
- Strictly enforce legislation and regulations that govern the disposal of hazardous waste.
- Educate consumers about the environmental risks posed by the production, use and disposal of toxic chemicals present in common household products.

### STRATEGY 2

Work to increase our capacity to provide high-quality drinking water to the growing population.

# STRATEGY 3

Reduce the impacts of water treatment processes on our river systems and the surrounding environment.

• Upgrade Calgary's water treatment plants.

### STRATEGY 4

Introduce water conservation measures, so our finite water resources are available for current and future generations.

- Introduce city-wide residential and commercial water meters.
- Work with surrounding towns and municipalities to reduce upstream and downstream water pollutants.

# STRATEGY 5

Curb the cultural expansion of Calgary's boundary to reduce our ecological footprint.

• Reduce our overall consumption of natural goods.

System

Social

Goal

Calgary is known for its attention to a healthy lifestyle. We sustain physical, mental and social well-being. In circumstances in which health is compromised, we can easily access knowledge and services. Ecological, social and economic interconnectedness is reflected in our support for well-being.

2

### **TARGET**

By 2036, 95 per cent of Calgarians enjoy positive and supportive living conditions, as reflected by adequate income; high rates of employment; adequate food and appropriate nutrition; appropriate, adequate and affordable housing; and high levels of personal safety.

### **Indicators**

- Unemployment rates remain below five per cent for all demographic groups in Calgary.
- Disparities between the income levels of the richest and poorest Calgarians, as measured by the Gini coefficient, do not exceed 0.25 (over 0.3 in 2006, while 0.25 is common in Scandinavian countries).
- All parents report that they have enough money to buy sufficient food for their children all of the time (80 per cent to 85 per cent in 2006).
- Food banks and food supplement programs are not required.
- Family homelessness is eliminated and individual absolute homelessness (meaning individuals are living on the street with no physical shelters of their own) does not exceed 0.01 per cent of the total municipal population (about 0.03 per cent in 2006).
- The incidence of core housing need, as measured by the Canada Mortgage and Housing Corporation, does not exceed 10 per cent (13 per cent in 2001, higher in 2006).
- Ninety-five per cent of Calgarians report that they feel very safe or reasonably safe walking alone in their neighbourhoods and downtown after dark.

### STRATEGY 1

Provide supportive housing services to people with mental illness and others who are unable to live independently.

• Clarify the roles and responsibilities of publicly funded entities, including the Ministry of Seniors and Community Supports, Children's Services and local service providers.

### STRATEGY 2

Use a collaborative and shared investment approach for collective action among the not-for-profit sector, industry and government, to ensure income equity and security for vulnerable Calgarians.

## STRATEGY 3

Ensure all public sector institutions, subcontractors and non-profit sector employers adopt livable wage policies.

### STRATEGY 4

Fund and structure all public income benefits to enable individuals and families to meet their basic needs, maintain safe and adequate standards of living in their communities and save for future needs.

**System** 

Social

Goal

Calgary is known for its attention to a healthy lifestyle. We sustain physical, mental and social well-being. In circumstances in which health is compromised, we can easily access knowledge and services. Ecological, social and economic interconnectedness is reflected in our support for well-being.

### STRATEGY 5

Establish targeted initiatives and programs to give all children from low-income families the opportunity to receive sufficient education or training that enables them to fully participate in the economy.

#### STRATEGY 6

Increase the overall education level among First Nations, Metis and Inuit youth, new Canadians and people with disabilities, as a means of providing these people with increased opportunities for meaningful work and of capitalizing on an otherwise underused labour pool.

- Develop innovative and effective approaches that meet the special needs of people from different cultures.
- Provide additional educational support programs for people with disabilities.

### STRATEGY 7

Encourage the use of sustainable practices (e.g. green infrastructure) to improve indoor and outdoor environmental conditions.

## STRATEGY 8

Significantly improve the health and well-being of Calgary's First Nations, Metis and Inuit citizens.

3

### TARGET

By 2036, 95 per cent of Calgarians receive sufficient information and supports to maintain and improve their health and foster their independence at all ages and stages of life.

### STRATEGY 1

Improve the health of all at-risk pregnant and postnatal women to increase the health of newborn children.

- Provide them with extensive, affordable and culturally appropriate counselling and personal support.
- Provide nutritional support as part of pregnancy and postnatal care.

### STRATEGY 2

Encourage the use of positive parenting methods, so parents are equipped to provide the love and support that children need to flourish.

- Raise public awareness about the importance of positive parenting to the healthy development of children and youth.
- Ensure comprehensive parenting instruction and support are available to all families, regardless of income.

### STRATEGY 3

Provide universal early childhood education for all Calgary children.

• Integrate service delivery into the learning system.

**System** 

Social

Goal

Calgary is known for its attention to a healthy lifestyle. We sustain physical, mental and social well-being. In circumstances in which health is compromised, we can easily access knowledge and services. Ecological, social and economic interconnectedness is reflected in our support for well-being.

### STRATEGY 4

Support or extend the ability of seniors and people with disabilities to live independently in the community.

- Expand the availability of affordable home care and related home support services (such as snow removal and housing maintenance).
- Expand the availability of, and access to, caregiver respite services.

### STRATEGY 5

Use a range of community development initiatives to support the development of social support networks within geographic communities and communities of affinity.

#### STRATEGY 6

Optimize the use of information dissemination methods — including Health Link and other health services, the telephone, the television and the Internet — in order to disseminate health information.

# 4

### **TARGET**

By 2036, 100 per cent of Calgarians can obtain quality, affordable, timely and appropriate health information and services, as measured by satisfaction levels.

### **Indicators**

- Ninety-five per cent of Calgarians report that they are satisfied with the quality of health services.
- Ninety-five per cent of Calgarians report that they receive the high-quality services they require in a timely manner.
- Ninety-five per cent of Calgarians report that they can access appropriate and accurate health information and advice in a timely manner.

### STRATEGY 1

Develop and use measures to regularly report citizens' opinions of the accessibility of affordable health services and the quality of the care they receive.

## STRATEGY 2

Train and retain health care workers who are familiar with the specific needs of diverse Calgarians.

### STRATEGY 3

Ensure low-income Calgarians of all ages receive effective health care.

• Provide comprehensive, accessible programs and services to meet their needs.

**System** 

Social

Goal

Calgary is known for its attention to a healthy lifestyle. We sustain physical, mental and social well-being. In circumstances in which health is compromised, we can easily access knowledge and services. Ecological, social and economic interconnectedness is reflected in our support for well-being.

### STRATEGY 4

Support new and innovative service delivery models to better support the health and wellness needs of Calgarians.

- Use interdisciplinary teams of primary health care providers.
- Use service delivery methods that are tailored to the languages and cultural needs of diverse ethnocultural groups.
- Expand the availabilities of telephone and video health information services.

#### STRATEGY 5

Provide increased access to preventative and primary care services, so Calgarians can better manage their health.

### STRATEGY 6

Increase the number of health providers and professionals in the healing arts/sciences by positioning Calgary as a destination of choice.

• Use Calgarians' strengthening commitments to health and wellness to attract additional providers and professionals.

## STRATEGY 7

Make strategic investments in health-related infrastructure.

# 5

## **TARGET**

By 2036, the incidences of preventable illness, injury and premature death are significantly reduced.

# **Indicators**

- Ninety-five per cent of Calgary adolescents and adults rate both their physical health and their mental health as very good or excellent.
- Suicide rates among both adolescents and adults do not exceed five per 100,000 people (13.3 in 2006).
- Ninety-five per cent of Calgarians report that their activity level is sufficient to produce health benefits (less than 50 per cent in 2006).
- Calgary's infant mortality rate is reduced to three per 1,000 live births (six or seven in 2006).
- Low birth weight is reduced to four per cent (7.3 per cent in 2006).
- Tobacco use is eliminated.
- Heavy drinking (five or more drinks on one occasion, 12 or more times per year) is reduced to 10 per cent of the population (23 per cent in 2006).
- Adult and childhood obesity is reduced to five per cent (14 per cent in 2003).
- The death rate from unintentional injury is reduced to 15 per cent (20 per cent in 2003).
- The incidence of cardiac disease is reduced to 100 per 100,000.
- One hundred per cent of the population receives standard childhood immunizations.

**System** 

Social

Goal

Calgary is known for its attention to a healthy lifestyle. We sustain physical, mental and social well-being. In circumstances in which health is compromised, we can easily access knowledge and services. Ecological, social and economic interconnectedness is reflected in our support for well-being.

### STRATEGY 1

Further restrict the sale and use of tobacco products to reduce the incidence of smoking-related illness and premature death.

• Strengthen tobacco-related legislation and taxation strategies to reduce access to smoking products.

#### STRATEGY 2

Provide effective incentives for people to maintain high levels of health.

 Provide increased flexibility in health-related benefits (e.g. health spending accounts) and similar initiatives.

### STRATEGY 3

Expand the use of social marketing campaigns to encourage physical activity and immunizations and the avoidance of unhealthy lifestyle practices, such as smoking and poor eating.

### STRATEGY 4

Promote physical activity as a regular and natural part of our daily lives.

• Design neighbourhoods that reflect mixed-use design and promote "walkability."

### STRATEGY 5

Create healing centres and injury prevention programs that are led by Calgary's First Nations, Metis and Inuit communities.

6

### **TARGET**

By 2036, 85 per cent of Calgarians, in all age groups, maintain excellent or very good mental health.

### **Indicators:**

- (Risk of) depression rates do not exceed five per cent, as measured by the Calgary Health Region (9.3 per cent in 2006).
- The number of Calgarians who are experiencing significant stress levels does not exceed 13 per cent, as measured by the Calgary Health Region (26.5 per cent in 2006).

### STRATEGY 1

Develop and use measures to regularly report Calgarians' mental health levels.

# STRATEGY 2

Develop and use measures to regularly report the levels of wellness and mental health in people with clinically significant mental disorders.

**System** 

Social

Goal

We value opportunities for continuous personal growth and development. We are empowered by learning and, as a result, can make substantial improvements to our own and others' lives. The community is a learning ground for all.

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### **TARGET**

By 2016, by the age of six years, 95 per cent of Calgary children exhibit school readiness, as reflected by physical well-being and appropriate motor development; emotional health and a positive approach to new experiences; age-appropriate social knowledge and competence; age-appropriate language skills; and age-appropriate general knowledge and cognitive skills.

#### STRATEGY 1

Increase the level of support to public libraries, so we can recognize and capitalize on the fundamental role of public libraries (individual capacity building, community building), particularly in the area of family literacy.

### STRATEGY 2

Ensure all families, with particular emphasis on at-risk families, have access to community-based referral services for prevention and early intervention programs, resources and support, such as those provided by City of Calgary Community Resource Centres, the Calgary Public Library and Parent Link Centres.

### STRATEGY 3

Provide universal early childhood education that is integrated into the education/learning system, for all Calgary children.

### STRATEGY 4

Ensure affordable, high-quality child care — as defined by the regulations related to child care settings (including child-staff ratio, group size, caregiver education and training) — is available for children and parents who require it.

2

## **TARGET**

By 2016, 95 per cent of Calgary students succeed in elementary and junior high school, as measured by standardized achievement testing in grades three, six and nine and alternate education metrics.

### STRATEGY 1

Provide students with opportunities to participate in informal, long-term programs.

- Implement new experiential learning and leadership programs.
- Ensure the availability of arts and music programs.
- Offer a variety of community-based enrichment programs.
- Encourage whole-school participation in programs that increase senses of belonging and connection to the school.

### STRATEGY 2

Support initiatives to encourage parental involvement in schools.

# STRATEGY 3

Provide students experiencing academic challenges with adequate supports.

- Encourage the availability of adult mentorship programs.
- Provide tutoring support programs.
- Offer study programs focusing on organizational skills, homework completion and study habits.

System

Social

Goal

We value opportunities for continuous personal growth and development. We are empowered by learning and, as a result, can make substantial improvements to our own and others' lives. The community is a learning ground for all.

#### STRATEGY 4

Increase overall support for English-as-a-second-language students.

- Provide intensive educational and personal support to students with English language deficiencies
- Ensure adequate English language instruction.
- Provide cultural bridging support for English-as-a-second-language students.
- Give additional support to schools to ensure they offer welcoming and supportive cross-cultural environments for newcomers.

### STRATEGY 5

Provide increased academic, personal and physical support to students with disabilities.

3

### TARGE1

By 2036, 95 per cent of Calgary youth complete high school by age 21 and complete some form of post-secondary education or training by age 25.

### STRATEGY 1

Strengthen students' levels of readiness for academic and career development.

- Encourage participation in youth development programs that specifically aim to increase academic and social competence.
- Support students in exploring education and career opportunities.
- Offer volunteer and service learning opportunities that include a skills development component.

## STRATEGY 2

Provide at-risk youth with opportunities to participate in long-term mentoring programs with caring adults.

### STRATEGY 3

Discourage students from working at jobs more than 20 hours per week (as more hours than this is associated with decreased school performance, higher levels of emotional distress and decreased physical activity).

# STRATEGY 4

Provide intensive educational and personal support to students who experience learning challenges due to English language deficiencies, different academic or cognitive abilities, cultural differences or other factors that place them at an educational disadvantage.

### STRATEGY 5

Ensure the availability of a range of alternative high school programs, to address different types of learner needs and interests.

### STRATEGY 6

Ensure there is universal access to formal post-secondary education and training.

System Social

Goal We value opportunities for con

We value opportunities for continuous personal growth and development. We are empowered by learning and, as a result, can make substantial improvements to our own and others' lives. The community is a learning ground for all.

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### **TARGET**

By 2016, 100 per cent of adult Calgarians have access to a full range of formal and informal quality learning opportunities and resource options that allow them to achieve their full potentials in life.

### STRATEGY 1

Develop and use measures to regularly report the accessibility levels, range and quality of formal and informal learning opportunities and resources.

### STRATEGY 2

Provide public support for learning and cultural activities that take place in museums, libraries, art galleries and other cultural institutions.

### STRATEGY 3

Ensure opportunities for learning are widely available and easy to use.

- Improve public transit to learning destinations.
- Use technological media to reach new audiences (e.g. incorporate virtual tours).
- Add satellite campuses and community hubs.

### STRATEGY 4

Promote relations between cultural facilities and other entities working with knowledge, such as universities, research centres, libraries and research companies.

### STRATEGY 5

Promote programs aimed at popularizing scientific and technical culture among all citizens.

• Take into account the ethical, social, economic, environmental and political issues raised by applications of new scientific knowledge that are of public interest.

## STRATEGY 6

Offer a variety of life-enhancing, lifelong learning opportunities, such as courses focusing on creative arts, domestic arts, crafts, languages, health and wellness and personal growth.

### STRATEGY 7

Recognize post-secondary organizations for their roles as major contributors to informal (and formal) lifelong learning opportunities for all citizens throughout their lives, and support them in these roles.

**System** 

Social

Goal

We value opportunities for continuous personal growth and development. We are empowered by learning and, as a result, can make substantial improvements to our own and others' lives. The community is a learning ground for all.

5

### **TARGET**

By 2016, 95 per cent of adult Calgarians have the minimum levels of literacy and numeracy — as defined by the International Adult Literacy and Skills Survey — required to fully participate in the economy and all aspects of life in Calgary.

### STRATEGY 1

Make available a wide range of formal and informal, community-based adult education programs and resources, to ensure all adults have ongoing opportunities to maintain and enhance literacy and learning skills.

- Invest new resources to permit disadvantaged groups to fully participate in learning activities.
- Fully take advantage of public libraries and organizations that form part of the social fabric of communities.

### STRATEGY 2

Provide a wide range of educational and employment training programs/supports to low-income Albertans who are unemployed, underemployed or otherwise experiencing difficulties in the labour market.

### STRATEGY 3

Support integrated and collaborative service delivery models to maximize literacy and numeracy learning.

### STRATEGY 4

Support new and innovative technology-based models to extend the reach of those service delivery models.

# Meaning, purpose and connectedness

System Social

Goal V

We create individual meaning, purpose and connectedness in our lives for our own benefit and that of others. We respect and embrace the ways in which others choose to create meaning, purpose and connectedness.

# TARGET

1 By

By 2036, 90 per cent of citizens agree that "Calgary is a city with soul," which is defined as citizens having meaning and purpose in life and experiencing ongoing feelings of connectedness with some form of human, historic or natural system.

### STRATEGY 1

Celebrate local inspirational and spiritual leaders from all faiths, cultures and traditions.

### STRATEGY 2

Provide opportunities for individuals to strengthen their own senses of meaning, purpose and connectedness.

• Ensure diverse forms of public expression and discussion are readily accessible.

# 2

### **TARGET**

By 2036, 100 per cent of Calgarians report that they feel respected and supported in their pursuits of meaning, purpose and connectedness, and that they extend respect and support to others who meet this need in ways different from their own.

## STRATEGY 1

Develop and use measures to regularly report respect and support levels related to the diverse ways that people meet their needs for meaning, purpose and connectedness.

• Establish a "state of our people" report that reports measured respect and support levels related to meaning, purpose and connectedness and the ways that citizens care for one another.

# STRATEGY 2

Ensure citizens build empathy, acceptance, respect and interdependent thinking skills to foster respect and support for others.

• Develop and implement educational programs and informal learning opportunities that focus on building these skills.

### STRATEGY 3

Promote the unique cultural attributes of Calgary citizens.

• Create community-wide opportunities to celebrate our diverse city.

### STRATEGY 4

Create opportunities for dialogue between different religions, faith traditions and cultures.

• Establish open forums, cultural celebrations and policy/program discussions that encourage this kind of conversation.

# Peace, safety and security

Social

System

Goal

We live in peace. We are safe in our homes and throughout our city. We believe and behave in ways that reflect our respect and consideration for all life forms. We have adequate income and access to resources. We live with each other in unity.

TARGET

By 2016, 95 per cent of Calgarians report that they feel safe walking alone in their neighbourhoods and walking alone downtown after dark.

STRATEGY 1

Develop and use measures to regularly report citizens' perceptions of safety.

STRATEGY 2

Raise public awareness about the decreasing incidence and prevalence of crime to reduce fear levels.

STRATEGY 3

Actively encourage and nurture the involvement of neighbourhood residents in community-building efforts.

- Focus on the development of personal and social capital.
- Encourage community economic development.
- Build community crime prevention initiatives.
- Create community-based services and businesses to increase social inclusion and social cohesion.

### STRATEGY 4

Employ best practices in the creation of healthy public places and the application of crime prevention through environmental design (CPTED) concepts and second-generation CPTED concepts.

STRATEGY 5

Promote non-violence as a communications strategy, as a means of resolving conflicts and as the dominant culture in schools, organizations, businesses, governments and families.

2

### TARGET

By 2016, 95 per cent of Calgary parents report that they allow their children over six years old to play unsupervised on their own blocks.

STRATEGY 1

Raise public awareness about the low incidence of child abductions and child abuse by strangers, to reduce levels of fear.

STRATEGY 2

Support the implementation of Block Watch programs in communities.

STRATEGY 3

Support community development strategies to increase sense of community and perceptions of safety within neighbourhoods.

# Peace, safety and security

System

Social

Goal

We live in peace. We are safe in our homes and throughout our city. We believe and behave in ways that reflect our respect and consideration for all life forms. We have adequate income and access to resources. We live with each other in unity.

3

### **TARGET**

By 2036, given that crime rates are driven primarily by the number of males in the population aged 15 to 24, the proportion of adolescents and young adults in conflict with the law decreases from 2006 levels of about one per cent to 0.01 per cent.

### STRATEGY 1

Address the risk factors associated with the onset of criminal behaviour in adolescence or early adulthood to prevent crime.

- Develop new intervention and treatment initiatives for adolescents and young adults who are experiencing family violence, including verbal and emotional abuse and neglect.
- Provide intervention and treatment supports for childhood trauma like physical or sexual abuse.
- Provide ways for parents to develop better parenting skills.
- Address parental alcoholism and drug addition.
- Provide supports to families with parents involved in crime.
- Give ongoing assistance to families at the onset of aggression and other emotional and behavioural problems in early childhood.
- Develop comprehensive programs to assist children who have low levels of mental functioning.
- Give counselling and support to families whose children have "difficult" personalities or temperaments.
- Provide adequate incomes and other supports to families who have low socio-economic status and/or are living in poverty.
- Prevent or effectively intervene with children who are at risk or experiencing school failure and/or drop-out.

## STRATEGY 2

Decrease the number of children and youth who are physically and/or emotionally abused or neglected by their parents.

- Reduce parental and family stress stemming from income, housing, neighbourhood and employment issues.
- Provide additional supports for mental health and child care issues.
- Provide school-based child abuse prevention programs.
- Increase awareness and support for professionals and other adults to report abuses that come to their attention.
- Increase investment in child welfare services.
- Provide extensive professional counselling to child and adult victims of abuse, and to abusers.

# Peace, safety and security

System

Social

Goal

We live in peace. We are safe in our homes and throughout our city. We believe and behave in ways that reflect our respect and consideration for all life forms. We have adequate income and access to resources. We live with each other in unity.

### STRATEGY 3

## Prevent adolescents from declining into criminal involvement.

- Provide counselling and mentoring programs to at-risk adolescents.
- Implement effective substance abuse prevention and cessation programs.
- Initiate the development of stress management programs for adolescents.
- Focus life skills programs on self-management and how to resist social/peer pressures that promote engaging in inappropriate or risk behaviours.
- Focus on ways to increase self-esteem and perceptions of personal competence and self-efficacy.
- Fully implement stay-in-school programs and supports.
- Provide targeted educational opportunities for at-risk adolescents.
- Implement anti-racism and equality awareness/training programs.
- Use anti-bullying and conflict resolution programs.
- Provide "alternative measures" and other early diversion programs.

#### STRATEGY 4

# Act collectively to decrease the disparities between the income levels of the richest and poorest Calgarians.

- Use a collaborative and shared investment approach among the not-for-profit sector, industry and government.
- Ensure all public sector institutions, subcontractors and non-profit sector employers adopt livable wage policies.
- Structure and adequately fund all public income benefits to enable citizens to meet their basic needs, maintain safe and adequate standards of living and save for the future.
- Establish targeted initiatives to give children from low-income families the opportunity to receive sufficient education or training that enables them to fully participate in the economy.
- Increase the overall education level among First Nations, Metis and Inuit youth, new Canadians and people with disabilities, as a means of providing these people with increased opportunities for meaningful work.

# 4

### **TARGET**

By 2036, the percentage of Calgary women who have been assaulted by their intimate partners at least once in the past five years is reduced from approximately 11 per cent to three per cent.

## STRATEGY 1

Improve community supports that enable women to leave or avoid violent relationships in the early stages.

- Enhance and build programs that address all women; this includes appropriate and culturally competent services that address the needs of women of all ages, with a range of abilities and disabilities and from a broad range of backgrounds and perspectives.
- Decrease the stigma associated with seeking help for abuse, and continue to decrease the stigma associated with marital breakup.
- Provide early intervention and prevention programs for teens and young adults.

# STRATEGY 2

Increase the supplies of long-term second stage residential shelters and affordable housing for victims of domestic violence and their children who have left abusive relationships.

# Recreation

System Social

Goal

We are continually renewed by participating in activities that refresh our bodies and minds. Active lifestyles contribute to our abilities to restore and enhance our senses of personal and community well-being.

1

### TARGET

By 2036, 90 per cent of people living in Calgary report that they participate in active lifestyles that include informal and structured recreational opportunities.

#### STRATEGY 1

Develop and use measures to regularly report citizens' participation levels in informal and structured recreational opportunities.

### STRATEGY 2

Integrate the planning and management of all public facilities that provide recreational and creative opportunities, with a view to improving public access to schools, libraries, performance spaces, parks and other public venues.

### STRATEGY 3

Include parks and cultural and recreational facilities in new and existing communities, to support active lifestyle choices as important investments in wellness.

### STRATEGY 4

Establish and implement a standard that requires there to be public recreational spaces for all ages within reasonable distances from all residential buildings.

### STRATEGY 5

Establish ways to integrate recreation into daily life, such as through workplace recreation, walkable communities and recreation fitness programs.

### STRATEGY 6

Introduce additional "neighbourhood-scale" recreational opportunities, and ensure larger regional recreational facilities are well served by alternative transportation.

### STRATEGY 7

Develop and implement a wide range of options to promote walking and bicycling as healthy forms of exercise and transportation.

- Make appropriate roadway and pathway enhancements.
- Design communities to promote walking opportunities.
- Develop incentives for biking to work.
- Install bicycle racks throughout the city.
- Create "borrow-a-bike" and similar programs, used successfully in many European countries.
- Implement volunteer community snow removal programs on pathway systems.
- Create a comprehensive bike/pathway network.

# Recreation

**System** 

Social

Goal

We are continually renewed by participating in activities that refresh our bodies and minds. Active lifestyles contribute to our abilities to restore and enhance our senses of personal and community well-being.

### STRATEGY 8

Provide a greater range of recreational opportunities outside of normal business hours and in areas where facilities are limited or not available.

- Use existing school facilities and those in decommissioned schools to provide additional opportunities for recreation activities, including physical activity.
- Develop a system of trained community volunteers who provide coaching, mentoring and other types of supports.
- Encourage beginners by providing a variety of structured activities that do not intimidate them.

### STRATEGY 9

Create new living landscapes in the rural urban fringe that encourage active lifestyles.

- Develop working farms, historic sites and cultural centres to regenerate land and develop communities.
- Incorporate the best in building and landscape design and management, sustainable transportation and renewable energy.
- Develop an environmental education program that teaches the importance of the natural environment, including wetlands.

### STRATEGY 10

Develop and implement physical activity strategies to engage inactive segments of the population.

- Provide low- or no-cost equipment rentals.
- Provide free or low-cost introductory programs and opportunities.
- Educate all market segments to increase awareness of the benefits of recreation.

# Recreation

System Social

Goal

We are continually renewed by participating in activities that refresh our bodies and minds. Active lifestyles contribute to our abilities to restore and enhance our senses of personal and community well-being.

2

### **TARGET**

By 2036, 100 per cent of Calgarians report that they can access a range of high-quality recreational experiences, regardless of gender, socio-economic status, age, ability, religion, race, sexual orientation or heritage.

#### STRATEGY 1

Develop and use measures to regularly report citizens' levels of access to high-quality recreational experiences.

### STRATEGY 2

Ensure public transit, pedestrian and bicycle routes provide access to every part of the city.

### STRATEGY 3

Support and create recreation policies that enhance access to facilities for citizens and remove prohibitive elements like user fees, onerous scheduling and barriers concerning time, transportation, ability and culture.

### STRATEGY 4

Invest in a comprehensive, affordable and accessible recreation model that includes a full range of sporting and other physical activities, provided as a public social good (such as those common in Norway and Sweden).

## STRATEGY 5

Acknowledge and address age, gender, ability and cultural barriers that deter or prevent people from participating in recreational opportunities (e.g. swimming pool attire regulations inadvertently exclude people from cultures with different standards of modesty).

# Relationships

System

Social

Goal

We participate in mutually supportive and generous relationships. Interactions are based on mutual respect: with oneself, other persons, other cultures, other beings and the larger whole of which all are a part. These healthy relationships help people understand their human, cultural, historic and natural systems.

1

### **TARGET**

By 2036, 95 per cent of Calgarians of every age and ability report that they value and have mutually supportive relationships in several settings, such as at home, school and work and in the community.

#### STRATEGY 1

Develop and use measures to regularly report citizens' opinions of the importance of and levels of participation in mutually supportive relationships.

### STRATEGY 2

Encourage volunteerism to create new opportunities for citizens to add to their social support networks.

- Encourage volunteer-focused organizations to link opportunities for service and other contributions with the benefits of social support.
- Encourage citizens to develop more interpersonal connections by volunteering where others are likely to have similar aspirations and philosophies.

# STRATEGY 3

Ensure Calgarians have many opportunities for, and understand the importance of, linking with others who share similar hobbies and interests.

### STRATEGY 4

Foster and accommodate social interaction and a range of activities in which Calgarians of all ages, abilities and backgrounds can participate.

- Design multi-use, community-based social spaces and facilities that enable social interaction.
- Develop formal and informal programs and activities that encourage people to get to know one another.

### STRATEGY 5

Identify and create innovative forms of collective housing and accommodation — new forms of living together — including those for aging Calgarians, by developing best practices based on the successes of European countries.

# **Self-esteem**

System Social

Goal We are confident and satisfied. We know we are valued and respected.

We collectively understand and act upon our inner potential so we can achieve

sustainable development.

TARGET

By 2036, 95 per cent of children aged two to five years exhibit high levels of emotional well-being and age-appropriate levels of attention span and impulse control, as measured by the Ages and Stages Questionnaire.

### STRATEGY 1

# Help at-risk parents develop appropriate and effective parenting skills.

- Provide parenting instruction and ongoing support to help parents do such things as:
  - identify appropriate expectations
  - master positive discipline techniques
  - model appropriate behaviour
  - provide appropriate stimulation and instruction
  - engage in constructive play; and
  - provide opportunities to succeed with new challenges.

### STRATEGY 2

# Help at-risk parents maintain family and household stability and positive life courses.

- Ensure appropriate literacy initiatives are available.
- Provide opportunities for parents to obtain and maintain employment.
- Provide effective substance abuse counselling.
- Provide adequate public income and housing supports when necessary.

## STRATEGY 3

### Provide universal early childhood education for all Calgary children.

• Integrate early childhood education into the learning system to improve co-ordination and availability.

# **Self-esteem**

System

Social

Goal

We are confident and satisfied. We know we are valued and respected. We collectively understand and act upon our inner potential so we can achieve sustainable development.

# TARGET

2

By 2036, 95 per cent of children aged six to 11 years report a high sense of self-worth, and 80 per cent of Calgary adolescents, both male and female, describe themselves as productive or potentially productive members of society, able to change themselves or their lives through their own actions, having the personal power to effect change in the world and being optimistic about their futures.

### STRATEGY 1

Develop and use measures to regularly report levels of sense of self-worth in children aged six to 11 years.

### STRATEGY 2

Promote positive family relationships, so children receive the support they need to build self-esteem.

- Ensure the availability of accessible parenting courses and family counselling.
- Create opportunities for family recreation, volunteering and public service.
- Provide income and housing support programs to help families maintain economic and household stability.

### STRATEGY 3

# Support initiatives that foster safe and caring schools.

- Deliver school-based bullying prevention/intervention programs.
- Provide conflict resolution training in schools.

# STRATEGY 4

## Encourage children in this age group to use their time constructively.

- Promote and enable participation in experiential learning programs.
- Encourage participation in volunteer and service learning activities.
- Enable children to easily join organized sports and recreation activities.
- Support participation in youth development organizations, arts and culture programs and other youth-oriented programs.

# **Sense of community**

System Social

Goal

We have a sense of belonging, friendship and identity within the context of our groups and neighbourhoods. We honour and celebrate diversity. We act as collective stewards of our values, traditions, institutions and the natural environment.

TARGET

By 2010

By 2010, 90 per cent of Calgarians agree that there is a strong sense of community in Calgary, and at least 80 per cent of Calgarians report high levels of satisfaction, sense of belonging, attachment and civic pride.

### STRATEGY 1

Develop and use measures to regularly report sense-of-community levels.

### STRATEGY 2

Ensure the whole community of Calgary continues to develop its "Calgary identity."

• Host another event of international scope and significance that will require a major volunteer effort (like the 1988 Winter Olympics).

### STRATEGY 3

Design new neighbourhoods and, over time, revitalize existing neighbourhoods to foster safety, perceptions of safety and increased social interaction among community residents.

- Develop policies that support mixed land use and restrict traffic areas.
- Provide inviting parks, playgrounds and sitting features.
- Use residential design to provide some, but not excessive, privacy.
- Include and co-locate amenities and community facilities, such as schools, health centres and community centres.

### STRATEGY 4

Support community-based strategies to welcome newcomers to the community and to Canada.

• Offer community-based English-as-a-second-language and cultural transition programs to increase social inclusion and sense of belonging.

### STRATEGY 5

Provide areas where Calgarians can go to connect with one another.

• Create a defining (built) feature, accompanied by a new term, to capture the essence of the European "plaza," where Calgarians can go to connect in a variety of ways (e.g. the Spanish el paseo: take a walk after dinner and be sure to find company, see and be seen).

# **Sense of community**

**System** 

Social

Goal

We have a sense of belonging, friendship and identity within the context of our groups and neighbourhoods. We honour and celebrate diversity. We act as collective stewards of our values, traditions, institutions and the natural environment.

2

### **TARGET**

By 2010, 80 per cent of citizens experience a high sense of community in their neighbourhoods and affinity-related communities, as reflected by residents' reports of neighbourhood participation and volunteering, sense of belonging, neighbourliness and reciprocity, sense of efficacy, attachment, safety and voter turnout.

### STRATEGY 1

Provide technical, financial and organizational support to community associations and groups defined by affinity and/or geography, to build capacity and foster sense of community.

- Encourage neighbourhood improvement projects.
- Enable the development of comprehensive community economic development initiatives.

3

### **TARGET**

By 2010, at least 75 per cent of Calgarians report that they volunteer for the benefit of others who are outside their circles of family and friends.

### STRATEGY 1

Emphasize and build on the importance of volunteerism in strengthening the entire community.

### STRATEGY 2

Support incentives for those who volunteer in the wider community with non-profit organizations that need our help.

- Provide opportunities to contribute to the wider community and to network with others.
- Integrate skills development initiatives into those opportunities.
- Ensure access to information and other resources.
- Develop ways to provide personal recognition for volunteers.

A core group of participants — including the Mayor's Panel on Urban Sustainability, the imagineCALGARY Round Table and the imagineCALGARY Working Groups — were involved in a range of intensive research and planning sessions. Over a 12-month period, these stakeholders volunteered thousands of hours to the project. The success of the project is due to their commitment, energy and imagination. The members of these groups are as follows.

#### Mayor's Panel on Urban Sustainability

- Mayor Dave Bronconnier, The City of Calgary; Panel Chair
- Alderman Linda Fox-Mellway, The City of Calgary; Panel Co-chair
- Michael Robinson, President & CEO, Glenbow Museum
- Ruth Ramsden-Wood, President, United Way of Calgary and Area
- Pierre Alvarez, President & CEO Canadian Association of Petroleum Producers
- Mayor Linda Bruce, Chair, Calgary Regional Partnership
- Lesley Conway, President,
   Hopewell Residential Communities; Board Member,
   Urban Development Institute Calgary
   Development Institute Calgary
- Gordon Dirks, Chair, Calgary Board of Education
- Eva Friesen, President & CEO, The Calgary Foundation
- Roger Gibbins, President & CEO, Canada West Foundation
- Dick Haskayne, Chairman, TransCanada Corporation
- Gary Holden, CEO, Enmax
- Dave Day, Director, Environmental Management, The City of Calgary
- Erika Hargesheimer, General Manager, Community Services & Protective Services, The City of Calgary
- David Watson, General Manager, Planning, Development & Assessment, The City of Calgary

- Donald Hrynyk, Director, City Manager's Office, The City of Calgary
- Robert Holmes, Senior Vice-president, Planning and Capital Development, Calgary Health Region
- Colin Jackson, President & CEO, EPCOR Centre for Performing Arts
- Irene Lewis, President & CEO, Southern Alberta Institute of Technology
- David Marshall, President, Mount Royal College
- Sharon Carry, President & CEO, Bow Valley College
- Dean Shingoose, Chair, Calgary Aboriginal Urban Affairs Committee
- Heather Douglas, President & CEO, Calgary Chamber of Commerce
- Brian Sinclair, Dean, Faculty of Environmental Design, University of Calgary
- Peter Wallis, Chair of the Board, Calgary Airport Authority
- Cathie Williams, Chair, Calgary Catholic School District
- Honourable Michael Harcourt, Chair, Sustainable Cities PLUS Network
- Rob Kerr, Director, ICLEI
- Yazmine Laroche, Head, Cities Secretariat, Privy Council Office
- Dr. Nola-Kate Seymoar, CEO, PLUS Network

#### imagineCALGARY Round Table:

- Chris Wade
- Brian Pincott
- Brenda Kenny
- Wanda Dalla Costa
- Pat Letizia
- Mary-Ellen Tyler
- Anila Umar
- Erika Hargesheimer
- David Watson
- Dr. Chris Eagle
- Colleen Shepherd
- Nancy Close
- Judy MacKay

- Katherine van Kooy
- Ali Shivji
- Aritha van Herk
- Sally Haney
- Eileen Stan
- Mike Fellows
- Jim Dewald
- Alice Brown
- Theresa Howland
- Wayne McCready
- Bob Schulz
- Dr. Guido van Rosendaal
- Naheed Nenshi

- Ald. Joe Ceci
- Ald. Andre Chabot
- Ald. Druh Farrell
- Ald. Madeleine King
- Ald. Barry Erskine
- Michael Embaie
- Patti Pon
- Sarbdip Singh Lail
- Brian Calliou
- Tom McCabe

#### Co-chairs

- Michael Robinson
- Ruth Ramsden-Wood

#### imagineCALGARY Working Groups:

#### **Built environment**

- Dr. Andrew Pattullo
- Gerry Barron
- Michael Nyikes
- Wanda Dalla Costa
- Kate Easton
- Geoff Dyer
- David Lawlor
- Mike Saley
- Don Mulligan
- Neil McKendrick
- Steve Wyton
- Amy Alexander
- Glen Radway
- Stephanie Jackman
- Eileen Stan
- Jesse Row

#### **Economic**

- Christopher Bruce
- Derek Cook
- Tom Heffner
- Ramona Johnston
- Michael Kerford
- Kevin Le
- Adam Legge
- Larissa Muller
- Patrick Walters ■ Richard White
- Michael Wilmott

#### Governance

- Michael Gretton
- J. B. Isaacs
- Barbara Kinnie
- Jake Kuiken
- Valerie McLean
- Bob Miller
- Byron Miller
- Bob Morrison ■ Joanne Steinmann ■ Terry Rock
- Anila Umar
- Sharon Wood
- Sharon Small

#### Social

- Ellen Humphrey
- Mario Siciliano
- Joyce Van Deurzen Norm Carlson
- Michael Embaie
- Michael Ireton
- Natalie Odd
- Beth Evans
- Greg McKenzie
- Allison MacKenzie
- Joanne Stalinski
- John te Linde
- Karen Young
- Trish Bond
- Cameron Falkenhagen
- Colleen Shepherd

#### Natural environment

- Halyna
  - Skala-Tataryn
- Noel Keough
- Mark Harrigan
- Chris Manderson
- Donna Rubenstein Paul Fesko
  - Carolyn Bowen
  - Mark Bennett
  - Lynn Sveinson
  - Pat Kinnear
  - Pat Letizia
  - Brian Pincott

### imagineCALGARY Project Team:

- Patricia Gordon (Project Manager)
- Linda Spencer
- Gerard Laing
- Monica Pohlmann
- Jennifer Allford
- Pia Novello
- Kevin Froese

- Dick Ebersohn
- John Lewis
- Cheryl De Paoli
- Cindy Prpich
- Jessica Park
- Alison Wilson

### Other Participants:

- Youth volunteers and staff at Child and Youth Friendly Calgary
- imagineCALGARY Advisor Group
- The Praxis Group: engagement consultants
- Global Community Initiatives: methodology consultants

This document provides background context for understanding the imagineCALGARY targets. These targets were developed using a wide range of research, expert analysis and the collective wisdom of participants in the multidisciplinary working group process. Guided by the 100-year goals, these create a reference point for the community to determine individual and collective action.

Bui	Built environment and infrastructure system		
Comn	Communications		
T1	By 2036, 75 per cent of Calgarians report that they are informed.	Having an informed public enables people to make better decisions and to understand the implications of the actions we each make. If members of the public are informed, they will understand the importance of thinking long term and understand their roles in carrying forward the imagineCALGARY initiative, including the various targets and strategies.	
T2	By 2036, all Calgarians have easy access to current forms of communications technology and resources.	• As technology advances, access to various communications resources may become an issue. Although Calgary has one of the highest rates of use of technology to communicate (Internet, cellphones, etc.), there are still those that do not have access. We need to ensure there is relatively easy access to the resources needed to effectively communicate and stay informed. This target will enable us to track whether the population is able to access the various resources that will make communicating easier and more effective. Specific aspects that could be looked at under this target are the number of public computer terminals available, the costs of various communications technologies, etc.	
ТЗ	By 2036, Calgarians increase their use of communications technology to support sustainability.	The communications infrastructure put in place should assist in achieving a more sustainable city. Many examples exist already that help us communicate with each other and reduce the impacts on items such as the transportation network. Specific measures we could look at to determine how communications technology is supporting sustainability include: number of people working from home (telework); number of services offered over Internet, like e-shopping; the creation of virtual space to support human interaction that does not require the creation of physical space.	
Т4	By 2036, Calgary increases the number of facilities and spaces that encourage human interaction, and they are widely distributed throughout the city.	• More traditional ways of communicating should not be lost. People still have the need to interact with one another. To foster this, physical space and facilities must be provided to encourage people to gather and communicate in a variety of ways. In meeting this target, there must be a continual review of our population to determine if the spaces and facilities we are creating are appropriate to what the population needs. For example, are the spaces we provide in suburban communities appropriate to meet the diverse and changing needs of Calgary's population? In addition, spaces and facilities should be adaptable over time, to change as the needs of the population change.	

Energy	Energy		
T1	By 2036, 30 per cent of Calgary's energy derives from low-impact renewable sources.	<ul> <li>Currently, we derive very little of our energy from low-impact renewable sources. As energy is a finite resource that impacts our environment, it is reasonable to assume we should be moving toward sources of energy that are low-impact and renewable. Quite simply, the target assumes that in 30 years we should be able to achieve a 30 per cent use of low-impact renewable sources of energy.</li> <li>Low-impact renewable energy (green power) plays a central role in addressing both global climate change and regional air pollution. Trends indicate that in 2003, total Calgary community green power consumption was about 0.75 per cent of total community electricity consumption. The municipal government of Calgary was the leading user of green power in Calgary, consuming approximately 49 per cent of the community total (City of Calgary, 2003 – Calgary Community GHG Inventory, p.8).</li> </ul>	
T2	By 2036, all new and retrofitted communities, buildings, vehicles, equipment and processes are built to be within five per cent of the highest energy-efficient design available out of all economically competitive products, as measured on a life cycle basis.	<ul> <li>This target is about reducing the amount of energy that we use. Even while we move to low-impact renewable sources of energy, it's important we reduce our overall energy consumption.</li> <li>Calgary is currently showing a decline in its per capita energy (household) consumption (6,000 kilowatt hours down from 1990 in 1999, City of Calgary). This encouraging trend has been associated with new energy-efficient technologies and changing energy consumption habits. This does not always relate to the consumption of gasoline sales, which have gone up in last five years by 11 per cent (Statistics Canada, 2005). With an increasing population, we have to build on the assets we already have, such as the reduction we see in household (in-house) consumption, and also change the way we consume other energy products.</li> </ul>	

Food		
T1	By 2036, Calgarians support local food production.	<ul> <li>Local food production is important to promote as it reduces the need to rely on food from sources that are beyond our control, it reduces the high costs and energy consumption associated with transporting our food and it supports opportunities for local food producers. The population within Calgary requires a significant amount of food to sustain itself, and it is unlikely a significant amount of our food can be produced locally, given our climate and soil conditions. Therefore, a numerical value has not been assigned to the amount of local food production that will be achieved within Calgary — only that it will be optimized.</li> <li>There is no data available to describe how much food is being produced within Calgary. However, it is recognized that according to the Alberta Government, 71.5 per cent of Calgarians participated in gardening activities during 2004. This is down slightly from the 2000 level of 73.5 per cent. These figures do not make the distinction between leisure (aesthetic) and food gardening.</li> </ul>

T2	By 2036, Calgary maintains access to reliable and quality food sources.	• At regular intervals, we should ensure we are maintaining access to reliable and quality food sources. Food security exists when all people, at all times, have access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for active and healthy lives. Food security includes, at a minimum, (1) the ready availability of nutritionally adequate and safe foods and (2) an assured ability to acquire acceptable foods in socially acceptable ways (that is, without resorting to emergency food supplies, scavenging, stealing or other coping strategies).
ТЗ	By 2036, 100 per cent of Calgary's food supply derives from sources that practice sustainable food production.	Many food producers do not practice sustainable food production.  In many cases, there is considerable use of chemicals, there is no consideration for the long-term impacts of producing food in certain ways and there are practices that do not operate under fair trade practices. This target is intended to address the practices of those supplying food to Calgarians and to encourage us to move to more sustainable sources and practices.
Т4	By 2010, 100 per cent of Calgarians have access to nutritious foods.	• In countries, provinces and cities as well off as ours, all people should have access to nutritious food. Currently, food banks are still required to provide food to those unable to access food. This target looks at a shorter time frame than 30 years and directs us to ensure nutritious foods are available to all people.

Good	Goods and services		
T1	By 2036, over 50 per cent of Calgary businesses adopt a protocol for sustainable practices and report on it regularly.	<ul> <li>It is widely accepted that sustainable business practice is regarded as         <ul> <li>a global competitive advantage</li> <li>a catalyst for innovation; and</li> <li>a way to ensure we operate in ways that consider the social, economic and environmental impacts of what we do.</li> </ul> </li> <li>Consumers are increasingly demanding that goods and services be produced by socially and environmentally responsible companies. Financial institutions evaluate companies and make decisions, considering both environmental risks and environmental market opportunities. Consequently, more companies are discovering the benefits of going beyond regulatory compliance, toward sustainability.</li> <li>This target is intended to encourage businesses to develop visions of a sustainable company and translate those visions into management action plans, which in turn can achieve additional sustainable practices while ensuring businesses succeed in the long run.</li> </ul>	
T2	By 2016, Calgary has a strong and diverse portfolio of locally based businesses.	Our economy is currently highly dependent on the oil and gas sector.  Over time, to build resiliency in our economy, it is important to diversify the businesses we have, so we are not as susceptible to "shocks" in the market that are related to a single sector of the economy.	

Т3	By 2036, all Calgarians consume more responsibly.	Responsible consumption is an important target for a number of reasons.  Ensuring that we are consuming more responsibly addresses the types of products and services we consume, and also the amounts we consume, which is a key aspect of an effective waste management system. A first step in more responsible consumption is to develop further information and awareness with the public on the impacts of consumption on long-term sustainability.
Т4	By 2016, we are developing "complete communities" that, among other aspects, allow people to obtain daily goods and services within a reasonable walking distance from home.	• A number of strategies are captured under this target of creating complete communities. "Complete communities" is a term coined to describe communities that are open to all people and offer people's daily needs within a reasonable distance of home. With this target, the strategies offer a better picture of what a complete community might be. The strategies identify residential density, a mix of uses, development of underutilized land and housing innovation as the most important aspects of building more complete communities. Other aspects of complete communities that are also important are identified in other systems.
Т5	By 2036, all new commercial buildings are designed to encourage the use of alternative forms of transportation (e.g. walking, cycling and transit).	Commercial areas are significant attractions for people and, therefore, vehicles. This target is aimed at creating a better environment for people to use other modes of travel to access commercial properties.
Т6	By 2036, all new and retrofitted non-residential buildings are built to be within five per cent of the highest energy- and water-efficient design available out of all economically competitive products, as measured on a life cycle basis.	<ul> <li>This target is about reducing the amount of energy we use. Even while we move to low-impact renewable sources of energy, it is important that we reduce our overall energy consumption.</li> <li>Calgary is currently showing a decline in its per capita energy (household) consumption (6,000 kilowatt hours down from 1990 in 1999, City of Calgary). This encouraging trend has been associated with new energy-efficient technologies and changing energy consumption habits. This does not always relate to the consumption of gasoline sales, which have gone up in last five years by 11 per cent (Statistics Canada, 2005). With an increasing population, we have to build on the assets we already have, such as the reduction we see in household (in-house) consumption, and also change the way we consume other energy products.</li> </ul>
Т7	By 2036, all commercial buildings are accessible to people with disabilities.	• The number of Calgarians with disabilities is increasing. Generally, the rate of people with disabilities increases as the population increases. Calgary's population is increasing and, at the same time, aging. As we age, the rate of people with disabilities also increases. To ensure we have a city built for all our citizens, it is necessary to ensure that businesses are accessible.

Housi	Housing		
T1	By 2016, we are developing "complete communities" that enable people to meet most of their daily needs within a reasonable walking distance from home.	• A number of strategies are captured under this target of creating complete communities. "Complete communities" is a term coined to describe communities that are open to all people and offer people's daily needs within a reasonable distance of home. With this target, the strategies offer a better picture of what a complete community might be. The strategies identify residential density, a mix of uses, development of underutilized land and housing innovation as the most important aspects of building more complete communities. Other aspects of complete communities that are also important are identified in other systems.	
T2	By 2036, all new and retrofitted residential buildings are built to be within five per cent of the highest energy-efficient design available out of all economically competitive products, as measured on a life cycle basis.	The type of housing we build and the materials we use in construction have significant impacts on how much energy we consume. A number of significant advancements are already being made in the area of energy efficiency. This target is intended to reinforce and accelerate the initiatives already being undertaken in the area of energy efficiency.	
Т3	By 2036, all Calgarians have the option of spending less than 30 per cent of their gross family incomes on housing.	Housing price is increasing faster than our incomes. In many cases, this means people have to spend in excess of 30 per cent of their gross family incomes on housing. In order for people to be relatively secure in the housing market, the target has been identified that all Calgarians have the option of spending less than 30 per cent of their gross family incomes on housing. The strategies identified to get us there look at both the delivery of housing and the price of housing, and also at ensuring Calgarians have sufficient income to achieve this target.	
Т4	By 2036, the Calgary market can meet the housing needs of those below the Low-income Cut-off (LICO).	• It is important to ensure the housing needs of those below the LICO can be met in Calgary. If they can't, there is an increased risk of homelessness.	

Trans	Transportation		
T1	By 2036, we reduce the annual private vehicle kilometres travelled per capita by 20 per cent.	<ul> <li>The vehicle kilometres travelled per person per year grew from 4,000 in 1964, to 10,500 in 1991, to 13,500 in 2001. Calgary's vehicle kilometres travelled is very high compared to other cities and is one of the highest in the world.</li> <li>The continued growth of vehicle travel in Calgary is due not just to population and job growth, but also to growth in travel by individuals. There have been many suggested explanations for this, but more research is needed to gain a better understanding of the underlying causes.</li> </ul>	
T2	By 2016, we increase the residential population within walking distance (600 metres) of LRT stations and major transit nodes by 100 per cent.	• LRT stations outside downtown, in general, are characterized as places to drive to or take the bus to. They are largely made up of large parking lots for commuters. This target aims to intensify populations near LRT stations to increase people's abilities to walk to stations and make the stations active and interesting places.	

Т3	By 2016, we increase the number of jobs within walking distance (600 metres) of LRT stations and major transit nodes by 35 per cent.	LRT stations outside downtown, in general, are characterized as places to drive to or take the bus to. This target aims to intensify the number of jobs close to LRT stations to make the stations active and interesting places and make them destinations, rather than simply starting points to get to downtown.
Т4	By 2036, there is a 50 per cent reduction from 1990 levels in the pollution (greenhouse gases) associated with automobiles.	• "It is essential to distinguish atmospheric concentrations of GHGs from annual emissions of GHGs. Global emissions of GHGs are rising, but simply halting the rise by stabilizing emissions will not be sufficient to stabilize concentrations. This is because about half the amount of GHGs emitted in recent years has simply accumulated in the atmosphere. This implies that to halt the buildup in concentrations, we not only need to reverse the current rise in emissions but also then go on to cut emissions by at least half." (David Suzuki Foundation and Pembina, 2005 – The Case for Deep Reductions, p.28.) Calgary's GHG emissions rose from 1990 to 2003 by 31.4 per cent. It is estimated that Calgary's population will increase by 30 per cent over the next 30 years.
Т5	By 2036, we increase peak period transit, walking and cycling and carpool travel to downtown by 50 per cent, 40 per cent and 20 per cent respectively.	Peak period vehicular travel to downtown places the most strain on the transportation system. By increasing non-vehicular travel during the peak period, we can reduce the demands placed on the roadways, etc.
Т6	By 2036, 100 per cent of public transit services (buses, CTrains and facilities) are accessible to people with disabilities.	• In our community, the number of people with disabilities is increasing. As a result, reliance upon public transportation will grow, as more people stop driving, or drive less, and demand other forms of transportation due to their disabilities. The 100-year goal for transportation references a transportation system that serves the access and mobility needs of all people. This target ensures public transit will enable access for those who are mobility-challenged.
Т7	By 2036, transit trips per capita increase 40 per cent over 2006 levels.	• Transit trips per capita is a measure of how effective transit service is in serving Calgarians' travel needs. If transit ridership goes up, it is usually the result of two factors: more people in Calgary or more frequent use of transit by existing Calgarians. In the past 10 years, not only did ridership increase, but so did the transit trips per capita. This means that transit's share of the travel market increased, as well as the total market. This measure will help determine if we are attracting trips to transit that would formally have been made by other modes.
Т8	By 2036, the number of on-street bikeways increases by 200 per cent, and the number of pathways by 100 per cent.	• Providing safe space for bicycle travel is important. We already have a great system of pathways and these should be maintained and expanded upon over the next 30 years. On-street bikeways are another way to make it easier to enable a broader range of travel choices.
Т9	By 2036, fatal collisions per 100,000 people and injury collisions per 1,000 people decrease by 50 per cent.	<ul> <li>The traffic collision rate has varied greatly from year to year, reflecting different weather conditions and changing reporting levels. Since 1991, the rate has been more stable and lower than the GoPlan target of 45 traffic collisions per 1,000 people. Studies show that Calgary has one of the best safety records in the world.</li> <li>The reduction and stabilization of the traffic collision rate likely reflect the effects of improved traffic enforcement, driver education and the reduction of roadway-related factors.</li> </ul>

Waste	Waste management	
T1	By 2036, 85 per cent of the waste generated within Calgary is diverted from landfills.	• The City of Calgary already has a target of reducing the amount of waste collected at landfills by 80 per cent by 2020. This target increases The City's target by a further five per cent in the following 16 years. It was determined that the marginal increases in the amount of waste diverted would get increasingly more difficult to achieve.
Т2	By 2036, 75 per cent of construction industry waste materials are recovered for reuse and/or recycling.	• There is a significant amount of waste generated with the construction of housing. Many of the materials that are wasted can be easily converted to other useful products. Pilot projects have been conducted in this area and have proven that a significant reduction can be made in the amount of waste generated.
Т3	By 2036, 85 per cent of waste materials are converted to other useful products.	• Increasingly, technologies are being developed to convert waste into useful products. Complex conversion processes can take waste and convert it to energy (biodiesel, methane, biomass) or less complex processes can transform waste materials into other useful products (old tires converted to paving materials, etc.).

Ecc	Economic	
Econ	omic well-being	
T1	By 2036, research and development intensity, both public and private, increases to five per cent of Calgary's gross domestic product.	<ul> <li>Diversification of the economy is a key aspect of sustainability.</li> <li>This reduces reliance on declining and non-renewable resources.</li> <li>This capitalizes on a highly educated workforce.</li> <li>Current research and development investment levels in Calgary are around 0.5 per cent. The current worldwide max is five per cent (in Seattle); Finland is around 3.5 per cent. Canada ranks fifth among Organisation for Economic Co-operation and Development (OECD) countries in "innovation."</li> <li>This capitalizes on Calgary's existing strength (knowledge of energy) and transforms it into increasingly more environmentally sustainable economic activity.</li> <li>Calgary has one of the highest-educated workforces in Canada.</li> <li>Calgary is headquarters to a wide range of financial investment capacity.</li> <li>The provincial government has resources to invest.</li> <li>Calgary is located within a province with a wide range of and abundant natural resources.</li> <li>Note: Gross domestic product is intended to be measured by gross public and private expenditures.</li> </ul>
T2	By 2036, the number of environmentally sustainable and commercially viable value-added products and technologies produced in Calgary increases by 100 per cent.	<ul> <li>Diversification of the economy is a key aspect of sustainability.</li> <li>This reduces reliance on declining and non-renewable resources.</li> <li>This capitalizes on a highly educated workforce.</li> </ul>

ТЗ	By 2036, Calgary's non-oil-related industries grow by 50 per cent.	<ul> <li>Diversification of the economy is a key aspect of sustainability.</li> <li>This reduces reliance on declining and non-renewable resources.</li> <li>This capitalizes on a highly educated workforce.</li> <li>Fifteen per cent of Calgary's gross domestic product is directly tied to oil and gas; it is estimated that, combined with secondary and tertiary spinoffs, nearly 60 per cent of Calgary's gross domestic product is tied to oil and gas.</li> <li>This capitalizes on Calgary's existing strength (knowledge of energy) and transforms it into increasingly more environmentally sustainable economic activity.</li> <li>Calgary has among the highest-educated workforce in Canada.</li> <li>Calgary is headquarters to a wide range of financial investment capacity.</li> <li>Calgary has a burgeoning arts and culture industry.</li> </ul>
T4	By 2036, Calgary is ranked as the most favourable Canadian city in which to establish businesses that support sustainability practices.	<ul> <li>Attracting businesses ensures a wide array of services is available and provides ongoing economic variety, thereby supporting sustainability and resiliency.</li> <li>Calgary already enjoys high rankings on many dimensions (favourable business climate).</li> <li>We will continue to work diligently at attracting strategic economic activity.</li> <li>This would help avoid unwanted, unsustainable enterprises.</li> <li>This could be a significant leverage tool toward ecologically and economically sustainable products and services, moving us in an environmentally sustainable direction.</li> <li>Calgary has a tax environment that favours economic, environmental and social sustainability.</li> <li>There is access to capital and to markets.</li> <li>There is promotion of a culture of innovation/creativity and risk taking.</li> <li>There is affordability and access to resources (human, capital, real estate, energy).</li> <li>There is well-developed training, education and incubation capacity.</li> <li>We promote/support entrepreneurship.</li> <li>Partnership brokering enables international competitiveness and fosters sustainability.</li> <li>There is electronic trade capacity.</li> <li>Flexible land use and other standards enable a wide variety of local businesses.</li> <li>Infrastructure is a necessary condition for all business activity.</li> <li>Quality of life can be a determinant in enterprises locating in Calgary.</li> <li>Quality of life is a key determinant in individuals coming and staying in Calgary.</li> </ul>
T5	By 2036, tourist visitations and expenditures grow by 90 per cent.	<ul> <li>Tourism provides an additional aspect to the diversification of the economy.</li> <li>Tourism Calgary projects three to five per cent growth per year, so the target is very achievable.</li> <li>Besides providing an additional export market, it enhances quality of life for residents.</li> </ul>

By 2036, alternative ways to	
measure economic well-being	
are commonly used to support	
sustainability principles in	
decision-making.	

- The totality of economic activity (the economy impacts other areas like citizen relations and governance, the natural and built environment) needs to be measured to achieve the economy's greater purpose, namely the well-being of all citizens.
- The triple bottom line or "genuine progress indicators" are examples of alternate measures.
- The unintended consequ ences of economic activity must be included in decision-making to ensure the well-being of all.
- For example, producing a barrel of oil has higher environmental costs than producing the equivalent amount of energy through wind. The environmental costs associated with oil production and consumption have not traditionally been considered in decision-making.
- The unintended consequences of economic activity must be included in decision-making to ensure the well-being of all.

#### Meaningful work

T1 By 2036, full employment of the labour force (defined as unemployment below five per cent) is sustained.

- Achieving a balance between demand for labour and supply provides stability and predictability for both business and individual workers.
- A balanced labour market fosters price stability.
- A balanced labour market supports quality of life and the common good.
- Existing tools can continue to be improved.
- An adaptive workforce is essential to remaining competitive in a continuously evolving and increasingly global economy.
- Ongoing learning is a key means of achieving this strategy.

T2	By 2036, the high school graduation rate for individuals up to age 21 increases to 95 per cent, and 75 per cent of adults aged 21 to 25 complete a post-secondary or vocational education program.	<ul> <li>Calgary's high school graduation rate for 2003–2004 was 74 per cent.¹</li> <li>Alberta's high school graduation rate in 2004 was 90 per cent for people aged 25 to 34.²</li> <li>Upper secondary education rates for selected countries (2003) are: Iceland – 88 per cent; Netherlands – 83 per cent; Sweden – 81 per cent; United Kingdom – 84 per cent.³</li> <li>Education/learning is increasingly essential in an economy that is inexorably moving toward "knowledge and information." (The proportion of this aspect of the economy in Calgary is already relatively high and increasing.)</li> <li>Alberta Advanced Education predicts that over the next 10 years, nearly eight in 10 new jobs will require a post-secondary education.⁴</li> <li>Consistent positive correlations have been found between educational attainment and occupational attainment, measured in both job position and income.⁵</li> <li>Other targets and strategies rely on an "educated and creative" workforce.</li> <li>One suggested strategy related to vocational options during secondary school is based on certain European practices (the United Kingdom, Austria, Switzerland, Germany, Spain and Iceland); the OECD reports that countries in which secondary school has a strong vocational component have a higher employment participation rate among youth than Canada.⁶</li> <li>These relate to the underlying/structural elements that may positively or negatively impact the completion of programs (e.g. a hot labour market offering short-term, but not necessarily long-term, rewards; ease of access to drugs or unproductive lifestyles; family dynamics in which ongoing encouragement or support is lacking; etc.).</li> <li>This increases the opportunities for disadvantaged segments of our community.</li> <li>This capitalizes on what is otherwise an underused human resource.</li> <li>This is the right thing to do; it is fair; it redresses the balance of opportunity.</li> </ul>
ТЗ	By 2036, 95 per cent of entrants in trades-related programs complete their programs and 98 per cent of graduates are employed in their fields of study within six months of graduation.	<ul> <li>An adequate supply of tradespeople is essential for the ongoing sustainability of many aspects of the economy and quality of life.</li> <li>The retiring population requires replenishment.</li> <li>Current (anecdotal) evidence suggests that many students do not complete their programs because the labour market is experiencing a shortage of labour; wages are escalating; and employers are offering immediate rewards to keep working instead of completing their programs.</li> </ul>

<sup>&</sup>lt;sup>1</sup>Calgary School District No. 19 and Calgary RCSSD No. 1 data – Alberta Education, July 2005

<sup>&</sup>lt;sup>2</sup>Alberta Finance – Measuring Up 2005 – Results by Goal (Government of Alberta Website – May 2006)
<sup>3</sup>Organisation for Economic Co-operation and Development, OECD Economic Outlook No 78 Annex Tables - 2003

<sup>&</sup>lt;sup>4</sup>Calgary Economic Report – First Quarter 2006, Calgary Economic Development – May 2006 <sup>5</sup>Evaluation framework for Federal Investment in the Social Economy: A Discussion Paper, Eric Leviten-Reid and Sherri Torjman, January 2006

<sup>&</sup>lt;sup>6</sup>OECD Economic Outlook No 78 Annex, 2003

T4	By 2036, all adult immigrants to Calgary have the opportunity to integrate into the economy through employment or entrepreneurial activity at the same participation or success rate as other Calgarians.	<ul> <li>Due to a negative natural population growth, immigration is seen as a critical and necessary means of supplying labour in a growing economy. (This phenomenon is exacerbated during the current level of high economic growth.)</li> <li>This will result in attracting the people that are needed (strategic selection).</li> <li>This requires offering a wide range of services and programs that foster adaptation and successful participation, whether in the labour or entrepreneurial market.</li> <li>Accreditation is cited as a current challenge; the amount of time required for immigrants to requalify and become certified is deemed excessive and costly and represents a significant loss of productivity.</li> <li>Professional associations are often cited as being overprotective or having an "undue" level of vested interest. A more acceptable balance is desired.</li> </ul>
Т5	By 2036, 85 per cent of employees express a high degree of job satisfaction.	<ul> <li>Surveys and literature are consistently clear that people seek meaning beyond a job that pays the bills.</li> <li>Job satisfaction is highly correlated to employee turnover.</li> <li>Stability of work benefits employees and employers.</li> <li>Job stability is a factor in quality of life.</li> <li>These are cited as means of fostering satisfaction.</li> <li>Society often values something when it needs it most, but often overlooks its ongoing benefits.</li> <li>Volunteerism provides opportunities to contribute to others and to benefit personally.</li> </ul>
Т6	By 2036, healthy seniors have the opportunity to be engaged in fulfilling work that contributes to the economy and/or the community.	<ul> <li>Due to changing demographics and increased life expectancy, older people will have the opportunity to work longer, unless immigration exceeds current national quotas.</li> <li>There will be a demand for their services; this segment of the population represents a potential labour source.</li> <li>People of all ages seek meaning, and work or volunteerism provides that opportunity.</li> <li>Wisdom and depth of experience complement youthful energy, risk and innovation.</li> </ul>

#### **Sufficient income**

T1 By 2036, 95 per cent of all people living in Calgary are at or above Statistics Canada's Lowincome Cut-off (LICO) rates;

there is no child poverty.

- Equity reflects societal values.
- Fairness provides meaning and a quality of life to be enjoyed by all, regardless of circumstance.
- Fairness supports stability in society.
- Except for those with persistent barriers to employment, self-sufficiency is achievable provided that people with temporary challenges are afforded the circumstances and supports to achieve it.
- This is a question of fairness. No job should be perceived by anyone in society as having such value that it does not afford the person the ability to meet his/her basic human and economic needs.
- This reflects the societal value that all should have a decent level of income
- The business sector needs to recognize the impacts of poverty on society in general (crime, safety, etc.) and on business (due to government transfers that would otherwise not be necessary).
- Persistent inequalities in education, income and affordable housing are
  costly in terms of lost productivity, foregone tax revenue and reduced
  consumer spending, plus higher income assistance, social services, health
  care and security expenditures.
- It is not reasonable for industry to expect "first-world" infrastructure and stable and peaceful governance, and expect to pay salaries to compete with labour from third-world countries (anything less than a livable wage is equivalent to asking some members of society to value their services less than what it takes for a decent existence).
- Self-employment, entrepreneurship, sweat equity, a barter system and community economic development represent alternative means, beyond wages/salaries, to earn a living.
- Reduced spending represents the other side of the income equation; it focuses on ways to make available income go further.
- Disadvantaged people are at odds with established financial systems that require collateral.
- The social economy also includes social networks that provide transitional supports, like information sharing, child care, collaboration among community groups, co-ordination of information, reduced/shared transaction costs (e.g. recruitment and training costs), emotional support, reinforcement of positive behaviours and brokerage of services or advocacy.
- By 2036, all children of low-income families who are residents of Calgary have the opportunity to complete post-secondary education or appropriate training to enable them to fully participate in the economy.
- Consistent positive correlations have been found between educational attainment and occupational attainment, measured in both job position and income.<sup>7</sup>
- Education and skills are universally regarded by experts as one of the key determinants in breaking the poverty cycle.

<sup>&</sup>lt;sup>7</sup>Evaluation framework for Federal Investment in the Social Economy: A Discussion Paper, Eric Leviten-Reid and Sherri Torjman, January 2006

Gov	Governance		
Acces	S		
T1	By 2016, 80 per cent of Calgarians report that they feel government activity is open, honest, inclusive and responsive.	It is essential for citizens to feel that the decision-making institutions that represent them are accessible. Included in achieving this target are the elements of accessible information, open engagement processes and inclusive decision-making.	
T2	By 2016, Calgary City Council establishes a participatory budgeting process.	Participatory budgeting could have a great public benefit in making information and decision-making more accessible. As the process that determines how City resources are allocated, these decisions have a great influence on the delivery of infrastructure and services. Allowing a more inclusive and participatory process to arrive at these decisions would be a strong statement in moving toward the key elements of the 100-year goals.	

Conf	lict resolution	
T1	By 2036, 100 per cent of non-criminal disputes are resolved by some form of collaborative process.	Resolving disputes through collaboration is an important step in creating processes that build relationships, rather than destroy them. Non-criminal disputes are ideal situations to act upon, as the stakes are lower and individuals can learn from the resolution processes and build on their experiences in future situations.
T2	By 2036, 80 per cent of non-violent criminal offences are handled in the community in which the victim lives.	Resolving non-violent criminal offences in the community in which the victim lives has a number of benefits. This model – also known as community justice – creates relationships and forces accountability. It recognizes the impacts of the offence on the victim and works to build trust. The process creates accountability of the offender within his or her community, rather than allowing the offender to hide behind a nameless, faceless process. Finally, this approach creates and/or rebuilds relationships in the community, ensuring that the resolution process has a long-term positive outcome.
Т3	By 2020, 100 per cent of regulatory offences are enforced by the responsible governments, rather than through court processes.	Ensuring that governments have the ability to act on their bylaws allows for quick resolution of conflict with these regulations, which are to enhance the quality of life for citizens. By allowing administrative action, subject to appeals, individuals within the community do not have to depend on contentious court actions. This way, relationships are not compromised within the community.
Т4	By 2036, 100 per cent of personal conflicts among students, parents, teachers, administrators, support staff and elected representatives in the education system are resolved through collaborative means.	Conflict resolution as a positive process requires a shift of mindset from our current view that conflict is negative. In order to shift this mindset and build skills that allow the conflict resolution process to build and enhance relationships, it is important to imbed this model into the education system, so young people can learn it. This will create many long-term benefits in the future resolution of personal, professional and community conflicts.

Equi	Equity		
Т1	By 2021, the makeup of elected and appointed bodies reflects the diversity of the community.	With an ever-diversifying community makeup, it is important that publicly elected and appointed bodies reflect the diversity of Calgary. This would help to make the decisions by these bodies more reflective of the opinions and wishes of the citizens and create a feeling of representation.	
T2	By 2010, all public institutions and organizations implement sustainability principles (e.g. Melbourne Principles) in decision-making and reporting, using tools such as triple bottom line.	An important element of sustainability is how we make our decisions. We must use a sustainability frame that allows our public institutions to look at "the whole" when making decisions, rather than at one particular element of the community (looking exclusively at the environmental benefits, for example). By recognizing the complexity of our community systems and providing principles and/or tools to evaluate our decisions with that in mind, we are better able to improve the quality of life in our community in a variety of areas.	
ТЗ	By 2020, all public institutions and systems create and implement an urban Aboriginal policy that recognizes the detrimental colonial history experienced by First Nations, Metis and Inuit people; reduces barriers to public participation and governance; and supports economic, social and political advancement.	Urban Aboriginal issues are extremely complex. There are a variety of unsettled collective rights issues related to the federal and provincial levels of government. In addition, there is a historical pattern of discrimination and social, political and economic issues that are related to these collective rights issues. Yet over half of the Aboriginal population lives in cities, where the local government has no formal authority or mandate on Aboriginal issues. The long-term demographic trends show that the urban Aboriginal population will steadily grow over the next few decades, raising the profile and importance of this issue within the general population. This target was set to (a) recognize the extremely complex context of urban First Nation, Metis and Inuit people and (b) take action on ways to better serve the unique issues and interests of these people.	
Т4	By 2036, racism and discrimination is dealt with by having public and private sector institutions and organizations throughout the city introduce meaningful and effective policies and processes and measurable outcomes.	In order to achieve the 100-year goal of true equity, this target focuses on proactive measures throughout the community to address discrimination. By utilizing a wide array of policies, processes and outcomes through a variety of institutions and organizations, the broadest achievement of this target is more achievable.	

Self-determination Self-determination		
T1	By 2036, there is a 75 per cent turnout in municipal elections.	Voter turnout in Calgary municipal elections has been on a decline over the past 30 years, with a low of 19.8 per cent in the 2004 election. The imagineCALGARY Governance Working Group set an ambitious target on municipal voter turnout, wanting to see citizens heavily engaged in the election of key decision makers in the city. By achieving a large voter turnout, decisions made by elected officials under these circumstances gain a level of legitimacy, as the decision makers were selected by a larger proportion of the citizenry that they represent.

T2	By 2036, there is a citizen-to-municipal-politician ratio of 55,000:1.	Calgary currently has the highest citizen to municipal politician ratio in the country (1:63,579), as opposed to other major cities like Vancouver (1:49,607), Edmonton (1:54,800), Toronto (1:55,145), Ottawa (1:52,069) and Montreal (1:55,496). This target intends to benefit decision-making in Calgary in two ways. First, it will reduce the workloads of aldermen. These are extremely busy people and, by reducing the number of constituents they represent, they would be able to gain more time for key issues and priority issues. Second, by reducing the ratio, aldermen are better able to hear the issues of their constituents, thereby making local government more accessible to its citizens.
ТЗ	By 2036, The City of Calgary reduces its dependence on property taxes to no more than 25 per cent of revenue.	Currently, The City of Calgary obtains approximately 35 per cent of its revenue from property taxes. This target recognizes the limitations of dependency on a particular type of revenue generation (as regulated by the Municipal Government Act). For example, if property taxation is the primary source of revenue generation, it can have negative consequences for the region if municipalities are competing with one another to develop as quickly as possible in order to raise revenues. The intent of this target is to provide The City with flexible options for raising revenues in the next 30 years.
Т4	By 2036, all general revenues are based on the principle of progressive taxation.	This target attempts to allow Calgarians to meet their needs in the most equitable way possible. By using the principle of progressive taxation, future revenues reflect the fact that different individuals have different capacities to pay for publicly provided goods and services and attempt to even the playing field in this regard.
Т5	By 2036, all publicly provided goods and services are affordable, accessible and priced in accordance with their public benefits.	How taxpayer dollars are spent directly influences opportunities for improving quality of life and creating an environment in which people can decide their futures. In working toward the 100-year goals, it is important for a sound evaluation of public goods and service provision.
Т6	By 2010, The City of Calgary has co-operative, supportive and mutually beneficial working relationships with governments in the region.	Working collaboratively with municipal neighbours can always be contentious. Given the growth pressures in the Calgary region, it is crucial that governments in the region are able to have an effective working relationship with each other in order to manage growth sustainably.
Т7	By 2016, governance is restructured to allow governments to create or reallocate authority so that effective decisions are made at the geographical scale that matches the processes involved.	This target recognizes the variety of scales that are required, depending on the issue at hand. For example, water should be addressed at the scale of the watershed, while issues such as creative self-expression should be addressed at a more local city, or even neighbourhood, level. It is important for the structures of governance to relate to the appropriate scale that is relevant to the issue.
Т8	By 2008, beginning with the approval of the 100-year vision, all government decisions protect individual freedoms, ensure that people meet their obligations and improve quality of life.	This target reinforces some key tenants of governance: that individual freedoms are protected, that people are responsible and that the overall objective is to improve the quality of life of Calgarians.

T9 By 2008, and every year thereafter, groups/organizations/ government report on how they have considered and adopted the imagineCALGARY targets and strategies that are relevant to them and in which they have been identified as having a role.

imagineCALGARY presents an exciting opportunity for the broad community to get on the "same page." This target recognizes this opportunity and strives for an annual reporting of how our community is collectively moving toward a more sustainable future.

Na	Natural environment		
Air			
T1	By 2036, energy consumption is reduced by 30 per cent based on 1999 use.	Calgary is currently showing a decline in its per capita energy (household) consumption (6,000 kilowatt hours down from 1990 in 1999, City of Calgary). This encouraging trend has been associated with new energy-efficient technologies and changing energy consumption habits. This does not always relate to the consumption of gasoline sales, which have gone up in last five years by 11 per cent (Statistics Canada, 2005). With an increasing population, we have to build on the assets we already have, such as the reduction we see in household (in-house) consumption, and also change the way we consume other energy products. The target is backcasted from 100 per cent in 2106.	
T2	By 2036, the use of low-impact renewable energy increases by 30 per cent as a per centage of total energy use.	Low-impact renewable energy (green power) plays a central role in addressing both global climate change and regional air pollution. Trends indicate that in 2003, total Calgary community green power consumption was about 0.75 per cent of total community electricity consumption. The municipal government of Calgary was the leading user of green power in Calgary, consuming approximately 49 per cent of the community total (City of Calgary, 2003 – Calgary Community GHG Inventory, p.8). The need for increased community green power consumption is therefore required. The target is backcasted from 100 per cent in 2106 and uses zero per cent as a base.	
ТЗ	By 2012, total community greenhouse gas emissions are reduced by six per cent from 1990 levels; by 2036, they're reduced by 50 per cent from 1990 levels and criteria air contaminants are also significantly reduced.	"It is essential to distinguish atmospheric concentrations of GHGs from annual emissions of GHGs. Global emissions of GHGs are rising, but simply halting the rise by stabilizing emissions will not be sufficient to stabilize concentrations. This is because about half the amount of GHGs emitted in recent years has simply accumulated in the atmosphere. This implies that to halt the buildup in concentrations, we not only need to reverse the current rise in emissions but also then go on to cut emissions by at least half." (David Suzuki Foundation and Pembina, 2005 - The Case for Deep Reductions, p.28.) Calgary's GHG emissions rose from 1990 to 2003 by 31.4 per cent. It is estimated that Calgary's population will increase by 30 per cent over the next 30 years. It clearly reflects an unsustainable pattern. Increased reductions are required if Calgarians are to succeed in decreasing their impacts globally.	
T4	By 2036, indoor air contaminants are reduced to zero per cent.	Air contaminants should not exist indoors, as they impact the health of all residents, especially those most susceptible to disease.	

Т5	By 2036, Calgary's ecological footprint decreases to below the 2001 Canadian average of 7.25 hectares per capita.	An ecological footprint is a measure of the demands humans place on nature. The ecological footprint measures what we consume from nature, as individuals, organizations, cities, regions, nations or humanity as a whole. It shows how much biologically productive land and water we occupy to produce all the resources we consume and to absorb our waste. Calgary's footprint is six per cent higher than the Albertan average, which is 30 per cent higher than the Canadian average. Calgary's footprint as of 2001 was 9.86 hectares per capita (Federation of Canadian Municipalities
		2001 was 9.86 hectares per capita (Federation of Canadian Municipalities, 2005 – Ecological Footprints of Canadian Municipalities).

Land	Land and soil		
T1	By 2036, land use efficiency increases by at least 30 per cent, as measured by public transit threshold and increased density.	Existing density in new development is six to eight units per acre (upa). An increase of 30 per cent will push the upa to a minimum of 10. According to Transit, we require a density of at least 16 upa to have an efficient and cost-effective transit system.	
T2	By 2036, sustainable urban food production increases to five per cent.	There is no data available to describe how much food is being produced within Calgary. However, it is recognized that according to the Alberta Government (Alberta Recreation Survey), 71.5 per cent of Calgarians participated in gardening activities during 2004. This is down slightly from the 2000 level of 73.5 per cent. These figures do not discriminate between leisure (aesthetic) and food gardening. Other studies (Sustainable Calgary, 2004 State of the City Report) indicate a growing number of Calgarians are participating in community gardens; however, these lands are becoming increasingly vulnerable to land development. Vancouver has set a target of a five per cent increase in urban food production, based on their already high level of production (above 50 per cent). A five per cent production increase would, for instance, mean an increase of five per cent of the land set aside for food production on each residential lot in Calgary. This equals approximately 6.5 to 14 square metres of each lot dedicated to food production.	
Т3	By 2036, the consumption of urban- and regionally produced food by Calgarians increases to 30 per cent.	This is backcasted from 100 per cent in 2106 and uses zero per cent as a base. According to Sustainable Calgary, the numbers of farmers' markets, vendors and visitors have all increased. This favourable trend bodes well for the residents' independence from food produced outside the region. Increasing this trend will reduce pollution and greenhouse gas emissions related to transporting food long distances and will improve soil quality, which in turn will improve overall ecological health.	
Т4	By 2036, there is zero per cent new soil contamination.	There is no reason for any soil contamination, if the correct procedures are in place and chemicals are used responsibly. The rate of pesticide application on municipal land decreased by 27 per cent between 1998 and 2001. Calgarians, however, use an estimated six times more pesticides than municipal staff (Sustainable Calgary, 2004 – State of the Environment Report, p. 46). This is a serious downward trend that impacts the health of those most susceptible and in contact with the outdoors, like children.	
Т5	By 2036, at least 30 per cent of existing contaminated sites are remediated.	This is backcasted from 100 per cent in 2106. In order to preserve life- supporting processes in soils, existing contamination has to be removed. In many cases, these sites are known, but in others it's the opposite.	

Т6	By 2036, Calgary's ecological footprint decreases to below the 2001 Canadian average of 7.25 hectares per capita.	An ecological footprint is a measure of the demands humans place on nature. The ecological footprint measures what we consume from nature, as individuals, organizations, cities, regions, nations or humanity as a whole. It shows how much biologically productive land and water we occupy to produce all the resources we consume and to absorb our waste. Calgary's footprint is six per cent higher than the Albertan average, which is 30 per cent higher than the Canadian average. Calgary's footprint as of 2001 was 9.86 hectares per capita (Federation of Canadian Municipalities, 2005 – Ecological Footprints of Canadian Municipalities).
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Plants	Plants and animals		
T1	By 2036, native biological diversity increases to healthy levels, as measured through Habitat Suitability Index indices and local key indicator species.	Trends indicate that habitat supply in Calgary is decreasing for many species of animals, but increasing for others. At issue here is loss of habitat, which is directly linked to the loss of species diversity. Urban sprawl and invasive species are among the greatest threats to diversity, disturbing natural cycles, impacting our aesthetic surroundings and influencing recreational opportunities negatively.	
T2	By 2036, the number and/or size of protected or restored habitats increases to a state of health and functionality.	<ol> <li>Trends indicate that we are losing native plant communities. The cause is related to</li> <li>urban sprawl and agriculture: native habitat is (or has been) converted to non-native</li> <li>invasive species: protected native habitats are gradually losing native species because of the encroachment of non-native, invasive species, with a resultant loss in habitat supply and carrying capacity; and</li> <li>low-level disturbance: encroachment from adjacent development (e.g. lawn mowing) and elevated use (off-leash parks, trail proliferation, etc.) can result in a long-term decline in habitat quality.</li> <li>Trends indicate that the number of species at risk is declining. Considerable effort is being put into monitoring the status of species provincially, federally and internationally. This is a long-term indicator of overall environmental health, which can serve as an early warning sign of other issues related to environmental degradation.</li> </ol>	

Water		
T1	By 2036, per capita water consumption is reduced by 40 per cent.	The City of Calgary has an existing target of 30 per cent water reduction by 2030. Taking into account the up- (glacier decline and irrigation) and downstream (river runs dry) impacts, as well as indications of severe climate change, Calgarians have to be prepared for more aggressive reductions in water use on a personal, organizational and commercial level. Currently, the average Calgarian uses twice as much water as the average European. The need for a more aggressive target will ensure an overall (and not only per capita) consumption decline.

T2	By 2036, positive rates of flow in the Bow River Basin are maintained to keep aquatic ecosystems at these levels.	A certain amount of water is required to maintain aquatic life (e.g. fish, plants, riparian zones). Any level of human consumption, whether for irrigation or municipal, should be curbed before the levels impact the aquatic ecosystem. Ecological integrity is damaged in such a way that the system will not recuperate, making it unable to support recreation (e.g. fishing) and reducing the quantity and quality of water.
ТЗ	By 2036, effective impervious areas are reduced equal to or below 30 per cent to restore natural hydrograph and become less susceptible to flooding.	Recent scientific findings have indicated that "healthy" watershed conditions, or conditions similar to those found in undeveloped watersheds, can be sustained if effective impervious areas are maintained at or below 10 per cent (Schueler, 1994; Paul and Meyer, 2001). According to Schueler, 1995, and Arnold and Gibbons, 1996, the permeability thresholds for watershed hydrology are as follows: protected areas <10 per cent; impacted 10 – 30 per cent; degraded >30 per cent (San Francisco Estuary Institute, 2005). It is estimated that as land use changes from forest/farm to urban landscape, the hydrologic cycle is impacted. In urban areas like Calgary, suburban areas have 35 per cent to 50 per cent impervious surface (30 per cent runoff) while downtown areas will experience 75 per cent to 100 per cent (55 per cent runoff) impervious surface. (Prince George's County, Maryland, USA, Department of Environmental Resources, July 1999 – Low Impact Development Hydrologic Analysis).
T4	By 2036, watershed health — as measured by loss of wetlands, water quality, non-compliance with pollution standards, instream flow and groundwater levels — improves.	Watersheds are a reflection of the health of our natural environment. Water quality and water quantity are directly impacted by human intervention in ecosystems – from the way we construct our communities, including residential development and infrastructure, to the way we live on a daily basis, including driving habits that cause air/soil pollution to waste creation from certain consumption patterns. Ecosystems that involve fresh water produce countless essential ecological goods and services, like human health maintenance, air and water purification, nutrient cycling, food production and waste treatment. Freshwater ecosystems provide habitat for numerous species of plants and animals, including fish, shellfish, mammals and birds. These services need to be protected for long-term sustainability. When freshwater decreases in quantity and quality, there is a long-term cost to attempting to replace lost ecological goods and services. As Calgary attracts more people and grows faster, the greater its influence is likely to be on surrounding areas. In Calgary's case, growing industrial production and higher levels of income in particular place even more pressure on areas of sensitivity.
T5	By 2036, Calgary's ecological footprint decreases to below the 2001 Canadian average of 7.25 hectares per capita.	An ecological footprint is a measure of the demands humans place on nature. The ecological footprint measures what we consume from nature, as individuals, organizations, cities, regions, nations or humanity as a whole. It shows how much biologically productive land and water we occupy to produce all the resources we consume and to absorb our waste. Calgary's footprint is six per cent higher than the Albertan average, which is 30 per cent higher than the Canadian average. Calgary's footprint as of 2001 was 9.86 hectares per capita (Federation of Canadian Municipalities, 2005 – Ecological Footprints of Canadian Municipalities).

Soc	Social System		
Aesth	Aesthetic enjoyment		
T1	By 2036, 90 per cent of citizens report that Calgary is a beautiful city.	A beautiful city contributes to citizens' sense of community and civic pride. It is also an important factor that people consider before moving to a city to work and live.	
Т2	By 2036, 95 per cent of Calgarians report that they have a range of opportunities for the aesthetic enjoyment of nature, arts and culture.	A range of opportunities is important so that individual citizens can enjoy beauty on a regular basis and in a variety of settings.	

Creat	Creative self-expression		
T1	By 2016, 90 per cent of Calgarians report that they have opportunities to express their unique gifts and talents.	This is an important aspect in the development of a "complete self." Creative and talented people create great cities.	
Т2	By 2021, 90 per cent of Calgarians report that Calgary is a city that promotes creative freedom.	Creative freedom must be valued and promoted in order for creative self-expression to flourish.	
Т3	By 2026, 90 per cent of Calgarians report that participation in creative activities is an important part of their lives.	Creative activities are often undervalued and forgotten in the balance of activities we engage in to meet our other needs, particularly those related to economic security.	

Healt	Health and wellness		
T1	By 2036, all Calgarians live in a safe and clean natural environment, as measured by the quality of its air, water, soil and food sources, plus by the lack of exposure to toxic waste.	Human health is deeply affected by the health of the natural environment.  Healthy individuals form a healthy community.	
T2	By 2036, 95 per cent of Calgarians enjoy positive and supportive living conditions, as reflected by adequate income; high rates of employment; adequate food and appropriate nutrition; appropriate, adequate and affordable housing; and high levels of personal safety.	Socio-economic factors directly impact the health status of individuals and communities. Calgary's widening income gap, and the issues that go with it, are significant risks to the health of our community.	

ТЗ	By 2036, 95 per cent of Calgarians receive sufficient information and supports to maintain and improve their health and foster their independence at all ages and stages of life.	Access to prevention and early intervention services is sometimes limited, particularly among vulnerable and marginalized citizens.
T4	By 2036, 100 per cent of Calgarians can obtain quality, affordable, timely and appropriate health information and services, as measured by satisfaction levels.	Access to health services is an important determinant of health. Our increasingly diverse population, rapid growth and fee-for-service models, plus other factors, create significant challenges in health care delivery.
Т5	By 2036, the incidences of preventable illness, injury and premature death are significantly reduced.	Calgary's preventable illness, injury and premature death rates are relatively high. Lifestyle choice is an important determinant of health and, where applicable, healthy choices should be enabled among at-risk Calgarians.
Т6	By 2036, 85 per cent of Calgarians, in all age groups, maintain excellent or very good mental health.	This target recognizes the importance of mental health for overall health and well-being. Depression and other stress-related illnesses pose a significant problem in our city.

Lifelo	Lifelong learning		
T1	By 2016, by the age of six years, 95 per cent of Calgary children exhibit school readiness, as reflected by physical wellbeing and appropriate motor development; emotional health and a positive approach to new experiences; age-appropriate social knowledge and competence; age-appropriate language skills; and age-appropriate general knowledge and cognitive skills.	A widely accepted premise is that reaching developmental milestones in the formative years of children's lives creates the foundation for lifelong success.	
T2	By 2016, 95 per cent of Calgary students succeed in elementary and junior high school, as measured by standardized achievement testing in grades three, six and nine and alternate education metrics.	Early academic achievement is closely correlated with high school graduation rates. The target proposes an increase of approximately 10 per cent over current success levels.	
Т3	By 2036, 95 per cent of Calgary youth complete high school by age 21 and complete some form of post-secondary education or training by age 25.	This target recognizes the importance of formal education as it relates to economic opportunity and overall health and well-being.	

Т4	By 2016, 100 per cent of adult Calgarians have access to a full range of formal and informal quality learning opportunities and resource options that allow them to achieve their full potentials in life.	The need for learning is continuous throughout our lives. Many types of learning opportunities are required for personal growth and in order to successfully adapt to change.
Т5	By 2016, 95 per cent of adult Calgarians have the minimum levels of literacy and numeracy — as defined by the International Adult Literacy and Skills Survey — required to fully participate in the economy and all aspects of life in Calgary.	Low levels of literacy among children, and among adult Calgarians whose primary language is not English, is a significant issue in our community. As the skills required for jobs increase and change, literacy is vital to employment. The unemployment rate of people with low levels of literacy is significantly higher than that of people with high levels of literacy.

Mean	Meaning, purpose and connectedness		
T1	By 2036, 90 per cent of citizens agree that "Calgary is a city with soul," which is defined as citizens having meaning and purpose in life and experiencing ongoing feelings of connectedness with some form of human, historic or natural system.	Citizens who are meeting their needs in this area are healthy and productive members of society. This is a significant factor in increasing our sense of community.	
T2	By 2036, 100 per cent of Calgarians report that they feel respected and supported in their pursuits of meaning, purpose and connectedness, and that they extend respect and support to others who meet this need in ways different from their own.	Calgary's level of diversity is steadily increasing. This target reflects some of the tenets of social inclusion, which are necessary in every well-functioning city.	

Peace	Peace, safety and security		
Т1	By 2016, 95 per cent of Calgarians report that they feel safe walking alone in their neighbourhoods and walking alone downtown after dark.	Calgary's incidence of crimes against people is relatively low, but citizens do not feel safe downtown and in the surrounding area. Good neighbourhood design also increases our sense of personal safely.	
T2	By 2016, 95 per cent of Calgary parents report that they allow their children over six years old to play unsupervised on their own blocks.	Parental fear is believed to be a major reason why parents do not permit unsupervised play. Child abduction by strangers is extremely rare in Calgary. Child development research suggests that children can effectively resolve conflicts between by age six.	

ТЗ	By 2036, given that crime rates are driven primarily by the number of males in the population aged 15 to 24, the proportion of adolescents and young adults in conflict with the law decreases from 2006 levels of about one per cent to 0.01 per cent.	The strong correlation between crime rates and the number of males aged 15 to 24 in the population suggests that crime prevention efforts be focused on reducing the incidence and impact of the risk factors associated with crime.
Т4	By 2036, the per centage of Calgary women who have been assaulted by their intimate partners at least once in the past five years is reduced from approximately 11 per cent to three per cent.	Safety in the home is accepted as a basic security tenet. Domestic violence rates are relatively high in Calgary and it is widely believed that our level of community response must be improved so we can significantly lower the incidence of abuse in the coming years.

Recre	Recreation					
T1	By 2036, 90 per cent of people living in Calgary report that they participate in active lifestyles that include informal and structured recreational opportunities.	Daily physical activity is an important component of health and wellness.				
T2	By 2036, 100 per cent of Calgarians report that they can access a range of high-quality recreational experiences, regardless of gender, socioeconomic status, age, ability, religion, race, sexual orientation or heritage.	Our recreation system should reflect the growing diversity of our community.				

Relati	Relationships						
T1	By 2036, 95 per cent of Calgarians of every age and ability report that they value and have mutually supportive relationships in several settings, such as at home, school and work and in the community.	Healthy personal relationships provide the basis for mutual social support and human growth. This need is typically met through a small circle of close friends, whom we could call at any time for help or support.					

Self-	Self-esteem						
T1	By 2036, 95 per cent of children aged two to five years exhibit high levels of emotional well-being and age-appropriate levels of attention span and impulse control, as measured by the Ages and Stages Questionnaire.	Healthy child development is the building block for healthy adulthood.					
T2	By 2036, 95 per cent of children aged six to 11 years report a high sense of self-worth, and 80 per cent of Calgary adolescents, both male and female, describe themselves as productive or potentially productive members of society, able to change themselves or their lives through their own actions, having the personal power to effect change in the world and being optimistic about their futures.	This target reflects the importance of protecting and building on self- esteem levels established in early childhood. Self-esteem levels are correlated with overall happiness and success.					

Sense	e of community	
T1	By 2010, 90 per cent of Calgarians agree that there is a strong sense of community in Calgary, and at least 80 per cent of Calgarians report high levels of satisfaction, sense of belonging, attachment and civic pride.	As our city continues to grow and our population becomes more diverse, we may lose our senses of belonging within the wider community context. Monitoring and continued action will be required to ensure we are in a position to act collectively to strengthen our city.
T2	By 2010, 80 per cent of citizens experience a high sense of community in their neighbourhoods and affinity-related communities, as reflected by residents' reports of neighbourhood participation and volunteering, sense of belonging, neighbourliness and reciprocity, sense of efficacy, attachment, safety and voter turnout.	Community involvement is an important component of building sense of community.
Т3	By 2010, at least 75 per cent of Calgarians report that they volunteer for the benefit of others who are outside their circles of family and friends.	The number of hours Calgarians spend volunteering is increasing, but most of the hours are spent volunteering for related children's activities (e.g. dance, sports, education), while volunteering for broader community initiatives is suffering.

The following tables highlight the targets that are connected to other needs. While there are a wide variety of connections amongst how we meet our needs, the connections indicated are most directly related to the target.

The example below illustrates how transportation Target 1 — decreasing the annual vehicle kilometres driven — relates most directly to how we meet our need for

- housing
- meaningful work
- air
- health and wellness; and
- recreation.

Need	Built	Economic	Governance	Natural	Social
TARGET 1 Decrease annual vehicle kilometres driven	• housing	• meaningful work		• air	health and wellness     recreation

This provides a useful reference to investigate other Targets that are relevant to a particular individual's or organization's interests or mandate. The following pages are a starting point to understanding the complexity of our community systems. Users are encouraged to explore other connections that exist between the Targets to further community collaboration towards sustainability.

Need	Built	Economic	Governance	Natural	Social
Built envir	onment and	l infrastruc	ture systen	n	
Communications					
TARGET 1 Report being informed		economic     well-being     meaningful     work	• access • equity		<ul><li>health and wellness</li><li>lifelong learning</li><li>relationships</li><li>sense of community</li></ul>
TARGET 2 access to communications technology and resources		economic well-being	• access		<ul><li>health and wellness</li><li>lifelong learning</li></ul>
TARGET 3 Communications support sustainability		• meaningful work		air     plants and animals     land and soil	health and wellness     lifelong learning
TARGET 4 Increase facilities and spaces to encourage human interaction	• housing	economic well-being			<ul> <li>aesthetic enjoyment</li> <li>creative self-expression</li> <li>health and wellness</li> <li>recreation</li> <li>relationships</li> <li>sense of community</li> </ul>

Need	Built	Economic	Governance	Natural	Social
Energy					
TARGET 1 Low-impact renewable sources	housing     transportation	economic well-being		• air	lifelong learning
TARGET 2 Energy efficiency	housing     transportation	• economic well-being		• air	lifelong learning
Food				1	
TARGET 1 Increase local food production	• goods and services	economic well-being		• land and soil	lifelong learning     sense of community
TARGET 2 Maintain secure and reliable food sources	• goods and services	economic well-being			health and wellness
TARGET 3 Increase sustainable food production	• goods and services	• economic well-being		• land and soil	<ul><li>health and wellness</li><li>lifelong learning</li></ul>
TARGET 4 Ensure access to nutritious foods		economic     well-being     sufficient     income			<ul><li>health and wellness</li><li>lifelong learning</li></ul>
Goods and service	es				
TARGET 1 Align with a sustainable business practice ethic		• economic well-being		• air • water	<ul><li>health and wellness</li><li>sense of community</li></ul>
TARGET 2 Diversity of locally based businesses	• food	economic well-being			• sense of community
TARGET 3 Responsible consumers	• food	economic well-being		• soil • air	lifelong learning

Need	Built	Economic	Governance	Natural	Social
TARGET 4 Complete communities with daily goods and services	• food • housing			• air	<ul><li> lifelong learning</li><li> sense of community</li></ul>
TARGET 5 Buildings support alternative transportation forms	• housing				<ul> <li>health and wellness</li> <li>lifelong learning</li> <li>recreation</li> <li>sense of community</li> </ul>
TARGET 6 Energy-efficient building design	• energy	• economic well-being			• lifelong learning
TARGET 7 Commercial buildings accessible to disabled people	transportation				• sense of community
Housing					
TARGET 1 Develop complete communities	• goods and services	• meaningful work			<ul> <li>aesthetic enjoyment</li> <li>health and wellness</li> <li>lifelong learning</li> <li>peace, safety and security</li> <li>recreation</li> <li>sense of community</li> </ul>
TARGET 2 Energy-efficient design	• energy	• economic well-being		• air • water	health and wellness     lifelong learning
TARGET 3 Ensure affordability		• sufficient income			• health and wellness • sense of community
TARGET 4 Provision of non-market housing		• sufficient income			<ul><li>health and wellness</li><li>lifelong learning</li><li>sense of community</li></ul>

Need	Built	Economic	Governance	Natural	Social
Transportation					
TARGET 1 Decrease annual vehicle kilometres driven	• housing	• meaningful work		• air	health and wellness     recreation
TARGET 2 Increase population around LRT stations	• housing				• sense of community
TARGET 3 Increase jobs around LRT stations	• goods and services	• meaningful work			lifelong learning     sense of community
TARGET 4 Reduce automobile pollution	• energy	• economic well-being		air     plants and animals	• health and wellness
TARGET 5 Increase alternative travel modes in peak	<ul><li>energy</li><li>goods and services</li></ul>				health and wellness     recreation
TARGET 6 Ensure accessible transit services					• sense of community
TARGET 7 Increase transit trips	• energy				• sense of community
TARGET 8 Increase bikeways and pathways	• energy				• recreation • sense of community
TARGET 9 Reduce fatal and injury collisions					lifelong learning
Waste manageme	ent				
TARGET 1 Increase waste diverted from landfills	• goods and services	economic well-being		• air • land and soil	health and wellness     lifelong learning

Need	Built	Economic	Governance	Natural	Social
TARGET 2 Increase construction waste recovered	• goods and services	• economic well-being			• health and wellness
TARGET 3 Increase opportunities for waste as a resource	• goods and services	• economic well-being			• health and wellness
Economic s	system				
Economic well-be	eing				
TARGET 1 Increase public and private research and development intensity		meaningful work     sufficient income			• lifelong learning
TARGET 2 Increase environmentally sustainable products and technology	• goods and services	<ul><li>meaningful work</li><li>sufficient income</li></ul>			• health and wellness
TARGET 3 Increase non-oil and gas industry	• goods and services	<ul><li>meaningful work</li><li>sufficient income</li></ul>			lifelong learning
TARGET 4 Provide favourable climate for sustainable business	• goods and services	• meaningful work			<ul><li>health and wellness</li><li>lifelong learning</li></ul>
TARGET 5 Increase tourist visitation and expenditures		<ul><li>meaningful work</li><li>sufficient income</li></ul>			<ul><li>aesthetic enjoyment</li><li>recreation</li><li>sense of community</li></ul>
TARGET 6 Develop alternative economic metrics to support sustainable decision-making			• equity		• health and wellness

Need	Built	Economic	Governance	Natural	Social			
Meaningful work	Meaningful work							
TARGET 1 Full employment of labour force is sustained		sufficient income     economic well-being			• lifelong learning			
TARGET 2 Increase high school and post secondary completion		sufficient income     economic well-being			• lifelong learning			
TARGET 3 Increase completion of trades training		• sufficient income • economic well-being			• lifelong learning			
TARGET 4 Improve integration of immigrants into economy		sufficient income     economic well-being			lifelong learning     sense of community			
TARGET 5 High degree of job satisfaction					<ul> <li>creative self-expression</li> <li>health and wellness</li> <li>lifelong learning</li> <li>sense of community</li> </ul>			
TARGET 6 Opportunities for seniors in the workforce					• sense of community			
Sufficient income	e				,			
TARGET 1 Most people living above Low-income Cut-off rates	• housing	• economic well-being			<ul><li>health and wellness</li><li>lifelong learning</li><li>sense of community</li></ul>			
TARGET 2 Post-secondary education for children of low- income families		economic     well-being     meaningful     work			lifelong learning     sense of community			

Need	Built	Economic	Governance	Natural	Social
Governanc	e system				
Access					
TARGET 1 Most Calgarians report an open, honest, inclusive government	• communication				<ul><li>lifelong learning</li><li>sense of community</li></ul>
TARGET 2 Establish City participatory budgeting process					• sense of community
Conflict resolutio	n				
TARGET 1 All non-criminal disputes resolved collaboratively					<ul><li>lifelong learning</li><li>peace, safety</li><li>and security</li><li>sense of community</li></ul>
TARGET 2 Non-violent offences handled in victims' community					<ul><li>peace, safety and security</li><li>sense of community</li></ul>
TARGET 3 Regulatory offences enforced by the responsible governments					<ul><li>peace, safety and security</li><li>relationships</li></ul>
TARGET 4 Conflicts in educational system resolved collaboratively					<ul><li>lifelong learning</li><li>peace, safety and security</li><li>sense of community</li></ul>

Need	Built	Economic	Governance	Natural	Social		
Equity							
TARGET 1 Elected officials reflect diversity of community					• sense of community		
TARGET 2 Public institutions implement sustainability principles in decisions		economic well-being			• sense of community		
TARGET 3 Public institutions implement an urban Aboriginal policy		• sufficient income			<ul><li>health and wellness</li><li>sense of community</li></ul>		
TARGET 4 Racism and discrimination dealt with					• sense of community		
Self determination	Self determination						
TARGET 1 Increase voter turnout	communications				lifelong learning     sense of community		
TARGET 2 Decrease citizen to municipal politician ratio					• sense of community		
TARGET 3 Property taxes less of overall revenue		economic well-being					
TARGET 4 General revenue based on progressive taxation		• economic well-being					
TARGET 5 Public goods and services are affordable and accessible	• goods and services	• sufficient income					

Need	Built	Economic	Governance	Natural	Social		
TARGET 6 Governments in region work effectively together							
TARGET 7 Governance structure to match appropriate geographic scale					• sense of community		
TARGET 8 Government decisions protect individual freedoms and quality of life					• sense of community		
TARGET 9 Community reporting on imagineCALGARY					• sense of community		
Natural en	Natural environment system						
Air							
TARGET 1 Reduce energy consumption	<ul> <li>energy</li> <li>transportation</li> <li>housing</li> <li>waste management</li> <li>goods and services</li> </ul>	<ul><li>economic well-being</li><li>meaningful work</li></ul>		• water • Soil	<ul> <li>health and wellness</li> <li>lifelong learning</li> <li>recreation</li> <li>sense of community</li> </ul>		
TARGET 2 Increase Iow-impact renewable energy use	<ul> <li>energy</li> <li>transportation</li> <li>housing</li> <li>waste management</li> <li>goods and services</li> </ul>	economic     well-being     meaningful     work		• water	• lifelong learning		
TARGET 3 Reduce greenhouse gas and criteria air contaminants	<ul><li>energy</li><li>transportation</li><li>housing</li><li>waste</li><li>goods and services</li></ul>	economic     well-being     meaningful     work		<ul><li>water</li><li>soil</li><li>plants and animals</li></ul>	<ul> <li>health and wellness</li> <li>lifelong learning</li> <li>sense of community</li> </ul>		

Need	Built	Economic	Governance	Natural	Social
TARGET 4 Reduce indoor air contaminants	• energy • housing	• economic well-being			health and wellness
TARGET 5 Decrease ecological footprint	<ul><li>energy</li><li>transportation</li><li>housing</li><li>waste</li><li>goods and services</li></ul>	economic     well-being     meaningful     work		water     land and soil     plants and     animals	health and wellness     recreation
Land and soil	<u>,                                      </u>	<u> </u>	,		
TARGET 1 Improve land use efficiency	<ul><li>energy</li><li>transportation</li><li>housing</li></ul>	• economic well-being		<ul><li>water</li><li>plants and animals</li><li>air</li></ul>	health and wellness     sense of community
TARGET 2 Increase urban food production	<ul><li>food</li><li>energy</li><li>transportation</li><li>goods and services</li></ul>	economic well-being     meaningful work		• water • plants and animals	lifelong learning     sense of community
TARGET 3 Increase urban and regional food consumption	<ul><li>energy</li><li>transportation</li><li>goods and services</li></ul>	economic     well-being     meaningful     work		water     plants and     animals	health and wellness     lifelong learning
TARGET 4 No new soil contamination	<ul><li>energy</li><li>transportation</li><li>waste management</li><li>goods and services</li></ul>	economic well-being		water     plants and     animals	health and wellness     lifelong learning
TARGET 5 Remediate contaminated land	<ul><li>energy</li><li>transportation</li><li>waste management</li><li>goods and services</li></ul>	• economic well-being		water     plants and     animals	health and wellness     lifelong learning
TARGET 6 Decrease ecological footprint	<ul> <li>energy</li> <li>transportation</li> <li>housing</li> <li>waste management</li> <li>goods and services</li> </ul>	economic     well-being     meaningful     work		<ul><li>water</li><li>plants and animals</li><li>air</li></ul>	<ul><li>health and wellness</li><li>lifelong learning</li></ul>

Need	Built	Economic	Governance	Natural	Social
Plants and animals					
TARGET 1 Increase native biodiversity	• housing • transportation	economic     well-being     meaningful     work		• water • land and soil	<ul><li>aesthetic enjoyment</li><li>health and wellness</li><li>lifelong learning</li><li>recreation</li></ul>
TARGET 2 Increase protected and restored habitats	<ul><li>housing</li><li>transportation</li><li>energy</li></ul>	economic     well-being     meaningful     work		• water • land and soil • air	<ul><li>aesthetic enjoyment</li><li>health and wellness</li><li>lifelong learning</li><li>recreation</li></ul>
Water					
TARGET 1 Reduce water consumption	<ul><li>energy</li><li>housing</li><li>goods and services</li></ul>	• economic well-being		• land and soil	health and wellness     lifelong learning
TARGET 2 Maintain present rates of flow	• energy • housing	economic well-being		<ul><li>land and soil</li><li>plants and animals</li></ul>	health and wellness
TARGET 3 Maintain effective impervious area	<ul> <li>energy</li> <li>transportation</li> <li>housing</li> <li>waste</li> <li>goods and services</li> <li>food</li> </ul>	economic well-being		<ul><li>land and soil</li><li>plants and animals</li></ul>	<ul><li>aesthetic enjoyment</li><li>health and wellness</li></ul>
TARGET 4 Improve watershed health	<ul><li>energy</li><li>transportation</li><li>housing</li><li>waste</li><li>goods and services</li></ul>	economic well-being		<ul><li>land and soil</li><li>plants and animals</li><li>air</li></ul>	health and wellness
TARGET 5 Decrease ecological footprint	<ul><li>energy</li><li>transportation</li><li>housing</li><li>waste</li><li>goods and services</li></ul>	economic     well-being     meaningful     work		<ul><li>land and soil</li><li>plants and animals</li><li>air</li></ul>	<ul> <li>health and wellness</li> <li>lifelong learning</li> <li>sense of community</li> </ul>

Need	Built	Economic	Governance	Natural	Social
Social syste	em				
Aesthetic enjoym	ent				
TARGET 1 Report that Calgary is a beautiful city		economic well-being			<ul><li>creative self-expression</li><li>lifelong learning</li><li>sense of community</li></ul>
TARGET 2 Report that there are a range of opportunities for aesthetic enjoyment		• economic well-being			<ul><li>creative self-expression</li><li>sense of community</li></ul>
Creative self-exp	ression			ı	
TARGET 1 Report that able to express unique gifts and talents		• meaningful work			<ul><li>aesthetic enjoyment</li><li>recreation</li><li>lifelong learning</li><li>sense of community</li></ul>
TARGET 2 Report that Calgary promotes creative freedom					• sense of community
TARGET 3 Report that participation in creative activities is important part of lives		• meaningful work			<ul><li>lifelong learning</li><li>recreation</li><li>sense of community</li></ul>
Health and welln	ess				
TARGET 1 Live in clean and safe natural environment	• transportation • energy	economic well-being			aesthetic enjoyment     lifelong learning
TARGET 2 Positive and supportive living conditions	• housing	<ul><li>meaningful work</li><li>sufficient income</li></ul>			lifelong learning     sense of community
TARGET 3 Sufficient information and supports	communications	economic well-being			<ul><li>lifelong learning</li><li>sense of community</li></ul>

Need	Built	Economic	Governance	Natural	Social
TARGET 4 Appropriate and affordable access to health services		• sufficient income • economic well-being			• sense of community
TARGET 5 Reduce incidence of preventable illness		• economic well-being			lifelong learning     recreation     relationships     self-esteem
TARGET 6 Maintain excellent/very good mental health					<ul><li>relationships</li><li>self-esteem</li><li>sense of community</li></ul>
Lifelong learning					
TARGET 1 Child school readiness		• sufficient income • economic well-being			<ul><li>health and wellness</li><li>lifelong learning</li><li>relationships</li><li>self-esteem</li></ul>
TARGET 2 Success in elementary and junior high		• sufficient income			<ul> <li>health and wellness</li> <li>meaning, purpose and connectedness</li> <li>relationships</li> <li>self-esteem</li> <li>sense of community</li> </ul>
TARGET 3 Youth high school and post-secondary completion		sufficient income     economic well-being			<ul> <li>health and wellness</li> <li>meaning, purpose and connectedness</li> <li>relationships</li> <li>self-esteem</li> <li>sense of community</li> </ul>
TARGET 4 access to range of formal and informal learning opportunities	communications	• sufficient income			<ul><li>health and wellness</li><li>recreation</li><li>sense of community</li></ul>
TARGET 5 Minimum levels of literacy and numeracy		<ul> <li>meaningful work</li> <li>sufficient income</li> <li>economic well-being</li> </ul>			health and wellness

Need	Built	Economic	Governance	Natural	Social
Meaning, purpose and connectedness					
TARGET 1 Citizens agree that Calgary is a city with soul					<ul><li> relationships</li><li> sense of community</li></ul>
TARGET 2 Report that they are respected and supported in pursuit of meaning, purpose and connectedness					<ul> <li>health and wellness</li> <li>lifelong learning</li> <li>self-esteem</li> <li>sense of community</li> </ul>
Peace, safety and	l security				
TARGET 1 Report that they feel safe walking alone after dark	• housing	• economic well-being	• conflict resolution		<ul><li> lifelong learning</li><li> relationships</li><li> sense of community</li></ul>
TARGET 2 Report that they allow children (six and older) to play outside on their blocks					<ul><li>lifelong learning</li><li>relationships</li><li>self-esteem</li><li>sense of community</li></ul>
TARGET 3 Decrease proportion of adolescents and young adults in conflict		• economic well-being	• conflict resolution		<ul> <li>health and wellness</li> <li>lifelong learning</li> <li>relationships</li> <li>self-esteem</li> <li>sense of community</li> </ul>
TARGET 4 Reduce percentage of women assaulted by partners		• sufficient income	• conflict resolution		<ul><li>health and wellness</li><li>relationships</li><li>self-esteem</li><li>sense of community</li></ul>

Need	Built	Economic	Governance	Natural	Social
Recreation					
TARGET 1 Report that citizens have access to informal and structured recreation		sufficient income     economic well-being			<ul> <li>health and wellness</li> <li>lifelong learning</li> <li>sense of community</li> </ul>
TARGET 2 Report that citizens have access to high-quality recreational experiences		• sufficient income			<ul><li>health and wellness</li><li>sense of community</li></ul>
Relationships					
TARGET 1 Report that citizens value and have mutually supportive relationships		• meaningful work	• conflict resolution		<ul> <li>health and wellness</li> <li>meaning, purpose and connectedness</li> <li>recreation</li> <li>self-esteem</li> <li>sense of community</li> </ul>
Self-esteem					
TARGET 1 Children (two to five) exhibit high levels of emotional well- being and age- appropriate levels of attention span		• sufficient income			<ul> <li>health and wellness</li> <li>lifelong learning</li> <li>peace, safety and security</li> <li>relationships</li> </ul>
TARGET 2 Children (six to 11) report high sense of self-worth					<ul> <li>health and wellness</li> <li>lifelong learning</li> <li>meaning, purpose and connectedness</li> <li>peace, safety and security</li> <li>recreation</li> <li>relationships</li> <li>sense of community</li> </ul>

Need	Built	Economic	Governance	Natural	Social	
Sense of community						
TARGET 1 Calgarians agree there is a strong sense of community in Calgary	• housing				<ul> <li>health and wellness</li> <li>lifelong learning</li> <li>peace, safety and security</li> <li>relationships</li> </ul>	
TARGET 2 Calgarians experience a high sense of community in their neighbourhoods and affinity-related communities	• housing	• meaningful work	• conflict resolution • equity		<ul><li>peace, safety and security</li><li>relationships</li></ul>	
TARGET 3 Report that citizens volunteer for the benefit of others		• meaningful work			<ul> <li>lifelong learning</li> <li>meaning, purpose and connectedness</li> <li>relationships</li> <li>sense of community</li> </ul>	







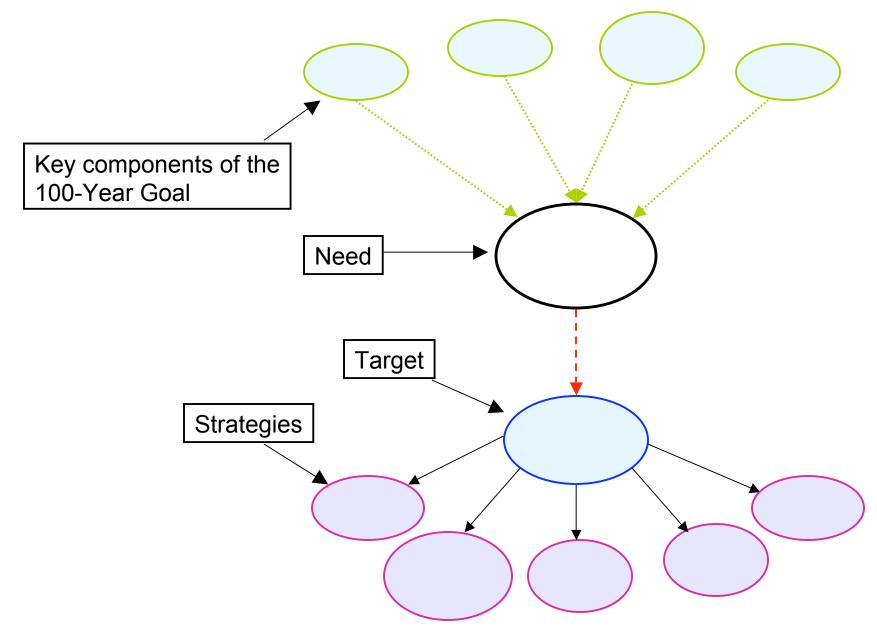




### **System Snapshots**

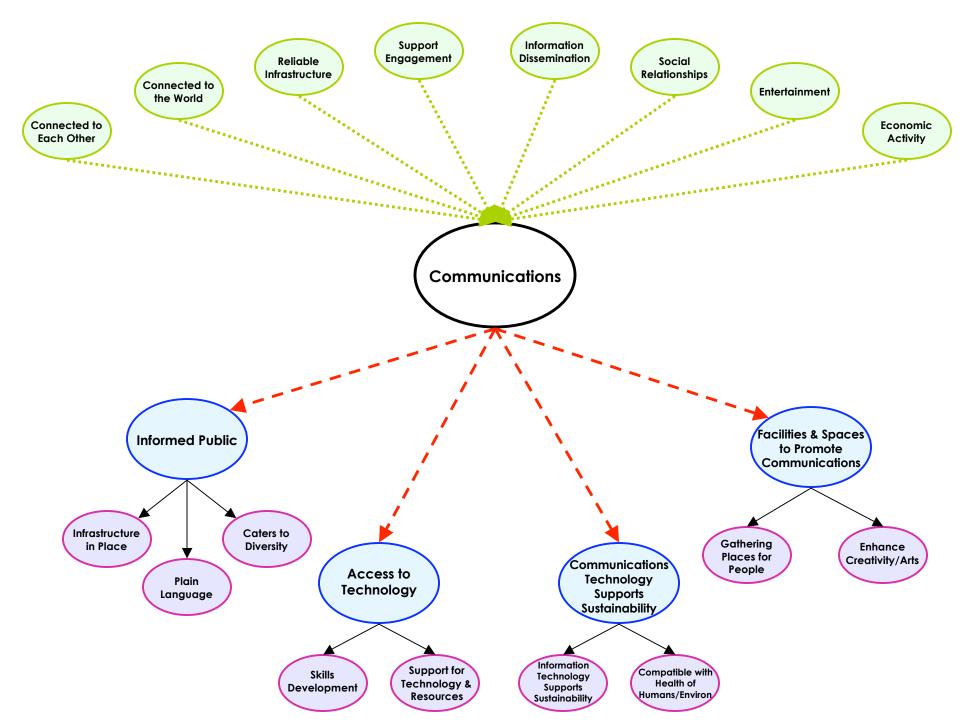
These diagrams provide a graphic illustration of the key elements of the 100 year Goal and the Targets & Strategies, showing how imagineCALGARY responded to our human needs.

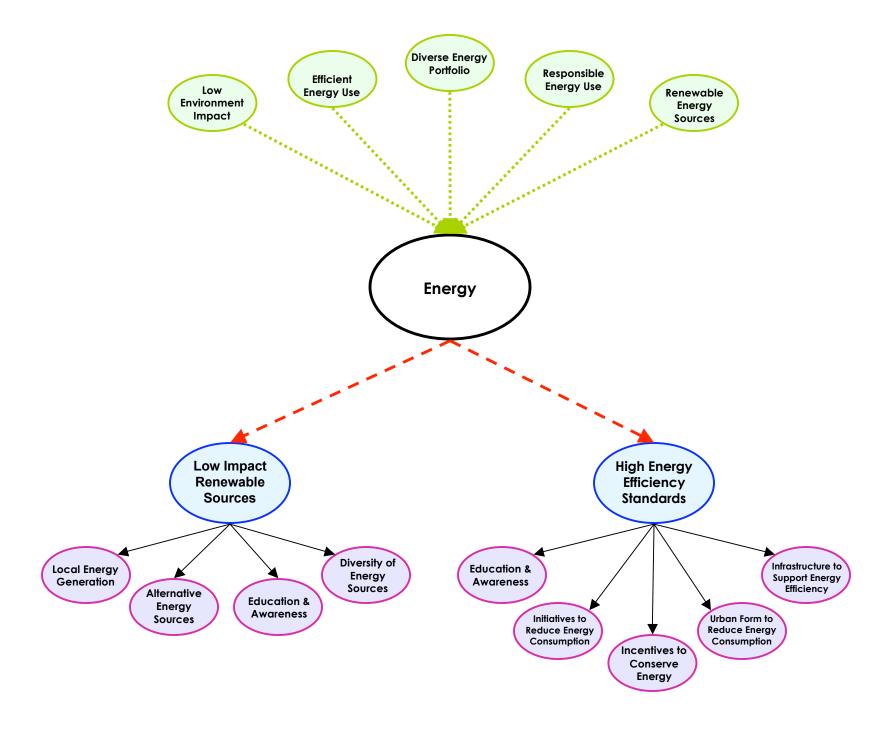
### Guide to the slides

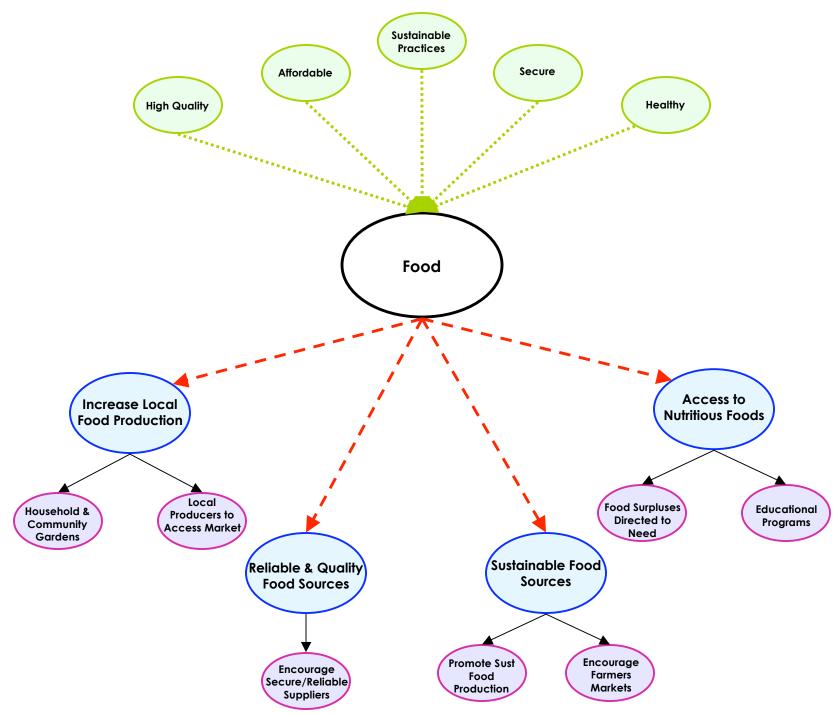


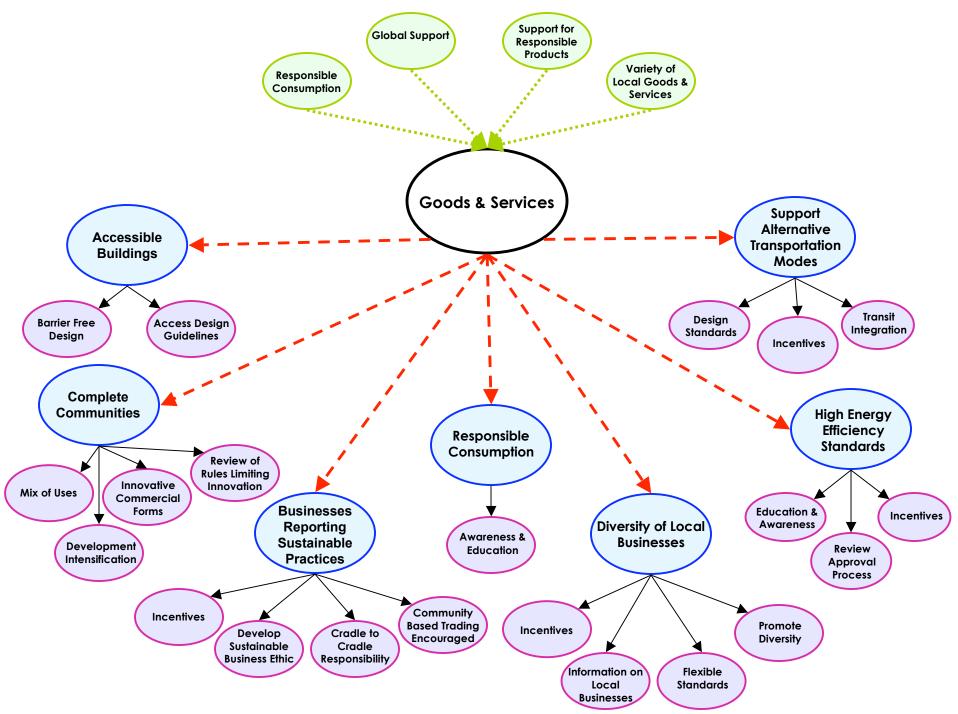


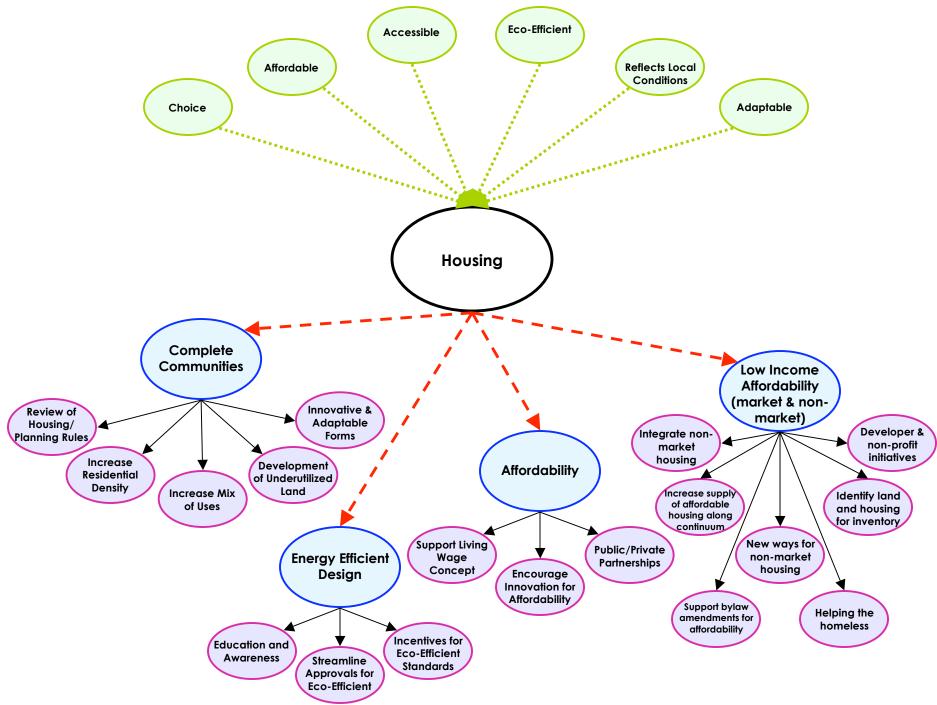
## **Built Environment System**

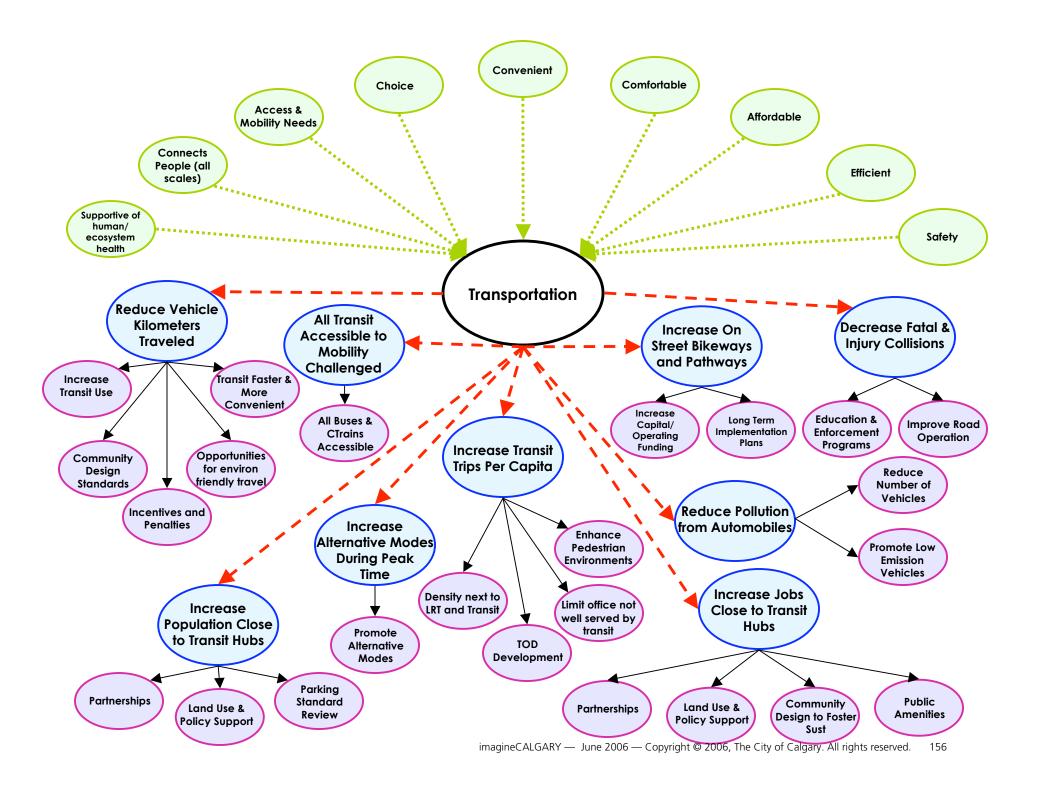


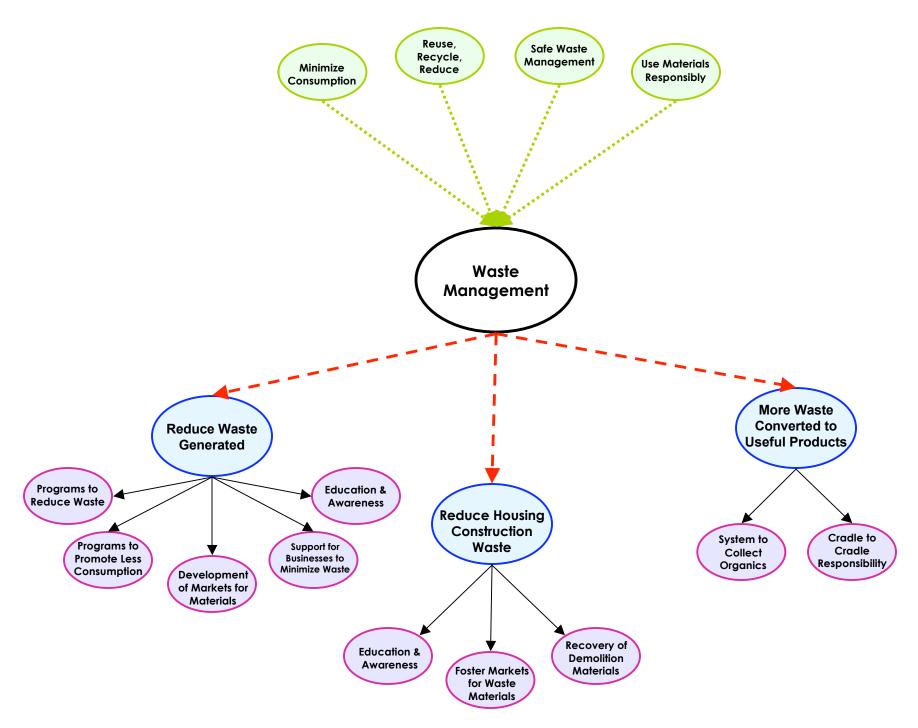






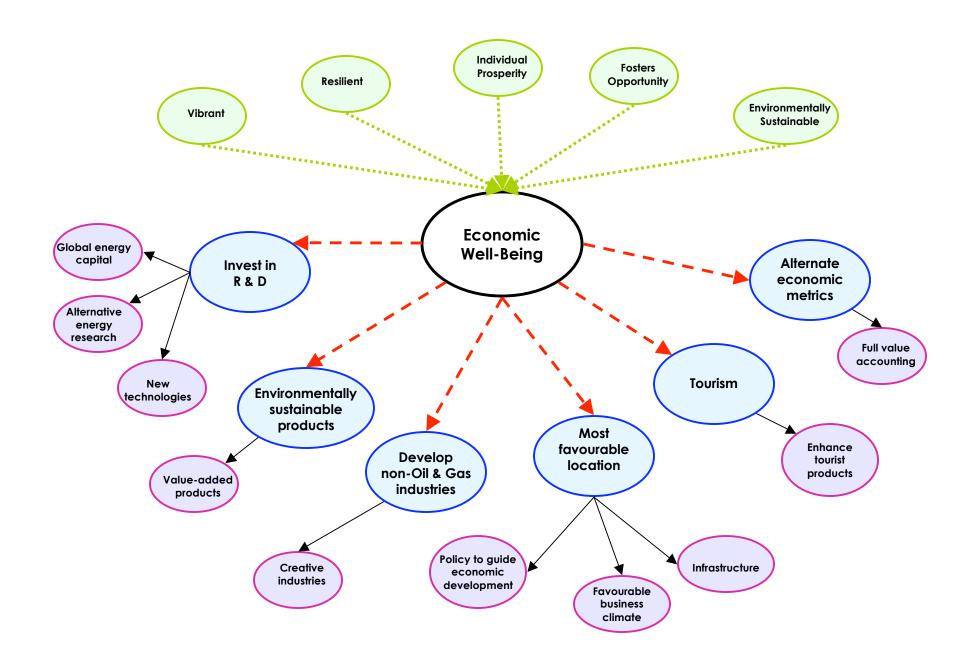


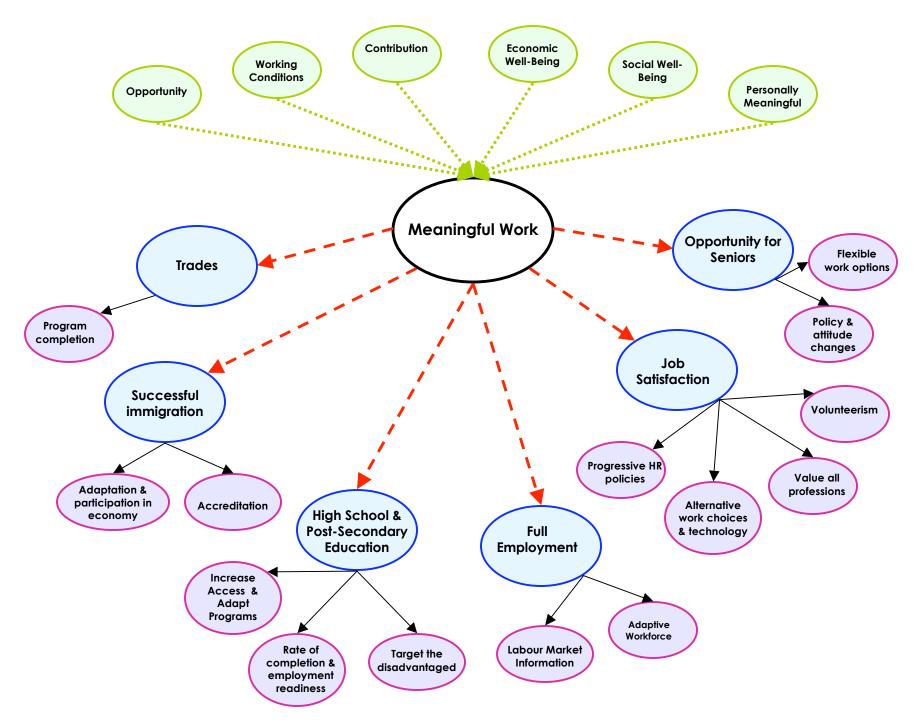


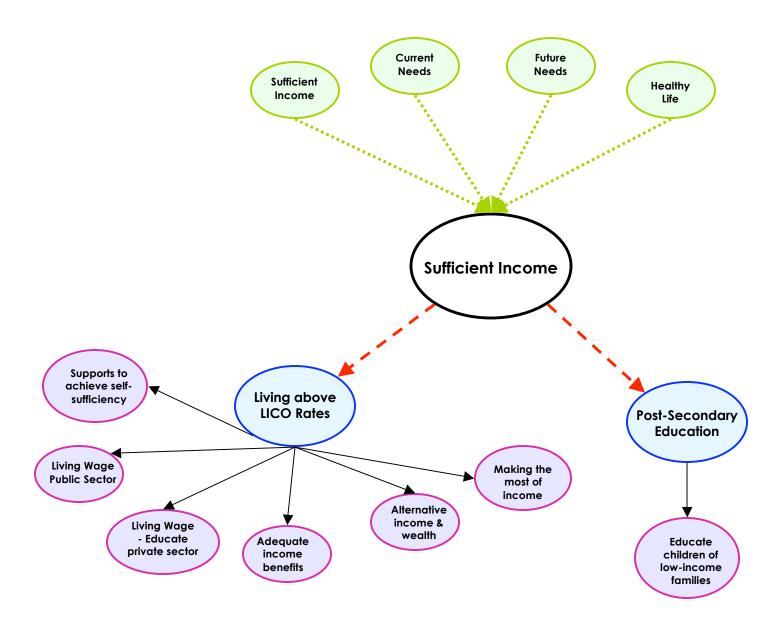




## **Economic System**

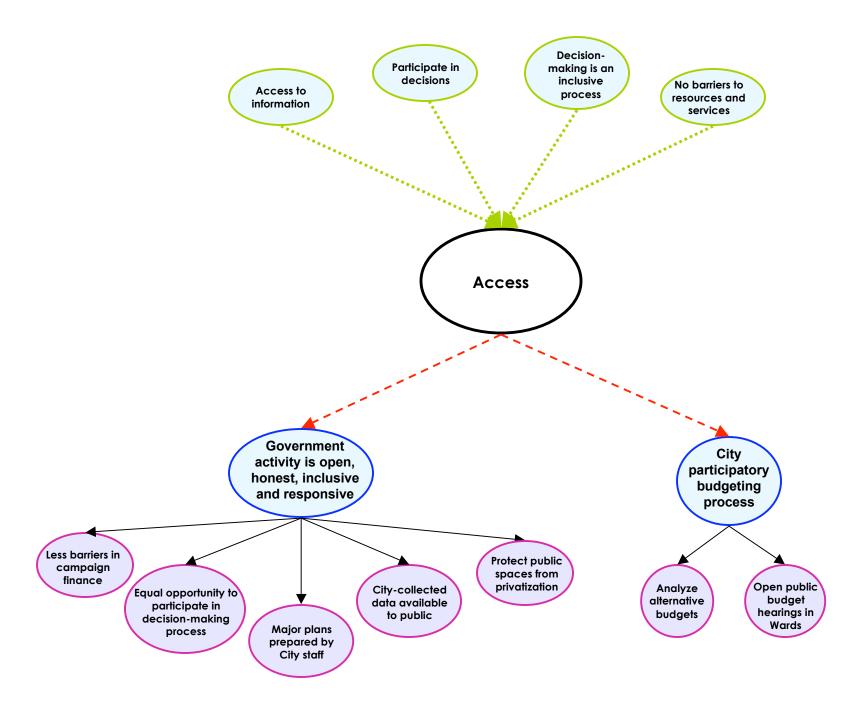


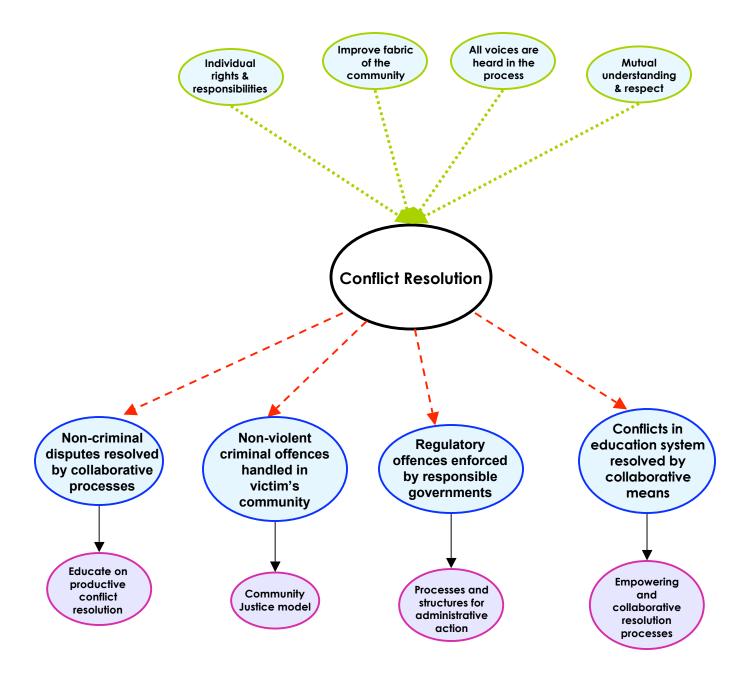


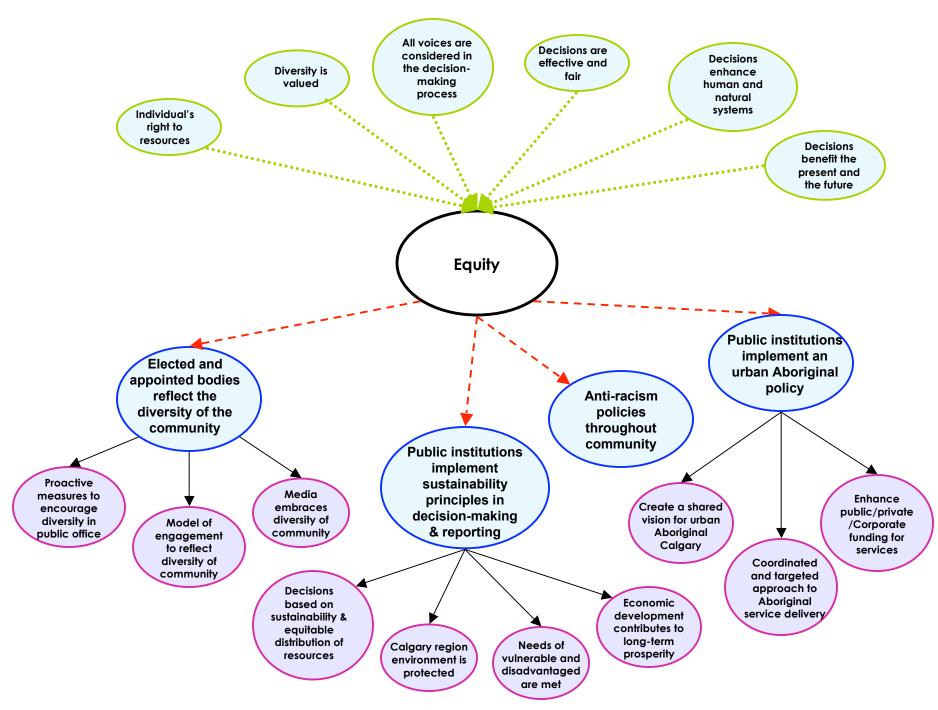


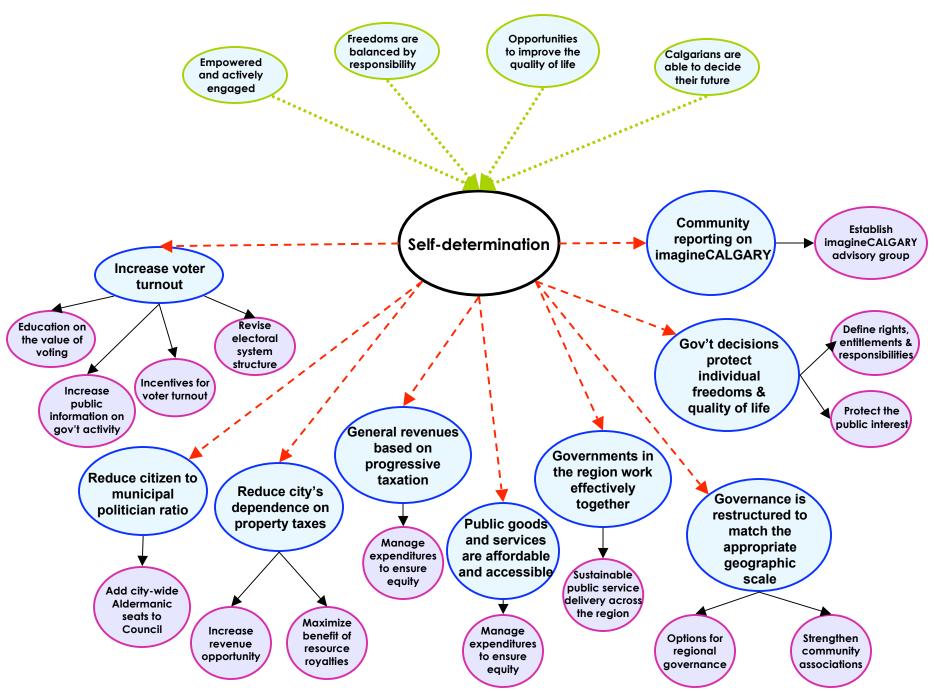


## **Governance System**



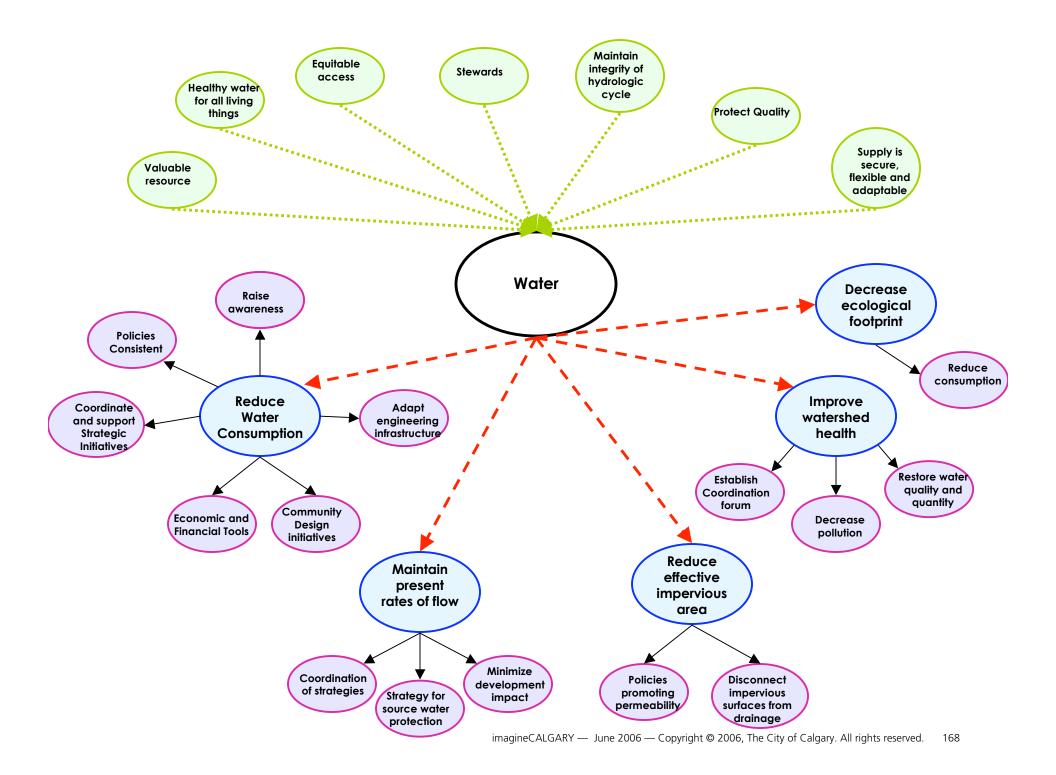


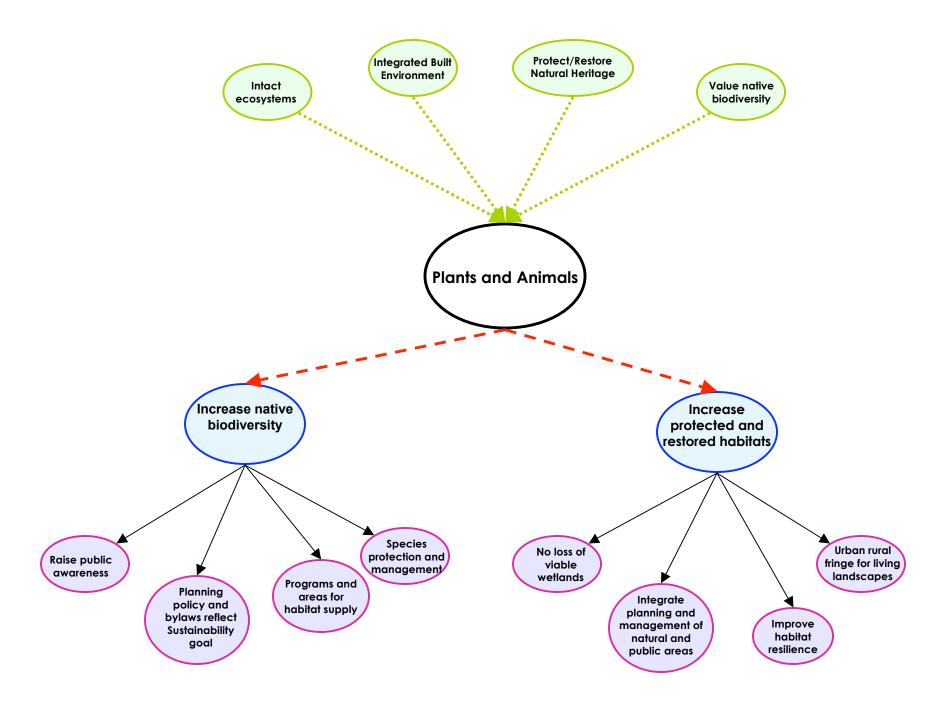


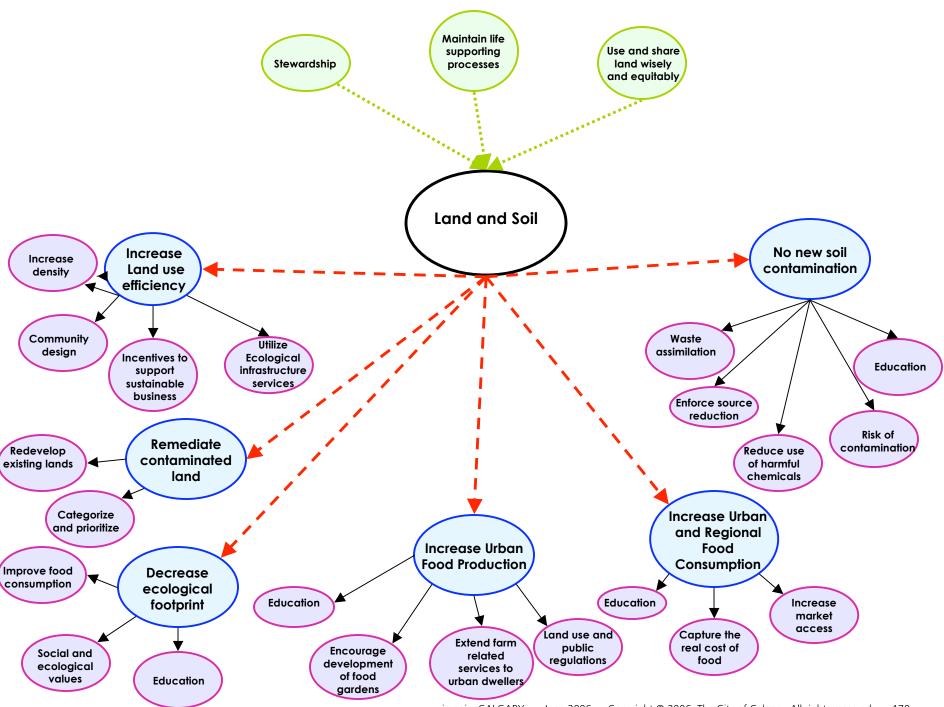


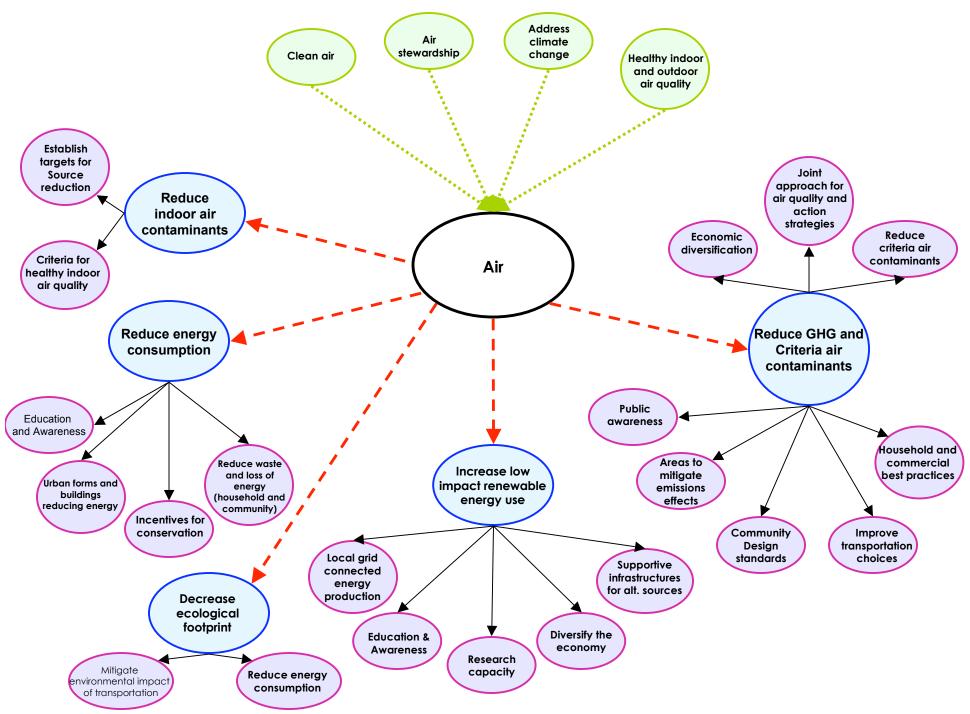


# **Natural Environment System**



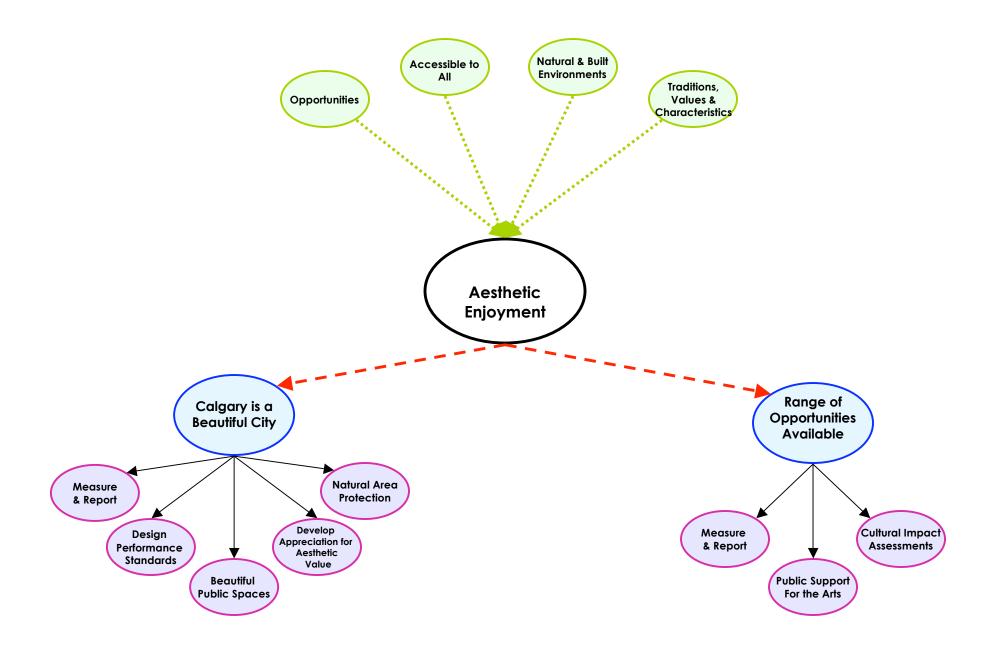


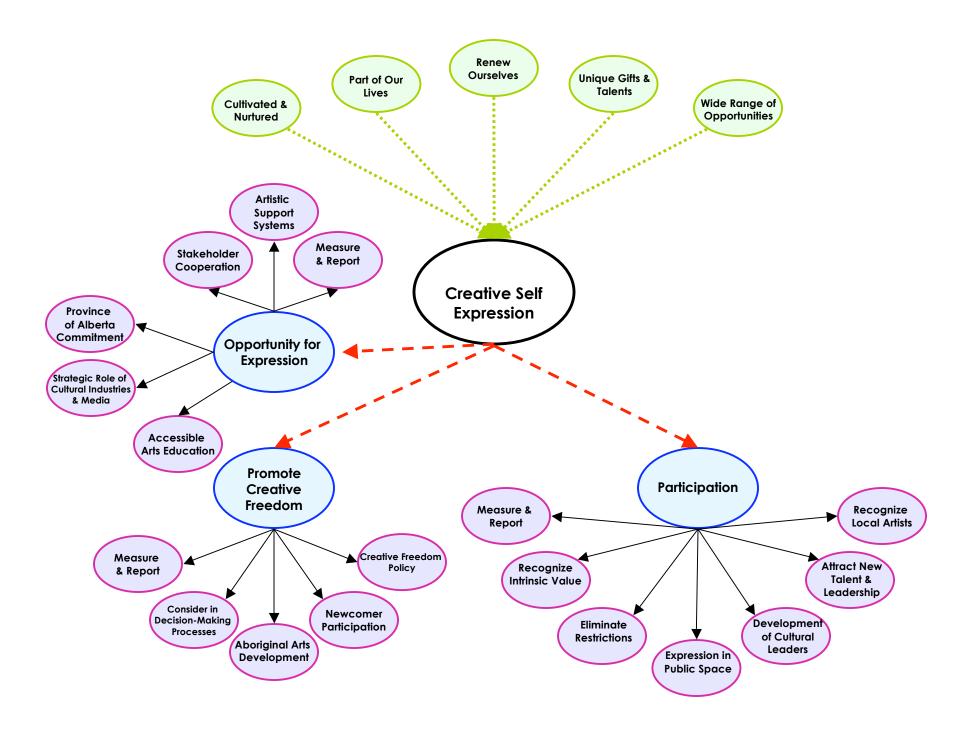


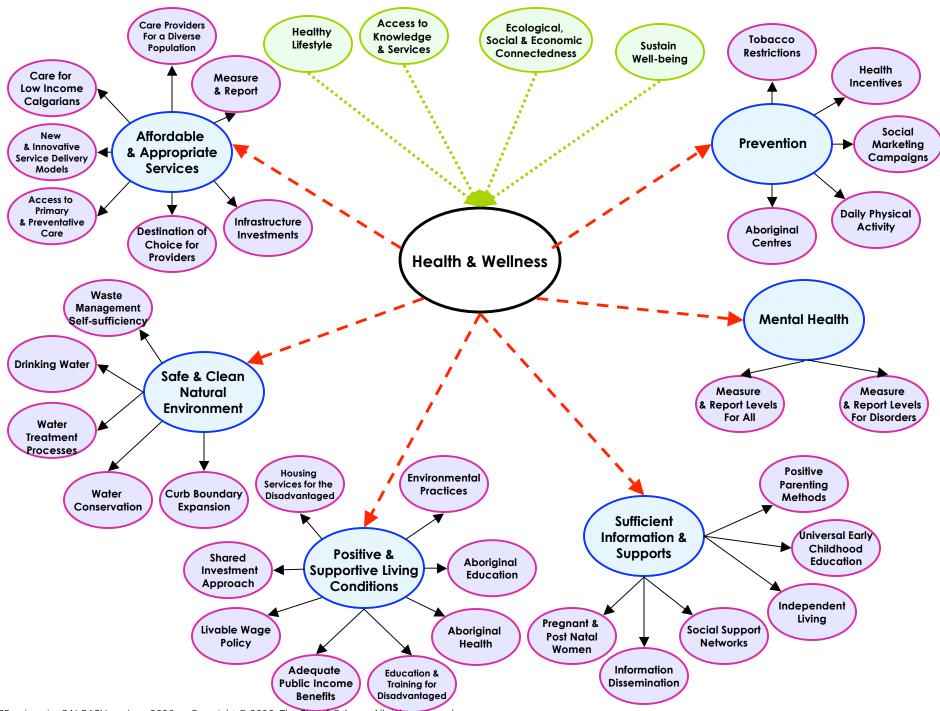


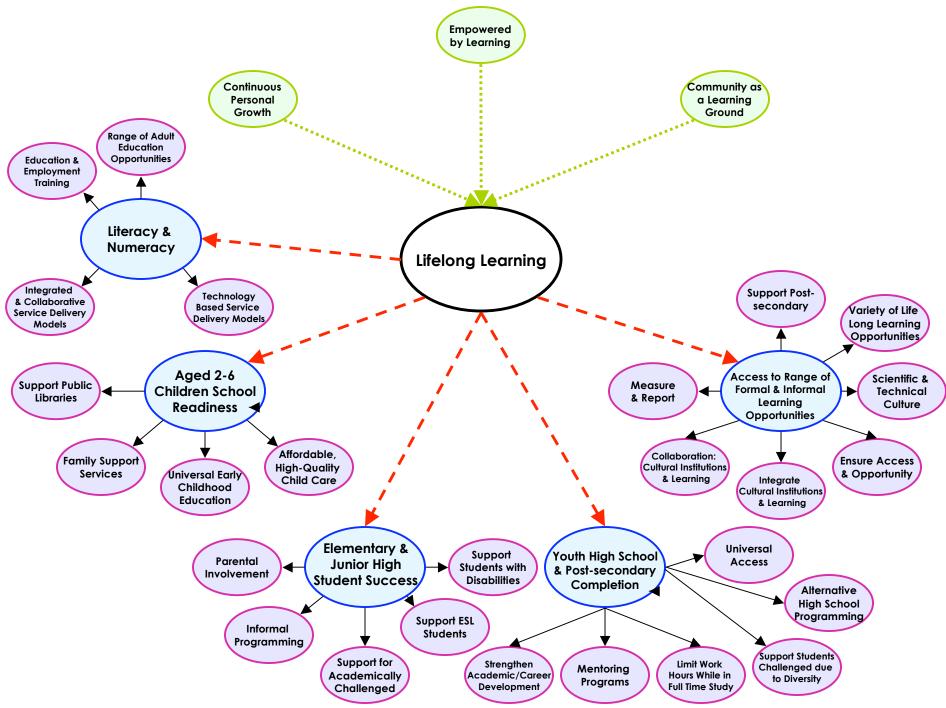


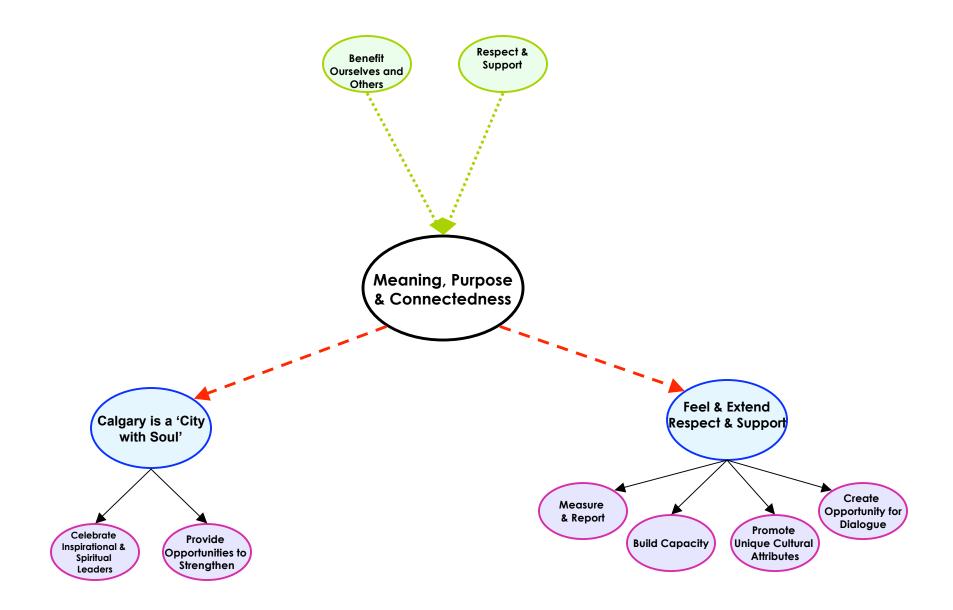
## **Social System**

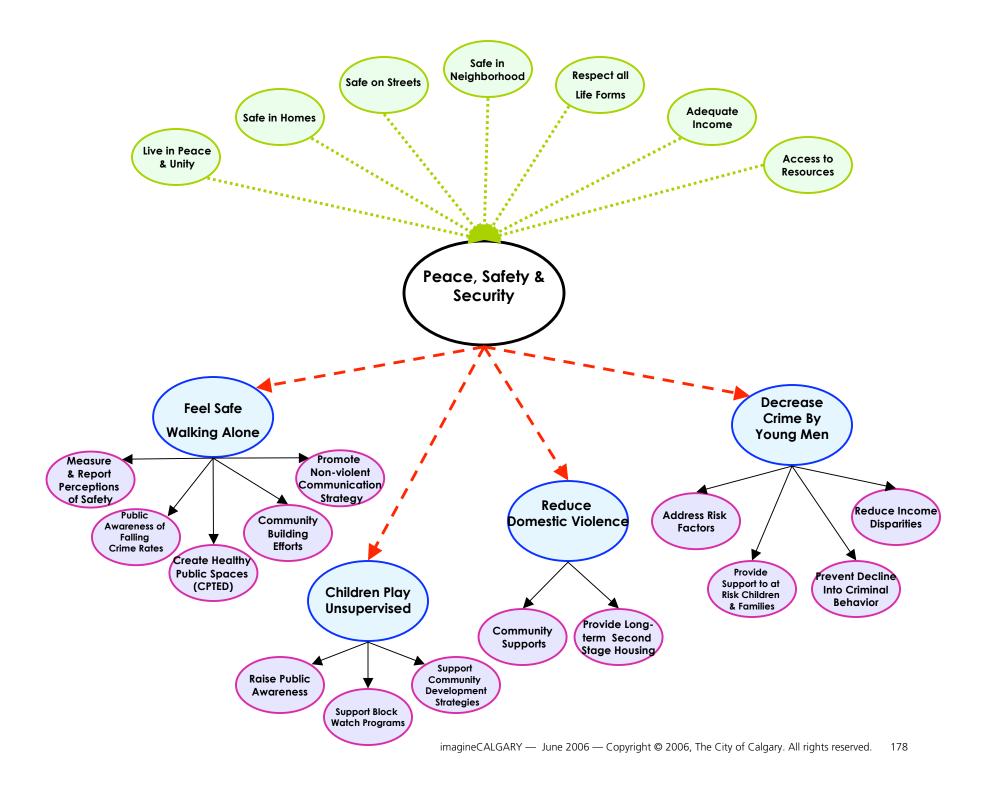


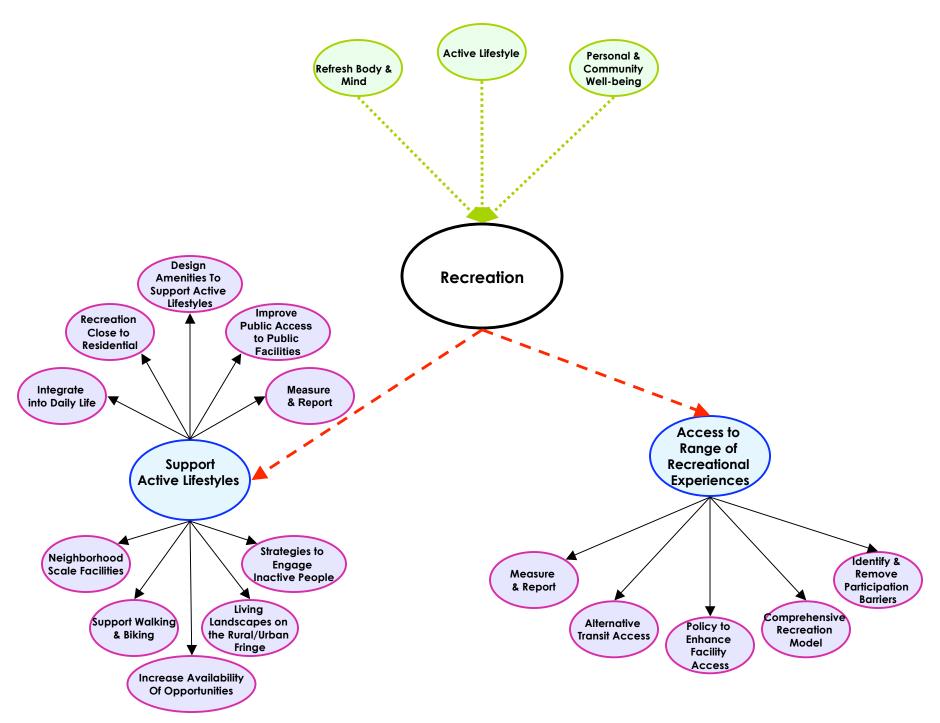


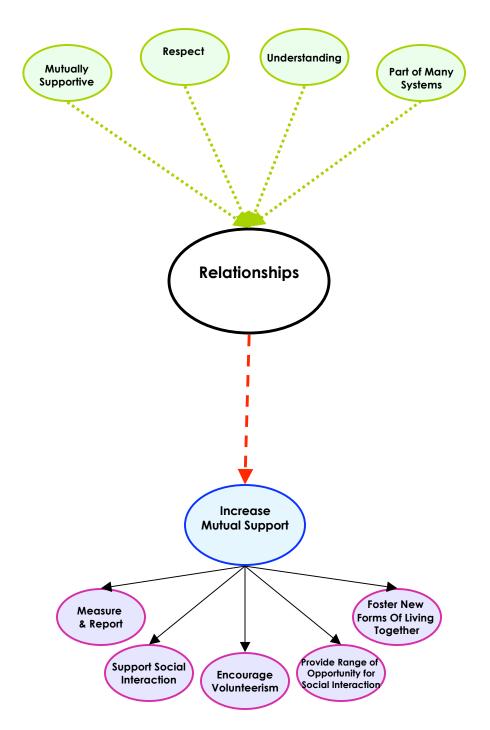


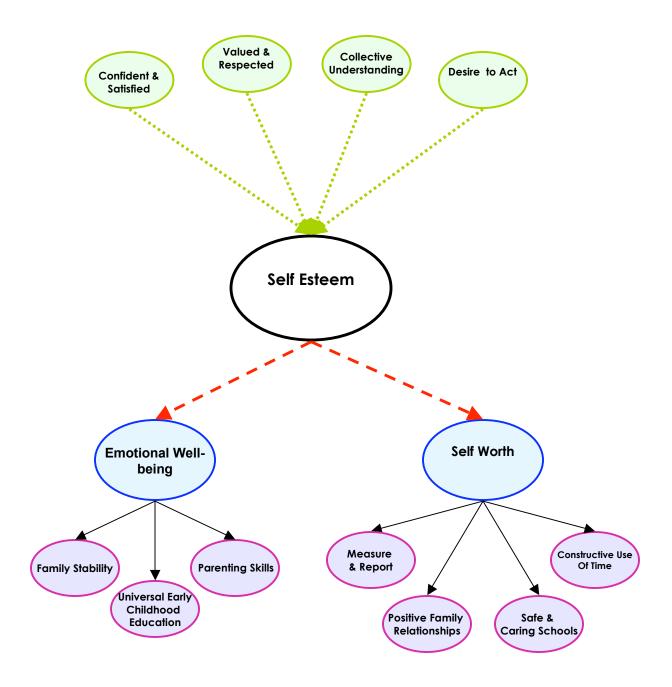


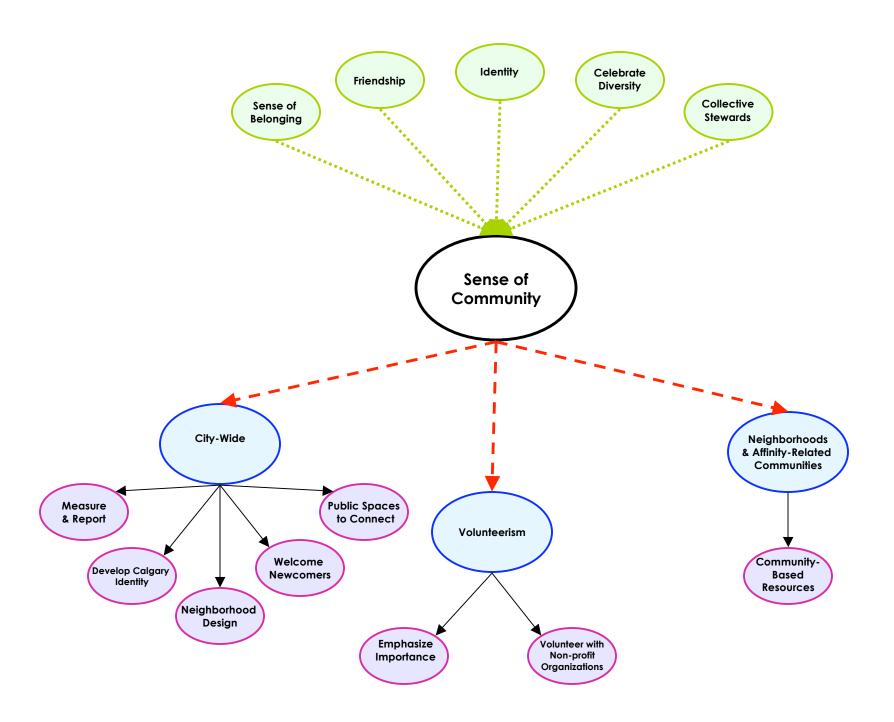












# imagineCALGARY: shaping our city's future

### Introduction

In January 2004, The City of Calgary joined the Sustainable Cities: PLUS Network, a growing network of global cities and regions committed to long-term quality of life. The purpose of the Sustainable Cities: PLUS Network is to foster urban sustainability by providing a venue for like-minded cities to share their experiences, tools and talents. Participants will create long-term plans that integrate economic, ecological and social well-being and build community resilience.



What are your hopes and dreams for Calgary in 100 years?

In response to its membership in the network, imagineCALGARY is The City of Calgary's commitment to creating a 100-year vision to ensure a high quality of life for current and future generations. It is a City-led, community-owned initiative that engages public, business, community and government stakeholders in a broad-based dialogue on the future of the city. imagineCALGARY is the first project of its kind in Canada and only one of a few in the world to have such a broad scope and include as many people. Combining vast community input, Calgary's entrepreneurial spirit and bold thinking, imagineCALGARY has created a 100-year vision for Calgary, which will guide the development of the city into the future.

Thinking ahead 100 years, instead of the usual 20 or 30 years, allows us the freedom of very creative thinking. A 100-year time frame also forces us to think beyond our current infrastructure to assess megatrends that will affect our community, such as demographic changes, resource scarcity, technological transformations and climate change. Calgary and the Greater Vancouver Regional District are the only two Canadian cities to develop a 100-year vision.

The following papers provide an overview of the methodology used throughout the process and the products that were created. These papers include

- 1. Sustainability
- 2. Melbourne Principles
- 3. Systems thinking
- 4. Human needs framework
- 5. Community assets
- 6. Process steps
- 7. Vision and 100-year goals
- 8. 30-year targets and strategies

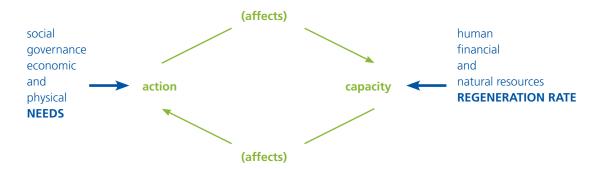
### 1. Sustainability (or sustainable development)

imagineCALGARY used the term sustainability, or sustainable development, to guide thinking and make a clear commitment to a "healthy, resilient and long-lasting" community that will have a high quality of life now and for future generations.

What is sustainable development? The Brundtland Commission (United Nations World Commission on Environment and Development) defined Sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." (United Nations, 1987 – Our Common Future.)

What is a sustainable community? What is a sustainable city? First and foremost in a long-range planning exercise, it provides an opportunity to look at the whole. "If we form communities to satisfy our common needs, then both the community itself and the role it plays meeting our needs has to be sustainable — healthy, resilient, long-lasting. This is what we mean when we refer to 'sustainable' communities: communities that satisfy people's needs now and in the future." (Hallsmith, 2005.) Sustainable community development is the process of working to meet and achieve balance between our economic, social, governance and environmental needs, an equitable distribution of both resources and opportunities and a balance between the needs of current generations and those of the future.

Looking across generations, it is important to understand how our current actions affect our capacities to meet these needs in the future, which will in turn affect how we are able to meet those needs. We therefore have to be mindful of how we enhance or erode the capacities we have to meet all the different needs in our community.



From The Key to Sustainable Cities

The term sustainable development or sustainability is not unknown in the Calgary context. It has been referenced throughout the community, including in

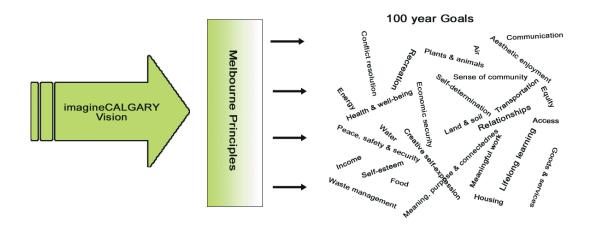
- The Calgary Plan Municipal Development Plan, The City of Calgary
- Triple Bottom Line frameworks in industry (e.g. Shell, Suncor Energy)
- State of the City Report Sustainable Calgary

### 2. Melbourne Principles

The Melbourne Principles were born from a need to put sustainable development in context for cities. The Melbourne Principles for Sustainable Cities (UNEP-IETC 2002) is the only internationally ratified set of sustainability principles for cities.

The use of the Melbourne Principles is intended to guide thinking and provide a strategic framework for action in imagineCALGARY. In essence it provides a simple set of statements on how a sustainable city would function. At the most strategic level, the Principles were imbedded in the 100-year goals. In the overall imagineCALGARY process, they serve several general purposes including

- (a) as guardrails for the process to keep the project on the road toward sustainability; and
- (b) as a tool for integration considering the whole.



The Melbourne Principles provide a sustainability filter to the 100-year vision in the creation of the 100-year goals.

There are 10 Melbourne Principles.

- 1. Provide a long-term vision for cities based on sustainability.
- 2. Empower people and foster participation and intergenerational equity.
- 3. Recognize and build on the characteristics of cities, including their human, cultural, historic and natural systems.
- 4. Build on the characteristics of ecosystems.
- 5. Achieve long-term economic and social security.
- 6. Expand and enable co-operative networks to work toward a common sustainable future.
- 7. Enable communities to minimize their ecological footprints through the redevelopment and operation of their urban metabolisms.
- 8. Enable continual improvement, accountability and transparency.
- 9. Require effective demand management and appropriate use of environmentally sound technologies for cities
- 10. Recognize the intrinsic value of biodiversity and natural ecosystems and their protection and restoration.

For an elaborate version of the Melbourne Principles, please visit http://www6.iclei.org/mp/index.html.

### 3. Systems thinking

The systems thinking approach is fundamentally different from traditional forms of analysis. "Systems thinking looks at the whole, and the parts, and the connections between the parts, studying the whole in order to understand the parts. It is the opposite to reductionism, the idea that something is simply the sum of its parts. A collection of parts that do not connect is not a system. It is a heap." (O'Connor & McDermott.)

An understanding of systems and the ability to think systemically were recognized as key components of the imagineCALGARY project. The complexity of cities, their sustainability and the requirements of participants to comprehend and work with this complexity were also recognized as key success factors. The wide variety of individuals and groups in the project required a differing understanding of systems to fulfill their roles.

- Round Table members were introduced to systems thinking.
- Working Group members were trained to understand the approach, systems diagrams and the process at large in the development of targets and strategies.
- Project Team leads for each Working Group were trained to understand systems to the level of systems design.

Due to the interconnected and interdependent nature of community systems, integration forms an integral part of systemic approaches. imagineCALGARY used integration in a number of areas.

- The methodology ensured the checking of results against the 28 human needs and Melbourne Principles.
- Working Group members were chosen from different backgrounds to represent an integrated thinking framework.
- Round Table participation in the Working Groups ensured the integration of ideas and guidance in remaining consistent with the vision and 100-year goals.
- Project Team leads integrated and checked results delivered by working groups to ensure system alignment.

Systems thinking supports three process pillars: sustainability, engagement and learning.

According to Peter Senge, learning organizations (or communities) are: "...organizations (or communities) where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together..."

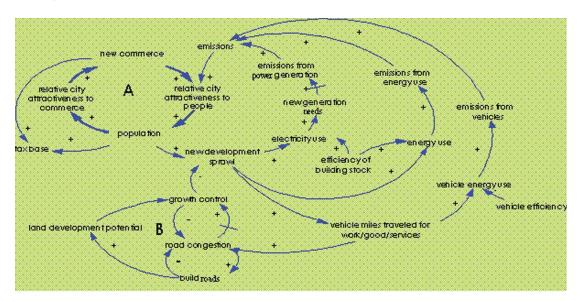
Learning is one of the most important aspects for long-term mindset change, commitment and implementation on both a community and organizational level. imagineCALGARY provided Calgarians with the opportunity to learn about urban sustainability and choice. Engaging the public in seminars, workshops and an international speaker series, and the through general media, provided the basis for learning and set the path toward empowerment and decision-making.

### Example of systems map for air

The following diagram illustrates the air system as it relates to land development, transportation, infrastructure, natural resource use, demographics and the economy.

The core impact starts at two intervening points.

- A. As the economy grows, it attracts more people, which increases the population, which in many ways attracts more commerce, which increases economic growth (a balanced loop). In effect, this creates the opportunity for new development. In Calgary's earlier days, this led to lower density, car dependence and segregated development scenarios. Inadvertently it increases the use of energy (electricity, natural gas, gasoline, etc.), which impacts air quality through emissions.
- B. Another core point is road congestion. Road congestion leads to an increase in road construction, which leads to more road congestion ("build it and they will come" scenario). As new roads are developed, the potential for land development increases. In effect, the city has to apply growth control measures. In many cases, this leads to lower density, car dependence, and segregated land uses. In turn, it speeds up the cycle of energy use, economic growth, land expansion and eventually ecological degradation in this case most evident in air quality.



- (+) = leads to more
- (-) = leads to less

### 4. Human needs framework

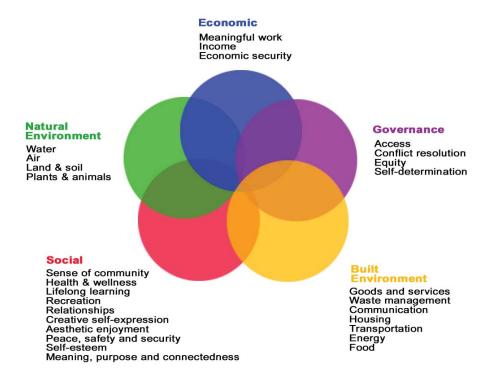
imagineCALGARY used a framework of human needs to structure its work. Building on Brundtland this approach is valuable in two ways.

- Human needs are universal. This allows for a broad understanding of the key issues facing a community. When creating a community-based plan for sustainability, this approach makes the outcomes more meaningful to a wider audience.
- Human needs remain the same over time. When looking at a 100-year time frame, it is essential to maintain some form of continuity between the present and this distant future. By using a human needs framework, the language remains the same over time. We need water today, and we will need water in 100 years. How do we make this happen?

Within a systems approach, imagineCALGARY used the EarthCAT approach of identifying five community systems that help meet human needs. These community systems and their goals are

- built environment system efficient services and infrastructure
- economic system economic well-being
- governance system empowerment and responsibility
- natural environment system ecological integrity; and
- social system health and well-being.

These systems exist to meet a variety of human needs. These needs include:



In the context of sustainability, the objective is to meet human needs in ways that do not erode the ability to meet other needs, both in the present and in the future. It is therefore important to understand how we meet these needs and ensure this occurs in the most sustainable way possible in order to maximize the long-term quality of life for Calgarians. Understanding the assets within the community is an essential step to determining the sustainability of how we meet our human needs.

### 5. Community assets

Community assets are the ways in which we meet human needs. These assets include people, organizations, infrastructure, legislation or any other way that we meet our needs.

Examples of community assets within each system are

- built environment system Calgary's light rail transit system is an asset to meet the need for transportation
- economic system occupational health and safety legislation helps meet the need for meaningful work
- governance system the Calgary Police Service's Diversity Unit is an asset in meeting the community's need for equity
- natural environment system the Bow and Elbow rivers are important in meeting the need for water; and
- social system emergency response services, plans and protocols meet the need for peace, safety and security.





Community assets are how we meet our needs. Calgary's LRT system (left) meets the need for transportation, while the Bow River (right) meets the need for water.

Taking an asset-based approach is an important shift in understanding our community systems. Rather than starting with problems and figuring out ways to solve them, the asset-based approach looks at existing strengths and finds ways to build on those in the future. This is beneficial in two ways.

- It uses existing momentum in the community and builds upon it, rather than fighting against the direction that our community systems are moving from the outset. You could call it the "aikido" approach to planning where you use existing momentum to create a desired result.
- Everyone is a champion. By starting from an acknowledgment of the positive features of the actions that are being taken, the process is much more inclusive. This is essential to achieving as wide a level of community support as possible to move toward a more sustainable future.

Understanding what assets exist in the community and how they are meeting our human needs provides both an understanding of the current situation and a foundation of how to meet other needs that are going unmet.

### 6. Process steps

imagineCALGARY employed the asset/needs approach (not the problem-solving approach) to develop a vision, goals, targets and strategies. Key elements in achieving this objective included the development of an engagement process, project structure and work plan.

### **Engagement**

Involving Calgarians in a conversation about the future is the objective that drove the communications and engagement strategy for imagineCALGARY. The City of Calgary's engage! framework was successfully employed in the engagement of more than 18,000 Calgarians. The framework provides citizens an opportunity to engage in a meaningful way, understanding the level of involvement (e.g. answering the five questions or commenting on the 100-year goals) and taking ownership. The following diagram describes the reach and involvement of stakeholders within this framework.



### engage! Framework, City of Calgary

Calgarians participated in the development of the 100-year vision (using the engage! frame work) by answering five appreciative inquiry questions soliciting the values of Calgarians. These questions were

- What do you value about Calgary?
- What is it like for you to live here?
- What changes would you most like to see?
- What are your hopes and dreams for the next 100 years?
- How can you help make this happen?

The five questions used a positive frame to take individuals out of the conventional problem-solving frame and ask them to build on what is working well and what needs to be improved. The questions focused upon valuing the present, envisioning the future and co-creating the future.

### **Project structure**

A project structure was developed early on in the process to illustrate and provide clarity on the roles and responsibilities of the participants. It represents a wealth of citizen knowledge, ranging from expert advice and research to day-to-day life experience. Stretching over a 12-month period, these stakeholders (and especially the Round Table and Working Groups), volunteered over 4,000 hours of their personal time to the project. The project structure graphically indicates the following interacting groups.

**18,000 Calgarians:** Calgarians responded to five appreciative inquiry questions reflecting their values. Youth and diverse group involvement was key to the success of the approach. Citizens participated at their own meeting places: community halls, churches, schools, daycares, festivals, public competitions, exhibitions, sporting activities, lemonade stands and others. Youth organizations, community members, consultants and project staff were involved in creating these opportunities for dialogue.

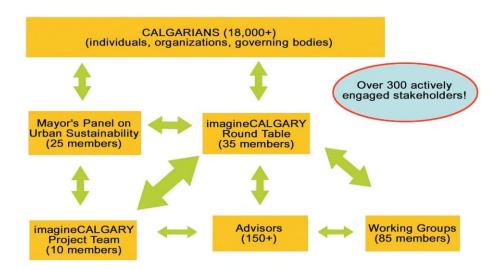
**Mayor's Panel on Urban Sustainability:** This group of city leaders advised on the nomination of the Round Table co-chairs and membership, the measures of success and the contributions of their own organizations to the project. The panel also provided feedback on the legacy of imagineCALGARY.

**imagineCALGARY Round Table:** This group of committed citizens formed the heart and soul of the project. The membership was from all sectors of society with an emphasis on affiliation, rather than representation. It focused on community ownership, the creation of the vision and 100-year goals, as well as recommendations to the community for the 30-year targets and strategies.

**imagineCALGARY Working Groups:** This group of experts developed targets and strategies. The participants worked in five Working Groups based on community systems. Membership in each group was made up of system expertise, Round Table participants and members of the public. The group followed the needs/assets approach to develop the 30-year targets and strategies.

**imagineCALGARY Advisors:** This ad hoc group of interested stakeholders provided input on an as-need basis, as well as participated in process learning.

**Project Team:** This multidisciplinary group of City of Calgary staff provided a support structure for the project, including research, analysis, planning, communications and implementation.



### The work plan

The work plan represents the flow of the major pieces over a 12 month period. There were three phases to the work plan.

- Vision and goals: This focused on broad community engagement in answering the five imagineCALGARY questions and on the creation of a 100-year vision and a set of 100-year goals.
- Targets and strategies: Building on background research conducted during the vision phase, Working Groups developed 10-to 30-year targets and strategies towards the 100-year vision and goals.
- **Legacy:** This relationship and community-building framework focused on community action and collaboration, working toward the imagineCALGARY charter (vision, 100-year goals, targets and strategies).



The imagineCALGARY project phases timeline.

### Vision and goals

Developing the vision was a celebration of community participation and imagination! It was an adventure in exploring values, building on assets and incorporating citizens' hopes and dreams for the next 100 years. Based upon the success of Imagine Chicago and other community movements around the world, imagineCALGARY reached out to Calgarians using a variety of strategies. Over 18,000 responded via

- the imagineCALGARY Web site (including the opportunity to complete the questions online in nine languages)
- imagineCALGARY booths at more than a dozen festivals and approximately 364 events
- over 40 youth volunteers spent approximately 425 hours interviewing 150 community leaders
- focused visioning sessions with over 60 groups from a range of diversity communities (ethno-cultural, seniors, low-income, urban aboriginals, disability groups)
- focused visioning sessions with 70 youth groups
- about 30 sessions with City of Calgary internal groups; and
- over 40 CalgaryQuest sessions (scenario exploration tool).



This is one of the largest-scale citizen involvements in a visioning process to occur in any city, anywhere in the world. Listening to what Calgarians value about their city and their hopes for the future, the imagineCALGARY Round Table carefully folded those themes and values into the vision.

The Round Table and Working Groups worked together to develop a set of 100-year sustainability goals, using elements of the vision, Melbourne Principles and needs framework.

### **Targets and strategies**

The development of targets and strategies used a well-defined methodology, involving a wide range of research, expert analysis and the collective wisdom of participants. The EarthCAT Guide to Community Development (Taking Action for Sustainability by Hallsmith) provided a step-by-step approach. The following diagram describes the steps involved in creating targets and strategies, as implemented by the five working groups.

### Target and strategy development: step-by-step process

Торіс	Date	Outcomes
Orientation	Oct. 2005	Working Group members able to comprehend systems outcomes.
Draft assets and capacity assessment	Nov. 2005	Listing of assets related to meeting the need.
Capacity assessment and needs connections	Dec. 2005	How well are the assets working toward achieving the end-state goal for the need and the connections that exist between assets within the system and between other systems?
Review existing visions, targets and strategies	Oct. to Dec. 2005	Review for good practices and possible alignment.
Presentation of vision and 100-year goals to Work Group from Round Table	Dec. 2005	Informed Working Groups.
Review vision and 100-year goals and identify data relevant to 100-year goals	Dec. 2005	Consider the vision; identify all 100-year goals to determine considerations for the specific need.
Review community trends	Jan. 2006	Trends indicate how well we are doing at meeting our 100-year goals. Trends relevant to understanding how we are meeting end-state goals and those relevant to setting targets.
Identify patterns of systems behavior	Jan. 2006	How are the variables linked and what story do they tell? Create systems diagrams to find interventions points.
Working Group status update	Feb. 2006	Information sharing between working groups.
Develop targets based on assets, trends, systems	Feb. 2006	Based on the assets, trends and patterns, establish 30-year targets using backcasting, benchmarking and existing sustainable targets.
Mapping community systems to determine leverage points	Feb. 2006	Create a map for each of the end-state goals. These are related to assets, systems and connections that influence our 100-year goals and targets.
Propose new strategies	Mar. 2006	Targets were developed through expert analysis, best practices and guidance from "Leverage Points: Points to intervene in a system" by Donella Meadows, which provides ways in which to move the system closer to sustainability. Check targets and strategies against sustainability criteria and the needs framework.

### Legacy framework

The legacy framework will ensure that the imagineCALGARY charter is widely used to shape Calgary's future by

- achieving widespread community support of the charter (Partners and Friends program); and
- ensuring ongoing progress toward the vision, goals and targets through the actions of community organizations, business, academia and government, as well as individual Calgarians.

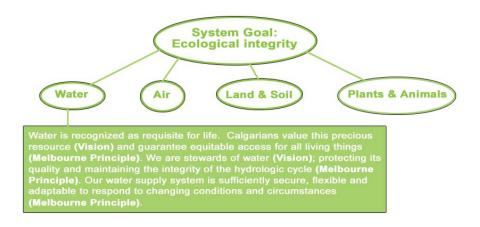
Through collaboration with the community, structures and practices are being developed to ensure progress toward the imagineCALGARY charter. Building on the assets and capacities that have been developed through imagineCALGARY so far, the legacy framework creates the elements that will ensure imagineCALGARY lives on in the community.

### 7. Vision and 100-year goals

The 100-year vision and goals were developed with the participation of more than 18,000 citizens. The engagement process captured a wide range of Calgarians, including youth, diverse groups (ethnic, disabled, gay-lesbian-transgender and others) and urban aboriginals. A qualitative analysis, considering all statements (and not only those mentioned the most), provided key stakeholders, such as the Round Table, information to develop the final vision.

The values expressed by Calgarians through the imagineCALGARY vision capture the broad spectrum of needs in our society. These values — from clear bright skies, to prosperity, to embracing cultural diversity — were captured in the 100-year goals, reflecting what Calgarians would like to achieve and aspire to in 100 years.

The 100-year goals describe the desired state of each of the 28 human needs in the year 2106. In reaching this desired state, Calgarians will also be able to meet the goal of each community system. The vision and the Melbourne Principles guide the 100-year goals. The goals incorporate these elements to reflect the vision in more manageable pieces and to incorporate the essence of sustainability through the Melbourne Principles. In addition, they are written to contain an end-state description, are phrased in an appreciative format and are expressed as a definitive.



100 year-goals were developed to describe how needs will be met in Calgary in 100 years. The graphic above illustrates how the 100-year goal for water also helps to meet the goal of the natural environment system.

The 100-year goal approach is holistic (incorporating systems thinking), multi-generational (spanning over several generations), applicable at all levels (individual, to regional, to global) and adaptive (backcasting from them implies continuous improvement and adjustment).

As indicated here, integrating systems thinking in goal development provides for an appreciation of the interrelationships, impacts and enhancements between systems within each 100-year goal.

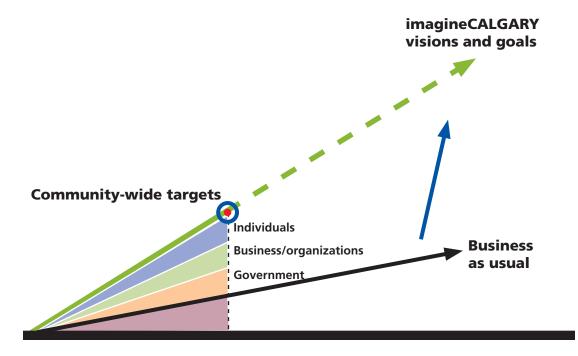
# Improved Social Networks Community Spirit Social Well-Being Empowerment and Responsibility Equitable Resource Distribution Economic Security Human and Environmental Health

### 8. 30-year targets and strategies

The 100-year vision and goals provide a long-term destination for a more sustainable Calgary. Based on the values and aspirations of Calgarians, these create a shared focus for the community to ensure a high quality of life for generations to come.

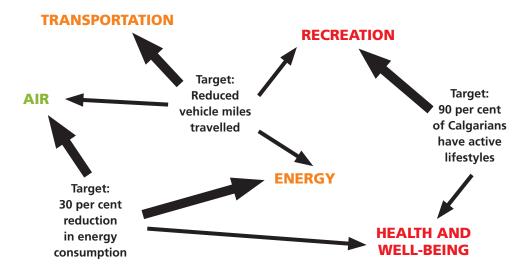
Starting today, the 10- to 30-year targets and strategies create a roadmap of how to get toward our 100-year vision and goals. The targets create a reference point for the community to determine individual and collective action toward the 100-year goals. The strategies provide a wide range of approaches to build collaboration and action toward the targets.

These targets and strategies are community-wide, rather than focusing on one or two particular actors or organizations. By setting a common direction, a variety of actors within the community can do their parts to achieving our targets to create a more sustainable city. Working collaboratively, these actors can achieve more sustainable results than if they were working in isolation.



imagineCALGARY targets are set to shift our community systems toward a more sustainable future.

The targets and strategies were developed through five Working Groups focused on our community systems — built environment, economic, governance, natural environment and social. Our 85 experts worked in multidisciplinary groups, looking at how we meet our needs in the context of our entire community, across the five systems, rather than a silo approach. For example, in the natural environment Working Group, there were experts in the built environment, economic, governance and social systems, in addition to experts in the natural environment system. Using the human needs framework, the targets and strategies are established to shift our existing community systems to meet the needs of Calgarians in a more sustainable way.



Targets set to meet particular human needs (highlighted arrows) also should contribute to meeting other human needs (lighter arrows).

While the targets and strategies are broken into individual human needs, the interdependent nature of our community systems means there are a variety of connections and impacts between the different needs (how we meet our need for water will impact health and well-being, for example).

### References

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# CalgaryConnections magazine June 2036 The 30-year checkup Looking back at the imagineCALGARY initiative Calgary in 2006

# imagineCALGARY: 30 years later

A look back at what our city has accomplished and a look forward to the future of sustainability

hirty years ago, an initiative called imagineCALGARY provided roadmap towards a sustainable future. It was the year that the City of Calgary decided to do what Calgarians do best - think big. Images of the future are powerful, and imagineCALGARY used a systems thinking approach to build on a number of community strengths. Community systems were shifted towards a number of 30year targets and strategies set by institutions, organizations and citizens of Calgary. We are now at the 30 year mark of the 100 year thinking behind imagineCALGARY and the 5 stories illustrated below capture the laboratory of possibility that is imagineCALGARY.

### **Complete Communities**

Describes the success attained through the connections made through social and built systems.

### **Opportunity and Prosperity**

Details the thinking behind the economic

diversification of Calgary.

### Inclusiveness

Discusses the importance of diversity and connections in our community.

### **Human Wellness**

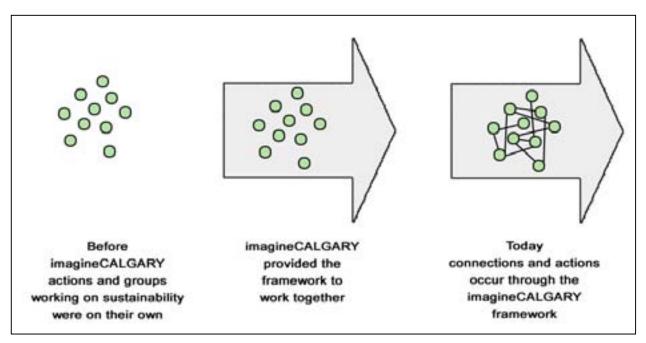
Examines the factors that contribute to overall well-being.

### **Ecological Integrity**

Looks at the importance of our environment and how it connects to us on a human level.

The intention behind imagineCALGARY was to provide a framework to encourage more collaboration action towards long-term sustainability.

Just imagine how the ideas and decisions that we make today will make a difference in the lives of your grandchildren's grandchildren. That is what imagineCALGARY and these stories are all about.



30 years ago, imagineCALGARY provided a collective framework for the entire community to work towards sustainability

# **Complete Communities**

The term "complete communities," describes a city where individual neighbourhoods offer most of our day-to-day needs – employment, commercial, recreational, and educational within a reasonable walking distance from our homes. Complete communities offer a high quality of life for residents, as there are options in how to get around the community, natural areas and open space are maximized, and by living, working and playing in the same area, residents feel more connected to the community.

The community decided that by 2016, we were developing 'complete communities' that enable people to meet most of their daily needs within a reasonable walking distance of their home (Housing, Target 1). To achieve more complete communities, certain steps were taken.

### An Increase in Density

To provide a greater amount of people in proximity to things such as commercial stores that require certain levels of population to make them viable.



Complete communities create spaces for Calgarians to enjoy many aspects of their daily lives close to their homes

### Mixing land uses

Living in close proximity to one another has allowed people to make multi-purpose trips,

something that is important if you are not traveling in a private vehicle.

### Adaptability

Demographically, our city has changed and it is important that the communities we created were able to change with the population to meet our needs.

The focus on complete communities challenged how we designed our city so that we were less reliant on travel. By 2036, the amount of annual private vehicle kilometers traveled per capita decreased by 20 percent (Transportation, Target 1). In addition to having more complete communities, options for other modes of travel such as transit, and pedestrian facilities cycling, developed to give Calgarians real options of how to get around our city.

With the need to drive less, there were great strides made in the energy used just to get around the city. By 2036, energy consumption was reduced by 30 percent based on 1999 use (Air, Target 1). The buildings in our communities, both existing and new, took advantage of energy efficient technologies and practices. Incentives such as rebates for energy efficient retrofitting were widely utilized to make this happen. In addition, there was a great public awareness campaign on the benefits of energy conservation.

The new look of these communities benefited the environment, but also other elements that make a great quality of life for Calgarians. By 2036, 90% of people living in Calgary reported that they participate in active lifestyles that include informal and structured recreational opportunities (Recreation, Target 1). Through community (re)design, we integrated recreation opportunities into daily life - whether it was through recreational facilities provided close to where we live in our communities, or through walking or cycling as part of residents daily routine of how they get around.

Initiatives were developed to create the most favourable environment for business. particularly the growth in entrepreneurship and small businesses, and the creation of new business so that in 2036 Calgary has been ranked as the most favourable Canadian city in which to locate and do business (Economic Well-Being, Target 4). Calgary enhanced its infrastructure and associated elements to attract and retain business and a quality workforce. This included the creation of mixed use and employment centres throughout the city, and expansion of infrastructure in the central city, in order to encourage connections across a variety of industries. In an age of an increasingly mobile workforce. Calgary recognized that economic development strategies must build upon the connection to the high quality of life that the city's complete communities allow.

These changes to how we (re) developed our communities made big impacts across the entire city.

# **Opportunity & Prosperity**

All who live in the community must be afforded the opportunity to contribute and to benefit, and all must be assured economic sufficiency. A sustainable economy should ensure long-term prosperity and move us towards a more economically, ecologically and socially sustainable future.

To be sustainable, the economy cannot rely primarily on a single output - it was estimated that in 2006, between 50% to 60% of Calgary's economy was attributable to the Oil & Gas Many of the key imagineCALGARY economic targets and strategies focused on diversifying Calgary's economy to provide resiliency and ensure long-term prosperity. A shift in the economy occurred where today in 2036, Calgary's non-oil related export industries grew by 50% (Economic Well-Being, Target 3). This was achieved through enhancing economic activity in alternate areas such as creative industries, education, tourism, etc.,

providing a basis for diversification. This broader economic base has afforded us more resiliency and stability than over-reliance on a single export commodity.



Calgary's economy has become more diversified and less dependent on the oil & gas sector in the past 30 years

An important step towards diversification was to enable public & private research and development intensity to account for 5 % of Calgary's GDP in 2036 (Economic Well-Being, Target 1). R & D did not have an immediate impact on the diversity of the economy. Its benefit was in the long-term commercial spinoffs such as local and exportable know-how, products, software and emerging technologies. R & D was a key element of adaptability in the city's economy over the past 30 years, allowing Calgary to become the energy capital of the world.

With its knowledge in the energy sector, Calgary was better suited than most communities to realize the importance and value of energy. Energy derived from lowimpact renewable resources is a win for ecological integrity and a win for the economy in the long run. Calgary decided to take a leadership role in energy efficiency and alternatives today in 2036, 30 percent of our energy is derived from low-impact renewable sources (Energy, Target 1; Air, Target 2). This is reflected in way we have developed and redeveloped our communities, buildings, vehicles, equipment and processes to be within 5 percent of the highest energy efficient design available out of all economically competitive products, as measured on a life-cycle basis (Energy, Target 2).

In order to engage in this increasingly diverse economy and remain globally competitive, it was important for Calgary to achieve the target that by 2036, the High School graduation rate for individuals up to age 21 increases to 95 %; and 75 % of adults aged 21 - 25 complete a post-secondary or vocational education program (Meaningful Work, Target 2, Lifelong Learning, Target 3). Strategies were developed to reach this goal, including:

- Developing intensive educational and personal support to students who experience learning challenges due to English-language deficiencies, different academic or cognitive abilities, cultural differences, or other factors which place them at an educational disadvantage.
- Placing at-risk youth in long-term mentoring programs with caring adults. A variety of high school programs were developed to address different types of learner needs and interests.

Building on a well-educated population and wide community recognition that opportunity and prosperity are inextricably linked, public sector institutions began paying a living wage. NGO's in Calgary took this lead and began educating the business community on the benefits of a liveable wage. This momentum has built to the point where today in 2036, 95 % of all people living in Calgary are at or above Statistics Canada's Low-Income Cut-Off (LICO) rates and there is no child poverty. This gave working people a sufficient income to meet their basic needs and to fully participate in society.

All of these elements have moved us towards a more diversified and hence more sustainable economy, and one where all Calgarians benefit; an economy that increasingly moved from reliance on a depleting resource towards renewable energy; and an economy that capitalized on existing assets and strengthened those assets by further investing in education, by respecting the natural environment, and by celebrating creativity and diversity.

### **Inclusiveness**

he imagineCALGARY 30-year targets & strategies worked towards creating a city that was inclusive - recognizing the diversity of the community, while creating a sense of togetherness within that context.

A first and important step in making the city inclusive was to ensure that our governments the institutions whose decisions affect all Calgarians - gained trust amongst citizens. The target was set that by 2016, 80% of Calgarians report that they feel government activity is open, honest, inclusive and responsive (Access, Target 1). In order to achieve this goal, campaign finance was made more open and equal, decision-making and engagement processes recognized various cultural norms that make our city rich, information was made widely available and easily accessible, and public spaces were valued as places of personal and political expression.

Evidence of this inclusive approach could be found in the development of urban Aboriginal policy in all of Calgary's public institutions and systems by the year 2020. (Equity, Target 3). In doing so, these institutions and systems made a conscious effort to reduce barriers to public participation and governance, and support economic, social and political advancement. This was an important indication of a more inclusive Calgary, showing a recognition of history and context that can require a different, sometimes more targeted approach to meeting needs for some of our citizens.

In order for citizens to feel included and understand and participate in how decisions are made, it is essential that they have information about our city and our people. This has been achieved to a large extent, as today in 2036, 75 percent of Calgarians report that they are informed (Communications, This was able to happen by Target 1).

developing communications infrastructure to support informed decision-making. Within the city, there was a conscious effort to increase the use of plain language in public communications and to establish communication programs that cater to the



imagineCALGARY recognized the value of urban aboriginal policies

increasingly diverse population.

Calgary's prosperity has led to it becoming a magnet for increased immigration. It was recognized that if the economy is a key reason for people to come to Calgary, then it should also be a vital gateway into the life of the community. The target was set that all adult immigrants to Calgary would have the opportunity to integrate into the economy through employment or entrepreneurial activity at the same participation or success rate as other Calgarians (Meaningful Work, Target 4). There were two important steps in achieving this target.

- The development of immigration policies and support programs that facilitated the adaptation and successful participation of immigrants into the Calgary economy.
- The development of effective and timely accreditation / certification approach ensured that migrants were able to find work at a level commensurate with their qualifications.

With an inclusive and responsive government, a well-informed population, and a welcoming economy, it is no surprise that **90% of** 

Calgarians continue to agree that there is a strong sense of community in Calgary and at least 80% of Calgarians report high levels of sense of belonging, satisfaction, attachment, and civic pride (Sense of Community, Target 1). Just as newcomers were welcomed into the economic life of the city, programs were available to include them into the social life of Calgary as well. The public spaces that allow for public expression also provide an important gathering function for our citizens to connect with one another.

The sense of community felt by Calgarians reflects a broad understanding amongst the citizens of the city. This is reflected in that fact that 100% of Calgarians report that they feel respected and supported in their pursuit of meaning, purpose and connectedness, and that they extend respect and support to others who meet this need in ways that are different from their own (Meaning, Purpose and Connectedness, Target 2). Through forums of dialogue amongst diverse groups and a celebration of that diversity, Calgary is able to show widespread support and understanding for the wide array of cultural contexts and traditions that are in the community.

## **Human Wellness**

Recognizing that so many elements of our lives are connected, it is important to look at a person's life as a whole – to look at the context of their social and physical environments. Human wellness fully involves physical, mental and social well-being.

In order to ensure a solid foundation for longterm wellness, it is essential that children are 'school ready' in order to contribute to happy childhoods, and set the stage for healthy and productive adults. As a key first step, it was important that by 2016, by the age of 6 years, 95% of Calgary children exhibit school readiness as reflected by physical well-being and appropriate motor development; emotional health and a positive approach to new experiences; age-appropriate social knowledge and competence; age-appropriate language skills; and age-appropriate general knowledge and cognitive skills (Lifelong Learning, Target1). A true community effort was required to achieve this. The provision of formal and informal family literacy and other social supports, and early childhood education and high quality childcare were important contributors to school readiness. Specialized efforts were given to at-risk families so that their children were fully equipped to achieve their full potential.

By recognizing the wide array of factors that human wellness adequate influence employment and income, nutritious food, appropriate, adequate and affordable housing, and personal safety - Calgarians were better able to respond to improving the quality This holistic view to of life for all citizens. wellness involved collaboration from multitude of actors in the community, ensuring that 95% of Calgarians enjoy positive and supportive living conditions in 2036 (Health & Wellness, Target 2).



The imagineCALGARY citizen's Round Table imagined a city where people could gather and come together

A number of initiatives were undertaken to give Calgarians more access to housing. Innovations that reduced the cost of new housing was introduced, as were public/private partnerships that created affordable housing units that were integrated into the fabric of the community. Coupled with initiatives on living wage that we saw in the 'Prosperity &

Opportunity Story', by 2036, all Calgarians now have the option of spending less than 30 percent of their gross family income on housing (Housing, Target 3).

Our children are more school-ready and as we saw in the 'Prosperity & Opportunity Story' we are achieving excellent levels of education. We are now a well housed city and are creating supportive living conditions for our citizens. This has allowed Calgarians to create meaning in their work and today, 85 % of employees express a high degree of job satisfaction (Meaningful Work, Target 5). In addition to employers adopting human resource approaches that encourage meaning in the workplace, a variety of technology, workspace / work locations and types of work have provided Calgarians with choices for meaningful work without harming our natural environment. These options changed the way we design our communities and how we move around the city and allowed for a 50% reduction of total Community Greenhouse Gas Emissions from 1990 levels and significant reduction in Criteria Air Contaminants (Air, Target 3).

Individuals need social support networks to achieve true wellness. By encouraging volunteerism and sharing hobbies, we are active contributors while also receiving support Creating more complete and from others. inclusive communities through community design, such as walkable neighbourhoods, collective housing forms and accessible public gathering places was another important step to ensuring that 95% of Calgarians of every age and ability report that they value and have mutually supportive relationships in several settings, such as home, school, work, and in the community (Relationships, Target 1).

Over the past 30 years, we have found a variety of ways to improve relationships within our community. Resolving disputes through collaboration is an important step in creating processes that build relationships, rather than destroy them. Through broad community education and awareness, 100% of non-criminal disputes are resolved by some form of

collaborative process (Conflict Resolution, Target 1). We have approached conflict not as a divisive process, but one that allows us to learn from each other and better understand our neighbours and colleagues. Non-criminal disputes are an ideal situation to act upon, as the stakes are lower and individuals can learn from the resolution process and build on their experiences in future situations.

# **Ecological Integrity**

Ecological integrity refers to nature's ability to perform its services to support human life and the natural environment. It include such things as erosion prevention, water filtering, pollination, plant and animal habitats, wildlife corridors, and pest control. These ecological services provide the basis for all life and the integrity of these natural systems are the foundation on which all aspects of our community life depend.

An essential element of ecological integrity is water. Especially in southern Alberta, where water is relatively scarce, the importance of maintaining and enhancing our watersheds becomes apparent. Looking forward 30 years, imagineCALGARY set the target to improve watershed health as measured by loss of wetlands, water quality, non-compliance with standards, instream pollution flow and aroundwater levels (Water, Target 4). stakeholders Coordination amongst increased to directly impact river basin issues and decreased all forms of water and riparian zone pollution and restored water quantity and quality to improve hydrological cycles.

Improved watershed health certainly secured water for human use, but over time, we have gained a better understanding that human wellness is not separate from ecological health and integrity. The biological diversity in our urban ecosystem in many ways reflects its overall health. Recognizing this, a variety of programs and areas to provide sufficient habitat supply were provided, allowing species to be protected and managed. In addition,

increased public awareness has successfully led to an increase in native biological diversity to healthy levels as measured through HSI Indices and local key indicator specie (Plants & Animals, Target 1).

Our connection to the natural environment has never been more apparent. Our improved ecological integrity has ensured that today, all Calgarians live in a safe, clean natural environment, as measured by the quality of the air, water, soil, and food sources, and lack of exposure to toxic waste (Health & Wellness, Target 1). In addition to improving watershed health, we have improved our water treatment facilities and have ensured that clean water is accessible to all Calgarians.

Both our human and environmental health has benefited from changes in the way we have built our city as well. The LRT system, fueled by wind power, is an important asset in our community and provides a more sustainable way to move around the city. maximize the use of the LRT, changes were made to make the C-Train more viable. As a result, by 2016, the residential population within walking distance (600m) of LRT stations and major transit nodes was increased by 100 percent, and the number of jobs within walking distance (600m) of LRT stations and major transit nodes was increased by 35 percent (Transportation, Targets 2 & 3). Given the overall benefits to the community, changes in policies and regulations were made to accommodate this change.

An important measure of ecological integrity was how our decisions were made. Public institutions and organizations became leaders in this regard. By 2010, all public institutions and organizations implemented sustainability principles – such as the Melbourne Principles – in decision-making and reporting, using tools such as triple bottom line (Equity, Target 2). These institutions and organizations were 'looking at the whole' rather than looking at one particular area that the decision might impact. The result was an ever-growing number of decisions that were based on sustainability and a fair and equitable



The health of the Bow River watershed has improved over the past 30 years

distribution economic Ωf social. and environmental resources.

This shift by public institutions and organizations was taken on by a variety of businesses and organizations and today in 2036, alternative measures of economic well-being commonly used in decision-making (Economic Well-Being, Target 6). Recognizing that 'looking at the whole' was a key aspect to creating long-term prosperity, private industry created an incredible array of indicators and measures that take into account the balance between economic, social and environmental goals and benefits. One of the most widely adopted methods was full value accounting which includes life-cycle, environmental, social, health, and other 'costs' in economic decisionmaking.

### The Next 30 Years

igwedge sustainable Calgary is a city that meets all of our needs today, while allowing for future generations to meet their own needs such as clean air and water, healthy and safe places to live, good jobs, and the freedom to make decisions about their lives. The roadmap for our city's urban sustainability plan started thirty years ago with five questions. It involved Calgarians in a conversation about their future and set targets for the community to reach together on the road to sustainability. As the anthropologist Margaret Mead stated:

"Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it's the only thing that ever has."

As we reflect on the last 30 years of imagination action within our community, commitment of Calgarians in creating the 100 year vision and goals is honourable. We still live in a city filled with challenges and opportunities towards the vision of sustainable. Visionary thinking and action from our community is required to thrust our city into realizing the next 70 years in the vision. What new targets will we set for the next 30 years? The question that was asked thirty years ago is still pertinent today: How can you help make this happen?