

Sustainability Charter



a commitment to sustainability



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MESSAGE FROM THE MAYOR

The Surrey Sustainability Charter is a commitment by the City to place the principles of social, environmental and economic sustainability as the foundation of all decisions we make. It is about making the right choices and doing the right things.

The Charter provides a comprehensive lens through which we will view all future initiatives, programs and plans. It provides us with a framework to best develop and manage Surrey's human and physical resources to create a strong, sustainable city.

Through the process of creating the Charter we have involved a diverse range of community members and policy experts to provide their knowledge and expertise to the shaping of this document. I greatly appreciate your valuable contributions as well as your dedication to making Surrey sustainable.

The Surrey Sustainability Charter establishes our city as a leader in sustainability policy and practice. It will create a city for the present and the future, a sustainable city we can all be proud to call home.

Sincerely,



Dianne L. Watts,
Mayor





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*...a high quality of life
but without compromising...*

INTRODUCTION AND BACKGROUND

A SUSTAINABILITY CHARTER FOR THE CITY OF SURREY

Growing concerns over social issues, the future viability of our economy and the ability of the earth to sustain our society have lead many progressive organizations and governments to adopt and commit to principles of sustainability as a framework to guide their actions and decisions.

In May of 2007, Surrey City Council gave direction to develop a Sustainability Charter for the City, and adopted the following definition:

“Sustainability” means meeting the needs of the present generation in terms of socio-cultural systems, the economy and the environment while promoting a high quality of life but without compromising the ability of future generations to meet their own needs.

Surrey’s Sustainability Charter, as set out in this document, paints a Vision of a Sustainable City. The Vision is supported by both high-level and specific Goals. The Charter also includes an Action Framework for addressing sustainability issues.

The Sustainability Charter will be the City’s overarching policy document, which will guide the actions of the City. In the absence of other specific policies, general policy direction will be taken from the Charter.

Supporting the Charter are:

- The Scope of the Charter, a “living document” that will be updated by Council to reflect and incorporate new and evolving issues and priorities; and
- An Implementation Strategy that sets priorities, establishes targets, measures progress, and identifies roles, responsibilities, resources and timeframes.

Figure 1 shows the relationship between the components of the Sustainability Charter and supporting documents.

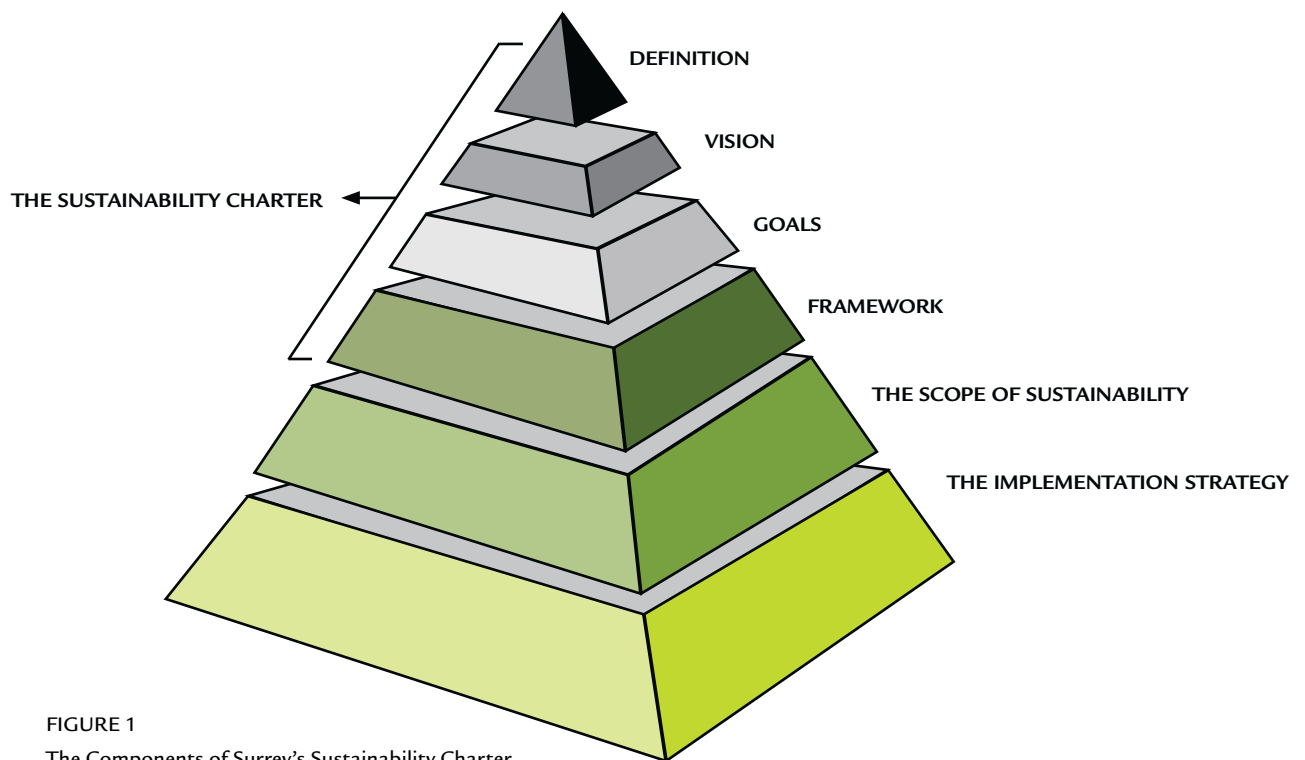


FIGURE 1
The Components of Surrey’s Sustainability Charter

A VISION OF SUSTAINABILITY

The Vision of a sustainable Surrey was developed through community consultation:

“Surrey values and protects its natural environment through stewardship of its rich tree canopy, and enhancement of its natural areas and biodiversity. It is a safe City, with a vibrant City Centre and livable communities that provide a range of affordable and appropriate housing options. Surrey leads the way in sustainable design, “green” buildings and “green” infrastructure. It provides transportation choice, with a focus on the efficient movement of people and goods, not just vehicles. Surrey incorporates “Triple Bottom Line Accounting” into its operations, incorporates and encourages alternative energy sources, and strives for carbon neutrality and no net impact from waste. It is a city that fosters local employment opportunities and “green” businesses including a sustainable agricultural base and local food security. Surrey has a network of widely accessible community health and social services, parks, recreation, library and cultural opportunities that promote wellness and active living. The City embraces its cultural diversity, and promotes tolerance, social connections and a sense of belonging.”

The Action Framework of the Sustainability Charter is illustrated by the Sustainability “Cube” shown here. The Action Framework is built upon:

The Three Pillars of Sustainability:

- The Socio-cultural Pillar;
- The Economic Pillar; and
- The Environmental Pillar.

The Three Time Frames for Implementing Sustainability:

- Immediate/short-term;
- Medium-term; and
- Long-term.

The Three Spheres of Influence to Achieve Sustainability:

- Corporate operations;
- Municipal jurisdiction; and
- External organizations.

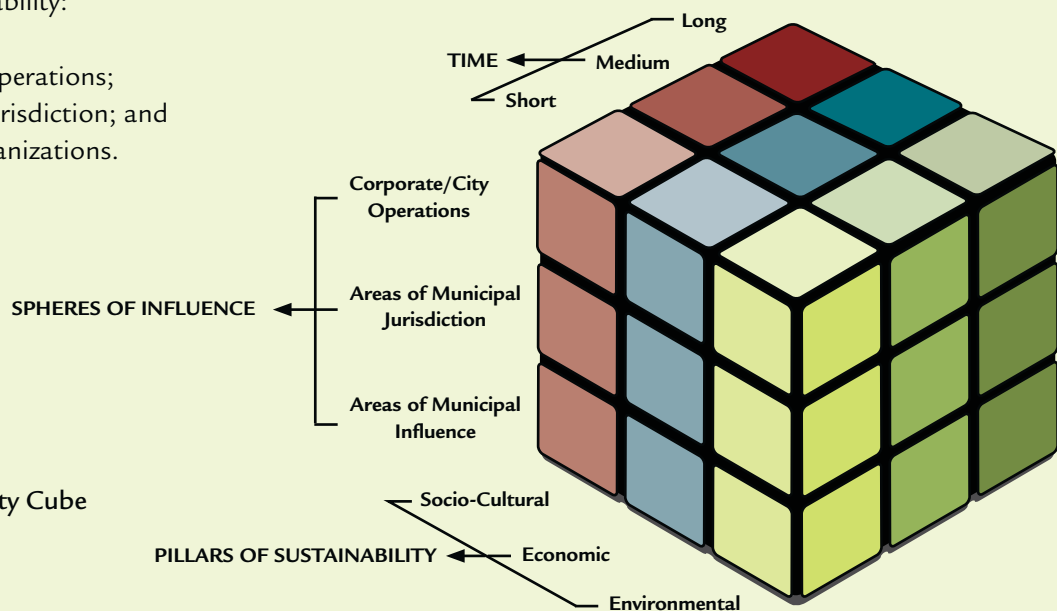


FIGURE 2:
The Sustainability Cube

THE SCOPE OF SUSTAINABILITY CHARTER

The Scope of the Sustainability Charter document will continue to be developed over time in consultation with the community. The Scope identifies the range of sustainability issues to be addressed by the City over time.

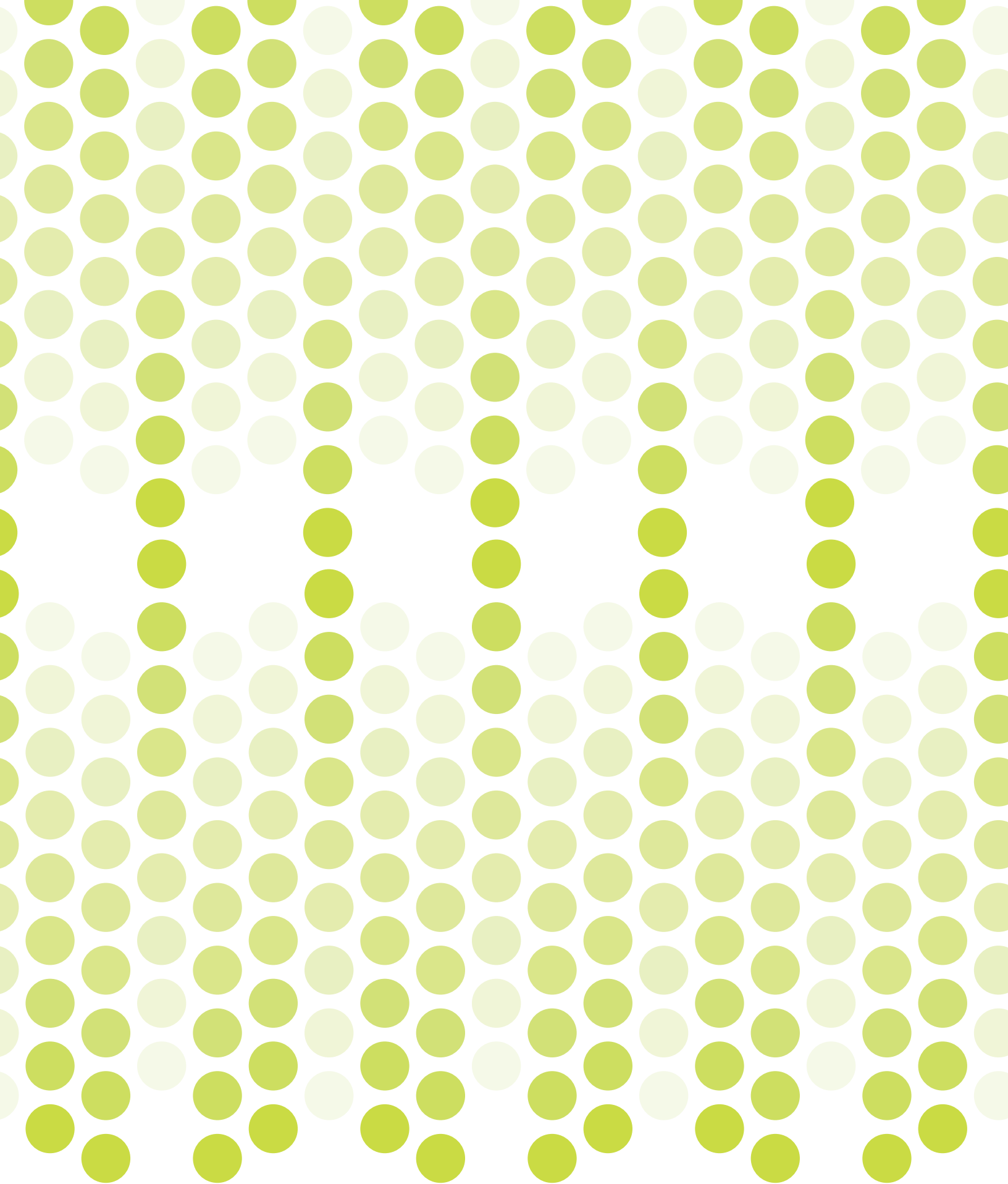
The “Scope of the Sustainability Charter” will be maintained as a living document that describes specific actions the City intends to take to support sustainability. Council will amend the Scope of the Charter as proposed actions and priorities evolve over time.

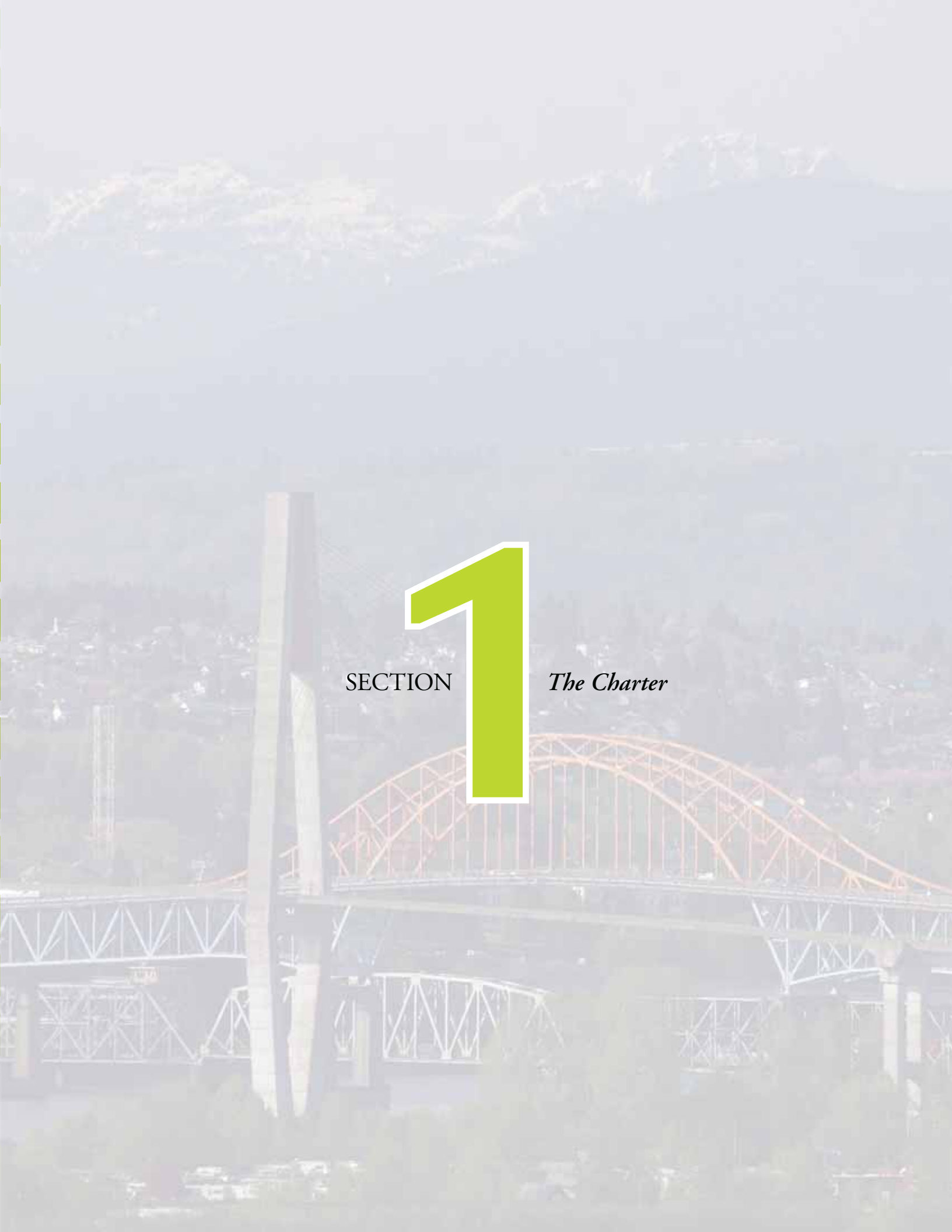
An additional component of the Implementation Strategy will be the development of education, awareness and outreach efforts highlighting the importance of sustainability, in the corporation and in the community. Education and outreach will help to achieve the level of knowledge and support required to ensure successful implementation of the Charter. On-going community consultation will aid in ensuring that the Scope of the Charter and the Implementation Strategy remain relevant and achievable.

THE IMPLEMENTATION STRATEGY

The Charter’s Implementation Strategy will:

1. Prioritize items within the Scope of the Sustainability Charter;
2. Establish targets and indicators with baseline (i.e., initial) values to measure progress towards targets;
3. Identify roles, responsibilities and resources needed to implement a sustainable city;
4. Develop plans, policies, practices and procedures;
5. Establish timelines for implementation of specific items; and
6. Initiate regular monitoring and reporting mechanisms that provide opportunities for effective public review and input.





1

SECTION

The Charter

PART 1 AN OVERVIEW OF SUSTAINABILITY

WHAT IS SUSTAINABILITY?

Sustainability is about living well without doing harm, either now or in the future. It is about finding ways to reduce our “environmental footprint” to a sustainable level, regardless of how many of us there are or where we choose to live.

The 1987 United Nations Brundtland Commission Report, “Our Common Future”, crafted the original definition of “sustainable development”. This definition provides the basis for Surrey’s Sustainability Charter. However Surrey’s definition is enhanced by adding reference to the three commonly accepted “pillars” of Sustainability (Socio-cultural, Economic and Environmental) and by stating that sustainability should be achieved within the context of promoting a high quality of life for Surrey residents. “Quality of life” does not have the same meaning as “standard of living” and does not imply promoting increases in the quantity of goods and resources consumed.

“Sustainability” in Surrey’s context is the principle of meeting the needs of the present generation in terms of socio-cultural systems, the economy and the environment while promoting a high quality of life but without compromising the ability of future generations to meet their own needs.



WHY IS SUSTAINABILITY IMPORTANT?

This is a time of increasing concern about climate change, and a peak in the production of the oil that fuels our economy. There is also concern over diminishing biodiversity, environmental degradation, and finite supplies of productive land. The Earth has a limited carrying capacity for population and resource extraction. Recent studies indicated that if the entire population of the world lived with the same lifestyle, energy use, and waste production of Canadians, it would take approximately 4 or 5 planets to meet our global needs. The question is not, “Will the Planet survive?” The question is whether the Planet can continue to support its human population.

Canada has been identified as the country with the world’s highest per capita use of energy and other natural resources. Instead of living off the interest of our abundant natural capital, there is concern that we are quickly using up the natural capital itself. Surrey is no exception to this. We, along with other Canadians, are using water, materials, and energy at a rate much faster than the earth can replenish. At the local level, what happens in Surrey will have an impact on the rest of the world and what happens in the rest of the world will impact Surrey.

In social terms, we are faced with an aging population with reduced mobility and increased health care needs. Housing affordability is a growing concern across the region, both for low and middle income households. The social fabric of our communities has undergone significant transformation. Once close knit and compact due to societal norms and the limitations of transportation infrastructure, we now live in more diverse and mobile communities where neighbours may not know each other and children are driven from place to place for their social activities. There have been enormous advances in our education and health care systems, and we have access to a vast selection of information sources. Yet not all have benefited from these advances. There remains a wide gap between rich and poor and unacceptably high rates of child poverty. There is concern that society is not doing enough to care for its most vulnerable citizens.

WHAT SURREY RESIDENTS THINK ABOUT SUSTAINABILITY....

Surrey residents and employers and institutions, city employees, community groups, Council's Advisory Committees and others were asked about the issues that are important to them, and their priorities for the focus of a Surrey Sustainability Charter. These questions were asked through questionnaires, discussions and working sessions. Input was also received at a Sustainability Fair that was held as part of the process of developing the Charter.

Key themes that evolved from this feedback include the need to:

- Raise awareness and provide education with regard to sustainability and sustainability initiatives;
- Provide incentives to the public to support “green” initiatives such as recycling and waste reduction, rainwater collection, urban gardens, anti-idling;
- Address homelessness and housing affordability;
- Provide sidewalks, greenways, trails, bikeways, pathways and pedestrian corridors that promote interconnectedness in the community;
- Improve and increase public transit, especially to employment areas and town centres;
- Ensure accessibility and social inclusion for all;
- Protect trees, riparian areas, natural areas and bio-diversity;
- Protect and support Surrey's agricultural land base and enhance food production;
- Protect the city's employment land base;
- Plan and build a beautiful city, that has a sense of place, with complete communities and density and services focused in the City Centre and Town Centres;
- Reduce energy and water consumption;
- Reduce the city's ecological foot print and promote and construct green buildings and building retrofit;
- Increase the feeling of public safety and security;
- Promote and support cultural activities and events that will increase understanding, tolerance and respect for the City's diverse population and promote community pride and social connections;
- Promote the elements of a child and youth friendly city, and a city that is responsive to the needs of seniors and people of all abilities; and
- Promote ongoing community engagement in sustainability initiatives.



THE CHALLENGES AND OPPORTUNITIES

The challenge of transforming a society from one where many people perceive the environment to be an endless source of resources and a receptacle for waste products, to one that embraces sustainable practices, can be daunting. But many observers believe that fundamental change must be made within a generation if dramatic and long-lasting impacts to our environment are to be avoided.

Society has made remarkable transformations in each of the last five generations, from a rural to an urban society. Information technology has transformed from printed materials to a high-speed digital world where messages and images can be sent almost anywhere in the world within seconds. The relative rate of these transformations indicates that, while there are significant challenges to be addressed, these are manageable and will create a whole new range of social, economic and environmental opportunities in a sustainable world.

Sustainability Challenges

Municipalities, unlike provincial and federal governments, have relatively constricted and highly prescribed powers. And a large proportion of municipal funding is allocated to providing basic services, such as police, fire, roads, sewers and water, leaving relatively little discretionary funding for innovative programs to promote local sustainability. A sustainable economy is needed to support social and environmental sustainability initiatives.

Also, it will be crucial to engage the community on a number of levels and to target the message to different demographic, cultural and linguistic groups if we are to achieve a sustainable city. Surrey is large, geographically dispersed, rapidly growing. Many people have busy lives and there is considerable competition to get their attention. An additional challenge is effectively reaching out to engage diverse populations, including youth, marginalized populations and multi-cultural groups.

Sustainability Opportunities

There are many examples of how quickly societies can change their lifestyles and develop new technologies in response to major challenges. There have been enormous societal changes in recent times, such as the pervasive implementation of recycling programs and conversion of our society from one of tolerance to smoking, to one of mostly non-smokers and the banning of smoking in public places. With increased awareness of climate change, issues of peak oil and other indicators, people are asking, “What can I do to make a difference?”



PART **2** THE SUSTAINABILITY CHARTER

A LONG TERM VISION FOR THE CITY OF SURREY

An important component of achieving Sustainability is the development of a long-term vision for the City. If the citizens and businesses share a common vision of a sustainable future, we can work together to achieve it.

The following Vision statement has been synthesized from community contributions during the Charter's development process. It provides a long-range view of what a truly sustainable City of Surrey can look like in 50 years.

Surrey values and protects its natural environment through stewardship of its rich tree canopy, and enhancement of its natural areas and biodiversity. It is a safe City, with a vibrant City Centre and livable communities that provide a range of affordable and appropriate housing options. Surrey leads the way in sustainable design, "green" buildings and "green" infrastructure. It provides transportation choice, with a focus on the efficient movement of people and goods, not just vehicles. Surrey incorporates "Triple Bottom Line Accounting" into its operations, incorporates and encourages alternative energy sources, and strives for carbon neutrality and no net impact from waste. It is a city that fosters local employment opportunities and "green" businesses including a sustainable agricultural base and local food security. Surrey has a network of widely accessible community health and social services, parks, recreation, library and cultural opportunities that promote wellness and active living. The City embraces its cultural diversity, and promotes tolerance, social connections and a sense of belonging.







*In 50 years, in the year 2058,
a Sustainable City of Surrey will:*

Be a model for the Protection and Conservation of the Natural Environment and Trees and Enhancement of Natural Areas and Biodiversity

Surrey will celebrate its rich biodiversity, protected fish bearing streams and its corridors connecting areas of natural habitat. There will be a lush tree canopy throughout the urban area integrating nature into Surrey's neighbourhoods.

Be Home to the Region's Second Downtown

Surrey will be the Fraser Valley's metropolitan centre, connected to major regional destinations by rapid transit and an efficient road network designed to support economic activity. The City Centre will be a welcoming home to a diverse population and be one of North America's most sustainable downtowns, renowned for its skyline, spectacular views, urban design, arts and culture, and its green infrastructure. It will include distinct and vibrant neighbourhoods, a dynamic business sector, education and hospital districts, and will be an important regional and international destination for visitors.

Institutionalize Triple Bottom Line Accounting

"Triple-bottom line" accounting will be a standard corporate practice. Social, economic and environmental factors will be considered in decision-making processes. The City's asset management system will ensure that facilities and infrastructure systems have sustaining funding sources to support ongoing operation and long-term maintenance.

Incorporate Alternative Energy Sources, and Strive to Maintain Carbon Neutrality and No Net Impact From Waste Generated by the Community

The City will seek ways to reduce the use of fossil fuels and to be carbon neutral, through a wide range of alternative energy sources that focus on renewable energy. These may include district heating systems, wind, active and passive solar, biomass, waste to energy and geo-exchange heating and cooling. Most resources will be produced locally, recycled or reused.

Have a Full Range of Local Employment Opportunities and Green Businesses

Surrey will be a "green" business leader, home to advanced education institutions producing cutting edge sustainability research and graduates who are experts in sustainable development practices. It will be a place for others to come for green ideas and green business partners. The City will have a balance of high quality local jobs available for its employed residents, resulting in minimal commuting distances and a strong tax base.

Have a Network of Accessible Health and Social Services

A full range of community-based health and social services will be available throughout the City, including health education, and prevention and wellness promotion activities. Surrey will be home to the region's largest full service hospital, offering state of the art health care and supporting an innovative biotechnology industry and health sciences school.



Be a Safe Community

Property crime and crimes against persons will be infrequent. There will be no part of the City in which people feel unsafe or uncomfortable, regardless of their transportation mode, age or physical abilities. Early childhood and youth development programs effectively prevent young people from coming into contact with the criminal justice system. Accessible local services exist to help people resolve disputes, deal with substance abuse and mental health problems, secure housing and an adequate income and find meaningful employment so that health and social issues do not lead to criminal activities.

Lead the Way in Sustainable Community Design and Development

Surrey's builders and developers will be at the forefront of sustainable building technology, constructing "green" buildings and upgrading and retrofitting existing buildings to provide housing and office/commercial space that is accessible, affordable, durable, bright, healthy and low maintenance. New and retrofitted neighbourhoods will provide a range of safe and affordable housing that reflects the needs of Surrey's residents, and will provide an attractive public realm that encourages a vibrant street life and social interaction.

Embrace an Accessible and Diverse Culture

Surrey will embrace a diverse population from a broad range of ethnic and cultural backgrounds, and celebrate a rich blend of art, music, dance, theatre and other cultural celebrations through festivals and events accessible to all who live and work in the City.

Incorporate a Sustainable Agricultural Base and Local Food Security

Surrey will be a leader in the protection of its agricultural land reserve (ALR) and in enhancing the productivity of this land base. Surrey will promote urban agriculture and support sustainable agriculture, with most of the City's high quality food being produced locally. Fresh and healthy food will be available to people of all income levels. Food processing industries will create local jobs and incorporate a high "value added" component to the local economy.

Efficiently Move People and Goods, Not Just Vehicles

Walking, cycling and transit will be the preferred transportation options for most people. All communities will have comfortable, direct and safe walking routes to their day-to-day needs. Surrey will have a comprehensive cycling network and frequent and inexpensive transit service. Goods movement vehicles will have priority and private automobiles will be zero or ultra-low emission vehicles.

Promote Active Living and Cultural Opportunities

A variety of parks, recreation, library and other cultural opportunities will be widely available to people of all ages and abilities. A network of greenways and natural corridors will be one of the many ways by which Surrey residents and employees will enjoy a high level of fitness and wellness.

Promote a Society Where All Residents Feel a Sense of Belonging

Surrey will be a community where people have a strong sense of social connection, where volunteerism is widespread, and where there is pride in the community and a high level of citizen engagement. Surrey will be inclusive of persons of different ages, cultures, abilities, religions, backgrounds and lifestyles. It will be designed to be child, youth and senior friendly and accessible to those with special needs.

Support Housing Options to Meet the Diverse Needs of Surrey's Population

Surrey will be a city with a range of housing choices that meet the needs of households of various sizes, compositions and income levels in safe, affordable and appropriate housing. Those with special needs will have the supports they need to enable them to live as independently as possible.



THE GOALS OF SURREY'S SUSTAINABILITY CHARTER

Fundamental to the Charter is a statement of Goals under each of the three pillars of sustainability the Socio-Cultural Pillar, the Economic Pillar and the Environmental Pillar. Each pillar supports a 'High-Level' or "Long-Term" goal, followed by more spe-

cific or "Short to Medium Term" goal statements. These High-Level and Specific Goals provide the long-range policy objectives in support of achieving the vision for and commitment to sustainability.



SOCIO-CULTURAL GOALS

To promote a safe, caring, engaged, and liveable community, with a sense of place, that is inclusive of all aspects of diversity and provides a range of educational, recreational, cultural and employment opportunities, affordable and appropriate housing, transportation options and personal, health and social services that are accessible to all.

Specific Goals

1. Provide a range of accessible and affordable recreation, cultural and library services that respond to the needs and interests of the City's diverse population, including children, youth, seniors, multi-cultural groups, families and those with special needs;
2. Promote the development of a range of affordable and appropriate housing to meet the needs of households of varying incomes and household compositions and for people with special needs;
3. Institutionalize the principles of Universal Design to remove barriers and ensure accessibility throughout the City;
4. Work with other orders of government to ensure that there are sufficient, high quality health and social services available in appropriate, accessible locations to meet the needs of all residents, including vulnerable populations;
5. Create a City that is, and is perceived as being safe and secure;
6. Create neighbourhoods that have distinct identities, diverse populations, lively public spaces that promote social connections, and a range of accessible services and opportunities;
7. Design neighbourhoods that are friendly and responsive to the unique needs of children, youth, seniors and those with special needs;
8. Cultivate a community that is caring and compassionate, inclusive and respectful of all aspects of diversity, in which citizens are involved and connected, and have a shared sense of pride in the City;
9. Incorporate high quality design and beauty, including public art, in the public realm and the built environment;
10. Provide opportunities for meaningful community engagement in civic issues so that the City is responsive and accountable to the needs of the community;
11. Support and foster a broad range of accessible life-long learning opportunities ranging from early childhood development programs and literacy initiatives, to world-class post-secondary educational opportunities;
12. Establish major arts and cultural facilities in central locations and a range of local cultural and entertainment opportunities at locations throughout the City; and
13. Promote a variety of opportunities for community celebration and gathering through local and City-wide events and festivals, and through the establishment of a range of gathering places in neighbourhoods and at the and City-wide level.



ECONOMIC GOALS

To create a local economy that builds on Surrey's natural advantages, and uses the land base and human resources efficiently to create a broad range of well located, transit accessible and environmentally friendly businesses that provide attractive local employment opportunities and a sustainable revenue base for the City.

Specific Goals

1. Protect the integrity of the City's agricultural land reserve (ALR) and industrial land base for food production, employment and agro-business services that support the local economy. Work with these sectors to find ways to enhance the productivity of ALR lands in Surrey;
2. Respect natural areas and minimize the impacts of economic activities on the environment;
3. Promote environmentally friendly businesses and "green" building practices;
4. Use employment land efficiently, in terms of compactness, employment densities and support for high value jobs;
5. Promote the co-location or clustering of a range of appropriate business and personal services that support compact and complete employment areas while reducing the need for additional trips to access these services;
6. Locate economic activities where they can be best serviced by a sustainable transportation network that prioritizes the movement of people and goods over the movement of vehicles;
7. Develop a vibrant City Centre and municipal Town Centres as mixed-use areas with excellent transportation connections that create an attractive business environment. Concentrate office and retail employment that is not location-dependent in areas that are well serviced by public transportation;
8. Encourage alternative employment arrangements such as low-impact home base businesses and telecommuting that build a sense of community and help reduce impacts of economic activity;
9. Support local opportunities for technical training, advanced education, research and development;
10. Strive for a balance of one local job for every employed resident in Surrey, and range of high quality/high value local employment opportunities;
11. Strive for a balanced tax base that provides the revenue necessary to support the City's sustainability goals;
12. Embrace Community Economic Development and develop gainful employment opportunities for people facing barriers to employment. Support local businesses that contribute to the social well-being of the community by hiring individuals facing barriers to employment or by other means;
13. Encourage a life-cycle approach to economic development, where businesses are encouraged to consider long-term as well as short-term impacts of their operations; and
14. Work towards a revenue base that balances commercial and residential property taxes.



ENVIRONMENTAL GOALS

To demonstrate good stewardship of the land, water, air and built environment, protecting, preserving and enhancing Surrey's natural areas and ecosystems for current and future generations while making nature accessible for all to enjoy.

Specific Goals

1. **Terrestrial Habitat and Life.** Create a balance between the needs of Surrey's human population and the protection of terrestrial ecosystems, considering:
 - a. *Interconnecting Surrey and the areas outside Surrey through wildlife corridors, parks and natural areas;*
 - b. *Protecting to the extent possible, existing urban forests and natural coverage, protecting trees and maximizing the city's tree canopy;*
 - c. *Maintaining ALR farmland and promoting food self-sufficiency and production without negatively affecting existing natural areas.*
2. **Water Quality/Aquatic Habitat and Life.** Protect Surrey's ground water and aquatic ecosystems for current and future generations, considering:
 - a. *Groundwater;*
 - b. *Surface runoff;*
 - c. *Drinking water sources;*
 - d. *Creeks, streams, and river systems;*
 - e. *Sources of pollutants entering aquatic systems;*
 - f. *Natural riparian systems; and*
 - g. *Native ocean and freshwater habitats.*
3. **Air Quality.** Preserve clean air for current and future generations, considering:
 - a. *Local air quality;*
 - b. *Stability of the global atmosphere; and*
 - c. *Air quality issues related to both human and ecosystem health.*
4. **The Built Environment.** Establish a built environment that is balanced with the City's role as a good steward of the environment:
 - a. *Minimize the impacts of development on the natural environment;*
 - b. *Promote the use of native species and reducing the impact of invasive species;*
 - c. *Promote permeable surfaces where possible in new developments;*
 - d. *Incorporate opportunities for natural areas and urban wildlife;*
 - e. *Protect unique and valuable land forms and habitats;*
 - f. *Reduce energy and resource consumption in the built environment;*
 - g. *Minimize solid and liquid waste;*
 - h. *Establish guidelines and practices that create green buildings; and*
 - i. *Express community environmental values in new developments.*



A photograph of a concrete culvert structure over a stream with a rocky bed and pink flowers in the foreground. The culvert is made of large concrete blocks and has a rectangular opening. The water is clear and flows over a bed of smooth, rounded stones. In the foreground, there are several pink flowers and green leaves, slightly out of focus. The background shows some trees and a concrete wall.

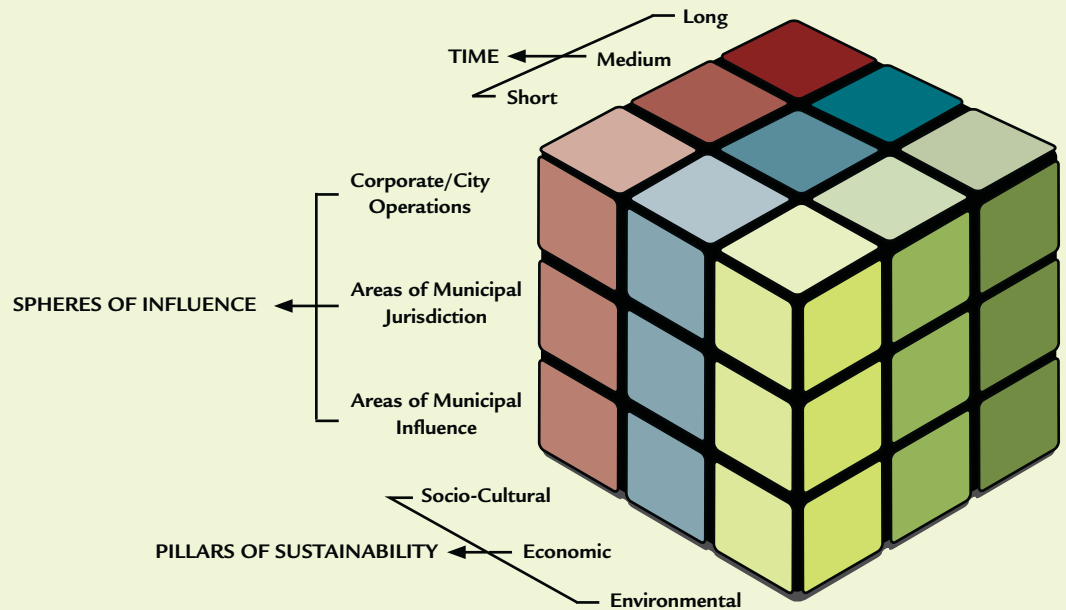
HOW DO WE REALIZE THE VISION AND GOALS OF THE CHARTER?

The Sustainability Charter is a statement of Vision, Goals and a general Framework for Implementation of this Vision. It is intended to guide Council, staff and others working with the City towards sustainability for Surrey, and in changing past practices where necessary.

The Vision and Goals are intended to have long-term applicability, not to be prescriptive. More specific direction is contained in the following **Action Framework**, in the **Scope of Sustainability** document and in the **Implementation Strategy** that will be developed in the next phase of the Sustainability Charter process.

THE ACTION FRAMEWORK

Surrey’s Sustainability Charter introduces a new way of organizing the three traditional “pillars” of sustainability, the three “spheres of influence” and the three time frames for implementation. The resulting action framework can be thought of as the “Sustainability Cube®.”



THE THREE PILLARS OF SUSTAINABILITY

The three widely accepted Pillars of Sustainability are:

The Socio-Cultural Pillar - For a community to be sustainable, the basic needs of its residents must continue to be met. This includes the need for housing, health care, employment, sufficient income and safety. A socially sustainable community must have the ability to maintain and enhance individual capacity and community capacity. To be effective and sustainable, individual and community resources need to be developed within the context of guiding principles of equity, social inclusion and interaction, security and adaptability.

The Economic Pillar - While environmental sustainability is fundamental to our survival, and socio-cultural sustainability is key to enriching human life, economic sustainability is essential for providing the resources required to enjoy a high quality of life now and in the future.

The Environmental Pillar - While all three pillars should be balanced in the decision making process, clean air, water and land are essential for our survival and the provision of renewable resources in perpetuity. The Charter outlines actions related to environmental sustainability in the areas of Air Quality; Water and Aquatic Habitat; Terrestrial Habitat and Life; and Built Environment.

THE THREE SPHERES OF INFLUENCE IN ACHIEVING SUSTAINABILITY

Municipal government is one of many organizations, both private and public, that influences sustainability. There are three significant roles, or “spheres of influence” in which Surrey can promote sustainability:

The Corporate Operations Sphere - The City of Surrey is a major corporation, employer and owner of land and facilities. The City’s activities are widespread and have a significant impact and influence on residents, businesses and institutions. Surrey’s leadership, by the way that it does business, is essential in promoting sustainability.

The Municipal Jurisdiction Sphere - The City’s legislated mandate is far-reaching. As well, local government is the most visible level of government in the day-to-day activities of residents, businesses and visitors. The City regulates land use planning, zoning, the transportation network, the water, sewer and drainage utilities, garbage collection and recycling and a range of regulatory by-laws including business licenses. As such, the City has considerable ability to influence change through its regulations.

The Influencing Others Sphere - As one of British Columbia’s and Canada’s largest and fastest growing cities, with a large number of elected officials in each order of government, Surrey’s residents, businesses and institutions have considerable influence over external agencies and other orders of government. The City can play a significant role in bringing together key stakeholders to work together in addressing local, regional, provincial, national and global sustainability issues.





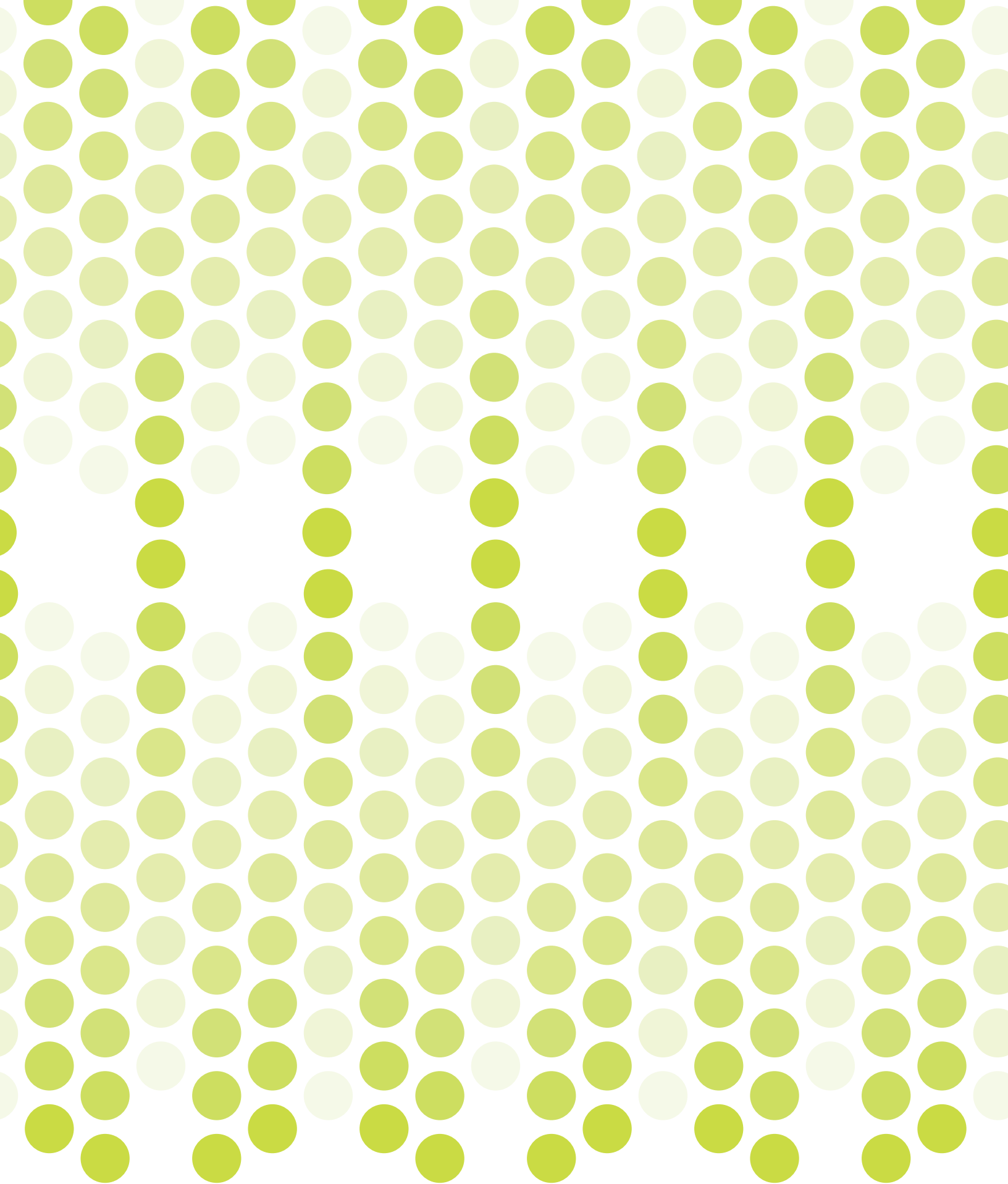
THE THREE TIME FRAMES

Immediate and Short-term Time Frame - These are actions that can be implemented quickly with relatively little preparation or additional resources or within 1 to 3 years.

Medium-term Time Frame - These are actions that can be implemented within a 3 to 10 year period.

Long-term Time Frame - These are actions that require longer lead times for implementation. The time frame for these measures may be 10 years or more.

The Sustainability Charter's Action Framework will be used in conjunction with the defined Scope of the Charter, as a basis for the Implementation Strategy.



SECTION

2

Implementing The Charter

PART 3 THE SCOPE OF SUSTAINABILITY

The Scope of the Charter is the critical component that identifies actions required to implement the Vision, the Goals and the Action Framework.

“The Scope of the Sustainability Charter” will be maintained as a living document that summarizes specific actions the City intends to take to achieve sustainability. Council will amend the Scope of the Charter as proposed actions and priorities evolve over time.

It will reflect the identified areas of interest under the three pillars of sustainability:

- The Socio-Cultural Pillar;
- The Economic Pillar; and
- The Environmental Pillar

...and that fall within the City’s three spheres of influence:

- Corporate Operations;
- Municipal Jurisdiction; and
- Influencing other levels of government.

The three Pillars of Sustainability often overlap. For example, the promotion of energy efficiency and waste reductions could be included under the Economic Sustainability Pillar. More efficient Transit options could also belong under the Social Sustainability Pillar.

Figure 3 illustrates these overlapping relationships.

For the City to achieve its objectives for Social, Economic and Environmental Sustainability, Surrey needs to be sustainable as a City, with revenue sources that are sufficient to meet the costs of its programs and initiatives. The targets and the recommendations that are set out below must be considered in keeping with the City’s ability to economically sustain these programs and initiatives.

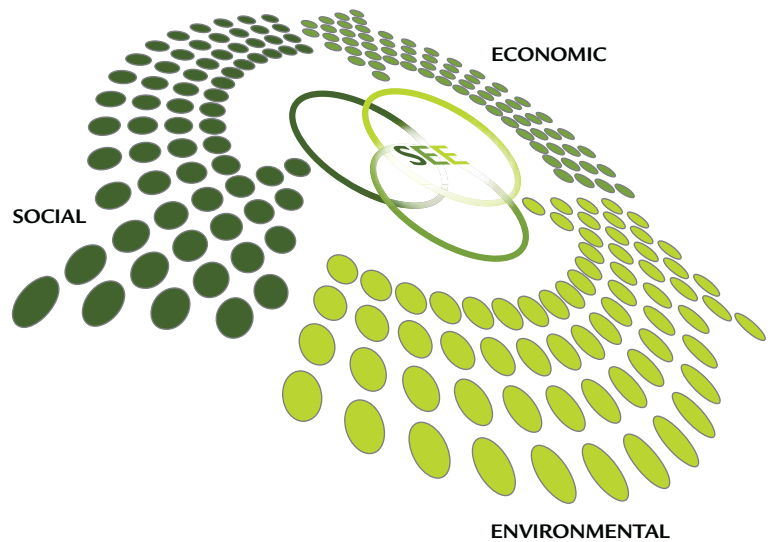


FIGURE 3:
Complementary Pillars of Sustainability

SCOPE FOR ACHIEVING ALL THREE PILLARS OF SUSTAINABILITY

The following two elements of the Scope of the Sustainability Charter are important to the achievement of all three of the Pillars of Sustainability.

G1: Create a City of Surrey Sustainability Office

The City will establish a Sustainability Office to act as a catalyst for sustainability throughout the corporation, and work with City staff to maintain a strong focus on sustainability within the City.

G2: Measure the City's Progress using Indicators and Targets

The City's ability to achieve its vision of Sustainability requires the setting of targets, and the establishment of "indicators" with current "baseline" values to monitor progress towards meeting these goals.

The City will develop targets and indicators that are:

1. Clearly related to the Vision, Goals and Scope items;
2. Measurable and easily understood;
3. Comprised of data that is readily available and will remain available over time;
4. Able to measure current performance against past performance; and
5. Achievable within a reasonable time frame with available resources.



SCOPE FOR ACHIEVING SOCIAL SUSTAINABILITY

CORPORATE OPERATIONS SPHERE

SC1: Personnel Policies and Staff Training

The City will continue to promote staff development and corporate structures that support the physical and emotional health and well-being of individuals and contribute to a healthy and productive work environment.

SC2: Cultural Awareness in the Workplace

The City will celebrate the cultural diversity of Surrey's workforce, and work to educate all staff of the backgrounds and needs of diverse cultural groups.

SC3: Sustainable Procurement Policies

The City will give priority to purchasing products and services from social enterprises or suppliers who blend business and social and environmentally sustainable values, provided that these products and services are also fiscally responsible.



MUNICIPAL JURISDICTION SPHERE

SC4: Cultural Awareness in the Community

Cultural activities are recognized as an important way for individuals to contribute to their communities. Culture is an essential tool in understanding the values, shared meanings and goals of residents within a community. Wide, inclusive participation in cultural activities contributes to community vitality and supports sustainability. The City of Surrey's past achievements in cultural planning, service delivery and promoting cultural awareness enabled Surrey to be recognized as a 2008 Cultural Capital of Canada.

The City will build on successes and cultural strengths by:

1. Organizing and participating in celebratory events of our multicultural heritage and traditional arts, through festivals, culinary celebrations and other participatory events;
2. Incorporating Public Art in each of Surrey's six town centres and recognizing civic leaders in the areas of arts and culture;
3. Implementing a Youth Cultural Services Strategy;
4. Promoting First Nations culture and traditions through partnerships;
5. Supporting initiatives that recognize the importance of digital technology to youth and new cultural practices; and
6. Promoting and raising awareness of arts and culture in Surrey in a manner that celebrates diversity and community identity and strives to ensure accessibility and inclusivity.

SC5: Plan for the Social Well Being of Surrey Residents

The City will continue to implement the recommendations of the Plan for the Social Well-Being of Surrey Residents and the five priority social issues that contribute to social sustainability for which the City has primary responsibility:

1. Creating a child and youth friendly City;
2. Programs and recreation opportunities for children and youth;
3. Initiatives to encourage citizen engagement with social issues and social planning activity to build community capacity;
4. City clean-up programs and civic pride initiatives; and
5. Ethnically and culturally appropriate and inclusive services, opportunities and programming.



SC6: Accessible and Appropriately Located Services within the City

The City will support the equitable distribution of services and amenities for Surrey residents by:

1. Developing and updating guidelines for the location of new City facilities, including recreation, arts, culture and customer service locations;
2. Mapping and continually updating locations of services and providing this information on the city's web site;
3. Facilitating business licenses for appropriate services;
4. Providing support for local service organizations, whether governmental or in the non-profit sector for actions that are within the City's mandated responsibilities;
5. Continuing to work with the Surrey School District and other community partners to support and develop the initiatives such as the Community Schools Partnership Initiative so that social and health services, as well as recreational, cultural, educational and library services can be provided at the neighbourhood level through the use of school facilities; and
6. Promoting additional opportunities for post-secondary education within Surrey.

SC7: Participation in Leisure Programs

The City will continue to remove barriers and increase accessibility to participation in its many leisure programs by:

1. Increasing the number of free and low cost offerings of leisure programs; and
2. Increasing opportunities for access to leisure for children, youth, seniors and those with special needs; and
3. Developing and updating guidelines for program accessibility.

SC8: Municipal Outreach, Public Education and Awareness

The City will promote education and awareness to develop a community that is engaged in the achievement of its sustainability goals by:

1. Encouraging residents, businesses, institutions and a range in interest groups to take responsibilities with regard to achieving a more sustainable City;
2. Facilitating and encouraging meaningful participation of all citizens in city policy decisions and encouraging residents to take responsibility in their actions; and
3. Involving School District 36 and advanced education institutions in Surrey in this education and awareness program.



SC9: Adequate, Appropriate and Affordable Housing

The City will develop and maintain a Housing Action Plan, which will set appropriate housing targets for the full range of housing needs for different household types, incomes and diverse needs and identify strategies and mechanisms for the implementation of the Plan.

The City will continue to support the Surrey Homelessness and Housing Society by providing advice and feedback on housing needs in Surrey and by contributing to the growth of the Affordable Housing Reserve Fund and the provision of affordable housing units through mechanisms such as the use of density bonusing.

C10: Historical and Heritage Assets

The City will actively document and protect Surrey's natural, built, social and heritage assets, including those assets of significance to the First Nations and later settlers, which provide a sense of place and belonging. This includes the preservation of significant assets, promoting and educating the public about our history and protecting our physical environment.

SC11: Public Safety and Security

The City will utilize the Surrey Crime Reduction Strategy and the Plan for the Social Well-Being of Surrey Residents as the foundation for addressing crime and public safety issues including:

1. Prevention and deterring of crime, through measures such as the incorporation of Crime Prevention Through Environmental Design (CPTED) principles in the design of communities and neighbourhoods, individual sites, and in the design of the public realm;
2. Apprehension and prosecution of offenders;
3. Rehabilitation and reintegration of offenders into society; and
4. Addressing both the reality and perception of crime, particularly where this creates a false image of the City that discourages quality development in our town centres and discourages peoples from their enjoyment of the public realm.



SC12: Adapting to Demographic Change

The City will design town centres and neighbourhoods to accommodate a wide range of households throughout their life cycle, including a rapidly changing multi-cultural community, families with children and seniors. This includes neighbourhoods that are child and youth friendly as well as safe, accessible and welcoming to seniors and new Canadians. In this regard, the City will prepare for demographic changes, such as the aging of the baby boom generation and a changing cultural makeup, and adapt to the changing needs of these groups by:

1. Promoting Universal Design and Adaptable Design, which describe the basic principles for considering the needs of people throughout their lives when designing buildings and the public realm;
2. Promoting Transit Oriented Development (TOD), which provides densities and mixes of land uses to support a high level of transit service in an environment that is friendly for pedestrians, cyclists, wheelchair users and those with other mobility and perceptual challenges; and
3. Encouraging and facilitating volunteerism and participation in community activities by persons of all ages, abilities and cultural communities.

SC13: Create a Fully Accessible City

The City will work towards providing access to all, including those with special needs by:

1. Systematically reducing barriers to mobility, including visual and perceptual barriers, through initiatives such as “Measuring Up”;
2. Creating an attractive, comfortable, walkable and accessible public realm, including adequate places to rest for those with mobility challenges;
3. Ensuring that all new neighbourhoods and developments are accessible and pedestrian, bicycle and transit friendly, and have safe and welcoming public gathering places;
4. Designing recreational paths and Greenways to be accessible where possible;
5. Designing and implementing programs to upgrade public infrastructure such as sidewalks and parks in neighbourhoods and developments that were created before current accessibility guidelines were in place; and
6. Promoting accessibility in provincial building codes and other mechanisms for achieving accessible buildings.



SC14: Support Food Security

Food is essential not only to maintain life, but to support healthy and productive residents. Food security is ensuring that that sufficient healthy food is accessible locally at a reasonable cost and that there is a secure supply of food for the future that is produced by sustainable practices.

To support food security, the City will:

1. Develop policy and research ways to support local food production;
2. Promote buying local farm products, urban agriculture and new methods for efficient food production;
3. Implement healthy eating and food and beverage practices at City facilities; and
4. Support the distribution of food to those who need it.

SC15: Literacy, Education and Training

The education system develops Surrey's future citizens. Literacy and education are important for creating informed, engaged and meaningfully employed citizens. Given the forecasted increase in population in the South Fraser region, due in large part to immigration, and the percentage of Surrey's population that has not completed high school education, the City acknowledges the critical importance of education and training opportunities for Surrey's citizens.

The City will deliver programs that improve literacy and skills for its citizens of all ages by:

1. Increasing the number of programs related to early literacy, to ensure that Surrey's children are ready to learn when they enter school;

2. Enhancing initiatives that assist residents whose first language is not English to learn and practice their English skills, in order that they can participate in education and training programs to improve their economic independence and ability to participate fully in society;
3. Implementing programs that address adult literacy needs in partnership with local educational institutions, to help residents improve the skills they need to succeed in and contribute to Surrey's economy; and
4. Increasing access to programs that enhance computer literacy skills for residents of all ages and abilities, so that they have the skills to find and assess computer-based sources of information.

The City will also support the Community Literacy Plan through its own programs and through advocacy with other levels of government to ensure that community-based literacy providers have the resources they need to meet the needs of Surrey's diverse community.

The City will continue its strong advocacy role with the Provincial and Federal Government to ensure the equitable allocation of resources to Surrey schools and for English as a Second Language instruction, training, and continuing education. The City will also champion the expansion of SFU Surrey and Kwantlen Polytechnic University's Surrey campus in programs and research areas critical to Surrey's socio-cultural, economic and environmental development.



INFLUENCING OTHERS SPHERE

SC16: Socio-cultural Infrastructure and Services

Social infrastructure and services are the primary responsibility of the federal and provincial orders of government. The impacts of failures in the system are, however, often most visible at the local level. The City's Plan for the Social Well Being of Surrey Residents and the Crime Reduction Strategy form the basis for addressing this scope item.

The Plan for the Social Well-Being of Surrey Residents identifies the three primary roles that the City can plan in facilitating solutions to social issues for which the City has limited, secondary or no direct mandate or legislative authority, in the areas of housing. They are:

1. **Understanding.** Acquiring and maintaining knowledge about the issues affecting the city in each of the social service issue areas. This includes organizing forums with social service providers, stakeholders, governments, etc to facilitate dialogue, participating on local and regional roundtables, and taking steps to stay abreast of emerging trends and opportunities and funding opportunities relative to social service issues.
2. **Advocating.** To seek resolution to issues in the City of Surrey by sharing information, discussing needs, assisting in developing solutions and establishing priorities with other orders of government, funders and community stakeholders.
3. **Supporting.** The implementation of solutions to social service issues through actions that are within the City's mandated responsibilities.

SC17: Crime Reduction Strategies

While the legal system is managed by the federal and provincial governments, the impacts of crime are often most visible at the local level. The City's Crime Reduction Strategy will form the basis for addressing this scope item.

SC18: Community Economic Development

Community Economic Development (CED) is the process by which local people build organizations and partnerships that interconnect business with other interests and values, for example, skills and education, health, housing, and the environment.

The City will promote local CED opportunities by initiatives such as:

1. Facilitating discussions between the community and service providers with the other orders of government and the private and non-profit sector, such as the United Way and local Business Improvement Associations;
2. Enabling in the development process for necessary training facilities at appropriate locations; and
3. Promoting training programs for immigrants including ESL and upgrading language skills, refugees, persons with lower incomes, and those with special needs through information distribution channels; and
4. Encouraging senior levels of government to enhance and provide more support for ESL programs with a focus on meeting the needs of children, youth and immigrants.





SC19: Equity in Social Infrastructure Investments

The South Fraser region, and Surrey in particular, is now the location of greatest growth in the Lower Mainland and this trend is anticipated to extend long into the future. In spite of this growth, the bulk of the investments by senior levels of governments in social infrastructure has been made in older, slower growing parts of the region.

To promote equity, the City will work cooperatively senior levels of government to focus with significant proportion of future social infrastructure investments into Surrey, as the region's second major urban centre, including:

1. Hospitals and health care facilities;
2. Major convention and sports facilities;
3. Higher education and training facilities;
4. Transportation infrastructure;
5. Cultural amenities;
6. Government offices; and
7. Community services.

SC20: Coordination with Local Educators on Sustainability

Partnering with educational organizations is essential for engaging the community and educating youth on Surrey's sustainability issues.

The City will work with and provide information and professional outreach to organizations such as School District 36, career and trades training centres and post-secondary institutions to promote opportunities for students to contribute to the City's sustainability initiatives.



SCOPE FOR ACHIEVING ECONOMIC SUSTAINABILITY

CORPORATE OPERATIONS SPHERE

EC1: Corporate Economic Sustainability

For the City to be in a position to promote and implement the Social and Environmental Pillars of Sustainability, the Economic Pillar must be addressed. Property taxes are the primary source of discretionary revenue for local governments.

The City requires sustainability initiatives to be affordable within the realm of the City's financial capability, i.e., the initiatives themselves must be sustainable over time.

EC2: Economic Development Strategy and an Employment Land Strategy

In the rapidly evolving economy that is increasingly focused on international trade, transportation and service and information based industries, it is important that the City create an attractive environment for investment in these sectors. This will create local job opportunities, reduce commuting distances, support a green economy and provide a sustainable expanding source of revenue from local businesses.

The City will foster an economy that is balanced and sustainable by:

1. Adopting and regularly updating an Employment Lands Strategy that protects a supply of employment land necessary to meet the city's objectives for a balanced assessment base and healthy economy;
2. Developing, adopting and periodically updating an Economic Development Strategy with a view to making Surrey a more attractive place for business investment;
3. Fostering an environment to retain and support existing businesses;
4. Establishing an economy that provides at least one job for each resident in the workforce;
5. Increasing the City-wide industrial/commercial property tax assessment base to at least 40% of the total property tax base;
6. Actively market Surrey's competitive advantages, including land availability, centrality to the region, business-friendly regulatory environment, proximity to post-secondary education institutions, a skilled workforce and transportation access, including access to highways, the U.S., harbours and airports.



EC3: Sustainable Infrastructure Maintenance and Replacement

The City of Surrey has made significant investments in infrastructure such as civic buildings, roads, lighting, sanitary sewers, water mains and storm water management. Buildings and other municipal facilities, such as parking lots and playing fields, are major investments that have significant environmental impacts and play an important role in the social structure of the City. It is important that these City investments are sustainable over time.

The City will ensure long-term corporate sustainability related to infrastructure by:

1. Developing policies and programs to undertake full life-cycle cost analysis evaluation of new and retrofitted buildings and infrastructure;
2. Designing new infrastructure as green infrastructure and to have as long a service life and as low a long-term maintenance cost as practicable;
3. Work with the region regarding life of major roadways, especially the maintenance impacts of truck routes and the potential for increased water transport; and
4. Establishing financial plans and related reserves to ensure adequate long-term funding for the maintenance and replacement of the City's infrastructure systems.

EC4: Sustainable Fiscal Management Practices

The City will work toward corporate financial sustainability by:

1. Employing sound accounting and financial management practices and structures;
2. Considering the life cycle investment in all facility decisions, including replacement costs, operating costs and maintenance costs;
3. Developing policies and practices to institutionalize "Triple Bottom Line" accounting principles in the decision-making process to ensure that, in addition to financial considerations, social and environmental costs and benefits are evaluated in the decision-making process; and
4. Include sustainability criteria/considerations in Corporate Reports.

EC5: "Green" Infrastructure and Sustainability Grants

Grants and cost-sharing programs at the regional, provincial and federal level have proven to be highly effective tools in assisting municipalities in leveraging funding to implement sustainability measures. Examples include green infrastructure, community planning grants and support for alternative transportation modes, such as greenway and cycling networks.

The City will maximize the utilization of available funding to support the development of green infrastructure in the city.



MUNICIPAL JURISDICTION SPHERE

EC6: Sustainable Practices through Business Licensing Operational Requirements

The City will, where practical and feasible, establish business-licensing requirements that promote sustainability objectives while encouraging business development, including the consideration of performance-based standards for business licensing.

EC7: Sustainable Building and Development Practices

The City will institute sustainable development practices by:

1. Working with the development and construction industry, educational institutions, professional organizations, utilities, and other orders of government to make information on sustainable development costs, benefits and implementation practices readily available, easy to understand, and applicable to the development environment in Surrey;
2. Working with building owners to promote the retrofit of existing buildings to improve energy efficiency and reduce resource consumption and waste; and
3. Working in collaboration with the provincial government and local builders in the development of a new “green” building code and enhanced standards and practices to promote sustainability in new construction, including the minimization of construction waste and the maximization of the use of construction materials from renewable and recycled sources.

EC8: Energy Security

There are increased concerns about significant increases in energy costs and the potential for supply disruptions that may have major economic and social impacts.

The City will address these concerns and the associated economic and social impacts by planning for land use patterns, infrastructure, development and building practices that:

1. Promote the use of low-impact, renewable energy sources;
2. Minimize energy requirements;
3. Reduce reliance on fossil fuels; and
4. Promote community energy solutions, such as Integrated Energy Master Plans.

EC9: Quality of Design in New Development and Redevelopment

Planning for communities that are developed at higher densities and in mixed uses demand a higher quality of design that promotes exemplary building design, attractive streetscapes, view protection and inviting public spaces. Design quality is fundamental to achieving sustainable communities, particularly in the City Centre, town centres and in higher density, mixed use nodes and corridors.

The City will promote innovation and will require sustainable design in building and community design, including the promotion of mixed-use development.

EC10: Green Technology Development and Businesses

There is an increasingly significant role for low-impact industries in the economy, particularly those developing sustainable technologies while creating local jobs that produce high economic benefit with low social and environmental impacts.



The City will promote “Green” businesses by:

1. Making businesses aware of the economic value and benefits of locating Green businesses in Surrey and actively encouraging and assisting these businesses to move to Surrey;
2. Working to ensure that there is adequate, suitably located and zoned land with the necessary infrastructure for these businesses and industries; and
3. Developing and promoting flexible zoning, development and building guidelines and business licensing requirements that remove any unnecessary barriers to the introduction of Green businesses.

EC11: Surrey’s Employment Land Base

The City has policies in place to preserve the integrity of its industrial land base. However there is pressure from external sources to convert these lands to “higher values” uses. In the context of the Employment Lands Strategy, that the City work with the region and the province to:

1. Establish a secure but equitable distribution of employment lands to promote a healthy local and regional economy; and
2. Ensure that there are ample quality jobs available locally and that the benefits and impacts of economic development are shared throughout the region.

EC12: Surrey’s Agricultural Land Base

The City has policies in place to preserve the integrity of a productive agricultural land base. However there is pressure on this land base from external sources for conversion of these lands to “higher values” uses.

The City will:

1. Work with the region and the province to protect the City’s ALR, designated agricultural land base, the quantity and quality of agricultural soil;
2. Work with the agricultural sector to enhance the productivity of ALR lands and to encourage increased production of ALR lands in the City that are not now used for agriculture due to these being unused or used for non-agricultural purposes;
3. Work with the agricultural, commercial and industrial sectors to accommodate agricultural uses that are not soil-dependent in other employment areas, such as the construction of greenhouses on industrial roof tops, to free additional lands for soil based agricultural production.
4. Develop policies, regulations and programs that will help to reduce the amount of land in the ALR that is used for non-agricultural use or is out of agricultural production;
5. Work with the agricultural sector to promote Surrey’s agricultural products, both through “buy local” programs and promotion of products outside of Surrey;
6. Encourage a stable and skilled local agriculture employment base, including the engagement and education of young people on the value of agricultural careers;
7. Promote opportunities for “value-added” processing businesses related to local agricultural products; and
8. Support initiatives and projects that introduce agriculture into the urban and the industrial areas of the city through means such as community garden plots, green roofs with agricultural capacity, “vertical farming” and other initiatives.



INFLUENCING OTHERS SPHERE

EC13: Municipal Finance Reform

Municipalities are limited in their revenue capacity and depend largely on property taxes and utility fees to finance all municipal operations. This limits the City's ability to apply financial incentives to promote sustainability goals. With the financial pressures faced by municipalities, from an assessment perspective, there have been times when municipalities have been pressured to make land use decisions from the perspective of revenue stream considerations, as opposed to planning principles that would promote a sustainable future.

The City will seek, through the federal and provincial governments, creative reform of municipal finances such that revenue streams available to local government are expanded or replaced by sources that are more directly linked to growth in the economy (i.e., sales tax, income tax, etc.) to promote sustainability and to create a level playing field among municipalities.

EC14: Taxation Policies and Financial Incentives

Federal and provincial governments have considerable resources that can be applied to promote sustainability. The City will promote more sustainable economic development by encouraging other orders of government to:

1. Adopt Tax Shifting principles, e.g., taxing “bads” (e.g., non-renewable resources and waste products) not “goods” (e.g. employment and services);
2. Introduce effective carbon taxes in a revenue neutral manner;
3. Offer energy efficient building rebates and educational programs;
4. Provide green building technology assistance and financial incentives;
5. Create fuel-efficient vehicle standards and low-impact vehicle rebates;
6. Increase taxation of agriculturally designated land that is not in active production; and
7. Modify capital gains taxation policies and other mechanisms to provide incentives for the redevelopment and intensification of underutilized existing urban properties.



EC15: Building/Energy Codes and Standards

To promote sustainable buildings, the City will build on existing programs, codes and standards to:

1. Support the province's initiatives to incorporate proven and cost-effective best practices in sustainability into a new provincial building code and energy codes; and
2. Support the province and the development and construction by providing education on these new codes and facilitating easy implementation.

EC16: Increased Transit and Transportation to Support a Sustainable Economy

In addition to promoting an efficient road network for the movement of goods, the City will continue to work with the province and TransLink to:

1. Develop and regularly update Surrey's Sustainable Transportation Plan to support the efficient and low-impact movement of people and goods;
2. Accelerate the provision of new rapid transit and the expansion of the frequent bus network in order to support City Centre, Town Centres, Corridors and Employment areas in Surrey;
3. Ensure that the carbon footprint of transportation is reduced;
4. Advocate for Triple Bottom Line analysis in the development of new transit and transportation networks.

EC17: Educating the Workforce

Essential to the health and growth of the local economy is the development of a skilled work force. To promote local career training opportunities, the City will:

1. Work with the federal government, the province, School District 36 and the private sector to provide a wide range of educational opportunities at key locations within the City;
2. Work with the City's two universities to develop them as world class institutions with a variety of programs that serve the future of the region and City and build on the City's strengths, such as agriculture, transportation and health care; and
3. Work with federal and provincial agencies to promote the access to training and retraining programs and higher education, including groups with special access, economic, linguistic or cultural needs.



SCOPE FOR ACHIEVING ENVIRONMENTAL SUSTAINABILITY

CORPORATE OPERATIONS SPHERE

EN1: Energy Efficiency

The City operates a wide range of facilities and consumes large quantities of energy in its operations. The City can take steps in its own operations to reduce energy consumption and also to reduce its production on Greenhouse gases.

The City will take steps to achieve energy efficiency and demonstrate community sustainability leadership by developing programs and undertaking staff training aimed at:

1. Developing and adopting policies for the use of triple bottom line analysis in decisions related to building energy use;
2. Incorporating alternative energy systems such as geo-exchange and solar heating systems for city facilities where feasible, including new and retrofitted buildings and structures;
3. Being carbon neutral by 2012; Conducting demonstration projects such as green infrastructure pilot projects; and
4. Make the public aware of the city's energy initiatives, successes and pilot projects.

EN2: Waste Reduction

The City will minimize consumption and waste generation and promote zero waste by:

1. Minimizing resource consumption;
2. Maximizing recycling and reuse;
3. Reducing its output of solid and liquid waste;
4. Innovating and expanding the City's waste and recycling programs;
5. Using extensive composting as a waste management tool; and
6. Introducing waste to energy conversion opportunities where practical.



EN3: Vehicle Fleet Programs

Transportation is responsible for about one-third of the Greenhouse Gas emissions in the Lower Mainland and is one of the primary users of energy in corporate operations.

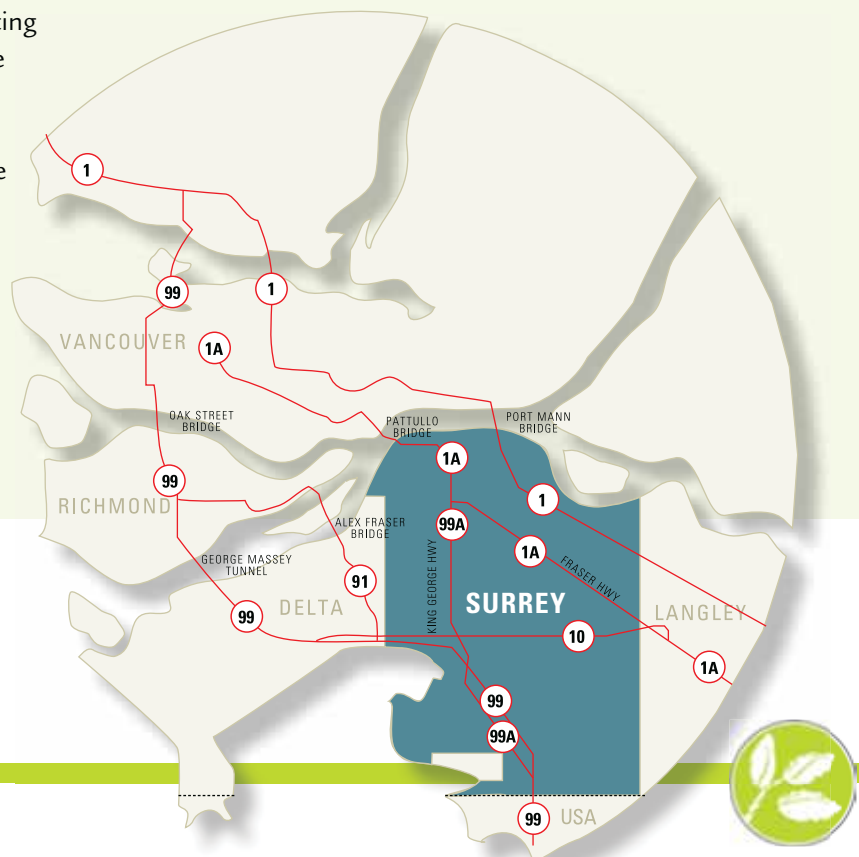
The City will take steps to minimize the impacts of transportation on the environment by:

1. Developing policies to “right-sizing” the City’s fleet of vehicles;
2. Developing a vehicle and equipment procurement policy that includes as one of its decision criteria the “carbon footprint” of the equipment, including both the embodied energy needed to produce the vehicle and energy used to operate the vehicle;
3. Analyzing the costs and benefits of alternative fuels in relation to their social, environmental and economic impacts, and use those fuels that have less impact on the environment without creating negative social impacts and do not exceed the City’s economic ability;
4. Adopting policies for “triple bottom line” analysis in purchasing decisions related to the procurement of equipment and vehicles.

EN4: Employee Trip Reduction Program

The City can assist its employees in making sustainable transportation choices by:

1. Locating new municipal facilities to facilitate walking, cycling and transit;
2. Promoting and facilitating walking, cycling, transit usage and carpooling in place of single occupant automobile usage in employee work tasks;
3. Reducing the number of trips that are necessary for conducting City business by choosing meeting locations that are transit accessible and closest to participants and by implementing alternative meeting methods, such as teleconferencing, video conferencing and webinars;
4. Developing and implementing policies focused on encouraging employees to use alternative transportation modes for commuting.



EN5: Green Procurement Policies and Practices

Local governments are major buyers of goods and services. The purchasing habits of governments can set the tone for local businesses and residents, and can create the “critical mass” of customers required to introduce green products economically into a community.

The City will support Green Procurement by:

1. Establishing and implementing a “Sustainable Meeting Policy” and a “Sustainable Events Policy” that is applicable to all internal meetings and public events, which includes the use of local products where possible, supports community economic development initiatives, reduces of trip lengths, promotes alternative modes of transportation and reduces waste, such as a “bring your own coffee mug” policy;
2. Using best sustainability practices in product selection, including minimal packaging, full product life cycle cost analysis and “triple bottom line” evaluation;
3. Establishing minimum green building and construction standards to be applied for new municipal facilities;
4. Conducting sustainability audits for new and existing municipal facilities;
5. Requiring consultants and contractors to demonstrate their knowledge and commitment to sustainable business practices in the proposal evaluation process; and
6. Requiring green procurement policies and practices as part of the purchasing process.

EN6: Enhancement and Expansion of the Nature Matters Program

The City of Surrey will continue to provide community education and awareness of Surrey’s natural environment to City staff and the public. This will include enhancement of stewardship and youth action opportunities for the community through volunteerism. Expansion of the program will include integration of broader regional initiatives such as water conservation, air quality and waste management.

EN7: Implement and Publicize Green Infrastructure Pilot Projects

After an assessment to determine feasibility and potential benefits, the City will construct and implement green infrastructure pilot projects annually, to test and monitor new green technology and practices, and publish information and lessons learned on these projects. An example of such a pilot project is a parking lot designed with porous pavement. Rain water will run through the pavement, and water that is not infiltrated into the existing soil is collected in a gravel drain along the edge of the lot and directed to the adjacent detention pond where the water is released slowly to the natural watercourse to maintain base flows and to eliminate damage to the watercourse by storm surges.



MUNICIPAL JURISDICTION SPHERE

EN8: Sustainable Engineering Standards and Practices

The City will take steps to minimize environmental impacts of development by re-creating the natural environment in drainage, landscaping, sewer and water projects. Demonstration projects can be implemented and monitored to refine best practices and the City can distribute lessons learned to the development industry and to other jurisdictions.

The City will demonstrate best practices in sustainable civil engineering by:

1. Reviewing current practices and regulations and removing any unnecessary barriers to the provision of green infrastructure;
2. Implementing sustainable green infrastructure on public land, in public rights-of-way and in private developments;
3. Minimizing environmental impacts of development by re-creating the natural environment to the extent possible in drainage, landscaping, sewer and water projects; and
4. Implementing demonstration projects, including monitoring, refining of future best practices and distributing lessons learned.

EN9: Sustainable Land Use Planning and Development Practices

A fundamental responsibility of municipalities, and one of the most effective tools for achieving sustainability, is land use regulation and the control of land development practices. The location of the various types of land uses, transportation choices, density, and the mix of land uses, along with development practices, are key determinants in the ecological footprint of the City.

The City will promote sustainable land use and development by:

1. Establishing sustainability guidelines and policies in the Official Community Plan and in the development of all new and updated Neighbourhood Concept Plans;
2. Creating sustainability practices through the development of tools such as “Sustainability Checklists” that will be used in the review and approval of new development;
3. Working with financial institutions to promote the adoption of sustainability checklist features in development projects;
4. Working with the development industry to provide information and incentives to promote energy efficient and “green” buildings and developments;
5. Incorporating Transit-Oriented Development near rapid transit stations, at transit nodes and along transit corridors;
6. Requiring land use densities and mixes of land use and activities that allow local access to goods and services and support high levels of walking, cycling and transit use for residents and employees;
7. Formalizing site planning processes that avoid critical habitat and preserve, protect and enhance natural habitat and landscape features; and
8. Retaining and planting more trees and promoting the use of native and low-impact species of trees and plants in new developments.



EN10: Integrated Community Energy Master Plans

The City will achieve energy efficiency and reduce the production of greenhouse gases by:

1. Developing Integrated Community Energy Master Plans for key locations in the City with the first such Plan to be undertaken in the Semiahmoo Town Centre area;
2. Including policies and directions for energy efficient land uses and practices in all new Neighbourhood Concept Plans and Plan Updates; and
3. Working with private property owners to promote upgrades and retrofits that increase building energy efficiency.

EN11: Surrey's Commitment to the Climate Change Action Plan

Climate change is one of the greatest challenges of our time. The City will undertake the following actions to reduce the causes of climate change and to mitigate potential impacts:

1. Develop strategies and take actions to achieve the goals of B.C.'s Climate Action Charter, to which Surrey is a signatory;
2. Expedite the completion of the five milestones in the Federation of Canadian Municipalities' (FCM) Partners for Climate Protection process, including:
 - a. *Creating an inventory of corporate and community generated Greenhouse Gases;*
 - b. *Setting targets and timelines for GHG reductions;*
 - c. *Developing a local action plan that minimizes GHG emissions through a range of established best practices in each of the three spheres of influence;*
 - d. *Implementing the local action plan; and*
 - e. *Monitoring progress on the action plan and reporting results.*

3. Create an adaptation strategy to deal with the unavoidable impacts of climate change.

EN12: Enhancement and Protection of Natural Areas, Fish Habitat and Wildlife Habitat

Surrey's significant natural habitat areas support a wide range of plant and animal species and provide large valued green space and natural areas that not only provide natural habitat, but also provide buffers to urbanization and support low impact forms of recreation.

The City will support its natural areas by:

1. Continuing to expand education and awareness of the importance of nature in the City through the Nature Matters Program, the Salmon Habitat Restoration Program (SHaRP), the Surrey Natural Areas Partnership Program (SNAP), ECO Rangers, and the Releaf Program;
2. Undertaking an Ecosystem Management study to update the City's mapping, policies and practices with regard to the identification, protection and management of environmentally sensitive areas using the Ecosystem Management Approach;
3. Showing environmental leadership in the management, conservation and/or development of City-owned lands;
4. Undertaking remediation works in cases where unsustainable practices have been used in the past;
5. Maintaining and increasing the area of fish habitat and wildlife habitat in the City, in both established and newly developed areas; and
6. Continuing to protect and remediate existing natural areas and to acquire additional new natural areas.



EN13: Enhancing the Public Realm

The design of the public streets, public rights-of-way, linkages, parks and natural areas, is an important element in the achievement of sustainability. In many urban areas, up to 30% of the land area is allocated to streets and parking. Design of public streets, sidewalks, walkways and the spaces between shall minimize negative social, economic and environmental impacts, and maximize comfortable, safe and beautiful streets.

The will City support sustainability through the public realm by:

1. Implementing street widths and roadway design standards that minimize the negative impacts of transportation facilities on communities while providing appropriate infrastructure in support of the transportation needs of the City;
2. Establishing attractive pedestrian environment with appropriate sidewalks or paths wherever walking is a viable option;
3. Expediting the completion of a continuous Greenway, bicycle and trail systems throughout the City;
4. Installing lighting and street furniture such as benches, bike racks and transit shelters at appropriate locations that supports walking, cycling and transit use within attractive, complete and compact communities;
5. Applying Crime Prevention Through Environmental Design (CPTED) principles to make streets safe, comfortable and welcoming for all users;
6. Designing and programming active public spaces and streetscapes to increase public safety and a sense of ownership and community;

7. Implementing demonstration projects in the public realm that promote best practices in sustainability, such as natural drainage systems (e.g., permeable pavers) and improved lighting (e.g., energy efficient heads, white light and minimum spillover into adjacent buildings or the night sky).

EN14: Public Education and the Sharing of Information

The City will initiate demonstration projects and make information available by:

1. Providing information on best practices in areas such as alternative energy systems, energy efficiency, recycling and reuse, composting, and reduction of solid and liquid waste through a variety of communication means that are easily accessible to local residents and businesses;
2. Providing information on best practices in new and retrofitted building technology to promote energy efficiency and reduce resource consumption;
3. Creating an interactive, readily accessible and easily used sustainability web site;
4. Making the city's sustainability indicators, targets and the results from monitoring these indicators available for public review and comment; and
5. Institute an awards program to recognize significant local sustainability initiatives.



INFLUENCING OTHERS SPHERE

EN15: Sustainable Transportation Options

The City has significant influence over the number of trips people make and the modes of travel they will choose through land use practices and the design of streets and other transportation facilities. However many crucial transportation systems are managed and financed by other orders of government, in particular public transit, regional roads and the provincial highway network.

The City will advocate for sustainable transportation services at all levels of responsibility by:

1. Working with the Province and TransLink to dramatically increase transit service and the frequent transit network in the City of Surrey;
2. Seeking the application of Triple Bottom Line analysis in the evaluation of all major transportation programs and projects; and
3. Maximizing regional, provincial and federal funding for improved transit, cycling routes, High Occupancy Vehicle (HOV) lanes, goods movement facilities and other priority sustainable transportation modes.

EN16: Land, Water and Air Quality Management

While the City is a key player in environmental management within the boundaries of the City, other agencies such as the Ministry of Environment have jurisdiction over legislation, regulations, monitoring and enforcement.

The City will advocate sound land, water and air quality management practices with other agencies to:

1. Protect water resources;
2. Promote regulations and practices related to ensuring that storm water runoff causes minimal environmental risks;
3. Monitor and report on soil, water and air quality;
4. Minimize air emissions and environmental impacts from both mobile and static sources in the region;
5. Reduce the use of harmful pesticides, particularly for cosmetic uses;
6. Mitigate the impacts of contaminated soils;
7. Encourage recycling, reuse and the reduction of the amount of waste produced by businesses; and
8. Reduce the impacts of noise sources.

EN17: Enhance Biodiversity

The City will advocate for sustainability in the areas of biodiversity, wildlife and fisheries by requesting additional tools and resources from senior levels of government, including:

1. Improved legislation for critical wildlife habitat protection;
2. Habitat management data, such as Sensitive Habitat Inventory Mapping (SHIM) and federal and provincial habitat and Species at Risk mapping;
3. Technical and financial assistance for habitat protection, potentially in partnership with private organizations and the community;
4. Practical, effective and equitable approaches to protect fish habitat and wildlife habitat;
5. A coordinated regional biodiversity strategy; and
6. Environmental monitoring resources to identify and manage areas of environmental concern as they emerge.





PART 4 THE IMPLEMENTATION STRATEGY

The **Implementation Strategy** will be completed as Phase III of the Sustainability Charter Process. It will set priorities, establishes targets, measures progress, and identifies roles, responsibilities, resources and timeframes.

The Implementation Strategy will:

1. Prioritize items within the Scope of Sustainability document;
2. Establish targets and indicators with baseline (i.e., initial) values to measure progress towards targets;
3. Identify roles, responsibilities and the resources needed to implement the Implementation Strategy;
4. Outline plans, policies, practices and procedures to create a Sustainable City;
5. Establish timelines for implementation; and
6. Establish regular monitoring and reporting mechanisms that provide opportunities for effective public review and input.

There will be an annual reporting process on the Implementation Strategy, to report on the previous year's successes and to set new tasks for the coming year.

The Implementation of Surrey's Sustainability Charter will require a significant degree of staff involvement and a high level of inter-departmental cooperation and coordination, as many of the responsibilities for implementation will be shared.

There will be a need for strong municipal policies and an oversight structure, as well as for a high degree of community involvement and participation.

Measuring Progress – The role of indicators and targets

The City's ability to achieve its vision of Sustainability requires the setting of targets, and the establishment of "indicators" or mechanisms to monitor progress towards meeting these goals.

Indicators and Targets will be established to support achieving the vision, goals and scope items of the Sustainability Charter and these will be:

1. Clearly related to the Vision, Goals and Scope items;
2. Measurable and easily understood;
3. Comprised of data that is readily available and will remain available over time;
4. Able to measure current performance against past performance; and
5. Achievable within a reasonable time frame with available resources.

Immediate Actions under the Implementation are identified in Appendix 1.



APPENDIX 1 - IMMEDIATE ACTIONS

In advance of the preparation of the Sustainability Charter's first Implementation Strategy, the City of Surrey is proceeding with a number of immediate actions to advance the Vision and Goals set out in the Charter. The following are some examples:

ACTIONS FOR ALL THREE PILLARS OF SUSTAINABILITY

G1: Establish a Sustainability Office

Council has approved a budget for the establishment of a Sustainability Office, which will oversee the implementation of the Charter. Staff from all City departments will provide support to the Sustainability Manager, who will act as a catalyst for sustainability throughout the corporation, and maintain a strong focus on sustainability within the City.

G2: Establish a Sustainability Indicators Task Force

A Task Force has been set up to define key indicators and targets to achieve the Charter's goals, to establish baseline values for these indicators and to define a monitoring program for the Charter's implementation Strategy.

ACTIONS UNDER THE SOCIAL SUSTAINABILITY PILLAR

CORPORATE OPERATIONS SPHERE

SC2: Enhance Cultural Awareness in the Workplace

The City will continue to enhance the program of cultural awareness events, including the celebration of key multi-cultural holidays and festivals.

MUNICIPAL JURISDICTION SPHERE

SC4: Enhance Cultural Awareness in the Community

Surrey's first Fusion Festival was a recent example of the City's role in celebrating our cultural diversity. Under the auspices of the "Cultural Capital of Canada" program, the "Catalysts, Connections and Intersections" will support six public art projects that explore Surrey's natural and built heritage, cultural diversity and First Nations history.

SC5: Improve the Social Well Being of Surrey Residents

Surrey is working with the Surrey School District on an expanded StrongStart Program, Community Kitchens and the Healthiest Babies Possible Program.

The Community School Partnership Program with School District 36 now has three elementary schools and 3 inner-city Secondary Schools being used as neighbourhood hubs, where services and programs will be more accessible and responsive to the unique needs of each neighbourhood.

SC6: Raise Awareness of Accessible and Appropriately Located Services within the City

A Community Resources map, describing and identifying the location of local social services is being launched on the City's web site.

SC7: Expand Participation in Leisure Programs

The City is increasing the number of free and low cost offerings of leisure programs under the "Everyone Gets to Play" initiative, and is expanding the youth and children Leisure Access Program in inner city schools.

SC9: Increase the Supply of Adequate, Appropriate and Affordable Housing

A Housing Action Plan is currently being prepared, which will set appropriate housing targets for the full range of housing needs for different household types, incomes and needs and identify strategies and mechanisms for the implementation of the Plan.

SC11: Improve Public Safety and Security

The City is continuing to implement recommendations of the Surrey Crime Reduction Strategy. Immediate Actions under the Strategy include:

- The introduction of 10 Community Safety Officers (CSO) in Surrey. CSOs are unarmed peace officers, working under the general supervision of a regular RCMP member, who will engage the community in crime prevention measures and crime reduction programs.
- A website focused on providing the community with information on how to reduce the risk of being victimized through crime.

- Partnership with the Surrey School District, RCMP and others on tools to identify youth most at risk of becoming involved in gang related activities.
- A 'voucher scheme' will provide discounted paint to those victimized by graffiti and support for the painting of murals at high profile locations.

SC13: Create a Fully Accessible City

The City, in partnership with the Surrey Association for Community Living, is using grant funding under the "Measuring Up" initiative and the 10 by 10 Challenge program to address community accessibility and inclusion.

SC14: Support Food Security

The Harvest Box program provides access to healthy, low cost, local produce, through the City's Parks, Recreation and Culture facilities.

SC15: Promote Literacy, Education and Training

The Mayor's Task Force on Literacy and Early Childhood is focused on enhancing literacy skills and lifelong learning in Surrey. The Surrey Public Library is expanding programs that build community capacity in the area of early literacy with programs to teach parents to build pre-reading skills with preschoolers and programs to provide skills and resource kits to daycare providers to improve the story time experience for children in daycare.

The City will also expand programs and opportunities that support early literacy through continued collaborative partnerships, including the First Steps project and Community Care Licensing of CLS preschool programs.

ACTIONS UNDER THE ECONOMIC SUSTAINABILITY PILLAR

CORPORATE OPERATIONS SPHERE

EC2: Complete an Economic Development Strategy and an Employment Land Strategy

The City has developed an Employment Land Strategy to define a strategic vision for Surrey's employment lands, and an Economic Development Strategy to expand and diversify employment opportunities and high value jobs in Surrey while strengthening Surrey's dual roles as a vibrant urban economy and a centre of agricultural production.

EC3: Initiate a Sustainable Infrastructure Maintenance and Replacement Program

The City is developing Asset Management Programs that will assist in managing the City's investment in capital assets and identify the financial resources required to sustain and replace those assets over time. Initially, the City will undertake a valuation

exercise to determine the worth of City assets to be maintained using the Public Sector Accounting Board (PSAB) practices.

EC5: Apply for "Green" Infrastructure and Sustainability Grant Funding

The Fergus Creek Integrated Storm Water Plan was awarded a Local Government Infrastructure Planning Study Grant. The Fergus Creek study is proposing green infrastructure, which includes leading edge innovations to be applied to development sites within the Fergus Creek drainage basin.

MUNICIPAL JURISDICTION SPHERE

EC7: Promote Sustainable Building and Development Practices

The City has held workshops regarding sustainable development practices with the building industry, and will create and distribute brochures on sustainable building and development practices, beginning with information on the potential to use geo-exchange energy for the heating and cooling of buildings.

EC8: Increase Energy Security through District Energy facilities

The City has entered into a Memorandum of Understanding with BC Hydro to conduct an Integrated Energy Master Plan for the Semiahmoo Town Centre. The partners will work with area landowners

to explore district heating options, promote high performance buildings and energy efficiency, reduce the use of electricity and maximize the use of alternative energy sources.

The City has adopted an interim density bonus-ing policy for Guildford and the City Centre, which provides for the integration of "above code" energy efficiency and alternative energy measures into building design to qualify as part of the community benefit associated with granting higher density to individual development projects.

The City Centre Plan Update will provide higher density, transit-oriented development patterns that will minimize the energy used for travel and will support potential future district heating networks.

EC9: Improve the Quality of Design in New Development and Redevelopment

Design Guidelines are being developed for the Semiahmoo Town Centre, Grandview Heights and the City Centre, which incorporate a high quality public realm, support the concepts of “place-making”, encourage the implementation of green infrastructure and building technologies and support for walking, cycling and public transit.

EC10: Research Opportunities for Green Technology Development and Businesses

The City has retained a consultant to study the potential for eco-industrial infrastructure in a local business/industrial park setting.

INFLUENCING OTHERS SPHERE

EC16: Increase Transit and Transportation to Support a Sustainable Economy

The City is completing an updated Transportation Strategy that supports higher density and mixed land uses, and supports a significantly higher modal shares for walking, cycling and transit in an effort to reduce congestion, green house gases and energy usage while creating a street network that supports efficient goods movement.

EC12: Enhance and Promote Surrey’s Agricultural Land Base

Events such as farmers markets, annual farm tours and the “Flavours of Surrey” food festival will increase awareness of Surrey’s agricultural base and encourage residents to “buy local”.

The Nature Matters Program promotes the importance of local agriculture to the community through educational campaigns, such as road signage, brochure development and participation in community events.

EC17: Educate Surrey’s Workforce

The City of Surrey has entered into a Memorandum of Understanding with SFU Surrey with the intent of partnering toward facilitating the construction of new facilities to accommodate a growing student population.

ACTIONS UNDER THE ENVIRONMENTAL SUSTAINABILITY PILLAR

CORPORATE OPERATIONS SPHERE

EN3: Introduce a Green Vehicle Fleet Program

The City is developing a fleet management plan to “right size” vehicles, reduce fuel consumption and reduce green house gas emissions.

EN4: Implement Employee Trip Reduction Measures

A Sustainable Meeting Policy has been developed with a view to ensuring that City meetings are held, whenever possible, at locations that are central, close to the majority of participants, and pedestrian, bicycle and transit-oriented.

EN6: Enhance and Expand the Nature Matters Program

Community education and awareness of Surrey’s natural environment is a focus for the City. Actions include stewardship and youth action opportunities for the community through volunteerism. Expansion of the program will include integration of broader regional initiatives such as water conservation, air quality and waste management.

The City is also working with the School District in assisting to develop lesson plans for teachers, teacher workshops, class fieldtrips and other activities and the creation of a host of school-based programs within the newly re-developed Nature Centre at Green Timbers.

The City is implementing the ‘Operation Save H2O’ program that provides residents with water conservation tools through direct community interaction and household visits.

EN7: Implement and Publicize Green Infrastructure Pilot Projects

As part of its on-going practice of constructing green infrastructure pilot projects to test and monitor new green technology and practices, a “green” parking lot has been designed and constructed with porous pavement and is being monitored with a view to expanding this application.

An interactive web site is being developed for use by the general public and teachers to assist in the process of educating others about green infrastructure.

MUNICIPAL JURISDICTION SPHERE

EN8: Apply Sustainable Engineering Standards and Practices

The City Centre Plan Update utility servicing study will investigate the feasibility of incorporating sustainability practices in water conservation, implementation of district heating systems, “green infrastructure” for reducing stormwater impacts, green roofs and the reduction of impervious surfaces.

An Erosion and Sediment control bylaw has been initiated within Surrey. The bylaw is intended to ensure water quality and streams are not negatively impacted from sediment disturbances. The internal development information tools for builders, a local conference cosponsored with the International Erosion Control Association and working with the BC Home Builders Association is assisting in informing the industry.

The City’s Drainage Bylaw was recently adopted to include sustainable drainage practices in new designs and standards. These include the use of infiltration galleries, porous pavements and rainwater gardens as means to reducing the impact of a development’s footprint.

EN9: Institutionalize Sustainable Land Use Planning and Development Practices

The City is developing a Sustainability Checklist, in consultation with the development industry, City committees and community stakeholders. New development projects will be measured in relation to the Checklist to determine the degree to which the goals set out in the Charter are being met.

The Official Community Plan Update will incorporate policies that address the Charter’s vision and objectives.

EN11: Initiate Actions in Support of the Climate Change Action Plan

The City as a signatory to the provincial Climate Action Charter is participating in Metro Vancouver’s Climate Protection Subcommittee and has completed an inventory of current actions that are being taken to mitigate and adapt to the effects of climate change.

The City will complete Milestones 1 and 2 of the Federation of Canadian Municipalities (FCM) Partners for Climate Protection (PCP), which includes the completion of a corporate and community Greenhouse Gas (GHG) emissions inventory and forecast and the establishment of emission reduction targets.

A moratorium on new developments being constructed in floodplain areas has been implemented as a result of changing flood elevations that have occurred due to climate change impacts and those predicted to come in the future.

The City is studying the Crescent Beach area related to the impact of rising ocean levels, local subsidence and groundwater intrusions and their effects on the local drainage system based on current and future conditions.

A comprehensive flood protection study is being undertaken on the Fraser River Foreshore area. The study addresses the need for enhanced flood protection related to the annual freshet.

EN12: Enhance and Protect Natural Areas, Fish Habitat and Wildlife Habitat

The City has initiated an Ecosystem Management Study that includes an updated inventory of environmental assets and management processes to protect and enhance these assets.

There will be a further expansion of stewardship programs that enhance natural areas and creeks, such as SNAP and SHaRP, while also providing unique education opportunities for students involved in the programs.

EN13: Enhance the Public Realm

The City has hired a City Beautification Coordinator who will work with the community to beautify the City. Initiatives will include but will not be limited to installing decorations and seasonal lighting, implementing a banner program, installing public art at Gateways, town centers, major streets and civic parking lots, and promoting mural projects, graffiti mitigation, entrance signs and other civic projects.

EN14: Increase Public Education and the Sharing of Information on Sustainability

The City is preparing a Sustainability Web Site that will provide information on the Charter and its implementation, with information and web links that will assist households and businesses to become more sustainable.

The City has prepared a 3-brochure series titled “Sustainability & You” themed on ways that residents can become more sustainable in their daily routine.

Through Nature Matters and numerous Park, Recreation and Culture programs, Surrey residents and businesses are being engaged in learning about natural area protection, pollution prevention and waterwise practices. The City’s website includes information for all ages. The City is developing a “Passion for Action” web-based education tool for schools with modules on sustainable practices.

APPENDIX 2 - GLOSSARY OF TERMS

Adaptable Design: Adaptable Design refers to building features, particularly housing features, intended for use by people with disabilities or those who are limited in mobility. Adapting a space beyond current building code requirements enables people to create livable homes where they can live and thrive independently.

Alternative Transportation Mode: These are transportation modes for the movement of people, or reducing the need to travel, that provide alternatives to travel by Single Occupant Vehicle (SOV). These modes include walking, cycling, transit, carpooling, telecommuting and other electronic means of meeting or conducting business.

Biodiesel: A form of biofuel consisting of diesel fuel that is mixed with organic matter, such as vegetable oil, which can provide higher fuel efficiency and reduced emissions. Biodiesel differs from biofuels in that the organic matter can be recycled waste products, such as restaurant cooking oil.

Biodiversity: Biodiversity is the variety of species and ecosystems on earth and the ecological processes of which they are a part – including natural ecosystems, living species and other components that provide genetic diversity.

Biofuels: Biofuels are renewable gas or liquid fuels, or fuel supplements, made from organic matter rather than fossil fuels, including waste products such as wood chips and plants grown specifically for biofuels, such as corn, wheat or sugar. Today's primary biofuels are ethanol and biodiesel.

Carbon footprint: This is the measure of the impact that the activities of an individual or organization have on the environment in terms of the amount of Greenhouse Gases that they produce, measured in unit of carbon dioxide equivalent.

Carbon neutrality: This refers to having no net emissions of Greenhouse Gases. This is generally achieved by reducing GHG emissions where possible, offsetting these emissions by investing in projects that eliminate GHGs, such as renewable energy projects, or “sequestering,” which is capturing and containing GHG emissions, such as in underground storage facilities.

Climate Action Charter: This is a non-binding set of principles developed by the provincial government in co-operation with the Union of BC Municipalities that has been endorsed by the City of Surrey as a framework for action on mitigating the impacts of Greenhouse Gases and adapting to climate change. It calls for compact land use patterns and requires municipalities to become carbon neutral in their operations.

Community Economic Development (CED): CED is a community-based and community-directed process that combines social and economic development and is directed towards fostering the socio-cultural, economic, and environmental well-being of individuals, communities and regions.

Crime Prevention Through Environmental Design (CPTED): CPTED is a pro-active approach that seeks to reduce or eliminate opportunities for crime through the incorporation of design principles at the conceptual through to the detailed design stages of building, site and public realm projects. An example of these principles is to have “eyes on the street,” i.e., designing street frontages and buildings with windows to provide surveillance over spaces.

GLOSSARY OF TERMS

District Heating: This is a system for distributing heat generated in a centralized location for residential and commercial heating requirements such as space heating and water heating. The heat can be obtained from a cogeneration plant burning fossil fuels, such as high efficiency natural gas boilers, but increasingly biomass (e.g., waste wood products), geothermal heating and central solar heating are also used. District heating can provide higher efficiencies and reduced GHG emissions than conventional heating.

Ecological Footprint: This is the area of the earth that would be required to sustain an individual or organization in terms of its resource consumption and waste products. It is estimated that three planet earths would be required to sustain the world's current demands. North American lifestyles are estimated to require five planet earths to sustain in the long term.

Ecosystem Management: An approach to Environmentally Sensitive Areas (ESAs) that focuses on ecological values and ensures that areas of ecological significance are protected and enhanced, e.g., wetlands, habitat reservoirs, wildlife corridors and areas with unique flora and fauna.

Food Security: Food security is when community residents have access to safe, affordable culturally acceptable, nutritionally adequate diet through a system that maximizes community self reliance, environmental sustainability and social justice

Geo-exchange Energy: Geo-exchange, also referred to as ground source heat pumps, is energy that is stored within the earth that can be used to heat or cool space or water. During the warm part of the year, heat can be extracted from a building and transferred to the earth using a process analogous to how a refrigerator extracts heat to keep the interior cold and, in the cool part of the year, the process can be reversed to extract heat from the ground.

Greenhouse Gas (GHG): This refers to any atmospheric gas that contributes to the greenhouse effect by absorbing infrared radiation produced by solar warming of the Earth's surface. They include carbon dioxide, methane, nitrous oxide, and water vapour. Although greenhouse gases occur naturally in the atmosphere, the elevated levels especially of carbon dioxide and methane that have been observed in recent decades are directly related, at least in part, to human activities such as the burning of fossil fuels, livestock and the deforestation of tropical forests and other absorbers of carbon dioxide.

Green Infrastructure: Green infrastructure uses elements of the natural environment to replace or supplement traditional infrastructure, such as drainage, sewers and water that contributes towards sustainable resource management. It is a network of facilities that can include parks, local woodlands, gardens, Greenway corridors, streams, street trees and built structures such as on-site water detention facilities and green roofs.

High Occupancy Vehicle (HOV): This refers to passenger vehicles that have one or more passengers in addition to the driver. HOV lanes give priority to vehicles with 2, 3 or more occupants.

Indicator: This is a measurable quantity that is indicative of a desired sustainability policy outcome. For example, if the desired outcome is to significantly reduce automobile dependence, the percentage of trips taken by different transportation modes (e.g., walking, cycling, transit, driving, carpooling) could be selected as an indicator.

GLOSSARY OF TERMS

Integrated Energy Master Plan: Energy planning for projects and sites that considers demand-side issues, such as building energy efficiency and site layout, as well as supply-side issues, such as energy security, costs and environmental impacts, to develop an integrated system that provides the optimal Triple Bottom Line outcome for the City, the site developer and the end user. These plans often have a “Governance” component, which describes how the system would be best managed, e.g., by the building owner, an energy utility or a level of government.

Mixed-use Development: This is development that incorporates multiple uses within a building or a site. In general, this can be a combination of residential, commercial, office, institutional and low impact industrial uses. Mixed-use development allows for a range of needs to be met within one location, reducing travel between different locations for housing, employment and services, such as shopping.

Native species: These are plants that are indigenous to a locality. These plants are suited to grow in the natural climate without the addition of artificial assistance, such as fertilizers and regular watering. Native species also tend not to be invasive, meaning that they don’t encroach upon and replace other native plant species.

Natural Area: These are Areas with significant flora and fauna, including fish, terrestrial wildlife and bird habitats and connecting corridors, ravines, treed areas, open fields and bodies of water including ocean frontages, watercourses and wetlands. While natural areas are generally thought of as being outside developed areas, habitat is increasingly being re-introduced into urban areas.

Neighbourhood Concept Plan (NCP): These are Plans that are developed in consultation with land owners and other stakeholders for new, complete communities with a significant residential and multiple residential component that provide more detailed land use and density information as well as requirements for servicing, amenities and financing.

Official Community Plan (OCP): An official community plan is a statement of objectives and policies to guide decisions on planning, land use management, and development within the area covered by the plan (usually an entire municipality or parts of regional districts).

Performance-Based Standards: Performance-based planning uses goal-oriented criteria to establish review parameters for proposed land use plans or development projects. In contrast to conventional regulations-based planning, which states specifically what a developer is permitted to do with their site, the performance-based approach provides flexibility, provided that there is a net benefit to the community and that negative impacts, such as noise, pollution, visual impact or traffic, are reduced to acceptable levels.

Public Realm: The spaces within communities to which the public has access. It includes streets, parks, public facilities and a significant amount of “quasi-public” space, which is private property to which the public has access through legal agreements or the permission of the owner. Surrounding properties also impact the experience from the public realm, particularly the design of buildings and landscaping of open spaces.

(Statutory) Right of Way: Land that is provided to allow access to properties or for public infrastructure, including streets, sidewalks, paths and utilities such as water, drainage, sewer and communications facilities. “Easements” also allow access for specified users, such as the general public or a utility provider, over private property.

GLOSSARY OF TERMS

Right-sizing: In the context of vehicle fleets, “right-sizing” refers to a fleet composition where vehicle sizes and types are matched to their functional requirements to reduce costs and environmental impacts, particularly Greenhouse Gases.

Target: Used in conjunction with indicators, targets are the minimum values that the City would need to achieve to meet sustainability policy objectives. For example, if the indicator was the percentage of trips taken by different transportation modes, the target might be 30% of trips taken by travel modes other than the automobile by 2010, 40% by 2020 and 50% by 2030.

Transit Oriented Development (TOD): Residential, commercial and mixed-use centers designed to maximize access by transit and non-motorized transportation modes, particularly walking and cycling. A TOD neighbourhood generally has a center with a rapid transit station or transit corridor with high quality stops that is surrounded by relatively high-density development, with progressively lower-density spreading outwards. Ideally, TOD provides a wide range of local services in order to reduce the need for using private automobiles.

Triple Bottom Line (TBL) Accounting: While traditional accounting focuses on finding the least-cost solution in support of decision making, TBL requires that costs, i.e., economic considerations, be balanced against social and environmental benefits and impacts. For example, when considering transportation investments, the benefit of reduced travel time for drivers

Universal Design: The principle that products or designs should be developed with built-in features and flexibility that enables use by all people, regardless of age and ability at no additional cost.




Value-added Processing: Economic activities that enhance raw materials to produce a finished product with higher value, e.g., taking agricultural produce to create processed foods such as cheese, baked goods or specialty foods. Value-added processing can create additional employment opportunities, including skilled labour, and an increased property tax base.

Webinar: The use of internet technology to conduct meetings and seminars without the need to meet in person, reducing travel costs and environmental impacts. These technologies can include speaker phones, web cameras, online presentations and interactive text dialogues.

Zero Waste: The principle that all waste products must be dealt with locally and not “externalized” to other places, particularly with respect to liquid and solid waste. Increasingly, the concept is being extended to air emissions, e.g., carbon neutrality.

APPENDIX 3 - CROSS REFERENCE

As noted in the Charter document, some Scope elements overlap and issues may fall under more than one of the Pillars of Sustainability. The Table below identifies the location of each Scope item under one specific Pillar of Sustainability and under one of the City’s specific spheres of influence. It then also identifies where there are overlaps under other Pillars and Spheres of influence. This table will hopefully assist the reader in coordinating all potential actions under each Scope item.

SCOPE	G	General Scope Item	 = Primary Scope Focus  = Some Scope Overlap  = Minor or No Scope Overlap	KEY
	SC	Socio-Cultural Scope Item		
	EC	Economic Scope Item		
	EN	Environmental Scope Item		
	CO	Corporate Operations		
	MJ	Municipal Jurisdiction		
	IO	Influence Others		

SCOPE ITEM		SOCIAL			ECONOMIC			ENVIRONMENTAL		
		CO	MJ	IO	CO	MJ	IO	CO	MJ	IO
G1	Establish a Sustainability Office	●	●	●	●	●	●	●	●	●
G2	Measure progress using targets & indicators	●	●	●	●	●	●	●	●	●
SC1	Personnel Policies & Staff Training	●	○	○	○	○	○	○	○	○
SC2	Cultural Awareness in the Workplace	●	○	○	○	○	○	○	○	○
SC3	Sustainable Procurement Policies	●	○	○	◐	○	○	●	○	○
SC4	Cultural Awareness in the Community	○	●	○	○	○	○	○	○	○
SC5	Plan for the Social Well Being of Surrey Residents	○	●	◐	○	○	○	○	○	○
SC6	Accessible & appropriately located services within the City	◐	●	◐	○	○	○	○	○	○
SC7	Participation in Leisure Programs	○	●	◐	○	○	○	○	○	○
SC8	Municipal Outreach, Public Education & Awareness	◐	●	◐	○	○	○	○	○	○
SC9	Adequate, Appropriate & Affordable Housing	○	●	●	○	○	○	○	○	○
SC10	Historical & Heritage Assets	○	●	◐	○	○	○	○	○	○
SC11	Public Safety & Security	○	●	●	○	○	○	○	○	○
SC12	Adapting to Demographic Change	○	●	◐	○	○	○	○	○	○
SC13	Create a Fully Accessible City	◐	●	◐	○	○	○	○	○	○
SC14	Support Food Security	○	●	◐	○	◐	◐	○	○	○
SC15	Literacy, Educational & Training	○	●	●	○	○	●	○	○	○
SC16	Socio-cultural Infrastructure & Services	○	○	●	○	○	○	○	○	○
SC17	Crime Reduction Strategies		◐	●	○	○	◐	○	○	○
SC18	Community Economic Development	○	○	●	○	○	◐	○	○	○
SC19	Equity in Social Infrastructure Investments	○	○	●	○	○	○	○	○	○
SC20	Coordination with Local Educators on Sustainability	○	○	●	○	○	○	○	○	○
EC1	Corporate Economic Sustainability	◐	○	○	●	○	○	◐	○	○
EC2	Economic Development Strategy & an Employment Land Strategy	○	○	○	●	◐	◐	○	○	○
EC3	Sustainable Infrastructure Maintenance & Replacement	○	○	○	●	◐	◐	○	○	○
EC4	Sustainable Fiscal Management Practices	○	○	○	●	○	○	○	○	○



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