



CITY OF ABBOTSFORD 2020 SUSTAINABILITY REPORT

June 2021



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1. Introduction

The City of Abbotsford is the fifth largest municipality in British Columbia, and the largest municipality by land mass. With a growing population of more than 150,000 diverse and vibrant residents, Abbotsford strives to be the Hub of the Fraser Valley. Council's 2019-2022 Strategic Plan is delivering on several initiatives that contribute to the sustainability of Abbotsford. With a mission to continually improve the quality of life within the community by delivering key services for current and future generations, the City of Abbotsford's vision is supported by four cornerstones: Vibrant Economy, Complete Community, Fiscal Discipline and Organizational Alignment.

The City signed the Climate Action Charter in 2007, a provincial commitment to act on climate change by fostering a compact, complete and energy efficient community. Since then, the City has demonstrated leadership through initiatives that make progress towards such objectives.

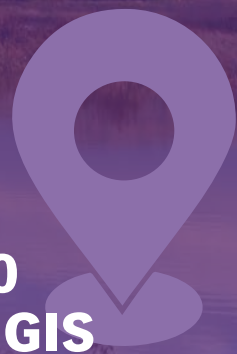
The 2020 Sustainability Report highlights the City's climate action and environmental stewardship by presenting sustainability initiatives that the City has taken in six categories, which are Planning, Buildings and Lighting, Parks and Open Spaces, Solid Waste, Transportation, and Water/Wastewater.

The impact of COVID-19 and the need to ensure sustainment of services for residents and safety for staff are also reflected in this report – from the closure of civic facilities to the public on March 18th, to the Stage 2 incremental reopening in July 2020, the pandemic had a significant impact on operations. It is reflected across all categories, with some notable items being the increase in solid waste collection, the efforts to prepare buildings and modify operations for reopening safely, the move to outdoor recreation and then reopening of recreation facilities. GHG emissions were also reduced by almost 19% overall due to the temporary closure of facilities, less work with contractors, and fewer kilometres travelled in fleet vehicles.



DID YOU KNOW

More than 130 City staff use GIS Webmaps on a daily basis, improving service delivery efficiency.

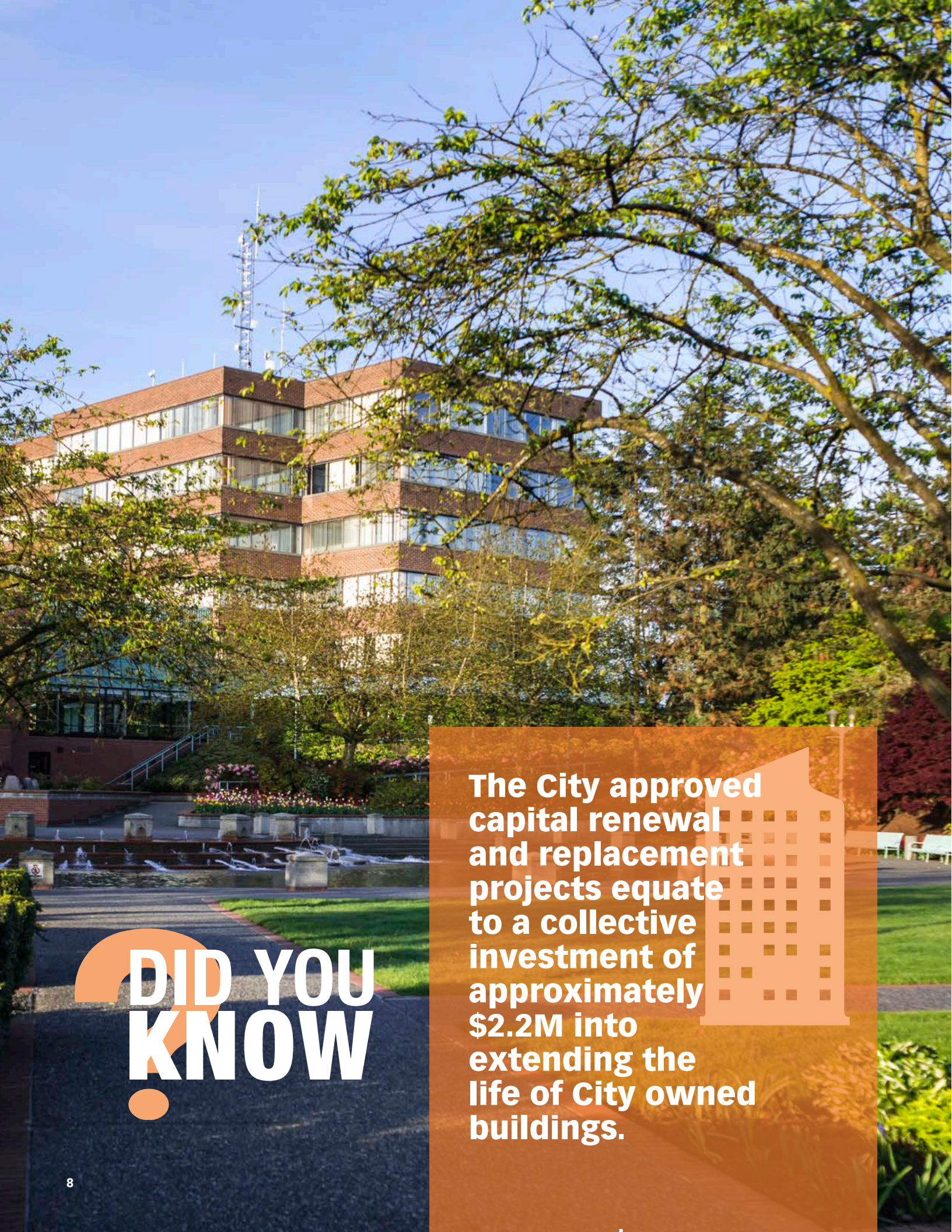


2. Planning

Planning and its associated community and organizational impacts are a key component to implementing a successful municipal sustainability initiative. Planning lays the groundwork for GHG emissions reductions, including through city-wide plans such as the Official Community Plan, Master Plans, Neighbourhood Plans and Special Studies. Land use planning that focuses on Smart Growth principles (compact, complete, connected, centred) plays an especially important role in energy and GHG reductions. Through plan development and implementation, the City meets a key Strategic Plan Principle of being a complete community that values our connections with the environment.

2020 Highlights

- Initiated the McKee Neighbourhood Plan (MNP) which will develop a vision for a new residential mountainside neighbourhood connected with trails, parks and open spaces. Integration of homes, schools, parks, trails, and environmental amenities will create a complete neighbourhood.
- Continued progress on the AgRefresh and Water Source Supply studies as part of the Plan 200K initiative.
- Continued progress on the Urban Forestry Strategy to promote tree retention and canopy cover growth within the City. When complete, this document will provide a clear direction and long-term vision for managing the City's urban trees for the next 15 years and beyond.
- Initiated work for EV-ready requirements in new multi-family residential buildings (consultation underway).
- Initiated carbon elimination studies at Abbotsford and Matsqui recreation centres.
- Completed projects as part of the Fraser Valley Adaptation Strategy, including an Agricultural Water Supply Assessment and use of reflective tarps on blueberry farms to manage extreme heat.
- Completed a transit exchange study to determine the appropriate timing and design of future transit hubs for service efficiency and ridership enhancement.
- Completed an update to the Water Efficiency Plan including a plan evaluation, comparative analysis using best practices and a quantitative analysis of current water use trends.



The City approved capital renewal and replacement projects equate to a collective investment of approximately \$2.2M into extending the life of City owned buildings.

3. Buildings & Lighting

The City of Abbotsford manages 188 municipal buildings which include 3 ice surfaces, 6 pools with 460,000 gallons of water and 1,300,000 square feet of occupied area. The City's goal is to minimize the energy required to provide comfort and safety and tap into renewable energy sources for heating, cooling, and power. This category also includes initiatives with respect to energy efficient street lights and lights in parks or other public spaces.

2020 Highlights

- Awarded grants from BC Hydro and FortisBC totaling approximately \$500,000 that build capacity to design and implement sustainability projects across the City.
- Continued to enforce Step 1 of the BC Energy Step Code for Part 3 buildings and implemented Step 1 for Part 9 buildings.
- Installed twelve Level 2 charging stations for City fleet, and four additional public EV charging stations, providing a total of thirty six City-owned EV Charging Stations.
- Increased utility of City buildings under COVID-19 Public Health protocols by installing approximately 30 new hand sanitizer stations and 550 square feet of Plexiglas to provide protection of staff and customers.
- Enhanced energy performance of City Buildings by completing scheduled asset replacements with more efficient components, including:
 - MCA building by increasing insulation and resolving air leakage during scheduled roof replacement.
 - Abbotsford Police Department headquarters by replacing aging skylights with insulated glass units utilizing UV reflective film.
 - Legacy Sports building by replacing air handling units with higher efficiency options.
- Continued use of two rainwater harvesting tanks for water collection: one at the Abbotsford Centre for making ice and the second at the Tradex for flushing toilets.



DID YOU KNOW

The City added 86.75 ha of parkland to the park inventory, the majority of it forested or open greenspace.

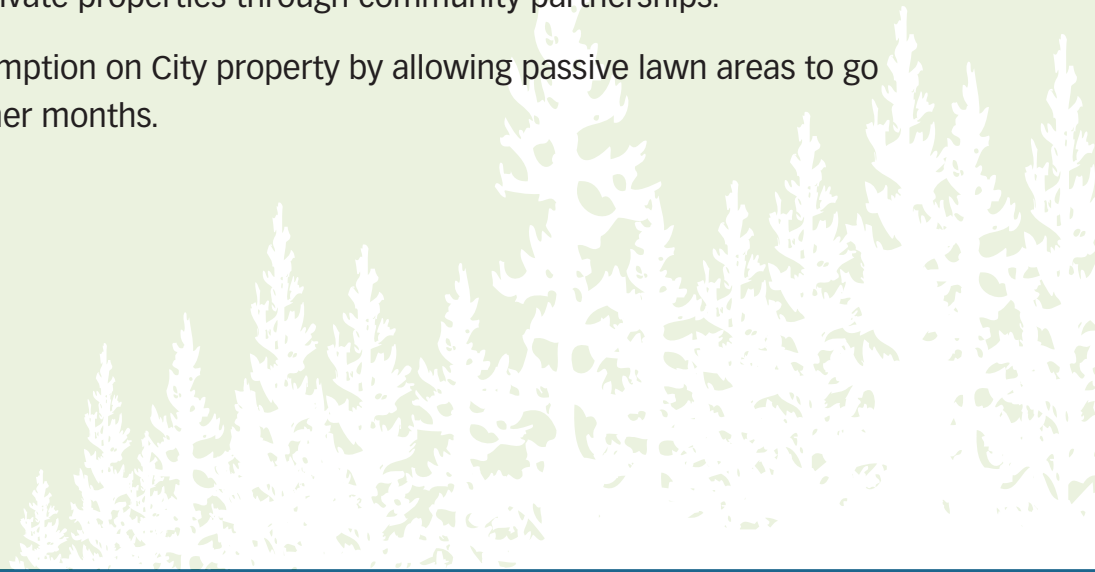


4. Parks & Open Spaces

Parks and open spaces refer to parks, greenways, boulevards, community forests, urban agriculture, and other naturally occurring areas. These spaces are among Abbotsford’s defining features and support the environmental, physical, social, and visual aspects of the City. Parks and open spaces play a key role in meeting the City’s Complete Community priority identified in the corporate strategic plan.

2020 Highlights

- Completed upgrades to enhance access and enjoyment of Hoon Park, Grant Park, and to the Willband Creek Connector Trail.
- Launched the Go Play Outside initiative to provide free community fitness and recreation activities outdoors, reducing barriers to participation during COVID-19.
- Planted 242 large street trees including over 150 along the Mt. Lehman Road widening to offset emissions from increased vehicle traffic.
- Restoration of various parks in partnership with the community; this included planting 140 trees in our natural areas with groups like the Abbotsford Mission Nature Club and the United Church.
- Removal of invasive weeds in partnership with the Fraser Valley Invasive Species Society including Wild Chervil, Tansy Ragwort, Giant Hogweed, and Japanese Knotweed.
- Enhanced natural energy efficiency resilience by providing 48 shade trees to homeowners on 12 private properties through community partnerships.
- Reduced water consumption on City property by allowing passive lawn areas to go dormant during summer months.





5. Solid Waste

Sustainable solid waste management and service delivery are a priority for a sustainable community. Reducing, reusing, recycling, recovering and managing the disposal of the residual solid waste minimizes environmental impacts and supports greenhouse gas reductions, and improved air and water quality.

2020 Highlights

- Set up almost 40% of serviced homes with collection day reminders through the Curbside Collection App.
- Replacement of aging solid waste collection trucks as part of implementation of the Solid Waste Operations Master Plan and the transition to automated cart collection – this means fewer and more fuel-efficient trucks to service the same number of homes.
- Implemented three-stream waste bins at all civic facilities to enhance waste diversion.
- Collected unprecedented volumes of yard waste during the first three months of the COVID-19 pandemic, ensuring diversion to compost facilities and reducing burning in City boundaries.
- Completed a curbside collection participation study in Summer 2020, collecting data from 8,500 stops that will enhance the City’s ability to target recycling and composting awareness education.

DID YOU KNOW

The 2020 curbside waste diversion rate was 66% for 2020, up from 64% in 2019.





The completed sidewalk projects brought the City's total length of sidewalks to 413km, or more than 1,000 times the distance of the Rotary Stadium running track.



DID YOU KNOW

6. Transportation

Transportation plays a significant role in the development of sustainable communities and Abbotsford understands how important it is to take a long-term view on maintaining and upgrading our city assets. The City's 2007 GHG inventory shows transportation as being the highest contributor to GHGs; as such the OCP sets a target of 25% of all trips being made without a vehicle, within the lifespan of the plan. The City's transportation vision seeks to create and support a vibrant, livable, healthy and sustainable community for residents, businesses, and visitors. Transportation actions that increase system efficiency, emphasize the movement of people and goods, and give priority to walking, cycling, ridesharing, and public transit, can contribute to reductions in GHG emissions and more livable communities.

2020 Highlights

- Completed the first year of the LED Streetlight Replacement Program, installed approximately 1,400 lights which contributed to a reduction of 10% of GHG emissions for street and traffic lights from 2007 levels.
- Aligned transit service levels to the significant drop in ridership due to COVID-19, ensuring efficiency of service and related GHG emissions.
- Completed construction of a 3.0km urban active transportation project – the Parkview-Tims-Charlotte Bikeway.
- Initiated implementation of Green Fleet Strategy, including the scheduled replacement of 11 vehicles with full electric options: an ATV, an ice resurfacer, two cars, and eight SUVs. This also involved right sizing some existing fleet from pickup to SUV upon replacement.
- Received \$80,000 in grants and rebates for electric vehicles.
- Completed a rural intersection improvement program resulting in safety enhancement through signage, road marking, and street lighting.
- Completed sidewalk, lighting, and utility improvements at King Road and Riverside Road, improving safety and access to important amenities.



**DID YOU
KNOW**

The City maintained over 900 kilometers of water mains, which delivered 65 million litres of water every day to Abbotsford and Mission (equal to 175 swimming pools).

7. Water & Wastewater

Managing and reducing water consumption and wastewater is an important aspect of developing a sustainable built environment that supports healthy communities, protects ecological integrity, and reduces greenhouse gas emissions.

2020 Highlights

- Continued water conservation program including the implementation of ongoing water restrictions from May 1st to September 30th; water restrictions are based on the Dickson Lake water level and are outlined in the City's Water Shortage Response Plan.
- Continued to work with residents and business owners to identify and resolve water leaks; over 2800 water leak notifications were processed, and approximately 1,700 final meter reads were completed.
- Continued partnership with BC Hydro to provide a clothes washer rebate program to reduce home water use and electricity; 130 rebates were issued to homeowners who replaced their washer with a new efficient model.
- Issued 208 toilet rebates to homeowners that replaced old toilets with a low-flow toilet to reduce residential water use.
- Provided 24 irrigation and landscape assessments and four rebates.
- Provided subsidy for ten rain barrels and ten indoor and outdoor water savings kits.
- Continued methane capture for space and process heat production at the JAMES Wastewater Treatment Plant, and completed the JAMES Renewable Natural Gas Study.
- Contracted beneficial reuse of 7,129 tonnes of biosolids through land application.
- Participated in the UBC microwave sludge pilot project.
- Initiated Biosolids Master Plan and beneficially reused approximately 6,396 wet tonnes of biosolids.



8. Conclusion

The City is committed to sustainability and climate action. Each year, this commitment is demonstrated by the multitude of actions undertaken in all service areas. While the annual Sustainability Report highlights the most relevant activities in the environmental pillar of sustainability, efforts to balance social, environmental, and economic benefits occur every day. The City is proud to instill a culture of conservation and strives to preserve Abbotsford's natural assets for generations to come.





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