



2023 SUSTAINABILITY REPORT


August 2023





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QUICK FACT

Council's 2022-2026 Strategic Plan identifies initiatives that contribute to the City's environmental, social and economic sustainability.

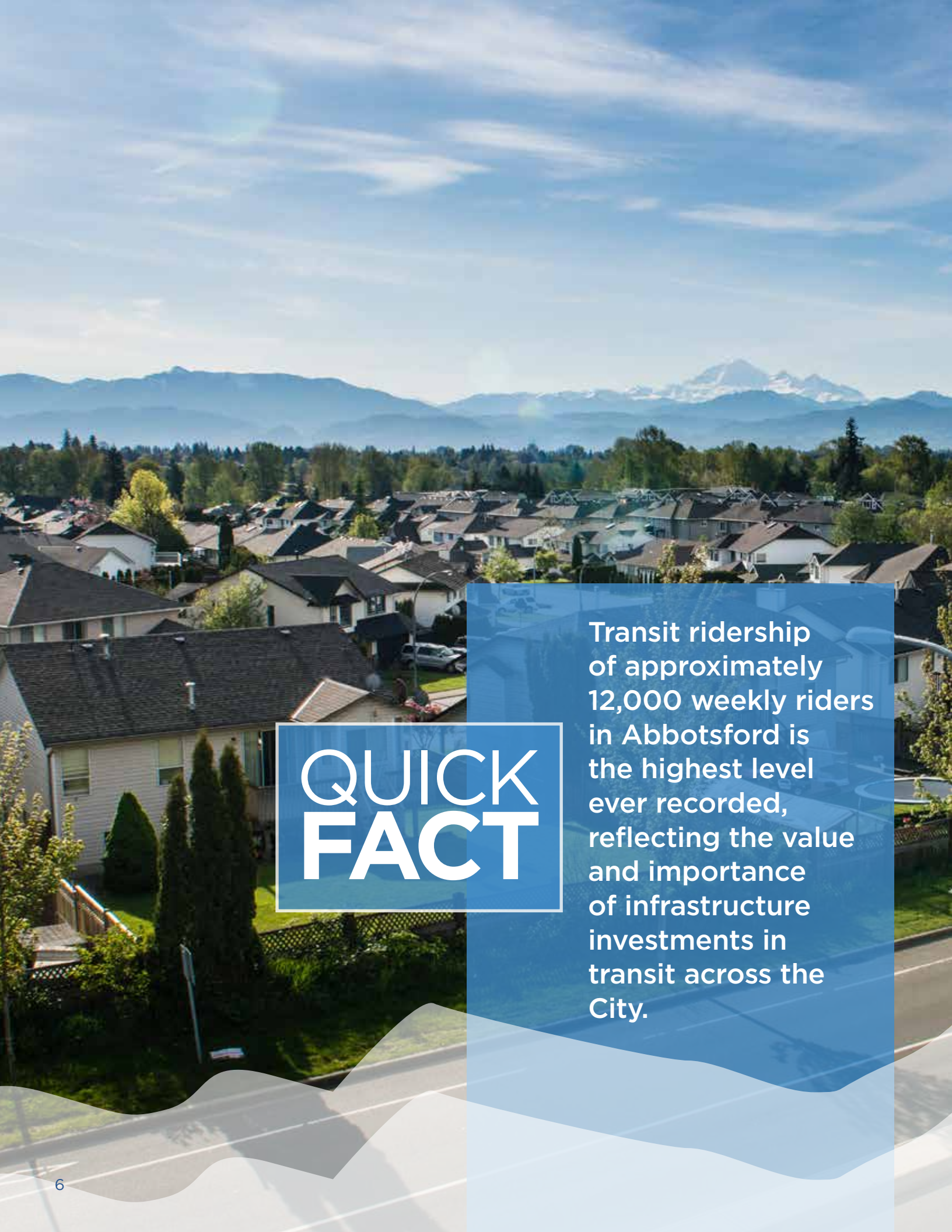
INTRODUCTION

With a population of more than 150,000 diverse and vibrant residents the City of Abbotsford is realizing its vision as the Hub of the Fraser Valley with centralized services and agencies to support residents, businesses and visitors across the valley.

Council's 2022-2026 Strategic Plan identifies initiatives that contribute to the City's environmental, social and economic sustainability. With a mission to continually improve the quality of life within the community by delivering key services for current and future generations, these four principles support the City of Abbotsford's vision: Inclusive and Connected Community, Sustainable and Safe City, Vibrant and Growing Economy, and Organizational Excellence and Integrity.

The City signed the BC 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 continues to demonstrate leadership through initiatives that make progress toward these objectives, which have taken on increasing importance after the flooding experienced in fall 2021.

This sixth Sustainability Report, covering 2023, highlights the City's climate action and environmental stewardship by presenting sustainability initiatives that the City has taken across seven categories: Planning, Buildings & Lighting, Parks & Open Spaces, Solid Waste, Transportation, Water & Wastewater and Finance & Governance.

An aerial photograph of a suburban neighborhood in Abbotsford, British Columbia. The houses have dark roofs and are surrounded by green lawns and trees. In the background, there are rolling hills and a large, snow-capped mountain peak under a blue sky with light clouds. A blue graphic overlay is present in the lower right quadrant, containing text and a 'QUICK FACT' label.

QUICK FACT

Transit ridership of approximately 12,000 weekly riders in Abbotsford is the highest level ever recorded, reflecting the value and importance of infrastructure investments in transit across the City.

PLANNING

Planning has significant community impact as it relates to meeting climate action targets. It lays the groundwork for greenhouse gas (GHG) emissions reductions through cyclical plans such as the Official Community Plan, various Master Plans, Neighborhood Plans and Special Studies. Land use planning that focuses on Smart Growth principles (communities that are compact, complete, connected, and centred) plays an especially important role in energy and GHG emissions reductions. Through planning development and implementation, the City can meet Strategic Plan goals related to sustainability and community resilience.

2023 Highlights

- Continued to support Smart Growth principles within the Urban Development Boundary including the implementation of the updated Community Amenity Contributions and Density Bonus Program.
- Established a new wildfire development permit area, preserving green space and wildlife linkages.
- Adopted the McKee Neighbourhood Plan to bring it forward as the outdoor adventure hub in Abbotsford, integrating neighbourhoods into the mountain, protecting the environment, and offering outdoor recreation opportunities with a village-like setting celebrating the mountainous landscape.
- Implementation of the AgRefresh plan aligns City Zoning and Policy with provincial legislation changes, modernizes city regulations to support and enable farming practices, strengthens edge planning between Agricultural Land Reserve (ALR) and urban areas, and adapts to new and recent provincial permissions in farming areas.
- Engaged the public to ensure alignment on concepts for the Mill Lake Master Plan. This is being completed based on guiding principles of Environment & Landscape, Amenities, Safety & Accessibility, and Culture, and will protect the park for future generations.
- Submitted a \$1.6B Disaster Mitigation and Adaptation Funding application in pursuit of funds to advance three elements of “urgent works” (Barrowtown Pump Station Resiliency, Sumas River Conveyance System, and Habitat Enhancement/Flood Storage Area) identified through the Sumas River Watershed Flood Mitigation Collaborative Framework.
- Collaborated on the Housing Needs Report to prioritize housing areas and support the Affordable Housing Strategy and other initiatives.
- Began scoping and work planning for the Official Community Plan Abbotsforward 2050 Update.
- Developed a Residential Retrofit Program Framework, guiding equitable program design to support residents in home decarbonization and energy efficiency improvements.



QUICK FACT


The Green Buildings Policy informed the design of two projects underway in 2023: Abbotsford Police Department Addition and ARC Heat Recovery & Optimization (HeRO) project.

BUILDINGS & LIGHTING

The City of Abbotsford manages 188 municipal buildings which include three ice surfaces, six pools with 1,740,000 liters of water and 120,000 square metres of occupied area. The City's goal is to minimize the energy required to provide comfort and safety while tapping into renewable energy sources for heating, cooling, and power. This category also includes initiatives that support Provincial sectoral targets to reduce building emissions to 59-64% below 2007 levels by 2030.

2023 Highlights

- Completed 30% design for the Abbotsford Recreation Centre (ARC) Heat Recovery & Optimization (HeRO) project.
- Analyzed building systems controls data to reduce energy use when buildings are empty and strategize equipment coordination to reduce future energy waste.
- Replaced outdated energy-intensive heating and cooling equipment with more efficient options, including air handling equipment replacement at ARC, heat recovery ventilator renewal at City Hall, and boiler replacement at ARC arena, MSA arena, and Centennial pool.
- Modified building envelopes to reduce heat gain and loss, including the replacement of exterior doors at Marshall Rd offices and fire halls, and air tightness improvements and skylight glazing replacement at Clearbrook Library.
- Identified “carbon-emitting” assets using the Building Condition Assessment software tool to flag upcoming replacement projects and inform project priority ranking based on their carbon reduction potential.
- Expanded the implementation of the Green Fleet Strategy:
 - 44 electric vehicles (EVs) in operation ranging from Pickup trucks to equipment such as forklifts and Zambonis.
 - Installed six new Level 2 charging ports for fleet.
 - City-owned EV charging station network saved an estimated 130 tonnes CO₂e, with 238,817 kWh recorded usage throughout 2023.
- Enhanced current and future energy performance of City buildings by completing:
 - Ten lighting studies across eight fire halls, Abbotsford Agrifair, and Ag-Rec Centre.
 - Two low-carbon electrification studies at the Marshall Road office building and Kariton Arts Building.
 - LED lighting upgrades, resulting in approximately \$27,000 and 200,000 kWh energy savings annually.
- Investigated renewable natural gas (RNG) opportunities with a view to implementing in key City facilities in 2024.



QUICK FACT

Trails Inspections & Tree Risk Assessments are now streamlined through new GIS-based applications, continuing the City's drive for sustainable operations.

PARKS & OPEN SPACES

Parks and open spaces refer to parks, greenways, planted boulevards, community forests, urban agriculture, and naturally occurring areas. In Abbotsford these spaces support the environmental, physical, social, and aesthetic aspects of the City and improve the lifestyle enjoyed by residents. They provide value by mitigating climate change effects and can provide a component of adaptive response to climate pressure through expansion, preservation and conservation.

2023 Highlights

- Initiated implementation of the Urban Forestry Strategy, which envisions a vibrant urban forest for Abbotsford, by planting 6214 trees and shrubs citywide with the help of 500 volunteer hours and \$18,000 in grants and donations.
- Initiated update of the Tree Protection Bylaw, including comprehensive review, best practice research, and community engagement in summer 2023 that built on previous Urban Forest Strategy consultation.
- Initiated and enforced a no-idling policy in Matsqui Regional Park operations to reduce vehicle emissions.
- Continued conversion of gas-powered Parks equipment to electric, including the addition of a new chainsaw, hedge trimmer, and line trimmer.
- Introduced irrigation controllers with smart valve technology that reduces the need for driving through remote system controls and automated delivery of flow sensor data for targeted intervention.
- Developed additional outdoor learning areas in City parks, providing inspiring spaces for students to learn about the natural environment.
- Continued development of parks across the City, which will increase forest canopy for climate resilience and reduce GHG emissions generated by vehicle travel to parks.
- Contributed almost \$855,000 in ecosystem services and benefits to the community by caring for more than 13,500 trees in the City's inventory.



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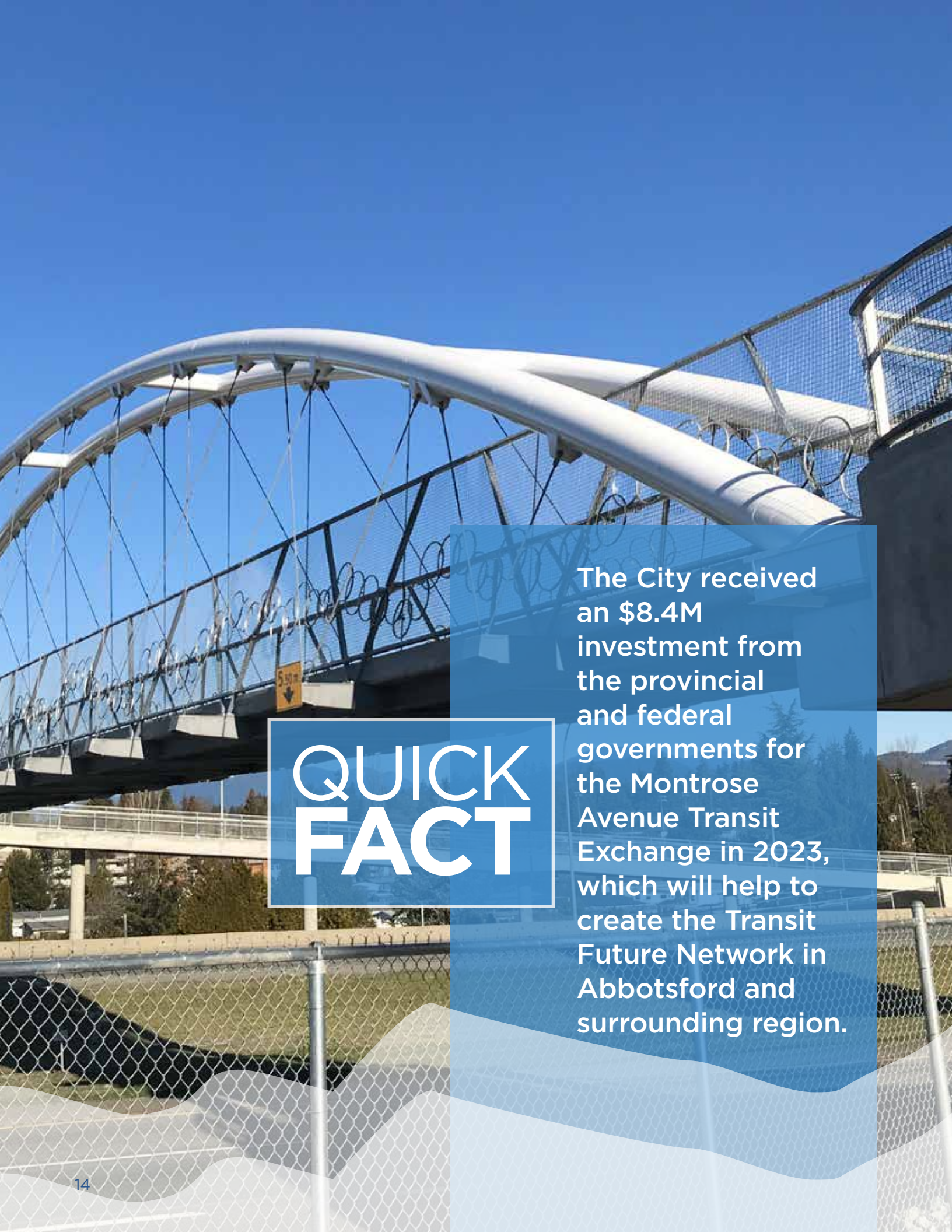
Over 14,000 searches were performed using the Waste Wizard recycling guide on the Abbotsford Curbside Collection App.

SOLID WASTE

Sustainable solid waste management and service delivery are key in creating a sustainable community. Reducing, reusing, recycling, and recovering and managing the disposal of solid waste minimizes environmental impacts and supports GHG reductions, as well as improved air and water quality.

2023 Highlights

- Continued to refine the City's fully automated, cart-based curbside collection system, with 51% of the City being serviced by renewable diesel-fueled trucks. The remainder is serviced by compressed natural gas (CNG) trucks operated under contract.
- Completed two waste composition studies to help inform the City's waste education and outreach programming. Ongoing studies provide opportunity to identify long term trends and better understand overall solid waste composition and seasonal impacts.
- Developed a comprehensive monitoring and enforcement program to address recycling contamination in the curbside collection program, which involved over 28,000 touchpoints with residents - a 173% increase since 2022 - including:
 - sending 16,000 postcards
 - completing 5,000 curbside audits
 - recognizing 1,100 star recyclers
 - issuing 800 warning letters
 - receiving 200 customer inquiries
 - issuing 100 bylaw tickets, and
 - holding 70 campaigns and events.
- Reduced the City's recycling contamination rate by 11%, with a target of an additional 25% reduction in 2024. The overall landfill diversion rate was 61.6%, supported by year-round education on waste diversion.
- Amended the Zoning Bylaw to address land use regulation issues with temporary storage of waste prior to being processed (compost and recyclables) or landfilled (garbage). These changes improve the regulation for Abbotsford's waste management industry and will foster more competition within the marketplace.



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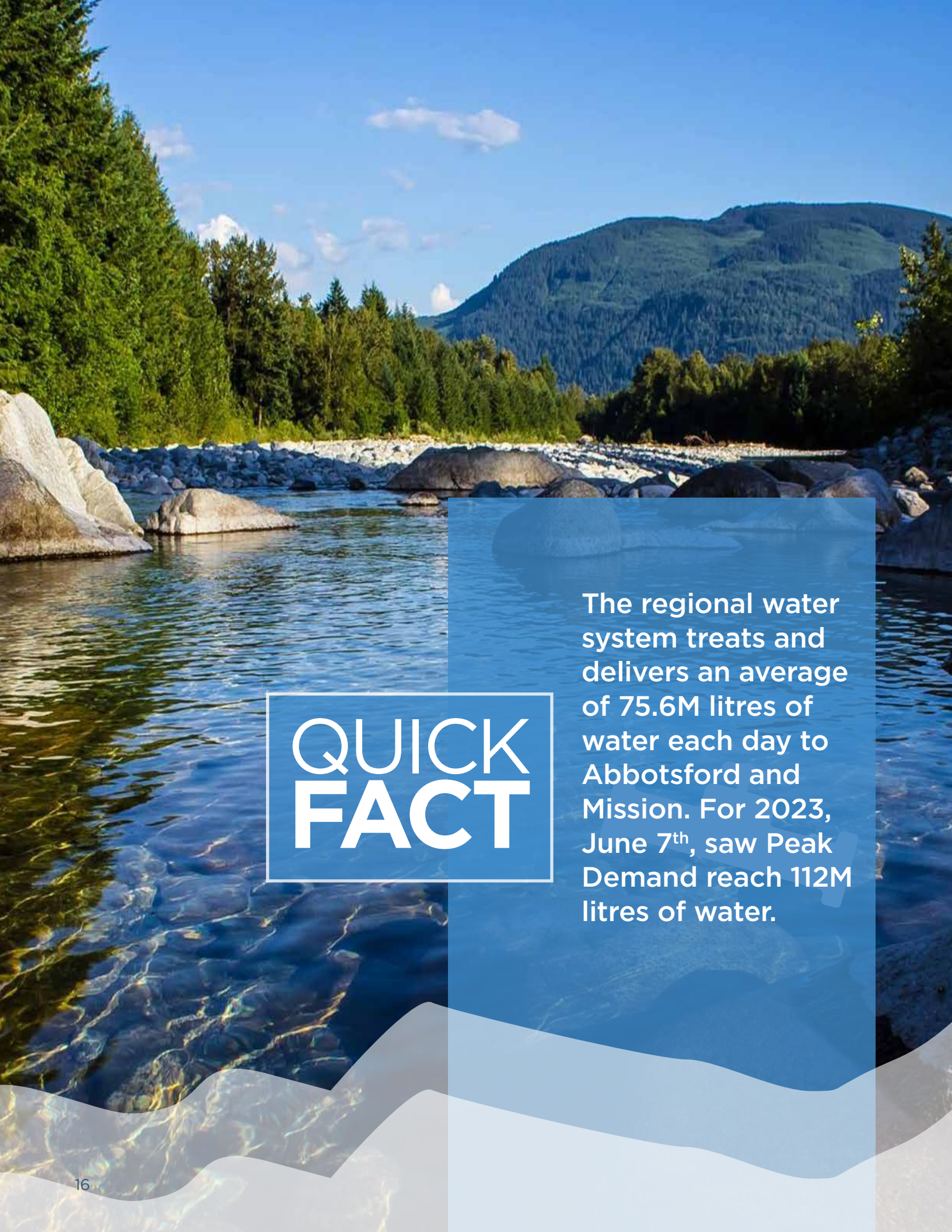
The City received an \$8.4M investment from the provincial and federal governments for the Montrose Avenue Transit Exchange in 2023, which will help to create the Transit Future Network in Abbotsford and surrounding region.

TRANSPORTATION

Sustainable communities are not possible without careful transportation system design, implementation and maintenance. 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, ride-sharing, and public transit can contribute to reductions in GHG emissions and more livable communities, which supports the provincial transportation sector target of 27-32% emissions reduction by 2030.

2023 Highlights

- Began construction of Montrose Avenue Transit Exchange, featuring 10 transit bays, bike lockers, widened sidewalks, and added street trees and street furniture to enhance public transit infrastructure and accessibility downtown.
- Completed construction of the Vye Road Overpass, eliminating an at-grade railroad crossing to improve safety and efficiency for motorists, cyclists, and pedestrians.
- Began construction of the Marshall Corridor Improvement Project, which transforms this collector road into a complete street, including separated bike lanes, sidewalks and upgraded transit infrastructure
- Completed new sidewalk installations through the Walking Infrastructure Program at nine locations including Blueridge Drive and Mayfair Avenue.
- Installed six new Rectangular Rapid Flashing Beacon (RRFB) crosswalks at locations including Mill Lake Park, Townhill Park, Palfy Park, and Centennial Park Elementary School.
- Installed special crosswalk at Whatcom Road and Lower Sumas Mountain Road.
- Installed green-colored cyclist conflict road markings at urban intersections to increase cycling safety and added 1.8KM of road markings to bikeways.
- Continued implementing Electric Vehicle (EV)-ready parking requirements in all new residential construction, ensuring capacity for charging a minimum of one EV in every household.
- Continued to implement the Green Fleet Strategy with increased use of sustainable fuels, including 24 heavy duty trucks and seven garbage trucks running on renewable diesel. Renewable diesel makes up more than half the fuel consumed by the City's heavy-duty and garbage trucks, reducing the City fleet's carbon footprint by 1,430 tonnes CO₂e since 2021 - the same as taking 340 cars off the road for one year.



QUICK FACT


The regional water system treats and delivers an average of 75.6M litres of water each day to Abbotsford and Mission. For 2023, June 7th, saw Peak Demand reach 112M litres of water.

WATER & WASTEWATER

Managing and reducing water consumption and wastewater is essential for developing and maintaining a sustainable built environment. As the climate continues to change and alter precipitation levels throughout the year, responsible water use and processing becomes increasingly important to support healthy communities, protect ecological integrity, and reduce GHG emissions.

2023 Highlights

- Continued updates of the City's Water Shortage Response Plan with changes in triggers for water restrictions that support resilience in water usage and resulted in water restrictions in place from May 1st to October 31st. The restrictions resulted in a slight downward trend in daily water demands amidst extended Stage 3 water restrictions due to worsening drought conditions.
- Advanced the planning of the City's New Water Source to provide additional resiliency to the regional water supply system
- Continued the Advanced Water Metering Infrastructure (AMI) program, alongside the bi-monthly billing initiative, which facilitated customer awareness of their water usage, leading to improved water management across the city.
- Community Interactions:
 - Water conservation sprinkler patrols distributed more than 500 door hanger reminders and issued 35 warning letters.
 - Water leaks resolved through communication and cooperation - during 2023, leak notifications were paused during the AMI replacement program and replaced by leak/high consumption letters, with approximately 750 issued.
 - Provided 75 irrigation and landscape assessments and six rebates.
 - Handed out 55 indoor and outdoor water saving kits.



QUICK FACT


Abbotsford has been a member of the Canadian Collaboration for Sustainable Procurement, a cooperative BC-based municipal purchasing group, since 2021.

FINANCE & GOVERNANCE

The City is committed to ensuring financial decisions and corporate practices consider long-term costs alongside the value to the community. This contributes to improving the quality of life for our residents and to building an inclusive, prosperous, and sustainable community for current and future generations.

2023 Highlights

- Updated the City’s Procurement Policy to include “Social Procurement”, a sustainable procurement approach that strives to have a positive impact on the economic, social, cultural and environmental well-being of the community.
- Incorporated criteria with social and environmental procurement objectives into publicly procured project evaluations to ensure the delivery of social value alongside traditional government infrastructure and service delivery.
- Awarded Marshall Road to McMillan Rd – Pedestrian and Cycling Improvements Project to an Indigenous-owned business, supporting Indigenous procurement and economic reconciliation.
- Supported the local economy with 53% of the City’s 2023 spend on goods and services with BC suppliers, and an additional 23% spent with Abbotsford businesses.
- Developed the Asset Management Governance and Accountability Framework demonstrating the City’s dedication to incorporating climate action into built and natural infrastructure planning and decision-making.
- Incorporated categorization fields into the annual budget process to allow staff to identify capital projects that support the City’s climate mitigation, adaptation and resilience efforts.
- Awarded grants from BC Hydro and FortisBC totaling approximately \$210,000 that build capacity to design and implement energy and climate action projects across the City.



QUICK FACT

Asset management in Abbotsford includes all engineered and natural assets in the City, and considers the impacts of climate change to support sustainable service delivery.

CONCLUSION

The City is committed to sustainability and climate action. Each year, this commitment is demonstrated by the multitude of actions undertaken across departments in all service areas. The annual Sustainability Report intends to highlight activities that enable, advance and support all three pillars of sustainability, recognizing the social, environmental, and economic benefits provided every day. The City is proud to instill a culture of conservation, innovation and excellence while striving to preserve Abbotsford's natural assets for generations to come.



CITY OF ABBOTSFORD
2023 SUSTAINABILITY REPORT
Engineering & Regional Utilities Department

