

2018 - 2023

Intelligent New West

Strategic Plan for The City of New Westminster



NEW WESTMINSTER

Becoming a smart city is not a goal but a means to an end. The entire point is to respond more effectively and dynamically to the needs and desires of residents. Technology is simply a tool to optimize the infrastructure, resources, and spaces they share. Few cities want to lag behind, but it is critical not to get caught up in technology for its own sake. Smart cities need to focus on improving outcomes for residents and enlisting their active participation in shaping the places they call home.

SMART CITIES: DIGITAL SOLUTIONS FOR A MORE LIVABLE FUTURE JUNE 2018 Copyright © McKinsey & Company 2018



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Messages

From the Mayor, Jonathan X. Coté

The City of New Westminster is pleased to present the updated Intelligent New West strategic plan. This plan includes goals and strategies to expand our collaborations and leverage technology in ways that will position the city, its residents, and businesses to thrive in the digital economy.

I'm very proud of the accomplishments we have already made with BridgeNet, our City-owned fibre network, and many other initiatives including our collaboration on Smart City research with the University of British Columbia and the recently signed Innovation Partnership Agreement with the New Westminster School District, in support of digital learning.

A key component of this strategy includes the implementation of a new digital policy. This policy will ensure technology-driven solutions take their place as an enabler of the economic and social systems we need to bring improved outcomes to the community. It is by refining our own technology capabilities that we will be able to more efficiently and proactively respond to and serve the complex and broad needs of our community.

From Lisa Spitale, Chief Administrative Officer

I would like to thank the many community members and volunteers who have worked alongside City staff to bring together a strategy with core values to enable inclusive access, to engage and connect, and to empower people, citizens and local businesses through the benefits of technology.

As we move to operationalize this work, it is critical that we continue to engage and collaborate with the community. Working together, we will move closer towards our vision: to be the most livable and technologically-advanced city in Canada.





Executive Summary

Cities across the globe are using technology to redefine core functions and are discovering that the availability of real-time data can be utilized to plan for and produce better government services. Technology is making it easier for cities to analyze many things, from the movement of people and goods, to garbage collection, and the usage levels of electrical vehicle charging stations. With cities moving towards 24/7 e-government services, and other new capabilities to acquire data through distributed sensing and monitoring systems on city assets, cities are finding new ways to facilitate value-based decision-making and bring more benefits to their citizens.

Building on previous Intelligent City accomplishments, the updated Intelligent New West plan lays the foundation for the City of New Westminster to harness City-owned fibre infrastructure (BridgeNet), and real-time data collection and analysis.

The City of New Westminster will leverage technology and data to build a sustainable digital economy, grow the knowledge employment base, and improve access and opportunities for all community members. Ongoing and expanded engagement in support of a digitally-empowered democratic approach to building an Intelligent New West community will be required. In the future, New Westminster will be thought of as both an intelligent community and a platform – one highly skilled at generating and sharing data for positive community change.

Introduction

The City of New Westminster began its Intelligent City journey in 2012. Since that time, the City has implemented an open access fibre network and earned global recognition from the Intelligent Community Forum (ICF) for its progress.

The purpose of this updated plan is to further embed the Intelligent New West initiative into City operations, and build new external partnerships, while maintaining existing collaborations. Further, the plan has been structured to support New Westminster City Council's commitment to organizational excellence.

The INW Strategic Plan recognizes the direct relationship with the City's Economic Development Plan (EDP), Future Forward 2018-2023, and the role the strategy plays in achieving the EDP goals. The INW Plan further recognizes the linkages with the Official Community Plan -- specifically Policy 3.0 Economic and Employment and Policy 12.4 Provide the infrastructure that enables a digital economy -- the Electrical Utility Commission Strategic Plan, the Public Engagement Strategy and Action Plan and the New Westminster Public Library Strategic Goals.

Drive continuous innovation in delivery of city programs, projects, and processes through implementation of Intelligent New West



CORE VALUES

We believe Intelligent New West harnesses digital transformation and does so by adhering to the following core values:

1. **Enabling inclusive access to digital solutions to engage in the digital economy**
2. **Engaging and connecting the community to the knowledge of the Intelligent New West community partners and collaborators**
3. **Empowering people, citizens and local businesses with innovative technology on a robust digital infrastructure**

To achieve the vision and mission, uphold our core values, and improve quality of life, economic prosperity, and the social well-being of citizens in the new digital age, the plan supports three goals and three strategies that align with the INW Model. (See INW Model in background, page 14).

VISION STATEMENT

To be the most livable and technologically-advanced city in Canada.

MISSION STATEMENT

To leverage BridgeNet, the city-owned fibre network, and enable digital solutions that increase citizen engagement, improve service delivery and access, and expand the use of open data to solve challenges, growing New Westminster's digital economy for the benefit of citizens and local business.





Goals

GOAL ONE



Improve quality of life and create jobs for the full benefit of the community

Emphasize initiatives that facilitate and support technology advances to drive knowledge workforce growth and transformation in New Westminster.

GOAL TWO



Enable equitable engagement and improve operational effectiveness and service delivery in the city

Expand digital intelligence with further transparency and more easily accessible services, making it possible for the City to be more efficient.

GOAL THREE



Prepare for the future development of new digital services

Capture data and information in a more cohesive and integrated way and purposefully leverage BridgeNet to result in improved City operations and outcomes.

The Plan

The City recognizes the positive impact innovation and technology has on attracting and maintaining local economic activity. The INW strategies and actions are intended to support the growth of local knowledge based employment, improve business access to digital services, tools and solutions, and drive integration of services for better engagement in a digital world.

STRATEGY ONE

Leverage partnerships and policymaking to develop an inclusive and prosperous digital economy enabling an environment where the community reports the highest quality of life in Canada.

Key Actions

Intelligent Economy

- Develop real estate and tech investment strategy for attracting and supporting knowledge-based companies
- Enable spaces where tech companies can work and grow together
- Build and evolve partner relationships with key New West organizations and anchors and evolve strategic partnerships with targeted post-secondary institutions
- Create new partnerships to attract more expertise and more funding
- Develop a corporate innovation policy

Key Actions

Intelligent Community Living

- Create the environment for a Collaboration Hub (i.e., a multi-use maker space and networking venue)
- Engage citizens and businesses to solve city problems through a platform where ideas flow and associated information can be found
- Cultivate a broader community of innovators



STRATEGY TWO

Drive leadership in digital participation and equitable engagement by implementing a comprehensive digital policy that creates new capabilities to transform the City's interface with the community.

Key Actions

Digital Government

- Improve overall service delivery
 - Increase access to digital tools, open data, online service choices to increase engagement and connectivity; e-government tools
 - Improve capacity to support digital literacy for all
- Ensure capacity and permitting structure to support the efficient and timely licensing of new businesses
- Expand open data resource and strategy centre; an Intelligent Community framework for smart applications and open government
- Develop and support civic applications and other citizen engagement software
- Enable operations with data and business analytics



STRATEGY THREE

Enable a safe and secure community by managing infrastructure connectivity as a strategic capability for integration and readiness of new services on a dynamic digital platform.

Key Actions

Intelligent Infrastructure

- Identify two or three major technology initiatives and focus on finding collaborative partners (i.e. other municipalities)
- Continue to build out fibre infrastructure (i.e. BridgeNet)
- Define approach to next generation wireless infrastructure
- Gain procurement commitment to purchasing internet-connected devices such as street lighting, parking meters, and garbage containers
- Assess opportunities for supporting the technology and data needs across the organization
 - Leverage technology and data to support integrated urban systems that promote health and wellness and achieve specific environmental goals for water, energy, air quality and waste, and support a robust transportation system to connect people, places and goods

Background

Since 2012, the City has implemented several projects and has been recognized for its leadership.

Projects

Innovation Partnership

Agreement between the City of New Westminster and the New Westminster School District

The Memorandum of Understanding (MOU) promotes effective collaboration in the area of digital innovation in education, and seeks increased emphasis on future innovation through utilization of resources such as the INW plan and the New Media Gallery.

Smart City Research with the University of British Columbia

Conducted best practice research collaboration in the areas of open data, civic transparency and public engagement, transportation, electrical vehicle policy, district energy systems, electrical metering and public Wi-Fi.

BCIT Computer Science Collaboration

Developing city problem-solving mobile applications in support of applied learning with BCIT students leveraging New Westminster's Open Data.

New Media Gallery (NMG)

New Media Gallery offers the public our reality transformed by technology where art reflects a contemporary world. Expanded teaching programs are offered in the new Learning Lab, a dedicated programming space, managed by the gallery, that contains a growing array of sophisticated teaching technologies including STEAM-based, Arts and Tech K-12 workshops.

ODEN – Open Data Developer Network

Collaborative open data, built for developers, by developers. A platform designed to make it easy for developers to efficiently discover and use open data in their web and mobile apps. <https://opendatadev.net>

Urban Solar Garden

A community-owned, centralized solar array providing local residents, businesses and non-profit organizations access to a portion of the electricity generated. The solar power generated is credited back to each subscriber's electrical utility bill twice per year.

Intelligent City Amendment to Subdivision Control Bylaw Schedule – Lighting and Traffic Signals

The design of street lighting and controls should consider future technology advances (e.g. Intelligent City fibre network, electrical vehicle charging stations, autonomous vehicle systems, etc.) and include opportunities to implement smart/intelligent city applications as appropriate. Two LED pilot locations have been implemented in Glenbrook North / Fraserview near the Canada Games pool and at Thompsons Landing in Queensborough.

Recognition

Smart 21
Community of the year, 2017

Recognized by the Intelligent Community Forum from more than 400 global applications as one of the world's Smart 21 Communities for 2017.

Most Open City

Recognized by Public Sector Digest as Canada's Most Open City in the 50,000 to 100,000 population category for 2017.

Open City Champion

ICAC co-chair and former Councillor, Bill Harper, was recognized by Public Sector Digest with an Open City Champion Award for leadership in open data and transparency for 2018. The award highlights International Open Government Week with the award shinning a spotlight on the importance of committing to more open, transparent and accountable local government.

Consultation Process

The updated INW Strategic Plan is the culmination of multiple engagements with community members, advisory committees and sub-committees and city staff including:

Intelligent City Advisory Committee

Knowledge Workforce sub-committee

Marketing and Advocacy sub-committee

Digital Infrastructure sub-committee

Smart City Challenge public survey

Economic Development Advisory Committee

Innovation sub-committee

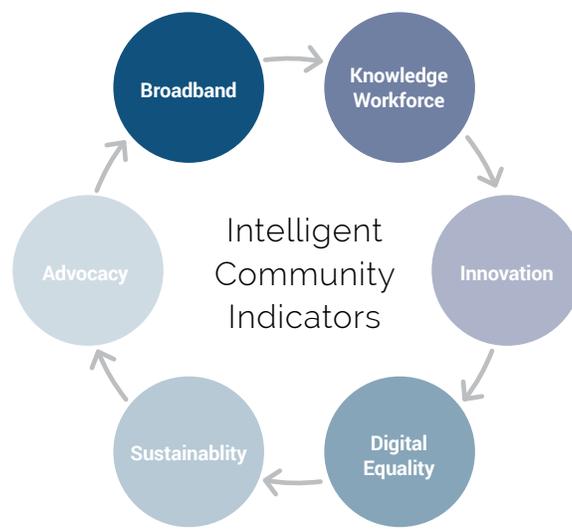
Digital Inclusion sub-committee

Smart City Challenge workshops

Intelligent New West Visionary workshop

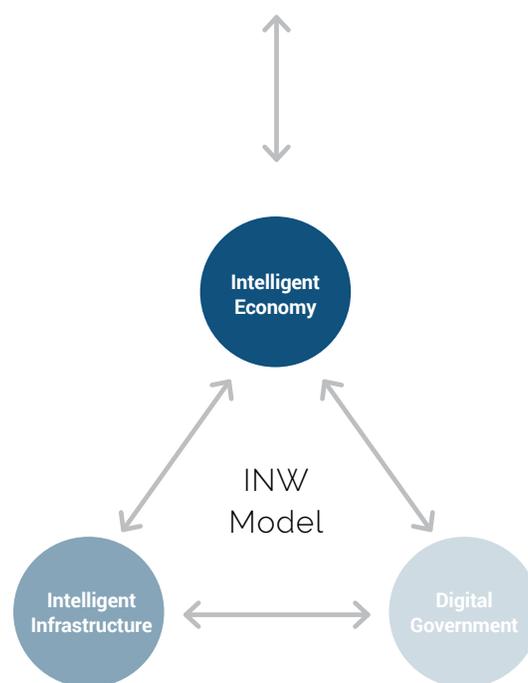
INW Model

The City adopted the Intelligent Community Forum (ICF) model in 2014. The model takes a balanced approach to helping communities bring positive and inclusive community benefits in the new digital economy. While the 2014 Intelligent City Strategy was built around the ICF best practices model, the 2018 INW Plan will continue to leverage the ICF model and also expands it to encompass a broader focus on city operations.



The INW Model introduces three main focus areas, led by the Intelligent Economy, to more closely align with and support city-wide information communication technology innovation opportunities.

1. **Intelligent Economy** – Create jobs and improve quality of life
 - Intelligent Community Living
2. **Digital Government** – Improve operational effectiveness and service delivery
3. **Intelligent Infrastructure** – Develop new services



Glossary of Terms

BridgeNet: The city-owned open access fibre network that is transforming the way New West links to the future. Open access fibre provides any internet service provider or telecommunication company access to the infrastructure at fair and reasonable prices, and on transparent, non-discriminatory terms, creating an open market and platform for internet service providers and telecommunication companies to add value and deliver competitive services to their customers.

Digital Economy: Refers to an economy that is based on digital computing technologies, although this is increasingly perceived as conducting business through markets based on the internet and the World Wide Web. The digital economy is also sometimes called the Internet Economy, New Economy or Web Economy.

Digital Government: Makes data, information and digital services easily accessible to the public and supports a digital democracy.

Digital Infrastructure: Foundational services necessary to the information technology capabilities of a nation, region, city or organization. Digital infrastructure is essential to the economy and quality of life of a modern nation.

Intelligent Community: Intelligent communities seek to make better cities where citizens and employers thrive and prosper in the broadband economy. They find vision-driven, community-based, technology smart solutions to the most urgent problems, ensuring they have the broadband and IT infrastructure needed to be competitive. They develop a workforce able to do knowledge work and craft an innovation ecosystem where business, government and institutional partners create high-quality employment, and meet social needs while ensuring access to digital skills and technology is inclusive for the entire community.

Intelligent Community Forum (ICF): The Intelligent Community Forum, a non-profit policy research organization, focuses on job creation and economic development in the broadband economy, with a focus on the economic effects of broadband, community-based best practices, and annual Intelligent Community Awards.

Intelligent Community Living: Brings citizens and technology together enabling digital connections for the purpose of co-creation and collaboration, in ways that benefit quality of life.

Intelligent Economy: An economy based on digital technologies, innovation, competitiveness and growth. When digital activities drive innovation and transform information into knowledge and value, the result is an Intelligent Economy.

Intelligent Environment: Computing technology woven in and used to achieve specific, sustainability goals for water, energy, air quality, and waste.

Intelligent Infrastructure: Connected, smarter infrastructure capable of leveraging the City fibre network in ground-breaking and collaborative ways to capture data and information for improving operations and outcomes.

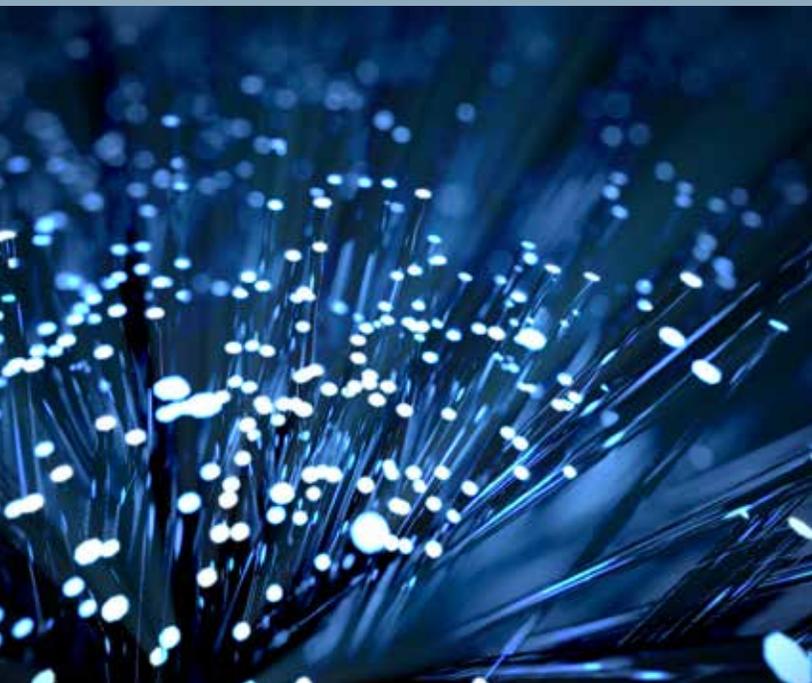
Intelligent New West (INW): The strategy for enabling the use of technology to improve outcomes for the community including the development of a knowledge-based economy in New Westminster.

INW Model: A City of New Westminster model to guide the Intelligent New West initiative inclusive of Intelligent Economy, Digital Government and Intelligent Infrastructure.

Intelligent Mobility: Using technology and data to connect people, places, and goods across all transport modes.

Smart City: Smart Cities apply information and communications technology to accurately monitor, measure and control city processes, from transportation to water supplies, the location of city vehicles to the performance of electric grids. Smart Cities are about saving money, becoming more efficient and delivering better service to their citizens.

Platform: A group of technologies that are used as a base upon which other applications, processes or technologies are developed. In personal computing, a platform is the basic hardware (computer) and software (operating system) on which applications can be run.



NEW WESTMINSTER

Intelligent New West

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