Report to Council

City of
Kelowna

Date: August 26, 2024

To: Council

From: City Manager

Subject: 2024 Esri Special Achievement in GIS Award

Department: Information Services

Recommendation:

THAT Council receives for information the report from the General Manager, Corporate Services regarding the receipt of the 2024 Esri Special Achievement in GIS award, dated August 26, 2024.

Purpose:

To update Council on the receipt of the 2024 Esri Special Achievement in GIS award.

Background:

The City of Kelowna was presented with the 2024 Special Achievement in GIS (SAG) Award at the Esri User Conference in San Diego on July 15, 2024 by Jack Dangermond, Esri's president and founder. The SAG Awards are presented to outstanding organizations that have pioneered new ways of using GIS technology. Since the inception of this prestigious award in 2015, 14 Canadian organizations have been honored, and the City of Kelowna is proud to be the fifth municipality and the first one in BC to receive this recognition.

Esri is the world's leading provider of geographic information system (GIS) software, location intelligence and mapping. Esri was established in 1969 and Esri Canada was formed in 1984. Esri is committed to helping customers use geographic science and geospatial analytics to empower people in business, government, and education to make informed and timely decisions by using the power of mapping and spatial analytics. Globally, Esri solutions serve more than 650,000 organizations across all sectors and regions, including most national governments, and 12,000 universities.

Discussion:

The City of Kelowna is being honored for addressing rapid growth challenges with GIS, revolutionizing asset management, creating a digital twin for efficient planning and development, and successfully engaging citizens in community development.

As Canada's fastest growing city, City of Kelowna's population grew to 150,000 in 2021 and is projected to reach 230,000 by 2040. Our stunning natural landscape attracts residents, but also restricts development areas and exposes the city to natural hazards like flooding, landslides, and wildfires.

To cope with the challenges of fast growth and climate change, the Data Services and Analytics team are using our enterprise GIS platform to provide innovative solutions. We are embracing digital transformation and using automation to enhance city operations and public services, while advancing IT and business goals without increasing staff or software expenses.

The City adopted Esri technology in 2005 to handle data from our CAD system and to geo-enabled some of our in-house custom applications. Although many departments used maps and spatial data for services and operations, not all recognized the potential value GIS could bring to the community.

This significantly changed in 2016, when the City adopted the GIS-based solution Cityworks to support our Corporate Asset Management System. This resulted in tremendous efficiencies by digitally transforming our asset management processes.

Recognizing the value of GIS, the City worked with Esri Canada's Management Consulting team in 2019 to assess the needs of key departments. They developed a long-term geospatial strategy and roadmap to build a foundation for innovation. Since then, the City has expanded its use of GIS to support land management, planning and development, transportation, emergency management and public engagement.

We are using GIS to meet the targets set out in our Official Community Plan to build 36,000 housing units to accommodate 70,000 more residents by 2040. To better plan for growth, we created Model City, a parcel-based digital twin data model. Model City uses Esri's ArcGIS technology to integrate disparate data and provide a comprehensive picture of what Kelowna looks like today, tomorrow and in the future.

Recently, the City released Explore3D Kelowna, which enables citizens to ask questions about planned developments in the City's urban centers and receive immediate, up-to-date and complete answers. Citizens can use insightful 3D tools to see different scenarios—e.g., how their community would appear if buildings were higher or lower than proposed. The app helps us overcome development challenges, effectively manage and synthesize large data repositories, and improve community engagement.

Our Esri enterprise license agreement provides us with affordable access to ArcGIS technology, so that we have the right tools for the job. More importantly, the City's leadership team fosters innovation by encouraging staff to learn from mistakes. Our GIS program plays a vital role in our digital transformation and smart city projects. It enables us to use data and spatial analytics to improve operations, enhance services, and plan for the future. We take pride in the innovative solutions developed using Esri technology and the positive effects they have on our community.

The award was presented to Cheryl Trent, Data and Analytics Manager and Naomi Pears, Business Systems Analyst.

Submitted by: Joe Sass, General Manager Corporate Services

Approved for inclusion: Joe Sass, General Manager Corporate Services