Report to Council

City of
Kelowna

Date: February 24, 2020

To: Council

From: City Manager

Subject: Introduction to the ModelCity Data analytics tool

Department: Policy and Planning

Recommendation:

THAT Council receives for information the report from the Policy & Planning Department, dated February 24, 2020, with respect to the award given to the ModelCity data analytics tool.

Purpose:

To inform Council about the work on the ModelCity data analytics tool and to provide a summary of the ways the tool has been and can be applied.

Background:

A GIS is a framework for capturing, managing, analyzing and displaying all forms of spatial information. It allows staff to question, interpret and understand data through revealed relationships, patterns and trends. It enables staff to quickly see on a map what otherwise might not be immediately visible or understood in a multipage report or complex spreadsheet.[1]

Applications of Model City

Developed over several years by City staff, ModelCity is a powerful digital model of the city that connects all of the data available to the City in one place. ModelCity opens up new analysis for the City as it is today, giving the City a much clearer sense of what is happening across our community. However, ModelCity's true potential is its ability to provide new ways to see the impacts of City decisions in the short-term and the long-term as staff and Council consider the implications of decisions about the future of the city.

With these new data analysis options at the City's fingertips, staff will be able to bring new evidence to bear in decision-making. A good example of this was the Pick Your Path process used during initial public consultation for the 2040 OCP update. This process used new ModelCity functionality to help the public to weigh the pros and cons of several different future growth scenarios, informed by high-quality

---

[1] ESRI, *What is GIS* [website], https://www.esri.com/en-us/what-is-gis/overview, ((accessed 18 February 2020).

data. Beyond this high-level work, ModelCity is also being used to drive the infrastructure planning and analysis in the OCP update process. The ModelCity tool can even help us visualize city growth with 3D graphics and video capability. This range allows the tool to help us communicate at various levels and with different audiences.

Furthermore, staff can now leverage ModelCity's spatial capabilities to map things such as: quantities and densities, find out where things are located, map what's inside specific areas, see what's occurring within a given distance, anticipate future conditions, measure the impact of a specific action, and so much more. In summary, ModelCity will help staff see the patterns, connections and relationships others can't.

This kind of work is strongly aligned with *Council Priorities 2019-2022: Imagine Kelowna, Vision Into Action* by empowering evidence-based decisions and driving improved predictive modeling and forecasting. Corporately, the tool will also help the City measure the impacts of its efforts and to adjust as needed.

ModelCity Development: A Collaborative Approach
The ModelCity tool was built through diligent and deliberate collaboration across the organization. The execution of this project involved coordination of staff across Policy and Planning, Information Services and Integrated Transportation Departments, among others. ModelCity already touches almost all business units across the City, but it's potential is much greater. Staff across the organization will continue to push ModelCity into new areas, providing new ways to understand the implications of the decisions and recommendations staff and Council make.

Awards and Recognition
ModelCity is an example of the collaboration, drive and innovation of staff at the City of Kelowna. In 2019, staff from the City of Kelowna were officially recognized by ESRI Canada with the Award of Excellence for Innovation & Collaboration for their work in the development of the ModelCity data analysis tool. This is one of only 15 awards given out across Canada, highlighting the high caliber of work being supported at the City of Kelowna. With the recognition of the ESRI award, its application is likely to spread to communities across the country.

Internal Circulation:
R. Entwistle, Information Services Department Manager
L. Smith, Application Systems Manager
R. Villarreal Pacheco, Integrated Transportation Department Manager

Submitted by:

Graham March, MCIP, RPP
Planner Specialist

Approved for inclusion: ☐ D. Noble-Brandt, Policy & Planning Department Manager

cc:
R. Entwistle, Information Services Department Manager
L. Smith, Application Systems Manager
R. Villarreal Pacheco, Integrated Transportation Department Manager