Examining urban data to determine just how smart Albertan cities can be

Expert in urban development and social justice receives new funding for investigating data-driven urbanism.

By Katie Willis on July 17, 2019

A University of Alberta urban development expert has received new funding to examine the role of urban data in building smart cities. Joshua Evans, assistant professor in the Department of Earth and Atmospheric Sciences, will receive more than $37,000 from the Social Sciences and Humanities Research Council (SSHRC) over the next three years.

Evans has partnered with the City of Edmonton. Using Alberta’s capital city as a case study, Evans will examine how urban data—such as statistics on energy use, consumption, and crime—is being produced, managed, and shared. The project will apply a critical social justice lens in order to understand how different social, economic, and political factors can influence the use of urban data. Hear more about the project from Evans himself, below.

What is data-driven urbanism? What place do you see for it?

Cities around the world are being rocked by an explosion in urban data. Real-time information linked to urban energy use, travel flow, personal location and movement, consumption, and criminal activity is bursting forth around the globe. Local governments, along with corporate and academic partners, are enthusiastically working to leverage this big data in order to improve the sustainability of cities and enhance the quality of urban life.

This so-called data-driven urbanism uses computer science and data analytics to refine our knowledge about urban conditions, patterns, and impacts, which is then used to inform urban policy and planning practices.

Increasingly, cities are turning to data-driven urban analysis to address problems—such as crime, poverty, and climate change. Fueled by the proliferation of big data and accelerating computational power, data-driven urbanism is celebrated for offering a new understanding of urban problems and enabling smarter forms of urban governance and organization.

But several decades of scholarship in critical data studies challenges this impression: science is fully immersed within networks of power, perceptions of validity, and relations of trust. Space and place matter in the conduct of scientific inquiry, as do issues of politics—and, by extension, data-driven urbanism. This project will explore the tensions between these two positions in an effort to bridge the gap with a richer understanding.

What outcomes do you hope to see from this project over the next three years?

First, when it comes to scholarly benefits, putting data-driven urbanism in its place in this way will help to bridge the two prevailing scholarly perspectives—one celebratory and one cynical. By thoroughly exploring how urban data is generated and the decisions that go into that process, this project will add a missing reality to current debates and discussions. This will provide researchers working from these two perspectives with a common space to engage with each other on the ethical and political implications of data-driven urbanism.

Second, when it comes to social benefits, contextualizing data-driven urbanism will provide a foundation for developing much-needed self-reflection by urban planners, policy makers, and decision-makers on how this data is being generated and used—both in Alberta and beyond. By introducing a new way of thinking about the prospects and limitations of urban data, this project aims to make smart cities not only more intelligent but also more equitable, inclusive, and democratic. Achieving this requires challenging the instrumental view of urban data that currently prevails and fostering a culture of critical reflection in urban governance.

Why is this an important area of focus for you?

I am interested in urban development, politics, and social justice. Increasingly, data-driven planning and policy-making processes are a focal point of power and politics. By unpacking the practices inherent in how this data is collected, managed and shared this project will shed light on an important yet under-acknowledged dimension of urban affairs. Furthermore, comparing and contrasting these case studies will illuminate what such practices mean for how cities in Canada are known and governed in the 21st century.

Source: Faculty of Science