

GREEN SPACE

CITY IQ

LINE BETWEEN
SMART AND
STUPID CAN BE
"RAZOR THIN"

ETHICAL
INVESTING

PASSIVE
HOUSE GETS
AGGRESSIVE

CLEAN TECH
SOLVING BIG
PROBLEMS

SUSTAINABLE SOLUTIONS FOR B.C.'S BETTER TOMORROW



GREEN EMPLOYERS



TRAINING LEADERS



ETHICAL RETURNS



CLEAN-TECH IDEAS



SUZUKI'S BLUE DOT

MAKING CITIES SMART

Researchers say line between smart and stupid can be razor thin



PATRICK BLENNERHASSETT

What makes a city smart? In answering the question, Mitchell Reardon, who works for IBI Group in Vancouver – an international professional services consulting company – says the line between smart and stupid is “razor thin” at times.

“The smart city and the stupefying city are closer together than we like to believe,” he says. “If we focus on efficiency there is a real risk that we lose that real interpersonal connection.”

Reardon, the co-lead for IBI’s TH!NK, the firm’s newly launched micro-research program, refers to his time living in Stockholm, Sweden – often cited for its smart sustainability – as a good example.

“One thing I really noticed about living there was how little interest or agency strangers take in supporting one

another,” he says. “So it’s difficult to engage people on the street.”

Reardon coupled that with a local survey done by the Vancouver Foundation in 2012 that found the top issues for polled citizens were loneliness and feelings of isolation, not poverty or housing. He adds that this is the challenge: as cities become more automated, do we threaten engagement? A recent study by the IBI Group also found locals were more likely to help out “lost-looking tourists” if they were in a part of town that was deemed vibrant or

Homayoun Vahidi and Mitchell Reardon of Vancouver’s IBI Group say “smart city” encompasses both technological innovations and increased levels of community happiness | CHUNG CHOW

Making cities smart



LINDA HEPNER

MAYOR OF SURREY

It fundamentally takes a culture to make a city smart

had painted walls, as opposed to sterile, grey concrete. Reardon says the City of Vancouver's VIVA Vancouver – which gives away grants to artists to spruce up public spaces – is as important as any technological innovation. “When we have density it is important that people have a comfortable place to retreat to,” he adds, “and also that they are able to come out and enjoy the place they’re a part of.”

One of the industries at the forefront of the smart-cities movement is transportation.

Homayoun Vahidi, a director for IBI Group in Vancouver who handles the firm's transportation and systems practice across the province, says the next step is to become proactive. Google Maps has made getting from point A to point B much more efficient, he says, but the technology needs to make sure it's not just creating new bottlenecks. “You don't want to solve one problem by just moving it elsewhere,” says Vahidi. He adds the integration of big data and simulation software can help with this as transportation networks can start to anticipate traffic jams rather than simply display them for drivers.

“And that's where the simulation approach can help because we can now, in real time, use available data to see how people might react over the next few hours, and use that in how the messaging comes out so we don't just tell people route A is bad and route B is better.”

Vahidi has worked on a number of intelligent

transportation systems (known as ITS) across Metro Vancouver, which includes the nation's first automated system to detect border delays and relay the information to drivers in real time. He says Vancouverites need to become OK with the concept of mobility pricing, in which commuters who travel more pay more for roads and other infrastructure.

“We need to stop dancing around the ‘C’ word – congestion pricing,” he says. “It's the best way to manage demand and generate revenue for other modes, which is smart. But the political sensitivity around it, although understandable, can keep us dumb.”

One of the cities creating waves in the smart-cities realm is Surrey, which is also Metro Vancouver's fastest-growing population. The municipality was named a Top 7 Intelligent Community two years in a row by the Intelligent Community Forum, a New York-based think-tank. The municipality has North America's first fully integrated, closed-loop waste management system at its biofuel processing facility. Surrey also has a traffic management centre with more than 400 traffic cameras to manage the city's sprawling road network. Mayor Linda Hepner says being a smart city isn't just about technological innovations; it's also about making sure citizens will actually use and benefit from them.

“You're only as smart as your people,” she says. “It fundamentally takes a culture to make a city smart.”

Briefs

It pays to build green in Langley

The Township of Langley is making it easier to build or renovate an energy-efficient home. Under the Township's voluntary Green Building Rebate Program, energy-efficient new construction and home renovations are eligible for a partial rebate of building permit fees.

The Green Building Rebate Program encourages the reduction of energy consumption and greenhouse gas (GHG) emissions during the life-cycle operation of a home. Over the next 15 years, the township expects the construction of more than 1,500 dwelling units per year – about a 50 per cent increase in the township's housing stock by 2031.

In such a fast-growing community, there is significant potential to reduce energy use and GHG emissions through energy-efficient building practices, the township says.

Canada's EnerGuide rating system is used as a standard measure of a home's energy performance. Homes that match the EnerGuide rating system, or that meet other



Quadra multi-family development in Langley | QUADRA

high-performance standards, such as Energy Star or Passive House, can benefit from the program's building permit rebates. Rebates are offered in amounts of up to \$1,500 for construction of new high-performance single-family houses, and multi-family projects can receive up to \$500 per unit.

Renovations are assessed based

on their improved EnerGuide rating for decreased energy consumption, and can receive up to \$750 in rebates.

The township also provides financial support with the costs of involving an energy adviser with new construction or renovation projects. These certified professionals provide energy plan evaluations or

home energy assessments to help projects meet or exceed the EnerGuide rating.

While the township's program is currently targeted at new residential homes and renovations, similar programs are being considered to include incentives for commercial buildings, and the use of alternative energy systems.