Case Study of Smartest Cities in North America

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Introduction

Global cities cannot continue to sprawl as many U.S. cities did in the 20th century. The growing urbanization increases high demands on infrastructure such as transportation and building as well as for resources such as food, water, and energy. Today's cities demand 21st century solutions to accommodate their growing populations in ways that not only maintain the quality of life, but also improve it. That's where smart cities come in. Smart cities find ways to become more efficient, to deliver more services via mobile technology, to optimize existing infrastructure, and to leverage citizen participation to create better land-use decisions and to break down bureaucracy in order to stimulate a creative, entrepreneurial economy.

Here are some smartest cities of North America:

1. Seattle

Seattle led the pack in Smart Economy and Smart Government rankings while coming in second behind Washington, D.C. in the Smart People category. Seattle is also home to lots of sustainability innovation and the home to the Bainbridge Graduate Institute, one of the world's leading master's program dedicated to sustainable innovation and entrepreneurship to measure the level of local happiness.

Seattle is also a quality hub for startups and is one of the only North American cities with more than 1,000 open data sets which are offered for transparency but also to support the growth of startups and introduction of mobile apps to improve mobility and quality of life in the city. In the 2012 publication of the Global Startup Ecosystem Index, Seattle's entrepreneurial ecosystem was ranked fourth in the world. One of the reasons Seattle achieved No. 1 position in this Smart Cities ranking is due to its ability to attract creative and entrepreneurial talent.

2. Boston

Boston has an incredibly smart and innovative population, boasting more than 70 universities and leading North America in both patents per capita and venture capital investment per capita. Boston is also excelling in the smart government

arena. The city writes: "we use cameras and inductive loops to manage traffic and acoustic sensors to identify gun shots. However, our biggest sources of sensors are our citizen's smartphones." Through apps they have developed such as Street Bump and Citizens Connect, they are able to empower their residents to extend the civic-sensor network with no additional cost to the taxpayer.

3. San Francisco

Like Boston, one of the areas regarding San Francisco is its strong entrepreneurial ecosystem. The epicenter of the Bay Area entrepreneurial ecosystem is moving away from Silicon Valley and towards San Francisco itself. San Francisco has been a leader in embracing sustainability and smart urban development as evidenced by their regular spot in the top of North American green cities rankings. San Francisco reports having 302 LEED (Leadership in Energy and Environmental Design Credit System for new construction) certified buildings, which would place them in the upper echelon of North American cities.

LEED stands for green building leadership. LEED certified buildings save money and resources and have a positive impact on the health of occupants, while promoting renewable, clean energy.

4. Washington, D.C.

Washington, D.C., formally the District of Columbia and commonly referred to as "Washington", or simply "D.C." Experts in the smart cities mostly agree that smart mobility is critical to improving the quality of life for citizens while reducing greenhouse-gas emissions from the transportation sector. D.C. is second in ranking i.e., behind New York in the use of biking, walking, and public transit for daily commuting. D.C. also has among the highest educated population in North America, while having one of the lowest Gini indexes (0.433). The Gini coefficient (also known as the Gini index) is a measure of statistical dispersion intended to represent the income distribution of a nation's residents, and is the most commonly used measure of inequality and the lower the score, the better.

5. New York

New York has pioneered the adoption of electric vehicles, embraced green and smart urban regeneration, and fostered a strong entrepreneurial ecosystem (Silicon Alley). New York has a significant number of universities and university-educated population and has been a leader in promoting the low-carbon economy. Also, New York recently launched one of the

largest bike-sharing initiatives in the world, with 4,500 bikes. This of course contributes to the city's ongoing leadership in North America in the use of non-motorized and public transport. As well, New York City has embraced open data, having more than 2,400 databases open to the public.

6. Portland, Oregon

Portland has long been a leading player in the green cities arena, with innovations such as green roof standards, home an office and also pioneering the development of eco-districts. On the mobility front, they have a fantastic set of clean, accessible public-transit options, particularly within the city. Collaborating with the local Climate Trust, Portland has been an early leader in the use of ICT solutions for real-time traffic signal timing adjustments to support smart mobility and congestion and GHG (Green House Gas) emission reductions. Like others, Portland has also engaged in a smart transformation of its waterfront into a mixed-use, green residential, university, and commercial area.

7. Chicago

Chicago is dedicated to being a green building leader, and with 405 certified LEED buildings and they have an ambitious bike-sharing program, with 4,000 bikes and 400 solar-powered bike stations. Chicago has embraced digital governance in several ways ranging from nearly 1,000 open databases to the recent launch of their "Data Dictionary" which aims to enhance the usability and accessibility of its open data program. The city has also developed an ambitious technology strategy complete with several initiatives driven by the vision of "becoming the city where technology fuels opportunity, inclusion, engagement, and innovation." Some of the initiatives include broader rollout of high-speed broadband, the introduction of public displays for residents and tourists to gain access to real-time, hyper-local data, increase public Wi-Fi access, and "provide a broad range of intellectual and financial resources to help residents and civic technologists use technology to improve urban life."

Conclusion

The initiative of Smart Cities seeks to expand the discussion by establishing a benchmark for what cities around the world are actually doing to get smarter. In fact, smart city reflect a journey, not a destination while helping to engage citizens in the dialogue.