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## How can the private and public sectors work together to create smart cities?

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Smart-city experts share examples of successful public-private partnerships from around the world.

**How does a city transform itself into a smart city?** One strategy involves bringing the private sector into the fold, to provide funding, technical know-how, and innovation that complements public-sector efforts. But bringing these two different elements together can also prove challenging in practice.

At a recent smart-cities event in New York, convened by the McKinsey Global Institute, Kathryn Wylde, president and CEO of the not-for-profit Partnership for New York City, asked smart-city experts for examples of successful public–private partnerships. Rit Aggarwala, head of urban systems at Sidewalk Labs and adjunct professor of international and public affairs at Columbia University; Ester Fuchs, professor of international and public affairs and political science, and director of the urban and social policy program at Columbia University; and McKinsey partner Jonathan Law shared the following thoughts.

**Jonathan Law:** When you've seen one public-private partnership, you've seen one public-private partnership. A lot of people are exploring and trying different things and trying to be thoughtful about it.

To give a couple of examples, in Copenhagen they're working with Hitachi around how to monetize data sets to be used for creating applications and other solutions for residents.

Another example is how Abu Dhabi has partnered with a Swiss company around telemedicine, determining how to provide solutions, do so equitably, and ensure that there's a good flow of funds.

Another one is Mexico City, which is working with a nonprofit around earthquake detection. It's not just about for-profit companies; it's also about think tanks and nonprofits who are working in this space and thinking about bringing them into this ecosystem.

A different model here is what Singapore is doing with its smart-nation initiative. The country is trying to incubate a number of different solutions on the governmental side, with the hope of spinning them off, so that they do have some longer-term, more sustainable revenue stream

against them. But at least at that beginning stage, where it's a little bit riskier, they can bring incubation and that risk capital.

Rit Aggarwala: One example that I always think about with great admiration is Amsterdam—and the story of Amsterdam Smart City—which effectively has the same relationship with the city government that New York's EDC [New York City Economic Development Corporation] has: it's a kind of captive nonprofit.

But interestingly, it started as an entrepreneurial nonprofit outside of city government. It was started with an EU grant independent of the city, and then it grew, and then the founder became the CTO [chief technology officer] of Amsterdam. And so, these two things converged, but it retains that entrepreneurial feel.

And at a time when the city was uninterested, it allowed a set of entrepreneurs to identify urban problems where there are technological solutions and set up a bunch of demos, pilots, and things that got the public's imagination. That made it something that government took very seriously and now is embraced fully.

**Ester Fuchs:** University partnerships are one type of partnership that has been critical in the smaller and middle-size cities, in fact, and even in New York as well.

Columbia University recently secured a grant from the National Science Foundation and is in the process, we hope, of getting a second grant, which uses Harlem as a test bed. The first grant, called COSMOS, is wiring a part of Harlem so that it will have the kind of capacity that will allow to it compete economically, as well as to provide it for the community.

The interesting part of these models is how much of it is bottom-up rather than top-down. There are community partners who will be engaging in the process of figuring out what we want to use this data for. Part of it is creating the technology to collect the data, but also engaging the community to determine how this data will be used to solve problems at what we're calling the streetscape level, which I think is very innovative and extremely promising.  $\square$ 

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