PALO ALTO: TAPPING SILICON VALLEY'S OTHER TRILLION-DOLLAR OPPORTUNITIES

Jonathan Reichental, Chief Information Officer, City of Palo Alto, spoke about a number of key challenges that are driving smart initiatives in the birthplace of Silicon Valley. Cutting greenhouse gases are a particular concern, and there is much to learn from how the city has empowered young people in its evolution.

Traffic

Like many cities, Palo Alto has a major traffic problem. Most people travel in a car by themselves – and that isn't sustainable. "We haven't invested over the decades in public transport...and now we are paying a significant price for that," Reichental explained. There are related issues too – you can't find a parking space so people can't go places they want to, for example.

Reichental said, "If we could make it easier for people to find parking spaces we could reduce the traffic significantly just from that change alone."

Climate

The environment and climate change are also big drivers for Palo Alto. Over the last century, the planet has heated up by 1 degree. Last year was the hottest year on record and July this year was the hottest month ever recorded.

"It doesn't sound like a lot, but you just need a few degrees and life can't exist. We are very, very fragile," Reichental said. "If we're going to solve this problem, we're going to solve it in cities."

PARKING WOES

In US urban settings

40% of traffic is caused by people looking for parking spaces

Cars contribute

60% of greenhouse gas emissions in Silicon Valley

US has **1 billion** parking spaces – yet 'nowhere to park'

'Peak car'

With these key challenges in mind, the city is spending a lot of time on transportation. Reichental explained, "If you were to intersect transportation with the environment, you're going to fix it with cars." If the city can reduce car usage and, where necessary, encourage the use of electrical cars, that solves a big problem.

Reichental said cars are going to become autonomous, connected and electric and will be part of the sharing economy. "We are already seeing peak car," he said. Fewer people are now buying cars in the United States and there's a whole generation of people who don't want a car – after all, "It's not safe, it's very expensive and you can't find a parking space."

When you start to play with cars, particularly in a US context, you are actually talking about changing the very nature of behavior in cities. If cars drive themselves and they talk to each other, why do you need traffic signals, signposts or parking spaces? It's going to happen faster than we think.

Palo Alto is already working on mobility as a service and is progressive when it comes to switching from fossil fuels to renewables and electric cars.

Citizen focus

Today, people want to interact with government in the same way they interact with companies as consumers.

Instead of going to city hall, they should be able to do the vast majority of what they need to using a mobile phone. "This gets us to the conclusion we need smart and connected communities to enable us to solve the transportation issues in the region, to solve our environmental changes, to connect people together and business together," Reichental said.

The ultimate weapon of mass democratization

Like many cities, Palo Alto has an app (PaloAlto311) where people can report fixes required, etc. The important part is the underlying data, which he called the "ultimate weapon of mass democratization" because it will underpin the innovation around transportation, the fixes we need to save our planet and the power of apps.

Palo Alto is focused on leveraging data – "the only thing that we have in abundance." It uses the data from the app, for example, to aggregate a picture of the city. They can see issues as they are reported and understand the "cadence of the city" so they can make decisions in near real time.

Open data by default

The key to innovation is sharing the data. So Palo Alto takes the data from the app and makes it available to everybody, including data around crime, energy, transportation, sustainability and more. Even the city's much-loved trees are an urban forest of data. (El Palo Alto is a type of tree and Palo Alto in Spanish means a tall stick or tree.)

You can view, download and use Palo Alto's data here. People are doing "fascinating things" with the data, perhaps not surprisingly as Silicon Valley is synonymous with innovative tech companies. Cities have problems which they often don't have the time, skill or money to solve. If cities share their data, people can solve challenges with it, while at the same time building businesses and creating jobs.

"The role of the community is to step up and try to solve problems."

Reichental told delegates. "We have to give data to people with great incentives, so they can make the apps and solutions themselves and we can benefit as a community." Palo Alto's data is now open by default. "Make it political and make it central, then things can happen," Reichental said.

Palo Alto Apps Challenge

In 2014, the city ran the Palo Alto Apps Challenge. The city's role was to make the data available. "The role of the community is to step up and try to solve problems," Reichental said, and they did that in the hundreds. When the challenge was over, a number of solutions had been created.

But what excited Reichental most was that 30 percent of the people who participated were under the age of 18. Young people often feel separated from public life and have no power, he said. "We empowered them to build solutions to actually change the community they live in."

The challenge garnered media and TV coverage, and Reichental wrote a book about it to help other cities interested in trying similar initiatives – it's available free here: www.CityofPaloAlto.org/AppsPlaybook

A new city operating system

Reichental closed, saying, "The future is very exciting. It's a multi-trillion dollar opportunity to change our cities in a way that is positive for every single one of us… So I have a challenge for you: Will you join me in creating a new city operating system for the future?"