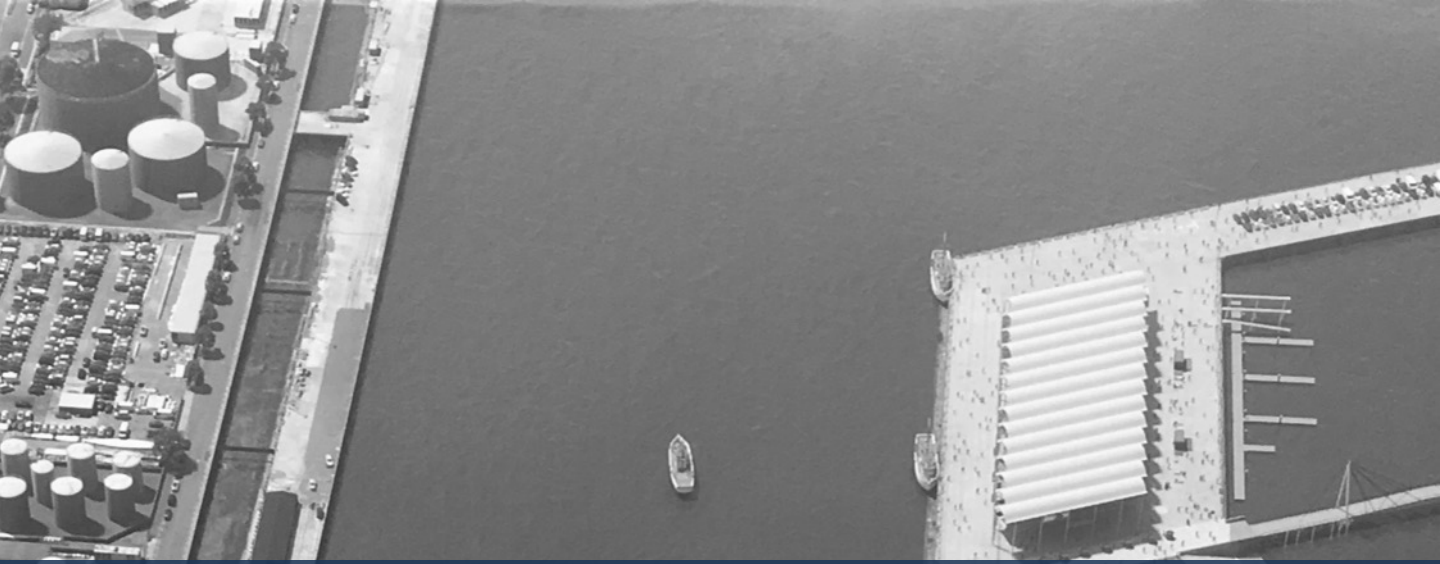




SUBMISSION
UrbanGrowth NSW
Sustainability Strategy

May 2017

Smart **Cities** Council
Australia New Zealand



YOU ARE HERE

Sustainability is our goal.
Smart cities is the accelerator.



Introduction

Smart Cities Council Australia New Zealand (SCCANZ) in its role as a connector of smart cities practitioners and policy makers, and accelerator of smart cities readiness, wishes to congratulate UrbanGrowth NSW on its leadership in establishing a Sustainability Strategy to help drive the creation of the best places for business and the community.

Since its launch in 2012 in Seattle, the Smart Cities Council has helped build capacity and catalyse projects within the world's largest smart cities markets – North America, India, and Europe. We want to make sure our impact in Australia is as transformative as elsewhere, and we are committed to working alongside UrbanGrowth NSW to ensure its smart cities activities are world class.

Our day-to-day work is focused on facilitating peer-to-peer exchange, and ensuring the best resources are available to ensure we accelerate the planning, design, development, and management of sustainable cities through the use of technology, data, and intelligent design. Sustainability is our goal, and smart cities is the accelerator.

To supplement our ongoing engagement with UrbanGrowth NSW during the development of this draft strategy, we offer this submission to help in shaping the final document.



Comments

The Opportunity

UrbanGrowth NSW is in a unique position – it is the custodian, on behalf of the community, of one of the most diverse portfolio's of urban transformation projects across the state, and indeed the country. The current pipeline of UrbanGrowth NSW projects suggests that the organisation will have the opportunity to catalyse new approaches to design and construction, community management. and city performance, among others.

Therefore, in line with the draft Strategy's 'Productive Cities' goal area, SCCANZ advocates for UrbanGrowth NSW to ensure the 'Priority' listed as "Advance our business approach to driving Smart Cities outcomes and fostering innovation" become an underpinning strategy for accelerating the targets listed throughout all goal areas.

To build the necessary foundations for smart cities success, UrbanGrowth NSW needs to embrace the most holistic, yet powerful, of definitions of the concept.

Defining the Smart City

In line with international standards (ISO), UrbanGrowth NSW should adopt the following definition:

A smart city should be described as one that...

... dramatically increases the pace at which it improves its sustainability and resilience,

... by fundamentally improving how it engages society, how it applies collaborative leadership methods, how it works across disciplines and city systems, and how it uses data and integrated technologies,

... in order to transform services and quality of life to those in and involved with the city (residents, businesses, visitors).



Establishing a Smart Cities Plan For UrbanGrowth NSW

It is important that at an organisational level, UrbanGrowth NSW develop its own roadmap to a smart cities vision, before driving it at a project level (see next section). This Smart Cities Plan should contain the goals to which the organisation should aspire, the features and functions it should specify at a project level, the best practices that will gain the maximum social and economic benefits for the community at the minimum cost, and reduced risk.

The Smart Cities Framework is a tool used by SCCANZ to help capture the relationship between an organisations responsibilities (what it needs to accomplish for the community) and the key smart cities enablers (the smart technologies that can make those tasks easier). It also highlights the key catalysts and accelerators for action. This framework is depicted below, and can be used to help engage the relevant internal and external stakeholders that support UrbanGrowth NSW's core responsibilities in delivering sustainable places, and how technology and data may support this vision.



Driving Project Level Outcomes

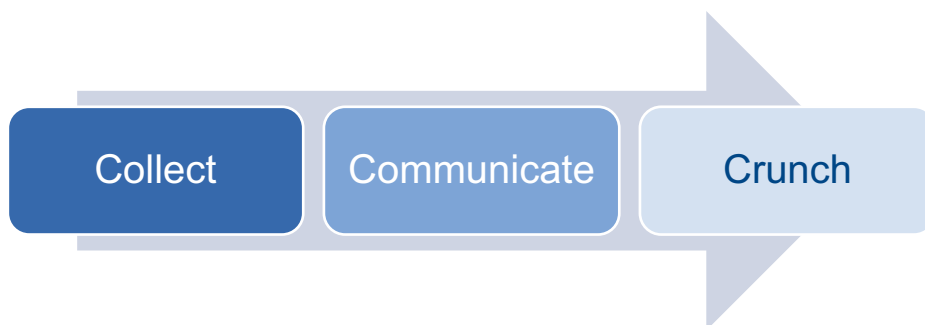
Following the creation of an organisational smart cities plan, identifying the key requirements for projects should be determined. For this, we recommend embracing the three core functions of the smart city. In simplest terms, there are three parts to this: collecting, communicating and “crunching.”

First, a smart city collects information about itself through sensors, other devices and existing systems. Next, it communicates that data using wired or wireless networks. Third, it “crunches” (analyses) that data to understand what’s happening now, and what’s likely to happen next.

Projects can derive benefit by collecting, communicating and analysing information from a single source. But the greatest benefits come when data is connected with multiple sources (government departments) and third parties.

Many projects combine historic traffic data with information about residential growth and business expansion to know when and where to add or subtract transit operations, as an example. Other projects correlate multiple data sources to predict pedestrian movement, and the way we predict weather.

Establishing the conditions and infrastructure to enable UrbanGrowth NSW to merge multiple data streams and mine them for amazing insights, should be a goal for all projects. It is those insights – presenting, perfecting and predicting – that enhance the overall sustainability of the organisations projects.



Collect information (data) about conditions across all core services (energy, water, traffic, weather, building performance, pedestrian activity, air quality), and store it...

Communicate that information to other devices, to a control centre and/or to another platform (devices both “talk” and “listen”)...

Crunch the data to provide actionable intelligence, which includes - 1) situational awareness, 2) real-time optimisation and, 3) predictive analytics.

The Core Functions of the Smart Community

An Offer to Collaborate

SCCANZ would like to offer UrbanGrowth NSW the opportunity to host one of our Smart Cities Readiness Workshops, which is facilitated by SCCANZ staff with case study contributions from our key partners. This workshop is based on the Smart Cities Readiness Guide, which is a handbook used in over 30 countries around the world to inform smart cities strategy development, and strategic smart cities investments.



And further to this, given the dynamic nature of the smart cities marketplace, and the deep ecosystem of solution providers, we recommend that UrbanGrowth NSW adopts SCCANZ's smart cities review panel process to be used on key projects where smart cities opportunities are being driven. This independent review process provides an opportunity to ensure that maximum outcomes are being identified from the project level initiatives being proposed by development teams.

Further finally, SCCANZ invites UrbanGrowth NSW to participate in our upcoming project – the Code for Smart Communities. This project will involve the development of a set of national principles and metrics associated with the planning, design, construction and management of smart urban development projects.



A city isn't smart because it uses technology. A city is smart because it uses technology to make citizen's lives better.



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