

# DIGITAL TWIN

## Smart Cities, Towns and Regions

December 2021

Smart **Cities** Council  
**DIGITAL TWIN HUB**

Australia | New Zealand

# WHO WE ARE

- Since 2012 the Smart Cities Council has been helping shape the smart cities movement.
- We have a mission to catalyse investment in technology and data solutions that build greater prosperity, enhance wellbeing and heal the planet.
- Born in Seattle, now with representatives across North America, India, Europe, Australia/New Zealand and South East Asia.
- We Inform, Education, Convene and Advocate.

# THE HUB

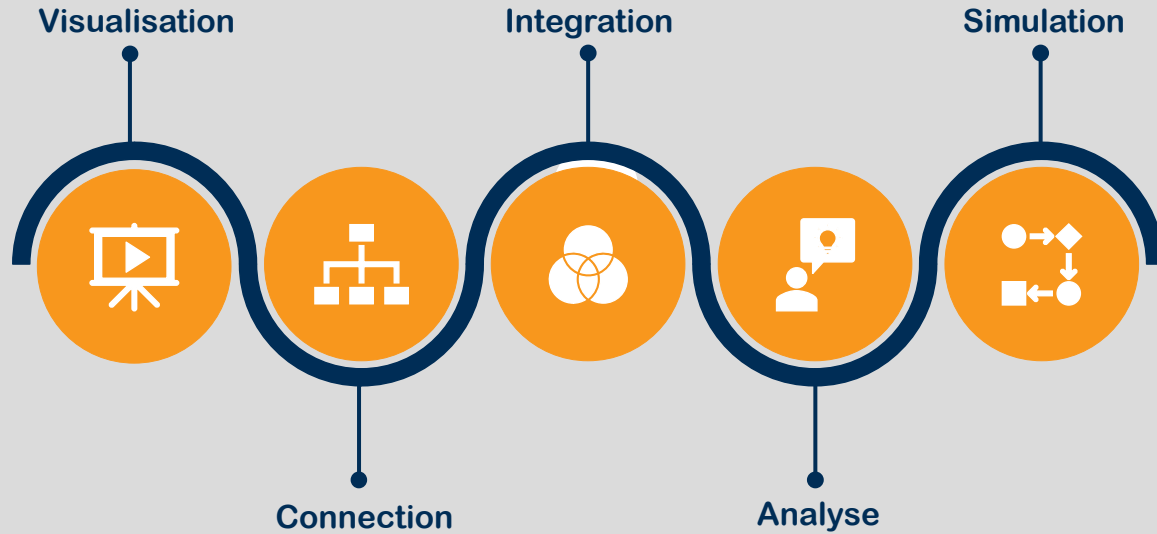
The screenshot shows the homepage of the SmartCitiesCouncil Digital Twin Hub. The header includes the logo 'SmartCitiesCouncil DIGITAL TWIN HUB' with 'Australia | New Zealand' below it, and navigation links for Home, Fundamentals, Forum, Blog, Resources, and About. Social media icons for Twitter, Facebook, Instagram, and YouTube are also present. A 'Top Resources' section highlights 'The New Zealand Digital Twin Forum'. A large image of two women in a meeting is featured, with a text box titled 'The Forum' that describes it as the heart of the community and includes an 'Explore +' button. To the right, a 'Welcome to the Digital Twin Hub' section provides an overview of the platform. Below that is a 'Subscribe for Digital Twin Updates' form with a 'Subscribe Now' button. At the bottom, there is a 'Digital Twin TV' section featuring 'Digital Twin Sessions' with a play button icon and a 'Digital Twin Sessions #2: Views from the Digital Engineering World' video player.

[www.digitaltwinhub.org](http://www.digitaltwinhub.org)

News  
Forum  
Events  
Challenge  
Resources

# THE DIGITAL TWIN

“The Digital Twin is a data-driven capability that accelerates outcome-focused decision making delivering better, quicker and cheaper infrastructure and services.”



*'Optimise' decision making*

# WHO

## A data capability *FOR ALL*

- Every department, division and agency
- Every discipline
- Every geography
- Every scale

# OUR GOAL

To build a thriving Digital Twin market place in Australia and New Zealand.

# OUR DIGITAL TWIN WORK

1. Digital Twin Guidance Note – to clearly define it, articulate the ‘why’ and provide guidance on ‘how to’
2. Establish a Task Force of our members to work through the market establishment activities
3. Build a broader Digital Twin Collaborative to knowledge share on key elements such as policy, standards and programs
4. Build the Digital Twin community and a place for it to engage – the ANZ Digital Twin Hub & NZ Digital Twin Summit, Digital Twin Week
5. Digital Twin Strategy Blueprint released in July
6. Digital Twin Challenge launched in July
7. Digital Twin Strategy ...



**13 projects** - each delivering a knowledge resource, freely accessible to all, to help kick-start Digital Twin action and investment

**17 organisations** - public, private and academia - doing the heavy lift to create the library of knowledge resources

**18 month program** - of activities and engagements, including knowledge exchange, networking, learning, promotion, resource development



### Cluster 1

- Digital Twin strategy
- GIS to Digital Twin roadmap
- IoT for Digital Twin strategy
- Project-level Digital Twin action plan

### Cluster 3

- A model for Digital Twin data management
- Digital Twin as a data sharing and data exchange platform
- A Digital Twin asset optimisation framework

### Cluster 5

- Digital Twin education program

### Cluster 2

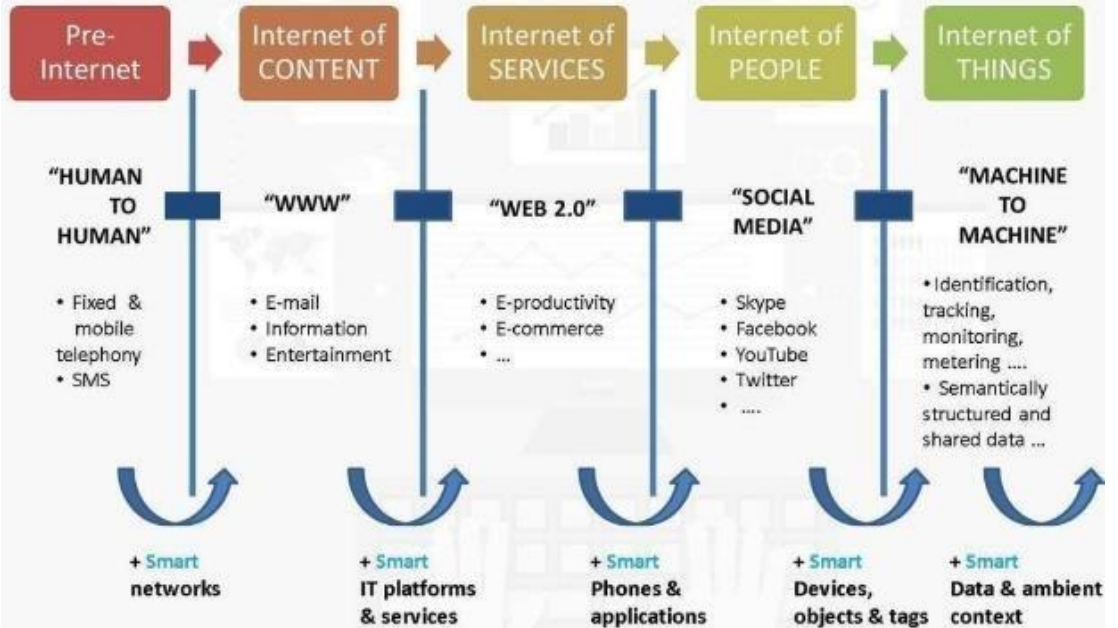
- Digital Twin pilot for city planning and design
- Digital Twin for sustainability strategy
- Landscape-based Digital Twin environments

### Cluster 4

- Advanced analytics and artificial intelligence for Digital Twin
- Digital Twin data visualisation roadmap for community engagement

# TECH AND DATA

## Evolution of Internet of Things



VEHICLE SENSOR DATA

SELECT A DATE  
**2020**

YEAR

MONTH

2016 2020

Traffic Sensor Count

annual growth  
**+1%**

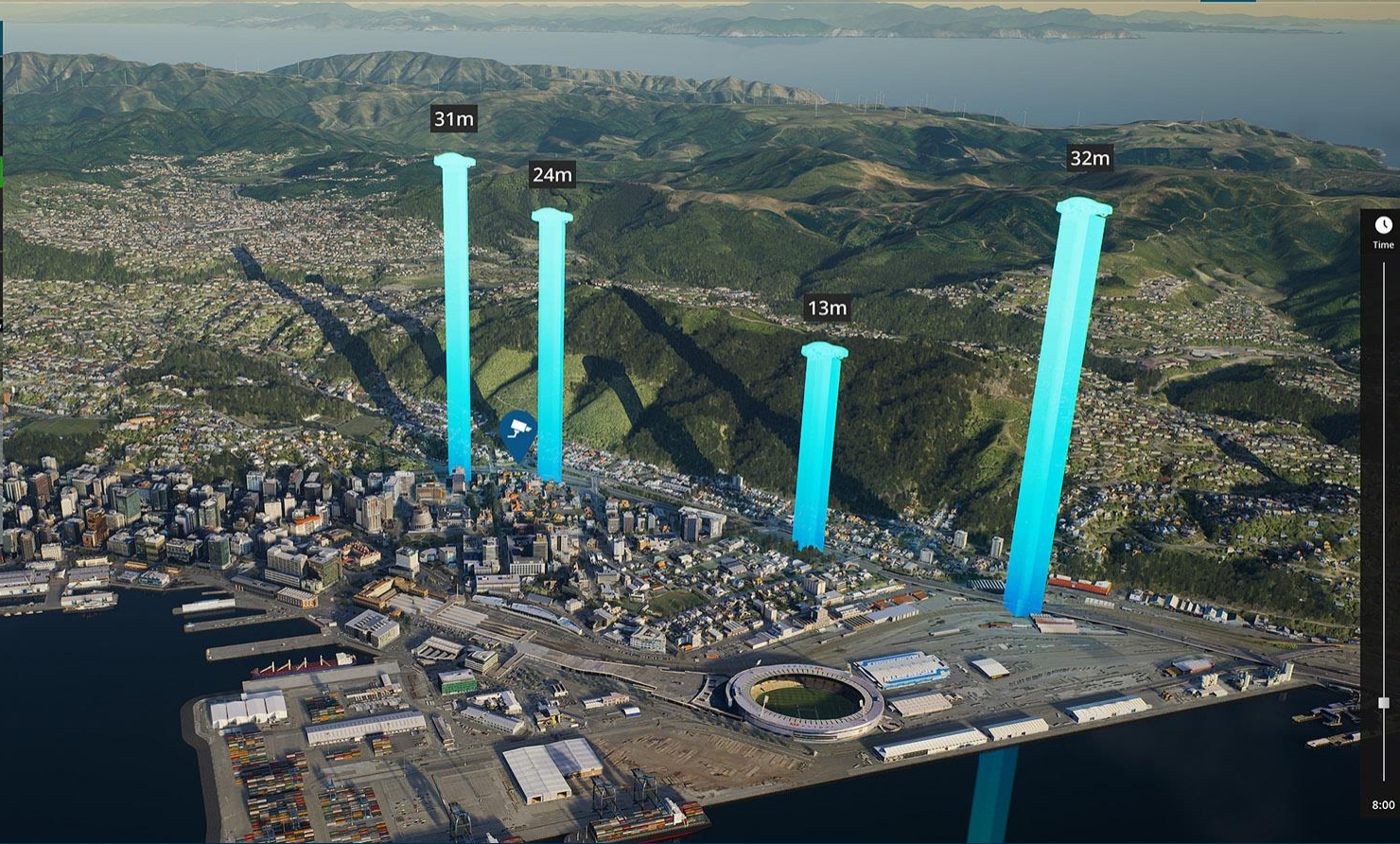
**1,023,489,200**

**Tinakori Rd On-ramp**

North along Urban Mwy from Tinakori Rd on-ramp

15/04/2021 12:58:02 PM

© 2021 NZ Transport Agency



Time

8:00

- **Liverpool**
- **Darwin**
- **Melbourne**
- **Regions**
- **Canterbury**
- **Hawke's Bay**

















# HOW

- Assess the application of a digital twin for your project
- Produce a strategic business case
- Provide a delivery strategy
- Produce a full business case
- Develop a detailed implementation and procurement plan

**But** before you dive in and create a strategy, educate yourself!

**BACK IN  
2022**



**Second Tuesday of the Month | 3 topics | 30mins**

[www.futureofplace.org](http://www.futureofplace.org)

[www.smartcitieschronicles.com](http://www.smartcitieschronicles.com)



[www.smartcitiesacademy.global](http://www.smartcitiesacademy.global)

[www.centrefordataleadership.com](http://www.centrefordataleadership.com)



# WHAT ELSE IS ON IN 2022

- **Future of Place - Lessons In Data**
  - 1 Feb - Linking data to value, can it be done?
  - 5 Apr - What's next for privacy?
  - 7 June - On AI, here's what I found out
  - 6 Dec - My biggest data lessons from 2022
- **Centre for Data Leadership - Designed By Data**
  - 1 March - Infrastructure, shaped by data
  - 3 May - Property, shaped by data
  - 5 July - Place, shaped by data
  - 6 Sept - Mobility, shaped by data
  - 8 Nov - Precincts, shaped by data
- 25 Feb - Future of Place Summit | Brisbane
- 7 July - NZ Digital Twin Summit | Wellington
- 18-22 July - Smart Cities Week ANZ | Various cities
- 9 Aug - SEQ Data Leadership Summit | Brisbane
- 17-21 Oct - Digital Twin Week 2022 | Melbourne

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# Thank You!

Smart**Cities**Council®  
Australia New Zealand

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