

Built to Last: Future-Proofing Auckland



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IPWEA Sustainability in Public Works Conference

14-15 May 2018



Part One:
Context



Part Two:
Issues & Experiments

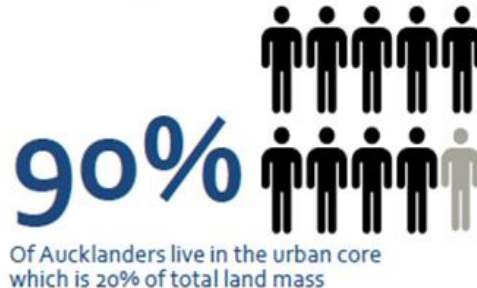
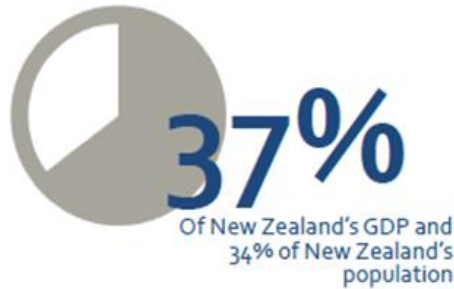


Part Three:
Better Decision-Making

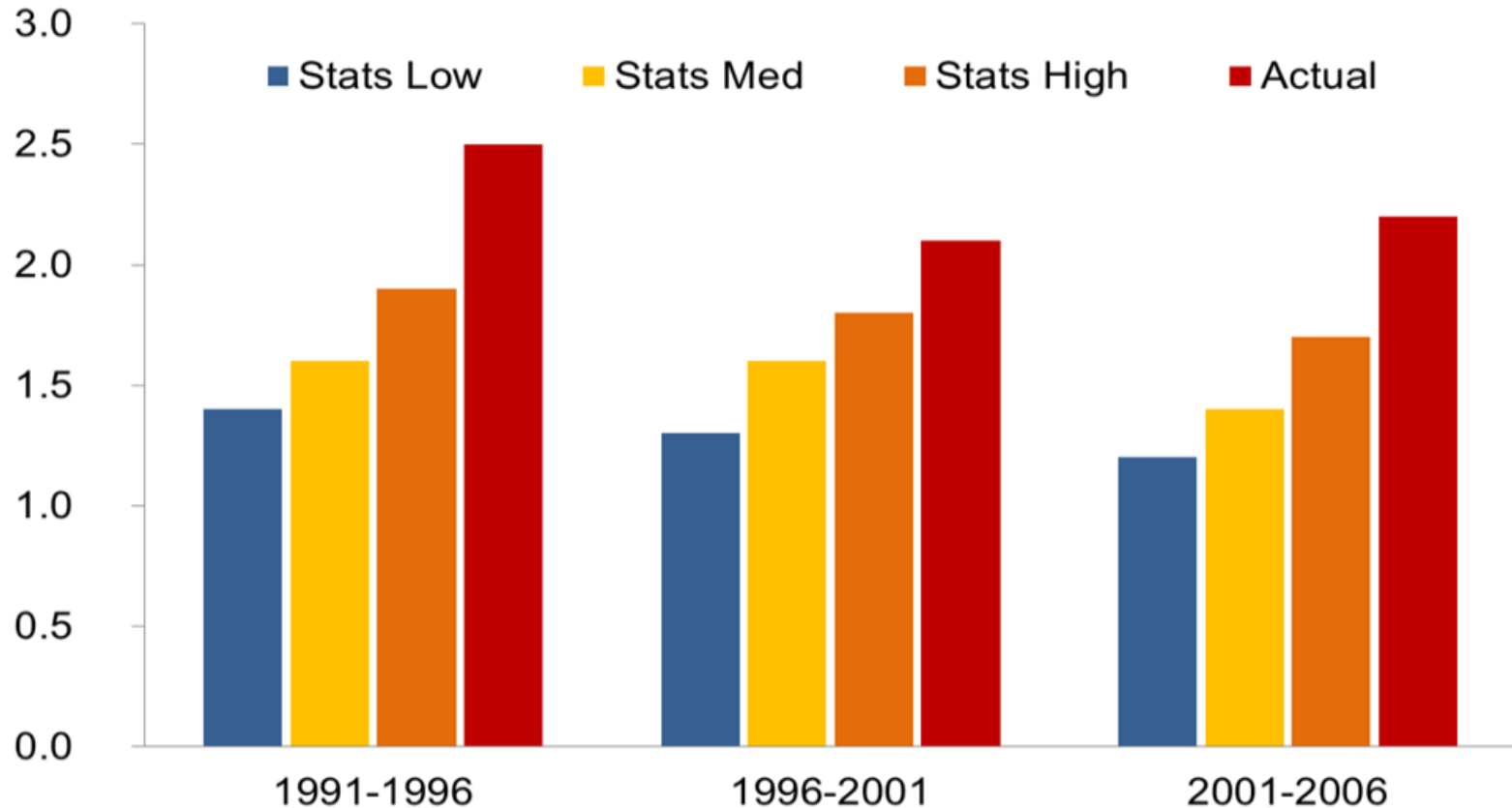
Context ▶ Growth & Change

- Amalgamation, Role & Scale
- Urbanisation, Growth, Diversity
- Cost of Infrastructure & Services
- Decline of Indicators
- Changing Political Context
- Changing Climate

Urban, Diverse, Liveable



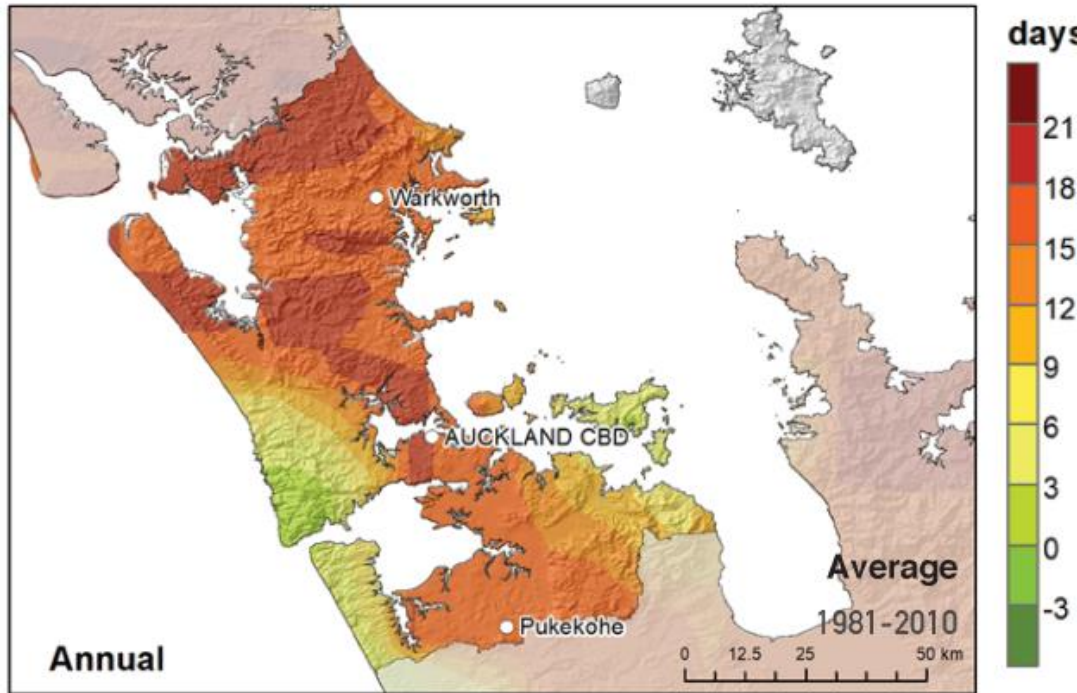
Growth Always Faster Than We Think



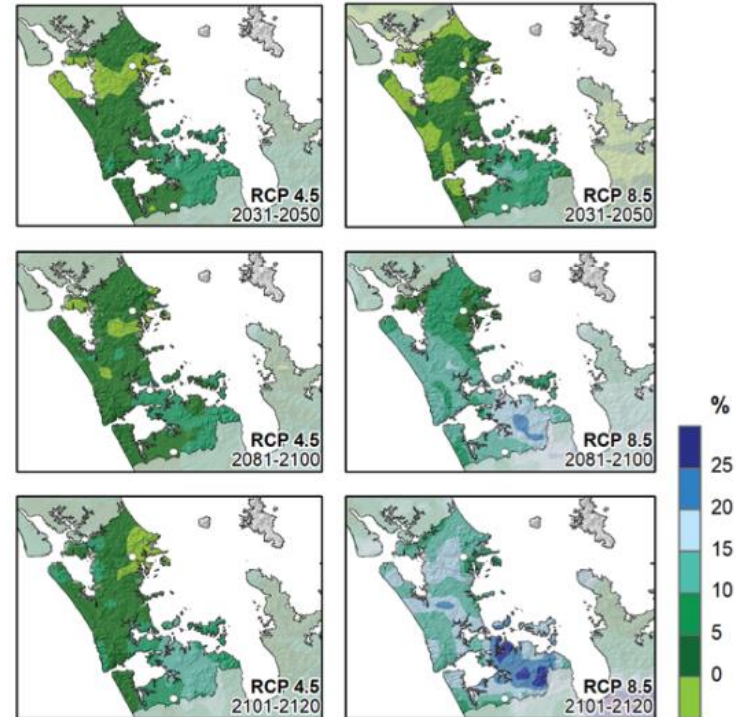
source: Statistics New Zealand, Auckland Council Chief Economist Unit

A Climate of Change

DRY DAY TRENDS



WETTEST DAY OF THE YEAR



Context Vision: A World-Class Auckland

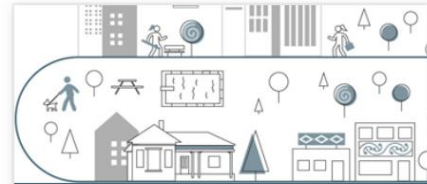
Our six outcomes



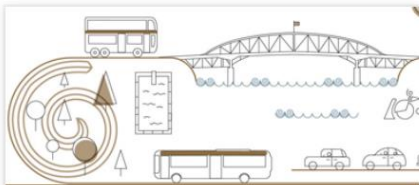
Outcome: Belonging and participation



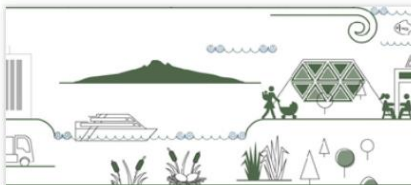
Outcome: Māori identity and wellbeing



Outcome: Homes and places



Outcome: Transport and access



Outcome: Environment and cultural heritage



Outcome: Opportunity and prosperity

Context World-Class Built Environment



*A healthy , quality and restorative built environment
that nurtures human productivity, prosperity, and potential*

Imagine









FREE
ENTRY

AUCKLAND ART GALLERY TOI O TAMAKI
OPEN 7 DAYS 10AM - 5PM





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Six Issues to Future-Proof

1. Limited **transport** choice w/ high emissions (39%)
2. **Energy** consumption up 65% in 25 years
3. Poor & aging **infrastructure** (e.g., housing, stormwater)
4. Over 1 ton/person **waste** to landfill
5. Impacts from historic **sprawl development** pattern
6. High **sea level rise** exposure and increasing **flood** risks

Experiments to Nudge Evolution

1. Empower through 'waste'
2. Create functional, resilient excellence
3. Invest in transport, invest in people
4. Activate and humanise the city

Experiment 1

Empower Through 'Waste'







- *Obvious Problem:* 3 tons waste per person
- *Unlikely Outcome:* Empowerment and employment
- *Evolution:* Localising power



Circular Economy Model Office Guide



The what, why and how of designing out waste in office refurbishments and builds





Experiment 2

Create Functional, Resilient Excellence







- *Obvious Problem:* Flooding and intensification
- *Unlikely Outcome:* Tree nursery, jobs, skills training
- *Evolution:* Stretch to meet community aspirations





Experiment 3 Invest in Transport, Invest in People







- *Obvious Problem:* Car dependence, lack of transport choice
- *Unlikely Outcome:* Cycling revival and \$200m to spend
- *Evolution:* Transport diplomacy, persistent & tactful advocacy



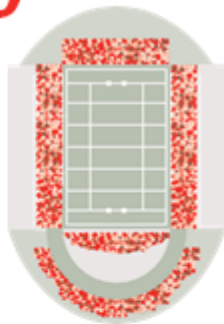
406%

Increase in cycle trips into the city via Upper Queen Street, since 2013.



45,600

New cyclists in 2016, enough to fill Mt Smart Stadium.



BECAUSE WE'VE JUST BUILT 27KM OF NEW CYCLEWAYS:



27km

 of new cycleways.

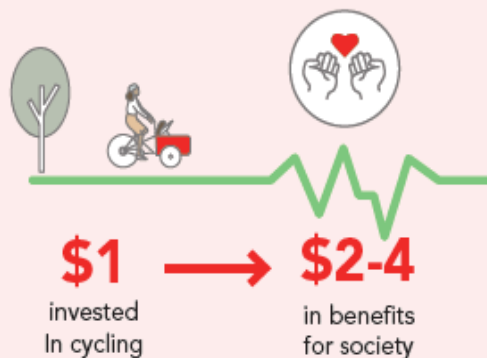
New connections in the cycle network has created a

44%

increase in people on bikes using the Northwestern Cycleway.



INCREASED BENEFITS



FEWER INJURIES

A 10-20% reduction in cycling related incidents would correspond with:

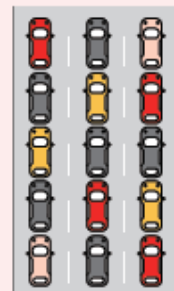


40-80
FEWER SERIOUS INJURIES
+
1-2
LESS DEATHS

over the 10-year period 2018-2028

INCREASED SPACE

4,500 PEOPLE BY BIKE OR **4,500** PEOPLE BY CAR



4,500 people are expected to travel to the city by bike (in the AM peak). This is the equivalent of **three lanes of traffic**.

FEWER HEALTH COSTS



Saving society **\$1,410** in health costs per year per person cycling regularly.

LESS POLLUTION

9,000

Less car trips per day on Auckland's network by 2026.

Reducing carbon emissions by more than

13 tonnes per day.



FEWER HOUSEHOLD COSTS

Families using one fewer car could save, on average:

\$10,200 every year



Experiment 4 Activate and Humanise the City





TOYWORLD
where the best toys come from

Westgate

SHARING SHED
HARLOTS FOR MEN AND WOMEN

**LOOK
SHARP
STORE**

Eastern Massage
Therapy & Relaxation

Bendon

TOYWORLD
where the best toys come from

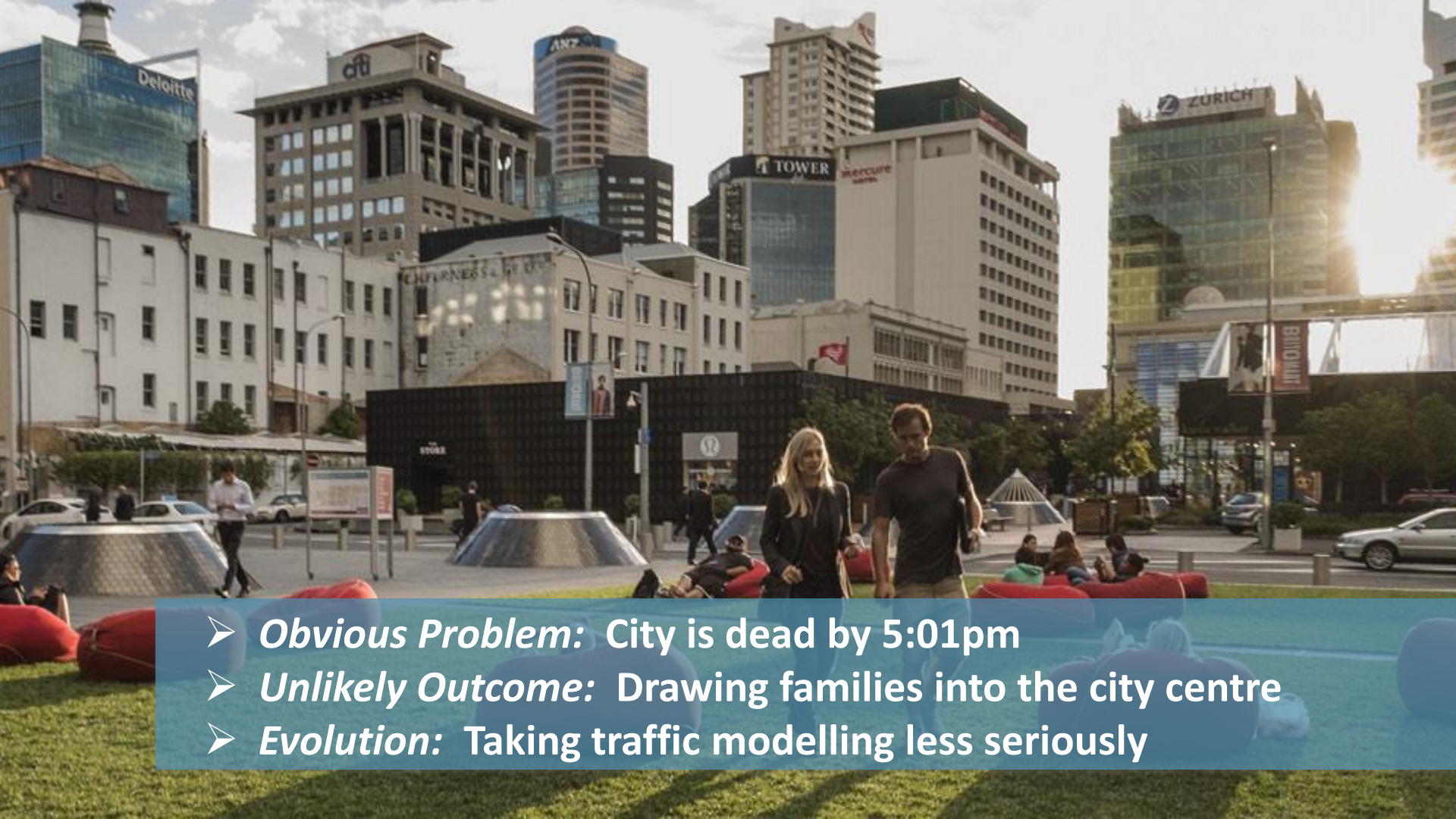
TOYWORLD

AON

BQJ382

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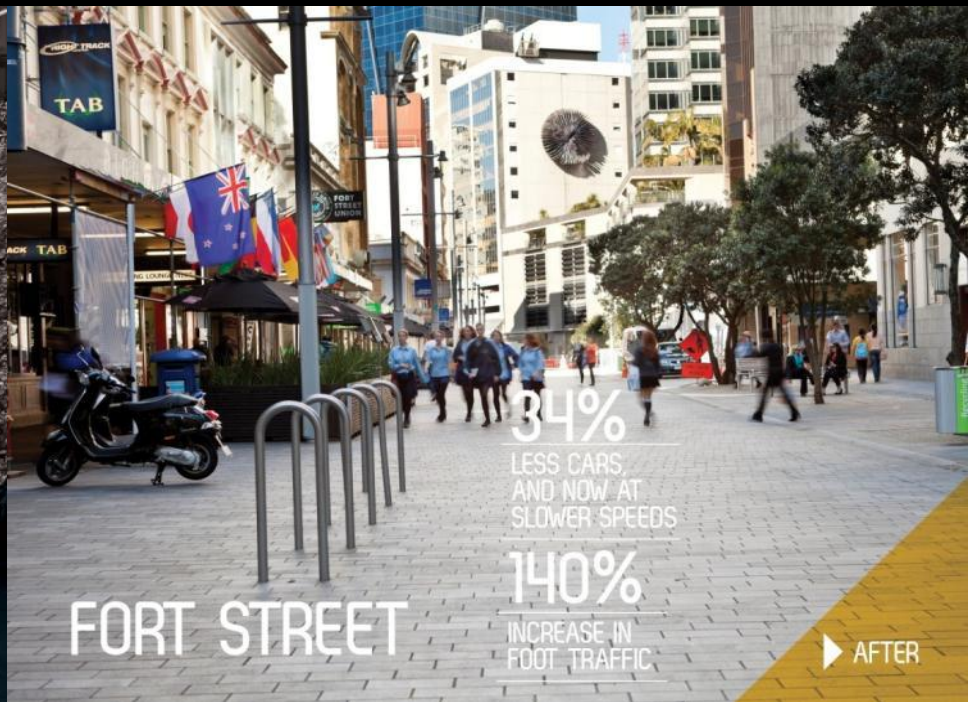




- ***Obvious Problem:*** City is dead by 5:01pm
- ***Unlikely Outcome:*** Drawing families into the city centre
- ***Evolution:*** Taking traffic modelling less seriously











O'CONNELL STREET

BEFORE



AFTER

WYNYARD QUARTER



► BEFORE

WYNYARD QUARTER



▶ AFTER



NZ Super Fund keen to build and operate Auckland's light rail

Henry Cooke · 15:34, May 09 2018



A photograph of a yellow Auckland Transport train, number 808, with its destination sign reading 'HENDERSON All Stops'. The train is in a station, with a digital display above it showing '1.AT.co.nz'. The background is a blurred station scene.

Local market-building goal to keep Auckland Council in New Zealand for green debut

Auckland Council plans to tap the New Zealand dollar market for its debut green bond during 2018, as the issuer aims to play its part in providing the supply needed to catalyse domestic funds growth. The council revealed on 7 March that it plans to become a green-bond issuer this year, though it is yet to develop detailed transaction plans.

News

New Zealand's first sustainable sports park - setting a new direction

Posted 22 03 2018

in News





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Better Decision-Making

Smarter, Strategic, Future-focused

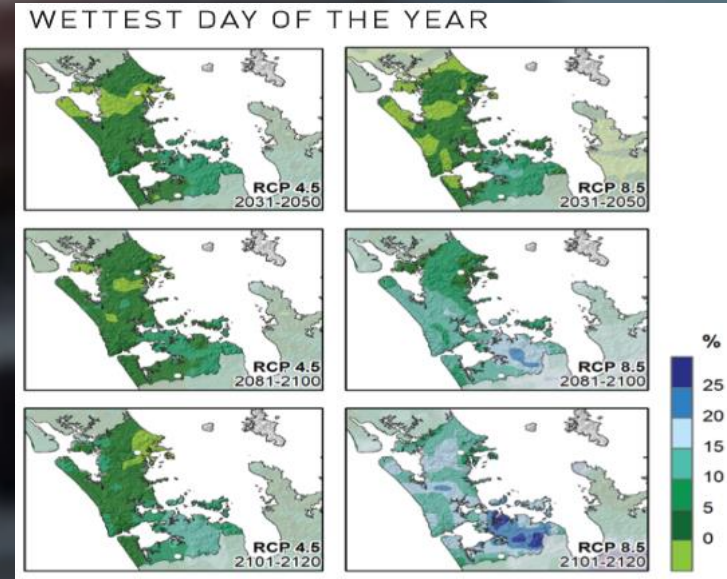
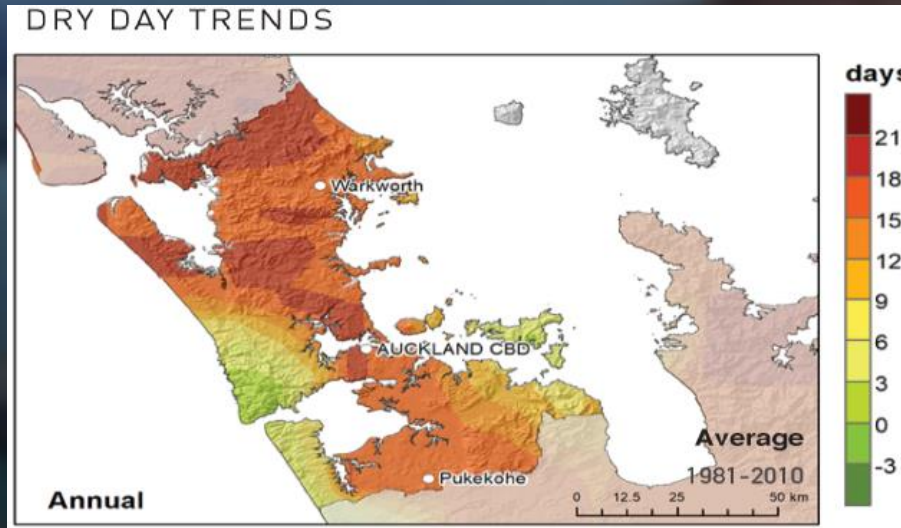
To future-proof in a changing world, we should always be:

- ***Hungry*** for information to inform longer-term thinking
- Endlessly ***curious and open*** to new ideas
- ***Eager*** to generate value beyond the bottom line
- ***Zealous*** in delivering multiple outcomes in partnership
- ***Ready*** to accept our mistakes
- ***Wise*** in pivoting our thinking and actions

Better
Decision-
Making

Smarter, Strategic, Future-focused

...Hungry for information to inform longer-term thinking



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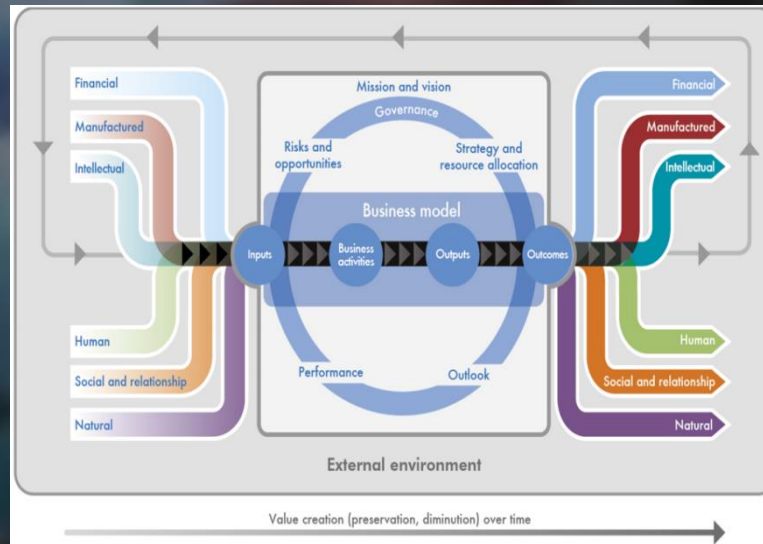
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...Wise in pivoting our thinking and actions



Summary

Building to Last

- We face unprecedented growth & change...
so herein lie opportunities to deliver integrated multiple benefits, to avoid major risks, and to generate value
- We're moving in the right direction in some ways...
but need acceleration, scale, big experimentation, mojo
- What we build will be around for a long while...
so let's anticipate the future & ensure today's decisions & investments help - not hinder - tomorrow's success

Questions & Discussion

