

Future Scenarios – Urban Edition 2008: Instructions & Tips for Successful Gaming

Minimum Number of Players: 8 (two groups of 4)

Preferably invite as many as 16–20 as this allows four groups of at least four people (one will cover each scenario) and also allows for last-minute absences. Much larger numbers could be involved if the space available suits, and if additional facilitators are available – one per 16 players.

Time Required: Approximately 3 hours plus tea/refreshment breaks.

Additional reflection and discussion time immediately and/or a few days afterwards is an advantage.

Space Required: Sufficient room for comfortable hearing within table groups during discussions.

Background construction/traffic noise or music should be avoided.

Seating Suggestions:

Random allocation to seats is best to maximise mixing of ideas. Discourage close friends/colleagues from being in the same group. Seating/group membership could be determined in advance depending on the composition of the participants. Try to have an equal number of each gender in each table group.

Equipment:

- Game materials - download these as PDF files:
 - Game Plan
 - Trend Picture Cards (4 per group, at random)
 - Change-Driver Example Cards (at least 3 per group, at random)
 - Scenario Cards (1 per group, and a duplicate useful if available)
 - Wildcards (at least 2 at random, per group, in different colours)
 - Central District Map (3 copies for each group)
Note: You could potentially substitute a mapped real area of your choice for game purposes, e.g. another district, city, or town in New Zealand
- Tables and reasonably comfortable chairs
- Flipchart or whiteboard and appropriate pens, for each pair of tables. (Beware damage from permanent marker pen ink on furnishings or decorations.)

Our **game plan** suggests timings and activity for each section, based on the trial runs held. Firm timekeeping by facilitator keeps the game running at a satisfying pace.

Tips for Facilitators:






- Start with introductions at the tables, rather than to the whole room.
- Ensure you are very familiar with the game plan in advance and note real timings alongside the suggested elapsed time, adding refreshment breaks.
- Occasional intervention may be required to reign in contributors who speak too long or too often for their table-mates. All should have the chance to take part!

- The facilitator's spoken instructions at the start of each game stage need to be clear, as participants will not be guided sufficiently by the content of game cards.
- Bring a device such as a bell, horn or whistle, to gain attention in a noisy room and help keep the game process on time by clearly signalling changes from one round to the next.
- Walk around the tables, ready to respond to questions.
- Have fun!

Feedback on the *Future Scenarios – Urban Edition* is welcomed, to improve the game content and process. Write to Daniel and Rhys at scenarios@landcareresearch.co.nz




Room laid out for groups of 4 people, around 4 or more tables.

Each group follows similar process; and materials used differ between but not within the tables.

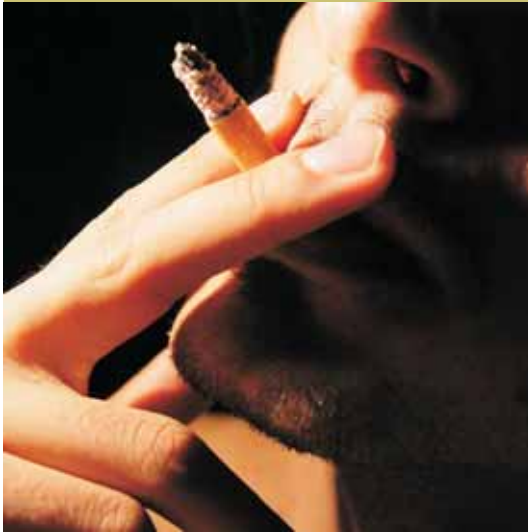
Step 1 (start)	Step 2 (20 minutes elapsed)	Step 3 (25 minutes elapsed)	Step 4 (45 min elapsed)	Step 5 (1hr elapsed)
You are in the present	You are in the present	Transition: today to 2030	In 2030 (and trend to 2055)	In 2030
<p>After introductions. Warm up activity - Past Trends: Table receives 2 (& if time 2 more) picture cards at random from a larger set, to look back 20yrs first, then look ahead)</p> 	<p>Receive 2 copies of a map of 'Central District', an imagined place some/anywhere in NZ - showing the urban form now.</p> 	<p>Receive 2 (& if time, more) Urban Change Driver example cards. Beyond these examples, what are the emerging influences on urban form & function?.</p> 	<p>Receive a future scenario description and a chart, showing its logical relationship to three other game scenarios. Each is a 'future possibility' but none are predictions.</p> 	<p>What would be the implications for 'Central District' after 20+ years of heading in <i>this given scenario</i> direction? (NB. It is not fully expressed as described until 2055).</p> 
15 minutes.	5 minutes.	20 minutes.	15 minutes	20 minutes.
Discuss in pairs. Share views with table.	Explore this map	Two adjacent tables work together: brainstorm & list on a flip chart or white board, likely drivers of urban change for the future.	Discuss which drivers seem to predominate in <i>this future</i> scenario? What's life like?	Draw on the map, with notes alongside. Label it with scenario name, and 2030.

Insert refreshment or meal breaks as required and adjust timings accordingly. *Continues overleaf.*

Insert refreshment or meal breaks as required and adjust timings accordingly.

Step 6 (1hr 20 mins elapsed)	Step 7 (1hr 35 mins elapsed)	Step 8 (1hr 55 mins elapsed)	Step 9 (2hr 5 mins elapsed)	Step 10 (2hr 30 mins + elapsed)
In 2030	In 2055	In 2055	In 2055	Back to Today
<p>Stay with the same scenario. Receive one or two 'wild cards' (to represent random future event or cumulative change trends passing thresholds)</p> <p>15 minutes.</p> 	<p>Now consider the longer term effects of this scenario and up to two wildcards on urban form. Nearly 50 years have passed, so your grandchildren have grandchildren, of their own.</p> <p>20 minutes.</p> 	<p>Discuss: How adaptable and resilient was Central District urban form to possible pressures, as envisaged in your future scenario + wildcard events?</p> <p>10 minutes</p> 	<p>Report back on your table's Central District 50 year scenario map, to the room. Across the room, this covers the 4 scenario 'contexts' to show resulting differences. The wildcards introduced more variation.</p> <p>5 minutes per table. Total time required depends on how many tables report.</p>	<p>Reflect on game process. (e.g. Exploring possibilities, and asking 'what if?') Could you apply such future possibilities to real NZ communities now?</p> <p>30 mins.</p>
<p>Discuss what could be the impact on Central District urban form, 20 years from now? Use map to aid discussion of impacts on form by 2030?</p>	<p>Looking 50 years ahead. Either annotate the map in a new ink colour or (preferably) draw on a clean copy. Label it with the scenario name, 2055 and which wildcards applied.</p>	<p>At the table: Make notes of key points, ready for reporting back.</p>	<p>Compare findings between scenarios. Ask if all or most of the change drivers (from earlier in game) were considered, and note any important ones that were missed out?</p>	<p>Room to discuss learning from the game: What features aid resilience in urban design? What, in urban form, aids behaviour that favours longer-term sustainability?</p>

IN-FLIGHT ENTERTAINMENT



20 years ago

We could smoke



Today

We can choose films



In 20 years

What could it be?

TERTIARY EDUCATION



20 years ago

State support



Today

Student loans



In 20 years

What could it be?



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TELECOMMUNICATIONS



20 years ago

The Brick



Today

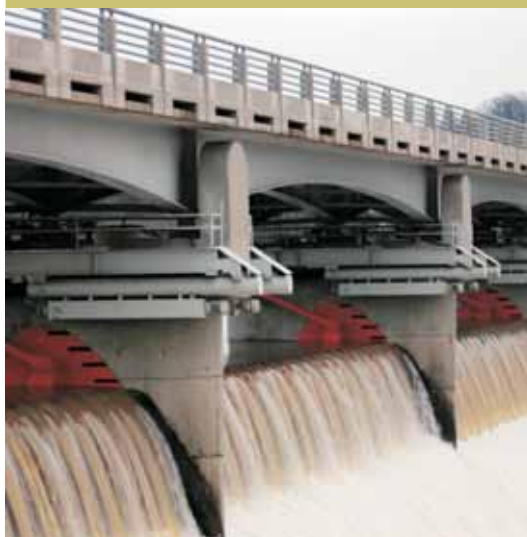
Smart Cellphones

?

In 20 years

What could it be?

RENEWABLE ENERGY



20 years ago

Think Big Hydro



Today

Windfarms

?

In 20 years

What could it be?



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TIMBER PRODUCTION



20 years ago

Clear felling
natives



Today

Clear felling pine

?

In 20 years

What could it be?

TOURISM



20 years ago

567,611 tourists
per year



Today

2,106,229 tourists
per year

?

In 20 years

What could it be?



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TOYS



20 years ago

The Rubics Cube



Today

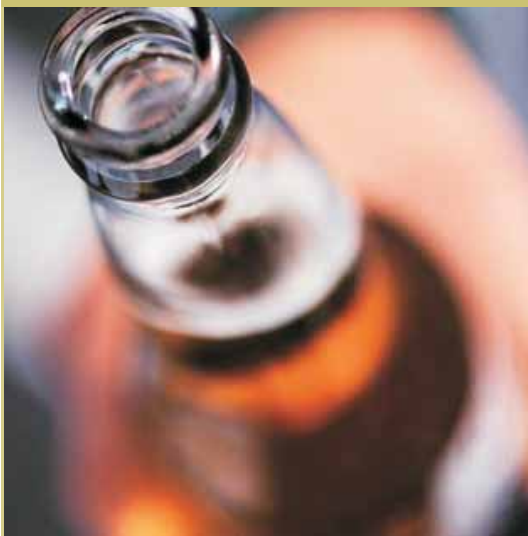
The i-pod



In 20 years

What could it be?

RECREATIONAL DRUGS



20 years ago

Alcohol



Today

Pills



In 20 years

What could it be?



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ELECTORAL SYSTEM



20 years ago

First Past the Post



Today

MMP

?

In 20 years

What could it be?

INFORMATION TECHNOLOGY



20 years ago

The computer



Today

Mini Tablet PC

?

In 20 years

What could it be?



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ENTERTAINMENT



20 years ago

Pacman



Today

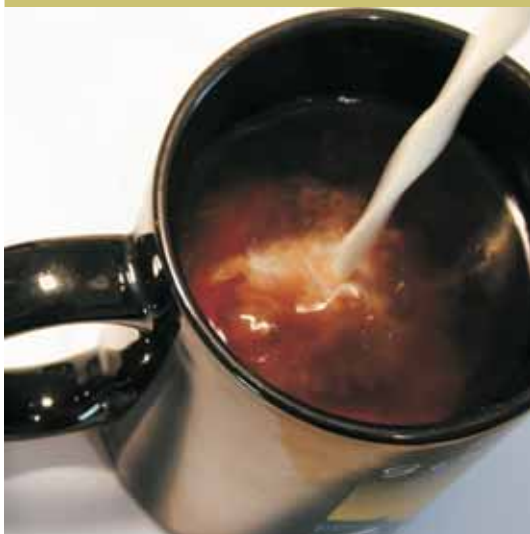
Portable Playstation

?

In 20 years

What could it be?

CAFE SOCIETY



20 years ago

Nescafé



Today

Trim decaf latte

?

In 20 years

What could it be?



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A NIGHT OUT



20 years ago

The Pub



Today

The Club

?

In 20 years

What could it be?

SHOPPING



20 years ago

The local shops



Today

The local mall

?

In 20 years

What could it be?



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GARDENS



20 years ago

??



Today

??



In 20 years

What could it be?

EXPORTS



20 years ago

To the UK



Today

To Asia



In 20 years

What could it be?



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AGRICULTURE



20 years ago

Large farms



Today

Lifestyle Blocks



In 20 years

What could it be?

YOUR NEIGHBOURS



20 years ago

Bi-cultural



Today

Muti-cultural



In 20 years

What could it be?



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URBAN SOUNDS



20 years ago

Less noise



Today

More noise

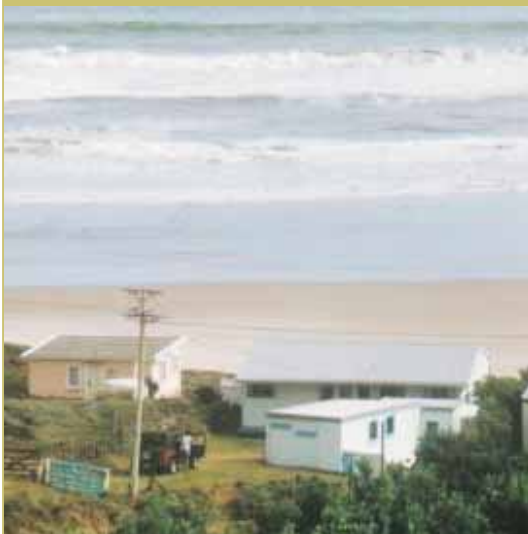


In 20 years

What could it be?



HOLIDAY HOUSES



20 years ago

Kiwi Bach



Today

Marina development

In 20 years

What could it be?





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CARS



20 years ago

One car family:
The Holden

Today

Two car family:
SUV & one other

In 20 years

What could it be?

20 years ago

Today

In 20 years



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INDEPENDENT
AOTEAROA

A

B

C

D



By 2055, Aotearoa New Zealand is a more cohesive society, outward looking and confident as an independent global citizen with a distinctly Pacific character.



Government response to climate change, Peak Oil and other challenges is slow and deliberative - many take part, some get frustrated.



Shift made from a competitive growth economy to valuing 'genuine progress' in well-being above short term profits. Benefits of modest growth are shared equitably. Individualist entrepreneurs are not much fostered, so some emigrate. High quality life-long education helps retain others.



Unprocessed primary produce exports reduced, but high quality organics in demand. Production focus on waste avoidance, energy efficiency, solar technology, making more from less. These cleaner technologies and skills are exportable.



Housing is more social, both urban and rural. Advantages of Maori & Pacifica traditional housing re-discovered by wider population. More shared-use facilities exist alongside private spaces, driven both by need for affordable housing in a low wage economy and effect of capital taxation.



Values have shifted towards the eco-centric rather than techno-centric, and measures of your 'worth' to social rather than material wealth. Social decline observed in societies overseas, stressed by resource shortage and over-population. This has led to some de-coupling from the global economy, but not from global media, read and viewed skeptically.



Native bird song; children at play outdoors; waiata-songs within a workplace; fewer cars; people in street discussion near food market traders; background hiss of wind or water turbines.



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LIVING ON N^o8 WIRE

A	B
C	D



Sustainability awareness arrived, but late, in this scenario. By 2055, city life in Aotearoa-New Zealand is potentially less appealing than it was in their buoyant market economy back in 2025.



Government was initially low intervention (as in *New Frontiers* scenario C), then prompted to regulate in the 2030s by a rise in social concern over weather, resource and ecosystem dysfunctions. Action was taken, unpopular to business, to gradually disconnect NZ from the global economy, making space for local restoration efforts and a new social identity.



As resource depletions and pollution took their toll on commercial activity after 2025, there were trade-offs made between economic growth and quality of life. These made overseas investment and trade terms less attractive. Falling land values and rising unemployment resulted, in part from overseas capitals' retreat.



Rural exports fell as farming diversified to focus on national food and fuel demand, had to reduce inputs and employed low-wage labour displaced from the cities.



Settlement density fell, now that food growing is a daily activity for many, and urban infrastructure is becoming unreliable due to under-investment during the prosperous years. Energy generation is decentralising.



The neighbourhood is a stronger social focus than the nation. Local ingenuity (in 'Kiwi No.8 wire' inventor tradition), providing multiple responses to organisational and resource challenges. Varied success, but made in good humour.



Local radio station's news broadcast when on public transport; children reading out-loud from the latest picture walls; noisy but happy crowd walks by on its way to a sports game against next town's side; distant church bells.



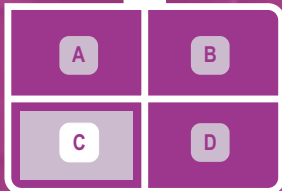
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NEW FRONTIERS



By 2055, New Zealand society is an individualistic meritocracy - social position is defined by visible financial status and fashion, not social or cultural origins. The country is open to inward and outward migration based on wealth and educational achievement, and is increasingly multi-cultural. Recently, more have left than arrived.



Once-public services such as health, education and transport have for years been privatised, creating business opportunities. Efficiency gains benefit the owners, not users. The State's role is limited to governing markets and maintaining law and order; but little action on environmental protection, nor response to global issues of climate change.



The economy is a fast adopter of available technology, and an innovator, often applying these before impacts are assessed. There have been some local eco-disaster incidents and a cumulative pollution of air and water is now affecting rich and poor alike. When a crisis hits, NZ is unprepared.



Minerals from the seabed, dairy products, GE timber, high tech.



Aspiration to a resource-intensive personal lifestyle are reflected through expensive neighbourhoods of luxury houses on gated sections or high rise inner city apartments for the wealthy. The 'losers' rent homes from the 'winners', commute longer distances, and have less comfortable living conditions, but they do still aspire.



Established faith in technology as a problem solver, but it has not come up with 'fixes' to the resource shortages and pollution felt keenly since 2045. Increasingly desperate measures by business extend the extractive approach to resources, as there is little public regulation. Eco-terrorists emerge.



Distant explosion - might be a quarry blast, or not? Sirens. Radio adverts for training, health care products and the latest fashion in secure private transport.



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FRUITS FOR A FEW

A

B

C

D



By 2055, natural resources are being conserved and used in technologically innovative ways, with much recycling and bio-mimicry. Benefits of this are enjoyed by only a few, however. Once 'public' resources, such as coastline, national parks, water and fisheries are now privatised.



The need to adapt to climate change and Peak Oil led to 'smart' environmental controls, implemented at public cost, with benefits mostly felt in private sector. Elite business interests strongly influence policy. Government has reduced social, health and education responsibilities compared to the 2020's.



The economy remains globalised with free capital and staff movement and property rights dominant. New Zealand is doing well compared to the early industrialised nations which have exhausted their resource bases. Skilled wealthy people migrate here, attracted by a clean environment.



Commodity exporting volume has reduced, but added-value products are exported, and tourism continues, managed largely from overseas, with profits expatriated.



A few live in 'gated palaces' but most in overcrowded and aging housing, unable to repair or improve these on low wages, and are subject to high recurring costs for water, fuel, travel, healthcare, etc. There is no social housing provision or elderly care provided by the State - only the insured get access. People have to work into their old age unless their children care for them.



The public is excluded from decision-making affecting their lives. They know their family but not their neighbours and fear strangers.



Fast luxury vehicles passing a squeaking bicycle, street beggar's plea, supermarket lottery-ticket hawker, guard dog barking, loud factory machinery through open doorway, bus queue grumpy complaints.



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Resources:
Plenty (through management)

FRUITS FOR A FEW

INDEPENDENT AOTEAROA

A

B

Identity:
Individual

Identity:
Cohesion

C

D

NEW FRONTIERS

LIVING ON N^o8 WIRE

Resources:
Depleted

Resources:
Plenty (through management)

FRUITS FOR A FEW

INDEPENDENT AOTEAROA

A

B

Identity:
Individual

Identity:
Cohesion

C

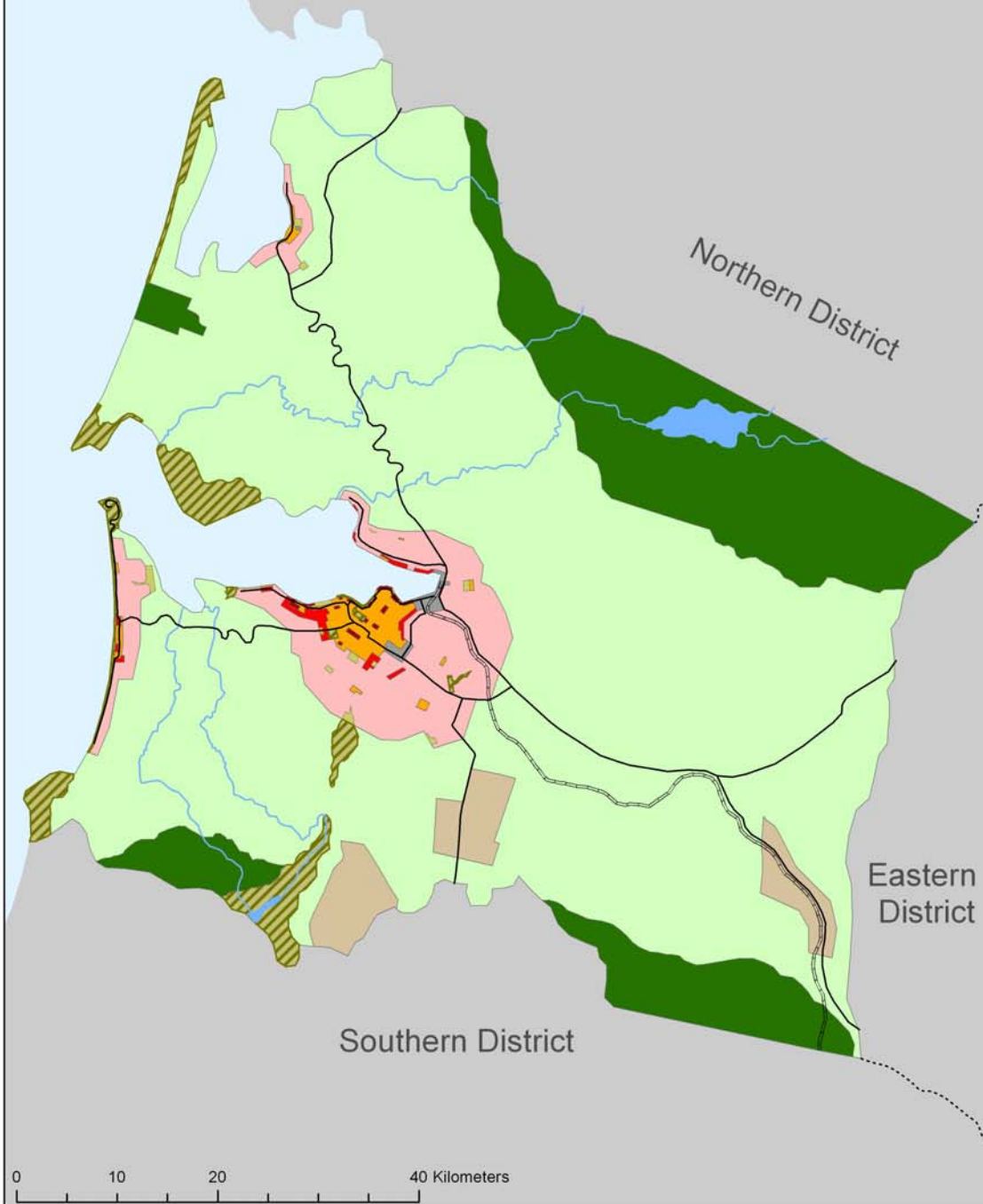
D

NEW FRONTIERS

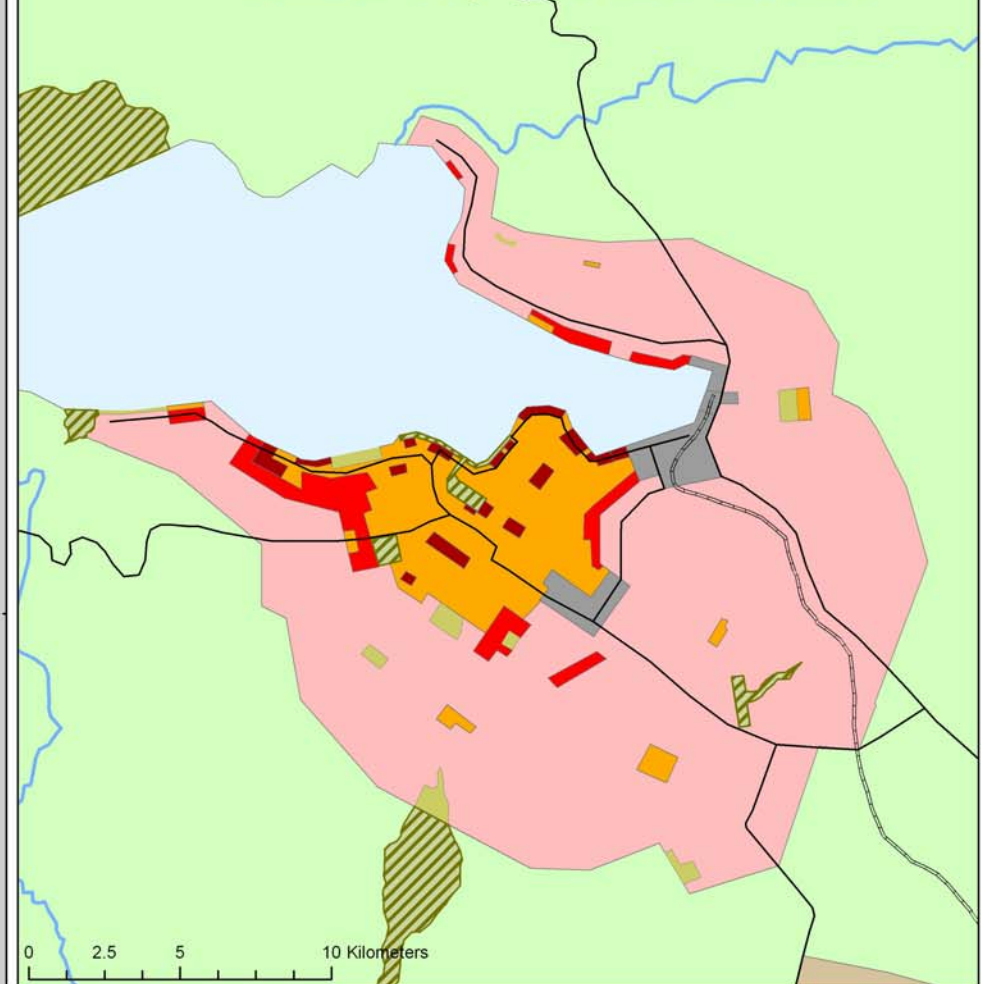
LIVING ON N^o8 WIRE

Resources:
Depleted

Future Scenarios - Urban Edition Central District



Central City - Central District



Key

Non-Urban Land Use

- Arable
- Conservation Estate/Reserve
- Forestry
- Pasture
- Recreation
- Lakes
- Rivers

Urban Land Use

- Residential - High Density
- Residential - Medium Density
- Residential - Low Density
- Commercial/Retail
- Industrial
- Major roads
- Rail lines



**URBAN CHANGE
DRIVER**

Drinking Water

Water quantity & quality available
from catchments & aquifers?

**URBAN CHANGE
DRIVER**

**Water quantity & quality
available from catchments
& aquifers?**

Expecting more flooding events:
Rising seas, fuller rivers, local
cloudbursts?

**URBAN CHANGE
DRIVER**

Wastewater management

Quantity and quality of discharges;
ecological & cultural impacts there?

**URBAN CHANGE
DRIVER**

Local food supply

Food quantity and quality available
from both local and distant
sources?



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**URBAN CHANGE
DRIVER**

Leisure time options

What will be 'new' leisure activities,
and their time/energy/cash
demands?

**URBAN CHANGE
DRIVER**

**Commuting to work &
study**

Physical travel and/or
telecommuting?

**URBAN CHANGE
DRIVER**

**Electricity supply
security**

Reliable and affordable power,
from centralised or de-centralised
sources?

**URBAN CHANGE
DRIVER**

Imported & NZ gas supply

Viable fuel of the future,
or reserve it for petrochemicals?



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**URBAN CHANGE
DRIVER**

Solid Waste Management

Burying the problem,
or recycling it?

**URBAN CHANGE
DRIVER**

**Governance &
Participation**

Reactive or pro-active leaders, to
supply visions of desired future?

**URBAN CHANGE
DRIVER**

**Ecological limits and
thresholds**

What is local area carrying capacity,
for both production and waste
absorption?

**URBAN CHANGE
DRIVER**

**Rising wind speed and
strength**

Climate is changing -
warmer wetter winds from
North & West!



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URBAN CHANGE DRIVER

Population composition

Different ratios of ethnic groups result from some sections of population growing faster

URBAN CHANGE DRIVER

Access to green-space

Walk and play locally, or travel to distant national parks?

URBAN CHANGE DRIVER

Health & longevity

More elderly need housing & support, but many are also healthy & active

URBAN CHANGE DRIVER

Existing housing's quality

Too many are cold and damp - do millions of homes need replacement?



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URBAN CHANGE DRIVER



Global Peak Oil Production

Rising prices as demand
exceeds supply
People drive less

URBAN CHANGE DRIVER



Workforce size & skills

Perhaps fewer workers in relation
to their dependents, and how
skilled?

URBAN CHANGE DRIVER



(in)secure financial system

Credit less easy, or currency
speculation, or overseas capital
might flee?

URBAN CHANGE DRIVER



Sense of security

Will more hide behind walls, gates
and video cameras?



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**URBAN CHANGE
DRIVER**

Mortgage availability

Will relatively more people rent,
not own their home?

**URBAN CHANGE
DRIVER**

Insurance non availability

Un-insurable NZ locations
emerging?

**URBAN CHANGE
DRIVER**

Infrastructure ownership

Private or public control of water
supply, roads, airports, ports,
telecoms, power?

**URBAN CHANGE
DRIVER**

**Underground
infrastructure**

How long will the sewers,
pipes & cables last?



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URBAN CHANGE DRIVER

Distinctive Sense of Place

Local loyalties and character
develop as settlements
outlast their 'founders'

URBAN CHANGE DRIVER

Land values at transport nodes

Rail and bus access command a
premium as the car era declines?

URBAN CHANGE DRIVER

Local manufacturing base

NZ industry declining or re-building,
in a changing global
trade context?

URBAN CHANGE DRIVER

Conspicuous consumption

Demise of the suburban 'trophy
home' and of throw-away goods?



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WILD CARD

Electro-magnetic pulse warfare (EMP) irreparably knocks out all electronic circuits, wiping out internet, telecommunications, cars and appliances

1

WILD CARD

Pulmonary type TB becomes rampant, highly contagious, unable to be treated or easily contained in long term

2

WILD CARD

Global pandemic (e.g. Sars III) kills 10% of working population each year for 5 years before being controlled

3

WILD CARD

Nuclear weapons used in the Northern Hemisphere, results in large movements of refugees to southern countries

4



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WILD CARD

Worldwide famine as rust fungus affects rice and grain crops and reduces harvests, on an ongoing basis

5

WILD CARD

Global banking & stocks crisis, loss of confidence leads to massive inflation and a collapse in world trade.
Unemployment rises above 30%

6

WILD CARD

New Zealand is hit by a Richter Scale 8 + earthquake swarm as alpine fault slips. Large death toll and widespread disruption to key infrastructure

7

WILD CARD

Global Climate Change accelerates to tipping points, Greenland melts, sea-level now expected to rise 5 m within the next 50 years

8



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WILD CARD

Global resource wars increase energy costs especially for liquid fuels. Actual continuity of supply becomes a major problem, with frequent interruptions

9

WILD CARD

Average temperatures rose 3°C (over 50 years) and weather now more extreme and variable, with intense cloud bursts and droughts

10

WILD CARD

New Zealand's population rises 2 million as returning NZ'ers and environmental refugees flood into the country. Ongoing net inflow there-after of 100,000 migrants/year

11

WILD CARD

NZ nanotechnology industry developed - retards aging, immediately extending life expectancy and childbearing years by 50%, prompts a baby boom

12



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WILD CARD

Ohu or “land squatter” scheme resurrected in urban and rural areas, on a harvest right basis, to provide access to land for productive use, without a change in ownership

13

WILD CARD

Airships in use for tourism and door to door freight delivery. Unfortunately, only seasonal use is possible, as they are prone to storm damage

14

WILD CARD

Resurgent Maori pan-tribal authorities, using Treaty Claim settlement funds, develop joint ventures with the yachting industry and create a wind and solar power based merchant navy with a global reach

15

WILD CARD

Small scale, labour intensive biotechnology develops. The use of bacteria to extract minerals from land and seawater and clean up pollution becomes a major economic activity in NZ, with major export earnings

16



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WILD CARD

NZ develops a large “commercial” military capability for peace keeping and mediation of conflicts. A training and research component attracts students from all over the world

17

WILD CARD

NZ develops specialized education programs (medical, biotech & appropriate technology) using virtual reality and high tech interactive systems. Attracts capital and skilled immigrants

18

WILD CARD

Cheap new technology allows setting up of satellite energy collection systems to provide low cost and clean energy back to earth

19

WILD CARD

Technology breakthroughs on recycling reduce building costs by 75% as well as 'disposing' of waste stream materials

20



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WILD CARD

New Topic

WILD CARD

New Topic

WILD CARD

Offshore algae farming becomes economic, for bio-fuel production. Floating structures also double up as fish farms and sources of electricity from wind and wave generators

21

WILD CARD

Forest land-cover is increased to offset CO₂ tax obligations. At the same time wood becomes substitute for 'fossil' fuels and a source of chemicals

22



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