



# Fittest City

# NEW ZEALAND

A snapshot of New Zealand's  
Life, Health and Wellbeing



HEALTHIER, LONGER,  
BETTER LIVES



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# FOREWORD

**At AIA, our purpose is to make a difference in people's lives and our vision is to champion Australia and New Zealand to be the healthiest and most protected nations in the world.**

Cardiovascular diseases, cancer, chronic respiratory diseases and diabetes account for 90% of premature deaths in New Zealand. While this number appears high, there is good news, in that all of these can be greatly influenced by lifestyle behaviours and positive changes, including even small increases in physical activity.

The Fittest City report has been produced as part of AIA Vitality's commitment to driving awareness of the importance of healthy behaviours. AIA Vitality, which we have recently launched in New Zealand, is a proven, global, science-backed programme, that uses behavioural economics theories to educate, support and incentivise members to better understand and improve their health.

AIA Vitality encourages small changes that will help you improve your health over time, no matter what country or city you live in. AIA Vitality has had incredible success in Australia since its launch in 2014, with more than 150,000 members achieving 115 billion steps, nearly 30,000 voluntary AIA Vitality Health Checks, 305,000 Health and Wellbeing Assessments and 1.3 million visits to our partner gyms. When talking about Health and Wellbeing we refer to the four pillars of Move Well, Eat Well, Think Well and Plan Well.

The Fittest City report highlights the interplay between environment, technology and behaviour, and the potential of evidence-based innovative solutions like AIA Vitality for addressing the far-reaching effects of physical inactivity. We want the Fittest City report to be an engaging benchmark for this, so that Kiwis leave a great legacy for future generations to come.

I'm really excited to see how we can make a difference through the Fittest City report, and AIA Vitality more broadly, to help Kiwis live Healthier, Longer, Better Lives.

Take care,  
Damien

**Damien Mu**  
CEO Australia and New Zealand





# FOREWORD

**The Fittest City report is an important review for New Zealand. By understanding and focusing on the right things, the health and wellbeing of all New Zealanders will improve.**

This is something both the public and private sectors can unite on. We know that as a country we have many health challenges. Healthier lifestyles start with making the right choices every day and taking small steps towards a healthier life.

At AIA we are looking to do our part to help make New Zealand the healthiest nation on Earth. As a country we are blessed by so much, but we do have our challenges. Taking steps towards overcoming those challenges does not need to be daunting and there is help available. AIA Vitality is an example of a programme that can play a part in ensuring we all live healthier lives.

We all know that by understanding our current health, setting some goals and measuring our progress we can take steps towards healthier living.

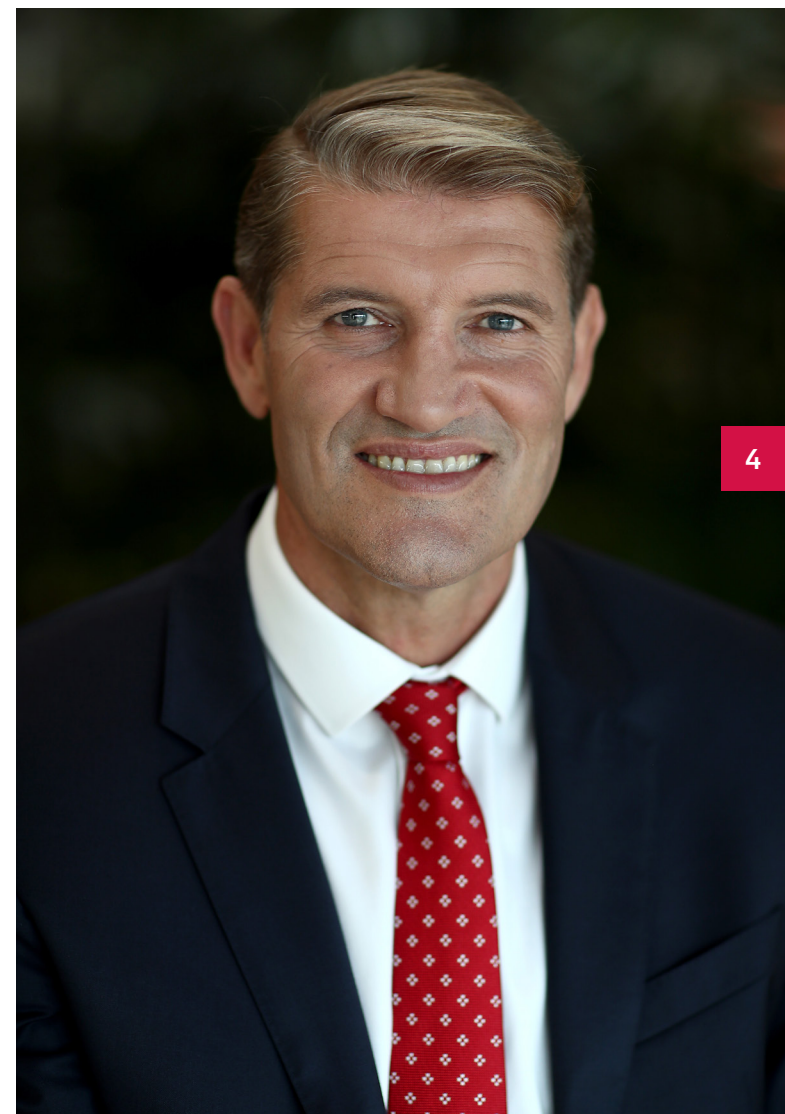
While some of New Zealand's health challenges are unique to our environment, what the Fittest City report shows is that our cities fare differently when it comes to health and wellbeing. The report makes some important recommendations and insights.

For me, one of the most important insights is that healthier living need not be difficult or unattainable. We all know that by moving more, not smoking, getting more sleep and focusing on healthier eating, we can all change our lives for the better.

As New Zealand's largest life insurer we are excited to be bringing AIA Vitality to New Zealand and to help New Zealanders on their health and wellbeing journey with this award-winning science-backed programme.

Cheers,  
Nick

**Nick Stanhope**  
CEO New Zealand





# THE BIG PICTURE

The numbers tell the story:

# FOUR

RISK FACTORS  
CAUSE

# FOUR

DISEASES  
THAT CAUSE

# 90%

OF PREMATURE  
DEATHS IN NEW ZEALAND

These diseases – **cancer, cardiovascular diseases, chronic respiratory diseases and diabetes** – all fall under the category of non-communicable diseases, or NCDs.

In other words, you can't catch cancer like you can a cold, a heart attack isn't contagious, and diabetes isn't infectious. The cause of these potentially fatal diseases is often, and to a large extent, driven by lifestyle factors such as insufficient physical activity, unhealthy diet, tobacco use and the harmful use of alcohol.

Some groups in our society are more at risk than others of developing NCDs. This is because the ability to maintain a lifestyle that can help combat these diseases is hugely influenced by factors such as socioeconomic, ethnic, geographical, living conditions and gender.<sup>1</sup>



# SLOWING DOWN

The 2017/2018 New Zealand Health Survey<sup>2</sup> showed that only **54%** of New Zealand adults (aged 15 years and over) met the minimum physical activity guidelines – which is a minimum of 30 minutes of sustained physical activity a day. 11.5% did little or no physical activity. When compared to the wider New Zealand population, Māori and Pacific peoples had the same level of physical activity as the non-Māori and non-Pacific population but higher rates of physical inactivity (being physically active for less than 30 minutes in the past week).

Physical inactivity is responsible for **5 million deaths** worldwide, which is **10%** of all deaths. It is a direct cause of the global burden of cardiovascular disease (6%), type 2 diabetes (7%) and breast cancer (10%)<sup>3</sup>.

The problem isn't confined to New Zealand. Across the globe, people are slowing down. On average **1 in 4 adults** (23%) are not active enough and do not meet the World Health Organization (WHO) physical activity recommendations.<sup>4</sup>

The economic impact of physical inactivity is huge. In New Zealand, the total cost of physical inactivity was \$1.3 billion in 2010, which is almost 1% (0.7%) of New Zealand's GDP.<sup>5</sup>

**46%**

of NZ adults did not  
meet the minimum  
physical activity guidelines

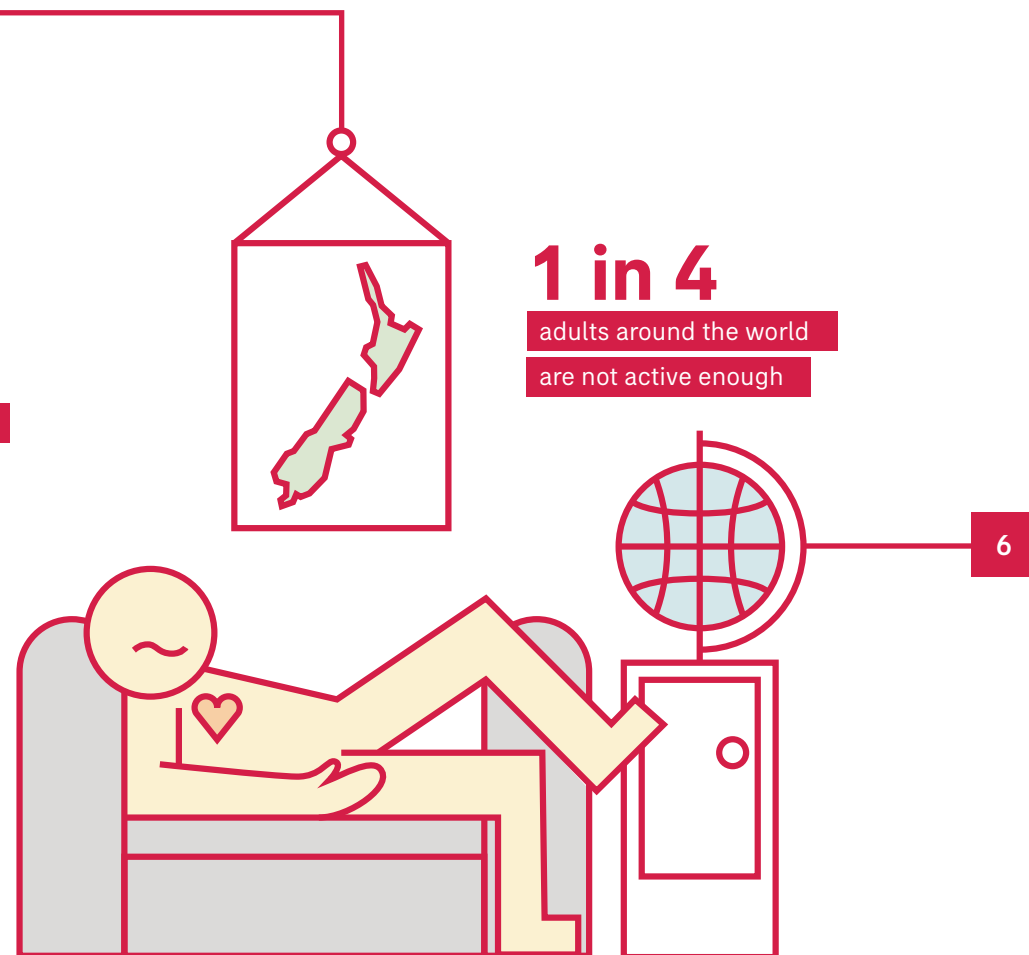
Physical inactivity is  
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**1 in 4**

adults around the world  
are not active enough





# 5 REASONS TO MOVE MORE

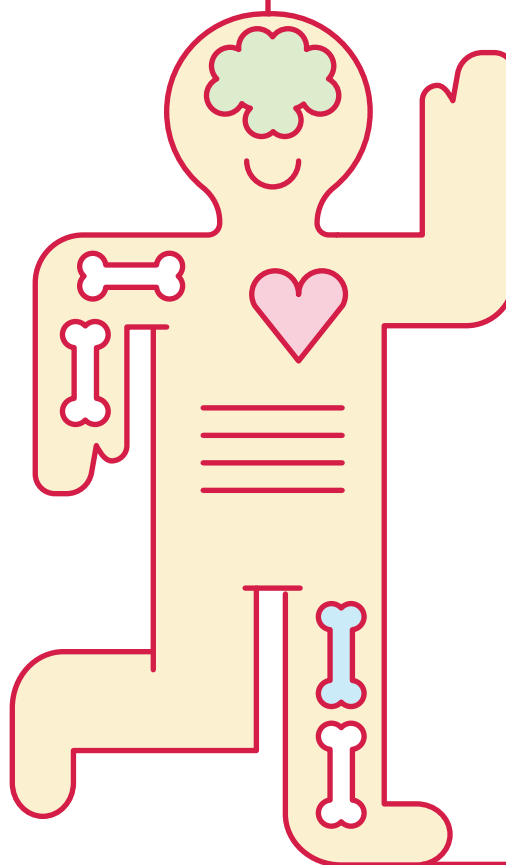
## Good for your brain

Studies have shown the physiological benefits of physical activity include **improving quality of sleep, boosting mood and memory, reducing stress, anxiety and depression and lowering the risk of developing Alzheimer's disease.** A study in JAMA Psychiatry showed higher levels of fitness in midlife lower your risk of depression by 16%.<sup>6</sup>

## Good for your heart

A recent study in the *Journal of the American College of Cardiology* showed that for people who sit for more than six hours a day, replacing one hour of sitting with equal amounts of moderate physical activity (such as strenuous gardening or housework) can mean a **20% reduced risk of dying from cardiovascular disease.**

The results are even better if you replace one hour of sitting with one hour of vigorous activity, such as swimming, aerobics, and tennis. This was associated with a **64% reduction in the risk of dying from cardiovascular disease.**<sup>7</sup>



## Good for your overall quality of life

Exercise **reduces high blood pressure and lowers bad cholesterol levels.** Physical activity also helps to **reduce your risk of developing colon and breast cancer.** A new study from the American Cancer Society shows that for people who are the least active, replacing half an hour of sitting time with physical activity was associated with almost a 50% reduction in mortality.<sup>8</sup>

## Good for your metabolism

In addition to the **weight-control benefits,** exercise also **improves insulin sensitivity and lowers your risk of developing Type 2 diabetes and metabolic syndrome.** A study in Diabetes Care showed physical activity together with weight loss can lower a person's Type 2 diabetes risk by up to 58% in high-risk populations.<sup>9</sup>

## Good for your muscles, joints and bones

Physical activity **strengthens muscles, boosts bone density and reduces the risk of disability and injury, as you get older.** A natural part of ageing is the loss of muscle mass, which can be offset through exercise. A meta-analysis in *Medicine & Science in Sports & Exercise* found resistance training in men (50 – 83 years) increased their lean body mass by around 1kg.<sup>10</sup>



# HOW MUCH SHOULD YOU MOVE?

The Ministry of Health recommends that New Zealand adults do at least 150 minutes – or just over 20 minutes a day – of moderate to vigorous physical activity each week.

The Ministry of Health's *Eating and Activity Guidelines for New Zealand Adults*<sup>11</sup> recommends the following Activity Statements:



Do muscle strengthening activities on at least two days each week.



Do at least 2½ hours of moderate or 1¼ hours of vigorous physical activity spread throughout the week.



Sit less, move more!  
Break up long periods of sitting.



For extra health benefits, aim for 5 hours of moderate, or 2½ hours of vigorous physical activity spread throughout the week.



The main thing to remember is that doing **some** physical activity is better than doing **none**.



## Active transport

Active transport is physical activity for transport and not purely for recreation. Examples are cycling, walking, and any incidental activity that comes from using public transport.

Active transport is an effective way to increase physical activity levels and meet the minimum guidelines for health benefits.



# GLOBAL RESPONSE

In line with its vision for more active people for a healthier world, the World Health Organization (WHO) developed a new Global Action Plan on Physical Activity (GAPPA) in 2018. It provides evidence-based recommendations to help countries reduce global levels of physical inactivity of 10% by 2025 and 15% by 2030.

There are four policy areas that are adaptable to all countries:



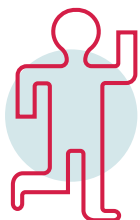
## Active societies

Implement behaviour change communication campaigns and build workforce capacity to change social norms.



## Active environments

Promote safe, well-maintained infrastructure, facilities and public open spaces that provide equitable access to places for walking, cycling and other physical activity.



## Active people

Ensure access to opportunities, programmes and services across multiple settings to engage people of all ages and abilities in regular physical activity.



## Active systems

Strengthen leadership, governance, multi-sectoral partnerships, research, advocacy and information systems to support effective coordinated policy implementation.



Implementation of the action plan, however, demands partnerships and pioneering solutions. Ideally the work should be occurring across local and central government and involve the private sector.

# BARRIERS AND OPPORTUNITIES

Good habits can be **hard to form** and as humans it can sometimes feel like we are programmed to find the **fastest solution**. Therefore, it shouldn't come as a surprise that people are more likely to make healthy **behaviour choices** when those choices are easily available to them.

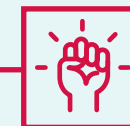
Physical activity behaviour occurs in a complex and multi-dimensional context, so it is critical to identify the factors that drive physical activity in order to achieve sustained behavioural change, and reduce the associated disease burden. Interventions that aim to improve physical activity at the population level need to take a socio-ecological approach that targets several levels of impact.

In this section we highlight three key areas that are showing promise in effectively improving physical activity: **behavioural economics, technology/data and the environment**.





# BEHAVIOURAL ECONOMICS



What makes one person exercise – and keep going – while another person may give up or not even begin? It all comes down to **behavioural economics**, or the **subtle art of understanding and influencing how people make decisions and take action**.

Behavioural economist and founder of research institution *The Center for Advanced Hindsight*, Dan Ariely has spent many years studying the motivations behind the choices we make in a wide range of areas, from health and wellness to financial success. And, in his opinion, **it often boils down to the right kind of rewards**.

If you want people to live healthier lifestyles you need to reward them for making healthier choices every day, as opposed to only rewarding them for achieving an ultimate big-picture goal.

**In the following Q&A we ask behavioural economist, Dan Ariely to share his insights.**

**How does behavioural economics play a role in getting people more active?**

When we think about physical activity, like running, it just seems like it's really going to be miserable and painful and unpleasant and so on. Therefore, we don't engage in it. But there are two facts to this.

The first is that once we're in the task, things change. We think less about the misery and we are able to enjoy the activity. The second is that, over time, the unpleasant aspect of the activity becomes less while the enjoyable aspect increases. The goal is to get people to take the first step of their fitness journey and incentivise them for doing so.

**What are some of the most insightful nudge experiments in the physical activity space?**

We've done quite a few experiments through the *Centre for Advanced Hindsight*, especially around exercise. I've looked at different strategies to motivate people to stick to their health goals by offering various incentives. These included social accountability (sharing progress on Facebook), a points system (depending on behaviour they could win or lose money) and app control (smartphone apps were blocked). Results showed that loss aversion was an effective means of motivating participations (via losing points compared to gaining them), as was the app control experiments. The social accountability aspect was more effective when participants shared their progress with larger audiences (like their entire Facebook community versus a limited group).

**"If you want people to live healthier lifestyles you need to reward them for making healthier choices every day, as opposed to only rewarding them for achieving an ultimate big-picture goal."**

**Dan Ariely** – Professor of Psychology and Behavioural Economics, Duke University.

# BEHAVIOURAL ECONOMICS



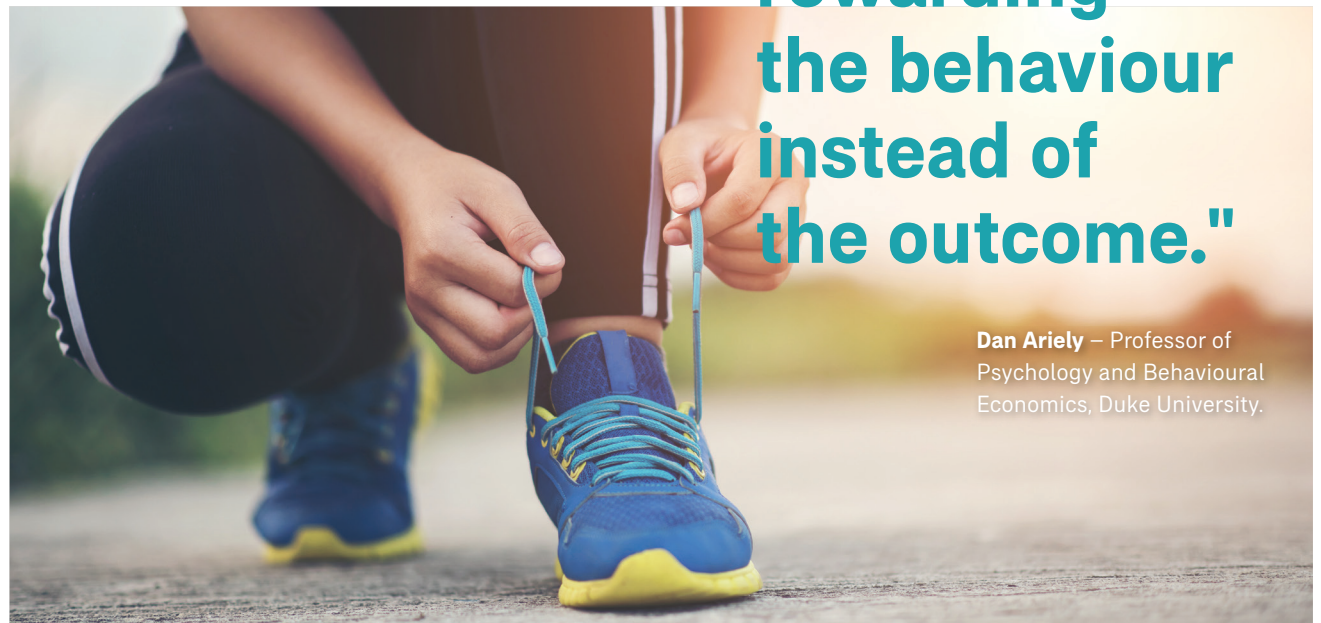
## What role does technology play in the field of behavioural economics?

One of the main lessons in behavioural economics is that the environment matters, and technology is an amazing way to become part of a person's environment. For example, if people know they should eat better, exercise more, take their medication on time or drive safely, but are not able to change their environment, the odds are that these lessons will not change their behaviour. But if people can take their phone with them as a reminder and act as a decision or nudge tool at the moment of temptation, the odds of improving behaviours are much, much higher. This is why I am a big fan of technology in general, as it helps to shape people's environments.

## Where immediate gratification and short-term incentives don't seem to work, what additional reward structures could be successful?

One of the wonderful features of human nature is that we draw motivation from a wide range of aspects. Think about something like running a marathon – on the surface it looks like running a marathon is a miserable activity where people are suffering, but in reality, people get tremendous satisfaction.

Running marathons, climbing mountains, writing books and starting new businesses – they all show that we have this capacity to draw on a wide range of types of motivations, and in recent years we've been trying to add to these motivations. Things like pride, identity, ownership and a sense of progress add to the mix of the motivation equation in order to get people to behave in a way that would ultimately be good for them.



**"When trying to develop healthy habits, we should focus on rewarding the behaviour instead of the outcome."**

**Dan Ariely** – Professor of Psychology and Behavioural Economics, Duke University.



# TECHNOLOGY AND DATA



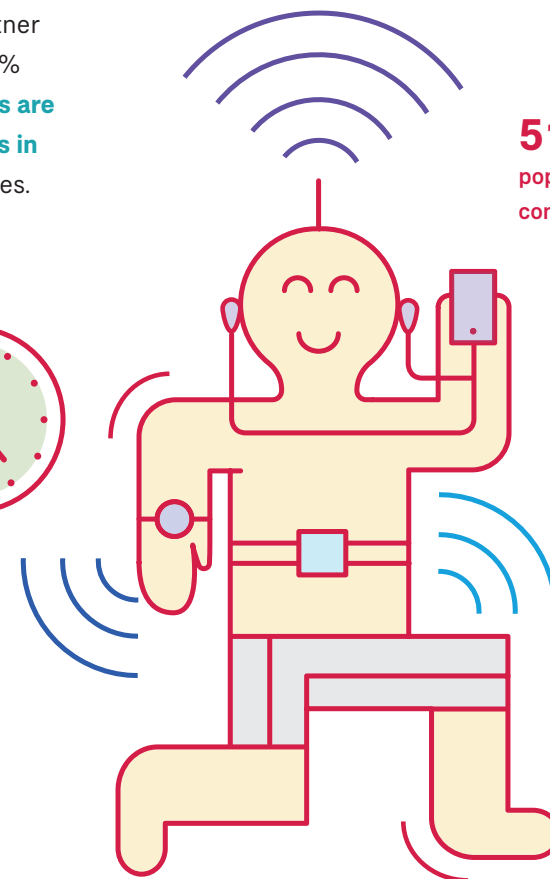
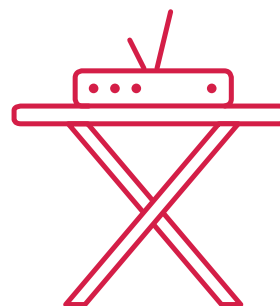
**Advances in technology increasingly impact daily life, from how we communicate, look for information and shop, to how we manage our health.**

One of the most impactful innovations is the Internet. For the first time ever, **51% of the global population (4 billion users) will be connected in 2019<sup>12</sup>**. Mobile connectivity means consumers can use a variety of devices to interact with content and services online. Every week, almost 3.5 million New Zealanders (15 years and older) spend **18 hours on the Internet**, mostly on mobile and social media platforms<sup>13</sup>.

Other technological innovations are wearable devices - technologies that can be worn on the body. These include sensor technologies that collect and deliver data, such as health and fitness information. The American College of Sports Medicine's *Worldwide Survey of Fitness Trends for 2019*, ranked wearable technology as number one<sup>14</sup>.

In 2016, one in six (15%) consumers in the United States were using wearable technology, such as smartwatches or fitness bands<sup>15</sup>. According to Gartner Inc<sup>16</sup>, sales of wearable devices will increase by 26% globally in 2019, up from 25.8% in 2018. **End-users are expected to spend \$42 billion on wearable devices in 2019**, \$16.2 billion of which will be on smartwatches.

Almost **3.5 million**  
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**51%** of the global  
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# TECHNOLOGY AND DATA



How we get and stay active can be influenced by these technological trends.

## Wearable technology

It's no surprise that wearable tech has claimed a top-three spot on the *American College of Sports Medicine's* list of global fitness trends for the past three years. Be it a heart rate monitor, step counter or an **Apple Watch**, fitness devices are making their mark on more and more wrists every day. **Wearable technology has given people unprecedented control over their personal health and fitness.**



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**Social media has facilitated a whole new way to get and stay motivated and connected.**

## Social media 'fitspiration'

There's nothing new about exercising in a group to boost individual motivation. But thanks to social media, there are so many new ways to interact with people while getting active. From online fitness communities and social challenges on Facebook to training advice from a host of self-made fitness gurus on Instagram and YouTube, **social media has facilitated a whole new way to get – and stay – motivated and connected.** If harnessed correctly it can be positive.

## Immersive fitness

Where would you like to train today? Perhaps a cycle in the Tour de France. Or how about a jog along a secluded mountain path? Many exercise studios, fitness consoles and apps now promise to take your training to the next level with the help of virtual reality routes, surround sound, wrap-around studio screens and integrated displays. It even has a name: **exertainment**. But it isn't just about keeping you entertained; ZWIFT, for example, is a multiplayer online cycling and running videogame and physical training programme that encourages competition by displaying a leaderboard with every participant's real-time stats during sessions.

# ENVIRONMENT



A wealth of research shows that environment impacts behaviour – **your surroundings directly impact how you live**. This makes the environment an important consideration for health and wellbeing. The interplay between urban design, transport and health were discussed in detail in a series of papers in the Lancet in 2016.<sup>17</sup>

Two trends are evident: **people are living longer than ever before, and more people are living in cities**. Cities are impacted by a combination of factors that impact health at different levels. Each city has a unique profile influenced by aspects like culture, economy, environment and politics. Despite their different personalities, all cities are subject to dynamics, such as globalisation, which create complex and rapidly transforming settings.

**A significant determinant of urban health outcomes is transport.**

The relationship of these traits affects the health and wellbeing of its individual inhabitants and broader communities. The health of city dwellers is not just impacted at an individual level, but also indirectly, such as via local or regional, national and global influences.

**A significant determinant of urban health outcomes is transport.** Urban transport systems differ across cities via policies, modes of transport, land-use and technology. These differences impact the choices available regarding how people travel between destinations.





# ENVIRONMENT



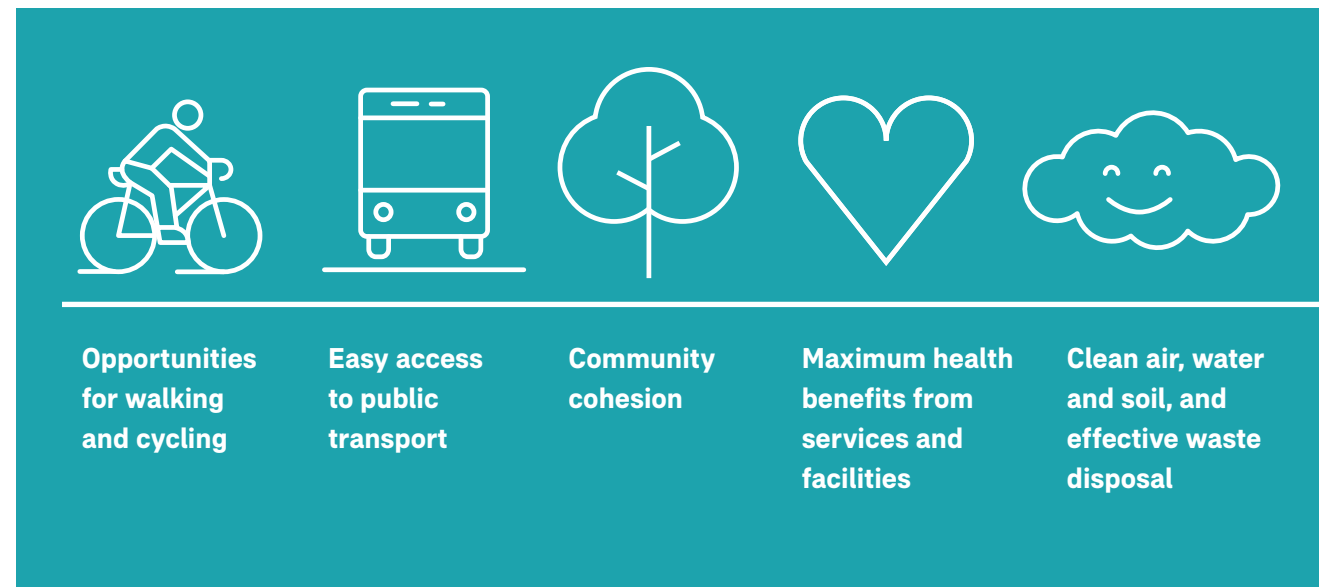
**Health can be positively impacted through influences, such as encouraging active transport (e.g. walking, cycling and public transport), or negatively impacted by road-related injuries and air pollution from vehicle gas emissions.**

Urban design impacts the number of people who use active forms of transport to get to and from their destinations. An increase in physical activity through active transport has multiple health benefits, such as weight reduction, lower risk of diabetes, and less sick leave. **Cycling and walking for transport positively impact health, the environment and the economy.**

Barriers that prevent people from using active transport can include suboptimal urban design, which leads to concerns about road safety and inadequate safe places to travel.

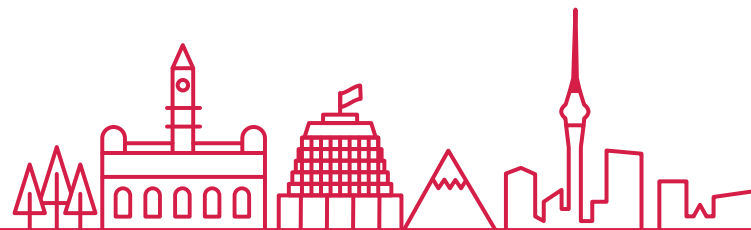
Inadequate access to transport can limit social interaction and access to services, including healthcare.<sup>13</sup>

The Public Health Advisory Committee's report *Healthy Places, Healthy Lives: Urban Environments and Wellbeing18* concluded that 'healthy urban form' provides:



We will discuss New Zealand cities in terms of their transport modes (private vehicle ownership, walking, cycling and public transport), the environmental impact of these patterns (air pollution via particulate matter and gas emissions) and transport related injuries.

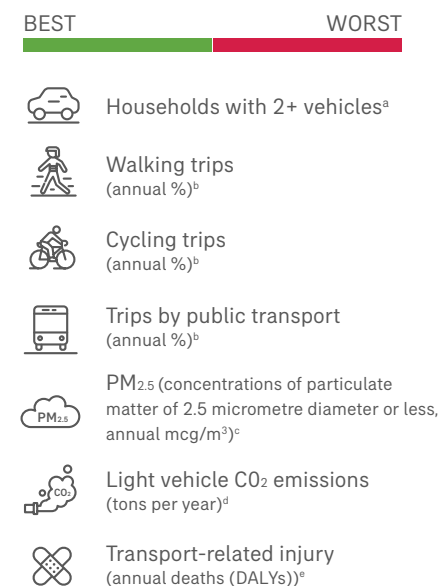
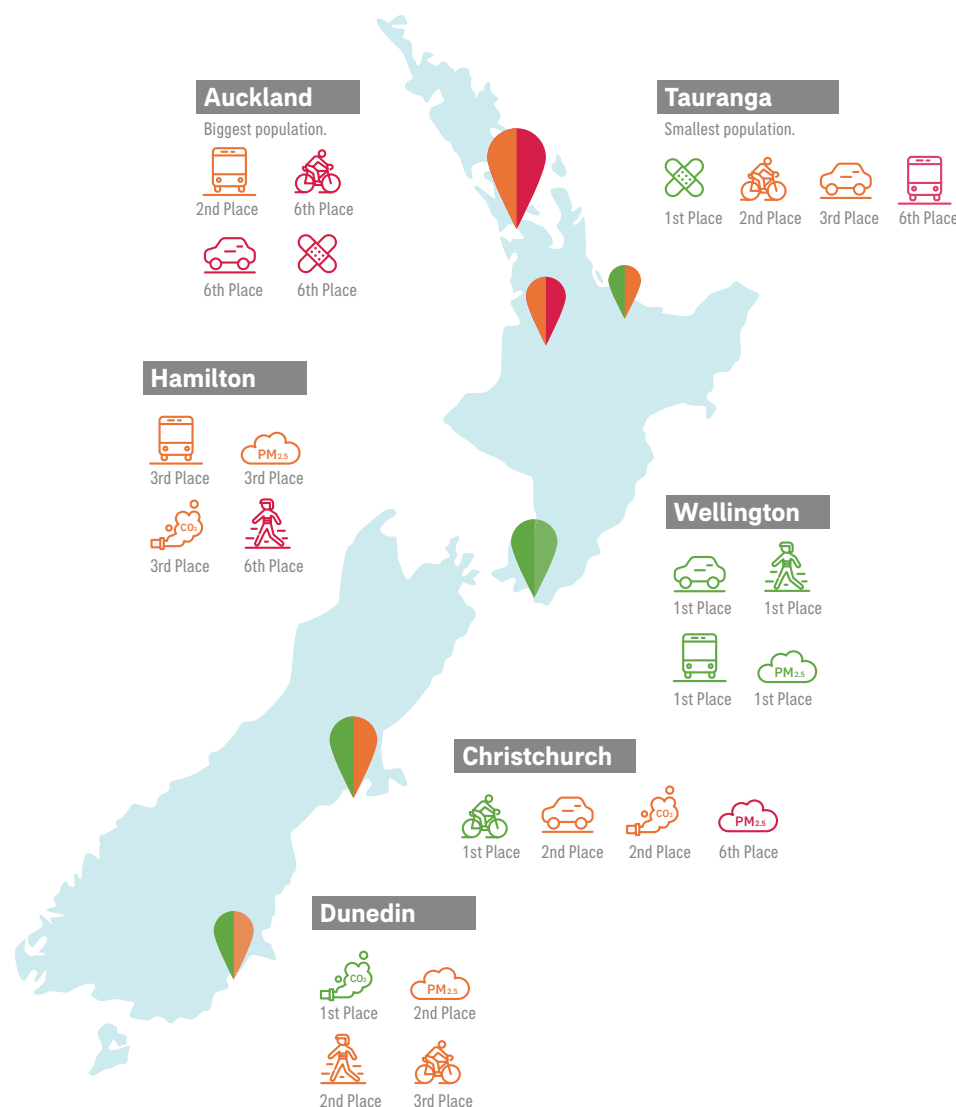
# NEW ZEALAND CITIES



New Zealand cities vary widely, influenced not only by their uniquely individual history and geography, but also by their distinct populations. This can make comparisons difficult however, researchers from the University of Otago and the University of Auckland<sup>13</sup> looked at the different levels of walking, cycling and public transport use, as well as their health consequences in the six largest New Zealand cities.

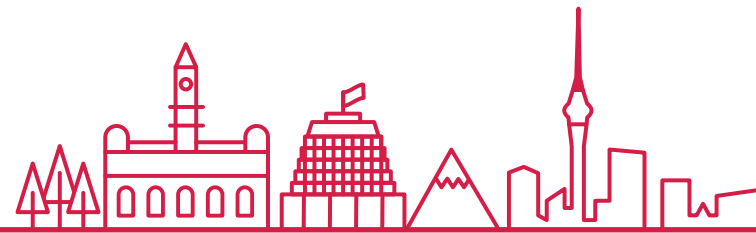
They created baseline profiles of each city based on their physical activity levels (walking, cycling and public transport), air quality (particulate matter and CO<sub>2</sub> emissions) and transport-related injuries. They then applied the Integrated Transport and Health Impacts Model.

Following that, they looked at the impact of improving transport patterns in each city if each city changed its transport patterns to reflect those of the city with the most sustainable transport patterns. Here's how they measured up.



Sources: <sup>a</sup>Statistics New Zealand, Census of Population and Dwellings 2013, <sup>b</sup>Ministry of Transport, New Zealand Household Travel Survey 2008–2014, <sup>c</sup>National Institute of Water and Atmospheric Research (NIWA), <sup>d</sup>Ministry of Transport, The New Zealand 2015 Vehicle Fleet: Data Spreadsheet, <sup>e</sup>adapted from Institute of Health Metrics and Evaluation, Global Burden of Disease study, 2013.

# RESULTS



**The purpose of the exercise is to understand and learn from those that are doing well in achieving healthier environments for their citizens.**

## Top New Zealand cities

Wellington was the stand-out city, scoring the highest in terms of the most sustainable transport system, the highest rate of active transport use in New Zealand, the most walking trips, and the least concentration of particle matter.

Dunedin scored best on light vehicle CO<sub>2</sub> emissions, which should be no surprise given a recent Otago University study showed that it is the city with the highest proportion of Electric Vehicles in the country.<sup>19</sup>

Christchurch, with the highest number of annual cycle trips, and Tauranga, with lowest numbers of transport-related injuries, are also worthy of a mention.

Meanwhile, the “supersized” nature of Auckland, and the growing population of Hamilton are some reasons why these cities were found to score lower in comparison. Auckland has put in place some fantastic initiatives (see page 30).

The purpose of the exercise is not to “name and shame” cities, but to understand and learn from those that are doing well in achieving healthier environments for their citizens.





**"Research is showing that governments, both central and local, are powerfully positioned to improve health and save lives by setting policy and making planning decisions that improve long-term sustainable transport (cycling, walking and public transport) choices for New Zealand cities."**

Wellington's compact city form has helped result in the highest levels of sustainable travel of all New Zealand cities. Christchurch has the highest level of cycling as a mode of travel, while Auckland has the highest level of multiple car ownership. This is in part due to geography – Christchurch is relatively flat, while Auckland is spread out geographically.

**Infrastructure that prioritises cars over sustainable transport comes at a very high cost.**

Our research showed that in New Zealand's historically car-dominated transport system, it's possible to reduce carbon emissions and significantly improve health in cities at the same time. The potential for radical reduction in premature deaths and environmental pollution is an extremely powerful motivation to do so.

**Sustainable transport not only reduces health risks by increasing physical activity, they also help reduce the road toll, which is once again increasing in New Zealand.**

While New Zealand's cities can be applauded for the changes they are making, there is still enormous room for improvement. The good news is that there are many opportunities to impact our cities that will result in multiple, long-term benefits. A long-term focus and commitment to strategic partnerships across multiple sectors is essential. Changes must be implemented now to reap the rewards now and into the future.

—  
**Dr. Caroline Shaw**

*MBChB MPH PhD FNZCPHM*

*Public Health Medicine Specialist and Epidemiologist  
University of Otago, Wellington.*



# GETTING IT RIGHT GLOBALLY



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# BOGOTÁ, COLOMBIA

Bogotá is revered for its transformation of public space and sustainable mobility during the late 1990s. Between 1995 and 2000, Bogotá designed and built 800 parks where its inhabitants can enjoy a sense of belonging. A pop-up park initiative, Cyclovía, closes streets to cars and opens them to people so they can safely be active. People use the opportunity to cycle, walk and do yoga or tai chi. It's a powerful way to change mind sets and for people of all ages and socio demographics to integrate while being active. More than one million people **walk, run, skate, cycle, and do yoga or tai chi** along 121 kilometres of the city's roads every Sunday.

The city is internationally recognised for advancing sustainable transport due to the building of the Bus Rapid Transit TransMilenio (TM). TM has reduced travel time, emissions of particulate matter and the traffic accident rate.

**Changes have significantly benefited efficiency, costs, safety and the environment:**

**9%**

of TM passengers used to commute by private car and now commute by bus

**75%**

reduction in injuries

**79%**

reduction in collisions

**92%**

reduction in deaths

**40%**

decrease in air pollutants within Bogotá



**"A civilized city is not the one where the poor have cars, it's the one where the rich use public transit."**

—  
Enrique Penalosa  
Mayor of Bogotá





# VICTORIA, CANADA



## 8 80 Cities

8 80 Cities is a non-profit organisation based in Canada that aims to build cities that prioritise people's well-being and that are age friendly. The principle is that creating cities that are fit for everyone – from eight to 80-year-olds – will mean great cities for everyone. Founder of 8 80 Cities, Gil Penalosa, is the former Commissioner of Parks, Sport, and Recreation for Bogotá, Columbia.

8 80 City – Victoria in British Columbia, Canada – aims to develop a bicycle network for people of all ages and abilities with an initiative called Biketoria. This is a bikeable city thanks to its infrastructure, mild climate, moderate topography, scenic routes and compact density that enable cycling to be part of everyday life.

**Victoria is planning to increase biking from its current 4% mode share to 25% by 2038.** It will achieve this goal through construction of an active transportation network suitable for all ages and abilities while reducing road congestion, mitigating CO<sub>2</sub> emissions, improving community health, enhancing urban living, and making Victoria a more attractive, vibrant and happier city.

## Biketoria *[noun]*

Bicycle network for people  
of all ages and abilities



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# BARCELONA, SPAIN



## Citizen spaces

Barcelona plans to reduce traffic by 21% to address the city's excessive pollution and noise levels. Almost 60% of streets currently used by cars will be converted into **"citizen spaces"** based on the concept of superblocks. Superblocks are mini neighbourhoods around which traffic will flow while the spaces within will be repurposed. Except for residents, vehicle traffic will be allowed only on roads in the superblock perimeters, and at a significantly reduced speed limit of 10km/h, thereby prioritising pedestrians and cyclists.



**Almost 60% of streets currently used by cars will be converted into citizen spaces**





# ATLANTA, USA



## The BeltLine

Atlanta is currently building a 35km-long paved recreational path around the entire city centre called the BeltLine. While the full BeltLine will only be complete in 2030, its 3.6km Eastside Trail has already attracted well over a million people. The BeltLine will ultimately connect 45 neighbourhoods and provide easy, active access to 8km of parkland, and much of the trail consists of converted railway corridors. Likewise, Miami proposes to convert unused land under the elevated Metrorail into a 16km linear park, while Freshkills Park on Staten Island is under construction on what was once the world's biggest landfill.

**The BeltLine will ultimately connect 45 neighbourhoods and provide easy, active access to 8km of parkland**





# HAMBURG, GERMANY



## The physical activity district

Hamburg prioritised physical activity in the planning of a new district called Oberbillwerder. The district will house 20,000 people in 7,000 homes, with all cars stationed in communal neighbourhood garages to reduce unnecessary traffic. Built on marshland, the groundbreaking borough will feature many activity-boosting innovations, including the positioning of three schools, a swimming pool and up to 20 daycare centres around a green loop to allow for car-free access.

The Oberbillwerder district will house

# 20,000

people in

# 7,000

homes



# DISTRICT TECHNOLOGIES



Founded in 2017, District Technologies has a vision to reignite the spirit of discovery by enabling everyone to lead an active and social lifestyle. Headquartered in Singapore, the company has a global presence, with key markets in Asia-Pacific and Europe. Through technological innovations, District Technologies apply the principles of gamification (the application of elements of game playing) to running and urban exploration.

## District plays at the intersection of four trends:



**Active living:**  
increasing interest  
in health and new  
ways to be active



**Technology:**  
growth of technology to  
enable experiences and  
health goals



**Experiential economy:**  
consumers increasingly  
valuing new experiences  
over material items



**Exploration:**  
growing desire for  
independent travel,  
particularly off the  
beaten track

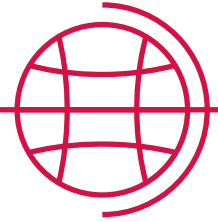
The company's key offering is District, an **experiential app designed to motivate people to rediscover their cities and improve their fitness**. By completing challenges built around the urban environment, the joy of discovery and the fun of exploration are harnessed to shift users towards a healthier and better life.

District activates cities with virtual checkpoints combined into experiences called Grids. The existing city infrastructure is used to create challenges, which integrate GPS geolocation, Bluetooth beacons and augmented reality technology. The objective is to collect as many points as possible in a time limit, using points, badges and prizes as continual motivators. The idea is to transform cities into playgrounds. By gamifying the experience, it is more enjoyable and addictive, which helps to building healthy habits.

An analysis of participants indicates a broad appeal across genders, age groups (specifically between 35 and 44 years of age) and level of running. In 2018, more than 3,500 runners participated in the Singapore race, while the 2019 Hong Kong race had more than 6,000 participants.



# VITALITY MODEL



**AIA Vitality is a world-leading, science-backed wellness programme that encourages people to look after their health and wellbeing, while benefiting from lower premiums and other rewards.**

While technology may be well known for reducing our need to move, it can also motivate people to be more physically active. Central to the Vitality Active Rewards (VAR) programme is a smartphone-based app that is designed to encourage Vitality members to increase their activity levels. This is achieved through **setting weekly, personalised physical activity goals and then rewarding users for achieving them.** Users who achieve their weekly goal qualify for a range of rewards: from smoothies and coffees, to subsidies and discounts on active wear and fitness tracking devices to Airpoints.

Members on the programme have been shown to increase their frequency of physical activity by **24%** and when exercising, tend to exercise at a higher intensity. Those who obtained a wearable device that measured physical activity as part of the programme are **35% more active** than members who did not use a wearable device.

The VAR programme is proving to be hugely positive for those taking part, with the *British Journal of Sports Medicine*<sup>20</sup> confirming that it is having a desired impact on physical activity behaviours. This is particularly true for older adult members who have lifestyle-related chronic diseases.



# GETTING IT RIGHT LOCALLY



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# THE ACTIVE STUDY

## Increased national funding for walking and cycling

Between 2015 and 2018, the New Zealand Transport Agency (NZTA) invested just under **\$300 million** for cycling in 15 urban centres.<sup>21</sup>

NZTA funded the Model Communities Programme to increase walking and cycling in Hastings and New Plymouth, and potentially create a model for investing in active travel initiatives in the country. The intervention provided funding for infrastructure changes (e.g. improved walkways and cycle lanes) and information and education (e.g. campaigns to increase uptake and the confidence of individual cyclists).

## The ACTIVE study

The ACTIVE (Activating Communities To Improve Vitality and Equality) study<sup>22</sup> examines whether the Model Communities Programme has resulted in any changes to walking and cycling habits, and attitudes and perceptions. The research shows that **investing in cycle lanes and walkways encourages people to drive less** and reduces carbon emissions.

Researchers from the University of Otago and Victoria University showed a **reduction of 1.6% in vehicle kilometres travelled** and an associated **1% drop in carbon emissions** due to new cycling and walking paths built in New Plymouth and Hastings three years after the development of the new infrastructure. A similar level of investment across the country could reduce national CO<sub>2</sub> emissions by at least 0.23 million tonnes over three years.<sup>23</sup>



**1.6%**

reduction in vehicle  
kilometres travelled



**1%**

drop in carbon emissions  
due to new cycling and  
walking paths



# AUCKLAND

## Investment in Auckland

As Auckland grows, it is rapidly becoming more congested and facing gridlock, which is demanding urgent and adaptable solutions. Auckland Transport (AT) is investing significantly in public transport, walking, and cycling to transform the system. AT is focusing on **shifting transport modes to reduce emissions improving environmental, social, economic, and cultural outcomes**. Two programmes are guiding this effort: the Auckland Transport Alignment Project (ATAP) and the Regional Land Transport Plan (RLTP).

ATAP is accelerating delivery of Auckland's rapid transit network, unlocking urban development opportunities, encouraging walking and cycling, and investing in public transport, commuter and freight rail and funds road improvements. Through ATAP, around **\$28 billion will be spent over the 2018-2028 period to improve travel safety, accessibility, environmental friendliness, and choice in transport modes**.

RLTP covers the region's land transport objectives, priorities and measures for at least 10 years. The RLTP<sup>24</sup> aims to support an economically, socially, culturally and environmentally successful Auckland. Public transport initiatives include new electric trains and bus priority lanes.

Active transport is emphasised for its reliability and affordability. Walking and cycling facilities are supported for example by cycleways and footpaths, improved pedestrian crossings and safer speed limits. Infrastructure will include various behaviour change activities, together with bicycle parking facilities, speed management and other innovations.

Auckland's city centre is evolving to be more **people-centric** including changes such as improved pedestrian crossings and high-quality paving and seating areas. Regional projects support walking through better footpaths, pedestrian crossings and speed limits.

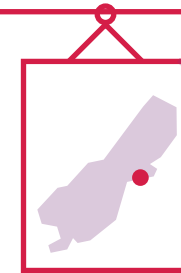
Examples of walking and cycling activities include an Urban Cycleways Programme, a walking and cycling programme, the SkyPath crossing over the Auckland Harbour Bridge, as well as a renewed emphasis on the importance of footpaths throughout the region.



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# CHRISTCHURCH



**By 2020, Christchurch aims to be considered one of the top five cycle cities in the world.**

Spokes Canterbury is a cycling advocacy group, based in Christchurch. Its mission is to promote the bicycle for everyday transportation by establishing a cycle network and encouraging increased use of bicycles in Christchurch.

**Christchurch has more than 30km of separated cycleways linking to the central city.** People can choose from cycleways separated from the road, shared paths with pedestrians, cycle lanes on the roadway and river trails for biking and walking.

The roads, footpaths and cycleways have been planted with more greenery. Traffic flow has been improved by offering more travel options for people whether by car, public transport, cycle or walking. By designing some routes for people and cyclists, cars and buses can flow easily. The central city has laneways and pocket parks suited to walking and biking while wider footpaths have increased space for seating and entertainment.

Four avenues have reduced congestion in the city's centre, while one-way streets allow easy movement around the city. Off-street car parking has freed up space to create wider footpaths, trees and cycleways while on-street parking has been prioritised for mobility spaces, loading zones and short stay.

**Networks that address active transport include<sup>25</sup>:**

**The Cycling Advocates Network**  
aims to get more people to cycle more often.

**The Disabled Persons Assembly**  
works towards a transport network that is accessible to all including people with disabilities, the very young and the elderly.

**Frocks on Bikes**  
a national voluntary organisation promoting bike riding.



**Living Streets Aotearoa**  
promotes walking.

**Go Cycle Christchurch**  
provides free cycling advice and skills.

**ICECycles Project**  
helps people access free bikes and repairs.

**BuyCycles Project**  
supports people from Corrections and the Mental Health Services to buy a bicycle.



# WELLINGTON



Currently a third of people in Wellington walk or cycle to work, a third use public transport and the remaining third drive.

The city is aiming for fewer people in cars and is considering a rail network as part of an urban rejuvenation project.

Let's Get Wellington Moving (LGWM) is an initiative that is focusing on developing mass transit, public transport and cycling networks to make the CBD more people friendly. It will help remove private vehicles from the CBD, thereby improving conditions for pedestrians.<sup>26</sup>

A new transport upgrade includes construction of an additional Mt Victoria Tunnel to reduce traffic delays in Wellington.



1/3

of people walk  
or cycle to work



1/3

of people use public  
transport to get to work



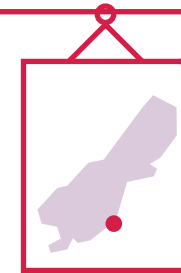
1/3

of people drive  
to work





# BEATS STUDY



## The Built Environment and Active Transport to School (BEATS) Study.

The University of Otago's BEATS Study<sup>27</sup> examines transport to school, the neighbourhood environment and physical activity levels of high school students in Otago. Students and parents participate in surveys and focus groups and school principals attend interviews.

The results of this study will inform schools, city councils, transport agencies and land planners about ways to encourage active transport to school and increase physical activity levels in adolescents.

Future initiatives for environmental change, education campaigns, school policy development and city/regional policy development will also benefit from the study.



# AIA VITALITY AMBASSADORS

**"We all know that physical exercise is important, but it can be challenging to find time to make it a priority, especially if we get caught up with trying to make big changes to live a healthy lifestyle."**

**I've come to realise it's the small decisions we make every day that have the biggest impact, and I'm more inspired to be active when my everyday environment enables me to make positive changes to my health and wellbeing.**

For me personally, I like to combine exercise with spending time with family and friends. I love getting outdoors with my wife and kids, and I've gone swimming with the same group of mates for 16 years. It's so good to get some exercise and spend time with loved ones as well.

**I think one of the key elements of good health is setting achievable health targets.** Putting too much pressure on yourself never ends well but setting small goals like a short walk every day, cycling to work, drinking more water – or whatever works for you – is much more sustainable long term, and can help motivate others to make positive lifestyle changes too. It's these small steps that help to bring balance to all parts of our lives, so we can give so much more to our family, friends and community. It's a win-win for everyone.

-

**Ian Jones**  
Former All Black





# AIA VITALITY AMBASSADORS

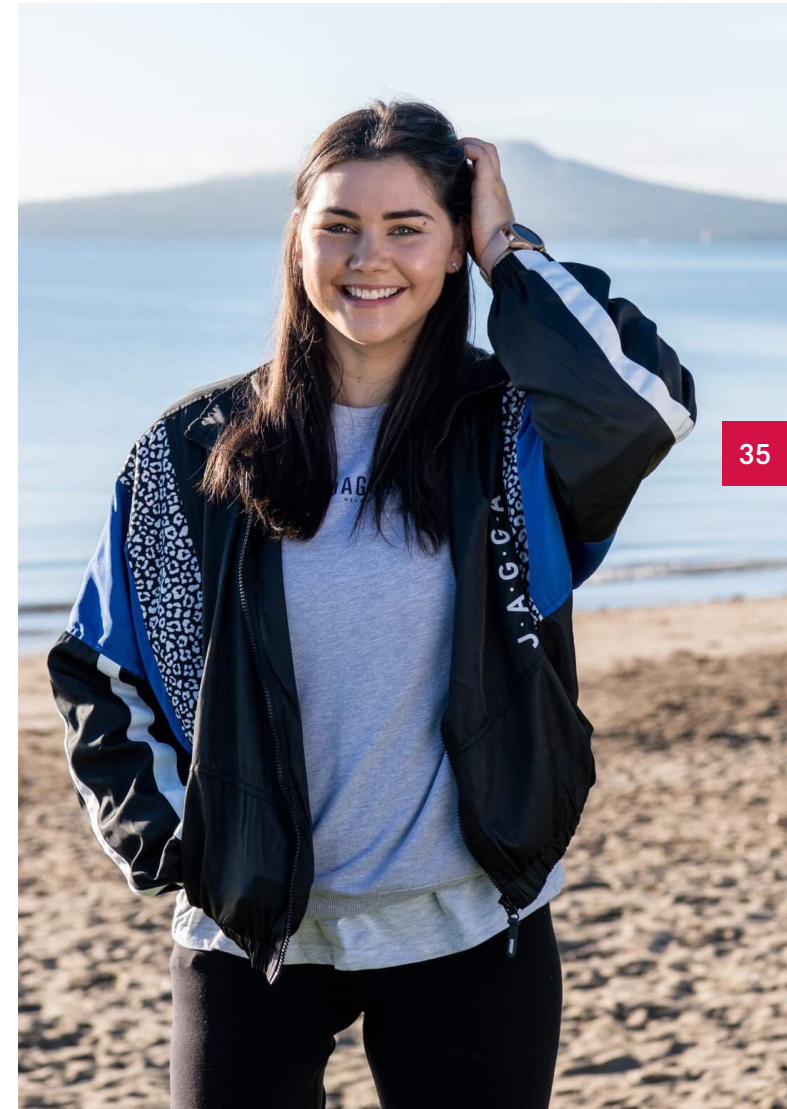
**"For me, being healthy and having an active lifestyle is essential for my overall wellbeing. I'm also much more comfortable in my body when I have a good health and fitness routine."**

The most important thing for me is understanding what works for me and my body, not what works for someone else. It's so easy to compare yourself to others, especially on social media, but their lives are totally different to yours so that's never going to work! Embrace the version of healthy that fits into your lifestyle and brings you joy.

I know what it's like to lack motivation, and my advice for anyone in that position is to find a form of exercise you love doing – it's the small steps that make the biggest difference. If you're a social early bird, do boot camp with some friends; if you're a solitary night owl, go to the gym at 9pm and watch TV while you're on the bike. I love working out and I usually train with a friend, but I also take the time to step out for a walk, get some fresh air and put on a podcast to learn something new – it's good for my body and my mind. We're incredibly lucky to have stunning outdoor spaces here in New Zealand, and **I find it easier to be active when I embrace all the beautiful parks and beaches in our backyard.** Go on, get out there and see the difference it makes!

-  
**Jess Quinn**

Fitness Advocate and Influencer



# A WORLD UNITED FOR CHANGE



## AIA Vitality's physical activity pledge

Encouraged by the support of WHO's Global Action Plan on Physical Activity, Vitality demonstrated its commitment to making people more active by signing a pledge.

*We, as part of the global Vitality insurance network, commit to make 100 million people 20% more physically active by 2025. This represents roughly 10% of the global health and life insurance population. With lifestyle diseases growing dramatically, often due to a lack of physical activity, we believe advances in behavioural science combined with technology can be used to help people be more physically active. We strive to be a positive force for good in society by changing the lives of millions of people.*

In 2019, the University of Otago's Active Living Laboratory released a report called *Turning the Tide*.<sup>28</sup> It aims to promote active transport and to provide strategic recommendations to guide decision makers in improving the levels of active transport over the next 30 years.

Recommended national targets include doubling walking trips to 25% of all trips by 2050, doubling cycling trips each decade so that 15% of trips are by bicycle by 2050 and doubling trips by public transport each decade to 15% by 2050.

In addition to a strong commitment to transformation, **national targets, accountability and strong governance** are essential.

Governments, international organisations, business and society must partner to ensure that health receives the focus it needs when it comes to cities. These collaborations will determine how cities will be experienced in the future.<sup>29</sup>

Isolated interventions are inadequate to achieve increases in cycling and walking and a combination of policies and programmes is essential. Interventions will also need to be consistently delivered over the long-term.

A combination of innovative behaviour change interventions and re-prioritisation of policies around active transport and urban design are needed.





# FINAL THOUGHTS

**While there is still scope for improvement, great strides have been made to get New Zealand more active to date.**

In order to achieve these results and create an environment that's more conducive to improved health behaviours, we need to better understand human psychology – paired with new technology trends and big data insights – to create positive shifts that can lead to positive outcomes.

There is no quick fix and the responsibility lies with all stakeholders – from individuals to industries – to make people more aware of their day-to-day choices when it comes to getting more active.

Investment in physical activity makes good business sense and we hope that these insights will help mobilise individuals, groups and policymakers to create a healthier, more sustainable and active country.

Better health has an economic impact on society: the healthier a nation, the healthier the economy. There are great opportunities for innovation and partnerships that will benefit society as part of our Shared-Value Insurance model. Vitality draws on behavioral economics, to support, guide and incentivise individuals to improve their health, which results in material benefits shared between AIA, policyholders and society. These shared value principles are what help to drive AIA Vitality's commitment to finding new, innovative ways to continue promoting healthier living.

We look forward to delivering on our promise to help make New Zealand one of the healthiest and most protected nations in the world.

## Acknowledgments

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