

**THE
HEALTHY
AUCKLAND**

SCORECARD





Auckland Regional Public Health Service
Ratonga Hauora-ā-Iwi ō Tāmaki Makaurau

WHAT IS HEALTHY AUCKLAND TOGETHER?

Healthy Auckland Together partners include agencies representing the health, local government and transport sectors, as well as iwi, academia and non-government organisations (NGOs). Together we are responsible for some of the key environmental settings that influence Aucklanders' health.

ACKNOWLEDGEMENTS

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- **Siddhartha Mehta**, Auckland Regional Public Health Service Health Promoter
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- **The Ministry of Transport**
- **Auckland Council**
- **Auckland Transport**
- **Auckland Regional Dental Service**
- **Stats NZ Tatauranga Aotearoa**
- **Heart Foundation.**



Photo: Aktive - Auckland Sport & Recreation

ABOUT HEALTHY AUCKLAND TOGETHER

Healthy Auckland Together (HAT) is a coalition committed to improving the Auckland environment so that it's a place where all people can live full and healthy lives.

our Vision

Our vision is a social and physical environment that supports people living in Auckland to eat well, live physically active lives and maintain a healthy body weight, within their communities.

We are working to achieve this by focusing on three goals:

1. improving nutrition,
2. increasing physical activity, and
3. reducing obesity.

These goals have a priority focus on equitable outcomes for Māori, Pacific and lower socio-economic communities.

What do we do

- We work together for more effective and equitable outcomes.
- We advocate and speak out to influence policy and environmental decisions, and raise the profile of key issues.
- We monitor, collect and present evidence to inform our approach and encourage progress towards our vision. This report is an example of such work.

Healthy Auckland Together partners work collaboratively to co-ordinate and strengthen existing programmes and improve infrastructure. The coalition focuses mainly on regional activities within partner agencies' direct control, while using its collective voice to influence policy settings at the national level.



ACRONYMS USED IN THIS REPORT

AC	Auckland Council
ADHB	Auckland District Health Board
ARDS	Auckland Regional Dental Service
ARPHS	Auckland Regional Public Health Service
AT	Auckland Transport
B4SC	Before School Check
BMI	Body Mass Index
CMDHB	Counties Manukau Health
DHB	District Health Board
DMFT/DMF/dmf	Decayed, Missing, Filled Teeth / Decayed, Missing, Filled
ECE	Early Childhood Education
ELS	Early Learning Service
GPS	Global Positioning System
HAT	Healthy Auckland Together
HIT	Health Improvement Team
INFORMAS	International Network for Food and Obesity/ Non-communicable Diseases Research, Monitoring and Action Support
LTL	Lift the Lip
MELAA	Middle Eastern Latin American and African
MoH	Ministry of Health
NGO	Non-government organisation
NZHS	New Zealand Health Survey
NZHTS	New Zealand Household Travel Survey
NZTA	New Zealand Transport Agency
SMM	Sequential Mixed Methodology
WDHB	Waitematā DHB
WHO	World Health Organization

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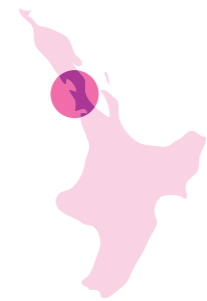
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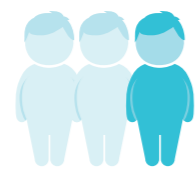
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ABOUT AUCKLAND



1.66 MILLION

the estimated Auckland region population



1 in 3

New Zealanders (around 35%) live in the Auckland region



720,000

the estimated increase in Auckland's population between 2018 and 2048



120

different ethnicities make up Auckland's population

11%

of people living in Auckland identify as Māori*. Almost 12 per cent of the Auckland population identify as being of Māori descent.

23%

of people living in Auckland identify with an Asian ethnicity*.

The Asian population is expected to increase to

788,800 by 2038.

In 2013, the figure was **307,233**

789,306

people living in Auckland identify as European

14.6%

of people living in Auckland identify as Pacific*.

This is estimated to increase by around **50%**

to an estimated **367,000** between 2018 and 2038

432,700

older adults (aged 65+) are expected to be living in Auckland by 2043. This is more than double the 2013 figure and will impact health, support and transport services.



ONE THIRD

of New Zealand's children and young people (younger than 25) live in Auckland.

*Ethnicity totals add to more than 100 percent. This is due to some respondents identifying with more than one ethnicity.

Auckland Council (June 2018). Auckland Plan 2050 Evidence Report. Demographic trends for Auckland: Data sources and findings. URL: <https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/auckland-plan/about-the-auckland-plan/Evidence%20reports%20documents/evidence-report-demographics.pdf>. (Information retrieved 29 May 2018).

Note that Auckland Council and Auckland Regional Public Health Service use different geographical boundaries to demarcate the Auckland region they each serve (ARPHS uses District Health Board boundaries). The difference is marginal, but means the Auckland Council population is one to two percent lower than the Auckland Regional Public Health Service population.

SUMMARY



Welcome to the fourth annual Healthy Auckland SCORECARD, formerly the Healthy Auckland Together Monitoring Report.

The Healthy Auckland Scorecard brings together obesity, nutrition and physical activity data, giving a consolidated insight into the health of people living in New Zealand's biggest city. It also considers environmental indicators such as community and transport infrastructure, and the supply and marketing of food.

So how are Aucklanders of all ages, varying ethnicities and differing socioeconomic positions faring? And how well does the Auckland environment support people to grow, eat, move and live well? As in previous reports, there are findings that are concerning, findings that encourage, and work still to be done.

ADULT OBESITY STILL TRENDING UP

Auckland has a high quality supply of tap water, ready access to health-giving fruit and vegetables, and a climate that lends itself to being outside and physically active. Yet only 34 percent of Auckland adults consume the recommended daily quantities of fruit and vegetables, less than half meet the guidelines for physical activity, and nearly a third (30.4 percent) are now obese. As a

major risk factor for illnesses such as heart disease, stroke, type 2 diabetes, cancer, osteoarthritis and depression, obesity's continued upward trend remains troubling.

WHAT ABOUT THE KIDS?

When considered overall, the prevalence of obesity in Auckland children aged two to 14 years is 15 percent, though more targeted information indicates a more positive story for preschoolers (see below). Both of these, however, vary across the region. In the north, west and centre of Auckland, child obesity has remained steady at around 10 percent. But in the south, the figure has risen to nearly a quarter (22 percent). Adults and children of Pacific and Māori ethnicity, and those in more deprived areas, are also more likely to be living with obesity.

On average, Auckland children spend 10.4 hours per week being active, a figure that exceeds the national guidelines (of at least one hour of moderate to vigorous activity daily). But this decreases to 8.7 hours for children living in our most deprived areas. Children identifying as Chinese or Asian are the least active (about eight hours a week) and, while Samoan

children are among the most active, that trend reverses as they grow; Samoan adults are the least physically active.

Fewer Auckland children are now achieving physical activity via active transport such as walking, biking, scootering or skating to school. This has been most evident in the Auckland District Health Board area, where the latest figures suggest only 30 percent of children use active transport, down from 42 percent in 2014/15. Traffic volumes and parent concerns about safety are likely contributors to the drop.

A MORE POSITIVE PICTURE FOR PRESCHOOLERS

More positively, and consistent with 2018 findings, obesity continues to decline in under-fives. The proportion of obese preschool children is now 24 percent lower than it was in 2012. The biggest decrease is in Pacific four-year-olds, where the prevalence of obesity has dropped by more than 10 percent to 35 percent. The prevalence of obesity across Māori four-year-olds has also dropped from 31 to 22 percent. As lifelong habits and taste preferences are formed in early life, this is an encouraging trend. But the challenge continues to maintain this momentum as children head to school, gain independence and grow into adulthood.



DENTAL HEALTH STILL NOTHING TO SMILE ABOUT

Unsurprisingly, we again found this year that obesity, poor dental health and deprivation are closely linked in children.

Particularly concerning is the finding that children living in the most deprived neighborhoods are more than 10 times as likely to have the worst category of decay as those living in the least deprived areas – statistics that should alarm us all.

Children in the obese category are eight percent less likely to have healthy teeth and gums than those who are normal or underweight. They are also 30 percent more likely to have the worst grade of decay. The average number of decayed, missing or filled (dmf) teeth across five-year-old Auckland children in 2018 was 2.3, with Māori children having dmf scores 3.7 times higher than European children, and Pacific children 4.8 times higher.

The consumption of sugar-sweetened foods and drinks contribute to these worrying statistics, and the pervasive marketing of these products increases their appeal and consumption.

HOW ARE WE TRAVELLING?

For a large number of Aucklanders, the car remains the primary mode of transport – so much so that Aucklanders now spend 267 hours annually sitting sedentary in their vehicles. That compares with 20 hours spent on public transport and a combined 34 hours via the active modes of cycling and walking.

Active transport makes up just 13 percent of trips in Auckland, compared with 25 percent in New Zealand's capital city of Wellington and 15 percent in Christchurch, where the terrain and city layout likely make active transport choices easier. Encouragingly though, Aucklanders' public transport use continues to trend

upwards, growing annually by 4.4 percent per capita since 2006. Aucklanders' current rate of public transport use is 4.7 trips per person per month, and there has been a 206km increase in cycleway infrastructure since 2016.

The aim of this report is to give the public, policy makers and key stakeholders clear information on Auckland's environment and health outcomes. Its annual release also helps to track changes over time, highlighting the good and bad trends in obesity prevention.

Joint and individual initiatives by Healthy Auckland Together partners, some detailed in this report, have made a tangible and positive difference in a number of the areas above. But there is more work to do, and everyone can play a part.

Please share this report with your friends, whānau, neighbours and other community connections. Pass it on, keep the conversation going and let's create a Healthy Auckland Together.

Dr Michael Hale
Public Health Medicine
Specialist, Auckland Regional
Public Health Service,
Healthy Auckland Together

HOW HEALTHY IS AUCKLAND?

THE 2019 HEALTHY
AUCKLAND

SCORECARD

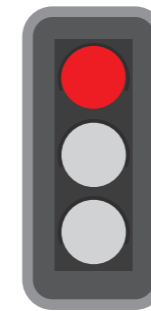
Every year Healthy Auckland Together looks at what's changing to enable Aucklanders to live healthy lives through good nutrition and physical activity. This section provides a snapshot of Aucklanders' health.

Nutrition

Whether we recognise it or not, our nutrition choices are influenced by where we live, our income, and the food and drink that's available and promoted in our local environments

Too often it's sugary drinks and cheap, low quality snacks and takeaways that dominate our diets - especially in areas of high deprivation, where obesity is overrepresented. Currently a wide variety of energy dense food is heavily promoted on streets, in shops and in the media. Some neighbourhoods have very few fruit and vegetable shops and most schools are close to dairies and convenience stores where junk food is prominently displayed.

These environments are contributing to New Zealand's poor rates of overweight and obesity, which are major risk factors for illnesses like heart disease, stroke, type 2 diabetes, cancer, osteoarthritis and depression.



GETTING WORSE
NO IMPROVEMENT
GETTING BETTER

ADULT OBESITY

The high rate of adult obesity persists

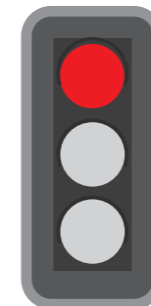
In 1977, only 10% of adults lived with obesity and the **rate of obesity has increased by 20%** over the last decade.

Asian people have the lowest rates of obesity (14.2% women, 17.1% men) and Pacific peoples the highest (72% women, 68.8% men).

Adults living in the **most deprived areas are 2.7 times** more likely to be obese than those living in the least deprived areas



A THIRD OF AUCKLAND ADULTS ARE OBESE



GETTING WORSE
NO IMPROVEMENT
GETTING BETTER

CHILD OBESITY 2-14 YRS OLD

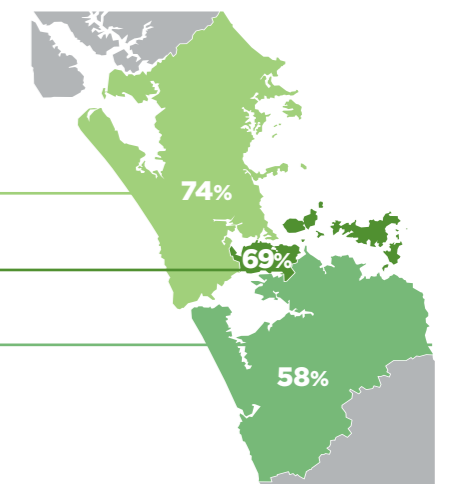
The high rate of child obesity persists

ONE IN SEVEN CHILDREN AGED 2-14 YEARS IS OBESE

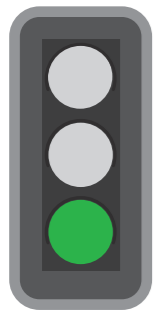
The proportion of **normal body weight** children living in the **Waitematā DHB area** — 74%

The proportion of **normal body weight** children living in the **Auckland DHB area** — 69%

The proportion of **normal body weight** children living in the **Counties Manukau DHB area** — 58%



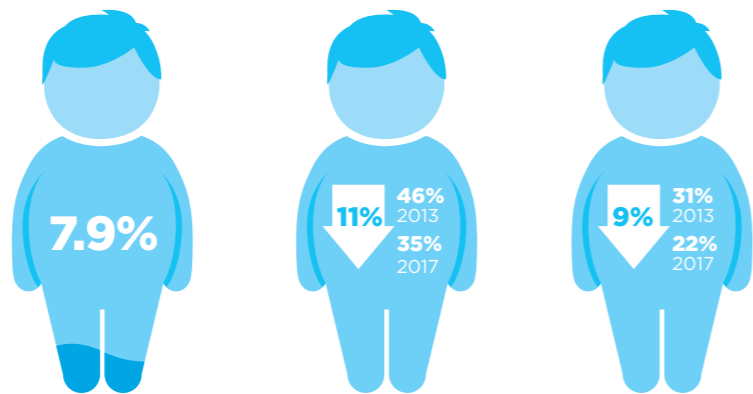
As with adult obesity, children living in the **most deprived areas are more likely to be obese** 26% compared to 3% in the least deprived neighbourhoods.



GETTING WORSE
NO IMPROVEMENT
GETTING BETTER

OVERWEIGHT AND OBESITY IN PRESCHOOLERS

The declining rate of obesity among pre-schoolers continues

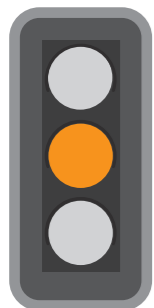


THE PROPORTION OF AUCKLAND PRE-SCHOOLERS (4 YR OLDS) WITH OBESITY

OBESITY IN PACIFIC FOUR-YEAR-OLDS HAS DROPPED SIGNIFICANTLY

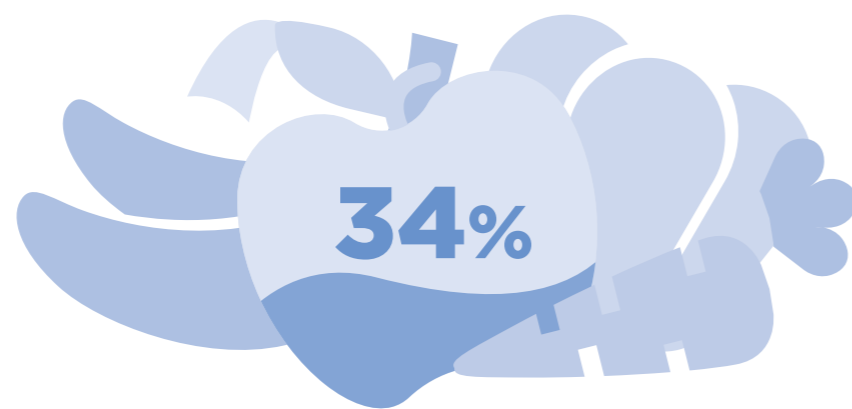
OBESITY IN MĀORI PRESCHOOLERS HAS DROPPED SIGNIFICANTLY

However the preschool obesity figures are still too high - especially in **more deprived neighbourhoods**, where pre-schoolers are **4.1 times more likely to be obese** as those living in Auckland's least deprived neighbourhoods.



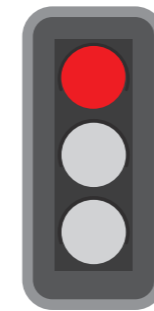
GETTING WORSE
NO IMPROVEMENT
GETTING BETTER

ADULT NUTRITION



THE PROPORTION OF AUCKLAND ADULTS WHO EAT THE RECOMMENDED DAILY SERVINGS OF FRUITS AND VEGETABLES

The proportion of Auckland adults who achieve the recommended **daily intake of fruit and vegetables remains low**, and is 13% lower in more deprived neighbourhoods (28%) compared with the least deprived neighbourhoods(41%).



GETTING WORSE
NO IMPROVEMENT
GETTING BETTER

CHILD DENTAL HEALTH



2.8

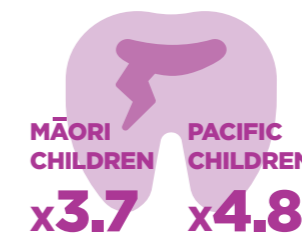
THE AVERAGE NUMBER OF **DECAYED, MISSING OR FILLED TEETH** Auckland five-year-olds have.



Children living in the **most deprived neighbourhoods** are **10 times** more likely to have the **worst category of decay** compared to those living in the least deprived areas.



Overweight children are **8% less likely to have healthy teeth and gums** than normal weight children, and **30% more likely** to have the **worst grade of decay**.



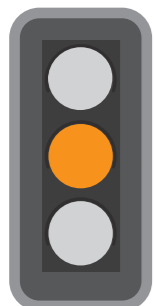
Māori children have **3.7 times** the number of **decayed, missing or filled teeth** as **European children**. For **Pacific children**, the number is **4.8 times higher**.

Physical Activity

The layout of our neighbourhoods, the quality of our parks, the safety of our suburbs and our transport options all nudge us to be active or sedentary.

You're more likely to walk or cycle if there are useful destinations close by and it's attractive and safe on the streets.

There's been significant investment in cycle and walkways, but more work is needed for this to translate into active journeys. There was a 200km increase in cycleway infrastructure between 2016 and 2017, but only six kilometres has been added in the last 18 months (See Appendix 7). Networks need to be connected and it needs to feel safe – especially for children.



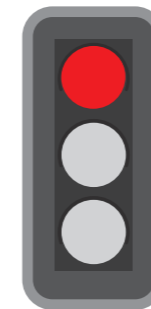
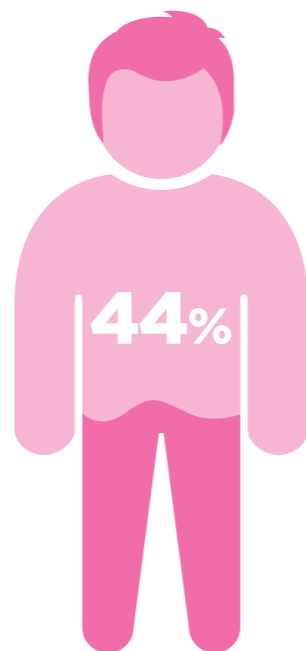
GETTING WORSE
NO IMPROVEMENT
GETTING BETTER

ADULT PHYSICAL ACTIVITY

Overall, Auckland adults are **physically active for 4.8 hours/week**, with men more physically active than women.

People living in Auckland's **least deprived neighbourhoods achieve an extra hour of physical activity** compared with those living in the most deprived neighbourhoods.

LESS THAN HALF OF AUCKLAND ADULTS MEET THE RECOMMENDED MINISTRY OF HEALTH GUIDELINES FOR PHYSICAL ACTIVITY



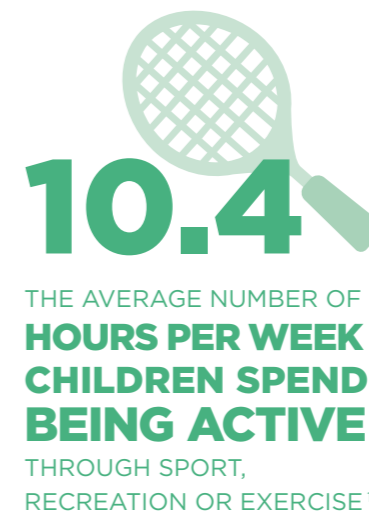
GETTING WORSE
NO IMPROVEMENT
GETTING BETTER

Asian children spend the **least** time being **physically active** (8.0-8.1 hours)

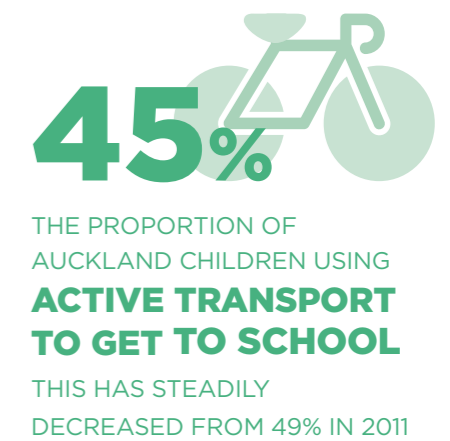
Children living in the **least deprived** areas are **more active (10.9 hours)** than those in the least deprived areas (10.4 hours).

Māori and Samoan children spend the **most** time being **physically active** (11.9 hours). But this changes over time, with Samoan adults the least physically active.

5-17 YRS OLD CHILD PHYSICAL ACTIVITY



¹Ministry of Health guidelines recommend an accumulation of at least one hour a day of moderate to vigorous physical activity for children and young people aged 5-17 years



ADULT JOURNEYS TO WORK

THE NUMBER OF **HOURS** AUCKLANDERS SPEND EACH YEAR TRAVELLING **TO WORK IN CARS**



THE COMBINED NUMBER OF **HOURS** AUCKLANDERS SPEND EACH YEAR TRAVELLING TO WORK BY **BIKING OR WALKING**



THE NUMBER OF **HOURS** AUCKLANDERS SPEND EACH YEAR TRAVELLING TO WORK USING **PUBLIC TRANSPORT**



Active modes of **travel make up 13% of trips in Auckland**, compared with Wellington at 25% and Christchurch at 15%.

Aucklanders' public transport use is increasing (average annual growth of 4.4% per person every year since 2006).

Aucklanders currently make **4.7 trips on public transport per person per month**



HEALTHY AUCKLAND TOGETHER WHAT ARE WE DOING?



Healthy Auckland Together's goals are to:

1. Improve nutrition,
2. Increase physical activity, and
3. Reduce obesity.

HERE'S HOW WE ARE TAKING ACTION:

- We're delivering Wai Auckland (see page 38); a three-year project to help make tap water the first and easy choice for Aucklanders, and displace sugary drinks (there are 16 teaspoons of sugar in just one 600ml bottle of regular soft drink). Choosing tap water is great for dental and general health, good for the environment (Kiwis use around 168 plastic bottles per person each year, but only a third are recycled) and great for the wallet (you can get around 6,000 glasses of tap water for the cost of just one litre of bottled water).
- We're putting in place policies for healthier sponsorships, so sports, community and other groups can seek and secure financial support that doesn't rely on promoting unhealthy food and drinks.
- We're making delicious, healthy and affordable foods and drinks easier to access at public events, festivals, schools and sports clubs. How? Through initiatives like the Good Food Kai Pai food and drink guidelines, and the Healthier Menu Challenge (see page 22).

- We're challenging the unhealthy food and drink marketing our children are exposed to. On average our children see and hear 27 ads for unhealthy foods and beverages a day. To date, Healthy Auckland Together has submitted more than half a dozen complaints to the Advertising Standards Authority, and we're preparing evidence on the need for stronger protections to make a meaningful difference to children's exposure to unhealthy food marketing.
- We're supporting the Vision Zero strategy to make our streets safe and increase the active and public transport infrastructure across Auckland. We're also promoting HAT partners' work in this area, such as Auckland Council's mobile-responsive AKL Paths website, designed to help you discover foot and cycle paths in the region.
- Healthy Auckland Together partners are also supporting the work of Active - Auckland Sport & Recreation to encourage more Aucklanders to take part in sports and recreation throughout their entire lives. Active's Auckland Approach to Community Sport aims to make New Zealand's biggest city the world's most active city, by bringing together a range of providers such as sports trusts, schools, churches, charities, sporting bodies and others to make it easier for people to participate in sport and recreation.

WE'D ALSO LIKE TO SEE:

- Sustainable investment in the ongoing collection of children's nutrition data at a national level.
- New Zealand moving at pace to implement the recommendations of the World Health Organization's Ending Childhood Obesity report, prioritising a healthy food environment and ending the marketing of unhealthy food to children.
- Accelerated and equitable progress on creating an Auckland environment that makes walking, cycling and public transport the safe, convenient, cost-effective - and therefore preferred - option for more Aucklanders.
- The Children and Young People's Advertising Code overhauled, including stronger regulation and greater enforcement. Currently marketing in New Zealand is self-regulated and there is no law to restrict the junk food advertising to which children are exposed.



POPULATION INDICATORS

OBESITY



Obesity is a major risk factor for ill health. It increases the risk of a wide range of diseases, including heart disease, stroke, type 2 diabetes, cancer, osteoarthritis, depression and others. Obesity in New Zealand has now overtaken tobacco use as the leading cause of overall health loss³.

Summary of obesity in Auckland

- **Obesity continues to rise in both adults and children (two- to 14-year-olds)**
- **Obesity continues to decline in preschoolers (under five-year-olds). Notably there is a reduction in the absolute differences in obesity prevalence in Pacific and Māori preschoolers compared with European preschoolers.**
- **The prevalence of obesity is still strongly linked to deprivation (see Appendix 5: Auckland's Deprivation Index), with children and adults in more deprived neighbourhoods being more obese than those in the least deprived neighbourhoods.**

Adult and overall childhood obesity continues to increase, with a recent study projecting that the number of obese people in New Zealand will be two million by 2030 if current trends continue⁴.

Despite worsening trends in nutrition and obesity, there is little evidence that food and nutrition environments in Auckland are being improved: children are inundated with unhealthy food advertising, school tuck shops can offer unhealthy kai daily, there are no zoning restrictions on unhealthy fast food retailers, and supermarkets routinely use aggressive price and place promotion on unhealthy products (see Appendix 6: Fast Food Proximity).

The one anomaly is the preschool population, where obesity rates continue to drop (though this trend reverses as the children get older). Due to the lack of large-scale data on diet, physical activity and sleep amongst this age group, the exact causes of this positive trend are unknown. But it's likely that nutrition and physical activity interventions, examples of which are detailed in this report, are contributing factors. The trend is also consistent with what's occurring internationally, where obesity has also been declining in under-fives in the USA, Singapore and some parts of Europe and the UK⁵.

However, the impact of socioeconomic status is concerning for both young and old. Auckland adults living in more deprived neighbourhoods are 2.7 times more likely to be obese than those in least deprived neighbourhoods, and for preschoolers, the figure is 4.1 times.

³ Ministry of Health. 2016. Health Loss in New Zealand 1990–2013: A report from the New Zealand Burden of Diseases, Injuries and Risk Factors Study. Wellington: Ministry of Health.

⁴ R Wilson, Abbott J (2018). Age, period and cohort effects on body mass index in New Zealand, 1997-2038

⁵ N. Shackleton et al (2017). Improving rates of overweight, obesity and extreme obesity in New Zealand 4-year-old children in 2010-2016

ADULT OBESITY

Figure 1 shows the prevalence of obesity in Auckland has been gradually rising over the past decade, closely echoing the national trend. A third (30.4 per cent) of Auckland adults are now obese, a 20 percent increase over the last decade. In 1977, only 10 percent of New Zealanders lived with obesity⁶.

Figure 2 shows the prevalence of Auckland adults who are overweight or obese by geographical area. About a quarter (25 percent) of adults in the Auckland and Waitematā DHB catchment areas are obese, compared with nearly 40 percent of adults in the Counties Manukau DHB area. Each of the Auckland region's three DHBs has populations where approximately one-third of people meet overweight (but not obese) criteria.

Figure 1: Adult obesity prevalence in Auckland

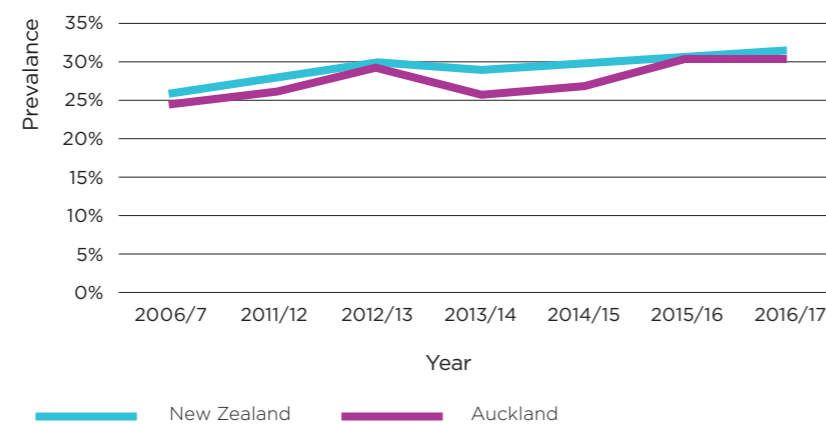


Figure 2: Adult Body Mass Index (BMI) distribution by DHB in Auckland

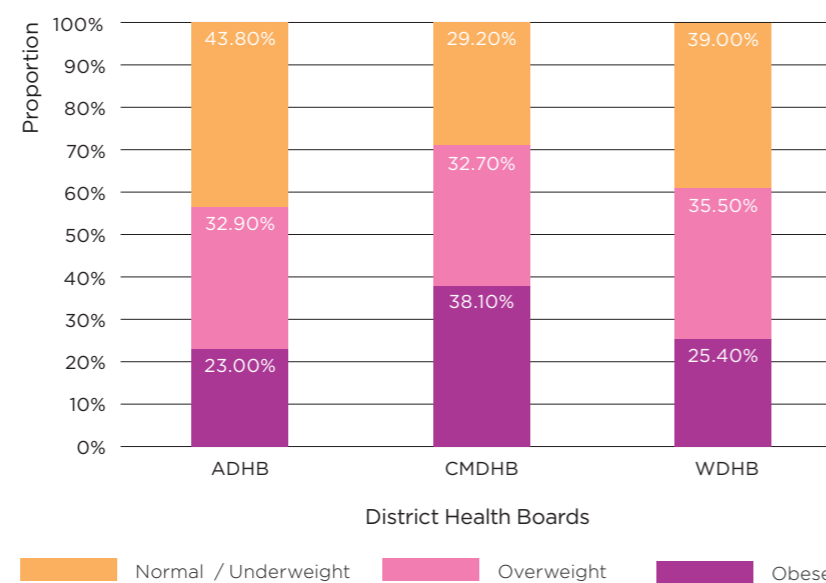


Figure 3: Incidence of obesity in adults by ethnicity in Auckland

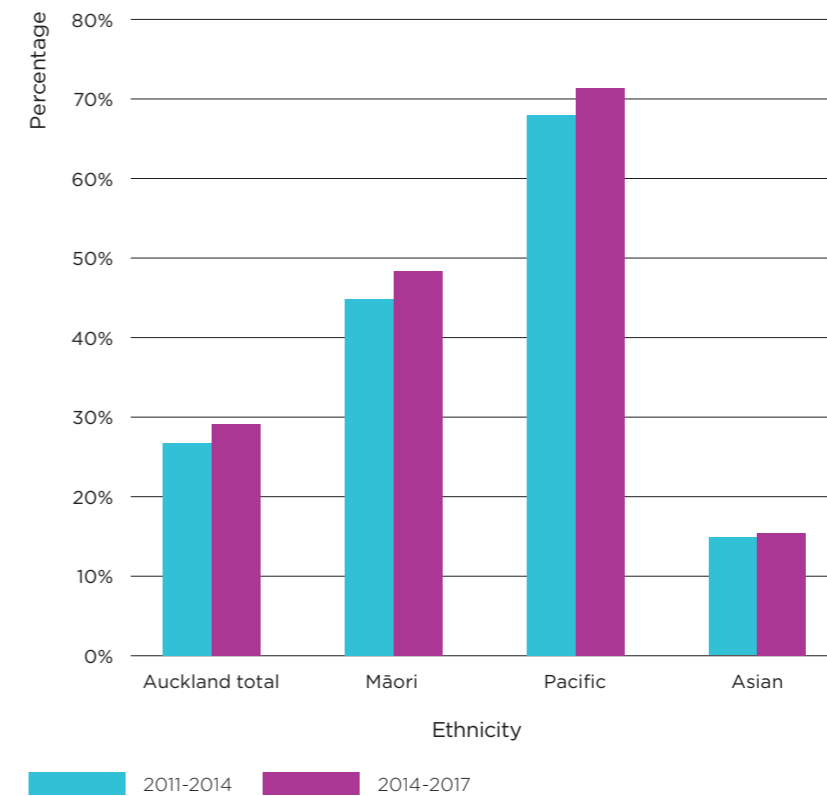
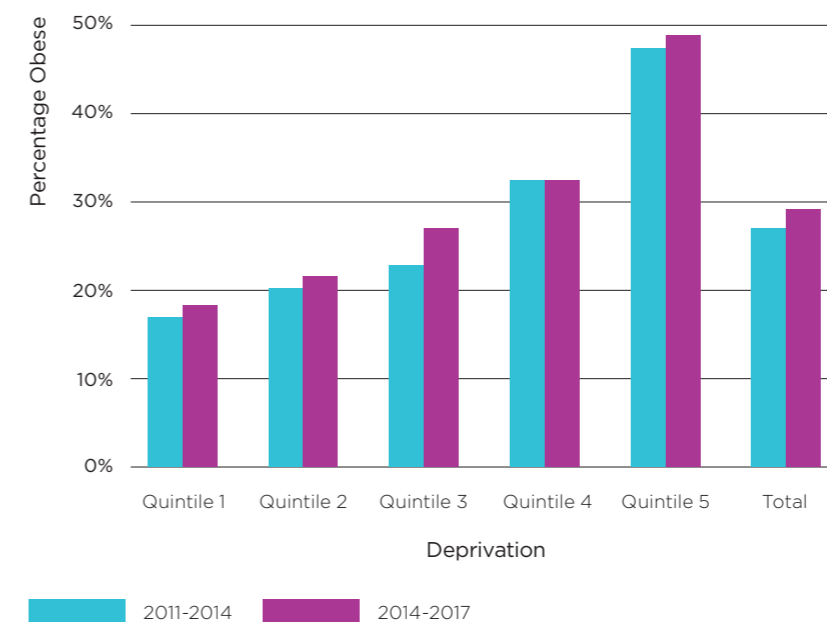


Figure 4: Incidence of obesity in adults by socioeconomic deprivation quintiles in Auckland



Further data from the New Zealand Health Survey (NZHS) illustrates large inequities in obesity prevalence. From 2014 to 2017 (Figure 3), the overall prevalence of obesity in Auckland adults was 28.4 percent for men and 30.1 percent for women; however this varies markedly between ethnic groups. Asian people have the lowest rates (14.2 percent for women and 17.1 percent for men), with higher rates for Māori (50.5 percent for women and 46.1 percent for men) and the highest for Pacific peoples (72 percent for women and 68.8 percent for men).

After adjusting for age and gender, the prevalence of obesity is significantly higher in Māori compared to non-Māori (prevalence ratio of 1.76) and in Pacific compared with non-Pacific (prevalence ratio of 3.08). By contrast, the prevalence of obesity is significantly lower for Asian ethnicity compared to non-Asian (prevalence ratio of 0.45).

In addition to disparities in obesity prevalence between ethnic groups, differences are also observed among groups according to socioeconomic deprivation. As shown in Figure 4, adults in the most deprived areas (Quintile⁷ 5) are 2.7 times more likely to be obese than those who reside in the least deprived areas (Quintile 1) of Auckland.

⁶Superu - <http://superu.govt.nz/sites/default/files/Obesity%20Fact%20Sheet.pdf>

⁷A quintile represents a fifth (or 20 percent) of a whole, for example, a population.

Taking healthy action

MENU CHALLENGE HELPS SERVE UP GOOD KAI

Healthy Auckland Together's Good Food Kai Pai Healthier Menu Challenge supports event and festival food vendors to serve fare that's not only delicious, but also better for you.



Story and photo: Auckland Regional Public Health Service

WINNING FOOD: Josephine John and Obert Sinala (second and third from right) with their colleague (left) and two of the Challenge judges, Jacqui Yip of Auckland Regional Public Health Service (right) and Michele Eickstaedt from Healthy Families Waitākere (second from left).

Jacqui Yip, Auckland Regional Public Health Service Senior Health Advisor, says the challenge is underpinned by the Good Food Kai Pai healthy food and drink guidelines designed to help vendors adjust their menus. "It can be changes as small as loading up dishes with vegetables for more colour and nutrients, offering different portion sizes, and thinking about other cooking methods," Jacqui says. "That might mean baking instead of frying or making sure that if you are deep frying, you're doing it at the right temperature so the food stays crispy and doesn't absorb extra oil."

Challenge winner at this year's Auckland Lantern Festival was Taste of Cape, operated by Glen Eden couple Obert Sinala and Josephine John.

The pair offers traditional Capetown barbecue-style cuisine that uses marinades and spices and is cooked over a flame to add a smoky flavour. Obert Sinala says the method uses almost no oil. "Healthy food can still be delicious - you just need to know how to cook and mix flavours," he says. Vegetables made up at least a third of all Taste of Cape dishes, alongside water as their beverage option and a healthy children's menu - all factors that led to their win.



Healthy food can still be delicious - you just need to know how to cook and mix flavours



What is Good Food Kai Pai?

Good Food Kai Pai is a set of healthy food and drink guidelines developed by Healthy Auckland Together. Over the past three years, HAT has been working with Auckland Council, Healthy Families Waitākere and ATEED to increase the number of healthier food and drink options available at ATEED events.

Why events?

Events are a highly visible and important part of Auckland's food system. Each year, a total of 292,000 people attend the Diwali, Lantern, Tāmaki Herenga Waka and Pasifika festivals. Events are a great opportunity to role model good choices for children and communities, to normalise healthy options and upskill community and commercial organisations in preparing and selling healthier food and drink options.

CHILDHOOD OBESITY



The New Zealand Health Survey (NZHS) collects data on the body mass index (BMI) of a representative sample of children aged two to 14 years old.

Figure 5 shows the change in obesity over time by DHB area (see Appendix 4). Obesity has risen for children living in Counties Manukau, and peaked there at nearly a quarter (22 percent) in 2016/17. Over the same time, obesity prevalence in Auckland and Waitematā DHBs has stayed the same (at 10 percent and nine percent respectively). The overall prevalence of obese children in Auckland is 15 percent.

Figure 5: Percentage of obese two- to 14-year-olds by DHB area

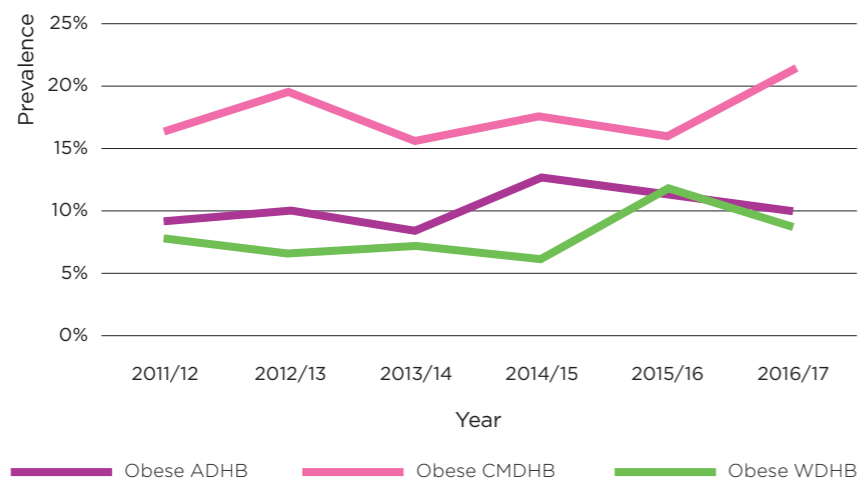


Figure 6: BMI distribution of Auckland children aged two to 14 years old by DHB in 2017

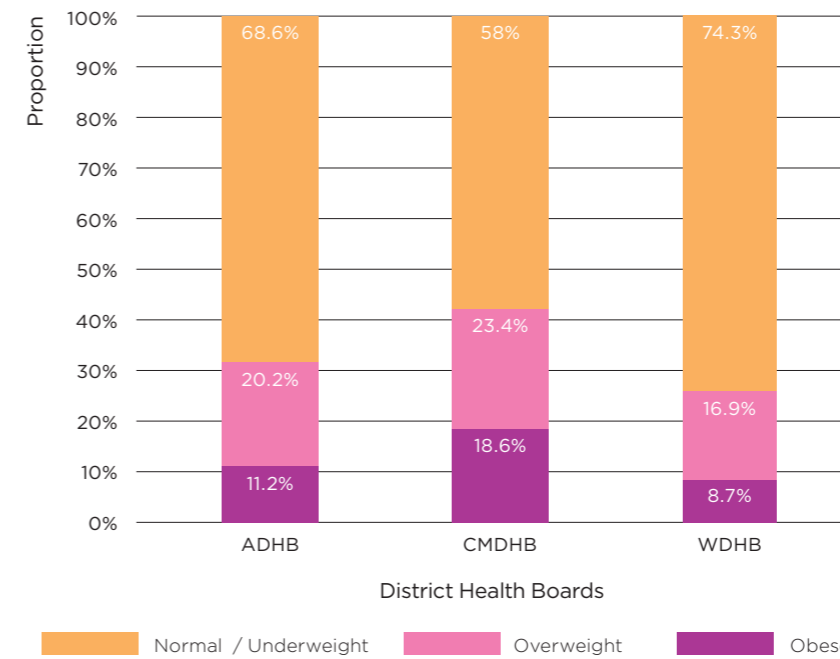


Figure 7: Proportion of two- to 14-year-olds with obesity by socioeconomic deprivation quintiles

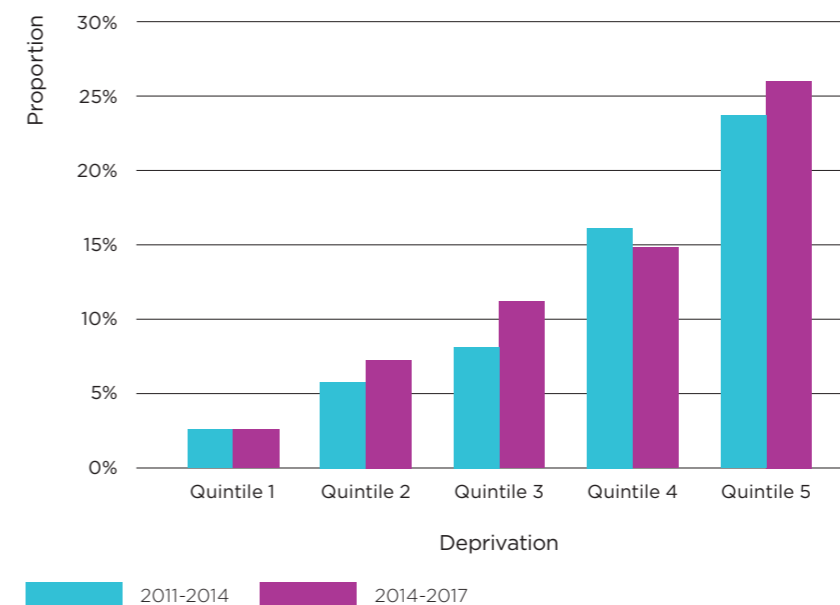


Figure 6 left shows the BMI distribution of children by DHB area for 2017. Waitematā DHB has the highest number of children of normal body weight at about 74.3 percent, followed by Auckland at more than two-thirds (69 percent) and Counties Manukau at 58 percent.

The New Zealand Health Survey data is consistent with this report's previous findings that obesity is overrepresented in more deprived neighbourhoods. About a quarter (26 percent) of two-to-14-year-olds in the most deprived quintile were considered obese between 2014 and 2017, compared with only three percent in the least deprived quintile (**Figure 7**). There has been a small increase across all quintiles, except Quintile 4, in the two three-year periods.

Childhood obesity and the B4 School Check

The B4 School Check (B4SC) is a Ministry of Health programme that measures a range of health indicators before children begin school. Body Mass Index (BMI) assessments need to take account of the child's age and gender. Instead of using fixed thresholds as in adults, cut-off points derived from reference populations are used.

Figure 8: Obesity prevalence across Auckland four-year-olds over time

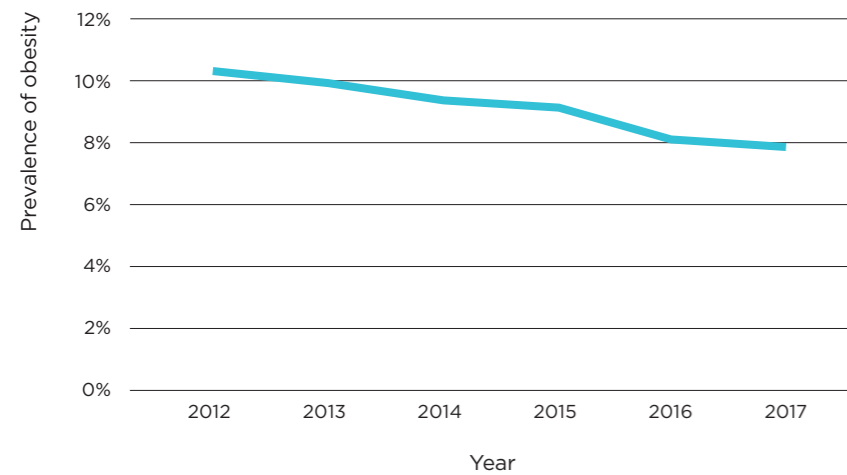


Figure 9: BMI distribution of Auckland four-year-olds by ethnicity

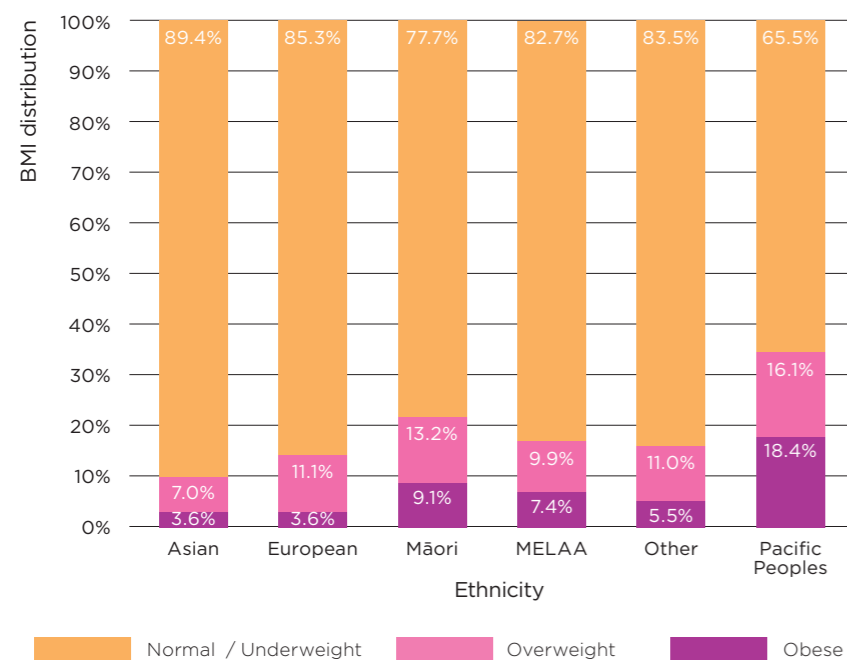


Figure 8 shows the overall prevalence of four-year-olds who are classified as obese, aggregated by year. Obesity prevalence in four-year-olds is steadily declining with 24 percent fewer children being obese in 2017 (7.9 percent) compared with 2012 (10.4 percent).

In **Figure 9**, Asian four-year-olds have the highest proportion of normal and underweight children (89.4 percent), followed by European four-year-olds (85.3 percent). The proportion of obese and overweight preschool children is highest for Pacific (34.5 percent), followed by Māori (22.3 percent).

Figure 10: Prevalence of overweight and obesity in four-year-olds by ethnicity

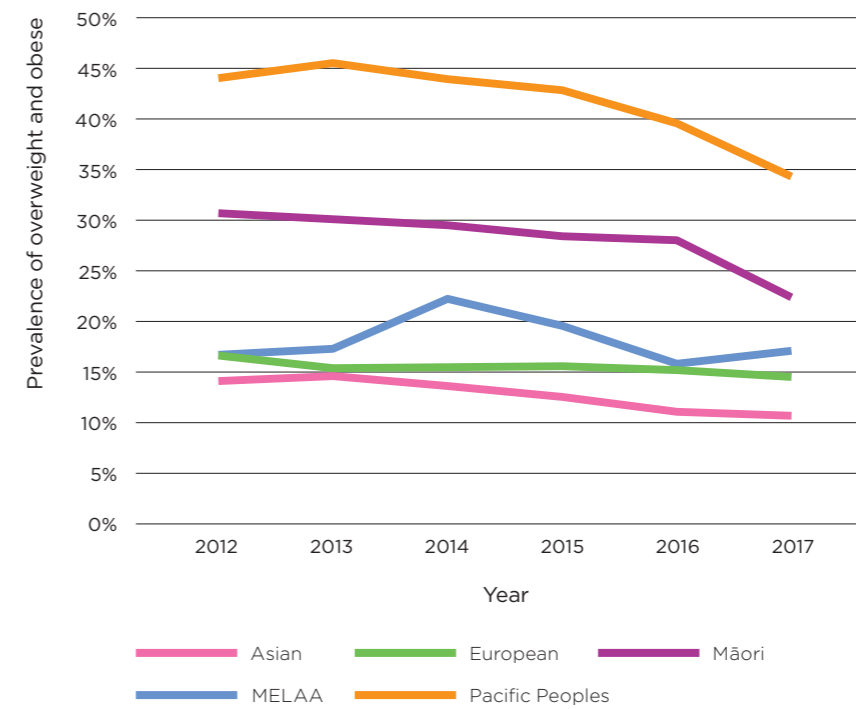
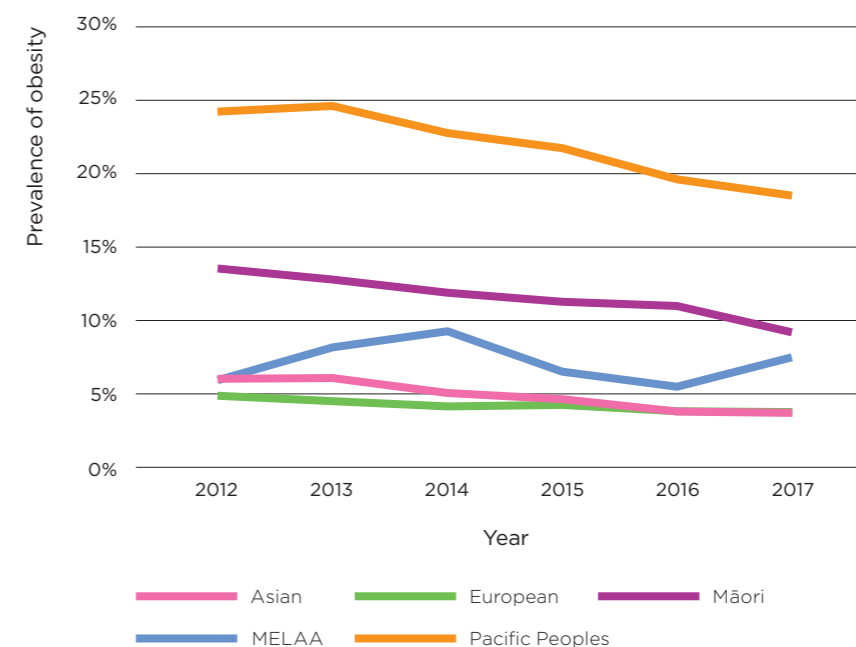


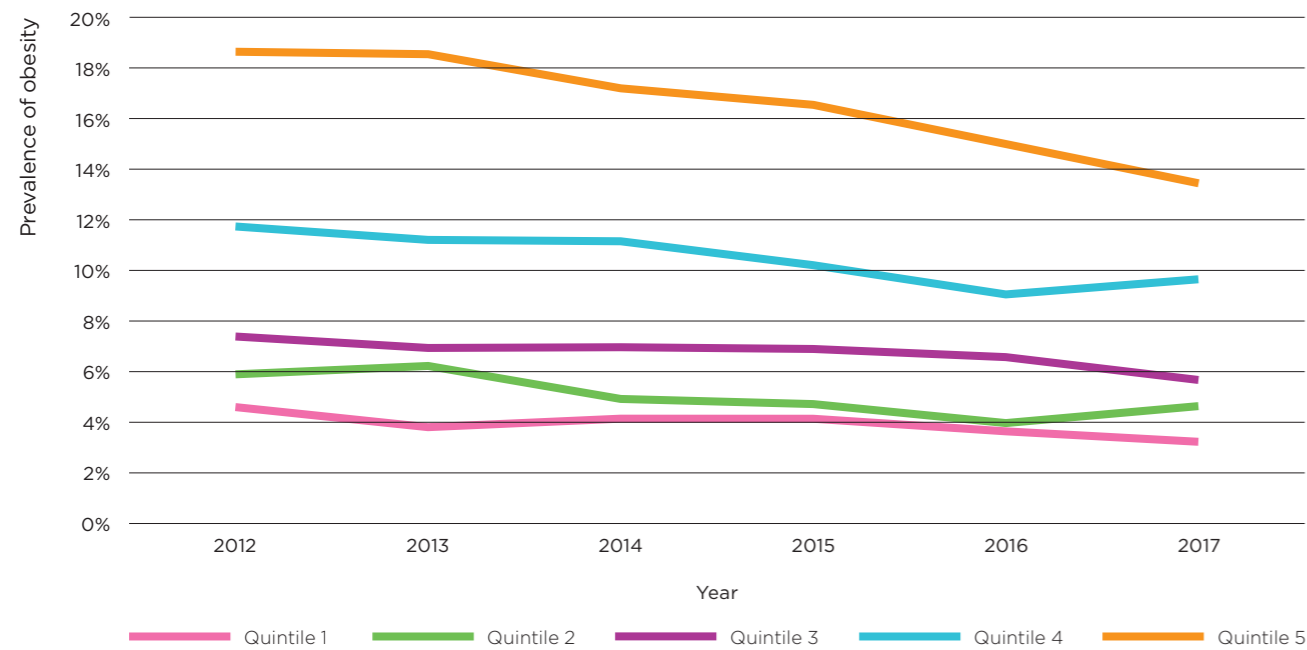
Figure 10 shows trends in the prevalence of overweight and obesity for four-year-olds by ethnicity. The biggest reductions are for Pacific peoples, with 35 percent classed as overweight or obese in 2017 compared with a peak of 46 percent in 2013. Other groups also saw reductions, with Māori prevalence dropping from about a third (31 percent) to a fifth (22 percent) between 2012 and 2017. Middle Eastern, Latin American and African (MELAA) prevalence reduced from about a quarter (23 percent) to 15 percent between 2014 and 2017, and Asian rates fell from 16 percent to 11 percent between 2013 and 2017. Prevalence for European and other groups stayed fairly stable over the period (15–17 percent).

Figure 11: Prevalence of obesity in four-year-olds by ethnicity in Auckland



Looking at the obese category only (**Figure 11**), Māori preschoolers were 2.5 times more likely to be obese than European preschoolers, and Pacific preschoolers were 5.1 times more likely. The relative disparities have decreased for Māori from 2.6 to 2.5, but have remained static for Pacific four-year-olds at a prevalence ratio of 5.1 (2012 and 2017).

Figure 12: Prevalence of obesity in four-year-olds by socioeconomic deprivation quintile in Auckland



In **Figure 12** a greater absolute drop has been observed for those in more deprived areas. The relative level of disparity has remained constant, with a prevalence ratio of about 4.1 for each year when comparing Quintile 5 with Quintile 1. This means that pre-school children in the most deprived groups are 4.1 times more likely to be obese than those in the least deprived group.



Taking healthy action

SCHOOL EATS HELPS SEND UNHEALTHY FOOD PACKING

After a successful debut at Lincoln Heights School in Term 1 of 2019, the School Eats pilot has now been extended to other West Auckland schools.



Story and photo: Healthy Families Waitakere

IT'S IN THE BAG! School Eats provides affordable, nutritious lunches for school children in West Auckland.

Why schools?

School environments have a large impact on children, their families and whānau. Children spend much of their week at school, so nutrition and physical activity initiatives in this setting can have a positive, wide-reaching and sustained effect. The World Health Organization also endorses supportive school settings as effective in helping foster good nutrition. Eating healthily in childhood is crucial because it is a time of rapid growth and development, and is when life-long taste preferences are established.

Jointly developed by Healthy Families Waitākere, Lincoln Heights School, Our City Church and Hebrew Café, School Eats provides nutritious \$5 lunches to students.

The goal of the social enterprise is to make the healthy choice the easy choice for parents and students.

And Lincoln Heights School Associate Principal Toby Kite says based on his school's Term 1 experience, it's working.

"It's been a great success. We had parents pre-purchasing lunches for the entire term... [and] we've seen students develop an ownership and understanding of healthy food."

Using an online ordering system, School Eats was created to provide healthier, affordable lunches to West Auckland schools, with a price-point to match that of readily available, unhealthy options.

"School Eats provides tamariki with healthy, affordable lunches with added convenience for parents," Kite says

<https://schooleats.co/>

ADULT NUTRITION

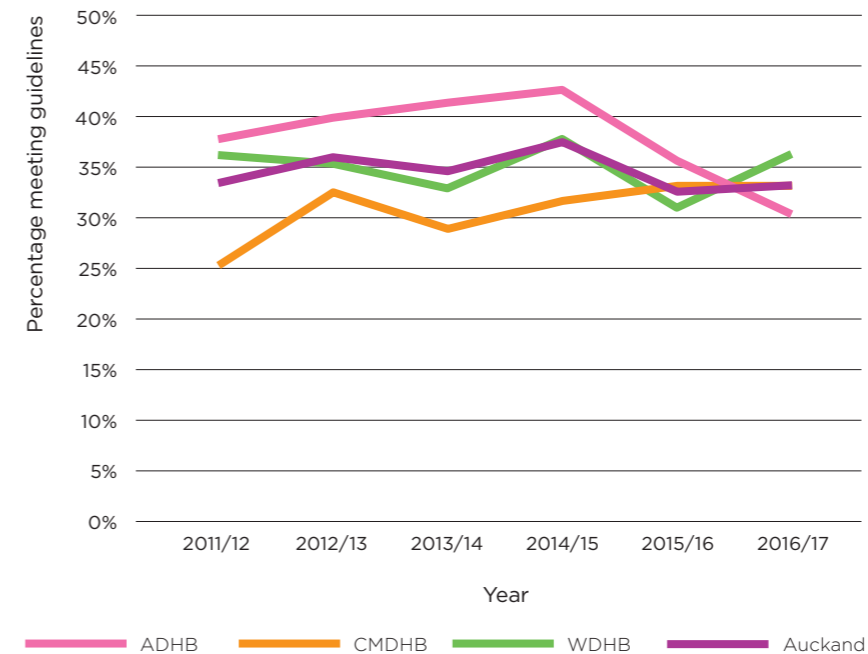


Fruit and vegetable intake

The Eating and Activity Guidelines for New Zealand Adults recommend consuming at least two serves of fruit and three serves of vegetables per day⁸. Serving sizes are generally between 50 and 150g of cooked or raw food. The New Zealand Health Survey asks participants how many servings each of fruit and vegetables they consume per day.

⁸ Ministry of Health. Eating and Activity Guidelines for New Zealand Adults 2015. <http://www.health.govt.nz/publication/eating-and-activity-guidelines-new-zealand-adultsv>

Figure 13: Percentage of Auckland adults meeting fruit and vegetable intake guidelines over time, by DHB



Overall, about a third (34 percent) of Auckland adults meet both the fruit and vegetable intake guidelines. **Figure 13** shows that in 2016/2017, adults' fruit and vegetable intake was similar regardless of where they lived in Auckland. But since 2013/2014, there has been a sustained increase in the percentage of adults living in Counties Manukau who meet the guidelines; from 26 percent in 2011/2012 to 33 percent in 2016/2017. Consumption rates have remained fairly static (around 35 percent) for adults residing in the Waitematā DHB area, while there has been a reduction for those living in the Auckland DHB catchment, from 42 percent to 30 percent in 2016/17.

Figure 14: Percentage of Auckland adults meeting fruit and vegetable intake guidelines by quintile

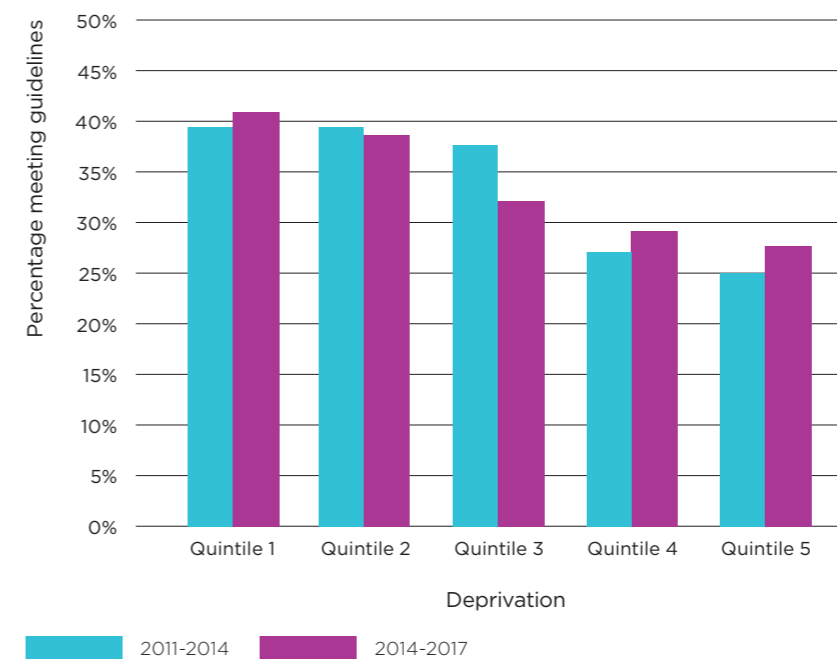


Figure 14 compares adult fruit and vegetable intakes between quintiles. Less than a third (28 percent) of those in the most deprived (Quintile 5) areas eat the recommended daily servings of fruit and vegetables compared with 41 percent of those in the least deprived (Quintile 1).

Taking healthy action

HEALTHY CHANGES BRING CAFÉ OWNERS LITTLE PAIN, LOTS OF GAIN

Manurewa Pools and Leisure Centre's café has made a splash with its new approach to providing a wider range of good food and drink options for its customers.



Story and photo: Healthy Families South

CAFÉ MAKEOVER:

Splashes Café owners Rob van der Berg and his wife, Marlin, have made an array of healthier food and drink options for Manurewa Pool and Leisure Centre customers.

Splashes Café owner Rob van der Berg says despite becoming well known for the cheap, large portions of chips they serve, he's instituted a number of changes.

These have included reducing serving sizes and removing a few of the old favourites – with surprisingly positive results.

“We started the process in November 2018, when we reduced some of the portion sizes and, to be honest, the feedback has been good,” he says.

The new approach, in line with Auckland Council's food and beverage bronze level guidelines, has been supported by [Healthy Families South Auckland](#) and [The Cause Collective](#).

Other changes have included removing vending machines, reducing the visibility of the hot chip and chicken nugget choices, and ensuring water is cheaper than an equivalent-sized sweetened beverage.

Allan Paraha, the Aquatics team leader at the facility, says the café was particularly famous for its chips, so he's impressed with Rob's commitment to change things up.

“Our team has actually been doing a weight-loss challenge, and I've lost 6kg over the last 10 weeks, so having the café taking this approach has definitely helped me and I'm sure it's helping our customers too.”

Rob and his wife, Marlin, love the Manurewa community and have been running Splashes for 11 years, having previously operated a bakery.

With more than 40 percent of children in the Manurewa and Papakura ward area overweight or obese, the couple are pleased to now be part of the solution, rather than adding to the problem.

“It's nice to do something that will help people,” Rob says.

www.aucklandleisure.co.nz/locations/south/manurewa-pool-and-leisure-centre/



Our team has actually been doing a weight-loss challenge, and I've lost 6kg over the last 10 weeks



CHILD DENTAL HEALTH



Summary of child dental health

- There has been no improvement and, in some indicators, an overall worsening of dental health.
- There are notable ethnic disparities in the dental health of preschoolers.
- Pacific preschoolers are overrepresented in the worst Lift the Lip category (grade 6) compared to all other ethnic groups.
- The impact of socioeconomic deprivation is reflected in children's dental health, with preschoolers living in the most deprived neighbourhoods being 10 times more likely to have the worst dental grade compared to those living in the least deprived areas (See Appendix 5: Auckland's Deprivation Index).

The trends in preschoolers' dental health in Auckland are consistent with findings from across New Zealand.

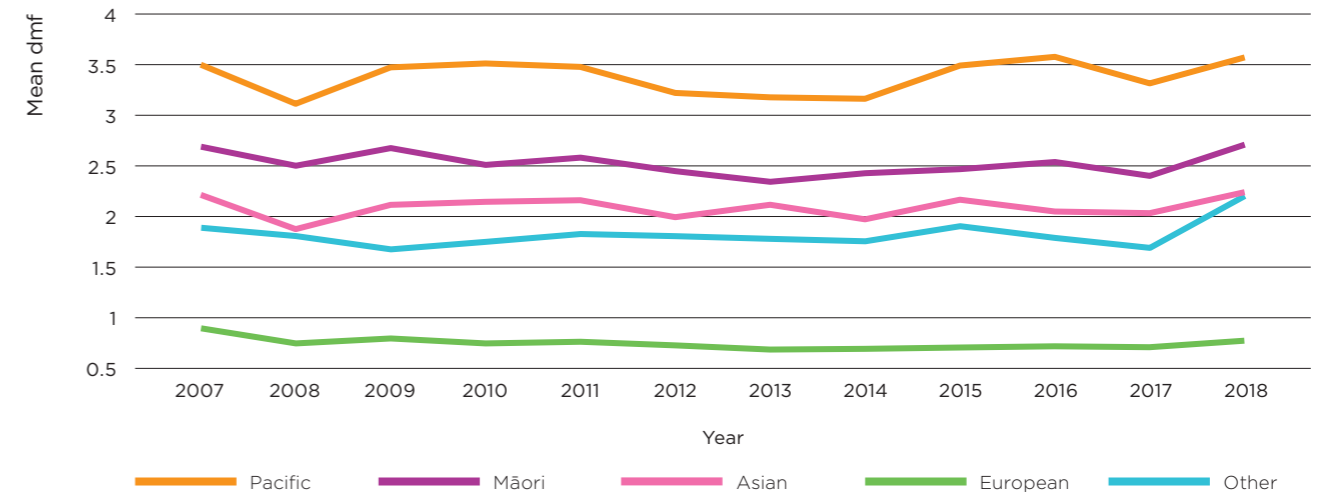
Diet plays a significant role in dental decay, and evidence clearly points to the amount and frequency of sugar intake being associated with the occurrence of dental caries.

The INFORMAS study noted that children's food environments are largely unhealthy, with access to foods that are ultra-processed and high in sugar. It also noted that the food retail environment in deprived neighbourhoods is largely obesogenic^{9,10}. In these areas, there is a concentration of convenience stores and takeaway outlets contributing to the socioeconomic disparities we see in dental health outcomes¹¹.

The causes of poor dental health in preschoolers can be traced back to the nutritional environment, particularly the ubiquity and cheapness of sugary foods¹². Until this changes, we can expect to see poor dental health in children persisting.



Figure 15: Mean 5-year-old dmf score in Auckland



Dental caries

The incidence of dental caries, or tooth decay, in children is strongly influenced by how much and how often they consume sugar. Reducing sugar intake is likely to reduce the burden of caries in children¹³. Data on dental caries are collected through the community oral health system and recorded in [Auckland Regional Dental Service's \(ARDS\) Titanium database](#). The decayed, missing, filled teeth (dmft or dmf) score gives the total number of primary (childhood) teeth that are affected by, or missing due to, dental decay.

⁹ Obesogenic - tending to cause obesity

¹⁰ Vandevijvere, S.; Mackay, S.; D'Souza, E.; Swinburn, B. 2018. How healthy are New Zealand food environments? A comprehensive assessment 2014-2017.

¹¹ Ibid Vandevijvere et al

¹² WHO (2003) Dental disease and oral health fact sheet

¹³ Moynihan PJ, Kelly SA. Effect on caries of restricting sugar intake: systematic review to inform WHO guidelines. J Dent Research. 2013 Dec 9:0022034513508954.

In **Figure 15**, the average dmf score for all five-year-old children in 2018 was 2.3. Over the past decade, rates of tooth decay have remained stable, with persistently high rates for Pacific and Māori children. Māori children have

dmf scores 3.7 times higher than European children (2.7 and 0.7 respectively in 2018) while Pacific children have dmf scores 4.8 times higher than European children (3.7 and 0.7 respectively in 2018).



Lift the lip

Lift the Lip (LTL) is the oral health component of the B4 School Check and is carried out by registered nurses or nurse practitioners¹⁴. Children's dental health is visually assessed, then graded from 1 to 6.

Grade 1 represents healthy teeth and gums with no signs of decay, while grades 2 to 6 represent a scale of progressively poor dentition from mild enamel breakdown to deep decay. Lift the Lip has very good coverage across the country for all gender and ethnic groups, as well as near universal documentation, so this data provides an excellent assessment of Auckland four-year-olds' oral health¹⁵. Figure 16 shows the percentage of children with 2 to 6 Lift the Lip grades, denoting some degree of dental decay over the last five years.

In 2012, the majority (83.8 percent) of children assessed displayed no signs of decay and were classified as grade 1. The figure was similar (83.4 percent) in 2017. However, there has been an increase in the proportion of children with higher Lift the Lip grades 4 to 6, representing more severe dental decay. In particular, grade 6 had an absolute increase of 1.5 percent over the five-year period, corresponding to a relative increase of 62.5 percent.

1 No visible caries

2 Chalky patches (enamel demineralisation) and possible initial enamel breakdown on anterior teeth

3 Obvious caries between anterior teeth and/or along gum line

4 Partial coronal breakdown of anterior teeth (as in, teeth collapsing due to caries)

5 Carious retained roots, whole crowns of anterior teeth are gone

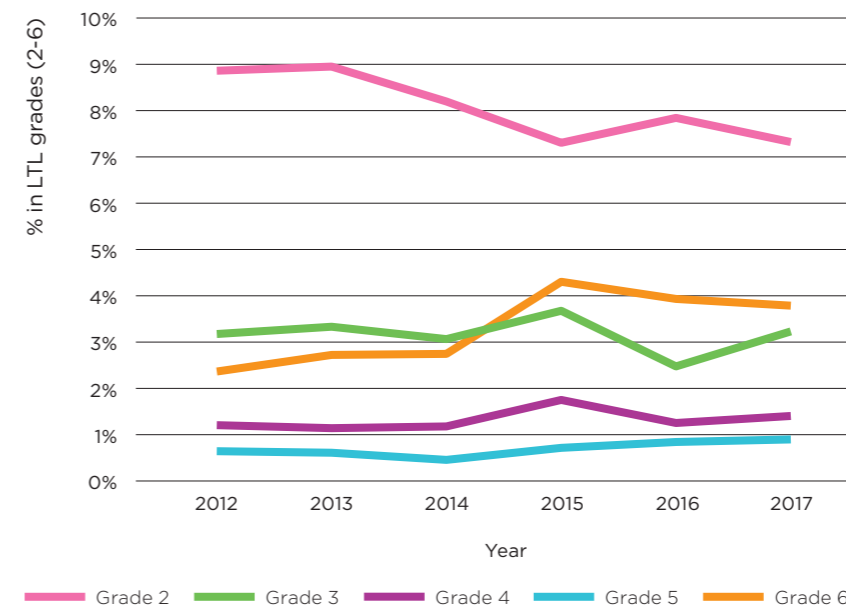
6 Severe caries including back teeth



¹⁴ New Zealand Dental Association. Healthy Smile, Healthy Child: Oral Health Guide for Well Child Providers. 2008 https://www.nzda.org.nz/assets/files/Public/Order_Resources/Healthy_Smiles_Booklet_3rd_Edition.pdf

¹⁵ Ministry of Health. B4 School Check information for the health sector 2016. <http://www.health.govt.nz/our-work/life-stages/child-health/b4-school-check/b4-school-check-information-health-sector>

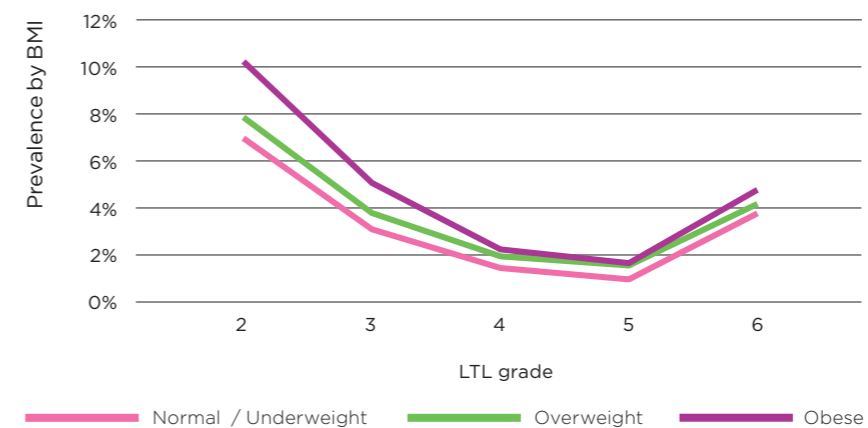
Figure 16: Lift the Lip grades (2-6) over time in Auckland



There are lower proportions of Māori and Pacific children with healthy teeth and gums compared with New Zealand European/Other children. In fact, Pacific four-year-olds are eight times more likely to have the worst Lift the Lip grade (6) than European children (prevalence ratio 8.06; 47.2 percent versus 5.9 per cent). Asian four-year-olds have the second highest prevalence of dental decay (grades 2 to 5).

Notable differences in dental health are also observed when comparing children based on their weight categories. There is a correlation between increased dental decay and increased weight (Figure 17). In 2017, children in the obese category were eight percent less likely than those in the normal/underweight category to have healthy teeth and gums (rate 0.91; 76.5 percent versus 84 percent). They were also 30 percent more likely to have the worst grade of decay.

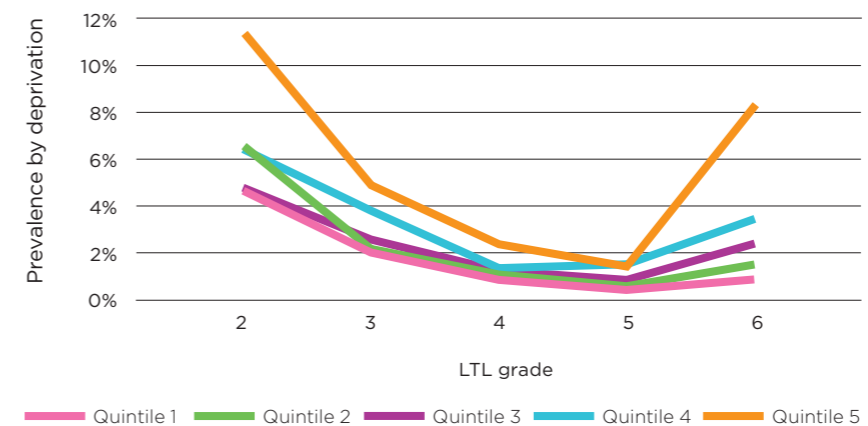
Figure 17: 2017 Lift the Lip by BMI



Notable disparities in dental health are also seen when comparing children using socioeconomic deprivation measures (Figure 18).

The proportions of children with dental decay increase as the deprivation index increases, particularly in terms of severity. This trajectory echoes the pattern seen above in relation to ethnicity and weight. In 2017, children living in the most deprived areas were more than 10 times as likely to have the worst category of decay (prevalence ratio 10.28; 8.3 percent versus 0.8 percent).

Figure 18: Lift the Lip by socioeconomic deprivation quintiles



Taking healthy action

WAI AUCKLAND – MAKING WATER THE FIRST AND EASY CHOICE

Healthy Auckland Together’s Wai Auckland is a three-year project that aims to make water the first and easy choice, and to displace sugary drinks.



Story and photo: Auckland Regional Public Health Service

WAI AUCKLAND? WHY NOT: Wai Auckland Project Manager Amanda Brien says Auckland’s tap water is great quality and choosing it over sugary drinks will positively impact people’s health, and their wallets.

Wai partners work across urban planning, infrastructure, policy, supply and retail, community, health, education and sport. Project Manager Amanda Brien says the team is on a mission to achieve four things.

“We want to make it easy to find tap water when you’re out, make water the ‘new normal’ at schools, facilities and events, help Aucklanders to choose water over sugary drinks, and support communities and parents to push for water only.”

A registered nutritionist, Amanda says sugary drinks are contributing to Aucklanders’ high rates of obesity and tooth decay, especially among children.

“It’s previously been estimated that Kiwis drink around 221 cans of fizzy drink each year – that’s more than 70 litres of a substance that has no nutritional value but can cause a whole lot of damage to your body.

“We’re lucky to have a high quality supply of safe tap water in Auckland. We just need to make the most of that to benefit our health, the environment and our wallets.

Why tap water?

Tap water in Auckland is great quality, free and far better for dental and overall health than sugary drinks. By making tap water readily available where people are (and encouraging people to refill their bottles from a tap rather than buy plastic bottles of water), we can improve health and wellbeing, reduce waste and normalise water as the best and easiest option for quenching thirst. Humans are around 60 percent water after all!

Did you know?

- New Zealanders spend more than \$680 million a year on bottled water.
- You can get 6000 glasses of tap water for the cost of one litre of bottled water.
- There are 16 teaspoons of sugar in one 600ml, regular bottle of soft drink.
- Nearly one in 10 children has a sugary drink every day.
- Wai Auckland has partnered with [Refill NZ](http://www.refillnz.org.nz) and is on a mission to get a thousand Auckland cafés and retailers signed up as Refill Stations – places where members of the community can refill their water bottles with tap water for free.

www.refillnz.org.nz



We want to have water available on tap, handy to where people are. That means more fountains and mobile drink and refill stations in places like parks, schools, shopping centres and bus stops.

Amanda Brien, Wai Auckland



Taking healthy action

HELPING STUDENTS TUCK IN TO HEALTHIER FOOD, DRINK

School tuck shop operator Libelle Group has been working with the Heart Foundation to design and launch a new, healthier Eat Smart menu this year.

The national company reaches 60,000 children daily from 62 schools across New Zealand, including 21 in Auckland, and makes 1.7 million lunches per year.

To create the Eat Smart menu, Libelle Group worked with the Heart Foundation-managed Fuelled4life programme to reformulate its standardised recipes, substitute existing ingredients for healthier ones, and remove pastry items and the number of sugary drinks and snacks offered.

Fuelled4life involves the education, health and food industry sectors working together to supply healthier food in schools and early learning services.

Heart Foundation Northern Nutrition Advisors' Manager Branko Cvjetan says that many school communities are already aware of the important links between food, health and learning, and are taking steps to

improve their food and nutrition environments.

"Consuming healthy foods and drinks every day not only improves students' overall health but can also improve their concentration, behaviour and opportunity to learn.

"It's great to see suppliers like Libelle Group take the time and care to address the nutritional benefits of the food they're providing to schools."

Libelle Group CEO Johannes Tietze says the company's mission is to see healthy, nutritionally balanced lunches in the bellies of every young person in New Zealand.

"We want to give all the hungry learners of New Zealand a chance to improve their learning potential."

www.heartfoundation.org.nz
www.libelle.co.nz



Consuming healthy foods and drinks every day not only improves students' overall health but can also improve their concentration, behaviour and opportunity to learn.



BEFORE



AFTER

Story and photo: New Zealand Heart Foundation

BEFORE AND AFTER Libelle Group has launched a new menu for schools this year, enabling tuck shops to offer a healthier array of brain fuel to their students.



PHYSICAL ACTIVITY INDICATORS



Summary of physical activity

- **Adult physical activity is low, with less than half of adults meeting the recommended Ministry of Health guidelines. This has shown no change over recent time.**
- **Māori and Samoan children spend the highest number of hours being physically active, while Asian children are the least physically active.**
- **Physical activity trends change as children grow to adults, with Samoan adults being the least physically active and European adults being the most physically active.**

Adults now spend a large portion of their time being sedentary. This may be through their jobs or their mode of transport which, for most Aucklanders, is private vehicle. Time is also a scarce resource, and the combination of these factors has led to the low levels of physical activity seen in adults.

For children, structured physical activity during school forms an essential part of the time they spend being active. But active commuting to school (by bike, scooter or foot) has steadily decreased, something that is

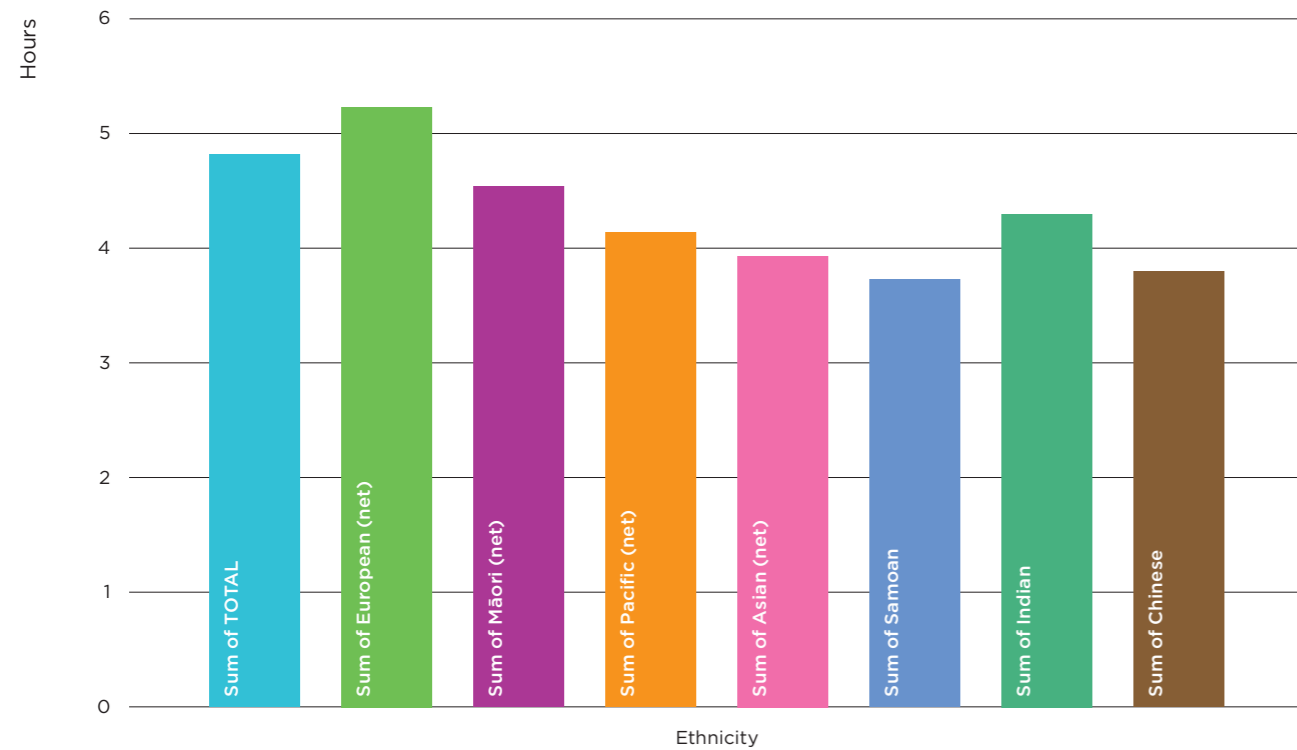
linked to safety concerns. A recent physical activity report card for New Zealand children found that only 43 percent went out and about on their own, with only 26 percent of parents believing that letting their kids walk or cycle independently was safe (due to threats on the road¹⁶). When combined with sedentary interests, such as screen time, children's dropping physical activity levels are a worrying contributor to rising obesity levels. Obesity in children is especially concerning because it's

something they are likely to carry into adulthood, putting them at premature risk of serious health conditions such as diabetes and heart disease.

Unless there is more support to increase physical activity across the life course, we are likely to see the low physical activity trends continuing. This points to the importance of initiatives that build physical activity into our daily lives, such as active transport.

¹⁶ Auckland Council (May 2019). 'The link between safer streets and healthy kids' in **Our Auckland**. URL: <https://ourauckland.aucklandcouncil.govt.nz/articles/news/2019/05/the-link-between-safer-streets-and-healthy-kids/>. (Retrieved 5 June 2019)

Figure 19: Auckland adults' active hours per week by ethnicity



ADULT PHYSICAL ACTIVITY

The Eating and Activity Guidelines for New Zealand Adults state that adults should do at least two-and-a-half hours of moderate, or one-and-a-quarter hours of vigorous, physical activity throughout the week.

From the [Sport NZ Active NZ](#) participation survey conducted in 2018 we get information on the number of hours per week Auckland adults spend being physically active for sport, exercise or recreation.

On average, surveyed adults aged 18+ spent 4.8 hours per week being active. **Figure 19** shows European adults were physically active for the longest period (5.2 hours), followed by Māori (4.5 hours) and Indian (4.3 hours). Adults in the least deprived neighbourhoods were found to be physically active for an average of 5.3 hours per week compared to 4.3 hours in the most deprived neighbourhoods. Disabled adults spent 4.4 hours per week being active, compared to those without disability at 4.9 hours.

Figure 20: Auckland children (5-14 years) using active transport to school over time, by DHB area

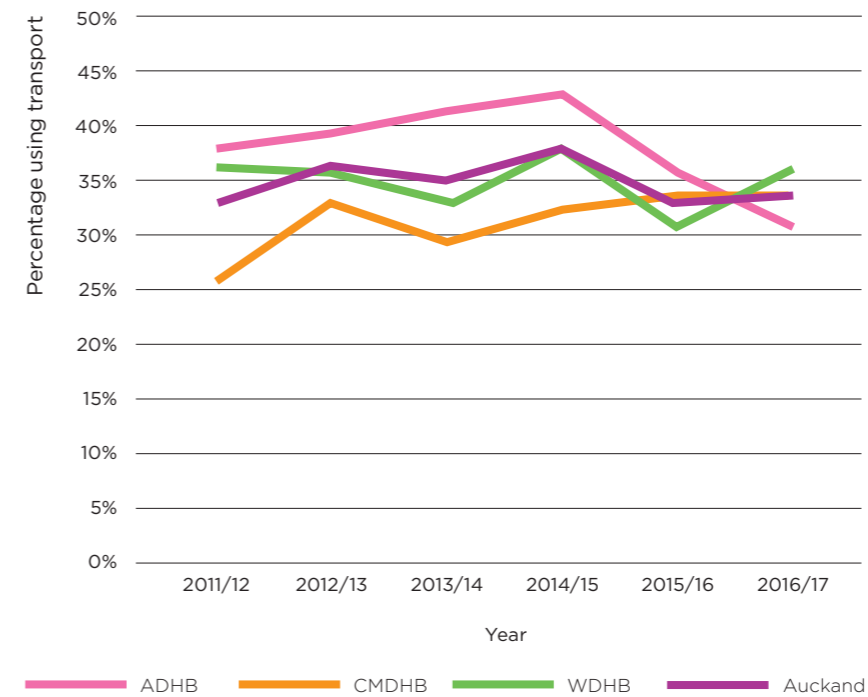
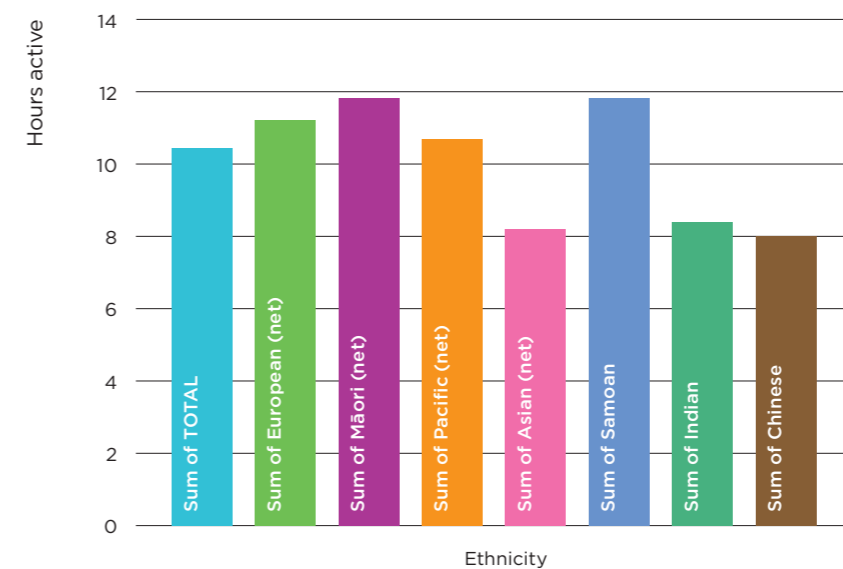


Figure 21: Auckland youth (5-17 years) active hours per week by ethnicity



CHILD PHYSICAL ACTIVITY

Active transport presents an opportunity to build physical activity into daily routines. The New Zealand Health Survey asks whether children aged five to 14 years usually use active modes of transport (walking, cycling, scootering, skating etc) to get to school. Children who do not use active transport to get to school could be either using public transport or being driven by adults.

There is a decreasing prevalence of all Auckland children using active transport (**Figure 20**). This is particularly evident for children living in the Auckland DHB area, where there was a sharp drop from more than 42 percent of children using active transport in 2014/15 to less than 30 percent in 2016/17.

Figure 21 shows Active NZ survey findings for children aged five to 17 years by ethnicity. On average, children spent 10.4 hours per week being active through sport, recreation or exercise. Māori and Samoan children spent the most time being active per week (11.9 hours). Conversely, children who identified as Chinese or Asian spent the least time being active each week, at 8.0 and 8.1 hours respectively. When considering deprivation, children in the most deprived areas spent the least amount of time being active (8.7 hours) compared with children in the least deprived areas (10.9 hours).

Taking healthy action

AUCKLAND'S PATHS ARE MADE FOR WALKING... AND CYCLING

Auckland Council this year launched its AKL Paths website, a one-stop shop for discovering an achievable walk or cycle route in the region.



Story: Auckland Council Image: Auckland Regional Public Health Service

OASIS IN THE CITY:

Cornwall Park is just one of the many Auckland walking and riding destinations featured on the AKL Paths website.

Auckland's Council's Bryce Pomfrett says there are more than 270 paths to choose from, with more being added.

"Every path has a detailed description and map, and identifies the activities and experiences on offer along the way," says Bryce, Service Development Manager for Service Strategy and Integration, Community Services.

"You can also search for a path based on its suitability for cycling or walking, its location in Auckland and the features en route, such as playgrounds and skate parks."

[AKL paths](https://aklpaths.govt.nz) is mobile responsive and easy to use – check it out at

aklpaths.govt.nz

“ Milford to Castor Bay Path! So peaceful and picturesque! #aklpaths ”

“ Had a great time exploring. Had no idea there was a waterfall so close to home. ”

“ At Oakley Creek yesterday. Beautiful and calming. It's hard to believe you're so close to the city. ”

“ We went to Musick Point today. Went down the steps to the beach below. Fabulous scenery and interesting rock formations and rock pools for the kids. ”

Why Paths?

Walking, running, skipping, scootering and cycling (see Appendix 7: Cycleways by Type) are all forms of physical activity that are great for health, require little or no equipment and can be inexpensive or free. That makes them accessible for almost everyone.

In Auckland, we have some amazing paths right on our doorstep that support these activities. Exploring the region using existing infrastructure is a great way to keep healthy or get from A to B – on your own, or with friends and family.

Did you know?

- Fifty-eight percent of Kiwi adults say that other commitments, such as work and family, take priority over physical activity¹⁷.
- The health cost of Aucklanders' insufficient physical activity has previously been estimated as being \$402 million per year¹⁸.
- Walking, cycling and outdoor play are among Aucklanders' most preferred methods of being active.
- Auckland Council has this year introduced a \$120 million [Sport and Recreation Facilities Investment Fund](#). The contestable fund is to help get more people active and involved in community sport. And it's in addition to the \$1 billion Auckland Council already invests in parks, sport and recreation.

¹⁷ Sport NZ's Active New Zealand Survey 2017

¹⁸ Auckland Council, Wellington Regional Council, Wellington Regional Strategy Committee (2013). The Costs of Physical Activity: Toward a regional full-cost accounting perspective. URL: <https://pdfs.semanticscholar.org/90a6/8f9e4dd0c-ba9c2306717f0a357527ab25a50.pdf>

Taking healthy action

BIKES IN SCHOOLS HELPS KIDS EMBRACE PEDAL POWER

More than 46 Auckland schools and 18,365 students are now participating in the Bikes in Schools programme, with many more schools in the pipeline.



Story and photo: Auckland Transport

The programme involves building bike tracks within school grounds so students can learn how to ride and practise their skills in a safe area.

Auckland Transport's Zane Bray, Senior Walking and Cycling Co-ordinator, says school projects usually also include a fleet of bikes, helmets and bike storage facilities.

"In West Auckland three schools have also partnered with Sport Waitakere to open their track to the community outside school hours. This creates even more opportunities for people to learn and practise riding a bike."

Since 2012, 710 Auckland teachers have also been trained so they can deliver fun cycle and fitness sessions during PE classes.

In late 2018, the New Zealand Transport Agency announced an extra \$23 million would be allocated to BikeReady, the national cycling education system that includes Bikes in Schools, cycle skills training and a suite of curriculum resources.

It's estimated the increased funding will give 43,000 more children across New Zealand access to Bikes in Schools facilities.

Did you know?

In the 1980s, more than half of school children walked or cycled to school. Today, it's less than a third.

Why bikes in schools?

School environments bring large communities of children and, by extension, their families and whānau, together in one place. Children spend much of their week at school, so physical activity interventions in this setting can have a positive, wide-reaching and sustained effect. Bike riding improves children's health, skills, safety, confidence and self-esteem. Not only that, but practising in the safety of a school environment sets them up to be our pedal-powered, active transport users of the future.

www.bikeready.govt.nz
www.bikeon.org.nz



Story and photo: Auckland Transport



ENVIRONMENTAL INDICATORS

Summary of environmental indicators

- **Active modes of travel make up 13 percent of trips in Auckland, compared with Wellington at 25 percent and Christchurch at 15 percent.**
- **Aucklanders are using more public transport, with a 4.4 percent increase per capita every year since 2006. The 2018 rate stood at 4.7 trips per capita per month.**
- **There was a 200km increase in cycleway infrastructure between 2016 and 2017 across Auckland Council, NZTA and Auckland Transport networks. Since 2018, there has been only a further 6.5 kilometres of growth (see Appendix 7: Cycleways by Type).**
- **There are 408 active Walking School Bus routes in Auckland and more than half of Auckland schools are active in the Auckland Transport Travelwise Programme.**

Auckland continues to grow its public transport network. In 2016, only 215,000 people lived within 500m of a frequent public transport stop or station. Now, after the implementation of a 'New Network', this has increased by 163 percent to 551,000 people.

On the AT bus network alone, Aucklanders now travel 59.1 million kilometres a year, between Wellsford and Port Waikato, with patronage in the last year increasing to over 100 million trips in a 12-month period.

Auckland's infrastructure has been dedicated to moving private cars and making space for their use¹⁹, and funding for active and public transport has also lagged behind funding for roads. But things are improving. There has been a sustained increase in funding for public and active transport over the past few years, and this is reflected in the growing number of people taking public and active transport. Programmes such as Travelwise have also helped displace private car use in peak hours by enabling school children to take active means to schools.

¹⁹ Austroads.2016. Congestion and Reliability Review.



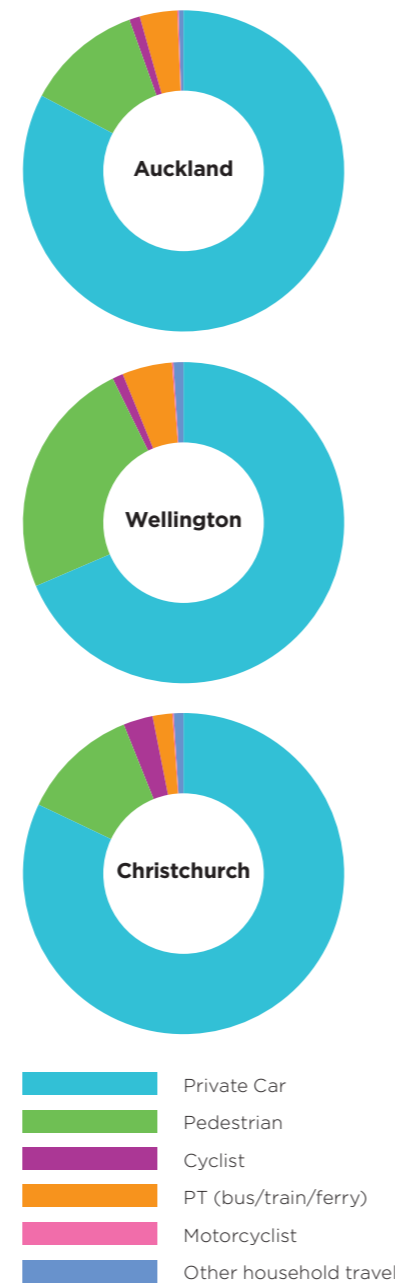
STREETS, PARKS AND PLACES



ADULT JOURNEYS TO WORK Figure 22: Mode share of trip legs, 2018

Making daily trips via active transport is an effective way to increase physical activity. The [New Zealand Household Travel Survey](#)²⁰ is an ongoing survey undertaken by the Ministry of Transport. Since 2015, every member of selected households has been asked to record all their travel over a seven-day period, once a year. Each is then interviewed about their travel and related information.

Figure 22 looks at mode share of trip legs²¹ in Auckland, Wellington and Christchurch. Walking makes up 12 percent of trip legs in Auckland, compared with Wellington where nearly a quarter (24 percent) are by foot. Cycling only makes up one percent of trip legs in Auckland, compared with Christchurch, where three percent of trip legs are pedal-powered. In Auckland, the majority (83 percent) of trips are by private car, with public transport representing a small share (four percent) of trip legs. Comparatively, less than three-quarters (69 percent) of trips in Wellington are by car, but public transport use is similar, accounting for five percent of trip legs.



²⁰ New Zealand Transport Authority. Household Travel Survey. 2018 <https://www.transport.govt.nz/mot-resources/household-travel-survey/>

²¹ A 'trip leg' is a non-stop leg of travel by a single mode. For example, driving to a friend's house with a stop at the shops on the way would be two trip legs.

Figure 23: Time spent travelling per person per year by transport mode (2015-2018)

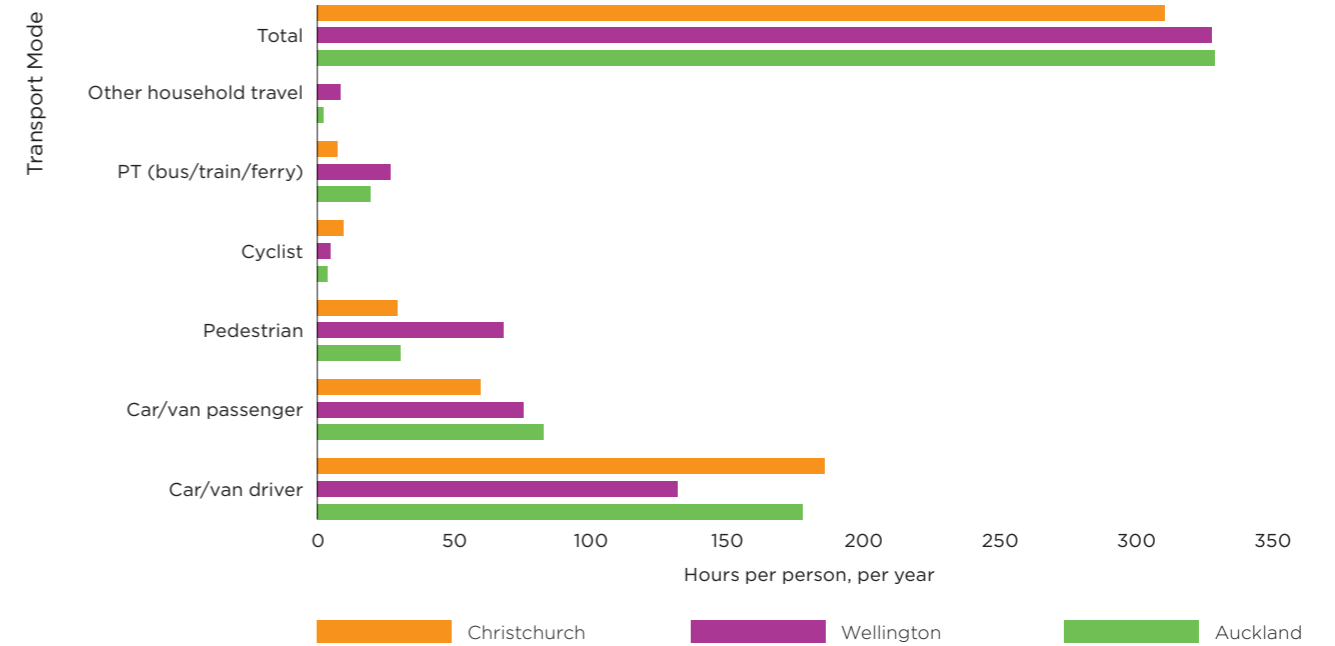
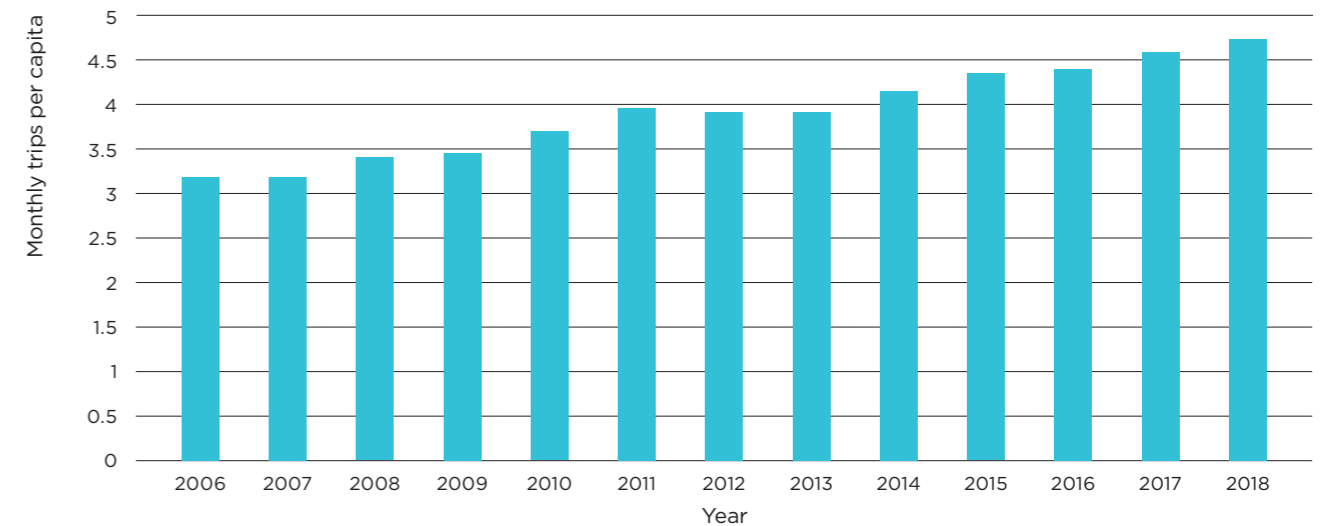


Figure 24: Monthly average public transport trips per capita in Auckland (passengers > 5 years old)



When time spent is factored in, we observe similar trends. In Auckland, 267 hours per person per year is spent travelling in cars compared to 20 hours on public transport and a combined 34 hours via the active modes of cycling and walking (Figure 23).

Public transport patronage

This report follows public transport trips over time using a 'per capita' method. This allows for the influence of Auckland's increasing population.

There has been a sustained increase in the monthly rate of public transport trips over the past decade, with a current rate of 4.7 trips per capita. This equates to a 4.4 percent increase year-on-year, and a total increase of 68 percent (rate of 1.48) since 2006.

Figure 25: Positive perceptions of public transport use, Quality of Life Survey

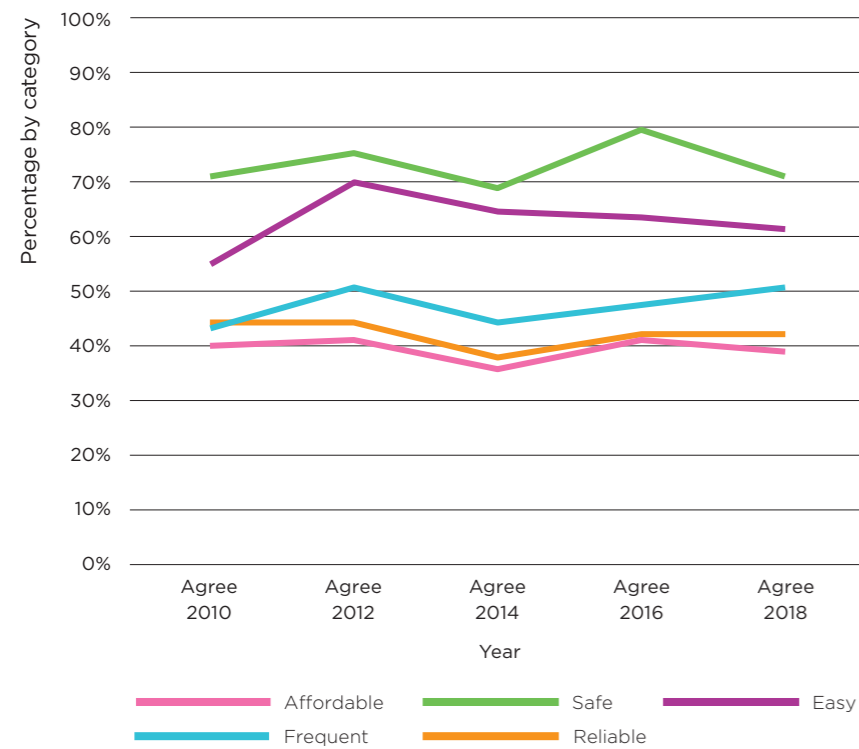
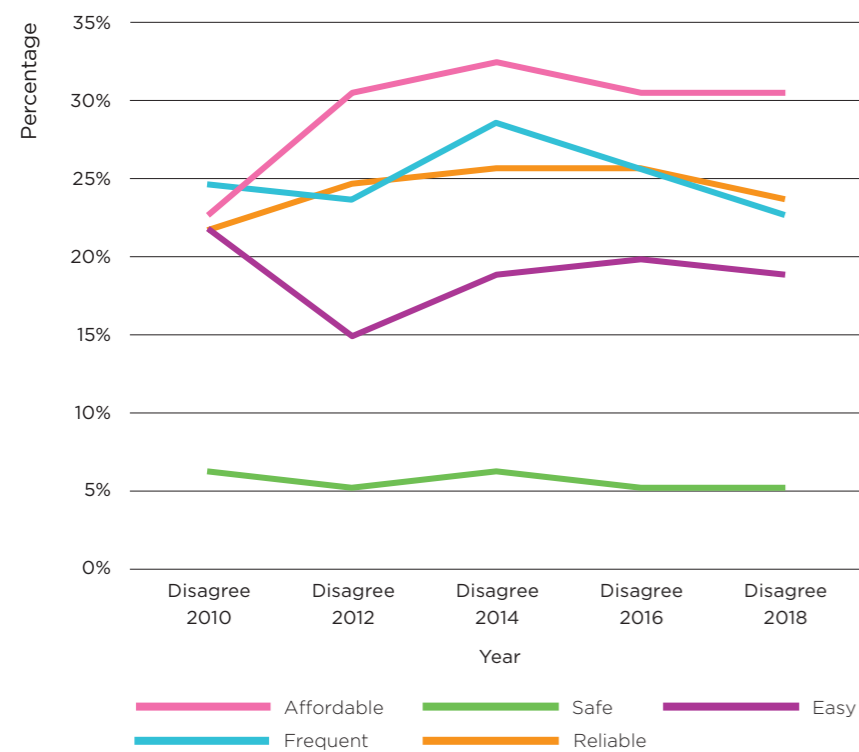


Figure 26: Negative perceptions of public transport use, Quality of life Survey



Perceptions of public transport

The biennial Quality of Life Survey²² collects data on Aucklanders' perception of public transport with regard to affordability, safety, ease of access, frequency and reliability. Data used here is from 2010 onwards. The survey methodology has changed over the years, but a similar question on perceptions has been asked every year. Figure 25 and 26 show the extent to which respondents agreed or disagreed with statements in the survey.

Figure 25 shows positive perceptions of public transport over time. As of 2018, 63 percent of survey respondents agreed that public transport was easy to use and less than half agreed it was affordable. This can be compared with **Figure 26**, which shows the negative perceptions. Here, a third of people disagree that public transport is affordable and just under a quarter think it's not frequent or reliable.

²² The Quality of Life Survey is a partnership between Auckland Council, Hamilton, Wellington, Porirua, Hutt, Christchurch and Dunedin City Councils and Wellington Regional Councils.

Active transport infrastructure

Footpaths and cycleways make people feel safe when travelling through the city and support active transport. Safety is a prime concern for people considering active transport options rather than driving, especially potential cyclists²³. Auckland Council and the New Zealand Transport Agency (NZTA) have made significant investments in cycle infrastructure in the past few years in an effort to increase mode share, by separating bikes from

cars, and improve navigation through the city²⁴.

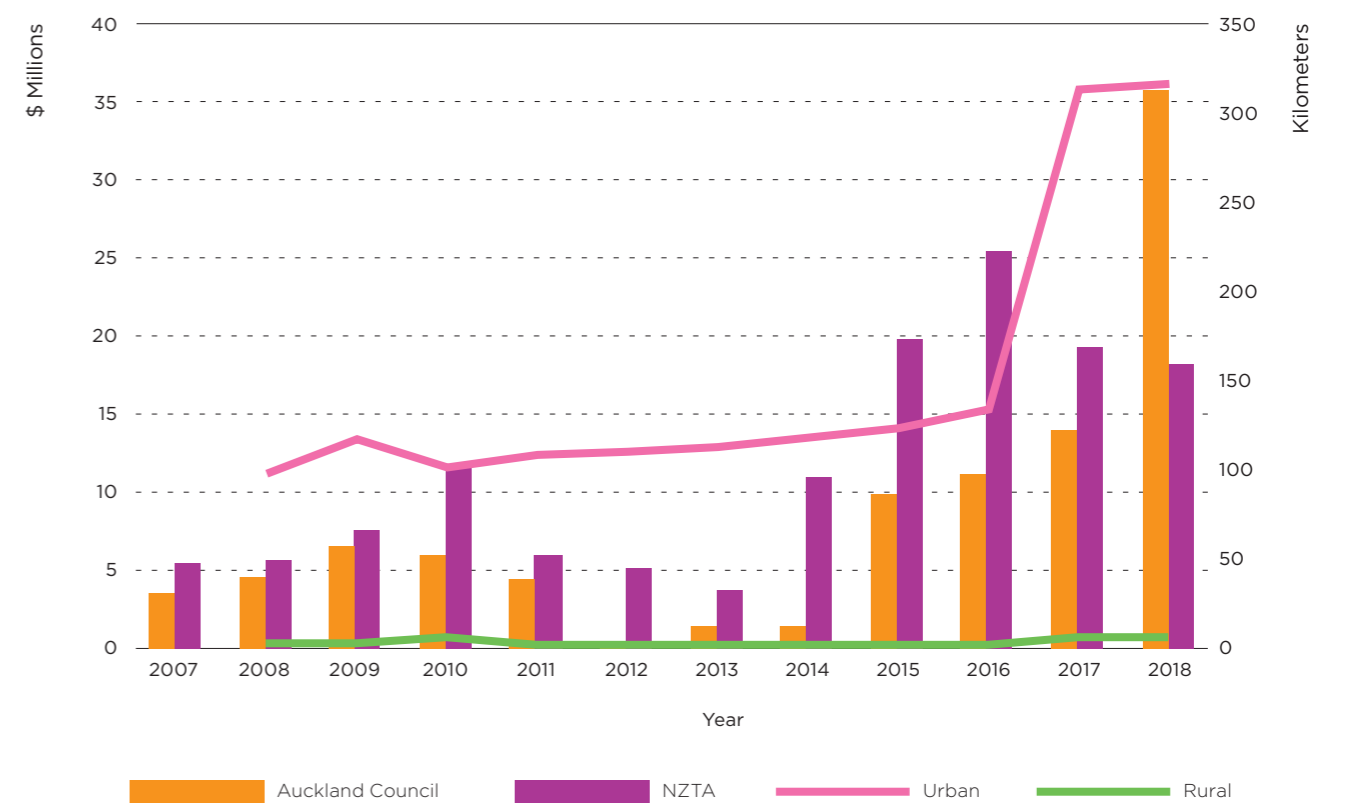
Figure 27 shows that Auckland Council and NZTA's combined investment in walking and cycling infrastructure has increased significantly in the past few years, from just over \$5 million in 2013 to \$33 million in 2017. In 2018, Auckland Council more than doubled its funding for active transport from \$14 million in 2017 to \$36 million, bringing the combined Auckland Council-NZTA funding total to \$54 million. Figure 27 also shows the

kilometres of cycleways built. There was a significant jump between 2015/16 and 2016/2017, with 200km added, but since then only 6.5 kilometres of cycleway infrastructure has been built or added to the network.

²³ Auckland Transport. Auckland Cycling Account Book 2018 <https://at.govt.nz/media/1873018/aki-cycling-account-book.pdf>

²⁴ NZTA. Transport Funding All Activities <http://www.nzta.govt.nz/assets/userfiles/transport-data/FundAllActivities.html>

Figure 27: Funding allocation (\$m) for active transport infrastructure (km) in Auckland, 2018





Active travel to schools

Walking School Bus

Walking School Buses promote safe and active travel to and from school. This programme is run by volunteer parents and community members and supports the development of road safety skills by mostly five-to-nine year olds at Auckland primary schools. There are currently 408 active walking school bus routes with 4502 children and 1605 parent/community volunteers.

In 2018/19, 12 new schools were added to the programme and 78 new routes added at existing schools. Eighty-seven percent of the active walking school buses were maintained.

School Cycle Programme

Formal Cycle Grade 1 (off road) and Grade 2 (on-road) skills training was delivered to 8127 Year 5 to 10 students across Auckland. Approximately 8,644 students at schools that had received training also participated in 40 events and activities. These included wheels days, bike breakfast promotions, bike and helmet checks, cycle assembly promotions and active reward initiatives.

A Cycle Ambassador Programme was delivered at 17 schools including four intermediate and 13 primary schools with at least 154 students participating. This programme included helmet check training and basic bike

maintenance, such as pumping tyres, checking brakes and how to role model safe cycling behaviours.

Auckland Transport's Travelwise Programme

The Travelwise programme helps develop individualised safe school travel plans, which aim to reduce congestion and improve safety. A whole-of-school approach is taken to adopt road safety measures and promote sustainable travel to schools. Travelwise has been running since 2005 and today, more than half (357 out of 558) of Auckland schools are active in the programme.

Figure 28: Number of cars displaced at morning peak by the Travelwise programme

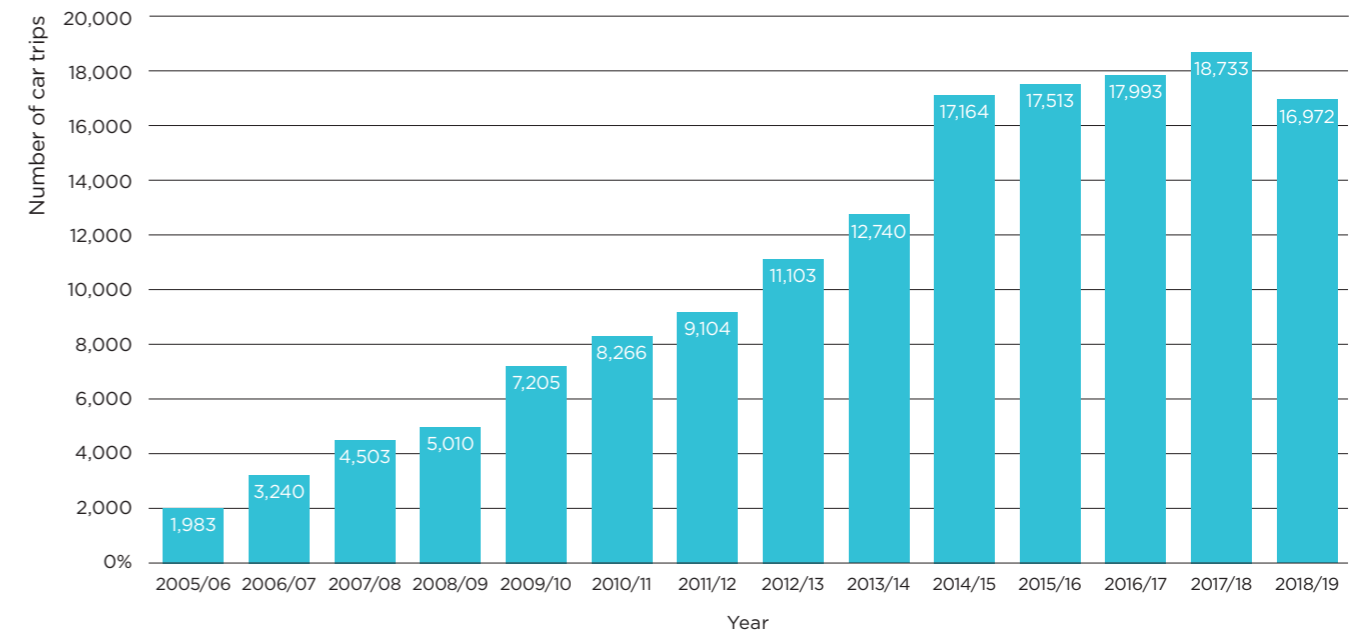
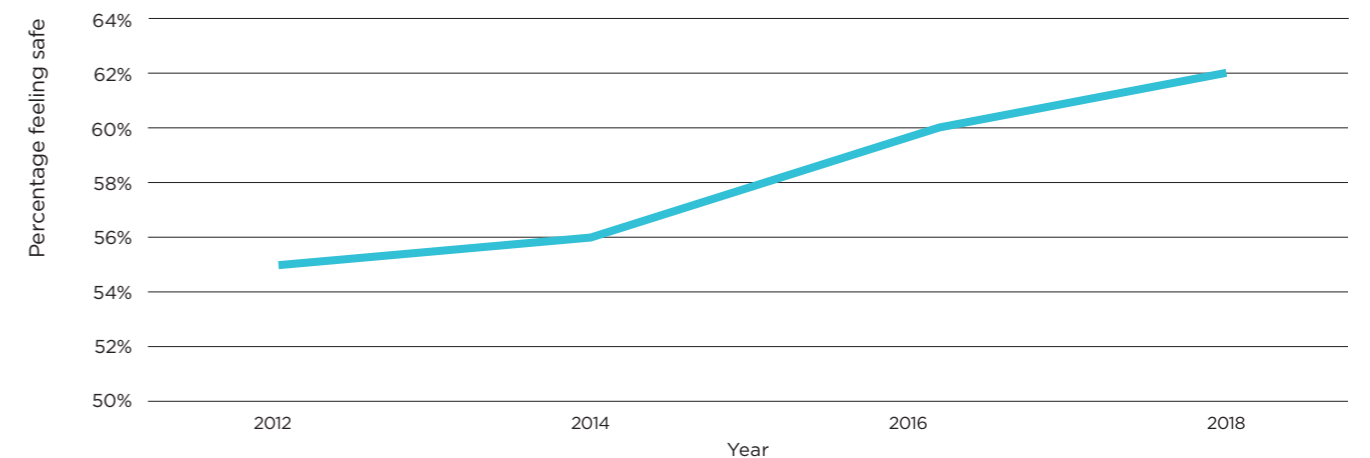


Figure 29: Perception of safety while walking at night (Quality of Life Survey 2018)



The 2018 target for Travelwise was to displace a further 12,800 cars during morning peak hours (6:30am to 8:30am), which was met. Since the programme began, there has been an increase in the number of cars taken off the road with a small uptick in the 2017/18 period. To date, around 17,000 cars have been displaced.

Perceptions of safety while walking after dark

Feeling safe is a major determinant of people's willingness to walk to work and other destinations. People are more likely to use a car to bypass areas they perceive to be unsafe. The Quality of Life Survey

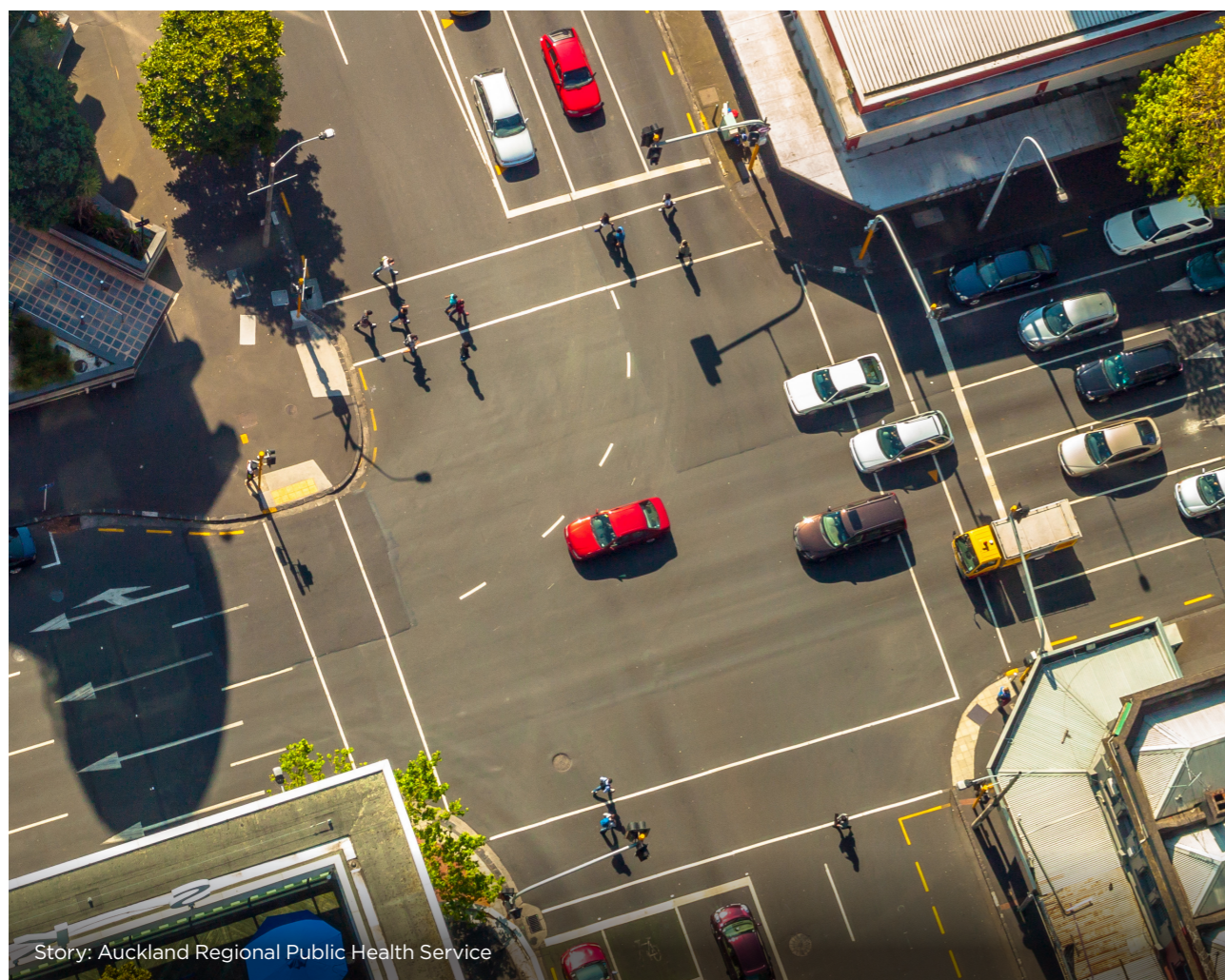
polled 2715 Aucklanders on their perception of safety while walking alone in different areas and at different times of day.

Figure 29 shows the number of people who feel safe walking in their neighbourhood after dark has increased from 55 percent in 2012 to 62 percent in 2018.

Taking healthy action

PUTTING THE BRAKES ON SPEED

Auckland Regional Public Health Service (ARPHS) is backing Auckland Transport’s proposal to lower the speed limit to 30kph in the city centre and make changes on high-risk rural roads where existing speeds are unsafe.



Dr Michael Hale, ARPHS Public Health Medicine Specialist, says there is irrefutable local and international evidence showing slower speeds save lives and reduce injuries.

“In 2017, 64 people died and 749 others suffered serious trauma on Auckland roads. Yet we have the opportunity now to make a change that would quickly reduce that level of devastation for families and communities.

“A lower speed limit may increase journey times by only seconds, but may mean a lifetime for a child,” Dr Hale says. “If we can also make it safer and easier for people to get out of their cars and use active forms of transport, like walking and cycling, there are proven benefits for people’s physical and mental health too.”

Other organisations in support of the reduced speeds include Starship Children’s Hospital and Safekids Aotearoa.

<https://at.govt.nz/projects-roadworks/safe-speeds-programme/speed-limit-changes-around-auckland/>

Why slower speeds and active transport?

Using active transport to get from A to B has multiple benefits: improving health and fitness, reducing the number of cars on the road, and protecting the environment. For children, it can also build life skills such as planning, decision making, time management and focus. But to navigate Auckland’s urban environment safely, and make active transport a realistic option for people of all ages, changes are needed. Among them is a reduction in speed limits on key roads and the introduction and expansion of other traffic-calming measures. This will improve health and reduce the rates of injury and death across the Auckland population.

Did you know?

- If you are walking or cycling and are hit by a vehicle travelling 50kph, you have an 80 percent chance of dying or being seriously injured. But if the vehicle is travelling at 30kph, that risk drops to 10 percent.
- Out of 26 international cities, Auckland has the second highest pedestrian fatality rate, the sixth highest cyclist fatality rate, and the highest motorcyclist fatality rate per distance travelled²⁵.
- New Zealand has the second highest private car ownership in the OECD²⁶.

²⁵ Santacreu, A. (2018) “Safer City Streets Global Benchmarking for Urban Road Safety” International Transport Forum Working Document, OECD Publishing, Paris.

²⁶ The Royal Society of New Zealand. 2016 Transition to a low-carbon economy for New Zealand



SCHOOLS AND EARLY LEARNING SERVICES

Heart-Healthy schools

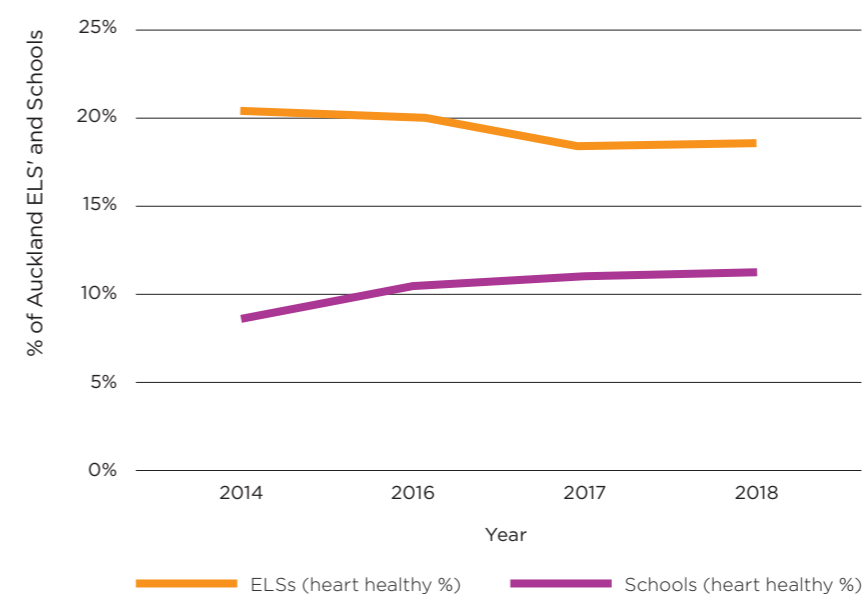
The Heart Foundation works with schools and early learning services to improve their nutrition and physical activity environments, with lower socioeconomic areas prioritised. During 2017, about 18.6 percent, or 271, of Auckland's 1460 early learning services were working towards a Healthy Heart Award²⁷. Sixty-four (11.2 per cent) of Auckland's 570 schools were also working towards improving their nutrition environment. While this represents an increase for schools (up from 8.7 percent in 2014), there has been a slight decrease for early learning services (from 20.6 percent in 2014). This is partly due to the high number of new early learning services, an additional 237, which opened during this time²⁸.

²⁷ The Healthy Heart Award provides guidance and structure for you to create an environment that promotes healthy eating and physical activity.

²⁸ Gerritsen S, Dean B, Morton S, Wall CR. Do childcare menus meet nutrition guidelines? Quantity, variety and quality of food provided in New Zealand Early Childhood Education services. Aust N Z J Public Health 2017; 41(4):345-351.



Figure 30: Healthy Heart Awards



In order to increase reach and better respond to customer needs, the Heart Foundation has recently changed its approach to working with schools and now provides tailored support for each school's individual needs.

Taking healthy action

COOKING UP GOOD KAI, HEALTHY HABITS FOR PRESCHOOLERS

Auckland's early learning service cooks are discovering new ways of cooking up nutritious, heart-healthy meals for under-fives.



Story and photos: Heart Foundation

HEALTHY START: Offering nutritious food choices and role modelling healthy eating early can help set young children up for a lifetime of good habits.

It's all thanks to a specialised Community Nutrition Course run by the Heart Foundation's Education and Pacific Heartbeat teams.

Since 2015, 15 courses have been held for early learning service cooks and other staff who help with food preparation.

Branko Cvjetan, Heart Foundation Northern Nutrition Advisors Manager, says that each centre's cook influences the food intakes of between 30 and 120 children daily.

"That means the benefits of learning important skills like heart-healthy menu planning, portion sizes, label reading and basic nutrition concepts have far reaching implications for young New Zealanders," he says.

Heart Foundation Pacific Heartbeat Manager Mafi Funaki-Tahifote says the decision to focus on early learning cooks was due to their influence on preschoolers' daily food intakes.

"Establishing healthy habits in the early years provides children with a strong foundation for good health and wellbeing throughout their lives," she says.

Menu changes can include reducing high-fat and high-sugar options and increasing the availability of fruits and vegetables by providing new food items such

Jody Langdon from Reach for the Stars Early Learning Centre in Rosedale did the Community Nutrition Course in March 2019, along with centre owner Bruce Poole.



Jody Langdon Reach for the Stars Early Learning Centre, Rosedale

The facility has around 100 children enrolled, with up to 85 children attending daily.

Jody says she learned a lot of new information about meal planning and label reading, which has helped her when choosing ingredients; she also picked up some good ideas for healthy celebrations.

"We're keen to teach the kids about what healthy food is, as they need to know from an early age to help create good habits. We also want them to know there are certain foods that are just for treats," says Jody.

"We've started using more milk products and are introducing a tuna casserole to the menu as we weren't serving any fish meals previously.

"We also used to use crackers that were very high in fat and salt, but have since changed to vegetable crackers and they still quickly disappear off the plate!"

as beetroot hummus, fruit kebabs and vegetable soup.

The Community Nutrition Course has proved very popular, often selling out within a day of registrations opening.

Those who have attended say they've appreciated learning

Why early learning services?

Like schools, early learning services bring communities of children and, by extension, their families and whānau, together in one place. Supporting preschoolers to develop healthy eating habits early on is crucial. Not only are they going through a time of rapid growth and development, they are also establishing life-long taste preferences. The goal is taste buds attuned to foods such as fruits and vegetables, rather than highly processed foods heavy in sugar and/or salt.

new skills and extending their knowledge.

And the majority have said they started making changes to their centre's menus immediately after attending.

heartfoundation.org.nz



APPENDICES

APPENDIX 1 REPORT METHODOLOGY

Indicators

Setting indicators and monitoring targets allows us to measure progress towards goals and to learn where the coalition of Healthy Auckland Together partners could improve performance, individually and collectively. It also provides a framework for accountability by benchmarking progress.

We can now use this local and relevant evidence to identify areas that are underperforming and ensure that policies and actions are improved where needed.

The indicators in this Monitoring Report directly link to HAT's three main objectives. The two main types of indicators used are population indicators and environmental indicators. Population indicators outline changes in population health and behaviour related to the development of obesity-related health outcomes. This includes, for example, improved nutrition and increased physical activity. Environmental indicators measure changes in health-related environmental factors. These include indicators such as accessibility of public transport or opportunities for physical activity.

There are five overarching action areas that contribute towards the three goals of improving nutrition, increasing physical activity and reducing obesity. The indicators are organised under the five action areas:

1. Schools and early learning services
2. Communities and community services
3. Workplaces
4. Streets, parks and places
5. Food environment and marketing

The indicators were selected based on the following criteria:

- Data is currently being collected
- Auckland-specific data is available
- Ability to determine impact on priority populations.

The indicator framework was developed from Healthy Auckland Together's 2015 Baseline Report and is organised into indicator areas based on the above action areas. Where possible, more robust quantitative data sources have replaced previous survey and qualitative data sources. Also, new indicators or sources that better represent the entire Auckland population have been added to the report. Some indicators now reflect changes in data sources. For example, the mode share indicator has changed to use the survey reported yearly by the Ministry of Transport, rather than the less frequent Census. Where possible, demographic variables are shown by deprivation first, then by ethnicity and gender.

Indicator	Status	Source
Population Indicators		
Adult obesity	Not updated	NZHS
Child obesity	Updated	B4SC
Child obesity (two- to 14-year-olds)	Not updated	NZHS
Adult fruit and vegetable intake	Not updated	NZHS
Child dental health	Updated	ARDS, B4SC
Physical activity indicators		
Adult physical activity	Not updated	NZHS
Child active transport to school	Not updated	NZHS
Hours spent being physically active	New	Sports NZ
Street, parks and places		
Adult active/public transport mode share to work	Updated	NZHTS
Public transport patronage	Updated	AT
Active transport infrastructure	Updated	AT
Perceptions of public transport	Updated	Quality of Life Survey
Travelwise	New	AT
Perception of safety while walking	Updated	Quality of Life Survey
Schools and early learning services		
Heart Foundation Schools	Updated	Heart Foundation
Food environment		
Data not available		

Indicators without 2019 updates

1. The New Zealand Health Survey 2017/2018 Auckland data were not available in time to be published with this report.
2. Healthy Auckland Together member organisations with workplace wellbeing programmes in place – no survey method yet established.

APPENDIX 2 MONITORING DATA

This section pertains to the access and use of data in order to conduct monitoring. The data is gathered and analysed on the basis that it has attributes of quality, reliability, availability and generalisability to Auckland's population, and is collected annually over time.

- Schools and early learning services**

Overall we have poor data on schools and early learning services (ELSs). We currently have gaps in longitudinal nutrition and physical activity data from schools and ELSs in the areas of policy, student habits and overall environment.
- Communities and community services**

Overall we have poor data on communities and community services. We have limited information from snapshot surveys, but no long-term data sources for monitoring community services.
- Workplaces**

Overall we have poor data on workplaces. There are no comprehensive formal evaluations of the nutrition and physical environment within workplaces, or any assessment of the population health of workers in various industries across Auckland.
- Streets, parks and places**

We have good data on streets, parks and places. We will grow monitoring in this area for quality of facilities and recreation centres, cycleway usage and facility types, and geographic spread of AT infrastructure.
- Food environment and marketing**

We have a lack of regularly collected monitoring data on the food environment and marketing. We have gathered information on fast-food density and have proxies through dental data. We have gaps in food marketing, drinking water fountain coverage and school food environments. Also fruit and vegetable consumption given the absence of the National Child Nutrition Survey

■ Good coverage
 ■ Satisfactory coverage
 ■ Poor coverage

APPENDIX 3 DATA SOURCES

The New Zealand Health Survey (NZHS) is a nationally representative survey conducted by the Ministry of Health (MoH) that questions participants on a wide range of health-related factors. It is a continuously administered survey and reports national level results annually, and regional results periodically, in three-year blocks. Specific results for the Auckland region were used for this report, for the periods 2011-2014 and 2014-2017. Prior to this time, the survey was conducted as a one-off every four to six years. The NZHS contributes data to the adult obesity, child active transport, and fruit and vegetable intake indicators. The New Zealand Health Survey data on the Body Mass Index (BMI) of its adult and child (two- to 14-year-olds) participants is in large enough numbers to gauge the prevalence of obesity in Auckland and provide comparisons nationally and between population subgroups. The MoH has recently moved to make regional data available online and this is used in this monitoring report; at first publication, however, the MoH has prioritised making ethnicity data available for Māori, Pacific and Asian groups and has not released data for a New Zealand European/ Other ethnic group.

The B4 School Check (B4SC) is a nationwide programme that carries out broad health screening of all four-year-olds in New Zealand whose families consent to participate. The check involves a questionnaire, physical measurements, hearing, vision and oral health screening as well as other elements. As it covers nearly every child in New Zealand, it is a quality indicator of population child health. The B4SC contributes the data for the child obesity indicator, and the results of the Lift the Lip visual assessment of oral health contribute to the child nutrition indicator. For this report, the data from the B4SC programme has been used to classify children's BMI based on World Health Organization (WHO) - New Zealand standard cut-offs. This methodology has been adopted for consistency of reporting, particularly with district health board data. It is important to note that there are alternative standards for classifying BMI in children, including those published by the World Obesity Federation³⁰. Data should only be compared when the same standard and thresholds have been applied.

The Ministry of Transport conducts the New Zealand Household Travel Survey (NZHTS) on a continuous basis, reporting four-year rolling averages. Data included in this report from the NZHTS includes GPS-based recording of travel, and participants completing survey questions online or via a phone interview. The NZHTS contributes data for the 'adult active' and 'public transport' indicators. A 'trip leg' is a non-stop leg of travel by a single mode. For example, driving to a friend's house with a stop at the shops on the way would be two trip legs. Catching a bus to work could involve at least three trip legs: the walk to the bus stop, the bus leg to town and the walk from the bus stop to work.

Auckland Regional Dental Service (ARDS) is responsible for delivering dental services to children in Auckland through school dental services and some hospital-based clinics. Dental therapists record diagnoses and procedures in the Titanium database. This contributes data toward the 'child dental health' (caries) indicator for children between five and six years old. Only the first visit for each child in the 2016 school year has been counted in this analysis.

Auckland Transport (AT) regularly publishes public transport boarding data on its website. This includes buses, trains and ferries in the Auckland region. This data is used for the 'public transport patronage' indicator. To calculate monthly public transport patronage (per capita) in this report, we have used the total resident population of Auckland (derived from Stats NZ data tables³¹), less the population of children aged younger than five years (as they travel for free and are therefore not counted), as the denominator. Cycleway infrastructure and transport funding investment data have also been used as key indicators.

Sport New Zealand's (Sport NZ) Active NZ Survey 2017 provides a point-in-time snapshot (rather than trend analysis) of sport and active recreation participation by age, gender, ethnicity and deprivation. The results in this report are based on Active NZ survey data collected between 5 January 2017 and 4 January 2018 from 6004 young people (aged 5-17) and 27,038 adults (aged 18+). The survey employed a sequential mixed methodology, enabling respondents (aged 18+ and randomly selected from the electoral role) to complete the survey either online or on paper.

The target population for this research was New Zealanders aged five years and older, located across Sport NZ's 14 regional sports trusts. The population data was based on Stats NZ's 2013 Census. Only one survey question was used for this report for all age groups: In total, how many hours did you spend being physically active for sport, exercise or recreation, over a week?

The **2018 Quality of Life Survey** is a collaborative local government research project. Its primary objective is to measure residents' perceptions across a range of factors that impact on New Zealanders' quality of life, including overall quality of life, environment (built and natural), housing, public transport, health and wellbeing, crime and safety, community, culture and social networks, economic wellbeing and council decision-making processes. The Quality of Life Survey was originally established in response to growing pressures on urban communities, concern about the impacts of urbanisation and the effect of this on residents' wellbeing. The survey results are used by participating councils to help inform their policy and planning responses to population growth and change. The 2018 survey employed a sequential

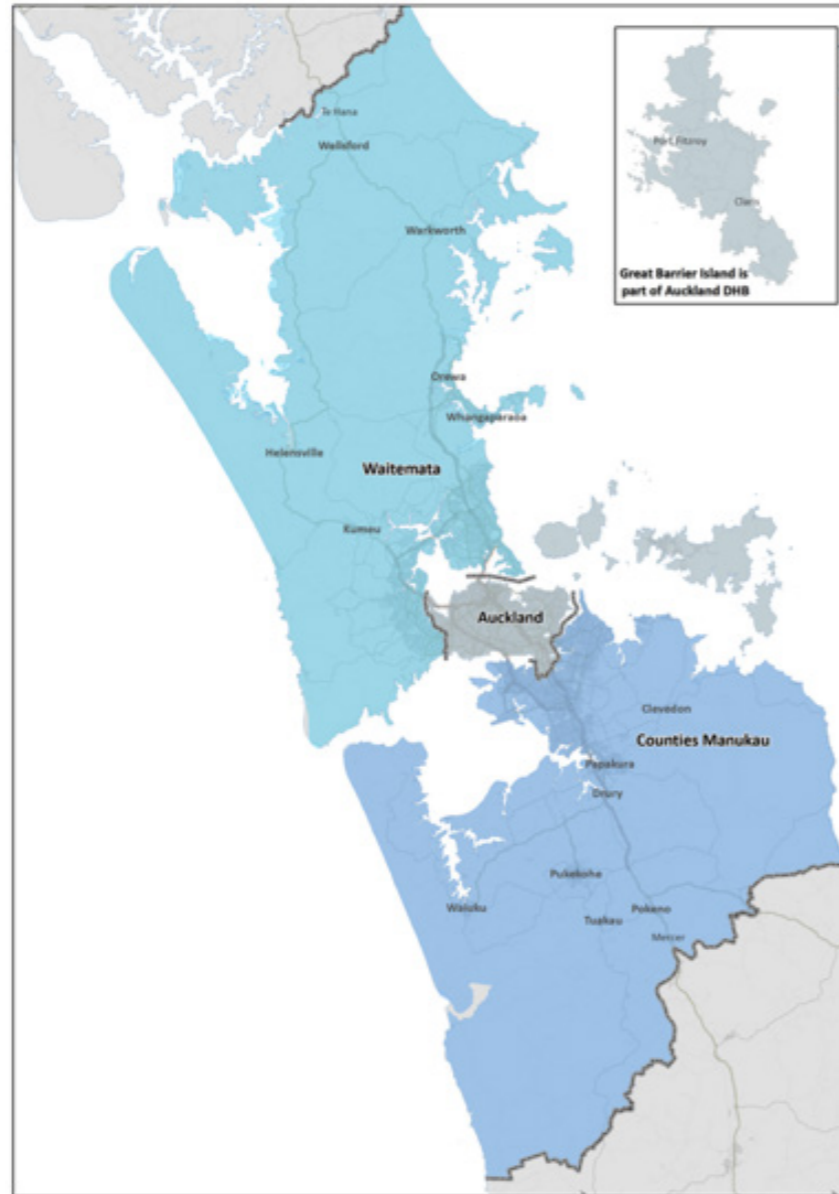
mixed methodology, enabling respondents to complete the survey either online or on paper.

Heart Foundation's Healthy Heart Award provides schools and early learning services with guidance and structure to create an environment that promotes healthy eating and physical activity. It helps address food and physical activity issues that teachers and staff are finding challenging, and can inspire and spark enthusiasm. The Healthy Heart Award has bronze, silver and gold tiers, each of which comprises four strands. Services can start at whichever level they choose. Once all four strands are complete, participants become a Healthy Heart Award service.

³⁰ World Obesity Federation - <https://www.worldobesity.org/what-we-do/publications/newchildcutoff>

³¹ Stats NZ. Population Estimates - Sub National Projection Tables http://www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/subnational-pop-estimates-tables.aspx

APPENDIX 4 DISTRICT HEALTH BOARD BOUNDARIES

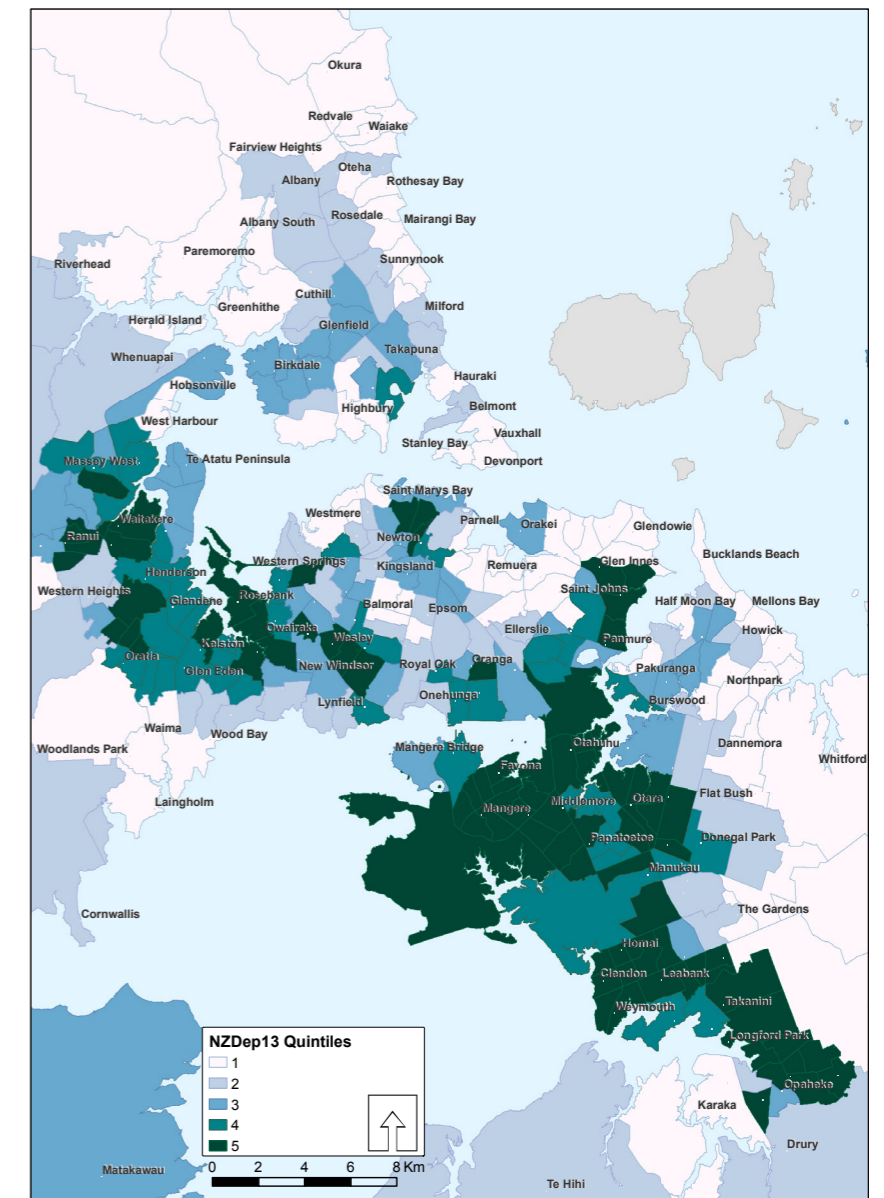


APPENDIX 5 AUCKLAND'S DEPRIVATION INDEX

People living in poorer areas are more likely to have worse health. This is reflected in a number of the indicators in this report.

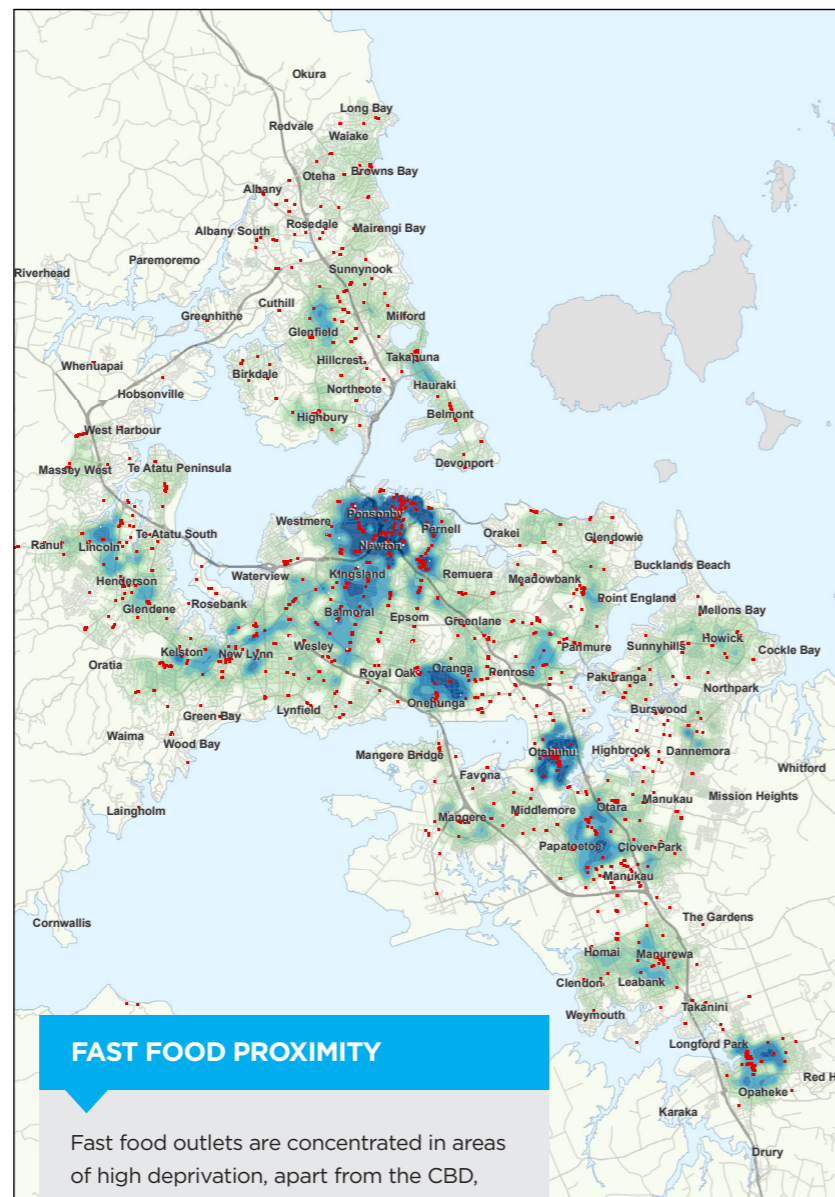
Auckland is a city with areas of very high and very low deprivation. Deprivation is measured by income, home ownership, employment, qualifications, family structure, housing, access to transport and the internet).

There are five levels, called quintiles, with five being the most deprived and one being the least deprived.



APPENDIX 6 FAST FOOD PROXIMITY

Fast food outlets are concentrated in areas of high deprivation, apart from the CBD, which has a higher population density.



FAST FOOD PROXIMITY

Fast food outlets are concentrated in areas of high deprivation, apart from the CBD, which has a higher population density.

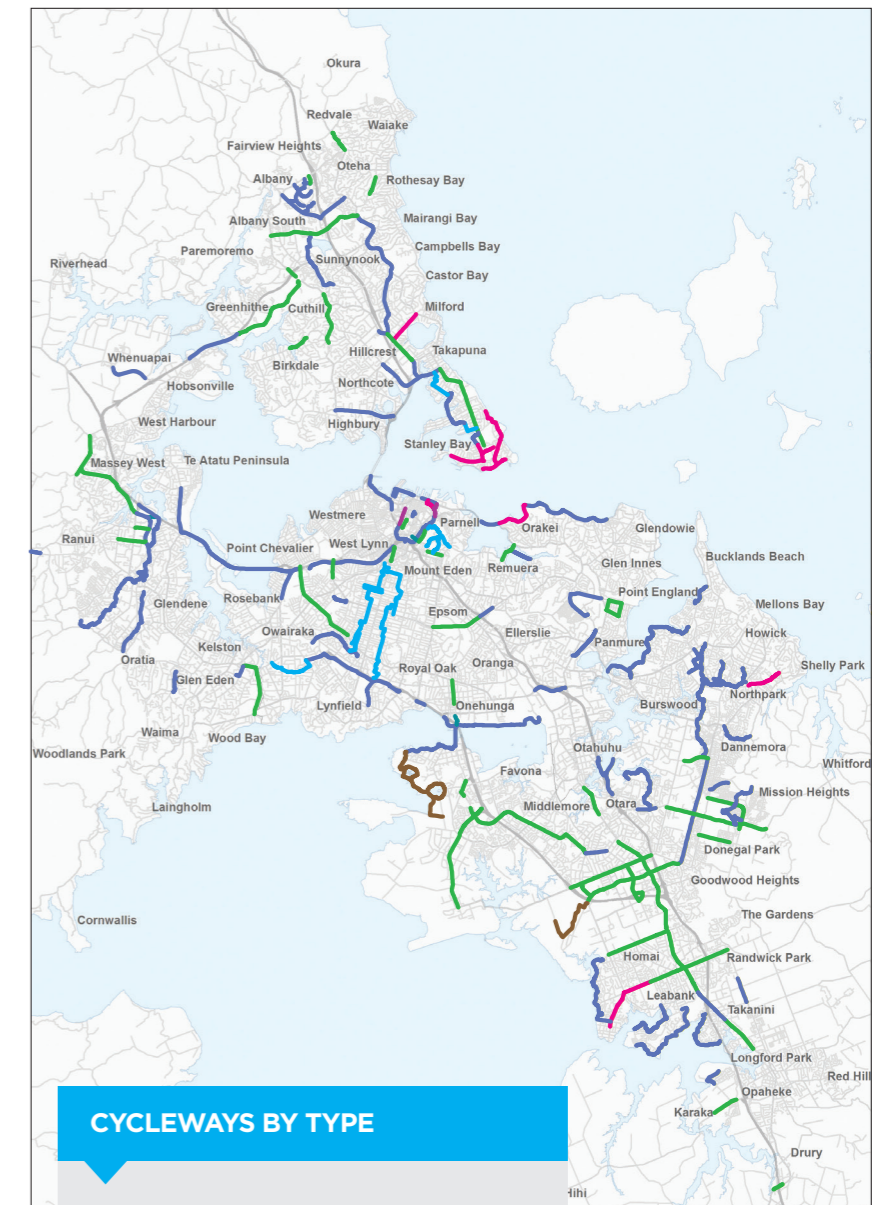
Fast food & Takeaways

Population Proximity Density

Low

High

APPENDIX 7 AUCKLAND CYCLEWAYS BY TYPE



CYCLEWAYS BY TYPE

While there is a growing network of cycleways, most of these routes are not protected from cars.

- Cycle lane
- Shared space
- Cycle path
- Traffic calmed streets
- Protected cycle lane
- Trail



**THE
HEALTHY
AUCKLAND
SCORECARD**