

Can the bicycle save the city?

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New Zealand Centre for Sustainable Cities Seminar
September 5, 2018

70% growth in transport GHG emissions since 1990; \$1 billion a year avoidable congestion costs; 1/3 of NZ adults are obese; 80% increase in road crash deaths and serious injuries in 5 years



NEW ZEALAND / TRANSPORT

Aucklanders spend 4 weeks a year stuck in traffic

6:50 am today

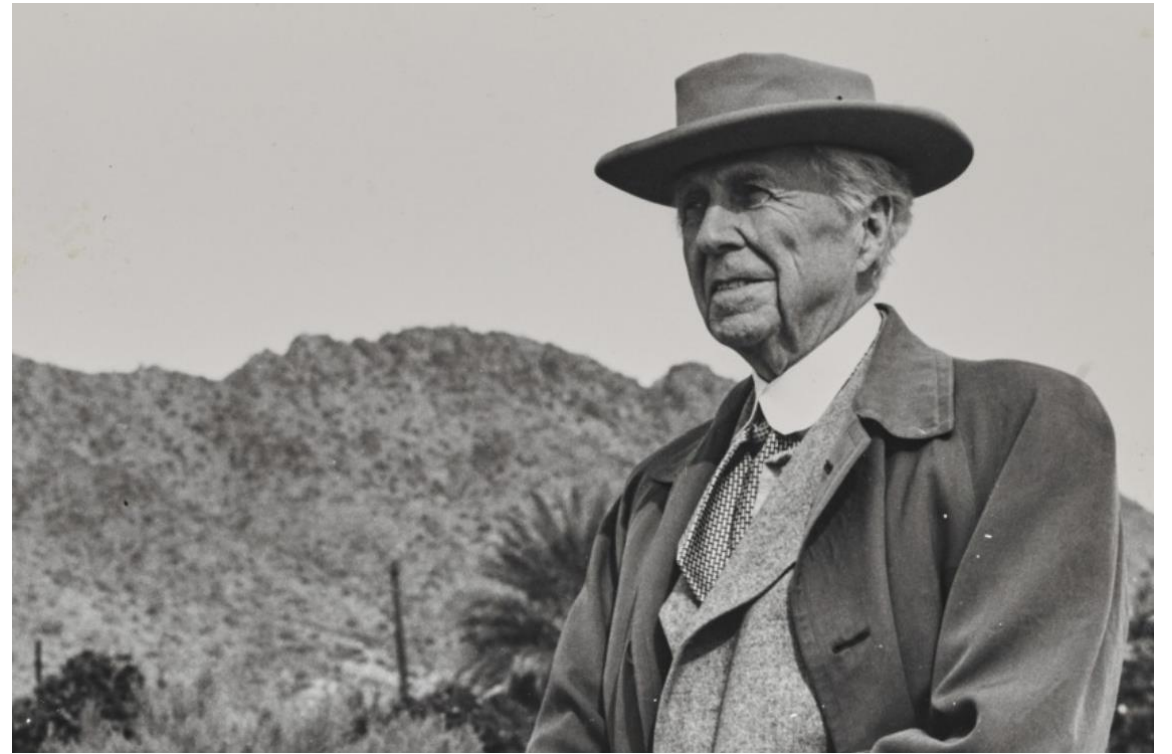
Share this      

Aucklanders who drive to work are spending an extra 172 hours, or four working weeks, stuck in traffic every year, new data from GPS technology company TomTom shows.

That was well up from 2014, when Aucklanders were spending an extra 95 hours a year stuck in traffic.

“City planning should respond to the new age, rather than the man on his legs .. The standard of space measurement has changed to a man seated in his motor car, vicarious power in the throttle at his feet ... one mile has little advantage to him over ten miles”

Frank Lloyd Wright. What does the Machine mean to life in a democracy? 1932



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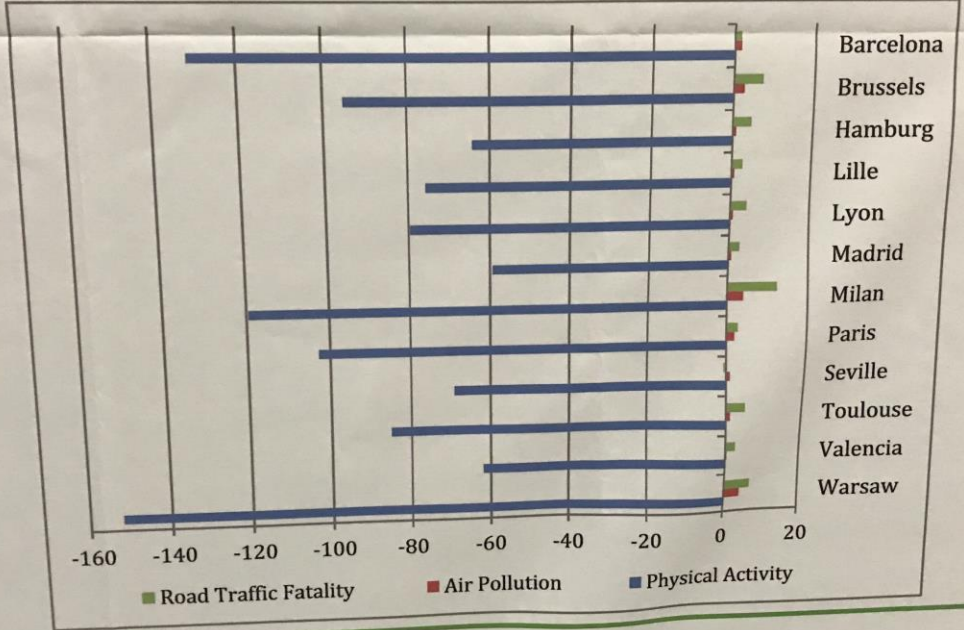


What would be different about a city built for the bike?

Valencia	Valencia	2 700	30 560	11,3
Warsaw	Veturilo	4 925	21 333	4,3

ework

Figure 3. Results by exposure
(annual deaths per year per 100,000 cyclists)



Results in 12 BSS, in deaths and Euros per year

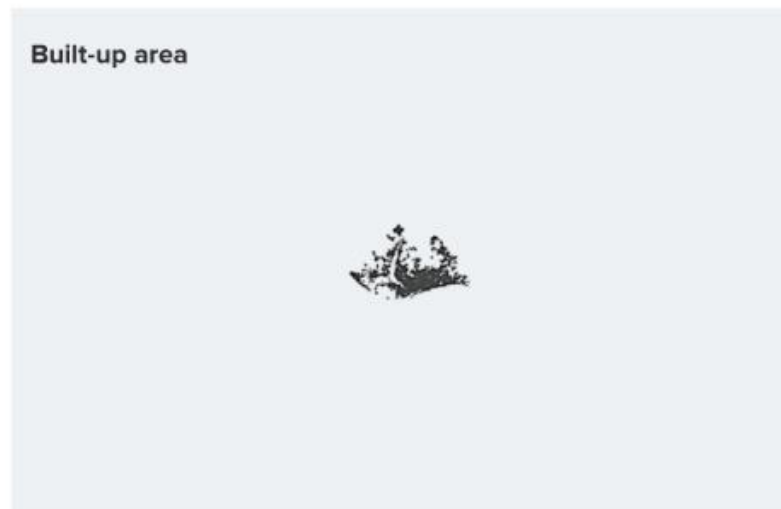
What if...				
Scenario 2	Scenario 3	Scenario 4	Increase 10 000 BSS trips per day	Increase 1000 cyclists per day
12% of BSS trips come from car trips	50% of BSS trips come from car trips	100% of BSS trips come from car trips		

Slimmer

Atlanta



Barcelona



Population

5.25
million

Urban area

4,280
km²

Transport carbon emissions

7.5
tonnes CO₂/ha/an
(public + private transport)

Population

5.33
million

Urban area

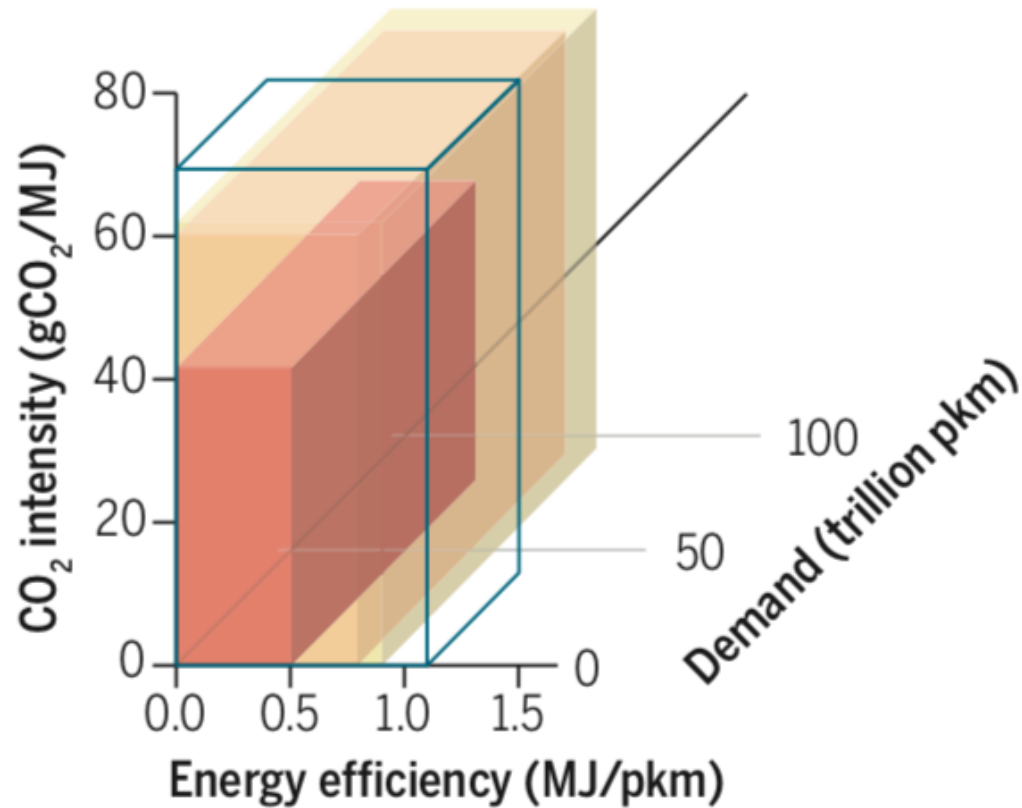
162
km²

Transport carbon emissions

0.7
tonnes CO₂/ha/an
(public + private transport)

SOURCE: Transit and Density: Atlanta, the United States and Western Europe, Bertaud and Richardson, 2004

A Land transport passenger



- 2011 reference
- 2050 ambitious mitigation: 450 ppm CO₂-eq scenario
- 2050 moderate mitigation: 650 ppm CO₂-eq scenario
- 2050 business as usual

How must land transport change to meet ambitious climate mitigation targets?

Cruetzig 2015

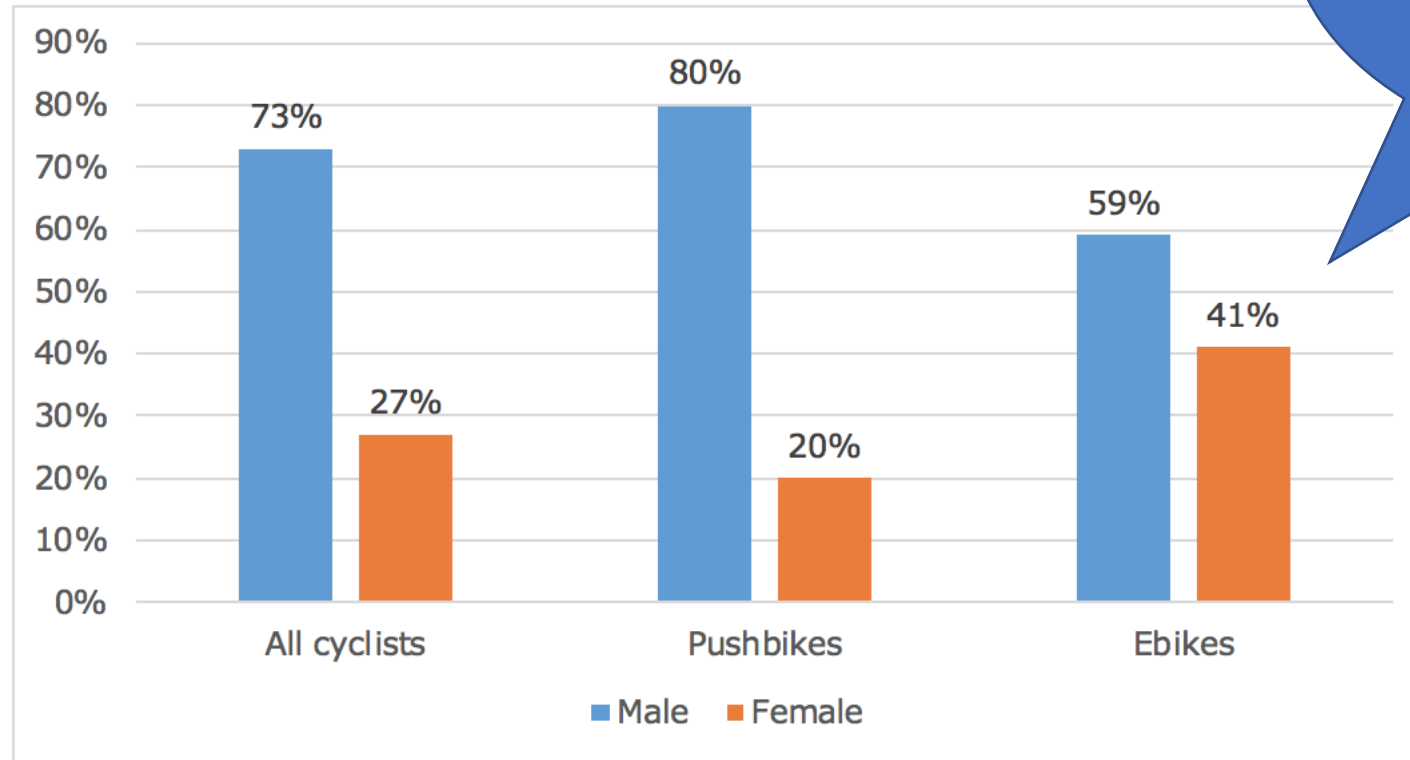
Healthy Future Mobility Solutions – The Future of the Bike

MBIE 2015-2019

Kirsty Wild, Adrian Field, Alex Macmillan, Hamish Mackie, Alistair Woodward



Might the Machine be part of the solution?

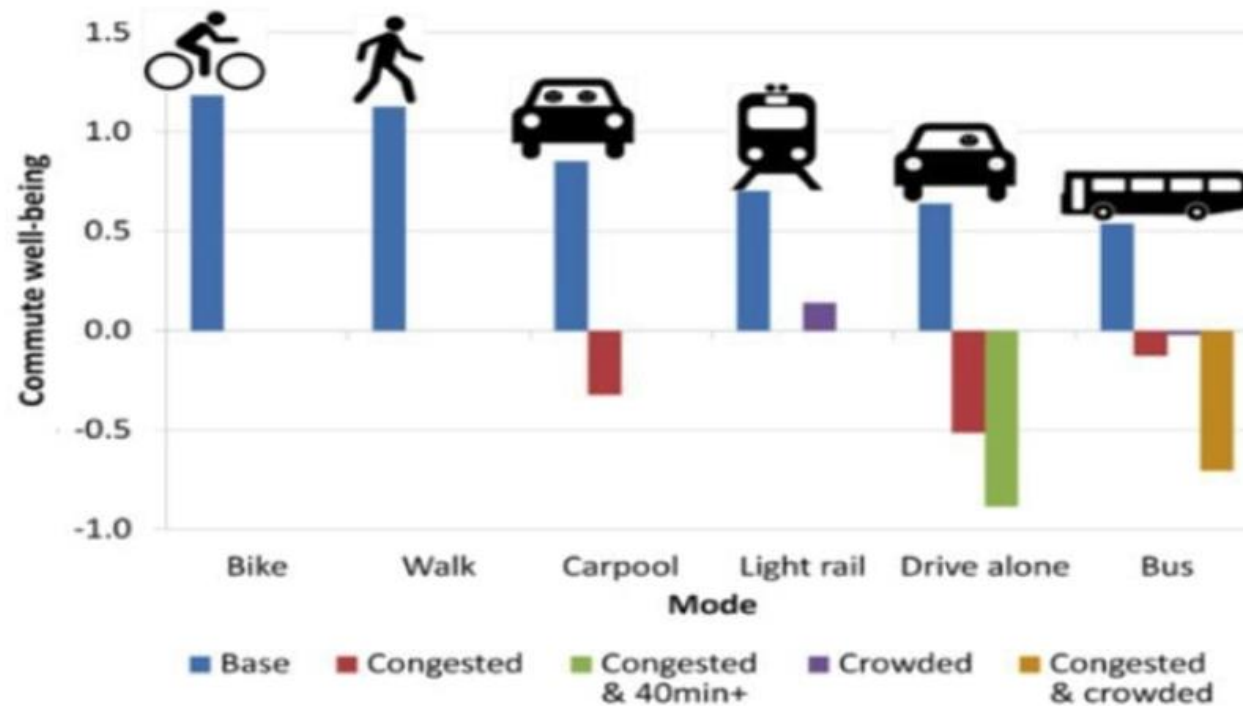


“the north-western motorway is such a dog that I can get more reliably home on the bike than in a car”

Figure 3. Bicycle type by gender of rider, northwestern cycleway, March 2018

Source: Nicholas Wilson. Counts were conducted from 7.30-9.30am on the 21 March 2018 on Upper Queen Street at the start of the Northwestern cycleway.

Why are cyclists the happiest commuters?



Commute satisfaction by mode (Source Smith, 2017).

Why so cross?



David Farrier  @davidfarrier · Mar 15, 2018



auckland's cycleway debacle is escalating daily. this is lisa and she appears fed up: pic.twitter.com/gjuoSmt03W



Streets for 10 year olds?



