A fair chance for all. Breaking the disadvantage cycle.

Productivity Commission submission prepared by Alex Dyer

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Tēnā koutou

Thank you for the opportunity to contribute to this consultation.

Key points

- Accessible transportation is a powerful determinant of economic upward mobility and advantage.
- Transportation in New Zealand is heavily skewed to private car use.
- Supporting car use is a severely inequitable transportation strategy.
- Urgent, wide-ranging measures are needed to enable people to escape monopolistic car dependency and all the resulting persistent economic disadvantages and negative externalities.
- 1. What are the main dimensions of persistent disadvantage that should be included in the Terms of Reference as areas to be investigated?

 For example, because they have a stronger direct impact on wellbeing, or because they have a knock-on impact in relation to other dimensions.

Recent <u>research in the US</u> has identified that **transportation is the single strongest factor** in the odds for escaping poverty there.

There are close parallels to the transport modal mix in New Zealand to the United States. Actearoa has among the <u>highest ownership rates of private motor vehicles per head of population in the world</u>.

There are many aspects to consider when evaluating transportation poverty that are well encapsulated in this <u>report for the Ministry of Transport by MRCagney</u> (PDF). I feel it is important to build some clarity of poverty as applicable to transportation which may be not directly associated with other typical poverty factors or demographics, such as income level or material acquisition / consumption.

Investing in systems and processes and resources that enable access to engage in the economy by perpetuating car use is not a sustainable strategy for escaping poverty. In fact, this approach actively worsens poverty as car ownership and all the systems, infrastructure, and societal and environmental impacts from accommodating excessive private vehicle use ensures that those stuck using them find it increasingly harder to escape poverty.

We also all become collectively poorer when more people use heavy vehicles frequently. Cars, and other heavy vehicles have <u>long been framed as an essential component for engaging in economic opportunity</u>, linking rural and city, primary industries and export markets, workers and employers. But cars are in reality draining our country of much greater wealth and wellbeing by making it very difficult to provide for more efficient, healthy, and affordable transportation options.

Cars have monopolised New Zealand's transportation system. To affect perhaps *the* main dimension of persistent disadvantage in Aotearoa, and to make climate action accessible to the whole population, we must include measures to address transportation and our unsustainable, damaging car dependency as a **very high priority**.

System change for true wealth

The time has come for deep structural changes to systems, not tweaking minor fixes to the status quo. Lay the groundwork for creating an equitable society that does as much to pull unhealthy excess and wealth accumulation down as much as lifting persistent poverty up. We cannot persist in the fantasy of elite projection that implies that everyone is striving to be successful and rich. We need to reframe what wealth is, what success looks like. True wealth is collective well-being and an environmentally regenerative biosphere. Our individual health is intrinsically entwined with the health of all.

Not individual behaviour blame

While individual choices can act as a force for good, it is not to blame for the inequalities resulting from unbalanced wealth distribution systems. This is <u>highly topical</u> in relation to

climate change at the moment. We need to avoid making the mistake of continuing to focus on behaviour change to address persistent poverty.

Multi-solving strategies

I like to think of tax as 'collective investment'. How do we reframe collective (tax) and private (income) spending and purchasing as all involved in a more holistic, collective wealth distribution system?

Elite projection is evident in the way we treat mobility in Aotearoa. We are the leading country in the world (with more than 100k citizens) when it comes to car dependency.

Currently we are extremely wed to the notion of individual income as almost the only measure of benefit. With a taxation framing, this makes people think they are losing out, the more they are text. It would help if there was more talk of the collective investment everyone makes with everything that is spent - whether as tax, or consumer purchases.

Everytime someone pays money to up-keep their car dependent lifestyle - they are investing in that system for everyone else. The monopoly of car use means this is an imbalance feedback loop that is self-reinforcing more and greater car dependency.

Prevailing attitude to private car use is that it is OK to take up some much space and that everyone is just aspiring to be as greedy and consumptive in their mobility. This collective perception should be reversed, where we can all recognise and understand the importance and potential of more egalitarian mobility and equity of our public streets.

2. Where should the Commission focus its research effort?

• What do you see as the biggest gaps in our collective knowledge?

Appreciation of the public health and inequitable nature of unnecessary car use. Please see the Car Blindness appendix attached.

• What areas would you encourage us to undertake further research into, and why? Is transportation poverty the highest factor in people's ability to escape poverty in New Zealand, as it has been shown to be in the United States?

How can we *urgently* reduce transport poverty <u>and car dependency</u> in Aotearoa?

How can we empower communities to be better connected and have richer social lives through reducing heavy vehicle journeys in cities?

How can New Zealand make the most effective and impactful changes to land use planning and mobility investment that will see the most urgent change in the balance of mobility choice?

How can we see city streets across Aotearoa have permanently low traffic, and slow dangerous polluting heavy private motorised vehicles - as experienced during our Level 4 lockdowns, permanently?

What other interventions in national policy can urgently deliver reductions in car dependent lifestyles and transport poverty in general?

How can the government most quickly alter the entrenched car bias and systemic inequities that are so tightly embedded in our infrastructure standards, procurement, and build systems?

How do we bring about more lasting evidence-based decision making that our often biased political structures deliver? Politicians are also extremely limited in their ability to alleviate car dependent systems from expanding and perpetuating. There are limited means for the government of the day to deliver lasting change in this area. How might we more effectively create a bipartisan set of values and objectives that sees things - especially land use and car use / road building - as the flagship political footballs they have been for decades now?

- 3. Where should the government focus it's effort when developing solutions?
 - What are the key barriers preventing New Zealanders from reaching their potential?
 Lack of access to opportunity. Loneliness. Lack of connectivity and community caused by the distances car dependent land use patterns create. Cars create more distance than they overcome. Cars become barriers to others to engage healthily in their local built environments.
 - What are the key triggers or circumstances that can result in people becoming stuck in persistent disadvantage?

Land use and suburban sprawl - the trigger locking people into more expensive, car dependent lifestyles and housing. Our unquestioning accommodation of personal cars for everyone is a major enabler and contributor to this pattern of development. How do we ensure that any and all private development is instrumental in reducing car dependency from here on out?

 Are there key windows of opportunity in a person's life course where positive changes are easier to secure, or where they are more likely to endure?

Designing cities for children to get around under their own steam. Cities need to be as accessible for as wide a cross-section of society as possible. Car dependency into old age is cruel.

• Which aspects of government policy are most important to focus on? For example, secure housing, mental health treatment and supporting new parents.

Reducing car dependency.

 Are changes needed in the ways that government services are provided? For example, devolving responsibility for services, joining up service provision and helping those most in need navigate the system.

Redesign revenue and investment of transport funding

I would suggest that the ways that funding of transport system investment needs the biggest shake up. The way that transport is funded in this country ensures there is a completely unbalanced feedback loop ensuring higher and higher spending on roads and driving.

This system in particular should be refactored to ensure all funds collected for public spending are free to be directed toward the infrastructure and options that deliver the most equitable, accessible, healthy, and sustainable transport and built environment possible.

There may be a claim that this already happens, and it does to a small degree. But there is an obvious imbalance in this part of the system that is reinforcing car dependency that needs refactoring heavily.

I would like to see measures similar here to those taken recently in Ireland that ensure that not less than 20% of the national transport budget is spent on walking and cycling infrastructure.

I have <u>read</u> about some work happening in this area already given there is an expected decline in fossil fuel use with efforts to lower climate change emissions. I would like whatever replaces this to ensure that we are not reinforcing car use in general - including electric cars.

Introduce presumed liability laws

I would like to see laws that put the onus on those operating heavy vehicles (cars, utes, suvs, vans, trucks etc) in public to prose they were not at fault in the event of a collision with a non-dangerous road user such as someone riding a bike, or walking.

Subsidise people getting out of their cars

I was disappointed to see the feebate scheme to encourage uptake of electric cars was not more broadly scoped to instead encourage and support uptake of the most effective and healthy mobility options. Electric cars are still cars and still present many shortcomings in the fight for equity. I would like to see generous subsidisation of electric bikes. Specifically electric cargo bikes. Some care is needed to ensure that such incentives actually deliver mode shift. Subsidising expensive recreational electric bikes - such as mountain bikes, may replace fewer car journeys. Not sure what to recommend to best ensure these outcomes. But it should be much easier for someone in more hardship to access quality bicycles and public transport than it is now.

Noise abatement

Make a much stronger deal about noise levels that are acceptable from infrastructure in residential areas. We adopted zoning laws to separate activities and make liveability better - but then for some reason we forgot to keep tabs on the amount of noise being made by private vehicles.

I'd welcome greater regulation of noise pollution as has been in Dutch law since the late '70's. A new book by Melissa and Chris Bruntlett called Curbing Traffic - The human case for fewer cars in our lives has a chapter titled: 'The Hearing City'. Reading this convinced me that regulation of noise levels in proximity to residences could have as much impact on transport equity as removing minimum parking requirements.

Absolute vehicle use quotas

Determine a national maximum number of vehicles and maximum vehicle kilometres travelled. Once maximums are established, introduce national regulation that brings those maximums lower over time (sinking lid policies).

The recent removal of mandatory parking minimums is encouraging. There should be more pressure on local councils to reduce public on-street car storage, and also sinking lid policies on total car parking quantities as seen in Zurich.

The average size of private vehicles needs to be trending smaller instead of the current trend of getting larger.

Private mobility efficiency comparison systems - such as energyStar used for household appliances - should not be constrained to cars. Learning about private mobility efficiency should bring the full spectrum of devices into the spectrum - especially including regular bicycles and electric bikes and cargo bikes.

The public health opportunity of lower car dependency

<u>I consider unnecessary driving to be the new smoking.</u> We need public health policies and mitigation strategies in New Zealand that recognise it as such, and provide mitigation and transition programmes as we have done in the past for the smoking epidemic.



Look to the opportunities to lift wellbeing from the lift in physical activity that a non-car-dependent lifestyle presents. People on low incomes should have much greater access to mobility options that are not cars than they currently do.

I am a fan of proposals that would see everyone up to the age of 18 years, students, the unemployed, disabled, and Community Services Card holders accessing public transport for free. This would mean that a family heading out would only be paying for the working parents if they took the bus, which would compete well with the usual decision making in this situation - which sees the car used so that they 'get value for money' from having bought it.

I would like to see Waka Kotahi be responsible for meeting health targets. Consistent access to walking and cycling has <u>enormous physical and mental health benefits for people</u>. Transport systems are the most effective means of incorporating essential daily physical activity requirements for health and happiness. Unconstrained car dependency is a serious barrier to more people doing this. Waka Kotahi should be responsible for ensuring that their

systems and infrastructure is not causing people to reach for their car keys over <u>choosing to walk, scoot, bike, bus, train.</u>

Accessibility

Less car dependent cities are more accessible for everyone. Cities that provide human-scale, step-free mobility networks work better for people of all ages and types and levels of disability. How do we best provide for everyone in this way while still making a clear prioritisation that heavy vehicle use is warranted and prioritised for those whose disabilities require it?

Land use development intervention policies

Introduce new land use policies that reduce car dependent journeys for people and assist transition of city development where <u>excessive parking provision (that is anti-poor)</u> and road building has been prevalent over the last several decades. Specifically - commercial premises that have been able to build large amounts of car parking, pulling people for large distances where there are extremely limited other mobility options. These commercial development trends in turn create an unfair disadvantage for retail and commercial districts that are closer in the residential areas.

Recognise impacts of induced demand

Induced Demand is another factor explaining how we have become so imbalanced with transport poverty in New Zealand. We are used to seeing headlines that say something about 'traffic projections', and having to build to accommodate projected demand. These are misleading in that the 'projected' demand would only become a reality by building the chicken road. Thankfully, we can use induced demand to take more confidence in predicting the use of transportation infrastructure we prefer to see used. The same thing happens for people riding bikes, taking public transport, walking, etc. We need to decide and design with a vision for equitable mobility, rather than predict and react to the prevailing road building and traffic inducing recent history.

Upskill and educate engineering practitioners

There are too many embedded systems and standards that protect inequitable transport and land use development practices. We need some careful consideration to be given to how to help our professional work force consulting in these areas to be able to shift perspectives and recommendations in the professional roles.

4. Is there anything else that you would like to see in the Terms of Reference for this inquiry?

Space allocation

There are studies and data that make clear comparisons of how much street space is allocated to a mode versus the number of people that a mode moves or is capable of moving. Often these kinds of comparisons show a very heavy skew of allocation of public space for a minority of people in cars. We could do with more data in this area across NZ cities.

My thanks again to the Commission for the opportunity to submit. I hope this document provides some constructive value to this work.

Ngā mihi nui

Alex Dyer

-- ENDS --

Appendix list

<u>Let's unite against car dependency</u> - wiki site of resources and links

Car blindness - Ignoring the true cost of cars - included below

Broken Hearted Cities - Why driving is the new smoking - included below

Curbing Traffic - The Human case for fewer cars in our lives. By Melissa and Chris Bruntlett

The Miracle Pill. By Peter Walker

Car Blindness

Ignoring the true cost of cars

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© August 2019 | Series available online at: https://medium.com/@alex.m.dyer

Synopsis:

Cars are a major, complex problem. Their many negative consequences are often ignored and externalised. How can we better see the problem.



We love cars. Or do we?

Perhaps instead, we just have places to go and people to see and jobs to do. Perhaps they're just another tool of modern life and have become familiar, habitual, routine.

Many don't even like driving but have come to rely on cars due to decades of investment in infrastructure optimising their movement.

Compared to driving cars other travel options may seem less familiar, or under provisioned, and be less accessible or convenient. And many options for getting around are severely compromised by heavy flows of private heavy vehicles.



Are the externalities of driving too hidden, too remote and indirect, or too "someone else's problem"? Will we look, or will we remain blind to it all?

This is the first in a series of four articles discussing car blindness. For cities around the world, more urgency is needed to enable sustainable, efficient, and healthy transport.

To realise this faster, we must carefully review one of the biggest barriers: our dependence on cars.

Car blindness

Car blindness is the mindset of not seeing that cars themselves are a major, chronic problem. It is when one overlooks the heavy price tag of driving cars and is unable to see the precariousness of car dependency.

A symptom of car blindness is being convinced that by fixing one or two problems, cars will finally make sense.

Maybe by changing how they're powered will fix them? Or maybe making them a tiny bit less dangerous? Or making non-dangerous road users, like cyclists, more visible? Or adding another lane to a highway, or tunnel through a city?



This quest for the elusive redemption of cars means being unprepared to accept they are incompatible with cities designed for people. 'Fixing cars' is actually all about fixing cities and providing accessible transport alternatives.

If cars were introduced as a new product today, would they even make it into the public domain? The problems they present are considerable. But seeing as we've already built them into society, it is very challenging to acknowledge this.

Cars for everyone was born from corporate fantasy, that everyone can just nip around everywhere in outsized heavy vehicles. This rose-tinted driving-goggles-vision is at odds with healthy city living and planetary resource boundaries.

The convenience of driving cars comes at the expense of many things including local community connections, individual and collective wealth, and general well-being. It is important that more people see these issues clearly.

Cars can be useful

Heavy vehicles designed to transport up to 7 occupants (but usually not actually transporting more than one) can do some jobs well;

- they enable mobility for some with physical impairments or illness,
- they're convenient for unplanned, inter-city journeys,
- they've been a focus of technological innovation,
- they are valuable tools in rural living & heavy trade work scenarios

they can assist in some emergency response scenarios (if there is no congestion to contend with)

Looking at the problem of cars

https://twitter.com/RuPaul/status/1148592721994498048



In reality, how we use cars today is *insanely* inefficient and problematic. As a transport system, cars waste vast amounts of time, space, resources, and energy.

Cars are a major source of several forms of pollution, contribute heavily to climate breakdown, and are exacerbating a global ecocidal mass extinction.

As a product cars frequently disrupt many people's daily lives. Driving contributes to many negative health impacts in humans. And cars are literally killing us in multiple ways.

The ruinousness of cars

Cars cause serious harm in many ways. Everything cars need to exist and operate are costing the Earth (literally).



Most people are probably aware that cars are bad for us and the environment. Given how much we have come to use them, perhaps most aren't aware just how very bad they are.

It is not uncommon to see well-meaning environmental initiatives proclaim their effectiveness by comparing their performance to the 'number of cars taken off the road'. Like this is some kind of official unit of measurement.

Every time this is used it does my head in: Why do they not just take cars off the road instead? They will only be trying to compare one or two aspects, usually air pollution or emissions. But it is car blind to ignore the many other benefits of reducing car use.

Cars cause serious harm in many ways. Climate breakdown is one. A health and safety crisis is another. And everything cars need to exist and operate are costing the Earth (literally).

Cars are ruinous.

Cars pollute and degrade the environment



When we think of pollution from cars, we generally think about air pollution from exhaust. The growing enthusiasm for electric cars might lead you to assume exhaust fumes are the only way cars pollute.

Running cars on electricity does help with a couple of important environmental problems: greenhouse gas emissions and air pollution, but only partially for both. The process of switching to a different power source for such a resource intensive product also exacerbates other environmental challenges.

Many tend to overlook the embedded carbon emissions from car manufacturing. Carbon emissions of producing a large new car - whether electric or conventional can be roughly equivalent to driving an average fossil fuel car ~150,000 kms.

Cars are also a serious problem in resource depletion - a problem being exacerbated by more complex technology, larger vehicles, and the switch electric power.

Every electric car produced is competing directly for resources that could be used to provision actually sustainable transport machinery. This distracting competition is displacing electric rail, electric buses, electric boats, electric bicycles, escooters, and other micromobility, making them all more expensive than they need to be. We should not be squandering these limited natural resources on cars when we desperately need to achieve much greater efficiencies in transport.

Experts advocate that we need fewer cars altogether, and that the planet cannot resource a wholesale switch to electric car dependency.

But cars also damage our world in other, less obvious ways.

A major source of microplastic pollution and not insubstantial amounts of fine particulate air pollution (the deadly kind) comes from vehicle tyre abrasion, braking, and kicked up dust. Electric cars perform worse at this problem due to being generally heavier.

Noise pollution is second only to air pollution from vehicles. One in three Europeans suffer health problems from noise pollution. Traffic noise is linked to 50,000 premature deaths every year in Europe.

Cars damage infrastructure through the wear and tear of normal use. One journey in an average car is over 17,000x more damaging than a journey by a heavy person riding a heavy bicycle. For the heaviest 'cars' - like a Hummer H2 - the ratio is ~350,000×. For the very largest trucks the difference in damage done is in the region of 6.8 million times. No wonder infrastructure is crumbling.

Cars are <u>crashed into things</u>. A lot.

Many cars leak oil and various toxic polluting fluids.

Where cars go, so too goes increased littering and fly tipping.

Air pollution particulates and dust can damage paint and building exteriors.

Cars contribute to the growing <u>light pollution problem</u>.

Cars and the spaces built for them are visual pollution - they can be a visual hazard for safety, especially for kids - and spaces for cars are by and large just plain ugly.

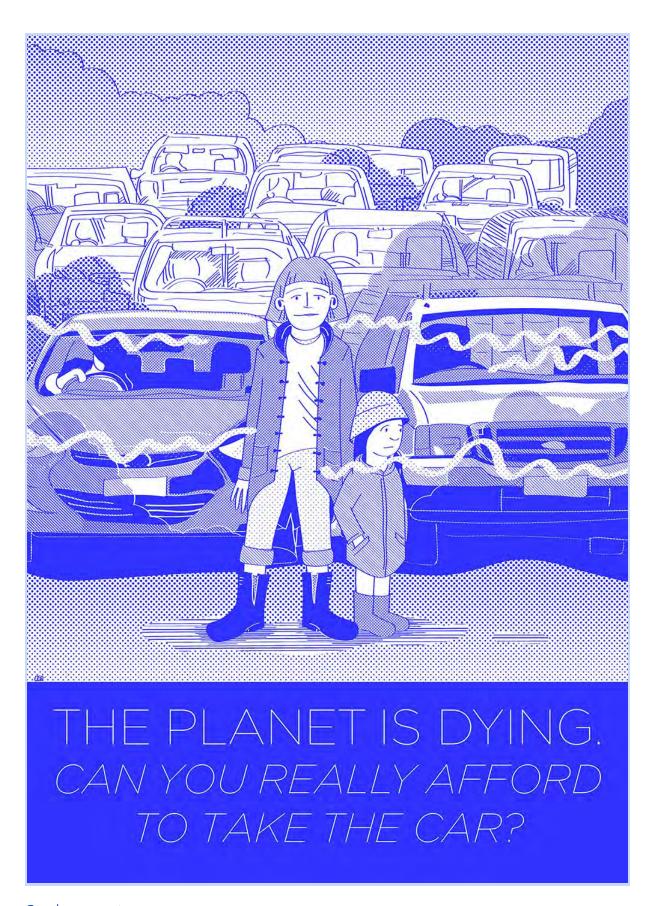
When was the last time you saw any tourism marketed by featuring a parking building, a congested 'freeway', or a nondescript fuel stop 'town'.

https://www.reddit.com/r/pics/comments/by1kpd/every random town along the highway looks exactly/



Of course, fossil fuel powered cars are **seriously** bad news when it comes to greenhouse gas emissions. In the United States for example, cars and trucks currently account for nearly one-fifth of that country's entire GHG emissions.

Climate breakdown is the most serious threat humanity has ever faced and our dependence on cars is a major contributor to this calamity. I really cannot think of a worse thing to happen to the environment than everything dying.



Carolgreen.net

Domesticated animals suffer a heavy toll from human driving. You probably know someone who has lost a pet cat or dog on a local road.

https://twitter.com/FirstCatofNZ?s=09

[Deleted - image of deceased cat by roadside]

Untold numbers of wild animals also die, have ecological conditions destroyed, or migratory patterns interrupted by roads and driving.

Plants and trees are a bit of an obstacle to driving. As a general rule: where cars are - plants aren't.

Did I mention damage to the environment from fuel extraction gone wrong?



Exxon Valdez. Deepwater Horizon. Rena. Tar Sands.

The only challenge that matters is how to enable everyone to use FEWER cars. The challenge is not how to power cars differently, or figure out the fantasy of making computers responsible for safe driving. If you can't see reduced car dependency as the primary means to fix cars - you have car blindness.



Cars are making us sick

Car fumes aren't nice. We understand that they are not good for health. But with the number of cars in intimate proximity of our homes and public spaces perhaps we generally underappreciate just how very bad air pollution from vehicles is.

According to the World Health Organisation, an estimated 4.2M people die prematurely from 'ambient air pollution', of which a major source is motor vehicle exhaust. Over 4M children suffer cases of asthma per year from traffic exhaust pollution, which is now arguably a larger health issue than smoking. That's 11,000 new cases per day.

Air pollution from cars reduces life expectancy for thousands and is especially dangerous for children. Scientists now assert that fine particulate matter may harm every organ in our <u>bodies</u>. The health problems complicated by this are possibly much worse than currently understood.

If fine particulate matter in the air is hurting our bodies, it will be harming all animals breathing that air as well.

#DrivingIsTheNewSmoking



Driving cars also compromises human health by reducing daily activity and exercise for a large proportion of people. <u>Inactivity is a major, growing health problem</u> around the world.

Many leading non-communicable diseases - the main modern causes of death - can be dramatically reduced by cycling instead of driving a car. Cardiovascular disease, cancer, stroke, type-2 diabetes, respiratory disease, and more. This is not to say driving directly causes these health problems, but our overly sedentary lifestyles definitely contributes to complications and driving is a sedentary activity.

Driving, possibly more than anything, interferes with critical opportunities for people to move actively in our busy modern lives. It does this by eliminating active journeys by motorists and also suppresses other people from choosing to due to reduced safety in the built environment.

The substantial expense of owning and operating cars diverts money from people's budgets, - money that could be spent on healthier food and activity choices.

People lose time driving - time they could be using more productively, socially, feeling less stressed, or travelling in healthier ways.

According to the U.S. Department of Transportation Americans on average spend just under 1 hour a day operating a car. This totals around 84 billion hours in traffic per calendar year - or **9,589,041 person years**.

In comparison, the health benefits of riding a bicycle are thought to be so great that the time spent doing it is practically free. For every minute you are cycling you extend your life expectancy by a minute.

And last but by no means least - road violence incidents can have life altering consequences which can impact quality of life and mental health for whole families.

Cars are dangerous

Every year around the world there are over 1.2M deaths from road violence.

https://ourworldindata.org/grapher/road-deaths-by-type

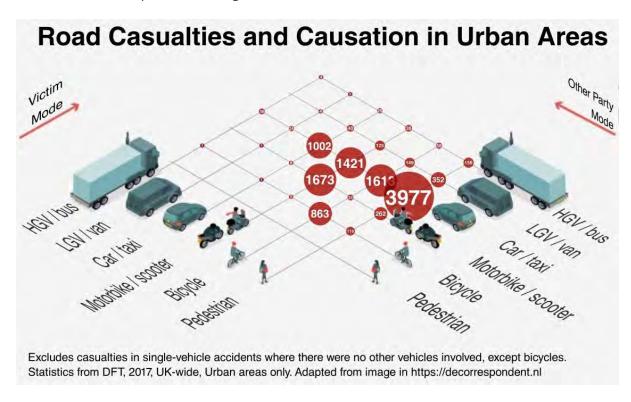
The number of people dying from road violence per year has only recently been matched by the number that are killed in gun related deaths per year in the United States.

https://www.washingtonpost.com/news/wonk/wp/2015/12/17/guns-are-now-killing-as-many -people-as-cars-in-the-u-s/

People walking or riding bikes are described, in road engineering terms, as 'vulnerable road users'. This is perverse. It frames people's natural vulnerability as weak, and insufficient for the dangerousness of the environment they're moving through. As if that danger is non-negotiable. It may be more constructive to classify road user types in terms of how dangerous to others they are.

People going for a walk, running, skating, scooting and riding bikes are all a relatively low danger to anyone but themselves. Let's call this user group: 'people'.

But cars, operated poorly, frequently put others in mortal danger. Due to huge numbers in close proximity in cities and residential areas, they are injuring and killing the most others other car occupants and other non-dangerous travellers - especially people walking. Motorists even sometimes kill other people just sitting in their homes! Let's call heavy vehicles and their operators: 'dangerous road users'.



"Who kills whom" and the measurement of danger. Road Danger Reduction Forum UK

More and more things in our modern lives compete for our attention and this is bleeding into our time behind the wheel as well. Lately, on balance, technology seems to be creating more distractions to drivers than delivering more safety.

Oh - yeah - a full dashboard-wide touch screen with 10 apps and live-streaming videos. What could possibly go wrong?!

https://twitter.com/martynschmoll/status/943667758272618496

A central tenet of motoring safety systems is predicated around a notion of 'crashworthiness' - where your transport option's safety is measured by how well you and other occupants survive in the event of a crash.

Think about that: you are only as safe as **how well you crash**. Actual safety, surely, is about how well you can avoid crashing while travelling.



An adapted road safety billboard in Ōtaki, New Zealand.

A more crashworthy car enables faster speeds - because somehow making messes survivable means it's ok to make bigger messes?

Hence we end up with 'Top Safety Pick' awards for monstrous machines that are somehow perceived and sold as 'safer' because they supposedly perform better at keeping their occupants alive when they crash, but not how well it can avoid crashing or running people over.

And a common refrain is that the bigger your car - the safer you are. There is a speck of truth to this - but only in that it creates a form of arms race, and civilians not encased in protective mech are 'putting themselves' in danger.

https://twitter.com/tomflood1/status/1057368837316886529?s=19

Another downside to crashworthiness is risk compensation - where the driver feels that the amount of protection they are wrapped in enables higher speeds, less attentiveness, and higher chances of crashing.

Drivers are persistently inattentive anyway - because we are human. It's almost like humans are not designed to operate these machines at these speeds for any amount of time really.

Distracted driving is already an enormous problem. Distraction from devices is rising and may now be a greater problem than drunk driving.

Even when drivers are driving without distraction, a <u>study from the University of Toronto in 2018</u> found they did not look properly to check for non-dangerous road users when turning fully 50% of the time!

Cars are getting bigger, heavier and more powerful on average every year. The average car is getting heavier and larger and more people are choosing to buy 'SUVs' and 'utes' (light trucks). The total number of cars has also been consistently increasing - making already overcrowded roads increasingly dangerous.

https://twitter.com/DanLinden/status/1065064126131646465

People can develop a variety of poor driving habits over the years; like dangerous following distances, speeding, and <u>bad visual checking</u> - especially at intersections.

And drivers being human (most anyway) - they make mistakes. They can be impaired in multiple ways like the usual drugs & alcohol. But also they can be too fatigued, distracted, or suffer sudden health emergencies at the wheel.

The design of most cars and trucks impose visibility challenges - obstructing drivers from maintaining good situational awareness of the road and others around them. Especially in close proximity like dense residential neighborhoods.

The dangerousness of driving is costing all of us dearly. And that's before we even start talking about the money side of cars.

Motordom is financially ruinous

The expense of crashes alone; including emergency response, hospitalisation, surgery, recovery care, legal, and vehicle and infrastructure repair, is enormous.

While uncomfortable to boil down to money, the New Zealand Ministry of Transport estimates the average "social cost" of a fatal crash is just over NZ\$5M, over NZ\$500,000 for a serious injury crash, and a minor injury crash is nearly NZ\$30,000 per. At these figures, road violence costs every man woman and child in New Zealand over NZ\$1000 each and totalling close to NZ\$5B (~US\$3.2B) per year every year.

The average income in the United States in 2017 was \$31,786. Owning and operating an average sedan car in the US costs ~\$9,000 per year, or 28% of the average income.

Cars suck an immense amount of wealth. 85% of money spent on driving in the United States leaves the local economy. Where once cars were seen as an economic driver, they are now one reason economies are more frequently crashing.

https://twitter.com/BrentToderian/status/872823763355656194

Owning and operating cars is also an immense financial drain with ongoing costs for fuel, maintenance, storage & parking, sometimes tolls, purchase and depreciation, licensing & registration, insurance etc.

Even the cost of the cost of cars is a massive, ugly problem, which has already covered pretty well by this guy:

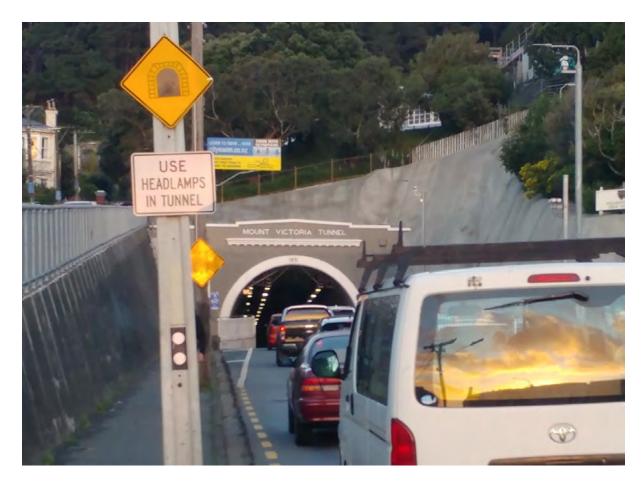
https://youtu.be/4U2eDInwz s

Cars are forming their own financial crisis - 'The GCDFC' if you like - The Global Car Dependency Financial Crisis.

Cars are possibly the worst investment too many people make. You never expect to make money on cars, instead you grit your teeth and hope you don't lose your money to cars too fast. Or your life!

Vast amounts of public money also pays for motoring infrastructure new and old..

When cities invest in other transportation options - which makes driving easier and safer for those still driving, some who are car blind remain vehemently opposed. It's like they want the next generation of residents indebted for one or two rejigged intersections, or a new tunnel,



Mt. Victoria Tunnel. Wellington, New Zealand.

... or a couple of extra traffic lanes to make a particular stretch of driving a few seconds faster - until it all jams even worse.

<u>Induced demand</u> is one of the most basic principles behind traffic planning. Yet the well documented adverse consequences of building more and more roads for cars seems to go out the window of many local authorities intent on 'fixing congestion', and 'saving time' for people driving expensive cars.

When all the investments of time and money, social and economic costs are boiled down cars deliver very little value for money. They effectively slow us down. The real speed of driving cars is just 5.9kph.

As <u>Brent Toderian says</u> - 'Let's be honest - let's put all the information out there about what things cost, and what different ways of getting around cost or save the public purse. Let's have that conversation.'



The problems that result from an excessive reliance on cars are many. It is not a case of trying to mitigate one or two of these problems. Cars are ruinous. They are damaging, degrading, dangerous, unhealthy, exclusionary, expensive, and inequitable and more.

At what point does a product, which has such deleterious side effects go from being problematic to being the problem?

Cars have always been problematic. Given the level to which society has normalised their use, it seems we seem stuck trying to solve their side effects and barred from seeing the real promise of alternatives.

Ever since cars were first marketed motoring interests have striven to convince people that their adverse consequences were worth the 'free' movement they enable. The adverse consequences are good for business.

And this perilous illusion is still working; many people are still passionate about cars and remain convinced they will continue to enjoy a dominant place in mainstream culture.

Many of the ways that cars degrade everyday lives don't even factor in any official monitoring. We have normalised the downsides, and externalise them as some immutable price of 'modern progress'.

Car blind society

People, kids, and politicians make sacrifices and concessions every day to smooth the road for cars.



Memorials at the site of a crash north of Wellington, New Zealand where Gary Smith, Craig Hempopo, and Raumoa Tamoa died in July 2001.

Car blindness affects our lives in many indirect ways. The undesirable side effects of cars have been normalised for so long that they seem invisible to most.

It is normal to smooth the road for cars. We wait to cross streets. Public transport stuck in private congestion is normal. It is normal to walk along wonky footpaths sculpted to make driveways smooth. It is common to expect the law to go easy on those involved in traffic violence incidents. We accept spending unimaginable amounts of collective, intergenerational wealth building and maintaining roads.

Many modern societies prioritise driving cars over keeping people healthy, or cities functioning smoothly. Somehow we have got to a point where questioning the continued use of cars has become off limits. The widespread over reliance on cars in modern society means we are practically going nowhere.

Driving worsens walking

Before cars, most people walked for a majority of journeys in cities. Some used horses, some bikes, and there were some trams and trains in larger cities. This was a big problem for car manufacturers because people riding and walking everywhere meant there was little clear space for their products to exploit their primary value proposition: getting around 'fast'.

Enter cars, and the drive to secure the purpose of a road to that of manoeuvring motor vehicles instead of people. To motoring lobby invented the notion of 'jaywalking' - that you were stupid if you didn't know exactly how and where to cross the street in such a way to make driving easier for motorists. Through the 1920's & '30's, pedestrians (people) went from the most important to the least important road user. This is so, in pretty much most cities, to this day.

Pedestrians must beg and wait to cross a road, and hope they're fast enough to get over the motoring chasm when the little green man finally permits them to move.

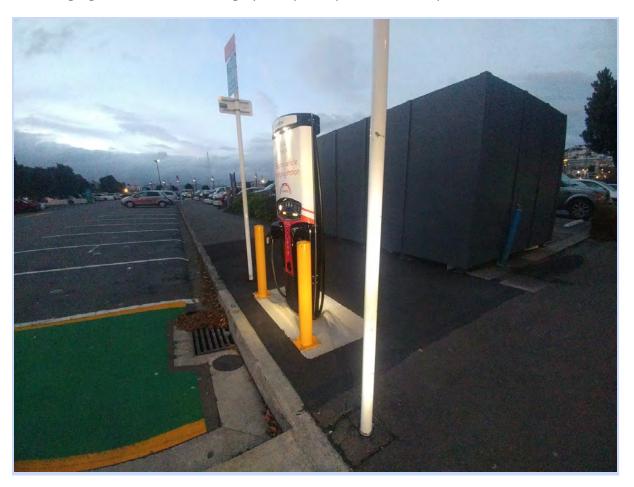


Wait! Do not cross

In areas with dense motor traffic, it is not uncommon to see intersections designed to make people cross three times to get to the nearest side, because making crossing convenient for people on foot would ever so slightly inconvenience people driving cars.

Large or busy roads have often destroyed dense, close-knit communities and walkable neighbourhoods in cities all over the world. This is historically a prevalent occurrence in city areas with poorer communities and ethnic minorities.

Once abundant footpath space has shrunk dramatically over the last century and is now frequently cluttered with signage, poles, and more infrastructure for cars. Lately electric car charging units are built taking up footpath space, for example.



Electric car charging station. Wellington, New Zealand.

People riding bikes, scooters, or skateboards or new forms of micromobility would for the most part rather not interact with dangerous road users. Cars worsen safety and comfort for all these travellers. They often seek refuge on footpaths.

The then needless confrontations that result with people walking should highlight a problem with the whole road design. If cities truly valued non-dangerous and non-damaging ways of moving around then public space and infrastructure would cater to these uses first and foremost.

https://twitter.com/RobinMazumder/status/1116083716760244228

Parking cars on pavements is so prevalent in some places that most people hardly give it a second glance.



Heck! Hek Tiling—did you HAVE to park there?

Footpaths in central districts of cities are commonly too narrow and can cause pedestrian congestion which has a negative economic impact.

Car centric planning often results in the mad idea that the only reason people driving cars are ever delayed is because they don't have quite enough space. So they add more lanes. Streets get wider, which makes crossing more stressful and dangerous, especially for more vulnerable or slower people.

The prevalence of cars is arguably suppressing many from walking more, either through habitually using cars or through deteriorating the walking experience. New Zealand currently has the highest rate of car ownership in the OECD. Health researchers are pressing the importance of the South Pacific nation to reduce car journeys by 50% by 2050.

Cars kill cities



Cars have got it good. Ever since cities were hoodwinked into incorporating cars like an essential component of some unavoidable utopian future, generations of governments and institutions have been perfecting the capability to build roads.

It's still happening. The next techbro trends we are being coerced into are 'self-driving' cars, flying cars, and, perhaps the silliest of all; dedicated car tunnels for the super rich. Not that these developments are new ideas. These projects are business as usual for the business of motordom.

Backers of autonomous car technology are already indicating the insidious need for further concessions of public space for their systems to work. A perfectly predictable transport corridor makes machine driving a much, much more achievable proposition.

Now... where do we see proven predictable transport corridors already?



For over a hundred years there have been more efforts focussed on enabling cars to move through cities than to ensure the city is a <u>pleasant place for people</u> to actually be!

In many cities it is cheaper to <u>store cars than it is to house people</u>. Unless perhaps you're <u>living in a car</u>, the affordability of housing is <u>severely compromised</u> by so much valuable land storing cars.

Many roads are engineered for daily peak traffic volumes. This means we have roads which are larger than needed for 90% of the time. The excess space is then almost completely unproductive for other uses.

Cars suppress economic activity and performance in downtown city centers. People who operate and fund a car dependent lifestyle generally have less money to spend on other goods and services. Fewer private heavy vehicles can access shopping places than can people on foot, bike or public transportation.

Take the London situation. Shopping areas with car dominated streets are missing out on huge opportunities to boost their economic success.

https://twitter.com/awire/status/1161651865068744704?s=19

Other economic measures such as productivity and happier, healthier employees are also underperforming compared to city centers prioritising cars last.

Businesses trying to attract car dependent customers have often relocated to purpose built shopping malls and big box shopping centres. The irony of a dedicated place to shop completely separated from dangerous road users that you have to drive to.

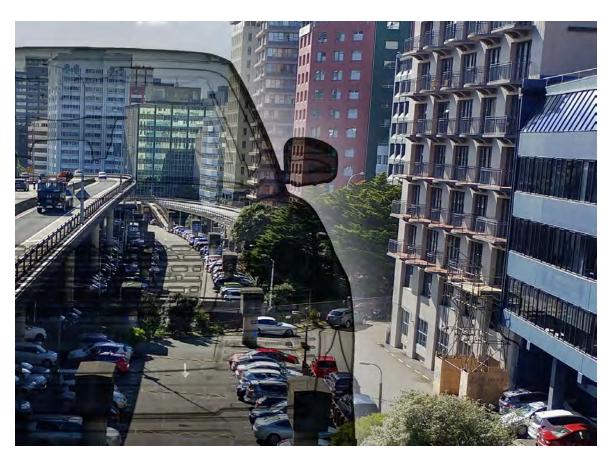
Reminds me of the strenuous plight of the car blind who drive (or are driven) to the gym to get some exercise...

On the surface, so to speak, roads seem pragmatic as they can be utilised by multiple traffic types - or 'modes'. This could work if each mode were carefully designed and regulated to co-exist safely. But that is not what has happened at all.

Instead most roads are violently dominated by cars at the direct expense and viability of accessible, healthy, economical, and sociable modes.

Many cities are engaging in projects like protected cycleways etc in another attempt to contain motor vehicles. These are an important development, but are only needed to continue accommodating large volumes of cars. It would be even better to just reallocate streets as people space and practically exclude all cars.

Cars have seen roads homogenized for use by heavier vehicles. It's 'one-size-fits-all' no matter how big your vehicle. This exclusion of humans who are not encased in armoured mech is the antithesis of what cities should be.



Even much space built for people is terribly compromised by cars. Driveways cut up footpaths, slip-lanes speed motorists around intersections, and many other details can make streets dangerous, uncomfortable, and unhealthy for anyone not encased in crashworthy hi viz metal exoskeletons.

Thankfully this dogma is being retired in many places around the world. Many cities are reclaiming healthier identities as places for people. They are beginning to reconnect people and communities, and to see that cars detract from this far more than they contribute.

Cars pervert land use



Public parking nestled between a hospital and school in Newtown, Wellington, New Zealand.

The way we design cities has been upended by the advent of private automobiles.

Civic leaders routinely rubber stamp unhealthy urban sprawl on the premise that everyone will just drive cars further and further.

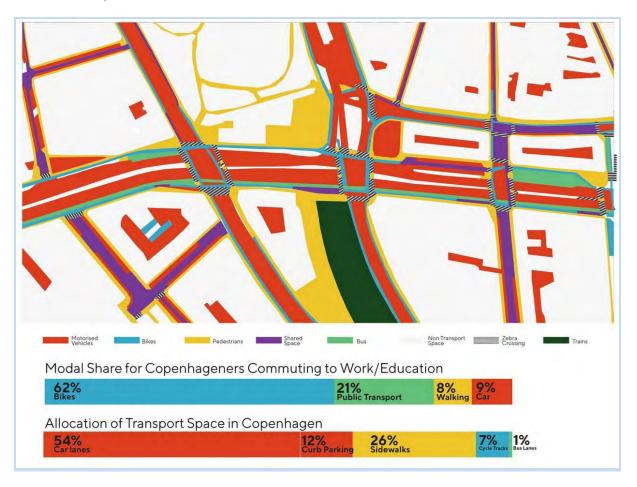
It's almost as if we need a new name for large car dependent sprawl. These areas should be called something other than a city. I propose 'petropolis': the outer area of urban development beyond accessible metro public transport.

On-street parking is often viewed as being free (it's not!). And much off-street parking is highly problematic. Parking buildings are expensive, ugly, and induce people to drive.

When urban designs are optimised for motor vehicle journeys it changes our land and makes places unhealthy. A car dependent petropolis is obesogenic. It keeps people less active by making almost every activity entail multiple car journeys.

Much business has been optimised for customers who drive or drive in, pushing up the cost of their products, even as they court customers who have less to spend (the petrol station took it!).

Even the world's best cities for active travel still have an inordinate amount of space dedicated to private motor vehicles.



Allocation of space by mode in Copenhagen. From 'Copenhagenize: The Definitive Guide to Global Bicycle Urbanism' by Mikael Colville-Andersen

Many districts have harmful 'minimum parking laws' enforcing the provision of car parking in developments, which in some cities take up to 30% of the available space.

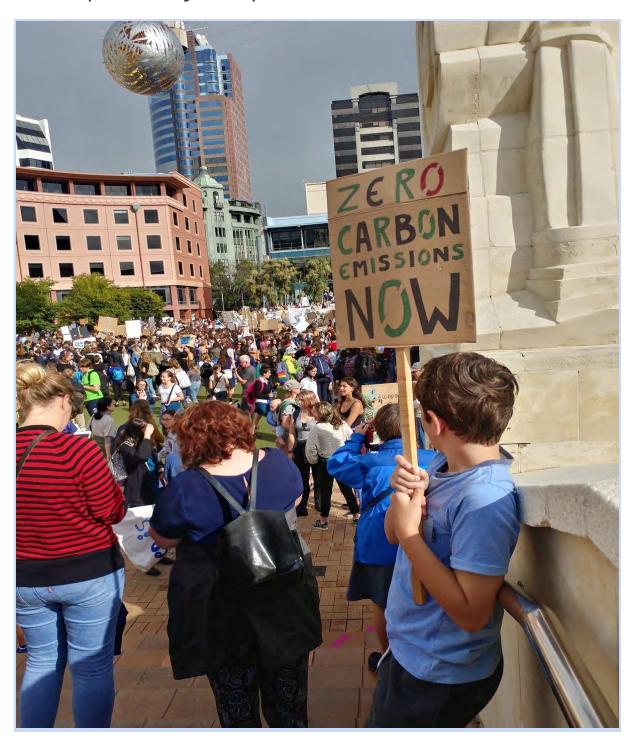
Many cities suffer disconnection from inner city mini-motorways - space being used by people who are not spending time there while creating barriers to people who are.

The excessive space requirements of cars destroys and suppresses opportunities for people in a city in order to allow other people to be somewhere else. There are few more destructive changes in land use in 'cities'.

Too much tarmac and concrete road surfaces cause havoc with water drainage and soil health, causing heat islands, pollution, and surface flooding, and putting undue pressure on expensive stormwater infrastructure.

Why do we keep doing it?

Car dependency compromises civics



Lawmakers, politicians, and law enforcement have been strengthening car dependency and people, animals, and the environment have been absorbing the growing adverse effects.

Many laws and enforcement policies make it seem like the adverse effects of cars is just the way life is.

<u>Car centric laws</u> all over the world enshrine roads as vehicle-only spaces and you are breaking the law by 'jaywalking' across it instead of moving through it in a sanctioned device.

https://twitter.com/greg_shill/status/1148551082353799168

Who isn't familiar with cases of light sentencing of driver infringements?

https://twitter.com/ormondroyd/status/997561246277885954?s=19

Some chronically car centric places have laws to punish people who ride bicycles without wearing plastic hats. In New South Wales, Australia, you can be fined AU\$330 (~US\$235) - if you're not wearing a helmet while cycling. But if you're caught speeding while driving your car: penalties conveniently start as low as AU\$119 (~US\$85).

Decision makers at every level are potentially compromised by car dependency.

When it comes to financial activities of public representatives there are often robust processes to provide transparency of spending interests. But there are few requirements of politicians and officials to declare any biases they may have towards how people get around.

This is a problem because people making decisions about how other people travel may effectively have a conflict of interest.

<u>Well-meaning representatives</u> who want to see change can face enormous push back from car dependent citizens stuck in car dependent environments.

Politicians love spending loads of public funds on cars and roads, and then strangely have little left to spend on other critical public needs. Political hopefuls often sell wider highways, tunnels and other expensive motor infrastructure to help them get elected.

The motoring industry has historically put a <u>lot of effort</u> towards the car blindness of decision makers.

We are terrible at judging just how expensive the ongoing maintenance of <u>infrastructure</u> will be.

The insurance industry is optimised for people to smash cars into things, and each other, and get them back behind the wheel as quickly as possible.

Renewing most driving licenses seems to be solely concerned with keeping an identity card up to date more than anything to do with safe driving standards. Aside from professional grades of license; renewals rarely involve any practical re-testing.

The language of car blindness

Even much everyday, common language normalises car culture.

Road violence incidents are routinely called 'accidents'.



Via <u>crashnotaccident.com</u>

We say 'drive safe' unironically - even as loved ones launch themselves into choked streets at dangerous speeds.

We say: 'hit by a car' - which is seriously daft because *cars* don't actually 'do' anything of their own volition! They are machines. They have no independent agency. Only drivers hit *with* cars.

We say: 'you're brave for cycling' - as if cycling is a dangerous activity, while the oppressive presence of dangerous heavy vehicles is overlooked.

People crossing the road in cities in not the exact place, time, and manner that best befits motorists are called 'jay walkers'. A derogatory invention courtesy of the early motoring lobby from the United States of America.

https://youtu.be/-AFn7MiJz_s

The language of car culture is also reflected back at us from mass media content. A recent <u>study of articles</u> from multiple American news outlets revealed patterns of language that consistently minimised the responsibility of motor vehicle drivers, while non-dangerous road users are often blamed for their own demise.

The study also found that reporting language also consistently frames road violence as isolated incidents and rarely drew any attention to broader systemic problems behind crashes.

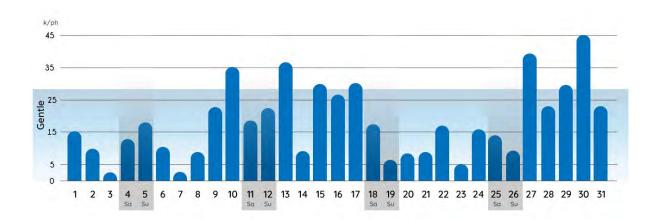
And none of the articles analysed consulted with planners, engineers, or road safety experts.

Cars are routinely marketed to appeal to our emotions and divert attention from their ruinous impacts. There are laws banning the advertising of cigarettes. Why not cars?

Being killed in road violence nowadays seems like an unfortunate, but inevitable cost of living in today's 'modern' world. There's nothing you can do. It's another 'price of progress'.

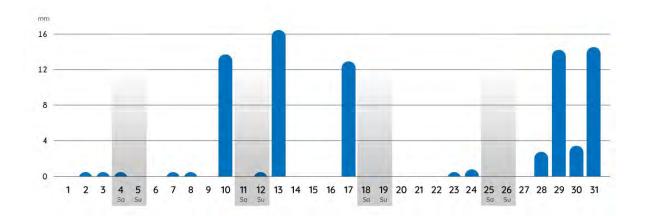
The weather is a frequently used excuse people use to justify sheltering in cars. But the weather is not the barrier many apparently think it is.

Take Wellington, New Zealand, for instance, a city known to be sometimes windy. The number of days where the wind is actually prohibitive to travelling without a car are quite rare, and the number of times you might be caught out in really bad conditions are easily worked around.



Daily average wind speed in Wellington, NZ for May 2019 - NIWA

Overall, the average wind speed in Wellington is generally light in anyone's books at 18.8kph. Depending on the direction of your journey, and especially if you're riding a bicycle, the wind may also be quite an advantage as well!



Daily rainfall levels in Wellington, NZ for May 2019 - NIWA

When good infrastructure enables people to easily go where they want by foot, bike, bus, etc, the weather is rarely a barrier. Cars consuming too much public space at the expense of safe clear streets really is though.

https://twitter.com/MamaMoose Be/status/1162286172149833728?s=19

#CarBlindness



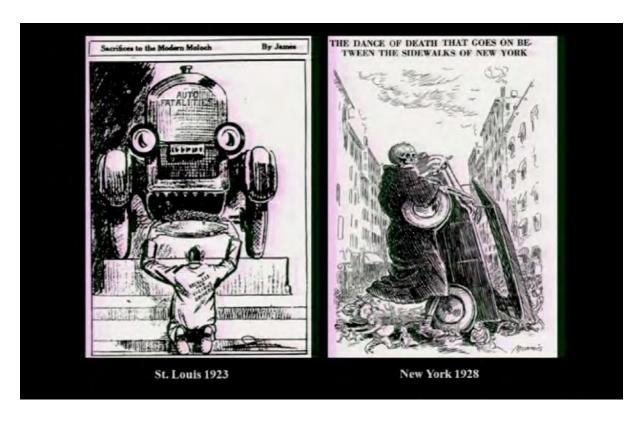
Car centric lifestyles are hard to escape from in places optimised to move cars, even if you desperately want to. Lots of people make many concessions, big and small, which are unnoticed and unaccounted to uphold the ability for some to drive conveniently.

While there are many ways we may improve towns and cities, one of the biggest opportunities lies in changing how we move around them. This shift won't happen by itself. It will only happen when more people denounce the failed experiment that is universal car dependency.

Public transport, walking, cycling, and micromobility are transport options which are true beacons of freedom for most. Greater provision to make these convenient will enable healthy and happy, people-focused modern societies.

With decades of technological improvement behind them, cars are still dangerous and disruptive, and don't come close to delivering a positive return on investment in the transport mix in cities.

It's not like people haven't tried to repel cars from cities in the past. When cars began invading cities early last century, the majority of citizens desperately repelled them.



Newspaper cartoons from 1920's America as appears in Fighting Traffic: The Dawn of the Motor Age in the American City (MIT Press) by Peter D. Norton

Today, car blindness appears semi-ubiquitous. Some car owners identify strongly with their cars. They might consider them an integral part of their culture and identity, and become defensive of the smallest criticism of motor vehicles - as if they're some sort of law of nature or a fifth limb.

The inhumanity of car dependency

Chronic car dependency has created places that do more to serve the needs of cars than of people.



Please Mr Motorist watch out for me? 1937

Our reliance on cars has affected cultural norms. Where once 'death machines' were (rightly) vilified and shunned, now it is a cultural tinderbox to criticise even one aspect of cars at a time.

https://twitter.com/BrooklynSpoke/status/1127689708488790016?s=19

'Developed' societies have embraced a car centric model predicated on diminishing and sidelining many basic human needs. Many sacrifices are made but hardly noticed.

If we actually consider the daily efforts required by individuals and groups to enable people to drive cars, they really start to look anything but convenient.

Car dependency is precarious. The level to which driving has become habitual for many, means we are very badly positioned to function well without them. It's like we completely erased the wake up call that was the oil embargo crisis of the '70's. If the same crisis were to happen again (which the climate emergency should be treated as) it will be very painful to adapt quickly.

Over-reliance on cars takes a toll on humanity. We have normalised their pervasive presence so much that we now find ourselves living and working in places that do more to serve the needs of cars than of people. Cars demand more of people than the benefits they provide.

Overcoming car blindness and reducing dependence on driving can help us to reconnect with nature and the human condition and boost our health, happiness, and resilience.

Cars & kids don't mix

A common refrain you may hear from new parents: 'Now that we've got a kid we had to get a car'.

Now, cars can be convenient for transporting little ones. But why are children driven in cars so much? Some reasons are not simply about convenience.

The poor safety of the built environment is one. Getting around safely (without a car) is persistently compromised by heavy traffic.

Parenting in a car dominated built environment can be hellish.

Keeping little kids away from cars is a very demanding job. You can't allow toddlers out of the house, into garages, onto driveways, or anywhere there are cars around - which is everywhere!

It is a little less stressful to live in a fully fenced property knowing your wee ones are less likely to 'escape' onto the road.

When they can walk, children are usually so small that motorists cannot see them over the bonnets of parked cars. And kids have a hard time seeing past those same parked cars while they are learning to look before crossing.

https://twitter.com/schmangee/status/1149024682055786496?s=19

As a parent, there's a persistent anxiety of hoping your kids survive the walk to & from school each day - if you even let them.

And when they do get bigger you become a private taxi service until your teenagers start getting lifts from friends who are (inexplicably) allowed to operate heavy machinery at speed in public.

Having pleasant road trips with kids seems fantastical too. Car seat compliance, various food & hydration paraphernalia, motion sickness, faffery, and general in-car pacification are torturous. And you're sitting in direct earshot of an inconsolable, physically restrained passenger who isn't getting their way and you can't pull over until the next exit which is 17 minutes away.

So, as a passenger, you try to help by turning around to retrieve a soft toy stuck under your seat and put your back out in three places and still don't reach Poochy, making the poor dear (and you!) scream even louder for the remaining 15 minutes until the exit finally arrives.

And because the vast majority of public space in the immediate neighbourhood is wholly inundated by parked cars and speeding cars, it becomes your duty as a parent to freight your energy laden kids, by car, to a designated playground, an empty sports field, some piece of nature that is an hours drive away. Or you have to pay to access some tired and sticky bounce-nation trampomatic-gym-zone inflatable-castle play-space-barn in some shed in a big box retail complex only after playing an impromptu game of life & death dodge-ems in a hostile expanse of melting tar seal car parking accessible via a labyrinth of urban motorways.



The number one cause of death for children and young people aged 5-24 in the United States of America is road traffic incidents.

In Australia it is top for 1 -14 year olds and 2nd for 15-24 year olds.

Children die locked in seats in cars in lethally high temperatures.

Children die being reversed over in family driveways. We mandate fencing of pools to prevent drowning. Why is driveway fencing not mandated?

Children die under heavy vehicles while walking home from school.

Children are killed in high speed collisions.

Cars are also invariably a factor in many stranger danger incidents, and are a common tool used for abductions.

Being driven around is just not good for kids either.

https://twitter.com/AxleRyde/status/840502369607532544

Too many cars clogging up city streets suppresses kids walking or cycling to school. In an unwelcoming, frequently unsafe environment and with a seemingly habitual compulsion to combine trips sees parents ending up driving them, worsening conditions further for those still car free.

All of these reasons have played a big part in <u>reducing kids' freedom</u> and damaging their development. Just two generations ago it was not uncommon for kids to play outside with friends and engage with their communities within a multiple kilometre radius of their homes. Today, in most places, that area has contracted heavily.

School crossing attendants should not be a thing. Kids working as crossing attendants to enable motorists to drive past schools at the worst possible time is a sad symbol of car blindness.

Perhaps cars should not be driven near schools. At the very least; children should not be required to smooth the passage of dangerous road users just when the most children are moving around in residential areas.

Driving is anti-social

When you encase yourself in a car it is hard not to distance yourself from the world. To exclude others. Sadly, that's also what a lot of people like about them. They are isolation chambers.

They are a slice of personal space & shelter as much as they are a tool for travelling. It has become a common first world modern comfort. But why do we crave this separation, and what are the downsides of this social disconnection?

Cars are more effective at <u>excluding and divorcing people</u> than they are at strengthening communities. In cities, being closer together and having convenient things is kind of the whole point.

Cars do support people connecting across longer distances, but only at the expense of disconnecting people in communities being driven through.

In general people living with high car dependency have lower real world social connections than people living in dense neighborhoods. People isolated in vehicles forego serendipitous encounters that may have occurred had they been getting around by other means.

Isolation in cars may also produce poorer connections between socioeconomic and cultural communities and contribute to bigotry and racism.

People without cars in a car dominated city are disempowered. Families, children, and older people are disadvantaged if they don't have access to a car or someone with a car. And once you do depend on a car - <u>losing access to one</u> can be a terrifying prospect.

Cars are also used as social status symbols - depending on how new, big, expensive, powerful, or shiny your wheels are. While seemingly innocuous, this symbolism isn't so much of an issue as the very real economic disparity being highlighted. A predilection for expensive private cars is symbolic of a celebration of socioeconomic distance. It is fairly poorly veiled classism.

Big car-centric roading projects are frequently promoted as a panacea - promising 'time savings' and 'fixing congestion', when in reality, they are socialism for the wealthy.

<u>Elite projection</u> is designing and building a world that a rich minority might imagine would work best for them and that such solutions must be the answer for everyone. These visions are invariably at odds with providing realistic, scalable solutions. They are often unrealistic, inaccessible, unscalable, and unsustainable. It would be like thinking the solution to crossing a river every day is to retain a helicopter and employ a personal pilot instead of just building a bridge that anyone could walk over.

Many private vehicles are designed and marketed to appeal to toxic masculinity.

https://twitter.com/BrooklynSpoke/status/1160969687091597312

So to be into car culture you have to be rich enough, and skilled enough, and tough enough. And if you can't step up then there must be something wrong with you.

And who hasn't experienced the anti-social posturing of someone behind the wheel absolutely losing their shit.

hhttps://www.voutube.com/watch?v=mZAZ_xu0DCg



Dehumanising 'others'

A recent <u>study out of Monash University</u> has found that more than 50% of motorists think 'cyclists' are not completely human. This is just the latest recognition of a widespread marginalisation and out-grouping of non-motorists.

Another form of dehumanisation is found in 'concern trolling' - having disingenuous concerns for people not in cars and thinking up various misplaced ways to 'fix their vulnerability' while never looking at the real sources of danger. A clear car blindness symptom.

Because we agree killing and injuring is wrong, yet without acknowledging cars as a dangerous problem (car blindness), we attempt to 'protect vulnerable road users' by applying similar 'safety' methods used for car occupants. We cocoon them in plastic hats, bright clothing, reflective paint, armour, air filter masks etc.

https://twitter.com/AxleRyde/status/1152031545554698240

Occasionally some communities provide little flags for people to wave while crossing the road, and tell pedestrians it is their job to ensure their visibility.

https://twitter.com/shaunabrail/status/1140243763597578241

People are then expected to 'share responsibility' for the safety challenge (of cars) - even though people walking or riding bikes contribute an infinitesimal amount of danger compared to the inertia of a private urban tank.

People not cocooned in cars should also ensure that they make eye contact with people at the wheel. Even if they can't see through the glare of the widescreen or the A-pillar to the driver ensconced on their phone playing their favourite game.



Lollysweet Mega-Jewel Squishsplosion - Generations: The Reckoning®.

All these car blind attempts to improve the safety of non-dangerous others are really only thinly veiled victim blaming.

Non-dangerous road users are dehumanised through the lack of care and investment given to keep them safe and make their journeys comfortable and enjoyable. Their journeys are 2nd class.

Sometimes footpaths are not even built in highly car dependent and car blind areas. But at least when they are, there is usually a physical separation involved. People on

bicycles usually get nothing, sometimes get paint, and extremely rarely get physical separation.

At its best 'paintfrastructure' makes those already cycling slightly safer. Done poorly, it doesn't help much at all (see: sharrows) and is effectively just signage to remind motorists that people on bikes do exist.

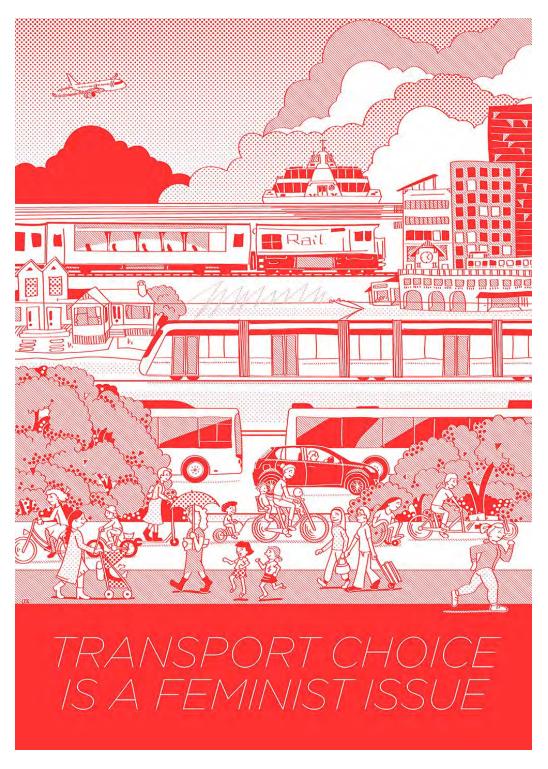
Painted on-road bike lanes are often exactly where parked cars' doors are opened. And this style of bike lane also tends to decrease the distance of passing motorists.



Inferior provisions for people riding bikes such as this are also called: 'door zones', 'murder strips', or 'bike lames'. I call it 'paintfrastructure'.

Unfortunately, there remains a faction of cycling enthusiasts who subscribe to a 'share the road' mentality. Known as 'vehicular cycling', its car blind proponents think riding bicycles amongst dangerous heavy vehicles should be the norm. For all ages & abilities. It is a strategy that car centric planners have historically found quite agreeable. It is like the Stockholm Syndrome of vulnerable road users. They have come to embrace their tortuous masters.

Decades of car centric city designing has suppressed bike riding for many segments of society, most notably women.



Carolgreen.net

And the rise of car dependency in cities has historically displaced many communities of minorities and people of colour in the name of 'gentrification'.

While on the face of it 'sharing the road' sounds like a logical maxim - 'Why can't we all just get along?' - the reality is that it suppresses people from travelling in more sustainable ways and can end in serious injury or death.

Even when nobody gets physically harmed, sharing the road with heavy vehicles can be traumatic. Close passes, or 'near misses', can leave people on bikes swearing off riding ever again.

The unappealing prospect of riding a bike amongst heavy traffic is mockingly referred to as ILOH - or 'Insert Loved One Here' (make your own!).



The doorzone along Island Bay Parade before a kerbside cycleway was built.

So, with such a hostile road environment where, as a non-motorist you're expected to not get yourself or your children killed by ensuring **other people**, **who may not even be looking** can see you and do look for you, and by being expected to prepare for crashes with heavy vehicles - is it really any wonder why many car centric modern cities suffer widespread, chronic car dependency?

#BreakCarCulture



Cars are just plain old hard work

Owning and using cars really isn't as easy as the marketing promises. Cars require a surprising amount of work to make them seem convenient.

Car centric infrastructure has made cars seem convenient, but everything else about them takes blood, sweat, tears, and (for most) recycled ancient dinosaur fat.

There are a bunch of basic barriers of entry. To use a car you must:

- learn road rules
- gain driving skills
- licence your driving ability
- buy a car (becoming less required, slowly)
- licence your car
- register your car
- insure your car and your driving
- fuel your car
- maintain your car
- wash your car (you don't have to do this one but if you don't you may be frowned upon)
- clean your car (the inside version of the point above)
- store your car (and often pay a lot for this) wherever you go
- Store your car where you live
- pay all the speeding and parking fines
- try to not kill anyone

There can be quite a lot of mental overhead administering car ownership and maintenance. Car maintenance can be seriously expensive.

Motion sickness from travelling in cars is not uncommon.

Driving requires superhuman attention to do safely.

Being mentally sturdy enough to put up with babysitting a parked car or zen enough to transcend seemingly endless bogs of congestion as a daily ritual is beyond the patience of many.

Being dependent on a car also has the insidious effect of making other ways you might travel seem daunting. Cars and the marketing behind them play into your self doubt, telling you you'll have a terrible time if you don't drive, and you'll most likely fail, or you'll be a loser. Car companies and their marketers are expert gaslighters.

Car blindness is no accident. It is an ingrained, structural ignorance. After all - you must choose driving for car companies to be profitable. It works for their business that people ignore and normalise all the downsides. That children lose out on so much. That we miss more social opportunities. That we dehumanise and out-group non-motorists. That individuals sacrifice so much to own and operate cars.

Towns and cities should work for people. Machines and transportation should work for people and the planet. Cars are mainly working for the corporations profiting from them.

Let's reclaim the built environment for people. Let's look to an independent future. A healthy, human future.

But many people can see the problems. People across the world are recovering, slowly, from car blindness.

Visionary, pragmatic cities around the world, such as <u>Amsterdam</u>, <u>Copenhagen</u>, <u>Barcelona</u>, <u>Oslo</u>, <u>Paris</u>, <u>Madrid</u>, and <u>many more</u>, are realising the immense benefits of new mobility options and infrastructure, and are rapidly eroding the dominance of private motor vehicles for their residents.

The promise of a better world

If we want cities to work better, if we want healthier, happier lives, and human life on Earth to continue in some level of comfort, we need to see past the motordom zeitgeist. We should be moving past using car technology in such wasteful ways. We must urgently realise a new world with transport options that work for people and the planet.

Cities and towns are meant to strengthen human social connections, enhance economic efficiencies, and promote well-being and community. Communities thrives in cities where the built environment is designed with people in mind. Public spaces should be universally accessible and as safe and inclusive as possible. Roads are public spaces.

We have a responsibility to tread lightly on this planet for ourselves and future generations. Travelling in sustainable ways - *literally treading lightly* - is a powerful way to

do this. By building healthy mobility into our lives we can be wealthier, safer, and happier.

In this wondrous, modern age it is common to perceive cars as a normal, functional transport option - that we are living one step away from a futuristic Jetsons-style utopian futurama as promised in world fairs of old.

But the real promise of a better world lies in truly appreciating what makes our lives and this world healthy. Sometimes this means reassessing technology that was once attractive, and finding more appropriate ways to utilise it.

Vision for the future

The good news is, choosing to travel differently; walking, public transport, or on a bike etc, can (if well provisioned for!) become as familiar and habitual as some find driving. They may present different challenges to driving cars, but many perceived barriers are just about **forming new habits**.

Becoming familiar with healthier travel choices can eventually make being car-free more convenient for many, and a whole lot more empowering, enjoyable, and life affirming.

Car free journeys are no longer the preserve of walking, public transport or riding bicycles either. These are still the champions, but there is an explosion of innovation happening around the world.

Everything is getting smaller and cheaper, and electrified and shared. It is called micromobility.

https://twitter.com/oliverbruce/status/1134418057600745472

In the not too distant future, owning are car will seem quaint. Archaic. And excessive - unless you have very particular mobility assistance needs.

Journeys of all kinds will be enabled by shared and connected transport systems - known as Mobility as a Service. This is already a reality in some progressive cities.

https://medium.com/@paulaaronmeister/what-is-mobility-as-a-service-5ac24e0e7937

Healthier, cheaper and accessible means of moving about is achieved by having public transport and space that is safe, attractive, and accessible. The rewards are not just about how we move either. Having more open spaces, seating, trees and nature, less noise, more freedom for all ages and abilities are achievable goals for city living. The main barrier to providing these rewards is: cars. Too. Many. Cars.

#CitiesForPeople



To overcome car blindness we need to put pressure on local and national authorities responsible for our built environment to <u>provide safe space for walking and cycling, and reliable, comfortable, and frequent public transport</u>. There must be a clear, measurable objective of reducing car dependency.

Vote. Vote with your shoes. Vote with your pedals. Vote with your bus and train passes.



Engage with public initiatives that can move us toward healthy streets, healthy cities, healthy people and a healthier Earth. Discuss the problems that cars bring with your friends and family. We will be unable to face these problems while we are blind to them.

At this critical time in human history it is important that more people face the many serious negative impacts of cars, especially for what is a very short list of unique benefits. We really need to treat driving as the extremely costly and privileged activity it is, and regulate it far, far more heavily.

Healthy air, a stable environment, and safe and accessible cities should be ours by right.

So next time you're heading out and about, listen to that little niggle of conscience in the back of your head. Look to travel about your city in a healthy way. Think of every journey you take as an opportunity to reinforce how highly you value all life and everyone's well-being.

By Alex Dyer

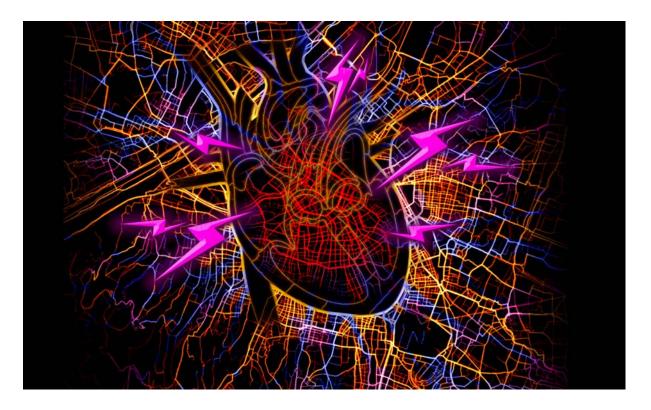
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Broken-hearted cities

Why driving is the new smoking.



Too many cars are giving our cities (and people) heart attacks around the world.

Unnecessary driving of cars is a major public health issue.

The adverse public health effects of too many cars, and the need for intervention is comparable to the ongoing challenge to reduce smoking.

This is not about shaming people who currently drive. Blame and guilt achieves nothing.

It is only now, years later with vastly shifted understanding and perspectives of smoking that it might seem like an attempt to undermine those who drive. I'm not trying to do that.

This is about raising awareness and a sense of urgency to bring change to the misuse of dangerous, unsustainable, life-threatening products that harm large numbers of people.

While confronting to associate driving with smoking, the parallels between how smoking was perceived, and how driving now is, are, to my mind; conspicuous.



To be clear: when I say 'driving' - I am not referring to all use of private motor vehicles.

There are entirely appropriate scenarios to employ such tools. Disabled mobility especially, emergency vehicles access, large goods delivery, heavy construction, rural work, etc.

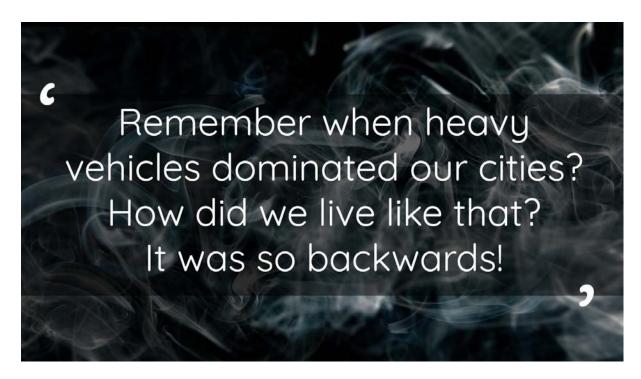
I am talking about all the journeys that could be made with healthier devices or methods, or not taken at all. I'm talking about <u>unnecessary driving</u>.

One-sixth of household car trips (trip chains) in New Zealand are under 2km long and almost half are less than 6km long. *Ministry of Transport, Household Travel Survey, 2003–2009*

A significant proportion of journeys are driven not because people choose to, but because they are effectively deprived of other choices.

We may look back in twenty years time and ask;

'how did we live like that? Remember when heavy vehicles dominated our cities? It was so backwards!'



I hope for this future.

But it won't happen unless we begin changing the mobility landscape and shifting perception and awareness of unnecessary driving now.

Reframing how we view the health impacts of unnecessary driving requires us to reshape widely held views of a commonplace product.

We must have faith in people's intrinsic sense of decency to each other and commonly held values to care for children, others and the environment.

It is about properly acknowledging a common source of injustice, inequity, and harm, and forming more human friendly mobility norms. Especially in cities.

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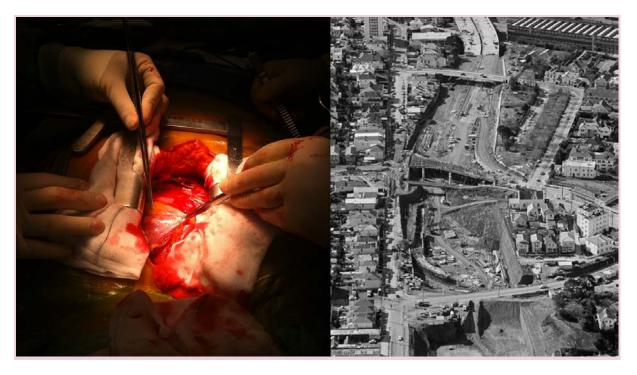
I want to live in a world where families can participate freely in cities in healthy, life-affirming ways that help maintain a sustainable shared future.

This is what cities free from heavy traffic are. Cities with healthy circulation, and low levels of personal and collective harm.

All children should be able to safely and independently engage in their neighbourhoods as they grow. For this, they need more than road safety. They deserve freedom from traffic.

I hope that, as a society, we may more readily turn to effective measures to mend our broken hearted cities.

I hope we can choose to heal our cities using preventative health strategies, rather than forever electing to reopen invasive surgery that leaves giant scars and creates ongoing complications and unaffordable dependencies.



Left: Open heart surgery. Right: Open city surgery - aerial photograph of the destruction of downtown Wellington to make way for the urban motorway. Alexander Turnbull Library. August 1969.

# The harmfulness of driving

Heavy vehicles harm in sometimes acute, graphic, and sudden ways, but also frequently in obscure, insidious ways.

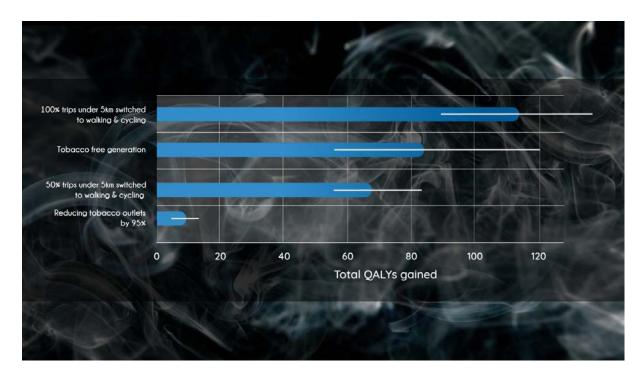
The less obvious ways that driving harms are more clearly similar to how smoking harms.

#### Consumer harm

Driving kills. Since the year 2000, <u>more Americans died in traffic crashes than were lost during both World Wars</u>.

Occupants of cars are <u>exposed to higher levels of air pollution</u> than people outside, as fumes and harmful particulates become concentrated in enclosed spaces.

Mortality from the worst non-communicable diseases would be significantly reduced if people who drive would cycle or walk for more of their journeys. For instance: commuting by bike can <u>reduce the risk of heart disease by 46% and lower the risk of developing cancer by 45%!</u>



From a comparison of active transport scenarios with previously modelled tobacco interventions. From Potential of active transport to improve health, reduce healthcare costs, and reduce greenhouse gas emissions: A modelling study

by Dr Anja Mizdrak, Department of Public Health, University of Otago, Wellington

#### Addiction

Driving is addictive. Once you own a car, driving tends to become difficult to give up.

Private motorised vehicles are as seemingly pervasive as cigarettes once were. Users can become agitated if they might have to walk further to their cars and are comforted by being able to keep them close by. <u>Present bias</u> plays into how habitual cars often are.

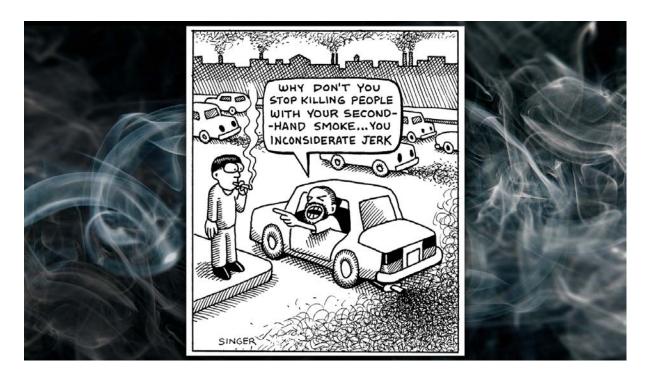
Driving is an expensive habit. Smoking a tank of petrol or diesel every other week can quickly put a big dent in back pockets.

There is also an enormous public bill for this addiction. Building and maintaining infrastructure, servicing the cost of ownership, and cushioning health and safety effects is significant, and contributing to intergenerational debt.

If someone really wants to quit driving there are often significant barriers that require will, creativity, and perseverance to overcome. Intervention helps.

#### Projected harm

Driving harms others. A significant aspect of the demise of smoking was the second-hand smoke issue, or 'passive smoking'.



I think of passive smoking as a form of 'projected harm' - where harm is done to others in an arbitrary, oblique way.

It is (now) unacceptable that smoking - an activity someone chooses to engage in - should expose others to serious health risks.

Are cars really so different? They are literally creating a passive smoke injustice in a majority of cities.

While electric cars reduce tailpipe emissions, they still generate lung-damaging particulate emissions from tyre, brake, and road wear.

Children are unwittingly exposed to air pollution when they are transported by car. Only the source and type of smoke from this passive smoking is different.

https://twitter.com/AxleRyde/status/840502369607532544



You might be thinking:

'but smoking is a recreational product, it's totally different'.



Does having a less recreational purpose for a product make any harm they inflict more acceptable? I'm not sure it does. Especially if that harm is to others.

Driving of private motor vehicles also projects harm onto others in ways other than air pollution.

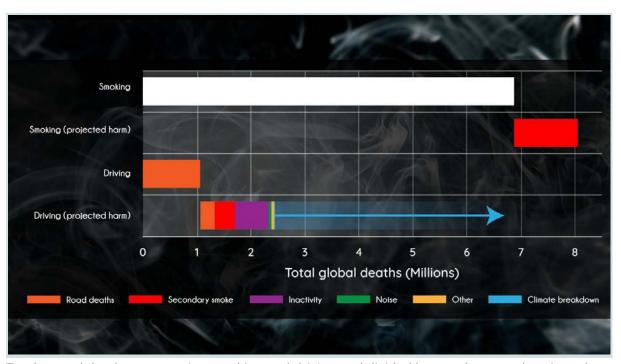
Excessive car traffic in cities and residential areas creates a significant barrier for many to lead active lifestyles. In this way, driving is projecting harm through health risks due to <u>inactivity</u>.

This problem is also particularly unjust to children.

Driving also harms others through road violence. According to the World Health Organisation, 26% of deaths from road violence around the globe are people who were walking or cycling. Figuring out who does the killing is an interesting topic. (Spoiler: It's people driving heavy motorised vehicles)

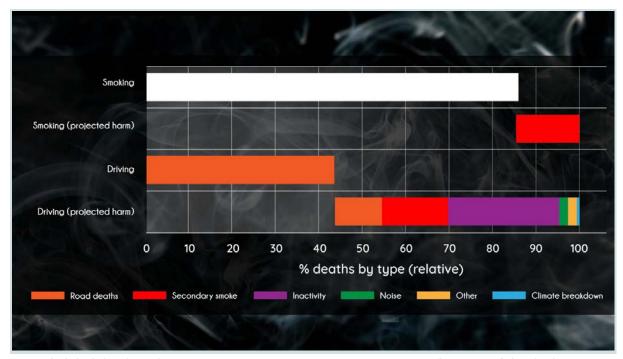
Some other projected harms from driving:

- near misses and traumatic experiences
- noise pollution
- light pollution
- visual obstruction
- constricted space for people
- heightened caregiver anxiety and effort
- reduced green space
- suburban sprawl
- social disconnection, mental health impacts
- wildlife loss of habitat
- dead animals
- climate breakdown



Total annual deaths - comparing smoking and driving and divided by user harm and projected harm. The absolute total number of deaths from secondhand smoking is less than from

projected harm from driving. Deaths related to climate change attributable to driving are rather small at this time, but this could become a large contributor if unmitigated.



Annual global deaths relative percentages - comparing proportions of causes of deaths between smoking and driving. The projected harm from driving is over half the total. Secondhand smoking was a significant motivator in choosing to reduce smoking rates - especially in public. What amount of projected harm from driving is needed until we feel the same urgency?

#### The health of cities

Crippling congestion of too many cars is to a city what a heart attack is to a person.



As a city's transport corridors are filled with larger vehicles in less free flowing streams of traffic, the risk of clogged arteries grows.

On-road car storage is to city streets as plaque is to arteries. It builds up and slows the flow. If untreated road plaque increases the risk of traffic clotting and stopping the healthy circulation of people.

<u>Cars create more distance</u> than they overcome. As our addiction to cars grows, our cities expand, pushing people further from each other and exacerbating mobility challenges.

The <u>analogy between city congestion and human biology</u> has been employed before to illustrate this problem, but we need to shift our perspective of how to address it.

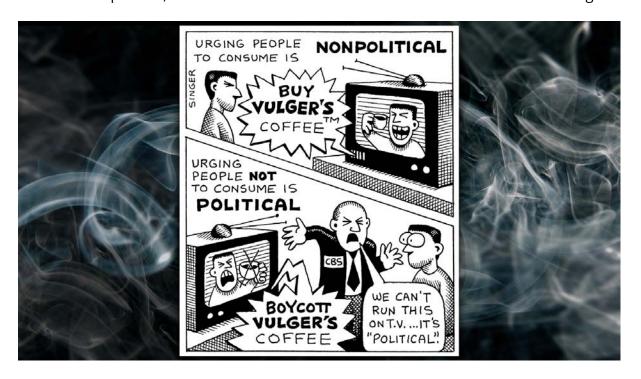
Cities stand to contribute a great deal in mitigating climate breakdown by transforming the mix of transport.

# Profit before everything

Car dependency is a complex problem. The weight of political and commercial inertia makes change in this area extremely challenging. The Political Economy of Car Dependence is holding back the ability of cities to flourish.

#### Political dependency

The inertia of political, and infrastructure interests behind motor vehicles is daunting.



Lobbying and influence of public institutions around the world have tended to favour business interests when it comes to cars since their invention. The road building industrial complex, the freight & trucking lobbies, planning, engineering & design standards - they all find it difficult to move away from the status quo

The amount of investment that individuals make in owning a car can create serious anxiety of stranded assets, making choosing change in a democracy harder.

It seems to me that there must be a high degree of sunk cost anxiety, or 'escalation of commitment' for users and industry. We have put so very much of our collective resources into trying to make cars work - that we cannot pivot when they obviously don't.

These fears and interests are effectively limiting political action, a problem not unfamiliar with the history of smoking products. Every step along the way to properly controlling cigarettes has had to reconcile against the attraction of 'economic opportunity'.

The <u>difficulty for politicians to introduce effective change</u> in this area is worrisome. <u>Political acceptability</u> is a real threat to achieving timely, effective change.

It doesn't have to be though. Leaders who are bringing decisive, transformative change to cities by reducing car use are being <u>rewarded</u> with <u>political success</u>.

#### Economic dependency

Our economic system is also stuck escalating the provision of cars.



There are many concessions for business when it comes to heavy vehicle use. Taxes and incentives need to change to support better mobility outcomes and make it obvious that business activity adapts too.

Transitioning away from these products will require us to be mindful.

Recently, the car industry famously <u>cheated</u> public perception of their negative externalities. The tobacco industry did similar things for many years.

The advertising dilemma

People are currently receiving highly mixed messages when it comes to cars.



Driving kills: Health warnings. Pic: Copenhagenize.com

A lot of quality journalism highlighting the challenges of mitigating climate change are frequently accompanied by ads for SUVs, double cab utes, and other powerful motorised vehicles and their fuels.

These products will need to face advertising regulations in the near future in ways we saw taken to dampen the smoking market.

As we stand, the opposite seems to be happening. An <u>ad for 'Vanmoof' eBikes</u> was recently banned on France TV because it dared to illustrate some of the ways cars harm.

We can't continue to hope that the Invisible Hand of capitalistic ideals still has our best interests at heart with these products.

To my mind, mobility choice <u>shouldn't</u> be a level playing field.

It should be normal for most to employ healthy, sustainable, and socially enriching mobility.

It should be normal to expect that, for most, our cities are accessible, healthy, full of connectedness and community, and generally enrich our welfare. Using dangerous, ecocidal, community degrading products should be a rare, expensive, cumbersome rigmarole. It should be the exception, not the norm.

Regulations should reserve the right mobility tools for specific scenarios, such as certain disabled access needs.

#### Junk mobility

Unnecessary driving is junk mobility.

The common discussion out there about the damaging availability of poorly nutritious foods and sugary drinks could be accompanied by an acknowledgement of the excessiveness of unhealthy mobility products.

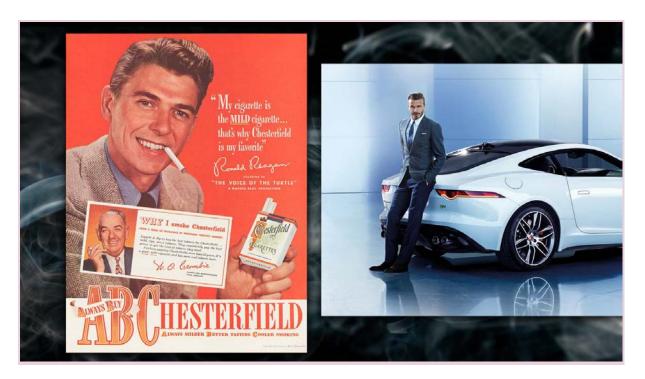


# Anti-social effects

Unnecessary driving, like smoking before it, can contribute to social challenges and ill effects.

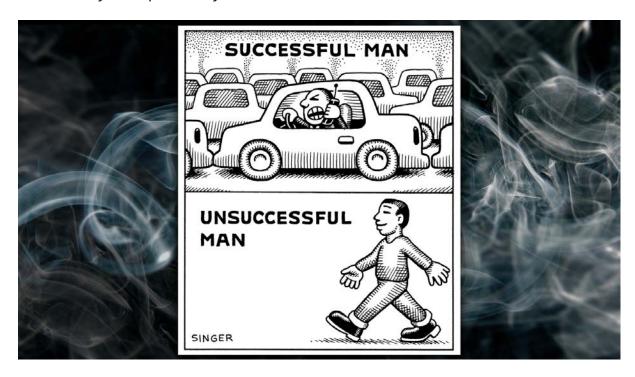
Success & status

Smoking was for a long time sold by appealing to an individualistic sense of status.



Owning expensive, dominating, new private motor vehicles has become a de facto symbol of success, wealth, and societal superiority. Older cars, smaller vehicles, fewer vehicles, no vehicle, are somehow socially 'less than'.

Your choice of car says something about how much you prioritise yourself. And how much society must prioritise you too.



Advertising frequently reinforces this; boosting the promise of status through the purchase of their products.

The status of motoring is reinforced in the built environment as well; where every affordance is given to perfect the 'level of service' offered to motor users.

Traditional forms of mobility have been progressively pushed to the side, even <u>eradicated</u>. A profusion of private heavy vehicles has made the mobility landscape more classist.

#### Petro-masculinity

When cigarettes were regulated to include filters, tobacco marketers scrambled to reframe what had been considered a feminine way to smoke. The Marlboro Man as painted filter cigarettes as compatible with tough guys.

While cars have been generally implementing more safety features and generally facilitating driving in cities for a majority domestic activities and trips, car design has been marketed more towards appearing tough and macho.

A staple of car marketing is designed to appeal to people's (especially men's) <u>desire to project strength</u> or give a misplaced sense of capability and resilience - even as these products <u>undermine the very things that provide resilience and safety</u>.



Left: The Marlboro Man reinforcing the idea that filtered cigarettes were manly. Right: A frame from a recent ad for the Lincoln 'Navigator' starring Matthew McConaughey.

In another disturbing parallel: SUVs are no safer for users and others (they're actually more dangerous) just as filters do not make cigarettes safer.

#### Gaslighting and peer pressure

Both cigarette and car marketing have delivered a steady diet of messaging that makes customers second guess themselves. (it's fitting that this behaviour is called gaslighting if you ask me).



**Cars:** You're too weak to ride a bike. It's going to be sooo hard to do it any other way than by owning this 7-seater. You're going to get stranded if you don't buy the extra powerful version. How will you transport that new fridge-freezer you buy every other week? How will you drive through all the floods and firestorms coming due to climate breakdown?

**Cigarettes:** You'll get fat unless you smoke. Smoking is a sign you are: successful, cool, desirable (and you're the opposite if you don't).

# What to do about it

I'm not an expert here. We need representatives and authorities to listen to experts and instigate measures that will be effective in lowering car dependency.



Tax incentives, regulations, built environment change, and more, accompanied with strong leadership and communications.

Through recent efforts with Covid-19 in New Zealand we have witnessed just how important and effective coordinated measures, accompanied with well crafted, consistent communications can be in mitigating major health challenges.

I think we need to see a similar scale of intervention for the problem of car dependency.

#### Set a goal

Set an ambitious goal to lower car use like we have with the SmokeFree 2025 initiative. How about; CarFreeCities 2030.

#### • Change the environment

We must prioritise space for healthy transport options much more than we have for a long time. And fast.

#### • Make car users pay

Make the costs of driving reflect the true costs.

#### • Incentivise non-car / shared car use

Make public, active, sustainable transport options and human scale cities the cost effective, attractive choice they should be.

#### • Regulate car advertising

Stop promoting and glamourising cars as personal consumer products.

#### Measure car dependency

If we can measure car dependency at a national level we will be in a better position to effectively reduce it over time.

#### • Define and communicate appropriate driving scenarios

Defining acceptable reasons to drive could help clarify for people the jobs that heavy motorised vehicles are the right tool for.

# Summary

To realise mobility in cities that works better for people, New Zealand needs to approach unnecessary driving as a major public health issue.



Cars are hurting their users. They are hurting others.

They are anti-social. Our political and economic systems struggle to contain them sustainably.

Decades of subsidising and prioritising junk mobility has resulted in many people getting hooked. Our streets are awash with a damaging product and if we're not careful, our cities will overdose.

I guess I am just skeptical that how most people get around should be as open to personal preference and consumer behaviour as it is.

People overwhelmingly want to do the right thing by each other, the planet, and our shared future. The problem is we have left the door open to abuse by private corporations selling dangerous products to distract and exploit.

It is time to contain this chronic addiction and start healing our hearts and the hearts of our cities. Healthy air, a stable environment, and safe and accessible cities should be afforded to all communities.

# #DrivingIsTheNewSmoking



Driving is the new smoking.

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