

4<sup>th</sup> Annual Land Transport Summit

**Where do walking and cycling fit in? Sustainable cities through urban planning**

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Just Too Humble

Many will question whether this topic needs a session to itself. After all – there isn't much cycling, and walking takes care of itself since most roads have footpaths and pedestrian crossings in key places – right?

It often surprises people that the Household Travel Survey shows nearly as much cycling nationally as public transport use (1.8% and 2.2% respectively). You wouldn't think so from the respective amount of attention the two modes get. Cycling gets dismissed as insignificant, yet we'd never dream of describing public transport in that way!

And walking accounts for about 18% of all trips. Most of us walk somewhere on the roading network most days. Some of us drive this often, but not as many as walk, and many of us rarely if ever use public transport. Ask yourself if, given a choice, you would prefer to lose your ability to walk or ability to drive, and the importance of walking becomes clear.

These two modes are just too humble. They don't get noticed because they take up very little space and cost very little money.

Yet, considering their importance, should that not give them a particularly high priority? Don't their cost and space requirements, compared to their versatility, imply an extremely high value for money?

Much as cycling is undervalued, I would suggest that walking is far more important, yet loses out through lacking the "green icon" appeal cycling has. Walking suffers through being too "ordinary".

We too easily fall into a mindset that the urban transport debate is a two-horse race – cars versus public transport. It isn't a race at all, and measures to help some aspects of transport can actually benefit us all. But doesn't "cars versus public transport" sound familiar?

It sometimes seems that getting people out of cars onto public transport is an over-riding objective of transport strategy. No wonder the Automobile Association takes offence – I'm not impressed either by this "crusade" style.

But why are we saddled with this mindset suggesting that the car is somehow bad, public transport is good, and walking at one-sixth of trips and cycling at nearly the same as public transport, barely merit a mention?

Our mindsets go deeper than we may realise. The Industrial Revolution introduced the idea that it was machines which added value to society by creating economic prosperity. This idea was still with us in the 1960s when “technology” was looked to for raising our living standards and quality of life. Walking and cycling don’t fit with this unspoken idea that to be of significant value, something needs to be expensive or technically complex. The very high usefulness and popularity of walking and cycling becomes somewhat embarrassing.

### Classic 1960s Transport Planning Theory

The 1960s was the era of the technical fix. We had emerged from two damaging early 20<sup>th</sup> century wars, and from now on, so it seemed, the appliance of science was going to be our weapon to eradicate poverty and suffering, in all sorts of fields.

And it was at this time that the motor car changed from a minority middle-class luxury into a mass transport mode. Looking at what had happened in the USA in the 1950s – seen at that time as a forerunner of progress trends – Europe and Australasia looked wistfully at the sleek fin-winged gas-guzzlers and the generous roads which accommodated them – and applied its mind to the trends of the times.

It fell to a creative thinker called Colin Buchanan to articulate what seemed a well-reasoned answer. Buchanan described the car thus:

*“We are nourishing a monster of great potential destructiveness – and yet we love him dearly”*

He foresaw the dangers of the impending mass car growth, but also embraced this as “progress”, another key concept of the time. His masterpiece, the 1963 *Traffic in Towns* UK Government report (1), has been required student reading ever since and contains many transport planning concepts so axiomatic that we barely notice them.

It was Buchanan who gave us the concept of a roading hierarchy – distinguishing between some roads for through traffic, and others for local access traffic. The danger he foresaw was that if strong action was not taken, rising car volumes would ravage and destroy the ability to walk around, which he saw as the essence of the quality of urban life.

That is why Buchanan drew up – in New Zealand, as well as Britain and elsewhere – motorway network blueprints. One of those is Auckland’s, of which we have heard so much at this conference about the urgency of “completing”. Yes, today’s Regional State Highway Strategy network is remarkably similar to the one Buchanan drew up for Auckland in the 1960s. Once completed, so the thinking went, traffic would flow freely and residential areas would be largely free of it. The other main New Zealand centres,

including my own of Hamilton, had something similar drawn up about the same time.

We seem to have lost sight of the fact than Buchanan's motive was to protect the ease and convenience of movement by foot. After extolling walking as "indispensable" for a very wide range of urban activities, this from the Report:

*"In all, it does not seem far from the truth that the freedom with which a person can walk about and look around is a very useful guide to the civilised quality of an urban area"*

And this one I like so much that I've put it on the back of my business card:

*"traffic and roads and not ends in themselves, they are services only. The end is the environment for living and working"*

For Buchanan, motorway network completion was about some kind of human right to drive, but as a way of clearing damaging cars out of local residential streets.

### Flaws in Classic Theory

However, Buchanan made a couple of mistakes.

The first was the expectation that car growth would surge through the 70s and 80s to stabilise to a "saturation point" some time around 1990.

Then, he thought, *"everyone who wants a car will have one"* – at an average of *"about one car per household"*.

Did you laugh? This "saturation point" is exactly what policy makers are after nowadays when they want to **reduce** car use. Many of us will have heard, often in connection with some public transport promotion *"Ask yourself: do you really need that second car?"*

There was an intense debate around the late 80s about whether building roads meets travel demand, or fuels it. Eventually it was settled conclusively that it does both – whereas policy up until then, including Buchanan-style motorway network blueprints, failed to recognise the fuelling of demand.

The second mistake was that people would compartmentalise their lives into "travelling" (on arterial roads) and "living" (on "local access" roads). Ever since the roading hierarchy concept was first formulated, people have resisted it. This isn't just greenies threatening to lie down in front of bulldozers; it's the full range of society, including the business community.

The Buchanan prescription for a shopping centre was to provide a bypass for "through traffic", and to pedestrianise the main street – local activity, predominantly on foot – with perhaps some service lanes for deliveries. The business community tends to resist this out of fear of missing out on "passing trade" from cars.

The British city of Milton Keynes – one of the last and boldest of the "New Towns", largely built in the 1970s – was planned on the basis of a grid-based

lattice of arterial roads, about 1 km apart from each other, and delineated distinct neighbourhoods, each of which was based around an easy-to-walk-to centre with shops, school, community centre, etc, well away from the arterial roads. The idea was that you met most of your daily needs in your local largely traffic-free environment, and drove elsewhere on the arterials for wider needs.

The planners attempt to enforce this orthodoxy was like King Canute with the waves. People wanted to drive to a wide choice of facilities, and businesses again wanted to locate to catch the “passing trade”.

Other examples could be given. The Radburn-style housing layout, originating in 1920s USA and used as the basis for many post Second World War New Towns elsewhere in the world, had houses accessing a path network at the front and a garage court and road network at the back. Residents resisted the segregation of their lives, and used the “back door” road access for both walking and driving, relegating the “front door” paths to little-used back-alleys.

My own 1920s railway house was built on a “corridors and rooms” principle. This meant that you needed to move from the dining room to the living room via a corridor. Before I bought it someone had knocked the two rooms, along with the corridor, into a single space. This is not as silly an example as it seems – exactly the same happens with urban roading hierarchies. People use a roading hierarchy how it works best for them, not how the planners’ theories say it “should” work.

Just like in Milton Keynes, Auckland’s motorways are clogged up with local trips. Motorway traffic speeds have been found to be 10 kph faster during school holidays (2). When, as seems to be the case, a significant amount of motorway traffic is the “school run”, then we can see that the arterial network is being considerably abused compared to how the theories predicted it should work. “Completing the motorway network” is not going to be the big white hope for Auckland’s traffic woes; it will instead be “stuffed up” with very local trips, as it is now.

The Household Travel Survey statistics on trip lengths come as a surprise to many people:

- 1/3 of vehicle trips are less than 2km long
- 2/3 of vehicle trips are less than 6km long

The vast bulk of these are car trips. They include cycling and public transport, but not walking – so if we were to add in the one-sixth of all trips which are by foot, those proportions would rise further.

In short, we aren’t driving just for those longer trips for which we need a car – we are driving for **everything**. We’ve all heard the classic anecdote about popping to the local dairy by car, and no doubt many of us have done it. This is a highly expensive and wasteful way of conducting our lives, a big drain on our cities’ prosperity, and hindrance to our safety and well-being.

Better for Everyone

The good news in all this is that we can help the situation greatly by supporting those forms of transport which cope best with short trips – and among those walking and cycling are pre-eminent.

Let's get out of this way of thinking that if we tip the balance towards the alternative modes, then we are working against the best interests of the motorist.

As a motorist I don't want **more** roads – I want **free-er flowing** roads. If more journeys were made by foot, bicycle, public transport, teleworking, or even by customising car use like ridesharing, then the roads would become free-er, and when I really need to drive somewhere, I would be able to free of gridlock.

Not a bad scenario for the motorist, I would suggest.

This is neither “forcing people out of cars”, nor is it robbing the motorist of petrol tax revenue which “rightly” belongs to them. I'll answer each of these.

### Freedom of Transport Choice

Freedom of transport choice means freedom to walk, cycle, use public transport, as much as it means freedom to drive. Whereas drivers experience congestion, which is annoying and costs the economy, pedestrians and cyclists may be debarred by a safety threat to their very lives – a far more significant threat to freedom, I would suggest. Many parents will not let their children walk or cycle to school, and will drive them instead because of the threat posed by the traffic. Given a free choice, many parents and children would no doubt prefer the exercise and sociability of a walk or bike ride. Rather than being “forced out of cars”, people are being forced into cars by the dangers caused by cars themselves.

In short, be very careful when stressing “freedom of transport choice”. That stance has a very nasty fish-hook which ends up turning you into supporters of more investment for alternative transport modes.

### The “Robbed Motorist”

As for the “robbed motorist” scenario, ask yourself why petrol taxes (and other motor vehicle related taxes) were raised in the first place. It was to repair damage caused when the first cars were introduced. These needed stronger road surfaces than other transport, so it isn't surprising that it was from cars that the taxes were levied.

To the AA and others I'd say, be very careful when you talk about money being “siphoned off into the consolidated fund”. Much of the damage caused by motorised traffic – such as noise, fumes, crashes, severance of accessibility by foot, dangers posed to cyclists, pedestrians and other drivers, health implications of couch potato (or should I say “car potato”?) lifestyles,

damage to public transport viability, and more – aren't computed in the calculations on which that contention is based.

From the other side we hear complaints that motorists do not pay the "true costs" they "impose" on others. Does this mean that maybe not enough motorised taxes are going into the consolidated fund?! No doubt it could be argued either way, and the answer may lie somewhere in the middle – but certainly the question is more complex than a moralistic "robbed motorist" stance would suggest.

### "Siphoned Off Into Walkways and Cycleways"

Be even more careful, AA or whoever, when you talk of "your" taxes being "siphoned off into walkways and cycleways" as if this is a frivolous waste of money urgently needed for "real" transport. Firstly the amount – about \$3 million a year in Transfund's Walking and Cycling Fund – is hardly a "siphoning". It is miniscule compared to the over \$1 billion spent on roading, and even \$100,000 or so on public transport, and don't forget those relative modal usage levels I referred to earlier.

Secondly, ask yourself why those cycle lanes, advanced stop boxes and underpasses are required in the first place. The answer is almost always to make up, in a very small measure, for the accessibility walkers and cyclists have lost because of motor traffic volumes.

In short, be very careful in using the "user pays" model regarding who should pay for walking and cycling investment. Again, there is a very nasty fish-hook, which in this case ends up sheeting the cost back at the motorist.

### Commercial Model Misleading – The Mogridge Hypothesis

The good news in all this is that we can work together. Commercial market models are misleading in relation to transport. In a commercial market, if one person receives a good – through purchase, or otherwise – they use it for their benefit and it isn't used for others' benefit. In transport, investment supporting particular forms of transport has widespread impact, for good or bad, on others.

We've all heard about adverse impacts of cars on other people, whether other types of road users or simply residents, businesses or citizens, but it can work the other way as well.

I don't know how many have heard of the so-called "Mogridge hypothesis", named after an academic in the 1970s. This suggests that the best way to increase road traffic speeds is to improve the rail system.

Weird? It's certainly the opposite of the idea that "completing the motorway network" will speed the traffic. But this is how the hypothesis runs.

A commuter drives 30 minutes to work, and could catch the train, except that the train also takes 30 minutes (including waiting time), so there's no point. He continues to drive.

However, improve the rail service so it only takes 20 minutes, and he's quite likely to shift to train commuting. As will many other road commuters – that is, until the roads become so much freer that it also takes 20 minutes to drive. Then the shift will stop.

Road traffic speeds tend to gravitate to whatever the rail speed is. This also applies to continuously dedicated bus lanes on the road.

It's a simple logic, and of course there are many other factors attracting and deterring people in their transport choices.

Incidentally, I do have some agreement with Steve Selwood of the AA. He suggests that bus has more potential in Auckland than rail has, because its coverage is more comprehensive. Whereas I don't see bus and rail as "either-or" – better to integrate the two, for example feeder bus services with timetables co-ordinated with those of rail, and integrated with walking and cycling through attractive walking environments, ability to carry bikes on trains and buses, secure cycle parking and the like. However, Steve makes a valid point; we are too often allured by the "sexy" image of light rail compared to bus. This is a variant of the "just too humble" problem I opened with in relation to walking and cycling.

I now want to use the example of my own transport choices.

If coming to central Auckland on business – and that included this conference – I don't bring my car. I get the train – yes, there actually is one. It leaves Hamilton at 6.30am, gets to Britomart at 8.30am (if on time, which it isn't always), it costs \$19 (less than petrol, let alone other car running costs), and I get 2 hours (more, including the wait) in which to catch up with a stack of business reading or work on a laptop. I may seem unusual, a suit among backpackers, but to me it sure beats battling the Southern Motorway traffic. Not to mention the hassle and expense of finding a park. To return, I usually get a coach from Sky City or Quay Street; every hour or so until 7.50pm, and the train is 8.40pm.

This makes logical sense – I plan my slightly-longer day around the timetables, and there are big overall time-saving, money-saving and comfort advantages. I do it for self-interest – not for "environmental correctness". Why don't more do it? I reckon it isn't thought of, or well-known that these services even exist. It does, though, suggest to me that "travel demand management" – marketing on the subject of transport choices – must surely have a very much under-rated potential compared to the traditional approach of simply providing ever more infrastructure.

Mogridge's hypothesis illustrates two very simple truths which seems to hold true:

- firstly, people exercise transport choices according to the effort and investment put into different transport modes. If you invest mainly in roading, people will mainly drive. If you put investment into public transport, more will use it, and that is shown clearly in Government actions and their results over the last few years.
- secondly, the best way to help drivers isn't necessarily roading. Putting investment into the alternatives may not only help those modes themselves, but help motorists as well.

### The "Green Plot" of "Integrated Transport Planning"

The AA has not got here yet. I read this from AA CEO Brian Gibbons, in the *AA Directions* Magazine which I receive as a member (3):

*"Members will be aware . . . that the AA made strong representation in the lead-up to the introduction of [the Land Transport Management Act 2003]. Our concern centred on the Act and the New Zealand Transport Strategy that underpins it, which have clearly been influenced by the Green vote and its ideology of an integrated transport strategy."*

I think I've already answered the sentence which immediately follows – *"This will result in less of motorists' excise taxes going into roading and more being spent on other transport options"* – the same flawed message repeated ad nauseam – but what about the rest?

Well, lucky old Green Party, I say. The Act also reflects strong advocating from the United Future party for alternative transport funding sources – even to the point of this being one of their conditions of support for the Government. This bit of the Act was vehemently opposed by the Greens, yet the Greens cop the flak for the whole lot. Jeanette Fitzsimons is probably laughing all the way to next year's polling booths over this credit and free publicity given them by the AA.

That both the Greens and United Future have had a strong influence on the Act is no more and no less than democracy, MMP-style. The AA should be commending this, even if they disagree with the outcome.

But what really gets me – and again perhaps Fitzsimons will be rubbing her hands with glee – is that "integrated transport planning" is not a particularly "Green ideology". The NZ AA is out of touch. It is nothing new and is reflected by Governments of all political shades of opinion throughout the developed world.

I have already given you the Colin Buchanan quote from the back of my business card. His philosophy is strongly underpinned by integration, in this case between transport and land use.

Some of you may have heard of, or know, Malcolm Douglass, now elderly and a doyen of several professional bodies. He was actually practicing as a planner when Buchanan paid his 1960s visits to New Zealand. Douglass chairs an Integrated Transport Planning Sub-Group of the IPENZ Transportation Group, of which I am a Waikato representative on the



Committee. Douglass urges a return to the integration stressed by Buchanan – and Douglass does not strike me as necessarily a Green supporter.

Even more starkly, I helped organise a cycling conference on the North Shore late last year, and our keynote speaker was Steven Norris, former British Conservative Government minister, businessman, and some-time consultant to the UK road freight industry. As true-blue a Tory as you'll ever get – and mad-keen on cycling, by his own admission. No, all this integrated transport planning lark is not some dastardly Green plot.

### Will People Really Shift to Walking and Cycling? “Anecdotal Evidence” and Serious Studies

With that preponderance of short trips I referred to earlier, it would appear that most of our journeys are short enough for us to walk or cycle. So why don't we?

The very question posed by another AA advocate, Peter King in a magazine he edits called . . . *AA Advocate* (4).

I like listening to the counter-arguments on things like cycling, because all too often there's woolly wishful thinking without a lot of intellectual grunt. Ever since the 1970s I've heard people say that a breakthrough of increased cycling is just around the corner – yet we are still waiting. I don't blame Peter King for being sceptical, and I think it's a healthy approach.

But just as cycling advocates must not have rose-tinted spectacles, neither should anyone else have blurred ones. Peter King cites that well-known researcher “Anne Ekdotal evidence” for having it that “*walking is less popular in Auckland due to the fact that it frequently rains*”, also referring to “*the implication of loads*” and traffic dangers as deterrents to cycling.

There's a lot of good sense in his article, notably that we need serious research into factors which determine people's transport choices, and not assume that if we shovel money into cycling facilities, the cyclists will magically appear. It's a pity he doesn't tap into the good research which already exists, instead of using “anecdotal evidence”.

He also suggests that cyclists and walkers are more likely to have shifted from public transport than from car use. I found his reasoning hard to detect here, but it seems to concern inner/ middle Wellington having above-average levels of both walking and public transport use (not sure how that means one would shift to the other).

I would suggest a couple of common sense reasons why any increase in cycling is more likely to be from car: firstly, there is simply a lot more car use than public transport use; and secondly, cycling as a private transport mode has the same personal flexibility as the car, enabling it to serve the increased complexity in journey patterns, for which public transport is hindered by routes and timetables. These aspects seem to have eluded Mr King.

There have actually been serious technical studies into what influences people to walk or cycle, or not to do so (5). Weather has been found to have very little effect. Weather patterns do not correlate with usage of these modes, when compared between different countries or over time – in short, it rains just as much where there's lots of cycling as where there's little.

Hilliness does have some influence, though not a crucial determining one. Whereas of course flat Holland has high cycling levels, so has mountainous Switzerland. There's hope yet for mountainous New Zealand!

Luggage and passengers are other commonly-cited deterrents. Firstly, consider what proportion of car trips carry passengers or significant luggage; the answer of course is that the bulk carry neither. It is more difficult to carry significant luggage on an urban bus than on a bike (ever heard of panniers?), yet curiously this deterrent is never cited in relation to bus use. And, again, the luggage needs are just the same in high cycling countries as low cycling ones.

There are examples of cities which have seen an increase in cycling levels. This has usually taken place as a result of measures which have significantly reduced traffic volumes and speeds. Later I'll consider whether or not it is advantageous for us to do this.

### Footpath Cycling Not The Answer – And Dangerous

A few years ago (6) Peter King suggested that the roads were so dangerous that child cyclists should stick to the footpaths. Apart from safety issues for pedestrians, ask yourself how safe this really is for cyclists next time you back your car out of your driveway. Crash data supports an obvious conclusion that it's highly dangerous.

Road traffic is the issue which needs tackling, and shoving cyclists out of the way of the cars into another dangerous situation will not help. The crucial safety advantage of road cycling is that you are more centrally in a motorists' field of vision, and if you are seen you are more likely to stay safe.

Apart from the driveways problem, cyclists get a far lower level of service on footpaths, through having to give way to all side roads, and there's also extreme danger at intersections.

As a motorist at an intersection, ask yourself where footpath cyclists will be crossing the road you are about to enter. The answer is in the **opposite** direction from where your attention will be on the traffic.

I dread to think how many cyclists would get killed or injured at intersections, not to mention driveways, if Peter King's silly footpath cycling idea ever gained credence.

### Traffic Danger and Sharing the Road

Peter King does however raise a valid point about the safety of cyclists in traffic. Ironically, it was an AA study – “*Cycling Motorists*” by the UK AA in 1993 (7) – which found from a members’ survey that motorist behaviour was one of the biggest factors deterring AA members from cycling. Equally ironically, that study was motivated by the UK AA recognising that the more of their members cycled, the more benefit in terms of free-er flowing roads for those who continued driving – exactly the point I’ve made above. I wish the NZ AA would be as positive and realistic as their British counterpart.

So I would agree with Peter King that motor traffic danger is a biggie in deterring cycling – but of course the answer lies with the AA’s own members.

So to go back to my earlier style – be very careful, AA, in saying that people won’t (or shouldn’t) cycle (or cycle on the road) because the traffic is too dangerous – the nasty fish-hook this time puts the onus for sorting that one out back on you.

To be more serious, there is a lot that can be done in this area, and it’s not all the fault of the motorist. Motorists and cyclists both need to cultivate good behaviour towards each other, and we also need to consider how much stress we lay on behaviour and how much on engineering.

I have had some very positive discussions in the past with George Fairbairn, the AA’s Director of Public Policy. He has rightly said “*there is only one road, and we must all share it*”. George is very positive about the need for motorists to respect cyclists’ rights on the road, even though we are far apart on whether road-related taxation belongs to the motorist or not.

I think part of George’s thinking is that the call for “cycling facilities” could gobble up a lot of what he sees as “motorists’ funds”. Leaving the latter argument aside, there are two sides to the question of whether cyclists’ needs are always best served by providing “cycling facilities”.

#### “Vehicular Cycling” – “Cycling Facilities” Not Everything

This may come as a surprise for some: often helping cyclists and providing cycling facilities are seen as one and the same thing. They aren’t, and in some cases I would suggest that cycling facilities either aren’t needed, or are actually counter-productive or downright dangerous. At least I have some good news for the AA over their concern at use to which transport money may be put (although not much, I’m afraid – a very big increase in funding cycling facilities is still needed).

There is a school of thought called “vehicular cycling” whose main proponent is John Forrester of the USA (8). The same message is spread by John Franklin of the UK, whose book *Cyclecraft* (9) is a classic on adult cycling skills.

The “vehicular cycling” thinking is based on the idea that the best way a cyclist can protect their safety is by behaving like a car. There’s a lot to be said for this. For a start, it stresses that you have the same responsibility to

behave safely – for your own safety and that of others – as any motorist has. Similar skills apply – the only difference is that you are “driving” a smaller and slower vehicle. Be clear as to your intentions, signal them clearly well in advance, and then execute them decisively. The last thing motorists want is a ditherer on the side of the road who darts across unpredictably and without signalling.

Many people are doing a lot of valuable work in cyclist education, but most of this is targeted at children and most of it is off the road. Contrast this with how you learn to drive a car – after a little bit of theory, the vast bulk of instruction is on the road – because most of the skills required can only be learnt through personal coaching in interaction with other traffic. It’s the same with cycling – we need to coach cyclists to build up skills in handling traffic situations.

We also need to target some of this at adults. If we only teach children to cycle, we convey a clear message that cycling is childish, and that you grow out of it as soon as you are allowed to drive (ask 16-year-olds!). The well-meant introduction of driving instruction in high schools, when we only have intermittent and incomplete cyclist education, re-inforces this (contrast this with comprehensive swimming education, and how often a child cycles compared to swims). Also, there will no doubt be many adults who would quite like to cycle, but they are daunted by the traffic and there is no one available to ease them into it with some one-to-one coaching.

By following “vehicular cycling” principles, the average-ability cyclist can safely negotiate most road situations. Sometimes you will need to occupy the centre of the traffic lane width – for example, when turning right, or when proceeding straight ahead from a straight-ahead/ left-turn lane. Motorists behind may not be able to drive quite as fast as they’d like, but being visible in the centre of a traffic lane is the very best thing for cyclist safety and accessibility. And please note – no hard-earned petrol tax money in this case been spent on cycling facilities – it’s a behaviour thing.

### Road User Education – A Joint Effort Needed

The AA could do with educating their members that not only may cyclists sometimes occupy a full traffic lane, but that this is actually where they **should** be in certain situations. Of course, cyclists also need to respect the law on delaying following traffic, and as soon as clear of the intersection, pull into the left to let the following cars pass – provided the traffic lane width is adequate for this, and that’s another question. Perhaps the cycling and motoring organisations could get together and promote a joint message on safely sharing the road together. Again, this has been done by the British AA with the cycling organisations there.

It may also help prevent situations like last month’s shocking Hawkes Bay report (10) of a cyclist who was rammed off the road and injured by a motorist who said the cyclist had “*got what he deserved*”. The cyclist was a 39-year-old award-winning triathlete and Senior Fire Service Officer – not the stereotypical young no-lights-dark-clothing-no-helmet “feral cyclist”. The

drivers were elderly in a late-model luxury car – not the stereotypical young “hoon petrolhead”. Whilst the AA can’t be blamed for rogue motorist behaviour like this, a strong positive message from the AA about cyclists’ rights on the road may help discourage this sort of behaviour. I certainly hope the AA agree with me that this is a serious problem which needs addressing. I commend the Bus and Coach Association for responding very positive on this type of issue regarding a few coach drivers.

In some cases, however, even experienced cyclists will not be able to safely mix with motorised traffic. This tends to be where traffic volumes and speeds are high. Motorways and large roundabouts are classic examples. This is where it is most important for cycling facilities to be provided. On the question of whether motorists’ funds are being diverted, as I said earlier, the need for the facilities derives from the motor traffic and how it is provided for, so there isn’t an issue; but also, whereas a motorist may suffer a reduced “level of service” from congestion, a cyclist – and walker – will suffer a total inability to pass through safely, and so the expenditure is a basic requirement, to protect the right to “pass and repass” which we all have under common law.

I have referred largely to cyclists in the last few paragraphs, because sadly, as I’ve said, cycling has had far more attention than walking, even though walking is arguably far more important.

#### Walking – Traffic Calming, Arterial Road Remodelling

Many of the issues I have referred to apply equally to walkers as to cyclists. And again, it may not always be the case that walkers are best helped by “facilities” dedicated to their own use. As with cycling, the ability to walk about freely – Buchanan’s litmus test of civilisation – is greatly influenced by traffic volumes and speeds. Whereas most roads have footpaths alongside them, the ability to cross the roads is often the big deterrent to the “walkability” of an area. This brings an issue of trade-off with “traffic efficiency”, which I would suggest shouldn’t necessarily be the over-riding concern.

In residential areas, away from the arterial roads, traffic calming may be able to resolve the issue. Traffic calming is a specialist science in its own right, but essentially rather than close roads and divert traffic, the road is redesigned around walkers. Care must be taken that particular user groups don’t lose out – for example, bus passengers from over-steep speed humps, or cyclists from pinch points which force them suddenly into the path of cars – and costs can be high when multiplied across a city. However, compared to what is spent on cars and the relative mode usage figures I referred to earlier, it may not seem so high after all.

Arterial roads may need redesign in a different fashion. Without any direct property access or parking, high traffic speeds may be able to be engineered for – the classic unimpeded through traffic road as per Buchanan. However, in other situations, such as shopping centres, the design of the road may be able to achieve a steadier and slower overall speed – with very large safety gains – and even a higher traffic throughput. The psychological effect of lines

of trees may keep speeds down while also contributing positively to the streetscape. Some increased space may be claimed for pedestrians, from roadway space which previously was inefficiently used, and extra crossings may be able to be provided. Slower, steadier speeds, given the right overall design, may actually ease rather than create congestion.

### Walking – Source of CBD Prosperity

It is in city centres, however, that motor traffic and pedestrians compete most intensely for the same space. Rarely in such spaces are cycling facilities appropriate – there simply isn't room for them, and the complexity of movement patterns of the different road users are such that sharing the roadway with motorists – vehicular cycling again – is often the safest option; Since traffic speeds are (or, at least, should be) low, this can work well without detriment to either group.

Pedestrians, however, can lose out heavily when their numbers are high. In the cores of CBDs – and Auckland's Queen Street is a classic – pedestrians often experience more congestion than do motorists. Transport engineers are used to predicting car congestion and providing to relieve it – but aren't used to measuring and providing for pedestrian congestion in the same way. Consequently, CBDs tend to be designed around motorised traffic flows and networks, and pedestrian movements have to fit around those.

Ask any valuer what the important factors are in valuing a CBD retail property, and they will mention "footfall" – the number of pedestrians walking past the shop. Cities by their nature are places where prosperity is based on large volumes of people coming together – to "trade" in the broadest sense – concentrated within a small area. And people concentrate and interact far more efficiently and effectively on foot than from within cars; also, this is far more conducive to the face-to-face human contact which is the essence of urban life.

Cities across the world have agonised over whether to turn CBD roadway space over to pedestrians or not. On the one hand, the motorised traffic hinders the ability to get about by foot, and on the other hand – as I mentioned earlier – traders fear their trade will suffer from the loss of motorised passing trade. Traffic engineers fear car congestion transferred to elsewhere in the roading network. The arguments typically go to and fro over many years.

However, when a city does turn key areas over to walkers, the result is usually a spectacular lift to the city's prosperity and quality of its street life. There may be a period of re-adjustment, sometimes a year or two, but soon people wonder why they hadn't done this earlier. Of course, it is important to get the details right – no blanket magic solutions ever exist anywhere – but at the end of the day, people like "trading" – interacting – where it is essentially pleasant to do so. Cities don't work on the small-town model of parking outside the shop you're visiting – the sheer numbers are too big for that – and so parking buildings may be needed a short walk away from the central core. If decent public transport is available, you may even save on that.

## Conclusion

Helping alternative modes in congested cities actually helps the motorist as well – and helps them more than does completing the region's motorway network. I say that as an AA member who gets public transport into and out of central Auckland because of the advantages it delivers to me.

If we are going to focus on the alternative modes, walking and cycling are far more important than they are usually given credit for. Walking at 18% of all trips and cycling at nearly as much as public transport, are very significant players. And contrary to some contentions, people will switch to these modes if the proper provision is made for them – there are serious studies on this. People tend to use the transport modes for which we provide, and that is why our motorways are clogged by “school run” and other very local trips for which they were never intended.

Providing for cycling isn't a case of shoe-horning in cycling facilities every chance we get. A lot depends on behaviour, and the AA could very usefully join with cycling organisations in promoting safe sharing of the road space, including respect for cyclists' right to be there – alongside a significant increase in educating cyclists in interaction with motor traffic.

Walking has always been the mainstay of urban civilisation and of the economic prosperity of cities. If we turn key CBD localities over to pedestrians, then there are very big gains in prosperity and quality of life – because it is the high numbers pedestrians in such places which are the source of the “trade” – in the broadest sense, on which the city's prosperity depends.

- (1) *Traffic in Towns*, UK Government 1963, and popular edition in Penguin Books 1964.
- (2) Auckland Regional Council calculations based on Transit NZ count data.
- (3) *AA Directions* magazine, Autumn 2004.
- (4) *AA Advocate* magazine, Issue 7 Summer 2004, available on AA website [www.nzaa.co.nz](http://www.nzaa.co.nz).
- (5) For example, Mynors P and Savell A, *Comparisons of cycling provision in four northern European countries*, Transportation Planning Systems, July/ September 1994; or McClintock H *The Bicycle and City Traffic*, Belhaven Press. These are statistical comparisons on behaviour; there is also a literature of research into attitudes, including by Governmental and academic agencies, and the UK *AA Cycling Motorists* referred to below.
- (6) In an *AA Directions* article *Go Play in the Traffic*.
- (7) UK Automobile Association Public Policy Unit *Cycling Motorists: How to Encourage Them*, 1993, main authors Steve Lawson and Anne Snelson.
- (8) Forester J, *Effective Cycling*, MIT Press, Cambridge, Mass, USA, 1993
- (9) Franklin J, *Cyclecraft: Skilled Cycling Techniques for Adults*, Unwin Paperbacks, 1988.

(10)NZ Herald 21/4/04 *Cyclist "Got What He Deserved"*, cited in eCAN, email news digest of the NZ Cycling Advocates Network (CAN), available on CAN website [www.can.org.nz](http://www.can.org.nz).