

One Billion Cars on the Roads

"Driven by demand from countries like China, India and Brazil, the global market for automobiles is accelerating faster than ever. According to an analysis from the auto trade journal Ward's, there are now over one billion cars, light-, medium- and heavy-duty trucks on roads around the world, up from 980 million at the end of 2009. In just half a year, the global auto fleet expanded by around 35 million vehicles. That's the second-biggest increase ever. The U.S. is still has the biggest population of cars and trucks – one for every 1.3 people in the country. But the American fleet is not growing much, only about 1% a year. The explosion in automobile deployments is coming from China, where registrations grew by 27.5%, bringing the country's vehicle population to 78 million. That increase was more than half of the total global expansion, according to Ward's. 'The leap in registrations gave China the world's second-largest vehicle population, pushing it ahead of Japan, with 73.9 million units, for the first time. India's vehicle population underwent the second-largest growth rate, up 8.9% to 20.8 million units, compared with 19.1 million in 2009. Brazil experienced the second largest volume increase after China, with 2.5 million additional vehicle registrations in 2010'.

"China put 16.8 million vehicles on the road in 2010. Industry analysts were forecasting another 15% jump in sales in 2011, but the market slumped after the government stopped providing subsidies for car buyers in order to temper the market. Even so, China's vehicle population could surpass America's in just a few years. According to the International Transport Forum, the global vehicle fleet could reach 2.5 billion by 2050. No doubt that those cars and trucks will be much more efficient than today's vehicles, especially with China and America setting tighter fuel standards. And many of them will be electric-drive vehicles. But another doubling of the global market – even with an increase in efficiency – means massive increases in greenhouse gas emissions. Auto industry executives everywhere are giddy with joy; meanwhile, those concerned about climate change wonder if we have the wisdom to take our foot off the fossil-fuel accelerator."

Ref: Stephen Lacy, Think Progress, 22/8/11



**The Ugly Equation:
MORE CARS = MORE ROADS**

"After a decade of nurturing China's car industry to become the largest in the world, the country's leaders are having second thoughts. Government officials at a weekend conference called for China's car makers to shift their focus from making ever more cars and towards producing more fuel-efficient and advanced models, including petrol-electric hybrids and all-electric cars. ... Years of double-digit expansion have increased Chinese production to almost 17 million cars, minivans, pick-up trucks and sport utility vehicles last year, from fewer than 2 million in 2000, making it almost twice the size of the US or Japanese industries and far larger than any European country's car-making sector."

Ref: New York Times, SMH, 6/9/11

"The latest VFACTS sales figures show that Australians are on track to buy one million new cars in this calendar year after a big jump in sales in August. Federal Chamber of Automotive Industries (FCAI) acting chief executive Steve Payne said improving supply from Japan and stronger sales in Queensland helped vehicle sales rise 7.3 per cent to 88,082 in August. ... The bulk of the August improvement came in the sport utility vehicle (SUV) category, which rose 19.4 per cent over the month."

Ref: David Twomey, Eco News, 6/9/11

Australian Cycling Data

- *"The [National Cycling Participation] Survey is a key benchmarking tool for the National Cycling Strategy 2011-2016, under which all State and Territory Ministers of Transport and the Federal Minister have committed to doubling the number of people cycling within 5 years.*
- *The bicycle industry is represented on the Australian Bicycle Council, which conducted the Survey.*
- *9,661 households and 24,858 individuals in both urban and regional areas in all states and territories responded via a phone survey in March and April.*
- *18% of Australians ride in a typical week (10% of adults), 40% have done so in the previous year.*
- *63% of children aged 5-9 ride in a week.*
- *22% of males and 14% of females ride in a typical week.*

- 4 million Australians ride in a typical week and 8,899,000 ride in a typical year.
- 1,243,000 Australians ride for transport in a typical week."

Ref: Cycling Promotion Fund, Media Release, 31/8/11

Car Emissions Discussion Paper

"The [Australian] Labor Government has released a discussion paper outlining the issues involved in the setting of mandatory standards to reduce carbon dioxide emissions from passenger vehicles from 2015. Car manufacturers, designers, importers and exporters play a critical role in helping the community cut carbon emissions in Australia. The Government has been working with industry on setting a fair target to reduce the impact of car emissions on global warming. The paper sets out how reductions in carbon dioxide emissions from vehicles could be achieved and we invite industry, environment groups and the wider community to comment.

"Cars and other light vehicles contribute around 55 million tonnes of carbon emissions to our atmosphere each year, so the light vehicle sector is an important area for action if we are to achieve our national five per cent target for carbon reduction by 2025. Mandatory vehicle emissions standards are internationally recognised as one of the most cost effective ways for industry and consumers to reduce transport emissions. The potential emission reduction targets explored in the discussion paper, if implemented, would reduce our carbon dioxide emissions by millions of tonnes every year. Lower emissions in cars would also give Australians better mileage from their vehicles which means households could reduce their carbon footprint while reducing their fuel costs. The Government is committed to working closely with industry to develop standards that will contribute to the important task of cutting CO2 emissions and creating a greener future for Australians. Comments can be submitted for the next three months – for more information go to: www.infrastructure.gov.au"

Ref: Federal Govt Media Release, SMH, 6/9/11

"All new cars bought in Australia after 2015 will be subject to new pollution standards to reduce carbon emissions by one million tonnes a year. The federal government has conceded the standards will add to the cost of new cars but said households would save as it would mean the vehicles would be more fuel efficient. . . . Australia is one of the last industrialised nations to adopt mandatory vehicle standards for carbon dioxide, with the US, China and Europe having already implemented them. 'The potential emission reduction targets, if implemented, would reduce our carbon dioxide emissions by millions of tonnes every year', said [Federal Transport Minister Anthony] Albanese."

Ref: Simon Benson, Daily Telegraph, 7/9/11

Car Emissions Standards in NZ

"The used car industry is saying that the next increase in emissions standards, which will be introduced in January, 2012, will severely damage their businesses. But a Ministry of Transport report has found little evidence this is so. They say that in some cases the new standards may encourage New Zealanders to buy smaller cars. While some New Zealanders genuinely need big cars a lot of urban dwellers don't. It's worth remembering, also, why we need emissions standards. The latest report on air pollution to Auckland Council showed that roughly 730 Aucklanders die prematurely of air pollution every year. Transport is responsible for 37% of that air pollution or about 270 deaths a year. Air pollution also has other costs, such as exacerbating many pre-existing conditions like asthma. It causes people to take many more sick days off work than they would otherwise need to. The overall cost to the health sector of air pollution, just in Auckland, is estimated to be NZ\$730 million/year. Such startling statistics show that the Minister is right not to delay the introduction of higher emissions standards for used car imports. The cost to our health of dirty air is too great. However, it's worth noting that the council report also states that improving vehicle emissions is not enough. Ultimately, to improve air quality in our cities, we need to see a decrease in vehicle kilometres travelled per person on our roads. I think one of the best ways to lower air pollution from transport is to have more compact urban growth in our cities and to invest in giving Kiwis more choice to make trips by train, bus, bike or on foot."

Ref: Gareth Hughes, Frogblog, 6/9/11

Headlines from Last Week

Same story, different headlines:

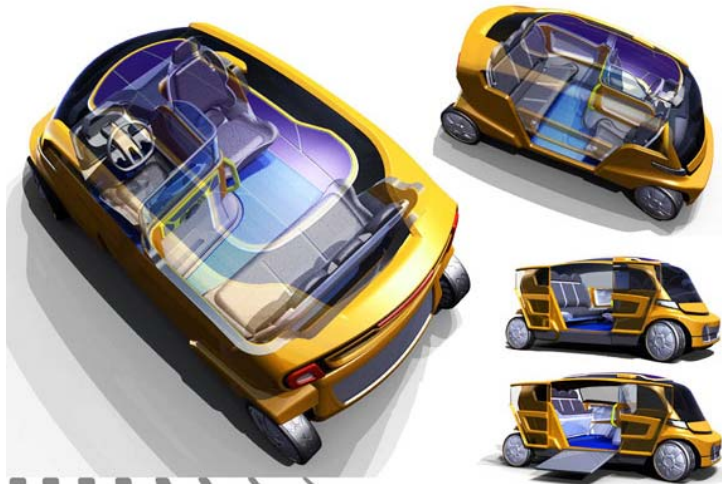
- **'End of the road for dirty clunkers'**
 - The Advertiser
- **'Fuel efficiency could save motorists \$600'**
 - The Age, SMH, Brisbane Times, SBS, Sky News
- **'Carbon emissions driving up new car cost'**
 - The Daily Telegraph

Melbourne Strategy Submission (Pt 4)

Here are some excerpts from my comments on the 2011 Melbourne Transport Strategy:

"Taxis are the 'problem child' of the transport system – more of an extension of public transport than part of it. They provide a service that can reduce car use but sometimes they just substitute for car use. For example using a taxi to go to the airport while leaving your own car at home (or for others to use) might save on airport parking fees but it doesn't remove a vehicle from the road. Obviously taxis are an important and integral part of the transport system particularly for those that don't have cars (through choice or by circumstance); where public transport is inadequate; or where inclement weather makes walking or cycling impractical or unpleasant (and in the case of mechanical failure of bikes or other wheeled vehicles)."

"It's arguable that taxis add to congestion, pollution and road trauma. Empirical evidence suggests that vacant taxis spend a lot of time cruising around and in doing so add to congestion and by definition pollution and greenhouse gasses – even those running on LPG. Stand near the intersection between Federation Square and Flinders Street Station – and other key points – and you will often observe that as many vacant taxis are entering the city centre as vacant ones leaving. In other words they are cruising, but it would make much more sense to marshal the taxis somewhere (like further along St Kilda road or vacant parking stations) and only allow them into the city by permit as either they have a confirmed booking or space becomes available at a dedicated taxi rank. In an age of computers this should not be difficult or expensive to organise."



New York Taxi UniCab Photos: The Age 2/6/10

"The point was made under the parking chapter [in #215] that potentially taxis, as well as being on ranks at public streets, could also be in allocated spots in parking stations and even as part of residential, commercial and community building parking programs. On most private premises this would likely be just one spot located near the driveway entrance (forecourt) to a building. This would provide obvious advantages (insurance and legal issues aside) to residents/tenants of those buildings in terms of convenience of access to this mode of transport and an extra 'set of eyes' providing passive surveillance and security. Building designers, owners and/or body corporate would to decide how many spaces to allocate and whether that should be for level 1 or level 2 taxis (see #217)."

"One of the key problems is that in many ways our taxis are the wrong type of vehicle. It is better that they run from LPG but essentially – with the exception here for the (mostly) excellent maxicabs – most are just converted family sedans. The problem with Australian family cars is that they were designed for two parents and three smallish children, making it difficult for taller people to use the back seat of a taxi." {Continued in #217}

Stephen Ingrouille. 30/6/11

And Also ...

"Queensland Rail opened a can of worms this week when it asked Twitter users who they would give up their train seats for. What started as an innocuous tweet quickly gained a big response, and prompted the company to post an online poll. Some respondents said they would give up their seat for anyone but others argued students should not have to give up their seat for passengers who paid full fare, or those who 'choose to get pregnant'."

Ref: Bridie Jabor, Bris Times, 9/9/11

Feedback

"Recently I asked Yarra [City Council] about St Georges Road (SGR) in Nth Fitzroy, as it's a major cycling route but suffers in my opinion from short clearway times, outside of which, cars are parked on the bike lanes. The clearways issue is a tricky one, the local councils seem to oppose them on the grounds of increased traffic through their area (bad I agree, but if generated outside their council and destined for the CBD will have to pass through their area regardless of local restrictions), but their arguments for shorter clearway hours seem to revolve on the idea that a few cars parked on the inside lane is good for business. A well-known wedge-shaped local pub had a petition against extended hours! As a cyclist, I feel much safer during clearway times, as outside them we're forced into the gap between trams and parked cars. The SGR bike lane is popular due to the well-designed, segregated path up in Northcote. For Yarra to be in favour of this parking but also supportive of new bike paths seems strange?"

Ref: Russell Adams, 8/9/11

Making Fuel from Thin Air (Part 3)

Replicating Photosynthesis

"Researchers working outside the biological realm do not face the same constraints as a fuel-making microbiologist, or even a leaf. So the US Department of Energy has hedged its ARPA-e bet by also investing in the Joint Center for Artificial Photosynthesis (JCAP) at the California Institute of Technology. The goal there is to build a system that works as well as photosynthesis in plants to produce fuel, whether hydrocarbons or just hydrogen. 'Chemical fuels would be the game-changer if you could directly make them efficiently and cost-effectively from sunlight', says chemist Nathan Lewis, JCAP director.

"Artificial systems can move energy as electrical current rather than the relatively chunky molecules that plants must rely upon in photosynthesis. In fact, an artificial system that uses photovoltaic panels to produce electricity, which is then used to split water into hydrogen and oxygen, can turn roughly 10 to 20% of incoming sunlight into the hydrogen gas that can fuel a hydrogen fuel cell. The most efficient photosynthetic plants, algae, only manage to turn roughly three to six per cent of incoming sunlight into plant food.

"So Lewis and his colleagues will have to build artificial light absorbers, molecule-makers, and even membranes to separate the various products of artificial photosynthesis, just as plants do. All of these components exist but do not necessarily work well together as a system. Within the next five years, JCAP hopes to prove that such a system can be created, and produce some fuel to prove it. Such a system has long been known by another name: the hydrogen economy. That hydrogen can be recombined with oxygen in a fuel cell to produce the electricity to drive an electric car or power a home. The problem with the hydrogen economy has always been the second word – the best hydrogen fuel cells rely on expensive platinum, and splitting water relies on expensive machinery. The most expensive cars on the planet are probably the hydrogen fuel cell test vehicles built by the likes of GM and Honda. But a company called Sun Catalytix is attempting to make at least splitting water cheap, and thereby provide an inexpensive source of the hydrogen for fuel cells or to make hydrocarbons with CO₂.

"Dropping the metal cobalt and the molecule phosphate into water as a catalyst and then running electricity through it – preferably supplied by the sun via a photovoltaic cell – can split water into hydrogen and oxygen. Chemist Dan Nocera of the Massachusetts Institute of Technology, whose team created the new catalyst – an invention somewhat erroneously hailed as an 'artificial leaf' – predicts enough energy to run a house could be derived from one drinking water bottle in less than four hours of sunlight. If hydrogen becomes cheap, then suddenly programs like electrofuels begin to make a lot more fiscal sense. 'If you've got something you can drop in water and it evolves hydrogen, that's pretty damn cool', says Toone, which is why ARPA-e is also funding Sun Catalytix's work. 'We've seen the data and it actually works'."

{Continued in #217}

Ref: David Biello, ABC Environment, 6/6/11

www.abc.net.au/environment/articles/2011/06/06/3232934.htm

UK Man Mounts Traffic War

"You would think the residents of Chideock, a small town in Dorset in the UK, would have been happy. After many, many years of heavy traffic making it difficult to simply cross the road, they received a pedestrian 'pelican' crossing, complete with a crosswalk sensor button that allowed them to bring a halt to the unceasing line of trucks and cars zooming through their hamlet. Not all of Chideock's residents were pleased, however. Instead, a few of them got fighting mad. Led by one man, Tony Fuller, some residents of Chideock staged a protest against the traffic that they saw as destroying their life quality and polluting their air. And they waged their protest using what turned out to be a powerful tool – the crosswalk button. Last year, working in shifts, a number of the town's residents kept the button continually pressed, and at one point had a miles-long traffic jam of trucks and autos stretching back out of town. Eventually, someone who disagreed with their method of protest simply jammed the button with a thick application of superglue. Fuller did not give up. He continued with his pelican protest, as well as meeting with highway officials. Due to his perseverance and considerable media coverage, a local government official, Oliver Letwin, is working on the possibility of implementing a London-style 'congestion charge' on large trucks that have no local business driving through Chideock on the A35 road. ... If Chideock is established as a 'low emissions zone', trucks and other large vehicles would have to meet low emissions standards or pre-pay a daily fee in order to use the road. Compliance would be enforced via cameras reading license numbers. Fuller's actions to ease truck and car traffic in his town spotlights the very real way that our dependence on car culture has negative effects on quality of life."

Ref: A K Streeter, Tree Hugger, 25/8/11



flickr

Opposing Melbourne's NE Link (Pt 2)

"We [Friends of Banyule] were encouraged to receive recent advice from the Parliamentary Secretary for Transport, Edward O'Donohue, that the North East [Road] Link is not a commitment of the Coalition government. However, residents had earlier received such comforting advice from the previous government and we remain concerned for the well being of our environment, both natural and built, that the project could still proceed. We welcome the government's Metropolitan Planning Strategy review as an opportunity to put right some major flaws in planning and transport in Melbourne. The predecessor planning blueprint, Melbourne 2030, failed not least because it was not backed up with adequate public transport infrastructure. Urban sprawl continues apace as a consequence. In this respect, it is encouraging to see there is to be an integrated approach to transport and planning policy. Public transport use in Banyule needs to be significantly greater than it is for a sustainable urban setting. In 2006 (Census) of the 13,701 Banyule residents who travelled to work in Banyule that day only 439 took PT (3.2%). Of the 35,203 people (Banyule and non-Banyule residents) who travelled to work in Banyule only 1351 (3.8%) took PT. This is clearly not sustainable. Major traffic pressure points in Banyule include Rosanna Road which has a current daily traffic load of approximately 46-47,000 vehicles per day on week days and possibly increasing by about 2% annually. During these periods Banksia Street carries an estimated 38,000 vehicles and Lower Plenty Road (north east of Rosanna Road) about 29,000. Traffic management measures need to be implemented promptly on Rosanna Road by Vic Roads.

"There are significant planning issues that should be addressed to make Banyule and Melbourne less car dependent and strategically planned. The focus of the previous government was on the delivery of very expensive engineering projects many of which failed to enhance the performance and sustainability of the transport system into the longer term. The costs and efficacy of one of these projects was strongly criticised recently in an Auditor General's report. In our view, this can be achieved far more economically and at substantially lower costs to government, by judicious planning and planning related initiatives:

- *At the macro level provide a framework and promote initiatives that ensure that activity centres such as Heidelberg and Greensborough become genuine transit oriented developments;*
- *Review the statutory requirements for the provision of private and public car parking in new residential, commercial and retail developments and consider the detachment of the provision of car parking from residential ownership in new developments.*

- *In the establishment of new estates and the redevelopment of brownfields sites, ensure that the road system permits direct bus, cycling and walking access. Much of the road design that still continues does not permit ready local bus access or consider how people actually walk on the ground and interact with their local environment.*
- *In public sector developments, e.g. Austin Health, Latrobe University, schools, social housing ensure that ready access to public transport as well as cycling and walking facilities are promoted and maximized.*
- *Provide green travel plans and other incentives for public employees to catch public transport to and from work.*
- *Ensure that natural open landscape in the form of parks and green wedges are protected from development to ensure the future health of its remnant fauna and flora and the wider Melbourne community, who use these areas for active and passive recreation.*
- *Develop a comprehensive program to ensure that more children walk to and from school and catch public transport. There are 55 primary and secondary schools in Banyule with an aggregate 19,708 students. It is estimated that car travel to and from school comprises about 13% of the morning peak. The previous government was not serious about getting more kids to walk or take PT to and from school each day.*
- *Ensure that development along transport corridors and in priority development locations respect local built form and neighbourhood character.*
- *Higher level of co-operation between the Department of Planning and the new Public Transport Development Authority as well as other transport agencies in all significant urban developments to maximise public transport take up and to reduce road congestion. This, for example, should be central to the redevelopment of Greensborough.*
- *Overall, development of an integrated inclusive policy approach, taking account of the total matrix of planning and transport strategy overall, which includes input by the community into planning decisions (eg; the Metropolitan Planning Strategy), which help form the shape, character and size as well as mobility, of our city, in more efficient, sustainable ways into the future."*

Ref: Discussion Paper, Friends of Banyule, 15/7/11

The Colourful Buses of Seoul

"Transit systems always want to paint their buses in matching colours so that riders can spot them easily. But what if different bus colours could tell you roughly where they are going? Seoul, Korea has done just that. It takes time to become familiar with a transit system, especially its bus routes. While rail has the advantage of being very legible – one can always see the directions that the rails are headed – buses are another matter. Transit systems try to help by providing route maps at stops, naming routes after their destinations or neighbourhoods they pass through, or through their route numbering system. In Vancouver, for example, buses with triple-digit route numbers leaving downtown and beginning with 24 are headed for North Vancouver, 25 to West Vancouver, and 13 to Burnaby. Surrey routes start with the number 3 and Richmond routes start with 4. But that's rather obscure ...

"What bus systems really need is way to make their routing easily understandable even to those who have never ridden them before. I recently found out that Seoul, Korea has implemented a system that goes a long way towards solving the bus legibility problem. In 2004 the Seoul Metropolitan Government completely overhauled their city bus system. Instead of replacing the buses themselves, though, they went with a different approach that consisted of 5 key changes:

- *Bus routes were simplified;*
- *Four bus categories were created, each with a different colour scheme (red, blue, yellow, and green);*
- *Route numbers were changed so that they explained both the origin and destination of the route, based on a district numbering system;*
- *A flat-fare system was implemented and integrated with the subway system;*
- *Real-time communication systems were installed so that transit riders could check arrival times by cell phone.*



"The colouring scheme goes a long way towards helping riders know exactly where their bus is going. It's very simple. Blue buses travel long distances on major arterial roads, serving more than 2 districts, and run in median bus lanes when they get close to the centre of the city. Green buses operate as feeder buses to the 8 lines on the subway system and are run by private companies. Red buses are express routes with limited stops connecting major suburban towns to the central city. And yellow buses are circular routes that travel between the major destinations in the central city. Blue and red buses are the same price, while the red (suburban) buses cost more and the local yellow buses less. But the addition of a route numbering system that actually has explicit meaning is something every transit system should adopt. First they divided Seoul into 8 numbered zones, starting at 0 in the downtown core and giving the surrounding zones numbers 1 through 7.

"Then they used these zones as part of the route numbers. Blue buses have three-digit route numbers. The first number indicates the origin zone and the second number the destination zone, with the last number the bus ID number. So if you encounter bus #048, for example, you know it travels from downtown (zone 0) to zone 4. Red buses put a 9 in front to indicate that these are suburban routes, while yellow buses have only two numbers, since they stay within the same zone. ... By developing a hierarchical system of trunk, feeder, intercity, and circular routes, Seoul made their buses easy for riders to use, while 183 km of dedicated median busways improved on-time performance. Even in the face of a 7% increase in mode share for the automobile between 2000 and 2006, mode share for bus and subway held steady at 28% and 35% respectively.

"The average daily number of bus passengers on the system has increased from 4.9 million in 2003 to 5.6 million as of 2009. Significantly, the total subsidy for bus and subway operations has dropped by US \$421 million over this period due to increased ridership and system efficiency. I applaud the efforts of the Seoul Metropolitan Government to make its system easy to use, even for the novice rider or the foreign visitor."

Ref: John Calimente, re:place magazine, 24/2/11

And Also ...

"An English dog that achieved fame by regularly catching a bus alone to a pub was knocked down and killed near his favourite stop. Ratty, a jack russell, used to travel 8km to see drinkers in the Yorkshire bar and be fed sausages. Owner Gary Kay said Ratty was hit by a speeding driver."

Ref: MX. 8/4/10