

## You may be travelling less – and that's a good thing

May 4 2015, by Patrick Moriarty



People travelled a total of 40 trillion km in 2012, mostly by car. Norlando Pobre/Flickr, CC BY

In 1900, humans travelled a total of just <u>0.2 trillion km</u> by vehicle, nearly all by train.

By 1950, people travelled a total of 3.3 trillion km, and by 2010, the annual total was over 40 trillion km – or over 133,000 round trips to the



sun. That's an average of nearly <u>6,000 km per person</u> each year. About half of all travel was by car, and 12% was by air.

But times are changing. Reductions in per capita passenger travel in key OECD countries has already begun. In <u>Australia</u>, per capita surface travel (road, rail and sea travel) has fallen since 2006, while in the <u>US</u>, it is still below its 2008 value.

In <u>Japan</u>, both total surface and air travel have been falling since 2000. A number of European countries are also experiencing <u>"peak travel"</u>.

This is a good thing, and efforts to further reduce travel (both passenger and freight) must be encouraged, for a variety of reasons.

## Why we should reduce vehicle travel

Global transport is a major cause of both global oil depletion and climate change. Despite much talk about bio-fuels such as ethanol, oil in 2012 still supplied about 93% of all transport fuels. Global transport also produced 22.5% of all energy-related greenhouse gases.

The <u>official</u> view is that these two problems can be overcome by a variety of technical fixes. These include use of <u>alternative fuels</u> and boosting vehicle energy efficiency, plus more exotic solutions such as storing carbon underground, and geoengineering.

The first two are already used to some extent, but have made little impact on either transport energy use or the resulting greenhouse gas emissions. The latter two technical fixes face serious problems and may never be employed.

In contrast to the current hype about the First World War, the tens of millions of road dead go unremembered. According to the World Health



Organisation (WHO), some 1.24 million people were killed on the world's roads in 2010 alone. Traffic deaths are now the eighth leading cause of mortality, and number one for 15-29 year-olds.

Traffic death rates are falling in OECD countries, but generally rising elsewhere as mass car ownership spreads to other countries. For this reason, the WHO forecast traffic fatalities moving up to the fifth leading cause of death globally by 2030.

Paradoxically, fatality rates (deaths per 100,000 people) are far higher in low-income countries, despite their low levels of <u>vehicle</u> ownership. The main reason? Pedestrian and cyclist deaths can be as high as two-thirds of those killed, compared with 16% in <u>Australia</u>.

<u>Tens of millions</u> are also injured each year on the world's roads. Particularly in low-income countries, this can mean a double catastrophe: loss of earnings and high medical costs for the affected families.

Air pollution also results in <u>millions of premature deaths</u>, especially in Asian megacities, and the rapid rise in vehicular traffic is an important cause. Further, a recent <u>Chinese study</u> has found that children's school performance was adversely affected by living in traffic-polluted areas.

## What's the alternative?

For some time in OECD countries—and even elsewhere, when we consider traffic casualties and air pollution health effects—the societal costs of extra mobility have been rising faster than the benefits obtained. We must now focus on *accessibility* —the ease with which people can reach various activities—rather than vehicular mobility.

When access replaces mobility, we can finally start designing our cities



for humans rather than cars. We'll need to design our cities and towns to encourage an attachment to place, rather than endlessly trying to be someplace else. Excess mobility can destroy this sense of place.

As Gertrude Stein reportedly said about her home town, Oakland, California: "Whenever you get there, there is no there there."

The needed changes may be easier than we think. In 1947, our cities were strongly focused toward the inner areas. Today, with suburbanisation, jobs, retail sales, and services are much more evenly spread over the city. Per capita travel levels have risen several-fold in our cities since 1947, when potentially they could have been <u>reduced</u>.

To hasten this process of "localisation", we'll have to reverse our usual urban transport priority of private car, then public transport, and non-motorised modes last. Such a reversal would bring important health benefits; physical exercise has been called the "wonder drug".

Further, <u>recent research</u> has found that the rise in obesity in recent decades results from physical inactivity, not from increased calories.

Not only will we have to rely much less on car travel, we'll also need to drop travel speeds, partly for safety reasons. For car collisions with pedestrians at 80 km per hour, most do not survive the impact, but at 32 km per hour, only 5% are killed. And of course, at low speeds, collisions are far fewer anyhow.

Non-motorised <u>travel</u> is superior to other modes in a number of ways: it uses no fossil fuels and produces no pollution. It is also cheap, efficient in urban land use, and needs no licence to operate.

So what's the drawback? Compared with cars, it's only good for humans, not for economic growth.



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