

Roads to Nowhere

By Lenny Antonelli

It was the great Spanish philosopher and essayist George Santayana who famously remarked that those who cannot learn from the past are condemned to repeat it. Anyone examining the National Roads Authority website could conclude that the organisation has failed to learn from its past policy mistakes and is condemned to repeating them endlessly.

Although a wealth of evidence shows that road construction cannot solve our transport woes, road construction stills forms the central plank of the government's transport plans and receives the vast majority of transport funding.

Inducing Congestion

For decades, studies have demonstrated that building roads simply generates more congestion and pollution. In California, researchers found that 60-90 percent of new road capacity is filled within just five years.¹

In 1984, the Sierra Club filed a lawsuit against the Metropolitan Transportation Commission in California to try to prevent the construction of a new highway, citing "induced traffic" (traffic generated as a result of the construction of new roads that would not otherwise have occurred) as a primary reason. In response, the Californian

Regional Transport Authority commissioned a study that it hoped would show that the added capacity would reduce congestion, increase speed and therefore cut air pollution. Instead it came to the opposite conclusion: over time, new highway lanes fill up, increase congestion and generate more emissions.² Many other studies have upheld this conclusion.

In a landmark report, the UK's Standing Advisory Committee on Trunk Road Assessment (SACTRA) concluded that induced traffic is a major component of traffic congestion. As a result, all new road-building plans in the UK now take induced traffic into account. In Ireland, however, it is ignored.

Why does building new roads simply encourage more cars on to them? The answers are somewhat intuitive: When new roads are built, the added space on the roads allows people to drive when journeys might otherwise have been made by bus, to travel during rush hour when they might otherwise have gone at off-peak times, and to make new and longer trips.

The extension of road networks into the countryside inevitably brings more development along the routes – creating new populations that are reliant on cars to get to essential services. Over time,

the new roads become clogged with these new streams of traffic. Inevitably, new roads are suggested as the solution to ease the congestion. And the cycle continues.

Accelerating Climate Change

Aside from its questionable impact on congestion, road building has serious implications for the environment. Road-building advocates fail to realise that we live in an era of impending and potentially catastrophic climate change. Nor do they recognise that fossil fuels are a finite and diminishing resource.

Increased car use and dependence increases dependence on fossil fuels and drives up carbon dioxide emissions. In Ireland, according to the Central Statistics Office, carbon dioxide emissions from transport increased by 67 percent between 1997 and 2005. Much of this can be linked to urban sprawl and the associated poor planning that has left new residential areas without essential services and facilities and highly dependent on the car for transportation.

Towards a Sustainable Road Network

Interestingly, a good road infrastructure can be part of the solution. In his book *Heat: How to Stop the Planet*



Burning, George Monbiot proposes an unexpected solution as the future of comfortable, sustainable, fast intercity transport: the humble coach. He argues that because the infrastructure for coaches - roads - already exists, improving the coach network would be far cheaper than improving the rail network. Coaches also emit less greenhouse gases per passenger.

A good road network is vital if this is to become a realistic option. In the UK, taking an intercity coach often involves journeys on good quality, wide and straight roads that by-pass smaller towns along the way. In Ireland, however, buses or coaches are synonymous with interminably long journeys along mean, narrow, poor quality country roads, or gridlocked in the cramped streets and awkward traffic systems of most towns and villages along the way.

If taking coaches between urban centres is to become a fast, comfortable way of travel, we need a network of good quality roads between our towns and cities, and in some cases bypasses of towns along the way too. It may also be necessary, as Monbiot suggests, to move principle bus stations out of over-congested town centres.

Discouraging Car Use

Roads and road building need not be part of an unsustainable cycle. A quality road network can be designed and operated in such a way so as to encourage the use of public transport and cycling, and discourage car use.

Tolling on cars - perhaps placing bigger tolls on the more polluting cars - may be one way. Charges on intercity routes that reflect the amount of carbon consumed in each traveller's journey - perhaps ultimately incorporated into a system of personal carbon credits - is certainly one idea. This could help dampen any induced demand created by new road building. Equally the replacement of VRT with a tax on fuel could discourage people from taking unnecessary journeys because of the opening up of new roads.

Roads can also be designed and upgraded in such a way so as to make cycling a legitimate and safe form of commuting - and this means wide, well surfaced, well maintained cycleways that are separated from the main driving lanes by large buffers on all main urban and interurban routes. Traffic systems can also be designed in such a way so as to give greater priority to buses over cars.

Proper Planning

Development has become a dirty word, but that doesn't have to be the case. If planning measures ensured that new residential developments also had new schools, public transport services, community centres, industrial and commercial centres, banks, post offices and other essential amenities, dependency on cars would be greatly reduced.

The frontier mentality whereby new roads serve no function beyond opening up new virgin territories for uncontrolled development has no place in a sustainable road strategy.

Roads can be part of the solution rather than the problem. By making car use more expensive than public transport use, by building and upgrading our roads so that they encourage and support sustainable transport, and with careful planning, roads need not fuel an endless cycle of car use and dependency. By heeding the mistakes that have been made in the past, both at home and abroad, Ireland could start to build a road and transport network that is reliable, comfortable and sustainable.

references

¹ Road Supply and Traffic in California Urban Areas, Hansen and Huang, Transportation Research, Part A, Vol. 31A, No. 3. (May, 1997)

² Highway Capacity Expansion and Induced Travel: Evidence and implications Transportation Research Circular, No. 481, 1998, 198

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