



HEALTHY AND ACTIVE TRANSPORT - CROSS-DISCIPLINARY RESPONSES TO FIVE GLOBAL PUBLIC POLICY ISSUES

HEALTHY AND ACTIVE TRANSPORT includes walking and cycling as well as public transport, which invariably involves walking to and from bus stops and rail stations. There is substantive evidence that *HEALTHY AND ACTIVE TRANSPORT* provides a strong and effective policy response to five global public policy issues, including:

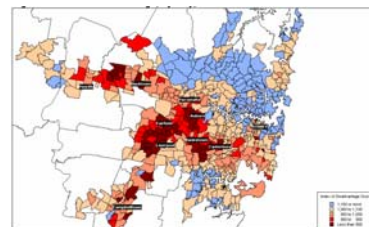
- Transport Equity
- Congestion
- Public Health
- Climate Change
- Peak Oil and Petrol Prices

Investment in physical, social and organisational infrastructure to support *HEALTHY AND ACTIVE TRANSPORT* can deliver positive benefit:cost ratios for each of these five global policy issues individually, especially when considering externalities. The real benefit of investment in infrastructure for *HEALTHY AND ACTIVE TRANSPORT*, however, lies in recognition of the cross-disciplinary benefits.

Herein is the challenge for both the *AUSTRALIA 2020 SUMMIT* and the *GARNAUT CLIMATE CHANGE REVIEW*.

Transport Equity

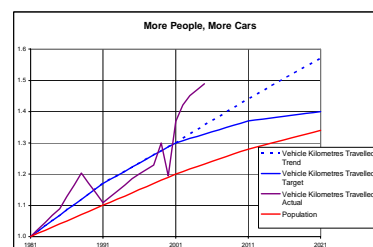
700,000 people in Western Sydney cannot reach essential services within a reasonable time, such as health care, employment, education and daily needsⁱ. The problems are broadly defined as being personal mobility factors (characteristics that affect individual's ease of travelling), transport accessibility factors (characteristics of the available transport services) and urban accessibility factors (characteristics of facilities, services and activities that individuals may need to access). Examples of some transport disadvantaged groups include sole parents, young unemployed people and recently arrived humanitarian entrants. A broader response to the travel needs of these groups is required including, inter alia, improvements to local accessibility through constructing and upgrading bus stops and shelters, footpaths and cycleways.



Research by Griffith Universityⁱⁱ confirms that similar problems exist in other capital and regional cities.

Congestion

Research by the NSW Roads and Traffic Authorityⁱⁱⁱ in the early 1990-ies predicted a 600% increase in congestion on Sydney's roads unless vehicle usage trends were reversed. Current evidence is that RTA's strategies have been ineffective in achieving

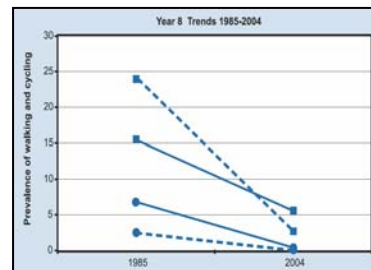




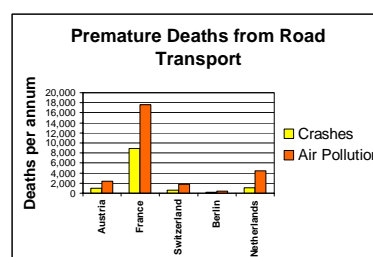
the required target. Similar problems are evident in other major cities in Australia and around the world. There is a strong need for renewed investment in environmentally friendly transport in cities, such as cycling, walking and public transport.

Public Health

The obesity crisis and the lack of exercise are well documented, eg the SPANS^{iv} reports by NSW Health which indicate that walking and cycling to school have the potential to provide 50% of the daily physical activity requirement for children. Yet, there has been a worrying decline from 1995 to 2004.



Less well known is the research flowing from the European Charter on Transport, Health and the Environment which shows that car-based air pollution kills twice as many people as car crashes.



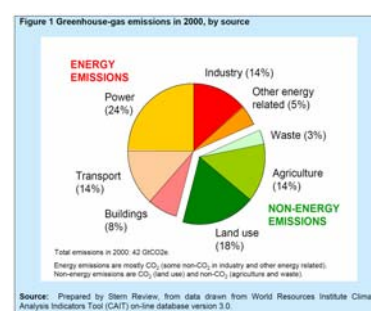
Research by Daley^v shows that physical inactivity is the second (after tobacco) most significant cause of ill-health in Australia. About 50% of Australian adults are not sufficiently active to achieve a health benefit. Regular cycling significantly reduces overall mortality, diabetes, heart disease and hypertension, and is associated with a lower prevalence of obesity. Importantly, integrating physical activity into people's daily routines is more cost effective and more likely to be sustained than structured exercise programs.

Research by Medibank Private^{vi} shows that:

- Physical activity costs Australia \$1.5Billion per year.
- If more Australians were physically active for just 30 minutes a day the Australian healthcare system could save \$1.5 billion a year, whilst creating a healthier community.
- The cost of physical inactivity far outweighs the cost of participating in fitness activities and the cost of healthcare for sports injuries.
- For example 150 minutes can be broken down to a 15 minute walk – to the train, around the block, with the kids to school – five times a week, plus one exercise session of one hour and 15 minutes a week, of whatever activity appeals to you.

Climate Change

The Stern Review^{vii} has now become the world's authoritative and conclusive document on this topic. While it acknowledges *HEALTHY AND ACTIVE TRANSPORT* as a key issue, it is weak on recommendations due to the complexity of the issue.



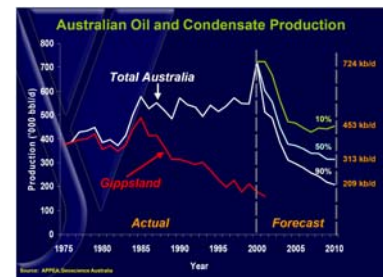


The *GARNAUT CLIMATE CHANGE REVIEW*^{viii} echoes the Stern findings, stating that “transport, land-use and buildings are major contributors of greenhouse gas emissions.” Garnaut goes further to say that “mobility is a core feature of our economy. Transport services link manufacturers to markets and enable individuals to access employment, goods, services and social opportunities. Fuel use in transport is a substantial source of greenhouse gas emissions, accounting for 14 per cent of Australia’s emissions in 2005, and is growing rapidly with a projected increase of 67 per cent over 1990 levels by 2020.”

Other research both overseas and locally indicates that there are strong opportunities to substantially increase the role of *HEALTHY AND ACTIVE TRANSPORT*, eg the City of Sydney has adopted a target of 20% of short trips by bike by 2016.

Peak Oil and Petrol Prices

Projections by Australian Government forecasting agencies^{ix} indicate that Australia is facing a rapid decline in liquid petroleum production over the next decade. Liquids self-sufficiency is expected to decline from an average of 80-90% over the past decade to less than 40% by 2010. On a global scale, the Arabian oil fields have reached their peak production levels. The world is at war over the next oil and gas fields. The Kimberley and Arctic seas are threatened with exploration.



Clearly, the imminence of peak oil and the increase in competition for this increasingly scarce resource is a major contributor to ever increasing fuel prices, which in turn affects large groups of vulnerable communities in all Australian in cities and towns and regional and rural areas.

Cross-Disciplinary Policy Responses

To address these five global public policy issues, it is necessary for *AUSTRALIA 2020* and the *GARNAUT REVIEW* to “substantively extend the idea of sustainability”^x, including leadership on walking, cycling and public transport, in particular:

- **Whole-of-government HEALTHY AND ACTIVE TRANSPORT policy**^{xi}. Develop this approach for *HEALTHY AND ACTIVE TRANSPORT* through more effective administration and by planning and undertaking land use, public transport, roads, public safety, health, education and sport and tourism initiatives.
- **Establishment of an intergovernmental agency to lead and implement such a policy.** The operational parameters for the Australian Greenhouse Office are too narrow. The resources of the Australian Bicycle Council are seriously curtailed. There are no Federal Government agencies for walking or public transport.
- **Substantive resources and funding to support the agency** both for policy development, and for the planning, design and construction of new infrastructure. The Better Cities program established under the previous Federal Labor Government went some way to meet these requirements, but has since been disbanded. The previous Minister for Health offered some funding for educational campaigns on cycling and walking, which was a small step in the right direction. Research for the Australian Conservation Foundation^{xii} indicates that “people would prefer the Federal Government spend the budget surplus on public transport than tax cuts. That’s the message from nearly 70 per cent of the people surveyed by the Australian Research Group for a poll released by ACF.”



- **Safe walking, cycling and public transport networks.** To make *HEALTHY AND ACTIVE TRANSPORT* widely attractive to all user groups requires good and perceptively safe networks of pathways for walking and bicycling. This need is confirmed by Garnaut^{xiii} stating that “one of the most substantial barriers to the use of public transport, walking and cycling is the lack of appropriate infrastructure and services.” These networks need to be planned and developed to connect neighbourhoods with public transport and to centres, schools and other public services and institutions, work places, parks, beaches and other places for recreation and leisure. This is still not happening under currently poorly funded State and local pathway and public transport infrastructure development programs. Once safe infrastructure and adequate services are available in an area, promotional programs are required for information and to overcome some cultural and perception impediments to people freely choosing to walk, cycle and catch public transport instead of continuing to travel by car for short local trips.

The need for the cross-disciplinary policy responses is supported by Research Australia^{xiv}, a national alliance of over 190 member and donor organisations with a common mission to make health and medical research a national priority. Key findings of their recent “*Healthy Planet, Places and People*” research include:

- There is a need in Australia to cultivate and support a broader-based interdisciplinary approach to studying the ways in which the natural, built and social environments influence patterns of human behaviours, exposures and health outcomes.
- In addition to research that identifies and quantifies the risks to health from climatic changes and the urban environment, there is a need for studies to assess the effectiveness of neighbourhood, community and regional strategies to lessen risks to health, eg demonstration projects in partnership with developers, showcasing improved urban environmental and health outcomes through innovation. Related to this is the importance of investing in evaluation of urban development, with a focus on environmental and human outcomes.
- Reduced fossil fuel combustion (industry, power generation, transport fuel) will reduce deaths and hospitalisations from ambient air pollutant exposure.
- A lower-emission urban transport system, with upgraded public facilities, will increase physical activity – walking, cycling. This will reduce over-weight, improve blood lipid and hormone profiles, and increase social contact and mental wellbeing. Road trauma should decline.

Barriers and Misconceptions

A key strategic barrier in developing physical infrastructure and related social plans for *HEALTHY AND ACTIVE TRANSPORT* is formed by common misconception about the potential for walking, cycling and catching the bus and train. Research by the Cycling Promotion Fund^{xv} is helpful to address these:

- Over 50% of car trips in Australian cities are under 5km and 30% are less than 3km, an ideal walking and cycling distance. The majority of children’s car trips to school are less than 3km.
- Transport is responsible for 34% of household greenhouse gas emissions.



- Government spending on road related expenditure exceeds \$7.5 billion a year with only \$100 million (approx) spent on cycling infrastructure.
- Australians currently riding to work save \$72 million annually in traffic congestion.
- By far the easiest way to build physical activity into one's activity pattern is to walk or cycle to work and school. Catching public transport is also good as it involves walking to and from the bus stop and train station.

Notes

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- ⁱ Hurni, Anne (2006). Transport and social disadvantage in Western Sydney: a partnership research project. Published by Western Sydney Community Forum
 - ⁱⁱ Nick Buchanan, Rick Evans and Jago Dodson (2005). Transport Disadvantage and Social Status: A Gold Coast Pilot Project. Griffith University Urban Research Program. Research Monograph. 8 April 2005.
and
Jago Dodson and Neil Sipe (2005). Oil Vulnerability in the Australian City. Griffith University Urban Research Program. Research Paper. 6 December 2005.
 - ⁱⁱⁱ Action for Transport 2010 - an integrated transport plan for NSW; Action for Transport 2010 - an integrated transport plan for Sydney; Road Transport Future Directions - summary report on options.
 - ^{iv} Booth M, Okely AD, Denney-Wilson E, Hardy L, Yang B, Dobbins T (2006). NSW Schools Physical Activity and Nutrition Survey (SPANS) 2004: Summary Report. Sydney: NSW Department of Health. NSW Centre for Overweight and Obesity (2006). NSW Schools Physical Activity and Nutrition Survey (SPANS) 2004: Short Report. Sydney: NSW Department of Health. Booth M, Okely AD, Denney-Wilson E, Hardy L, Yang B, Dobbins T (2006). NSW Schools Physical Activity and Nutrition Survey (SPANS) 2004: Full Report. Sydney: NSW Department of Health. www.health.nsw.gov.au or www.coo.usyd.edu.au
 - ^v Daley M, Rissel C, Lloyd B (2007). All dressed up and nowhere to go? A qualitative research study of the barriers and enablers to cycling in inner Sydney. In: Road & Transport Research, Vol 16, No 4, December 2007. pp42-52.
 - ^{vi} Medibank Private (2007). The cost of physical inactivity: What is the lack of participation in physical activity costing Australia? August 2007.
 - ^{vii} Stern Review (2007). The Economics of Climate Change. www.sternreview.org.uk
 - ^{viii} Garnaut Climate Change Review (2008). Issues Paper - Forum 5 - Transport, Planning and the Built Environment. Pp2-3.
 - ^{ix} Akehurst, John (2002). World Oil Markets and the Challenges for Australia. Presentation by Woodside Energy Ltd at the ABARE Outlook Conference, 2002.
 - ^x Peter Garrett, AM, MP, Labor Member for Kingsford Smith. First speech to Parliament on 8/12/2004.
 - ^{xi} London, June 1999, the Third Ministerial Conference on Environment and Health: ministers responsible for health, environment and transport from 54 countries adopted the World Health Organisation Charter on Transport, Environment and Health (http://www.euro.who.int/document/peh-ehp/charter_transport.pdf). The International Charter for Walking as promoted by Walk21 is another good example (<http://www.walk21.com/papers/International%20Charter%20for%20Walking.pdf>).
 - ^{xii} ACF (18-Oct-2007). Two thirds of Sydneysiders want good public transport before tax cuts. http://www.acfonline.org.au/articles/news.asp?news_id=1470&c=125810
 - ^{xiii} Garnaut Climate Change Review (2008). Issues Paper - Forum 5 - Transport, Planning and the Built Environment. P6.
 - ^{xiv} Research Australia (2007). Healthy Planet, Places and People. October 2007.
 - ^{xv} Cycling Promotion Fund (2008). Bicycles outsell cars in Australia - sales top 1.4 million. Media Release. 7 January 2008.

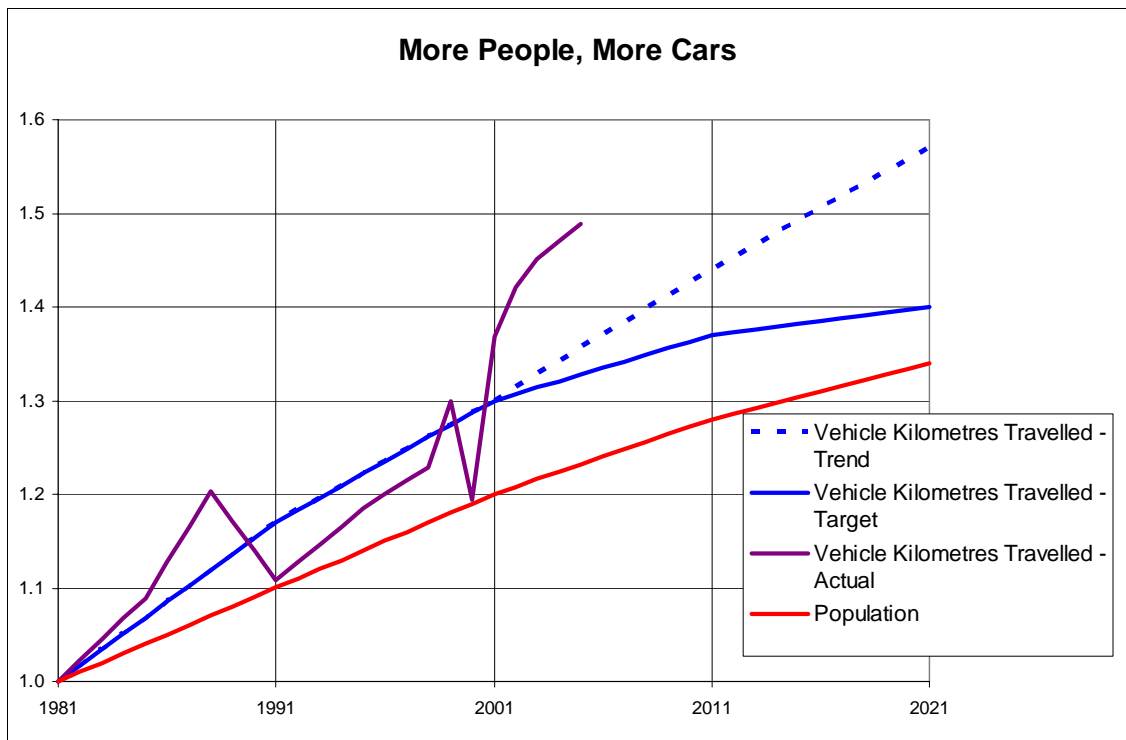
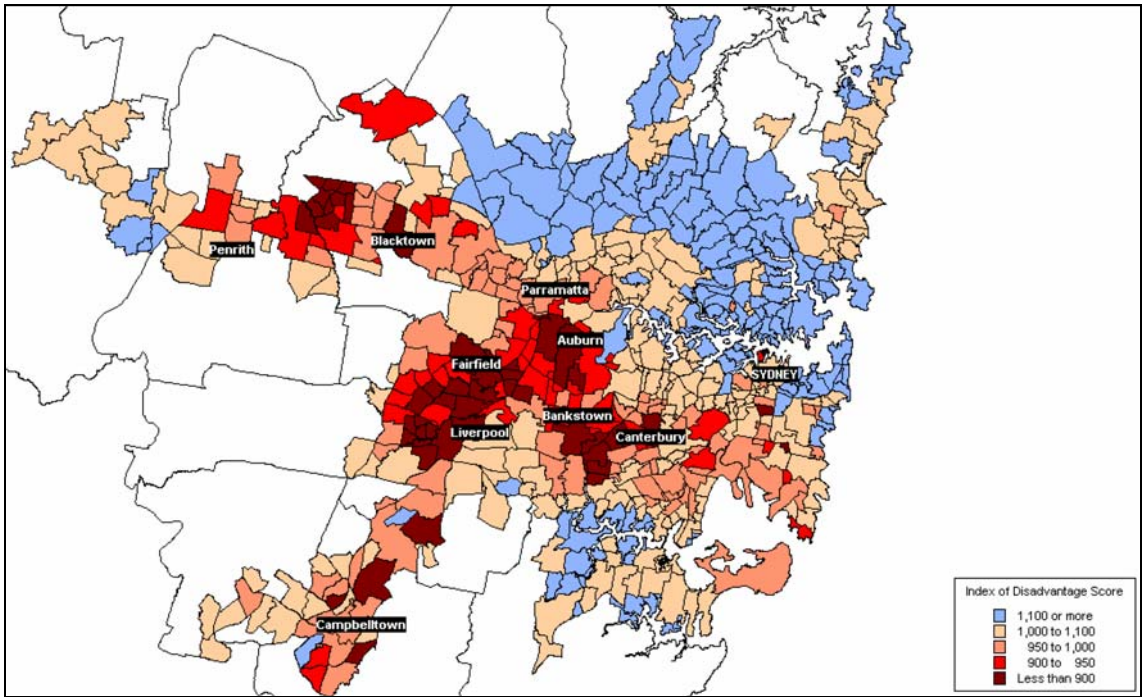
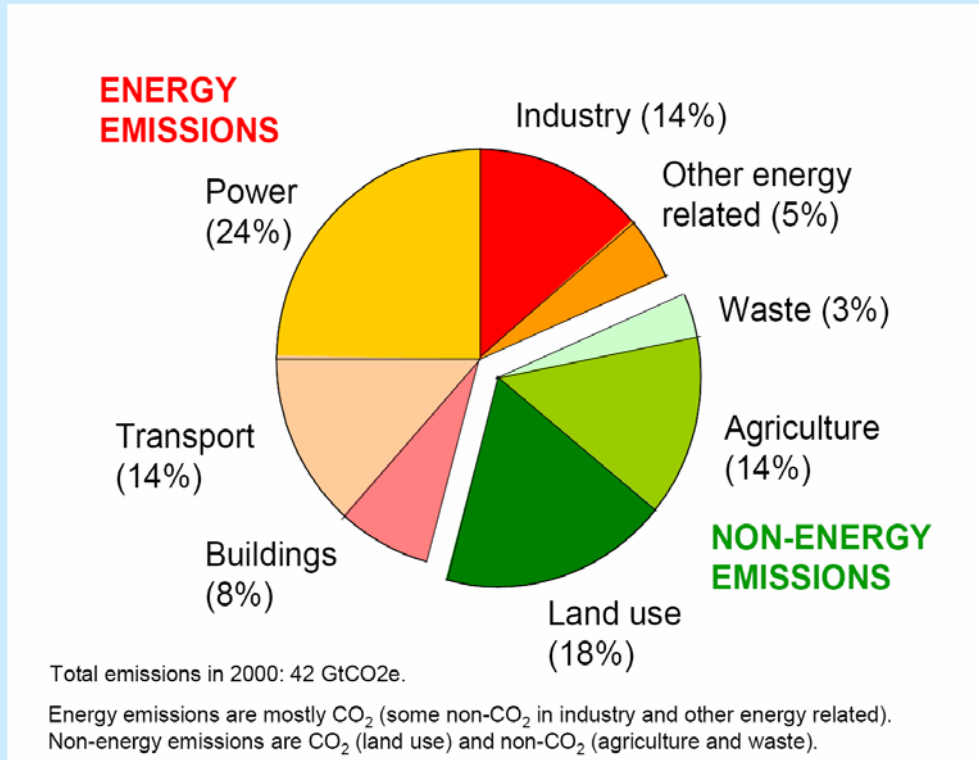
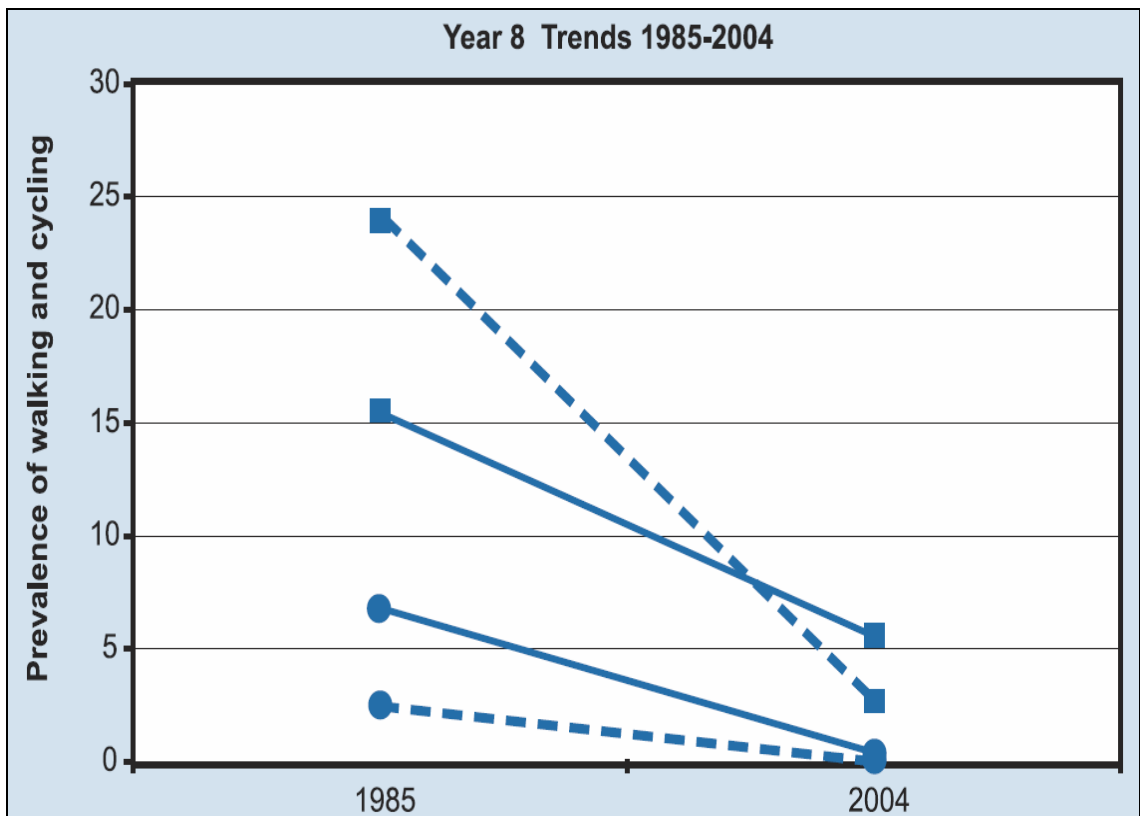


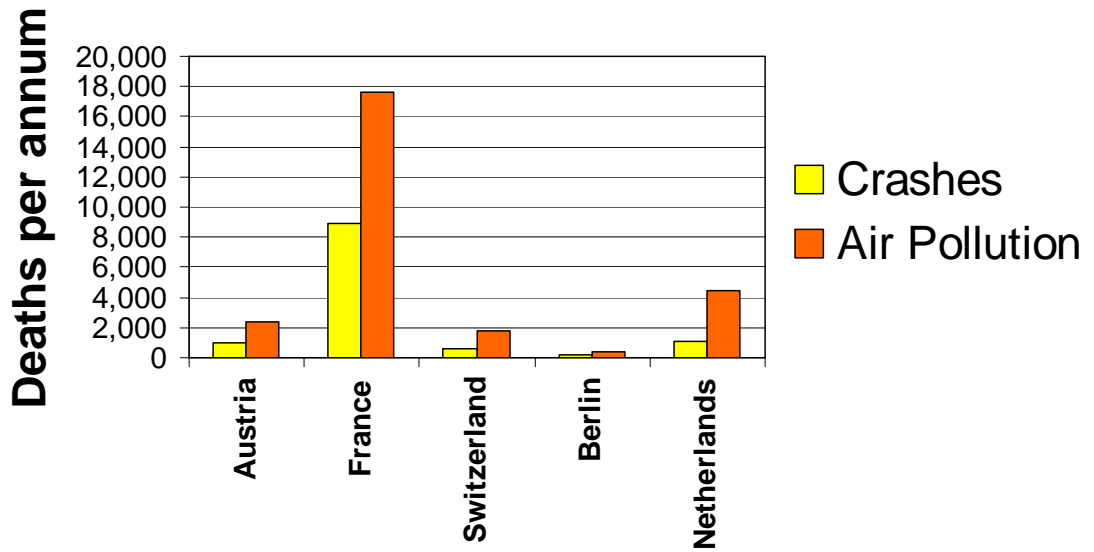
Figure 1 Greenhouse-gas emissions in 2000, by source



Source: Prepared by Stern Review, from data drawn from World Resources Institute Climate Analysis Indicators Tool (CAIT) on-line database version 3.0.



Premature Deaths from Road Transport



Australian Oil and Condensate Production

