

Submission to the Transport Bill
Committee for Regional Development

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Introduction

The Institute of Public Health in Ireland (IPH) aims to improve health on the island of Ireland by working to combat health inequalities and influence public policies in favour of health. IPH promotes cooperation between Northern Ireland and the Republic of Ireland in public health research, training and policy advice.

Health is influenced by a wide range of social determinants, including economic, environmental, social and biological factors. Transport is one of the key determinants of health and IPH welcome the opportunity to contribute evidence to the Transport Bill as part of the Committee for Regional Development inquiry.

IPH recognise the Transport Bill is a technical report. We believe we have a significant contribution to make to the evidence in relation to transport and its relationship to health and therefore welcome the opportunity to present to the Committee.

Key points

- Transport impacts on health through a variety of means including air and noise quality, road traffic collisions, physical activity patterns, providing access to employment and services and social interaction. Health impacts are interconnected and action on transport will impact on a number of health outcomes.
- Decisions made in 2010 for future transport systems in Northern Ireland will have a significant influence on transport patterns and subsequently health outcomes for the next 20 years and beyond.
- IPH recommends a strong emphasis is placed on promoting healthy active travel by investing in public transport, walking and cycling infrastructure to facilitate individuals and populations in making active travel choices. Active travel contributes to preventing health problems such as heart disease, obesity, high blood pressure and cancer. The Transport Bill can support a move to active travel by ensuring there is legislation to support a safe, equitable and efficient transport service.
- Some communities across Northern Ireland have limited access to services such as health care and educational or employment opportunities which may be a direct result of transport provision. IPH calls for greater recognition of and action on the different travel needs of different population groups such as older people and those living on low incomes or in rural areas to avoid further exacerbating current inequalities.
- IPH advocates building long-term and meaningful relationships between transportation and public health and supports the Department of Regional Development's commitment to health initiatives such as the Obesity Prevention Steering Group led by Department of Health, Services and Public Safety (DHSSPS) and the Department for Regional Development (DRD), Travelwise initiative.
- IPH calls for Health Impact Assessments to be undertaken to help determine the potential health impacts of transportation policy.

IPH has published a range of supporting information in this area including the Health Impacts of Transport¹ and the Health Impacts of the Built Environment² and are currently developing an Active Travel and Health review. Through this work IPH has developed extensive knowledge and the following response provides further information on how transport can impact on health for the Northern Ireland population.

Climate change

Transport is a major contributor to climate change which is identified as one of the biggest public health issues of the 21st Century. Northern Ireland has higher greenhouse emissions than the UK which can be attributed to our transport (and agriculture) emissions. The health impacts of climate change across the island of Ireland include an increase in mortality from cardiovascular or respiratory disease, particularly for people living in cities³. Regional transportation systems and behaviours have a major role to play in addressing climate change and reducing levels of greenhouse gases attributed to transport.

Current Northern Ireland transport policy is heavily focused on developing structures for the motorised vehicle and whilst this is required to support infrastructure and economic growth there is a need to complement this investment with other measures which focus on encouraging active travel such as walking and cycling. Since the inception of the Regional Transportation Strategy in 2002, Northern Ireland's greenhouse gases have been increasing and transport accounts for 25% of these emissions. Northern Ireland's transportation patterns heavily rely on private transport with 84% of travel to work journeys in 2007 being car, van or minibus⁴. Looking specifically at independent journeys, the average car journey length is just over seven miles long and 17% of all journeys are less than one mile⁵. A modal shift towards reducing dependency on private transport for short journeys can support a reduction in greenhouse emissions.

Air and noise quality

Transport is the main source of health-damaging air pollutants with concentrations highest near major roads and in urban areas. Poor air quality contributes to respiratory disease particularly amongst disadvantaged urban areas and amongst vulnerable groups such as the elderly and those whose health is already impaired.

Vehicle noise imposes disturbance and discomfort and many health effects including increased cardiovascular disease risk, stroke, hypertension, depression and a lack of concentration and impaired cognitive development in children⁶ are linked to stress

¹ Kavanagh P, Doyle C, Metcalfe O., (2005) Health Impacts of Transport: a review. Institute of Public Health in Ireland: Dublin. Available at: www.publichealth.ie

² Lavin, T et al., (2006) Health Impacts of the Built Environment: a review. Institute of Public Health in Ireland: Dublin. Available at: www.publichealth.ie

³ Institute of Public Health in Ireland (2010) Climate Change and Health: forthcoming.

⁴ Department for Regional Development (2008) DRD Annual Transport Statistics 2007-2008

⁵ Department for Regional Development (2008) DRD Annual Transport Statistics 2007-2008

⁶ BMA, (2009) Transport and health, available at http://www.bma.org.uk/images/transportandhealth_tcm41-191801.pdf

hormones in people exposed to noise pollution. Noise pollution is greatest in dense urban areas where exposure is greatest (i.e. people are located close to roads).

Road traffic collisions

IPH recently submitted a response to the DoE road safety strategy. We recognise the responsibilities of different government departments but call for joined up action in relation to transport policy. Many actions planned by the DRD Travelwise programme support a healthier approach to transport by promoting cycling to work, enhancing safety initiatives for young people to encourage walking to school and instilling behaviours at a young age which will continue into adulthood. Promoting environments which are conducive to walking and cycling support opportunities for healthier communities.

Transport supporting physical activity

Physical activity is a key factor in preventing obesity and obesity-related diseases such as diabetes, cardiovascular disease and some types of cancer. It can also help to improve mental health and maintain strong bones⁷. Incorporating physical activity into everyday activities is considered to be one of the most sustainable ways of increasing activity. Thus replacing short car trips with active travel modes such as walking and cycling presents a major opportunity to shift modes of transport towards active travel which can improve levels of physical activity among children, adolescents and adults.

Northern Ireland is currently facing an obesity epidemic as 59% of all adults in Northern Ireland are either overweight or obese with 24% of these obese⁸. Amongst children, 22% are either overweight or obese, with more than 5% already obese⁹. It is recognised that a major contributor to our sedentary lifestyles is the environment in which we live and how we use travel options to facilitate our journey requirements. IPH forecasts that if the current trends in obesity continue then over a 15 year period there will be a 40% increase in the proportion of people with Type 2 diabetes¹⁰. This has major consequences for Northern Ireland due to the loss of productivity and the costs of care. Obesity is estimated to cause 450 deaths per year, cost £14.2 million in lost productivity and £90 million in health and social care costs. In 2010 the cost of physical inactivity and obesity to the Northern Ireland economy is likely to exceed £500m and therefore it is essential there is a shift towards more active travel patterns in Northern Ireland. A recent inquiry into obesity by the Northern Ireland Assembly Health Committee identified that ‘all Departments and sectors have a crucial role to play in tackling obesity’ and there was a need for the ‘Executive to fully recognise the potential impact of the obesogenic environment on the health and wellbeing of the population’¹¹.

⁷ Warburton 2006 Health benefits of physical activity: the evidence, Canadian Medical Association journal, Vol 174, No. 6, p 801-9.

⁸ Health and Social Wellbeing Survey in Northern Ireland (2005)

⁹ Child Health System, Northern Ireland (1997-2006) Obesity in Primary 1 Children

¹⁰ Institute of Public Health in Ireland, (2010) Making Chronic Conditions Count, available at www.publichealth.ie

¹¹ Committee for Health, Social Services and Public Safety, (2009) Inquiry into Obesity, first report

There are many factors which contribute to increased sedentary living. Urban sprawl, where land use spreads out into areas adjoining the edge of the city can increase car dependency and evidence shows that those living in such areas drive three to four times more than those who live in efficient, well-planned areas. It has also been shown that each additional hour spent in a car a day can be associated with a 6% increase in the likelihood of obesity.

Promoting a culture shift towards increasing active travel is required in Northern Ireland however to support this there needs to be appropriate infrastructure and investment for long-term gains. Guidance from the National Institute for Clinical and Health Evidence (NICE) supports this by recommending transport planners should 'ensure pedestrians, cyclists and users of other modes of transport that involve physical activity are given the highest priority when developing or maintaining streets and roads which can be achieved by widening pavements and introducing more cycle lanes'¹².

Public transport also contributes to a more active lifestyle as accessing public transport usually involves walking to or from the service which can enhance physical activity levels and contribute to nearly two-thirds of the recommended 30 minutes of daily physical activity levels¹³. However to ensure that public transport is identified as a transport option, services need to be efficient, cost effective, connected to different forms of public transport e.g. buses and trains and also supported by safe environments in which people wait to access the service.

Other options such as park and ride schemes which are designed to reduce private car usage in town centres need to be sited far enough from the city centre to make real benefits. Park and ride sites need to have appropriate security measures in place e.g. lighting to ensure they are seen as attractive to users¹⁴. Town centre car parking options also need to be reduced to fully support a drive towards decreased private transport usage.

IPH recognises and supports current DRD efforts to contribute to increasing physical activity initiatives such as the DHSSPS Obesity Prevention Steering Group and placing a strong focus on developing sustainable travel policy. IPH call on the Regional Development Committee to show leadership to really engage in offering alternative modes of transport which support physical activity and tackle health related problems such as obesity in Northern Ireland.

Building healthy communities

Transport plays a vital role in connecting communities to services and social contacts which contributes to creating healthy environments and reducing non-communicable diseases such as respiratory and cardiovascular diseases, and preventing injuries¹⁵. A

¹² National Institute for Clinical and Health Evidence (NICE), (2008) Promoting and creating built or natural environments that encourage and support physical activity.

¹³ Besser L and Dannenberg A. "Walking to Public Transit: Steps to Help Meet Physical Activity Recommendations." *American Journal of Preventive Medicine*, 29(4): 273–280, November 2005.

¹⁴ Belfast City Council (2004) Health Impact Assessment of the Draft Air Quality Action Plan for Belfast

¹⁵ Strategic Review of Health Inequalities in England post 2010 (Marmot Review). Available at: www.ucl.ac.uk/ghcg/marmotreview

well planned transport system can facilitate social connections which are important for mental health. Neighbourhood designs most likely to promote social networks are those that are mixed use and pedestrian orientated, enabling residents to perform daily activities without the use of a car. As traffic volumes increase, people's sense of neighbourliness decreases which results in decreased social connections. Lowering speed limits in residential areas also improves road safety as the introduction of 20mph limits could reduce all casualties by 60% and child casualties by 70%. Reduced speed limits also reduce noise levels and can encourage walking, cycling and public transport use. A multi-sectoral approach to regional development and transport can ensure sustainable transport systems are a key element of any new development or neighbourhood. Access to services can enhance opportunities for health e.g. providing access to education and employment opportunities. Alternatively journeys not made due to unavailability of transport services can contribute to poorer health

Transport contributing to health inequalities

Health inequalities are the differences in outcomes between different population groups for example between different socio-economic groups or between males and females. There are a number of inequalities in Northern Ireland's current transport system. Children from deprived communities are more likely to be injured as a pedestrian in a road collision than those resident in the most affluent areas¹⁶. In Belfast, areas which exceeded air quality limits as a result of commuting traffic were all identified as deprived communities which are areas least likely to have access to private vehicles. Transportation needs to adopt a lifecourse approach to recognise that different users have different needs.

- The number of children walking or cycling to school is rapidly decreasing which is a worrying trend as exercise habits established in childhood are a key indicator of physical activity in adulthood.
- Older people must be catered for as exercise and social connectedness are critical aspects of a healthier older age.
- The needs of rural communities are very different from those in urban areas and as public transport services may not be available often the private transport mode is the only option.
- Deprived communities are also less likely to own private transport, have a higher rate of public transport usage and be more vulnerable to road traffic injuries. Given that low income groups are more likely to use public transport it is essential that this option is efficient in terms of financial costs, reliability and choice which will not further exclude this group from employment and education opportunities and access to healthcare services. There is a need to review the travel patterns of all users to make sustainable transportation more attractive in terms of travel times, convenience and financial cost.

IPH welcome the opportunity to present to the Regional Development Committee to discuss this submission and wider transport and health issues.

¹⁶ Department of the Environment, (2010) Deprivation and Child Pedestrian Road Casualties

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