

**In-depth follow-up of the
transport policy objectives –
human health and
the living environment**

**Summary
Report 2019:11**

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Summary

This interim report briefly reviews how the transport sector affects human health and the living environment. It is based on reviews of the literature and on reports mainly from government agencies and institutions responsible for transport and health issues. It serves as a preliminary study, providing a knowledge base in advance of upcoming reports concerning the transport policy consideration objective.

This report reviews the structure of the objectives for sustainable development and health surrounding Swedish transport policy objectives. It describes the most common correlations between the transport system, human health, and living environment impacts, but also addresses somewhat less common impact correlations, such as those between climate change and the effects of commuting on health. This report concludes by addressing various quantifications and cost calculations pertaining to the impact of the transport system on health.

This report shows that our transport policy objectives are correlated with several of the global objectives in Agenda 2030, namely, the public health and environmental objectives. The health aspects of the transport system directly or indirectly influence several of the global objectives. The transport system can, in the best case, contribute to achieving the global objectives, but there is also a risk that the transport system could make it more difficult to achieve those objectives.

Transport policy and public health objectives are interrelated, partly because Swedish transport policy promotes greater accessibility to the labour market, education, food, and social services, regardless of gender, place of residence, and socioeconomic background. Access to these is a precondition for good and equitable public health. The transport system can also contribute to an improved residential environment by reducing air pollution and noise, as well as contributing to a safe and inclusive society. Successes in the public health area can also help realise transport policy objectives. For example, successful efforts to combat alcohol and narcotics abuse could reduce traffic accidents.

Transport policy is, in principle, important to all 16 environmental objectives, as transport greatly affects the environment and nature through emissions of acidifying, fertilising, and ozone-forming substances. At the same time, transport policy and the environmental objectives are strongly correlated with Swedish public health objectives, as transport-related emissions of pollutants and noise also damage human health.

The EU has legal instruments in the form of regulations, directives, recommendations, and action programmes that address the impact of the transport sector on health, primarily through the regulation of combustion engines with a view to reducing carbon dioxide emissions and improving air quality to the benefit of human health.

The public health objectives, environmental quality objectives, and the global objective for health and well-being can help us recall what should be considered when evaluating transport policy proposals. This will clarify relevant health considerations, providing a better evidentiary basis for policy decisions and related impact assessments.

The impact of the transport sector on human health and the living environment is, in part, well known. People sustain injuries and die while travelling. Emissions of air pollutants and noise, mainly from road traffic, are harmful to human health. The growth of car usage also indirectly

influences health, as fewer and fewer people are meeting their physical activity needs via active travel on foot or bicycle to work, school, or leisure pursuits. Traffic injuries and fatalities have long been declining in Sweden, though the trend in 2018 was negative in terms of traffic fatalities.

Air pollution from transport has decreased over the last few decades but continues to cause some 3 000 premature deaths per year in Sweden. Noise also has negative effects on both the living environment and health. Transport is the dominant source of noise in our society. Roughly two million Swedes are negatively affected by noise levels that exceed national guideline values. People exposed to high noise levels for extended periods may experience increased stress, leading to increased risk of cardiovascular disease. At least 300 early deaths occur each year in Sweden as a result of noise from road traffic. Interim reports also describe less dramatic impact correlations, for example, with electromagnetic fields, climate change, and commuting.

The total negative health effects of road traffic in Sweden in 2001 are calculated at roughly SEK 97 billion in 2008 prices. Of this, SEK 46 billion can be tied to fatalities, with the remaining SEK 51 billion attributable to injuries or illnesses.

This interim report describes various ways of calculating the costs of the transport system in terms of degraded health, early death, and socioeconomic costs. It also shows that different calculations and methods yield different results, justifying continued studies to create more robust calculation models and methods yielding more consistent results. However, air pollution and noise from the transport system are clearly more detrimental to health than are traffic accidents. It is also clear that physical activity derived from active travel (i.e., walking and cycling) contributes significantly in terms of function-adjusted life years gained.

In 2019, Transport Analysis will generate a knowledge base concerning the impact correlations between transport mode and health, i.e., who and what incur impacts, but also concerning what resources are currently being used to prevent the negative health effects of the transport system, and how effectively those resources are being used.



Transport Analysis is a Swedish agency for transport policy analysis. We analyse and evaluate proposed and implemented measures within the sphere of transport policy. We are also responsible for official statistics in the transport and communication sectors. Transport Analysis was established in April 2010 with its head office in Stockholm and a branch office in Östersund.