LIIKUTUS

Cost effectiveness of road investments from the road safety perspective

Tienpidon uus- ja laajennusinvestointien kustannustehokkuus liikenneturvallisuuden näkökulmasta

Funding: National (Finland)
Duration: May 2003 - Oct 2004
Status: Complete with results

Background & policy context:

Nordic countries have their visions of traffic safety. E.g. Finland has a vision, which states that no one should die or be seriously disabled due to a traffic accident. In the project appraisal system, which is based on calculation of the socio-economic profitability, one of the measures evaluated is the impact of the investment on accidents and accident costs. An evaluation card is produced for each project, presenting the most relevant information of the project to decision-makers.

Among the information presented safety impacts are also shown, but unfortunately with varying level of detail or in some cases almost non-existent. Whilst in most cases the data on injury prevention was available, deaths were not reported so accurately. This is unfortunate, particularly if the projects are analysed from the point of view of the road safety vision.

Objectives:
The role of traffic safety in decision-making for road investments will be evaluated.

Methodology:
Analysis of decisions made and their background data.

Related Projects:
Research Programme for Impact Management of the Finnish Road Administration (VAHA), further information at: alk.tiehallinto.fi/vaha/eindex.htm

Parent Programmes:
LINTU - Long-term Research and Development Programme for Road Safety

Institute type: Public institution
Institute name: Ministry of Transport and Communications research programme
Funding type: Public (national/regional/local)

Partners:

- Ministry of Transport and Communications,
Key Results:

Even though the Ministry of Transport and Communications sets the safety goals on the basis of persons injured rather than persons killed, the National Road Administration (Finnra) has gained positive results from following the safety vision in producing a development plan for main road network. In the development plan the projects and also the prevention of fatal accidents focused on the worst sections, where cost-effectiveness can be best achieved. With data from a case study it is shown that by altering the measures within a project to better take into consideration the road safety, it would be possible to further improve cost effectiveness and it is also possible that the benefit-cost ratio could improve.

Policy implications

In the future, more concrete and harmonised presentation of traffic safety impacts is needed in project appraisal. In the discussions evolving around project appraisal in Finland it is also necessary to discuss the other areas of transport policy in a critical manner.

Road

No results directly relevant to this theme. However, please note that findings for the project’s key theme - Safety and Security - are generically applicable.

Economic aspects

No results directly relevant to this theme. However, please note that findings for the project’s key theme - Safety and Security - are generically applicable.

Safety and security

Even though the Ministry of Transport and Communications sets the safety goals on the basis of persons injured rather than persons killed, the National Road Administration (Finnra) has gained positive results from following the safety vision in producing a development plan for main road network. In the development plan the projects and also the prevention of fatal accidents focused on the worst sections, where cost-effectiveness can be best achieved. With data from a case study it is shown that by altering the measures within a project to better take into consideration the road safety, it would be possible to further improve cost effectiveness and it is also possible that the benefit-cost ratio could improve.

Decision-support tools

No results directly relevant to this theme. However, please note that findings for the project’s key theme - Safety and Security - are generically applicable.

Documents:

- Final Report in Finnish (Final report)

STRIA Roadmaps: Network and traffic management systems

Transport mode: Road transport

Transport sectors: Passenger transport, Freight transport

Transport policies: Societal/Economic issues, Safety/Security

Geo-spatial type: Network corridors