Summary:

Economic valuation of non-market goods:
The need for new valuation studies and methodological discussions.

Why new valuation studies are needed

The existing economic valuations of non-market goods, applied by the transport sector in Norwegian cost-benefit analyses, originate from the first half of the nineteen-nineties. The data forming the basis for these valuations are now approximately 10-15 years old.

During this period a considerable testing and development of methods for valuation has taken place. The valuations currently applied in the transport sector are not based on state-of-the-art methodology for economic valuation of non-market goods. Research indicates that there may be serious errors and weaknesses in current valuations. Major weaknesses of existing valuations are: (1) the valuations do not include all goods that should be valued; (2) the valuations do not cover all transport modes; (3) the valuations have not been elicited in a context relevant for governmental use of valuations; (4) the valuation task has not always been made sufficiently comprehensible/relevant to the respondents.

Based on these weaknesses it is concluded that it is not longer defensible to continue to rely on current valuations.

Which elements/goods that primarily should be valued and how

The following non-market goods, or attributes, are connected to the consumption of transport or represent external effects of transport:

- Safety
- Time
- Reliability
- Comfort
- Pollution
- Noise
- Insecurity
- Health (positive health effects)
- Nature intervention (effects on outdoor recreation and habitats)

- Cultural heritage (buildings/landscape)
- Social effects (accessibility / liveable cities)

These goods/attributes are described and demarcated in the following chapters. This list is meant to be exhaustive and the goods are meant to form mutually exclusive categories. Problems related to the risk of omitting relevant goods or double counting of goods are discussed in the report.

We propose a valuation study applying a variety of methods. Basically, three main types of approaches to valuation studies can be distinguished: (1) Stated choice studies (often a sequence of pair-wise choices), where the respondent faces alternatives that differ in terms of the amounts supplied of various goods (attribute level); (2) Contingent valuation studies, in which the respondents are either asked directly about their willingness to pay for stated amounts of a certain good or asked to choose between combinations of stated amounts of goods and costs; (3) Behavioural studies, where the valuation of goods is estimated by econometric modelling of actual choices, e.g., valuation of travel time as revealed by the choice of transport mode or valuation of road as revealed by means of residential choice.

All methods are relevant and will be considered. However, stated choice studies enable valuation of several goods in one study. This is also advantageous in terms of valuing the goods in a more correct context. A pilot study will be carried out where various methodological applications will be tested.

Costs of implementing a valuation project

Considerable resources are needed to obtain monetary values of all the listed goods, based on comprehensive testing and the use of large representative samples (maybe as much as in the interval between NOK 6 and NOK 8 million). We will possibly have to make a selection of goods, but we will stress the new possibilities of less expensive sampling by use of Internet. We may draw on previous testing of Internet-based valuation of some of these goods in local studies. Other goods may be valued in connection with the valuation of safety, especially the valuation of time (and possibly insecurity). Further, more than two goods can be valued in a stated choice sequence, and several stated choice sequences can be designed to cover all the above-mentioned goods. However, the difficulty of obtaining unit prices weigh against the inclusion of the three last categories of goods on the list (nature intervention, cultural heritage, social effects).

A funding of NOK 3.5 or NOK 4 million for a main project is assumed necessary. The project could eventually be initiated in the autumn of 2006, continue throughout 2007, and be reported in 2008. The results of the project will be expected to be of considerable international interest. In addition to a main report at least two scientific papers should be published with basis in the project. As an introduction to the project it is proposed to organise an international research conference on valuation studies.