1 Conclusion and main points

- Public transport acquires its greatest share in mobility during rush hour periods to urban areas. In fact, during these periods public transport is used for around 40% of journeys longer than ten kilometres. The problems related to traffic jams are also at their most acute in these areas, but convincing – more – people stuck in traffic jams to switch to public transport is no easy task.
- The highly diverse group of adults without a driving licence travel to a large extent by public transport. The same does not apply to more specific target groups such as the elderly, people with a disability or low-income households. Public transport's role in the mobility of these groups does not exceed or barely exceeds that of the average resident of the Netherlands.
- The various goals for which policymakers harbour expectations as regards public transport are reflected in the standard system used to assess the social effects of investments (cost-benefit analyses or CBAs).
- The CBA system can be improved for public transport projects. Certain costs and benefits have been overlooked. As regards individual projects, this can have a considerable effect on the costs or benefits calculated. On average, however, the effect is relatively limited.
- We suggest using a number of indicators to ensure that these 'forgotten' effects are considered, including, for example, avoidable parking expenses, missed excise income, benefits of 'no longer having to stand' and all manner of 'other' comfort and social safety aspects.
- Although welfare-enhancing public transport projects exist, they are by no means easy to find. A CBA is a handy tool in this context.

These are the most salient conclusions of the report entitled Het belang van openbaar vervoer (The importance of public transport) by the Netherlands Bureau for Economic Policy Analysis (CPB) and the Netherlands Institute for Transport Policy Analysis (KiM).

Background: what are the benefits of public transport?

The public transport debate often focuses on the question whether the benefits of public transport receive sufficient consideration in the standard system to assess the social effects of investments.

Average public transport performance

This report illustrates first of all how public transport performs on average as regards the goals frequently referred to in policy documents: contributions to accessibility, quality of life and social participation. For example, public transport is used on a daily basis by around one million people and accounts for 5% of the journeys and 11% of the kilometres travelled, of which the majority take place during the rush hour and are associated with work or education in the major cities. An average kilometre travelled by public transport causes approximately half as much nuisance for the environment as an average kilometre travelled by car.

Averages say little about the effect of new projects

The problem is that this average performance data says little about the effects of specific new public transport projects. By contrast, a costbenefit analysis (CBA) does exactly that. Of all CBAs performed in connection with Dutch public transport projects that could be reviewed for this report, around a third show that the project improves welfare. Hence, CBAs do not always reflect negatively on public transport projects, as is often assumed.

The key benefits of a public transport project are usually the travel times and costs saved on travel (including reliability and comfort). This goes without saying: public transport projects are primarily intended to make journeys faster, more comfortable, more reliable or cheaper.

Are no effects overlooked in CBAs?

We have investigated whether certain effects should receive more consideration in the CBA system. More specifically, we have considered the following effects:

- indirect economic impact;
- avoidable additional parking expenses;
- reduced excise income;
- value of public transport as a fallback (option value);
- benefits resulting from increased frequency of services, better chance of finding a seat and improved comfort.

A number of these points can be improved. The report outlines indicators which can be used to incorporate these effects in future CBAs. As regards infrastructure construction projects, the incorporation of these effects will often only have a limited impact on the CBA result.

If the project is aimed primarily at increasing the frequency of services, the chance of finding a seat, or the comfort of public transport, and if it is impossible to realise this without the project being implemented, incorparating these effects may have a more substantial impact on the CBA result. Surveys have shown, for example, that if 30% of passengers have to stand, all passengers on the train regard this as equally regrettable as a 50% longer travel time. Where this is a problem, increasing the chances of finding a seat can, therefore, imply a substantial prosperity benefit.

Which public transport projects produce a favourable CBA result?

As regards heavy transport flows and serious bottlenecks, the CBA often shows that public transport projects positively contribute to prosperity. Examples include the more effective use of the Utrecht-Arnhem railway line, increased capacity of the Utrecht-Den Bosch railway line and, many years ago, the construction of the Schiphol railway line. In the case of projects aimed at lighter transport flows or bottlenecks, CBAs often favour small investments. However, many projects in the Netherlands involve relatively large investments for relatively light flows or have a relatively minor effect as regards easing the bottleneck. In such cases, the results of the CBA – rightly – reveal the project as reducing welfare.

Only rarely do CBAs assess investments in public transport operations. This can possibly be explained by the fact that such projects often remain under the multiple targeted subsidy schemes (BDU) threshold¹ and that CBAs are implemented primarily in connection with projects which are – well – in excess of this threshold. In the case of projects exceeding the BDU threshold, another key factor to bear in mind is that transport companies and regional authorities bear no or only a small proportion of the investment costs, despite the transport company and/or the regional authority enjoying almost all the benefits of the new infrastructure. The institutional relationships therefore encourage transport companies and regional authorities to develop additional infrastructure, partly or largely funded by the central government.

[†] Brede doeluitkering (multiple targeted state subsidy schemes). This state subsidy enables provincial or urban regional authorities to make, for example, other infrastructure investments. Investments under the BDU threshold are funded entirely by these local authorities. The state then does not contribute to the costs. In the case of the Amsterdam and Rotterdam urban regional authorities and the Haaglanden regional authority, the threshold has been set at \in 225 million. In the case of the other provincial and urban regional authorities, the threshold is \in 112,5 million.

Conclusion

Policymakers have formulated goals to which public transport has to contribute. This study shows how performance in relation to these goals clearly features as a benefit in CBAs and proposes improvements to aspects of the CBA system. As a result, the expectations placed on public transport and the results of CBAs can now better be aligned.