

Summary

Evaluation of the Research Program Transport Economics

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In this report we summarise an evaluation of the Swedish research program TRANSPORT ECONOMICS. We have focused on scientific quality and have not considered internal processes or the impact for the programme. The use of a Research programme in a collaboration between a financing organisation (in this case the Swedish Transport Administration -STA) and a number of Research institutions, seems to be a good solution that generates better impact (locally) and creates a possibility to build competence over a longer period of time, as well as take greater risks. At the same time, the competition is reduced, which may result in lower quality on the research. Therefore, a research programme of this type need to be followed by an independent evaluation. We find that the programme has an unbalanced portfolio, with projects focused on applied projects for the STA's planning models, and less on system analysis or regional economics. The researchers have good insights into the theoretical framework and can write scientific papers but, sometimes the methods used are not up-to-date. The contribution to the discipline Transport economics is rather weak, and we can't classify any publication as innovative. However, a majority of the publications give rise to scientific merit to some degree. To develop the programme the focus should be on creating research that can be used by STA in its planning models, and at the same time be innovative and contribute to the discipline. With a focused programme in Transport economics such a development should be possible.

Research programme

A Research programme financed by one organisation (Swedish Transport Administration) that includes a smaller number of Research institutions is interesting and probably a very fruitful form of organisation. The competence can be developed over a longer time horizon and the the research institutions should be willing to take higher risks. In addition, the local impact for the financing organisation is expected to be high. This may also be a risk, as results have not always passed international peer review before implantation. In addition, this form of organisation excludes competition between research organisations, something which may cause lower quality work than what alternative organisations could offer. The use of this kind of research programme thus demands a thoroughly independent evaluation.

The Balance in the Portfolio.

The Research program has three focus areas. The first, "Effect models and calculation methods for system analysis", is the biggest area with 76% of the output. The program seems to deliver useful input to the (traditional) planning organization, while the actual analysis is made at Trafikverket. The second area is System- and analysis of policy instrument for the whole transport sector" which seems to be about 18% of the output, while the last area, "Transport system, land use, mobility and regional economy", is the smallest area with 6%.

Scientific publishing and quality

Reading all the output from the program's first 2,5 years gives an impression of very experienced researchers who know their theory very well and can put it into context. They are also skilled at writing scientific publications. However, the methodological approach does not always appear to be up-to-date, and the results do not always provide (less than 50%) a scientific contribution to the development of the discipline.

Three published articles are the result from the program so far. In addition, the program uses a publication form "publishable manuscript" that are prepared for international publication. This is a very clever form of output. If the "publishable manuscripts" also count as international scientific publications, the share increases to 40%, which is good. If these "publishable manuscripts" fail to increase the amount of scientific publications, the program need to focus stronger on international publishing.

Given that not all publications are meant for scientific journals, it is encouraging that as much as 71% is written in English. This means that also more or less internal documents can reach an international audience and give rise to international feedback.

The majority of the output show a good understanding of theory and context and relates to the research in the field. The output that fails to meet these criteria is one of two types; i) the aim of the output is not research but more of general manuals etc., based on the researchers' existing knowledge and ii) some areas/groups where it seems that the demand on scientific quality is lower.

The majority of the output is based on high quality methods but not all of them seem to be up-to-date. All of the reports and manuscripts are well written and easily accessed by a reader.

However, not all of the output contributes to the scientific development of the discipline transport economics. This may not be surprising, given that scientific quality only had a 40% weight in the internal project evaluation, but we expected a higher number of contributions to the discipline.

Innovation

A research program with this construction should give room for more risky and innovative approaches and projects. We can't find any true innovative research in this program so far.

Recommendations

- The program should evaluate its balance between the different sub-themes in its portfolio. It seems too focused on applied input to Trafikverket.
- It is encouraging that so much output is written in English, which make international feedback possible also on non -journal published output.
- If the number of scientific publications does not increase over time, the program should take action to improve this
- The program should have higher demand on scientific quality, also on publications that deliver reports and model input to Trafikverket.
- The program should consider ways to combine local impact for Trafikverket with scientific quality and innovative research.
- The program produces many scientific meriting outputs, and only need to focus on some of the areas or groups where this is lower.
- The Research in the program has a surprisingly low level of innovative research.