

Summary

Central government investments
in transport infrastructure – value
for money? (RiR 2012:21)



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Audit background

Every year, central government spends billions of kronor on investments in roads and railways and their maintenance. Effective transport infrastructure is important, both for individuals and for society as a whole. The volume of the funds invested in infrastructure measures, in combination with the measures' impact on so many, places demands on a good economy of resources. This in turn places demands on the Government and agencies to provide sound decision-making documents and good opportunities for following up implemented measures.

Since 2009, the Swedish National Audit Office (Swedish NAO) has carried out a series of audits on the theme “Infrastructure on new terms”. The central question of the audit strategy is: *Are central government's instruments for developing and maintaining transport infrastructure designed so as to lead to an effective use of the resources?*

The purpose of this audit is to provide a comprehensive and in-depth picture of the deficiencies in effectiveness observed in previously completed audits of economy with central government funds for infrastructure maintenance and development. The purpose has also been to analyse the causes of the problems and, in the light of completed and ongoing changes in the sector, to point to the further changes that are needed to remedy the problems identified. This final audit has placed particular focus on the question: *Has the Government's control led to an effective use of the resources for infrastructure?*

Audit results

The Swedish NAO's overall conclusion is that the Government is not ensuring an effective use of central government resources. According to the Swedish NAO, there are problems with respect to:

- planning not being carried out in accordance with established transport policy principles for the selection of effective measures,
- transport being underpriced in relation to its variable costs,
- the existence of overestimated benefits and underestimated costs in the decision-making documents,
- planning deficiencies regarding identification of costs in time,
- the lack of systematic follow-up in several areas.

According to the Swedish NAO, these deficiencies lead to the creation of significant risks for ineffective investments and further cost increases. The deficiencies may also have consequences for the implementation of climate policy and for the management of the central government budget. According to the Swedish NAO, the problems are not due to deficiencies in the design of policy instruments and principles, at least not primarily. Rather, the problems are due to policy instruments and principles not being applied as intended, either by the Government or by the Swedish Transport Administration.

A positive process of change

Recent years have seen a comprehensive process of change within the transport infrastructure sector. The agency structure has been changed, including the formation of the Swedish Transport Administration. The planning system has been changed and new steering models have been introduced. This process of change is still taking place. It will create better preconditions for intermodal planning and may lead to improvements in several areas. However, the Swedish NAO's assessment is that the changes are not sufficient.

The Government is deficient in its own application

The Swedish NAO observes that the Government is not acting in accordance with the transport policy principles established by the Riksdag. According to these, the Government shall, in order to secure an effective distribution of the investments, ensure that analyses are performed with respect to the policy instruments' ability to effectively address deficiencies in the transport systems before considerations are made regarding more costly construction work. This has not taken place to a necessary extent. The Government has also not controlled the pricing of transport in accordance with the applicable principle of transport bearing its variable costs.

The Government has reduced the opportunity for the selection of effective measures in the long-term infrastructure planning through the great extent to which it has designated measures and thereby already locked large parts of the financial framework in the directives to the expert agencies ahead of their planning work. This counteracts an effective use of the resources.

The Swedish NAO also establish that the Government then make changes in relation to the proposals contained in documents from the expert agencies when the Government makes decisions on the long-term plan. These changes occur as a result of political assessments or other priorities, without explanation being provided in a transparent way. Furthermore, the Swedish NAO also notes that the changes that the Government makes imply, among other things, a reduced scope for minor measures of high socio-economic profitability in favour of major investments of lower socio-economic profitability. There are also instances of decisions being made by the Government without relevant documentation on the projects' costs or socio-economic effects, something which is contrary to applicable principles. There are also decisions made in accordance with priorities other than those endorsed by the Government and the Riksdag, without this being reported.

The Government's control is not appropriate

The Government has not requested supporting documentation from the Swedish Transport Administration demonstrating the effects that can be achieved through pricing and other policy instruments and has also not provided the Swedish Transport Administration with guidance on how 'the four-step principle', intended to lead to the selection of effective measures, is to be applied with respect to policy instruments over which the Swedish Transport Administration has no control. There is also a contradiction between the Government's steering towards the promotion of co-financing, which according to the Swedish NAO mainly provides incentives for measures of new investments, and an effective use of the four-step principle through which investment measures are only to be considered in the fourth and final step, a contradiction which has not been analysed by the Government. Taken together, these deficiencies make it difficult for the Swedish Transport Administration to implement effective planning.

Several important improvements of the decision-making documents have been made by the Swedish Transport Administration. This is a development to which the Government has contributed through its introduction of firmer control regarding the content of the decision-making documents. It is also positive that the agency Transport Analysis has been commissioned to examine the Swedish Transport Administration's planning documents.

However, a number of deficiencies remain. One example is the Government's and the Swedish Transport Administration's decision-making documents for operations and maintenance measures, an area which is currently undergoing major development. In order to rectify the problems of delays and cancelled trains in the rail system in recent years, the Government has expanded the investments in railway maintenance, something which is in accordance with the Swedish Transport Administration's documents demonstrating that the need for maintenance investments is great. However, it is not possible to make more informed assessments of whether the benefit of the maintenance investments corresponds to the costs and thus also whether the level of the investments is well balanced.

There also remain a number of deficiencies that are not being directly addressed by ongoing improvement work at the Swedish Transport Administration. One example is the information on investment costs in the documents. The Swedish NAO still assesses the information on investment costs in the planning to be surrounded by a high risk of underestimation. This is because the results of the costing methodology introduced need not be applied, which means that the risk of the strategic underestimation of costs remains. Another example is deficiencies in the system approach in major investment projects. Necessary additional investments, at a cost of tens of billions of kronor, are missing in the documents. In the case of the West Link Project (Västlänken), a railway tunnel under Göteborg estimated to cost SEK 20 billion to build, the decision-making documents lack information on necessary additional investments of a cost amounting to between SEK 20 and 35 billion. These additional investments are necessary for being able to expand rail traffic, which is one of the objectives of building the West Link.

The Swedish NAO notes that initiatives have been taken for follow-up, analysis and learning. But despite this, the lack of follow-up, and the absence of necessary data for follow-up, constitute one of the most important problems observed in the audit. For example, productivity measurements are not yet reported by the Swedish Transport Administration, and the effectiveness of various procurement strategies has not been followed up. In addition, the Riksdag also does not receive from the Government any follow-up of the outcome of major investments in relation to what the documents showed at the time of making the decision.

Misleading information to the Riksdag and the general public

The Swedish NAO's conclusion is that the Government has not explained the decisions and informed the Riksdag and the general public about the infrastructure investments in a transparent and accurate manner. The Government has not ensured that the Riksdag has received relevant knowledge bases on which measures and resources that are effective. Since the Government's decisions lack relevant explanations for departing from economically optimal assessments, the Riksdag and the general public are not being given the opportunity to assess the investments. This means that the opportunities for potential accountability are obstructed.

At the same time, the absence of an accurate system for measuring, valuing and reporting the development of fixed assets and capital stock obstructs the Government's and the Riksdag's long-term assessment of future financing needs in the central government budget.

Continued risk of ineffective investments and future cost increases

The Swedish NAO assesses that a consequence of the deficiencies, if not corrected, is that there will still continue to be many major cost increases in infrastructure projects after they have entered the long-term plans. Another and probably more serious consequence is that there is a great risk that it is not the most effective measures that are selected and implemented. Some projects risk becoming unnecessary or too extensive because their benefit has not been calculated on the basis of a more socio-economically effective pricing. Deviations from the transport policy principles thus entail a cost in terms of reduced effectiveness. Decisions on effective, but politically inexpedient measures are passed on to future decision-makers.

The deficiencies also have consequences for the activities of the Swedish Transport Administration since its analysis resources are not being used in an effective manner. The fact that transport is not priced correctly also has implications for the implementation of policy in other policy areas, in particular climate policy. Transport demand, and thus emissions, risk becoming greater than in the case of pricing based on marginal cost. In particular, this applies to freight transport.

The problem would have been smaller if decision-making documents and reasoning surrounding decisions had been transparent, but the Swedish NAO notes that there is a large gap between the principles established and their practical application. This means that the general public and the Riksdag are not receiving accurate information.

The long-term nature and the extent of the infrastructure mean that the quality of decision-making documents is of great importance in accounting and budgeting. Here however, the Swedish NAO notes major deficiencies, as also pointed out by the Swedish Fiscal Policy Council. These deficiencies in the financial accounting of the state of the infrastructure can lead to erroneous valuations of maintenance needs and at worst lead to strain on the central government budget in the form of significantly higher maintenance costs in the future.

For citizens, the deficiencies identified by the Swedish NAO have important consequences. Firstly, these mean that taxpayers' money relating to large investment volumes risks being used in an ineffective manner. Secondly, deficiencies in the effectiveness of resource distribution may lead to deterioration in quality. This affects the benefit and reliability of transport, which more specifically might give rise to deficiencies in punctuality and longer journey times, among other things.

Recommendations

The problems that the Swedish NAO has observed and called attention to in this report are not unknown. They are also not new, but have recurred in audits and other descriptions of the infrastructure sector over a long period, regardless of agency structure and regardless of the Government in power. The Swedish NAO can see a number of basic preconditions for incentive structures at various levels – as a result of the financing system for infrastructure investments, the allocation of roles in the area and the fact that the policy objectives most highly prioritised in practice do not always coincide with the objectives of transport policy. All this influences the problem representation reported here. The process of change taking place within the infrastructure sector may lead to improvements in several areas, but the Swedish NAO's assessment is, however, that the changes are not rectifying the basic structures that are counteracting an appropriate application of the transport policy principles.

The Swedish National Audit Office addresses the following recommendations to the Government:

- *Ensure that policy instrument analyses are available as a basis for planning measures*
Produce policy instrument analyses as a basis for planning measures and secure the production of necessary data. In the long term, full internalisation of the marginal costs of transport should be pursued.
- *Introduce clearer guidelines for four-step analyses and external quality assurance of major infrastructure investments*
Introduce more regulated four-step analyses, in which the reporting of how alternative solutions have been investigated is mandatory, and external quality assurance of these analyses.
- *Report reasons and purposes of infrastructure investments more transparently and improve the follow-up of major infrastructure investments*
Report total costs including necessary subsequent investments, purposes and reasons for infrastructure investments more transparently, both for projects identified in government bills and directives and in ratification decisions. Set further requirements for a more detailed follow-up of major investment projects in which the outcome of costs and benefits should be set against the costs and benefits reported in the decision on the plan. Causes of changes should be reported. Reasons for departing from decision-making documents from agencies should be reported clearly. The fact that decisions are made outside of the ordinary planning process does not alter the need for the transparent reporting of measures' costs, purposes and reasons.
- *Develop a long-term financing plan*
Develop a system for long-term financial steering and budgeting of fixed assets.
The purpose should be to create preconditions for assessing future demands for the financing of investments and the maintenance of infrastructure.
- *Consider a strengthened Government Offices*
Consider increased resources for the Government Offices in line with the proposal of the Transport Administration Inquiry.

The Swedish National Audit Office addresses the following recommendations to the Swedish Transport Administration:

- *Further develop methods for cost control and improve the follow-up of cost control*
Further develop methods for cost control and improve the follow-up of cost control. Follow up how the successive calculation method is applied and to what extent the method has led to more certain calculations of construction costs. To the extent that the successive calculation method does not live up to expectations of more certain calculations, alternative or supplementary methods should be investigated.
- *Improve the system approach and reduce the risk of unforeseen subsequent investments*
Develop methods for how system effects and dependencies between measures are to be analysed and reported. This has the purpose of improving the system approach and reducing the risk of unforeseen subsequent investments.
- *Secure data for follow-up and learning*
Ensure that necessary data for an effective development and an effective maintenance of the transport infrastructure is collected and stored in a systematic way.