Review of the Swedish Transport Administration's Cost-Control Efforts — Interim Report

Summary report: 2024:5

Date: 2024-08-21



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Summary

The commission

The Swedish Government has tasked Transport Analysis to conduct a review and follow-up of the Swedish Transport Administration's cost-control efforts within the framework of the National Transport Infrastructure Plan (NTIP). This commission will run through April 30, 2028, and is intended to improve the Swedish Transport Administration's routines and working methods. It will be reported upon on April 30 of every year from 2024 to 2028.

The present report is the interim report for 2024; its emphasis is on describing the existing problems. The analysis will be developed in future interim reports, leading up to the final report in 2028. An analysis of the Swedish Transport Administration's report to the Government regarding the evolution of the costs in its investment activities was also published within the framework of this commission in September 2023.

Interpretation of the commission and course of action

Generally speaking, Transport Analysis believes that good cost control within an organization means that decisions regarding issues that have a significant impact on the organization's operations are being made with an awareness of the relevant tradeoffs that affect various aspects and potential consequences of different decision options. In the current context, this viewpoint applies within the framework of the planning and execution of individual projects, to the comprehensive portfolio of actions in the NTIP from both a short- and a long-term perspective, and in relation to our transport policy objectives. Transport Analysis considers the following aspects to be key to achieve good cost control:

- That the Swedish Transport Administration has the ability, using its
 calculation methods, to assess the future costs and benefits of its activities;
- That *learning* is taking place within the Swedish Transport Administration, which
 means that previous experience with changes in costs and cost control is being
 utilized:
- That the basis for decisions regarding planning and actions is *transparent* in a way that creates favorable conditions for good cost control;
- That the Swedish Transport Administration's information-management systems and routines provide the means of monitoring and tracing changes in costs and their causes accurately;
- That the *incentive structures* within and around the Swedish Transport Administration contribute to the prioritization of cost control; and
- That the management of the Swedish Transport Administration's efforts in connection with the NTIP is carried out in a way that creates conditions favorable to the foregoing aspects.

The commission has been carried out using various methods and activities with a bearing both on concrete operations in terms of the transport infrastructure and on the Swedish Transport Administration's processes for planning, execution, follow-up, and operational development. A large part of the work to date has been intended to define the set of problems clearly, based

on what is known from earlier reports and studies, and on data and documents from the Swedish Transport Administration. The documentary basis has been expanded through interviews and meetings with representatives from the Swedish Transport Administration, both at an overall level for the commission as a whole and with respect to specific substantive issues within its investment and maintenance activities. Multiple sub-studies have also been conducted, at our behest, by consultants and researchers within the framework of this effort. This has resulted in the publication of reports and memorandums on the Transport Analysis website.

Conclusions

Overall set of problems

We find cost increases in infrastructure planning to be a well-documented problem. The empirical work embarked upon within the framework of our commission confirms the situation described in other reports, which the Swedish Transport Administration delineates clearly in both the NTIP and the strategic framework regarding cost increases in investment activities. The scope of the cost increases depends upon how they are measured (i.e., the timepoints between which comparisons are made, how price levels are indexed, how changes in content are taken into account, etc.), as a result of which the assessments of the scopes of the cost changes will vary. Earlier empirical observations indicate that the cost increases are systematic and generally extensive in the early planning stages. They affect the majority of the projects in the NTIP, although a smaller share of the projects account for the greatest share of the total cost increase.

In general, we find that the set of problems looks similar on the maintenance side and on the investment side; for example, cost increases occur in contracts, and the estimated costs for the operations over time increase more than the general price increase in the economy. However, in the case of the operational and maintenance activities, it is less clear which key metrics are most relevant to analyze in assessing the Swedish Transport Administration's cost-control efforts. One overarching problem in the operational and maintenance activities is neglected maintenance—a problem that has also increased over time. Moreover, because the Swedish Transport Administration does not fully apply a lifecycle cost perspective in its investment decisions, we perceive deficiencies in how well the Swedish Transport Administration takes future maintenance needs into account.

Calculation methods

In view of the well-documented problems associated with systematic cost increases within investment activities, there appear to be problems with the calculation methods being used or how they are being applied in the planning process. Thus, our assessment indicates that the Swedish Transport Administration has a pervasive need to develop its ability to make cost forecasts and assess the risk of future changes in costs. At the same time, it is impossible to precisely calculate costs in the early investigation stages as the bulk of the investigative work still remains; therefore, it is important to enable continued investigative work without the early calculations being viewed as definitive. There is also a related need to generate a documentary basis for decision-making in terms of prioritizing maintenance actions—an area where there is a lack of knowledge of significant cause-and-effect correlations and socioeconomic methodology.

Learning

We see a need to enhance learning with regard to both maintenance and investments. With regard to investments, the systematic character of cost increases indicates that experience from earlier projects is not being fully utilized in the cost estimates. The evaluation of cost-control efforts in the Swedish Transport Administration's operations is hampered by a lack of routines for experiential feedback regarding changes in costs and, significantly, by a lack of support systems for monitoring investment activities from start to finish. This is especially true with regard to following up on smaller measures. From a lifecycle cost perspective, the transfer of knowledge from the maintenance phase to the investment phase is important in ensuring that projects are designed to take into account the need for future maintenance—something that is not occurring sufficiently at present.

Transparency

In our view, it is problematic that the cost trends associated with the activities in the NTIP are almost opaque to external reviewers. It is difficult to gain an understanding of how maintenance activities are being planned and carried out, and it is often hard to deduce the data upon which certain assertions are based; for example, it is difficult to determine how the Swedish Transport Administration has arrived at its conclusions regarding neglected maintenance. In the case of investment activities, there is no coherent description of long-term cost trends for individual objects, and there are limited means available to determine how the costs have changed and why. Difficulties in tracking cost trends within these operations hamper the search for underlying problems and the identification of relevant suggestions for improvement. When no knowledge or documentation of cost trends is available to external reviewers, it can degrade the proactive work done within the Swedish Transport Administration and reduce incentives to intensify cost-control efforts.

Information management

The means available to track costs, changes in costs, and their underlying causes are currently limited by the fact that the Swedish Transport Administration's systems for managing such data are weakly coordinated or have not yet been fully implemented. Cost data are managed in a number of different systems, all of which were created for different purposes and have not been developed into a common whole. Several earlier investigations—including those by the Swedish National Audit Office and VTI—have identified difficulties in obtaining information about the contents and costs of measures taken, and the information gathering that has been carried out as part of this commission paints a similar picture. Significant developmental work is being performed in this area, and a number of new information—management systems or routines have been introduced recently, are about to be introduced, or will be introduced in future.

Incentives

The incentives to prioritize cost control are partly related to the external pressure being exerted on the Swedish Transport Administration by the Government or external reviewers and partly related to the internal organizational structures that affect working methods and employee motivation. The fact that investment objects are seldom suspended or reconsidered when costs increase exemplifies the ways in which political governance impacts the incentive structure. If the risk that a project will not be realized grows in parallel with more realistic—and, in many cases, higher—cost estimates, then the incentives for making accurate cost estimates in the early stages are weakened. Transport Analysis finds that the ongoing discussion on the importance of not making a definitive decision on investment measures at too early a stage is relevant in this context.

Governance

The governance of the Swedish Transport Administration is a topic that has been touched upon and will be elucidated further as we move forward with the commission. Relevant examples include our observations that there is no coherent system for compiling project costs in various stages, that adopted working methods used to determine how costs are to be documented are not being fully complied with, that lifecycle costs are not being fully taken into account in decision-making about investments, and that the lack of methods to determine cause-and-effect correlations or socioeconomic impacts for maintenance measures limits the means available to set clear priorities from a socioeconomic perspective.

Effects of efforts to achieve more robust cost control

We also note that we have a favorable view of the developmental work being done within the Swedish Transport Administration, including that within the framework of the Cost-Management Program [Program Kostnadsstyrning], in which we view several initiatives as being both pressing and relevant. The Swedish Transport Administration's ongoing developmental work surrounding these issues, combined with Transport Analysis's multiyear commission, indicates strong awareness of the need for better cost control at present. Moreover, we find that many of the problems noted here have been elucidated in many earlier investigations, which raises questions about more fundamental structural impediments to more robust cost control. Transport Analysis consequently views the very fact that such issues recur as a problem area in itself, indicating that there is reason to deepen our understanding of these issues in our continued work on this commission.

Transport Analysis is a Swedish agency for transportpolicy analysis. We analyse and evaluate proposed and implemented measures within the sphere of transportpolicy. We are also responsible for official statistics in the transport and communication sectors. Transport Analysis was established in 2010 with its head office in Stockholm and a branch office in Östersund.

