



KUNGL. TEKNISKA HÖGSKOLAN
Royal Institute of Technology

TRITA-IP FR 99-58
ISSN 1104-683X
ISRN KTH/IP/FR--99/58--SE

INSTITUTIONEN FÖR
INFRASTRUKTUR OCH SAMHÄLLSPANERING

FORSKNINGSRAPPORT

Svealandsbanan

En studie av efterfrågan före och efter etableringen
av ett nytt tågsystem mellan Stockholm och Eskilstuna



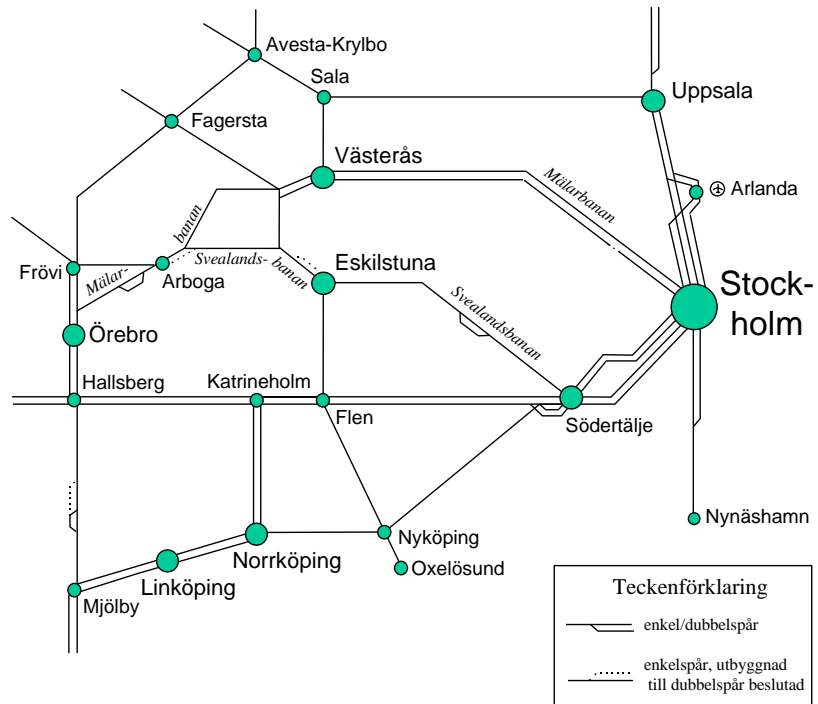
Oskar Fröidh

Avd. för Trafik- och transportplanering

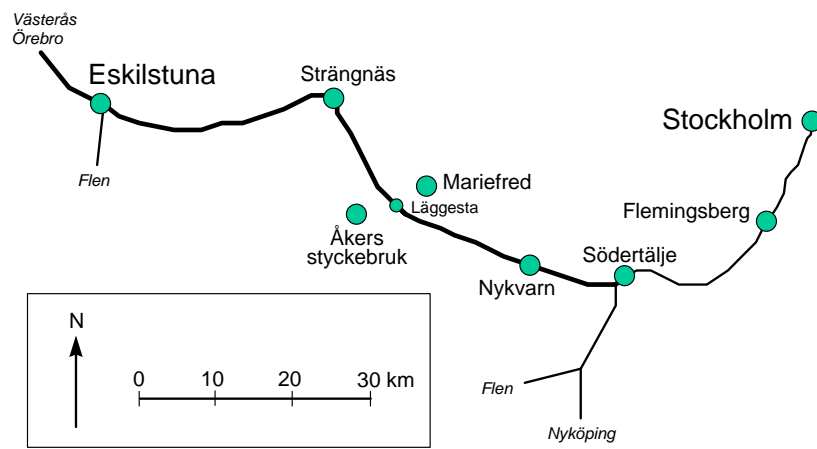
JÄRNVÄGSGRUPPEN KTH
Centrum för forskning och utbildning
i järnvägsteknik



Järnvägsnätet i östra Svealand 1999



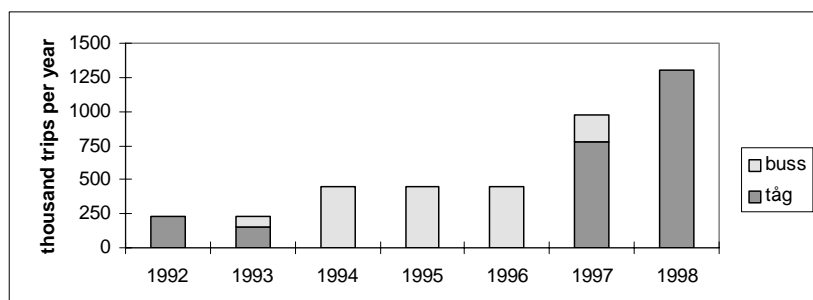
Svealandsbanans nybyggda sträcka



Summary

Svealandsbanan (the Svealand Line) was opened for traffic in 1997. This new rail connection enabled the rail traffic services between Eskilstuna and Stockholm to be improved - from old trains with long travelling times and an infrequent service to regional express trains with short travelling times and a very frequent service. While Svealandsbanan was under construction, rail traffic was replaced by bus traffic offering a frequent service, although the travelling times were still long.

This new rail system provides a unique opportunity to study the effects of this dramatic change in service. This research report presents the range of and demand for public transport and car traffic, together with the knowledge, values and behaviour of travellers and people living in the area when it comes to regional journeys along the parallel road, the E20, and Svealandsbanan. Interview studies were conducted on board the buses between Eskilstuna and Stockholm in 1997, on board Eskilstuna-Stockholm trains in 1998 and among the people living along Svealandsbanan, with Nyköping as the reference town, on both occasions.



Number of trips with SJ between Stockholm and Eskilstuna, journeys to Örebro exclusive, with bus and train respective.

The new rail traffic is attractive, with short travelling times and a very frequent service, and many new travellers have been attracted to public transport. The rate of regional travel on Svealandsbanan is now about six times greater than it was on the trains on the old line between Eskilstuna and Stockholm and the train has increased its market share from around 6% to 25-30%. The market shares for regional public transport, including bus traffic run by the regional pub-

lic transport company (Länstrafiken) in Södermanland, have improved from 10-15% to 25- 30%.

At the same time, car traffic on the E20 has decreased, unlike that on other comparable roads in Mälardalen. Train traffic on Svealandsbanan, with its short travelling times, is probably the most important reason. The effects of this new rail traffic can be seen most clearly in Strängnäs. On the other hand, rail traffic appears to have had a less significant effect on travelling to Mariefred, Åkers styckebruk and Södertälje, as the railway stations in Läggesta and Södertälje South require long connecting journeys to reach these destinations.

One-fifth each of the new regional train passengers come from SJ (Swedish State Railways) and regional public transport buses, more than one-third come from cars and about one-fourth are newly-generated passengers. This study reveals that it is the people who always have access to cars who account for the largest proportional increase in terms of travelling by public transport. Even the groups which do not always have access to a car are using public transport on a larger scale. Bus traffic is generally regarded as a poor replacement for the car, while train traffic which offers a good service attracts travellers on its own merits. The value of the new regional express train traffic is high compared with the previous train and bus traffic, according to a stated preference study. A large percentage of motorists assign a higher value to an express-train journey to Stockholm than they do to a car journey, especially if ticket prices are low.

This study also identifies the areas that can be improved in the current service programme. The principal improvements are lower ticket prices and a co-ordinated fare, including connecting journeys, as well as better connections with the central parts of Södertälje. If this can be achieved, Svealandsbanan could help to bring about further improvements in availability and positive regional development, together with an increase in the percentage of people travelling by public transport, thereby exerting a positive effect on the environment.