

**Summary:**

# **The Traffic Potential of Norwegian Airports**

In this project, the focus is on the individual airport, in the sense that the investigations primarily are designed with the aim of evaluating future investment needs at this particular airport.

The approach is direct and bottom-up. The justification for that is the hypothesis of place specific characteristics and driving forces being important to the extent that they can create significant differences in the relative traffic potential, and that these forces can only be identified through an understanding of the local setting.

The Norwegian perspective is illustrated by the fact that even the largest airports are small in an international comparison. Thus, the modest traffic volumes and the functional simplicity of the overwhelming majority of the airports constitute a warning sign as to an uncritical application of methods developed in other contexts.

The basic forecast (for an airport) shall be defined as the potential inherent in to-day's dynamics, i.e. in the present development of population, travel frequencies, consumer bases and behaviour. This definition presupposes that a number of decisions and events may change this potential, in either direction. Dependent then upon the evaluation of the present general and place specific dynamics, such a basic forecast can be identical or different from the strategic forecast, i.e. the forecast based on which the airport owner will plan his future investment policy.

In the present project, we have come no further than suggesting a basic forecast for each airport, and even that with varying plausibility. We have, however, in addition raised a number of questions and hypotheses pertinent for future work both regarding growth and market share forecasts.

A major part of the report and the underlying working documents, is a systematic survey of all individual Norwegian airports. The mapping of the geographical or accessibility defined sphere of influence is particularly stressed, being a necessary basis for any airport specific traffic forecast, regardless of the general methodological approach. The mapping of place specific characteristics beyond that is carried out in varying detail, but completed scarcely anywhere.

As a background for and governing the work ahead, we have discussed the notion of 'prognosis' in some of its many disguises; the competition against other modes of transport; the relationship between the geographical and func-

tional sphere of influence in a hierarchy; and the population development in Norway as a driving force in the growth in air traffic. In closing, we have strongly argued for the usefulness of a particularly thorough analysis of the trends we can observe at present:

The conceptual discussion of forecasting as a terminological, methodological and strategic problem centres on the distinction between descriptive and predictive models, i.e. on the difference between forecasting the past and the future. The key problem here is the forecasting of the independent or explanatory variables. This implies, for instance, that a conditional forecast where the conditions are not discussed properly, really has nothing to do with prediction in the probabilistic sense. On the basis of this and related arguments, our conclusion, which is supported by international evidence, is that no single model or technique represents the methodological 'solution'. On the contrary, only a *combination of approaches* has that potential.

Having discussed the competition and co-operation between air transportation and the coastal carrier, high speed boats, the railway and the road sector - express buses and the private car -, the general conclusion is that the growth potential for the air sector is not so much related to transferred traffic as to the ability to create new traffic in old and new market segments. In fact, the air plane may turn out to be its own worst enemy, as a result of a much more fierce fight for customers among airports and airlines. This is, however, not in any way to say that the competition between modes is not interesting from now on, since the conditional basis for competition very well can change.

We have discussed relationships between population and traffic developments. Historically, the growth of air traffic has been very much higher than the population growth rate. This is also the perspective: Towards the year 2010, on a national basis, we can conclude that the traffic growth potential associated with the population growth 'as such' is very modest.

In closing, we have tried to identify bottlenecks in forecasting with particular emphasis on (1) the importance of price policies and the possibilities for implementing the desired policies, desired in relation to the conditions for behavioural response, and (2) in which market segments and to what degree we must begin to talk in earnest about maturity and saturation.

