Travel times play an important role when people decide where, when and how much to travel. But travel times are not always predictable from the traveller’s point of view: They may vary from day to day due to demand fluctuations, weather conditions, accidents and other unforeseen events that cause road capacity to decrease. We refer to this uncertainty as travel time variability (TTV).

TTV is likely to affect how travellers schedule their trips, since it affects their probability of arriving late at their destination. We would like to account for TTV in traffic models and cost-benefit analyses, but in practice there are limits to the kinds of behaviour that can be accommodated in such applications. For that reason, we are not solely interested in explaining travellers’ behaviour, but also in whether this behaviour can be approximated by behavioural models that are simple enough to be applied in traffic models and cost-benefit analyses.

In this presentation we investigate how travellers schedule their trips to take TTV into account. We present stated preference and revealed preference evidence from Scandinavian surveys and try to explain the behavioural pattern using theoretical models from the transport research literature. Finally, we discuss whether the behavioural pattern is consistent with application in traffic models and cost-benefit analyses.