

Summary:

Basic Forecasts for Domestic Travel Demand Year 2001- 2020

The basic forecasts for domestic travel demand presented in this report are a project for the Ministry of Transport and Communications and their work with the Plan for National Transport year 2006- 15. The forecast is based on data from the subordinate agencies transport strategies and on expected economic development. The forecasts for trips over 100 km has been calculated using the newly developed National Transport Model for passenger transport, NTM5, which includes the travel modes car, train, bus, boat and air. The forecasts for trips under 100 km are based on the old transport model, NTM4, which includes the travel modes car and public transport. Estimated development in passenger transport will serve as a foundation for road- and public transport planning in Norway.

We have assumed the following:

- Real disposable income per household is expected to grow at a rate of 2.8 per cent per year in 2001-12, and 2.4 per cent per year in 2012-20. Relative fares and car costs change with less than the change in income.
- Network and infrastructure in 2001-12 are coded using data from the Public Roads Administration, Norwegian National Rail Administration and Civil Aviation Authority. We have not changed bus and boat transport from the 1998- scenario.
- Frequency in air transport will increase with 1 per cent per year in 2001-20.
- Forecasts in demography are supplied by Statistics Norway. The total population growth is 11 per cent in 1998- 2020, which gives an average of 0.48 per cent per year.

The tables and histogram below gives the main results from our forecasts given these assumptions.

Tabell S1. Average growth per year in no of long trips (traffic per day) in the periods of forecast

	Traffic per day	Average growth per year. Per cent.			
		2001	2001-2006	2006-2012	2012-2020
Car	127 497	2.0	1.3	1.1	1.4
Bus	7 119	0.8	0.9	0.8	0.8
Boat	3 815	0.5	0.8	0.6	0.6
Train	14 450	0.8	0.8	0.7	0.8
Air	22 323	1.7	1.7	1.4	1.6
Total	177 206	1.7	1.3	1.1	1.3

TØI report 582/2002

Tabell S2: Average growth per year in passenger kilometres (bn pkm/year). Basic forecast

	Bn pkm/year	Average growth per year. Per cent.			
		2001	2001-2006	2006-2012	2012-2020
Car	11 539	2.2	1.3	1.2	1.2
Bus	746	0.8	0.9	0.9	0.9
Boat	366	0.6	0.8	0.8	0.8
Train	1 460	0.9	0.8	0.8	0.8
Air	5 899	1.8	1.8	1.8	1.5
Total	20 010	1.9	1.4	1.4	1.4

TØI report 582/2002

Table S3: Average growth per year in passenger kilometres (bn pkm/year). Basic forecast

	Bn pkm/år	Average growth per year. Per cent.			
		2001	2001-2006	2006-2012	2012-2020
Car	15.3	0.8	0.2	0.5	0.5
PT. ¹	1.3	-1.6	0.0	0.0	-0.4
Car int ²	13.1	1.5	0.7	0.7	0.9
PT int	1.1	0.0	0.0	0.0	0.0
Car total	28.1	1.3	0.4	0.6	0.7
PT total	2.4	-0.8	0.0	0.0	-0.2

¹ Public transport

² Traffic within the zone defined in the model (municipality).

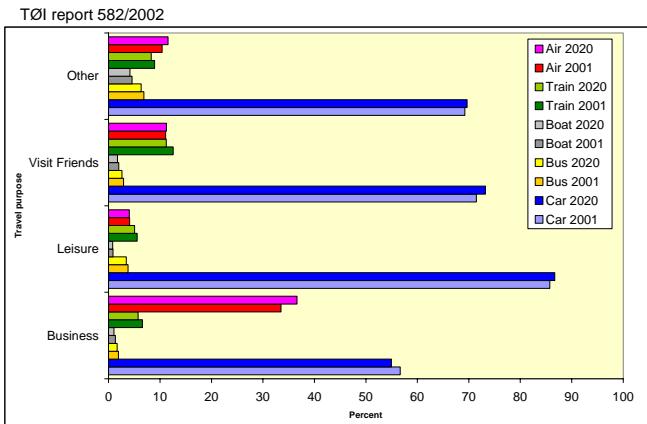


Figure S1: Distribution of travel purpose per travel mode for long trips. Year 2001 and 2020. Per cent

Passenger transport is expected to experience a low growth rate, both totally and per travel mode for trips over 100 km in the period 2001-20. The expected growth rate is lower than the one calculated in the previous forecast (Voldmo 2000), especially for air and car. This may be because we have used a new passenger transport model estimated on new travel survey data. It is reasonable

to believe that these data gives a better reflection of the real world.

The forecasts for short trips are calculated using the short distance model from the previous transport model, NTM4 (Grue et al 1999). Here, the growth rates are close to the one found in the previous forecasts (Voldmo 2000), though a little weaker. We have a negative growth in public transport in the period 2001-06. There is uncertainty in these results, and we will develop new models for short trips – regional models – starting this fall (Rekdal and Larsen 2002).

The transport model NTM5 consists of four estimated models split by travel purpose; business, leisure, visit friends and other private trips. Commuting trips are included in other private trips. We see a very small change in market share per mode on all travel purposes. The car is dominating, with 65 to 90 per cent market share. On business trips, the share of car trips will decline and the share of air transport will rise to over 35 per cent.