Summary

Mobility Report 2010

Last year the economic crisis had various effects on traffic and transport in the Netherlands. Owing to the influence of international developments, the crisis profoundly affected the freight transport and aviation sectors. Traffic volumes and rates of public transport use were however largely unaffected by the crisis, although, in contrast, the crisis had a considerable impact on traffic jams and traffic congestion levels. These repercussions serve to deepen our understanding of mobility and the factors that influence mobility. The economic downturn did however also have positive effects: in addition to lower traffic volumes and congestion levels, CO_2.emmissions also decreased.

Total mobility rates stabilized and the amount of traffic on the Netherlands' main motorways decreased by only 1% in 2009. Nevertheless, car drivers experienced as much as 10% less inconvenience due to delays caused by traffic jams and congestion. The total number of train passengers did not decrease in the past year.

Freight transport experienced an unprecedented 12% decrease. The aviation sector also experienced a severe downturn. The total number of passenger movements via Amsterdam Airport Schiphol dropped by 8% in 2009. Rates of passenger movements did however continue to increase at the Netherland's regional airports. Owing to the economic crisis, CO_2 emissions deriving from road traffic fell by 4%.

Home-to-work travel the driving force behind mobility growth

Over the past 25 years, mobility rates among Dutch people increased by some 40%, with the increases especially prevalent in the 1980s and 1990s. Since 2000, however, the growth in the total number of kilometres people travel annually has slowed, and, since 2007, these growth rates have more or less remained stable.

The number of kilometres travelled by car has particularly increased over the past decade, with home-to-work travel responsible for one-third of this increase. Starting in 2000, home-to-work travel has accounted for virtually

all of the increase in passenger car traffic volumes. The reasons for this lie in the fact that more people – especially women – now have jobs and the distances between home and work have increased. The average distance travelled by car drivers rose from an average of 15 kilometres in 1985 to nearly 22 kilometres in 2008. In terms of the amount of time employees spend travelling from home to work, the Netherlands ranks as one of the leading European countries. Employees who are higher educated, earn high salaries and hold full time jobs, reside on average the furthest away from their places of employment.

The average speed of home-to-work car journeys rose from 41 km/h in 1985 to 47 km/h in 2008, an increase which is partly attributable to major improvements made to the road network over the past 20 years, and partly - and perhaps more importantly - to the fact that the longer home-to-work travel distances are primarily covered on the main motorway network, where cars are permitted to travel at higher speeds.

The increase in car traffic volumes is not due to the fact that fewer people travel by public transport or use their bicycles less frequently. Over the past 20 years, the modal split among the various modes of transport has remained largely unchanged. Approximately half of all journeys are undertaken by car, one-third by bicycle, and 1 in 20 by pubic transport. On weekends, there are fewer traffic jams on the main motorway network; however, this is not because there are fewer cars on the roads, but rather because there is a better distribution of traffic volumes over the course of the day. On Saturdays, traffic volume levels are virtually the same as on a weekday. On Sundays, however, the roads are indeed quieter: there is nearly half the number of cars on the roads.

The economic crisis has seemingly had very little influence on total mobility rates and traffic volumes on the main motorway network. Instead of the annual growth rate of a couple percentage points over recent years, traffic volumes on the main motorway network experienced a limited decline of 1% between 2008 and 2009. Traffic congestion levels on the main motorway network did however decrease by 10% during the same period.

Train use growth continues, urban and regional transport stable

While total mobility rates have remained relatively constant since 2007, train use increased in the period 2007-2009. Because high school and university students travel more often by train, the railways are less dependent on business-related travel. However, as a consequence of the economic downturn in 2009, the growth in train use was indeed less than in 2007 and 2008.

From 2000 to 2009, train use increased by 16%, which is primarily attributable to population growth and economic development. During this period, increased train ticket prices slowed the growth of train use.

On a national level, trains, buses, trams and metros played a minor role, accounting for 5% of all journeys. There was however great variation on the local level; for example, in the country's five major urban areas, the rates of public transport use during the morning rush hours hardly differed from the rates of car use.

High school and university students account for nearly half of all the kilometres travelled by bus, tram and metro. From 2000 to 2008, the use of urban and regional transport remained relatively equal, although there were major differences per region. Consequently, the number of kilometres travelled by bus, tram and metro rose by 15% in Haaglanden and in Zeeland, but fell by 10% in Rotterdam and Noord-Holland

Aviation sector experienced hard times

Due to the economic crisis, the aviation sector experienced hard times in 2009. The total number of passenger movements via Amsterdam Airport Schiphol dropped from nearly 47 million in 2008 to slightly more than 43 million in 2009. The number of passenger movements beginning or ending at Schiphol has declined since July 2008, while the total number of transfer passengers continues to grow. A possible explanation for this is the air ticket-tax which was introduced in the Netherlands at that time. Beginning in the fourth quarter of 2009, passenger movement rates are however once again on the rise.

The total number of passenger movements at Dutch airports increased from 10 million in the early 1980s to 50 million in 2008. Regional airports have experienced significant growth in recent years. The overall market share for the Dutch aviation sector increased from 4% in the 1990s to more than 6% in 2009. Eindhoven is the Netherlands' largest regional airport. Between 2008 and 2009, Eindhoven continued to experience growth in its total number of passenger movements, in contrast to the Netherlands' other airports. Dutch people also use various German and Belgian airports, owing to their close proximity.

Unprecedented decrease in freight transport

Owing to the economic crisis, freight transport levels fell by 12% in 2009. Such a steep drop had never before occurred in preceding decades - not even during the oil crisis stretching from the mid 1970s to early 1980s.

Freight transport by road decreased by 13% in 2009. Inland waterway shipping and the railways recorded the sharpest decrease. The aviation sector was also hard hit by the economic crisis. In 2009, Schiphol airport transported one-fifth less cargo. Recovery began in the fourth quarter of 2009, however.

In 2009, cargo container transfers decreased in virtually all ports, from Hamburg to Le Havre, by a total of 12%. Ports in the Netherlands experienced a less severe downturn than their foreign competitors.

From 2000 to 2009, freight transport grew by a total of 5%, or less than 1% per year. Between 1985 and 2000, that figure was double. The reason for this downward trend is that more of the Netherlands' income is now generated through service provision and less through the manufacturing of goods. The fact that more expensive, higher quality products are now being produced also plays a role. Consequently, cash flow and turnover increase, but the amount of transported goods does not.

Traffic jams and congestion cause fewer delays in 2009

For car drivers, between 2000 and 2008 the number of delays caused by traffic jams and congestion rose by 55%. In 2009, the economic crisis caused that figure to fall by 10%.

From 2000-2008, traffic volumes increased by an average of 2%. In 2009, traffic volumes fell by 1%. Apparently, then, a small increase in traffic volumes leads to a large increase in traffic congestion; or, conversely, a relatively small decrease in traffic volumes consequently lead to a relatively large increase in traffic congestion. In recent years, this relationship between traffic volumes and traffic congestion has intensified. Presumably, the reason for this is that the maximum capacity of the main motorway network is reached at increasingly more places and during an increasingly larger share of the day.

Time loss due to traffic jams and congestion increased by 40% from 2000 to 2009. Had various measures, including peak-hour and extra lanes, road-widening works and traffic information systems, not been undertaken during this period, travel time loss would have increased by 13%.

In 2009, the total costs due to traffic jams on the Dutch main motorway network was estimated at 2.4 to 3.2 billion euros, which is 10% less than in 2008.

The unreliability of journey times – the difference between the actual journey time and the average, expected journey time – increased by 4%. The implementation of infrastructure and traffic management regulations positively impacted the reliability of journey times. Without such regulations, the degree of unreliability would have been 15% higher.

No drop in serious road traffic injuries and CO2 emission levels

From 2000 to 2009, the number of fatalities fell by 38%, to 720 deaths, despite the increase in traffic volumes. This decrease is a result of safer cars (due to airbags, for example), safer layouts of roads, (rotaries, 30-60 km/h roads) and information campaigns.

Unlike the decrease in fatalities, the number of people seriously injured in road traffic accidents increased. Between 2006 and 2008, the number of people seriously injured in traffic accidents rose by 15%, with the primary victims being bicyclists.

From 2000 to 2009, emissions of air pollutants fell, despite a rise in total traffic volumes, although this did not apply to CO_2 emissions during this time period. However, owing to the economic crisis, CO_2 emissions decreased by 4% in 2009.

The costs in terms of environmental damage and traffic unsafety were estimated at 12 to 22 billion euros, of which the largest share of this is attributed to traffic unsafety.

The significance of mobility and transport

It is difficult to quantify, and express in monetary terms, the significance of mobility and transport. We can however determine the overall significance by estimating what citizens and companies are willing to pay for mobility and transport.

For citizens, the significance of mobility accounts for a minimum of 64 billion euros per year. This sum consists of the costs paid for transport and the time, expressed in monetary terms, spent travelling. In 2008, Dutch people spent 39 billion euros on travel-related expenditures, or 14% of their total expenditures, which is nearly equal to the amount people spend on food. For companies, the significance of transport amounts to at least 55 billion euros per year.

People's perception inconsistent with hard figures

The perceptions people have about accessibility, livability and traffic safety do not correspond to the hard figures available on such matters. In recent

years, people have begun to experience traffic jams, traffic accidents and environmental pollution as less of a personal problem. This is remarkable, given the fact that, prior to the brief respite during the 2009 economic crisis, the problems related to traffic jams have only increased. Moreover, while the number of traffic-related fatalities has dropped in recent years, the number of people being seriously injured in traffic-related accidents has risen. Meanwhile, in terms of livability, CO_2 emission levels are not falling.