



Oslo, Norway

Oslo, the capital of Norway, has a population of 573,388. The urban area extends beyond the boundaries of the municipality into the surrounding county of Akershus, which has a population of 523,272. The city centre of Oslo is situated at the end of the Oslofjord from where the city sprawls out in three distinct corridors from its centre; inland north-eastwards and southwards on both sides of the fjord. The corridors are divided by forests and the ocean.

Why was urban road user charging introduced in Oslo?

The pricing objective of Oslo Package 1 was to finance road infrastructure and, to an increasing extent, public transport infrastructure investments. Future use as a means for traffic restraint was also an open possibility, but congestion relief was not an objective *per se*. Oslo Package 2 is a plan for new and upgraded infrastructure and rolling stock for public transport in Oslo and Akershus. It is financed by increases in the toll-ring charge and the price of public transport tickets. Thus, the pricing objectives are still the same — to raise revenue for infrastructure investments. In the new Oslo Package 3, the objective is still to raise revenue for investments. In addition the latest initiative also raises revenue for public transport operation.

What are the features of the Oslo scheme?

The toll ring offers electronic toll collection with the use of on-board units, using the AutoPass system. The Oslo toll ring is located five to eight km from the city centre. It has been in operation since 1990, with only minor changes. There are 19 toll plazas, creating a water-tight ring. Tolls must be paid 24 hours a day all year round including weekends and holidays. There is no extra peak surcharge. To increase revenues for Oslo Package 3, new toll stations were added on the main roads from the west. In addition, all monthly and yearly passes have been removed and the maximum discount has been set at 20% per trip. In addition, the fare in the toll ring has been increased by 25% for passenger cars (now NOK 25/ €2.75) and by almost 90% for larger vehicles (now NOK 75/ €8.20). The fare at the new toll stations are half of that in the toll ring. There is a maximum payment of 60 trips per month for users of the AutoPass system.

How was the Oslo scheme implemented?

From 1970 and towards the end of the 1980s Oslo experienced deteriorating conditions on the roads and for the environment. The general lack of public funds for road in-

vestments in Oslo forced the politicians to consider other options to raise money for investments. The Oslo toll ring (Oslo Package 1) was the solution. The toll ring started in 1990 and provided funds for road infrastructure investments. In addition 20 percent of the revenue was earmarked for public transport infrastructure investments.

A few years after the toll ring was introduced, and following extensive road investments in the region, there was a growing concern about car traffic increasing more rapidly than expected, as well as a lack of infrastructure investments in the public transport infrastructure system. Oslo Package 2 was initiated to meet the challenges. This plan put more emphasis on public transport investments. The Oslo toll ring was due to end in 2007. As the end of the toll ring drew closer, and the problems still were not solved, the politicians decided to extend it. The new Oslo Package 3 was approved by Parliament in March 2008. The new feature of this latest initiative is that public transport operation also receives some of this revenue.

The Oslo toll ring has been accomplished through negotiations between local stakeholders. Three important elements in that respect were earmarking some of the revenue for "high-profile" investments, low fare levels with large discounts for heavy users, and no time variation in the toll levels. A major planning challenge has been to secure sufficient political acceptance for the toll ring through more than a decade of numerous minor decisions. For Oslo Package 3, negotiations between key politicians have been the key element. All parties have put their mark on the use of revenue. To finance this they have agreed to eliminate heavy discounts, introduce new toll plazas and extend the toll ring for another 20 years.

Impacts of the Oslo scheme

During the period of the Oslo toll ring, traffic growth in Oslo has been slightly lower than the national average, in spite of strong growth in traditional drivers of mobility like population, employment and income. Increased road capacity has slightly more than kept pace with the growth in traffic. A fully connected metro system and dedicated lanes for buses have been important and effective measures for public transport. Dismantling the Oslo toll ring is in the short term calculated to increase road traffic by 8-10 %.

Overall, the effects from the Oslo packages on the local environment have been positive. This is primarily due to improved road infrastructure, in particular tunnels. The investments have made the increase in traffic occur on the main roads rather than local roads.

The total operating income of the Oslo toll ring was NOK 1.248 m (€156 m) in 2006. The operating cost of the Oslo toll ring was NOK 134 m (€16.8 m). During the last 10

Charging area



years, about 10-11 percent of the scheme's operating income goes to operate the scheme itself. With the introduction of Oslo Package 3 in 2008, revenue will increase significantly.

The general public view of the Oslo toll ring has been negative over the entire period. However, the attitude has changed over time. More people were negative before the toll ring was introduced compared to after. Also, the charge increase to finance Oslo Package 3 reduced the acceptability temporarily. When people are informed of the use of revenue, they turn more positive.

Conclusion

The Oslo toll scheme must be considered in a political and organisational context. The charging scheme is far from optimal from an economic point of view. Nevertheless, the Oslo packages have contributed to a more efficient transportation system both for roads and for public transport. Also the packages have created a dynamic in which both the revenue use and the charging scheme have changed in the direction of a more economically efficient system. Oslo Package 3 is another step in that direction.

The Oslo toll ring has succeeded in speeding up the infrastructure investments in the Oslo region. In this way, investments in increased road infrastructure have counterbalanced the growth in traffic by a small positive margin. The local environmental effects are positive. The general public view of the Oslo toll ring has been negative over the entire period. However, the attitude has changed over time. More people were negative before the toll ring was introduced compared to after. When people are informed of the use of revenue, they turn more positive.