

**Report No. 24 to the Storting**

**(2003–2004)**

**National Transport Plan 2006–2015**

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**English Summary**

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# 1. Introduction and summary

## 1.1 Introduction

In this report, the main features of the Government's transport policy are presented. The report is also a strategic plan for development of the overall state infrastructure for transport by road, rail, air and sea. The Government will pursue an integrated transport policy where the various modes of transport will be viewed within an overall context. The National Transport Plan is an instrument for setting priorities regarding construction, maintenance and operation of state infrastructure within and between all modes of transport, purchase of transport services and various types of financing. The National Transport Plan will be followed up in the annual fiscal budget proposals and other propositions submitted to the Storting.

The National Transport Plan 2006–2015 further develops the planning system that was established by means of Report No. 46 to the Storting (1999–2000), The National Transport Plan 2002–2011. The basis for priorities and policy shaping has been laid through close cooperation between the Ministry of Fisheries and the Ministry of Transport and Communications, the three state transport agencies (the Norwegian National Rail Administration, the Norwegian National Coastal Administration and the Norwegian Public Roads Administration) as well as Avinor AS, the county authorities and the major urban areas of Oslo, Kristiansand, Stavanger, Bergen, Trondheim and Tromsø. In this work, we have also benefited from consultations with and contributions from a number of different interest organizations.

In June 2003, the transport agencies presented their joint input to a National Transport Plan 2006–2015. This input has been submitted for comment to the county authorities and major urban municipalities. A number of other authorities, organizations and enterprises have also commented on this document and in this way have provided important contributions to this Report to the Storting.

## 1.2 Summary

In the report, the Government presents an overall strategy for transport policy. The Government's strategy takes as its point of departure that the various forms of transport have different qualities and advantages, and that it is necessary to adapt transport policy to the different challenges in different parts of the country.

The Government adopts the following four main goals for transport policy:

- *Fewer fatalities and serious injuries on the roads* and a continued high level of safety in other modes of transport
- *More environmentally sound urban transport* – with reduced dependence on private cars and increased public transport

- *Improved traffic flow in and between regions* in order to promote development of viable districts and growth-oriented housing and labour markets while meeting the transport needs of business and industry
- *A more efficient transport system*, increasing the element of competition in order to bring about the best possible transport provisions for the total investments in transport.

This chapter presents the Government's overall transport policy and provides a summary of the most important points in the report.

Chapter 2 describes the background for work on the report and discusses the methodological basis.

Chapter 3 describes developmental trends and challenges for transport policy.

Chapter 4 reviews the standard and structure of the transport system and proposes measures for attaining a more efficient transport system where modes of transport are viewed within an overall context.

Chapter 5 presents a policy for improved organization and financing of the transport sector in order to receive the best possible return on investments.

Chapter 6 presents strategies for increased road safety, a transport system that contributes to achievement of Norwegian environmental objectives and increased accessibility for all transport users.

Chapter 7 presents the economic frameworks for the period covered by the plan and the main priorities within these frameworks.

Chapter 8 describes challenges and main priorities in eight transport corridors and distribution of planned investments within these corridors.

Chapter 9 presents a policy for more environmentally sound transport in towns with increased public transport and reduced use of private cars.

Chapter 10 reviews challenges and priorities in each of the six largest urban areas.

Chapter 11 presents effects of the total investments in the transport sector.

### 1.2.1 Developmental trends and challenges

Transport policy has to take many different and often conflicting objectives and interests into account.

Transport is in itself a means of achieving national goals associated with economic growth and welfare, commercial and industrial development and regional development. In order to contribute to the achievement of these overall goals, the main transport policy challenge involves development of a transport system with good traffic flow, taking the environment and road safety into consideration. Transport policy must also take account of the intersection between local, regional and national goals and interests.

Modern society places considerable demands on rapid and reliable goods and passenger transport. A high degree of mobility in the population is an important feature of welfare development. Transport development is closely associated with economic development.

### *Internationalization and new technology*

Transport policy must take into account increasingly close international cooperation, where major framework conditions are defined jointly by countries and regions. Trade in goods and services, direct investments and movement of capital and labour and transfer of technology have increased considerably. Capacity constraints, delays and environmental requirements along the road network in Europe also affect Norwegian transport and Norwegian carriers.

Increasingly stringent international safety requirements in the civil aviation, shipping and rail transport sectors place demands on safety investments that are not always well adapted to Norwegian conditions. Such new and stricter requirements are often extremely costly. Investment in measures that provide the most possible safety for the transport sector as a whole constitutes a major challenge, especially in view of the fact that road traffic is responsible for the majority of killed and injured.

Technological developments may help to bring about more environmentally sound transport. Examples of this are wholly or partly electrically powered vehicles, hydrogen as an alternative to fossil fuel, development of less noisy vehicles, tires and road surfaces.

### *Developments in goods and passenger transport*

The goods transport sector in Norway is expanding. Economic growth and reduced transport costs are important forces driving developments. Technological improvements enable more rapid and reliable transport, thereby reducing transport costs.

Norwegian goods transport, both domestic and foreign, is dominated by road transport and maritime transport, both of which sectors are growing. The volume of goods transport measured in tonne-kilometres carried by sea is approximately equal to that carried by road (respectively, 48 per cent and 46 per cent). There are considerable variations between corridors and regions and between different markets and types of goods. Distribution and other short-distance transport is in practice only carried out by road. In the case of long-distance transport in general and specific types of goods, rail transport has a considerable share of the market.

The establishment of favourable conditions for greater competition in the transport sector makes room for new players in the market, thereby increasing the available options for transport users and the possibility of lower prices. Structures, volumes and price levels in the market are influenced by new structures for ownership and cooperation among both customers and transporters.

During the last 20 years, the Norwegian passenger transport sector has shown continuous growth. Private cars are the dominant means of transport, with a market share of 80 per cent of passenger transport.

Labour market developments give rise to concentration of settlements, thereby increasing the volume of traffic in and around major urban areas. Changes in commerce and industry contribute to this.

Increased traffic, particularly in the form of increased use of private cars, has to a great extent been the result of a desired social development which has received broad political support. However, in some sectors of the transport market, this results in an increase in transport and car dependence that has negative consequences for traffic flow, health and the environment.

In land use and transport planning there is a basis for introducing measures that deviate from a pattern of passenger transport based on the use of cars for all forms of travel without this being perceived as a weakening of the individual right of mobility.

A particular challenge is presented by population increase and the resulting increase in transport within and to and from the largest towns. Here there is a need both to reduce the need for transport and to steer the distribution of modes of transport in the direction of public transport, walking and cycling.

### 1.2.2 A safe transport system – fewer killed and injured on the roads

The Government will maintain its zero casualties objective for road safety. The zero casualties objective entails that means of transport and the transport system must be designed in such a way that they promote correct conduct on the roads while as far as possible preventing fatal consequences of incorrect actions. Road users must also be influenced to adopt safety-conscious behaviour.

#### *Fewer killed and injured on the roads*

The number of fatal road accidents has been cut by half since 1970 despite almost a trebling of traffic. Nevertheless, an average of 1 500 people were killed or severely injured each year on the roads during the years 1998–2002. The socio-economic cost of road accidents is estimated at approximately NOK 25 billion a year. As the basis of its policy shaping for the period of 2006–2015 covered by the plan, the Government has decided on an ambitious target for a marked and permanent reduction in the number of dead and seriously injured in transport accidents. Road accidents are a particularly difficult challenge. As a result of the measures presented in this report, we estimate a reduction by 330 in the number of people killed or seriously injured in road accidents in 2016, compared with the estimated number without these measures.

The Government will increase its efforts to build safety into new and existing road systems. This includes increased state allocations for more rapid expansion of heavily trafficated trunk roads to four lanes and increased use of central guardrails on two and three-lane roads.

Estimates from the Norwegian Public Roads Administration also show positive effects of relatively minor targeted road safety measures. In this report, the Government recommends a considerable increase in funding of such measures. Priority will also be given to increased funding for improved maintenance of the most heavily trafficated road network, which will increase both safety and traffic flow.

In addition to measures in relation to the road network, road safety will be enhanced, among other reasons, as a result of proposals for new and improved driving instruction and development of improved traffic education in schools. Control activity on the roads will be strengthened in order to monitor compliance with statutes and regulations concerning road traffic. The Norwegian Public Roads Administration will make increased use of risk analyses and systematic revisions throughout the road traffic system. Stricter safety requirements will be introduced for commercial transport, particularly heavy transport.

The Ministry of Transport and Communications will take the initiative to provide for improved consumer information concerning a vehicle's safety features.

#### *Continued high level of safety in other forms of transport*

There is a high level of safety in both the aviation sector and the rail transport sector and, in both of these sectors, the main challenge involves maintaining the high level of safety. However, certain types of air transport, such as passenger transport by helicopter, have a lower safety level than scheduled air services. Special efforts are required here during the period covered by the plan.

Safety on the railways is good compared with other forms of transport. There are very few passenger fatalities in connection with railway accidents. In 2002 there were none. As regards accidents involving level crossings, there has been a reduction both in the number of fatalities and the number of accidents (collisions) in recent years. The Government has set in motion extensive efforts to further increase safety on the railways, including improvements to infrastructure and development of a new system for safety communications, GSM-R. Investments and other measures mentioned in this report will further improve the safety of the railway system.

Maritime safety in Norwegian waters has considerably improved during the last 15–20 years. Despite this, there are approximately 100 groundings and collisions between ships along the coast each year. The probability of major shipping accidents involving the loss of many lives or major damage resulting from oil spillage or the like is statistically very low, and most accidents along the coast have relatively slight consequences. However, the accident involving the *Rocknes* in January 2004 demonstrated that the consequences of maritime accidents can be extremely serious. This emphasizes the need to maintain the priority given by the Government to measures to increase safety in shipping lanes.

The Government will place an emphasis on an integrated, cross-sectoral approach to safety, so that strict and costly statutory requirements in certain transport sectors do not unintentionally result in the transfer of transport to other parts of the transport system where risks are greater, thus reducing total safety.

### 1.2.3 More environmentally sound urban transport

A well functioning transport system is necessary to ensure that major urban centres and regions are functional and environmentally sound. It is the intention of the Government that the design of transport systems in urban areas shall strike a balance between the capacity of the main roads into the town and the traffic load tolerated by the central urban area. It is neither environmentally nor socio-economically correct, nor in many cases at all practicable, to expand a main road network in order to remove rush-hour traffic jams.

In view of the fact that there are already congestion problems in several large towns and that forecasts indicate that these problems will be exacerbated if no preventive measures are taken, there is a need to reduce the growth in the use of private cars and to increase public transport in the towns. Such a strategy will have the greatest chance of success if there is a local willingness both to invest more in public transport and to introduce restrictions on the use of private cars. In addition to this, the Government proposes a number of state measures to create a more environmentally sound transport system in major urban areas.

Government investments in environmentally sound transport in major urban areas during the period covered by the plan will include a considerable increase in allocations to public transport facilities over the roads budget, more rapid development of railways in major urban areas and larger allocations for provision of a continuous network of footpaths and cycle paths.

The Ministry of Transport and Communications adopts the basic policy that towns that provide for reduced use of private cars and increased public transport, bicycles and walking shall be rewarded, among other ways, by means of increased allocations via the incentive scheme for public transport. Local authorities shall have free use of these funds, and may also use them for operation of public transport.

The Ministry of Transport and Communications will introduce a new state financing package for infrastructure for local public transport with reduced requirements regarding the local share of financing and the possibility of using road toll revenues to finance the local share. Financing will still be partly based on charging of road users in the towns, with the possibility of varying charges according to the time of day and application of revenues to improved infrastructure for public transport. This will help to ensure more efficient use of the road network while strengthening the financing of the transport system as a whole.

The Government wishes to implement mutually binding agreements between the state and the urban municipalities based on coordinated land-use and transport plans in order to achieve long-term, sustainable land-use and transport development. New forms of cooperation and coordination will also be tested and developed to ensure efficient, safe and environmentally sound urban transport by means of arrangements such as the Coordinating Body for Public Transport in Central Eastern Norway and experiments in the other large urban areas. The Ministry will also make provisions to enable urban municipalities to implement “low emission zones”.

#### 1.2.4 Improved traffic flow in and between regions

Different regions have different needs for infrastructure and transport provisions. It is the Government’s intention to secure settlements, economic growth and viable local communities throughout the country. The Government will pursue a progressive and prospect-oriented rural and regional policy, and make provisions for creation of lasting and profitable jobs.

In order to strengthen local centres, particularly at a regional level, it is important to strengthen connections with the surrounding country. This also helps the regions to function better as units. In this report, the Government describes its plans to reduce the disadvantages of distance between regions and to countries abroad by increasing investments in development of major transport corridors in all parts of the country. Transport policy is thus an effective instrument of regional policy.

##### *Improved road transport*

Most of the country’s overland transport goes by road, and the road network also plays an important role in linking other forms of transport. Most transport goes by road at one or both ends of its journey.

In the heavily trafficated road network the greatest challenges are associated with transporting in the most efficient and safe way possible without inflicting unnecessary loads on the environment. There is a considerable need for development of the heavily trafficated road network. In less trafficated stretches, development will be based on improvement of the existing road in order to provide a satisfactory breadth and load-bearing capacity and on improved road safety.

The Government plans a strategy where road toll financing of long, continuous stretches of trunk road coupled with increased state allocations will provide a basis for a more rapid

development of the trunk road network in central areas while maintaining and strengthening investments in the rural road network. It is also of major importance for rural areas that safe and reliable transport is secured by means of increased investment in rockslide and avalanche prevention and reduction of bottlenecks.

#### *Concentrated investments in railways – regional investments in civil aviation*

Major parts of the railway network are in need of modernization. In this report, the Government describes its plans for increased allocations to railways directed towards the raising of railway standards and capacity in heavily trafficated areas. This is aimed at increasing the attractiveness of the railways in the years ahead. The Government will also maintain the railway's infrastructure in less trafficated stretches. In these stretches, investments will particularly be concentrated on operation and maintenance.

As a consequence of scattered settlement patterns and long distances, climatic and topographical conditions as well as a lack of alternative forms of transport, air transport plays a more important role in the pattern of transport in Norway than in most other European countries. It is not possible to maintain a network of airports and commercial air service provisions in all parts of the country. Where indicated by social considerations, the Ministry of Transport and Communications purchases airport services at Avinor's regional airports and air services from airlines on the basis of competitive tendering. The Ministry plans to increase regional airport resources during the period covered by the plan and strengthen the economy of the airport network by means of rationalization, use of competitive tendering when purchasing aviation services and structural changes.

#### *More goods transport by sea and rail*

Particularly in the most heavily trafficated parts of the transport network both in Norway and on the primary road network in Europe, the continuous increase in road traffic gives rise to capacity problems. This results in delays and higher costs for transporters, and thus also for commerce and industry and for consumers. Increased road traffic also results in environmental challenges, particularly in urban areas, and also as regards global and regional air pollution.

The Government wishes to make provisions to enable more goods transport to be carried out by sea and rail, and more people to travel by means of public transport. These are challenges we share with the rest of Europe. However, there are considerable differences between Norway and the EU as regards both environmental and traffic flow problems. The solutions in Norway must therefore be adapted to Norwegian conditions.

Achievement of such a transition involves a considerable challenge. Heavy trends in industrial and social development are pulling in the opposite direction.

It is therefore important to increase the effectiveness of road transport and to make provisions for transition to sea and rail transport. The share of the total transport volume represented by sea transport is greater in Norway than in most other European countries, but there is still room for growth. The precondition for such a transition is that intermodal solutions (two or more forms of transport in a transport chain) provide adequate transport quality at a competitive price.

In order to encourage a transition from road to sea and rail transport, provisions must be made for a concentration of cargo traffic in nodes and corridors, so that there is a sufficient cargo basis to set up new intermodal transport services.

Investments in railway capacity and quality of infrastructure and development of efficient terminals are important measures for improving the competitiveness of the railways. In the road sector, this must be followed up by provisions to enable satisfactory supplies to the terminals.

An important contribution involves providing for information flow between the various transport sectors and with transport users. In cooperation between users, researchers and the administration, a joint framework is being developed for data interchange in the transport system (ARKTRANS). The Ministry of Transport and Communications anticipates that this will be implemented when the various players develop electronic services in the transport sector.

Through Norwegian participation in the EU Marco Polo programme, it will be possible to make funds available for measures that can assist in reducing market barriers to intermodal transport.

The establishment of the Shortsea Promotion Centre-Norway (SPC-Norway) is an important element of the Government's strategy for enabling the transition of goods transport from road to sea. By means of networks, SPC-Norway can help to link players, thereby functioning as a catalyst for the establishment of combined door-to-door transport.

Success in bringing about a transition from road to sea and rail transport is dependent on measures in the areas of the transport market where there are real competition interfaces. Regard must be paid to the limitations deriving from commodity composition and transport quality. The Government is therefore planning a balanced policy where the good qualities of road transport are exploited while providing for sea and rail transport where appropriate.

#### *Port structure*

The Government wishes to provide for development of ports to strengthen sea transport and stimulate commercial and industrial development and establishment of robust areas. If sea transport is to gain ground in the competition with land transport as regards both price and quality, the ports must have a volume of general cargo and containers that provides a basis for frequent and regular calls by ships. A precondition for success in this is that the handling of general cargo and containers is mainly concentrated in a limited number of ports. At the same time, a long-term approach coupled with predictability is important both for the transport and logistical planning of commerce and industry and for state infrastructure development. The Government will therefore continue to build on the existing port structure. However, this structure will be adjusted to two levels, and will consist of national ports and other ports.

In compliance with Report No. 46 to the Storting (1999–2000), the National Transport Plan 2002–2011 and consideration of this by the Storting, the Government will adopt as a basis that the ports in Oslo, Grenland, Kristiansand, Stavanger, Karmsund, Bergen, Ålesund, Trondheim, Bodø and Tromsø will be maintained as national ports. The Government anticipates that the national ports will be developed in such a way that they have a standard and are able to handle a volume of goods permitting regular and frequent calls by ships for purposes of general cargo and containers. Other ports will primarily serve local communities and local commerce and industry.

### 1.2.5 A more efficient transport system

The authorities are responsible for developing, maintaining and operating public transport infrastructure. More than NOK 20 billion is allocated over the fiscal budget each year for transport purposes, with increased allocations in recent years. In addition to this, the county authorities and municipalities use billions of kroner on the road network and on local public transport.

In this plan, the Government provides for a continued high level of allocations to transport. However, the quality of the transport system and provision of the best possible facilities for transport users will depend on even better utilization of the total resources.

#### *Increased use of competition*

The Government will implement new measures in order to ensure a better return on its investments. The Government anticipates that increased use of competition will promote efficient use of resources because it encourages producers and providers of transport services to operate efficiently, thereby producing at the lowest possible cost. This benefits the users and fosters socio-economically efficient use of resources. When markets fail to provide socially desirable results, the public authorities are responsible for providing transport services from the producers to the users, as in the state purchase of transport services.

It must be emphasized that increased use of competition in making state allocations, as provided for in this report, does not mean that the authorities disclaim responsibility for ensuring that the service is provided. On the contrary, it may in practice mean that the authorities specify clearer quality requirements concerning how the service is carried out and receive a better return on the total use of resources.

The Government is moreover concerned that necessary public administration be organized in a manner that promotes efficient use of resources. Increased efficiency frees resources for high-priority transport policy tasks.

Increased efficiency can also be attained by means of improved organization of the provision of services to the users and through the organization of public administration and supervision within the transport sector.

The Government will continue the development of more market-oriented development, operation and maintenance of infrastructure in all transport sectors. The purpose of this is to encourage more efficient operation, maintenance and development, while upholding public control where necessary. This places demands on new forms of contract and sound overall management.

In compliance with Report No. 26 to the Storting (2001–2002) *Improved public transport*, the Ministry of Transport and Communications is working to establish competition for the state purchase of passenger transport on the railways. It is planned that competition for state purchase of services on the Gjøvikbanen Railway will be announced during the course of 2004.

In this report, the Government announces its plans to advertise competition for two major transport packages: the Bergensbanen Railway package (which consists of all passenger transport on the Bergensbanen Railway and winter transport on the Flåmsbanen Railway) and the Sørlandsbanen Railway package (consisting of all passenger transport on the Sørlandsbanen Railway and Arendal branch line).

Such a division into larger packages will increase interest in taking part in the competition, and will provide the transport packages with regional centres of focus for the long-term marketing of the transport companies. This will support the goal that competitive tendering shall result in increased use of public transport.

The Ministry of Transport and Communications has liberalized express bus policy in order to provide for collective improvements of public transport provisions, involving increased options. A general characteristic is that, where express buses have been permitted to operate services in competition with the railways, there has been an increase in the total number of persons using public transport. The majority of the new users of express buses are former users of private cars. Liberalization of the express bus policy has thus helped to strengthen public transport.

The Government also plans a gradual transition to competitive tendering for public road ferry operation as well as for maintenance and development of the railway network.

#### *Public Private Partnership (PPP)*

Public Private Partnership (PPP) is being tried out in three projects in the road sector. The purpose is to achieve efficiency gains. In the view of the Ministry of Transport and Communications, PPP shall only be used to the extent that this form of contract involves the transfer of risk and where the total cost of the project is lower than in traditional development. The Ministry will present an overall assessment of its experience of PPP when the procurement process is complete for all trial projects.

#### *Taxation policy and user financing in the transport sector*

It is necessary to maintain a balance between the desire to provide transport services to commerce and industry and the general public and the damage to society brought about by transport use. The Government views taxation and fee policy as an important instrument in maintaining such a balance. The Government wishes to ensure equal framework conditions for the various transport sectors. Socio-economically appropriate tax and fee structures are an important element of such a policy. This will ensure better correspondence between prices and social transport costs.

Development of the infrastructure of the transport sector is partly financed directly via the fiscal budget, i.e. via the ordinary taxation policy, and partly via user fees. In this area too, the Government wishes to make provisions for the most efficient arrangements.

Firm costs constitute the largest cost component in the transport system, whereas, in many cases, use-dependent costs are small. Once investments are made, it is important that the capacity is exploited well. Too high a price for the use of infrastructure, for example to ensure full cost absorption, may be inexpedient.

The choice of the form of financing may have major effects on the competitiveness of the various means of transport. Financing should be viewed in connection with tax policy in relation to the various transport sectors. The Government plans to prepare better analyses with a view to the consequences of the choice of financing structure for infrastructure and services in the transport sector. The work will form part of an overall strategy for meeting the various objectives in the transport area.

In the road sector, user fees are levied for road infrastructure services by means of road tolls and payment for use of public road ferries. Road tolls have made it possible to accelerate a number of projects that would otherwise have been postponed for many years if they had been financed purely by means of ordinary allocations.

Different principles have been established in connection with road toll financing. In the view of the Government, there is a need for a critical review and enforcement of the principles of road toll financing. The aim is a simplified and more user-friendly system that will result in greater equality and equity. Emphasis will be placed on enforcing the requirement that projects are planned to be financed at least 50 per cent by road tolls before approval of road toll projects. In addition to this, great emphasis will be placed on correspondence between benefit and payment. Road tolls will normally be collected retroactively, while simultaneous collection may be appropriate to a limited extent, primarily in urban packages.

### 1.2.6 A transport system for a cleaner environment and increased accessibility for all

#### *Environment*

Transport contributes to global, regional and local environmental problems. We refer to the separate description above of the policy for resolving local environmental problems in towns.

During the last decade, the environmental impact of transport has been considerably reduced in certain areas partly as a result of reduced emissions of sulphur dioxide, nitrogen oxide and lead. Extensive state investments in noise barriers have reduced noise pollution for many people.

This is a result of stricter environmental requirements for vehicles and fuel, for example the requirement that private cars be fitted with catalysers. During the years ahead, environmental requirements will be made even more stringent, for example, emission requirements for buses.

On the other hand, the increase in transport has resulted in increased emissions of the greenhouse gas carbon dioxide (CO<sub>2</sub>). The emissions of CO<sub>2</sub> from road traffic increased by approximately 18 per cent during the period from 1990 to 2001. Over time, considerable reductions in greenhouse gas emissions from the transport sector will be a necessary condition for fulfilment of international obligations regarding climate policy.

The Ministry of Transport and Communications is in process of drawing up a strategy for increased use of zero-emission technology in the transport sector in order to facilitate less dependence on fossil fuel in Norway over time.

As one of very few countries, Norway has introduced CO<sub>2</sub> tax on domestic aviation as part of its environmental policy, and is involved in international efforts to introduce climate measures for international aviation as well.

The Ministry of Transport and Communications and the Ministry of Fisheries are also planning to implement measures to reduce NO<sub>x</sub> emissions by transport, particularly in the ferry sector and other coastal transport. Work on preventive measures and strengthened oil pollution contingency plans associated with coastal oil transport will be continued.

New measures will be implemented to comply with regulations pursuant to the Pollution Control Act concerning threshold values for noise pollution and local air quality. In order to

improve the air quality in towns, the Ministry of Transport and Communications will place greater emphasis on reducing emissions by means of permanent measures directed at the sources of emission rather than limiting itself to emergency measures. In this connection, a policy limiting the growth of motor vehicle traffic in towns plays an important role.

### *Accessibility for all*

Transport infrastructure is not designed and adapted to serve everyone's needs equally well. The Government will make provisions to reduce the number of obstacles met by functionally disabled persons in the transport system.

The Government will increase the accessibility of transport by strengthening the requirements and guidelines for accessibility in the design of infrastructure, in the granting of transport licences and in public purchase of passenger transport services. In addition to this, the Government will prepare a new accessibility programme in order to improve transport accessibility for everyone in the transport sector. The programme will include infrastructure, rolling stock and transport logistics.

## 1.2.7 Economic frameworks and main priorities

In order to address the challenges of the transport sector, there is a need for major contributions both for investments and for operation and maintenance. As regards the period of 2006–2015, the Government adopts as the basis a total plan framework of NOK 192.5 billion. This framework includes expenditure chapters for the Norwegian National Rail Administration, the Norwegian Public Roads Administration and the Norwegian National Coastal Administration. State purchase of regional airport services is associated with infrastructure and is therefore included in the framework. The framework also includes state purchases of passenger train services.

Compared with the average allocations for 2002–2004, this involves an annual increase of approximately NOK 420 million. Compared with the allocations during the period 1998–2001, the annual increase is approximately NOK 1 billion for roads and railways together.

The economic framework adopted by the Government in the report is a total of NOK 7 billion higher than that of the transport agencies' proposal (NOK 700 million a year). The consultative comments on the planning proposal have been an important basis for establishment of an increased economic framework and distribution of this.

The increase in the plan framework in relation to the framework of the transport agencies' proposal is distributed as follows:

- Norwegian National Rail Administration, NOK 2 150 million
- Norwegian Public Roads Administration, NOK 4 550 million
- Norwegian National Coastal Administration, NOK 300 million

The increase contributes to improved profitability and safety in the road sector and to strengthening of the competitiveness of the railways by facilitating increased use of the railways for goods and passenger transport.

In the railway sector, the increased plan framework has made it possible to increase the amount invested in the Østfoldbanen and Vestfoldbanen railways. There is also a considerable increase in minor investments for safety improvements, increased capacity and development of stations and nodes.

In the road sector, the increased plan framework has made it possible to accelerate the investment in the four-lane development of the E6 between Oslo and the towns on the shore of Lake Mjøsa and the E18 through Vestfold, as well as increased investment in the E39 in western Norway, the E6 through Nordland and the corridor between Oslo and Bergen. In addition, the economic framework for distribution between counties for the remaining national roads has been strengthened. Investments in minor goal-oriented investment measures have also been increased in order to improve safety, traffic flow for public transport and measures for facilitation of walking and cycling.

In the case of the Norwegian National Coastal Administration, priority has been given to measures to strengthen safety and preparedness at sea.

The Government's distribution of the economic framework is shown in table 1.1. In the case of railways, roads, maritime transport and regional airports there is a lag in the maintenance of the infrastructure. The Government will therefore strengthen investments in operation and maintenance during the period covered by the plan. This will result in improvement in the maintenance of the infrastructure, which will have a positive effect on traffic flow and safety while reducing the need for future maintenance and for reinvestment.

**Table 1.1 Framework allocation of state funds. Annual average. 2004 NOK-millions**

	Allocated 2002– 2004 <sup>1</sup>	NTP 2006– 2015
Norwegian National Rail Administration <sup>2</sup>	4 575	4 700
Norwegian Public Roads Administration	12 000	12 250
Norwegian National Coastal Administration	600	600
State purchase of regional airport services	234	300
Purchase of passenger train services	1 418	1 400
<b>Total</b>	<b>18 827</b>	<b>19 250</b>

<sup>1</sup> Allocated 2002 and 2003, and balanced budget for 2004

<sup>2</sup> Chapter 1350, item 25 Operation and maintenance of the Gardermoen line is financed by user fares and is not included as part of the planning basis in the National Transport Plan.

### *Railways*

A total annual framework of NOK 4 700 million has been adopted for investments, operation and maintenance of railway infrastructure during the period 2006–2015. Of this, NOK 3 060 million has been reserved for operation and maintenance. In addition, the Ministry of Transport and Communications expects that increased competitive tendering for production activities and a general administrative rationalization of the Norwegian National Rail Administration will contribute to reduction of the costs, thereby enabling further increase in maintenance.

NOK 1 640 million has been reserved for investments. The funds will particularly be applied to measures to increase capacity and enhance the quality of rail track, collective nodes and goods terminals. Investments are concentrated in the parts of the network where there is most

basis for increased transport volumes and market shares. Investments will be particularly directed towards:

- short-distance transport in the Oslo region, the Stavanger area and the Bergen area,
- regional transport in eastern Norway (Intercity network) and Trøndelag,
- goods transport network between regions and to and from abroad.

The most important railway projects during the period involve extension to four tracks from Asker towards Oslo on the Drammenbanen Railway (Lysaker–Sandvika and Lysaker station) and extension to four tracks on the Østfoldbanen Railway from Ski towards Oslo (Kolbotn–Ski, including Ski station), and extension to double track on the Østfoldbanen Railway (Haug–Onsøy) and on the Vestfoldbanen Railway (Barkåker–Tønsberg and Holm–Holmestrand) and parts of the line from Eidsvoll–Hamar on the Dovrebanen Railway. There will also be extension to two tracks on the Sørlandsbanen Railway (Sandnes–Stavanger) and the Bergensbanen Railway (Bergen–Fløyen). A new goods terminal will be built at Ganddal to replace the current terminal at Stavanger and Alnabru goods terminal in Oslo will be rebuilt. The Gevingåsen Tunnel on the Nordlandsbanen Railway will be completed during this period. In addition, the start of the extension to four tracks from Kolbotn towards Oslo S, the new route between Larvik and Porsgrunn (Eidanger tunnel) and continuation of the extension to two tracks between Arna and Bergen all have priority at the end of the period covered by the plan.

The Ministry of Transport and Communications currently purchases commercially unprofitable passenger transport services from NSB for approximately NOK 1.4 billion a year on the basis of a framework agreement with NSB for the period of 2003–2006. It has been decided to maintain this level during the period covered by the plan. This means that the gains from competition for state purchase of railway passenger transport can be used to strengthen railway provisions where they are most needed.

### *Roads*

A total framework of NOK 12 220 million a year has been adopted for state funding of roads during the period of 2006–2015. The Ministry of Transport and Communications will strengthen investments in operation and maintenance. This is of major importance for road safety and for efficient traffic patterns. The Ministry of Transport and Communications will give particular priority to investment funds for a more rapid and more continuous development of all parts of the trunk road network. This will be done primarily for road safety reasons and out of regard for the needs of commerce and industry. The trunk road network also helps to link regions together, and satisfactory traffic flow here is therefore of major importance to the country as a whole. Minor investments that have a positive effect on road safety are also given high priority in this plan.

In the case of the remaining national road network, practical priorities within the allocated plan framework will be made in connection with the work on the action programmes, where the priorities of the county authorities will be permitted a decisive influence on the guidelines established in the course of consideration of this report by the Storting. The Ministry of Transport and Communications anticipates that priority within the framework will be given to public transport facilities in major urban areas, road safety measures, footpaths and cycle paths.

A number of major trunk road projects will be initiated at the start of the period covered by the plan. These include important urban projects, such as the northern relief road on the E6 in Trondheim and the Bjørvika project on the E18 in Oslo, projects on the heavily trafficated trunk road network in eastern Norway (Høvik–Frydenhaug and Kopstad–Gulli on the E18 and Wøyen–Bjørnum on the E16) as well as the projects in rural areas, such as the E6 Jevika–Selli in Nord-Trøndelag, the E16 in Lærdalen in Sogn og Fjordane and Lofoten's mainland connection on the E10 in Nordland.

There will also be room for several important projects on trunk roads in all parts of the country during the first part of the period of 2006–2015 covered by the plan. These will particularly concentrate on the E6 in Østfold, the E6 northwards from Gardermoen, the E18 south of Drammen, the E39 in western Norway and the E6 through Nordland. At the end of the first four-year period, a four-lane road will be built through the whole of Østfold and a continuous four-lane road from Oslo to Tønsberg. At the end of the ten-year period, a four-lane road through Vestfold and between Gardermoen and Kolomoen south of Hamar will be almost complete. Local work is in progress on various further solutions.

The framework for state purchase of public road ferry services will be NOK 1 155 million a year during the period. A number of new or almost new ferries are planned in connection with the increased use of competitive tendering.

#### *The Norwegian National Coastal Administration*

A total framework amounting to NOK 1 105 million each year has been adopted for the activities of the Norwegian National Coastal Administration during the period of 2006–2015 covered by the plan. This framework includes state allocations of NOK 600 million a year, while user-financing amounts to NOK 505 million a year. Priority will be given to contingency work to combat acute pollution and measures to improve safety and traffic flow along the coast. In addition, investments directed towards operation and maintenance will be strengthened so that existing infrastructure does not deteriorate.

In order to meet the traffic flow and safety goals for sea transport, instruments will be directed at measures such as improvement of sea routes, marking, pilot services and other sea traffic services.

#### *Civil aviation*

The purchase by the Ministry of Transport and Communications of airport services has increased considerably during recent years. Purchases for NOK 300 million a year are planned during the period covered by the plan.

Avinor will invest more than NOK 800 million in connection with implementation of EU rules to combat terrorism and aviation sabotage. The ongoing replacement of flight control systems is another major measure under Avinor. The measure is of major importance both to air safety and efficiency of air traffic control. The new system is estimated to cost a total of approximately NOK 370 million. At Stavanger Airport, Sola, Avinor has adopted a major development of the passenger terminal building, cost estimated at NOK 175 million. At Kirkenes Airport, Høybuktnoen, Avinor has adopted development of a new terminal area to replace the current one. The project is cost estimated at NOK 170 million, and is planned to be completed in 2006. In addition to this, there are recent and ongoing improvements to Haugesund Airport, Karmøy, Trondheim Airport, Værnes and Bardufoss Airport.

### 1.2.8 Effects

Effects of the investments in the transport sector have been estimated in order to elucidate how transport policy contributes to meeting the policy goals associated with efficiency, traffic flow, safety and the environment. Such estimates of effects are important for policy shaping, management of the sector and follow-up of planning.

In this report, the Government places particular emphasis on safety and traffic flow for commercial and industrial transport.

Road safety improvements require input from many players. The investments and other measures presented in this report are alone estimated to reduce the number of persons killed and seriously injured by approximately 330 in 2016, compared with the expected figures without these measures. No corresponding figures have been estimated for other sectors, where the initial accident figures are extremely low.

Priority measures during the period covered by the plan are estimated to reduce Norway's transport costs by over NOK 50 billion, over NOK 35 billion in relation to roads and NOK 15 billion in relation to railways. NOK 9 billion of the reduction in relation to roads is estimated to come from accessibility and distance gains in the rural district policy area. However, these parts of the country will also benefit considerably from measures in the transport network outside this area.

A reduction of NOK 22 billion is estimated in the commercial costs for business and industry.

Measures given priority in this report contribute to reduction of various environmental disadvantages along the road network, but estimates show that it will be difficult in several areas to meet ambitious national goals by means of these measures alone.

Collectively, the investments in road and railway infrastructure are estimated to provide a socio-economic net gain of NOK 3.1 billion. A number of commitments in the roads area (state commitments associated with follow-up of adopted road toll packages) contribute negatively to this result. New investments contribute positively to profitability. This is particularly owing to considerable investments in specific road safety measures (road lighting, emergency measures on stretches of road of poor standard, roundabouts, improvements at accident black spots, etc). Minor improvements to footpaths and cycle paths also contribute positively, while new investments in stretches of trunk road contribute negatively to profitability estimates. The Government has, inter alia, found it appropriate to ascribe importance to the need for a more *continuous* development of the heavily trafficated trunk road network. This road network also has a relatively high concentration of serious accidents, and performs an important linking function of the total transport network.