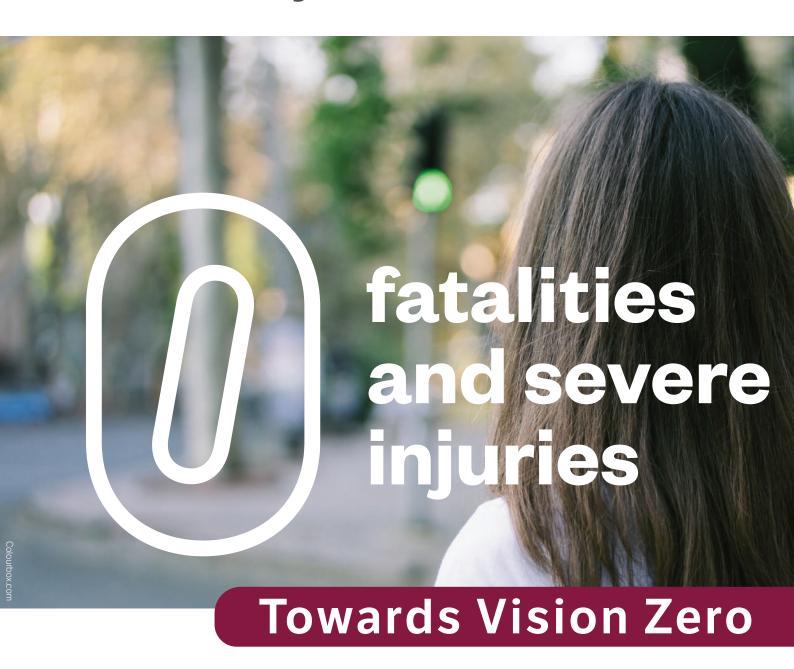
# National Plan of Action for Road Safety 2022-2025

















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### Introduction

Ambitions and priorities for road safety work are set out in the *Report to the Storting (white paper) No. 20 (2020-2021) National Transport Plan 2022-2033 (NTP)*. Our road safety work will continue to build on a vision of no accidents with fatalities or serious injuries within the road transport system. It is also our ambition that by 2030, the number of people killed or seriously injured in road traffic should be reduced to a maximum of 350, including a maximum of 50 fatalities. There should be zero fatalities from road traffic accidents in 2050.

The ambition in the NTP means that the number of people killed or seriously injured must be reduced by more than 50 percent from 2020 to 2030, while for the number of fatalities alone this means a reduction of 46 percent. The ambition for 2050 means that for the first time an actual date has been set for when fatal accidents should no longer occur on our roads.

The white paper on the NTP says that: "Based on the goals and priority areas in the National Transport Plan, the Ministry of Transport and Communications is giving the Norwegian Public Roads Administration the mandate to lead the work on updating the National Plan of Action for Road Safety. The purpose of the plan is to develop a wide range of agreed and knowledge-based measures, in addition to strengthening cooperation among key road safety stakeholders. The action plan sets out how these stakeholders are to contribute to a reduction in the number of people killed or seriously injured".

This is the sixth time a four-year plan of action for road safety is drawn up in Norway. *The National Plan of Action for Road Safety 2022-2025* includes 179 different measures, and these are expected to be followed up throughout the plan period. It has been considered important that measures should be feasible within the expected available resources, both in terms of finances and manpower.

A wide range of different parties are listed as responsible for implementing the measures. The key parties are the Norwegian Public Roads Administration (NPRA), the Norwegian Council for Road Safety, the police, the Norwegian Directorate of Health, the county administrations and eight large city municipalities. In addition, the plan includes measures from a number of other parties from the national level of administration and from various interest organisations.

The action plan is presented after two years characterised by considerable restrictions due to the corona pandemic. This has affected the implementation of several of the measures from the previous action plan, which applied to the period 2018-2021. In the plan for 2022-2025, we have chosen to assume that the restrictions will be lifted, and that the measures can be implemented without special restrictions related to infection control.

A total of 15 different priority areas have been selected, and these will be the focus of particular attention during the plan period. These have been selected either because targeted measures in the area have a great potential for reducing the number of people killed or seriously injured, or because they are important in the general preventive road safety work. These are:

- Speed
- Intoxication
- Seat belt use and proper securing of children
- Inattention
- Children (0–14 years)

- Young people and young drivers
- Elderly road users
- Pedestrians and cyclists
- Motorcycles and mopeds
- Freight transport by road
- Head-on collisions and run-off-the-road accidents
- Operation and maintenance
- Utilisation of new technology in road safety work
- Systematic road safety work in private and public enterprises
- Work to increase the available knowledge base

Within each priority area, a level of ambition has been specified, either in the form of specific targets for the development up to 2026, or in the form of an overall formulation that points out the direction and the ambition of the efforts to be invested within the area. This is followed up with a description of measures that the different parties are committing to implement and that will contribute towards the desired improvement.

This is a short version of the Plan of Action. It has been prepared primarily to show which measures the different parties have committed to implement during the plan period.





### 1. Vision, targets and follow-up

#### 1.1 Goal hierarchy

The action plan is built around a four-level structure:

- **Vision Zero** A vision of a transport system in which no one is killed or seriously injured. Vision Zero is the basis for all road safety work in Norway.
- Ambition for reduction in the number of people killed or seriously injured In 2030, the number of people killed or seriously injured in road traffic should be maximum 350, of which no more than 50 fatalities. There should be zero fatalities from road traffic accidents in 2050. The formulation is taken from the National Transport Plan (NTP) 2022–2033, and illustrates the political ambition for how fast we should be approaching Vision Zero.
- **Indicator targets** The Plan of Action includes targets for the development of the current situation in a number of areas where changes are important to achieve the desired development in the number of people killed or seriously injured. The targets are to be achieved by 2026, or apply as totals for the period 2022–2025.
- Measures The Plan of Action provides a description of important road safety measures to be implemented during the period. This applies both to the continuation of ongoing road safety work and to the implementation of new measures. Some measures have been specified with regard to implementation and level of ambition, and are listed as follow-up measures. This short version lists all 179 follow-up measures.

#### 1.2 Further details about Vision Zero

Vision Zero was adopted in 2001, in connection with the Storting's processing of *Report No. 46* (1999-2000) to the Storting, National Transport Plan (NTP) 2002-2011. This means that Vision Zero has been the basis for road safety work in Norway for 20 years.

Vision Zero applies to the entire transport system, but the challenges are greatest in road traffic, and thus it is here that the Vision has had the greatest impact. It has given us something to reach for. It has also provided a clear direction for our efforts, and an unequivocal basis on which to manage priorities. Vision Zero requires long-term, systematic and determined work by all parties affecting the safety of the road system.

The Report to the Storting No. 20 (2020-2021) NTP 2022-2033 includes the formulation of an overarching and long-term goal for the transport sector – an efficient, environmentally friendly and safe transport system in 2050. At the next level, there are five equally important policy goals, which will decide the direction for resource usage during the plan period. Among these are Vision Zero: No fatalities or serious injuries from road traffic (cf. Figure 1.1). This gives us a clear mandate to continue our efforts to ensure that no one is killed or seriously injured in road traffic.

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Figure 1.1 – Goals for the transport sector, taken from the Report to the Storting No. 20 (2020-2021) NTP 2022-2033

#### Fact box 1.1 – The three pillars of Vision Zero

**Ethics** - Every human being is unique and irreplaceable. We cannot accept that a large number of people are killed or seriously injured in traffic every year.



**Scientificity** - The physical and mental capacities of human beings are known and must form the basis for the design of the road system. Knowledge of our limited ability to master traffic situations and to

withstand the impact of a vehicle crash must underlie our choice of solutions and measures. The road traffic system should steer road users towards safe behaviour and protect them against serious consequences of normal mistakes. Knowledge of road safety effects is to form the basis for our prioritisation of measures.

Responsibility – Road users, the authorities and other parties that are able to affect road safety have a shared responsibility. Road users are responsible for their own behaviour; they need to be vigilant and avoid deliberate violations of rules and regulations. The authorities are responsible for providing a road system that facilitates safe behaviour and protects road users against serious consequences of normal mistakes. Buyers and providers of transport services are responsible for facilitating safe transport. Suppliers and manufacturers of vehicles are responsible for providing, developing and producing vehicles that are safe in traffic. Other relevant parties, such as the police and various special interest organisations, also have a responsibility within their areas to contribute towards optimal road safety.

### 1.3 Further details about the ambition for reduction in the number of people killed or seriously injured

In connection with their processing of the NTP 2018-2029, the Storting set an interim target of maximum 350 people killed or seriously injured in 2030. In the *Report to the Storting No. 20 (2020-2021) NTP 2022-2033*, pursuit of this target is continued in the form of the government's ambition for the development in the number of people killed or seriously injured. This has been supplemented with an ambition that there should be a maximum of 50 fatalities in 2030 and zero fatalities from road traffic accidents in 2050. Thus, for the first time, an actual date has been set for the fulfilment of the part of Vision Zero that concerns fatalities.

The Report to the Storting on the NTP 2022-2033 contains graphs showing the progression that is required if we are to be on the right track with regard to the ambition for the development in the number of people killed and seriously injured towards 2030 (see Figure 1.2) and for the development in fatalities towards 2050 (see Figure 1.3).

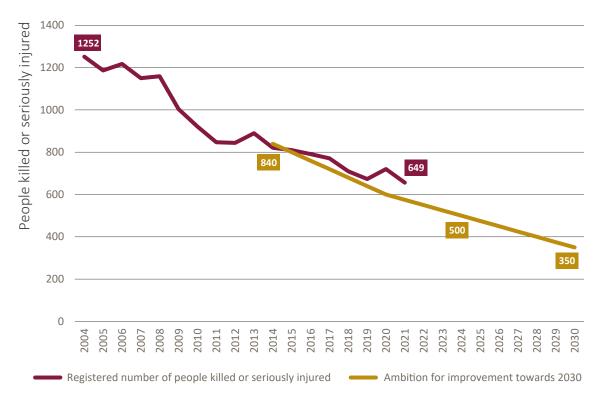


Figure 1.2 – Development in the number of people killed or seriously injured – situation registered for the period 2004-2021 and graph showing our ambition for improvement towards 2030.

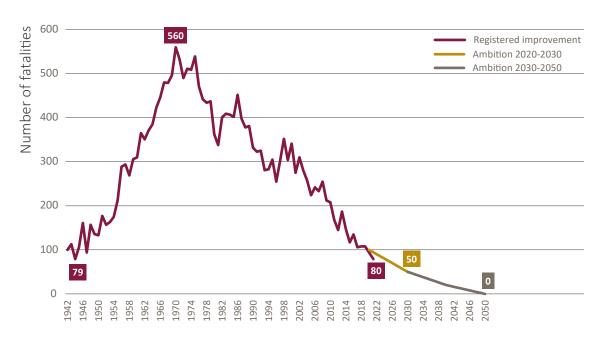


Figure 1.3 – Development in the number of people killed – situation registered for the period 1942-2021, and graph indicating our ambition for the improvement towards 2050.

#### Additional notes on the figures:

- The level of ambition and the registered developments are based on accidents that have been
  reported to the police and that involve personal injury. We assume that all fatalities in road traffic
  accidents are reported to the police. However, we know that many victims of serious injury are not
  reported. The real number of seriously injured persons is therefore significantly higher than what is
  included in Figure 1.2.
- Suicides in traffic and fatalities where death occurs directly as a result of sudden illness or a medical condition are not included in the accident statistics, and are therefore not included in Figures 1.2 and 1.3.
- Single-person accidents involving pedestrians (fall accidents etc.) are not considered road traffic accidents, even if they occur in a traffic environment, and thus are not included in the statistics underlying Figures 1.2 and 1.3.

#### 1.4 Following up the Plan of Action

The National Plan of Action for Road Safety 2022-2025 will be followed up in the same way as the action plans for 2014-2017 and 2018-2021. This means that annual performance reports will be prepared showing progress in relation to the level of ambition in the National Transport Plan and the indicator targets in the action plan. In addition, separate reports will be prepared showing progress with regard to the implementation of the 179 follow-up measures. Measures are followed up every second year, halfway through the plan period and when the period is over.

Follow-up reports will be submitted to the Ministry of Transport and Communications, and will provide the Ministry with a basis for assessing the need to adjust the direction of road safety work during the plan period.





### 2. Speed

#### Background for selection of priority area

Results from the in-depth analyses of the Norwegian Public Roads Administration's (NPRA) Accident Analysis Group show that high speed was a probable contributing factor in 34 percent of all fatal accidents in the period 2011-2020. In this context, high speed means speed that was either too high for the prevailing conditions or that was well above the speed limit (i.e. speed that would have resulted in confiscation of the speeder's driving licence).

There is a well-documented correlation between changing the speed level and changing the risk of being killed or seriously injured. Calculations made by the Norwegian Institute of Transport Economics (TOI) show that if all drivers were to comply with the current speed limits, the number of people killed and seriously injured would have been reduced by almost 10 percent.

#### Improvement of the current situation

Efforts in the plan period 2022-2025 are expected to result in achievement of the following target:



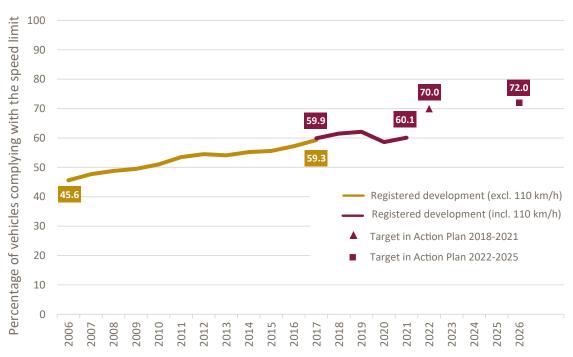


Figure 2.1 – Compliance with speed limits – registered development and targets.

The figure shows that up to 2019 there was a steady positive trend, from 45.6 percent compliance in 2006 to 62.1 percent compliance in 2019. However, the results for 2020 and 2021 show a clear violation of this trend. It is not unreasonable to assume that the corona pandemic may have been a

contributing factor, partly as a result of a strong reduction in traffic from 2019 to 2020. Despite the reduced compliance during the corona pandemic, the result is still significantly better than just a few years ago.

- 1. The police, in cooperation with the NPRA, will use regional speed data for knowledge-based speed enforcement activities.
- 2. The NPRA, in cooperation with the police and county administrations, will carry out a survey to identify national and county roads that meet the criteria for automatic section speed enforcement or automatic spot-speed enforcement.
- 3. The police, in cooperation with the NPRA, will prepare a comprehensive strategy and plan for more effective use of automatic speed enforcement.
- 4. The police will improve the efficiency of the automatic speed enforcement process, and work to implement digital issuance and reception of fines.
- 5. The Norwegian Council for Road Safety will strive to ensure that road safety carries more weight when fundamental choices are made related to the determination of speed limits.
- 6. The NPRA will continue to develop the national anti-speed campaign.
- 7. The NPRA will carry out a systematic survey of the road network to identify routes where the road design invites drivers to drive at an unsafe speed, and may thus contribute to an increased risk of accidents.



### 3. Intoxication

#### Background for selection of priority area

Results from the Norwegian Public Road Administration's (NPRA) Accident Analysis Group show that intoxication was a probable contributing cause in 25 percent of all fatal accidents in the period 2017-2020. Of these, 47 percent were due to alcohol, 29 percent to drugs/medicines and 24 percent to combined intoxication. The real proportion is probably even higher, since the requirement for a forensic autopsy of all traffic fatalities was introduced only from 1 May 2020.

#### Improvement of the current situation

Efforts in the plan period 2022-2025 are expected to result in achievement of the following targets:

#### By 2026, a maximum of

- 0.1 percent of traffic performance should involve drivers under the influence of alcohol with a BAC of more than 0.02 percent.
- 0.4 percent of traffic performance should involve drivers under the influence of drugs above the threshold for criminal punishment.

In order to establish a picture of the extent of driving under the influence of alcohol or drugs, roadside surveys are carried out, where the selection of drivers is random. The Section for Drug Abuse Research at Oslo University Hospital has carried out such surveys in 2008/2009 and in 2016/2017. A new roadside survey is expected to be carried out by 2026, with a methodical approach that makes the results comparable to the previous two surveys.

Table~3.1-Percentage~of~traffic~performance~involving~drivers~intoxicated~at~a~level~corresponding~to~a~BAC~of~0.02~%~or~higher

	Results from the roadside survey 2008/2009 <sup>A)</sup>	Results from the road- side survey 2016/2017	Targets for 2026
Alcohol	0.2%	0.2%	0.1%
Drugs	0.8 %	0.7%	0.4 %

<sup>&</sup>lt;sup>A)</sup>Results from the part of the survey carried out in Eastern Norway.

Figures from the Norwegian National Road Policing Service show that in 2020, 10,224 cases were reported to the police for driving under the influence of alcohol or illicit drugs. This is an increase compared to previous years. A main trend over the past ten years has been that the number of blood samples found to contain THC (active chemical in cannabis) has increased, while the number of samples found to contain alcohol is declining. However, alcohol gives a higher risk of getting involved in serious accidents compared to most other intoxicants, and alcohol remains the main challenge when it comes to intoxicated driving. Based on figures from the roadside survey from 2016/2017, we can assume that passenger cars drive a combined distance of more than 200,000 km every day while the driver is under the influence of alcohol.

- 8. The police will carry out preliminary alcohol tests of all drivers who are stopped for police roadside inspection.
- 9. The police will implement stricter routines with regard to testing all drivers for alcohol or drugs when they are involved in accidents.
- 10. The NPRA will make an assessment of whether to propose that the rule currently in force regarding mandatory alcolock in buses should be extended to also apply to taxis.
- 11. *MA Rusfri trafikk* (Norwegian Abstaining Motorists' Association), in cooperation with the Norwegian Council for Road Safety, will be a driving force for the establishment of a drink driving programme that uses alcolocks as an alternative to licence suspension for those convicted of driving under the influence of alcohol.
- 12. MA Rusfri trafikk (Norwegian Abstaining Motorists' Association), in cooperation with the other members of  $Rusforum^{1}$ , will carry out a pilot project considering the implementation of alcolocks as an alternative licence condition for people with alcohol problems who wish to retain their driving entitlement.
- 13. The temperance campaign organisation *AV-OG-TIL*, in cooperation with the police, will implement two annual awareness campaigns on drink driving.
- 14. *Ung i Trafikken* (Norwegian Youth Road Safety Association) will continue its *DeathTrip* project and make it more visible through their *DeathTrip on the Road* travelling exhibition.
- 15. *Ung i Trafikken* (Norwegian Youth Road Safety Association) will update their e-learning course *Rus i trafikken* ("Intoxication and Traffic"), and make it user-friendly for the target group from different digital devices.
- 16. The Norwegian Correctional Service, through information exchange with the prosecuting authority and the courts, will strive to ensure that a higher percentage of those convicted of driving under the influence of alcohol or drugs will be sentenced to *Program mot ruspåvirket kjøring* ("Programme against intoxicated driving").
- 17. The Norwegian Correctional Service will prepare course contents on driving under the influence of alcohol or drugs aimed at convicts serving sentences with electronic monitoring.
- 18. In line with their policy document "Prevention as the police's main strategy", the police will look into the possibility of introducing new routines for more systematic use of conversations with drivers who have been caught driving under the influence of alcohol or drugs, where they can provide guidance on issues such as how to get help to avoid repeating the same offence.
- 19. *MA Rusfri Trafikk* (Norwegian Abstaining Motorists' Association), together with MHF in Sweden, will carry out a survey over three years to uncover people's attitudes to cannabis use and driving.
- 20. Oslo University Hospital will carry out a roadside survey to determine the extent of intoxication in traffic.
- 21. Oslo University Hospital will carry out a national study of intoxication among injured road users admitted to hospital.

## 4. Seat belt use and proper securing of children

#### Background for selection of priority area

The Norwegian Public Roads Administration's (NPRA) indicator surveys show that more than 97 percent of all drivers and front seat passengers in light vehicles and more than 85 percent of all drivers of heavy goods vehicles wear seat belts. However, results from the NPRA's Accident Analysis Group show that as much as 35 percent of all those who were killed in cars in the period 2011-2020 either did not wear a seat belt or used the seat belt incorrectly. The percentage was particularly high in 2020. Of the 53 who were killed in cars in 2020, 23 were not wearing seat belts and two were wearing seat belts incorrectly.

The majority of children in cars are legally secured, but there are still many that are not secured in accordance with current recommendations. Securing children in cars is therefore still an important challenge in our road safety work.

#### Improvement of the current situation

Efforts in the plan period 2022-2025 are expected to result in achievement of the following targets:

#### By 2026:

- 98.5 percent of all drivers and front-seat passengers in light vehicles should wear seat belts.
- 95 percent of all drivers of heavy goods vehicles should wear seat belts.
- 75 percent of all children aged 1-3 should be secured facing the rear when seated in a car.
- 85 percent of all children aged 1-8 should be secured correctly when seated in a car.

Seat belt use in light vehicles and heavy goods vehicles is registered in annual indicator surveys:

- The share of drivers and front-seat passengers in light vehicles wearing seat belts has increased from 89.8 percent in 2004 to 97.4 percent in 2019. The trend has been positive throughout the period, but progress has slowed since 2013. The indicator surveys do not include back seat passengers. However, based on previous surveys, we know that seat belt use among back seat passengers is significantly lower than among front seat passengers.
- The NPRA began registering seat belt use among drivers of heavy goods vehicles in 2009, and up to 2015 there was a very positive development. But since then, progress has come to a complete halt, and the results for 2018 and 2019 are at the same level as in 2015.

Indicator surveys were not carried out during the corona pandemic (2020 and 2021).

It is recommended that children in cars are seated facing the rear for as long as possible, until at least the age of four. Since 2010, the Norwegian Council for Road Safety has registered rear-facing securing of children aged 1-3, and the development has been very positive, from 20 percent in rearfacing safety seats in 2010 to 65 percent in 2021. Broken down by age group, the result for 2021 showed that 92 percent of one-year-olds, 73 percent of two-year-olds and 43 percent of three-year-olds were secured in rear-facing seats.

Proper use of safety equipment is important to provide optimal protection for children and adults. Research and accident analyses show that incorrect use of seat belts or safety seats is a major problem, which can have serious consequences in the event of an accident. Inspections of child safety in cars carried out in 2021 show that 18 percent of children aged 1-8 years were secured incorrectly.

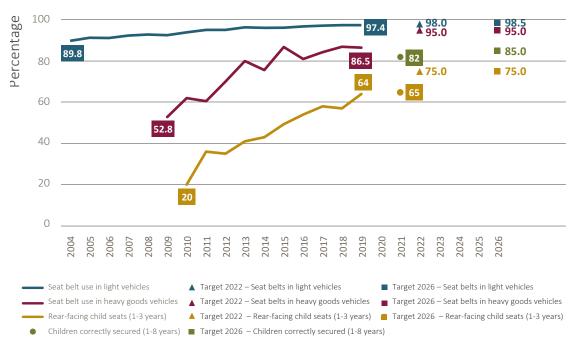


Figure 4.1 - Registered development and targets with respect to (1) use of seat belt by drivers and front seat passengers in light vehicles, (2) use of seat belt by drivers of heavy goods vehicles, (3) securing of children aged 1-3 in rear-facing safety seats, and (4) correct securing of children aged 1-8.

- 22. The NPRA will carry out an analysis of non-use of seat belts, based on data from the Accident Analysis Group.
- 23. The NPRA will carry out an analysis of incorrect use of seat belts, based on data from the Accident Analysis Group and the Norwegian Safety Investigation Authority.
- 24. The NPRA will continue its bus seat belt campaign in cooperation with *Fellesforbundet* (United Federation of Trade Unions), *NHO Transport* (Federation of Norwegian Transport Enterprises), and *Yrkestrafikkforbundet* (Union of Norwegian Transport Employees).
- 25. The Norwegian Council for Road Safety, with the support of the insurance company *If*, will carry out an annual campaign on the proper securing of children in cars, including informing people about the importance of rear-facing safety seats for the age group 1 3 years.
- 26. The Norwegian Council for Road Safety, in cooperation with the police, will carry out counts/inspections of child safety in cars every two years.
- 27. The Norwegian Council for Road Safety will provide information to health centres, adult education centres and the police about the correct securing of children in cars.
- 28. The county administrations will implement measures to ensure that children are secured properly, in accordance with statutory requirements, when travelling to and from school, including behaviour-oriented measures and requirements for safety equipment on buses.

### 5. Inattention

#### Background for selection of priority area

Distraction and inattention constitute a significant, and probably increasing, challenge. In 2016, the Institute of Transport Economics (TOI) conducted a literature study showing that inattention or distraction was a causal factor in almost a third of the accidents. This picture is confirmed in an analysis based on findings from the Norwegian Public Roads Administration's (NPRA) Accident Analysis Group, which states that a motor vehicle driver's inattention contributed to almost one in three fatal traffic accidents in the period 2011-2015. This shows that the challenge linked to inattention and distraction is in the same order as the challenges linked to speed, intoxication and non-use of seat belts.

#### Improvement of the current situation

No systematic indicator surveys are carried out showing how the extent of inattention is developing over time. Analyses from the NPRA's Accident Analysis Group will be an important source of knowledge. However, the conclusions are often somewhat uncertain because the situation is difficult to uncover. In addition, the annual number of fatal accidents is too low as a basis for generalisations, and analyses will therefore provide limited information about how the situation is actually changing over time. Instead of a quantified target, efforts in this area are based on the following ambition:

During the plan period 2022-2025, the parties will continue and further develop their efforts to reduce the number of accidents caused by inattention due to distraction.



- 29. The police will continue to focus on inattention in traffic and carry out inspections specifically aimed at mobile phone use.
- 30. *Ung i Trafikken* (Norwegian Youth Road Safety Association) will monitor the development in the number of people below 26 that are fined for mobile phone use. Attention will be drawn to this using various tools in social media and through press releases.
- 31. The NPRA will continue their national road safety campaign for attentive driving.
- 32. The Norwegian Council for Road Safety, with the support of the insurance company *Fremtind*, will develop and implement a digital campaign against inattention related to new technology in cars.
- 33. *Trafikkforum* and *Norges Trafikkskoleforbund*<sup>2)</sup> will continue to work actively to combat distraction and inattention in traffic, through information, textbooks, driver training, courses and periodic training of professional drivers.
- 34. As part of the national campaign for attentive driving, the NPRA will encourage businesses to have a more deliberate focus on distraction and take action against inattentive driving.
- 35. Norges Lastebileier-Forbund (Norwegian Road Transport Association) will continue its work focusing on distraction and inattention through their "Active Safety" and "Fair Transport" programmes and through their "Hands on the Wheel, Eyes on the Road" campaign.
- 36. The NPRA will initiate research to gain more knowledge about the connection between technology and inattention and the driver's role with regard to automation.

### 6. Children (0-14 years)

#### Background for selection of priority area

Over time, there are no age groups where the development in accidents has been as positive as among children. In 2019, for the first time, no children died in traffic, while there were two in 2020 and three in 2021. But even though we have achieved good results, there is still a lot that remains also for this group before Vision Zero is realised. Two children killed in 2020 and three in 2021 shows that the result in 2019 still does not represent a "normal year." In addition, a not insignificant number of children are still seriously injured every year.

It is also not obvious that the number of children that are killed or seriously injured will remain at today's relatively low level. New generations of children need to be trained for traffic and new parents need guidance. In addition, there are still many challenges with regard to providing physical facilities, for example in connection with school roads.

#### Improvement of the current situation

Efforts in the plan period 2022-2025 are expected to result in achievement of the following targets:

During the plan period 2022-2025, there should be at least two years without children aged 0-14 years being killed in traffic. In the same period, on average, there should be no more than 15 children killed or seriously injured per year.

Figure 6.1 shows the development, both in terms of the sum of children killed or seriously injured and in terms of fatalities only. The indicator target is twofold. The target for fatalities and serious injuries is related to police-reported personal injury accidents, and entails that in the period 2022-2025 there should be 27 percent fewer children killed or seriously injured than in the period 2017-2020.

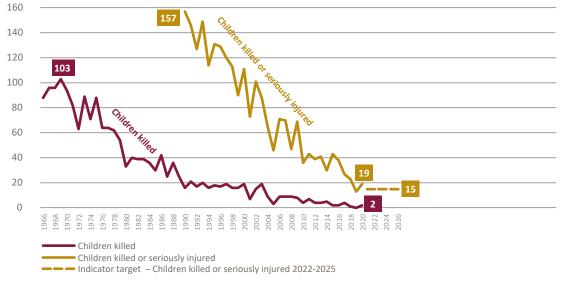


Figure 6.1 – Development in the number of children (0-14 years) killed or seriously injured.

The target for fatalities must be seen in connection with the indicator target in the action plan for 2018-2021, which was that there should be at least one year within the plan period with no children killed. This was achieved in 2019. The indicator target for the plan period 2022-2025 means that the number of years with zero children killed must be increased from one to two.

### Follow-up measures that the different parties have committed to implement

#### Measures relating to road safety training in kindergartens

- 37. The Norwegian Council for Road Safety, in cooperation with the Norwegian Directorate for Education and Training, will further develop *Barnas Trafikklubb* ("Children's Traffic Club") and strive to ensure that more kindergartens and schools make active use of the club.
- 38. The Norwegian Council for Road Safety will further develop the course *Barnehagen i trafikken* ("Kindergarten in Traffic") in accordance with the Framework Plan for Kindergartens, and provide courses for kindergarten employees.
- 39. The Norwegian Council for Road Safety will update their course contents for kindergarten teacher education programmes and offer digital and physical courses to the educational institutions.
- 40. *Norges Automobil-Forbund* (Norwegian Automobile Federation) will continue distribution of *NAFFEN traffic boxes* to the departments for older children in kindergartens around the country.

#### Measures relating to road safety training in primary and lower secondary schools

- 41. The Norwegian Council for Road Safety, in cooperation with the Norwegian Directorate for Education and Training, will prepare support and guidance materials for primary and lower secondary schools in line with the national curricula, which can also be used at *SFO* ("the Before and After School Activity Programme").
- 42. The Norwegian Council for Road Safety, *Norges Automobil-Forbund* (Norwegian Automobile Federation) and *Syklistenes Landsforening* (Norwegian Cyclists' Association) will operate and further develop the learning portal *sykkeldyktig.no* ("cycling proficiency" website).
- 43. *Norges Cykleforbund* (Norwegian Cycling Federation) will work with road safety cycle training in primary and lower secondary schools, through the training programme *Sykkelkids/Sykkelskolen* ("Bike kids/Cycle school")
- 44. The Norwegian Council for Road Safety, with support from *Finans Norge* (Finance Norway), will initiate a pilot project to transfer knowledge from the research project *Barn, oppmerksomhet og sykling* ("Children, Attention and Cycling") to road safety and cycle training.
- 45. The Norwegian Council for Road Safety will further develop their course contents for teacher education programmes and offer digital and physical courses to the educational institutions.
- 46. Norges Lastebileier-Forbund (Norwegian Road Transport Association) will continue their road safety programme Venner på veien ("Friends on the road"), which provides information on topics such as lorries' blind spots.
- 47. The Norwegian Council for Road Safety, in cooperation with the Norwegian Directorate for Education and Training, the Norwegian Public Roads Administration (NPRA) and other relevant authorities and stakeholders, will investigate how road safety and mobility training for children and young people can be coordinated and strengthened.

#### Measures for safe school roads and school transport

- 48. The NPRA, the county administrations and the eight large city municipalities will implement physical measures to prevent accidents involving children and young people on their way to and from school.
- 49. The county administrations will support and encourage municipalities and voluntary organisations to implement measures that will increase road safety for school children on their way to and from school and in their local communities, and that will contribute to safe behaviour among children and young people.
- 50. The eight large city municipalities will invite schools and voluntary organisations to provide their input regarding places where there is a need for physical measures, and support their attitude-forming work related to safe behaviour in traffic. This can be organised, for example, through *Hjertesoner* ("Heart Zones")<sup>3)</sup>.
- 51. The NPRA will administer the grant scheme for safer school roads and local communities, in close cooperation with the county administrations and the Norwegian Council for Road Safety.
- 52. *Hjertesonenettverket* (The Heart Zone network) will support schools, *FAUs* (Parents Committees), municipalities and county administrations in their work to establish Heart Zones by sharing good examples and information, for example through social media, seminars and meeting activities.

#### Measures for systematic road safety work in kindergartens and schools

53. The Norwegian Council for Road Safety, through the approval system *Trafikksikker kommune* ("Road-safety-approved municipality"), will assist municipalities in ensuring that road safety is incorporated in school and kindergarten plans.



<sup>3)</sup> A "Heart Zone" is a car-free (to the extent possible) zone around the school. Measures related to the Heart Zone must be adapted to the traffic and other conditions at the individual school. Children who are driven to school are dropped off at certain places outside the Heart Zone.

### 7. Young people and young drivers

#### Background for selection of priority area

In the years of adolescence, there is a dramatic increase in the risk of getting involved in serious traffic accidents. Young people assume new road user roles and their abilities to cope with new challenges are characterised by a lack of experience. This is reinforced by the fact that the brain is not fully developed, which also affects their ability to perceive and interpret risk in complex situations.

The priority area *Young people and young drivers* covers the age group 15-24 years, i.e. starting with the final year of lower secondary school. Accident rates are particularly high for those aged 16-19. From 2007 to 2014, we had a period of sustained significant reduction in the number of people killed or seriously injured in this age group. But the positive development has stalled and the number of people killed or seriously injured has remained virtually unchanged over the past seven years.

Data for the years 2017 and 2018 show that the risk of being killed or seriously injured is about five times higher per kilometre driven for car drivers aged 18-19 compared to the risk for car drivers aged 25-64. 16-17-year-olds also have a much higher risk of being killed or seriously injured compared to other age groups. This is to a large extent related to riding light motorcycles and mopeds (referred to under priority area *Motorcycles and mopeds*).

#### Improvement of the current situation

For 18- and 19-year-olds, accidents while in the role of driver constitute the biggest challenge. In the *Young people and young drivers* priority area, measures are therefore mainly aimed at young drivers. Efforts in the plan period 2022-2025 are here expected to result in achievement of the following target:

During the plan period 2022-2025, the average risk for drivers aged 18 and 19 of being killed or seriously injured should be 25 percent lower than the average for the years 2018 and 2019.

The target of a 25 percent risk reduction means that the risk must be reduced from 0.026 people killed or seriously injured per mill. km driven in the years 2018 and 2019 to 0.020 in the period 2022-2025. This is illustrated in Figure 7.1.

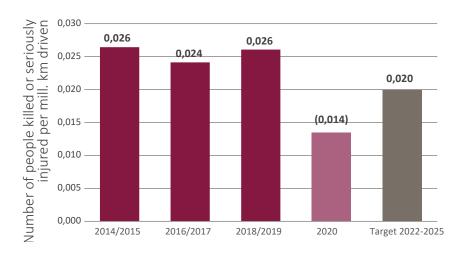


Figure 7.1 - Risk of being killed or seriously injured for car drivers aged 18 and 19 per mill. km driven - Development and target.



- 54. The Norwegian Council for Road Safety will offer a physical or digital competence development programme for teachers of the elective *Trafikk* ("Traffic") in all counties in Norway.
- 55. *Ung i Trafikken* (Norwegian Youth Road Safety Association) will carry out a training programme aimed at the elective *Trafikk* ("Traffic") in lower secondary school. The main topic is alcohol and drugs, attitudes and behaviour.
- 56. The Norwegian Council for Road Safety, with support from *Finans Norge* (Finance Norway), will further develop and promote the digital learning resource *Underveis* ("Underway") for secondary schools at both lower and upper levels.
- 57. The Norwegian Council for Road Safety, with support from *Gjensidige Forsikring* insurance company, will initiate work to coordinate and strengthen the efforts aimed at young people.
- 58. The Norwegian Public Roads Administration (NPRA), in cooperation with the Norwegian Council for Road Safety and the Road Safety Committee in Innlandet County, will offer 10th-graders a "Road Safety Day" at *Trafikksikkerhetssenteret* ("Road Safety Centre") at the Norwegian Road Museum. A digital course based on the topics presented at the "Road Safety Day" will be distributed to schools around the country during the plan period.
- 59. Agder County Administration will work to ensure that road safety is included as a mandatory component of apprenticeships.
- 60. *Ung i Trafikken* (Norwegian Youth Road Safety Association) will influence high school graduates ("russ") to make wise and safe choices in traffic through their campaign #Edrusjåfør ("#Soberdriver").
- 61. The county administrations and the City of Oslo, in cooperation with the Norwegian Council for Road Safety, the NPRA, the police and other cooperation partners, will work actively on road safety for pupils in their final year of upper secondary school.
- 62. The county administrations will implement measures to encourage good road safety behaviour in young people undergoing education or training at upper secondary level, including those in apprenticeship programmes.
- 63. The Norwegian Council for Road Safety, in cooperation with the NPRA, the police and the Norwegian Correctional Service, will test and evaluate a trial programme involving courses and behaviour recorders for young drivers who have lost their driving entitlement
- 64. The Norwegian Council for Road Safety will assist municipalities, county administrations and regional parties who are developing and implementing measures aimed at particularly at-risk young people.
- 65. *Trafoen*<sup>4)</sup> in Kristiansand will continue the "National forum for executive attitude-forming road safety work". This forum will help communities established at local/regional initiative and involved in executive attitude-forming road safety work to learn from each other and share knowledge and experience.
- 66. The NPRA will introduce new requirements for supplementary training, and a re-approval system for driving instructors. The content of the supplementary training programme will be developed in cooperation with the industry organisations for driving schools and educational institutions for the education and training of driving instructors.
- 67. The Norwegian Council for Road Safety will prepare and distribute guidance materials on road safety to municipality and county Youth Councils.

### 8. Elderly road users

#### Background for selection of priority area

Data for the years 2017 and 2018 show that the risk of being killed or seriously injured is about five times higher per kilometre driven for car drivers aged 75+ compared to the risk for car drivers aged 25-64. Moreover, the risk of being killed or seriously injured is between six and seven times higher per kilometre walked for pedestrians aged 75+ compared to the average for pedestrians in other age groups.

There are many reasons why the elderly are generally at higher risk in road traffic than younger age groups. Aging reduces skills that are important in traffic, such as concentration, observation and processing of information. In addition, old people are less able to withstand the physical stresses of accidents than young people, and accidents involving the elderly therefore often have serious outcomes. We also have to face the fact that the elderly are an increasing population group and that they are going to have different needs and expectations related to old age than today's elderly.

A review of fatal accidents in the period 2017-2020 shows that 10 percent of these were caused by drivers over the age of 75. In comparison, about 3.5 percent of traffic performance is carried out by drivers in this age group. Illness was significantly more common as a contributing factor to these accidents than for accidents caused by younger drivers, while high speed and technical vehicle control issues occurred less frequently in the oldest driver group.

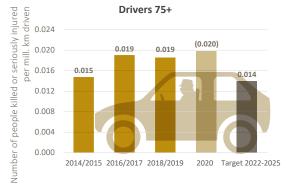
#### Improvement of the current situation

Efforts in the plan period 2022-2025 are expected to result in achievement of the following targets:

During the plan period 2022-2025, the average risk of being killed or seriously injured

- for car drivers in the age group 75+ should be 25 percent lower than in the years 2018 and 2019 (per km driven).
- for pedestrians in the age group 75+ should be 25 percent lower than in the years 2018 and 2019 (per km walked).

Figure 8.1 illustrates the targets for risk development compared with the registered development after 2014.



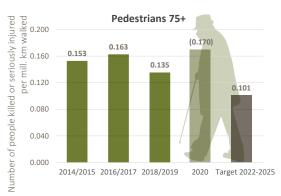


Figure 8.1 - Risk of being killed or seriously injured for road users aged 75+ per mill. km - Development and targets. Drivers in the left part of the figure and pedestrians in the right part of the figure.

- 68. The Norwegian Council for Road Safety, in cooperation with *Nasjonalforeningen for folkehelsen* (Norwegian Health Association), will be a driving force in ensuring compliance with the health requirements for driving licences set out in the Norwegian Driving Licence Regulations, especially with regard to drivers from the age of 80.
- 69. The Norwegian Public Roads Administration (NPRA) will work to increase participation in the refresher course *Bilfører 65+* ("Driver 65+"), with the target that the number of participants each year should correspond to 30 percent of those born 70 years ago and holding a driving licence.
- 70. The NPRA will further develop *Bilfører 65+* ("Driver 65+"), focusing on topics such as driver support systems, technical road design, digital signage and new information systems. Increasing the digital part of the course as a supplement to the physical courses will be considered.
- 71. *Pensjonistforbundet* (Norwegian Pensioners' Association) will arrange and hold road safety courses aimed at older pedestrians, based on materials developed by the NPRA. The NPRA will ensure that existing course materials are updated and adapted with regard to professional and technical contents.
- 72. The Norwegian Council for Road Safety will prepare and distribute guidance materials on road safety to municipal councils for the elderly.



### 9. Pedestrians and cyclists

#### Background for selection of priority area

Put simply, *nullvekstmålet* ("the zero growth target") means that all growth in passenger transport in the largest urban areas should be absorbed by public transport, walking and cycling. This entails that an increase in walking and cycling is desired (and thus also expected).

Accident statistics and data from the National Travel Survey for 2017/2018 show that the risk of being killed or seriously injured is about ten times higher per kilometre for cyclists and about five times higher for pedestrians compared to car drivers. The real difference in risk is probably much greater. This is due to the fact that there is significant under-reporting of seriously injured cyclists, especially when it comes to single-person accidents. Also, pure fall injuries among pedestrians are not included in the accident statistics.

The Report to the Storting No. 20 (2020-2021) NTP 2022-2033 refers to the challenge posed by an increase in pedestrians and cyclists, but at the same time clearly establishes that: "It is an ambition that the goal of increased walking and cycling should be achieved without resulting in more pedestrians and cyclists killed or seriously injured."

#### Improvement of the current situation

Efforts in the plan period 2022-2025 are expected to result in achievement of the following targets:

During the plan period 2022-2025, the average risk of being killed or seriously injured:

- for pedestrians should be 25 percent lower than in the years 2018 and 2019 (per km walked).
- for cyclists should be 25 percent lower than in the years 2018 and 2019 (per km cycled).

#### By 2026:

- 75 percent of cyclists should wear bicycle helmets.
- 53 percent of pedestrians should wear safety reflectors on lit roads during dark hours.

Figure 9.1 illustrates the target for risk development for pedestrians and cyclists respectively, compared with the registered development after 2014.

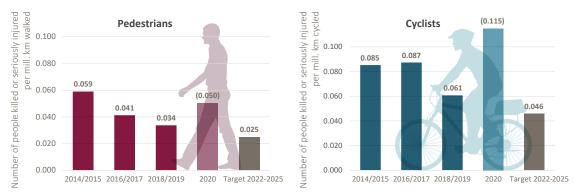


Figure 9.1 - Risk of being killed or seriously injured per mill. km for pedestrians (left) and cyclists (right) respectively.

A number of parties are implementing measures to increase the use of bicycle helmets and pedestrian safety reflectors, and this is an important part of the road safety work aimed at pedestrians and cyclists. We have therefore chosen to supplement the indicator targets for risk development with indicator targets for the use of bicycle helmets and pedestrian safety reflectors, respectively.

Figure 9.2 shows that for all age groups combined there has been a positive trend in the use of bicycle helmets, from 34.8 percent in 2006 to 65.9 percent in 2019. It is among the adults (over 17 years) that we have had the most positive development over time. Still, helmet use is by far the highest among children. However, there has been no increase in helmet use among children during the last four years of registration, and the result for 2019 is lower than for 2015. Among adolescents, helmets are worn clearly less than among other age groups.

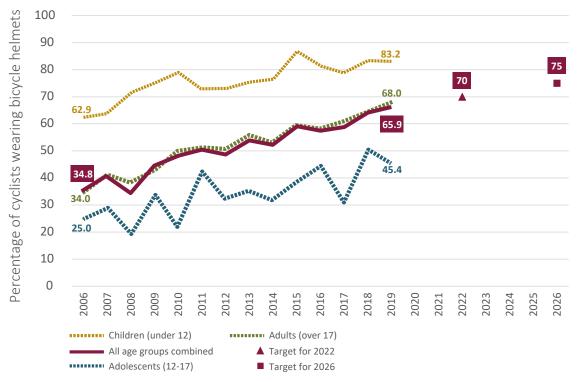


Figure 9.2 – Use of Bicycle Helmets – Registered development and targets

The Norwegian Council for Road Safety perform annual registrations of the use of safety reflectors among adult pedestrians in November. The registrations are made on illuminated roads in the dark hours and include counting points on country roads as well as in densely populated areas. Figure 9.3 shows that use is increasing, from 27.5 percent use in 2010 to 46 percent use in 2021.

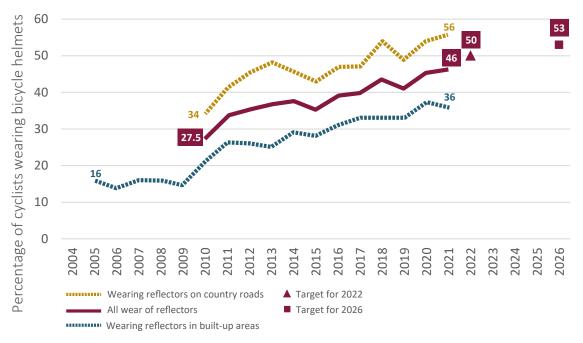


Figure 9.3 Wearing Pedestrian Safety Reflectors - Registered development and targets



#### Measures to improve physical facilities for pedestrians and cyclists

- 73. During the period 2022–2025, county administrations will provide facilities for pedestrians and cyclists on approximately 225 km of county roads, of which approximately 110 km will be in urban areas.
- 74. During the period 2022–2027, the Norwegian Public Roads Administration (NPRA) will provide facilities for pedestrians and cyclists on approximately 155 km of roads connected to the national road network, of which approximately 75 km will be in urban areas.
- 75. The eight large city municipalities will provide physical facilities and carry out upgrading projects and operation/maintenance, to ensure road safety for cyclists and pedestrians on municipal roads. Efforts will also be directed at single-person accidents related to micromobility and fall accidents for pedestrians.
- 76. The NPRA will review rules and regulations relating to unobstructed visibility along roads, and consider measures to make the provisions easier to enforce.
- 77. The eight large city municipalities, in cooperation with relevant other parties and possibly neighbouring municipalities, will develop walking strategies and cycling strategies, where increased road safety is emphasized as a means of making it more attractive to walk and cycle.
- 78. The county administrations will carry out road safety assessments of priority cycle routes, and ensure prioritisation of funds for the implementation of measures.
- 79. The NPRA will carry out a systematic review of pedestrian crossings along the national road network and identify where there is a need for measures. Particular focus will be on lighting.

#### Road user related measures directed at pedestrians and cyclists

- 80. The Norwegian Council for Road Safety, with the support of the insurance company *Tryg Forsikring*, will carry out an annual digital bicycle helmet campaign.
- 81. Every autumn *Syklistenes Landsforening* (Norwegian Cyclists' Association) will carry out a campaign directed at the public, called *Synlig syklist* ("Visible cyclist").
- 82. The county administrations will, through a range of measures and instruments, encourage increased use of bicycle helmets and reflectors.
- 83. The Norwegian Council for Road Safety will carry out annual national and local reflector activities, such as in connection with *Refleksdagen* ("Reflector Day") and carry out annual reflector counts.

#### Micromobility and electric scooters

- 84. On request from the Ministry of Transport and Communications, the NPRA will contribute to the effective implementation of more restrictive regulations for the use of electric scooters and other small electric vehicles, as well as assess the need for further measures.
- 85. The NPRA will carry out a new campaign on interaction in traffic, including interaction between electric scooters and other road users.
- 86. *Ung i Trafikken* (Norwegian Youth Road Safety Association) will influence young people to travel safely on micro vehicles, by conducting digital campaigns as well as physical events where drunk impairment goggles can be tested.

### 10. Motorcycles and mopeds

#### Background for selection of priority area

Accident statistics and data from the National Travel Survey for 2017/2018 show that the risk of being killed or seriously injured is about nine times higher per kilometre for mopeds, about 18 times higher for heavy/medium heavy motorcycles and as much as 50 times higher for light motorcycles, compared to car drivers.

The percentage of those killed or seriously injured who were drivers or passengers on motorcycles is increasing, and in 2020 this group made up 22 percent of the total number of people killed or seriously injured. An important reason for this increase is that the fleet of motorcycles has increased far more than what applies to cars. However, when more than one in five people killed or seriously injured were on a motorcycle, there is good reason to pay particular attention to this group of road users. Development is better for mopeds than for motorcycles, but moped accidents are nevertheless a significant challenge in the 16-17 years age group. The *Report to the Storting No.* 20 (2020-2021) National Transport Plan 2022-2033 says that "in the light of the development for motorcycle and moped accidents it is necessary to revitalise the work to increase motorcycle safety."

#### Improvement of the current situation

Efforts in the plan period 2022-2025 are expected to result in achievement of the following target:

During the plan period 2022-2025, the average risk of being killed or seriously injured on a heavy motorcycle, light motorcycle and moped, respectively, should be 25 percent lower than the average for the period 2017-2020 (per person km).



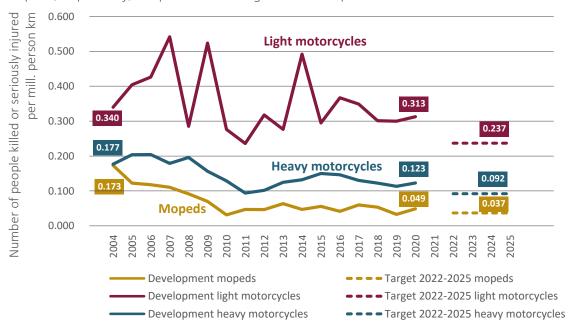


Figure 10.1 illustrates the targets for risk development for light motorcycles, heavy motorcycles and mopeds, respectively, compared with the registered development after 2004.

Figure 10.1 - Risk of being killed or seriously injured for mopeds, light motorcycles and heavy motorcycles per mill. person km - registered development and targets for the period 2022-2025.

The age distribution of those killed and seriously injured provides important information to be used as a basis for the choice of measures. Figure 10.2 shows that it is the 45-54 years age group that has the highest number of people killed or seriously injured on heavy motorcycles. We also see that those killed or seriously injured on mopeds or light motorcycles are mainly in the 15-19 years age group. 16-and 17-year-olds are particularly at risk. In the period 2011-2020, 52 percent of those killed or seriously injured on mopeds and as much as 62 percent of those killed or seriously injured on light motorcycles were 16 or 17 years old.

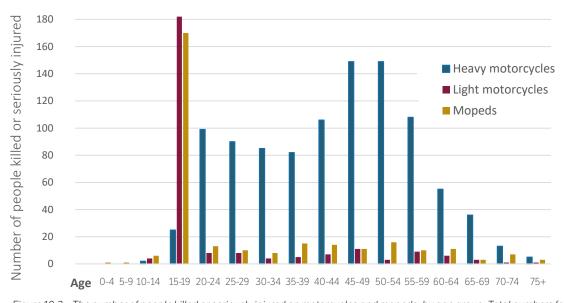


Figure 10.2-The number of people killed or seriously injured on motorcycles and mopeds, by age group. Total numbers for the ten-year period 2011-2020.

- 87. The Norwegian Public Roads Administration (NPRA) will lead a *National Forum for Motorcycle Safety*, with the purpose of gathering and involving central and competent professional communities.
- 88. The county administrations will facilitate coordinated efforts against motorcycle accidents.
- 89. The NPRA, in cooperation with *Norsk Motorcykkel Union* (Norwegian Motorcycle Union) (NMCU) and other relevant parties, will draw up an implementation plan for ATV, moped and motorcycle measures, based on, inter alia, the measures in the *National Plan of Action for Road Safety 2022-2025*.
- 90. The NPRA will carry out targeted technical and administrative inspections in schools and other places where moped drivers can be found.
- 91. Members of *Norsk MC-Forhandlerforening* (NMCF) (Norwegian Motorcycle Dealers' Association), in cooperation with the NMCU, will help organise one road safety event per year where members have the capacity and premises to host such an event.
- 92. *MCSikkerhet.no*<sup>5)</sup>, in cooperation with the industry organisations for driving schools, *Trafikkforum and Norges Trafikkskoleforbund*, the NMCU, *Norges Automobil-Forbund* (Norwegian Automobile Federation) and the NPRA, will further develop the concept of short and easily understandable films based on knowledge about accidents.
- 93. Nord University, in cooperation with the research organisation SINTEF and the Norwegian Council for Road Safety, will carry out a project involving the use of eye trackers for motorcycle riders. The results are intended to be used for various information and training purposes.
- 94. The NMCU will prepare materials describing the challenges of group riding and providing advice on how to ride.
- 95. The NPRA will help ensure that foreign motorcyclists are informed of particular challenges related to Norwegian roads, for example by receiving information when they arrive in the country.
- 96. The NMCU, in close cooperation with *Norsk MC-Forhandlerforening* (NMCF) (Norwegian Motorcycle Dealers' Association), will take responsibility for ensuring that motorcyclists and moped riders are provided with good safety information and professional advice when purchasing helmets and other safety equipment.
- 97. The NMCU, in cooperation with the NPRA, will implement measures aimed at motorcyclists aged 45-54 years, based on special analyses of the accident risk for this target group.
- 98. Norges Automobil-Forbund (Norwegian Automobile Federation) will continue running their Sikker på MC ("Safe on a motorbike") course, a nationwide low-threshold course for new and experienced motorcycle riders with a focus on good riding strategies.
- 99. The NMCU, in cooperation with the road owners, will initiate, and participate in, road inspections and thematic inspections with a particular focus on critical issues relating to the road, the side terrain and optical guidance for motorcycles.
- 100. The NPRA will commence work to survey side terrain route by route for the potential establishment of motorcycle protection devices or facilitation of forgiving terrain. The county administrations will be invited to participate.
- 101. The NPRA will carry out a pilot to test measures to prevent motorcycle off-the-road accidents, including clearly visible and flexible delineator posts to improve optical guidance at unexpected curves.

### 11. Freight transport by road

#### Background for selection of priority area

Road safety challenges for freight transport on roads has attracted considerable attention, especially when it comes to accidents involving heavy goods vehicles. This is natural, since such accidents are often very serious. This is illustrated by the fact that for the years 2017-2020 we have seen that 7 percent of those lightly injured, 8 percent of those seriously injured and as much as 27 percent of those killed were in accidents involving heavy goods vehicles.

#### Improvement of the current situation

Efforts in the plan period 2022-2025 are expected to result in achievement of the following targets:

In 2026, at least 30 percent of all freight vehicles with a maximum authorised mass > 3.5 tonnes and at least 45 percent of all vans with a maximum authorised mass  $\le$  3.5 tonnes should be found to have neither Code 2 nor Code 3 deficiencies at the periodic roadworthiness test.

Freight vehicles with a maximum authorised mass > 3.5 tonnes must undergo periodic roadworthiness tests at one-year intervals, while vans with a maximum authorised mass  $\leq$  3.5 tonnes must undergo such tests after four years and then every two years. Since all vehicles must undergo periodic roadworthiness tests, results from these will provide a good indication of how the technical standard of the vehicle fleet is changing. This includes headlamps, brakes, chassis/chassis equipment, axles, tyres and wheels/wheel suspension.

Deficiencies found at the roadworthiness tests are divided into deficiencies to be corrected but not requiring a follow-up test (Code 1 deficiencies), deficiencies that require a follow-up test (Code 2 deficiencies), and deficiencies that result in a prohibition on use (Code 3 deficiencies). It is the percentage of vehicles with deficiencies in the two most serious categories that will be followed up through the plan period.



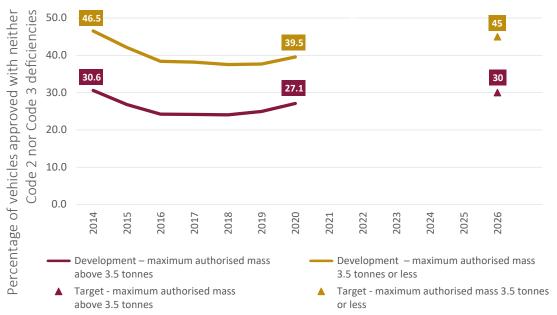


Figure 11.1 - Percentage of goods vehicles found to have neither Code 2 nor Code 3 deficiencies at the periodic roadworthiness test.

#### **Business planning within freight transport**

- 102. The Norwegian Public Roads Administration (NPRA) and the Labour Inspection Authority together will consider whether it may be appropriate to propose extended responsibilities for buyers of transport services.
- 103. The NPRA will continue and further develop its *Trygg Trailer* ("Safe heavy goods vehicles") programme, and also update the *Trucker's Guide*.

#### Inspections

- 104. The NPRA will strengthen its inspection efforts through the use of new technology.
- 105. The NPRA, the Labour Inspection Authority, Norwegian Customs, the Norwegian Tax Administration and the police will continue their cooperation in accordance with annual action plans and continue their joint inspection activities in regional cross-agency cooperation groups.
- 106. The NPRA will work to establish separate regulations relating to extended storage time when personal data are processed in connection with the targeting and performance of inspections.

#### Information and training

- 107. Norges Lastebileier-Forbund (Norwegian Road Transport Association), in cooperation with Fellesforbundet (United Federation of Trade Unions), will work to improve understanding and competence with regard to load securing.
- 108. The NPRA, in cooperation with *Norges Lastebileier-Forbund* (Norwegian Road Transport Association), *NHO Transport* (Federation of Norwegian Transport Enterprises), *NHO Logistikk og Transport* (Norwegian Logistics and Freight Association), *Fellesforbundet* (United Federation of Trade Unions) and *Yrkestrafikkforbundet* (Union of Norwegian Transport Employees), will develop a supplementary training programme for professional drivers transporting goods by light vehicles.
- 109. The NPRA will develop information on the risk associated with pedestrians and cyclists in blind spots, and on relevant measures that may help reduce this risk.

# 12. Head-on collisions and run-off-the-road accidents

#### Background for selection of priority area

Vision Zero requires us to focus on targeted investment measures, where the purpose is to prevent accidents with a high probability of serious consequences. This applies particularly to head-on collisions and run-off-the-road accidents. In the period 2017–2020, 28 percent of those killed or seriously injured were killed or injured in head-on collisions and 30 percent in run-off-the-road accidents. On the national road network, head-on collisions constitute the biggest challenge. Correspondingly, run-off-the-road accidents constitute the biggest challenge on the county road network.

#### Improvement of the current situation

- By 1 January 2028, 60 percent of traffic performance on national roads with speed limits of 70 km/h or higher should take place on roads with median barriers.
- Through a systematic approach, efforts will be made to reduce the risk of serious run-off-the-road accidents on national roads and county roads.

Roads with median barriers include four-lane roads with a central reservation and two- or three-lane roads with a central crash barrier. Accident statistics show that such roads have a much lower risk of serious accidents compared to roads without a physical divide between traffic in opposite directions. This is not least due to the fact that the head-on collisions are almost eliminated.

According to the Norwegian Public Roads Administration's (NPRA) road standard specifications, there is a need for four lanes and central reservation on roads outside urban areas with an average daily traffic of more than 12,000, and two- or three-lane roads with central crash barriers where average daily traffic is between 6,000 and 12,000. As of 1 January 2021, 53.3 percent of traffic performance on national roads with speed limits of 70 km/h or higher took place on roads with median barriers. In the *Report to the Storting No. 20 (2020-2021) NTP 2022-2033*, this percentage is expected to be increased to 60 percent by 1 January 2028. This estimate requires that the NPRA's projects described in the National Transport Plan (NTP) are carried out in accordance with the current progress plan, and that *Nye Veier*'s<sup>6)</sup> projects are carried out in accordance with the progress plan from 2020. We choose to use the ambition in the NTP as a basis for our follow-up in the action plan, even if the ambition describes a situation two years after the end of the plan period for the action plan.

Run-off-the-road accidents occur geographically spread out, and often on roads with low traffic and high speed limits. An appropriate approach to reducing the extent of serious run-off-the-road accidents will depend on a number of factors, including traffic volume and speed level. We have therefore chosen to focus on working determinedly and systematically in the period, both on national roads and county roads, rather than setting a quantified target related to a specific standard.

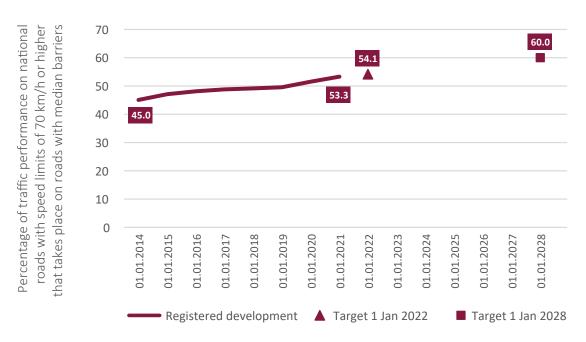


Figure 12.1 - Development in the percentage of traffic performance on national roads with speed limits of 70 km/h or higher that takes place on roads with median barriers.



#### Measures to reduce serious head-on collisions

- 110. In the period 2022-2027, the NPRA and *Nye Veier* will build a total of around 435 km of new national roads with median barriers, of which around 400 km of four-lane motorway with central reservation and around 35 km of two- or three-lane roads with central crash barriers
- 111. The NPRA will provide inlaid audio-tactile centreline markings on all national roads that fulfil the current criteria, at the latest when the road in question is repaved.
- 112. Based on their review of the county road network, the county administrations will select stretches of road that are suitable for inlaid audio-tactile centreline marking according to established criteria. County administrations will provide inlaid audio-tactile centreline markings on these stretches when they are repaved.

#### Measures to reduce serious run-off-the-road accidents

- 113. The NPRA will continue its work to review and improve national roads, with the long-term ambition that all national roads with a speed limit of 70 km/h or higher should meet the minimum standard relating to run-off-the-road accidents as described in the National Transport Plan (NTP) 2022-2033.
- 114. Through a systematic approach, the county administrations will prioritise measures to prevent serious run-off-the-road accidents on the county road network. The measures will be implemented after road safety inspections or simplified methods that on a professional basis are able to identify where there is a particular risk of run-off-the-road accidents.
- 115. The NPRA will carry out a thematic analysis to examine run-off-the-road accidents along motorways, with a particular focus on barriers and guardrails, road safety equipment and safety zones.
- 116. *Trafikksikkerhetsforeningen* (Norwegian Road Safety Association) will provide a course and training programme for employees who install barriers and guardrails, and will strive to ensure that a certification scheme for installation work is introduced.

## 13. Operations and Maintenance

#### Background for selection of priority area

The standard of operation and maintenance is closely related to the accident situation on the road network. It is a natural ambition that all operation and maintenance activity on the road network should contribute to better road safety in accordance with Vision Zero. This requires that all road owners focus on this continuously.

#### Improvement of the current situation

Performing core tasks within operation and maintenance contributes to road safety every day. Contractors provide accessible, open and safe roads through their operation of the road network. In addition, maintenance and minor investment projects contribute to improved accessibility, traffic flow and road safety.

During the plan period 2022-2025, road owners will retain and further develop their daily focus on road safety in core tasks within operation and maintenance.

#### This means ensuring:

- the continuation of current efforts, in order to maintain the basis for low accident figures.
- a high level of competence for those involved in operation and maintenance work.
- close cooperation among local and national road owners.
- the sharing of knowledge, including digitised knowledge.



- 117. The Norwegian Public Roads Administration (NPRA) will adapt its work to the requirements of the revised Road Safety Regulations<sup>7)</sup>.
- 118. *Nye Veier AS*<sup>8)</sup>, in connection with registration of all adverse incidents on its road network, will further develop this registration to also include accurate spatial data and indicators for the adverse incidents.
- 119. The NPRA will develop new ways of using available knowledge and data sources to prioritise road safety in continuous operational tasks and in the performance of maintenance.
- 120. The NPRA will carry out a thematic analysis of fatal accidents, which will take a closer look at selected safety-critical processes within operation and maintenance.
- 121. The NPRA will continuously assess the contents of its templates for operation and maintenance contracts on the national road network, including criteria relating to road safety competence.
- 122. The NPRA will prepare road safety courses for the performance of operation and maintenance tasks, to be offered to the various road owners.
- 123. The NPRA will implement the application TS-inspeksjon ("Road safety inspection").
- 124. The NPRA will incorporate the use of inlaid road marking in NPRA guidelines for road marking.
- 125. *Yrkestrafikkforbundet* (Union of Norwegian Transport Employees) will establish a scheme where professional drivers will have the opportunity to evaluate winter maintenance.
- 126. The NPRA will improve interaction between Traffic Control Centres and road owners/ road owners' contractors for systematic follow-up of reported issues that affect road safety.
- 127. The NPRA will evaluate and revise NPRA Guidelines *R610 Standard for operation and maintenance of national roads*.



<sup>7)</sup> Regulations based on the EU Directive on Road Infrastructure Safety Management.

<sup>8)</sup> Nye Veier ("New Roads") is a Norwegian government-owned limited company that was founded in 2015. This company has taken over the responsibility for the construction, operation and maintenance of certain national road sections. This mainly applies to roads with high traffic volumes that are converted to four-lane motorways.

# 14. Utilisation of new technology in road safety work

#### Background for selection of priority area

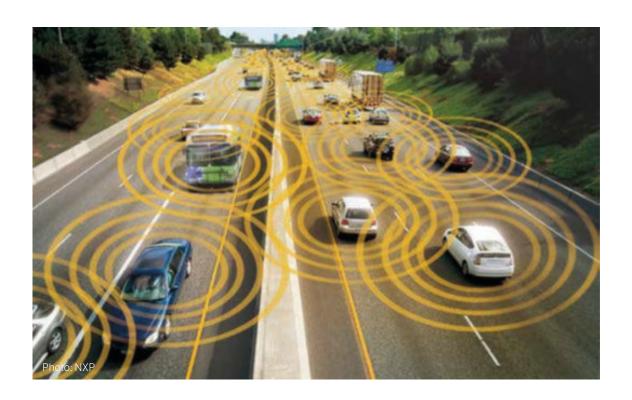
Technological developments have contributed substantially to a significant reduction over time in the number of people killed or seriously injured. This applies in particular to the vehicle fleet. The Institute of Transport Economics ( $T\emptyset$ I) summarised Norwegian and international research in 2017, and found that the probability of being killed or seriously injured in a traffic accident was about 40 percent lower if you drove a new car compared to one that was 10 years old.

The ambition in the National Transport Plan for reduction in fatalities and serious injuries up to 2030 and 2050 requires that we make full use of the opportunities new technology offers, for the benefit of road safety. This applies both to widespread distribution and to how we make use of "already developed" technology, as well as to the development of new technology, for example in connection with the facilitation of automated driving.

#### Improvement of the current situation

Efforts in the plan period 2022-2025 are expected to result in achievement of the following targets:

Norway should be a leading nation within Intelligent Transport Systems (ITS), including road and vehicle technology, where available systems that improve road safety are utilised. With regard to drivers, training must be adapted to new technology.



Development of ITS will form a key pillar of our road safety work. This includes vehicle technology and facilities that use information or communication technology within the road transport system, and where the purpose may be to prevent accidents, reduce the extent of damage and injury, influence behaviour and improve and simplify traffic flow. A range of the ITS solutions implemented will contribute to improved road safety and include solutions for both vehicles and infrastructure. New technology in vehicles and automated transport will contribute strongly to reducing accidents involving fatalities and serious injuries, by eliminating human error.

During the plan period 2022-2025, efforts in the action plan will be concentrated in four areas:

- Utilising existing policy instruments during the plan period.
- Development and facilitation of automated driving.
- Vehicle technology and the driver's role in new cars.
- The role of regulator.

## Follow-up measures that the different parties have committed to implement

#### Utilising existing policy instruments during the plan period

- 128. The Norwegian Public Roads Administration (NPRA) will utilise known ITS solutions on existing road networks to reduce accidents, especially on high-traffic-volume motorways, as defined in the NPRA's implementation plan for 2022-2027.
- 129. The NPRA will prepare standard requirements for communication infrastructure along the road network.

#### Development projects and facilitation of automated driving

- 130. The NPRA will carry out pilots to provide a basis for selecting technology with a positive impact on road safety.
- 131. The NPRA will look into the possibility of using geofence for speed control in places where there is a high risk of accidents, for example near schools.
- 132. The NPRA will work to find solutions that can improve the quality of digitally available speed limit data in vehicles.
- 133. The NPRA will develop guidelines and requirements for instrumentation of the road network, giving first priority to important main roads.

#### Vehicle technology and the role of the driver

- 134. The NPRA will initiate research to gain more knowledge about the impact of automated systems on road user behaviour, and map how the driver is affected by new technology.
- 135. *Nord University* will initiate a study to describe future driver competence in a transport sector that is increasingly digitalised.
- 136. The NPRA will ensure that the development of driver training and driving tests is based on new knowledge about automation of the driver role.
- 137. The NPRA will ensure the exchange of knowledge and experience related to future driver training through cooperation with educational institutions and industry organisations.

#### The role of regulator

- 138. The NPRA will participate in the international work to develop requirements that will apply to new vehicles.
- 139. The NPRA will develop legislation and rules for the use of new data sources to improve road safety.

# 15. Systematic road safety work in private and public enterprises

#### Background for selection of priority area

A study made by the Institute of Transport Economics (TOI) shows that 36 percent of all fatal road accidents involved at least one person driving during working hours. This shows that there is considerable potential in developing good safety routines in enterprises where employees spend a large part of their working hours on the road. This applies to private as well as public enterprises.

#### Improvement of the current situation

Efforts in the plan period 2022-2025 are expected to result in achievement of the following targets:

#### By 1 January 2026:

- At least 200 municipalities should be approved as *Trafikksikker kommune* ("Road-safety-approved municipality").
- As many counties a possible should be approved as *Trafikksikker fylkeskommune* ("Road-safety-approved county")
- Tools for organisational road safety work should be available and used, and be relevant for all private enterprises where road travel is an important part of the enterprise's activity.

Road safety is an important issue in many enterprises, both in the public and private sectors, and there is a great need for safety management at various levels. Various approval or certification schemes have been developed to ensure a satisfactory level of organisational road safety work. The number of approved/certified enterprises says something about how well we succeed in making road safety part of the mindsets of public and commercial organisations.

The Norwegian Council for Road Safety's approval scheme *Trafikksikker kommune* ("Road-safety-approved municipality") is well established, and has become widespread among the municipalities. The Norwegian Council for Road Safety has also developed the approval scheme *Trafikksikker fylkeskommune* ("Road-safety-approved county"), and in several counties work has been started to ensure compliance with the stipulated criteria.

In addition, various schemes have been developed that establish requirements with regard to organisational road safety work and that are mainly relevant for private enterprises (e.g. ISO 39001). However, compared to municipalities and counties, there is far greater variation among private enterprises, both in terms of their need and motivation for carrying out systematic organisational road safety work, and in terms of their resources to carry out such work. We see that it will be necessary to supplement currently available tools in order to reach all industries that generate a lot of road traffic, and in order to cover both large and small enterprises.

#### Measures to promote organisational road safety work in public enterprises

- 140. The eight large city municipalities will have valid and operational road safety plans during the plan period. The county administrations, in cooperation with the Norwegian Council for Road Safety, will help ensure that other municipalities also have valid and operational road safety plans. The target is that at least 300 municipalities should have valid and operational road safety plans by 1 January 2026.
- 141. The Norwegian Public Roads Administration (NPRA), in cooperation with the Norwegian Council for Road Safety and the county administrations, will prepare a new guide for the preparation of municipal road safety plans.
- 142. The eight large city municipalities will encourage legally required participation bodies (i.e. councils for the elderly, councils for people with disabilities, and youth councils) to participate in the municipalities' road safety work and work actively with road safety directed at their own groups.
- 143. The Norwegian Council for Road Safety, in cooperation with the county administrations, will strive to ensure that by 1 January 2026, at least 200 municipalities will have been approved as *Trafikksikker kommune* ("Road-safety-approved municipality"), and that municipalities that have already been approved are recertified.
- 144. The county administrations will develop plans and/or strategies relating to road safety, ensuring a healthy degree of involvement and political support. These shall be closely linked to the national plan of action.
- 145. The county administrations will encourage legally required participation bodies (i.e. councils for the elderly, councils for people with disabilities, and youth councils) to participate in the county's road safety work and work actively with road safety directed at their own groups.
- 146. The county administrations will further develop and reinforce the counties road safety forum as a place for sharing experience and new knowledge.
- 147. The county administrations will work to obtain approvement as *Trafikksikker fylkeskommune* ("Road-safety-approved county"). The Norwegian Council for Road Safety will facilitate the county administration's efforts.
- 148. The NPRA will continue the project *Revitalisation of Vision Zero* as an externally directed project, aiming to increase awareness of *Vision Zero* and the choices it requires that we make.
- 149. The NPRA will initiate cooperation with contractors, transport operators etc., and consider what requirements the NPRA should include in its contracts, which would increase transport safety.
- 150. The eight large city municipalities will ensure that road safety as an issue is included in land-use and transport plans for urban areas that are eligible for *urban growth agreements*<sup>9)</sup>, and that targets and strategies for road safety are set. The eight large city municipalities will help ensure that projects financed through *urban growth agreements* contribute to improved road safety for pedestrians and cyclists.
- 151. The NPRA will take the initiative to establish a forum for the sharing of experience and discussions about road safety measures in the nine urban areas that either have or are working towards establishing *urban growth agreements*. An important part of the purpose will be to ensure that the action programme for urban growth agreements is based on Vision Zero.

<sup>9)</sup> Urban growth agreements are mutually binding agreements between the national government, county administrations and municipalities, to achieve the goal of ensuring that the growth in passenger transport in metropolitan areas is absorbed by public transport, walking and cycling. The solutions chosen will help ensure improved mobility in general, and in particular make it easier to choose alternatives to the use of private cars. Urban growth agreements have been signed for the Oslo area, Nord-Jæren, the Bergen area and the Trondheim area. Work is currently underway to prepare urban growth agreements for the Nedre Glomma area, Buskerudbyen (Drammen, etc.), Grenland, Kristiansand and Tromsø.

#### Measures to promote organisational road safety work in private enterprises

- 152. The NPRA will initiate work to operationalise and specify the first three steps in the "Safety Ladder" 10).
- 153. The NPRA, in cooperation with the Norwegian Council for Road Safety, will develop guidance materials to be used by apprenticeship companies in their work with health, safety and environment.
- 154. *Norges Lastebileier-Forbund* (Norwegian Road Transport Association) will further develop the quality programme *Fair Transport*.



# 16. Work to increase the available knowledge base

#### Background for selection of priority area

Vision Zero requires that road safety work must be knowledge-based. Systematic and thorough work has been carried out to build a broad knowledge platform, based on research and scientific methods. This is an important reason why Norway in recent years has been the safest country in Europe when it comes to road traffic.

The impacts of today's measures will change over time, and our level of knowledge must keep up with developments. This means that we will need stricter requirements with regard to solutions and improvements. Our level of knowledge must be raised continuously and we need to enforce the requirement for targeted R&D activities. Furthermore, we must strengthen the coordination between the production of knowledge and the implementation of measures.

#### Improvement of the current situation

Efforts in the plan period 2022-2025 are expected to result in achievement of the following targets:

- There should be up-to-date and new knowledge that enables us to make appropriate priorities to ensure a reduction in the number of people killed or seriously injured in accordance with the ambition level in the National Transport Plan 2022-2033.
- A system should be established for registering injuries so that when an ambition for a reduction in the number of people killed or seriously injured is set in the National Transport Plan for 2026-2037, it can be based on the actual situation with correct numbers.
- There should be up-to-date calculation tools available as a basis for priorities to apply from 2026.

As an explanatory note on the second bullet point, it is data from police-reported personal injury accidents that are included in Norway's official accident statistics and in the Norwegian Public Roads Administration's (NPRA) accident register. This is the most commonly used source in our road safety work, and currently forms the basis for determining the level of ambition for reductions in the number of people killed or seriously injured in road traffic. All fatalities are reported. However, it is well known that far from everyone who is injured in road traffic is registered by the police. This means, among other things, that neither the determination of the level of ambition in the National Transport Plan nor the annual follow-up of developments is based on the real number of people killed or seriously injured. The Report to the Storting No. 20 (2020-2021) National Transport Plan 2022-2033 says that: "Through a number of subprojects, the road authorities will strive to ensure that in the next National Transport Plan, an ambition for a reduction in the number of people killed or seriously injured can be set based on the actual situation with correct numbers."

#### **Organizational measures**

155. The Norwegian Public Roads Administration's (NPRA) will lead an inter-agency forum to assess future knowledge needs regarding road safety. The forum will be a continuation of the forum established in 2018, but will have an adjusted mandate.

#### Areas with particular needs for knowledge building

156. In the period 2022-2025, the NPRA will carry out an R&D programme within road safety.

#### Knowledge about the accident situation

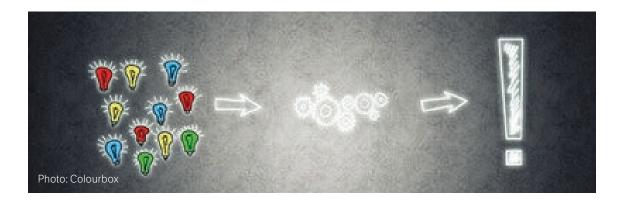
- 157. The NPRA, in cooperation with the police, will draw up revised guidelines for police reports on road traffic accidents, with a code system that ensures high quality of the information to be used in road safety work as well as electronic transfer of data from the police to the NPRA
- 158. The NPRA and the Norwegian Directorate of Health will contribute in "The Lighthouse Project Registration of injuries, analysis and use". This project was established by the Ministry of Transport and Communications and the Ministry of Health and Care Services, and aims to provide a more complete picture of people injured after traffic accidents, better analyses and more use of data. The findings from the project will be followed up by the contributing parties and by the Norwegian Council for Road Safety.
- 159. The NPRA will carry out a project to study the extent of consistency between the injury grading in the agency's accident register and medically defined categories in the form of AIS codes.
- 160. The NPRA will facilitate the transfer of the Accident Analysis group's database to a new technological platform.

#### Knowledge about the effect of measures and development of road safety tools

- 161. The NPRA will develop a new version of a model tool for calculating normal risk and injury costs along homogeneous road sections.
- 162. The NPRA will develop an updated tool to make aggregated calculations of risk and injury costs on long road sections.
- 163. The NPRA will update and develop the *TSeffekt* calculation tool.

#### Dissemination of knowledge

164. In 2022, the NPRA will establish a programme of webinars where the goal is to disseminate knowledge about road safety.



# 17. Follow-up measures within remaining areas

The 15 priority areas discussed in chapters 2-16 cover key investments in road safety work, and most of the measures that will be followed up in the next four-year period are logically included in one of these areas. But in order to keep moving forward towards Vision Zero, we must take a broad approach, where we involve new participants and apply policy instruments in new areas. In our work to identify new road safety measures, we have seen that there are a number of effective measures that do not belong naturally within any of the selected priority areas. These measures will be listed in chapters 17.1-17.7.

### 17.1 Penalties and driving entitlements

#### Follow-up measure

165. The police will follow up the provisions in Section 34 of the Road Traffic Act on their role in the management of driving entitlements, by observation during inspection and in other contexts where the holder of a driving entitlement behaves in a way that makes it reasonable to question whether the criteria are met in accordance with these provisions.

### 17.2 Improved injury care

#### Follow-up measure

166. The Norwegian Directorate of Health will lead and coordinate the national first-aid programme *Sammen redder vi liv* ("Together we save lives"), which is a national campaign based on voluntary efforts to promote life-long first-aid training of the public.

## 17.3 Measures aimed at road users of immigrant backgrounds

#### Follow-up measures

- 167. The NPRA will take the initiative to update the knowledge base with regard to the accident risk of immigrants and what traffic challenges apply to immigrants in particular.
- 168. Norges Trafikkskoleforbund ("Norwegian Association of Driving Schools"), in cooperation with Trafikkforum<sup>11)</sup>, the National Centre for Multicultural Education (NAFO) and the NPRA, will prepare a terminology list of words and explanations for use in driver training.
- 169. *Nord University* will prepare didactic materials and effective learning methods for immigrants that wish to undergo training for a Driver Certificate of Professional Competence in line with the Norwegian regulations.
- 170. *NHO Transport* (Federation of Norwegian Transport Enterprises) will further develop the *Bussnorsk test*, which is used to verify bus drivers' Norwegian language skills.

### 17.4 Works on and along roads

#### Follow-up measures

- 171. The NPRA will undertake a comprehensive review of roadworks warnings on high-speed roads in cooperation with important parties within the field of roadworks warning.
- 172. The NPRA will study potential new solutions for improved warning (signs, markings etc.) of work taking place on and along roads, directed at pedestrians and cyclists.
- 173. The NPRA will carry out a minimum of 750 inspections of roadworks warnings every year, distributed across the agency's geographically based transport units and the national team of inspectors. The inspections are to uncover any faults and deficiencies that affect road safety in general, and also focus in particular on pedestrians and cyclists in the area.

#### 17.5 Deer-vehicle collisions

#### Follow-up measure

174. The NPRA will take the initiative to carry out a pilot project with variable speed limits on a selection of road sections with many wildlife collisions, where the speed limit is lowered temporarily in periods of particularly high risk of wildlife in the road.

#### 17.6 ATVs

#### Follow-up measures

- 175. Nord University, in cooperation with the Norwegian Council for Road Safety, will survey the attitudes and behaviour of ATV drivers, as well as the attitudes of parents towards the behaviour of their adolescents and the knowledge parents have about the risks involved in their adolescents' use of ATVs.
- 176. The NPRA will carry out a comprehensive review of the rules and regulations relating to ATVs, including the vehicle itself as well as training and use.
- 177. ATV-importørenes Forening (Association of ATV importers) will further develop the concept of a voluntary safety course for ATVs, aiming to make this an attractive, nationally available offer for all buyers of ATVs.

### 17.7 Tunnel safety

#### Follow-up measures

- 178. The NPRA will upgrade tunnels of more than 500 metres on the national road network in accordance with the Tunnel Safety Regulations<sup>12)</sup>, or replace these with new roads. Priorities will be made in accordance with the NPRA's implementation plan for 2022-2027.
- 179. The NPRA will carry out risk-reduction measures in tunnels without evacuation lights, in anticipation of a full upgrade.













