

Action plan for safe road traffic 2019–2022

Measures that 14 authorities and stakeholders intend to apply for increased road safety.

Swedish Transport Administration

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Foreword

Road safety work is entirely dependent on concerned authorities and stakeholders showing significant commitment and responsibility for shared objectives and ambitions. Effective measures need to be applied, both individually and in collaboration, in order for the set targets to be achieved. In an effort led by the Swedish Transport Administration, 14 authorities and stakeholders have specified what they intend to do over the coming four years to contribute to safe roads. This has resulted in the present document – Action plan for safe road traffic 2019–2022.

The trend for the number of fatalities and severely injured is currently on a course away from the set targets, as described in the report Analysis of road safety trends in 2018. This is very worrying, and a call to all those involved to join forces in a huge effort to get as close as possible to achieving the 2020 interim targets.

This action plan highlights 111 measures that 14 authorities and stakeholders have the ambition of implementing in order to contribute to safe roads during the period from 2019 to 2022. The strength of the plan is that the various stakeholders and authorities themselves point to what contribution they can and want to make over the next few years. This allows all those involved to find connections between their own operations and those of others.

The Swedish Transport Administration is responsible for the contents and conclusions of the action plan, while each authority and stakeholder is responsible for their own ambitions for contributing to safe roads. The ambitions presented will be followed up annually under the management of the Swedish Transport Administration.

This report is the first of its kind since Vision Zero was adopted in 1997, and if work on the plan proves fruitful, a new action plan should be drawn up in a few years' time. When such a new action plan is drawn up, the possibility of inviting additional authorities and stakeholders to take part – as well as which these might be – should be considered.

The Swedish Transport Administration would like to express its heartfelt thanks to all the authorities and stakeholders that have contributed to this report.

Lena Erixon

Director General, Swedish Transport Administration



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Abbreviations and terms

Abbreviations and terms used in this report are explained in Table 1 below.

Table 1.
Abbreviations and terms
that occur in this report.

ANDT	Alcohol, narcotics, doping and tobacco.
ATK	Road Safety Cameras. A system for automatic speed monitoring using road safety cameras. The system includes equipment for the collection, transfer and management of data, as well as processing, investigation and governance operations.
Euro NCAP	European New Car Assessment Programme. A collaboration between European countries (including Sweden), car makers and volunteer organisations for crash testing new cars.
GNS Väg	Gruppen för Nollvisionen i Samverkan – Väg (The Vision Zero Group Collaboration Group – Roads). A forum for collaboration between agencies/authorities and stakeholders intended to improve the shared ability to contribute actively to Vision Zero and current interim targets, as part of sustainable community development.
ISO 39001	An international standard for road traffic safety management.
MHF	Motorförarnas Hälnykterhetsförbund, the Swedish Abstaining Motorists' Federation.
NTF	Nationalföreningen för trafiksäkerhetens främjande, the National Society for Road Safety.
NYKTRA	A collaboration project between the Swedish Transport Administration and the Swedish Police for the development of a new concept for sobriety checks.
PCM	Abbreviation for pedestrian, cycle, moped (abbreviated GCM in Swedish).
SAFER	Vehicle and Traffic Safety Centre at Chalmers University of Technology.
Severe injury	Personal injury with a risk of permanent medical impairment of at least 1 per cent (RPMI 1%+).
SIS	The Swedish Institute for Standards. A non-profit association for the development and promotion of standards in Sweden.
SKR (SALAR)	Sveriges Kommuner och Regioner, the Swedish Association of Local Authorities and Regions.
SMADIT	Cooperation programme between government authorities against alcohol and drugs in road traffic.
STR	Sveriges Trafikutbildares Riksförbund, the Swedish National Association of Driver Trainers.
STRADA	Swedish Traffic Accident Data Acquisition. A system for registering crashes and injuries within the entire road transport system. Both the police and the medical care services report to STRADA.
Veoneer	Technology company focusing on active safety systems and self-driving cars.
Very severe injury	Personal injury with a risk of permanent medical impairment of at least 10 per cent (RPMI 10%+).
VGU	Vägars och gators utformning, the Design of Roads and Streets handbook, a requirements document drawn up and managed by SALAR and the Swedish Transport Administration.



1 Introduction

Aim of the action plan

The action plan for safe road traffic is a tool to allow the Swedish Transport Administration to manage and follow up road safety work at the national and regional levels in an effective and results-oriented manner. The action plan applies for the period from 2109 to 2022.

Background

On 1 September 2016 the government adopted Nystart för Nollvisionen, Renewed Commitment to Vision Zero – intensified efforts for transport safety in Sweden.¹ It was noted at the time that “road safety work is based to a large extent on collaboration, and continuing engagement and responsibility among the stakeholders involved is crucial to its success”.

In connection with its adoption of Renewed Commitment to Vision Zero, the government commissioned the Swedish Transport Administration to manage overall collaboration in road safety work². The aim is to provide support to the broad group of stakeholders participating in road safety work in planning and implementing their respective operations, and thus make their work more effective. The Swedish Transport Administration’s assignment includes the following tasks:

- Bring together the concerned authorities and stakeholders and hold a dialogue with them.
- Lead an annual, detailed follow-up of the road safety situation that is of use for the concerned authorities and stakeholders in the planning and implementation of their operations connected with road safety.
- When necessary, propose joint operational development in which individual stakeholders might improve road safety through cooperation with others.
- Manage, develop and disseminate knowledge about Vision Zero as a safety philosophy.

Under the Swedish Transport Administration’s current rules of procedure, the authority is to lead collaboration in road safety work at the national as well as the regional level.

On 31 May 2018 the government adopted the National plan for transport infrastructure 2018–2029³. In connection with this, the government commissioned the Swedish Transport Administration to implement, among other things, citizen and road user information for increased road safety. The assignment specified that the information and awareness-raising measures to be implemented must be long term measures that contribute significantly to fulfilling transport policy objectives as well as providing evident added value.

In its 2018 feedback⁴ on the assignment to lead overall collaboration in road safety work the Swedish Transport Administration highlighted the need for a continued dialogue with the concerned authorities and stakeholders

Footnote

¹<https://www.government.se/artikles/2016/10/renewed-commitment-to-vision-zero---intensified-efforts-for-transport-safety-in-sweden/>

²<https://www.regeringen.se/regeringsuppdrag/2016/09/uppdrag-att-leda-overgripande-samverkan-i-trafiksakerhetsarbetet-for-vagtrafik/>

³<https://www.trafikverket.se/for-dig-i-branschen/Planera-och-utreda/Planer-och-beslutsunderlag/Nationell-planering/nationell-transportplan-2018-2029/>

⁴https://trafikverket.ineko.se/Files/sv-SE/47909/Ineko.Product.RelatedFiles/2018_161_2018_ars_ater-rapportering_av_uppdraget_att_leda_overgripande_samverkan_i_%20

in 2018, in order to clarify what additional measures could be and should be undertaken in the short term. The Swedish Transport Administration's ambition was to draw up an action plan for safe roads 2019–2022 on the basis of this dialogue.

Assumptions and limitations

In order to achieve Vision Zero's 2020 interim targets for road traffic, quick and effective measures are required in the short term. To support the joint effort needed, the Swedish Transport Administration has drawn up this action plan for safe road traffic 2019–2022 in collaboration with the concerned authorities and stakeholders.

As the originator of the action plan, the Swedish Transport Administration is responsible for the report's content and conclusions. Each stakeholder is responsible for their ambitions for contributing to safe roads, and these are presented in Sections 4–7.

The action plan is the first of its kind since the decision on Vision Zero was made in 1997⁵. It is based on the Swedish Transport Administration's analyses of road safety trends, which describe progress towards the current interim target for road safety in 2020 by analysing 11 different road safety indicators. Against the background of the trends described in these analyses, the action plan focuses on three main priority action areas for the four-year period: right speed, sobriety in traffic and safe cycling.



Footnote

⁵ https://www.riksdagen.se/sv/dokument-lagar/dokument/proposition/nollvisionen-och-det-trafiksakra-samhallet_GK03137

In addition to the measures described in the action plan there are some other important issues that should be addressed. These need to be dealt with in dialogue with the Ministry of Infrastructure and, as necessary, included in the Swedish Transport Administration's feedback on its commission to lead collaboration in road safety work, which has to be delivered by 31 May every year.

Process

In June 2018 the Swedish Transport Administration suggested to GNS Väg (Gruppen för Nollvisionen i Samverkan, the Vision Zero Collaboration Group) that a joint action plan for safe road traffic be drawn up by the stakeholders. A source of inspiration for the plan was the Norwegian report *Nasjonal tiltaksplan for trafikksikkerhet på veg 2018–2021*⁶. Fundamental assumptions for the action plan included the following:

- The plan will have Vision Zero as its long term objective.
- The plan will specify concrete and effective measures that are possible to evaluate and review, for the short term 2019–2022.
- The plan will focus on the most important issues with reference to the annual analysis report.
- The plan will strengthen joint and systematic road safety work for road traffic.
- The plan will enable leading and follow-up of regional and national road safety work.
- The plan will be ready in time for the results conference in April 2019.

An important question when work on the action plan began concerned which authorities and stakeholders should be invited to participate. At a meeting of GNS Väg in June 2018 it was decided that the process would only include those stakeholders that are represented in GNS Väg. These are the Swedish Work Environment Authority, Folksam, the City of Gothenburg, the Ministry of Infrastructure, NTF (Nationalföreningen för Trafiksäkerhetens Främjande, the National Society for Road Safety), the Swedish Police Authority, SAFER (the Vehicle and Traffic Safety Centre at Chalmers University of Technology), the Swedish Association of Local Authorities and Regions (SALAR), the City of Stockholm, the Swedish National Association of Driver Trainers, the Swedish Association for Road Transport Companies, the Swedish Transport Agency, the Swedish Transport Administration, and Veoneer. It was decided subsequently that the Public Health Agency and MHF (the Swedish Abstaining Motorists' Federation) would also be invited to participate, primarily in order to strengthen efforts for sobriety in traffic.

During the autumn of 2018 and at the beginning of 2019 the Swedish Transport Administration held bilateral talks with all the stakeholders above. The aim of these talks was to identify concrete and scheduled measures that each stakeholder plans to undertake in 2019–2022 and which can actively contribute to fewer deaths and severe injuries on the roads during that period. The question was also raised during the talks of whether further measures, in addition to those planned, could be identified and deemed feasible.

Footnote

⁶ <https://www.vegvesen.no/fag/fokusomra-der/trafikksikkerhet>

A workshop was organised for all involved authorities and stakeholders in February 2019. Its focus was to discuss the various stakeholders' ambitions for contributing to safe roads in the short term. A draft action plan was submitted to GNS Väg in March.

With the limited amount of time available in which to draw up the action plan, it has only been possible to give a general description of the different measures that the concerned authorities and stakeholders intend to undertake. These ambitions nevertheless provide a very good basis for continued collaboration in operative efforts. Additionally, the discussions during the process have allowed us to identify important connections between the various operations. This will facilitate cooperation and coordination of operative road safety work at the national as well as the regional level.

The measures described in the action plan will be managed and implemented by the stakeholder that has specified them as their own ambition. The next stage will involve specifying the measures in greater detail and appointing managers. Each agency and stakeholder is also responsible for providing, as necessary, a description of expected effects and consequences of their respective measures.

The intention is to make annual follow-ups of the ambitions described in the action plan. These would most appropriately occur at the end of each calendar year, in connection with GNS Väg's final meeting of the year. Results of the follow-ups can then be presented at the following year's results conference. We therefore suggest that the first follow-up of the ambitions laid out in this action plan be carried out at the end of 2019, under the supervision of the Swedish Transport Administration.

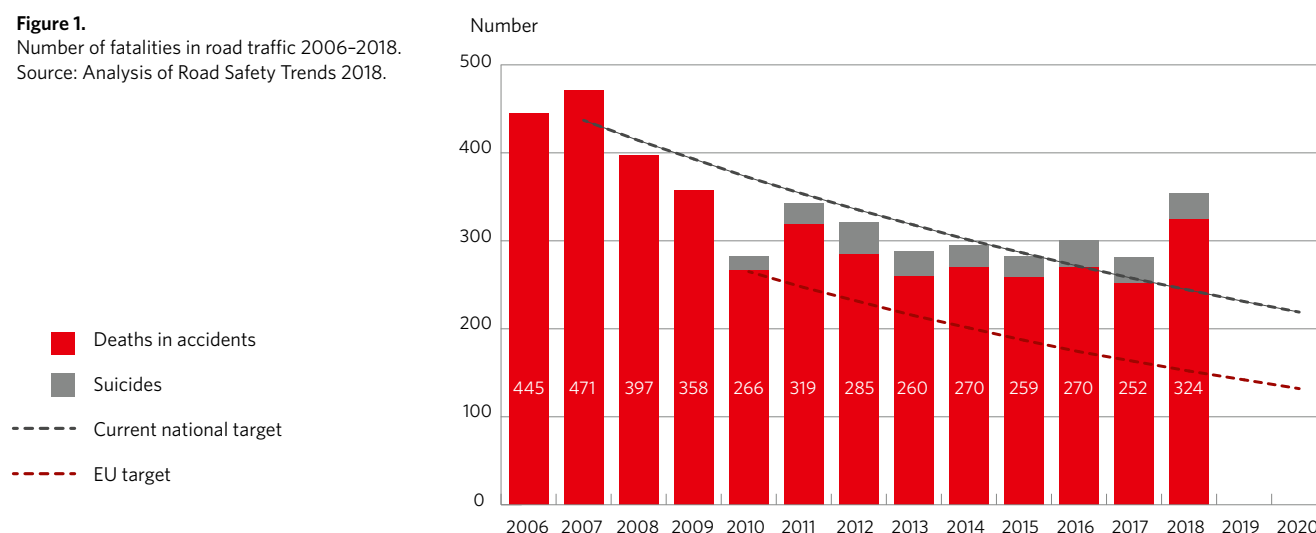
If work on the action plan for safe road traffic leads to positive results, a new action plan should be drawn within a few years. An appropriate time for this would be if and when a new interim target for 2030 is decided by the government. In connection with drawing up a new action plan it should also be considered whether additional authorities and stakeholders should be invited to participate, and if so which ones. There are a number of authorities and stakeholders, besides the 14 that have been involved in the present action plan, that are both willing and able to make significant contributions in terms of knowledge, engagement and accountability. It may be noted already, for example, that it would be appropriate to involve regional planners in future work on the action plan.

2 From analysis report to action plan

Negative trend for road traffic safety

The 2020 interim target is for a maximum of 220 fatalities and 4,100 severely injured in road traffic that year. The decline in the number of fatalities has stagnated during the current decade (2010s). However, the number of severely injured has been falling in line with the required trend. Figure 1 below shows the trend for the number of fatalities between 2006 and 2018.

Figure 1.
Number of fatalities in road traffic 2006–2018.
Source: Analysis of Road Safety Trends 2018.



The year 2018 was a tragic one, with 325 deaths on the roads, not counting suicides. That is 72 more than in 2017. In contrast with Sweden, the other Nordic countries had a continued slight decline in roads deaths during 2018.

The increase in the number of fatalities has occurred in the national road network, and mainly among car drivers and motorcyclists. The number of head-on crashes on national roads increased by 77 per cent between 2017 and 2018. Both the stagnation during the current decade (2010s) and the increase in the number of deaths in 2018 occurred in the national road network. In the municipal road network there was a continued slight decline in the number of fatalities across all transport modes.

A more detailed analysis of the numbers of fatalities and severely injured in 2018 is presented in the report Analysis of Road Safety Trends 2018⁷. The report also presents the outcome for the 11 different road safety indicators, of which several are not in line with the required trend. The report concludes that it is highly unlikely that the interim target for the number of fatalities will be achieved.

Footnote

⁷ Analysis of Road Safety Trends 2018,
www.trafikverket.se/nollvisionen

The indicators in red (not in line with the required trend) include speed limit compliance in both municipal and national road networks, safe national roads, sobriety in traffic, safe PCM passages, and the share of cyclists wearing helmets, see Figure 2 below.

Indicator	Starting point	2018	2020 target	Trend
Share of traffic volume within speed limits, national road network	43 %	45 %	80 %	Not in line with the required trend
Share of traffic volume within speed limits, municipal road network (starting year 2012)	64 %	66 %	80 %	Not in line with the required trend
Share of traffic volume with sober drivers sobriety in traffic	99,71 %	99,73 %	99,90 %	Not in line with the required trend
Seat belt wearers in the front seat of passenger cars, share of total	96 %	99 %	99 %	In line with the required trend
Share of cyclists wearing a helmet	27 %	42 %	70 %	Not in line with the required trend
Share of moped riders using a helmet correctly	96 %	93 %	99 %	In line with the required trend
Share of traffic volume with the highest Euro NCAP score	20 %	76 %	80 %	In line with the required trend
Correct use of motor-cycles	-	-	-	Not measured yet, no target set
Share of traffic volume on roads equipped with speed limit above 80 km/h and median barriers and with speed limits above 80 km/h, national road networks	50 %	76 %	90 %	Not in line with the required trend
Share of safe pedestrian, cycle and moped passages	19 %	27 %	35 %	Not in line with the required trend
Share of municipalities with good-quality operation and maintenance of pedestrian and cycle paths [doesn't match Analysis report 2018]	18 %	36 %	70 %	Not in line with the required trend
Systematic road safety work in line with ISO 39001	-	-	-	Not measured yet, no target set
Number of fatalities on the roads	440	324	220	Not in line with the required trend
Number of seriously/severely injured on the roads	5 400	4200	4 100	I linje med nödvändig utveckling

Figure 2

Indicators for road safety – current situation in 2018 and trend towards 2020 target. Source: Analysis of Road Safety Trends 2018.

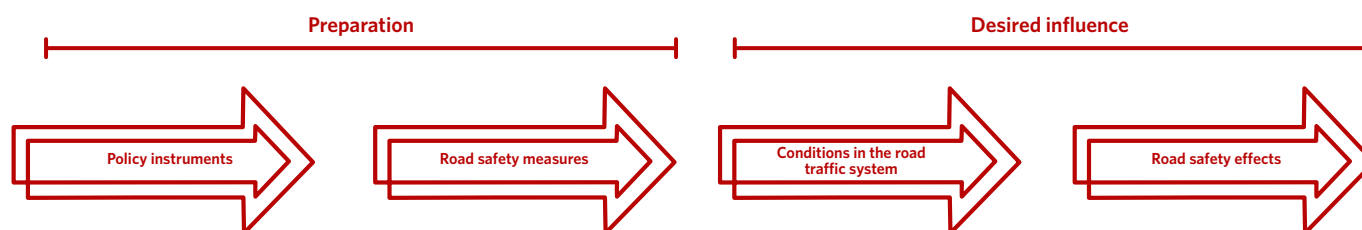
Involved stakeholders must make a huge effort

In order to reach the 2020 interim target, the Swedish Transport Administration as well as the other authorities and stakeholders involved need to increase their commitment and responsibility. We have to break the stagnation of the decline in the number of fatalities and severely injured in road traffic – and the increase in the number of fatalities in 2018 – if achieving the 2020 interim target, and eventually Vision Zero, are going to be possible. The involved authorities and stakeholders therefore need to make a huge effort to contribute to reaching the interim target. Prompt application of effective measures is required in several different areas. This action plan therefore needs to consist of several different, mutually reinforcing road safety measures.

Figure 3 below illustrates the importance of undertaking measures in order to influence various conditions with the aim of achieving the desired effects. Different stakeholders contribute different types of measures, as described in this action plan. But in order for different measures to be applied, some form of instrument or catalyst is required in many cases. Some of the measures described in the plan have this character, but further analysis is required to identify additional important instruments. No such analysis has been as part of the work in drawing up the Action Plan for Safe Road Traffic 2019–2022.

Figure 3

The process for reaching Vision Zero is made up of four phases.



Three priority action areas

Based on the red indicators highlighted in the analysis report, the action plan focuses on three priority action areas: right speed, sobriety in traffic, and safe cycling. These areas have previously been indicated as prioritised by GNS Väg in 2018 and 2019. It may be noted, however, that achieving safe roads will also require other measures that do not fit into any of these priority action areas. These include measures for safe vehicles and transports, and to prevent suicides. The action plan therefore describes measures in these areas as well.

Crashes in the form of pedestrian falls in the road traffic environment are a major health problem that leads to many severe injuries and premature deaths. Measures to address this type of injuries are not included in the action plan, however. The main reason for this is that the 2020 interim target does not include pedestrian falls.

The action plan – a contribution to the 2030 Agenda

Although the action plan focuses on the next four years, it is also an important starting point for continuing and longer-term road safety work – work which needs to be seen as part of the 2030 Agenda for Sustainable Development⁸.

Seen from the perspective of the 2030 Agenda, road safety is an aspect of sustainability consideration that needs to be linked to other aspects of sustainability in order to create safe, secure, accessible and attractive environments, not least for pedestrians and cyclists. Road safety work should be carried out in consideration of other important goals for societal development. It may also be noted that a sustainable road transport system must be safe in order to be regarded as sustainable in the long term.

The Swedish parliament's adoption of Vision Zero is the basis of Swedish efforts for a safe transport system. In order for road traffic to become sustainable in the long term, therefore, the safety philosophy of Vision Zero must be considered in all of those efforts. The 2030 Agenda sets the short-term target 3.6: By 2020, halve the number of global deaths and injuries from road traffic crashes. Target 11.2, for example, addresses the longer term: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

Target 11.2 thus means that part of achieving the 2030 Agenda involves providing access to safe transport systems for all, and improving road safety with a particular focus on the needs of certain vulnerable groups, not least children and the elderly. In Swedish road traffic, pedestrians and cyclists are among the most vulnerable groups in terms of the numbers of deaths and severe injuries.

There are other areas where the work to achieve a safe road transport system is linked to the 2030 Agenda. For example, introducing road safety requirements on the work environment of different occupational categories, and in public procurements of vehicles, travel and transports, are other ways of working towards achieving the 2030 Agenda. Target 8.8 includes promoting safe and secure working environments for all workers. Target 12.7 is about promoting public procurement practices that are sustainable, in accordance with national policies and priorities.

The National environmental quality objective “A Good Built Environment” has had 10 specifications⁹ added to it, and these are used in regular follow-ups and reviews of the objective. One of the specifications is that health and safety are part of sustainable community planning, infrastructure and sustainable traffic. This includes the position that people may not be subjected to unacceptable health and safety risks. The government's decision on Vision Zero should be seen as a definition of where to draw the line between acceptable and unacceptable health and safety risks in the built environment. Implementation of Vision Zero can therefore be seen as part of working towards achieving the environmental quality objective “A Good Built Environment”.



Footnote

⁸ Reference: <https://www.globalamalen.se/>

⁹ Reference: <https://www.naturvardsverket.se/Miljoarbete-i-samhall/Sveriges-miljomal/Miljokvalitetsmalen/God-bebyggd-miljo/Precisering-av-God-bebyggd-miljo/>

3 Action plan with the potential for saving lives

Fourteen stakeholders with the ambition to undertake 111 measures

The action plan presents a total of 11 measures that 14 different authorities and stakeholders have the ambition of implementing in order to contribute to safe road traffic during the period 2019–2022. These measures primarily address the priority action areas right speed, sobriety in traffic, and safe cycling. Some measures will have a direct effect on road traffic, while others are more about creating beneficial conditions.

The 111 measures in the action plan have been divided into 13 different packages, and are presented in greater detail in sections 4–7.

1. Right speed

Package 1.1: Infrastructure and adapted speed limits

Package 1.2: Measures to influence behaviour

Package 1.3: Measures to create beneficial conditions

2. Sobriety in traffic

Package 2.1: Technical systems

Package 2.2: Measures to influence behaviour

Package 2.3: Measures to create beneficial conditions

3. Safe cycling

Package 3.1: Infrastructure – design

Package 3.2: Infrastructure – operation and maintenance

Package 3.3: Measures to influence behaviour

Package 3.4: Measures to create beneficial conditions

4. Other measures

Package 4.1: Safe vehicles and transports

Package 4.2: Suicide prevention

Package 4.3: Measures to create beneficial conditions



Potential for saving 40–50 lives per year

If the measures described in the action plan are fully implemented, this is estimated potentially to reduce the number of road deaths by 40–50 individuals annually after 2022. The measures are also estimated potentially to contribute to around 500 fewer severely injured individuals annually after 2022.

The Swedish Transport Administration's measures represent at least two thirds of the estimated potential for saving lives. The measures that are estimated to have the greatest effect on the number of lives saved are the continued expansion of ATK (road safety cameras) and roads with median barriers, together with targeted road safety measures and lowered speed limits in the national road network. The measures in the action plan are not, however, estimated to be enough for the 2020 interim target to be achieved – though they will make a significant contribution. The specified measures are assumed to be possible to implement within existing budget frameworks, even if some priorities may need to be redefined within the operations of the Swedish Transport Administration and other stakeholders.

The measures described in the action plan's packages will not only lead to fewer deaths and severe injuries. They will also substantially contribute to other important societal goals such as reduced emissions of greenhouse gases, increased security, more attractive urban environments, increased accessibility for various road user categories, fewer traffic violations, and a more level playing field for commercial traffic.

The implementation of the action plan does not just have the potential of contributing significantly to fewer deaths and severe injuries over the next few years. It also constitutes an important beginning for longer-term road safety work towards a new interim target in 2030.

4 Measures for right speed 2019–2022

Eleven stakeholders' ambitions for contributing to right speed

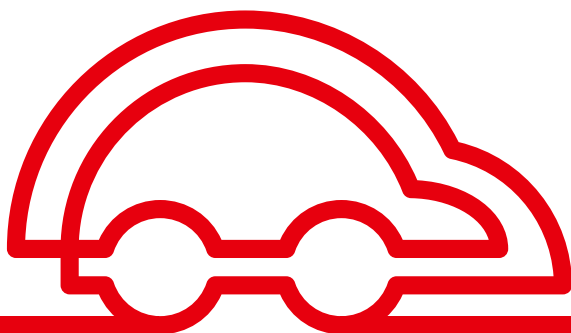
Below are 35 measures that eleven different authorities and stakeholders have stated as their ambitions for contributing to right speed during the 2019–2022 period. In most cases, the measures listed need to be implemented in consultation or collaboration with other authorities and stakeholders, not least in order to achieve the greatest possible effect. In addition to the stakeholders that feature below there are many other authorities and stakeholders that contribute various types of measures in the area right speed.

The measures are listed in no particular order, but have been divided into three different packages of measures:

1.1 Infrastructure and adapted speed limits

1.2 Measures to influence behaviour

1.3 Measures to create beneficial conditions



Package 1.1: Infrastructure and adapted speed limits

The City of Gothenburg will continue its work to create safe and secure interaction between road users by means of safe traffic environments where no one is injured or killed. **Start 2019.**

NTF will hold Vision Zero training programmes for elected representatives in municipalities to create greater understanding of e.g. changed speed limits and safe infrastructure for unprotected road users. **Start 2019.**

The Swedish Association of Local Authorities and Regions (SALAR) intends to work towards greater allocation of funds to regional plans so that necessary measures for increased safety for all road users can be applied in the regional road network. **Start 2019.**

The City of Stockholm will carry out a speed limit review and introduce 30, 40, 60 and 80 km/h limits in the city's principal road network until 2026. **Start 2019.**

The City of Stockholm plans to implement speed reducing measures in prioritised locations at a cost of about SEK 100 million/year until 2026, which to a large extent will be done in connection with changed speed limits. **Start 2019.**

The Swedish Association for Road Transport Companies will work for the establishment of more, and more accessible, lay-bys and parking areas in order to counter stress among professional drivers. **Start 2019.**

The Swedish Transport Administration will hold dialogues at the regional level with regional planners and others about the need for median

barriers and continued adaptation of speed limits to the safety standard of the roads. **Start 2019.**

The Swedish Transport Administration is planning an expansion of roads with median barriers in the national trunk road and regional road networks, by means of co-financing, at a total cost of SEK 8–9 billion over the period. **Start 2019.**

The Swedish Transport Administration is planning to implement trimming measures in the form of targeted road safety measures in the national trunk road network, including installing side barriers, measures in side areas, central line rumble strips, intersection measures, and various regulations, at a cost of about SEK 1.5 billion over the period. **Start 2019.**

The Swedish Transport Administration will continue to adapt speed limits to the safety standards of the roads within the national road network, including by lowering the speed limit from 90 to 80 km/h on around 2,500 km of roads over the period. **Start 2019.**

The Swedish Transport Administration will work to achieve continued introduction of 30 and 40 km/h speed limits and additional safe pedestrian, cycle and moped passages in urban areas. **Start 2019.**

The Swedish Transport Administration The Swedish Transport Administration is reviewing criteria for ensuring that road markings are visible to vehicles equipped with lane support systems such as the Lane Departure Warning and Lane Keeping Assist systems. **Start 2019.**

Package 1.2: Measures to influence behaviour

Folksam will offer insurance policies of the pay-as-you-drive type in order to induce drivers to comply with speed limits. **Start 2019.**

Folksam intends to continue measuring the speed limit compliance of commercial traffic in the Stockholm region with the aim of improving professional drivers' compliance, which in turn will influence other road user categories. **Start 2019.**

The City of Gothenburg intends to introduce geofencing of both speed and powertrain on route 55 buses, as part of ElectriCity¹⁰. **Start 2019.**

MHF wants to carry out a pilot operation with Intelligent Speed Adaptation (ISA) among drivers who have had their licences withdrawn due to speed violations. **Start 2019.**

NTF intends to carry out speed measurements in urban areas, with associated communication initiatives and a dialogue with the municipality. **Start 2019.**

NTF intends to relaunch the Right Speed tool and communicate the importance of maintaining the right speed in urban areas and on rural roads. **Start 2019.**

The Police Authority's ambition is to increase measures in the road safety area, with the focus on speed and sobriety. **Start 2019.**

The Police Authority will continue to contribute to lowered average speeds by reporting speed violations via stationary ATK, with mobile speed cameras and manual speed surveillance as complementary methods. **Start 2019.**

SALAR and the Swedish Transport Administration intend to draw up an agreement to enable the establishment of ATK in the municipal road network. **Start 2022.**

The City of Stockholm intends to introduce ATK in parts of the city's road network. **Start 2020.**

The Swedish Transport Administration kAdministration will continue its work to get around 250 stationary ATK units operational every year. **Start 2019.**

The Swedish Transport Administration intends to hold a dialogue with and reach regional agreements, as necessary, with the Police Authority for increased manual speed surveillance throughout the country, on national roads as well as in urban areas. **Start 2020.**

The Swedish Transport Administration intends to hold a dialogue with and reach agreements, as necessary, with transport buyers and providers for the purpose of helping make buyer requirements and self-monitoring of speed in commercial traffic more stringent. **Start 2019.**

The Swedish Transport Administration has established a collaboration platform for carrying out testing and demo projects with geofencing in urban areas during the period. **Start 2019.**

The Swedish Transport Administration intends to implement information and knowledge improving measures for citizens and road users with the aim of achieving improved speed limit compliance. **Start 2019.**

The Swedish Transport Administration Administration intends to convene the concerned authorities and stakeholders at the national level for a dialogue on planned communication measures about right speed. **Start 2020.**

Package 1.3: Measures to create beneficial conditions

The Swedish Work Environment Authority intends to develop procurement criteria for requirements regarding the work environment in purchases of transports, in collaboration with the National Agency for Public Procurement and other concerned authorities and stakeholders. Start 2019.

The Swedish Work Environment Authority will work strategically on a Vision Zero in working life, where road environments are one of four indicated target areas. Start 2019.

The Swedish Work Environment Authority will carry out a review of the information and guidance material directed at employers with employees working in traffic, in order to support and clarify the employer's obligation to ensure, as part of systematic work environment management, that employees have the requisite conditions to travel safely in their work. Start 2019.

The City of Gothenburg intends to draw up guidelines for new speed limits in order to propose a speed plan. Start 2019.

The Swedish Association for Road Transport Companies Companies will support serious hauliers and road transport companies by disseminating the Fair Transport concept, with binding commitments that make it easier for responsible transport buyers to choose sustainable transport solutions. Start 2019.

The Swedish Transport Administration intends to continue carrying out speed measurements of motorcycles to provide a basis for future measures for safer motorcycle traffic. Start 2020.

The Swedish Transport Agency Agency will examine the effect of driving licence warnings by looking at what share of those warned have their driving licence revoked due to another traffic violation within two years of being warned. Start 2019.

Discussion

The ambition to achieve safe speed levels on national roads and municipal streets is the single biggest factor for reaching the interim target of no more than 220 fatalities in road traffic by 2020.

A large number of roads and streets have speed limits that are too high in relation to the design of the road or street, and to the road user categories that travel along them and across them. The combination of the road's or street's design with the signposted speed simply does not match the safety philosophy of Vision Zero.

Introducing a new base speed limit of 40 km/h in urban areas would be an important step towards achieving right speed in urban areas. This could be seen as a natural continuation of the trend over the last decade or so, with increasing numbers of municipalities replacing 50 and 70 km/h with 30, 40 and 60 km/h in large parts of their urban areas. Additionally, a large number of municipalities have long been working successfully to adapt the traffic environments of urban areas to the safety and accessibility needs of pedestrians and cyclists. Efforts with physical road safety measures need to continue in the municipal road network.

In the national road network, road safety work needs to intensify through continued expansion of roads with median barriers and targeted road safety measures. In connection with the government's decision on the 2018–2029 National Plan, the Swedish Transport Administration received a new mandate to co-finance road safety measures in the regional road network, including median barriers. This will also release funds for other road safety measures.

Footnote

¹⁰ <https://www.electricitygoteborg.se/>

Adaptation of speed limits to roads' safety standards needs to continue in the national road network, with regard to the planned expansion of roads with median barriers as well as to planned speed reductions, mainly from 90 to 80 km/h. Additionally, speed limits on 70 km/h roads need to be adapted to the roads' safety standards, but at the current time the Swedish Transport Administration does not have a mandate to introduce 60 km/h speed limits on national roads.

The big increase in the number of fatalities in 2018 occurred in the national road network, primarily in its regional part. Targeted road safety measures are therefore required, including:

- ordinary, traditional side area measures that involve clearing away dangerous objects or installation of side barriers
- upgrading of aging and dangerously designed roadside ancillaries
- adding centre line rumble strips on two-lane roads and along the verges of roads without pedestrian and cycle traffic
- intersection measures that involve speed reduction in intersections and measures to heighten road users' attention.

Speed limit compliance in commercial traffic must increase. This will require both clients and providers to assume greater responsibility for quality assurance of commercial transports. One way of quality assuring transports and strengthening systematic road safety work is for organisations to become certified or eligible for certification under ISO 39001. Installing new technology for speed adaptation support in vehicles is a concrete way of quality assuring road transports.

Speed limit compliance needs to increase in motorcycle traffic too, while targeted adaptations of the infrastructure should be carried out in parallel. New documentation in the form of injury risk curves for motorcycles at different speeds allow for analysis and for proposing measures to make motorcycle traffic safer. As additional documentation for the analyses, speed measurements of motorcycles need to be carried out by means of baseline measurement in 2020 and indexations for the other years.

Legislation concerning the work environment places a clear onus on employers to manage the risks that employees are exposed to at work. This is regardless of whether work is carried out on the employer's premises or the employee is working externally, e.g. on a client's premises or in traffic. Of the fatal road traffic crashes that occurred during normal working hours in 2013–2017, 35 per cent were single-vehicle crashes while 20 per cent were head-on crashes and 11 per cent of fatalities were of pedestrians. Of the heavy goods vehicle drivers that were killed in road traffic during the same period, 60 per cent were single-vehicle crashes and 12 per cent head-on crashes.

Effective speed surveillance is also required for the achievement of road safety policy objectives. The Police Authority's Strategy for traffic as a method¹¹ is an important starting point in this context. The number of fines issued by the police as a result of manual speed surveillance has more than halved since 2010¹². Among the reasons for this is that the Police Authority has never before had such limited personnel resources in relation to the size of the population. Although the plan is to hire an additional 10,000 police

Footnote

¹¹ <https://polisen.se/siteassets/dokument/strategier/polismyndighetens-strategi-for-trafik.pdf>

¹² Analysis of Road Safety Trends 2018, www.trafikverket.se/nollvisionen.

officers, it still remains unlikely that it will be possible to return manual speed surveillance to earlier levels. This makes road safety cameras (ATK) an increasingly important factor in ensuring effective speed surveillance in the national road network in the coming years.

At the present time around 4,400 km of the national road network are monitored with ATK. The Swedish Transport Administration intends to increase the number of kilometres monitored by about 600 km every year until 2022. An agreement needs to be reached between the Swedish Transport Administration, the Police Authority and the Swedish Association of Local Authorities and Regions SALAR that will clarify the conditions for establishing ATK in the municipal road network. One problem with ATK is that it cannot be used for motorcycles, as neither the registration plate nor the rider can be recorded using the current ATK system.

There is a clear need for effective and coordinated communication about the importance of keeping the right speed on our streets and roads, directed at decision makers, the general public, and road users. This communication is important not least in order to give the various measures being implemented by different stakeholders their appropriate context. In connection with the government's adoption of the 2018–2029 National Plan, the Swedish Transport Administration was tasked with carrying out information and knowledge improving measures targeting road users, and including the efforts around right speed.

Consequences

The measures in the action plan's packages 1.1, 1.2 and 1.3 will lead to fewer fatalities and severely injured, reduced greenhouse gas emissions, reduced traffic noise, increased security, more attractive urban environments, increased accessibility for vulnerable groups, fewer traffic violations, and a more level playing field for legal commercial traffic.

The overall effect of lowered (mainly to 80 km/h) and raised speed limits (mainly to 100 km/h as a result of median barriers) in the national road network will be fewer fatalities and shorter journey times, without increased CO₂ emissions. The legal speed limit for heavy vehicles will not be affected by lowering speed limits from 90 to 80 km/h.

Several of the proposed measures will create synergies with other objectives concerning the environment, health, and good work environments. These include measures to adjust speed limits in urban areas and in the national road network, ATK, and measures for right speed in commercial traffic. It is also important that public procurement requirements for safe transports be coordinated with other requirements concerning the environment and work environments.

Installing median barriers on national roads means that speed levels, and thus accessibility for car traffic, increase. The combination of reduced CO₂ emissions as a result of lowered speed limits, and increased emissions as a result of raised speed limits with median barriers, produces an overall marginal net reduction of CO₂ emissions from road traffic¹³. Journey times will be increased for those connections in the national road network where speed limits are lowered, which in some cases may have a negative effect at the regional level. However, on sections of road with capacity problems, lowering speed limits can lead to increased capacity and fewer disruptions, largely as a result of a more even traffic rhythm and less variation in speeds.

Footnote

¹³ National report: Measures for systematic adaptation of speed limits to roads' safety standards. <https://www.trafikverket.se/om-oss/var-verksamhet/trafikverkets-uppdrag/regeringsuppdrag-remisser-och-remissvar/remisser/remiss-for-anpassning-av-hastighetsgranserna-pa-vagarna/>

5 Measures for sobriety in traffic 2019–2022

Seven stakeholders' ambitions for contributing to sobriety in traffic

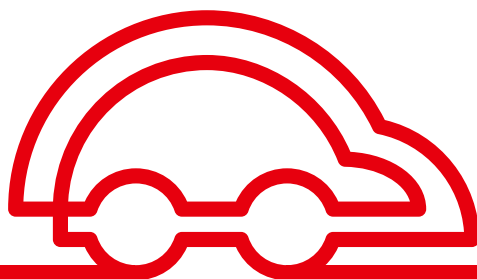
Below are 21 measures that seven authorities and stakeholders have stated as their ambitions for contributing to sobriety in traffic during the 2019–2022 period. In most cases, the measures listed need to be implemented in consultation or cooperation with other authorities and stakeholders, not least in order to achieve the greatest possible effect. In addition to the stakeholders that feature below there are many other authorities and stakeholders that contribute various types of measures in the area sobriety in traffic.

The measures are listed in no particular order, but have been divided into three different packages of measures:

2.1 Technical systems

2.2 Measures to influence behaviour

2.3 Measures to create beneficial conditions





Package 2.1: Technical systems

MHF will work to bring about better tools for police drug driving checks, in the form of screening instruments (rapid drugs tests). Start 2019.

MHF intends to work towards getting municipalities and regional stakeholders to demand alcohol interlock devices or equivalent systems when procuring travel and transport services. Start 2019.

MHF will become involved in work on automated sobriety (drink driving etc) checks in order to facilitate implementation of effective, staff-efficient and legally certain systems for sobriety (drink driving etc) checks. Start 2019.

The Swedish Association for Road Transport Companies will continue to work towards the introduction of automated sobriety (drink driving etc) checks in ports that are strategically important for goods transports, and on the Öresund Bridge. Start 2019.

The Swedish Association for Road Transport Companies will encourage private businesses to carry out their own alcohol checks at their own entrances and exits. Start 2019.

The Swedish Transport Administration will introduce sobriety (drink driving etc) checkpoints in at least three ports. Start 2019.

Package 2.2: Measures to influence behaviour

The Public Health Agency of Sweden will continue to develop the SMADIT working method together with the national agency group for SMADIT. **Start 2019.**

MHF intends to carry out various communication initiatives for sober drivers sobriety in traffic, including National Sober Driving Day, Take a Break, Awakening and information at motoring events and to young people attending driving courses. **Start 2019.**

NTF intends to contribute to information and knowledge improving initiatives about alcohol and drugs in traffic, directed at upper secondary school pupils. **Start 2019.**

The Police Authority's ambition is to increase measures in the road safety area, focusing on speed and sobriety. **Start 2019.**

The Police Authority intends to carry out alcohol breath tests in a variety of locations and at a variety of times – thereby increasing the perceived risk of getting caught – in order to achieve a generally preventive effect. **Start 2019.**

The Police Authority will use each checkpoint interaction with drivers of motorised vehicles to carry out breath tests and an assessment of possible symptoms of drug use by the driver. **Start 2019.**

The Police Authority will carry out targeted checks in specific locations and at specific times where there is an increased risk of drunk driving. **Start 2019.**

The Police Authority will contribute to reducing the risk of relapses ecidivism byin drunk driversiving violations by using the SMADIT method. **Start 2019.**

STR's member companies will carry out drunk driving checks of customers at every training session. **Start 2019.**

The Swedish Transport Administration intends, as part of the Public Health Agency's SMADIT coordination, to work towards getting municipalities to reinforce their initiatives in social care (care of addicts) to promote sober drivers sobriety in traffic. **Start 2019.**

The Swedish Transport Administration intends to hold a dialogue with, and if necessary enter into regional agreements with the Police Authority, for increased surveillance of alcohol and drugs in road traffic. **Start 2020.**

The Swedish Transport Administration intends to carry out information and knowledge improving measures aimed at citizens and road users, in order to achieve a reduction in alcohol and drugs in road traffic. **Start 2019.**

Package 2.3: Measures to create beneficial conditions

The Public Health Agency will lead the national ANDT group, which has identified road traffic as one of four focus areas in 2019-2020. **Start 2019.**

MHF intends to promote legislation for criminal liability in the event of what is known as "drinking after driving". **Start 2019.**

The Swedish Transport Administration and the Police Authority will jointly examine the conditions for introducing a new category of monitoring personnel, road safety controllers, authorised to carry out breath tests of drivers. **Start 20210.**

Discussion

About a third of all fatal crashes are alcohol or drug-related. Drug-related crashes make up about half of those crashes. Efforts for sobriety in traffic are therefore central to achieving the interim target of no more than 220 fatalities by 2020.

Through the Public Health Agency of Sweden's two government commissions for collaboration between indicated authorities in the alcohol, narcotics, doping and tobacco (ANDT) area, and collaboration against alcohol and narcotics on the roads (abbreviated SMADIT in Swedish), the potential is created for direct as well as indirect contributions to reducing drink and drug driving. The decision to include "driver monitoring" in Euro NCAP's 2020–2025 roadmap opens up possibilities for new technical sobriety-promoting solutions that can be integrated in vehicles. Another important step is the development of standards within the framework of SIS/TK 609 for test equipment, purchasing, management, execution and analysis of rapid drugs tests.

Additionally, both clients and providers have to assume greater responsibility for quality assurance of commercial transports. One way of quality assuring transports and strengthening systematic road safety work is for organisations to become certified or eligible for certification under ISO 39001. Installing new technology in vehicles to improve sobriety in traffic, including alcohol interlock devices, is also a way of quality assuring road transports. Procedures and systems for drugs tests within companies could also be an important contribution.

It is important that authorities and stakeholders continue to collaborate so that they can jointly contribute to reducing the problem of drink and drug driving. This includes continued work on sobriety checks. The number of breath tests more than halved between 2011 and 2016, but has remained at a constant level over the past three years¹⁴. It is important in both the short and the long term that the Police Authority's strategy for traffic as a method¹⁵ has an impact. Improved measures for preventing relapses by drunk drivers are also needed. The Public Health Agency's commission to head collaboration regarding SMADIT creates the potential for bringing in additional stakeholders to jointly contribute towards the shared goal of reduced relapses by drunk drivers.

In September 2017 the Swedish Transport Administration was commissioned by the government to introduce facilities for sobriety (drink driving etc) checks in ports and other appropriate locations in the traffic environment. A dialogue is in progress with the Police Authority, Swedish Customs and the Ports of Sweden. The commission was partially presented to the Ministry of Enterprise and Innovation in March 2018; a final presentation is due by 31 December 2020.

Consequences

The measures in the action plan's packages 2.1, 2.2 and 2.3 will lead to fewer fatalities and severely injured, fewer traffic violations and increased security in society and on the roads. The proposed measures create synergies with other objectives concerning health, good work environments and prevention of other drug-related crimes in society. Good preventive efforts do not just have the potential of reducing road deaths, but can be seen as a way of identifying and helping people with alcohol problems, as well as preventing other drug-related criminality.

It has not been possible to identify any negative consequences of efforts to counter alcohol and drugs in road traffic.

Footnote

¹⁴ Analysis of Road Safety Trends 2018, <http://www.trafikverket.se/nollvisionen>

¹⁵ <https://polisen.se/siteassets/dokument/strategier/polismyndighetens-strategi-for-trafik.pdf>

6 Measures for safe cycling 2019–2022

Eight stakeholders' ambitions for contributing to safe cycling

Below are 37 measures that eight authorities and stakeholders have stated as their ambitions for contributing to safe cycling during the 2019–2022 period. In most cases, the measures listed need to be implemented in consultation or collaboration with other authorities and stakeholders, not least in order to achieve the greatest possible effect. In addition to the stakeholders that feature below there are many other authorities and stakeholders that contribute various types of measures in the area safe cycling.

The measures are listed in no particular order, but have been divided into four different packages of measures:

3.1 Infrastructure – design

3.2 Infrastructure – operation and maintenance

3.3 Measures to influence behaviour

3.4 Measures to create beneficial conditions



Package 3.1: Infrastructure – design

The City of Gothenburg plans to build around 20 cycle path routes each year, most of which will be co-financed under agreements reached in the the National Negotiation on Housing and Infrastructure (Swedish: Sverigeförhandling).Sweden negotiations). **Start 2019.**

The City of Gothenburg will develop better solutions for the design of construction site exits in order to increase road safety for the city's pedestrians and cyclists during construction works.**Start 2019.**

The City of Gothenburg will draw up design principles for new construction and conversions, with the aim of improving clarity and road safety at points where flows of pedestrians and cyclists intersect. **Start 2019.**

The City of Gothenburg will continue its work to reduce real speed to a maximum of 30 km/h in places where pedestrians and cyclists have to cross the street. **Start 2019.**

NTF intends to continue its follow-up of and dialogue with those municipalities where inventories of PCM pedestrian, cycle and moped passages have been made, with the aim of getting more municipalities to prioritise safe pedestrian, cycle and moped PCM passages and to have a clear plan for doing so. **Start 2019.**

The City of Stockholm will implement and follow up speed reducing measures by pedestrian, cycle and moped PCM passages, which will include carrying out trials with dynamic speed bumps. **Start 2019.**

The City of Stockholm plans to expand, improve and re-equip the cycle path network for an estimated SEK 1 billion over the period, with the aim of improving safety and accessibility for cyclists. **Start 2019.**

The City of Stockholm will test new, innovative materials for the safe and accessible rerouting of cyclists during road works. **Start 2019.**

The Swedish Transport Administration will implement targeted measures for safe pedestrian, cycle and mopedPCM passages in the national road network, with the objective of making at least 50 pedestrian, cycle and mopedPCM passages safer over the period. **Start 2019.**

The Swedish Transport Administration will provide financial support to bicycle infrastructure via the City Environment agreements, for increased and safe cycling in urban areas. **Start 2019.**

The Swedish Transport Administration will work to make design and maintenance of bicycle infrastructure contribute to safe cycling in urban areas. **Start 2019.**

Package 3.2: Infrastructure – operation and maintenance

The City of Gothenburg will make it a requirement for procured operating contracts that cycle paths be inventoried every two months, and that this be done by bicycle at least once a year, usually in the spring or early summer. **Start 2019.**

The City of Gothenburg will scan 550 km of cycle paths at a cost of SEK 570,000 in order to assess their surfaceir evenness smoothness, and this data will then be used in planning future maintenance works. **Start 2019.**

The City of Gothenburg intends to improve the quality of pedestrian and cycle paths by means of a 10-year paving programme comprising SEK 10 million per year. **Start 2019.**

NTF intends to continue its observational studies of how municipalities' and the Swedish Transport Administration's maintenance

of cycle paths matches the requirements specified for winter and summer maintenance of cycle paths. **Start 2019.**

NTF intends to further develop the assessment tool that has been used for cycle paths in 25 municipalities, and then carry out additional mappings surveys. **Start 2019.**

The City of Stockholm will introduce salt-sweeping as part of regular winter maintenance in parts of the commuter network. **Start 2019.**

The Swedish Transport Administration will review standard requirements and follow-up procedures for summer and winter maintenance in the national road network, with a particular focus on pedestrians, cyclists and motorcyclists. **Start 2019.**

Package 3.3: Measures to influence behaviour

Folksam will continue to carry out bicycle helmet tests in order to provide guidance to consumers and influence helmet manufacturers and standards. **Start 2019.**

The City of Gothenburg intends to improve information to cyclists about e.g. traffic disruptions and the risk of slippery road conditions. **Start 2019.**

MHF will hold training programmes on safe cycling specially adapted for new Swedes, which will raise issues such as cycle helmet use and drink cycling when drunk. **Start 2019.**

MHF will inform about the importance of always being visible in traffic, and will distribute pedestrian safety reflector strips and discs widely. **Start 2019.**

NTF intends to encourage increased bicycle helmet use by offering students attractively priced helmets at attractive prices, running campaigns for increased cycling connected to local events, and by means of a dialogue with helmet manufacturers and retailers. **Start 2019.**

NTF intends to encourage safe cycling among children by means of the Brainy Bike game, dialogues with teachers, parents and municipal officials, and by means of the #minskolväg (my school route) tool. **Start 2019.**

NTF intends to use its consumer information channel to spread information about good choices for safe cycling. **Start 2019.**

The City of Stockholm will carry out road safety campaigns, including initiatives to increase children's and parents' awareness of road safety and to influence their behaviour. **Start 2019.**

The Swedish Transport Administration intends to implement information and knowledge improving measures for safe cycling, in particular to increase the use of bicycle helmets. **Start 2020.**

The Swedish Transport Administration intends to hold a dialogue with municipalities and other major employers about requirements that employees wear bicycle helmets on work-related bicycle journeys. **Start 2020.**

Package 3.4: Measures to create beneficial conditions

SAFER will prioritise research projects into cycling, including on how electric bicycles affect safety, "intelligent" bicycles with sensors, and bicycles in the entire traffic system. **Start 2019.**

Swedish Association of Local Authorities and Regions (Swedish: SKR)SALAR intends to update its method for municipal road safety audits to focus on unprotected road users. **Start 2020.**

Swedish Association of Local Authorities and Regions (Swedish: SKR)SALAR will produce and distribute a handbook on safer road works in urban areas. **Start 2019.**

The City of Stockholm will poll citizens about measures that could contribute to a more accessible and safe infrastructure as well as remedy current deficiencies. **Start 2019.**

The City of Stockholm will train entrepreneurs and its own employees to increase awareness of how their work can contribute to reducing the number of accidents/crashes. **Start 2019.**

The Swedish Transport Administration will update VGU with more stringent design requirements to contribute to safe as well as increased cycling. **Start 2019.**

The Swedish Transport Administration will work towards producing a revised PCM pedestrian, cycle and moped handbook. **Start 2020.**

The Swedish Transport Administration intends to continue its dialogue with municipalities and interest groups at the national and regional levels for increased collaboration and a shared view on issues to do with safe cycling. **Start 2019.**

Discussion

Efforts to make cycling safer are a central element of the work done to increase road safety on national roads and municipal streets. In working to achieve the target of fewer severely injured cyclists, efforts to prevent single-bicycle crashes and the injuries they cause among cyclists are of particular importance.

Cyclists represent about half of all those severely injured in road traffic crashes. A significant share of cyclist road deaths are the result of single-bicycle crashes. Head injuries make up about half of all severe injuries among cyclists, and head injuries are the most common personal injury that causes deaths among cyclists. Fifteen per cent of the total number of cyclists killed were under the influence of alcohol or other drugs¹⁶. For the interim target of fewer severely injured to be reached, it is crucial that measures are undertaken to reduce both single-bicycle crashes and collisions with cyclists.

Traffic planning in both the municipal and the national road networks should lead to the systematic removal of various safety risks to cyclists. This means preventing fatalities and severe injuries in single-bicycle crashes as well as collisions in the traffic environment. In the longer term it will also be important that development of new population areas, compacting of existing city districts, and alterations to different urban spaces are carried out with the ambition of creating safe, secure, direct and fast connections for bicycle traffic. It is important to consider safety requirements for cyclists even in investments made primarily to increase accessibility for cyclists – which applies not least at intersection points in the cycle path network.

Intensive and important work is currently underway in many cities to improve the conditions for various sustainable and attractive traffic solutions, not least by means of the development of fast and effective public transport. It is important that this is done in a way that takes the safety and accessibility needs of pedestrians and cyclists into account. More and more pedestrians and cyclists move about in these urban environments, while at the same time the demands for accessibility and speed in public transport are growing. Speed bumps adapted to the requirements of bus traffic are an important element of solving problems at specific intersection points, but they don't solve the problem at the system level.

Guidance is therefore needed as to how this type of conflict of aims should be managed in the development of sustainable city traffic within the framework of Vision Zero.

Eight of ten severely injured cyclists sustain their injuries in connection with single-bicycle crashes. In order to prevent this type of accident it is important to ensure the quality of operation and maintenance of cycle paths in both the municipal and the national road network. But even if the number of single-bicycle crashes can thereby be reduced, that does not solve the whole problem. In order to prevent serious head injuries it will also be important in the short term to increase bicycle helmet use among children as well as adults.

Sales of electric bicycles in Sweden are approaching the high levels they have attained in many European countries. In the Netherlands electric bicycles made up 20 per cent of total sales of new bicycles already in 2012. Sales in Germany are now reported to be at a similar level; in Sweden the

Footnote

¹⁶ Joint focus on safe cycle and moped traffic 2018. <https://www.trafikverket.se/for-dig-i-branschen/samarbete-med-branschen/Samarbeten-for-trafiksa-kerhet/tillsammans-for-nollvisionen/inriktningar-och-strategier-tillsammans-for-nollvisionen/sakraretrafik-med-cykel-och-moped/>

share has reached around 12 per cent. It is not clear what the accident picture for electric bicycles looks like in Sweden at present, as data on electric bicycle crashes have not been systematically collected in STRADA. There is a risk, however, that the total number of bicycle crashes, and the number with serious consequences, will increase as a result of increased electric bicycle use. Possible reasons for this include increased exposure (a higher number of total cycling kilometres), higher average speed, more elderly and inexperienced cyclists, incorrect expectations among other road user categories, and a shift from cars to electric bicycles¹⁷. As increased cycling with electric bicycles can be seen as part of society's move towards more sustainable transport provision, efforts for safe cycling will become increasingly important.

Many employers see advantages in more of their employees using bicycles for work-related local transport. This is positive for both the environment and for the cyclist's health. Under the Work Environment Act, however, employers are always obliged to assess risks that employees face and undertake the necessary measures to prevent those risks. Cycling in road traffic for work is one such risk that needs to be taken into account in systematic health and safety analyses. One preventive measure in work-related cycling is to require that the cyclist wear a helmet. In work-related cycling, then, the employer is responsible for ensuring that cycling employees have whatever is necessary for travelling safely in road traffic.

In order for municipalities and national road operators to be able to plan for the safety of cyclists and other unprotected road users, access to reliable accident data is crucial. The accident data provided by hospitals (emergency medical services) through their reporting in the STRADA system is fundamental for correct analyses, correct choice of measures, and correct choice of locations for physical interventions. It is therefore important to ensure good access to quality STRADA data for those stakeholders that need such data.

Consequences

The measures in the action plan's packages 3.1, 3.2, 3.3 and 3.4 will lead to fewer fatalities and severely injured, increased security, increased equality, more attractive city and urban environments, increased accessibility for pedestrians and cyclists, and will contribute to increased cycling and reduced greenhouse gas emissions. Increased access, security and safety for cyclists makes it more attractive to cycle.

Several of the proposed measures create synergies with other objectives concerning the environment, health, and good working environments. These measures include safe design and better operation and maintenance of cycle paths, and increased bicycle helmet use.

There are many synergies between increased cycling and safe cycling, both in terms of ends and means. The government's national strategy for increased and safer cycling notes that the 2030 Agenda and the global sustainability goals integrate three equally important sustainability perspectives: social, economic and environmental development. The global goals in the 2030 Agenda address sustainable transport solutions, road safety, and health, among other things. These goals have to be achieved simultaneously and are equally important. This in turn means that efforts for improved public health through increased cycling can

Footnote

¹⁷ [Joint focus on safe cycle and moped traffic 2018](#)

never be placed at odds with efforts to develop and provide a safe system for cyclists. Instead they have to be seen as complementary parts that reinforce each other as we strive to achieve the global sustainability goals and a road transport system that is sustainable in the long term.

A system with low safety levels is not attractive. For many people, cycling brings both freedom and a sense of well-being, but at the same time bicycles can be perceived as a dangerous and unsafe means of transport. A lack of safety and security for cyclists can therefore be an obstacle to increased cycling. Thus efforts to develop and provide a safe system for cyclists are essentially efforts to make cycling more attractive.

A system with low safety levels is not a healthy one, either. Cycling brings considerable public health benefits, but these can never compensate for or balance unacceptable health failures in the form of fatalities and severe personal injuries. Efforts for a safe system for cyclists are therefore a part of broad-ranging and multifaceted efforts to improve public health. Many of the measures undertaken for cyclists contribute to both increased and safer cycling.

Measures such as safe pedestrian, cycle and moped passages, safe cycle paths, better operation and maintenance of cycle paths, and lower speeds in urban areas increase the accessibility, attractiveness and safety of cycling at the same time. They furthermore increase security, contribute to gender-equal road traffic, and give children, the elderly and people with functional impairments better conditions for sustainable travel. Some speed bumps at speed regulated pedestrian, cycle and moped passages may affect the journey speeds of cars and public transport, as well as working environments and convenience – but with the right design and maintenance, this conflict of aims can be minimised.

Developments in vehicle safety and design that we have seen in recent years can also contribute to improved health and safety for cyclists. New emergency braking systems and collision-friendly front ends, for example, contribute to increased safety at intersections between cars and unprotected road users. Accelerating the introduction of cars with the latest safety technology is therefore beneficial to cyclists' health and safety as well.

Bicycle helmets are an important component of a safe cycling system. Cycling without a helmet implies a major safety risk for the cyclist; such cycling journeys cannot be considered safe. Currently approximately four in ten cyclists wear a bicycle helmet, and the challenge is to get more cyclists to wear helmets. Working to increase bicycle helmet use does not go against the ambitions to increase cycling. There is nevertheless concern that some form of compulsory helmet use law would counteract increased cycling. Based on current knowledge, however, there is no unequivocal scientific link between a new helmet use law and a reduction in cycling. Still, the discussion is likely to continue about whether there is a conflict between compulsory helmet use and increased cycling, and how big that conflict is.

7 Other measures for safe road traffic 2019–2022

Eight stakeholders' other ambitions for contributing to safe road traffic

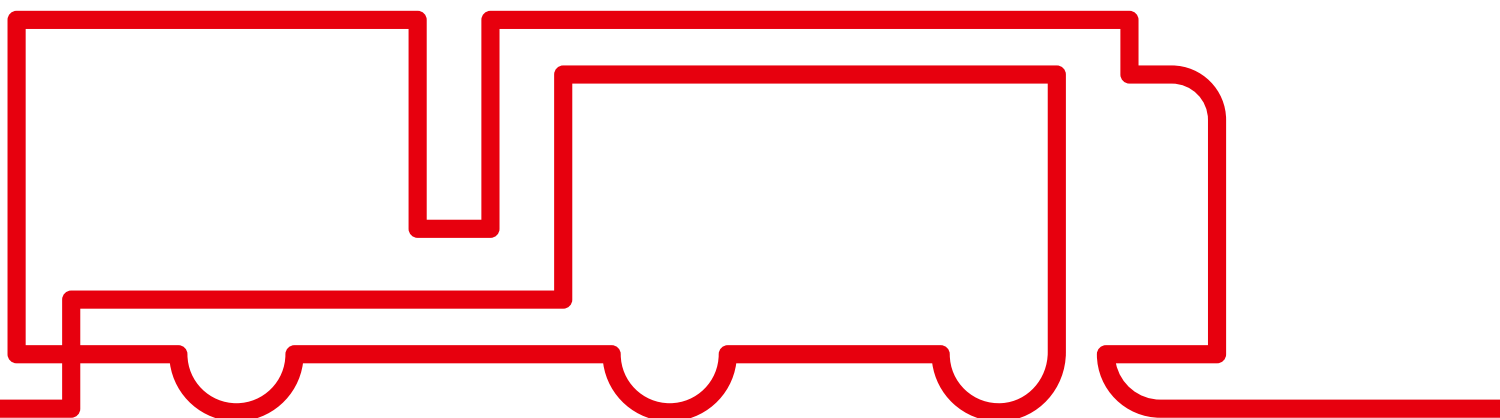
Below are 18 measures that eight authorities and stakeholders have stated as other ambitions for contributing to safe road traffic during the 2019–2022 period. In most cases, the measures listed need to be implemented in consultation or collaboration with other authorities and stakeholders, not least in order to achieve the greatest possible effect. In addition to the stakeholders that feature below there are many other authorities and stakeholders that contribute various types of measures in the areas in question.

The measures are listed in no particular order, but have been divided into three different packages of measures:

4.1 Safe vehicles and transports

4.2 Suicide prevention

4.3 Measures to create beneficial conditions





Package 4.1: Safe vehicles and transports

Folksam will continue studying the development of vehicle safety and the effectiveness of safety systems in order to influence the vehicle industry and provide guidance to consumers. **Start 2019.**

Folksam will make annual reviews of the requirements in its travel and procurement policies, and of the requirements for replacement cars in the event of damage. **Start 2019.**

The City of Stockholm will study the possibility of formulating and following up road safety requirements in connection with the city's procurements. **Start 2019.**

The Swedish Association for Road Transport Companies will encourage hauliers and goods vehicle terminals to work systematically with road safety towards ISO 39001. **Start 2019.**

The Swedish Transport Administration intends to work in accordance with ISO 39001 and impose stringent requirements for road safety on its own and outsourced travel business trip arrangements and road transports. **Start 2019.**

The Swedish Transport Administration will present, each year, approved cars that meet stringent road safety and climate requirements – requirements that will govern the Swedish Transport Administration's procurement of vehicles. **Start 2019.**

The Swedish Transport Administration intends to hold a dialogue with municipalities and other major employers regarding requirements for road safety on their own and outsourced business trip arrangements and road transports. **Start 2020.**

Package 4.2: Suicidprevention

The Public Health Agency of Sweden will coordinate national efforts for suicide prevention. Start 2019.

The Swedish Association of Local Authorities and Regions (SALAR) will produce and distribute the handbook "Suicide prevention in the physical environment – guidance for municipal organisations". Start 2019.

The Swedish Transport Administration intends, within the framework of national efforts for suicide prevention, to work towards preventing suicide within the entire road transport system. Start 2019.

The Swedish Transport Administration will update VGU with written texts on where suicide prevention measures are to be applied in the road environment. Start 2019.

The Swedish Transport Administration will initiate the systematic installation of suicide barriers on exposed bridges throughout the national road network, as well as the installation of fencing along roads with median barriers in urban areas, for suicide prevention. Start 2019.

Package 4.3: Measures to create beneficial conditions

Folksam intends to evaluate which severe injuries have the greatest impact on health and quality of life, in order to better be able to prioritise preventive measures. Start 2019.

The City of Gothenburg intends to develop a new road safety programme to form the basis of systematic efforts to meet the road safety challenges the city faces – not least single-individual crashes among cyclists and pedestrians. Start 2019.

The Swedish Transport Administration will be an active collaboration partner with municipalities and regional development managers in the early stages of planning, in order to promote safe road traffic and the formulation of traffic strategies. Start 2019.

The Swedish Transport Administration will work to increase knowledge among relevant state and municipal officials of issues around Vision Zero, as part of sustainable development efforts. Start 2019.

The Swedish Transport Agency will enable a safe system through legislation, permits and oversight in the areas of speed, vehicles, infrastructure and road user behaviour. Start 2019.

The Swedish Transport Agency will make it possible, through the development of regulations, for other stakeholders to create safe systems, and for the global sustainable development goals to be incorporated in society rapidly and effectively. Infrastructure and road user behaviour. Start 2019.

Discussion

The development of safe motor vehicles and safe road transports is absolutely crucial to the achievement of safe road traffic. But it takes time to renew the vehicle fleet, and for that reason it takes several years for new requirements and new technology to have a real impact in the form of fewer deaths and severe injuries in road traffic. New requirements for safe vehicles and transports will therefore not have such a great impact in the brief time period that this action plan covers.

The introduction of a scrapping premium for older model years could therefore contribute to a quicker renewal of the vehicle fleet, which could generate a safety benefit in the shorter term. However, the consequences and effects of such a premium need to be studied before any proposal can be made.

About one in ten road deaths are suicides. Three types of collisions are the most common in road traffic suicides: single-vehicle collisions, head-on collisions, and pedestrians in collisions with motor vehicles. To this figure should be added those that die as a result of jumping off bridges or similar actions, but there is currently no reliable data on the extent of this problem.

Some measures intended to reduce the number of road traffic crashes are likely to be effective in preventing acts of suicide as well. These include median barriers, clearing away fixed objects from the side areas of roads, and some intersection measures. In addition to these, targeted measures need to be applied, such as fencing and other measures to prevent suicides from high bridges and selected locations along high-speed roads.

The Public Health Agency has been commissioned by the government to coordinate national suicide prevention efforts. It is important, therefore, that measures and new knowledge for preventing suicide in the road transport area be coordinated with the work of the Public Health Agency.

Successful road safety work by government authorities as well as companies requires the existence of clear road safety goals that can be followed up, and a systematic approach to achieving these goals. ISO 39001, a management system standard for road safety, is one of several sources of support in this context. Drawing up a road safety policy, a road traffic strategy, or a road safety programme are other ways of making these efforts more systematic.

Consequences

The measures in the action plan's packages 4.1, 4.2 and 4.3 will lead to fewer fatalities and severely injured, safer and more environmentally friendly vehicles and transports, as well as increased security.

Several of the proposed measures create synergies with other objectives concerning the environment, health, and good working environments. It is important, for example, that requirements for procurements of vehicles, travel and road transports include requirements regarding the environment, road safety and working environments.

Preventing suicides in the existing road environment may in some cases cause a possible negative impact on the configuration of urban environments, but these conflicts of aims can be defused with the right kind of planning and design.

Annex: Detailed descriptions of the ambitions of the authorities involved

In this annex, the authorities involved and Swedish Association of Local Authorities and Regions (SALAR) give a more detailed description of their ambitions for contributing to safe road traffic 2019–2022. These descriptions can be regarded as providing a background to the measures listed in Sections 4–7.

The Swedish Work Environment Authority (Arbetsmiljöverket)

Summarised below are the Swedish Work Environment Authority's ambitions for contributing to safe road traffic in the priority action areas safe speed, sobriety in traffic, and safe cycling.

The Swedish Work Environment Authority works to raise awareness of the work environment in procurement. We strive to get clients and buyers to include requirements regarding the work environment in procurements. The transport industry is one of the industries with the highest number of fatal crashes at work, and also one where unfair competition occurs – i. e. where companies break laws and rules in order to gain a competitive advantage. It is therefore extra important to focus on buyers and clients of transport services.

In 2019 the Swedish Work Environment Authority wants to initiate a collaboration with the National Agency for Public Procurement in which we, together with industry associations, management and labour, and other relevant authorities such as the Swedish Transport Administration and the Swedish Transport Agency, formulate procurement criteria for requirements regarding the work environment when purchasing transport services. The goal of this collaboration is to draw up quality assured and relevant requirements that government authorities as well as private stakeholders will be able to use when buying transport services.

As road traffic is one of the most important work environments for transport workers, road safety will be a prominent part of these efforts, with speed limit compliance and safe speeds obvious criteria in drawing up requirements. The Swedish Work Environment Authority is currently in dialogue with the National Agency for Public Procurement about launching this collaboration.

The Swedish Work Environment Authority has adopted a strategy for Vision Zero efforts in working life. Our Vision Zero is that no one should die as a result of their work. These efforts will initially focus on fatal crashes in four designated target areas where the highest number of fatal crashes occur. One of these areas is fatal road traffic crashes, and here collaboration with other stakeholders is crucial if we are to be successful. Strategic work on Vision Zero will begin in the spring of 2019. As a part of this, new inspection projects for risk-exposed industries will be considered. Inspections directed at the transport business could be a possibility, but are not something the Swedish Work Environment Authority has taken a position on at the present time.

Between 2019 and 2021 the Swedish Work Environment Authority plans to carry out a review of the information and guidance material provided to employers with employees who spend time in road traffic. The goal of this information material is to draw attention to, clarify and support the employer's obligation to ensure, as part of systematic work environment considerations, that their employees work under conditions that allow them to travel safely on the roads. In order to maintain a high and relevant level of content in our information, we expect to collaborate in this context with other authorities such as the Swedish Transport Administration and the Swedish Transport Agency.

The Public Health Agency of Sweden (Folkhälsomyndigheten)

Together with the national agency group for SMADIT, the Public Health Agency will further develop the SMADIT working method. Under the government commission, the authorities that are part of this group are the Swedish Transport Administration, the Swedish Transport Agency, the Police Authority and the National Board of Health and Welfare. Other authorities that also participate include county administrative boards, the Swedish Prison and Probation Service, the Swedish Coast Guard, and Swedish Customs. SMADIT is a working method that aims to give people who have been apprehended for drink or drug driving or boating an offer of institutional help with their problem. SMADIT is based on collaboration and cooperation between different stakeholders such as the police, municipalities and other care providers.



In 2019 the Public Health Agency and the SMADIT group intend to poll how SMADIT work was carried out during 2018, using surveys sent to county administrative boards and the Police Authority. The aim is to consolidate and describe the various ways that SMADIT is applied locally and regionally throughout the country.

The Public Health Agency heads and convenes the national ANDT group, in which 14 government authorities and county administrative boards meet twice a year. The group has identified road traffic as one of four focus areas for 2019–2020. Among other things, we will look at how we can improve narcotics statistics, which comprehend road traffic as well as other parts of society.

The Public Health Agency coordinates national efforts in suicide prevention. The Swedish Transport Administration is one of the partners in the inter-authority collaboration group that is headed by the Public Health Agency. This commission officially applies until 2020, but will likely be extended.

The City of Gothenburg

The Traffic Committee's road safety programme for 2010–2020 will soon end, and the Traffic and Public Transport Authority intends to draw up a new road safety programme, or an equivalent plan, to meet the road safety challenges that the city currently faces. This programme will introduce new approaches to reducing the number of cyclists injured in single-bicycle crashes and will include the biggest injury group, pedestrian falls. It will also prepare the ground for more systematic efforts through the application of ISO 39001, as well as continue work on speed reducing measures that we know to be effective.

To increase road safety for pedestrians and cyclists in the city during construction projects, the City of Gothenburg's Traffic and Public Transport Authority is running a project that is part-financed by Skyltfonden (a Swedish Transport Administration fund for road safety) to the tune of SEK 700,000, and which aims to find better solutions for the design of construction site exits. The hope is that this project will lead to concrete proposals in 2019 which can then be implemented in the city's regulatory framework and terms of reference.

The Traffic and Public Transport Authority wants to improve information to cyclists about traffic disruptions and the risk of slippery road conditions, for example, as well as collect information about deficiencies in the cycle path network. To this end we will be developing the Cykelstaden (Cycle City) app during 2019, which will allow us to send push notifications to users, and where users can report deficiencies using the app's map.

To improve clarity and road safety at points where flows of pedestrians and cyclists intersect, as well as for parallel flows, the Traffic and Public Transport Authority will formulate new design principles to be applied in new construction and conversions. These principles are expected to be ready in 2020.

The Traffic and Public Transport Authority will continue its efforts to

guarantee safe and secure interaction between road users, as well as traffic environments in which no one is injured or killed. These measures are intended, among other things, to reduce the real speed to 30 km/h in locations where pedestrians have to cross streets, or where there is pedestrian movement. They are also intended to contribute to lowering the number of pedestrians injured in falls.

The City of Gothenburg will enable investments in the expansion of cycle paths, in order to continue long term efforts towards a dense and extensive cycle path network that is separated from pedestrians and motor traffic. Work has been underway 2016–2019 on around twenty routes, and plans are to add around 20 routes each year between 2019 and 2023. Most of the latter will be co-financed through the National Negotiation on Housing and Infrastructure (Sverigeförhandlingen). In total, 31 partial routes will be co-financed within the framework of the National Negotiation on Housing and Infrastructure (Sverigeförhandlingen) between 2019 and 2027.

The Traffic and Public Transport Authority wants to offer attractive and safe cycle paths in order to allow more people to cycle, and to cycle safely. Based on our knowledge of cycling injuries and crashes, we prioritise even, clean, and non-slippery cycle paths. Procurement procedures include a requirement that cycle paths be inventoried every two months, and that this be done by bicycle at least once a year, usually in the spring or early summer. 550 km of cycle paths will be scanned in 2019 at a cost of SEK 570,000, in order to assess their surface smoothness, and this data will then be used in planning future maintenance works. The Traffic and Public Transport Authority in the City of Gothenburg also wants to improve the quality of pedestrian and cycle paths by means of a 10-year paving programme comprising SEK 10 million per year until 2029.

The Police Authority (Polismyndigheten)

The overall objective of the Police Authority's road safety work is that no one should be killed or severely injured in road traffic (Vision Zero). One of the goals in the Police Authority's strategy for traffic as a method is for the Police Authority to contribute to reducing the number of fatalities and severely injured in the road traffic environment. Above all, this involves contributing to a lowering of average speeds on the roads and reducing the number of drivers who are under the influence of alcohol or drugs. This work is carried out in various ways. The Police Authority will continue to be an active participant in the group for collaboration for Vision Zero (GNS Väg).

Speed: A prerequisite for contributing to lowered average speeds and getting more drivers to stick to the speed limits is that the Police Authority regularly reports speed violations. The lowest tolerance level applied by other elements of the justice system must be used, which currently means that legal proceedings can be initiated beginning at a 6 km/h violation of the applicable speed limit.

Road safety cameras (ATK) is an important part of the Police Authority's strategy, and is intended to bring about lowered average speeds in the road transport system as well as to contribute to effective investigations of speed violations. The Police Authority and the Swedish Transport Administration share the responsibility for the development and expansion of stationary ATK. The selection of roads where stationary ATK will be deployed is made

on the basis of several criteria formulated by the Swedish Transport Administration in consultation with the Police Authority.

Mobile ATK and manual speed surveillance serve as complements to stationary ATK for the Police Authority. Manual speed surveillance is prioritised on roads where stationary ATK will be deployed in the future and on roads not suitable for ATK technology. The Police Authority selects roads that fit these criteria in each region, but choices must always be considered against current resources and against other tasks and undertakings the Police Authority has.

Sobriety: A breath test and an assessment of possible symptoms of drug use by the driver must be carried out in each checkpoint interaction with drivers of motorised vehicles. The Police Authority's continued application of various preventive measures is crucial to reducing the share of drunk drivers on the roads.

By carrying out breath tests, for example, in a variety of locations and at a variety of times – thereby increasing the perceived risk of getting caught – a generally preventive effect can be achieved. And by combining surveillance activities with information campaigns, this effect can be increased. The aim is to get drivers of motorised vehicles to refrain from drink driving due to the risk of getting caught.

Targeted checks and interventions in specific locations and at specific times where there is a generally increased risk of drink driving, or when we have received intelligence regarding individual drivers, can contribute to an individually preventive effect.

The Police Authority can furthermore use the SMADIT method to address the risk of relapses by drunk drivers, and thus contribute to the prevention of repeat offences. In this connection, the Police Authority would welcome better communication channels and reception by medical care services, in order to allow us to work together to achieve a positive effect of SMADIT.



The Police Authority's strategy for traffic as a method has made it clear to the Police Regions which measures have the greatest effect on road safety in operations. It is the Police Authority's ambition to increase operations in the area of road traffic safety. We will continue to prioritise the EFFEKT (Effect) and NYKTRA (Sobriety) projects, and projects addressing speed in commercial traffic (the TAXI project and speed in the transport services business).

Swedish Association of Local Authorities and Regions, SALAR (Sveriges Kommuner och Regioner, SKR)

SALAR contributes to the goals in the road safety area through its daily work, via different channels and at different levels: in regular contacts with its members, the Swedish Transport Administration and the Swedish Government Offices; by replying to referrals for consideration; by spreading information and inviting debate at e.g. conferences and seminars; and by lobbying within the EU.

The City of Stockholm

When every street has the right speed limit on the basis of its particular conditions, the number of traffic crashes declines. The Traffic Administration Office is currently carrying out an extensive speed limit review and introducing 30, 40, 60 and 80 km/h limits in the city's principal road network. This process will continue until 2026. Accessibility is also expected to improve as a result of the new speed limits.

To increase safety and security for pedestrians and cyclists above all, the City of Stockholm plans to implement a large number of speed reducing traffic calming measures. The rate of investment is estimated to be around SEK 100 million annually until 2026. A big part of the measures are for speed regulation of pedestrian, cycle and moped passages. To a large extent, measures will be carried out in connection with changed speed limits, but also through the city's efforts for safe and secure school routes, for example. Many of the measures are classic road safety measures such as bumps and road narrowing, but the City of Stockholm also intends to test new measures such as dynamic speed bumps and ATK.

The rate of investment in road safety measures will remain high for several years. This high rate of investment makes it possible to carry out large scale studies, but also brings requirements that measures implemented have the intended effect. Between 2019 and 2022 the City of Stockholm will carry out studies with the aim of quality assuring the speed reducing and speed regulating measures undertaken.

To avoid a reduction in bicycle traffic, and to increase the safety of cyclists when there are road works, the Traffic Administration Office will be testing new, innovative materials for safe and accessible rerouting of cyclists.

Stockholm must be a city in which it is simple and safe to cycle. The cycle path network must be continuous, capable of handling high capacities, as well as accessible, secure and safe for all cyclists. Between 2019 and 2022 the city will carry out expansion, conversion and improvement of the cycle path network for an estimated SEK 1 billion.

In order that more people choose to cycle during the winter season, the City of Stockholm is putting extra investment into winter maintenance of cycle

paths. Since the winter of 2013/2014, the city uses salt-sweeping to keep prioritised cycle routes free of snow and ice. Just over 200 of the city's 360 kilometres of commuter cycle paths are currently being salt-swept. Beginning in the 2018/2019 winter season, Stockholm will make salt-sweeping part of normal winter road maintenance.

The City of Stockholm is continuing its much appreciated awareness training programmes for its own employees and entrepreneurs. The aim of these programmes is to increase knowledge of how their work can contribute to increased accessibility, security and safety, as well as fewer crashes.

The City of Stockholm has several channels for communicating with its citizens. To spread information about ongoing projects, for example, the Traffic Administration Office uses the Facebook page "Cykla och gå i Stockholms stad" ("Cycling and walking in Stockholm"). Via an app on their smartphones, and on the city's website, citizens can leave feedback and report things such as broken glass, low-hanging branches above the cycle path, and damaged paving. The city will continue to collect feedback from citizens and to remedy reported deficiencies.

In order to provide children with good conditions for walking or cycling to school, the City of Stockholm is putting a special effort into the traffic environment around the city's schools. This includes measures to reduce motor traffic and to lower speeds in the vicinity of schools. A large part of the work done by the Traffic Administration Office also involves implementing measures to influence behaviour, to raise children's and parents' awareness of road safety, and to inspire more people to walk or cycle.

The City of Stockholm intends to examine the possibility of imposing and following up road safety requirements in connection with the city's procurements.



The Swedish Transport Administration (Trafikverket)

The Swedish Transport Administration has broad-ranging responsibilities regarding road safety work in road traffic. Among other things, the Swedish Transport Administration is responsible for maintenance and traffic regulation within the entire national road network, and for investments and trimming measures within the national trunk road network. Additionally, the Swedish Transport Administration is responsible for leading the collaboration of road safety work and for producing citizen and road user information for increased road safety.

The measures presented by the Swedish Transport Administration in its 2019–2022 action plan for safe road traffic vary in character. Some measures are ongoing and are being implemented under a previously adopted plan, while other measures are to be regarded more as expressions of will. During 2019 the Swedish Transport Administration intends to describe the implementation of measures that currently lack an adopted plan. This will make it clearer what can be expected of the Swedish Transport Administration's various actions at both the national and regional levels, in the shorter term.

The Swedish Transport Agency (Transportstyrelsen)

In order to meet citizens' and businesses' transport needs, and to contribute to a sustainable society, the Swedish Transport Agency's mission statement and approach are to work towards achieving the overall transport policy goal and the equally important functional and consideration goals.

The Swedish Transport Agency's work is based on a comprehensive view grounded in the laws and regulatory frameworks that the agency has to comply with and the policy decisions that govern its operations. The Swedish Transport Agency focuses its activities on four target areas (regulatory development, technology development, digitisation, and sustainability) with the following formulations:

- Our regulations are in tune with the times and enable society's development.
- We have the capability to manage technology developments in the transport system.
- We have secure digital solutions that meet society's needs.
- We contribute to sustainable transport.

The Swedish Transport Agency has a strategy for being an active partner in Sweden's efforts to fulfil the 2030 Agenda. Part of this is to contribute underlying documentation for ambitions concerning safe road traffic 2019–2022. These are then presented at the annual results conference in April.

The Swedish Transport Agency's activity often influences an external party which in turn has to generate benefit in keeping with a predetermined intention behind the Swedish Transport Agency's regulations. The Swedish Transport Agency therefore often acts indirectly to improve a situation or state of affairs such as road traffic safety. Due to this indirect effect of its work, the Swedish Transport Agency is not as directly operational within the transport system as other organisations are – the Swedish Transport Administration, the Police Authority and others.

Examples of the Swedish Transport Agency's indirect work include

- efforts to ensure the use of more environmentally friendly and safer transport modes
- developing policy instruments that increase bus use
- imposing requirements concerning safety, health and the environment in new construction and conversions within the transport system, in order to contribute to sustainable cities with more cyclists and pedestrians
- developing new regulations within the EU and the UN
- investigating crashes and making recommendations to road operators
- carrying out inspections under the Road Safety Act, the Road Safety Ordinance and other legislation.

The Swedish Transport Agency's indirect work benefits increased accessibility, safety and health. By means of various national mandates and international regulatory work, the Swedish Transport Agency also helps achieve a high standard of transportation and infrastructure, and thus also of accessibility. In this way the Agency contributes to GNP growth, which may then be used to contribute to the fulfilment of the function and consideration objectives.

The Swedish Transport Agency contributes to increased sustainability and thus also to increased road safety. It is the government's ambition that Sweden be a leader in the implementation of the 2030 Agenda. Road safety issues, their consequences and potential solutions are closely linked to other sustainability challenges, including the climate, equality, and human rights. The Swedish Transport Administration, municipalities, regions and others are important stakeholders in the implementation of the agenda. These organisations implement policy and change society, constitute the link between citizens and decision makers, and are those best suited to bringing the global goals and reality together at the local level. The Swedish Transport Agency's role is to provide regulatory development that enables the rapid and effective incorporation of the global goals in society.

The Swedish Transport Agency contributes through regulatory development that improves the conditions for other stakeholders to create a safe system. The creation of a safe system can be done in different ways in different forums. For example, regulations can be developed out of international or national policymaking collaboration, and by means of national and local regulations. Policy instruments can also be devised that encourage a shift towards preferring the safest and most environmentally friendly transport modes. Rules and regulations are also needed to promote and support the use of transport modes that are beneficial to the environment and to health, such as walking and cycling, while at the same ensuring that they are safe, so that the outcome for public health becomes positive.

The Swedish Transport Agency is active in four strategic areas for the purpose of contributing to the action plan for safe road traffic. The Swedish Transport Agency wants to contribute to increased sustainability such that society's traffic solutions, on the basis of health, the environment and safety, should primarily benefit those who choose to walk, cycle or use public transport. To achieve this we need a different transport system than what we have today – one that better fulfils all transport policy objectives and

their specifications. Such a sustainable transport system also has road safety as an important characteristic. In order for the transport system to become more sustainable, and also safer, the Swedish Transport Agency intends to improve others' potential by developing legislation. These efforts will primarily be focused on current national and international regulatory development in the areas of speed, vehicles, infrastructure and road user behaviour.

Within the Swedish Transport Agency's core processes – legislation, permits and oversight – work is in progress in a number of groups or projects with the principal aim of having a positive effect on road safety. For example, the Swedish Transport Agency now issues more warnings to drivers who have only committed minor traffic offences than it used to, investigates the cause of road traffic crashes, ensures safe vehicles through type approval procedures, participates in policymaking and in the majority of legislative processes both within and outside of the EU (including its driving licence committee, other legislative groups, UNECE with in the Global Forum for Road Safety - WP.1, as well as the UNECE World Forum for Harmonization of Vehicle Regulations - WP.29 - and its Working Party on Automated/Autonomous and Connected Vehicles – GRVA). These groups are involved in work on the automated vehicles of the future, for example, which will increase road safety.



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