## THE STYRIAN ROAD SAFETY PROGRAMME 2011-2020













## SAFETY PROGRAMME 2011-2020



#### IMPRINT

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## **Foreword**



Styria has achieved remarkable success with regard to road safety in the last seven years. The number of fatalities on our roads has fallen by 55 per cent since 2000. In the last three years alone, the number of road accident fatalities fell by 28 per cent. This reduction can be attributed to the successful implementation of the Styrian Road Safety Programme.

Targeted awareness-raising and sustainable road safety measures help to make the citizens of Styria more safety conscious and encourage safer behaviour on our roads. Accordingly, we feel it is extremely important to have a clear road safety programme in place that will serve as the basis for a targeted road safety policy in Styria over the next 10 years. Particular focus will be placed in the coming years on preventing accidents involving serious injury.

Any efforts directed at preventing or reducing the consequences of road accidents can only really succeed if we cultivate a genuine road safety culture. This means that everyone – both young and old alike – is called upon to be vigilant and act responsibly on our roads.

The Styrian Road Safety Programme 2011–2020 was developed by the Department of Transport in close cooperation with the Styrian Road Safety Advisory Council. This brochure outlines this programme and provides readers with an overview of the road safety strategy and measures that will be implemented in Styria in the coming years in the various thematic areas. It also provides information on future priorities in road safety and offers guidelines for the implementation of related projects.

We look forward with great confidence to a future in which we enjoy safety and courtesy on our roads and one in which our own commitment to being responsible road users spreads to others. Finally, I would like to thank everyone involved, in particular the members of the Road Safety Advisory Council, for their contribution to this Road Safety Programme.

#### **Gerhard Kurzmann**

Provincial Minister of the Government of Styria Responsible for Transport and the Environment

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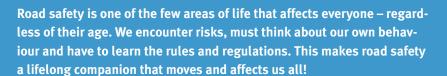


# Introducing the Road Safety Programme (RSP)

- 1.1 Road safety is everyone's concern
- 1.2 Development of the Styrian RSP since 2004
- 1.3 Road Safety Advisory Council the RSP working group
- 1.4 Accident statistics

## <u>1,1</u>

## Road safety is everyone's concern



We are pedestrians, car drivers, motorcyclists, bus and train passengers and/ or cyclists. We all have experience in using the roads. All of us may at some point be involved in an accident or observe precarious situations. In the event, our actions are the result of many things: knowledge, intuition, misjudgement or underestimation of the situation, lack of due care and attention, a sense of responsibility or regard for other road users. Sometimes these actions are right, sometimes they are wrong. We form our own opinions about the meaningfulness of regulations, the behaviour of others, the importance of laws and the tolerance thresholds for non-adherence to the rules. We assess the risk and assume we know how to handle it.

#### The evolution of road safety

The objectives of road safety activities are to prevent accidents and lessen the impact of accidents. Most of the measures introduced to improve road safety prior to 2000 concentrated on developing the rules and regulations as well as improving technology and infrastructure. However, it became increasingly evident during the implementation of these measures that human behaviour was and remains - the biggest cause of road accidents. These are often triggered by our own overestimation of our abilities, a lack of attention or even recklessness. In our efforts to foster a road safety culture, all road users should be encouraged to show consideration towards and assume responsibility for one another. The objective here is to bring about a change in behaviour and attitude. As an established human right, road safety takes on a new dimension.

## Road safety activities aimed at specific target groups

To maximise the effectiveness of measures, we have to determine the actual target group for a particular message. This is especially important for awareness-raising activities. Accident statistics show that young people constitute a high risk group. Almost one third of all accident victims (injuries or fatalities) on Austria's roads fall into the 15-24-year-old age group.

#### → See Figures 1 and 2

By age group, young adults between the ages of 20 and 24 account for by far the most fatalities on Styria's roads in 2010. This could lead to the hypothesis that young drivers evidently take greater risks after they have passed their driving test (i.e. completed the 2nd phase driver education programme). For measures targeted at young people, age/maturity factors and the form of delivery are particularly important. The people who provide these measures must also be very competent and experienced.

The range of relevant issues that can be addressed in road safety activities for young people is broad: risk behaviour, situation assessment and management, peer pressure, evaluating one's own ability, lack of road experience, personal experiences on the roads (as drivers or passengers), deliberately risky actions, adolescent attitude and struggle with rules/norms, consumption of substances that pose a risk to road safety. This is confirmed by the statistics: in 2010, 1,501 young people between the ages of 15 and 19 were injured on Styria's roads.

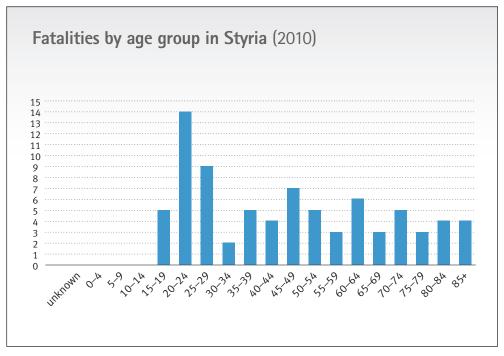


Figure 1: Fatalities by age group in Styria (2010); Source: Austrian Road Safety Board

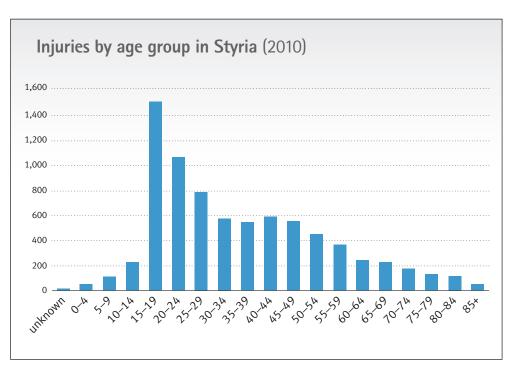


Figure 2: Injuries by age group in Styria (2010); Source: Austrian Road Safety Board

Demographic trends show that the number of elderly road users is increasing significantly. While more and more elderly people will use our roads and drive vehicles in the future, the psychophysiological changes caused by the ageing process remain the same. Accordingly, any change in the way road users

treat each other will, for example, also have to take into consideration the fact that more road users will show longer reaction times and will be slower to recognise and process information. The mobility of many elderly pedestrians is restricted because they no longer feel safe crossing the road.

Road safety work begins where problems have been identified and where preventative measures are already needed.

## Development of the Styrian RSP since 2004

Styria has had a road safety programme in place since 2004. This programme serves as the roadmap for road safety activities in the region. One benefit of such an RSP lies in the fact that the measures taken follow a strategy that has been conceived to be followed over the course of many years. The objectives of the RSP are carefully discussed and agreed, with the Road Safety Advisory Council (see 1.3) setting the course. The Styrian government is committed to the RSP, which establishes a binding road safety framework for all stakeholders and decision makers in the transport sector in Styria.

## Cornerstones of a successful road safety programme

- Long-term road safety strategy and policy
- Definition of quantifiable, measurable targets
- Political backing for the programme
- Close cooperation between local authorities
- Allocated budget
- Communication structures between the stakeholders and the public
- Problem-specific measures
- Regular monitoring and improvements to the programme to achieve targets

## The Styrian RSP has had a positive impact since 2004:

- 55 % reduction in fatalities on Styrian roads since 2000
- Sustainability through strategically chosen measures
- Positive results through prevention activities
- Raising awareness in organisations (e.g. schools, driving schools, the army, etc.) of the importance of contributing to road safety

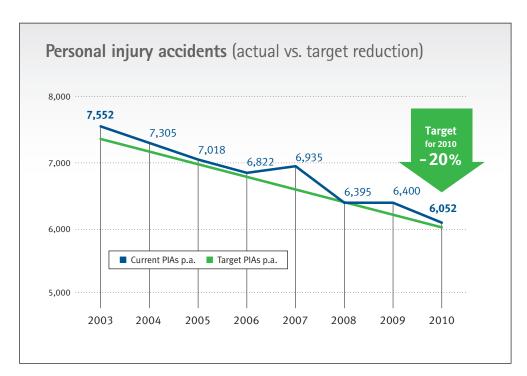


Figure 3: Personal injury accidents (actual vs. target reduction); Source: Austrian Road Safety Board

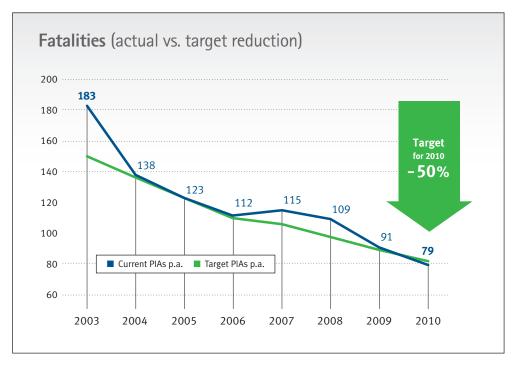


Figure 4: Fatalities (actual vs. target reduction); Source: Austrian Road Safety Board

The number of road accidents in Styria has decreased by almost 20 % since 2003. In 2010, there were a total of 6,052 road accidents. Encouragingly, the number of road accident fatalities fell by 57 %.

## Road Safety Advisory Council – the RSP working group

The planning and implementation of a road safety programme requires the actions and commitment of responsible people who are willing to accept and take on the challenges involved.

Styria has had a Road Safety Advisory Council since 2003. Under the direction of the State Department of Transport and Planning (Dept. 18A; project manager: Maria Knauer-Lukas), the council meets regularly throughout the year. This schedule provides support and consistency in the development and implementation of the RSP. Council meetings and workshops serve as a forum to discuss the latest research findings and analyse accident trends. In this way, Styria operates a modern, practice-oriented road safety policy.

Current road safety trends and issues form the basis for the choice of measures to be carried out in a particular year. The analysis of road accident trends in Styria provides current data on those fields and target groups with an urgent need for action. The thematic areas and measures defined in the RSP 2011–2020 reflect the long-term road safety strategy.

The RSP 2011–2020 was developed and approved by the Styrian Road Safety Advisory Council.



#### From left:

Wolfgang Staudacher (Head of Transport, Styrian Police Force), Wolfgang Thierrichter (District Commissioner, Murau), Peter Felber (Head of the Styrian Office of the Austrian Road Safety Board), Andreas Tropper (Regional Planning Director, State Government of Styria), Maria Knauer-Lukas (Dept. 18A – Transport and Planning, State Government of Styria; RSP Project Manager), Peter Weiß (Head of Dept. 18E – Traffic Law, State Government of Styria), Doris Hary (Office of Minister Gerhard Kurzmann), Karl Lautner (Head of Dept. 18C – Road Maintenance, State Government of Styria), Bertram Werle (Municipal Planning Director, City of Graz), Robert Rast (Head of Dept. 18B – Road Infrastructure & Construction, State Government of Styria)

#### Not pictured:

**Helmut Hirt** (Regional Administrative Director, State Government of Styria), **Burkhard Thierrichter** (District Commissioner, Graz-Umgebung)

## **Accident statistics**



Accident data and statistics provide an important basis for assessing road safety. They are indicators of positive or negative changes and trends.

Styria has had a road safety programme in place since 2004 that forms the basis for many strategic and operative measures. The base data and figures for the year 2003 are therefore of particular interest in the determination of trends.

The number of road accident fatalities has continued to decrease in recent years both in Austria and in other countries. This encouraging reduction is the result of a combination of advances in technology in the automobile sector, huge improvements in the infrastructure and a targeted focus on raising awareness in recent years. However, there were still 552 fatalities on Austrian roads in 2010, 79 of which were in Styria, which corresponds to a reduction of almost 28 % in the last three years.

→ See Figure 5 (p. 14)

The number of fatalities on Styrian roads more than halved in the period from 2003 to 2010. However, statistics show that the number of serious injuries only fell by just under 9 % in the last three years. In absolute terms, this corresponds to a fall in the number of seriously injured road users from 1,161 in 2008 to 1,060 in 2010. Consequently, particular focus will be placed in the next 10 years on trying to reduce the number of people who sustain serious injuries in road accidents. A serious injury sustained in a road accident can cause great suffering and lead to existential problems. Loss of employment, severe relationship problems and increasing isolation are frequent, tragic side effects for accident victims. In addition to personal misfortune, severe longterm injuries (which can lead to lifelong disabilities) also have a major, negative effect on the economy.

If we look at the totals, we can see that the number of injured road users in Styria has fallen by an encouraging 20 % since 2003 (7,788 people in 2010 compared to 9,714 people in 2003).

→ See Figure 6 (p. 15)

Most road injuries (2010: 61 %) and fatalities (2010: 50.5 %) are the result of accidents involving cars.

- → See Figure 7 (p. 15)
- → See Figure 8 (p. 16)

Nonetheless, a considerable number of people are also injured in accidents involving mopeds and small motorcycles: some 11 % of injured road users were riding a moped or small motorcycle.

The third largest group among injured road users is cyclists in accidents involving at least one bicycle.

→ See Figure 7 (p. 15)

In 2010, 63 % (3,769 of a total 6,052) of personal injury road accidents took place in urban areas. 53 % of these accidents occurred on municipal roads. While fewer (2,283) accidents occur on rural roads, the number of fatalities in such accidents is very high. In 2010, 77 % of all road fatalities in Styria occurred on rural roads.

→ See Figure 9 (p. 16)

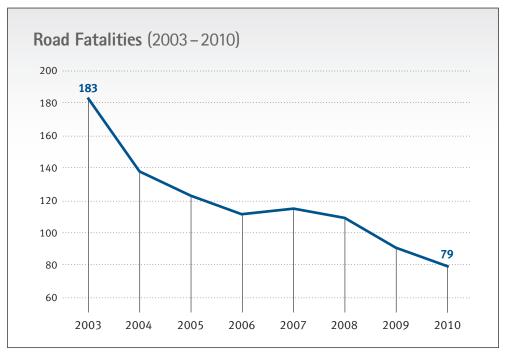


Figure 5: Road Fatalities (2003 – 2010); Source: Austrian Road Safety Board

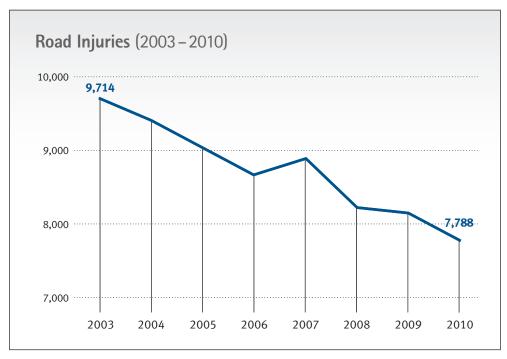


Figure 6: Road Injuries (2003 – 2010); Source: Austrian Road Safety Board

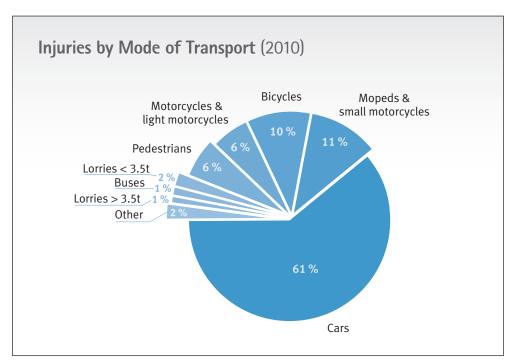


Figure 7: Injuries by Mode of Transport (2010); Source: Austrian Road Safety Board Definition: "Other" refers here to injuries in train or tram accidents.

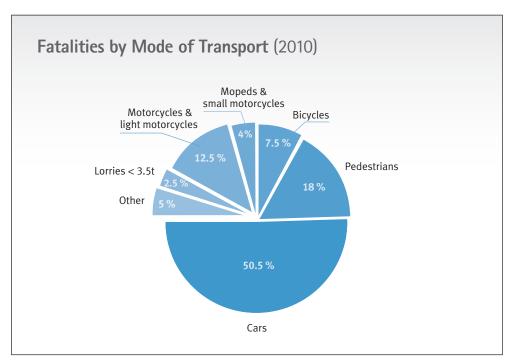


Figure 8: Fatalities by Mode of Transport (2010); Source: Austrian Road Safety Board Definition: "Other" refers here to injuries in train or tram accidents.

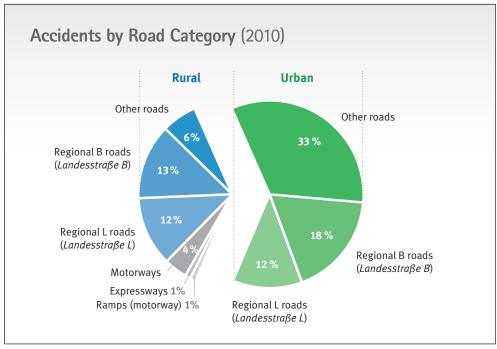


Figure 9: Accidents by Road Category (2010); Source: Austrian Road Safety Board
This graphic shows the distribution of all accidents in rural and urban areas. It is also clearly evident here that the
accident frequency is highest on "Other roads" in urban areas.





## **Road Safety Priorities**

- 2.1 Risk behaviour
- 2.2 Individual responsibility
- 2.3 Networking and cooperation
- 2.4 Road safety culture

Road safety involves the interaction between many different fields and their particular measures. What makes road safety so special is that it actively affects each and every one of us in our capacity as road users - be it as pedestrians, cyclists, motorists or public transport users. We can all make a productive contribution to road safety through our own behaviour and active participation. Nonetheless, despite the many measures taken on both a political or a social level in recent decades, we cannot totally prevent accidents on our roads. Our efforts to minimize the severity of accidents result from the realisation that we ourselves play the leading role in what happens on our roads: our own behaviour and attitude largely determine how safe these roads are.

## 2.1 Risk behaviour



"I can calculate the motion of heavenly bodies, but not the madness of people."

(Isaac Newton)

There is always a certain risk attached to road use, namely whether we will make it safely from A to B. We trust other road users to behave in such a way that potentially hazardous situations are avoided. Sometimes we do have to take certain risks to negotiate particularly difficult traffic situations. We are confronted on a daily basis with situations in which we have to determine what risks we will take. The main causes of road accidents like "speeding", "drink driving" and "dangerous overtaking" are all accompanied by an excessive level of willingness on the part of the driver to take risks. For young motorists in particular, increased risktaking is often a dangerous companion when driving.

In accidents involving cars, this is reflected in a high accident severity, often caused by loss of control and/or the influence of alcohol and an overestimation of one's own capabilities. In the case of single track motor vehicles, disregarding the obligation to wear a helmet and protective clothing is a significant factor. Preventive work targeted at changing attitudes and behaviour is a complex matter, particularly when dealing with young people. Achieving a balanced level of willingness to take risks while gaining experience is all part of growing up.

Optimising behaviour and actions is one goal of road safety work. That's why prevention activities for young people build on letting them experience what constitutes a reasonable risk and helping them to learn from this experience.

→ See also Chapter 10, Practical Examples

## Individual responsibility

"We are responsible not only for what we do, but also for what we don't do."

(Lao Tse)

With their concept of "shared responsibility", the European Union member states have agreed to make the sense of responsibility of road users the focus of their road safety activities. Shared responsibility establishes a firm foundation for respectful and considerate behaviour.

Responsible behaviour that conforms to the rules and an acceptance of the limits of the traffic system increase road safety. The Styrian RSP 2011–2020 stipulates that awareness-building activities shall focus on the fact that all road users have to actively share responsibility for road safety.

### Acting responsibly means ...

- > knowing and obeying the traffic rules
- → accepting, but not insisting on your rights
- → showing due care and consideration for the weaknesses of other road users
- → thinking ahead, anticipating and thus proactively influencing the behaviour of other road users
- → weighing up the danger to yourself and others for each and every risk.

## Networking and cooperation

"No man can do everything, some men can do some things, together we can achieve our goal."

(Anonymous)

To achieve the highest possible standard of road safety, all parties involved have to work together and be totally committed to the task. That's why particular relevance is attached to networking in the implementation of the Styrian RSP 2011–2020. Interdisciplinary cooperation boosts the effects of awareness-raising measures. Interaction between different

stakeholders, local decision-makers and representatives from the different target groups must be encouraged, managed and put to strategic use in the interests of road safety programme targets. Cooperation with the media emphasises the importance of specific topics and helps reach a broader audience. This fact needs to be put to best use.

### Successful road safety networking thrives on ...

- → an active and open communication process
- → an efficient information culture
- → a managed implementation process.

## Road safety culture



"It is hard to fail, but it is worse never to have tried to succeed!"

(Franklin D. Roosevelt)

The heroic goal of establishing a road safety culture requires both vision and action. The ultimate objective of the "Vision Zero" initiative is to create a traffic system in which there are neither fatalities nor injuries due to accidents on the roads. Although this vision is far from the current reality, steps are already being taken to depict our future road use and traffic encounters in a new, responsible light.

Measures aimed at raising awareness make a significant contribution to promoting a road safety culture. A genuine, active road safety culture reflects a society in which consideration and tolerance for other road users assume top priority. Efforts to bring a road safety culture to life follow the principle that everyone together produces the whole, but each individual is more than just a part of that whole!

#### A road safety culture results in ...

- → a reduction in the number of road accidents
- → an appetite for mobility
- → people feeling safer on the roads
- → road users who share a common goal: arriving safe and sound at their intended destination





# European and National Developments – All Pulling in the Same Direction

- 3.1 Road safety from a European Union perspective
- 3.2 Austrian Road Safety Programme 2011–2020

## Road safety from a European Union perspective

A total of 43,000 people are killed each year on Europe's roads. If everyone in the European Union (EU) wore a seat belt, kept within the speed limits and didn't drive under the influence of alcohol, 12,000 fewer people each year would die on Europe's roads.

In the decade from 2011 to 2020, the European Union will step up its efforts to achieve the highest possible road safety standards. It has set itself the target of halving the overall number of road accident fatalities in the EU by 2020 (based on the 2010 figure). Particular focus will also be placed on preventing injury accidents on the roads. The EU approach also seeks to identify and foster synergies with objectives in other political sectors like healthcare, the environment and education.

To contribute to raising awareness for road safety, Styria has signed the European Road Safety Charter. The associated web platform (www.erscharter.eu) offers local and public authorities, research establishments, associations and commercial enterprises the opportunity to sign up and commit to concrete road safety measures. The Styrian Road Safety Programme is itself an example of such a commitment.

#### The EU's seven strategic targets

- To improve safety measures for lorries and cars
- To build more safe roads
- To develop intelligent vehicles
- To introduce increased measures for driving tests, driving practice and quality assurance in driver education
- To increase enforcement
- To focus on measures aimed at reducing the number of people injured in road accidents
- To focus on a new target group: motorcyclists

## Austrian Road Safety Programme 2011–2020

Austria has set itself the target of becoming one of the five safest countries in Europe!

The number of fatalities on Austrian roads fell by 13 % from 2009 to 2010. Compared with 2001, the number of fatalities dropped by a total of 42 %. However, road safety figures for Austria are still only average for the EU-27 countries.

The Austrian Road Safety Programme 2011–2020 sets the target of making Austria one of the five safest countries in the European Union. Austria plans to achieve this ambitious target by adopting the new EU trend of working together to create a safe system for all road users (the so-called Safe System Approach). In such an approach, all factors that impact a traffic system are viewed in combination and aligned to each other in the implementation process.

→ Further information on this topic can be found at: www.bmvit.gv.at/en/service/ publications/transport/index.html The individual Federal States are actively called upon to adopt this strategic approach in the implementation of road safety measures at a regional level. In the Styrian Road Safety Programme, the thematic areas defined at national level are considered from a regional perspective and integrated into regional measures.

→ See also Chapter 5







## Styrian RSP Strategy

- 4.1 A strategic approach as basis for sustainable road safety activities
- 4.2 Recommendations to Federal Government

# A strategic approach as the basis for sustainable road safety activities

The primary targets set the parameters for our road safety activities. Achieving these is our top priority.

Primary road safety targets for Styria by 2020

- → 50% reduction in road fatalities
- → 40% reduction in serious injuries on the roads
- → 20% reduction in personal injury accidents

Basis: average figures for the years 2008 to 2010

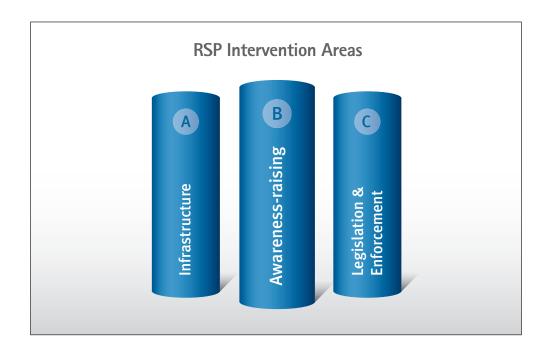
Styria has had a road safety programme in place for eight years. It was agreed from the outset that such a programme would establish the framework for a range of measures that complement each other and thereby create added value for road safety. Based on this experience, the RSP 2011-2020 details the strategic approach, guiding principles and specific targets for each thematic area. The primary targets set the parameters for our road safety activities. Achieving these is our top priority. To do so, we have defined three key areas of intervention: "Infrastructure", "Awarenessraising" and "Legislation and Enforcement".

The combined effect of the three areas of intervention provides added value in practice-based road safety activities.

Measures in the **infrastructure** sector include all traffic planning, road construction and road maintenance activities required to improve and maintain road safety.

**Awareness-raising** interventions focus on identifying, feeling, trying out, experiencing and changing. Behaviour cannot simply be changed overnight. Targeted awareness-raising activities help to promote and establish safety conscious attitudes and behaviour.

**Legislation & enforcement** activities concentrate on measures that improve the legislative situation and/or can be enforced by the police.



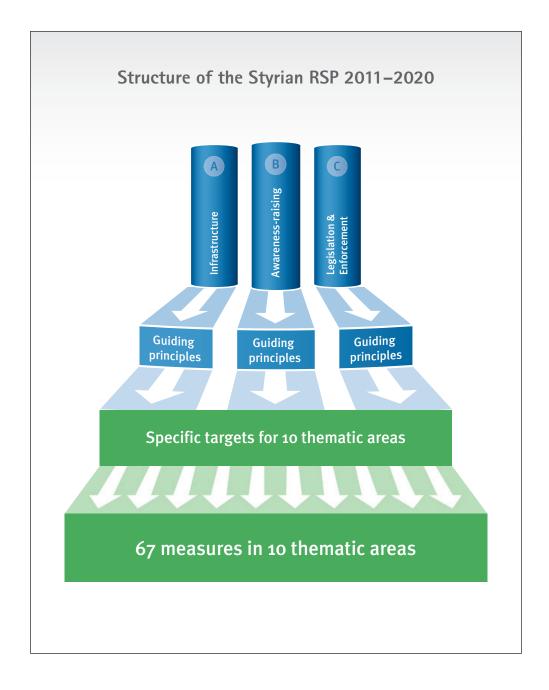
Guiding principles have been defined for each area of intervention. These establish the direction for the detailed definition of specific targets and sub-targets for each of the individual thematic areas.

#### → See p. 29

In a next step, these specific targets were used to define the actual measures relating to each different thematic area. Over the next 10 years, this detailed definition of measures will allow us to develop

targeted awareness-raising campaigns, organise projects and activities to improve the infrastructure, strengthen our priorities with regard to enforcement and intensify our public relations activities.

Precise timing and structured coordination of activities is required to ensure the different measures produce the desired combined effect. A focused and coordinated approach is absolutely essential.



#### Guiding principles in the three areas of intervention



#### Infrastructure

The layout and design of the road network encourages safe behaviour by road users.

A clearly laid out road network encourages road safety.

Road users (in particular vulnerable road users) are more likely to use a safe and attractive road.

Identified high accident concentration sites provide important information for improving road safety.



#### **Awareness-raising**

The creation of a road safety culture encourages and strengthens road safety.

High relevance should be placed on making people aware of the potential dangers that can result from traffic violations.

Accepting and respecting other road users are prerequisites for road safety in practice.

Taking the right risks when driving can reduce accident frequency.

Mobility training encourages people to make considered, environmentally-conscious transport choices.

Raising awareness that responsibility towards other road users is a lifelong learning process.

Road safety awareness-raising activities should be made broadly available and accorded greater significance – particularly at a local level (road safety officers, traffic experts, schools, parents, nursery schools, police, young people, driving schools, rail and public transport service providers like the ÖBB, GVB, Postbus AG, etc.).

Interdisciplinary cooperation boosts the effects of awareness-raising measures.

Awareness-raising measures require target group specific communication combined with the use of appropriate means of communication.



## Legislation & Enforcement

Raising awareness of the potential dangers that can result from traffic violations is an important aspect of law enforcement work.

Police presence on the roads contributes significantly to road safety.

Setting appropriate priorities increases the effectiveness of enforcement activities.

Stopping motorists who have committed a traffic violation increases the effect of spot checks.

Equal treatment with regard to penalties and fines promotes understanding of unlawful behaviour among road users.

### Do good - and tell people about it!

Many road safety activities are not even recognised as such by road users. They simply enjoy the benefit – namely greater road safety.

Examples of "hidden" road safety measures:

- "Smileys" on long stretches of narrow lanes through roadworks or on motorway contraflows
- Removal of objects from the side of the road
- Warning signs alerting people to dangerous sections of road
- Special road surfaces to encourage safe driving
- Obligation to have a reflective safety waistcoat to hand
- Definition of a maximum permissible cubic capacity for two-track vehicles according to age, driving ability, etc.

Road safety work faces the challenge of aligning measures and their related effects to an extremely diverse group of people. What makes one person think and reflect might annoy or even be rejected by another. Raising awareness for particular topics or among specific target groups requires collaboration at various levels. Networking and cooperation activities with relevant stakeholders like local authorities, schools and trafficrelated organisations create a wider impact.

Publicly reporting on road safety measures is a key element of the Styrian Road Safety Programme strategy.

## Recommendations to Federal Government

The measures and recommendations outlined in the following list are the responsibility of Federal Government. Styria is of the opinion that the implementation of these measures and recommendations would constitute a further major contribution towards improving road safety.

- → Evaluate and revise the catalogue of offences for the demerit points system
- → Establish a unified nationwide catalogue of on-the-spot fines (*Organmandat*) and fines which do not identify the offender (*Anonymverfügung*) for traffic violations listed in the Austrian Road Traffic Act (*Straßenverkehrsordung*; *StVO*) as the main causes of road accidents
- → Assign traffic fine revenues to the Federal Road Safety Fund and/or the individual State Road Safety Funds
- → Increase the use of section controls on the major road network where there is an increased risk of accidents
- → Intensify practical driving training for category A driving licence candidates
- → Prohibit so-called gigaliners
- → Lift the 60 km/h restriction for lorries over 7.5 t on motorways between the hours of 10 pm and 5 am, except on sections of road where such a restriction is required for noise protection reasons (§ 42 (8), StVO)





## Thematic Areas and Measures

## Over the next 10 years, interventions will be made in the following 10 thematic areas:

5.1	Lack of due care and attention	34
5.2	Driver education & driving licences	36
5.3	Fitness to drive: alcohol, drugs, etc.	38
5.4	Pedestrians	40
5.5	Speed & following distance	42
5.6	Two-wheeled motor vehicles	44
5.7	Bicycles	46
5.8	Heavy goods vehicles	48
5.9	Road safety education & instruction	50
5.10	Traffic planning, road construction & road use	52

5

The measures defined in each thematic area either set the direction for the subsequent interventions or are specifically intended to address a particular problem.

Road safety work addresses all manner of different topics, which in turn are determined by the causes of accidents. In Austria, driving at an inappropriate speed remains the main cause of fatal road accidents (36 %). Violations of right of way and driving without due care and attention also rank high on the list of accident causes.

Each thematic area contains plenty of scope for interventions that contribute to the safety of all road users.

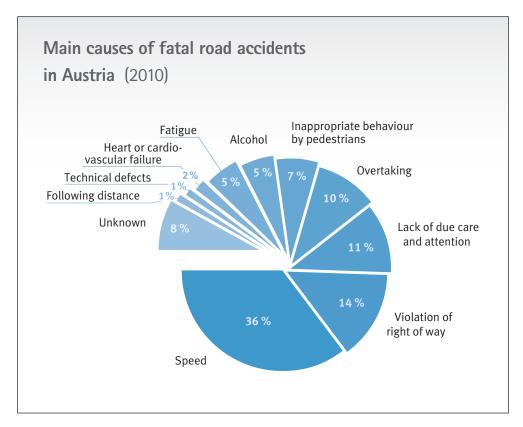


Figure 10: Main causes of fatal road accidents in Austria (2010); Source: Austrian Road Safety Board

## Driving without due care and attention



#### What distracts us when we're driving?

#### Do you recognise these situations?

- A motorist is smoking and/or using a mobile phone while driving.
- A cyclist is listening to music through headphones and answers a mobile phone while riding a bicycle in traffic.
- The voice in your navigation system tells you that the traffic is getting heavier, and you miss the motorway exit because you were too busy waiting for the next instruction.

When the driver of a vehicle is distracted, this can lead to inappropriate behaviour such as erratic following distances, delayed reactions, unnecessary steering manoeuvres and much more.

Using a mobile phone without a handsfree device while driving a car has been against the law in Austria for over 10 years. Despite this fact, there has been no significant increase in the acknowledgement of the risks of using a mobile phone while driving. Law enforcement officers can currently only check if a person is using a mobile phone when they stop a vehicle. Roadside information (e.g. signage, advertisements, etc.) attracts a driver's attention and must be processed in order of priority.

Road users need to concentrate on the traffic and assume responsibility for themselves and for others. A brief moment of distraction can have fatal consequences. Road users must be constantly aware of this fact.

#### **Potential distractions**

**Outside the vehicle:** eye-catching people, attractive views, adverts, poor road signage

Inside the vehicle: using a mobile phone without a hands-free device, driver assistance systems, navigation systems, e-mails, the internet, changing a CD, eating and drinking, talking to passengers, smoking, dealing with small children, pets, personal hygiene (e.g. applying make-up)

**Personal issues:** strong feelings like excitement, panic, aggression, grief, etc.

#### Did you know that ...

- ... anything which occupies your attention for more than two seconds has already distracted you from your driving?
- ... eating or reaching for objects (e.g. to change a CD) increases the risk of an accident by a factor of 1.5?
- ... driving without due care and attention is the third most frequent cause of fatal road accidents?

#### **Targets**

- → To make people aware that their own actions can cause accidents.
- → To make risk behaviour a central topic in awareness-raising activities.
- → To raise awareness among road users of their responsibility (for themselves and for others).

# → Measures Use campaigns to identify and raise awareness of the causes of distraction and their effects → Targeted campaigns to emphasise that using a mobile phone without a hands-free device is against the law, with a focus on the risks to other road users → Raise awareness among information providers of the need to consider the quantity/quality of roadside information to ensure it is recognised and understood by road users

## Driver education and driving licences



#### A driving licence – a ticket to freedom?

For many young people, passing their driving test is their ticket to freedom. Regardless of the public transport services available in their area, having a driving licence and being independently mobile both day and at night gives young people a real sense of freedom. For them, mopeds and cars are their entrance tickets to the adult world.

Many young drivers underestimate the risks, overestimate their own abilities and exceed their own personal and actual limits in their efforts to experience and try things out. Typical car accidents involving young drivers are usually serious and are caused by losing control of the vehicle on a weekend night, at high speed, under the influence of alcohol and while out with friends.

This realisation is nothing new. In the coming years, great relevance will be placed on topics like risk behaviour and the overestimation of one's abilities as well as on improving knowledge transfer in driver education. Regular ongoing training for driving instructors, driving safety instructors and driving test examiners is absolutely essential.

Innovative approaches are called for: consistently implemented measures that raise awareness and meet young people "on their own territory". The peer education principle (learning from people of the same generation) that has been successfully realised in the CLOSE TO project for many years is a good example of an effective, practical approach.

Factors that must be effectively addressed in driver education include:

- Assessing your own abilities
- Overconfidence
- Risk assessment
- Recognition of dangers
- Acting with foresight

#### We have to "want to be" safe on the road!

Every lesson taught and every measure taken to raise awareness presupposes that the target audience is willing to listen to the message, give it some thought and then modify their own behaviour accordingly. This is a challenge that can only be met through a concerted, joint effort by driving schools, young people, parents and other relevant stakeholders.

#### **Targets**

- → To make the RSP a topic of interest in relevant institutions (e.g. driving schools).
- → To make risk behaviour a central topic in awareness-raising activities.
- → To make people aware that their own actions can cause accidents.

# → Measures Involve young people who have had accidents, young drivers who have caused accidents and young traffic offenders in road safety activities (e.g. the CLOSE TO project) → Place increased attention on training for examiners and driving instructors to assure the quality of lessons and examinations → Strengthen the emphasis placed in driver education on factors that cause accidents, e.g. inappropriate speed or following distances, "keep right" policies, risk behaviour or driving without due care and attention

# Fitness to drive – alcohol, drugs, etc.



#### If it gets you drunk, it also clouds your mind.

What can I get you? A glass of wine, an Aperol Spritz, a cold beer, or maybe even two? Having a drink is part of a social event. Several glasses of beer as a reward for a hard day's work may be considered harmless. A study\* shows that 1.2 million Austrians are at risk of developing an alcohol problem. In European terms, Austria is high on the list when it comes to the number of young people "having one too many" – especially at the weekend.

These facts must be taken into consideration in a road safety context. In recent years, drink driving measures indicate that many road users have come to realise it is wrong to drink and drive. Nonetheless, there are clearly still cases where the fear of being "caught" drunk at the wheel outweighs the realisation that drivers under the influence pose a lethal threat both to themselves and other road users.

When we talk about drugs in everyday language, we usually think of intoxicants and stimulants like hallucinogens (e.g. marijuana or LSD) or opiates (e.g. heroin). Even if there is little evidence to date of road safety being seriously impaired by people driving under the influence of such drugs, the effect of prescription medicines on fitness to drive has so far been under-

estimated. Given the increasing amount of medication that is now prescribed, it can be assumed that this could lead to increased risks on the roads.

#### Recognise the advance warning signs of microsleep!

Early warning signs include:

- Yawning
- A burning sensation in the eyes; blinking
- Sensitivity to glare
- Tension in the shoulder and back muscles

<sup>\*</sup> Source: WHO "Global Status Report on Alcohol and Health", 2011

The most frequent causes of fatigue are lack of sleep and overwork. The subjective feeling of "being tired" is very different for young people than it is for older people. Fatigue is dependent not only on the length of time spent behind the wheel, but also on the amount and quality of sleep a person has had, the work they were doing before they set off and the amount of stress they are under.

#### Did you know that ...

- ... blood alcohol content drops by only o.1 per mil each hour?
- ... young people need 9 to 9.5 hours of sleep per night (as do children), so they are far more susceptible to attacks of fatigue when out late?
- ... constantly driving on the centre line is a warning that you are about to experience microsleep?

#### **Targets**

- → To raise awareness among road users of their responsibility (for themselves and for others).
- → To make people aware that their own actions can cause accidents.
- → To strive for interdisciplinary cooperation in awareness-raising measures.

# → Measures → Raise awareness among road users of their own risk behaviour and its causes (e.g. alcohol, prescription medicines, fatigue, peer pressure, lack of alternative transport options, etc.) → Cooperate with Styrian medical practitioners and pharmacists to communicate the medical links between the use of medication and fitness to drive → Raise awareness of the influence of alcohol and drugs on road safety (e.g. in schools, driving schools, the army, the general public) → Intensify public relations activities (e.g. cooperation with the media) on all these topics → Raise awareness of the risks of fatigue and microsleep

#### **Pedestrians**



#### Safely on foot?

Walking is good for our physical and mental health. Improving and prioritising the construction of pavements and footpaths encourages people to walk more. In urban and metropolitan areas in particular, a pedestrian friendly infrastructure offers a welcome alternative to motorised transport.

As we get older, "walking" once again becomes our most important mode of transport and enables us to get out more. Elderly people have a far greater need for safety and security than their younger counterparts. Statistically, elderly people and children are the age groups that walk the most. Poor visibility is the overriding cause of accidents involving pedestrians.

In 2010, 465 pedestrians were injured on Styrian roads. Of these, a significantly high proportion (125) were injured by other road users on pedestrian crossings, with 28 % of these accidents occurring on signalised pedestrian crossings.

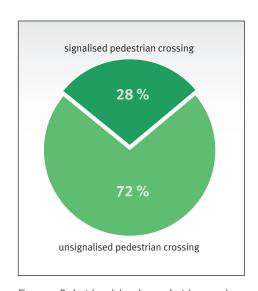


Figure 11: Pedestrians injured on pedestrian crossings (2010); Source: Austrian Road Safety Board

In a road safety culture, it's up to everyone to do their bit by recognising and accepting responsibility: pedestrians do not necessarily insist on their rights and by the same token, motorists recognise the rights of more vulnerable road users!

The design and layout of public roads play a significant role in pedestrian safety. It is crucial that all road users assume responsibility and treat each other with due respect and consideration.

#### **Targets**

- To ensure all road users act with due care and consideration in their different roles (motorists, cyclists, pedestrians, etc.).
- → To use the design and layout of roads to bring about a change in behaviour and increase the acceptance of personal responsibility.
- → To improve road safety by extending the network of pedestrian and cycle paths.

#### Measures Intensify activities to keep school crossing patrol officers in place Awareness-raising campaigns to improve pedestrian safety on pedestrian crossings Raise awareness of the need for mutual consideration between pedestrians and other road users Raise awareness of the importance of highly visible clothing for vulnerable road users Raise awareness for vulnerable road users and the high risks they face (pedestrian safety) Evaluate existing pedestrian crossings for compliance with guidelines Design and develop pedestrian zones in urban areas Continue to extend the network of pavements and footpaths for pedestrians in urban areas State-wide identification and marking of waiting areas for pedestrians at pedestrian crossings

# Speed and following distance



### Inappropriate speed is the number one cause of road accidents among young drivers!

Willingness to take risks, limited experience in handling a vehicle and misjudgement of the danger lead to serious – often fatal – accidents.

#### If you accept responsibility for yourself and others, then you will drive with appropriate care and consideration!

The influence of role models is grossly underestimated when it comes to ignoring speed limits and driving at an inappropriate speed. Children and young people base their subsequent driving behaviour on what they experienced as passengers. Driving at 70 km/h instead of the permitted 50 km/h in urban areas has dramatic consequences in the event of a collision with a pedestrian or cyclist. The correlation with the stopping distance shows just how crucial the speed factor is. Studies\* show that reducing speed in urban areas has an enormous effect on road safety: for example, reducing speed by 20 km/h results in 30 % fewer accidents and 70 % fewer traffic fatalities.

#### The motives for "driving too fast" are rooted in the driver's personality!

Example: A learner driver whose motivation is to pass the practical element of a driving test has to "comply with the rules and drive accordingly". A driver who wants to be considered by friends to be a fast driver has an increased motivation to drive as quickly and with as much corresponding risk as possible.

Nilsson Göran, 2004/1, Traffic Safety Dimensions and the Power Model to Describe the Effect of Speed on Safety, Bulletin 221, Lund Institute of Technology, Department of Technology and Society, Traffic Engineering, Lund University, 2004

Nilsson Göran, 2004/2, Traffic Safety Measures and Observance, Compliance with speed limits, seat belt use and driver sobriety, Swedish National Road and Transport Research Institute, 2004

<sup>\*</sup> Source:

#### **Targets**

- → To make people aware that their own actions can cause accidents.
- → To make risk behaviour a central topic in awareness-raising activities.
- → To use road layout and design to encourage people to drive at an appropriate speed.

<b>→</b>	Measures
<b>→</b>	Raise awareness of the topic of speed
<b>→</b>	Raise awareness of the risks of inadequate following distances in various road traffic situations (e.g. bicycle traffic on rural roads, motorway traffic)
<b>→</b>	Targeted use of mobile speed indicators to help drivers learn to assess their speed
<b>→</b>	Implement the Styrian "Speed Harmonisation Directive" (50/80/100)
<b>→</b>	Intensify speed enforcement in sensitive areas (e.g. in the vicinity of schools)
<b>→</b>	Definition of the location of all speed radars by the corresponding local authorities
<b>→</b>	Use electronic devices for measuring following distances

# Two-wheeled motor vehicles



#### Freedom on two wheels - but it's safety first!

Riding a motorcycle has lost none of its fascination – it remains the epitome of freedom, independence and proximity to nature for young and old alike.

Statistically, 40–50-year-old motorcyclists are just as much at risk as inexperienced, young motorists. Lack of driving practice and the misconception that adequate experience in driving a car will balance out a lack of motorcycle driving practice lead to serious accidents in which driving at high speed is the primary cause.

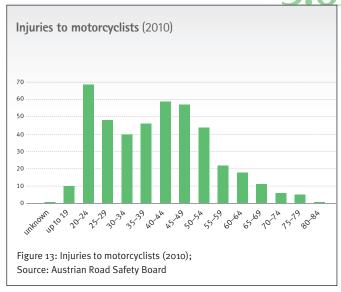
Motorcyclists account for a relatively small proportion (7 %) of all road traffic injuries in Styria. But at 13 %, the number of motorcycle fatalities is dramatic – particularly given their very low total vehicle kilometres in comparison to cars.

For young moped owners, their twowheeler represents entry into the motorised world. Yet they face a ten times higher risk of being involved in an accident than car drivers. Given their young age and the very short training time required for a moped driving licence, it is particularly important to communicate and raise awareness of the risks and dangers among moped riders – without spoiling their enjoyment of driving.

In Styria, the number of injuries to moped riders fell by 12 % from 2009 to 2010. Of the 785 moped riders injured in 2010, around 34 % were 15—year-olds. Appropriate measures will be taken to address this situation.

The majority of injured motorcyclists (2010: 69) fall into the 20–24-year-old age group. This is followed by the mature adults group (40–49-year-olds), whose accidents can often be attributed to their lack of driving practice. There were a total of 437 injuries and 10 fatalities among motorcyclists in Styria in 2010.





When interpreting accident figures and statistics relating to motorcyclists, particular consideration must be given to the weather conditions in a given year, the seasonal weather conditions and the reduced number of total vehicle kilometres.

#### **Targets**

- → To make risk behaviour a central topic in awareness-raising activities.
- → To install guardrail covers when replacing the guardrails on proven high motorcycle accident concentration sections of road.
- → To take appropriate measures to reduce the risk on sections of road that are particularly dangerous for motorcycles.

# → Measures → Awareness-raising campaigns to reduce the risks of accidents (e.g. no crumple zones, group training, illegal races) → Raise awareness among young motorcyclists of the need to understand the condition of their vehicles and the need for adequate (safety) equipment → Promote additional awareness-raising activities for 15-year-old moped riders with a focus on rural and urban road conditions (e.g. moped rider workshops) → Take account of accident statistics when replacing guardrails and install guardrail covers where required → Evaluate the effectiveness of guardrail covers

# 5.7 Bicycles



#### The bicycle revival

Cycling is gaining in popularity. The development and extension of the cycle path network has encouraged many people to get back on their bikes. The bicycle has thus become an important mode of transport while at the same time making a contribution to maintaining health.

Naturally, the increasing number of cyclists also causes problems among road users – both on cycle paths and on the roads. These problems include conflicts between cyclists and pedestrians on both multi-use and cycle paths and between cyclists and motorists on the road.

Cycling is an attractive option when you can cycle from A to B with few or even no detours, when there is a continuous network of cycle paths in place, and cyclists can feel safe in traffic.

The Styrian "Strategy for Bicycle Traffic 2008-2012" provides detailed information on the relevant factors relating to bicycle traffic. This dedicated programme gives due consideration to the multifaceted topic of "bicycle traffic".



→ Further information on this topic can be found (in German) at: www.verkehr.steiermark.at or www.radland.steiermark.at

#### **Targets**

- → To encourage people to be responsible road users in their different roles (cyclists, motorists, pedestrians, etc.).
- → To establish a clear and well-structured road network.
- → To provide continuous cycle paths (closing the gaps).

<b>→</b>	Measures
<b>→</b>	Communicate/provide information on the rights and obligations of cyclists and motorists – cooperation activities with the media
<b>→</b>	Raise awareness of the need for mutual consideration between cyclists and pedestrians, car drivers and lorry drivers
<b>→</b>	Network with local authorities to establish safe, user-friendly pavements, footpaths and cycle paths
<b>→</b>	Raise awareness and educate people in the correct use of helmets and the role model effect of wearing them for all age groups
<b>→</b>	Educate people on the need to wear high visibility clothing (e.g. made of reflective materials) in cooperation with the clothing industry
<b>→</b>	Make it a priority to close gaps in the cycle path network with a particular focus on metropolitan areas
<b>→</b>	Improve information systems and signage for cycle traffic
<b>→</b>	Analyse accidents involving bicycles with particular regard to potential danger spots
<b>→</b>	Improve the infrastructure for cycling to school
<b>→</b>	Improve the safety standards of existing bicycle traffic infrastructure, in particular by assessing lines of sight at junctions
<b>→</b>	Place increased attention on bicycle-related aspects in road safety audits

# Heavy goods vehicles



#### The responsibility that comes with size

Heavy goods vehicles are involved in 4.3 % of accidents in Styria (average for the last five years).

Given their large mobile mass, lorries are only capable of carrying out limited braking or avoidance manoeuvres. Other road users often overestimate the options that are open to lorry drivers in an emergency to try to avoid an accident. 14.2 % of all road traffic fatalities on Styria's roads are the result of accidents involving lorries.

The availability of sufficient rest areas and traffic control sites as well as telematics-based information on their locations on the major traffic routes contribute to raising driver awareness of the need to adhere to driving and rest periods. Lorry drivers have to become more aware of the need to treat other road users with due care and consideration.

A recent study\* shows that:

- cars are the other party in 70 % of all accidents involving lorries, while a significant 11 % involve pedestrians and cyclists
- when asked to identify their main causes of stress, 73 % of lorry drivers surveyed named other road users, closely followed by traffic jams (72.5 %) and time pressure (68.2 %)
- 89 % of lorry drivers surveyed named the lack of consideration by other road users as a source of annoyance

<sup>\*</sup> Source: Austrian Road Safety Board, 2011

The sharp increase in total vehicle kilometres for lorries often leads to stipulated driving and rest periods being neglected or disregarded. Stressed and exhausted lorry drivers result in dangerous overtaking manoeuvres and the ignoring of overtaking bans for lorries on motorways.

Lorry drivers and other road users all have to show mutual consideration for each other. The damage incurred to the other vehicles and people involved is usually far greater in accidents involving lorries. Encouragingly, the trend in Styria in the last 10 years has been positive: the number of lorry accidents in which people were injured fell from 320 to 248 for the "heavyweights", i.e. lorries over 3.5 t. The majority of lorry accidents (63 %) occur on regional roads; only 18 % take place on motorways.

There is clearly an urgent need to encourage and reinforce a sense of responsibility and raise safety consciousness both among lorry drivers and other road users.

#### **Targets**

- → To ensure all road users act with due care and consideration in their different roles (motorists, cyclists, pedestrians, etc.).
- → To make people aware that their own actions can cause accidents.
- → To improve road safety through increased enforcement.

# → Measures → Development of a unified catalogue of fines for overloading → Increase police spot checks on transit and other heavy goods transport routes with a focus on driving and rest times, loading, vehicle technical condition, tyres and compulsory use of snow chains, driving bans and toll avoidance → Raise awareness of the need for mutual consideration between lorry drivers and other road users

# Road safety education and instruction



### You can't teach an old dog new tricks. Or: It's never too late to learn!

Learning how to act safely on the roads is a lifelong process, and road safety education concentrates on reinforcing the need for socially responsible attitudes and behaviour. People of all ages need to regularly assess their own road use behaviour and try first and foremost to change any inconsiderate actions on their own part.

The vision of a creating a road safety culture extends to all age groups. Children, young people and adults all make their own contributions to a real road safety community. Genuine cooperation on the roads includes both accepting and demonstrating responsibility. A considerate road user knows the rules and shows a tolerant attitude to others.

Every road user is a role model – and the positive example set by each individual makes an essential contribution to realising genuine road safety.

Role models are everywhere: older children for younger children, parents for their children, children for their parents, adults for young people and adults for adults.

Lifelong road safety education can be provided to specific target groups in the form of mobility training. Raising awareness and learning the cornerstones of a genuine road safety culture – social competence and adequate knowledge – are vital in such training.

#### **Targets**

- → To raise awareness and motivate road users of all ages to demonstrate responsibility to others on the roads.
- → To ensure all road users act with due care and consideration in their different roles (motorists, cyclists, pedestrians, etc.).
- → To actively educate the citizens of Styria on the topic of road safety.

<b>→</b>	Measures
<b>→</b>	Promote coordinated road safety activities for specific target groups (e.g. children)
<b>→</b>	Increase cooperation and motivation for road safety education tasks in schools
<b>→</b>	Continue efforts to raise awareness and educate people in the correct use of restraint systems in cooperation with nursery schools, schools and law enforcement agencies
<b>→</b>	Circulate available road safety materials and instruct people on how to use them
<b>→</b>	Awareness-raising activities for adults on the topics of risk behaviour and acting as role models
<b>→</b>	Provide more information and educate the parents of learner drivers in the "L17 accompanied driver scheme" on road safety related topics
<b>→</b>	Foster cooperation between law enforcement agencies and compulsory level schools, vocational schools and secondary schools in road safety issues
<b>→</b>	Instruct people and refresh their knowledge of traffic regulations via the media and target group specific means of communication
<b>→</b>	Provide refresher courses on the correct procedure for securing accident sites and repeat the first aid course in cooperation with companies and organisations (e.g. senior citizens associations)
<b>→</b>	Raise awareness of the need for a responsible attitude and understanding between lorry drivers and other road users (e.g. recognising blind spots)
<b>→</b>	Increase the involvement of traffic experts in road safety activities

Traffic planning, road construction and road use



### Planning without construction is usually futile – construction without planning is usually disastrous!

The design and layout of the road network has a major influence on road safety.

For many years now, the safety of road users has been taken into consideration in the planning of all road construction projects. The Road Safety Audits (RSA) provide important recommendations which allow for timely corrections in the planning phase.

However, this can only positively assist the behaviour of drivers to a limited extent. Ultimately, it is the responsibility of each individual to react adequately to such improvements. Nonetheless, experience shows that the design of public spaces has a positive effect on people and can be used to steer their behaviour in a responsible direction.

Coordinating all the different departments with their own particular competences, responsibilities and interests and then working with other important or-

ganisations to produce speedy results is a huge challenge – and one that requires careful management.

The Road Safety Inspection (RSI) is a standardised test procedure used to identify and resolve safety deficits and potential dangers when accidents of a similar nature occur. The inspection also serves to augment local road safety activities and analyses in the treatment of high accident concentration sites and dangerous sections of road. Regular RSIs are a means of preventing potential risks to all – including vulnerable – road users as well as potential dangers in road construction zones.

An active knowledge exchange process supports the attainment of a common goal, namely making road safety a priority!

#### **Targets**

- → To have an infrastructure in place that enables road users to use roads safely.
- → To establish a clear and well-structured road network.
- → To continue to use proven measures like audits before and during construction projects.
- → To give priority consideration to high accident concentration sections of road.
- → To draw on available resources (e.g. competences and experience) and identify synergies in each field of activity.

<b>→</b>	Measures
<b>→</b>	Conduct a targeted assessment of the plausibility (number) of traffic signs with a view to reducing streetscape clutter
<b>→</b>	Carry out a Styria-wide assessment of existing pedestrian crossings (including their necessity and meaningfulness) with the involvement of local government and authorities
<b>→</b>	Adhere to guidelines for safety barriers at roadworks
<b>→</b>	Give priority in the construction programme to the treatment of high accident concentration sections of road
<b>→</b>	Evaluate treated high accident concentration sections of road
<b>→</b>	Apply corresponding guidelines in the development and configuration of pedestrian crossings (e.g. lighting)
<b>→</b>	Continue to use the Styrian state road safety audit in relevant construction and reconstruction projects
<b>→</b>	Incorporate accidents resulting in material damages into the accident database
<b>→</b>	Develop and include "self-explaining roads" in transport planning activities
<b>→</b>	Continue to use road safety inspections, with a particular focus on factors that cause accidents (lighting, trees, etc.)





# Support for Road Safety

- 6.1 Mobility management
- 6.2 Public transport





#### Mobility management

People who feel at ease on the move show more consideration to other road users!

Mobility is a prerequisite for an active social and cultural life. A public transport system adapted to the needs of the region it serves allows road users to make individual mobility choices.

Mobility management allows road users to choose their mode of transport based on appropriate information about the available options and their respective contributions to road safety.

The "Styrian Transport Concept 2008+" highlights the importance of mobility in today's society.

→ Further information on this topic can be found (in German) at: www.verkehr.steiermark.at

#### What contributes here to road safety?

- The "Bicycles in Everyday Life" campaign to increase mobility
- Intensive campaigns to raise awareness of transport choices, e.g. increased publicity regarding the true costs of transport
- Raising awareness of the benefits of using different modes of transport on one journey
- Improved safety in the vicinity of retirement homes to boost the mobility and consequently the quality of life of the elderly
- Cooperation between relevant organisations and enterprises in the planning of mobility concepts for new housing developments

#### **Public transport**



#### Using public transport contributes to road safety!

People will only switch to public transport if it adequately meets their needs. For public transport to be an attractive option, the advantages of using it must be immediately evident, and people must feel safe when doing so.

The risk of sustaining an injury in a car accident is 13 times greater than in a bus accident and 38 times greater than in a train accident.

Children (especially schoolchildren) and the elderly are the primary users of public transport in regional areas. Accidents here occur most often at bus stops, where getting on and off buses is the top risk factor for both the above age groups.

#### What contributes here to road safety?

- Increasing the use of public transport by making it an attractive option
- Raising awareness of the available transport options to allow people to make a reasoned choice
- Increasing cooperation between public transport operators with a particular focus on the needs of commuters
- Awareness-raising activities to improve safety in and around buses, e.g. when getting on and off at bus stops





# Police Road Safety Activities

As law enforcement officers, the police assume an important dual role in road safety: in enforcement and in awarenessraising. Experience shows that the interaction between awareness-raising and enforcement (i.e. police spot checks and control activities) has a positive effect on road safety. Timing enforcement activities to coincide with awareness-raising measures (e.g. increased spot checks during anti-drink-driving campaigns) boosts their effects on road safety. In their awareness-raising capacity during spot checks the police draw motorists' attention to their misdemeanour and point out the potential risks of such behaviour or actions.





7

#### Prevention and awareness-raising measures

#### Awareness-raising during traffic spot checks

- To promote understanding of the potential risks associated with the traffic violation that has just been committed
- Use of didactic methods and materials like video clips, animations, brochures or the *Gurteschlitten* collision simulator

#### In schools

- Road safety education and the Kinderpolizei ("children's police force") initiative in primary schools
- Road safety instruction for young people in secondary schools, vocational schools
- Advice and practical tips for moped riders in special campaigns (e.g. "Mopeds in Town")

**Driving techniques training for motorcyclists** and special awareness days like those organised as part of the "Born to Ride" campaign

#### Increasing the visibility of pedestrians and cyclists









7

#### **Enforcement**

25,000 hours of police presence on the roads each month – with a focus on traffic violations that can cause accidents:

**Speed** – with drivers stopped by default after laser speed checks as well as the use of computer animations in focus campaigns to illustrate the potential effect of the speeding violation that has just been committed

Careful selection of the **locations for radar speed controls** (in consultation and agreement with the respective local authorities)

**Alcohol** – at least 220,000 breathalyser tests each year (corresponds to one third of all cars registered in Styria)

**Correct use of seat belts and child restraint systems** (as part of daily patrol duties carried out by the police)

**Use of mobile phones without hands-free devices** in traffic (as part of daily patrol duties carried out by the police)

**Following distance** – daily spot checks carried out on motorways and expressways

**Vulnerable road users in urban areas** – use of focus campaigns to monitor and check the behaviour and visibility of pedestrians and cyclists as well as their behaviour at pedestrian crossings









# Road Safety Activities at Local Level

Road safety activities carried out at local level play a very important role in the implementation of a regional road safety programme. National and regional targets cannot be achieved without the efforts made at local level.

Consistent awareness-raising at local level ensures direct and unambiguous delivery of the message to road users. Regular campaigns that focus on key road safety topics establish the foundations for a road safety culture.

→ See also Chapter 2

#### Reasons for active participation at local level:

- To increase the sense of well-being and personal safety of all citizens
- To improve the quality of life and standard of living of the local population through traffic calming measures
- Appraisal of local decision-makers based on their efforts to protect and ensure the safety of the local population
- Regular exchanges with those responsible in other municipalities to work together to achieve road safety targets ("no need to constantly reinvent the wheel")

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Road safety work at local level makes good use of the available resources (competences, experience, etc.) in a particular field and identifies synergies to ensure efficient implementation of activities. The importance of road safety in the locality is thus reinforced in collaboration with the members of the local community.

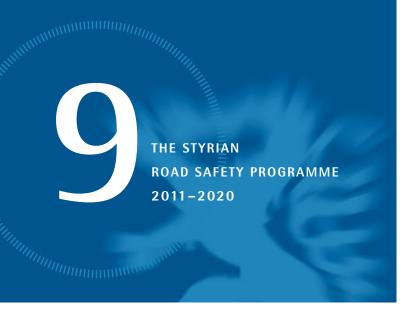


www.radland.steiermark.at

www.verkehr.steiermark.at

#### Contributions to road safety

- → Support for the local communities in road safety issues through coordinated collaboration with designated experts (e.g. for the "safe way to school maps" concept)
- → Promotion of information websites and newsletters in the local community, e.g. www.verkehr.steiermark.at, www.radland.steiermark.at, www.verkehr.steiermark.at
- → Active linking of the municipalities to the State Transport Department and the district administrative authority for knowledge exchange purposes and coordination of road safety measures
- → Integration of road safety activities into local community events (e.g. fêtes, festivals and functions)
- → Evaluation of existing pedestrian crossings for their compliance with guidelines and implementation of the results





## From Idea to Reality

The ideas are plentiful, but turning them into reality is often a complicated process. This chapter is designed to provide municipalities and other interested parties with a brief guide to the implementation of road safety measures.

An analysis of the status quo is crucial to the effective implementation of road safety initiatives. This analysis helps to identify other (similar) situations that can be linked to and/or potentially cause the identified problem.

#### Questions that need to be asked:

- → What traffic problem has been identified?
- → How and when does this problem arise?
- → Who is responsible for resolving this problem?
- → Have any similar problems been encountered here or elsewhere?
- → If so, how were they resolved?

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Discussing the situation with the people concerned helps to achieve an appropriate solution to the problem. For example, members of the local community can be asked if they have encountered any difficult situations or are aware of any problems in the locality. An analysis of the results of such surveys provides decision making support and also awakens the interest of local residents in road safety issues and potential changes.

When carrying out road safety projects, it is important to make use of relevant communication channels to implement new ideas. These could include, for example, a local newspaper or a project information sheet.

The importance and involvement of multipliers have been clearly shown to be success factors in awareness-raising activities. Multipliers boost the acceptance of a project and lay the foundations for its continuation.

It is advisable to involve appropriate road safety experts in the implementation of road safety projects. Their experience and competences help to ensure success.

#### **Contacts**

- → The mayors in the municipalities
- → The road safety offices in the district administrative authorities
- → The traffic experts in the district construction management offices
- → The Styrian Department of Transport
- → The Austrian Road Safety Board (Styrian office)

#### Example of a local community project

### Construction of a pedestrian crossing



#### **Starting point:**

Members of the community approach the local authorities with a request for a pedestrian crossing.

#### Analysis of the status quo:

Assessment of the use criteria in accordance with the Styrian regulations for pedestrian crossings (*Schutzwegrichtlinie\**) by the local authorities:

- Pedestrian frequency
- · Vehicle frequency and speed
- Visibility range and lines of sight

#### **Results:**

The analysis of the status quo indicated that the pedestrian and traffic frequencies were sufficient and the lines of sight were ostensibly adequate to permit a safe crossing at the proposed site. In this particular case, the situation had to be assessed by an independent authority.

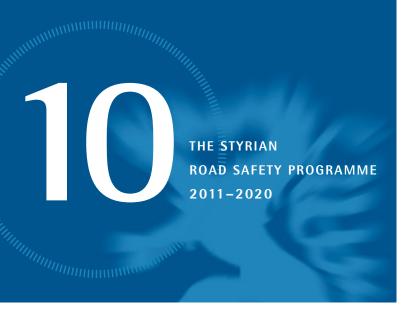
#### Implementation steps:

1. Organisation of a traffic and road user survey to assess the stipulated use criteria. In addition to pedestrian and vehicle frequency, this survey also investigated pedestrian road crossing activities on an approximately 80 m section of road. Vehicle speeds were also measured.

These speeds were then used to calculate the stopping distances that determine the necessary lines of sight.

- **2.** Based on the survey results, the local administrative authority was requested to issue a decree for the construction of a pedestrian crossing.
- **3.** At the subsequent traffic hearing, the local authority's request regarding the construction of the proposed pedestrian crossing was assessed by a road safety expert and certain conditions were imposed to ensure compliance with the applicable regulations for pedestrian crossings (e.g. a lowering of the kerb, lighting for the pedestrian waiting areas and the crossing itself).
- **4.** After successful completion of the required construction measures, the local administrative authority issued the decree for the pedestrian crossing.
- 5. Throughout the process, the local authority kept local residents informed about its plans, the results of the use criteria assessment and the proposed project completion date. In this way, the process remained transparent, and local residents were kept informed about upcoming road safety measures.

<sup>\*</sup> A copy of these regulations can be found in German at: http://www.verkehr.steiermark.at/cms/dokumente/10554022\_15914779/87943579/Schutzwegrichtlinie.pdf





# Styrian Road Safety Fund

- 10.1 Personalised number plates –an individual contribution to road safety
- 10.2 Examples of Road Safety Fund projects

# Personalised number plates - an individual contribution to road safety

Since the introduction of personalised number plates in Austria, all motorists have been able to make an additional contribution to road safety – and an extremely profitable one too.

For a fee of just 228.30 euros, owners of personalised number plates get their own advertising presence on the roads. For companies, such number plates serve as a mobile advertising vehicle. The purchase of a personalised number plate also makes a valuable, individual contribution to promoting road safety activities since the proceeds generated from the sale of such plates flow directly into national and regional road safety funds.

The Styrian Road Safety Fund is administered by the State Government and used solely to finance and/or promote road safety activities, projects and initiatives.

→ For further information, please call +43(0)316/877-3017 or contact your local administrative authority.



# **Examples of Road Safety Fund projects**

#### **INSIDER**

Prevention campaign for vocational school pupils



INSIDER – Road accidents kill friends Do something to prevent them!

Using the CLOSE TO method, workshops are held with young people in vocational schools in Styria to discuss traffic related topics and identify road safety aspects. In 2010, this state-funded project was implemented by Austrian Mobility Research (FGM-AMOR) in several schools across Styria.

Content of the four-hour workshop:

 "Being mobile": What modes of transport are available to the workshop participants? How can they get safely to their leisure and social activities? What risks have they personally taken on the roads? What risks have they seen being taken by other young people?

- Discussion with a young driver who had been involved in an accident: his motives, his experiences and his life since the accident (based on the CLOSE TO project).
- Communication and assertiveness training for specific youth situations with a focus on giving young people the confidence to stand up for not taking risks on the roads.

# TV spot and "White Crosses" campaign

"Thou shalt not kill! Live responsibly."

This is the title of a TV spot\* broadcast to coincide with and promote the "White Crosses" campaign aimed at significantly raising awareness of the need for more responsibility on the roads and greater road safety. It was broadcast on Austrian national television from October to December 2009.

The "White Crosses" campaign showed road users the locations where fatal accidents had occurred on rural roads in the last 15 years. A white cross was erected at the site of each fatal accident. This visualisation using crosses was designed to make road users aware of the need for greater concentration and care when using the roads. Styria ran this campaign in cooperation with the Austrian Road Safety Board.

→ Watch the video at www.youtube.com/watch ?v=8MXkoPspocU+feature=player\_embedded







<sup>:</sup>v=8мхкоPspocu+jeature=ptayer\_embeaae

<sup>\*</sup> Director: Max Zähle

# EU Project "SOL – Save Our Lives"



A comprehensive road safety strategy for Central Europe

#### Styria has been a partner in the EU's SOL project since April 2010.

The SOL project develops strategies to reduce the number of fatalities and injuries on the roads in Central Europe. Targeted road safety plans are being developed and effective measures implemented in 12 pilot project areas in seven countries: Poland, Czech Republic, Slovakia, Hungary, Slovenia, Austria and Italy.

Styria is an active partner in the SOL consortium and assumes a major role in the implementation of the project as a result of the state's extensive, long-term experience with road safety programmes. Styria has long been a pioneer in this field, not least through the development and establishment of the state's own road safety advisory council and its constant implementation of road safety measures in the region.

The "Styrian Road Safety Programme 2011–2020" is sponsored under the European Union's "SOL – Save Our Lives" project. SOL is being implemented as part of the EU's "Central Europe" programme and is co-financed by the European Regional Development Fund (ERDF).

→ More information on the SOL project can be found at: www.sol-project.eu







## **Appendix**

#### **Definitions**

**2**<sup>nd</sup> **phase driver education:** a driving instruction model in which novice drivers have to complete further training units after taking the driving test.

**Accident database:** a system for collecting and analysing data on road accidents and identifying high accident concentration sections of road.

**Audit:** the identification of early, independent and systematic safety deficits.

**Bicycle infrastructure:** areas of the road designed for use by bicycle traffic. According to the Austrian Road Traffic Act, these comprise: cycle lanes, multi-use paths, cycle paths, paths for pedestrians and cyclists, and bicycle crossings.

"Born to Ride": a road safety campaign for motorcyclists; project run in cooperation between the police, the Austrian Road Safety Board and the ÖAMTC (the Austrian Automobile, Motorcycle and Touring Club). **CLOSE TO:** an accident prevention project aimed at young motorists, www.close-to. net

**Gigaliner:** an "extra-long lorry" – a long combination vehicle up to 25.25 m long and weighing up to 60 t.

High accident concentration sections: according to the Austrian road guidelines and regulations (RVS 02.02.21), a high accident concentration section must meet one of two criteria. A junction or section of road up to 250 m in length is classified as a high accident concentration junction or section if at least three similar personal injury accidents or at least five similar accidents (including material damages accidents) occurred at the same site in one year.

**L17 learner drivers:** young people participating in the L17 accompanied driver training programme to obtain a licence to drive a car (category B licence) at the age of 17.

"Mopeds in Town": a road safety campaign targeted at young motorists and run in cooperation between the police and Arge2Rad (the Austrian Association of Powered Two Wheeler Manufacturers and Importers).

**Road accidents:** for the purposes of the Styrian RSP, these are accidents on roads which result in personal injuries. Road accidents which result in material damages and no personal injuries are not included in the statistics.

**Road Safety Audit (RSA):** an audit carried out in the planning phase of construction and reconstruction projects.

**Road Safety Inspection (RSI)** – a perception physiology and psychology based inspection of the status of a particular section of road (or a road network) based on quality assurance principles in order to remove existing proven accident risks and hazards.

**Section control:** a system used to enforce traffic speed limits over a particular section of road. Section controls do not measure vehicle speed at a specific point, but instead calculate the average speed over a longer section of road.

**Self-explaining roads:** roads that are designed in such a way as to meet the expectations of road users simply by virtue of their design, thereby promoting safe road user behaviour.

**Serious injuries:** the extent of an injury is defined in accordance with the provisions of the Austrian Penal Code (Strafgesetzbuch) for serious and minor physical injuries.

**Vision Zero:** the goal of making the traffic system so safe that no more fatalities or serious injuries are sustained on the roads.

THE STYRIAN ROAD SAFETY PROGRAMME 2011-2020



#### **Publisher:**

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The "Styrian Road Safety Programme 2011–2020" is sponsored under the EU project "SOL – Save Our Lives". SOL is being implemented as part of the EU's "Central Europe" programme and is co-financed by the European Regional Development Fund (ERDF). Legal disclaimer: The sole responsibility for the content of this document lies with the authors. It does not necessarily reflect the official opinion of the European Union. The European Commission is not responsible for any use that may be made of the information contained herein.