

SWOV Annual report 2007

Foreword

45 years SWOV

In 2007 SWOV had its 45th anniversary which, of course, was celebrated. The conference that SWOV organized in the New Church in The Hague was used to present the most important results from the 2003-2006 research programme. These results were summarized in a special publication. This way SWOV met one of their objectives: disseminating knowledge acquired from scientific research, with the hope and expectation that those who are professionally involved in traffic and transport will indeed use this knowledge. Of course we will continue our knowledge dissemination. Also in the year ahead, we wish to invite everybody who is searching for road safety information to visit the SWOV website. The SWOV website offers much information about very many different subjects. And if you do not find what you are looking for, we are always prepared to assist you in finding the information you require. Also in years to come, SWOV will continue its efforts to perform high quality research with a regional, national, as well as an international scope, and hopes to make a contribution to further road safety improvement.

... alive and kicking

In 2007, SWOV started the execution of the 2007-2010 programme (and tied up the loose ends remaining from the previous programme). Again this year, it is fitting to extend our thanks at this location to all those who contributed to SWOV's work. In the first place, these are our own employees. SWOV maintains high standards and also in the past year much was asked of them. The employees' passion and quality ensured excellent achievements. But we also extend our thanks to those who partake in the SWOV board, in the Advisory Boards and in the Support Groups to contribute to the quality of SWOV's work. Without exaggeration we can label it a unique network for the Netherlands. SWOV appreciates the cooperation with different organizations, and wishes to further strengthen the ties in the coming years.

Is the Netherlands safe enough?

Measured by the number of road deaths per 100,000 population, the Netherlands is one of world's safest countries. And the Netherlands has the ambition to maintain its top position and to further reduce the number of traffic casualties. During the last few years, the annual number of road deaths has fluctuated at about 800. But SWOV still thinks the target of no more than 750 road deaths in 2010 is feasible. The ambitions for future years are presently being formulated by the Dutch Ministry of Transport in the *Strategic Road Safety Plan 2008-2020*, which is expected to be published in 2008. SWOV gives its support to the three cornerstones for future policy: *cooperation*, *integral approach* and *Sustainable Safety*. According to SWOV, further road safety improvements must be carried out in a different manner than in the past. Or, as it was formulated in a SWOV report: "*with the odd exception, road unsafety manifests itself increasingly diffuse. The most poignant problems have been dealt with. What remains is a problem that is stripped of its sharpest edges, for which the most obvious improvements have been carried out, and for which further gain will need to be found in less obvious areas, in less orthodox ways. The increasingly diffuse character of the road safety problem asks for a different approach than that of earlier times. And there still are enough possibilities for further improvements.*"

Sustainable Safety: also on DVD and in English

In 2005, the Sustainable Safety vision was updated in the book *Advancing Sustainable Safety*. This book with its 250 pages, describes the vision in its entirety. In 2007, SWOV, together with the Knowledge Platform for Traffic and Transport, used a DVD to make the

essence of the vision visible and more easily accessible. This DVD was distributed in all Dutch regions. In 2006, SWOV published an English translation of the vision: *Advancing Sustainable Safety*. By now, the Sustainable Safety vision is considered as one of the world's leading examples of the *safe system approach*: how to improve road safety effectively and efficiently. This conclusion can be drawn from how the vision is discussed internationally and from the many invitations that ask SWOV to amplify on *Sustainable Safety*. It fills SWOV with due pride that we have been able and allowed to make this contribution to the ideas about road safety.

Contemporary management structure

The SWOV board has taken the initiative to give SWOV a more contemporary management structure. Therefore, the present SWOV board will become a Board of Supervisors, and in the new situation the daily management will be the task of the new SWOV management which will have to consist of at least one person. The present SWOV director Fred Wegman will take this position. The Board of Supervisors will focus on the main lines of SWOV's strategy and will judge the management's decisions afterwards. To a large extent this situation was already daily practise. However, the new management structure will give the director more possibilities for speedy action. The necessary preparations for these changes have for a large part been carried out in 2007 and will be formalized in 2008 by passing the new SWOV statute.

Pieter Jan Biesheuvel
Chairman SWOV board



Fred Wegman
Director



Director's report

SWOV programme 2007-2010 has started

In 2007, SWOV started work on the multi-year programme 2007-2010. This programme will largely continue along the same lines as the previous programme, and with the same mission. With its knowledge SWOV wishes to make a contribution to further improvement of road safety. SWOV wants to increase its knowledge about road safety and ensure that the knowledge that is acquired reaches those who can use it. In other words, SWOV will continue doing scientific research and disseminating its findings.

Cooperation with the region

Nevertheless, the emphases are sometimes somewhat different from previous periods, concerning content as well as in our ambitions. For example, the programme 2007-2010 has a special component in which research for regional authorities will be carried out. Although this activity has only been started a few years ago, we can already conclude that it is successful. Different regions are very interested in possible cooperation and in 2007 this cooperation has already resulted in a number of concrete developments and products. It is clear that these activities benefit both sides. Not only do we bring our knowledge to the regions, we also get a better insight in what is taking place there, which need there is for knowledge, and what the possibilities are to apply this knowledge.

SWOV as a network organization

Even more so than in previous years, our ambition encourages us to strengthen our position as a network institute. Road safety is less and less a solitary concern. In this day and age, road safety can come out better in connection with accessibility and environment, but also, for instance, in relation with public health and the economy. As a network organization SWOV wants to dedicate itself to making road safety join forces with other interests and policy areas of this kind. Increasing the strength of SWOV as a network organization is also illustrated by our commitment to cooperation with other researchers, both in the Netherlands and abroad. In 2007, European cooperation in the framework of European research programmes took a central position in SWOV's international activities.

SWOV as a leading institute

SWOV also intends to continue its development as a leading institute in the field of road safety, with top-researchers at its basis. In support of this ambition, PhD-research has once more been given a well defined place in the programme 2007-2010. As regards to contents this research is closely connected to ongoing research, but in addition it results in a thesis and an academic doctorate. In 2007, this has resulted in a PhD degree for Ragnhild Davidse on the subject *The elderly in traffic*. Another activity is the cooperation with other leading institutes and the exchange of our researchers. Besides the previously mentioned European cooperation, for example, a Memorandum of Understanding with the University of North Carolina, United States, was signed in 2007 and a SWOV researcher carried out research at that university. In 2007, discussions were initiated to start a similar kind of cooperation with MONASH University Accident Research Centre (MUARC) in Melbourne, Australia.

Continued effects of knowledge

A core issue in the programme 2007-2010 is intensifying the effects of SWOV knowledge. Developing new knowledge is useful, but it is at least as important that this knowledge is in fact used. Of course SWOV is not responsible for the concrete political decision making and decision making in accordance with policy. Besides, other aspects than just road safety are often involved. But SWOV aims at its knowledge at least being known in the decision making process, and being taken into account. This makes large demands of the knowledge SWOV makes available. In the first place it is important that the available knowledge meets the demand. In the second place it is important that the knowledge is offered in the correct form

and at the correct time. With the help of our Advisory boards and Support groups we attempt to always connect with is important at different levels. Much of our knowledge already reaches the relevant bodies, for example knowledge about recognizable road layout, about safe and credible limits, about testing novice drivers' hazard perception, about the Segway. The instruction DVD about Advancing Sustainable Safety which SWOV made in 2007 together with the Knowledge Platform for Traffic and Transport is an example of making general knowledge available. Regional road safety organizations also played a major role in the further distribution of the information. In 2007, SWOV started optimizing and embedding the continued effects of knowledge in our daily activities.

45 years SWOV

In 2007, some work had to be done on completing the programme 2003-2006. In addition a generous amount of results from the previous multi-year programme have been made public: several articles were published and presentations were given about the work in the past four years. Another result was the SWOV anniversary conference which was held on April 26th in the New Church in The Hague to celebrate SWOV's 45 year existence from 1962 to 2007. More than 150 guests attended this conference. Presentations and posters were used to put the emphasis of the conference on the results of the programme 2003-2006. A special publication with an extensive survey of the most important findings in that programme gave those present a complete picture of four years of road safety research.

At the conference, Mr. C. Zuidema, manager Road Safety Policy of the Ministry of Transport and Waterworks spoke on behalf of the Dutch Minister of Transport, mr. C. Eurlings. The minister informed those present that the Dutch road safety policy is successful and that this is also due to SWOV's efforts. "The ministry is continuously looking for sound knowledge. We use the building stones that SWOV makes available to us" said the minister. He also stressed the importance of international cooperation and SWOV's good reputation in other European countries.

Strategic Road Safety Plan 2008-2020

Also in April minister Eurlings announced the road safety figures for the year 2006. They showed that the number of road deaths of 811 was practically at the same level as the year before. This strengthens SWOV in its earlier conclusion that the large decreases in 2004 and 2005 were no accidental positive peaks. It really looks like a structural road safety improvement from the year 2004 onward. However, much more can be gained, not only in the number of road deaths, but also in reducing the number of severely injured road crash casualties.

Also from this point of view, the Ministry of Transport and Water management started to develop a long term (2020) strategic vision for road safety. In this plan the three cornerstones for the long term policy have been summarized in the principles Sustainable Safety, Integrality and Cooperation. SWOV fully supports these principles and has actively thought about the actual filling-in and working out of this strategy. SWOV's findings and recommendations have been published in the report *Better safe than sorry*.

A look ahead

In 2008, we will of course continue working on the SWOV programme 2007-2010. Once more we will be happy to use the support and constructive advice given by the Programme Advisory Board, the Scientific Advisory Board, and the four Support Groups. By now, SWOV has also taken initiatives to do research and advisory work in the fields of road safety data and in-depth research. It is not yet entirely clear what form these activities will have, but SWOV will put in extra effort to also make these activities successful.

Number of road deaths stable in 2006

After the spectacular 19% decrease to 881 road deaths in 2004 and a further 7% decrease to 817 in 2005, the number of road deaths in 2006 seems to have stabilized at 811. This brings the average number of road deaths in the past three years well below the number that was to be expected based on the trend in the preceding decade. Therefore, a broken trend is increasingly likely. It is highly unlikely that the considerably lower figures of the past three years in comparison with earlier years are just a coincidence.

Fewer deaths among passenger car occupants, more among cyclists

The stabilization of the number of road deaths in 2006 is valid for all road users. However, when specific groups are considered, we get a more differentiated picture. Compared with the average over the period 2004-2005, the number of road deaths among car occupants decreased by 12%, whereas the number of fatalities among cyclists showed a 16% increase. There are several reasons for the decrease for car occupants: there were fewer crashes between passenger cars, there were fewer crashes during night time, fewer drivers in the age group 18-24 and 40-59 years old were involved in crashes, and the number of crashes on motorways decreased. The increase in the number of fatalities among cyclists must mainly be ascribed to car-bicycle crashes on 50 km/h roads involving older cyclists.

More bicycle kilometres by older cyclists

In 2006, the total mobility decreased slightly, by 0.3%, in comparison with the average over the period 2004-2005. The total cyclist mobility showed a slight increase of 0.3%, but the mobility of older cyclists, the over-60s, had a considerably higher increase of 5%. In combination with the higher death rate of older cyclists, this increase in mobility probably explains the increased number of fatalities for this group.

Fewer vehicle kilometres, more child's seats

Car occupant's mobility decreased more than the general total: it went down 1.8% in comparison with the average in the period 2004-2005. The largest decrease was for the age group 18-24 years old. Their mobility even decreased by 14.5%. Because this group in particular has a relatively high death rate, this group's decreased mobility partly explains the decrease in the number of road deaths among car occupants. Another explanation can possibly be found in the large increase in the use of child's seats in 2006. In 2004, 25% used a child's seat; this had increased to 56% in 2006. The new European legislation on this issue and the extensive accompanying information campaigns have undoubtedly contributed to this positive development.

Extra measures necessary to achieve 2020 target

The 2006 figures are no reason for SWOV to adapt its earlier prognoses about future developments. It remains uncertain whether the target of 580 road deaths in 2020 can be achieved if no extra measures are taken. In the not too distant future, SWOV will make new proposals as to which extra measures these should be. This way SWOV hopes to make a contribution to the contents of the Ministry of Transport's Road Safety Plan 2008-2020. SWOV report 'Road safety in 2006; analysis of crashes, mobility, behaviour and policy' (R-2007-14) is available on the SWOV website under Publications. The report is in Dutch, but it has an English summary.

New incentives for international cooperation

As a national research institute SWOV considers it important to also cooperate at an international level. SWOV has a long international tradition, for example by taking part in international expert groups and European research projects, and by exchanging researchers. In 2007, several activities were undertaken to expand the existing network of international contacts and to continue formalizing them. The Memorandum of Understanding between the University of North Carolina and SWOV which was signed in March 2007 is a good example.

Exchange of knowledge and expertise

International cooperation and the international exchange of knowledge and expertise have always been important to SWOV. We can use the knowledge we gain in these contacts to further road safety in the Netherlands and to improve the quality of our own scientific work. The other way round, we hope that our knowledge and experience can make a contribution to road safety improvements in countries with less of a history in road safety.

Dozens of European projects and international expert groups

European projects are one of the possible ways to achieve the desired international cooperation. In the past decades SWOV has been an appreciated partner in dozens of European cooperations. In 2007, SWOV was in seven European projects that were active in very different areas. Another form of international cooperation is taking part in international expert groups, for examples those formed by OECD/ITF, IRTAD, ETSC, the World Health Organization and the World Bank. From its foundation in 1991 SWOV has taken part in FERSI, a cooperative body presently formed by road safety institutes of 21 European countries.

Memorandum of Understanding

In March 2007, SWOV and the University of North Carolina's Highway Safety Research Centre (HSRC) have signed a Memorandum of Understanding to formalize their cooperation in the field of road safety. The exchange of researchers is part the memorandum. This has resulted in a study visit of a SWOV researcher who studied their Highway Safety Information System in North Carolina. This HSIS is an example of a research database that can be used to determine the relations between accidents and road features. A return visit is expected in April 2008 when an HSRC researcher will come to SWOV to make a contribution to the follow-up of the SUNflower project. SUNflower was a European project that was initially aimed at comparing road safety developments and their explanations in Sweden, the United Kingdom and the Netherlands (the SUN-countries). At a later stage South- and Mid-European countries were also involved in the project.

Liaison member of the American SHRP2

In 2007, SWOV also joined the American Strategic Highway Research Program (SHRP2). The SHRP2 contacts have resulted in SWOV's director Fred Wegman being appointed liaison member of the SHRP2 Technical Coordinating Committee on Safety Research. Furthermore, consultations are taking place with the Monash University Accident Research Centre (MUARC) in Melbourne, Australia to also enter into a Memorandum of Understanding.