From home to school
Greater safety for young cyclists (and pedestrians)

Jack Wolters, Erna Ruijer
Department of Infrastructure, Traffic and Transport of the City of Amsterdam
P.O. Box 95089, Amsterdam 1090 HB, The Netherlands
Email: wolters@ivv.amsterdam.nl

1 Traffic accident statistics
The City of Amsterdam is currently operating a Long-term Road Safety Scheme, the objective of which is to achieve a 25% reduction in traffic casualties by 2000 (against the base year of 1985). This objective has almost been attained: in mid-1999 the number of traffic casualties had fallen by nearly 20%. In 1997, the number of traffic accidents was at its lowest for fifty years. The number of fatalities and casualties requiring hospital treatment fell by approximately 40%. In absolute figures, there was a reduction in fatalities from 38 to 24, and a reduction in casualties requiring hospital treatment from 604 to 363. The number of casualties among cyclists fell by 20% and those among pedestrians by 40%.

The statistics for young cyclists and pedestrians are presented in the table below:

<table>
<thead>
<tr>
<th></th>
<th>Reduction in casualties</th>
<th>Casualties per 100,000 head of population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age 5-9</td>
<td>Age 10-14</td>
</tr>
<tr>
<td>Cyclists</td>
<td>+17%</td>
<td>-32%</td>
</tr>
<tr>
<td>Pedestrians</td>
<td>-49%</td>
<td>-37%</td>
</tr>
<tr>
<td>All</td>
<td>-27%</td>
<td>-30%</td>
</tr>
</tbody>
</table>

The traffic risk for young people is lower than that of the average Amsterdam resident (= 410), but above that of cyclists (= 100) and pedestrians (= 55).
Of all traffic casualties in Amsterdam, 25% are cyclists and 13% are pedestrians. Among the 10 to 14 age group, the figures are 40% cyclists and 32% pedestrians.

2 Road safety policy
The Road Safety Scheme 1995-2000 recognizes that traffic education in Amsterdam must be given a new impulse. Accordingly the Coordination Point for Traffic Education has been set up. Two staff members address issues such as the home-to-school routes for pupils in primary and secondary education. Here, it is important that the material used in class lessons is specifically geared to both the target groups and the local situation. In addition to the implementation of traffic education directed at road behaviour in as many schools as possible, the home-to-school routes are to be screened for road safety problems. On the basis of this screening, and with financial support of the central City authority, the traffic safety problems in the vicinity of the school(s) are being tackled. The 1998-1999 school year saw the commencement of the 'From home to school' pilot project in the Slotervaart district. A handbook has been compiled to enable the other thirteen city districts to follow suit with similar projects. The 'From home to school' project is being implemented in the Osdorp and Oud-Zuid districts during the 1999-2000 school year.
In addition to traffic education and the specific school route projects, Amsterdam is devoting considerable attention, manpower and financial resources to various road safety activities in the areas of information, enforcement by police and other agencies, action to deal with accident black spots, the so-called (risky) 'red routes' and the large-scale introduction of 30 km per hour zones. There is also ongoing discussion and coordination with other road safety partners.

The City of Amsterdam's Road Safety Programme for 2000-2005 includes a number of new objectives: an overall 33% reduction in traffic casualties by 2005 (against the base year of 1985) and a minimum 25% reduction in traffic casualties among the target groups. For one of these target groups - young cyclists - a specific campaign is therefore required.

3  The 'From home to school' project
A survey held in 1998 established that among Amsterdam residents in the 12 to 15 age group, 31% travel to school by bicycle, 27% on foot and 38% using public transport. An important part of the 'From home to school' project is the written survey of schoolchildren, teachers and parents. The survey of the children themselves aims to establish how they travel between home and school, and to identify the risky situations they encounter between home and school, and particularly in the direct vicinity of the school itself. The pupils had to fill in the questionnaire in the classroom. This survey was held in the Slotervaart district (population 43,000) among 438 pupils from nine primary and 689 pupils from nine secondary schools. In the Osdorp district (population 42,000) it was held among 560 pupils from eleven primary schools and 78 pupils from one secondary school.

3.1  The Slotervaart district
In Slotervaart, almost 60% of primary school pupils travel to school on foot, while approximately 75% of secondary school pupils use public transport. In both primary and secondary education, almost 90% (88% and 89%) never cycle to school, or do so only very infrequently. To the question of why this is so, 60% of primary school pupils responded that the school was too close at hand to warrant using the bicycle, while some thirty per cent considered it too dangerous to do so. Among secondary school pupils, around half the respondents stated that the school was too far away to travel by bicycle, 18% do not own a bicycle and 21% consider it too dangerous to cycle from home to school. The pupils also frequently gave the supplementary answers that they 'don't feel like' cycling, that it is too cold to do so in winter, or that there is some technical problem with their bicycle preventing its use. Other answers included, "I'm not the sporting type", "I hate cycling" and "I'm too lazy!"

3.2  The Osdorp district
In Osdorp, almost half the primary school pupils travel to school on foot, while 28% use their bike. The most significant reason for not cycling was given as the school being close at hand to warrant it (cited by 52% of pupils and 51% of parents). Other significant reasons included: too dangerous (32% of pupils, 38% of parents), the school is too far (15%) or no bicycle available (8%). The bicycle is the most widely-used means of transport among secondary school pupils in the district, with 44% cycling to school against 38% using public transport. The most significant reasons for not cycling to school were given as: the school is too far (28%), it is too close to warrant cycling (14%) or cycling is too risky (14%).
4   Activities
Various activities have been undertaken by the City of Amsterdam and its individual administrative
districts (urban boroughs) to improve road safety and to encourage the use of the bicycle. These
include the following.

4.1   Traffic education: introduction of a module addressing aspects of cycling
The results of the survey are to be used in the development of study material specific to the local
situation. In the first instance, the study material will be directed at the 9 to 12 age group. Acquisition
and assimilation of practical skills will be achieved through use of situations familiar to
the pupils. Lessons considering the school area will be supplemented by references to the more
general topics covered in the existing study material used by the schools. This approach will result
in the children being more able to apply the theoretical aspects and acquired behaviour in actual
practice. Each school is to reserve sixteen hours of the (central) education service's time for the
implementation of this teaching programme. These hours will be devoted to intake, design of the
specific traffic education plan, discussions with the teachers involved, and attendance at the
practical lessons.
Earlier this year, a start was made on the preparation of study material for first-year pupils in
secondary education. Specific attention is devoted to ensuring relevance to the problems posed by
these pupils' new, and often longer, home-to-school route. The newly-developed material will
address the changing role of the pupil as road user (whether on public transport or the cycle) in new
and different traffic situations, and against the background of changing road regulations (cyclists
approaching from the right are shortly to have right of way).

4.2   Traffic examination
Each year, a theoretical traffic (road safety) examination is conducted for Group 7 pupils of almost
all Amsterdam primary schools. Just over half the schools also participate in the practical (cycling
proficiency) examination. Many pupils are required to take the practical examination at some
considerable distance from their own school surroundings. Conducting this examination in the local
area seems to have a motivational effect. Following the opening of a new cycling proficiency
examination area in Slotervaart in 1999, the number of local participating schools increased from one
to seven. A further seven schools have expressed a desire to participate in 2000.

4.3   Traffic practice garden
Amsterdam is currently working towards creating a traffic practice area, which will enable pupils to
the traffic theory learnt at school into practice, without adult help but with no risk of accidents. By
combining the educational function of such an area with its recreational possibilities (whereby it will
be open to the public at weekends and on Wednesday afternoons), the annual operating costs can be
partially offset by revenue. The Zuideramstel district is prepared to cooperate in the realization of
this traffic practice garden in the Amstelpark (close to the RAI Conference Centre). A design has
already been produced. Construction costs have been budgeted at NLG 1 million. The traffic
practice garden is expected to open in 2001.

4.4   Screening of school routes
The survey results are also to be used to improve road safety on the home-to-school routes and in
the immediate vicinity of schools. A particular area for attention will be the parking congestion that
ensues at the end of the school day. Using both the survey results and the traffic accident statistics,
the Slotervaart district has examined a number of problem areas and has made proposals for both short-term and long-term infrastructural measures. In addition to the introduction and (re-)design of 30 km/h areas, various supplementary physical measures are shortly to be introduced in Slotervaart. These include extra lane markings, central reservations, fencing, extra traffic islands (including those used for bus stops), roundabouts and traffic lights. The central City authority is to provide a 50% subsidy for the construction of these supplementary infrastructural measures.

4.5 The 'Ethnic minorities on cycles' project.
The surveys show that children in both districts make little use of the cycle on the way to and from school. It is thought that this applies in particular to children of an ethnic background other than Dutch. A study conducted in Amsterdam (under the title 'Cycling - I don't have time for that!') established that ethnic minority women do not cycle, and that the lack of any cycling 'culture' results in aspects of cycling not being passed on to children in the home situation. This is particularly the case among the Moroccan and Turkish communities. Because this situation can have major consequences in terms of future road behaviour (the children of today are, after all, the adults of tomorrow), the City council has commissioned a study into the underlying reasons for the transport preferences identified. Ways of encouraging bicycle use among the ethnic minorities are also to be investigated.

4.6 Bicycle inspections
In 1997, a campaign directed towards cyclists was conducted under the title 'No light, no life'. The campaign involved the police devoting extra attention to the physical condition of bicycles on the roads (with particular regard to lighting) and the road behaviour of cyclists. Furthermore, motorists whose conduct was likely to endanger cyclists on the through-routes (e.g. by 'jumping' red lights or parking on cycle lanes) were summoned or their vehicles towed away. In November / December, 35,000 official warnings ('yellow cards') were issued to cyclists who were in contravention of the regulations. Schools and bicycle storage areas were also visited. In January / February, 2,000 fixed-penalty tickets (in the form of 'red cards') were issued to cyclists for various offences. However, in the case of technical shortcomings, a system was applied whereby the fixed-penalty ticket would be withdrawn if the bicycle was presented to the local police within one week with all faults rectified. Almost 85% of those receiving a penalty ticket took advantage of this system.

4.7 Latest news (from The Hague)
To encourage the use of the bicycle by secondary school pupils, the Aloysius College in The Hague has launched a novel campaign which is certainly suitable for use elsewhere. Every pupil who cycles to and from school during the campaign (13 to 28 April) receives a stamp on his or her 'cycling record card'. Those able to submit a fully-stamped card may select one of the free gifts supplied by various sponsors. There is also a chance to win a new bicycle. If a pupil does not actually own a bicycle, he or she can borrow one for the campaign. Those wishing to purchase a bicycle can take advantage of special discounts. Maps and written directions along safe school routes are available to those who do not know the way. When this campaign started, over 800 pupils (out of a possible one thousand) took part. The preliminary result is that some 200 pupils have resumed cycling to school, with thirty making use of the free loan bicycles. Eventually 670 pupils have been able to prove that they have cycled to school for ten schooldays in a row.
Appendix
Amsterdam has a population of approximately 730,000. The demographic composition by ethnic background of children in Amsterdam, Slotervaart and Osdorp is shown in the table below.

<table>
<thead>
<tr>
<th></th>
<th>Netherlands</th>
<th>Morocco</th>
<th>Turkey</th>
<th>Suriname &amp; Neth. Antilles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amsterdam</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-9 years (5.25%)</td>
<td>16.5%</td>
<td>9.5%</td>
<td>18.5%</td>
<td>35%</td>
</tr>
<tr>
<td>10-14 years (4.65%)</td>
<td>17.5%</td>
<td>9.5%</td>
<td>22%</td>
<td>32.5%</td>
</tr>
<tr>
<td>Slotervaart</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-9 years (7.2%)</td>
<td>24%</td>
<td>11%</td>
<td>14%</td>
<td>35%</td>
</tr>
<tr>
<td>10-14 years (6.3%)</td>
<td>29%</td>
<td>13%</td>
<td>16%</td>
<td>26%</td>
</tr>
<tr>
<td>Osdorp</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-9 years (6.6%)</td>
<td>25%</td>
<td>14%</td>
<td>13%</td>
<td>35%</td>
</tr>
<tr>
<td>10-14 years (5.9%)</td>
<td>26%</td>
<td>13%</td>
<td>14%</td>
<td>32%</td>
</tr>
</tbody>
</table>

For information about traffic education projects, you can phone +31 (0) 20 5565 219 or fax +31 (0) 20 5565 719