pedestrians, Two-wh Eelers and road saf Ety

## pedestrians, two-wheelers and road safety

A statistical comparison of pedestrian, cyclist and moped-rider road-traffic fatalities in The Netherlands from 1968 to 1972

INSTITUTE FOR ROAD SAFETY RESEARCH SWOV

The Institute for Road Safety Research SWOV was founded in 1962. Its object is, on the basis of scientific research, to supply the authorities with data for measures aiming at promoting road safety. The information obtained from this scientific research is disseminated by SWOV, either as individual publications, or as articles in periodicals or via other communication media.
SWOV's Council consists of representatives of various Ministries, of industry and of leading social institutions.
The Bureau is managed by E. Asmussen, SWOV's Director. Its departments include: Research Policy, Research Co-ordination, Research Services, Theoretical Research Pre-crash Projects, Applied Research Pre-crash Projects, Crash and Post-crash Research, and Information.

## Contents

Foreword ..... 7
Summary ..... 8

1. Demographic variables ..... 11
1.1. Sex ..... 11
1.2. Age ..... 11
2. District variables ..... 13
2.1. Province ..... 13
2.2. Inside and outside built-up areas ..... 13
2.3. Municipal population ..... 17
3. Local factor variables ..... 19
3.1. Location on road ..... 19
3.2. Object collided with ..... 19
4. Circumstantial variables ..... 21
4.1. Month of the year ..... 21
4.2. Day of the week ..... 21
4.2.1. Daytime or nighttime ..... 21
4.3. Time of day ..... 25
4.4. Weather and lighting conditions ..... $25^{\circ}$
5. Nature of injuries ..... 27
List of related SWOV publications ..... 28
Tables ..... 29
.

## Foreword

This report on Pedestrians, Two-wheelers and Road Safety was compiled at the request of the Interdepartmental Project Group on Pedestrians and Two-wheelers, initiated by the Minister of Transport and Waterways. The terms of reference of this Project Group are to draft guide-lines and formulate measures to make the roads safer for pedestrians, cyclists and moped riders inside built-up areas.

Data were collected from the available Dutch source, the Central Bureau of Statistics in The Netherlands CBS, on pedestrian, cyclist and moped-rider traffic fatalities from 1968 to 1972. Use could only be made of statistics for pedestrians, cyclists and moped riders killed in traffic accidents because no other recent, sufficiently differentiated and or reliable material is available. These statistics were provided by the Central Bureau of Statistics CBS and were worked out in greater detail by SWOV researchers. The variables that were successively gone into related to demographic factors (sex and age), district characteristics (province, inside or outside a built-up area and municipal population), local factors (location on road and object collided with), other circumstances (month of the year, day of the week, time of day and weather and lighting conditions) and lastly, the nature of the injuries.

In view of the limited nature of the available material, it is unfortunately impossible to use it as a basis for direct indications for concrete measures which might solve the problems of the dangers facing pedestrians, cyclists and moped riders. These data, therefore, are only of limited value in the framework of policy-preparatory research which SWOV - in view of the importance of this to the community - regards as one of its principal tasks. They may, however, serve to indicate the scope and nature of the problem so that the need for further study and research can be pointed out.
It seems advisable to examine in the future to what extent the absolute figures given can be related to (as yet unavailable) exposure data such as kilometres walked or ridden per annum. Such ratios provide better opportunities for explaining established differences than absolute figures.

This report was compiled by J.H.Kraay, Sociologist, (Department of Applied Research Pre-crash Projects).

E.Asmussen<br>Director Institute for Road Safety Research SWOV

## Summary

Fatal traffic accidents to pedestrians, cyclists and moped riders involve many more males than females.

The 0 to 9 year and 60 year or older age groups represent a very high proportion of pedestrian fatalities. In these groups males are the principal victims. Pedestrian fatalities occur more inside built-up areas than outside, except in the 10 to 19 age group. In cyclist fatalities, the 10 to 19 and the 60 or older age groups form a very high proportion. Here, too, there is a high proportion of males. Cyclist fatalities are about evenly divided between inside and outside built-up areas; the 20 to 29 age group fatalities occur most in built-up areas.
Most moped-rider fatalities occur in the 10 to 19 age group. There are more males than females in all age groups. Moped rider fatalities are about equally divided as between inside and outside built-up areas; only the 30 to 39 and 70 or older age groups are represented more outside built-up areas. Among female moped rider fatalities inside built-up areas, the 10 to 19 age group is by far the greatest.

The smaller the population of a municipality is, the more pedestrian and two-wheeler fatalities there are per 100,000 inhabitants. Municipalities with over 200,000 inhabitants are an exception as regards pedestrian deaths. But a sub-division between inside and outside built-up areas shows that the above tendency does not apply to inside builtup areas alone. This implies that in smaller and very small municipalities comparatively more pedestrian and two-wheeler fatalities occur outside built-up areas than inside.

The vast majority of pedestrian fatalities occur on straight roads, whereas cyclist and moped-rider fatalities are divided equally between straight roads and intersections. This applies both inside and outside built-up areas.
The objects with which pedestrians and two-wheelers have fatal collisions are mainly private cars, and then motor trucks.
Pedestrian fatalities occur mainly on Fridays, while cyclist fatalities are more evenly divided over the days of the week, with the favourable exception of Saturdays, Sundays and public holidays. As regards moped-rider fatalities no pronounced differences are found between the days of the week.
Of all nighttime moped-rider fatalities, the proportion of the 10 to 19 and 20 to 29 age groups is very high on all days of the week.
Most pedestrian and two-wheeler fatalities occur between 16.30 and 18.30 hours. Of pedestrian fatalities, the vast majority are in the 0 to 9 and 60 or older age group. As regards moped riders, all age groups are about evenly divided, with the favourable exception of the 0 to 9 group.
As regards pedestrian and cyclist fatalities in the dusk and after dark, a substantial proportion are in the 60 or older age group. In moped-rider fatalities in the dusk and after dark, however, the 10 to 19 age group occurs most.

Statistics on the nature of injuries show that the most common injuries suffered by the pedestrians and two-wheelers and by other road users are head injuries, and after that leg injuries.


Figure 1. Pedestrian, cyclist and moped-rider fatalities in the ages 0 to 20 years inside built-up areas from 1968 to 1972.

## 1. Demographic variables

### 1.1. Sex

The percentage of males among pedestrian, cyclist and moped-rider* fatalities in the period 1968 to 1972 was well above that of females; for males the respective percentages were 64.6, 72.2 and 83.4 (Table 1).

### 1.2. Age

Classification by age groups shows that those from 60 years onward together accounted for $42.5 \%$ of pedestrian fatalities, and the 0 to 9 age group for $31.3 \%$ (Table 2 ).
Classification by age groups in the case of cyclists' fatalities shows the same pattern for the age groups from 60 on, i.e. $45.2 \%$; for the 10 to 19 age group the proportion is $21.5 \%$, and for the 0 to 9 age group $14.3 \%$ (Table 2).
For moped riders, classification by age groups gives $21.6 \%$ for 60 years on. The 10 to 19 age group occurs most in this case, at $38 \%$; the proportion in the 20 to 29 age group in this case is $15.3 \%$ (Table 2).
Whereas in the case of pedestrian fatalities the age groups from 60 on and from 0 to 9 years are very pronounced, in the case of cyclists and moped riders this applies to the age groups from 60 onward and from 10 to 19 (Table 2).

Figure 1 shows that up to the age of 21 most pedestrian fatalities occur at the age of 3 ; most fatal accidents to moped riders up to the age of 21 occur at the age of 16 . No such striking differences can be detected for fatalities of cyclists up to 21 years, but seven to fifteen-year olds occur more than the other age groups.

Table 3 shows the age of pedestrian, cyclist and moped-rider fatalities according to sex. As to pedestrian fatalities it can be seen that males occur more than females.
The same applies to cyclist fatalities. It is striking that cyclist fatalities in the age group from 70 years on, by far the biggest proportion of the total, are nearly $90 \%$ males.
In moped-rider fatalities, the proportion of males is generally still greater than for pedestrians and cyclists. In the 70 or older age group the fatalities are nearly all males. Males from 10 to 19 years show a very high proportion of the total number of mopedrider fatalities.

An examination as to whether the pattern of accidents has shifted in the course of time reveals no great differences in pedestrian and cyclist fatalities. The minor percentage differences are due mainly to the low absolute figures (Tables 4a and 4b). In the case of

[^0]moped-rider fatalities the proportion in the 10 to 19 age group has increased: from $34.9 \%$ in 1968 to $42.3 \%$ in 1972 (Table 4c).

## 2. District variables

### 2.1. Province

Classification by provinces shows that the four biggest provinces population-wise: Noord-Brabant, Noord-Holland, Zuid-Holland and Gelderland, are also those with the highest proportion of pedestrian, cyclist and moped-rider fatalities (Table 5).

Related to provincial population, however, Friesland, Drenthe and Limburg have the highest numbers of pedestrian deaths per 100,000 inhabitants. For cyclist fatalities they are Overijssel, Friesland and Drenthe; for moped riders they are Drenthe and NoordBrabant. It is striking that Zuid-Holland has the lowest number of fatalities per 100,000 inhabitants for all three categories of road users.

### 2.2. Inside and outside built-up areas

Most pedestrian fatalities ( $63.2 \%$ ) occur inside built-up areas (Table 6a).
The groups from 60 onward and 0 to 9 years are again represented most ( $48.1 \%$ and $32.1 \%$ respectively). The 10 to 19 age group is noticeably more strongly represented for pedestrian fatalities outside built-up areas than inside ( $13.3 \%$ as agalnst $4.9 \%$ ). As against this, the proportion of the 70 or older age group outside built-up areas is lower than inside ( $21.4 \%$ as against $34.7 \%$ ).

In the case of cyclist fatalities, the difference between inside and outside built-up areas is not as great as for pedestrians: $54.4 \%$ and $45.6 \%$ respectively (Table 6b).
In the case of cyclist fatalities, the age groups from 60 onward and from 10 to 19 occur especially both inside and outside built-up areas. Only the 70 or older age group is more strongly represented outside built-up areas than inside ( $32.5 \%$ as against $24.7 \%$ ).

Table 6c shows that the division of moped-rider fatalities as between inside and outside built-up areas is about equal ( $50.8 \%$ and $49.2 \%$ respectively).
Here again, the age groups from 60 onward and from 10 to 19 provide the highest proportion both inside and outside built-up areas. There are also hardly any differences in the percentages of moped-rider fatalities as between inside and outside built-up areas.

If pedestrian fatalities inside and outside built-up areas are classified by sex (Table 6a), the proportion of males, both inside $a^{\text {nd }}$ outside built-up areas, is generally found to exceed that of females. An exception is that females in the 60 to 69 age group occur slightly more than males inside built-up areas $51 \%$ as against $49 \%$ ). It is al so notiœable that the proportion of males outside built-up areas is significantly greater ( $71.3 \%$ ) than inside ( $60.7 \%$ ).

$\qquad$

Figure 2a. Pedestrian fatalities, numbers per age group according to sex and accident location from 1968 to 1972.


Figure 2b. Cyclist fatalities, numbers per age group according to sex and accident location from 1968 to 1972.


Figure 2c. Moped tider fatalities, numbers per age group according to sex and accident location from 1968 to 1972.

In cyclist fatalities, too, there are clearly more males than females (Table 6b). But there is hardly any difference between males ins ide or outside built-up areas: $70.8 \%$ inside and $73.9 \%$ outside.
In moped-rider fatalities, males occur more, both inside and outs lde built-up areas, than pedestrians and cyclists: $80.9 \%$ inside and $81.6 \%$ outside (Table 6 c ). In the 60 to 69 and 70 or older age groups, the proportion of males is higher than in the other groups, both inside and outside built-up areas.

The best way is to relate the difference between ins ide and outside built-up areas to sex and age. Figures $2 \mathrm{a}, 2 \mathrm{~b}$ and 2 c make this possible; they are based on the same figures as Tables $6 \mathrm{a}, 6 \mathrm{~b}$ and 6 c .
Figure 2a again shows that the highest peaks in pedestrian fatalities are in the 0 to 9 and the 60 and onward age groups. There are many more males than females. Moreover, in these age groups there are significantly more pedestrian deaths inside built-up areas than outside.
Figure 2 b shows a slight peak in cyclist fatalities for the 10 to 19 age group, especially for males inside built-up areas. In the 60 and onward age groups there is a high peak for males only, both inside and outside built-up areas.
Figure 2c shows that for moped-rider fatalities there is a high peak in the 10 to 19 age group, particularly for males, both inside and outside built-up areas. In this age group the proportion of females inside built-up areas is a little higher than outside. As a whole, there are many more male moped-rider fatalities than female. As to males in the 60 to 69 age group, there is also a slight peak both inside and outside built-up areas.

### 2.3. Munic'pal population

It can be concluded from Table 7a that the smaller the municipal population is, the more pedestrian, cyclist and moped-rider fatalities there are per 100,000 inhabitants. Only the relative number of pedestrian fatalities in municipalities with more than 200,000 inhabitants forms an exception-
It is striking that, in municipalities with fewer than 20,000 inhabitants the number of pedestrian, cyclist and also moped-rider fatalities per 100,000 inhabitants compares unfavourably with national averages. But if a subdivision is made for inside and outside built-up areas, the above trend does not apply inside built up areas (Table 7b). It is therefore determined entirely by the numbers of fatalities per 100.000 inhabitants occurring outside built-up areas. The smaller the municipal population, therefore, the greater the relative number of fatalities outside the built up area, in fact without the number of fatalities inside built-up areas being exceeded by that outside, even in the smallest municipalities.

In municipalities with fewer than 20,000 inhabitants most pedestrian fatalities occur in the 0 to 9 age group; in those with more than 20,000 inhabitants, most pedestrians killed in built up areas are 60 years or older (Table 8a).
In the case of cyclist fatalities inside built up areas, espectally the 10 to 19 and from 60 onward age groups are strongly represented (Table 8b). In municipalities with fewer than 20,000 inhabitants, the 0 to 9 age group also occupies an important place.

Table 8 c shows that of moped-rider fatalities inside built-up areas, most are in the 10 to 19 age group. In municipalities with 5,000 to 10,000 inhabitants the 10 to 19 age group account for as many as $51.6 \%$ of all moped riders killed in these municipalities.

## 3. Local factor variables

### 3.1. Location on road

Table 9 shows that the vast majority of pedestrian fatalities occur on straight roads ( $77 \%$ ), while cyclist and moped-rider fatalities are more evenly divided between straight roads and intersections (cyclists $47.2 \%$ on straight roads and $48 \%$ at intersections; moped riders $48.3 \%$ on straight roads and $43 \%$ at intersections).
On straight roads, comparatively more pedestrians are killed outside built-up areas than inside ( $82.6 \%$ as against $73.8 \%$ ). This likewise applies to cyclists and moped riders (cyclists $51.3 \%$ on straight roads outside built-up areas compared with $43.7 \%$ on straight roads inside; moped riders $53.7 \%$ and $43 \%$ respectively). At intersections inside built-up areas more pedestrians, cyclists and moped riders are killed than at intersections outside.

Table 10a shows that pedestrian fatalities at intersections inside built up areas occur mainly in municipalities with over 200,000 inhabitants ( $43 \%$ ); inside built-up areas these municipalities also have a large proportion of pedestrian fatalities on straight roads ( $20.1 \%$ ).
Table 10b shows that more cyclists are killed at intersections inside built-up areas in municipalities with 100,000 to 200,000 inhabitants ( $20.5 \%$ ) than in those of adjoining magnitudes. On straight roads inside built-up areas more cyclists are killed in municipalities with 20,000 to 50,000 inhabitants ( $19.3 \%$ ) than in those of adjoi ring magnitudes. Of the moped-rider fatalities at intersections inside built-up areas (Table 10c) most fatalities occur in municipalities with over 200,000 inhabitants ( $24.8 \%$ ). On straight roads inside built-up areas more moped riders are killed in municipalities with 20,000 to 50,000 inhabitants $(18.9 \%)$ than in those of adjoining magnitudes.

Table 11 shows that persons 60 years or older account for very ma $n$ ly of the pedestrians killed in built-up areas at intersections and on straight roads: $59.5 \%$ and $45 \%$ respectively. The proportion of these age groups together is likewise high among cyclists killed inside built-up areas at intersections and on straigh $t$ roads: $514 \%$ and $34.1 \%$ respectively. Of moped-rider fatalities inside built-up areas at intersections and on straight roads, however, the 10 to 19 and 20 to 29 age gro ups represent the highest proportion: $50.6 \%$ at intersections and $57.3 \%$ on straight roads.

### 3.2. Object collided with

Of fatally injured pedestrians, cyclists and moped riders, $66.6 \%, 594 \%$ and $42.9 \%$ respectively were killed in collisions with private cars $17.1 \%$ of pedes trian fatalities, $25.6 \%$ of cyclist fatalities and $23.2 \%$ of moped-rider fata lities were caused in collisions with motor trucks. In other words: of the pedestrian and two wheeler fatalities a
total of $78.2 \%$ are attributable to collisions with private cars or trucks (Table 12). As compared with cyclists and moped riders, pedestrians are kiled more in collisions with private cars and relatively less in collisions with trucks.

Furthermore, $5.8 \%$ of pedestrian fatalities are due to collisions with moped riders and $4.8 \%$ of moped-rider fatalities to collisions between mopeds themselves. Another remarkable feature is the high percentage of single-vehicle moped collisions $(16.8 \%)$.

## 4. Circumstantial variables

### 4.1. Month of the year

A comparison of pedestrian fatalities according to the month of the year shows that the months of October, November and December compare unfavourably with those for the other months (Table 13).
In the case of cyclist fatalities, especially June, August and September compare unfavourably. For moped riders the months from June to September compare unfavourably, with July as the worst.
The monthly figures for pedestrian fatalities compare rather favourably with those for the other traffic fatalities in May to September. For cyclists, February, March, July and December compare favourably, and for moped riders November to March.

### 4.2. Day of the week

Classification by the day of the week shows that most pedestrian fatalities occur on Fridays. Cyclist fatalities are spread evenly over the working days; Saturdays, Sundays and public holidays show a favourable difference (Table 14). As regards moped riders, there are no pronounced differences in the day of the week.

### 4.2.1. Daytime or nighttime*

$88.5 \%$ of pedestrian fatalities occur in daytime and $11.5 \%$ at nighttime (Table 15 a ).
The 20 to 29 age group differs most from this distribution, with $61.5 \%$ in daytime and $38.5 \%$ at nighttime. The 0 to 9 age group appears only in pedestrian fatalities in daytime.
Although only $9.4 \%$ of pedestrian fatalities in the 70 or older age group occur at nighttime, the absolute number in this group is nevertheless the highest.
For pedestrian fatalities at nighttime on working days the age groups from 60 onward are very strongly represented (together $46.7 \%$ ), similarly to pedestrian fatalities in daytime on Sundays and public holidays (together $45.8 \%$ ).

Table 15 b shows that only $7.2 \%$ of cyclist fatalities occur at nighttime compared with $92.8 \%$ in daytime.
This distribution differs mostly for the 20 to 29 and 30 to 39 age groups which, moreover, have the lowest absolute total numbers of cyclist fatalities. Compared with the others, this group has higher percentages of cyclist fatalities at nighttime ( $29.2 \%$ and $23.3 \%$ respectively). Here again, there were no cyclist fatalities at nighttime in the 0 to 9 age group.

* 'Nighttime' is defined as: from 22.00 to 04.00 hours.



Figure $3 a$. Percentages and total numbers of pedestrian fatalities by age groups and time of day from 1968 to 1972.



Figure $3 b$. Percentages and total numbers of cyclist fatalities by age groups and time of day from 1968 to 1972.


Time


Figure $3 c$. Percent ages and total numbers of moped-rider fatalities by age groups and time of day from 1968 to 1972.

Of daytime cyclist fatalities, on Saturdays, Sundays and public holidays the 70 or older age group invariably shows the highest proportion $(30.1 \%, 28.8 \%$ and $25.1 \%$ respectively).

Of moped-rider fatalities, $80.1 \%$ occur in daytime and $19.9 \%$ at nighttime (Table 15 c ). Similarly to cyclists, the 20 to 29 and 30 to 39 age groups differ most from the overall daytime/nighttime distribution.
In the classification of moped-rider fatalities according to day of the week and daytime and nighttime, the 10 to 19 age group occurs by far the most in all cases.

### 4.3. Time of day

Most pedestrian fatalities occur between 16.30 and 18.30 hours (Figure 3a). This is attributable mainly to the high peaks of the 0 to 9 and 60 or older age groups at these times.
For pedestrian fatalities in the 0 to 9 age group there is also a peak from 10.30 to 12.30 hours. In the 10 to 19 age group they are spread more over the hours of the day, as are those in the 20 to 59 age group. In the 60 or older age group the abovementioned peak from 16.30 hours continues in the period 18.30 to 20.30 hours.

For cyclist fatalities, too, the highest peak is observed from 16.30 to 18.30 hours (Figure 3b). This is largely attributable to the 60 or older age group. The other age groups also reach the highest figures at this time, but are otherwise spread more evenly over the hours of the day.

For moped riders there are three peaks, viz. from 06.30 to $08.30,16.30$ to 18.30 and 22.30 to 00.30 hours (Figure 3c). They are due mainly to the more or less equal proportions in the 10 to 19 and 20 to 59 age groups, except for the 16.30 to 18.30 peak in which the 60 or older age group forms a substantial proportion with its highest figure for the day.

### 4.4. Weather and lighting conditions

As Table 16 shows, the great majority of pedestrian, cyclist and moped-rider fata hities occur in dry weather. Of pedestrian fatalities, the 0 to 9 age group forms a high proportion in dry weather and the 60 or older age group in bad weather. Cyclist fatalities include the 70 or older age group most, whether in dry weather or during precipitation (fog, rain, hail, snow or glaced frost). Compared with the distribution found in Table 2 (i.e. not subdivided according to more variables), the 0 to 9 age group is greatly under-represented during precipitation ( $7.1 \%$ in Table 16 and $14.3 \%$ in Table 2). Slight over tepresentation of cyclist fatalities during precipitation is found for the 50 or older age groups. In both dry weather and during precipitation, the 10 to 19 and 20 to 29 age groups have the highest proportion of moped-rider fatalities. If a comparison is also made with the distribution found in Table 2, there is overrepresentation, during precipitation, of the 20 to 29 and 60 to 69 age groups, and under-representation of the 70 or older age group-

The classification based on lighting conditions (Tables 17a, 17b and 17c) shows that $61.9 \%$ of pedestrian fatalities and $61.1 \%$ of moped-rider fatalities occur in daylight; for cyclists the proportion is as high as $74.7 \%$.
In daylight, in the case of pedestrian fatalities (Table 17a), the 0 to 9 age group is represented most ( $47.6 \%$ ), an over-representation compared with Table 2. In a similar comparison the 60 or older age groups are under-represented after dark and in the dusk, and while the road lighting is on.
Among cyclist fatalities in daylight (Table 17b), the highest proportion ( $32 \%$ ) is in the 70 or older age group; compared with Table 2 there is some slight over-representation. In this way, there is likewise a slight over-representation of the 0 to 9 age group. For pedestrian and for cyclist fatalities after dark and in the dusk, the biggest proportion is accounted for by the 60 or older age groups.
Among moped-rider fatalities in daylight (Table 17c) the biggest proportion is in the 10 to 19 age group ( $33.7 \%$ ); compared with Table 2, however, there is some slight under-representation. The 60 or older age groups, as compared with Table 2, are over-represented in daylight. As compared with Table 2, in the case of moped-rider fatalities in the dusk and after dark, the 10 to 19,20 to 29 and 30 to 39 age groups are over-represented.

## 5. Nature of injuries

Tables 18a, 18b, 18c and 18d are based on statistics, provided by the Medical Records Association (SMR), of road accident casualties admitted to hospitals affiliated with $t$ he SMR, in 1970, 1971 and 1972. They incorporate the principal and ancillary diagnoses of the casualties.
They show that head and cervical injuries to pedestrians, cyclists and moped riders, as for all road users combined, are the most common injuries, followed in all cases by leg injuries.
There are no major differences in type of injury as between the various age groups.

## List of related SWOV-publications

The following SWOV publications and articles and papers published by SWOVresearchers provide information on the matters dealt with in this report and other related subjects:

- A pilot study for the project Pedestrian safety in built-up areas. J.H.Kraay, Sociologist. Paper presented at the NATO-CCMS conference, Brussels, 24 September 1971.
- Evaluation of a number of measures for increasing pedestrian safety. J.H. Kraay, Sociologist. Paper presented at the NATO-CCMS conference, Brussels, 24 September 1971.
- Countermeasures in the field of human factors in relation to pedestrian behaviour, regulations and law enforcement. J.H. Kraay. In: Pedestrian safety project. Committee on the Challenges of Modern Society CCMS-report No. 27, pp. 34-48. U.S. Department of Transportation, 1974.
- Rules of conduct for pedestrians and motorists on or near zebra crossings. [J.H.Kraay]. In: Pedestrian safety project. Committee on the Challenges of Modern Societ y CCMS-report No. 27, pp. 49-54. U.S. Department of Transportation, 1974.
- Safety of pedestrian crossing facilities; An international comparative research on the effect of variously composed sets of pedestrian crossing facilities (zebra crossings, signal controlled crossings, grade separated crossings) on pedestrian safety in towns. J.H. Kraay \& M.Slop. Publication 1974-2E. Institute for Road Safety SWOV, Voorburg, 1974.58 pp ., ill.
- A comparative investigation in Delft into pedestrian safety in the residential districts of Gillis and Fledderus. Contributed to OECD Semi-independent Working Group on Pedestrian Safety. J.H. Kraay \& V.A. Güttinger. Institute for Road Safety Research SWOV, Voorburg, 1974.
- Safety of pedestrian crossing facilities. [J.H.Kraay, e.a.]. Traffic Engineering and Control 16 (1975) 3: 124-126.
- Crash helmets for moped-riders. SWOV (Information Department). Publication 1975-1 E. Institute for Road Safety Research SWOV, Voorburg, 1975. 24 pp.
- Influencing road-users' behaviour; and its application for promoting the use of safety devices. SWOV (P.C. Noordzij). Publication 1976-1 E. Institute for Road Safety Research SWOV, Voorburg, 1976. 35 pp .
- Cycling in the dark; An analysis of fatal bicycle accidents in The Netherlands. P.C.Noordzij. Journal of Safety Research 8 (1976) 2 (June): 73-76.

Tables

| $\omega$ | Pedestrian fatalities | Cyclist fatalities | Moped-rider fatalities |
| :--- | :---: | :--- | :--- |
| Males | 1896 | 1919 | 2362 |
|  | 64,6 | 72.2 | 83.4 |
| Femalcs | 1040 | 738 | 469 |
|  | 35.4 | 27.8 | 16.6 |
| Tcal | 2936 | 2657 | 2831 |
|  | 100 | 100 | 100 |

Table 1. Classification by sex of total numbers and percentages of pedestrian, cyclist and moped-rider fatalities from 1968 to 1972.

| Age groups | Pe iestrian fatalitics | Cyclist fatalitics | Moped-rider fatalities |
| :--- | :---: | :---: | :---: |
| 0 to 9 years | 970 | 380 | 17 |
|  | 31.3 | 14.3 | 0.6 |
| 10 to 19 years | 234 | 572 | 1077 |
|  | 8.0 | 21.5 | 38.0 |
| 20 to 29 years | 117 | 96 | 433 |
|  | 4.0 | 3.6 | 15.3 |
| 30 to 39 years | 97 | 73 | 194 |
|  | 3.3 | 2.7 | 6.9 |
| 40 to 49 years | 123 | 108 | 184 |
|  | 4.2 | 4.1 | 6.5 |
| 50 to 59 years | 196 | 225 | 315 |
|  | 6.7 | 8.5 | 11.1 |
| 60 to 69 years | 374 | 453 | 12.2 |
|  | 12.7 | 17.0 | 266 |
| 70 years or older | 875 | 28.2 | 9.4 |
|  | 29.8 | 2657 | 100 |
| Total | 2936 | 100 |  |

Table 2. Classification by age groups of total numbers and percentages of pedestrian, cyclist and moped-rider fatalities from 1968 to 1972.


Table 3. Classification by ag egroups an dsex of total numbers and percentages of pedestrian, cyclist and moped-rider fatalities from 1968 to 1972.

| Pedes rian fatalities byage groups | 1968 males | females | total | $\begin{aligned} & 1969 \\ & \text { males } \end{aligned}$ | females | total | 1970 males | females | total | 1971 males | females | total | 1972 <br> males | females | total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 to 9 years | 124 | 83 | 207 | 124 | 66 | 190 | 117 | 60 | 177 | 126 | 40 | 166 | 107 | 73 | 180 |
|  | 59.9 | 40.1 | 100 | 65.3 | 34.7 | 100 | 66.1 | 33.9 | 100 | 75.9 | 24.1 | 100 | 59.4 | 40.6 | 100 |
|  | 34.1 | 36.9 | 35.1 | 31.9 | 31.7 | 31.8 | 29.2 | 29.0 | 29.1 | 34.1 | 21.7 | 30.0 | 28.8 | 33.8 | 30.6 |
| 10 to 19 years | 30 | 12 | 42 | 36 | 19 | 55 | 34 | 21 | 55 | 25 | 18 | 43 | 24 | 15 | 39 |
|  | 71.4 | 28.6 | 100 | 65.5 | 34.5 | 100 | 61.8 | 38.2 | 100 | 58.1 | 41.9 | 100 | 61.5 | 38.5 | 100 |
|  | 8.2 | 53 | 7.1 | 9.3 | 9.1 | 9.2 | 8.5 | 10.1 | 9.0 | 6.8 | 9.8 | 7.8 | 6.5 | 6.9 | 6.6 |
| 20 to 29 years | 8 | 9 | 17 | 19 | 7 | 26 | 20 | 7 | 27 | 15 | 7 | 22 | 21 | 4 | 25 |
|  | 47.1 | 52.9 | 100 | 73.1 | 26.9 | 100 | 74.1 | 25.9 | 100 | 68.2 | 31.8 | 100 | 84.0 | 16.0 | 100 |
|  | 2.2 | 4.0 | 2.9 | 4.9 | 3.4 | 4.4 | 5.0 | 3.4 | 4.4 | 4.1 | 3.8 | 4.0 | 5.6 | 1.9 | 4.3 |
| 30 to 39 years | 17 | 6 | 23 | 10 | 3 | 13 | 17 | 3 | 20 | 14 | 5 | 19 | 20 | 2 | 22 |
|  | 73.9 | 26.1 | 100 | 76.9 | 23.1 | 100 | 85.0 | 15.0 | 100 | 73.7 | 26.3 | 100 | 90.9 | 9.1 | 100 |
|  | 4.7 | 2.7 | 3.9 | 2.6 | 1.4 | 2.2 | 4.2 | 1.4 | 3.3 | 3.8 | 2.7 | 3.4 | 5.4 | 0.9 | 3.7 |
| 40 to 49 years | 19 | 3 | 22 | 9 | 4 | 13 | 19 | 5 | 24 | 25 | 8 | 33 | 20 | 11 | 31 |
|  | 86.4 | 13.6 | 100 | 69.2 | 30.8 | 100 | 79.2 | 20.8 | 100 | 75.8 | 24.2 | 100 | 64.5 | 35.5 | 100 |
|  | 5.2 | 1.3 | 37 | 2.3 | 1.9 | 2.2 | 4.7 | 2.4 | 3.9 | 6.8 | 4.3 | 6.0 | 5.4 | 5.1 | 5.3 |
| 50 to 59 years | 21 | 14 | 35 | 34 | 12 | 46 | 24 | 14 | 38 | 28 | 12 | 40 | 22 | 15 | 37 |
|  | 60.0 | 40.0 | 100 | 73.9 | 26.1 | 100 | 63.2 | 36.8 | 100 | 70.0 | 30.0 | 100 | 59.5 | 40.5 | 100 |
|  | 5.8 | 6.2 | 5.5 | 8.7 | 5.8 | 7.7 | 6.0 | 6.8 | 6.3 | 7.6 | 6.5 | 7.2 | 5.9 | 6.9 | 6.3 |
| 60 to 69 years | 36 | 31 | 67 | 37 | 42 | 79 | 49 | 38 | 87 | 33 | 35 | 68 | 44 | 29 | 73 |
|  | 53.7 | 46.3 | 100 | 46.8 | 53.2 | 100 | 56.3 | 437 | 100 | 48.5 | 515 | 100 | 60.3 | 39.7 | 100 |
|  | 9.9 | 13.8 | 11.4 | 9.5 | 20.2 | 13.3 | 12.2 | 18.4 | 14.3 | 8.9 | 19.0 | 12.3 | 11.8 | 13.4 | 12.4 |
| 70 years or older | 109 | 67 | 176 | 120 | 55 | 175 | 121 | 59 | 180 | 104 | 59 | 163 | 114 | 67 | 181 |
|  | 61.9 | 38.1 | 100 | 68.6 | 31.4 | 100 | 67.2 | 32.8 | 100 | 63.8 | 36.2 | 100 | 63.0 | 37.0 | 100 |
|  | 29.9 | 29.8 | 29.9 | 30.8 | 26.5 | 29.3 | 30.2 | 28.5 | 29.6 | 28.1 | 32.1 | 29.4 | 30.6 | 31.0 | 30.8 |
| Total | 364 | 225 | 589 | 389 | 208 | 597 | 401 | 207 | 608 | 370 | 184 | 554 | 372 | 216 | 588 |
|  | 61.8 | 38.2 | 100 | 652 | 34.8 | 100 | 66.0 | 34.0 | 100 | 66.8 | 33.2 | 100 | 63.3 | 36.7 | 100 |
|  | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Table 4a. Classification by age groups and sex of total numbers and percentages of pedestrian fatalities in 1968, 1969, 1970, 197 1 and 1972.

| Cyclist fatalitres by age groups | 1968 <br> males | females | total | 1969 males | females | total | 1970 <br> males | females | total | 197 males | females | total | 1972 <br> malcs | femal | total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 to 9 years | 46 | 18 | 64 | 53 | 25 | 78 | 64 | 15 | 79 | 53 | 32 | 85 | 50 | 24 | 74 |
|  | 71.9 | 28.1 | 100 | 67.9 | 32.1 | 100 | 81.0 | 19.0 | 100 | 62.4 | 37.6 | 100 | 67.6 | 32.4 | 100 |
|  | 12.2 | 13.8 | 12.6 | 14.2 | 15.8 | 14.7 | 16.8 | 11.5 | 15.4 | 14.0 | 18.8 | 15.5 | 12.3 | 16.0 | 13.3 |
| 10 to 19 years | 54 | 39 | 93 | 61 | 52 | 113 | 78 | 47 | 125 | 75 | 48 | 123 | 73 | 45 | 118 |
|  | 58.1 | 41.9 | 100 | 54.0 | 46.0 | 100 | 62.4 | 37.6 | 100 | 61.0 | 39.0 | 100 | 61.9 | 38.1 | 100 |
|  | 14.4 | 30.0 | 18.4 | 16.3 | 32.9 | 21.2 | 20.4 | 36.2 | 24.4 | 19.8 | 28.2 | 22.4 | 17.9 | 30.0 | 21.1 |
| 20 029 years | 13 | 7 | 20 | 17 | 7 | 24 | 6 | 5 | 11 | 12 | 6 | 18 | 16 | 7 | 23 |
|  | 65.0 | 35.0 | 100 | 70.8 | 29.2 | 100 | 54.5 | 45.5 | 100 | 66.7 | 33.3 | 100 | 69.6 | 30.4 | 100 |
|  | 3.5 | 54 | 4.0 | 45 | 4.4 | 4.5 | 1.6 | 3.8 | 2.1 | 3.2 | 3.5 | 3.3 | 3.9 | 4.7 | 4.1 |
| 30 to 39 ycars | 9 | 3 | 12 | 16 | 7 | 23 | 9 | 3 | 12 | 6 | 4 | 10 | 11 | 5 | 16 |
|  | 75.0 | 25.0 | 100 | 69.6 | 30.4 | 100 | 75.0 | 25.0 | 100 | 60.0 | 40.0 | 100 | 68.8 | 31.2 | 100 |
|  | 2.4 | 2.3 | 2.4 | 43 | 4.4 | 4.3 | 2.4 | 2.3 | 2.3 | 1.6 | 2.4 | 1.8 | 27 | 3.3 | 2.9 |
| 4009 years | 30 | 7 | 27 | $8$ | 10 | $18$ | $13$ | $6$ | $19$ | $15$ | $8$ | $23$ | $13$ | 8 |  |
|  | $741$ | $25.9$ | $100$ | $44.4$ | $55.6$ | $100$ | $68.4$ | $31.6$ | $100$ | $65.2$ | $34.8$ | $100$ | $61.9$ | 38.1 | $100$ |
|  | 5.3 | 5.4 | 5.3 | 2.1 | 6.3 | 3.4 | 3.4 | 4.6 | 3.7 | 4.0 | 4.7 | 4.2 | 3.2 | 5.3 | 3.8 |
| 50 to 59 years | 31 | 16 | 47 | 24 | 18 | 42 | 32 | 16 | 48 | 18 | 20 | 38 | 32 | 18 | 50 |
|  | 66.0 | 34.0 | 100 | 57.1 | 42.9 | 100 | 66.7 | 33.3 | 100 | 47.4 | 52.6 | 100 | 64.0 | 36.0 | 100 |
|  | 82 | 12.3 | 9.3 | 6.4 | 11.4 | 7.9 | 8.4 | 12.3 | 9.4 | 4.7 | 11.8 | 6.9 | 78 | 12.0 | 9.0 |
| 60 to69 years | 51 | 27 | 78 | 67 | 27 | 94 | 67 | 24 | 91 | 68 | 2 S | 96 | 66 | 28 | 94 |
|  | 65.4 | 346 | 100 | 71.3 | 28.7 | 100 | 73.6 | 26.4 | 100 | 70.8 | 29.2 | 100 | 70.2 | 29.8 | 100 |
|  | 136 | 20.8 | 15.4 | 17.9 | 17.1 | 17.7 | 17.5 | 18.5 | 17.8 | 17.9 | 16.5 | 17.5 | 16.2 | 18.7 | 16.8 |
| 0 years of older | 152 | 13 | 165 | 128 | 12 | 140 | 113 | 14 | 127 | 132 | 24 | 156 | 147 | 15 | 162 |
|  | 92.1 | 7.9 | 100 | 91.4 | 8.6 | 100 | 89.0 | 11.0 | 100 | 84.6 | 15.4 | 100 | 90.7 | 9.3 | 100 |
|  | 40.4 | 10.0 | 32.6 | 34.2 | 7.6 | 26.3 | 29.6 | 10.8 | 24.8 | 34.8 | 14.1 | 28.4 | 36.0 | 10.0 | 29.0 |
| Total | $3 \%$ | 130 | 506 | 374 | 158 | 532 | 382 | 130 | 512 | 379 | 10 | 549 | 408 | 150 | 558 |
|  | 74.3 | 25.7 | 100 | 70.3 | 29.7 | 100 | 74.6 | 25.4 | 100 | 69.0 | 31.0 | 100 | 73.1 | 26.9 | 100 |
|  | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Table 4b. Classification by age groups and sex of total numbers and percentages of cyclist fatalities in 1968, 1969, 1970, 1971 and 1972.

| Moped-rider fatalities by age groups | $\begin{gathered} 1968 \\ \text { males } \end{gathered}$ | females | total | $\begin{aligned} & 1969 \\ & \text { males } \end{aligned}$ | femals | total | $\begin{aligned} & 1970 \\ & \text { males } \end{aligned}$ | females | total | 1971 <br> males | females | total | 1972 <br> males | females | total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 to 9 years | 4 | 1 | 5 | 1 | 0 | 1 | 2 | 2 | 4 | 1 | 1 | 2 | 3 | 2 | 5 |
|  | 80.0 | 20.0 | 100 | 100.0 | 0.0 | 100 | 50.0 | 50.0 | 100 | 50.0 | 50.0 | 100 | 60.0 | 40.0 | 100 |
|  | 0.9 | 1.4 | 0.9 | 0.2 | 0.0 | 0.2 | 0.4 | 2.1 | 0.7 | 0.2 | 1.0 | 0.3 | 0.6 | 2.1 | 0.9 |
| 10 to 19 years | 154 | 34 | 188 | 159 | 51 | 210 | 156 | 40 | 196 | 193 | 47 | 240 | 206 | 37 | 243 |
|  | 81.9 | 18.1 | 100 | 75.7 | 24.3 | 100 | 79.6 | 20.4 | 100 | 80.4 | 19.6 | 100 | 84.8 | 15.2 | 100 |
|  | 32.9 | 48.6 | 34.9 | 33.6 | 48.6 | 36.3 | 35.0 | 42.1 | 36.2 | 38.8 | 45.6 | 40.0 | 43.1 | 38.5 | 42.3 |
| 20 to 29 years | 77 | 15 | 92 | 79 | 16 | 95 | 65 | 19 | 84 | 51 | 11 | 62 | 73 | 27 | 100 |
|  | 83.7 | 16.3 | 100 | 832 | 16.8 | 100 | 77.4 | 22.6 | 100 | 82.3 | 17.7 | 100 | 73.0 | 27.0 | 100 |
|  | 16.5 | 21.4 | 17.1 | 16.7 | 15.2 | 16.4 | 4.6 | 20.0 | 15.5 | 10.3 | 10.7 | 10.3 | 15.3 | 28.1 | 17.4 |
| 30 to 39 years | 43 | 2 | 45 | 25 | 6 | 31 | 27 | 5 | 32 | 35 | 7 | 42 | 37 | 7 | 44 |
|  | 95.6 | 4.4 | 100 | 80.6 | 19.4 | 100 | 84.4 | 15.6 | 100 | 83.3 | 16.7 | 100 | 84.1 | 15.9 | 100 |
|  | 9.2 | 2.9 | 8.4 | 5.3 | 5.7 | 5.4 | 6.1 | 5.3 | 5.9 | 7.0 | 6.8 | 7.0 | 7.7 | 7.3 | 7.7 |
| 40 to 49 years | 24 | 7 | 31 | 31 | 9 | 40 | 32 | 12 | 44 | 31 | 14 | 45 | 20 | 4 | 24 |
|  | 77.4 | 22.6 | 100 | 77.5 | 22.5 | 100 | 72.7 | 27.3 | 100 | 68.9 | 31.1 | 100 | 83.3 | 16.7 | 100 |
|  | 5.1 | 10.0 | 5.8 | 6.6 | 8.6 | 6.9 | 7.2 | 12.6 | 8.1 | 6.2 | 13.6 | 7.5 | 4.2 | 4.2 | 4.2 |
| 50 to 59 years | 47 | 7 | 54 | 53 | 8 | 66 | 55 | 11 | 66 | 61 | 15 | 76 | 42 | 11 | 53 |
|  | 87.0 | 13.0 | 100 | 87.9 | 12.1 | 100 | 83.3 | 16.7 | 100 | 80.3 | 19.7 | 100 | 79.2 | 20.8 | 100 |
|  | 10.0 | 10.0 | 10.0 | 12.3 | 7.6 | 11.4 | 12.3 | 11.6 | 12.2 | 12.3 | 14.6 | 12.7 | 8.8 | 11.5 | 9.2 |
| 60 to 69 years | 70 | 4 | 74 | 69 | 13 | 82 | 56 | 4 | 60 | 67 | 4 | 71 | 51 | 7 | 58 |
|  | 94.6 | 5.4 | 100 | 841 | 15.9 | 100 | 93.3 | 6.7 | 100 | 80.3 | 19.7 | 100 | 79.2 | 20.8 | 100 |
|  | 15.0 | 5.7 | 13.8 | 14.6 | 12.4 | 14.2 | 12.6 | 4.2 | 11.1 | 13.5 | 3.9 | 11.8 | 10.7 | 7.3 | 10.1 |
| 70 years or older | 49 | 0 | 49 | 51 | 2 | 53 | 53 | 2 | 55 | 58 | 4 | 62 | 46 | 1 | 47 |
|  | 109.0 | 0.0 | 100 | 96.2 | 3.8 | 100 | 96.4 | 3.6 | 100 | 93.5 | 6.5 | 10.3 | 97.9 | 2.1 | 100 |
|  | 10.5 | 0.0 | 9.1 | 10.8 | 1.9 | 9.2 | 11.9 | 2.1 | 10.2 | 11.7 | 3.9 | 10.3 | 9.6 | 1.0 | 8.2 |
| Tota 1 | 468 | 70 | 538 | 473 | 105 | 578 | 446 | 95 | 541 | 497 | 103 | 600 | 478 | 96 | 574 |
|  | 87.0 | 13.0 | 100 | 81.8 | 18.2 | 100 | 82.4 | 17.6 | 100 | 82.8 | 17.2 | 100 | 83.3 | 16.7 | 100 |
|  | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Table 4c. Class fication by age groups and sex of total numbers and percentages of moped-rider fatalities in 1968, 1969, 1970, 1971 and 1972.

| Province | Pedestrian fatalities |  | Cyclist fatalities |  | Moped-rider fatalities |  | Population1.1.1971 | Pedestrian fatalities per annum per 100,000 inhabitants | Cyclist fatalities per annum per 100,000 inhabitants | Moped-rider fatalities per annum per 100,000 inhabitants |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | number | \% | number | \% | number | \% |  |  |  |  |
| Groningen | 108 | 3.7 | 141 | 5.3 | 108 | 3.8 | 522,425 | 4.1 | 5.4 | 4.1 |
| Friesland | 180 | 6.1 | 170 | 6.4 | 121 | 4.3 | 526,749 | 6.8 | 6.5 | 4.6 |
| Drenthe | 106 | 36 | 115 | 4.3 | 120 | 4.2 | 372,580 | 5.7 | 6.2 | 6.4 |
| Overijssel | 211 | 7.2 | 309 | 11.6 | 239 | 8.4 | 932,946 | 4.5 | 6.6 | 5.1 |
| Gelderland | 341 | 11.6 | 378 | 14.2 | 393 | 13.9 | 1,538,740 | 4.4 | 4.9 | 5.1 |
| Utrecht | 196 | 6.7 | 148 | 5.6 | 156 | 5.5 | 816,369 | 4.8 | 3.6 | 3.8 |
| N-Holland | 499 | 17.0 | 290 | 10.9 | 382 | 13.5 | 2,259,955 | 4.4 | 2.6 | 3.4 |
| Z-Hol land | 489 | 16.7 | 350 | 13.2 | 419 | 14.8 | 2,991,735 | 3.3 | 2.3 | 2.8 |
| Zeeland | 67 | 2.3 | 0 | 2.6 | 80 | 2.8 | 310,318 | 4.3 | 4.5 | 5.2 |
| $N$ - Brabant | 447 | 15.2 | 491 | 18.5 | 561 | 19.8 | 1,819,459 | 4.9 | 5.4 | 6.2 |
| Limburg | 288 | 9.8 | 194 | 7.3 | 245 | 8.7 | 1,012,357 | 5.7 | 3.8 | 4.8 |
| Z. Usselmeer polders Others | 4 | 0.1 | 1 | 0.0 | $\begin{aligned} & 5 \\ & 2 \end{aligned}$ | $\begin{aligned} & 0.2 \\ & 0.1 \end{aligned}$ | $\begin{array}{r} 17,211 \\ 3,586 \end{array}$ | 4.6 | 1.2 | 5.8 |
| Total | 296 | 100 | 2657 | 100 | 2831 | 100 | 13,119,430 | 4.5 | 4.1 | 4.3 |

Table 5. Qassification by provinces of total numbers and percentages of pedestrian, cyclist and moped-rider fatalities per annum per 100,000 inhabitants from 1968 to 1972.

| Pedestrian fatalities by age groups | Inside males | females | Outsid males | females | Total inside built-up areas | Total outside built-up areas | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 to 9 years | $\begin{gathered} 383 \\ 64.2 \\ 340 \end{gathered}$ | $\begin{gathered} 214 \\ 35.8 \\ 29.3 \end{gathered}$ | $\begin{gathered} 215 \\ 66.6 \\ 28.0 \end{gathered}$ | $\begin{gathered} 108 \\ 33.4 \\ 34.8 \end{gathered}$ | $\begin{gathered} 597 \\ 64.9 \\ 32.1 \end{gathered}$ | $\begin{gathered} \hline 323 \\ 35.1 \\ 299 \end{gathered}$ | $\begin{aligned} & 920 \\ & 100 \\ & 31.3 \end{aligned}$ |
| 10 to 19 years | $\begin{aligned} & 60 \\ & 65.9 \\ & 5.3 \end{aligned}$ | $\begin{aligned} & 31 \\ & 34.1 \\ & 4.2 \end{aligned}$ | $\begin{aligned} & 89 \\ & 62.2 \\ & 11.6 \end{aligned}$ | $\begin{aligned} & 54 \\ & 37.8 \\ & 17.4 \end{aligned}$ | $\begin{aligned} & 91 \\ & 38.9 \\ & 4.9 \end{aligned}$ | $\begin{gathered} 143 \\ 61.1 \\ 13.2 \end{gathered}$ | $\begin{gathered} 234 \\ 100 \\ 8.0 \end{gathered}$ |
| $20 \mathrm{t}_{\mathrm{o}} 29$ year $^{\text {s }}$ | $\begin{aligned} & 35 \\ & 62.5 \\ & 3.1 \end{aligned}$ | $\begin{aligned} & 21 \\ & 37.5 \\ & 2.9 \end{aligned}$ | $\begin{aligned} & 48 \\ & 787 \\ & 6.2 \end{aligned}$ | $\begin{aligned} & 13 \\ & 21.3 \\ & 4.2 \end{aligned}$ | $\begin{aligned} & 56 \\ & 47.9 \\ & 3.0 \end{aligned}$ | $\begin{aligned} & 61 \\ & 52.1 \\ & 5.7 \end{aligned}$ | $\begin{gathered} 117 \\ 100 \\ 4.0 \end{gathered}$ |
| 30 to 39 years | $\begin{array}{r} 38 \\ 74.5 \\ 3.4 \end{array}$ | $\begin{aligned} & 13 \\ & 25.5 \\ & 1.8 \end{aligned}$ | $\begin{array}{r} 40 \\ 87.0 \\ 5.2 \end{array}$ | $\begin{gathered} 6 \\ 13.0 \\ 2.0 \end{gathered}$ | $\begin{aligned} & 51 \\ & 52.6 \\ & 2.8 \end{aligned}$ | $\begin{aligned} & 46 \\ & 47.4 \\ & 4.3 \end{aligned}$ | $\begin{gathered} 97 \\ 100 \\ 3.3 \end{gathered}$ |
| 40 to 49 years | $\begin{aligned} & 45 \\ & 71.4 \\ & 4.0 \end{aligned}$ | $\begin{array}{r} 18 \\ 28.6 \\ 2.5 \end{array}$ | $\begin{aligned} & 47 \\ & 78.3 \\ & 6.1 \end{aligned}$ | $\begin{aligned} & 13 \\ & 21.7 \\ & 4.2 \end{aligned}$ | $\begin{aligned} & 63 \\ & 51.2 \\ & 34 \end{aligned}$ | $\begin{aligned} & 60 \\ & 48.8 \\ & 5.6 \end{aligned}$ | $\begin{gathered} 123 \\ 100 \\ 4.2 \end{gathered}$ |
| 50 to 59 years | $\begin{aligned} & 57 \\ & 53.8 \\ & 5.1 \end{aligned}$ | $\begin{aligned} & 49 \\ & 46.2 \\ & 6.7 \end{aligned}$ | $\begin{aligned} & 72 \\ & 80.0 \\ & 9.4 \end{aligned}$ | $\begin{array}{r} 18 \\ 20.0 \\ 5.8 \end{array}$ | $\begin{aligned} & 106 \\ & 54.1 \\ & 5.7 \end{aligned}$ | $\begin{aligned} & 90 \\ & 45.1 \\ & 8.3 \end{aligned}$ | $\begin{gathered} 196 \\ 100 \\ 6.7 \end{gathered}$ |
| $60 \rho 69$ years | $\begin{gathered} 122 \\ 49.0 \\ 108 \end{gathered}$ | $\begin{gathered} 127 \\ 51.0 \\ 17.4 \end{gathered}$ | $\begin{aligned} & 77 \\ & 61.6 \\ & 10.0 \end{aligned}$ | $\begin{aligned} & 48 \\ & 38.4 \\ & 15.5 \end{aligned}$ | $\begin{gathered} 249 \\ 66.6 \\ 13.4 \end{gathered}$ | $\begin{aligned} & 125 \\ & 33.4 \\ & 11.6 \end{aligned}$ | $\begin{aligned} & 374 \\ & 100 \\ & 12,7 \end{aligned}$ |
| 70 years or older | $\begin{gathered} 387 \\ 60.1 \\ 34.3 \end{gathered}$ | $\begin{gathered} 257 \\ 39.9 \\ 35.2 \end{gathered}$ | $\begin{gathered} 181 \\ 78.4 \\ 23.5 \end{gathered}$ | $\begin{aligned} & 50 \\ & 21.6 \\ & 16.1 \end{aligned}$ | $\begin{gathered} 644 \\ 73.6 \\ 34.7 \end{gathered}$ | $\begin{gathered} 231 \\ 26.4 \\ 21.4 \end{gathered}$ | $\begin{aligned} & 875 \\ & 100 \\ & 29.8 \end{aligned}$ |
| Total | $\begin{gathered} 1127 \\ 60.7 \\ 100 \end{gathered}$ | $\begin{gathered} 730 \\ 393 \\ 100 \end{gathered}$ | $\begin{gathered} 769 \\ 71.3 \\ 100 \end{gathered}$ | $\begin{gathered} 310 \\ 28.7 \\ 100 \end{gathered}$ | $\begin{gathered} 1857 \\ 63.2 \\ 100 \end{gathered}$ | $\begin{gathered} 1079 \\ 36.8 \\ 100 \end{gathered}$ | $\begin{array}{r} 2936 \\ 100 \\ 100 \end{array}$ |

Table $6 a$. Classtfication by age groups and inside or outside built-up areas and sex of total numbers and percentages of pedestrian fatalities from 1968 to 1972.

| Cyclist fatalities by age groups | hside built-up areas males <br> females |  | Outside built-up areas males females |  | Total inside built-up arcas | Total outside built-up areas | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 to 9 years | $\begin{gathered} 141 \\ 67.1 \\ 13.8 \end{gathered}$ | $\begin{aligned} & 69 \\ & 32.9 \\ & 16.4 \end{aligned}$ | $\begin{gathered} 125 \\ 73.5 \\ 14.0 \end{gathered}$ | $\begin{aligned} & \hline 45 \\ & 26.5 \\ & 14.2 \end{aligned}$ | $\begin{gathered} \hline 210 \\ 55.3 \\ 14.5 \end{gathered}$ | $\begin{gathered} 170 \\ 44.7 \\ 14.0 \end{gathered}$ | $\begin{gathered} \hline 380 \\ 100 \\ 14.3 \end{gathered}$ |
| 10 to 19 years | $\begin{aligned} & 198 \\ & 60.2 \\ & 19.3 \end{aligned}$ | $\begin{gathered} 131 \\ 39.8 \\ 31.0 \end{gathered}$ | $\begin{aligned} & 143 \\ & 58.8 \\ & 16.0 \end{aligned}$ | $\begin{aligned} & 100 \\ & 41.2 \\ & 31.6 \end{aligned}$ | $\begin{gathered} 329 \\ 57.5 \\ 22.8 \end{gathered}$ | $\begin{gathered} 243 \\ 42.5 \\ 20.1 \end{gathered}$ | $\begin{aligned} & 572 \\ & 100 \\ & 21.5 \end{aligned}$ |
| 20 to 29 years | $\begin{gathered} 42 \\ 70.0 \\ 4.1 \end{gathered}$ | $\begin{aligned} & 13 \\ & 30.0 \\ & 4.3 \end{aligned}$ | $\begin{aligned} & 22 \\ & 61.1 \\ & 2.5 \end{aligned}$ | $\begin{aligned} & 14 \\ & 38.9 \\ & 4.4 \end{aligned}$ | $\begin{aligned} & 60 \\ & 62.5 \\ & 4.1 \end{aligned}$ | $\begin{aligned} & 36 \\ & 37.5 \\ & 3.0 \end{aligned}$ | $\begin{gathered} 96 \\ 100 \\ 3.6 \end{gathered}$ |
| 30 to 39 years | $\begin{gathered} 27 \\ 65.9 \\ 2.6 \end{gathered}$ | $\begin{aligned} & 14 \\ & 34.1 \\ & 3.3 \end{aligned}$ | $\begin{aligned} & 24 \\ & 75.0 \\ & 2.7 \end{aligned}$ | $\begin{gathered} 8 \\ 25.0 \\ 2.5 \end{gathered}$ | $\begin{aligned} & 41 \\ & 56.2 \\ & 2.8 \end{aligned}$ | $\begin{aligned} & 32 \\ & 43.8 \\ & 2.6 \end{aligned}$ | $\begin{gathered} 73 \\ 100 \\ 2.7 \end{gathered}$ |
| 40 to 49 years | $\begin{aligned} & 38 \\ & 65.5 \\ & 3.7 \end{aligned}$ | $\begin{array}{r} 20 \\ 34.5 \\ 4.7 \end{array}$ | $\begin{aligned} & 31 \\ & 62.0 \\ & 3.5 \end{aligned}$ | $\begin{aligned} & 19 \\ & 38.0 \\ & 6.0 \end{aligned}$ | $\begin{aligned} & 58 \\ & 53.7 \\ & 4.0 \end{aligned}$ | $\begin{aligned} & 50 \\ & 46.3 \\ & 41 \end{aligned}$ | $\begin{gathered} 108 \\ 100 \\ 4.1 \end{gathered}$ |
| 50 to 59 years | $\begin{gathered} 77 \\ 57.5 \\ 7.5 \end{gathered}$ | $\begin{aligned} & 57 \\ & 42.5 \\ & 13.5 \end{aligned}$ | $\begin{aligned} & 60 \\ & 65.9 \\ & 6.7 \end{aligned}$ | $\begin{aligned} & 31 \\ & 34.1 \\ & 9.8 \end{aligned}$ | $\begin{gathered} 134 \\ 59.6 \\ 9.3 \end{gathered}$ | $\begin{aligned} & 91 \\ & 40.4 \\ & 7.5 \end{aligned}$ | $\begin{gathered} 225 \\ 100 \\ 8.5 \end{gathered}$ |
| 60 to 69 years | $\begin{gathered} 181 \\ 70.4 \\ 17.7 \end{gathered}$ | $\begin{aligned} & 76 \\ & 29.6 \\ & 18.0 \end{aligned}$ | $\begin{gathered} 138 \\ 70.4 \\ 15.4 \end{gathered}$ | $\begin{aligned} & 58 \\ & 29.6 \\ & 18.4 \end{aligned}$ | $\begin{gathered} 257 \\ 56.7 \\ 17.8 \end{gathered}$ | $\begin{aligned} & 196 \\ & 43.3 \\ & 16.2 \end{aligned}$ | $\begin{aligned} & 453 \\ & 100 \\ & 17.0 \end{aligned}$ |
| 70 years or older | $\begin{gathered} 320 \\ 896 \\ 31.3 \end{gathered}$ | $\begin{aligned} & 37 \\ & 10.4 \\ & 8.8 \end{aligned}$ | $\begin{gathered} 352 \\ 89.6 \\ 39.3 \end{gathered}$ | $\begin{aligned} & 41 \\ & 10.4 \\ & 13.0 \end{aligned}$ | $\begin{aligned} & 357 \\ & 47.6 \\ & 24.7 \end{aligned}$ | $\begin{aligned} & 393 \\ & 52.4 \\ & 32.5 \end{aligned}$ | $\begin{aligned} & 750 \\ & 100 \\ & 28.2 \end{aligned}$ |
| Total | $\begin{gathered} 1024 \\ 70.8 \\ 100 \end{gathered}$ | $\begin{gathered} \hline 422 \\ 29.2 \\ 100 \end{gathered}$ | $\begin{gathered} 895 \\ 73.9 \\ 100 \end{gathered}$ | $\begin{gathered} 316 \\ 26.1 \\ 100 \end{gathered}$ | $\begin{gathered} 1446 \\ 54.4 \\ 100 \end{gathered}$ | $\begin{gathered} 1211 \\ 45.6 \\ 100 \end{gathered}$ | $\begin{array}{r} 2657 \\ 100 \\ 100 \end{array}$ |

Table $6 b$. Classification by age groups and inside or outside built-up areas and sex of total numbers and percentages of cyclist fatal'ties from 1968 to 1972.

| Moped-rider f talitics by age groups | Inside built-up areas males <br> females |  | Outside built-up areas males females |  | Total insi fe built-up areas | Tctal outside built-up areas | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 to 9 years | $\begin{array}{r} 7 \\ 70.0 \\ 06 \end{array}$ | $\begin{gathered} 3 \\ 30.0 \\ 1.1 \end{gathered}$ | $\begin{gathered} 4 \\ 57.1 \\ 0.3 \end{gathered}$ | $\begin{array}{r} 3 \\ 42.9 \\ 1.6 \end{array}$ | $\begin{aligned} & 10 \\ & 58.8 \\ & 0.7 \end{aligned}$ | $\begin{array}{r} 7 \\ 41.2 \\ 0.5 \end{array}$ | $\begin{array}{r} 17 \\ 100 \\ 0.6 \end{array}$ |
| 10 to 19 years | $\begin{aligned} & 419 \\ & 75.4 \\ & 36.1 \end{aligned}$ | $\begin{gathered} 137 \\ 24.6 \\ 49.8 \end{gathered}$ | $\begin{gathered} 449 \\ 86.2 \\ 37.4 \end{gathered}$ | $\begin{aligned} & 72 \\ & 13.8 \\ & 37.1 \end{aligned}$ | $\begin{gathered} 556 \\ 51.6 \\ 38.6 \end{gathered}$ | $\begin{gathered} 521 \\ 48.4 \\ 37.4 \end{gathered}$ | $\begin{gathered} 1077 \\ 100 \\ 38.0 \end{gathered}$ |
| 20 to 29 years | $\begin{gathered} 170 \\ 8.0 \\ 14.6 \end{gathered}$ | $\begin{aligned} & 48 \\ & 22.0 \\ & 17.4 \end{aligned}$ | $\begin{gathered} 175 \\ 81.4 \\ 14.6 \end{gathered}$ | $\begin{aligned} & 40 \\ & 18.6 \\ & 20.6 \end{aligned}$ | $\begin{gathered} 218 \\ 50.3 \\ 15.1 \end{gathered}$ | $\begin{gathered} 215 \\ 49.1 \\ 15.4 \end{gathered}$ | $\begin{aligned} & 433 \\ & 100 \\ & 15.3 \end{aligned}$ |
| 30 to 39 years | $\begin{aligned} & 78 \\ & 86.7 \\ & 6.7 \end{aligned}$ | $\begin{array}{r} 12 \\ 13.3 \\ 44 \end{array}$ | $\begin{aligned} & 89 \\ & 85.6 \\ & 7.4 \end{aligned}$ | $\begin{aligned} & 15 \\ & 14.4 \\ & 7.7 \end{aligned}$ | $\begin{aligned} & 90 \\ & 46.4 \\ & 6.3 \end{aligned}$ | $\begin{array}{r} 104 \\ 53.6 \\ 7.5 \end{array}$ | $\begin{gathered} 194 \\ 100 \\ 6.9 \end{gathered}$ |
| 40049 years | $\begin{array}{r} 74 \\ 74.0 \\ 6.4 \end{array}$ | $\begin{aligned} & 26 \\ & 26.0 \\ & 9.5 \end{aligned}$ | $\begin{gathered} 64 \\ 76.2 \\ 5.3 \end{gathered}$ | $\begin{aligned} & 20 \\ & 23.8 \\ & 10.3 \end{aligned}$ | $\begin{array}{r} 100 \\ 54.3 \\ 7.0 \end{array}$ | $\begin{array}{r} 84 \\ 45.7 \\ 6.0 \end{array}$ | $\begin{gathered} 184 \\ 100 \\ 6.5 \end{gathered}$ |
| 50 to 59 years | $\begin{array}{r} 134 \\ 81.2 \\ 11.5 \end{array}$ | $\begin{aligned} & 31 \\ & 18.8 \\ & 11.3 \end{aligned}$ | $\begin{gathered} 129 \\ 86.0 \\ 10.8 \end{gathered}$ | $\begin{aligned} & 21 \\ & 14.0 \\ & 10.8 \end{aligned}$ | $\begin{gathered} 165 \\ 52.4 \\ 11.5 \end{gathered}$ | $\begin{gathered} 150 \\ 47.6 \\ 10.8 \end{gathered}$ | $\begin{aligned} & 315 \\ & 100 \\ & 11.1 \end{aligned}$ |
| 60 to 69 years | $\begin{gathered} 162 \\ 92.6 \\ 13.9 \end{gathered}$ | $\begin{aligned} & 13 \\ & 7.4 \\ & 4.7 \end{aligned}$ | 151 <br> 88.8 <br> 12.6 | $\begin{aligned} & 19 \\ & 11.2 \\ & 9.8 \end{aligned}$ | $\begin{gathered} 175 \\ 50.7 \\ 12.2 \end{gathered}$ | $\begin{gathered} 170 \\ 49.3 \\ 12.2 \end{gathered}$ | $\begin{aligned} & 345 \\ & 100 \\ & 12.2 \end{aligned}$ |
| 70 years or ol der | $\begin{gathered} 118 \\ 95.9 \\ 10.2 \end{gathered}$ | $\begin{aligned} & 5 \\ & 4.1 \\ & 1.8 \end{aligned}$ | $\begin{aligned} & 139 \\ & 97.2 \\ & 11.6 \end{aligned}$ | $\begin{aligned} & 4 \\ & 2.8 \\ & 2.1 \end{aligned}$ | $\begin{array}{r} 123 \\ 46.2 \\ 8.6 \end{array}$ | $\begin{aligned} & 143 \\ & 53.8 \\ & 10.2 \end{aligned}$ | $\begin{aligned} & 266 \\ & 100 \\ & 9.4 \end{aligned}$ |
| Total | $\begin{gathered} 1162 \\ 80.9 \\ 100 \end{gathered}$ | $\begin{gathered} \hline 275 \\ 19.1 \\ 100 \end{gathered}$ | $\begin{gathered} 1200 \\ 86.1 \\ 100 \end{gathered}$ | $\begin{gathered} 194 \\ 13.9 \\ 100 \end{gathered}$ | $\begin{gathered} 1437 \\ 508 \\ 100 \end{gathered}$ | $\begin{gathered} 1394 \\ 49.2 \\ 100 \end{gathered}$ | $\begin{array}{r} 2831 \\ 100 \\ 100 \end{array}$ |

Table 6 c. Classification by age groups and inside or outside built-up areas and sex of total numbers and percentages of moped-rider fatalities from 1968 to 1972.

| Population of municipality of accident | Pedestrian fatalities |  | Cyclist fatalities |  | Moped-rider fatalities |  | Population 1.1.1971 | Pedestrian fatalities per annum per 100,000 inhabitants | Cyclist fatalities per annum per 100,000 inhabitants | Moped-rider fatalities per annum per 100,000 inhabitants |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | number | \% | number | $\%$ | number | \% |  |  |  |  |
| >200.000 | 471 | 16.0 | 211 | 7.9 | 306 | 10.8 | 2,315,498 | 4.1 | 1.8 | 2.6 |
| 100,000-200,000 | 274 | 9.3 | 287 | 10.8 | 277 | 9.8 | 1,672,881 | 3.3 | 3.4 | 3.3 |
| $50,000-100,000$ | 292 | 9.9 | 273 | 10.3 | 293 | 10.3 | 1,755,638 | 3.3 | 3.1 | 3.3 |
| 20,000-50,000 | 488 | 16.6 | 481 | 18.1 | 496 | 17.5 | 2,462,512 | 4.0 | 3.9 | 4.0 |
| 10,000 20,000 | 595 | 20.3 | 572 | 21.5 | 585 | 20.7 | 2,352,609 | 5.1 | 4.9 | 5.0 |
| 5,000-10,000 | 463 | 15.8 | 514 | 19.3 | 482 | 17.0 | 1,559,614 | 5.9 | 6.6 | 6.2 |
| $<5.000$ | 373 | 12.1 | 319 | 12.0 | 392 | 13.8 | 1,000,678 | 7.5 | 6.4 | 7.8 |
| Total | 2936 | 100 | 2657 | 100 | 2831 | 100 | 13,119,430 | 4.5 | 4.1 | 4.3 |

Table 7a. Classıfication by munıcipal populations of total numbers and percentages of pedestrian, cyclist and moped-rider fatalities per annum per 100000 mhabitants from 1968 to 1972.

| Population of municipality of accident | Pedestrian fatalities inside built-up areas | Per annum per 100,000 inhabitants | Cyclist fatalities inside built-up areas | Per annum per 100,000 inhabitants | Moped-rider fatalities inside built-up areas | Per annum per 100,000 inhabitants |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| >200.000 | $\begin{array}{r} 459 \\ 24.7 \end{array}$ | 4,0 | $\begin{aligned} & 206 \\ & 14.2 \end{aligned}$ | 1.8 | $\begin{gathered} 296 \\ 20.6 \end{gathered}$ | 2.6 |
| 100,000-200,000 | $\begin{aligned} & 239 \\ & 12.9 \end{aligned}$ | 2.6 | $\begin{aligned} & 255 \\ & 17.6 \end{aligned}$ | 3.1 | $\begin{aligned} & 223 \\ & 15.5 \end{aligned}$ | 2,7 |
| 50,000-100,000 | $\begin{aligned} & 226 \\ & 12.2 \end{aligned}$ | 2.6 | $\begin{gathered} 205 \\ 14.2 \end{gathered}$ | 2.3 | $\begin{gathered} 206 \\ 14.3 \end{gathered}$ | 2.3 |
| 20,000-50,000 | $\begin{aligned} & 291 \\ & 15.6 \end{aligned}$ | 2.4 | $\begin{aligned} & 276 \\ & 19.1 \end{aligned}$ | 2.2 | $\begin{aligned} & 279 \\ & 19.4 \end{aligned}$ | 2.3 |
| 10,000-20,000 | $\begin{gathered} 286 \\ 15.4 \end{gathered}$ | 2.4 | $\begin{gathered} 231 \\ 16.0 \end{gathered}$ | 2.0 | $\begin{gathered} 202 \\ 14.1 \end{gathered}$ | 1.7 |
| 5,000-10,000 | $\begin{aligned} & 198 \\ & 10.7 \end{aligned}$ | 2.5 | $\begin{gathered} 178 \\ 12.3 \end{gathered}$ | 2.3 | $\begin{gathered} 128 \\ 8.9 \end{gathered}$ | 1.6 |
| <5,000 | $\begin{aligned} & 158 \\ & 8.5 \end{aligned}$ | 3.2 | $\begin{aligned} & 95 \\ & 6.6 \end{aligned}$ | 1.9 | $\begin{gathered} 103 \\ 7.2 \end{gathered}$ | 2.1 |
| Total | $\begin{array}{r} 1857 \\ 100 \end{array}$ | 2.8 | $\begin{array}{r} 1446 \\ 100 \end{array}$ | 2.2 | $\begin{array}{r} 1437 \\ 100 \end{array}$ | 2.2 |

Table 7b. Classification by municipal populations of total numbers and percentages of pedestrian, cyclist and moped-rider fatalities inside built-up areas and per annum per 100,000 inhabitants from 1968 to 1972.

| Pedestrian fatalities mside built-up areas by age groups | Population of muncipality of accident |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $200,000$ | $\begin{aligned} & 100,000- \\ & .200,000 \end{aligned}$ | $\begin{gathered} 50,000- \\ 100,000 \end{gathered}$ | $\begin{aligned} & 20,000- \\ & 50,000 \end{aligned}$ | $\begin{aligned} & 10,000- \\ & 20,000 \end{aligned}$ | $\begin{gathered} 5,000- \\ 10,000 \end{gathered}$ | $\stackrel{<}{5,000}$ | Total |
| 0 to 9 years | 63 | 57 | 63 | 100 | 135 | 99 | 80 | 597 |
|  | 106 | 9.5 | 10.6 | 16.8 | 22.6 | 16.6 | 13.4 | 100 |
|  | 13.7 | 23.8 | 27.9 | 34.4 | 47.2 | 50.0 | 50.6 | 32.1 |
| 10 to 19 years | 18 | 10 | 11 | 11 | 22 | 7 | 12 | 91 |
|  | 19.8 | 11.0 | 12.1 | 12.1 | 24.2 | 7.7 | 13.2 | 100 |
|  | 3.9 | 4.2 | 4.9 | 3.8 | 7.7 | 3.5 | 7.6 | 4.9 |
| 20 to 29 years | 16 | 5 | 8 | 10 | 3 | 6 | 3 | 56 |
|  | 28.6 | 8.9 | 14,3 | 17.9 | 14.3 | 10.7 | 5.4 | 100 |
|  | 3.5 | 2.1 | 3.5 | 3.4 | 2.8 | 3.0 | 1.9 | 3.0 |
| 30 to 39 years | 14 | 8 | 5 | 3 | 11 | 5 | 5 | 51 |
|  | 27.4 | 15.7 | 9.8 | 5.9 | 21.6 | 9.8 | 9.8 | 100 |
|  | 3.1 | 3.3 | 2.2 | 1.0 | 3.9 | 2,5 | 3.2 | 2.8 |
| 40 to 49 years | 18 | 10 | 6 | 11 | 6 | 8 | 4 | 63 |
|  | 28.6 | 15.9 | 9.5 | 17.5 | 9.5 | 12.7 | 6.3 | 100 |
|  | 3.9 | 4.2 | 2.7 | 3.8 | 2.1 | 4.1 | 2.5 | 3.4 |
| 50 to 59 years | 26 | 9 | 22 | 19 | 7 | 14 | 9 | 106 |
|  | 24.5 | 8.5 | 20.8 | 17.9 | 6.6 | 13.2 | 8.5 | 100 |
|  | 5.7 | 3.8 | 9.7 | 6.5 | 2.4 | 7.1 | 5.7 | 5.7 |
| 60 to 69 years | 89 | 30 | 34 | 42 | 26 | 15 | 13 | 249 |
|  | 35.8 | 12.0 | 13.7 | 16.9 | 10.4 | 6.0 | 5.2 | 100 |
|  | 19.4 | 12.6 | 15.0 | 14.4 | 9.1 | 7.6 | 8.2 | 13.4 |
| 70 years or older | 215 | 110 | 77 | 95 | 71 | 44 | 32 | 644 |
|  | 33.4 | 17.1 | 12.0 | 14.8 | 11.0 | 6.8 | 5.0 | 100 |
|  | 46.8 | 46.0 | 34.1 | 32.7 | 24.8 | 22.2 | 20.3 | 34,7 |
| Total | 459 | 239 | 226 | 291 | 286 | 198 | 158 | 1857 |
|  | 24.7 | 12.9 | 12.2 | 15.6 | 15.6 | 10.7 | 8.5 | 100 |
|  | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Table 8a. Classification by age groups and municipal population ${ }_{\mathrm{s}}$ of total numbers and percentages of pedestrian fatalities inside built-up areas from 1968 to 19 p.

| Cyclist fatalities inside built-up areas by age groups | Population of mumicipality of accident |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underset{200,000}{>}$ | $\begin{aligned} & 100,000- \\ & 200,000 \end{aligned}$ | $\begin{array}{r} 50,000 \\ 100,000 \end{array}$ | $\begin{aligned} & 20,000- \\ & 50,000 \end{aligned}$ | $\begin{aligned} & 10,000- \\ & 20,000 \end{aligned}$ | $\begin{gathered} 5,000- \\ 10,000 \end{gathered}$ | $\underset{5,000}{ }$ | Total |
| 0 to 9 years | 12 | 17 | 21 | 40 | 51 | 40 | 29 | 210 |
|  | 5.7 | 8.1 | 10.0 | 19.0 | 243 | 19.0 | 13.8 | 100 |
|  | 5.8 | 6.7 | 10.2 | 14.5 | 22.1 | 22.5 | 30.5 | 14.5 |
| 10 to 19 years | 47 | 60 | 44 | 73 | 56 | 32 | 17 | 329 |
|  | 14.3 | 18.2 | 13.4 | 22.2 | 17.0 | 9.7 | 5.2 | 00 |
|  | 22.8 | 23.5 | 21.5 | 26.4 | 24.2 | 18.0 | 17.9 | 22.8 |
| 20 to 29 years | 14 | 11 | 5 | 13 | 10 | 4 | 3 | 60 |
|  | 23.3 | 18.3 | 8.3 | 21.7 | 16.7 | 6.7 | 5.0 | 100 |
|  | 6.8 | 4.3 | 2.4 | 4.7 | 4.3 | 2.2 | 3.2 | 41 |
| 30 to 39 years | 5 | 10 | 4 | 9 | 4 | 4 | 5 | 41 |
|  | 12.2 | 24.4 | 9.8 | 22.0 | 9.8 | 9.8 | 12.2 | 100 |
|  | 2.4 | 3.9 | 2.0 | 3.3 | 1.7 | 2.2 | 5.3 | 2.8 |
| 40 to 49 years | 7 | 10 | 11 | 12 | 10 | 3 | 5 | 58 |
|  | 12.1 | 17.2 | 19.0 | 20.7 | 17.2 | 5.2 | 8.6 | 100 |
|  | 3.4 | 3.9 | 5.4 | 4.3 | 4.3 | 1.7 | 5.3 | 4.0 |
| 50 to 59 years | 27 | 29 | 25 | 21 | 14 | 13 | 5 | 134 |
|  | 20.2 | 21.6 | 18.7 | 15.7 | 10.4 | 9.7 | 3.7 | 100 |
|  | 13.1 | 11.4 | 12.2 | 7.6 | 6.1 | 7.3 | 5.3 | 9.3 |
| 60 to 69 years | 36 | 54 | 46 | 43 | 31 | 37 | 10 | 257 |
|  | 14.0 | 21.0 | 17.9 | 16.7 | 12.1 | 14.4 | 3.9 | 100 |
|  | 17.5 | 21.2 | 22.4 | 15.6 | 13.4 | 20.8 | 10.5 | 17.8 |
| 70 years or older | 58 | 64 | 49 | 65 | 55 | 45 | 21 | 357 |
|  | 162 | 17.9 | 13.7 | 18.2 | 15.4 | 12.6 | 5.9 | 100 |
|  | 282 | 25.1 | 23.9 | 23.6 | 23.8 | 25.3 | 22.0 | 24.7 |
| Tota 1 | 206 | 255 | 205 | 276 | 231 | 178 | 95 | 1446 |
|  | 14.2 | 17.6 | 14.2 | 19.1 | 16.0 | 12.3 | 6.6 | 100 |
|  | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Table 8b. C assification by age groups and muncipal populations of total numbers and percentages of cyclist fatal'fies inside built-up areas from 1968 to 1972.

| Moped-rider fatalities inside built-up areas by age groups |  | $\begin{aligned} & \text { municipalit } \\ & 100,000- \\ & 200,000 \end{aligned}$ | $\begin{aligned} & \text { accident } \\ & 50,000- \\ & 100,000 \end{aligned}$ | $\begin{aligned} & 20,000- \\ & 50,000 \end{aligned}$ | $\begin{aligned} & 10,000- \\ & 50,000 \end{aligned}$ | $\begin{gathered} 5,000- \\ 20,000 \end{gathered}$ | $\stackrel{<}{5,000}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 to 9 years | 2 | 3 | 2 | 1 | 1 | 1 | 0 | 10 |
|  | 20.0 | 30.0 | 20.0 | 10.0 | 10.0 | 10.0 | 0.0 | 100 |
|  | 0.7 | 1.4 | 10 | 0.3 | 0.5 | 0.8 | 0.0 | 07 |
| 10 to 19 years | 85 | 79 | 81 | 111 | 92 | 66 | 42 | 556 |
|  | 15.3 | 14.2 | 14.6 | 20.0 | 16.5 | 11.9 | 7.6 | 100 |
|  | 287 | 35.4 | 39.3 | 39.8 | 45.6 | 51.6 | 40.8 | 38.6 |
| 20 o 29 years | 53 | 33 | 28 | 37 | 31 | 20 | 16 | 218 |
|  | 24.3 | 15.1 | 12.8 | 17.0 | 14.2 | 9.2 | 7.4 | 100 |
|  | 17.9 | 14.8 | 13.6 | 13.3 | 15.4 | 157 | 15.5 | 15.1 |
| 30 to 39 ycars | 18 | 12 | 17 | 22 | 13 | 4 | 4 | 90 |
|  | 20.0 | 13.3 | 18.9 | 24.4 | 14.4 | 4.4 | 4.4 | 100 |
|  | 6.1 | 5.4 | 8.3 | 7.9 | 6.4 | 3.1 | 3.9 | 6.3 |
| 40 to 49 years | 23 | 11 | 11 | 22 | 11 | 9 | 13 | 100 |
|  | 230 | 11.0 | 11.0 | 22.0 | 11.0 | 90 | 13.0 | 100 |
|  | 78 | 49 | 5.3 | 7.9 | 5.4 | 7.0 | 12.6 | 7.0 |
| 50 to 59 years | 51 | 28 | 27 | 19 | 19 | 14 | 7 | 165 |
|  | 30.9 | 17.0 | 16.4 | 11.5 | 11.5 | 8.5 | 4.2 | 100 |
|  | 17.2 | 12.6 | 13.1 | 6.8 | 9.4 | 10.9 | 6.8 | 11.5 |
| 60 to 69 years | 38 | 36 | 26 | 41 | 17 | 5 | 12 | 175 |
|  | 21.7 | 20.6 | 14.9 | 23.4 | 9.7 | 2.9 | 6.9 | 100 |
|  | 12.8 | 16. 1 | 12.6 | 14.7 | 8.4 | 3.9 | 11.7 | 12.2 |
| 70 years orolder | 26 | 21 | 14 | 26 | 18 | 9 | 9 | 123 |
|  | 21.1 | 17.1 | 11.4 | 21.1 | 14.6 | 7.3 | 7.3 | 100 |
|  | 8.8 | 9.4 | 6.8 | 9.3 | 8.9 | 7.0 | 8.7 | 8.6 |
| Total | 296 | 223 | 206 | 279 | 202 | 128 | 103 | 1437 |
|  | 20.6 | 155 | 143 | 19.4 | 141 | 8.9 | 7.2 | 100 |
|  | 100 | 100 | 900 | 100 | 100 | 100 | 100 | 100 |

Table 8 c. Classification by age groups and municipal populations of total numbers and percentages of moped-rider fatalitres inside built-up areas from 1968 to 1972 .

| Location on road | Pedestrian fatalities |  |  | Cyclist fatalities |  |  | Moped-rider fatalities |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Inside built-up areas | Outside built-up areas | Total | Inside built-up areas | Outside built-up areas | Total | Inside built-up areas | Outside built-up areas | Total |
| Intersection | $\begin{gathered} 407 \\ 21.9 \end{gathered}$ | $\begin{gathered} 139 \\ 12.9 \end{gathered}$ | $\begin{gathered} 546 \\ 18.6 \end{gathered}$ | $\begin{gathered} 760 \\ 52.6 \end{gathered}$ | $\begin{gathered} 516 \\ 42.6 \end{gathered}$ | $\begin{gathered} 1276 \\ 48.0 \end{gathered}$ | $\begin{gathered} 733 \\ 51.0 \end{gathered}$ | $\begin{gathered} 484 \\ 34.7 \end{gathered}$ | $\begin{gathered} 1217 \\ 43.0 \end{gathered}$ |
| Straight road | $\begin{gathered} 1370 \\ 73.8 \end{gathered}$ | $\begin{gathered} 891 \\ 82.9 \end{gathered}$ | $\begin{aligned} & 2261 \\ & 77.0 \end{aligned}$ | $\begin{gathered} 632 \\ 43.7 \end{gathered}$ | $\begin{gathered} 621 \\ 51.3 \end{gathered}$ | $\begin{gathered} 1253 \\ 47.2 \end{gathered}$ | $\begin{gathered} 618 \\ 43.0 \end{gathered}$ | $\begin{aligned} & 749 \\ & 53.7 \end{aligned}$ | $\begin{aligned} & 1367 \\ & 48.3 \end{aligned}$ |
| Square | $\begin{gathered} 20 \\ 1.1 \end{gathered}$ | $\begin{aligned} & 3 \\ & 0.3 \end{aligned}$ | $\begin{aligned} & 23 \\ & 0.8 \end{aligned}$ | $\begin{gathered} 10 \\ 0.7 \end{gathered}$ | $\begin{aligned} & 5 \\ & 0.4 \end{aligned}$ | $\begin{gathered} 15 \\ 0.6 \end{gathered}$ | $\begin{gathered} 14 \\ 1.0 \end{gathered}$ | $\begin{aligned} & 8 \\ & 0.6 \end{aligned}$ | $\begin{gathered} 22 \\ 0.8 \end{gathered}$ |
| Corner/Bend | $\begin{gathered} 60 \\ 3.3 \end{gathered}$ | $\begin{gathered} 46 \\ 4.3 \end{gathered}$ | $\begin{aligned} & 106 \\ & 3.6 \end{aligned}$ | $\begin{gathered} 44 \\ 3.1 \end{gathered}$ | $\begin{gathered} 69 \\ 5.7 \end{gathered}$ | $\begin{gathered} 113 \\ 4.3 \end{gathered}$ | $\begin{aligned} & 72 \\ & 5.1 \end{aligned}$ | $\begin{aligned} & 153 \\ & 11.0 \end{aligned}$ | $\begin{gathered} 225 \\ 7.9 \end{gathered}$ |
| Total | $\begin{array}{r} 1857 \\ 100 \end{array}$ | $\begin{array}{r} 1079 \\ 100 \end{array}$ | $\begin{array}{r} 2936 \\ 100 \end{array}$ | $\begin{array}{r} 1446 \\ 100 \end{array}$ | $\begin{array}{r} 1211 \\ 100 \end{array}$ | $\begin{array}{r} 2657 \\ 100 \end{array}$ | $\begin{array}{r} 1437 \\ 100 \end{array}$ | $\begin{array}{r} 1394 \\ 100 \end{array}$ | $\begin{array}{r} 2831 \\ 100 \end{array}$ |

Table 9. Classification by location on road inside or outside built-up areas of total numbers and percentages of pedestrian, cyclist and moped-rider fatalities from 1968 to 1972.

| Pedestrıan fatalities inside built-up areas by population of municipality of accident | Intersection | Straight road | Square | Corner/Bend | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $>200,000$ | $\begin{gathered} 175 \\ 38.1 \\ 43.0 \end{gathered}$ | $\begin{gathered} 276 \\ 60.1 \\ 20.1 \end{gathered}$ | $\begin{gathered} 5 \\ 1.1 \\ 25.0 \end{gathered}$ | $\begin{aligned} & 3 \\ & 0.7 \\ & 5.0 \end{aligned}$ | $\begin{gathered} 459 \\ 100 \\ 24.7 \end{gathered}$ |
| 100,000-200,000 | $\begin{aligned} & 52 \\ & 21.8 \\ & 12.8 \end{aligned}$ | $\begin{gathered} 176 \\ 73.6 \\ 12.8 \end{gathered}$ | $\begin{gathered} 4 \\ 1.7 \\ 20.0 \end{gathered}$ | $\begin{gathered} 7 \\ \quad 79 \\ 11.7 \end{gathered}$ | $\begin{gathered} 239 \\ 100 \\ 12.9 \end{gathered}$ |
| 50,000-100,000 | $\begin{aligned} & 43 \\ & 19.0 \\ & 10.6 \end{aligned}$ | $\begin{gathered} 172 \\ 76.1 \\ 12.6 \end{gathered}$ | $\begin{gathered} 5 \\ 2.2 \\ 25.0 \end{gathered}$ | $\begin{gathered} 6 \\ 2.7 \\ 10.0 \end{gathered}$ | $\begin{aligned} & 226 \\ & 100 \\ & 12.2 \end{aligned}$ |
| 20,000-50,000 | $\begin{aligned} & 57 \\ & 196 \\ & 14.0 \end{aligned}$ | $\begin{gathered} 220 \\ 75.6 \\ 16.1 \end{gathered}$ | $\begin{aligned} & 1 \\ & 0.3 \\ & 5.0 \end{aligned}$ | $\begin{gathered} 13 \\ 4.5 \\ 21.7 \end{gathered}$ | $\begin{aligned} & 291 \\ & 100 \\ & 15.7 \end{aligned}$ |
| 10,000-20,000 | $\begin{aligned} & 45 \\ & 15.7 \\ & 11.1 \end{aligned}$ | $\begin{gathered} 227 \\ 79.4 \\ 16.6 \end{gathered}$ | $\begin{aligned} & 1 \\ & 0.3 \\ & 5.0 \end{aligned}$ | $\begin{gathered} 13 \\ 4.5 \\ 21.7 \end{gathered}$ | $\begin{aligned} & 286 \\ & 100 \\ & 15.4 \end{aligned}$ |
| 5,00-10,000 | $\begin{gathered} 16 \\ 8.1 \\ 3.9 \end{gathered}$ | $\begin{gathered} 170 \\ 85.9 \\ 12.4 \end{gathered}$ | $\begin{gathered} 4 \\ 2.0 \\ 20.0 \end{gathered}$ | $\begin{gathered} 8 \\ 4.0 \\ 13.3 \end{gathered}$ | $\begin{aligned} & 198 \\ & 100 \\ & 10.7 \end{aligned}$ |
| $<5000$ | $\begin{aligned} & 19 \\ & 12.0 \\ & 47 \end{aligned}$ | $\begin{gathered} 129 \\ 81.6 \\ 9.4 \end{gathered}$ | $\begin{aligned} & 0 \\ & 0.0 \\ & 0.0 \end{aligned}$ | $\begin{gathered} 10 \\ 6.3 \\ 16.7 \end{gathered}$ | $\begin{gathered} 158 \\ 100 \\ 8.5 \end{gathered}$ |
| Total | $\begin{gathered} 407 \\ 21.9 \\ 100 \end{gathered}$ | $\begin{gathered} 1370 \\ 73.8 \\ 100 \end{gathered}$ | $\begin{gathered} 20 \\ 1.1 \\ 100 \end{gathered}$ | $\begin{gathered} 60 \\ 3.2 \\ 100 \end{gathered}$ | $\begin{array}{r} 1857 \\ 100 \\ 100 \end{array}$ |

Table 10a. Classification by muncipal populations and location on road of total numbers and percentages of pedestrian fatalities inside built-up areas from 1968 to 1972.

| Cyclist fatalities inside built-up areas by population of municipality of accident | Intersection | Straight road | Square | Corner/Bend | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| >200,000 | $\begin{gathered} \hline 128 \\ 62.1 \\ 16.8 \end{gathered}$ | $\begin{aligned} & 70 \\ & 34.0 \\ & 111 \end{aligned}$ | $\begin{gathered} 5 \\ 2.4 \\ 50.0 \end{gathered}$ | $\begin{aligned} & 3 \\ & 1.5 \\ & 6.8 \end{aligned}$ | $\begin{gathered} 206 \\ 100 \\ 14.2 \end{gathered}$ |
| 100,000-200,000 | $\begin{gathered} 156 \\ 61.0 \\ 20.5 \end{gathered}$ | $\begin{aligned} & 92 \\ & 36.1 \\ & 14.6 \end{aligned}$ | $\begin{gathered} 3 \\ 1.2 \\ 30.0 \end{gathered}$ | $\begin{aligned} & 4 \\ & 1.6 \\ & 9.1 \end{aligned}$ | $\begin{aligned} & 255 \\ & 100 \\ & 17.6 \end{aligned}$ |
| 50,000-100,000 | $\begin{gathered} 118 \\ 57.6 \\ 15.5 \end{gathered}$ | $\begin{aligned} & 8_{1} \\ & 39.5 \\ & 12.8 \end{aligned}$ | $\begin{gathered} 1 \\ 0.5 \\ 100 \end{gathered}$ | $\begin{gathered} 5 \\ 2.4 \\ 11.4 \end{gathered}$ | $\begin{gathered} 205 \\ 100 \\ 14.2 \end{gathered}$ |
| 20,000-50,00 | $\begin{gathered} 144 \\ 52.2 \\ 18.9 \end{gathered}$ | $\begin{aligned} & 122 \\ & 44.2 \\ & 19.3 \end{aligned}$ | $\begin{aligned} & 0 \\ & 0.0 \\ & 0.0 \end{aligned}$ | $\begin{gathered} 10 \\ 3.6 \\ 22.7 \end{gathered}$ | $\begin{aligned} & 276 \\ & 100 \\ & 19.1 \end{aligned}$ |
| 10,00-20,000 | $\begin{gathered} 102 \\ 44.2 \\ 134 \end{gathered}$ | $\begin{gathered} 113 \\ 48.9 \\ 17.9 \end{gathered}$ | $\begin{aligned} & 0 \\ & 0.0 \\ & 0.0 \end{aligned}$ | $\begin{gathered} 16 \\ 6.9 \\ 36.4 \end{gathered}$ | $\begin{aligned} & 231 \\ & 100 \\ & 16.0 \end{aligned}$ |
| 5,000-10,000 | $\begin{aligned} & 73 \\ & 41.0 \\ & 9.6 \end{aligned}$ | $\begin{aligned} & 103 \\ & 57.9 \\ & 16.3 \end{aligned}$ | $\begin{gathered} 1 \\ 0.6 \\ 10.0 \end{gathered}$ | $\begin{aligned} & 1 \\ & 0.6 \\ & 2.3 \end{aligned}$ | $\begin{gathered} 178 \\ 100 \\ 12.3 \end{gathered}$ |
| < 5,000 | $\begin{aligned} & 39 \\ & 41.1 \\ & 5.1 \end{aligned}$ | $\begin{aligned} & 51 \\ & 53.7 \\ & 8.1 \end{aligned}$ | $\begin{aligned} & 0 \\ & 0.0 \\ & 0.0 \end{aligned}$ | $\begin{gathered} 5 \\ 5.3 \\ 11.4 \end{gathered}$ | $\begin{gathered} 95 \\ 100 \\ 11.4 \end{gathered}$ |
| Total | $\begin{gathered} 760 \\ 52.6 \\ 100 \end{gathered}$ | $\begin{gathered} 632 \\ 43.7 \\ 100 \end{gathered}$ | $\begin{gathered} 10 \\ 0.7 \\ 100 \end{gathered}$ | $\begin{gathered} 44 \\ 3.0 \\ 100 \end{gathered}$ | $\begin{array}{r} 1446 \\ 100 \\ 100 \end{array}$ |

Table 10b. Classification by municipal populations and location on road of total numbers and percentages of cyclist fatalities inside built-up areas from 1968 to 1972.

| Moped-rider fatalities inside built-up areas by population of municipality of accident | Intersection | Straight road | Square | Corner/Bend | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $>200,000$ | $\begin{gathered} 182 \\ 6.5 \\ 24.8 \end{gathered}$ | $\begin{gathered} 104 \\ 351 \\ 16.8 \end{gathered}$ | $\begin{aligned} & \hline 5 \\ & 1.7 \\ & 6.9 \end{aligned}$ | $\begin{aligned} & \hline 5 \\ & 1.7 \\ & 6.9 \end{aligned}$ | $\begin{gathered} 296 \\ 100 \\ 20.6 \end{gathered}$ |
| 100,000-200,000 | $\begin{gathered} 124 \\ 55.6 \\ 16.9 \end{gathered}$ | $\begin{aligned} & 82 \\ & 36.8 \\ & 13.3 \end{aligned}$ | $\begin{gathered} 2 \\ 0.9 \\ 14.3 \end{gathered}$ | $\begin{gathered} 15 \\ 6.7 \\ 20.8 \end{gathered}$ | $\begin{aligned} & 223 \\ & 100 \\ & 15.5 \end{aligned}$ |
| 50,000-100,000 | $\begin{aligned} & 115 \\ & 55.8 \\ & 15.7 \end{aligned}$ | $\begin{aligned} & 75 \\ & 36.4 \\ & 12.1 \end{aligned}$ | $\begin{gathered} 4 \\ 1.9 \\ 28.6 \end{gathered}$ | $\begin{gathered} 12 \\ 5.9 \\ 16.7 \end{gathered}$ | $\begin{aligned} & 206 \\ & 100 \\ & 14.3 \end{aligned}$ |
| 20,000-50,000 | $\begin{aligned} & 146 \\ & 52.3 \\ & 19.9 \end{aligned}$ | $\begin{gathered} 117 \\ 41.9 \\ 18.9 \end{gathered}$ | $\begin{aligned} & 1 \\ & 0.4 \\ & 7.1 \end{aligned}$ | $\begin{gathered} 15 \\ 5.4 \\ 20.8 \end{gathered}$ | $\begin{aligned} & 279 \\ & 100 \\ & 19.4 \end{aligned}$ |
| 10,000-20,000 | $\begin{aligned} & 92 \\ & 45.5 \\ & 12.6 \end{aligned}$ | $\begin{gathered} 100 \\ 49.5 \\ 16.2 \end{gathered}$ | $\begin{aligned} & 1 \\ & 0.5 \\ & 7.1 \end{aligned}$ | $\begin{gathered} 9 \\ 4.5 \\ 12.5 \end{gathered}$ | $\begin{aligned} & 202 \\ & 100 \\ & 14.1 \end{aligned}$ |
| 5,000-10,000 | $\begin{aligned} & 39 \\ & 30.5 \\ & 5.3 \end{aligned}$ | $\begin{aligned} & 82 \\ & 64.1 \\ & 13.3 \end{aligned}$ | $\begin{aligned} & 1 \\ & 0.8 \\ & 7.1 \end{aligned}$ | $\begin{aligned} & 6 \\ & 4.7 \\ & 8.3 \end{aligned}$ | $\begin{aligned} & 128 \\ & 100 \\ & 8.9 \end{aligned}$ |
| <5,000 | $\begin{aligned} & 35 \\ & 34.0 \\ & 4.8 \end{aligned}$ | $\begin{aligned} & 58 \\ & 56.3 \\ & 9.4 \end{aligned}$ | $\begin{aligned} & 0 \\ & 0.0 \\ & 0.0 \end{aligned}$ | $\begin{gathered} 10 \\ 9.7 \\ 13.9 \end{gathered}$ | $\begin{aligned} & 103 \\ & 100 \\ & 7.2 \end{aligned}$ |
| Total | $\begin{gathered} 733 \\ 51.0 \\ 100 \end{gathered}$ | $\begin{gathered} 618 \\ 43.0 \\ 100 \end{gathered}$ | $\begin{gathered} 14 \\ 1.0 \\ 100 \end{gathered}$ | $\begin{gathered} 72 \\ 5.0 \\ 100 \end{gathered}$ | $\begin{array}{r} 147 \\ 100 \\ 100 \end{array}$ |

Table 10c. Class fication bymul uncipal populations and location on road of total numbers and percentages of moped-ride $\mathrm{r}_{\mathrm{r}}$ fatal ties inside built-up areas from 1968 to 972.

| Inside built-up areas by age groups | Pedestrian fatalities |  |  |  | Cyclist fatalities |  |  |  | Moped-rider fatalities |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Intersection | Straight road | Square, corner or bend | Total | Intersection | Straight road | Square, corner or bend | Total | Intersection | Straight road | Square, corner or bend | Total |
| 0 to 9 years | 78 | 501 | 18 | 597 | 78 | 123 | 9 | 210 | 6 | 3 | 1 | 10 |
|  | 13.1 | 83.9 | 3.0 | 100 | 37.1 | 58.6 | 4.3 | 100 | 60.0 | 30.0 | 10.0 | 100 |
|  | 19.1 | 36.6 | 22.5 | 32.1 | 10.3 | 19.5 | 16.7 | 14.5 | 0.8 | 0.5 | 1.2 | 0.7 |
| 10 to 19 years | 23 | 61 | 7 | 91 | 140 | 173 | 16 | 329 | 266 | 251 | 39 | 556 |
|  | 25.3 | 67.0 | 7.7 | 100 | 42.6 | 52.6 | 4.9 | 100 | 47.8 | 45.1 | 7.0 | 100 |
|  | 5.7 | 4.4 | 8.7 | 4.9 | 18.4 | 27.4 | 29.6 | 22.8 | 36.3 | 40.6 | 45.4 | 38.6 |
| 20 to 29 years | 16 | 35 | 5 | 56 | 23 | 33 | 4 | 60 | 105 | 103 | 10 | 218 |
|  | 28.6 | 62.5 | 8.9 | 100 | 38.3 | 55.0 | 6.7 | 100 | 48.2 | 47.2 | 4.6 | 100 |
|  | 3.9 | 2.5 | 6.3 | 3.0 | 3.0 | 5.2 | 7.4 | 4.1 | 14.3 | 16.7 | 11.6 | 15.1 |
| 30 to 39 years | 6 | 42 | 3 | 51 | 21 | 18 | 2 | 41 | 42 | 41 | 7 | 90 |
|  | 11.8 | 82.3 | 5.9 | 100 | 512 | 43.9 | 4.9 | 100 | 46.7 | 45.6 | 7.8 | 100 |
|  | 1.5 | 3.1 | 3.8 | 2.8 | 2.8 | 2.8 | 37 | 2.8 | 5.7 | 6.6 | 8.1 | 6.3 |
| 40 to 49 years | 17 | 41 | 5 | 63 | 32 | 23 | 3 | 58 | 52 | 40 | 8 | 100 |
|  | 27.0 | 65.1 | 7.9 | 100 | 55.2 | 39.7 | 6.2 | 100 | 52.0 | 40.0 | 8.0 | 100 |
|  | 4.2 | 30 | 6.3 | 3.4 | 4.2 | 3.6 | 5.5 | 4.0 | 7.1 | 6.5 | 9.3 | 7.0 |
| 50 to 59 years |  |  |  |  |  |  |  |  | 90 | 72 | 3 | 165 |
|  | $23.6$ | 69.8 | 6.6 | 100 | 56.0 | 39.6 | 4.5 | 100 | 54.5 | 43.6 | 1.8 | 100 |
|  | 6.1 | 5.4 | 8.7 | 57 | 9.9 | 8.4 | 11.1 | 9.3 | 12.3 | 11.6 | 3.5 | 11.5 |
| 60 to 69 years | 63 | 175 | 11 | 249 | 159 | 93 | 5 | 257 | 93 | 71 | 11 | 175 |
|  | 25.3 | 70.3 | 4.4 | 100 | 61.9 | 36.2 | 1.9 | 100 | 53.1 | 40.6 | 6.3 | 100 |
|  | 15.5 | 12.8 | 13.7 | 13.4 | 20.9 | 14.7 | 9.3 | 17.8 | 12.7 | 11.5 | 12.8 | 12.2 |
| 70 years or older | 179 | 441 | 24 | 644 | 232 | 116 | 9 | 357 | 79 | 37 | 7 | 123 |
|  | 27.8 | 68.5 | 3.7 | 100 | 65.0 | 32.5 | 2.5 | 100 | 64.2 | 30.1 | 5.7 | 100 |
|  | 44.0 | 32.2 | 30.0 | 34.7 | 30.5 | 18.4 | 16.7 | 24.7 | 10.8 | 6.0 | 8.1 | 8.6 |
| Total | 407 | 1370 | 80 | 1857 | 760 | 632 | 54 | 1446 | 733 | 618 | 86 | 1437 |
|  | 21.9 | 73.8 | 4.3 | 100 | 52.6 | 43.7 | 3.7 | 100 | 51.0 | 43.0 | 6.0 | 100 |
|  | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Table II. Classification by age groups and location on road of total numbers and percentages of pedestrian, cyclist and moped-rider fatalities inside built-up areas from 968 to 1972.

| Object collided with | Pedestrian fatalities number percentage |  | Cyclist fatalities number | percentage | Moped number | talities percentage | Total number | percentage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| In main colliston: |  |  |  |  |  |  |  |  |
| Private cars | 1955 | 66.6 | 1578 | 59.4 | 1215 | 42.9 | 4748 | 56.4 |
| Road trucks | 501 | 17.1 | 680 | 25.6 | 655 | 23.2 | 1836 | 21.8 |
| Buses | 57 | 1.9 | 95 | 3.6 | 84 | 3.0 | 236 | 2.8 |
| Motor cyc es | 44 | 1.5 | 23 | 0.9 | 24 | 0.9 | 91 | 1.1 |
| Other vehicles | 70 | 2.4 | 36 | 1.3 | 42 | 1.5 | 148 | 1.7 |
| Railed vehicles | 73 | 2.5 | 40 | 1.5 | 70 | 2.5 | 183 | 2.2 |
| Mopeds | 170 | 5.8 | 57 | 2.1 | 137 | 4.8 | 364 | 4.3 |
| Cycles | 12 | 0.4 | 21 | 0.8 | 41 | 1.4 | 74 | 0.9 |
| Single-vehicle | - ${ }^{1}$ | - | 87 | 3.3 | 477 | 16.8 | 564 | 6.7 |
| Not in main collision: | 54 | 1.8 | 40 | 1.5 | 86 | 3.0 | 180 | 2.1 |
| Total | 2936 | 100 | 2657 | 100 | 2831 | 100 | 8424 | 100 |

Table 12. Classification by objects collided with, of total numbers and percentages of pedestrian, cyclist and moped-rider fatalitres from 1968 to 1972 (including those in which pedestrians, cyclists and moped-riders were not involved in the main collision).

1 By defintion not recorded as a road-traffic accident.


Table 13. Classification by months of total numbers and percentages of pedestrian, cyclist and moped-rider fatalities and other road-traffic fatalities from 1968 to 1972.

| Day of the week | Pedestrian fatalities | Cyclist fatalities | Moped-rider fatalities |
| :--- | :---: | :---: | :---: |
| Sunday Public holiday | 370 | 226 | 470 |
|  | 12.6 | 8.5 | 16.6 |
| Monday | 402 | 410 | 425 |
|  | 13.7 | 15.4 | 15.0 |
| Tuesday | 387 | 430 | 1401 |
|  | 13.2 | 16.2 | 351 |
| Wednesday | 436 | 430 | 12.4 |
|  | 14.9 | 16.2 | 374 |
| Thursday | 416 | 13.2 |  |
|  | 14.2 | 16.6 | 457 |
| Friday | 499 | 16.1 |  |
|  | 170 | 17.0 | 353 |
| Saturday | 426 | 267 | 12.5 |
| Total | 14.5 | 10.0 | 2831 |
|  | 2936 | 2657 | 100 |

Table 14. Classification by days of the week of total numbers and percentages of pedestrian, cyclist and moped-rider fatalities from 1968 to 1972.

| Pedestrian fatalities by age groups | Monday to Friday daytime nightime |  | Saturday daytime | nighttime | Sunday/ daytime | lic holiday nighttime | Total daytime | nighttime | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 to 9 years | 716 | 0 | 131 | 0 | 73 | 0 | 920 | 0 | 920 |
|  | 77.8 | 0 | 14.3 | 0 | 7.9 | 0 | 100 | 0 | 100 |
|  | 36.2 | 0 | 36.6 | 0 | 27.9 | 0 | 35.4 | 0 | 31.3 |
| 10 to 19 years | 139 | 15 | 27 | 14 | 26 | 13 | 192 | 42 | 234 |
|  | 59.4 | 6.4 | 11.5 | 6.0 | 11.1 | 5.6 | 82.1 | 17.9 | 100 |
|  | 7.0 | 4.8 | 7.5 | 14.4 | 9.9 | 15.1 | 7.4 | 12.5 | 8.0 |
| 20 to 29 years | 52 | 31 | 13 | 10 | 7 | 4 | 72 | 45 | 117 |
|  | 44.4 | 26.5 | 11.1 | 8.5 | 6.0 | 3.4 | 61.5 | 38.5 | 100 |
|  | 2.6 | 20.1 | 3.6 | 10.3 | 2.7 | 47 | 2.8 | 13.3 | 4.8 |
| 30 to 39 years | 48 | 15 | 9 | 7 | 11 | 7 | 68 | 29 | 97 |
|  | 49.5 | 158 | 9.5 | 7.4 | 11.6 | 7.4 | 70.1 | 29.9 | 100 |
|  | 2.4 | 9.8 | 2.5 | 7.2 | 4.2 | 8.1 | 2.6 | 8.6 | 3.3 |
| 40 to 49 years | 68 | 10 | 12 | 12 | 10 | 11 | $90$ | $33$ | 123 |
|  | 55.3 | 8.0 | 9.6 | 9.6 | 8.0 | 8.8 | $73.2$ | $26.8$ | 100 |
|  | 3.4 | 6.5 | 3.4 | 12.4 | 3.8 | 12.8 | 3.4 | 9.8 | 4.2 |
| 50 to 59 years | 123 | 11 | 15 | 17 | 15 | 15 | 153 | 43 |  |
|  | $627$ | 5.6 | 77 | 8.6 | 7.7 | 7.7 | 781 | $21.9$ | $100$ |
|  | 6.2 | 7.1 | 4.2 | 17.5 | 5.7 | 17.4 | 5.9 | 12.8 | 6.7 |
| 60 to 69 years | 233 | 29 | 41 | 16 | 37 | 18 | 311 | 63 | 374 |
|  | 62.3 | 77 | 11.0 | 4.3 | 9.9 | 4.8 | 83.2 | 16.8 | 100 |
|  | 11.8 | 18.8 | 11.5 | 16.5 | 14.1 | 20.9 | 12.0 | 18.7 | 12.7 |
| 70 years or older | 600 | 43 | 110 | 21 | 83 | 18 | 793 | 82 | 875 |
|  | 68.6 | 4.9 | 12.6 | 2.4 | 9.5 | 2.0 | 90.6 | 9.4 | 100 |
|  | 30.3 | 27.9 | 30.7 | 21.7 | 31.7 | 20.9 | 30.5 | 24.3 | 298 |
| Total | 1979 | 154 | 358 | 97 | 262 | 86 | 2599 | 337 | 2936 |
|  | 67.4 | 5.3 | 12.2 | 3.3 | 8.9 | 2.9 | 88.5 | 11.5 | 100 |
|  | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Table 15a. Classification by age groups and daytime and nighttime on working days and other days, of total numbers and percentages of pedestrian fatalities from 1968 to 1972

* 'Nighttime' is de fined as : from 22.00 to 04.00 hours.

| Cyclist fatalities by age groups | Monday to Friday daytime nighttime |  | Saturday daytime | nighttime | Sonday/P daytime | lic holiday nighttime | Total daytime | nighttime | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 to 9 years | 315 | 0 | 47 | 0 | 18 | 0 | 380 | 0 | 380 |
|  | 82.9 | 0 | 12.4 | 0 | 4.8 | 0 | 100 | 0 | 100 |
|  | 15.3 | 0 | 19.3 | 0 | 10.8 | 0 | 15.4 | 0 | 143 |
| 10 to 19 years | 461 | 14 | 50 | 11 | 31 | 5 | 542 | 30 | 572 |
|  | 80.6 | 2.5 | 8.8 | 1.9 | 5.4 | 0.9 | 94.8 | 5.2 | 100 |
|  | 22.4 | 13.6 | 23.6 | 26.8 | 18.6 | 10.4 | 22.0 | 15.6 | 21.5 |
| 20 to 29 years | 58 | 14 | 5 | 4 | 5 | 10 | 68 | 28 | 96 |
|  | 60.4 | 14.6 | 5.2 | 4.2 | 5.2 | 10.4 | 70.8 | 29.2 | 00 |
|  | 28 | 6.8 | 2.1 | 9.8 | 3.0 | 20.8 | 2.7 | 14.6 | 3.6 |
| 30 to 39 years | 40 | 7 | 8 | 3 | 8 | 7 | 56 | 17 | 73 |
|  | 54.8 | 9.6 | 11.0 | 4.1 | 11.0 | 9.6 | 767 | 23.3 | 100 |
|  | 1.9 | 6.8 | 3.3 | 7.3 | 4.8 | 14.6 | 2.3 | 8.8 | 2.8 |
| 40 to 49 years | 68 | 14 | 8 | 5 | 10 | 3 | 86 | 22 | 108 |
|  | 63.0 | 13.0 | 7.4 | 4.6 | 9.3 | 2.8 | 79.6 | 20.4 | 100 |
|  | 3.3 | 13.6 | 3.3 | 12.2 | 6.0 | 6.3 | 3.5 | 11.5 | 4.1 |
| 50 to 59 years | 159 | 19 | 17 | 7 | 17 | 6 | 193 | 32 | 225 |
|  | 707 | 8.4 | 7.6 | 3.1 | 7.6 | 2.7 | 85.8 | 14.2 | 100 |
|  | 7.7 | 18.4 | 7.0 | 17.1 | 10.2 | 12.5 | 7.8 | 16.7 | 8.5 |
| 60 to 69 years | 337 | 24 | 38 | 8 | 36 | 10 | 411 | 42 | 453 |
|  | 74.4 | 5.3 | 8.4 | 1.8 | 8.0 | 2.2 | 90.7 | 9.3 | 100 |
|  | 16.4 | 23.3 | 15.6 | 19.5 | 21.6 | 20.8 | 16.7 | 21.9 | 17.0 |
| 70 years or older | 617 | 11 | 70 | 3 | 42 | 7 | 729 | 21 | 750 |
|  | 82.3 | 1.5 | 9.3 | 0.4 | 5.6 | 0.9 | 97.2 | 2.8 | 100 |
|  | 30.1 | 10.7 | 28.8 | 7.3 | 25.1 | 14.6 | 29.6 | 10.9 | 28.3 |
| Total | 2055 | 103 | 243 | 41 | 167 | 48 | 2465 | 192 | 2657 |
|  | 77.3 | 39 | 9.1 | 1.5 | 6.3 | 1.8 | 92.8 | 7.2 | 100 |
|  | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Table 15b. Classification by age groups and daytime and nighttime on working days and other days, of total numbers and percentages of cyclist fatalities from 1968 to 1972.

* 'Nighttıme' is defined as: from 22.00 to 04.00 hours.

| Moped-rider fatalities by age groups | Monday to Friday daytime nighttime |  | Saturday daytime | n ghttime | Sunday/P daytime | lic holiday nigh time | Total day ime | nighttime | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 to 9 years | 7 | 1 | 2 | 0 | 7 | 0 | 16 | 1 | 17 |
|  | 41.2 | 5.9 | 11.8 | 0 | 41.2 | 0 | 94.1 | 5.9 | 100 |
|  | 0.4 | 0.4 | 0.8 | 0 | 2.6 | 0 | 0.7 | 0.2 | 0.6 |
| 10 to 19 years | 607 | 97 | 76 | 101 | 116 | 80 | 799 | 278 | 1077 |
|  | 56.4 | 9.0 | 7.1 | 9.4 | 10.8 | 7.4 | 74.2 | 25.8 | 100 |
|  | 34.7 | 41.6 | 30.3 | 59.4 | 43.3 | 50.3 | 35.2 | 49.5 | 38.0 |
| 20 to 29 years | 216 | 57 | 39 | 35 | 35 | 51 | 290 | 143 | 453 |
|  | 49.9 | 13.3 | 9.1 | 8.1 | 81 | 11.9 | 67.0 | 33.0 | 100 |
|  | 12.3 | 24.5 | 15.5 | 20.6 | 13.1 | 32.1 | 12.8 | 25.4 | 15.3 |
| 30 to 39 years | 98 | 28 | 19 | 21 | 16 | 12 | B3 | 61 | 194 |
|  | 50.5 | 14.4 | 9.8 | 10.8 | 8.2 | 6.2 | 68.6 | 31.4 | 100 |
|  | 5.6 | 12.0 | 7.6 | 12.4 | 6.0 | 7.5 | 5.9 | 10.8 | 6.9 |
| 40 to 49 years | 126 | 14 | 21 | 4 | 14 | 5 | 161 | 23 | 184 |
|  | 68.5 | 7.6 | 11.4 | 2.2 | 7.6 | 2.7 | 87.5 | 12.5 | 100 |
|  | 7.2 | 6.0 | 8.4 | 2.4 | 5.2 | 3.1 | 7.1 | 4.1 | 6.5 |
| 50 to 59 years | 236 | 17 | 25 | 6 | 26 | 5 | 287 | 28 | 315 |
|  | 74.9 | 5.4 | 7.9 | 1.9 | 8.3 | 1.6 | 91.1 | 8.9 | 100 |
|  | 13.5 | 7.3 | 10.0 | 3.5 | 9.7 | 3.1 | 12.6 | 5.0 | 11.1 |
| 60 to69 years | 255 | 14 | 44 | 1 | 29 | 2 | 328 | 17 | 345 |
|  | 73.9 | 4.0 | 12.7 | 0.3 | 8.4 | 0.6 | 95.1 | 4.9 | 100 |
|  | 14.6 | 6.0 | 17.5 | 0.6 | 10.8 | 1.3 | 14.5 | 3.0 | 122 |
| 70 years or older $r$ | 205 | 5 | 25 | 2 | 25 | 4 | 255 | 11 | 266 |
|  | 77.1 | 1.9 | 9.5 | 0.8 | 9.5 | 1.5 | 95.9 | 4.1 | 100 |
|  | 11.7 | 2.1 | 10.0 | 1.2 | 9.3 | 2.5 | 11.2 | 2.0 | 9.4 |
| Total | 1750 | 233 | 251 | 170 | 268 | 159 | 2269 | 562 | 2831 |
|  | 61.8 | 8.2 | 8.9 | 6.0 | 9.5 | 5.6 | 80.1 | 19.9 | 100 |
|  | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Table 15c. Classification by age groups and daytime and nighttime on working days and other days, of total numbers and percentages of moped-ider fatalities from 1968 to 1972.

* 'Night sme' is defined as: from 22.00 p 04.00 hours.

| Age group | Pedestrian fatalities |  |  |  | Cyclist fatalities |  |  |  | Moped-rider fatalities |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dry number | \% | Precipitat number |  | Dry number | \% | Precipitat number |  | Dry number | \% | Precipitat number | on* |
| 0 to 9 years | 863 | 34.0 | 57 | 14.2 | 358 | 15.3 | 22 | 7.1 | 16 | 0.7 | 1 | 0.3 |
| 10 to 19 years | 204 | 8.0 | 30 | 7.5 | 508 | 21.6 | 64 | 20.6 | 930 | 38.2 | 147 | 36.9 |
| 20 to 29 years | 98 | 3.9 | 19 | 4.7 | 81 | 3.5 | 15 | 4.8 | 352 | 14.5 | 81 | 20.4 |
| 30 to 39 years | 75 | 3.0 | 22 | 5.5 | 61 | 2.6 | 12 | 3.9 | 167 | 6.9 | 27 | 6.8 |
| 40 to 49 years | 103 | 4.1 | 20 | 5.0 | 90 | 3.8 | 18 | 5.8 | 155 | 6.4 | 29 | 7.3 |
| 50 to 59 years | 161 | 6.4 | 35 | 8.7 | 189 | 8.1 | 36 | 11.6 | 281 | 11.5 | 34 | 8.5 |
| 60 to 69 years | 299 | 11.8 | 75 | 18.7 | 387 | 16.5 | 66 | 21.3 | 285 | 11.7 | 60 | 15.1 |
| 70 years or older | 732 | 28.9 | 143 | 35.7 | 673 | 28.7 | 77 | 24.9 | 247 | 10.2 | 19 | 4.8 |
| Total | 2535 | 100 | 401 | 100 | 2347 | 100 | 310 | 100 | 2433 | 100 | 398 | 100 |

Table 16. Classffication by age groups and weather conditions of total numbers and percentages of pedestrian, cyclist and moped-rider fatalities from 1968 to 1972.

* fog/rain/hail/snow/glaced frost

| Pedestrian fatalities by age groups | Daylight | After dark/dusk Road lighting on | Road lighting not on or no road lighting | Total |
| :---: | :---: | :---: | :---: | :---: |
| 0 to 9 years | $\begin{gathered} 866 \\ 94.1 \\ 47.6 \end{gathered}$ | $\begin{gathered} 37 \\ 4.0 \\ 4.7 \end{gathered}$ | $\begin{aligned} & 17 \\ & 1.8 \\ & 5.0 \end{aligned}$ | $\begin{aligned} & 920 \\ & 100 \\ & 31.3 \end{aligned}$ |
| 10 to 19 years | $\begin{gathered} 106 \\ 45.3 \\ 5.8 \end{gathered}$ | $\begin{aligned} & 65 \\ & 27.8 \\ & 8.3 \end{aligned}$ | $\begin{aligned} & 63 \\ & 26.9 \\ & 18.6 \end{aligned}$ | $\begin{aligned} & 234 \\ & 100 \\ & 8.0 \end{aligned}$ |
| 20 to 29 years | $\begin{aligned} & 38 \\ & 32.5 \\ & 2.1 \end{aligned}$ | $\begin{aligned} & 45 \\ & 38.5 \\ & 5.8 \end{aligned}$ | $\begin{aligned} & 34 \\ & 29.1 \\ & 10.0 \end{aligned}$ | $\begin{gathered} 117 \\ 100 \\ 4.0 \end{gathered}$ |
| 30 to 39 years | $\begin{aligned} & 30 \\ & 30.9 \\ & 1.7 \end{aligned}$ | $\begin{aligned} & 40 \\ & 42.1 \\ & 5.1 \end{aligned}$ | $\begin{aligned} & 27 \\ & 28.4 \\ & 8.0 \end{aligned}$ | $\begin{gathered} 97 \\ 100 \\ 3.3 \end{gathered}$ |
| 40 to 49 years | $\begin{aligned} & 40 \\ & 32.5 \\ & 2.2 \end{aligned}$ | $\begin{aligned} & 47 \\ & \quad 37.6 \\ & 6.0 \end{aligned}$ | $\begin{aligned} & 36 \\ & 28.8 \\ & 10.6 \end{aligned}$ | $\begin{array}{r} 123 \\ 100.0 \\ 4.2 \end{array}$ |
| 50 to 59 years | $\begin{aligned} & 75 \\ & 38.3 \\ & 4.1 \end{aligned}$ | $\begin{aligned} & 85 \\ & 43.4 \\ & 10.9 \end{aligned}$ | $\begin{aligned} & 36 \\ & 18.4 \\ & 10.6 \end{aligned}$ | $\begin{gathered} 196 \\ 100 \\ 6.7 \end{gathered}$ |
| 60 to 69 years | $\begin{array}{r} 158 \\ 42.3 \\ 8.7 \end{array}$ | $\begin{aligned} & 168 \\ & 44.9 \\ & 21.6 \end{aligned}$ | $\begin{aligned} & 48 \\ & 12.8 \\ & 14.2 \end{aligned}$ | $\begin{aligned} & 374 \\ & 100 \\ & 12.7 \end{aligned}$ |
| 70 years or older | $\begin{aligned} & 505 \\ & 57.7 \\ & 27.8 \end{aligned}$ | $\begin{gathered} 292 \\ 33.4 \\ 37.5 \end{gathered}$ | $\begin{gathered} 78 \\ 8.9 \\ 23.0 \end{gathered}$ | $\begin{aligned} & 875 \\ & 100 \\ & 29.8 \end{aligned}$ |
| Total | $\begin{gathered} 1818 \\ 619 \\ 100 \end{gathered}$ | $\begin{gathered} 779 \\ 26.5 \\ 100 \end{gathered}$ | $\begin{gathered} 339 \\ 11.5 \\ 100 \end{gathered}$ | $\begin{array}{r} 2936 \\ 100 \\ 100 \end{array}$ |

Table 17a. Classification by age groups and lighting conditions and state of road lighting, of total numbers and percentages of pedestrian fatalities from

| Cyclist fatalities by age groups | Daylight | After dark dusk Road lighting on | Road lighting not on or no road lighting | Total |
| :---: | :---: | :---: | :---: | :---: |
| 0 to 9 years | $\begin{gathered} 359 \\ 94.5 \\ 18.1 \end{gathered}$ | $\begin{aligned} & 12 \\ & 3.1 \\ & 2.7 \end{aligned}$ | $\begin{aligned} & 9 \\ & 2.4 \\ & 4.1 \end{aligned}$ | $\begin{gathered} \hline 380 \\ 100 \\ 14.3 \end{gathered}$ |
| 10 to 19 years | $\begin{aligned} & 441 \\ & 77.1 \\ & 22.2 \end{aligned}$ | $\begin{gathered} 80 \\ 14.0 \\ 17.8 \end{gathered}$ | $\begin{gathered} 51 \\ 8.9 \\ 23.1 \end{gathered}$ | $\begin{gathered} 572 \\ 100 \\ 21.5 \end{gathered}$ |
| 20 to 29 years | $\begin{aligned} & 46 \\ & 47.9 \\ & 2.3 \end{aligned}$ | $\begin{aligned} & 38 \\ & 39.6 \\ & 8.4 \end{aligned}$ | $\begin{array}{r} 12 \\ 12.5 \\ 5.4 \end{array}$ | $\begin{gathered} 96 \\ 100 \\ 3.6 \end{gathered}$ |
| 30 to 39 years | $\begin{aligned} & 30 \\ & 41.1 \\ & 1.5 \end{aligned}$ | $\begin{aligned} & 29 \\ & 39.7 \\ & 6.5 \end{aligned}$ | $\begin{aligned} & 14 \\ & 19.2 \\ & 6.3 \end{aligned}$ | $\begin{gathered} 73 \\ 100 \\ 2.7 \end{gathered}$ |
| 40 to 49 years | $\begin{aligned} & 49 \\ & 45.3 \\ & 2.5 \end{aligned}$ | $\begin{gathered} 40 \\ 37.0 \\ 8.9 \end{gathered}$ | $\begin{aligned} & 19 \\ & 17.6 \\ & 8.6 \end{aligned}$ | $\begin{gathered} 108 \\ 100 \\ 4.1 \end{gathered}$ |
| 50 to 59 years | $\begin{gathered} 131 \\ 58.2 \\ 6.6 \end{gathered}$ | $\begin{aligned} & 66 \\ & 29.3 \\ & 14.7 \end{aligned}$ | $\begin{aligned} & 28 \\ & 12.4 \\ & 12.7 \end{aligned}$ | $\begin{gathered} 225 \\ 100 \\ 8.5 \end{gathered}$ |
| 60 to 69 years | $\begin{gathered} 294 \\ 64.9 \\ 14.8 \end{gathered}$ | $\begin{gathered} 111 \\ 24.5 \\ 24.7 \end{gathered}$ | $\begin{aligned} & 48 \\ & 10.6 \\ & 21.7 \end{aligned}$ | $\begin{aligned} & 453 \\ & 100 \\ & 17.0 \end{aligned}$ |
| 70 years or older | $\begin{aligned} & 636 \\ & 84.4 \\ & 32.0 \end{aligned}$ | $\begin{gathered} 74 \\ 9.9 \\ 16.4 \end{gathered}$ | $\begin{gathered} 40 \\ 5.3 \\ 18.1 \end{gathered}$ | $\begin{aligned} & 750 \\ & 100 \\ & 28.2 \end{aligned}$ |
| Total | $\begin{gathered} 1986 \\ 74.7 \\ 100 \end{gathered}$ | $\begin{gathered} 450 \\ 16.9 \\ 100 \end{gathered}$ | $\begin{gathered} 221 \\ 8.3 \\ 100 \end{gathered}$ | $\begin{array}{r} 2657 \\ 100 \\ 100 \end{array}$ |

Table 17b. Classtication by age groups and lighting conditions and state of road lighting, of total numbers and percentages of cyclist fatalities from 1968 to 1972.

| Moped-rider fatalities by age groups | Daylight | After dark/dusk <br> Road lighting on | Road lighting not on or no road lighting | Total |
| :---: | :---: | :---: | :---: | :---: |
| 0 to 9 years | $\begin{array}{r} 14 \\ 82.4 \\ 0.8 \end{array}$ | $\begin{gathered} \hline 3 \\ 17.6 \\ 0.4 \end{gathered}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{gathered} 17 \\ 100 \\ 0.6 \end{gathered}$ |
| 10 to 19 years | $\begin{gathered} 584 \\ 54.2 \\ 33.7 \end{gathered}$ | $\begin{aligned} & 307 \\ & 28.5 \\ & 43.4 \end{aligned}$ | $\begin{aligned} & 186 \\ & 17.3 \\ & 47.4 \end{aligned}$ | $\begin{gathered} 1077 \\ 100 \\ 38.0 \end{gathered}$ |
| 20 to 29 years | $\begin{gathered} 208 \\ 48.0 \\ 12.0 \end{gathered}$ | $\begin{gathered} 134 \\ 30.9 \\ 18.9 \end{gathered}$ | $\begin{aligned} & 91 \\ & 21.0 \\ & 23.2 \end{aligned}$ | $\begin{gathered} 433 \\ 100 \\ 15.3 \end{gathered}$ |
| 30 to 39 years | $\begin{aligned} & 89 \\ & 45.9 \\ & 5.1 \end{aligned}$ | $\begin{aligned} & 75 \\ & 38.7 \\ & 10.6 \end{aligned}$ | $\begin{aligned} & 30 \\ & 15.5 \\ & 7.7 \end{aligned}$ | $\begin{gathered} 194 \\ 100 \\ 6.9 \end{gathered}$ |
| 40 to 49 years | $\begin{array}{r} 114 \\ 62.0 \\ 6.6 \end{array}$ | $\begin{aligned} & 50 \\ & 27.2 \\ & 7.1 \end{aligned}$ | $\begin{aligned} & 20 \\ & 10.9 \\ & 5.1 \end{aligned}$ | $\begin{gathered} 184 \\ 100 \\ 6.5 \end{gathered}$ |
| 50 to 59 years | $\begin{gathered} 224 \\ 71.1 \\ 12.9 \end{gathered}$ | $\begin{array}{r} 64 \\ 20.3 \\ 9.0 \end{array}$ | $\begin{aligned} & 27 \\ & 8.6 \\ & 6.9 \end{aligned}$ | $\begin{aligned} & 315 \\ & 100 \\ & 11.1 \end{aligned}$ |
| 60 to 69 years | $\begin{gathered} 271 \\ 78.6 \\ 15.7 \end{gathered}$ | $\begin{aligned} & 51 \\ & 14.8 \\ & 7.2 \end{aligned}$ | $\begin{aligned} & 23 \\ & 6.7 \\ & 5.9 \end{aligned}$ | $\begin{aligned} & 345 \\ & 100 \\ & 12.2 \end{aligned}$ |
| 70 years or older | $\begin{gathered} 227 \\ 85.3 \\ 13.1 \end{gathered}$ | $\begin{gathered} 24 \\ 9.0 \\ 3.4 \end{gathered}$ | $\begin{gathered} 15 \\ 5.6 \\ 3.8 \end{gathered}$ | $\begin{gathered} 266 \\ 100 \\ 9.4 \end{gathered}$ |
| Total | $\begin{gathered} 1731 \\ 61.1 \\ 100 \end{gathered}$ | $\begin{gathered} 708 \\ 250 \\ 100 \end{gathered}$ | $\begin{gathered} 392 \\ 13.8 \\ 100 \end{gathered}$ | $\begin{array}{r} 2831 \\ 100 \\ 100 \end{array}$ |

Table 17c. Classification by age groups and lighting conditions and state of road lighting, of total numbers and percentages of moped-rider fatalities from

| Pedestrians by types of injury | $0-14$ years number \% |  | 15.24 years number $\%$ |  | 25.34 years number |  | 35-44 years number \% |  | 45-54 years number \% |  | 55 years or older number |  | Total number | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cranial or cervical injuries: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cranial or facial fracture | 740 | 8.4 | 132 | 7.5 | 51 | 8.1 | 60 | 8.6 | 58 | 7.3 | 261 | 6.4 | 1302 | 7.8 |
| Intercranial injury | 1056 | 12.0 | 138 | 7.8 | 57 | 9.0 | 48 | 6.9 | 73 | 9.2 | 323 | 7.9 | 1695 | 10.1 |
| Concussion | 1881 | 21.4 | 366 | 20.8 | 114 | 18.0 | 117 | 16.7 | 123 | 15.5 | 623 | 15.2 | 3224 | 19.2 |
| Eye injuries | 1 | 0.0 | 2 | 0.1 | - | - | - | - | - | - | - | - | 3 | 0.0 |
| Minor facıal injuries + dislocated or wrenched jaw | 782 | 8.9 | 147 | 8.3 | 52 | 8.2 | 63 | 9.0 | 61 | 77 | 332 | 8.1 | 1437 | 8.6 |
| Cervix | 5 | 0.1 | 1 | 0.1 | - | - | - | - | 1 | 0.1 | - | - | 7 | 0.0 |
| Sub-tota 1 | 4465 | 50.8 | 786 | 44.6 | 274 | 43.3 | 288 | 41.2 | 316 | 39.8 | 1539 | 37.6 | 7668 | 457 |
| Vertebral injury | 205 | 2.3 | 75 | 4.3 | 41 | 6.5 | 40 | 5.7 | 46 | 5.8 | 251 | 6.1 | 658 | 3.9 |
| Injuries to trunk | 708 | 8.0 | 99 | 5.6 | 35 | 5.5 | 26 | 3.7 | 31 | 3.9 | 139 | 3.4 | 1038 | 6.2 |
| Upper extremities | 689 | 7.8 | 174 | 9.9 | 51 | 8.1 | 94 | 13.4 | 96 | 12.1 | 497 | 12.1 | 1601 | 9.5 |
| Lower extremet es | 2304 | 26.3 | 546 | 31.0 | 197 | 31.1 | 206 | 29.4 | 230 | 28.9 | 1292 | 31.6 | 4775 | 28.4 |
| Other injuries | 433 | 4.9 | 83 | 4.7 | 35 | 5.5 | 46 | 6.6 | 76 | 9.6 | 373 | 91 | 1046 | 6.2 |
| Total injuries | 8804 | 100 | 1763 | 100 | 633 | 100 | 700 | 100 | 795 | 100 | 4091 | 100 | 16786 | 100 |

Table 18a. Nature of pedestrians' njuries in 1970, 1971 and 1972 by age groups (Source SMR).

| Cyclists by types of injury | $0-14$ years number \% |  | 15-24 years number \% |  | 25-34 years number \% |  | 35-44 years number \% |  | 45-54 years number \% |  | 55 years or older number \% |  | Total number | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cranial or cervical injuries: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cranial or facial fracture | 341 | 8.5 | 166 | 9.7 | 73 | 13.5 | 55 | 11.4 | 67 | 9.5 | 171 | 6.3 | 873 | 8.6 |
| Intercranial mjury | 437 | 10.9 | 174 | 10.2 | 52 | 9.6 | 31 | 6.4 | 53 | 7.5 | 207 | 7.7 | 954 | 9.4 |
| Concussion | 1033 | 25.7 | 486 | 28.5 | 129 | 23.8 | 100 | 20.7 | 149 | 21.1 | 406 | 15.1 | 2303 | 22.7 |
| Eye injuries | 3 | 0.1 | 1 | 0.1 | - | - | 1 | 0.2 | - | - | 4 | 0.1 | 9 | 0.1 |
| Minor facial injuries + dislocated or wrenched jaw | 311 | 7.7 | 145 | 8.5 | 55 | 10.2 | 46 | 9.5 | 52 | 7.4 | 210 | 7.8 | 819 | 8.1 |
| Cervix | 2 | 0.0 | 3 | 0.2 | 2 | 0.4 | - | - | 2 | 0.3 | - | - | 9 | 0.1 |
| Sub-total | 2127 | 52.9 | 975 | 57.2 | 311 | 57.5 | 233 | 48.2 | 323 | 45.8 | 998 | 37.0 | 4967 | 49.0 |
| Veterbral injury | 70 | 1.7 | 46 | 2.7 | 19 | 3.5 | 14 | 2.9 | 34 | 4.8 | 116 | 4.3 | 299 | 2.9 |
| Injuries to trunk | 248 | 6.2 | 75 | 4.4 | 16 | 3.0 | 22 | 4.5 | 15 | 2.1 | 94 | 3.5 | 470 | 4.6 |
| Upper extremities | 483 | 12.0 | 221 | 13.0 | 68 | 12.6 | 60 | 12.4 | 98 | 13.9 | 323 | 12.0 | 1253 | 12.3 |
| Lower extremities | 951 | 23.6 | 327 | 19.2 | 105 | 19.4 | 126 | 26.0 | 184 | 26.0 | 910 | 33.8 | 2603 | 25.6 |
| Other injuries | 143 | 3.6 | 62 | 3.6 | 22 | 4.1 | 29 | 6.0 | 53 | 7.5 | 255 | 9.5 | 564 | 5.6 |
| Total injuries | 4022 | 100 | 1706 | 100 | 541 | 100 | 484 | 100 | 707 | 100 | 2696 | 100 | 10156 | 100 |

Table 186. Nature of cyclists' injuries in 1970, 1971 and 1972 by age groups (Source SMR).

| Moped-riders by types of injury | $0-14$ years number \% |  | $15-24 \text { years }$number \% |  | $25-34 \text { years }$ <br> number |  | 35-44 years number $\%$ |  | $\begin{aligned} & 45-54 \text { years } \\ & \text { number \% } \end{aligned}$ |  | 55 years or older number \% |  | Total number | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cranial or cervical injuries: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cranial or facial fracture | 103 | 9.3 | 1753 | 10.1 | 290 | 11.5 | 240 | 13.6 | 227 | 12.7 | 319 | 10.1 | 2932 | 10.6 |
| Intercranial injury | 125 | 11.3 | 1690 | 9.7 | 243 | 9.6 | 176 | 9.9 | 143 | 8.0 | 264 | 8.4 | 2641 | 9.5 |
| Concussion | 283 | 25.5 | 4423 | 25.5 | 608 | 24.0 | 396 | 22.4 | 391 | 21.8 | 654 | 20.7 | 6755 | 24.4 |
| Eye injuries | - | - | 12 | 0.1 | 4 | 0.2 | 4 | 0.2 | 1 | 0.2 | 3 | 0.1 | 26 | 0.1 |
| Minor facial injuries + | 103 | 9.3 | 1475 | 8.5 | 244 | 9.6 | 176 | 9.9 | 181 | 10.1 | 323 | 10.2 | 2502 | 9.0 |
| Cervix | 4 | 0.2 | 8 | 0.0 | 3 | 0.1 | 1 | 0.1 | 1 | 0.1 | - | - | 15 | 0.1 |
| Sub-total | 616 | 55.6 | 9361 | 53.9 | 1392 | 55.0 | 993 | 56.1 | 946 | 52.9 | 1563 | 49.5 | 14871 | 53.7 |
| Vertebral injury | 8 | 0.7 | 387 | 2.2 | 60 | 2.4 | 38 | 2.1 | 48 | 2.7 | 105 | 3.3 | 646 | 2.3 |
| Injuries to trunk | 33 | 3.0 | 649 | 3.7 | 106 | 4.2 | 50 | 2.8 | 62 | 3.5 | 89 | 2.8 | 989 | 3.6 |
| Upper extremeties | 95 | 8.6 | 1800 | 10.4 | 249 | 9.8 | 196 | 11.1 | 214 | 11.9 | 410 | 13.0 | 2964 | 10.7 |
| Lower extremities | 311 | 28.0 | 4380 | 25.2 | 574 | 22.7 | 381 | 21.5 | 415 | 23.2 | 707 | 22.4 | 6768 | 24.4 |
| Other injuries | 47 | 4.2 | 789 | 4.5 | 150 | 5.9 | 112 | 6.3 | 107 | 6.0 | 286 | 9.1 | 1491 | 5.4 |
| Total injuries | 1110 | 100 | 17366 | 100 | 2531 | 100 | 1770 | 100 | 1792 | 100 | 3160 | 100 | 27729 | 100 |

Table 18c . Nature of moped riders' mjuries in 1970,1971 and 1972 by age groups (Source SMR).

| All road users by types of injury | 0-14 years number \% |  | 15-24 years number \% |  | 25-34 years number \% |  | 35-44 years number \% |  | 45-54 years number \% |  | 55 years or older number \% |  | Total number | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cranial or cervical injuries: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cranial or facial fracture | 1481 | 8.6 | 3158 | 9.3 | 1090 | 8.9 | 775 | 9.6 | 647 | 8.1 | 1204 | 7.0 | 8355 | 8.6 |
| Intercrantal injury | 1973 | 11.4 | 3044 | 9.0 | 889 | 7.2 | 600 | 7.4 | 575 | 7.2 | 1250 | 7.3 | 8331 | 8.6 |
| Concussion | 3956 | 22.8 | 8116 | 24.0 | 2498 | 20.3 | 1481 | 18.3 | 1419 | 17.7 | 2734 | 15.9 | 20204 | 20.9 |
| Eye injuries | 6 | 0.0 | 31 | 0.1 | 16 | 0.1 | 14 | 0.2 | 7 | 0.1 | 15 | 0.1 | 89 | 0.1 |
| Minor facial injuries + dislocated or wrenched jaw | 1668 | 9.6 | 3526 | 10.4 | 1479 | 12.0 | 954 | 11.8 | 828 | 10.4 | 1631 | 9.5 | 10086 | 10.4 |
| Cervix | 11 | 0.1 | 32 | 0.1 | 21 | 0.2 | 5 | 0.1 | 13 | 0.2 | 6 | 0.0 | 88 | 0.1 |
| Sub-total | 9095 | 52.5 | 17897 | 52.9 | 5993 | 48.7 | 3829 | 47.4 | 3489 | 43.7 | 6840 | 39.8 | 47153 | 48.7 |
| Vertebral injury | 386 | 2.1 | 1154 | 3.4 | 625 | 5.1 | 441 | 5.1 | 438 | 5.5 | 927 | 5.4 | 3923 | 4.1 |
| Injuries to trunk | 1201 | 6.9 | 1706 | 5.0 | 813 | 6.6 | 477 | 5.9 | 485 | 6.1 | 815 | 4.7 | 5497 | 5.7 |
| Upper extremities | 1564 | 9.0 | 3631 | 10.7 | 1348 | 11.0 | 901 | 11.1 | 940 | 11.8 | 2158 | 12.5 | 10542 | 10.9 |
| Lower extremities | 4288 | 24.8 | 7574 | 22.4 | 2435 | 19.8 | 1662 | 20.5 | 1756 | 22.0 | 4382 | 25.5 | 22097 | 22.8 |
| Other injuries | 799 | 4.6 | 1902 | 5.6 | 1074 | 8.7 | 827 | 10.2 | 889 | 11.1 | 2080 | 12.1 | 7571 | 7.8 |
| Total injuries | 17315 | 100 | 33874 | 100 | 12288 | 100 | 8107 | 100 | 7997 | 100 | 17202 | 100 | 96783 | 100 |

Table 18d. Nature of all road users' injuries in 1970, 1971 and 1972 by age groups (Source SMR).


[^0]:    * Cyclist and moped-rider fatalities include passengers.

