Summary:

Safe public transport Public transport users' experiences of using public transport

and measures to increase safety Annex report

In order for public transport to be an option for everyone, it is important for passengers to feel safe when using public transport. As well as knowing that traffic safety is dealt with, they also need to feel safe with regard to their fellow passengers, their surroundings and at bus stops. Passengers who do not feel safe when using public transport will eventually stop using buses, trains and trams and public transport will no longer be an alternative for them.

The report deals with regular public transport users' experiences of feeling unsafe when using public transport, i.e. the fear and anxiety they may experience in relation to the surroundings, bus stops and fellow passengers, and the measures which people feel could be taken to reduce this fear. Regular public transport users are defined as people who use public transport at least once a month. The report does not deal with feeling of a lack of safety and measures in relation to traffic accidents involving public transport.

The data used in the report was obtained through a questionnaire given to a sample of people aged between 16-80 years, living in Gothenburg and Jönköping.

Half the public transport users have felt unsafe

Amongst the regular public transport users in Gothenburg and Jönköping, 51 per cent have felt unsafe when using public transport. The vast majority, 46 per cent, have felt unsafe once in a while. Very few, just 6 per cent, have felt unsafe very often or often. Adjusted for the population figures for Gothenburg and Jönköping this comprises a total of around 160,000 public transport users who have felt unsafe when using public transport in these cities.

Table S.1: Regular public transport users according to how often they have felt unsafe when using public transport. Per cent. Safe public transport 2003

Felt unsafe when using public transport	Per cent
Yes, very often	2
Yes, often	4
Yes, occasionally	46
No	49
Total	100
Number	1489

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Most people feel unsafe in large cities and at night

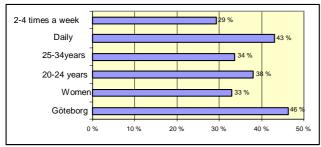
Feeling unsafe when using public transport is a bigcity problem. A larger proportion of public transport users have felt unsafe in Gothenburg than in Jönköping (56 as opposed to 44 per cent). Thus around 144,000 regular public transport users in Gothenburg have felt unsafe in connection with a journey by public transport, as opposed to ca 17.000 in Jönköping.

Conditions in a large city are less surveyable than in smaller cities. There are groups of the population which are unrecognised or unknown and levels of crime are often higher. This can be experienced as unsafe by many and may be the reason why feeling unsafe seems higher in Gothenburg than in Jönköping.

The groups which have the highest probability of feeling unsafe when they travel by public transport are (figure S.1)

- women
- relatively young people
- public transport users in Gothenburg.

In addition, those who use public transport often are more often exposed to unsafe situations than those who seldom travel by public transport.



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Figure S.1: Increased probability of different groups feeling unsafe. Multivariate analyses. Safe public transport 2003

Whether travellers feel safe using public transport depends on the time of day when they travel. It is most common to feel unsafe when it is dark. Regular public transport users in Gothenburg and Jönköping have felt unsafe in connection with journeys by public transport at night and in the late evening in particular. Almost 60 per cent of those who have felt unsafe have done so when travelling late in the evening, and over 40 per cent at night. However, around 20 per cent felt unsafe at earlier times in the day, in rush hour and /or early evening.

Feeling unsafe during the entire journey

The fact that people feel unsafe when they use public transport is not necessarily connected with public transport itself, but may be an expression for a more general social problem, which is that people are afraid of going out, especially when it is dark.

45 per cent of regular public transport users in Gothenburg and Jönköping, who have felt unsafe when using public transport, have felt unsafe on the way or from the bus stop. This is normally a feeling which cannot be ascribed to conditions associated with public transport directly, but which is linked to the area, the surroundings and the people in the area. 54 per cent have felt unsafe at the bus stop, while a total of 75 per cent have felt unsafe on the vehicle itself. Large parts of this feeling of a lack of safety are thus experienced in areas for which the public transport companies and others who work with public transport are responsible.

Drunks make people feel unsafe on paths to and from the bus stop

There are a number of things which make people feel unsafe. What might seem unsafe to some people may be regarded as totally unimportant by others.

The State, the municipality and the county council are all responsible for providing and maintaining roads and pavements and for people feeling safe when they use them.

Having to walk past people who are drunk is clearly the most common reason why people feel unsafe on their way to or from the bus stop (table S.2). As many as 2/3 of regular public transport users who have felt unsafe on the way to or from the bus stop state this as one of a number of reasons. About half say that poorly lit roads are a reason why they have felt unsafe.

Table S.2: Regular public transport users according to why they feel unsafe on the way to or from the bus stop. Per cent. Several answers could be given. Safe public transport 2003

Why do you feel unsafe on the way to/	Per cent*
from the bus stop?	
Walking past drunks	67
Poorly lit roads	52
Tunnels/passages	28
Don't like the surroundings	25
Poorly maintained road/pavement	23
No pavement/poor pavement	10
A lot of traffic/noise along the road	8
Other	9
Total	337

* Percentages are calculated from the number of regular public transport users who have felt unsafe on the road to or from the bus stop
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Poor lighting and few people make bus stops feel unsafe

Usually the "owner of the road", i.e. the State, the municipality or the county council is responsible for conditions at the bus stop. In practice this means that the municipality is responsible for bus stops in towns ands built-up areas, while the Swedish National Road Administration is responsible for rural areas.

Rather more than half the regular public transport users who have felt unsafe on journeys by public transport have felt unsafe at the bus stops.

Drunks in the vicinity is the factor which plays the biggest role in this. More than ³/₄ of the regular public transport users who have felt unsafe at the bus stop give this as the reason (table S.3).

Public transport users like other people to be present, to be able to see and be seen or to make contact with others if necessary. Few or no people in the area and poor lighting are reasons given by a

relatively high proportion as to why they felt unsafe at the bus stop (44 per cent and 43 per cent respectively).

The need for other people is also expressed in that around 1/3 of regular public transport users who have felt unsafe at the bus stop state that this is due to the fact that there are no staff or guards present. The lack of surveillance cameras (31 per cent) and emergency telephones (19 per cent) are also reasons which indicate that people want to be seen by others, or to be able to ask someone for assistance if necessary.

Table S.3: Regular public transport users according to why they feel unsafe at the bus stop. Several answers could be given. Safe public transport 2003

Why people feel unsafe at the bus stop	Per cent*
Drunks	77
Few/no people present at or near the bus stop	44
Poor lighting	43
Lack of staff/ guards	34
No camera surveillance	31
Graffiti/vandalism	25
No emergency telephone	19
Don't like the surroundings	18
Poor cleanliness and maintenance	15
No bus shelter	14
Poor information about departure times	14
Difficult to purchase tickets	6
A lot of traffic/ noise	5
Other	3
Total	409

^{*} Percentages are calculated from the number of regular public transport users who have felt unsafe at the bus stop.

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Poor driving makes public transport users feel unsafe

A total of 75 per cent of regular public transport users who have felt unsafe when using public transport have felt unsafe on the vehicle itself. Responsibility for making passengers feel safe during the journey clearly lies with the public transport company.

As on the way to and from and at the bus stop, it is the presence of drunks which is the most common reason for people feeling unsafe on the bus. As many as ³/₄ give this reason (table S 4). Bad driving also makes people feel unsafe. This can be dealt with through driver training.

People also need to be seen and have someone to turn to for help while on the vehicle. The lack of guards/bus staff, no camera surveillance and few or no other passengers all contribute to passengers feeling unsafe while on the vehicle. The state of the vehicle also affects personal experiences and enjoyment of the journey. Vehicles which are poorly maintained or covered in graffiti also make people feel unsafe.

Table S.4: Regular public transport users according to why they feel unsafe on the vehicle. Percentage. Several answers could be given. Safe public transport 2003

Why people feel unsafe on the bus/tram	Percentage*
Drunks	74
Bad driving	47
No guards	30
Graffiti /vandalism	20
No contact with driver/staff	17
No camera surveillance	16
Poor maintenance	15
Few or no other passengers	14
Poor information during the journey	9
Other	10
Total	565

^{*} Percentages are calculated from the number of regular public transport users who have felt unsafe on the bus TØI-report 704a

Feeling unsafe reduces the use of public transport

When people feel unsafe on journeys by public transport, this may lead to a reduction in the use of public transport and to people going by car instead.

Nonetheless, of the regular public transport users who have felt unsafe, 74 per cent say that they have not stopped using the bus, tram or train because they feel unsafe. However, 10 per cent avoid the trams, while 8 per cent avoid using the bus. Very few avoid using the train. 7 per cent avoid using a number of forms of transport, mostly bus and tram.

There are differences between the cities with regard to the forms of transport which public transport users avoid using: over 80 per cent of those who have felt unsafe in Jönköping do not avoid using any form of public transport. In Gothenburg, 70 per cent do not avoid using any form of public transport, very few avoid using the bus, while 25 percent avoid using the tram or both the tram and the bus. This means that 42,000 people in Gothenburg avoid using one or more forms of public transport, compared with 3,000 in Jönköping.

The fact that people avoid certain forms of transport does not necessarily affect the total use of public transport, in that alternative forms of transport are available. Among the regular public transport users who have felt unsafe, around 60 per cent say that they do not avoid using public transport while 40 per cent say that they do avoid using public transport, usually once in a while. These public transport users would therefore have used public transport more often if they had felt safe.

A larger proportion of those living in Gothenburg than in Jönköping (42 per cent as opposed to 34 per cent) would have used public transport more often if they had not felt unsafe. Around 60,000 regular public transport users in Gothenburg and 3,000 in Jönköping reduce their use of public transport because they feel unsafe. For the public transport companies this means that they are losing a good number of journeys.

Measures can reduce the feeling of being unsafe

In order to reduce the extent of feeling unsafe on journeys by public transport, it may be necessary to implement measures. The measures should be in a "whole journey" perspective since public transport users experience feeling unsafe both on the way to and from the bus stop, at the bus stop and on the bus itself. It is therefore necessary for the different authorities, departments and companies which are responsible for the different elements of the journey to work together so that public transport users can feel that their journey is safe from start to finish.

Good lighting reduces feeling unsafe on the way to and from the bus stop

Good lighting along the road is important for people to feel safe on the road to and from the bus stop. Drunks in the vicinity are undesirable. Good cleanliness and snow clearance along the roads and pavements, and not having to use subterranean passageways and tunnels are all important in helping public transport users to feel safe on the way to and from the bus stop. Traffic noise, however, appears to have only a marginal effect on whether people feel safe or not.

What public transport users state as important depends on how they have experienced feeling unsafe or not when using public transport, but the differences between the "safe" and the "unsafe" public transport users are not great (table S.5). Those who have felt unsafe put more emphasis on good lighting, no drunks in the vicinity and not having to use subterranean passageways or tunnels. Those who have not felt unsafe emphasise cleanliness, maintenance and snow clearance.

Table S.5: Regular public transport users evaluation of conditions which are important for feeling safe on the route to and from the bus stop according to whether they feel unsafe. N=1444. Percentage. Safe public transport 2003

Conditions on the way	Have felt unsafe		Have not felt unsa	
to/from the bus stop	Very	Not	Very	Not
	important	important	important	important
Good lighting on the road	62	3	53	6
No drunks	54	3	33	8
Good standard of				
cleanlyness and snow				
clearance	33	8	43	5
No subterranean passage				
ways/ tunnels	43	9	30	15
Pavements and footpaths				
in good condition	30	9	34	5
Pleasant surroundings	28	9	22	13
Not too much traffic noise	9	37	8	31

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Good information and lighting reduce feelings of being unsafe at the bus stop

Public transport users think that good information about departure times, bus shelters and good lighting are all important for them to feel safe at the bus stop (table S.6). Those who have felt unsafe put greatest emphasis on good lighting (72 per cent), while those who have not felt unsafe specifically request good information about departure times (82 per cent).

A large proportion (55 per cent) of those who have felt unsafe also state that they would feel safer at the bus stop if there were no drunks in the area. Overall, this group puts greater emphasis on conditions which are more directly related to safety, such as the presence of other people, camera surveillance and emergency telephones than those who have not felt unsafe. This group, on the other hand, puts more emphasis on the bus stop being in good condition, without rubbish or graffiti, and on being able to buy tickets easily.

Table S.6: Regular public transport users evaluation of conditions which are important for feeling safe at the bus stop according to whether they have felt unsafe. N= 1444. Percentage. Safe public transport 2003

Conditions required to	Have felt unsafe		Have not felt unsaf	
increase safety at the	Very	Not	Very	Not
bus stop	important	important	important	important
Good lighting	72	2	59	3
Good information				
about departures	70	2	82	3
Bus shelter	63	5	71	3
No drunks	55	3	30	10
Other people present	29	11	13	22
Easy to buy tickets	21	26	25	26
Pleasant surroundings	21	9	19	10
Good conditions, no				
rubbish	20	10	26	8
Camera surveillance	20	26	9	42
Emergency telephone	19	27	11	39
No graffiti	18	21	24	17
Manned bus stops	17	27	5	50
No traffic/noise	7	32	6	27

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Good driving and well-maintained vehicles increase feelings of safety

Responsibility for making passengers feel safe during the journey clearly lies with the public transport company.

Well-maintained vehicles and good driving are the factors which the majority of public transport users gave for feeling safe on the bus. Good information during the journey and no drunks in the vicinity are also important for many people.

These conditions are to a large extent connected to people feeling unsafe due to a lack of mastery, rather than to fear of other people. For example, travelling on public transport may feel unsafe if a person does not have information about where to disembark, whether the bus is late etc. Others feel it is not safe to move about inside the bus if the driving is characterised by sudden stops and driving in fits and starts.

Public transport users who have felt unsafe when using public transport emphasise different conditions to those prioritised by people who did not feel unsafe (table S.7). The "unsafe" public transport users put more emphasis on being seen and other people being present. The "safe" public transport users place more emphasis on cleanliness and maintenance.

Table S.7: Regular public transport user's evaluation of conditions which are important if they are to feel safe on the bus according to whether they feel unsafe. N=1444. Percentage. Safe public transport 2003

Conditions on the bus	Have felt unsafe		Have not felt unsafe	
(tram, train):	Very	Not	Very	Not
	important	important	important	important
Good maintenance	60	3	67	3
Good driving	65	3	61	2
Good information				
during the journey	45	3	46	4
No drunks	55	4	30	9
No unmanned vehicles/				
contact driver	39	7	23	15
Clean, no rubbish	26	8	39	5
Camera surveillance	37	11	20	21
No graffiti	22	14	35	10
Other passenger	26	11	14	19
Guards	23	12	9	28

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Summary

- The extent of feeling unsafe when using public transport is relatively high. Around 50 per cent of public transport users have felt unsafe in connection with a journey by public transport. Even though the vast majority have only experienced a lack of safety from time to time, this can lead to people using public transport less than they would wish to, and they then either go by car or limit their travels.
- Lack of safety on journeys by public transport is a
 bigger problem in large cities than in smaller cities
 and towns. A greater proportion of those who use
 public transport late in the evening and at night
 feel unsafe compared with those travelling by day
 and in the early evening.
- Women report that they feel unsafe more often than men
- A common assumption is that older people are more anxious than younger people and that the elderly therefore feel less safe than young people when using public transport. However, we have found that a higher proportion of young people than old people have felt unsafe. This is due to the fact that young people make more journeys by public transport and comprise the majority of public transport users making journeys in the late evening and at night.
- In order to reduce the extent of feeling unsafe on journeys by public transport it may be necessary to

- implement measures. The measures should be in a "whole journey" perspective. Public transport users experience feeling unsafe both on the way to and from the bus stop, at the bus stop and on the vehicle itself. It is therefore necessary that the different authorities, departments and companies which are responsible for the different elements of the journey should work together so that public transport users can feel that their journey is safe from start to finish.
- The State, the municipality and the county council are all responsible for providing and maintaining roads and pavements and for people feeling safe when they use them. Good lighting along roads and pavements, minimum use of subterranean passageways and tunnels, and roads and pavements kept clean and free of snow and ice are all important measures to increase people's feeling of safety on the way to and from the bus stop.
- Usually the "owner of the road", i.e. the State, the municipality or the county council is responsible for conditions at the bus stop. In practice this means that the municipality is responsible for the

- bus stops in towns ands built-up areas, while the Swedish National Road Administration is responsible for rural areas. It is also important to ensure that the bus stops are well maintained and well lit. Standard factors such as information about departure times and bus shelters also increase the feeling of safety at the bus stop. Many public transport users also want other people to be present, ideally guards or transport personnel.
- The majority of those who have felt unsafe when using public transport have felt unsafe on the bus itself. The public transport companies are responsible for public transport users feeling safe on board the bus, tram or train. In order for people to feel safe on board, it may be necessary in many cases to have transport staff on board or to have camera surveillance in the vehicles. Public transport users feel safer if the vehicles are of a good standard, i.e. that there is a good standard of cleanliness and maintenance and that information is available during the journey Furthermore, drivers need to be trained to drive well, without sudden stops and starts.