

Part of the Urban Mobility Strategy

The Stockholm Pedestrian Plan



Stockholms
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stockholm.se/gang

THE STOCKHOLM CITY PLAN

How Stockholm will grow

THE URBAN MOBILITY STRATEGY

Planning the city's streets and highways

Cycling Plan

Pedestrian Plan

Freight Plan

Parking Plan

Transit Network Plan

Road Safety Programme

Other future plans

Projects for implementation

Overview of the Urban Mobility Strategy and its detailed plans, showing how these relate to the Stockholm City Plan



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Introduction

There are numerous benefits to be gained from more people choosing to walk, both for the individuals themselves and for society as a whole. The Pedestrian Plan is an extension of the City of Stockholm's Urban Mobility Strategy and describes how the City is aiming and planning for a more pedestrian-friendly city.

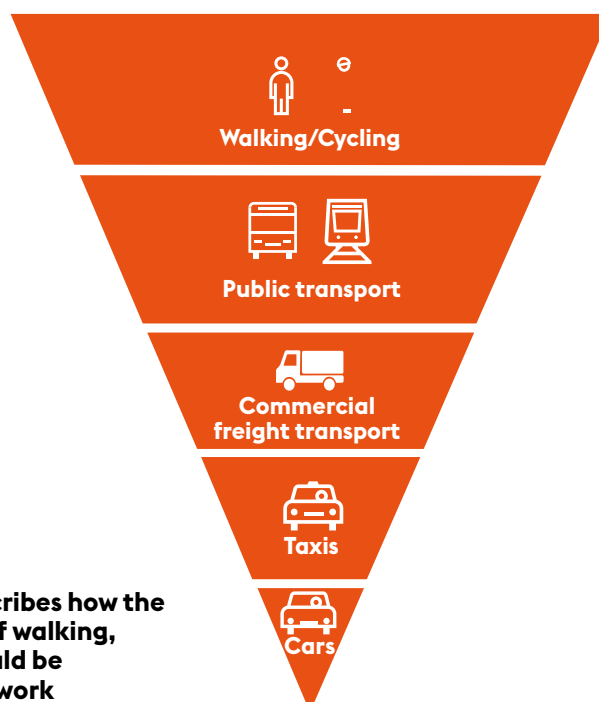
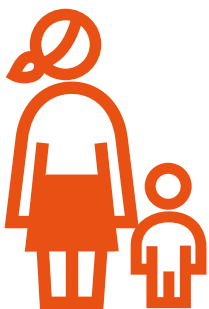
Numerous benefits

The more people walk, the more it enhances the appeal of a city. Pedestrians are an intrinsic part of urban life, contributing by their presence to meetings and to ensuring a safe, interesting urban environment for other pedestrians. A high proportion of pedestrians in the traffic system reduces negative climate and environmental impacts. More walking also brings health benefits on both an individual and a collective level. As the proportion of pedestrians increases, it frees up capacity in the traffic system because pedestrians take up less space than other road users.

Part of the Urban Mobility Strategy

The Pedestrian Plan is based on Stockholm's traffic strategy, the Urban Mobility Strategy, which sets traffic targets in the growing city of Stockholm. The Strategy primarily involves allocating and optimising available street space. The three high-capacity transport modes, public transport, walking and cycling, all play a key role in the city's transport system.

Plans for public transport and commuter cycling in the surface road network have been established, as well as plans and strategies for parking,



The Urban Mobility Strategy describes how the high-capacity transport modes of walking, cycling and public transport should be prioritised in the city's street network

commercial freight traffic and road safety. Together, these plans will facilitate prioritisation when implementing changes in the existing built environment and during the further construction of an attractive, growing Stockholm. As street space is usually limited, both in the existing city and during urban development, the final traffic solution should be a combination of the needs and interests of the various road users at a particular location. Knowledge of the needs of all road users must therefore be obtained if the correct balance is to be achieved in each project.

The Urban Mobility Strategy is based on the Stockholm City Plan, the primary purpose of which is to enable the safe mobility of residents around the city on foot or by bike. This will be achieved by continuing to reinforce and extend the city's central districts, investing resources in the densification of nine attractive strategic nodes that already enjoy good public transport access, connecting the various city districts with a focus on walking, cycling and public transportation, and promoting a vibrant urban environment across the city.

Part of the commitment to a sustainable city

Creating favourable conditions for walking for all Stockholm residents is a step closer to the goal of a sustainable city. Stockholm's environmental programme includes a goal to increase pedestrian and bicycle travel in the city while reducing the climate impact of urban travel. According to the City of Stockholm's sports policy programme, the City is committed to ensuring that all Stockholm residents become and remain physically active.

The first of the seven goals of the City's participation programme for people with functional impairments states that everyone must be able to access the City of Stockholm's indoor and outdoor environments. This is a principle that the Traffic Administration must always adhere to in its work, and in the related work that is carried out on the basis of the Pedestrian Plan.

Purpose and goal

The purpose of the Pedestrian Plan is to describe what we know about current circumstances for Stockholm pedestrians, and to present a target for enhanced pedestrian friendliness in Stockholm as well as an action plan for the City's commitment to pedestrian issues from 2015–2020.

Two of the goals of the Urban Mobility Strategy are critical from a pedestrian standpoint and used as indicators in the work with pedestrian issues in Stockholm. The first is that the proportion of local pedestrian journeys (in the inner city and southern/western districts respectively) should be at least 60 percent in the inner city and 50 percent in the outer districts by 2030. The current proportions are 54 and 35 percent respectively.¹ The second is that the proportion of people who find the city's streetscape attractive should remain at a minimum of 85 percent by 2030, i.e. the equivalent of 2013.

The overall goal of the Pedestrian Plan is for the city's public spaces to provide every resident and visitor with the opportunity, the desire, the know-how and the courage to walk. The Action Plan sets out ten actions that will enable the fulfilment of one or several of these four key concepts.

At least

85%

should feel that the city's streetscape is attractive

At least

50%

of the local journeys in the outer districts

and at least

60%

of the local journeys in the inner city should be made on foot by 2030

Stockholm today

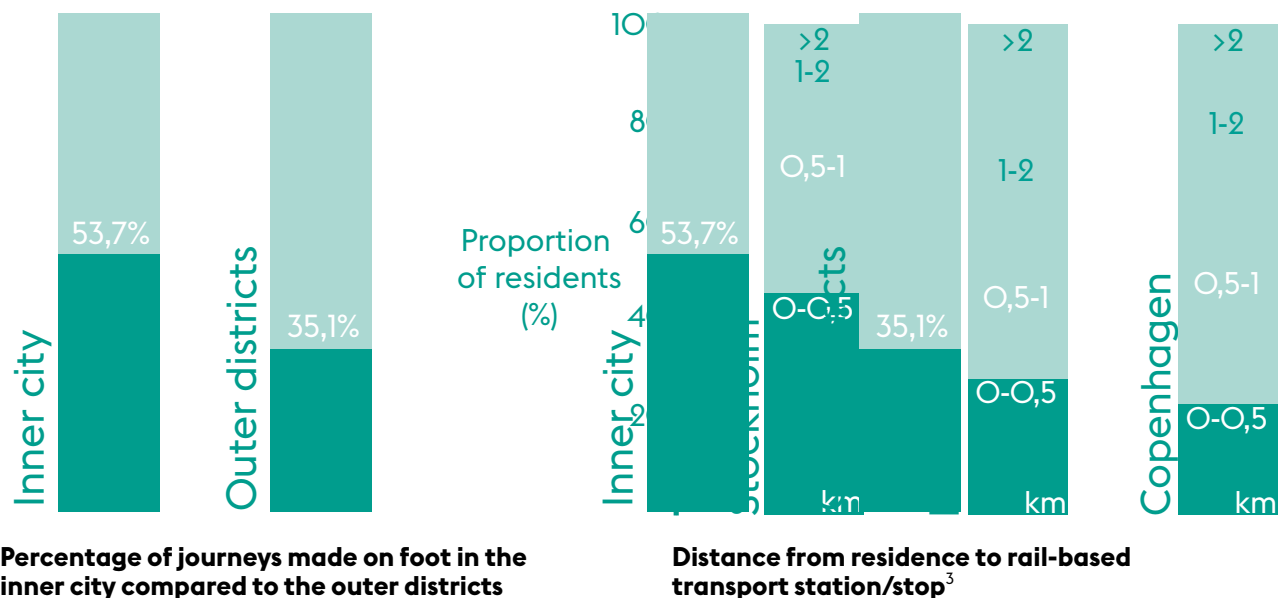
Stockholm is growing faster than ever before in the modern era. This has placed high demands on its urban development. A pedestrian-friendly city attracts motorists and public transport users to the benefits of walking. Stockholm residents already walk far and wide, but the city is well placed to increase its proportion of pedestrians.

Walking is influenced by physical environment

Stockholm has good conditions for walking. 38 percent of all journeys in the City of Stockholm take place on foot, which is a relatively high percentage compared to other European cities. Walking is most common in the central districts. In the inner city the proportion is nearly 54 percent, whereas in the outer districts it is 35 percent.¹ The reason for the uneven distribution may be because the inner city is generally more densely developed and multi-functional than the outer districts. Since desired inner-city destinations are closer, more people are likely to walk.

The fact that the characteristics of a neighbourhood influence the physical activity of its residents has been demonstrated in a doctoral thesis, which showed that people living in areas of Stockholm with good opportunities for walking had a higher level of physical activity, with more daily walking, than people living in areas with less opportunities for walking. This was regardless of individual income, gender, age, and car ownership. Two factors in the local environment – the density of development and functional mix – were shown to play a key role in an area's pedestrian friendliness, regardless of where in the city an area was located.²

38%
of all the journeys
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made on foot



Stockholm is the second fastest growing city and urban region in Western Europe, with an annual population growth of two percent.⁴ To maintain a satisfactory level of urban mobility, the proportion of pedestrians must remain high or preferably grow for the street space to cope with the population increase.

Different groups have varying needs and circumstances

For large segments of the population, the usefulness of built environment is not only determined by factors such as development density and functional mix. There are additional factors that impact on overall physical activity. As a group, persons with functional impairments are generally less physically active than the rest of the population. Although research on the subject is incomplete, according to a report from the National Public Health Institute it can be concluded that deficiencies in the physical environment contribute to reduced physical activity in the aforementioned group. The level of impact depends both on the design of the physical environment and on the extent and nature of the impairment.⁵ Until now there has been no specific research conducted to determine how much the design of physical environments in Stockholm influence the way they are used by people with impairments.

In modern Swedish society, urban mobility for children has become worse, partly because distances to destinations have increased, for example freedom to choose schools means that children do not always attend the nearest school, and partly because motor traffic has increased. In addition, many parents feel that traffic environments are unsafe for children, which has increased car usage for transporting children. This in turn has led to a decrease in the physical activity of children. In the early 1980s, 94 percent of children aged 7–9 travelled alone to school. By 2000, the figure had dropped to 77 percent and in 2007 it was as low as 30 percent.



Stockholm is the second-fastest growing city in Western Europe with a population growth of

2%



Length of a pedestrian journey

Stockholm has been built in such a way that its residents are closer to public transport services than in many other cities, both in terms of the average distance from workplaces and residences.³ This allows large numbers of people to commute by public transport, with relatively short distance between public transport services and destinations.

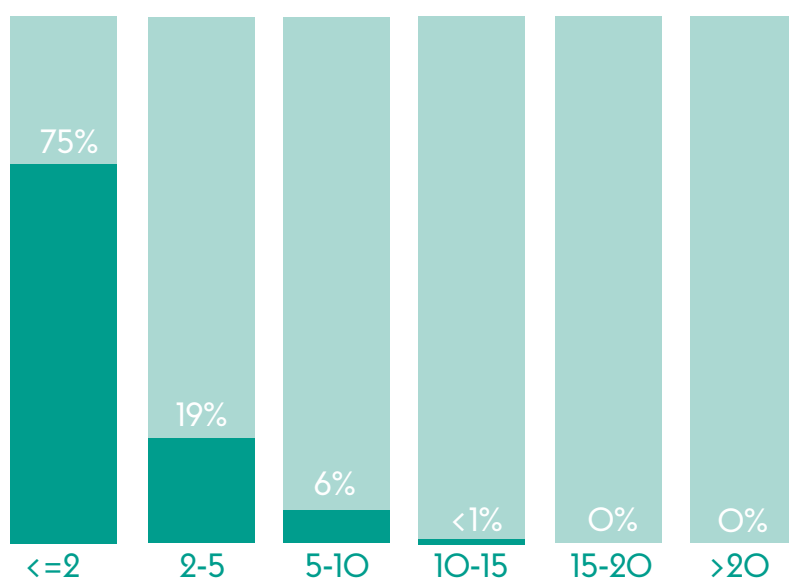
The average Stockholm resident walks about 300 metres to and from public transport. Thus the high proportion of public transport journeys in the City of Stockholm, 34 percent of all daily journeys, results in more pedestrian journeys than if residents had, for example, driven their cars.¹

The average length of journeys made entirely on foot is about 1.6 km, a figure that hardly differs between the inner city and the outer districts. 19 percent of all the daily journeys in Stockholm under 2 km are made on public transport or by car. In other words, there is potential to increase the proportion of short pedestrian journeys. However, there is a sharp percentage decrease for journey distances of over 2–2.5 km.¹

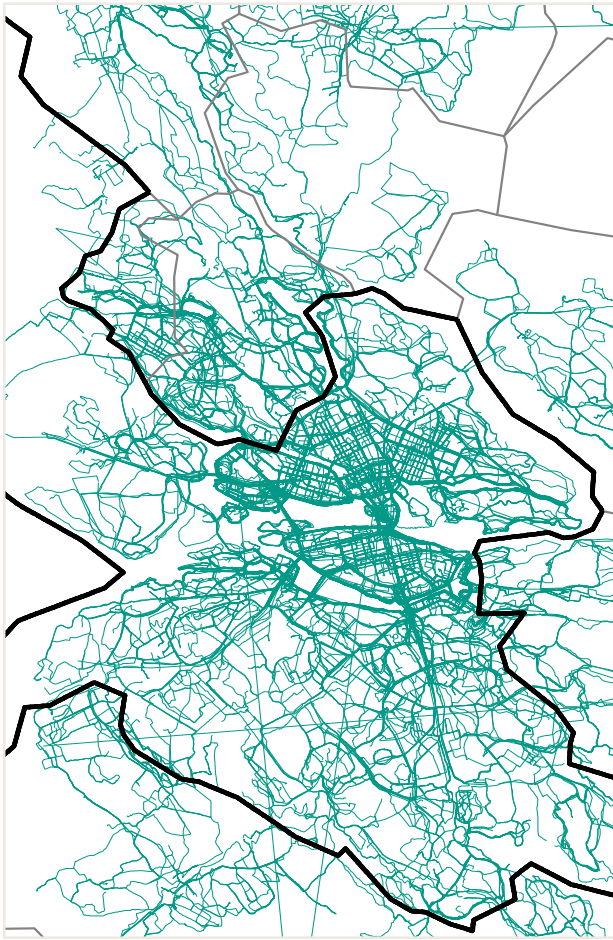
Many of the above statistics have been obtained from the Swedish National Travel Survey (RVU Sverige, den nationella resvaneundersökningen), a travel survey that covers randomly selected individuals living in Sweden aged from 6 to 84 years old. RVU Sweden is a complex tool, but it does not include all the journeys made on foot. It focuses on journeys made between residences and work or studies. For example, the travel habits of foreign visitors are not included in the statistics.

The average pedestrian journey is approximately

1,6 km long



Proportion of pedestrian journeys by journey length¹



Public data maps of walking and running routes with a starting point in Stockholm made with the Runkeeper app. The walking routes are on the left and running routes on the right. The data on which the maps are based is not a representative sample of the population in Stockholm that uses outdoor environments for recreational use, hence they should only be seen as illustrations. Worth noting, however, is that quaysides and seashores appear to be attractive environments for running and walking, but almost the entire street network is used to some extent.⁶

If a pedestrian journey takes longer than

5 min
fewer people choose to walk¹

Recreational walking

Journeys with the same starting and finishing point are not counted as main journeys in RVU and excluded from the statistics. Examples of the type of movements that often have the same starting and finishing point are runs and walks. From a pedestrian perspective, it might be worthwhile to research where people choose to run or walk because they often choose scenic routes or routes that are attractive in some other way.

Pedestrian flows. Example Drottninggatan



45 000

people walk on Drottninggatan
every weekday (Mon–Thur)

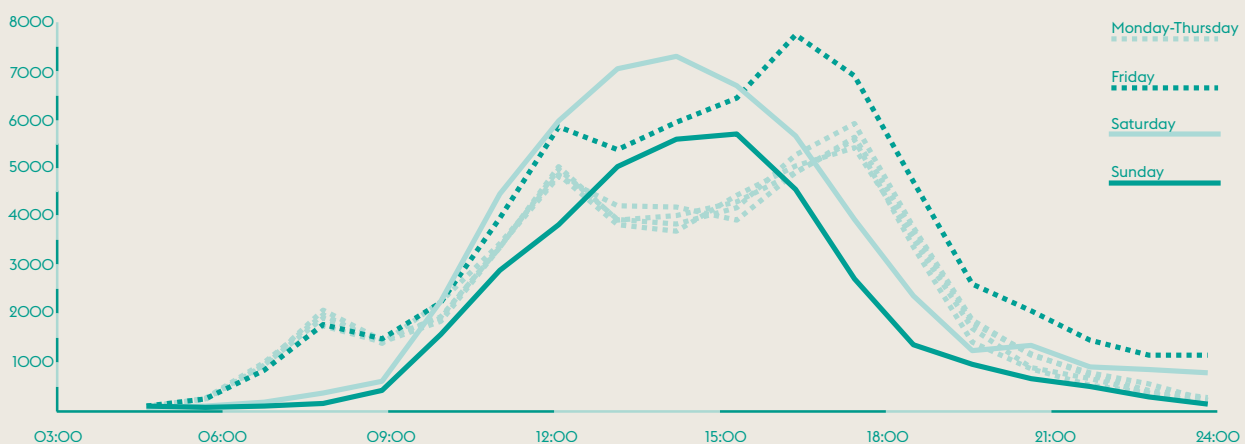
At the weekend (Sat) this rises to

50 000

Researching pedestrian flows on a specific thoroughfare requires site-specific measurements of pedestrian traffic. At present, continuous measurement of pedestrian traffic is only conducted in one location in Stockholm, on Drottninggatan.

Drottninggatan (measured on a section adjacent to Bryggargatan) is used on average by 45,000 pedestrians every weekday (Mon–Thur), 60,000 pedestrians on Fridays, 50,000 pedestrians on Saturdays and 35,000 pedestrians on Sundays. By comparison, about 26,000 vehicles use Sveavägen on a typical weekday.

The busiest pedestrian period on Drottninggatan occurs on Friday afternoons between 16.00 and 17.00, with a circulation of about 7,700 pedestrians. Weekend peak periods of approximately 7,200 pedestrians occur on Saturdays between 14.00 and 15.00.⁶ The graph is an example of a street used by pedestrians who are out shopping, with peak periods occurring during the times of day when the shops and cafes are open. Pedestrian traffic drops sharply after the shops close. The peaks on weekdays during the morning, lunch and evening periods show that streets are also used by people going to and from work.



Comparison of pedestrian flows on Drottninggatan in central Stockholm⁷



Walking habits

In 2012, a survey was conducted amongst Stockholm residents, including adjacent municipalities. Respondents were asked why they did not walk long distances. The most common responses (39 and 36 percent respectively) were that the journey time was too long or the distance too far to walk. The third most common response was bad weather (12 percent), and the fourth most common was that it was unsafe to walk outside alone/after dark (11 percent).⁸

The City of Stockholm's public sense of security surveys, conducted every three years, show that perceived safety and security has increased in Stockholm in recent years. In 2008, 10 percent of respondents were very concerned about crime or did not go out because they were concerned about crime. In 2011 this figure had fallen to 8 percent. Stockholm residents are also quite satisfied with local access to footways, cycle paths and public transport in their city districts. 68 percent of Stockholm residents are fairly or very satisfied with their outdoor environments.⁹

According to an opinion survey conducted by the Traffic Administration, 64 percent of women and 59 percent of men felt insecure in traffic. Many pedestrians felt that cyclists in particular showed them less respect in traffic than they were shown in return. In contrast, cyclists felt that motorists, pedestrians and other cyclists showed them less respect than they were shown in return.¹⁰

In 2011 an interview survey on walking habits was conducted in Liljeholmen. Requests and suggestions for pedestrian enhancements included:¹¹

- additional, more direct and wider pedestrian links
- separation of pedestrian and cycle traffic
- better lighting
- safer, clearer and additional pedestrian crossings
- more seating facilities
- wayfinding
- meeting places and cafe/restaurant terraces
- pedestrian precincts and less space for motor traffic
- clearer demarcation of pedestrian spaces
- well-maintained urban environments and shrubbery
- cleaning, maintenance and snow removal on school roads.

68%

of Stockholm residents are quite or very satisfied with their outdoor environments

64 %

of women and

59 %

of men feel insecure in traffic





57%

of all traffic collisions occur in the inner city compared with

35%

in the outer districts

8%

have an unknown location

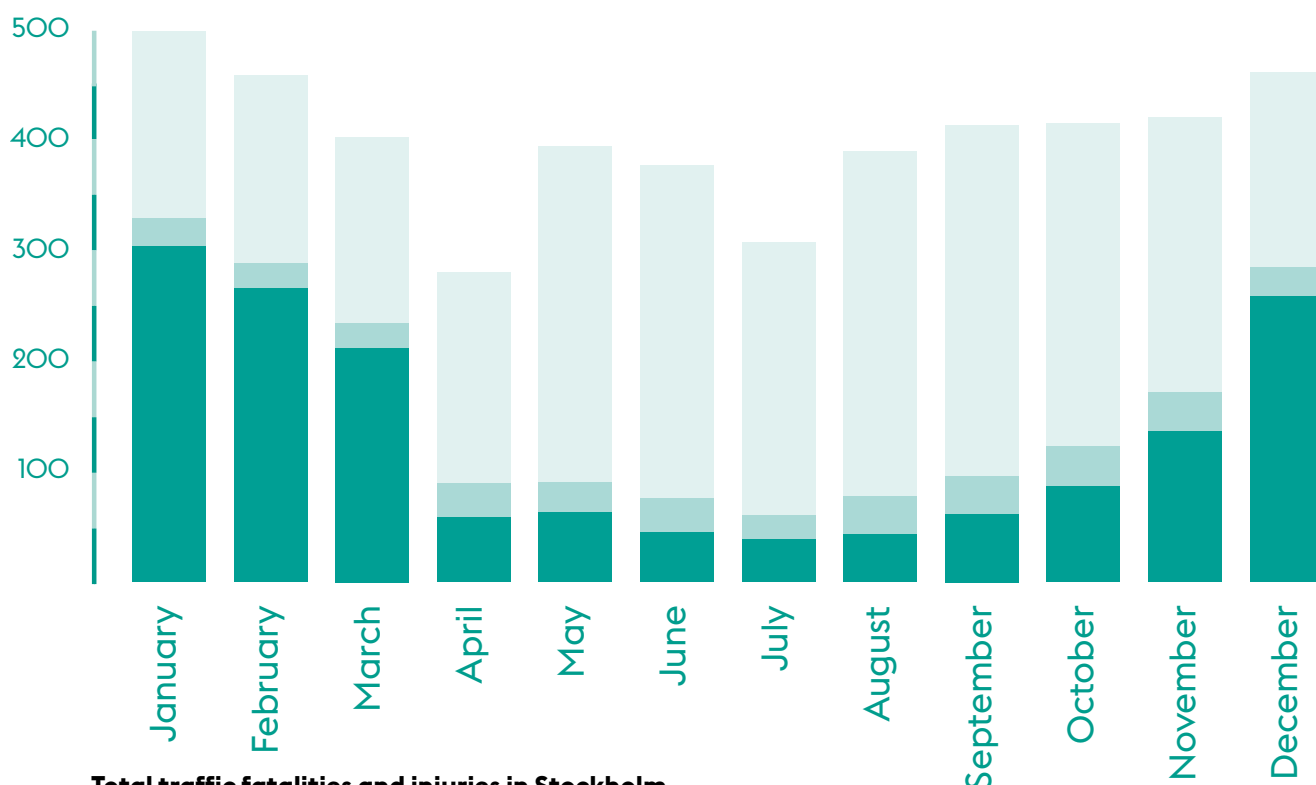
Accidents

In 2013, 358 Stockholm pedestrians were injured in vehicle collisions, three of which were fatalities. Most accidents of this nature occur in the inner city due to its higher proportion of pedestrians. They usually occur on streets with major flows of vehicles and people.

The number of pedestrians injured in single pedestrian accidents in the same year, i.e. accidents that did not involve other road users, was 1,482, 66 of which were serious. Single pedestrian accidents occurred as often in the outer districts as in the inner city.¹²

From 2009-2013, almost 60 percent of single pedestrian accidents were caused by slipping, snow or ice.¹³ Two-thirds of those injured in single pedestrian accidents were women. Statistics show that a greater proportion of vulnerable road users, i.e. pedestrians, cyclists, moped riders and motorcyclists, suffer more severe injuries than accident victims travelling by car.¹²

For the elderly, single pedestrian accidents can have serious consequences. Elderly women in particular need long periods of treatment and recovery. Single pedestrian accidents in Stockholm cost society half a billion Swedish crowns annually.¹⁴



Total traffic fatalities and injuries in Stockholm, broken down by monthly average for the years 2010–2013.



Residents should have

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What is a pedestrian-friendly city?

If Stockholm is to be more pedestrian-friendly, it should provide an intricate pedestrian network that enables more people to walk instead of driving their cars. It should be easy to navigate and residents should feel safe. Places and meeting points should be well-maintained and encourage meetings and visits. The city's public spaces should provide every resident and visitor with the opportunity, the desire, the know-how and the courage to walk. Several projects that correspond with the Pedestrian Plan's strategic objective have been implemented or are currently ongoing in Stockholm. There are also areas that need development in order to achieve the strategic objective throughout the city.

Purpose and function

This chapter presents a vision for a pedestrian-friendly city that comprises four key concepts. The strategic objective has several purposes

- To summarise the Stockholm vision of a pedestrian-friendly city.
- To form a basis for evaluating pedestrian friendliness in an existing site compared to the ideal state.
- To act as a tool in creating favourable conditions for pedestrianism in the city's urban development projects.

he four key concepts of the strategic objective: **opportunity**, **desire**, **know how** and **courage** are described below. The goal is to fulfil as many of the characteristics of each concept in the same location as possible, although it is seldom possible to fulfil them all. If only one or two characteristics can be fulfilled, these must be of especially high quality. For example, pedestrian thoroughfares with poor visibility from surrounding areas must be provided with especially good lighting for pedestrians to have the courage to use them, especially during the times of day when pedestrian traffic is low.





Pedestrian thoroughfares should exist, be wide enough and accessible for everyone. The pedestrian network should be direct, provide alternative routes and not be obstructed by obstacles that make it difficult or impossible to navigate.

Current projects

- The City's commitment to accessibility for persons with functional impairments has been ongoing for more than 15 years. Each public administration is now responsible for accessibility issues within its own operating area. At the Traffic Administration, accessibility enhancements in existing street environments have largely focused on removing so-called "easily remedied obstacles", such as obstructing kerbs, inadequate contrast markings and uneven surface materials, as well as on ensuring that new obstacles do not arise. The City's guide to good accessibility is used in built environment projects to ensure that accessible and usable public spaces are achieved.
- The Traffic Administration is working in several ways to improve the quality of winter maintenance in the city. Contractors receive training to increase their awareness of the needs of vulnerable road users, with a special focus on the elderly and the mobility impaired. New contracts have also been signed that include more specific requirements and greater control of how tasks are performed. Work is in progress to tailor winter snow removal so that the needs of pedestrians and cyclists receive a higher priority.

Potential improvement areas

- By researching the distribution of pedestrians across the city, we can allocate more resources to the most important thoroughfares, e.g. regarding street management and maintenance, as well as monitor permits/licences and other factors that impact pedestrian mobility.
- As the city grows and new residents move in, footway congestion will become more common near important destinations in the city centre. We need to investigate where the congestion is worst and how we can avoid an unsustainable traffic situation for pedestrians.
- In the outer districts, it is often difficult for pedestrians to access adjacent districts due to obstacles such as railway lines, major roads, unsafe green areas and rivers. We need to work to reduce or overcome insulating barriers to create a more integrated city.

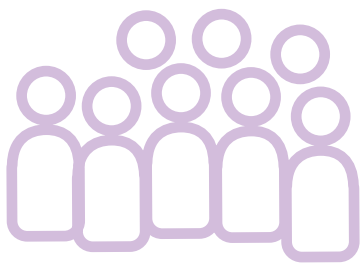
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Pedestrian thoroughfares should be busy, vibrant, include meeting places and be designed with quality. The characteristics of the pedestrian network should encourage walking above other transport modes.



Current projects

- The Stockholm City Plan highlights the importance of a functional mix when planning new build in order to create rich, populated public spaces with vibrant ground floors. The Plan describes a traffic hierarchy in which pedestrians, cyclists and public transport services are more important. The aim to build densely along the thoroughfares that connect city districts also provides opportunities for a populated and substantial urban environment.
- The “Street Stockholm” manual (Handboken Gata Stockholm) will create good prerequisites for a uniform standard when classifying streets in areas intended for different transport modes, tree planting etc., and provide support when prioritising between different functions. The “Quay and Shore Stockholm” manual (Handboken Kaj och Strand Stockholm) is a guide to waterfront areas in the central city, which often form important footways and pedestrian thoroughfares.
- During summer 2015, parts of Swedenborgsgatan and Skånegatan were trialled as pedestrian zones to enhance their appeal to pedestrians and allow for more visits and activities.

Potential improvement areas

- Sites and thoroughfares that have the potential to become pedestrian zones or living streets need to be identified. Street management methods are an extremely potent tool in creating vibrant streetscapes. Redeployment of street space can either be a temporary measure, e.g. during the summer months, or a permanent change that can also be followed up with reconstruction to further increase its appeal.

The pedestrian network should be navigable, visible and signposted in such a way that it is easy to understand where thoroughfares lead and the destinations along the route. It should be easy to understand which zones are for pedestrians and which are for other transport modes.

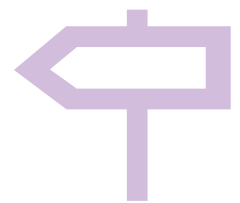
Current projects

- Stockholm's street and park environments have been characterised with a coherent design language in which the same surface materials recur on pedestrian surfaces throughout the city. This makes it easy to understand which areas are designated for pedestrians. There are type drawings of pedestrian crossings, pedestrian rights of way and continuous walkways to ensure consistent design. This enables pedestrians to recognise and understand the behaviour that is expected of them and other road users.
- The Traffic Administration is currently conducting a signage programme for Stockholm's parks in collaboration with the district councils.
- The Traffic Administration has been working to address the lack of tactile and visual guidance in open spaces and squares in the city. Tactile and visual guidance is subject to legal requirements for accessibility and usability for persons with functional impairments.

Potential improvement areas

- Sometimes the shortest pedestrian routes cross private land such as an apartment block yard, or even indoors through a mall. Shortcuts that can be used by more pedestrians should be indicated, for example with signage. This should take place in co-operation with property owners and other stakeholders, for example the Stockholm Transport Administration.
- The digital pedestrian network should be made available to developers via the city's commitment to open data. The aim is to develop guidance services and other beneficial public services.

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Pedestrian thoroughfares should be safe for traffic, populated, well lit, visible from the surrounding area and perceived as safe.

Current projects

- The City arranges local safety and security walks with a focus on pedestrian and park environments. The purpose is to work with local residents to identify unsafe places and improve them, for example through more lighting or vegetation maintenance.
- The City of Stockholm's road safety programme has set goals and policies for the City's commitment to safety in traffic. The needs of road users that are particularly vulnerable in traffic – children, the elderly, persons with functional impairments, pedestrians and cyclists – should be given special consideration. The goals that are directly related to pedestrian safety include managing the speed of motor vehicles, ensuring that main roads are safe, and enhancing standards of street management and maintenance.
- Ensuring the road safety at points where pedestrians and cyclists intersect with motor traffic is one of the most important measures to improve safety for unprotected road users. A review of crossings with two or more traffic lanes in the same direction has been implemented. A number of crossings are corrected every year to create a safer traffic environment.
- The City works actively to implement both physical and behavioural measures that will improve road safety near schools. Physical measures include securing pedestrian crossings, vehicle speed reduction, improving the pedestrian and cycle network, and better lighting. By creating favourable conditions for children to walk and cycle to and from school, they quickly learn how to behave in traffic and gain a perspective on transport in which walking and cycling are important elements.
- Preschools and schools that need to cross busy streets can apply to the Traffic Administration to install a special device in the traffic lights that prolongs the green light to increase road safety.
- The Cycling Plan emphasises the importance of separating pedestrians and cyclists and providing more space for both modes that will minimise levels of insecurity and conflict. A research project is underway to develop design principles for locations where cycle and pedestrian flows intersect. A project to find methods and designs to reduce conflicts between pedestrians and cyclists has also begun.

Potential improvement areas

- The link between the number of pedestrians who suffer single-pedestrian accidents and the status and priority of pedestrian spaces in terms of management and maintenance needs to be investigated.
- Efforts to create outdoor environments that are perceived by pedestrians as safe and secure need to be strengthened.



Action plan



This Action Plan contains actions that will enhance Stockholm's pedestrian friendliness up until 2020. The actions will improve the pedestrian network. The City will have access to better tools and methods in order to prioritise pedestrian needs, as well as more knowledge of where, when and how pedestrians move. The actions will provide Stockholm residents and visitors with the opportunity, the desire, the know-how and the courage to – Walk!

Purpose of the proposed actions

The actions proposed in this Action Plan are intended to remedy pedestrian problems in the city's design, and prioritise pedestrian issues in ongoing City activities and projects. This will be achieved through increased knowledge of Stockholm's pedestrians and their needs, new tools and methods, as well as awareness of what creates an attractive pedestrian environment.

In a growing city, new and old districts should be connected with beneficial pedestrian environments. The city's new and densified districts need good pedestrian connections, both to public transport services and to surrounding districts. In the existing city, there are sites and thoroughfares where the capacity and appeal of the street network can be enhanced by expanding pedestrian spaces and making them more attractive.

Within ongoing City projects and activities, there is a need for development as well new procedures and tools to ensure that pedestrians are correctly prioritised. Knowledge of the city's pedestrians must be more comprehensive if the City is to strike a balance between the needs of the various transport modes, and to establish a basis for sound investments.

Costs

Attached to each action in the Action Plan is an estimated cost of implementation. Both operating and investment costs may be included in the total. Some of the actions incur an annual cost, while others vary from year to year depending on the project phase. The total cost for all the actions has been estimated at MSEK 180, a third of which is investment cost. All figures are preliminary estimates that may need to be revised at a later date.





Proposed actions

Action

1

Responsible Authorities:

The Traffic Administration, in cases where densification has been planned along the same thoroughfare, in collaboration with the Stockholm City Planning Administration and the Stockholm Development Administration.

Fulfil all four key concepts

Estimated cost:

MSEK 26 for three pilot projects

Enhancing the pedestrian-friendliness of a number of pedestrian corridors with great potential

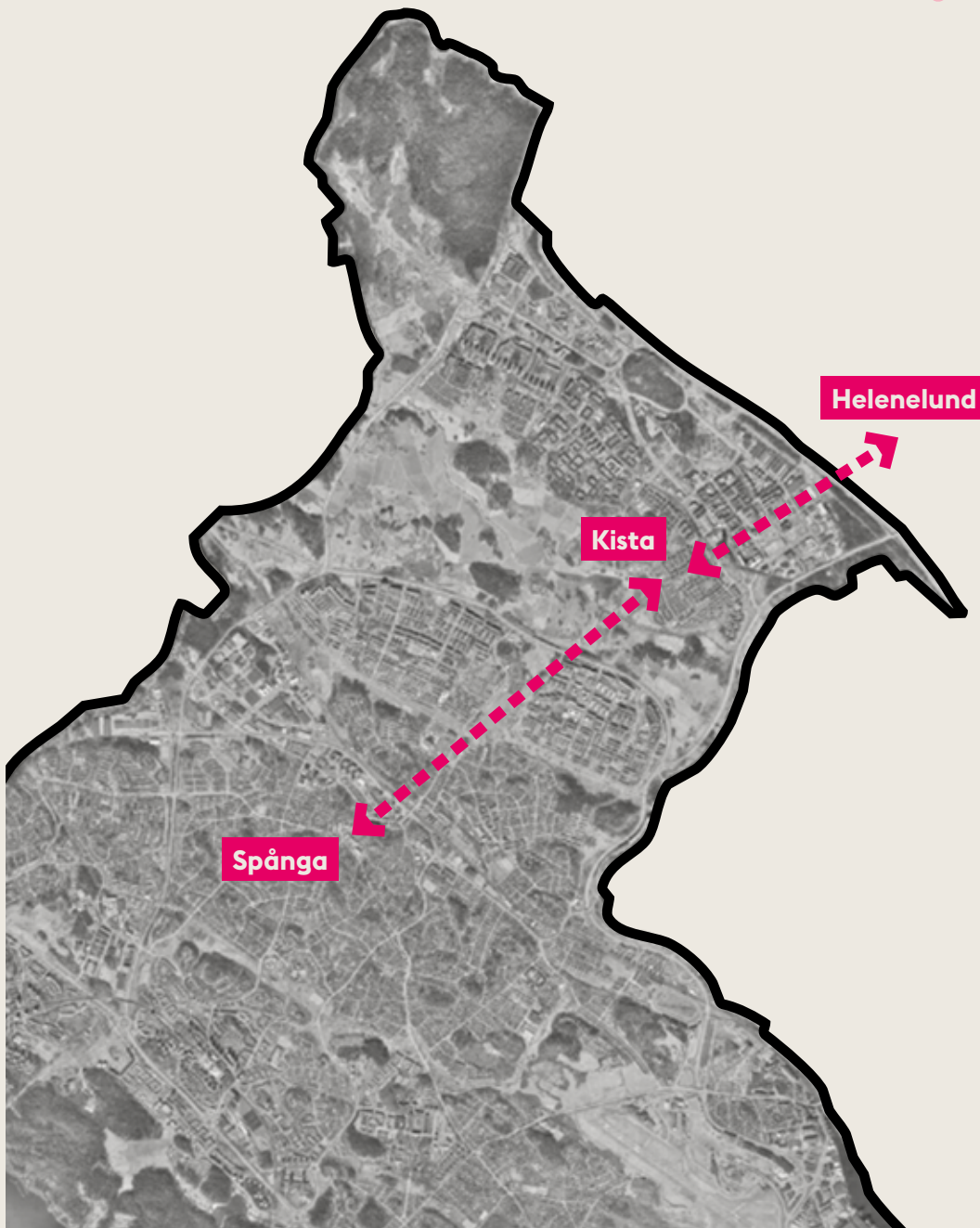
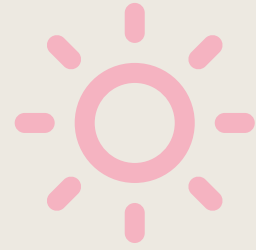
The purpose of this action is to improve a number of strategically important thoroughfares with the potential to become major pedestrian corridors in the future, or corridors that are already strong but have the potential to become even more significant if the right actions are taken. Some of the corridors link new inner city districts with old ones. Others facilitate orbital mobility between different public transport routes or improve access to high capacity public transportation. The centrally located corridors provide older parts of the city with better prerequisites for long-distance walking, with better pedestrian orientation and mobility as a result. They can also provide opportunities to relieve public transport services on highly congested routes.

The corridors are generally much longer than a normal pedestrian journey in Stockholm. The purpose is to facilitate pedestrian journeys along entire corridors, regardless of whether they are used for a few hundred meters or several kilometres.

Improvements to corridors will take place in phases, with a primary focus on the stages that are most in need of actions, for example journeys across the inner city zone or past obstacles of various kinds. The secondary focus will be on places where other projects are planned, which may include pedestrian enhancements.

The aim is to implement three pilot projects by 2020 that encompass parts of the corridors, as described below.

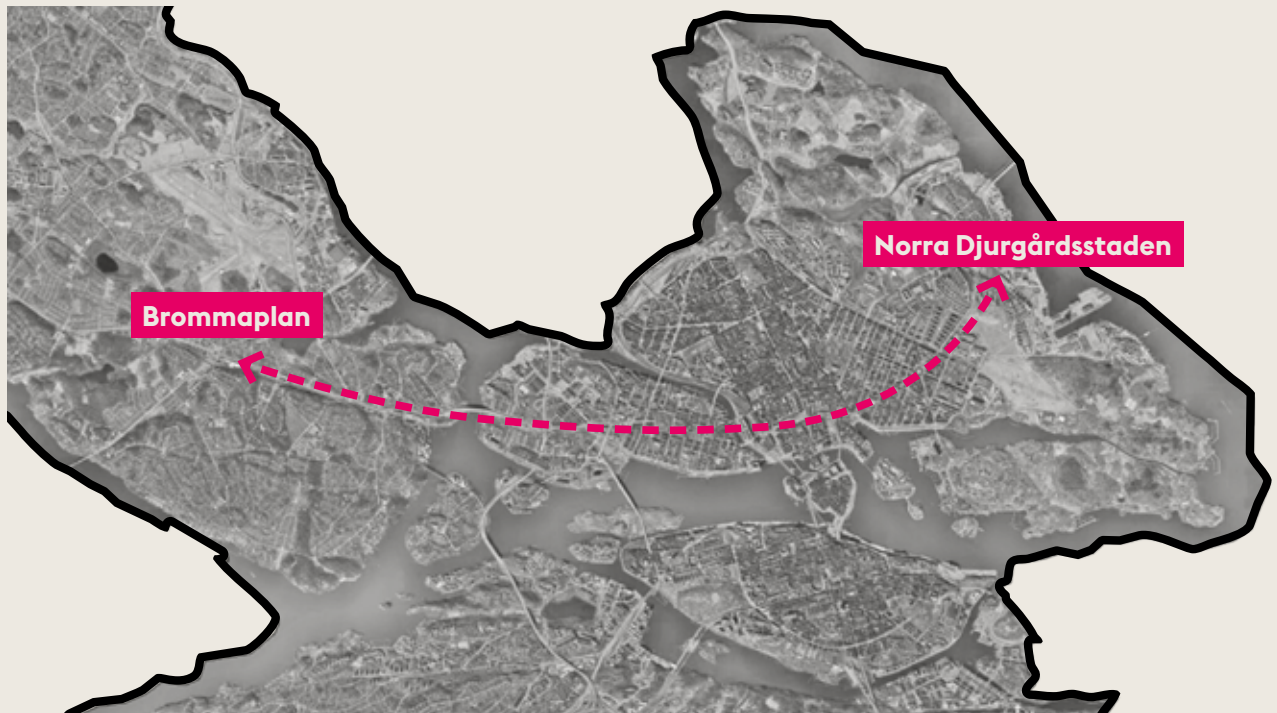




The Spånga – Kista – Helenelund corridor

The Spånga – Kista – Helenelund corridor enables an orbital connection between the commuter rail stations in Spånga, which is a strategic node according to the Stockholm City Plan, and Helenelund (located in Sollentuna).

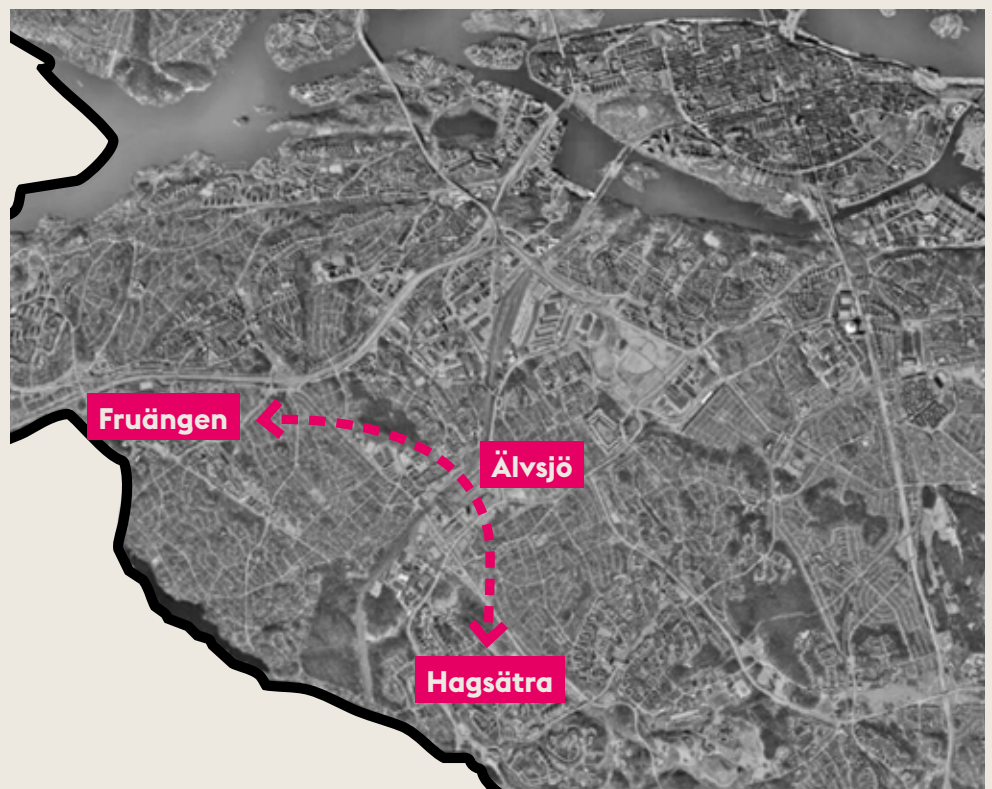
The corridor runs via Kista, another strategic node according to the Stockholm City Plan, and there are strong destination points along the corridor such as Kistamässan and Kista Centrum.



The Stockholm Royal Seaport – Brommaplan corridor

The Stockholm Royal Seaport – Brommaplan corridor is intended as an east-west pedestrian connection through the inner city, connecting the

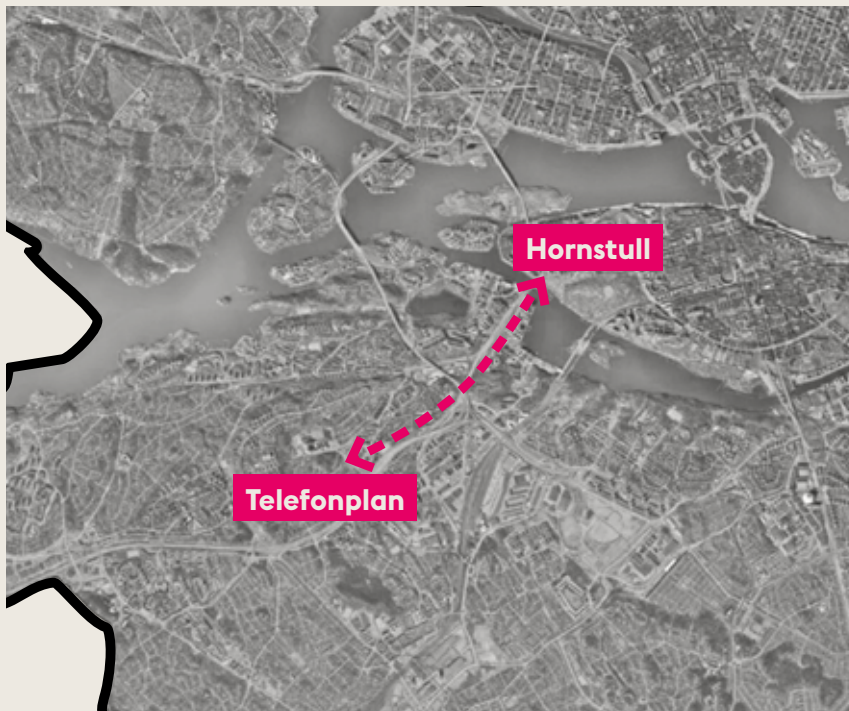
major urban development areas in Brommaplan, Alvik and Northwest Kungsholmen with City and Stockholm Royal Seaport.



The Fruängen – Älvsjö – Hagsätra corridor

The Fruängen – Älvsjö – Hagsätra corridor will enable an orbital connection that can expand the area surrounding the commuter rail station in Älvsjö, which is a strategic node according to the Stockholm City Plan, and the Metro stations

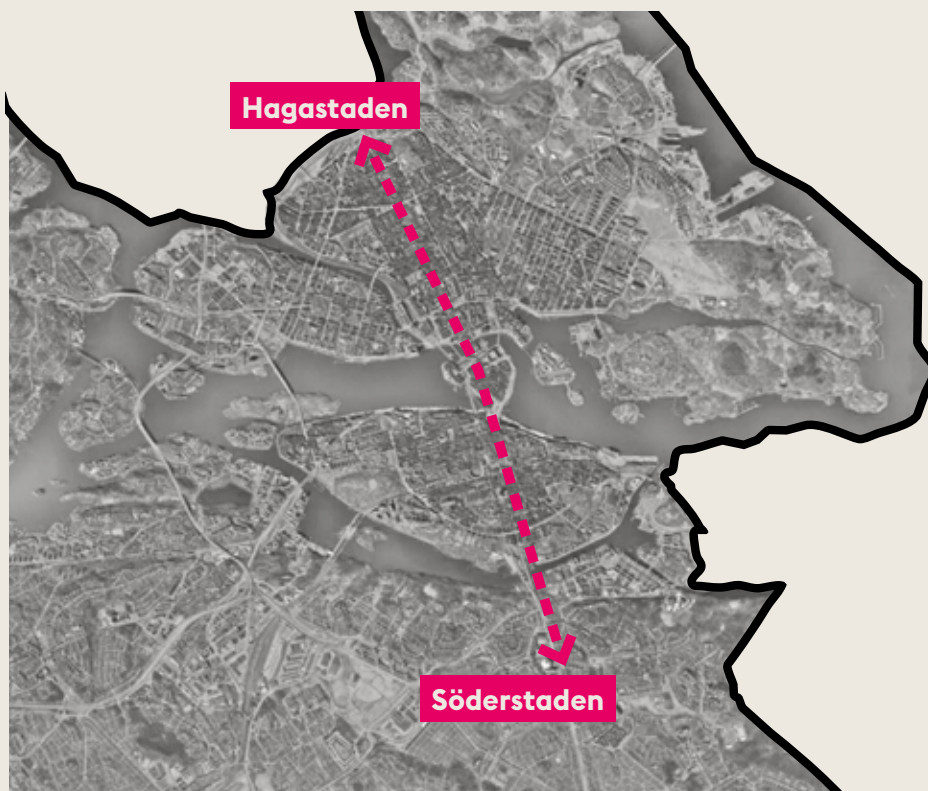
in Fruängen (also a strategic node) and Hagsätra (where public transport services are in need of relief). Älvsjö also has a strong visitor destination point at Stockholm International Fairs.



The Hornstull – Telefonplan corridor

The Hornstull – Telefonplan corridor connects the new dense urban development in Liljeholmen with Södermalm, as well as expanding the area surrounding the Tvärbanan light railway in a

north-south direction. The corridor has great potential because distances are short, the built environment is already relatively dense and strong destination points already exist.



The Hagastaden – Söderstaden corridor

The Hagastaden – Söderstaden corridor enhances and extends the existing north-south link for inner city pedestrians. The corridor runs via the pedestrian streets of Drottninggatan, Västerlånggatan and Götgatsbacken, and connects the major

urban development areas Hagastaden and Söderstaden with the inner city. The route also aims to provide better pedestrian connections with the new commuter rail station at Odenplan.



Improving recreational thoroughfares

The purpose of the action is to make an inventory of important recreational thoroughfares to identify their shortcomings. Examples of deficiencies might be if a thoroughfare is too narrow, the terrain makes parts of the thoroughfare inaccessible, the lighting is inadequate or other factors that reduce the thoroughfare's appeal and usability. The inventory will result in investment projects that increase the attractiveness and usability of recreational thoroughfares. Taking a comprehensive approach to a thoroughfare that, for example, runs along street space or parkland on parts of its route facilitates the creation of a more attractive environment without gaps and obstacles.

The aim is to initiate a pilot project along a recreational thoroughfare by 2020.

Action

2

Responsible authorities:

The Traffic Administration in collaboration with the district councils, possibly in collaboration with adjacent municipalities if thoroughfares cross municipal boundaries

Fulfils the key concept
know how

Estimated cost:
MSEK 11

Conducting a campaign that resolves local pedestrian issues

This action aims to correct local, frequently short, but crucial, pedestrian connections such as muddy footpaths, simple bridges over water-courses, and obstacles in the form of fallen trees and uneven surfaces. The measures will resolve local problems that prevent pedestrians from using the shortest, most pleasant route to a destination point and cause them to choose other modes. Any missing pedestrian connections will be identified with help of city residents through a public campaign in which citizens will be encouraged to report issues that they know about. Funds will be set aside for corrective measures, which will be selected jointly by the Traffic Administration and the relevant district council.

Action

3

Responsible authorities:

The Traffic Administration in collaboration with the district councils

Fulfils three of the key concepts

Estimated cost:
MSEK 16 (distributed over six years)

Action

4

Responsible authorities:

The Traffic Administration

Fulfils the key concept

Know how

Estimated cost:

MSEK 7

Developing a pedestrian wayfinding system

A wayfinding system aimed at pedestrians will provide better opportunities to find important destinations that are within walking distance. For example, a wayfinding system can indicate to tourists and visitors if inner city distances are relatively short, which will relieve the public transport network on routes where relief is most needed. It can also indicate short-cuts and connections between districts and ensure that they are used more frequently. The wayfinding system could either consist of stand-alone maps and directional signs, or be integrated with wayfinding for cyclists or advertising displays.

Places where the need for wayfinding is greatest should be the first to be equipped with guidance, but the system should be planned and designed to include all parts of the city.



Creating a “toolbox” for pedestrian analysis

The purpose of this action is to bring together different approaches so as to map and evaluate pedestrian friendliness within a defined area or corridor. The evaluation will provide a basis for pedestrian improvement measures or for reprioritisation within existing projects. The aim is to meet the needs of all road users more effectively, based on their priority in the current situation.

The toolbox can be used both as an element in investment projects to ensure that pedestrian needs are met, or on its own to develop pedestrian measures in a particular area or site. A small part of the toolbox should be mandatory in investment projects in order to facilitate conditions for correct prioritisation.

Pedestrian friendliness can be evaluated in several ways:

- Listing the environmental factors that impact pedestrian friendliness, such as barriers, surface materials, destination points, density of experiences, availability of seating, missing or excessively long pedestrian connections, trees and shrubbery, noisy streets and sites, alternative routes, and sites with road safety issues.
- Measuring pedestrian flows at one or several locations, for example to establish where there is a lack of space or there are underused pedestrian connections.
- Interviews with pedestrians to determine what they think of an area, for example to determine which sites are perceived as unsafe or pleasant to visit, whether specific pedestrian groups appreciate or dislike a particular location, the “mental barriers” that exist, or if a pedestrian connection is missing or perceived as excessively long.
- Using various analytical methods in the existing pedestrian network, for example to determine how integrated or visible specific thoroughfares and locations are.

The measures can take several different forms:

- Changes in conditions for other road users (road traffic control or speed limits, speed management, etc.)
- Increased priority for pedestrians at traffic lights
- Expansion of or changes in pedestrian spaces
- Creating new pedestrian connections
- Enhancing the appeal of pedestrian surfaces by changing surface materials, lighting, furnishings, vegetation, etc.

The toolbox can also include other aids: a manual for dimensioning street permits/licences or closures that affect pedestrian spaces in a thoroughfare or location, recommendations for seating availability in different types of thoroughfare with respect to, for example, pedestrian volumes, the number of destination points, the density of development and the demographic characteristics of the area.

Action

5

Responsible authorities:

The Traffic Administration in collaboration with the Stockholm City Planning Administration and the Stockholm Development Administration.

Fulfils all four key concepts

Estimated cost:

MSEK 1



Action

6

Responsible authorities:

The Traffic Administration

Fulfil all four key concepts

Estimated cost:

MSEK 24
(distributed over six years)

Implementing temporary measures

This action is based on the Guidelines for Idea-based Urban Development adopted by the municipal executive. The purpose is to clarify the prerequisites for different types of temporary measure, both within the City and with external stakeholders. The action will also result in information for city residents that describes the available options that can impact the local environment, how to apply for them and the requirements that need to be met to obtain a permit.

The temporary reallocation of street space can be a way of testing its potential as a pedestrian zone or a living street. The measure is simple to implement as it only requires new signage, and various types of space allocation can be tested and evaluated before a design is made permanent. Street space can also be temporarily reallocated in places where the volume of motor traffic decreases for a limited period or seasonally, for example space that is not as busy in the summertime or where traffic flows disappear or decrease in conjunction with redevelopment. An example of this is when Swedenborgsgatan and parts of Skånegatan were trialled as pedestrian streets during the summer of 2015.

Another aim for allowing temporary measures in a street environment can be to increase public influence on how their local environment is used, for example by transferring responsibility for parts of the street environment such as car parks, wasteland or temporarily unused surfaces to organisations, businesses or individuals that commit to managing the site for a period of time. Another possible use of temporary measures is to close streets to traffic for short periods of time, for example for one or several weekends, when the need for space for motor vehicles decreases and the volume of pedestrians increases.

Action

7

Responsible authorities:

The Traffic Administration

Fulfil two of the four key concepts

Estimated cost:

MSEK 90
(distributed over six years)

Improving street management and street maintenance from a pedestrian perspective

This action aims to reduce the number and severity of single pedestrian accidents by reviewing methods and priorities related to street management and street maintenance. Acquiring more knowledge of where single pedestrian accidents occur, as well as which thoroughfares and locations are most popular with pedestrians, enables the prioritisation of street maintenance and winter road maintenance. As women are more frequent pedestrians than men, the action should be implemented in conjunction with the ongoing project for gender-equal snow removal.

The action should involve all stakeholders in the city that order street management and street maintenance services in order to create common guidelines. Testing new methods of snow removal from walkways should also be included.

Developing a method for assessing footway congestion

Well-used pedestrian thoroughfares are an asset to any city and are often perceived as safe and attractive. However, this is impacted negatively when pedestrian flows become so large that footway congestion occurs. Congestion reduces the appeal of locations and thoroughfares, and can lead to impaired accessibility and road safety in a worst-case scenario. At present, there is no Stockholm-tailored method of assessing footway congestion in the form of reduced pedestrian mobility, inconvenience and discomfort. The design and width of a pedestrian street, as well as the number of pedestrians in it and their preferences, all combine to impact pedestrian mobility.

The action should include an inventory of existing methods for measuring congestion, a study of how Stockholm pedestrians experience congestion, and the development of a method tailored to Stockholm conditions. The action will result in a method that can be applied in all city projects involving the reallocation of street space with a view to achieving the desired level of pedestrian mobility.

Action

8

Responsible authorities:

The Traffic Administration

Fulfils two of the key concepts

Estimated cost:

MSEK 2



Measuring pedestrian traffic

The purpose of the action is to begin gathering data on the number and proportion of pedestrians in various Stockholm locations. Further analysis will be required to determine the methods of measurement and the locations where measurements should be made. The data will be applied as a knowledge basis for decisions relating to pedestrian traffic and to investigate both short-term and long-term pedestrian trends in selected locations. The data can also provide a basis for an analysis of the pedestrian network and serve as reference material for predicting variations over time and in varying weather conditions.

Action

9

Responsible authorities:

The Traffic Administration

Fulfils all four key concepts

Estimated cost:

MSEK 24
(distributed over six years)

Implementing “Living Stockholm”

The Traffic Administration will investigate and test more pedestrian streets, living streets, summer-only pedestrian streets/zones and adjustable footways. It will also review how parking spaces can be temporarily licensed as outdoor seating areas for cafes and restaurants and, for example, how pop-up parks and market squares can be better utilised. Changes that enable a more vibrant city are important for the whole of Stockholm, and city districts should be involved in the work.

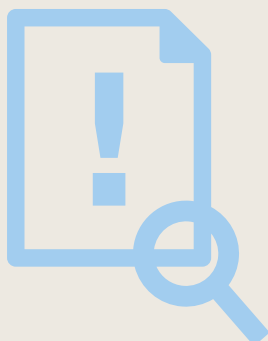
Action

10

Responsible authorities:

The Traffic Administration

Fulfils all four key concepts



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